

Committee Meeting

of

SENATE ENVIRONMENT AND ENERGY COMMITTEE ASSEMBLY ENVIRONMENT AND SOLID WASTE COMMITTEE

"The committees will meet to hear testimony from invited speakers on the topics of forest stewardship and prescribed burning, and the role humans should play in managing the State's forests"

LOCATION: Committee Room 4
State House Annex
Trenton, New Jersey

DATE: February 22, 2023
11:00 a.m.

MEMBERS OF COMMITTEE PRESENT:

Senator Bob Smith, Chair
Senator Linda R. Greenstein, Co-Chair
Senator Richard J. Codey
Senator Edward R. Durr, Jr.
Senator Jean Stanfield

Assemblyman James J. Kennedy, Chair
Assemblyman Sterley S. Stanley, Vice-Chair
Assemblywoman Shama A. Haider
Assemblywoman Bethanne McCarthy Patrick
Assemblyman Gerry Scharfenberger



ALSO PRESENT:

Carrie Anne Calvo-Hahn
Eric Hansen
Office of Legislative Services
Committee Aides

Joey Gurrentz, Ph.D.
Dayna Mercadante
Senate Majority
Committee Aides

Rebecca Panitch
Senate Republican
Committee Aide

Sam Aloi
Elizabeth Theodore
Assembly Majority
Committee Aides

David Harkness
Assembly Republican
Committee Aide

Meeting Recorded and Transcribed by
The Office of Legislative Services, Public Information Office,
Hearing Unit, State House Annex, PO 068, Trenton, New Jersey

Bob Smith
Chairman

Linda R. Greenstein
Vice-Chairwoman

Richard J. Codey
Edward R. Durr, Jr.
Jean Stanfield



Eric Hansen
Office of Legislative Services
Committee Aide
609-847-3855
Fax 609-292-0561

NEW JERSEY STATE LEGISLATURE

SENATE ENVIRONMENT AND ENERGY COMMITTEE

STATE HOUSE ANNEX • P.O. BOX 068 • TRENTON, NJ 08625-0068
www.njleg.state.nj.us

COMMITTEE NOTICE

TO: MEMBERS OF THE SENATE ENVIRONMENT AND ENERGY COMMITTEE
FROM: SENATOR BOB SMITH, CHAIRMAN
SUBJECT: COMMITTEE MEETING - FEBRUARY 22, 2023

The public may address comments and questions to Eric Hansen, Committee Aide, or make bill status and scheduling inquiries to Pamela Crocrot, Secretary, at (609)847-3855, fax (609)292-0561, or e-mail: OLSAideSEN@njleg.org. Written and electronic comments, questions and testimony submitted to the committee by the public, as well as recordings and transcripts, if any, of oral testimony, are government records and will be available to the public upon request.

The Senate Environment and Energy Committee and the Assembly Environment and Solid Waste Committee will meet jointly on Wednesday, February 22, 2023 at 11:00 AM in Committee Room 4, 1st Floor, State House Annex, Trenton, New Jersey.

The committees will meet to hear testimony from invited speakers on the topics of forest stewardship and prescribed burning, and the role humans should play in managing the State's forests.

Issued 2/14/23

For reasonable accommodation of a disability call the telephone number or fax number above, or for persons with hearing loss dial 711 for NJ Relay. The provision of assistive listening devices requires 24 hours' notice. CART or sign language interpretation requires 5 days' notice.

For changes in schedule due to snow or other emergencies, see website <http://www.njleg.state.nj.us> or call 800-792-8630 (toll-free in NJ) or 609-847-3905.

TABLE OF CONTENTS

	<u>Page</u>
Andy Bennett Board Member New Jersey Forestry Association, and Owner Ridge & Valley Forest Management	4
Tom Gilbert Co-Executive Director New Jersey Conservation Foundation	5
Anjuli Ramos-Busot Director Sierra Club New Jersey Chapter	6
Eileen Murphy, Ph.D. Vice President of Government Relations New Jersey Audubon	7
Elliott Ruga Policy and Communications Director New Jersey Highlands Coalition	56
Sara Webb, Ph.D. Director Drew University Forest Preserve	61
Leslie Sauer Founder Emeritus Andropogon Associates	68
Jaclyn Rhoads, Ph.D. Assistant Executive Director Pinelands Preservation Alliance	72
Eric Olsen Director of Conservation Programs The Nature Conservancy New Jersey Chapter	75

TABLE OF CONTENTS (continued)

APPENDIX:

Testimony submitted by Eileen Murphy, Ph.D.	1x
Testimony submitted by Elliott Ruga	5x
Testimony submitted by Sara Webb, Ph.D.	11x
Testimony submitted by Leslie Sauer	15x
New Jersey Forest Stewardship Task Force Report submitted by New Jersey Forest Stewardship Task Force	24x
New Jersey Forest Stewardship Task Force Findings and Recommendations submitted by New Jersey Forest Stewardship Task Force	294x
Testimony submitted by New Jersey Highlands Coalition	314x
Testimony submitted by Members Natural Heritage Committee New Jersey Highlands Coalition	320x
Testimony submitted by Shauna Canter President Garden Club of Mount Tabor	329x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Gene Cracovia Chair Madison's Shade Tree Management Board	330x
Testimony submitted by Ken Dolsky Vice President New Jersey Forest Watch	331x
Testimony submitted by Katherine Evans Participant New Jersey Forest Task Force, and Co-Founder New Jersey Forest Watch	334x
Testimony submitted by Mary Ellen Hennessy-Jones Member Sustainable Madison Advisory Committee, and Member Madison Climate Action Committee	337x
Testimony submitted by Christine Hepburn, Ph.D. Trustee Ridge and Valley Conservancy, and Friends of the Drew Forest	338x
Testimony submitted by Nicholas Homyak Participant New Jersey Forest Task Force	340x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Ann Huber Member Environmental Commission Madison, NJ	355x
Testimony submitted by Kate Krehel Member New Jersey Forest Task Force, and Youth President High School's Climate Action	356x
Testimony submitted by John Landau Member Morris Township Environmental Commission Steward New Jersey Woodland, and Rutgers Environmental	358x
Testimony submitted by Doris Lin, Esq. Legal Director League of Humane Voters of NJ	374x
Testimony submitted by Angi Metler Member NJ Forest Task Force	379x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Laura Oltman Member NJ Forest Task Force, and Representing Support Roaring Rock Park	382x
Testimony submitted by Mitalee Pasricha Steward Ridgeview Conservancy, and Member New Jersey Forest Task Force	388x
Testimony submitted by Sharon Petzinger Senior Zoologist Endangered and Nongame Species Program New Jersey Division of Fish and Wildlife	389x
Testimony submitted by Susan E. Russell Wildlife Policy Director Animal Protection League of New Jersey	396x
Testimony submitted by Patricia Shanley, Ph.D. Program Director People and Plants International, and Associate Director Woods & Wayside International, and Director of Stewardship Ridgeview Conservancy	400x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Patricia Westerfer Private Citizen	403x
Testimony submitted by Silvia Solaun Member NJ Forest Task Force, and Founder and Executive Director New Jersey Forest Watch	404x
Testimony submitted by Silvia Solaun, Ken Dolsky, and Katherine Evans New Jersey Forest Watch	409x
Testimony submitted by Cynthia Soroka-Dunn Member NJ Forest Task Force	420x
Testimony submitted by Dorothea Stillinger Chair Great Swamp Watershed Association (GSWA) Land Preservation and Advocacy Committee, and Member Board of Trustees of the GSWA	421x
Testimony submitted by Allie Taylor President Voters for Animal Rights	422x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Susi Tilley Executive Director Ridge and Valley Conservancy	423x
Testimony submitted by Claire Whitcomb Chair Environmental Commission Madison, NJ	424x
Testimony submitted by Lee Widman Ventnor Green Team	425x
Testimony submitted by Margaret Wood Member New Jersey Forest Task Force	426x
Testimony submitted by Nushin Amirhosseini Private Citizen	430x
Testimony submitted by Danielle Amodeo Private Citizen	431x
Testimony submitted by Marie Ansari Private Citizen	432x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by David and Debra Ashton Private Citizens	433x
Testimony submitted by Eric Baratta Private Citizen	434x
Testimony submitted by Sherrill Barbary Private Citizen	435x
Testimony submitted by Diane Barker Private Citizen	436x
Testimony submitted by Cindy Bartman Private Citizen	438x
Testimony submitted by Joe Basralian Private Citizen	439x
Testimony submitted by John Bell Private Citizen	441x
Testimony submitted by James N. Benko Private Citizen	442x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Elizabeth Bennett Private Citizen	443x
Testimony submitted by Maoly Beras Private Citizen	444x
Testimony submitted by Cynthia Bergstein Private Citizen	445x
Testimony submitted by Beth Berniker Private Citizen	446x
Testimony submitted by Kevin Beversluis Private Citizen	447x
Testimony submitted by Mari Beversluis Private Citizen	448x
Testimony submitted by Suzanne Binette, and Diana Rodenbeck Private Citizens	449x
Testimony submitted by Charles A. Bivona Private Citizen	450x

TABLE OF CONTENTS (continued)**APPENDIX (continued)**

Testimony submitted by Eve Bolkin Private Citizen	451x
Testimony submitted by Jane Books Private Citizen	452x
Testimony submitted by Jennifer Books Private Citizen	453x
Testimony submitted by Terrie Bouchard Private Citizen	454x
Testimony submitted by Karen Breny Private Citizen	455x
Testimony submitted by Trudy M. Bruke, DDS, MS. Private Citizen	456x
Testimony submitted by J. Brummell Private Citizen	457x
Testimony submitted by Jeanne Cambouris Private Citizen	458x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Natalie Cerciello Private Citizen	459x
Testimony submitted by Maria Cetrola Private Citizen	460x
Testimony submitted by Lydia Chambers Private Citizen	461x
Testimony submitted by Robert Cini Private Citizen	462x
Testimony submitted by Jill Coletti Private Citizen	464x
Testimony submitted by Maria Cecilia Correia Private Citizen	465x
Testimony submitted by Clara Cracchiolo Private Citizen	466x
Testimony submitted by Colette Crescas Private Citizen	467x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Teresa Croizier Private Citizen	468x
Testimony submitted by Mary Ann D'Alessandro Private Citizen	469x
Testimony submitted by Charles Davidson Private Citizen	470x
Testimony submitted by Debra Demmin Private Citizen	471x
Testimony submitted by Valerie DeVine Private Citizen	472x
Testimony submitted by Jennifer Downing Private Citizen	473x
Testimony submitted by Nancy Ehrlich Private Citizen	476x
Testimony submitted by Steve Ember Private Citizen	477x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Diane Famula Private Citizen	478x
Testimony submitted by Edmund Fanning Private Citizen	479x
Testimony submitted by Emma Fanning Private Citizen	480x
Testimony submitted by Katy Fendrich-Turner Private Citizen	481x
Testimony submitted by Steven Fenster Private Citizen	482x
Testimony submitted by Elena Marie Fetch Private Citizen	483x
Testimony submitted by Nancy Fleming Private Citizen	484x
Testimony submitted by Jeanne Fox Private Citizen	485x

TABLE OF CONTENTS (continued)**APPENDIX (continued)**

Testimony submitted by Doreen Frega Private Citizen	494x
Testimony submitted by Joy Fregonese Private Citizen	495x
Testimony submitted by Lisa Friedlander Private Citizen	498x
Testimony submitted by Sherry Fudim Private Citizen	499x
Testimony submitted by Christina Galvin Private Citizen	500x
Testimony submitted by Monica Garcia Private Citizen	501x
Testimony submitted by Tatiana Gelfand Private Citizen	502x
Testimony submitted by John T. Gfrorer Private Citizen	503x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Kim Giberson Private Citizen	506x
Testimony submitted by Susan Gordon Private Citizen	507x
Testimony submitted by Martha Halmo Private Citizen	508x
Testimony submitted by Catherine Harrington Private Citizen	509x
Testimony submitted by David H. Hartzell Private Citizen	510x
Testimony submitted by Mary E. Healy Private Citizen	511x
Testimony submitted by Lorraine Henry Private Citizen	512x
Testimony submitted by John Hila Private Citizen	513x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Andrea Hirschfeld Private Citizen	514x
Testimony submitted by Diane R. Hoffman Private Citizen	515x
Testimony submitted by James A. Hughes Private Citizen	516x
Testimony submitted by Nicholas Huss Private Citizen	517x
Testimony submitted by Lauretta Iavarone Private Citizen	518x
Testimony submitted by Claudia Ionescu Private Citizen	519x
Testimony submitted by Shannon Irwin Private Citizen	520x
Testimony submitted by Melissa Jacobs, Ken Green, and Patricia Tuttle Private Citizens	521x

TABLE OF CONTENTS (continued)**APPENDIX (continued)**

Testimony submitted by Shannon Jacobs Private Citizen	523x
Testimony submitted by Kelly Janocko Private Citizen	524x
Testimony submitted by Richard Jaretsky Private Citizen	525x
Testimony submitted by Lisa Jess Private Citizen	526x
Testimony submitted by Cheryl Johansen Private Citizen	527x
Testimony submitted by Ginny Johnson Private Citizen	528x
Testimony submitted by Marilyn Johnson Private Citizen	529x
Testimony submitted by Elizabeth Jonach Private Citizen	530x

TABLE OF CONTENTS (continued)**APPENDIX (continued)**

Testimony submitted by Yana Kane-Esrig Private Citizen	531x
Testimony submitted by James Kent Private Citizen	532x
Testimony submitted by Margaret Kent Private Citizen	533x
Testimony submitted by Quincy Kirsch Private Citizen	534x
Testimony submitted by Howard Klein Private Citizen	536x
Testimony submitted by Carol Kloss Private Citizen	537x
Testimony submitted by Maureen Koplow Private Citizen	538x
Testimony submitted by Kimberly Kozakiewicz Private Citizen	539x

TABLE OF CONTENTS (continued)**APPENDIX (continued)**

Testimony submitted by Sheila Kraus Private Citizen	540x
Testimony submitted by Judy Kroll Private Citizen	541x
Testimony submitted by Maria Kucyna Private Citizen	542x
Testimony submitted by Mary Lagatol Private Citizen	543x
Testimony submitted by Thea Landesberg Private Citizen	545x
Testimony submitted by Patti Lane Private Citizen	546x
Testimony submitted by Doreen Laury Private Citizen	547x
Testimony submitted by Cheryl Lechtanski Private Citizen	548x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Catherine Lembo Private Citizen	549x
Testimony submitted by Matt Leonard CIPP Private Citizen	550x
Testimony submitted by Michelle Lerner Private Citizen	551x
Testimony submitted by Stewart Lindenberger Private Citizen	552x
Testimony submitted by Arline Lippin Private Citizen	553x
Testimony submitted by Paul Luente Private Citizen	554x
Testimony submitted by Marijane Lundt Private Citizen	555x
Testimony submitted by D. Lynch Private Citizen	556x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Joan Maccari Private Citizen	557x
Testimony submitted by Sandra Machtemes Private Citizen	558x
Testimony submitted by Marie Maclel Private Citizen	559x
Testimony submitted by Barbara Maddalena Private Citizen	560x
Testimony submitted by Jessica Maddox Private Citizen	561x
Testimony submitted by Sally Malanga Private Citizen	562x
Testimony submitted by Joan Maloof Private Citizen	563x
Testimony submitted by Phyllis Mandelbaum Private Citizen	568x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Lorraine Marozzi Private Citizen	569x
Testimony submitted by Pat McKee Private Citizen	571x
Testimony submitted by Katya McKnight Private Citizen	572x
Testimony submitted by Nisha Menon Private Citizen	573x
Testimony submitted by Rajendra Menon Private Citizen	574x
Testimony submitted by Cheryl and Robert Miller Private Citizens	575x
Testimony submitted by Julie Miller Private Citizen	576x
Testimony submitted by Janice Mondoker Private Citizen	577x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Leslie K. Moran, Ph.D. Private Citizen	578x
Testimony submitted by Barbara Moretti Private Citizen	579x
Testimony submitted by James J. Morrison Private Citizen	580x
Testimony submitted by Corinne Moshman Private Citizen	581x
Testimony submitted by Janine Motta Private Citizen	582x
Testimony submitted by Kimberly Nagelhout Private Citizen	587x
Testimony submitted by Mark Nagelhout Private Citizen	590x
Testimony submitted by Julie O'Connor, Ph.D. Private Citizen	591x

