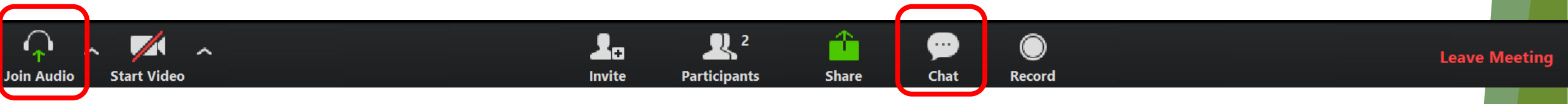
Webinar logistics

- Click on “Join Audio” to hear the webinar.
- This webinar is being recorded.
- The recording of the presentation will be posted on www.mass.gov/2030CECP afterwards.
- Remain on mute during the presentation.
- The line will be open for questions and oral comments after the presentation.
- Chat box is reserved for logistical issues and questions.
- Written comments should be sent to gwsa@mass.gov



December 2021 Public Webinar: *Natural and Working Land Strategies for the Clean Energy and Climate Plan for 2025 and 2030*

December 21, 2021

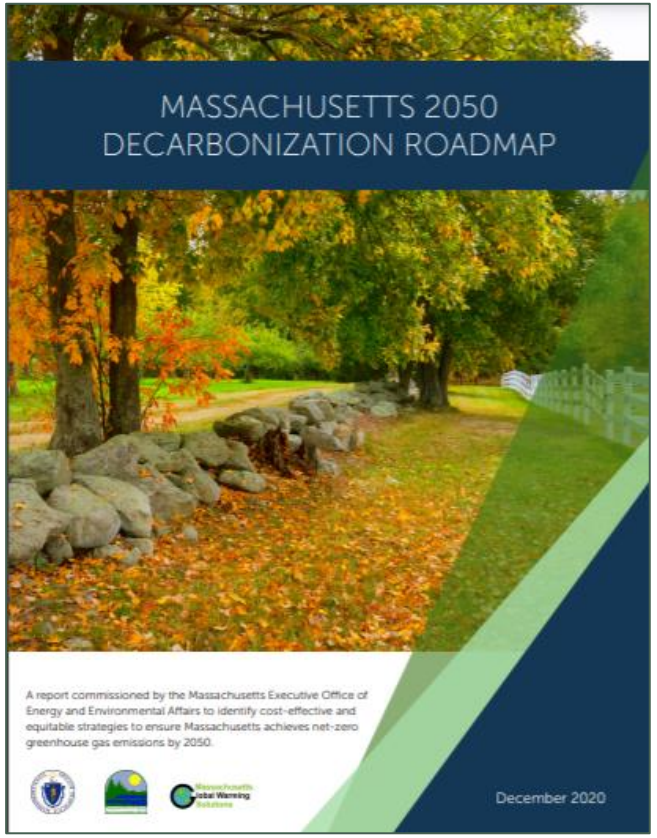
Overview

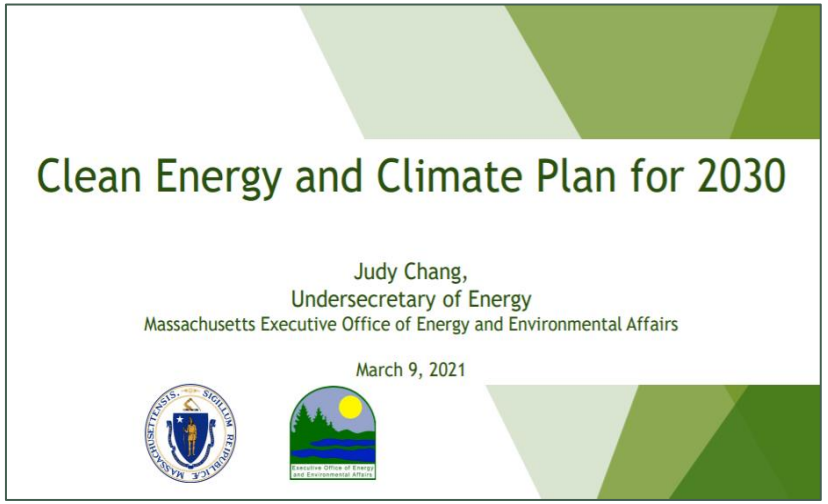
- Statutory requirements and the Clean Energy and Climate Plan (CECP) development process
- Development of goals for reducing GHG emissions and enhancing carbon sequestration on NWL, and strategies and actions to achieve those goals
- Public comments received on the Interim 2030 CECP, and EEA's plan for additional stakeholder feedback
- Gather feedback on the main strategies for reducing GHG emissions and enhancing carbon sequestration on NWL

