

NELF Scenario Framing Suggestions: Recent Trends

- Can be easier to work with as the purely data-driven NELF scenario.
- Linear continuation of patterns of land use change that occurred between 1990-2010 within subregions across New England, focusing on conversion of farmland and forest to development & forest conservation.
- Can be used to augment messaging you already use around the value / status of forests by adding context about recent trends in land use and implications of a business-as-usual future.
- The table below summarizes how Recent Trends can be used with a few common conservation messages.

<i>Your Message</i>	<i>Recent Trends Result</i>	<i>RT shows message?</i>	<i>Suggested (re)framing</i>
Development threatens our forests	Much forest lost to development	Yes	Frame works – use the stats & maps!
	Not much forest lost to development	No	Can you show that the location of development matters (e.g. lakeside, on farmland, cutting off wildlife corridors)? If so, try reframing with a focus on <i>where</i> development happens rather than <i>how much</i> . Consider other frames such as the one below, which may work better for rural towns not as threatened by development.
Resource / value XYZ threatened by lack of forest conservation	Not enough forest conserved to protect XYZ	Yes	Frame works – use the stats & maps!
	Enough forest conserved to protect XYZ	No	We have set a pretty good pace to achieve our goals by 2060, but we need to maintain our pace!

About Recent Trends:

- Business as usual scenario, but still not a prediction. Maps represent plausible future land use given reference period & methods used.
- Assumption of Recent Trends is that future will be like the past (linear continuation of rates of land use change from the reference period).
- Due to lack of zoning and stochasticity, not appropriate for parcel level uses. It is not a build-out analysis. It is a regional land use change analysis suitable for applications at the town level and larger.
- Create additional statistics and charts using Recent Trends data from NELF Explorer: bit.ly/NELFstats2
- Citation: Thompson JR, Plisinski JS, Olofsson P, Holden CE, Duveneck MJ. 2017. Forest loss in New England: A projection of recent trends. PLoS ONE 12(12): e0189636. Accessed via NELF Explorer (<https://newenglandlandscapes.org/>) on DATE.

NELF Scenario Framing: Alternatives to Recent Trends

- Developed with stakeholders working on land-use across New England.
- Represent possible futures that could arise as a result of global forces (e.g. climate change, globalization) and local decisions (e.g. settlement patterns, valuing ecosystem services).
- Based on differences in *socio-economic connectedness* and *natural resource planning and innovation*, which were identified as highly impactful and uncertain drivers of land use change by workshop participants.
- The table below summarizes the two most extreme alternatives to to RT as a single sentence to show some ways of simply explaining them, as well as pro-conservation frames the scenario supports.

<i>Scenario</i>	<i>A scenario where...</i>	<i>Pro-conservation frames</i>
Connected Communities	Society recognizes and values the benefits natural lands provide us. Smart growth development and land protection work together to conserve our natural resources.	Gain ability to shape future development and protect land-based economic revenue (forestry, recreation) with proactive conservation Preserve rural character for future generations, protect against encroaching Boston and Worcester suburbs
Growing Global	We are unprepared for an influx of climate and economic refugees, resulting in a Boston mega-city and sprawling development across the region.	Financial strain of developing in certain areas (e.g. wetlands, flood zones) Lost economic opportunities in recreation and tourism – can't "undevelop" land Loss of forest ecosystem services in absence of planning

About alternatives to recent trends:

- Represent ideas from New Englanders about impactful and uncertain aspects of our future including global and local forces.
- Translation of qualitative scenario narratives to land use maps can be "squishy" but can also be a powerful and thought-provoking visualization.
- Citation: Thompson JR, Plisinski JS, Lambert KF, Duveneck MJ, Morreale L, McBride MF, MacLean MG, Weiss MS, and LG Lee. Spatial simulation of co-designed land-cover change scenarios for New England: Alternative futures and their consequences for conservation priorities. DOI: 10.1101/722496 (preprint – not yet peer reviewed).