TABLE OF CONTENTS (continued)**APPENDIX (continued)**

Testimony submitted by Heripsime Ohanian Private Citizen	592x
Testimony submitted by Brian Ostering Private Citizen	593x
Testimony submitted by Patti Packer Private Citizen	594x
Testimony submitted by Carol Paszamant Private Citizen	596x
Testimony submitted by Anthony and Tricia Peloso Private Citizens	597x
Testimony submitted by Alex Perla Private Citizen	598x
Testimony submitted by Laurie Perla Private Citizen	599x
Testimony submitted by Mike Perla Private Citizen	600x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Elizabeth Petersen Private Citizen	601x
Testimony submitted by Amanda Picker Private Citizen	602x
Testimony submitted by Kristin Star Picun Private Citizen	603x
Testimony submitted by Janet Piszar Private Citizen	604x
Testimony submitted by Kelly Pladeck Private Citizen	605x
Testimony submitted by Maureen Porcelli Private Citizen	606x
Testimony submitted by Patricia S. Porter Private Citizen	608x
Testimony submitted by Robert Puca Private Citizen	609x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by John Radzniak Private Citizen	610x
Testimony submitted by L. Ralph Private Citizen	611x
Testimony submitted by Joann Ramos Private Citizen	612x
Testimony submitted by Leah Reedy, M.S., CCC-SLP Private Citizen	614x
Testimony submitted by John Rello Private Citizen	616x
Testimony submitted by Joy Rizzo Private Citizen	617x
Testimony submitted by Martha Romano Private Citizen	618x
Testimony submitted by Linda Rossin Private Citizen	619x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Blaine Rothauser Private Citizen	620x
Testimony submitted by Julie Sacco Private Citizen	621x
Testimony submitted by Jan Schwartz Private Citizen	622x
Testimony submitted by Mary Sepede Private Citizen	623x
Testimony submitted by Roberta Shields Private Citizen	624x
Testimony submitted by Jeff Sickles Private Citizen	626x
Testimony submitted by Herbert Skovronek, Ph.D. Private Citizen	628x
Testimony submitted by Art Slott Private Citizen	629x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Ann Smulewicz Private Citizen	630x
Testimony submitted by Ruth S. Snediker Private Citizen	631x
Testimony submitted by Sara Soens Private Citizen	632x
Testimony submitted by Claudette Stulz Private Citizen	633x
Testimony submitted by Wendi Swaffield Private Citizen	634x
Testimony submitted by Jeanne Sylvester Private Citizen	636x
Testimony submitted by Catherine Tamasik Private Citizen	637x
Testimony submitted by Kyleigh Tangen	638x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Dana Teschlog Private Citizen	640x
Testimony submitted by James Tomori Private Citizen	641x
Testimony submitted by Robin Trynin Private Citizen	642x
Testimony submitted by Gayle Tunstead Private Citizen	643x
Testimony submitted by Terry Vaccaro Private Citizen	644x
Testimony submitted by James Van Duyne Private Citizen	645x
Testimony submitted by Nina Van Duyne Private Citizen	646x
Testimony submitted by Alicia Van Sant Private Citizen	647x

TABLE OF CONTENTS (continued)**APPENDIX (continued)**

Testimony submitted by Virginia Vassey Private Citizen	648x
Testimony submitted by Georgeann Ventola Private Citizen	649x
Testimony submitted by Donna Wallace Private Citizen	650x
Testimony submitted by Kirsten Wallenstein Private Citizen	651x
Testimony submitted by Gail and Doug Wallis Private Citizens	652x
Testimony submitted by Sharon Wander Private Citizen	653x
Testimony submitted by Marissa Weber Private Citizen	657x
Testimony submitted by Jacquelyn Wenzel Jungkunst Private Citizen	658x

TABLE OF CONTENTS (continued)

APPENDIX (continued)

Testimony submitted by Shari Wexler Private Citizen	660x
Testimony submitted by Michelle Weyler Private Citizen	661x
Testimony submitted by Beverly Wilke Private Citizen	662x
Testimony submitted by Mike Wojciehowski Private Citizen	663x
Testimony submitted by Bill Wolfe Private Citizen	664x
Testimony submitted by CK Yoe Private Citizen	669x
Testimony submitted by Jennifer Zarcone Private Citizen	670x
Testimony submitted by Tamir Zomer Private Citizen	671x

Testimony
submitted by
Maria Teresa Zuger
Private Citizen

672x

Additional Testimony
submitted Anonymously

673x

mej: 1-85

SENATOR BOB SMITH (Chair): Jim Kennedy is stuck in traffic, and, I can personally attest to it. I was trying to be down here at 9:30 today -- left at 8:30 -- it's a 60-minute on-the-button kind of thing, and it took an hour and a half. Route 1 had lots of problems today, for whatever reason.

So, Assemblyman Kennedy said, "Get us started on time, and I'll join you as soon as I get through the traffic." So, I don't think we have to take roll -- it's a hearing -- but, it would be great if we could introduce ourselves. And, I don't know all of the Assembly members.

So, why don't we start on the very end, and if you would introduce yourself and where you're from, that would be great.

MR. HARKNESS: Sure.

Dave Harkness with the Assembly Republican Office.

ASSEMBLYMAN SCHARFENBERGER: I'm Gerry Scharfenberger, Assemblyman from LD-13.

ASSEMBLYWOMAN HAIDER: Assemblywoman Shama Haider from LD-37.

ASSEMBLYMAN STERLEY S. STANLEY (Vice Chair): Assemblyman Sterley Stanley from the 18th District.

SENATOR SMITH: Yes, staff, too. Let's all get to know each other.

MS. CALVO: Carrie Anne Calvo, I am with the Office of Legislative Services.

MR. ALOI: Sam Aloi, Assembly Democratic Office.

SENATOR SMITH: Back here?

MS. THEODORE: Elizabeth Theodore, also Assembly Democratic Office.

SENATOR SMITH: Great.

MS. BERRIOS: Melissa Berrios -- oh my God -- Office of Legislative Services.

SENATOR SMITH: OK.

Bob Smith, Senator.

DR. GURRENTZ: Joey Currentz, Senate Democrats Office.

UNIDENTIFIED SPEAKER: (indiscernible) Senate Democrats Office.

MR. HANSEN: I'm Eric Hansen, Office of Legislative Services.

SENATOR STANFIELD: I'm Jean Stanfield, 8th Legislative District Senator.

MS. PANITCH: I'm Rebecca Panitch with the Senate Republican Office.

SENATOR DURR: Senator Durr, 3rd Legislative District.

SENATOR SMITH: Great.

So, we're here to listen.

A little background for everybody: More than a year ago, we asked many of the prominent leaders of our environmental community to help us. And, the help is to gather information -- hopefully policies that the people of New Jersey could support -- with regard to our public forests in the State of New Jersey.

And, every once in a while during the year, they would check in. Seems to me that more than 600 people participated in this process. Over a

year, there were many, many, *many* meetings in an attempt to try to find consensus on policies and also identify items that don't have consensus.

So, we're basically here to listen.

And, I do want to publicly thank the four co-chairs who headed this Forestry Task Force, namely Andy Bennett from the New Jersey Forestry Association; Tom Gilbert from the New Jersey Conservation Foundation; Eileen Murphy from New Jersey Audubon; and, Anjuli Ramos, Sierra Club.

They put in countless hours, and I know that you all have families and other real lives to participate in, so it was wonderful that you could devote all the time that you devoted into putting together the task force findings and recommendations.

And, I had a chance to begin reading this 270-page document last night. I got about an hour into it, and I was really impressed by how inclusive the document was. If you get a chance to read it, you really want to read it, because every -- as far as I can tell, everybody's point of view was in there. You actually could say, "Let's not have a hearing today because we already know what everybody is going to say," and, that's not really true.

We really need to educate the Legislature, which is really why we're here, and, hopefully at the end of -- we're going to continue to get input for the record. And, I mean for the record; there's a court stenographer recording everything everybody says. So, no bad words today, all right?

But, Number 2, the record is being kept open for another three weeks. So, if you want to put in additional information for all of us to consider, we'll happily do that. And, I'm hoping sometime months from now -- sooner, if possible -- we're going to put together forestry legislation that

hopefully will set policy for our public forests and hopefully do other good things to help the forests, because they do need a lot of help.

So, with that being said, New Jersey Forestry Task Force is at bat first. What did you find out? What were consensus items? What were not consensus items? And, especially, tell us about the process.

I mean, I want people in this room to know how much you suffered, all right. So, the legislators can say, "This sounds -- it's maybe the real deal."

Who is going to be the first? Eileen?

UNIDENTIFIED SPEAKER: We're going to introduce ourselves and--

SENATOR SMITH: Tell me how you wanted to do it.

UNIDENTIFIED SPEAKER: We're going to introduce ourselves and our organizations, and then I'll start with the process.

SENATOR SMITH: Go ahead; go to it.

A N D Y B E N N E T T: Well, good morning.

My name is Andy Bennett. I am a Director of the New Jersey Forestry Association. For nearly 50 years, the Forestry Association has promoted responsible and sustainable forest stewardship on both private and public lands. The Association is dedicated to the wise use, conservation, and scientific management of New Jersey's forest resources, both now and for future generations.

In my day job, I am a consulting forester, serving more than 750 landowners in northern New Jersey who collectively own more than 35,000 acres. I also have the great honor of assisting my family in stewarding our 450-acre farm in Sussex County, which includes about 400 forested acres.

And, lastly, I do all this with lots of help, including my wife and my four kids. As foresters, we're trained to think 20, 40, 60, 100 years down the road – which, at times, can be challenging, but I have found that I'm thankful for my kids, because parenting -- we're investing in the future, and I think managing our forest resources is very similar. The decisions we make today are going to have an effect 50 years, 100 years down the road. That's what we're here to talk about.

So, Chairman Smith, thank you for inviting the Forestry Association to be part of this, to be on the Task Force -- but, not only that, to be a Chairman on the Task Force. So, I have thoroughly enjoyed it, and I would just qualify it with "for the most part." Like you said, it wasn't always amazing, but it was a lot of fun. I learned a lot, and I just want to commend these three -- these folks were awesome. I was usually -- when the four of us met, make no mistake, I was the idiot in the room. These guys are awesome. They're smart; they're intelligent; and I'm grateful for having done this with them.

So, thank you.

T O M G I L B E R T: Good morning.

Hi, my name is Tom Gilbert, and I'm Co-Executive Director of New Jersey Conservation Foundation.

And, we work to preserve land and nature for the benefit of all New Jerseyans -- rural, urban, and suburban -- because it is critical to our health and our quality of life for present and future generations.

We've preserved over 140,000 acres of open space and farmland throughout the state since 1960, and we support sensible policies to protect natural resources and address the climate crisis.

I also want to note that we own and manage 17 preserves around the state, many of them which are forested -- that total over 27,000 acres of land. And, that includes over 11,000 acres at our Franklin Parker Preserve, which is in the heart of the Pine Barrens, where we work with the DEP and we do prescribed burning to reduce the risk of catastrophic wildfire and also to sustain the Pine Barrens ecosystem.

Senator, I just want to thank you for your leadership in calling us together to focus on these important issues.

I also want to thank and commend my fellow Co-Chairs; I could not say enough good things about, kind of, how we all dug in together and worked hard to find common ground.

I want to thank all of the participants of the Task Force -- the many participants, many hours. And, everyone really had the same goal in mind. We didn't always agree on every detail, but everyone was really committed to finding a better future for our public forest land.

So, thank you.

A N J U L I R A M O S - B U S O T: Good morning, everybody.

My name is Anjuli Ramos, and I am the New Jersey Chapter Director for the Sierra Club.

The Sierra Club is the most enduring and influential grassroots environmental organization in the United States. The New Jersey Chapter - - 80,000-plus members and supporters -- are a powerful force working to defend our right to a livable environment.

A little bit of our mission: To explore, enjoy, and protect the wild places of the Earth; to practice and promote the responsible use of the Earth's ecosystems and resources; and, to educate and enlist humanity to

protect and restore the quality of the natural and human environments. For over 125 years, Sierra Club members have worked to protect the Earth's vital resources, natural beauty, wild creatures, and scenic landscapes.

I just want to thank Senator Smith for your leadership for creating this Task Force. It's a lot of work, but we are very thankful for that, because we think that we're moving forward.

And, I also want to thank my fellow Co-Chairs. I want to echo what Andy said, except for that we were the only smart ones -- he is also very smart.

And, I want to echo Tom's comments. This process was very long. A lot-- A big commitment that we are very grateful to everybody who participated, because it definitely developed the conversation we have, really, the framework. And, we learned a lot in the process.

And, thank you everybody for being here and for listening to us.

E I L E E N M U R P H Y, Ph.D.: Thank you.

And, finally, I am Eileen Murphy. I am Vice President of Government Relations at New Jersey Audubon. I've been here for about three years. I have a Ph.D. in Environmental Science, but it's not in forestry. I work on contaminants in drinking water and spent 21 years at New Jersey DEP doing drinking water research -- for a little bit about me.

New Jersey Audubon is privately supported. We're the oldest independent Audubon in the country with over 25,000 members. We were established in 1897. We have an education department; a research department; government relations; and a stewardship department, all doing on-the-ground work to connect people to nature. We maintain stewardship of 34 sanctuaries and we conduct our education program at seven staffed

facilities. We're committed to the preservation of natural habitats and the protection of birds, mammals, and other animals and plants -- especially threatened and endangered species.

And, the four of us, when we initiated this endeavor, we didn't know each other well. We knew each other by reputation, and we were aware of our organizations' contentious relationships on this particular issue. But, over the course of the past year, we as four Co-Chairs have come together in agreement -- not 100% on every issue -- but enough to work together to forward some good forest policies for the State of New Jersey.

So, I thank everyone, and ditto on everything that they said.

So, with that, I am -- I'm starting out, all four of us have different areas that we're going to present to you today. And, I'm going to focus on the process. And, I know that process can be boring, but it's very important to understand we are four nonprofit groups with zero capacity to run a stakeholder process of this magnitude the way that we might like to do it; the way that a government entity might do it. But, we did investigate Sunshine Laws; we investigated how government handles stakeholder groups, and tried to mimic it as best we could.

So, I am going to go into the process. You'll notice in some of the dissenting opinions there were some complaints about the process, so I think it's important to lay the baseline so that you're aware of what our intentions were; of where we pivoted when we thought we needed to pivot; and, where we landed.

So, just about a year ago, Senator Smith announced the creation of the Task Force. There had been four bills that were introduced in the legislature, and they were very controversial; there was a lot of opposition.

And, we think that this prompted this Task Force. Senator Smith and others wanted to know, "How pervasive is this opposition? What do you want, green community? What is it that we can do to keep our forests healthy?"

So, he brought us -- we four together, our four organizations who had varying, divergent opinions about this -- together to work with anyone else in the state with an interest to discover: Are there issues that we can agree on? And, if so, what are they? Specifically, his charge to us was to study and identify ways in which the State can best manage its forests in order to fight climate change; prevent forest fires; improve ecosystems; and protect soil and water quality among other things. And, that was our charge, and we stuck to it throughout the year that we worked together.