Statutory requirements and the Clean Energy and Climate Plan (CECP) development process

Quick Refresher

- Dec. 30, 2020:
  - Massachusetts 2050 Decarbonization Roadmap (2050 Roadmap) reports released on www.mass.gov/2050Roadmap
  - Secretary Theoharides set the 2030 emissions limit at 45% below the 1990 baseline level
  - Interim Clean Energy and Climate Plan for 2030 (Interim 2030 CECP) released on www.mass.gov/2030CECP
- January 7 to March 22, 2021:
  - Public comment period on the Interim 2030 CECP
  - January 15: Public webinar on the 2050 Roadmap
  - March 9 & 15: Public webinars on the Interim 2030 CECP





On March 26, 2021

- Governor Baker signed into law "An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy" (Chapter 8 of the Acts of 2021), which requires the following (among other requirements):
  - Statewide greenhouse gas emissions limits for every 5 years between 2020 and 2050
  - Sector-based statewide emissions sublimits
  - A roadmap plan to realize each emissions limit

New Statutory Requirements

Emissions Limits:

- Interim 2030 statewide emissions limit of "at least 50% below the 1990 level"
- Interim 2040 statewide emissions limit of "at least 75% below the 1990 level"
- Statewide emissions limit for 2050 that "achieves at least net zero statewide greenhouse gas emissions; provided, however, that in no event shall the level of emissions in 2050 be higher than a level 85 per cent below the 1990 level"

Roadmap Plans:

- "Each limit shall be accompanied by publication of a comprehensive, clear and specific roadmap plan to realize said limit."
- JULY 1, 2022 deadline for the 2025 and 2030 emission limits, sublimits, and plans
- JANUARY 1, 2023 deadline for the 2050 sublimits and plan

Statutory Requirements related to NWL

Roadmap plans shall:

(Chapter 8 of the Acts of 2021, Section 10)

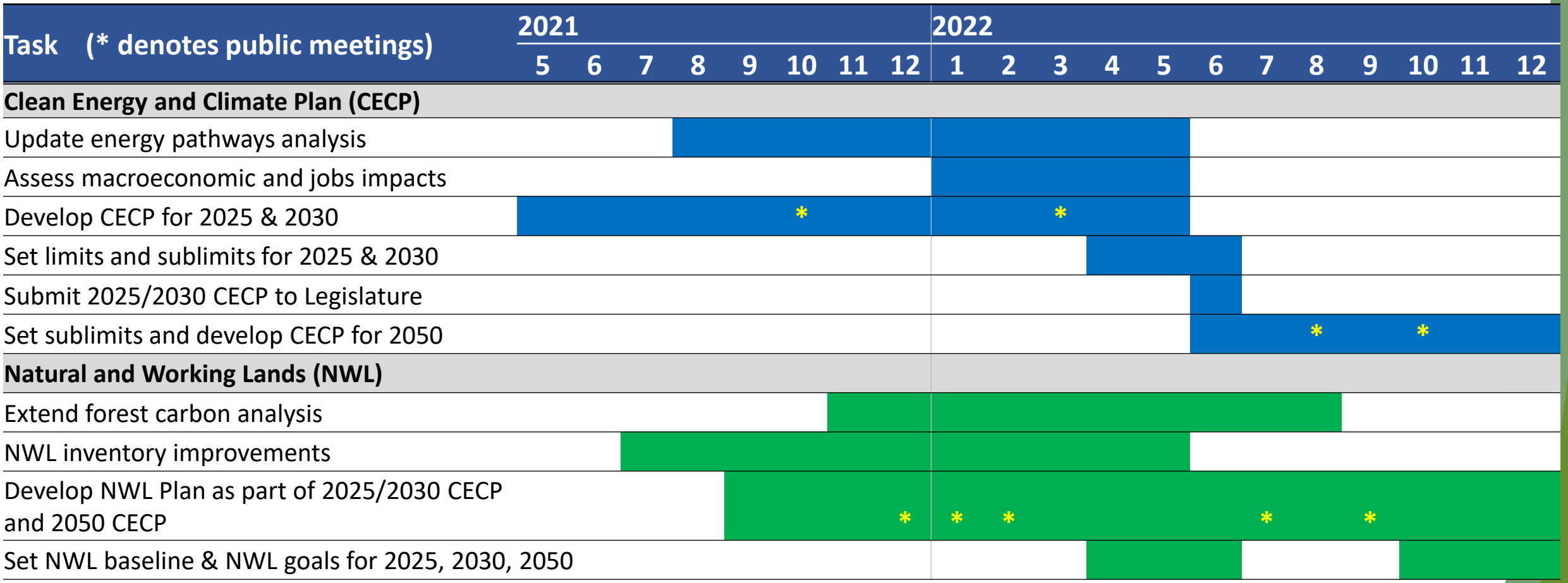
1. Contain a statewide baseline measurement and measure current carbon flux on NWL
2. Adopt statewide goals to reduce GHG emissions and increase carbon sequestration on NWL
3. Develop a NWL plan for each roadmap plan—developed and informed by a stakeholder process—that outlines actions to meet these statewide goals, including but not limited to:
   - land protection, management, and restoration;
   - state and local legislation, laws and regulations;
   - programs, grants, loans, incentives and public-private partnerships;
   - provide guidance and strategies for state agencies, authorities, municipalities, regional planning agencies, nonprofit organizations, landowners and operators