Early on, we created a Google account. We knew that there was tremendous interest in the state in this issue, and we wanted to be able to share materials. We wanted a neutral place not involved with any of our organizations where people could go to share information; where we could send emails and receive emails in a neutral way. So, we created a Google account. It had a YouTube channel, we recorded all of our meetings, we loaded them up on the YouTube channel, and we started to create distribution lists.

Senator Smith, you had asked some other groups throughout the state for their email lists. I believe the Highlands Coalition had had a forestry symposium with 600 people registered. We contacted all of those 600 -- they graciously shared that email list with us. New Jersey Audubon has a forestry webinar series, and we had an email list of about 200 that we actively engaged. And, then, other professional associations and other academics, etc., where we went out to them and invited their participation.

In addition, again, anyone with an interest -- not necessarily an expertise, but an interest in forests in New Jersey -- was invited to write to the Forest Task Force email and say, "I want to be included in the distribution list." Whether they wanted to be active participants or passive participants didn't matter; if they were interested and sent us an email, they were included on the list.

So, by April -- this all started in February -- we had 1,200 email addresses on our distribution list. This is a lot, and it was a wide variety of people throughout the state who were professional practitioners; academics; conservation groups; advocacy groups; and many members of the general public -- residents who had an interest in healthy forests in New Jersey. So, given this number, we thought, "How are we going to establish what the most important issues to 1,200 people are?"

So, we did have a general idea of what the important priorities are in this state, and we developed a survey. In this survey, we listed 11 different potential forestry policies like deer control, invasive species, biodiversity, climate-change impacts, and sent that survey out to the list of 1,200 people. Four hundred and thirteen responded to that survey, and we took a look at it, and said, "OK, what are the results telling us?" There were 11 priorities. Are we going to have 11 work groups to look at all of these different priorities, or something else? Well, what it turned out is that the results seemed to center around two main issues: climate change and ecological health. So, we created two working groups: a climate working group and an ecological health working group and proceeded from there.

Throughout the rest of the discussions, that survey that established priorities for the state informed how we moved forward. Initially

-- and, maybe naively -- we sought a consensus approach. We wanted to find where 95%, 80% of the participants could land on certain issues. We learned early on that that was a very high bar, given the group that was this large and this diverse. Ultimately, we pivoted to looking at broad agreement rather than formal consensus -- again, given the size of the participants and their diversity of opinions.

I will say, though, there is one area where there is 100% consensus, and that is every single participant cares about New Jersey's forests. They do. Where we diverge is how to get there. So, I did want to point that out; we have that 100% consensus issue. Yay.

(laughter)

We also wanted -- we wanted to empower the participants as much as possible, so we determined we were going to have a proposal-solicitation process, whereby we are asking the participants to send proposals to us and gave them a set of criteria for what would be a good proposal for discussion by the larger group. And, that is, provide a proposal where there is one clear recommendation that can later be transferred into legislative action. So, one idea at a time. We didn't want five ideas in one proposal; we were really looking to break this apart so that we could have discussions. So, we created almost like an RFP -- a call for proposals -- with some guidance and described that process.

So, with our ideas of having consensus and with this proposal and the two work groups, we scheduled our first meeting -- our kickoff meeting on April 28. Four hundred people registered for that initial meeting, and 338 attended. That's 338 little squares on Zoom. So, you know, we

wanted to make sure that all of those squares had an opportunity to speak if they wanted to.

So, the way we set it up: We invited anyone who wanted to speak to let us know if they wanted to speak at that meeting; 125 people did, so we -- that's a lot of people to speak at a public meeting -- so we gave them two-minute limits. We set it up so that if you want to speak, you can, but it'll be two minutes just for time constraints. And, if you didn't sign up to speak but later you determined you want to, you had an opportunity then, too. After all the people who registered, then we started calling on other folks using the "raise hand" feature of Zoom. We established some rules for engagement for Zoom. I don't know if many of you are aware of Zoom -- there can be interruptions, there can -- you really need to establish some housekeeping rules, which we did. We established rules of engagement which, for the most part, the participants abided by. Again, people wanted this to work. People were interested. There were high passions, and also high interest.

We established our -- we described the consensus approach at that initial meeting, again, thinking that that's the way we were going to go, and then we invited comment. After the initial meeting, we scheduled two meetings every other week: One for the climate group, and one for the ecological health group, and some of the people attended both. For others, they attended one or the other. And, we had that schedule all the way through December. So, it's over 30 meetings of two hours each, *minimum* -- many meetings went over that -- and, in between these larger Task Force meetings, the four of us would meet once or twice in between to go over what

we heard; to go over the emails that people had sent us; and to discuss and hash out the issues that we heard.

Those early meetings -- we fought, the four of us. Sorry Tom -- I remember yelling at Tom--

MR. GILBERT: (laughter)

DR. MURPHY: --and apologizing later.

These were not easy meetings for the four of us, or for the larger Task Force. We all had closely held opinions about forest management, and we each wanted to convince the other that we were right. And, in fact, what we needed to do was come together.

We had described the proposal submission. We had two rounds of proposals. One hundred thirty-two proposals were submitted overall, and they kind of were categorized kind of similarly to our initial survey -- which isn't surprising: Deer management; planning; inventory; biodiversity; climate change; proforestation. These are all some of the common topics that we saw in the proposals that were submitted. So, what we did initially, again, was to invite proposal sponsors -- that is the people who submitted the proposals -- to come and present their idea to the larger group. Again, we were trying to empower the participants so that it wasn't always just the four of us bringing them ideas, it was the participants bringing ideas to the larger group.

We selected -- we had criteria for the proposals that we accepted for discussion, and then invited at first what we considered to be non-controversial proposals. We thought, "Let's stick with some easy ones and see how it goes." And, I'm glad we did that. (laughter)

Also, throughout the meetings, when necessary or when appropriate, we did invite New Jersey Department of Environmental

Protection representatives, for instance, to describe the current invasive species program; to describe their current mechanisms for deer control; to describe the current conditions of New Jersey public forests. We felt it was important for all of the members of the Task Force to have the same information from the entity that's actually responsible for regulating and implementing forest-management activities in the state.

The general meeting format of all of these meetings from April through December, the four of us co-facilitated discussions. Tom and I facilitated ecological health -- although we also attended the climate meetings -- and Andy and Anjuli facilitated the climate meetings, and they attended our meetings. We always went over the rules of engagement, particularly in those early meetings. We took advantage of technology using Zoom -- chat and Q&A features were available for all the participants to communicate with us, with the Co-Chairs. On occasion we used polling; sometimes there'd be some heated discussion on a particular topic, but, oftentimes, there was always at least 100 people at any given meeting. And, we would hear from 20 at a particular meeting, which would mean there were 80 people not speaking. So, in order to ascertain, "What are those other 80 people thinking?" we would occasionally use the polling feature in Zoom.

The attendees did decrease over time; that's not unexpected. Again, we had 338 at the kickoff meeting, and then we averaged in the hundreds for subsequent meetings. But, representation-- Again, anyone with an interest could participate and participate in the polling and in the surveys.

For organizations, though, we asked them to select a representative. So, one formal representative for their organization. Which isn't to say that if you had other board members from that organization they

could speak -- of course they could participate; they could do the polls. But, in our formal surveys -- we asked that those organizations -- only their representative to participate in the formals. Because we didn't want double counting. If you're a member of an organization -- a simple member of an organization -- that didn't count. So, for instance, at New Jersey Audubon there was a board member who was participating who was not our authorized representative. That board member could not participate in formal polling, but she could certainly speak at meetings and could participate in the informal polling. And, of course, individual residents could do all of the above.

The organizations really ranged from very small groups; environmental commissions; shade tree commissions; to regional groups, like the Pinelands Commission; to statewide groups like New Jersey Audubon, New Jersey Conservation Foundation; and, then, some national groups participated as well. So, we had high variation in the organization types and sizes throughout.

All right, so, at our first few meetings where we invited proposal sponsors to come and present some of their ideas, we noticed that, even though some of the topics seemed, in this discussion, to enjoy broad agreement, we couldn't get past certain issues. And, we spent some time the first four or so meetings trying to focus on the proposals that we had presented to the group. And, we learned that there were two issues that kept getting brought up, and it was an impasse -- we couldn't discuss any topic until we resolved these two topics: Proforestation and logging. So, I'm going to define proforestation and how we address that, and then I'll define logging and how we address that. In order to move us forward, we couldn't -- we just

couldn't talk about anything else in the beginning, so we felt, "Let's tackle this head on so that we can talk about other things."

So, proforestation is defined in the New Jersey DEP Forest Action Plan, and elsewhere, "The practice of growing a forest and keeping it intact in order to maximize its ecological potential." So, to address this, there was a paper -- this proforestation term was coined by Professor Moomaw and some of his colleagues in a paper, perspective paper, in -- What was it in? -- *Frontiers for Global Change* under the journal section of "Tropical Forests." This appeared in 2019. So, we invited Professor Moomaw and another author on his paper, Ed Faison, to do a panel presentation here for us in New Jersey. We also invited one of the forest ecologists that they cited in their paper frequently, Keeton -- Bill Keeton -- to be a panel member; and, then, a fourth person, Tony D'Amato, who is a leading expert on silviculture and climate change in proforestation. So, we have four panel members not from New Jersey to come to speak to us about the general issue of proforestation. And, then, we followed that with Q&A from all of the participants who wanted to attend. So, 125 people attended that particular webinar. We recorded it, put it on the YouTube channel, and shared that.

To address logging -- first, to define it. "Logging, or harvest, is the removal of trees for wood fiber use and other multiple-use purposes." And, this came up quite a few times, too. To address this, we did a survey, and in the results section that's going to be presented later, you'll see the results of that survey. We just wanted to know, of the group of common participants, of those 100 people who have been attending all of the meetings, what are your thoughts about this? And, that will help inform the direction that we take our future meetings.

We also -- in addition to that survey -- we dedicated two full, two-hour meetings -- I believe both of them went over two hours -- to this discussion of logging, with the caveat that we would move forward on the other topics that were introduced to us through the proposal after that. Again, this is the opportunity to talk about logging, and then we don't want to talk about it anymore. Let's talk about it, we're going to give it its due, but there's so many other issues we need to address. That was -- that's how we presented it to the group.

Both topics, however, continued to be raised at every meeting, preventing discussion on other issues like reforestation, urban forestry, and other ideas that we thought might be priorities, and for which proposals were submitted. They did continue to be raised all the way into December, and, that was their right. If a person raised their hand in Zoom and wanted to make a comment about that, of course we allowed it, because this was a participatory process. However, by the summer, we realized we were not going to move forward either with consensus or with our proposal ideas, so we pivoted.

By now, we had information from the survey and from the proposals that were submitted. We had a general idea of what topics seemed to be important to the participants: things like deer control; invasive species. So, we pivoted away from consensus more toward broad agreement and away from the proposal and into a framework, a conceptual framework. We developed a conceptual framework, our very first draft, and sent it out to the group in a survey fashion. We went over it in a meeting, in both the climate meeting and ecological health, and invited clarifying questions and comments and then invited comment on each individual point within the framework

and on the framework as a whole. We did this three times; each time we received really thoughtful comments on all of the issues in the framework. A lot were contradictory from each other. I want to make that point because I think when you give a comment and you feel it wasn't addressed or you think we ignored it -- no, it kind of means that there was another comment in direct contradiction, and we had to kind of reconcile those two. We did this three times, and then we had a final format which appears in your report.

We were feeling pretty good, actually, at the end of this. The framework was generating some really good and thoughtful discussion, and four main areas were really making themselves present and we decided to focus our final meetings on those four areas. They were: fire, invasive species, natural areas and reserves, and deer management. We invited proposal sponsors to come and speak about those issues in particular, and those wound up being our favorite meetings of the entire Task Force. They generated so much great discussion, and a lot of agreement.

So we started with proposals, we pivoted to the framework, and then back to proposals. At the end, we did a final survey based on the framework. We had converted them from statements into recommendations because, after all, we are making recommendations. And, we sent a final survey. For this particular one, we asked for support or not support of the whole framework as a holistic piece, rather than individual recommendations, and *that* is what you are going to hear in the results.

And, unless any of the Co-Chairs have anything to add about the process, I'm going to move it to Anjuli, who will talk about the results.

MS. RAMOS-BUSOT: All right, thank you, Eileen.

So, as Eileen just mentioned, all of the numerous meetings, surveys, and feedback ultimately informed this framework that she just discussed.

And, also, mentioned by Eileen, the topic of cutting and removing trees -- reaching consensus and moving forward with our discussion was very difficult. So, therefore, in that effort to hear all views, two two-hour meetings -- as mentioned by Eileen -- were held to discuss issues surrounding tree cutting and removal of wood products. The sponsors of the proposals related to these issues were invited to discuss their proposals, and discussion was open to all interested participants. After hours of discussion, it seemed clear to the Co-Chairs that consensus among participants on the Zoom call would not be reached on these issues, no matter how many additional hours might be spent discussing them.

It was unclear what the majority view was, therefore, a survey using Google Forms was created and sent to all Task Force participants to understand the participants' positions on these issues. The results can be found on page 15 and 16 of the report that you all have, but, to make things easier, we are showing them here visually.

So, the first pie chart here that you can see is the results for cutting trees. So, essentially, we asked all participants, "Is this something that you never -- you don't want to see it ever happening," so never permitted, or, "Happening only for ecological health objectives for that particular forest," "For any reason," or, "Abstain," because we had a little bit of that. So, overall, the tree-cutting survey results show that a majority of respondents -- which is 83%, which is the addition of yellow and red -- supported allowing the cutting of trees to meet ecological objectives or other reasons. The largest

contingent, 66% -- which is in red -- supported cutting trees for only ecological health purposes, while a minority of participants -- 14%, in the blue -- indicated that trees should never be cut for any reason. Lastly, 17% in yellow responded that trees can be cut for any reason, including the generation of revenue.

The second question that we asked is with products. So, what does that mean? That means that if and when you need to cut a tree, are you OK with removing that tree from the forest, from the soil? So, overall, the wood-removal survey results showed that a majority of respondents -- 62%, which is the addition of the red and the yellow colors.

And, I want to clarify -- we think the 41% should be 42%. Sorry, that was typo. But, it is correct in your report.

So, supported -- so, this majority supported allowing the removal of wood to meet ecological goals or for other reasons. The largest contingent in the red color, which is the 42%, supported the removal of wood only for ecological health purposes, while 36% in the blue color of participants indicated that wood should *never* be removed for any reason. And, 20% in the yellow responded that wood could be removed for any reason, including revenue generation.

So, I want to emphasize again that these surveys heavily informed how we were moving forward with the framework. This is the opinion of all of the Task Force members that were actively participating in all of these meetings.

So, as previously mentioned by Eileen, for the draft frameworks, the co-chairs asked participants to provide input on each individual recommendation. However, the final version, the co-chairs asked

participants if they could support the framework as one comprehensive recommendation rather than 16 separate parts. The rationale for this was to develop a holistic approach to sorting New Jersey's public forests rather than 16 specific recommendations found in the framework. This approach also acknowledged the idea that, along the way, the draft frameworks were being discussed and refined; compromises were being made on specific recommendations in order to move towards broad agreement on the full package of recommendations. The four co-chairs worked to be responsive and to reconcile different perspectives in order to build broad support for the recommendations. Our hope was that even if participants did not agree with every single recommendation, that they would support the holistic package because their priorities were concluded, one way or another.

However, we also understood that some participants would not support the entire framework, even if one recommendation was not exactly the way they wanted. The survey templates utilized to collect input of the three versions of the framework appear in appendix B of your report. By the end of the Task Force discussion, the four co-chairs reached consensus amongst the four of us on the entire framework informed by the active conversations at the Task Force meetings; all the participants' feedback regarding the individual frameworks' recommendations; and all surveys conducted.

The super majority -- which means two-thirds -- of participants supported the final framework recommendations. In total, 113 responses were recorded from organization representatives and individuals. There were 49 organizations with formal authorized representatives -- as Eileen described -- every organization had one representative. Yes, and 64 individual New

Jersey residents responded to the survey. Responses from organizations and individuals resulted in the same level of support: 67% supported the framework, while 33% did not.

And, the following visual is the display of organizations and individuals. And, as you can all see, it's the same results as I just mentioned for both -- 33% of organizations did not support, as well as for individuals, and 67% of individuals and organizations supported the framework. And, below that, you have the total in numbers, not percentages.

Bear with me, too many pages.

Yes -- so, in the interest of time, I am only going to list the organizations that supported and not supported, not the individuals -- it's a total of 64 individuals. So, I am going to start with the organizations that did not support the framework. These are a total of 16 organizations: Animal Protection League of New Jersey; Empower NJ; Environmental Education Fund; Friends of Drew Forest; Great Swamp Watershed Association; The Highlands Coalition; League of Humane Voters; New Jersey Environmental Lobby; NJ Forest Watch; New York-New Jersey Trail Conference; Passaic River Coalition; Rich (indiscernible) Conservancy; Sourland Conservancy; Support Roaring Rock Park; Thonet Associates; Woods & Wayside.

The organizations that supported the framework -- 33 of them: Allegheny Society of American Forests New Jersey Division; Appalachian Mountain Club; Association of New Jersey Environmental Commissions; Beaver Lake Realty Company; Duke Farms; Friends of Hopewell Valley Open Space; Great Egg Harbor Watershed Association; Hackensack Riverkeeper; Lebanon Township Environmental & Open Space Commission; Monmouth County Audubon; Morris County Park Commission; National Wild Turkey

Federation -- New Jersey Chapter; New Jersey Nursery and Landscape Association; New Jersey Outdoor Alliance PAC; New Jersey State Federation of Sportsmen's Clubs; New Jersey Tree Farm; Ocean County Department of Parks and Recreation; Pinelands Preservation Alliance; Princeton Environmental Commission; Princeton Shade Tree Commission; Raritan Headwaters Association -- almost there; Raritan Township Environmental Commission; Somerset County Parks; The Nature Conservancy; The Wildlife Society -- New Jersey Chapter; Tri-County Sustainability; Union County Parks; USDA NRCS -- New Jersey State Office; UU FaithAction NJ; and, of course, the support of our four organizations: New Jersey Audubon; New Jersey Conservation Foundation; New Jersey Forestry Association; and the New Jersey Sierra Club.

So, with that, those were the results for both the key survey that we conducted regarding the issue of logging, and the results for the overall framework that we present as a holistic package for the Legislature to move forward.

I just want to add one note. When we go into discussing the framework, you will see that all recommendations kind of depend on each other, and it makes sense to propose this as a full package.

And, with that, I'll leave it to Andy.

MR. BENNETT: OK, thank you Anjuli -- and Eileen.

So, Tom and I are going to just briefly summarize kind of the high points of both the supporting and dissenting opinions.

So, I'm referencing page 11 if you're looking at your book there. So, page 11 at the top talks about the main topics in the supporting opinions.

So, we just kind of sifted through and pulled out a couple that seemed to be kind of recurring themes of those who were in support of the framework.

The first one was the most common topic from participants who submitted supporting opinions, concerned ensuring adequate funding for resources and staff to New Jersey DEP to carry out the recommendations in the framework. So, funding.

And, Number 2, overall supporting commenters thought the process used by the co-chairs was robust and fair, and, given the large number of participants, the optimal way to identify and categorize consensus and non-consensus participant opinions about forest protections and forest management in the state.

MR. GILBERT: OK, thanks, Andy.

So, I'm going to summarize some of the main dissenting opinions that were registered.

The first was the issue of logging, which Eileen described, and Anjuli in the survey as well. And, concerns raised by some participants about any removal or sale of wood products and concern that that was occurring on state land, should not be.

Second, we also heard numerous concerns about one particular forest-management plan, the Sparta Mountain Forest Management Plan, which is a State wildlife management area in the northwestern part of the state, was mentioned repeatedly as an example of the logging concerns that we noted.

Third, the issue of climate change. So, we did hear from some participants who felt that climate change, specifically carbon sequestration and storage, should be the primary focus, the primary goal for management

of our public forest lands. There were some who felt it should be really the sole consideration; a little bit of both; and that other considerations, such as biodiversity, wildlife protections, water quality, climate resiliency, and other ecological goals should be subordinate to a focus on climate change.

Some participants called for a moratorium on any new or existing forest-management plans on state lands, and they urged that a moratorium be put in place indefinitely, or until the Task Force report was finished.

As Eileen noted, there also were concerns raised about the process itself that we undertook. Some participants felt like we should have spent more time discussing and debating science -- the science behind forest ecology, forest (indiscernible), forest management. Some felt that we should have been actually taking votes on specific elements -- something we considered but, ultimately, dispensed with because frankly it's just too complicated to figure out how to do it in a way that people (indiscernible).

And, also, the issue of proforestation. Some felt they wanted the term proforestation to be used specifically in the final recommendations.

So, those were the main things that we heard. I'm sure that we'll hear some additional issues from the second panel. We would just note, also, that many who dissented did not -- they supported some aspects of the framework, but there were other aspects of the framework that they had issues with. So, in some cases, there wasn't -- it was sort of a mixed bag in terms of their feeling on the several recommendations.

MR. BENNETT: OK, moving right along here.

Once again, I'm going to just reference a page; this is page two. I would like to read the co-chair statement.

And, I just want to emphasize, this is-- You've heard this from each of us already, but we are obviously four very different people from four very different organizations with differing ideas of how to do all this; different backgrounds; different experiences; etc. But, we worked very hard to stick together, the four of us, and I think this statement -- we each worked on this statement together and apart. So, this represents the four of us very well.

So, like the Task Force participants, the co-chairs came into this process with very different backgrounds and perspectives on these issues. However, through many hours of discussion with the participants, agency, and academic experts and each other, we reached agreement on a comprehensive high-level framework to guide the protection and management of New Jersey's public forest lands. Finding common ground was not easy given the passionate and divergent views on these issues. But, through healthy give and take, we crafted a framework that enjoyed support from two-thirds of the many organizations and individuals involved.

We are united in our belief that these recommendations, if adequately funded and implemented effectively through legislation and rulemaking, will result in significant steps being taken towards better protecting and stewarding our public forest lands. These recommendations acknowledge the vital role the forest must play as part of the State's response to the climate crisis, while also recognizing the equally important goals of ecological health, biological diversity, clean air and water, and recreation opportunities in the most densely populated state in the nation.

And, lastly, these recommendations acknowledge the deep, intrinsic value of our forests apart from human use.

We're going to shift now to what I would kind of call -- to us, it's kind of like the crown jewel of our report, is the framework you've been hearing about. And, the framework is made up of -- we're going to walk through these 16 different recommendations, OK.

But, before we get into this, I would like to make an appeal to everyone. And, Anjuli mentioned this; I think Eileen did, too. But, it would be easy to view these 16 recommendations almost as if they're items on a menu that you get to choose from. I like Number 1, I like Number 6, I like Number 13, but I don't like Number 4 -- I would refrain from doing that, because what I'd like you to understand is that's not how this was put together. This was put together as a cohesive kind of package. And, I would equate it to the game of Jenga. We like to play Jenga in our house with our kids, but all the blocks kind of work together to build this tower, right? When you start to pull a block out, that's when the thing gets unstable.

So, these recommendations really lean into each other; they build off of one another, and they're meant to be looked at as a package, as one unit. So, I just wanted to make that clear, that -- don't look at it as a menu; it's one package, that's how we're going to be discussing it today, OK?

Thank you.

MR. GILBERT: Thanks, Andy.

So, we're going to move into the recommendations now.

Just, a little bit of context first. So, again, our charge was to focus on New Jersey's public forest lands, not the entirety of New Jersey's forest lands. And, just for context, according to the most recent State Forest Action Plan, New Jersey has just shy of 2 million acres of forest land, which is 40% of the state's land area. Forty-eight percent of those forests are privately

owned, and that was not the focus of our deliberations. Of those remaining forests, 31% are owned by the State, 14% by the counties -- by counties or municipalities -- and 7% by the Federal government. There's a certain amount in there that's also held by private land concerns, such as ours, as well.

So, just wanted to put that out there to set the stage and remind everyone that what we're talking about are recommendations for our public forest lands only.

So, the first recommendation is that the New Jersey DEP should be directed to initiate and conduct a statewide planning and mapping process for our forested public lands in New Jersey. And, that process should be based upon the best available science and data. And, in some cases, that would require some additional inventories of significant biota, as needed and feasible. The planning process should be directed by a scientific advisory panel, and it should require public participation throughout the process. We recommend that it focus first on State-owned lands, and then be extended to significant forested parcels of county, municipal, and other lands acquired using State funding.

Secondly -- and this can almost be a recommendation in and of itself -- we recommend that the planning process identify places of historical, cultural, and spiritual significance for indigenous people. And, we did have participation from Chief Mann, who is Turtle Clan Chief of the Ramapough Lenape Nation, and they did educate us about the importance of identifying and protecting ceremonial landscapes that are important to their people and scattered throughout our public and private forest lands. And, most of them are not identified or protected in any way.

So, that's the first recommendations, if any of my co-chairs want to add any.

The second recommendation is that DEP should be directed to commence a formal rulemaking process for the development of forest-management plans on public lands. One of the things that we learned -- and, we actually had a subcommittee of folks who really dug in to try to understand what rules and regulations apply to our public forest lands -- and, one of the things we learned and kind of came to agreement on is that outside of natural areas, in the Pinelands for example, there are no formal rules or regulations governing forest-management plans on our public forest lands. The DEP does follow a 14-step internal process for forest-management plans, but that process does not exist in statute or rule. So, it could be changed, by a future administration for example.

And, everyone agreed there should be -- these are our public forest lands we're talking about, and there should be a formal process governing forest-management plans on our public lands. It should be done in accordance with the New Jersey Administrative Procedures Act, and it should be done within three years, which I neglected to note. The planning process that I referenced in Recommendation 1 -- our feeling is that that should be completed within three years as well. This is a significant undertaking to map, analyze, plan for the entirety of our public forest lands. The rulemaking process should be on a similar timeline and be informed by that planning process.

If anybody wants to add here?

DR. MURPHY: Yes, just one thing.

We emphasize (indiscernible) of robust public process to be inherent in this rulemaking. And, that came up quite a bit--

MR. GILBERT: Absolutely--

DR. MURPHY: --during our discussions, and we need to include that here.

MR. GILBERT: Right.

Of course, the Administrative Procedures Act would require that. But, it's an important point to highlight, Eileen.

The third recommendation is -- again, recognizing that the first two steps are going to take quite some time to do them right -- is that there should be an interim rulemaking, completed within a year, that would govern how forest-management plans are developed while this longer planning and rulemaking process is being carried out. Again, that should follow the New Jersey Administrative Procedures Act. It should apply to state lands, as well as significant forested parcels of county or municipal lands.

And, then, second, we had some conversation -- OK, so what happens during that one-year interim period? And, we agreed that once that rulemaking process begins, any newly initiated plans should not be approved, either for that one-year period or until the rules are adopted -- whichever comes first. So, we couldn't have an indefinite delay, so, we agreed on a one-year period, and the hope would be that the Department would be able to do an interim rulemaking within a year to at least have a sufficient process to govern the development of forest-management plans while the lengthier planning and rulemaking process was being carried out.

And, also, we thought there should be some exceptions to deal with, obviously, any emergency scenario; to deal with fire management; to

deal with invasive species. There should be some exceptions if there's a need for new management activities for those circumstances in the interim, those should be permitted.

If anybody wants to add something here.

MR. BENNETT: Just add one thing real quick.

So, we were specific about how we said this one-year kind of hiatus is on newly initiated plans. So, it's not going to interfere or interrupt with existing plans that are already in place and approved.

MR. GILBERT: Thanks, Andy.

The next recommendation is that the DEP should be directed to revitalize and implement the existing Natural Areas Program.

Just a brief word of background on this program if you're not familiar with it: It was established in 1961, later amended in statute in 1975, with a goal of protecting lands in a natural condition and in particular areas that support rare species. There are 44 natural areas around the state, with a total of over 40,000 acres. The problem is, the program is on life support. And, this is something that we heard from the DEP -- I mean, I think this was straight from their mouths in terms of the status of the program -- there hasn't been a new natural area designated since 2004. There's little to no staffing for the program. Many of the natural areas that have management plans, those plans are not being implemented. Many of the natural areas that have been designated don't even have management plans. There is a Natural Areas Council that has vacancies that have not been filled.

So, the program desperately needs to be revitalized with increased funding, staffing, and appointments to fill the vacant seats, in order to fulfill the original vision and mission of the program. We need

implementation of the existing management plans, and we need management plans for the areas that don't have them.

And, also, the planning process noted in Recommendation 1 should identify additional natural areas that should be designated on public lands, including, in particular, the natural heritage priority sites that are sites that are very important for biological diversity and are prime candidates to be considered as natural areas.

And, it goes without saying, all of this is going to require more resources, and this is going to be a theme throughout our recommendations. Many of these things that we're pointing to just simply won't happen without additional resources and staff (indiscernible).

MR. BENNETT: I want to kind of camp out here for a minute, because this was probably, for me, one of the most significant moments on this Task Force, was a meeting we had when we invited -- as Tom said, the DEP shared all this, kind of the current state of affairs of the Natural Areas Program, and they shared this information with us.

And, I'll be honest, I didn't know a whole lot about the program, but as I was listening, it was very discouraging because these natural areas are our kind of highest and best resource value areas. They're set aside for a particular reason, whether they have some endangered plant or rare plant species; endangered wildlife species; whatever it might be, they've set it aside. We've preserved it, we've protected it, we've set up a plan on some of them - - we don't have a plan on any of them -- but, then, the worst part is none of the plans have been executed. None of the plans have been carried out.

So, what does that mean? Well, we know that a natural area or any forest, it's dynamic -- it changes every day, right? There's always things

happening. So, just preserving that natural area doesn't mean that it's going to exist just like that in perpetuity. It needs maintenance, potentially; it needs care.

I'll use a quick personal example. On my family property, we have a conservation easement with the USDA because we have the endangered species the bog turtle on our property, OK. We regularly go in and do some maintenance and manipulation of vegetation to make sure that that habitat continues to work for the bog turtle.

So, these natural areas are no different than that. They need maintenance; they need help. And, as Tom said, we're going to get to that. Recommendation 16 is all about funding. And, to give you a real-life example of that, you've heard of the Atlantic White Cedar Restoration Project that I believe has commenced. That's a project covering 10,000 acres to restore and help an ecosystem that's very uncommon, very rare -- \$20 million over 10 years, over 10,000 acres. That's what it takes for the Atlantic White Cedar Project. So, it's not a small amount that is going to be required to treat these areas and to care for them properly and steward them.

And, in summary, I just would say we've been asleep on the job, so to speak; we've neglected it. And, I think, to DEP's defense, I've met a lot of their people -- they have some really good people. But, the common theme is they're short on bodies and they're short on resources. So, I think that Recommendation 16 is going to be very, very important as part of this package.

DR. MURPHY: OK, continuing to Recommendation 5.

The DEP should be directed to identify areas where afforestation and reforestation should occur on public lands. It should be done as part of

the inventory and planning process, and informed by that process, and should include measures needed to ensure success consistent with our carbon sequestration goals that are identified in the New Jersey DEP Global Warming Response Act 80 by 50 Report, which includes reforestation and afforestation.