Completing the 2025/2030 CECP

- We will continue to accept comments and questions on emissions limits and sublimits, plans to achieve them, and other related topics at **GWSA@mass.gov**
- We are committed to:
  - Developing strategies, policies, and programs that can help Massachusetts reach 50% emissions reduction by 2030, with more specificity and clearer timeline;
  - Developing goals, strategies, policies, and programs that aim to lower GHG emissions while enhancing carbon sequestration on natural and working lands
  - Significantly expanding discussion of equity and just transition, and developing equitable policies and programs;
  - Improving tracking of CECP implementation on www.mass.gov/gwsa
- Please visit **www.mass.gov/2030CECP** for updates on the 2025/2030 CECP development.

CECP Process & Timeline

- EEA will release the final 2025/2030 CECP by July 1, 2022



Public Meetings on 2025/2030 CECP

Oct. 14 & 15, 2021

(recording of meetings posted on www.mass.gov/2030CECP)

- EEA presented on proposed approach for completing the 2025/2030 CECP and gathered feedback on these questions:
  1. What are your concerns with EEA setting limits on gross emissions while tracking and lowering net emissions through goal setting and policy development?
  2. Do you support EEA setting emissions sublimits to be consistent with the categories already in the statewide greenhouse gas emissions inventory? If not, what are your concerns?
  3. Do you support EEA finalizing the Interim 2030 CECP to be the Clean Energy and Climate Plan for 2025 and 2030? If not, what are your concerns?

Input on these questions can be submitted to gwsa@mass.gov through Dec. 24, 2021.