And, I just want to reference that 80 by 50 Report, because a lot of the recommendations in that report are consistent with our recommendations. I wish we could have spent more time on this report, frankly, talking about climate -- we didn't, but I want to point out their recommendations on afforestation; reforestation of pasture and crop land; reforestation of wetland and other lands; urban reforestation; and, agri-forestry. All four of these tasks are very doable in the State of New Jersey, and they get at this recommendation Number 5 that we show in our framework. So, I just wanted to emphasize that connection there.

The sixth--

MR. GILBERT: Eileen, can I add one thing real quick?

DR. MURPHY: Oh, I'm sorry, I didn't-- Yes.

MR. GILBERT: Super quick, just so people understand what the carbon goals are that are indebted in that DEP Global Warming Response Act Report.

They estimate that -- these are 2018 figures. New Jersey's land sector -- and, that's not just forest: forest, wetlands, ag. lands -- sequester the equivalent of 8.1 million metric tons of CO₂ equivalent, which is 8% of New Jersey's net emissions. So, it's not insignificant when you're talking about (indiscernible) net emissions. They also project that -- they count on maintaining that carbon sequestration across those various land types and

increasing it by up to 10.8 million metric tons, which would be a 33% increase. And, one of the most promising strategies to identify there is reforestation, as Eileen noted.

DR. MURPHY: Sixth.

The DEP should be directed to establish a new program within the agency to designate carbon reserves, as identified again through that planning process, with a primary goal of protecting mature forests and providing for future all-growth forests, as defined by the Science Advisory Panel, which we defined in the Recommendation 1, for the carbon benefit.

Now, this particular recommendation is our attempt to address the proforestation issue. Certainly, there are areas in the state that we should leave alone. We preserve those lands. Should it be every acre of forested land in the state? That might be where we participants disagree, but certainly some, and they should be reserved as carbon reserves.

So, that's -- this was our attempt to address that particular concern that we heard frequently among participants.

If anybody else wants to add to this.

MS. RAMOS-BUSOT: Yes, I just want to add that this recommendation, particularly, is something kind of new, because the DEP has not taken a look at forest management within the lines of climate change. So, setting aside carbon reserves is one of the most important recommendations, because it's just simply not been done before.

So, we feel very proud about this.

DR. MURPHY: Yes, that's a big one.

And, seven, the DEP should be directed to identify areas where active management is needed, to promote future carbon sequestration,

maintain biodiversity, and to address current and future threats to ecological health. It's kind of a compliment to the one before. In some areas, we want to leave alone, we want carbon reserves; in other areas, they need some active management in order to better sequester carbon, as well as maintain other ecological goals.

So, these are kind of like the yin and the yang of active management to proforestation, if you will.

Any comment?

MS. RAMOS-BUSOT: I want to add something.

I just want to add that whatever is set aside as a carbon reserve or as an area that needs active management, it'll all be informed based on the inventory, which is Recommendation Number 1.

So, that's truly what's going to dictate what needs help, what needs a little bit more management, or what has the potential for (indiscernible).

DR. MURPHY: Yes, and, also, I forgot to mention "active management" is listed as one of the techniques in that 80 by 50 Report for carbon sequestration active management.

And, then Recommendation 8--

MR. BENNETT: Can I just add one thing there, Eileen?

In particular, there's a lot of focus on the Pinelands, with regard to the need for dealing with a lot density of the forests in the Pinelands, and the risk of catastrophic wildfire as a result of that.

So, in a lot of respects, it's a carbon defense strategy, because if we have massive catastrophic wildfires, then that's going to result in a larger release of carbon and loss of carbon storage.

DR. MURPHY: Good point.

OK, and my final one is the DEP must recognize the importance of adaptive management during that inventory and planning process, and, I think Andy alluded to this.

As your land changes, your techniques to manage that land must also necessarily change. You adapt your management approaches over time based on new data and the changing circumstances of our forest.

And, we recommend that the planning and inventory be updated at least every 10 years. That's consistent with a New Jersey Forest Action Plan, which is updated every 10 years, so we wanted to be consistent.

So, after the first inventory and planning exercise, we propose that 10 years from then we re-visit it.

Any additions?

MS. RAMOS-BUSOT: Just one addition.

The adaptive management is especially important because of climate change. Our ecosystems are continuously changing because of the impacts of climate change, so we should always be looking at the new data and the new science so that we keep up and we manage the forests correctly.

MR. GILBERT: OK, moving right along, we're on Number 9 -- Recommendation 9.

It says the New Jersey DEP must recognize the significant variation in our forests, both on a macro level and micro level, as a guiding principle of the planning and rulemaking process.

So, this was just to acknowledge there's obvious differences between the Highlands and the Pinelands. But, it's even deeper than that. There's differences from county to county; from township to township; and

from property to property. It's very site specific, and that's what we're getting at here, is acknowledging those differences.

Good? OK.

All right, now we're going to move onto the next section of the framework. The first section -- what did we call the first section, guys? I can't remember. That was a long time ago--

MR. BENNETT: Statewide inventory--

MS. RAMOS-BUSOT: Inventory--

MR. GILBERT: OK.

So, statewide inventory and planning. This is more getting down, boots-on-the-ground, forest-management planning and implementation.

So, recommendation Number 10: New Jersey DEP must protect and manage New Jersey's public forest lands to maintain and enhance carbon sequestration and storage as necessary to advance State climate goals while advancing equally important goals of ecological health, biological diversity, climate resiliency, and protection of water and soil resources, while providing low-intensity, safe public recreation opportunities.

And, Tom kind of got at this when he was talking about the dissenting opinions. There were some folks who thought the focus of this should be solely on climate goals, but we kind of -- the supermajority was more in favor of, yes, climate, yes, carbon, but also all of these other things, right -- ecological health, biological diversity, etc., etc.

So, anything to add on 10, guys?

DR. MURPHY: Yes, I'll just add one thing.

We did also hear people wanted us to get specific about the tools that you use for forest management. Whereas, we thought that was better left to the science advisory panel and the experts that were implementing any of the management decisions that were made.

What we proposed here is that the goals -- the goals should be clearly established, and, then, the tools to reach those goals would be determined individually by each individual management plan.

MR. GILBERT: Yes, helpful point, too, I should have mentioned this.

As you continue reading, it says, "Planning and inventory should guide the prioritization of management goals in specific areas, recognizing that these goals would be achieved across the aggregate of acres owned by the State, rather than on one single acre." So, that's just acknowledging that on one single acre, you can't do everything, OK. There's tradeoff -- you have to pick one or the other. What are we going to focus on here or there?

OK, Recommendation 11. New Jersey DEP forest-management plans on public land must be developed in accordance with the process established through rulemaking noted in the previous section. So, nothing new there, we're just referencing back to Recommendations 2 and 3 which spell that out.

OK, Number 12. New Jersey DEP should continue to use fire as an important management tool based upon sound science. The most significant action the agency could take on this issue is to fully implement the Prescribed Burn Act, which outlines processes for the use of prescribed burning as an effective tool for forest management and public safety. So, this is -- I think when we think of fire, we think of prescribed fire; automatically

we relate it to the Pinelands and we think about catastrophic fire, reducing fire risks. But, there are instances where prescribed fire can be used as a management tool to promote a certain type of forest or whatever it might be. So, this is encouraging the forest fire service to utilize fire to train other people to use fire on the landscape.

Anything else to add, guys, on that one? (no response)

No? OK.

MS. RAMOS-BUSOT: OK, so, I am going to take you all through the last four recommendations. Recommendations 13 and 14 basically look at, specifically, into invasive species, and also the problem that we have in New Jersey with the abundant deer population.

So, Recommendation 13: The New Jersey DEP should be directed to amplify efforts to address the impacts of invasive, non-native species, including insects, animals, plants, pathogens, and microorganisms. These efforts include reconvening the New Jersey Invasive Species Council created in 2004 but currently dormant; very similar to the Natural Areas Program. And, charging them with abating and implementing a statewide and strategic plan to address the issue. The New Jersey DEP should develop regional collaborations with neighboring states, including Pennsylvania and New York, and other regions that have addressed this issue.

In addition, the proposals -- which you can all find in Appendix E in the report -- approved by the Task Force participants include directing the Legislature to do the following: Consider passing legislation that establishes and funds a youth conservation corps, with a focus on invasive species removal and increased funding for New Jersey DEP -- excuse me -- the

New Jersey Department of Agriculture Alampi Lab to expand their work on invasive species control.

On really good news on invasive species -- as we were finalizing our report, thanks to Senator Greenstein's leadership, as well as Senator Smith, they introduced a bill to do this same thing, which is to get a handle of the invasive species in New Jersey, to prohibit the sale of invasive species for residents in New Jersey. And, so, we were really, really happy. We created a separate -- with the Task Force, everybody was really eager to participate, everybody -- it was a consensus item, essentially, which we were really excited about that.

But, we presented testimony, and we were incredibly excited to see that right then and there during the Senate Environment and Energy Committee, the bill got amended to reintroduce the Invasive Species Council. So, it hasn't passed full legislature, but we're very excited and we're going to push that through. So, thank you Senator Greenstein and Senator Smith for that.

Recommendation 14--

DR. MURPHY: Oh, wait, I want to say one more thing.

MS. RAMOS-BUSOT: Oh, yes, please.

DR. MURPHY: I just wanted to add that the people who testified on behalf of the Task Force on that invasive species bill were participants. We didn't (indiscernible) -- it was participants in this Task Force that did that. We're so happy -- we were very, very pleased with that.

MR. BENNETT: Can I just--

DR. MURPHY: Yes, please.

MR. GILBERT: There's a couple specific things here that, I guess, are not addressed in that bill -- which is terrific -- that also are worth consideration, which is establishing and funding a youth conservation corps with a focus on invasive species removal and increasing funding for the New Jersey Department of Ag. Alampi Lab to expand their work on invasive species control.

DR. MURPHY: And, the Alampi Lab, for those of you who don't know, they focus on research on invasives. So, that's--

MR. GILBERT: Biological--

MS. RAMOS-BUSOT: Yes, biological -- thank you, Tom.

So, that's why it's very important to provide funding to this research place.

OK, so Recommendation 14: The New Jersey DEP should be directed to measure and reduce deer densities in our public forest lands to ecological sustainable levels, with guidance from the Science Advisory Panel. We are all very much aware that we have a deer population problem in New Jersey. It impacts us in our cars, but it also impacts our forests pretty significantly.

So, specifically, the New Jersey DEP should identify and implement new and innovative steps -- and, we say this because the actions that have been taken thus far are clearly not working -- such as establishing a pilot program for the commercial sale of venison; exploring the role of natural predators in deep forest; providing a stable source of funding for Hunters Helping the Hungry; implementing fertility control, including sterilization; and considering revisions to current guidelines on baiting and feeding -- for example, (indiscernible). New Jersey DEP should evaluate these and other

steps with public input and report back with recommendations to the Legislature within a year. We consider this a pretty significant issue, so we think that the New Jersey DEP can report back to the Legislature within a year.

I want to add, for a little bit of background: In many of our public forest lands, deer densities are as much as 10 times greater than is needed to ensure forest regeneration and the survival of native plant species. What happens is that when we are actively planting native species in our forests, they have the threat of deer eating them and not really providing the opportunity for these plant species to regrow. So, it's a very serious problem, and one that everybody faces within the forestry community.

Does anybody want to add anything? Co-Chairs? (no response)

Recommendation 15: The New Jersey DEP should not include commercial profit as a goal in any forest-management plan on public land. Commercial timber management should not be a goal for any forest-management plan on public land. Wood products can be sold in instances where cutting and removal of wood is a necessary part of the approved plan with ecological help, climate, or non-commercial goals.

So, what this does is if and when you have to cut a tree -- if and when you have to remove that tree -- this only allows for the commercial sale of that piece of wood, with the objectives of ecological health. That commercial -- making profit out of wood products should never be the objective of the (indiscernible) management plan. And, I'm going to provide an example of this. I think it was by Andy, Atlantic white cedar restoration. For the Atlantic white cedar to regrow effectively, you have to remove wood

from the soil. So, in this case, the ecological objective dictates that you have to remove the wood.

And, so, what do you do with that wood? You can compost it, which can release carbon to the atmosphere, or, other instances -- you don't want to throw it to a landfill, so, in those theories, special small instances, it is OK to sell that wood.

Recommendation 16: The Legislature and others must identify and implement funding mechanisms to ensure success of recommendations in this report. This gets to what Andy -- well, pretty much everybody was saying -- that this framework cannot be done correctly if the DEP does not receive funding so that they can employ staff to really do these -- conduct these programs and do these activities correctly.

Many elements and goals of this framework can now move forward without significant resources and staffing to the DEP. All recommendations discussed above require funding in the form of staffing and resources in order to be successful. Funding should include increased appropriations via the annual state budget; new state funding sources; external brands; programs; and, other government entities that can assist the agency in completing these goals. Specifically, and immediately, the legislature and agencies should direct funding from the Federal Inflation Reduction Act to advance initiatives in this framework. Proposals -- some of the proposals that actually, we reached consensus, which can be found in the appendix E in the report -- approved related to new funding sources include: Increased block rate pricing on water use to recognize the impact of forest protections on availability of clean water; extending the realty transfer fee progression to sales of homes of \$1 million and above; relocation of Green

Acres funding to include management activities; and -- sorry -- and, tapping carbon markets, including the RGGI funding, and other Federal funding sources.

And, that is the end of the framework recommendations, and, I believe the end of our--

DR. MURPHY: That concludes our presentation--

MS. RAMOS-BUSOT: Yes--

DR. MURPHY: --and, we're happy to take questions.

SENATOR SMITH: So, we would like to ask you some questions, OK, and give everybody on the panel a chance to ask.

But, let me first note the presence of Senator Greenstein, who has arrived, and our Co-Chair on the Assembly side, Assemblyman Kennedy.

And, Assemblyman Kennedy, if it's OK, we'll open up to questions from the members.

Does anybody have a question for the Task Force?

Yes, sir.

ASSEMBLYMAN SCHARFENBERGER: Thank you, Mr. Chairman, and thank you for your unbelievable effort in this undertaking here.

Just a little clarification about the term "logging." When you say logging, is that live trees, or felled trees, or a combination of both?

MR. BENNETT: So, yes, logging is just simply the removal of trees, whether they were felled with a chainsaw -- if they came down in Hurricane Sandy, logging would be the removal of those trees.

ASSEMBLYMAN SCHARFENBERGER: OK, so, would we look at standing trees, I guess, for lack of a better term, versus dead trees on the floor differently? You know, within logging requirements?

DR. MURPHY: I think it depends on who you ask. For some, any removal of any piece of wood is unacceptable, and that's logging. And, then, for others, it's a more active process where you cut the tree and then you sell it.

So, it depends on who you ask, I think.

MS. RAMOS-BUSOT: Well, you cut the tree, and then there's a second step, which is removal from the soil. (indiscernible) sometimes you cut the tree and you let it decompose; sometimes, the ecological objectives require just that, to just let the tree on the soil.

So, it's the two steps.

ASSEMBLYMAN SCHARFENBERGER: OK.

And, I guess, a logical question is, who is going to decide in what case what would apply? Whether it's a felled tree or a living tree -- who is going to decide that, ultimately?

MR. GILBERT: So, that should be based on the management plans that are in place for the particular land unit that's in question, and what we're trying to do is put some parameters in place so that, first off, there's a scientifically based planning process that underlies all those forest-management plans.

Second, there's a forest-management plan that's developed in keeping with the rulemaking that's established to govern how forest-management plans are put together, and shows the nexus to the planning and science. But, then, ultimately, it's the land managers -- whether it's State

land; if it's the DEP; or it's county land -- that are then carrying out and implementing those plans and making those decisions in accordance with the over-arching plan and the management plan for the specific unit.

And, then, what we recommended is that the parameter include that wood products should not be removed, whether it's live or downed, unless it's necessary to achieve an ecological objective that was established in that forest-management plan.

MS. RAMOS-BUSOT: I want to add something to that question; thanks.

I just completely lost my train of thought -- oh, it just came back.

So, all of these management plans and this rulemaking and this entire process will have, essentially, a third-party involved, which is the Scientific Advisory Panel. And, so, these management plans are dictated by science. And, so, an outside voice, in addition to the DEP, will ultimately make those decisions (indiscernible) kind of gave (indiscernible) etc.

So, it's a robust process, with the input of experts.

DR. MURPHY: And, logging, per se, is not a legitimate goal for any forested land. That was our Recommendation 15, that the commercial sale of wood should never, ever be the goal on a piece of land.

However, if you have a management tool -- I mentioned this before -- that involves cutting a tree, part of your management plan for ecological purposes is to cut a tree, then you may sell it -- you can remove it and sell it as long as the ecological purposes have been withheld.

But, commercial gain should never be a goal on any land.

ASSEMBLYMAN SCHARFENBERGER: Thank you very much, thank you, miss.

SENATOR DURR: Excuse me.

On that statement, you said the commercial should not have any-- So, you're telling a private owner of a land should not be able to sell their trees?

DR. MURPHY: No, no, public land--

SENATOR DURR: See, I have a problem with when government tells private ownership what they can and can't do.

SENATOR SMITH: Senator, this is policy for public lands *only*.

SENATOR DURR: Well, I wanted to ask a couple questions.

SENATOR SMITH: Sure.

SENATOR DURR: I didn't hear the word -- now, I've heard this term before, so, correct me if I'm wrong -- but clearcutting, as far as preserving the forest. Where does that play a part in this, and, also, what are we doing about reforestation? Do we have a program set up in that regard?

MR. BENNETT: So, what was your question about clearcutting?

SENATOR DURR: I didn't hear this in the comments, talking about-- With clearcutting, that's clearly removal of the wood, you know? You're going to be cutting it down and you're going to be removing it. You're not going to just cut it down and leave it on the floor, because that kind of defeats the purpose.

MR. BENNETT: At times. So, there are--

SENATOR DURR: Would you want -- you want to thin it out, just like anything, because we hear it all the time with these Pine Barrens forest fires, you know, that it's over-forestation that causes the growth on the floor, and all the fallen trees.

So, where is this going to play a part in it?

MR. BENNETT: So, I don't know. I would just say that clearcutting is, what we call in forestry, a silvicultural practice.

So, there are certain techniques you use in the management of the forest -- and, they're described by different terms. One would be clearcutting; that would be taking all of the trees. Doesn't necessarily mean they're all removed. There are times when trees are cut, felled, you're making a mess with the intent to create habitat for wildlife.

So, there's different goals, different objectives, and that's where clearcutting could come into play if there was a certain objective you were trying to accomplish.

And, what was the other -- what was the other question?

SENATOR DURR: The other part -- where does reforestation come in? I've heard so many times that for every tree that's taken down, they plant two seedlings to regrow the forest.

MR. GILBERT: So, one of our recommendations -- excuse me -- does focus on and call for reforestation as an important strategy, with respect to the State's land sequestration goals.

And, Eileen talked about some of the different types of reforestation projects that are identified in the DEP report. I would think, for public forest lands, some of the opportunities might include -- and, this is referenced in the DEP report -- planting trees in understocked areas; so, we have some areas of forest where, in the pines and many areas, it's *too* dense. But, we've got other forests where they're not, you know, fully stocked, and there's opportunity to actually increase the density and, thus, the carbon storage and some of our understocked forest lands on public lands.

But -- and, I would also note that you've got to deal with the deer issue, one of the other recommendations. So--

SENATOR DURR: Increase hunting. (laughter)

MR. GILBERT: That and many other things, I think, is kind of what we're pointing to.

But, unless we deal with the deer issue, we're not going to have success in reforestation because they're going to eat -- they're already eating everything, and we don't have the forest regeneration in a lot of our forests. Any efforts at reforestation would fail--

SENATOR DURR: Well, we're an overgrowth state, and, so, as we continue to grow out, the area for deer shrinks. So, we have to consider that, too.

The one other question I did have -- and, I know -- where does the Legislature play a part in this? Because I see all these recommendations for the DEP -- why wasn't the DEP asked to join us in this event?

Because, other than writing a check, I haven't seen you mention the Legislature in this.

MS. RAMOS-BUSOT: Well, writing the check is very important. (laughter)

So, that's an excellent question, Senator. But, currently, as mentioned at the beginning of the framework, there are no existing rules for our public lands or forests aside from the Highlands and comprehensive rules for the pines.

So, this would allow for these rules to -- well, for the direction via statute--

SENATOR DURR: Laws, right -- laws that legislators write?

MS. RAMOS-BUSOT: Right, exactly. (laughter)

To be in statute so that the DEP has to commit to developing these rules, so that there is an authority and mechanism to employ all of these activities (indiscernible) some accountability.

So, having it in statutes is a significant step so that the DEP has the authority to do so.

SENATOR DURR: Again, laws that the Legislature writes that the DEP follows the laws?

MS. RAMOS-BUSOT: Yes.

SENATOR DURR: OK.

MR. GILBERT: Exactly.

And, some of these are new ideas, like establishing carbon reserves -- that's a new concept that needs to be created and embodied in statute to give the DEP the direction, the authority to go ahead and move forward on that idea, for example.

SENATOR DURR: Thank you.

SENATOR SMITH: Other members with questions? (no response)

All right, then I have two.

Unfair question: What is this going to cost?

(laughter)

Do you have any estimates?

And, one thing we're doing, when we were going through the recommendations, it became clear that one of our rules may be to check. So, I'm asking staff to write to the Commission with a copy of the report saying what would each item cost.

But, as a panel or as a group, have you thought about what the cost would be? Any ballpark ideas?

MR. GILBERT: We really didn't try to put a number on it, Senator, and honestly I think-- And, the question about DEP.

So, DEP was very involved in these conversations--

SENATOR SMITH: Sure--

MR. GILBERT: --and, we appreciate the time that they spent. They were there as an informational resource; they provided background on the current status of various efforts; and answered questions.

Honestly, I think the DEP would be in the best position to answer that question and try to come up, put a number on what kind of personnel and staffing and other resources are needed to--

SENATOR SMITH: We're soliciting that.

The other question is related to your comments, the less we get the deer population under control, proforestation is not going to happen -- or, it's not going to happen very well.

Would you elaborate on that? Why are deer the public enemy Number 1 for the forest?

MS. RAMOS-BUSOT: Great question, Senator.

So, it's that stat that I mentioned earlier, which is the deer population for proper regrowth of our forests is 10 times greater than what a sustainable population should be.

So, that is a significant number, and it's very difficult to control. I mean, I know that some management areas or management plans that require fencing to keep deer outside, so you can have regrowth -- Tom can speak to this at length.

But, it's just 10 times greater; it's just too much, too many deer.

SENATOR DURR: Excuse me, just real quick.

Is it deer are 10 times greater, or they have 10 times less land mass to operate on? Because, you know, that's kind of what we're really talking about. We shrank to the land that they are operating on.

SENATOR SMITH: So, let me be helpful--

MS. RAMOS-BUSOT: It's both--

SENATOR SMITH: Senator, let me be helpful.

We've been working with the New Jersey Farm Bureau for years. Farmers in this state have a huge -- besides everybody else having a problem with deer -- farmers have an amazingly large problem. And, they've actually been doing surveys -- you can't do all the square miles in the State of New Jersey, but you can pick out an area, count the number of deer, and extrapolate.

And, the Farm Bureau says the following: First, that there are more deer in New Jersey than there are people. Secondly, they point out there's 30,000 accidents a year in New Jersey involving deer and human beings. And, then, thirdly -- and, they don't have to point it out -- is the problem with deer as vectors of disease. Not just tickborne, but a whole bunch of other diseases as well.

The problem that I was trying to post more information about -- the reason why they're so deadly to reforestation: They eat the saplings; the seedlings; whatever. You put a small tree, a young tree, that's like a garden salad for deer. They just do it.

So, the question is: Can we do reforestation or proforestation without some very significant reduction in the deer population?

MR. GILBERT: Not at a large scale, no.

I mean, there are techniques to do reforestation in small areas, and to fence those areas, or to do tubing on the trees and so forth.

So, it can be done on a small scale, but not at a large scale.

And, Senator, you are absolutely correct. We would be happy to take any member of the Committee out into the woods and show you many, many areas where there is literally no regeneration on the forest floor. The deer eat everything; they prefer the native species, so sometimes the only thing that's left are the invasive species -- which is one of the other problems we're trying to address -- and, it's very striking. We can show you an area that's been fenced, and you see the incredible regeneration. If you just remove the deer through this fencing, you can see incredible forest regeneration and recovery of the native species. Right outside that fence -- nothing.

It's very striking, and it's an enormous -- it's not going to be an easy problem to fix, and it's going to require some new, innovative, out-of-the-box thinking. It's not just -- back to the Senator, it's not just more hunting that it's going to require --

SENATOR SMITH: And, it also adds other impacts to wildlife.

Joey, who never sits quietly there, he's also doing -- a Googler -- got a *New Jersey Biz* article. It's from 2020 -- yeah, March 20, 2022 -- and, it is reporting that a small group of New Jersey farmers -- actually 27 farmers -- documented losing nearly \$1.3 million to deer damage in 2019, according to the Rutgers Cooperative Extension and Rutgers New Jersey Agricultural Experiment Station.

And, by the way, that's just a tiny example. And, we all love Bambi, but the issue here is the damage they do to our forests; to our health; to our cars; to our mortality; we really need to take a new look at it.

SENATOR DURR: Senator -- Chairman -- I'm not disagreeing with any of your stats on that.

Again, this is what I'm saying is, that you do agree, then, increased hunting *would* help. Lessening the population of deer *would* help in the reforestation.

MR. BENNETT: Yes, I think that's one avenue.

I think, again, to our recommendations--

SENATOR DURR: I didn't say it was the silver bullet that would solve it, but it is a step forward. It's a positive step, correct?

MR. BENNETT: One hundred percent agree.

I think we also know -- I'm a deer hunter, my generation doesn't have as many deer hunters as the previous generation, etc., etc.

SENATOR DURR: Yes, because guns are bad.

MR. BENNETT: That's right.

SENATOR DURR: (laughter)

MR. GILBERT: But, I would just add that we're going to need some changes in hunting policies, because I am not a hunter, but the hunters want to take bucks. The hunters don't want to take does.

So, the recreational hunting is not a terribly effective mechanism for reducing the deer problem.

SENATOR DURR: Well, that's where we partner with food banks and stuff. Venison is a good meal to give to the needy.

So, it can be done.

MR. GILBERT: We agree. Hunters Helping the Hungry program is in there. We also have in there a recommendation to explore a pilot for the commercial sale of venison. Let's create a market.

Those are -- we're going to need some game-changing ideas to really get a handle on this problem.

SENATOR SMITH: It's huge.

Thank you, thank you, and thank you again for all your hard work. You have been enormously helpful to the Legislature.

Hopefully, we can figure out a uniform, consistent forestry policy for our public lands. But, again, your work and the work of the 600 people who participated has helped tremendously, and we're hoping that you're going to see some good legislation and make sure that our forests are doing the maximum they can for global climate change to prevent it, and, at the same time, to make our forests healthy.

Thank you so much.

We have scheduled three groups to come up and testify. Assemblyman Kennedy and I hoped to have everybody out of here by 1:00 p.m.; it's 12:42, so --

(laughter)

But, we have the three groups. Let's get them up.

First, for a different point of view, the Highlands Coalition -- Elliott Ruga, if you could come on up -- you have several witnesses?

E L L I O T T R U G A: You want them here?

SENATOR SMITH: Well, I would like the Task Force to stay--

UNIDENTIFIED SPEAKER: Should we move?

SENATOR SMITH: --stay here in the room, so you can hear what's being said.

And, Elliott is bringing up -- Elliott is the Policy and Communications Director for New Jersey Highlands Coalition. Leslie Sauer is Founder Emeritus of Andropogon Associates. And, Sara Webb is Director, Drew University Preserve.

Elliott, why don't you take the lead on this?

MR. RUGA: Great; thank you for introducing my colleagues, that will save me some time, because we don't have a lot.

Thank you, Chairman Smith, and Chairman Kennedy and Committee members.

My name is Elliott Ruga, I am the Policy and Communications Director for the New Jersey Highlands Coalition. I am here today to represent the Coalition's Natural Heritage Committee, which, for the past several years, has become a think tank for developing policies for managing New Jersey's publicly owned forests.

And, I am joined by my colleagues Dr. Sara Webb, and Leslie Sauer. Dr. Sharon Wander was going to join us today, but she had a household emergency, and her statement is in the package that is being handed out to you.

Over a dozen members of our Natural Heritage Committee were members of the Task Force, and actively participated in all of the meetings, including the regulatory and invasive species subcommittee. Although we agree with almost all of the recommendations of the Task Force, where the report discusses our opposition, our experiences of those discussions differ

from their accounts so sharply that it seems we may have been in a different meeting.

For example, on page 11, the report says that two full meetings were devoted to the topic of logging. What we experienced were two full meetings where we *attempted* to have a robust debate about logging, but the Task Force leaders did everything they could to stifle that debate. The subject of logging as a management technique, or canopy opening, or seed tree harvest -- and, this should answer your question, Assemblyman Scharfenberger -- what we mean is the mechanized harvesting of timber at any scale, and wood removal for whatever the circumstance. This is the major controversy that divides us.

In the press release announcing the formation of the Task Force, Senator Smith, you are quoted as saying, "We assembled this Task Force in order to identify *and* debate the major issues." But, after 45 hours of Task Force meetings, we are no closer to a resolution on that controversy.

It might surprise you that 10 of the 16 of the Task Force recommendations were based on proposals our members submitted. Notably, recognition of the fact that there are no duly adopted regulations pertaining to the management of State-owned forests -- and, that we need them. But, many other proposals that we submitted, that we know to be sound or scientifically supportable, were not accepted for discussion.

So, why did we object to the overall framework if we supported the majority of the framework? It is because we cannot compromise on this single provision under Recommendation Number 15, which would allow wood products to be sold in instances where cutting and removal of wood is

a necessary part of an improved plan with a goal of ecological health. *This* is the crucial issue for us.

The disturbances by mechanized harvesting of timber, and the removal of felled timber, including the need to cut new access roads, causes impacts, often devastating, to sensitive ecological components of the forest that must be weighed against any so-called ecological goal. Currently, there is *no* requirement that the impacts of logging on soils, water resources, vegetation, wildlife, on carbon capture -- none of these are considered prior to the approval of a forest-management plan. And, I would argue, given the climate crisis, that until we understand these impacts, we enact a moratorium on logging of the (indiscernible).

We also see spurious claims of ecological health used to justify the logging element of a forest-stewardship plan. Originally, the justification for the forest-stewardship plan at the Sparta Mountain Wildlife Management Area was to create a habitat for the golden-winged warbler -- a bird species whose range appears to be moving north, entirely out of New Jersey, perhaps under the pressures of climate change. Are the destruction of existing habitat for forest interior wildlife species; the compacting of sensitive forest soils; and exposing them to invasion by non-native species and other impacts -- are they worth it?

The plan has since been amended to say the golden-winged warbler is merely an indicator species, that the logging benefits many other declining early successional bird species. But, without an impact analysis, we have no understanding whether a management plan will produce a net benefit or loss.