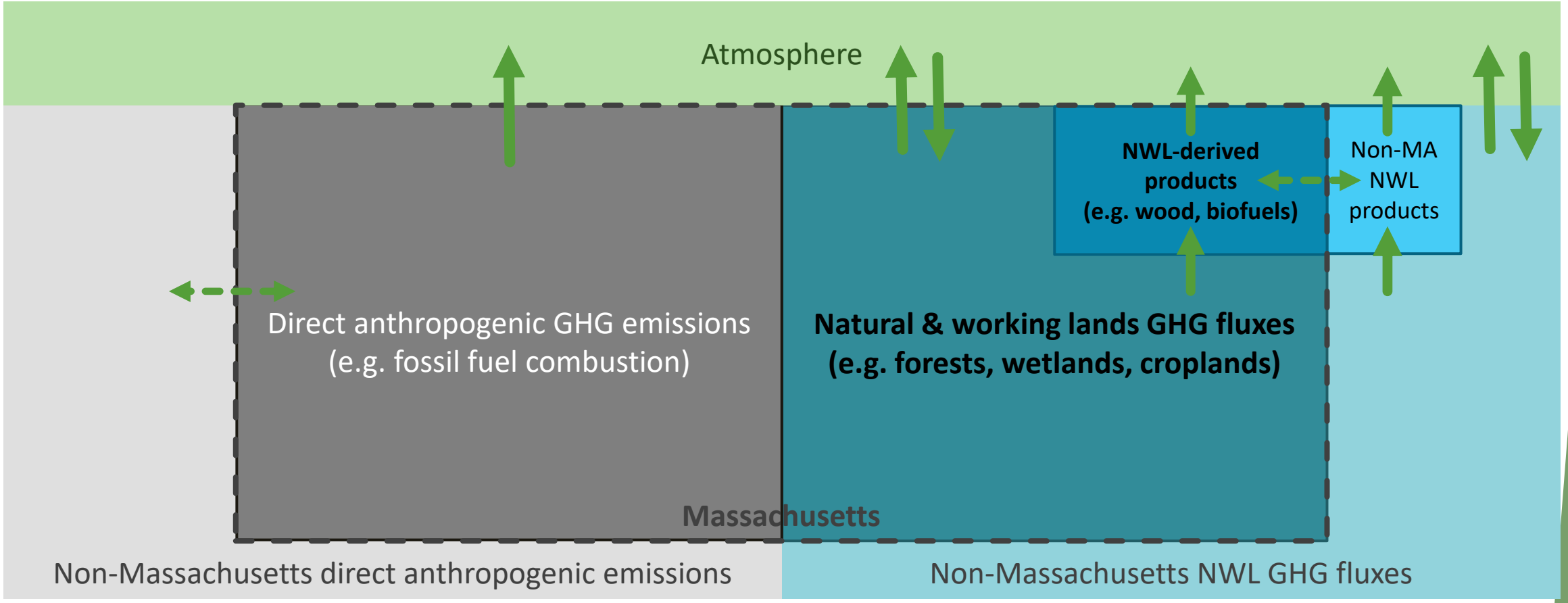
March 2022

- EEA will present and gather feedback on:
  1. Proposed emissions limits and sublimits for 2025 and 2030;
  2. Proposed goals for reducing emissions from and increasing carbon sequestration on natural and working lands (NWL)
  3. Proposed policy portfolio that aim to achieve these emission limits, sublimits, and NWL goals.

Development of goals for reducing GHG emissions and enhancing carbon sequestration on NWL, and strategies and actions to achieve those goals

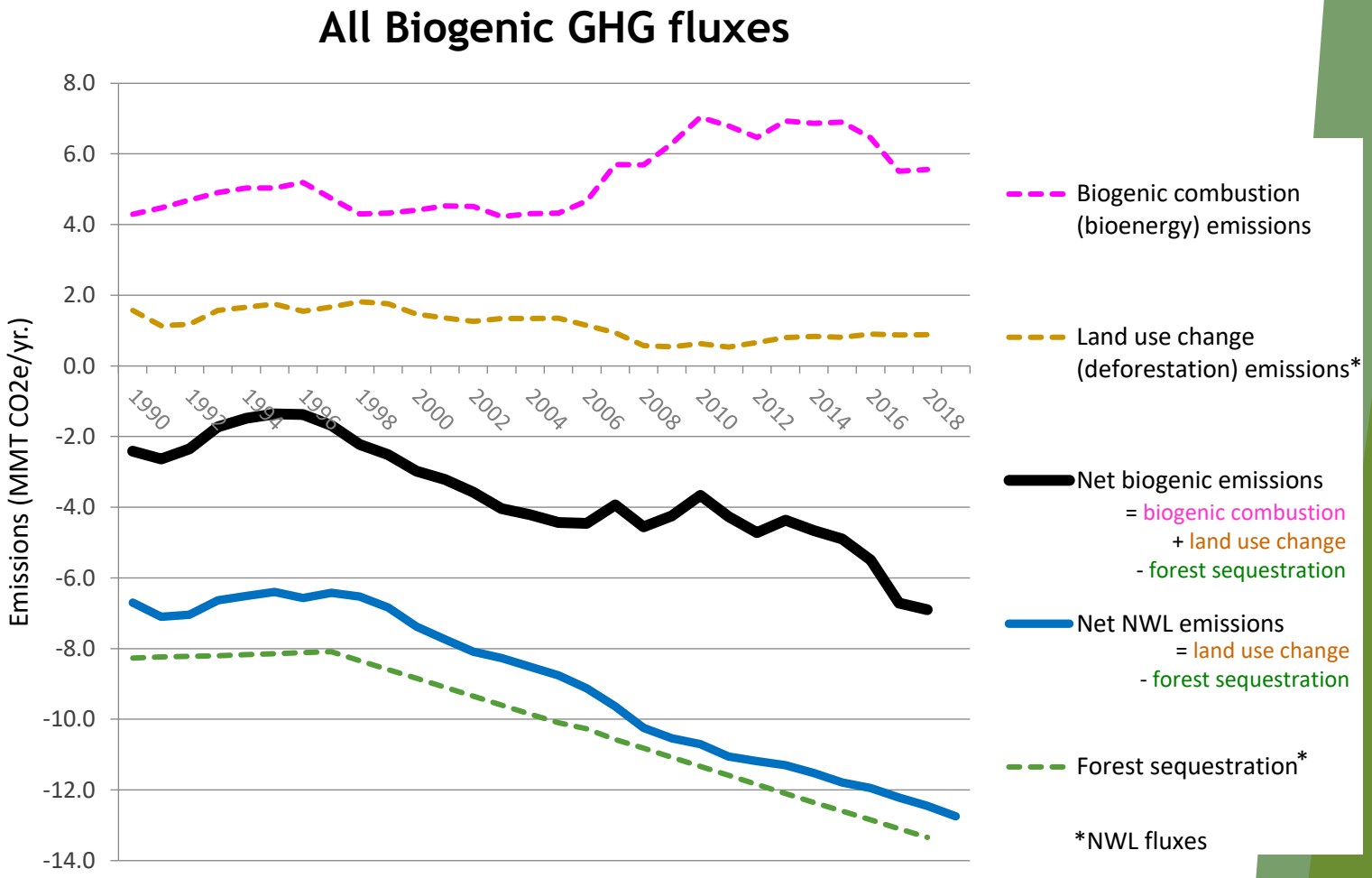
Greenhouse Gas (GHG) Fluxes

- Net GHG emissions accounting includes tracking the emissions and removal/storage of carbon on natural and working lands (NWL) and NWL-derived products.