The surveys of the Task Force participants, regarding tree cutting and wood removal that Anjuli discussed earlier, are misleading. In the survey of responses to tree cutting, 66% supported cutting trees *only* for ecological health purposes. But, without a definition of “ecological health,” it is impossible to understand what respondents had in mind when they indicated support. We would have voted yes if the definition was for the most narrow of circumstances, and the ecological benefit outweighed the adverse impacts. How many respondents voted yes, but with the same threshold of ecological health in mind? It is the same with the wood-removal survey -- how many respondents voted in support under the assumption that only the most narrow of circumstances were intended?

Arguably, the same ambiguity characterizes the vote on the overall Task Force framework. We voted to oppose the framework, despite agreeing with a majority of the recommendations, because the one provision of Recommendation Number 15 was so crucial. How many respondents felt the same as we, but voted in support? We don’t know.

Our concerns with the process and the results as reported by the Task Force leaders are not intended in any way to undermine their efforts. They had a nearly impossible and unwieldly task that they executed with professionalism and a commitment to their charge. I do not envy them. It was a charged atmosphere with many strong players with strongly held positions. We believe that Senator Smith attempted to appoint four leaders who represented a balance among the prevailing views on forest policy, but, for whatever reason, that balance did not quite play out as intended. There was a definite bias in favor of logging as management, and alternative views

on this matter were suppressed, which is why we appreciate being provided an opportunity to present an alternative perspective.

And, Senator Smith, we will be sending you a report on that alternative perspective.

SENATOR SMITH: Thank you.

MR. RUGA: So, now I hand it over to Dr. Webb.

(applause)

S A R A W E B B, Ph.D.: Thank you very much for the opportunity to speak today.

I am a Professor Emeritus of Biology and Environmental Studies at Drew University. And, out of concern for what I've been seeing in our forests, I became involved with this effort to take a much closer look at so-called stewardship plans and try to limit the logging that's going on.

Someone -- maybe Andy -- mentioned they were spending too much time talking about logging, but recall the reason we have this Task Force is *because* of concerns about the logging happening in our public lands. And, so, that is front and center for good reasons. We really should not be logging our mature forests in northern New Jersey. After we log, there's no path back to forests because of the deer and the invasive species. And, we are sacrificing one of our very best defenses against climate when you take out mature trees.

We should have carbon reserves as one of the points of the framework -- the Task Force recommendations -- but all of our public forests are wildlife-management areas and parks and forests. They should be default carbon reserves where the trees and soil and intact ecosystem is left alone, in our view.

But, I've been really surprised after 40 years of teaching and doing research in our forests to see a steep acceleration of logging in the last decade or so. And, the forest-stewardship plans that proliferate are logging plans. The words "logging," "clearcutting," are never used; other words like "thinning," "seed tree silviculture," "habitat management," and even "stewardship," and "the young forest initiative" -- these are phrases that are used. But, having been in forestry graduate school, I know logging when I see it.

There's an active management sort-of smokescreen, and the ecological health phrase as Elliott Ruga mentioned, is also ambiguously used and, therefore, I think, confused people in voting on the framework that has been proposed by our Task Force leaders.

The Forest Task Force report also creates a false dichotomy between preventing climate disaster and those who care about ecological health, telling us that, if we care about the climate, we're not paying attention to ecological health. The two go hand in hand. They're both threatened by logging in our mature northern New Jersey forests. On the first day of the Task Force, there was a straw poll on Zoom and 85% of the participants voted for no more logging on our public lands. But, logging was not on the ballot or any of the surveys, and it's not questioned or discussed in the final report, so this is puzzling.

So, here's the thing: There's two major problems with logging management. One is the loss of planet defense. And, I know that you are all very engaged in that effort on behalf of New Jersey and the planet. The other problem is the failure of trees to grow back. After we clearcut -- and, they don't call it clearcutting, but it is, you look at it on the ground -- trees don't

come back because of the deer and the invasive species. So, those are serious problems. Young Forest Initiative is optimistic thinking if we log out our swaths of mature forests as our agencies are doing, that a young forest will return. But this does not return healthy and vibrant young forests -- the forests do not return. Any young trees that sprouted are eaten by deer or choked out by invasive species, and there's just no path back to forest. So, this Young Forest Initiative doesn't really work in northern New Jersey.

So, controlling the deer and the invasive species is very difficult, and we all are on board with doing what we can to protect our forests. We have to be realistic about how expensive it is on doing forest restoration. (indiscernible) university forest reserve, these last 15 years, and it's incredibly expensive to put deer fencing around just 50 acres, never mind all of our public lands, and that's what is necessary. But, we still have a systematic clearcutting of one expanse after another of our state lands, and this is really something that we should not be doing.

Let me talk about the problem with trees not growing back -- well, I've already talked about that, that's really a big problem, why we shouldn't be clearing the canopy.

The second is the climate defense that is served to us by our intact, mature forests. They absorb and store huge amounts of carbon in the ecosystem; in the soil; in their wood. Much more than the young trees, contrary to what we often see per-tree, per-acre -- this is in proportion to their leaf area, they're bringing in carbon; they're cleaning the air much more cheaply than these high-tech equipment efforts that are being developed. And, our largest, oldest trees absorb and store far more carbon than younger trees per-acre, per-tree, per-year.

There's a lot of misinformation about that point, and I have put together a list of scientific peer-reviewed sources that address these issues. I believe a copy of them is in your packets I sent along to Senator Zwicker at his request recently. And, you will see the huge amount of evidence against logging -- it's not directly that -- it's the evidence that our mature intact forests are really important for protecting us from climate change and that the logging practices underway are not helping us in that defense, but hurting us.

So, we don't have any future forests after we log, we lose carbon-sequestration services. We scientists have visited these New Jersey public forests before and after logging, and we count over 100 tree rings, both rings on stumps -- the stumps aren't hollow, the trees were healthy; there are deep roots; the wood is removed with all of the carbon and habitat value that it carries. That's what we should be doing on our natural lands, is leaving the wood there. We need timber, but not from our public conservation lands in the state with the highest population density and utterly reliant on our forests for our very inexpensive and high-quality water.

So, in some cases, DEP officials have worked with us and we've negotiated small changes to some of the logging projects that have been proposed. But, the logging drum beat goes on.

So, in conclusion, we just need science to prevail rather than tradition. It's a tradition to manage our forests by thinning, by cutting out large trees, taking away the wood -- that is not right for today's planet, particularly in New Jersey.

I know many of you are very involved with climate change on behalf of humanity here in New Jersey, and I appreciate that, and I hope that

today is helpful in shedding light on how much our public conservation forests can help the cause.

So, thank you very much on the many fronts that you are taking strides on to protect New Jersey from harm.

Thank you.

SENATOR SMITH: So, I have a question--

(audience applauds)

Question for Ms. Webb, or for Elliott -- or, for the Task Force. Just so we know what we're talking about.

We divided up the acreage in New Jersey; we said there were 2 million acres of forested land, half of which -- roughly -- were owned by the private sector; half of which were owned by some public sector -- State, county, locals, whatever.

In the year 2020, 2021, 2022, how many acres of public land were clearcut?

MR. RUGA: That's a good question, Senator Smith.

We don't know because it's not always public. Number 1, there's our Green Acres properties on municipal and county level that are being logged that we're not aware of, and right now in the state the only one we know about is Sparta Mountain. But, you remember the bills that were introduced two years ago when you--

SENATOR SMITH: Yes, yes, yes, but I'm trying to get facts.

MR. RUGA: That was the intention.

SENATOR SMITH: My question is, is this a real problem? Does our DEP take the 30% of the land that they have and contract for clearcutting of wood to be sold?

MR. RUGA: If it wasn't for us, a lot more that needs--

SENATOR SMITH: But, you don't have a fact.

One of the things we're doing is, what -- I mean, the great thing about this hearing is we're finding out things we don't know, all right. So, one item, we're writing to the DEP commissioners, how much actual New Jersey state land was clearcut '20, '21, '22? And, let's see the extent of the problem. No one here is for clearcutting. I don't see anybody standing up with a hand raised, "We're for clearcutting." If anything, we're here to protect the forest. We've all agreed there aren't any rules and regulations about what the criteria should be; we all agree there should be reforestation; we all agree there's a deer problem.

I mean, there's a lot of things that we agree on, but I'd like to know if we actually had a problem with the DEP (indiscernible). This is like one of those TV series where we're -- unfortunately, the popular theme in America today is to just say whatever you think, whether you have any facts behind it or not.

We're going to ask: How many acres in the last three years were clearcut to our public land, that the DEP authorized, and if they know how much was done by counties or how much was done by locals.

MR. RUGA: What if they don't know, Senator?

SENATOR SMITH: Well, we're going to find out. We're going to ask the question.

MR. RUGA: I mean, we found out about--

SENATOR SMITH: The great thing about your presentation is you're pointing out a real gap in our knowledge---

MR. RUGA: Yes, well--

SENATOR SMITH: --all right.

We're not going to authorize clearcutting. That is not happening.

SENATOR DURR: Chair -- Chairman.

SENATOR SMITH: Yes, Senator.

SENATOR DURR: I think not only should we know how much they've done, but why they had clearcutting done.

SENATOR SMITH: If they've done it--

SENATOR DURR: They need to have the answer of why.

SENATOR SMITH: Yes, if they've done it.

SENATOR DURR: If they've done it, we want to know why it was done.

SENATOR SMITH: Yes, and I have to believe-- I mean, we have a state with 9.3 million citizens, and most of them are awake. Now, if there was this clearcutting done on public lands, I would have thought we -- somebody around the state -- would have heard about it. Because people generally don't like their forests cut down.

MR. RUGA: Senator, I'm trying to answer you.

SENATOR SMITH: Go ahead.

MR. RUGA: There was Roaring Rock Park in Warren County where someone happened to notice what the red ring on the tree meant -- it meant it was marked for logging. A municipal park--

SENATOR SMITH: Logging, or is that what Ms. Webb described as thinning?

MR. RUGA: No--

SENATOR SMITH: The whole thing coming down?

MR. RUGA: No, this was--

DR. WEBB: No, it's not--

MR. RUGA: This was a clearcutting. They--

SENATOR SMITH: And, who owned the land?

MR. RUGA: The municipality owned it, and they had a logging contract expressly to raise revenue for the municipal budget.

SENATOR SMITH: All right, well, we're--

MR. RUGA: And, Green Acres approved it because they said it was for conservation.

SENATOR SMITH: We'll take a look at it.

MR. RUGA: OK.

Let me introduce Leslie Sauer.

SENATOR SMITH: Is your third witness here?

MR. RUGA: Yes.

SENATOR SMITH: Oh, I'm sorry, I thought you said she wasn't.

L E S L I E S A U E R: I would like to speak to the issues of what can the Legislature do.

SENATOR SMITH: Please.

MS. SAUER: Because, I agree that many of the recommendations will fall upon DEP, but I think we're asking way more of DEP than they can follow through on. It took nine years to get recommendations for forest-stewardship plans. They do not have the expertise to do a proper inventory and a proper plan for every single park before we go ahead and actually make decisions about climate change.

I think in order to meet Senator Smith's goal of actually addressing climate change, we have to look at the option of suspending logging on public lands only until that work is complete. It would be a very low-cost solution to a very serious problem that is being largely ignored. It's the only way to take carbon out of the air, and the biggest cost might be in funding to consultants and to DEP, but there are lots of other sources, such as for reforestation.

I would remind you that it's going to take a thousand trees planted probably 30 years to replace *one* of the big trees logged at Sparta Mountain. The dissenters did *not* oppose diversity, water quality, wildlife, at all, but rather argued that not cutting wood would be a better way to foster these goals. I defy any of them to find one word in the Task Force hearings or in any of the proposals that said, "Do not pay attention to these concerns." In fact, virtually all of us who wrote about carbon sequestration also wrote about the importance of management in order to maintain quality of our forests.

We want a higher standard than a forester claiming that cutting trees is necessary for ecological health, since that seems to include fragmenting our most intact forests; cutting hundreds of trees over 100 years of age; and destroying a forest with a laurel understory to make a poor quality young forest. The Task Force also ignored the importance of wood left behind. Having wood taken out for ecological reasons is almost a contradiction in terms. It is the most important builder of the forest food web, and is absolutely necessary to developing mature forest conditions.

No rules exist presently, and Recommendation 15 covers virtually every single project that's been proposed and opposed in the last 11

years. That would include hundreds of acres of Mahlon Dickerson that locals stopped; hundreds of acres of Sparta that were stopped; as well as Roaring Rocks. So, in fact, it would have been very much larger if there had not been public opposition, and, if we don't have the support of the Statehouse in opposing law, it really becomes very problematic.

Forestry is about sustaining wood production -- that's not what we're interesting in. We're interested in the ecological restoration of our forest. Ecological restoration is completely consistent with carbon protection, and, as Tom said, we cannot afford to lose any of these natural areas that store carbon. The goal is not to lose the carbon already stored, but how to figure out how to store millions more. The one way to do it is to allow our trees to grow, maintaining a no-net loss just as sacrificing our single biggest opportunity to do something important about climate change right now.

Thank you.

(audience applause)

SENATOR SMITH: Thank you very much for your comments.

MR. RUGA: Senator, may I just say one thing--

SENATOR SMITH: Sure.

MR. RUGA: --just to indulge us.

People expected that there may be public comment, but because of time there isn't. A lot of people traveled very far to come here to show their support--

SENATOR SMITH: Right--

MR. RUGA: --for us. I would just like them -- if it's OK with you -- if they stand?

And, these represent organizations as well as individuals.

SENATOR SMITH: By the way, we thank them for coming; we thank them for their participation in the Task Force; and, I don't know if you heard the earlier comment -- I don't have a microphone that works -- will you turn off your microphones? Maybe that's the problem. Let me try this.

Yes, that's the problem.

So, we can't thank you enough for all of the time and effort that you've put into -- and, not necessarily agreeing with the Task Force recommendations, but being part of the process, making sure that people are aware of all of the issues. Your issues are legitimate issues. We're going to look at all of them.

And, you may not have heard the first comment that we made, which is, we know we're in a tough time frame here. The record is -- there's a stenographic record being taken, and there is also three weeks from today -- today is the 22nd of February -- it's three weeks where we'd love to get more comments from anybody. Emails, cards, letters -- whatever you want. Because, it's a huge topic, and we want to make sure that we've gotten everybody's point of view.

But, the flipside of that is, there's only so much abuse we can do to our representatives, and we still have two more groups that are coming out.

So, let me suggest that -- don't be afraid to send in your cards and letters. In fact, I think you have, but-- And, then, one other thing. If you take a look at the 270 pages, every group's position and representative is on a page, which I think -- and, especially if there's somebody there who wasn't in the report, and the position is misstated, please make sure you correct it.

So, thank you for your time and effort today. I think our next speaker is Jaclyn Rhoads from Pinelands Preservation.

MS. SAUER: Thank you.

SENATOR SMITH: Thank you very much.

DR. WEBB: Thank you all.

SENATOR SMITH: Is Jackie Rhoads here?

J A C L Y N R H O A D S, Ph.D.: I am here.

SENATOR SMITH: You are here? Oh, there you are.

DR. RHOADS: And, don't worry, I don't plan to take 15 minutes. I am eager -- well, I have somewhere else to be as well.

But, I am Jaclyn Rhoads, I am the Assistant Executive Director of Pinelands Preservation Alliance.

Simply, we are the watchdog organization for the Pinelands National Reserve, which is about 1.1 million acres. Pinelands represents nearly 25% of the land area in New Jersey, and contains close to -- not more than -- a third of the open space in the state as well. So, obviously, forest stewardship, forest management, is absolutely critical to the livelihood of the Pinelands.

I want to first say a thank you to the Task Force chairs. Obviously, they spent countless weeks on this, besides just being in the meetings but understanding, just from my perspective, being involved in this issue for many, many years, all the work it took to listen, gather information, obviously manage the various opinions of hundreds of people. It was definitely hard, but also a very important task.