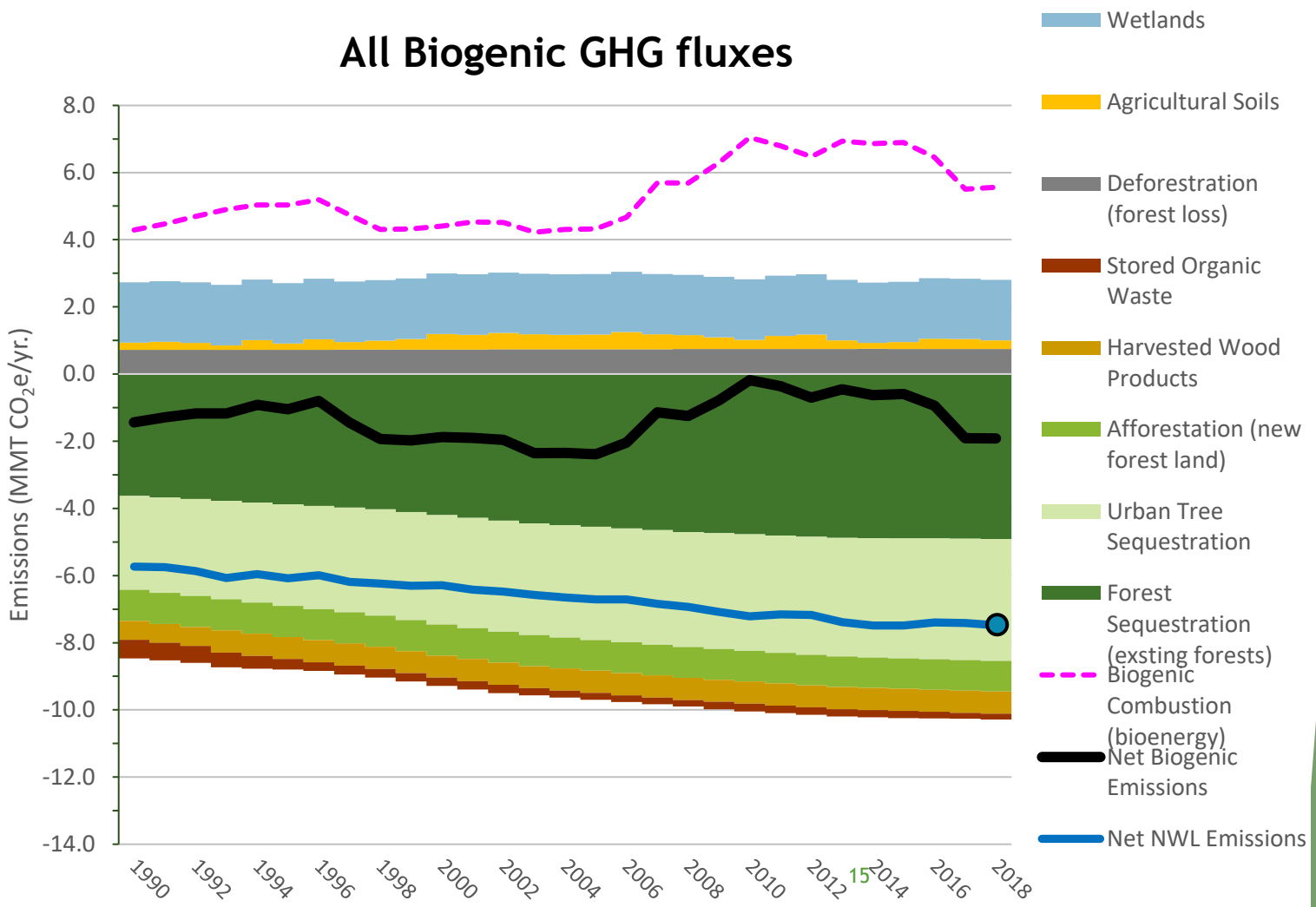
Current Biogenic GHG Inventory

- The biogenic component of our current GHG inventory currently tracks some NWL fluxes (deforestation, forest sequestration), but was developed ~10 years ago, and must be updated to:
  - Track additional NWL GHG fluxes e.g. wetlands, urban trees/forests, croplands, harvested wood products;
  - Use more standardized, updated data sources and methodology;
  - Incorporate spatially-explicit accounting of land use change.



Preliminary NWL Inventory Improvement

- Net NWL GHG emissions estimated at -7.4 $MMTCO_2e/yr.$ for 2018 (i.e. net GHG removal)
- NWL carbon removal and storage is smaller than previously estimated (-12.7 $MMTCO_2e/yr.$ for 2018)
- Net overall biogenic emissions (NWL + biogenic combustion) are likely still negative (estimated at -1.9 $MMTCO_2e/yr.$)
- All results preliminary now but magnitude of net carbon sequestration unlikely to change



Preliminary NWL Inventory Improvement

- Forest land is the largest source of GHG removal and storage, and the largest carbon stock, in Massachusetts.
- Loss and gain of forest land (i.e. deforestation and reforestation) are key NWL GHG emission sources & contributors to carbon removal/storage, respectively.
- Durable wood products and urban forests and trees also store significant carbon.
- Wetlands and croplands can sequester and store carbon, but are currently net GHG emission sources due to past and ongoing land use and management practices.

Land Class (i.e. NWL Subsectors)	Net Emissions $MMTCO_2e$/yr. in 2018	Carbon Stock $MMTCO_2e$
Forest Land (live & dead biomass, soils)	-5.7	1,020
Forest sequestration	-4.9	-
New forest land	-0.9	-
Forest loss	+0.8	-
Harvested wood products	-0.7	-
Wetlands	+1.8	700
Settlement Land (urban trees, soils, landscape areas)	-3.8	Unknown
Croplands (agricultural soils)	+0.3	45
Other Land (e.g. grasslands, water bodies)	Unknown (likely small)	Unknown
Net NWL Emissions:	**-7.4**	**Total: > 1,800**

Emissions estimates from EPA (2020) State Information Tool – LULCF module, MassDEP (2019) *Wetlands Status and Trends* and Blue Carbon Calculator. Stock estimates from Massachusetts' *2050 Decarbonization Roadmap Land Sector Report* and *Healthy Soils Action Plan.*