And, thank you to everyone here sitting today who are listening; who are traveling far; and, of course, the legislators for taking the time.

And, of course, to you, Senator Smith, for being the leader of this issue for many, many years. I don't know if you recall, but I've been with PPA now for 19 years. I came to you when we first were working on the Prescribed Burn Bill asking you to be a sponsor. You said no at the time, but that's OK, because you had said, "I have someone else for you." Ultimately, the bill was passed and signed into law in 2018. And, that is an important element of forest stewardship in the Pinelands, is prescribed burning.

I've heard a number of comments, obviously, to the recommendations before you today. Number 9 and Number 12 highlight the variation in the state -- Pinelands obviously being one of them. Also, highlighting the need for fire as an important tool for forest stewardship. That is why we pushed for that act, we recognize the importance of that tool; we recognize that fire, although emits carbon into the atmosphere, it also can sequester a lot of carbon after the fact in terms of regeneration. So, I just wanted to highlight that, because thinning is an important element of setting a prescribed fire, but in no way can replicate the need for fire and for allowing, in some cases, some wildfire that can be contained to occur, because of the ecological benefits associated with it. Of course, recognizing we want to protect residential communities and the like; that we want to have a system in place that has done so safely.

So, with that said, there are a couple of other highlights I wanted to mention, one being Recommendation Number 1 -- the inventory and planning. That was a recommendation of our organization as well as several others that presented proposals for the Task Force meetings. And, that is key. I think a lot of the debate, a lot of the concerns that exist around forestry in New Jersey, is because of individual proposals that were presented over the

years that lacked a little bit of public outreach that seemed to have very specific goals that didn't necessarily take into account -- or, at least, appeared to not take into account -- the entire ecosystem. With inventory, with planning, we can really address a lot of those concerns, and, also, have that plan forward that looks at climate change; that looks at ecosystem management; that looks at protecting our water resources by managing those forests in a (indiscernible) and ecosystem perspective way. So, that is absolutely key.

I also would like to highlight that I'm wearing a sticker here today. We did support the recommendations, but we also recognize that, as Elliott said and other people that did not sign onto the framework, there are still some issues to work through. The devil is in the details for some of these issues. And, although we have a lot of consensus in the room today regarding most of the recommendations, there is still some work to be done. You know, the work on, what does it mean to have ecological purpose for the sale and extraction of wood? We feel the same way. I mean, there are going to be proposals. There was one recently, Bass River State Forest, that received a lot of opposition. In the end, Pinelands Preservation Alliance supported it because we recognize it as a tool, as a need for thinning in order to protect communities from wildfires, but also to allow for prescribed fires to happen.

There are going to be those instances; there are going to be time spent on defining these things, still, as we move forward. But overall, again, we support the recommendations. We recognize that the need for writing a check, coming up with that amount, is absolutely critical, and it feeds into a campaign that, actually, many of our groups are involved in right now called

(indiscernible), where we need more resources devoted to our State parks and forests.

We spent a lot of money on acquiring that land, which is phenomenal; we obviously have a lot of open space in New Jersey. But, we tend to fail in terms of the resources devoted to maintaining it, both from forest management but as well as those recreation areas. And, I think a lot of these things are coming together as we realize how much importance needs to come down to those resources and money that we need for it.

So, thank you all, I'm happy to answer questions.

SENATOR SMITH: Thank you, Jackie.

Any questions? (no response)

All right, then our last witness today -- last group -- is Eric Olsen, Director of Conservation Programs, The Nature Conservancy, New Jersey Chapter. Mr. Olsen, are you here?

Take it away.

E R I C O L S E N: Thank you.

Good afternoon, Chairmen Smith and Kennedy, and distinguished members of the Committee.

I have the coveted ending speaking spot here. My name is Eric Olsen, I am the Conservation -- the Director of Conservation Programs for the New Jersey Chapter of The Nature Conservancy.

And, on behalf of TNC, I applaud the Chairman -- Chairmen -- and legislative members here today for holding this hearing and digging into this very important topic.

TNC is one of the leading conservation organizations in the world, with a presence in all 50 states, and over 70 countries worldwide. Our

mission is to conserve the land and waters on which all life depends by working in a collaborative, science-based manner with a variety of partners. Here in New Jersey, TNC has helped to preserve over 60,000 acres of open space; removed dams and restored more than 30 miles of river habitat; planted more than 100,000 trees across the state; and restored hundreds of acres of coastal marsh habitat by thin-spreading sediment to promote growth. They also promote state and local levels, the use of nature-based solutions to reduce the impacts of climate change. TNC currently owns and manages more than 22,000 acres in 23 nature preserves throughout the State of New Jersey. We are actively dealing with many of the threats to the health of our forests on a daily basis -- many of the items that were brought up today.

And, our state has often lagged behind others to enact many of the priorities that have been identified in this report. Issues like regulating invasive species and scientifically designed deer management are two such examples. So, we feel this is bringing us to current times. And, we feel that the recommendations made by the Forest Task Force outline strong actions that would make significant contributions for the health and well-being of the state's forest lands and the biodiversity that depends upon those forests. Especially in the face of a changing climate.

They were not deeply involved in developing these recommendations, but I wanted to emphasize and highlight three important aspects of the recommendations that secured our support. The first, which was mentioned a lot today, was the emphasis on science, design, planning. We support those recommendations to conduct a statewide mapping and data-collection process, and that inventory of mapping take place on a routine basis to develop a robust database over time.

We recommend the inclusion of urban forestlands in this inventory process, as they are net positives for nature and people in our fight against climate change. Science-driven management, planning, and implementation is a hallmark of our organization. We are regularly collecting on-the-ground data, and use that data to develop a sound plan; we act; and then monitor and learn from the results of our actions. To do this well, it will take consistent State investment in collecting robust data, and evaluating the impacts of actions taken. This is a recurring gap in natural lands management in our state, and we do not often have enough capacity -- as has been a pretty consistent theme today -- in the state agencies to conduct adequate management, nor to monitor the results of actions taken. Therefore, we wholeheartedly support the recommendation to secure, find, and/or create sustainable funding to implement these recommendations.

Our second point of support is for the recommendations related to climate change, forest protection, and management to store carbon. Climate change is altering the world as we know it, no matter how quickly we act to reduce our carbon footprint. Permanently protecting forests and allowing them to grow old has proven to be one of the most effective and cost-efficient methods available to address the climate crisis.

We support the recommendations that encourage the designation of important carbon reserves and the continued protection of forests, important for carbon sequestration, as well as the recommendations to identify areas on state lands for forest restoration and afforestation efforts. Each of these efforts as has been outlined really is critical to achieving the ambitious goals set out in the 80 by 50 Framework. And, one of the cheapest ways to reforest our forests is to let nature do it. Talking about cost cutting

-- let nature do it themselves. And, that's another reason why we should be managing our deer populations.

So, our final point of support is that we felt these recommendations provided a sound, reasonable set of compromises across the interests in the environmental community regarding forest management. This was not an easy assignment that was given to those. I commend the organizations that led and participated in this process. I know not every organization will support these recommendations, but we are confident that the recommendations addressed the main interests and concerns that have been raised, and offer sound steps to address items like public participation and (indiscernible).

We found the recommendation to be both holistic and comprehensive. If these recommendations are implemented, we're confident the resulting processes would involve robust stakeholder input to allow a customized approach for each region in which a planning process is designed. A lot of these management plans are case-by-case basis -- inventory on a place, and a management plan designed for that specific place. And, this is important to ensure that a diversity of thoughts is heard relative to the region and issues of concern. We want to underscore the importance for including indigenous people and traditional ecological knowledge among other stakeholder groups in these processes.

And, as we all continue to build a stronger, more resilient ecologically thriving state, we must ensure that we make smart, science-based decisions that benefit nature and our residents. Forests play a critical role in supporting the health of our communities, and our natural resources. We

owe it to the future generations to be able to work together to safeguard New Jersey's people and its biodiversity.

I am happy to take any questions you may have.

ASSEMBLYMAN KENNEDY: I have a question from Assemblyman Stanley.

ASSEMBLYMAN STANLEY: Yes, thank you, Chairman.

I just wanted to see if one of the Co-Chairs can come back up here.

I hear the terminology "ecological health." So, I would like to know how the term derived, under what terms are they used, and is it a scientific-based term, or is it a -- how is it brought up?

SENATOR SMITH: Mr. Olsen, please stay here.

DR. MURPHY: Yes, we have a glossary of terms.

I am going to read some definitions that are in our glossary, but I also want to expand on the context of what you heard for ecological health in relation to Sparta Mountain, because I think that that's why you're asking the question. But, let me just read from our glossary, I have it up here.

So, we thought it was important to define some terms because we were hearing them a lot and they were contentious -- ecological health was one of them. So, we selected several different sources, several different professional organizations -- respected scientific organizations -- and that defined terms in forest ecology.

The International -- the IPPC, the International Climate Change that Professor Moomaw is involved in defines ecological health as, "A metaphor used to describe the condition of an ecosystem by analogy with human health. Note that there is no universally accepted benchmark for a

healthy ecosystem; rather, the apparent health status of an ecosystem is judged on the ecosystem's all 2907 glossary (indiscernible) to change," that's a very specific definition, "With details depending upon which metrics are employed and judging it in which societal aspirations are driving the assessment."

Also, "ecosystem function," which is related: "The major processes of ecosystems that regulate or influence the structure, composition, and pattern. These include the nutrient cycle; energy flows; trophic levels; food-chain diversity patterns; development and evolution; cybernetics; hydrologic cycle; and weathering processes."

And, finally, "ecological restoration" is, "The process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed." So, there's lots of different definitions.

In the context of Sparta Mountain, the ecological health goal there is to create habitat for bird species -- primarily bird species. This is the New Jersey DEP goal for the Sparta Mountain Management Plan. That is an ecological goal; it's to provide habitat for bird species, for animal species. That is not an acceptable reason for some people to manage a parcel of land. It's still -- the goal is ecological health at Sparta Mountain.

ASSEMBLYMAN STANLEY: So, is this terminology being used currently when assessing issues in New Jersey?

DR. MURPHY: Yes, more specifically. So, if you have a forest-management plan, you need to define your goals. And, they go deeper than "ecological health." For instance, in the Sparta Mountain, it is defined that its habitat creation for species of birds. So, they get into more specifics.

But, overall, in discussing an ecological health goal, that's an umbrella term for habitat creation, biodiversity, carbon sequestration -- those are all within the umbrella term of "ecological health."

And, I didn't notice Tom came up. (laughter)

MR. GILBERT: I just want to add that we understand there's some concern out there about the fact that ecological health is not clearly defined or easy to define. And, we get that.

We felt like this was not the appropriate forum for us to try to resolve that issue, and that's why we recommended the creation of a scientific advisory council and a science-based plan in process as the appropriate forum to have that conversation, and have that council composed of scientific experts across various disciplines that would look at the data and would assess what should be the appropriate ecological objectives and concerns in our public forest lands based on the data, and to have that comprehensive planning process with public input so that the public can fully be a part of that and comment on, suggest what those ecological objectives should or should not be -- a comment comes out of that process.

But, we very intentionally felt like that's the place to resolve that issue that we couldn't resolve; we would not have been able to resolve and come to an agreement on how to define ecological health or not define the Task Force.

ASSEMBLYMAN STANLEY: OK, one more question.

According to your Recommendation Number 15, is that ecological health a formal definition or a narrow definition of what it is you're recommending for these (indiscernible) trees?

DR. MURPHY: For some ecological end points -- some ecological goals -- the cutting of trees *can* be a management tool. If, in those instances where you are cutting a tree for your ecologically health-derived management goal, you can either leave the wood onsite or you can remove the wood. In some instances, it's best to leave the wood if you want to create different kinds of habitat. And, in some instances, the wood is removed.

And, what we're seeing here is that in instances where wood can be removed after cutting, yes, you may as well sell it rather than put it in a landfill or otherwise put it in a place where the carbon might be released -- yeah, be released.

So, it's a multi-step process, beginning with the tool that you used for the management plan.

ASSEMBLYMAN STANLEY: So, in essence, it is a narrow definition?

DR. MURPHY: Yes, simply put.

ASSEMBLYMAN STANLEY: OK, thank you.

Thank you, Chairman.

SENATOR DURR: Chairman, I have a question.

SENATOR SMITH: Senator, go ahead.

SENATOR DURR: With all this discussion, I hadn't heard any topic brought around with the increased building in the state. That poses an effect, too, when we have increased population -- our population continues to grow in this state; we have manufacturers building warehouses, tearing down forestry.

Where do you fall in that regard? Is this something that-- I mean, clearly, we're not going to impose upon private lands; private lands is private lands. But, public lands may be restricting that aspect?

MS. RAMOS-BUSOT: Thank you, Senator, for that question.

I would like to start with the private land part. It is a threat in those -- we have a development problem here in New Jersey because they say we are the most densely populated state. And, so, that is a threat to forests and open space in New Jersey -- more so than public lands, if you really look at it in terms of numbers.

But, unfortunately, it's a much-complicated mechanism to tell private owners what to do with their land or not. Therefore, that's why would focus on public lands, so the magnitude that private land has on our forests and any open spaces and that they can be larger.

When it comes to public lands, I think that development is something that is much more complicated, and I don't think I can answer that question, but, Tom--

MR. GILBERT: I'll try to answer it.

So, again, our focus was not on private lands, but, as I noted earlier, that the DEP's Global Warming Response Act 80 by 50 Report is counting on maintaining the over 8 million metric tons of carbon stored across various land types, and increasing that by 33%. We're not going to hold onto that 8.1 million metric tons of carbon if we continue to lose large amounts of forested and other natural lands, and that's where New Jersey's very successful preservation programs need to continue.

The work is not done; New Jersey has been at it for decades, has been very successful, but we need to continue to fund our Green Acres

program, our farmland-preservation program, to purchase lands from willing sellers. When a landowner wants to sell their property for preservation and that's a win for the landowner and it's a win for the public, and the work is not done. There's still hundreds of thousands of acres, of high-value open space, forested, agricultural wetlands; lands throughout the state that still need to be preserved.

SENATOR DURR: Well, yeah, I agree. I think we should more incentivize the purchase of these and preserve the lands. I think that's where we fall short.

Thank you.

MR. GILBERT: I agree.

SENATOR SMITH: So, one last question for Mr. Olsen.

You've indicated here in the business of preserving land and forests, etc. Any suggestion on the deer problem?

MR. OLSEN: We hunt all of our lands. I think a lot of the recommendations that were made in this report are worthy to discuss. We're losing hunters generation by generation. We've seen success when we've created rules on our lands, where we encouraged the removal of does, of female deer from the herd, and that's when we see the most significant deer reductions on -- we do the aerial surveys over our preserves where we're actively -- we make a plan, we act, and now we're measuring the impact. And, we've seen deer herds slash in half just by implementing more aggressive doe hunting.

SENATOR SMITH: Thank you.

DR. MURPHY: Oh, can I mention one thing on deer?

We mentioned Chief Mann earlier, and he proposed -- he has some interesting ideas about handling deer populations based on the indigenous populations, the stewarding of land. And, in fact, New Jersey Audubon is coordinating with Chief Mann and his tribe to control deer on some of our lands.

So, we're eager to see how successful that is, and we'll share the results.

SENATOR SMITH: If the Chief has any secrets, we'd really like to hear them.

DR. MURPHY: He's happy to talk about them, so I'll let him.

ASSEMBLYMAN KENNEDY: Is there any other questions from members?

SENATOR SMITH: Chairman, are we OK?

ASSEMBLYMAN KENNEDY: We're fine.

SENATOR SMITH: OK, meeting is adjourned.

Thank you all for your participation.

(MEETING CONCLUDED)