Main Topics to be Covered in the NWL Plan in the 2025/2030 CECP

- Main Strategies, by priority level:
  1. Protect NWL to protect current carbon storage
  2. Manage NWL to enhance and improve resiliency of carbon storage
  3. Restore NWL to enhance carbon storage ← Not in the Interim 2030 CECP
  4. Incentivize carbon storage in durable wood products
  5. Explore additional carbon sequestration to achieve net zero emissions by 2050

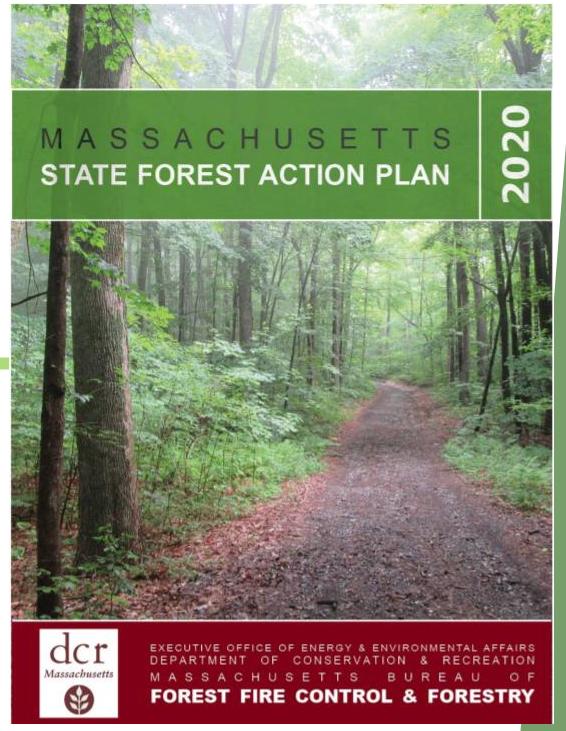
Resources for NWL Plan Development

Provides NWL conservation/ restoration goals and policies

Provides soil carbon data for NWL inventory & NWL carbon storage potential, and policies to increase soil carbon storage

NWL Plan in 2025/2030 CECP

Provides forest management strategies



Expert input

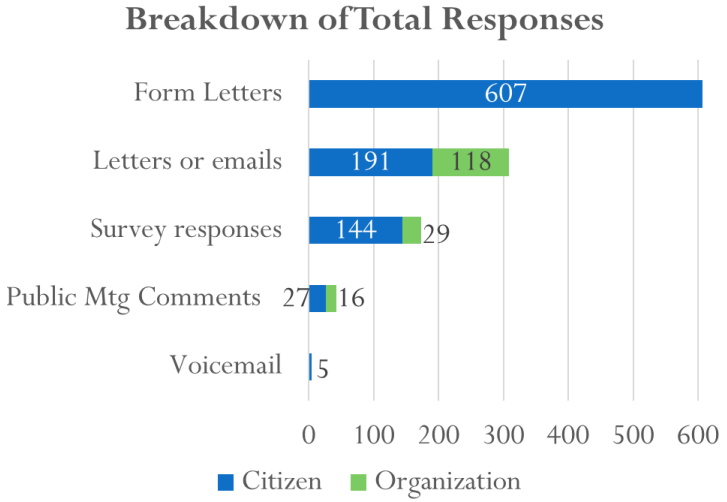
Provide technical guidance on carbon flux inventory and strategies

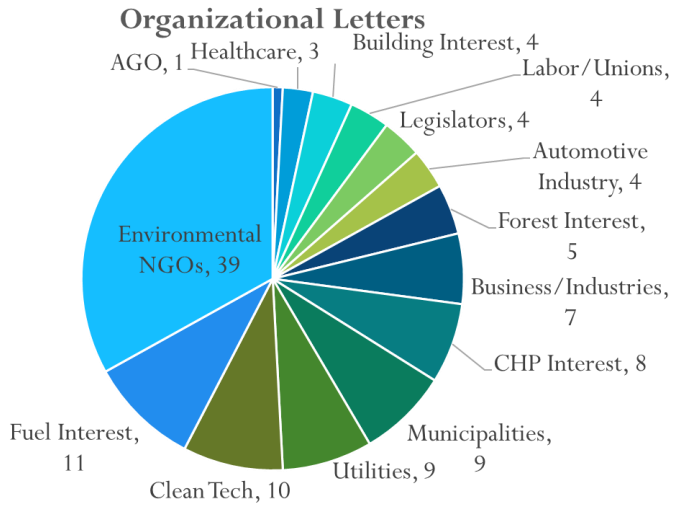
Provide NWL goals and policy suggestions

Stakeholder input

Public comments received on the Interim 2030 CECP, EEA's plan for additional stakeholder feedback

Key Themes/Topics from Received Public Comments on the Interim 2030 CECP





- Over 1,100 comments on the Interim 2030 CECP during the public comment period.
- Significant request for more commitment and specificity around:
  1. Equity and Environmental Justice in policy and support
  2. Just transition/workforce development and training programs, for both workers in fossil-based industries/businesses and environmental justice populations
  3. Funding and financing programs to support decarbonization
- Many support raising the 2030 emissions limit from 45% to 50%

Key Land Sector Issues from Submitted Comments

1. **Forest management**
   - Some advocates prefer no tree cutting, especially on public lands.
   - Others prefer climate-smart forestry practices, acknowledging dynamic forest ecosystems, and better accounting of forest carbon flow (such as leakage).
2. **Harvested long-lived wood products**
   - Several groups advocated that wood building products are lower-carbon than concrete and steel, and recommended use of embodied carbon in evaluating building materials.
   - Other advocates raised concerns about the cutting of trees for timber products and the need to account for the lifecycle of mass timber.
3. **Carbon sequestration and land goals**
   - Some advocates prefer specific goals for biogenic carbon sequestration and/or conservation, reforestation, and restoration of natural and working lands, including metrics for measuring progress.
4. **Urban tree planting**
   - Some advocates prefer an explicit commitment to maintaining and increasing urban tree canopy, particularly in EJ communities.
5. **Stakeholder engagement**
   - Several advocates and forestry groups prefer more stakeholder engagement around land sector analysis and policies.
6. **Other topic raised:** wetlands and blue carbon

Upcoming NWL Public Meetings and Technical Workshop

Public Meetings

- **Jan. 14, 2022, 12PM-2PM**
  - Summarize and gather feedback on key elements of the Resilient Lands Initiative
- **Feb. 11, 2022, 12PM-2PM**
  - Gather feedback on additional options for reducing GHG emissions and enhancing carbon sequestration on forestlands

Technical Workshop

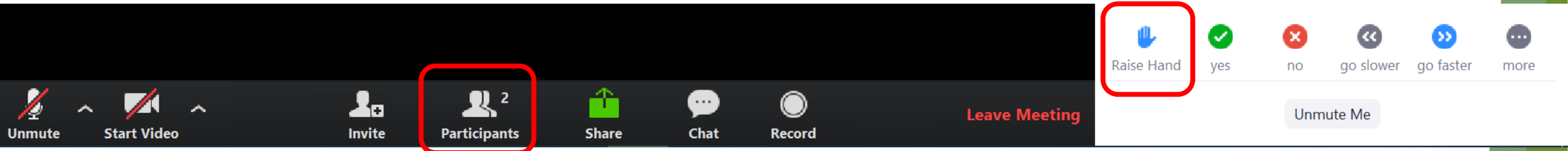
- **February 2022**
  - Gather input on defining the NWL sector baseline and scope for goal setting and assessment

Sign up to get more information on these meetings and technical workshop is available on www.mass.gov/2030CECP

Feedback

- Do you have feedback on the proposed main strategies for reducing GHG emissions and enhancing carbon sequestration on NWL?
  1. Protect NWL to protect current carbon storage
  2. Manage NWL to enhance and improve resiliency of carbon storage
  3. Restore NWL to enhance carbon storage
  4. Incentivize carbon storage in durable wood products
  5. Explore additional carbon sequestration to achieve net zero emissions by 2050

Click on “Participants” and then “Raise Hand” and we will unmute you



If you are on the phone, press ***9*** to raise your hand.
When we call on you, press ***6*** to unmute yourself.

Thank You!

Website: www.mass.gov/2030CECP
Email: gwsa@mass.gov