

June 12, 2025

Dawn Hallowell
Director, Southern Maine Regional Office
Maine Department of Environmental Protection
312 Canco Road
Portland, ME 04103

RE: NECEC Conservation Plan – Opportunity for Comment

Dear Ms. Hallowell,

Thank you for the opportunity to provide public comments on the New England Clean Energy Connect (NECEC) Conservation Plan (“Plan”) submitted by NECEC Transmission LLC (“NECEC LLC”) to the Maine Department of Environmental Protection (DEP) on May 9, 2025.

As required by Condition #39 of the May 11, 2020 Maine DEP Order (“DEP Order”) and Condition #10 of the July 21, 2022 Maine Board of Environmental Protection (BEP) Order (“BEP Order”), NECEC LLC is required to conserve at least 50,000 acres in the vicinity of Segment 1 of the NECEC project subject to certain requirements.

This is a pivotal, highly consequential condition that is required of the NECEC project as compensation for the fragmenting effects of the transmission line on habitat in the region of Segment 1 and the related edge effects of the project. The importance of the Plan is illustrated by the fact that the *only* substantive modification that the BEP made to the DEP permit on appeal was to *increase* the acreage of the required conservation land by 10,000 acres, from 40,000 acres (an 8:1 ratio of conservation to impacted land) to 50,000 acres (a 10:1 ratio).

The Plan submitted by NECEC LLC on May 9, 2025, serves as a condition compliance submission. The DEP’s role now is to evaluate whether the Plan meets the compliance requirements set forth in Condition #39 of the DEP Order and Condition #10 of the BEP Order.

Overall Evaluation

After careful review of NECEC LLC’s submission, we conclude that the Plan fails to comply with the DEP and BEP Orders and must be denied. We also conclude that NECEC LLC would need to make *very substantial* changes to the Plan in order to comply with the Orders.

Highlights of our analysis include the following:

- NECEC LLC’s definition of “mature forest” is not ecologically defensible and fails to meet the explicit standards of the Orders. According to the Plan, it would take 40 years for trees in this heavily harvested landscape to meet even the deficient definition of a

mature forest. Even then, in 2065, nearly all of the Plan area would be available for harvesting, and only 50% would have trees that are 50 feet or taller with a minimum basal area of 60 ft²/acre – but the precise location of this 50% would likely be shifting over time. This approach violates the intent of the Orders to manage for mature forests and habitat, as many of the key mature forest habitat features that support wildlife will not develop under a shifting mosaic approach.

- NECEC LLC has not accurately described the current condition of the forest within the proposed 50,063 acres. According to work done by forest ecologist Dr. John Hagan using LiDAR, 78% of the land is less than 35 feet tall, not 60% as claimed by NECEC LLC, and only 7% is over 50 feet, not 13% as claimed by NECEC LLC.¹ These discrepancies matter enormously, as NECEC LLC has selected one of the most heavily harvested areas of Maine’s working forest as the landscape upon which it is attempting to comply with Orders focused on conserving and managing for mature forests. In doing so, NECEC LLC’s plan requires waiting until 2065 for trees to reach even 50 feet high, which is far below what we would expect in a mature forest.
- Only about 124 acres (0.2%) of the proposed 50,063 acres are considered late-successional or old-growth (LSOG) forest, with an additional 1,821 acres (3.6%) classified as transitioning late-successional forest. This is compared to 3.0% LSOG and 15.8% transitioning late-successional forest for the entire 10.4 million acres of Maine’s Unorganized Territories.² Under the Plan, most of these mature forest areas would remain unprotected from being harvested, as only about 8 acres of LSOG and 232 acres of transitioning late-successional forest would fall within proposed 100-foot stream buffers, and there are no additional “no cut” protections outside these buffers.
- The Plan is not as contiguous and unfragmented as claimed and is vulnerable to considerable additional fragmentation in the future through loopholes in the Conservation Easement that would allow for new rights-of-way, easements of ingress or egress, driveways, roads, utility distribution or service lines, or towers. Thus, inexplicably, the Conservation Easement would allow additional fragmentation to occur even though the primary purpose of the easement is mitigation for fragmentation.
- The Plan inappropriately includes within the proposed 50,063 acres approximately 1,066 acres of habitat affected by fragmentation associated with Segment 1 of the NECEC – the same land for which the project is intended to compensate. Additionally, the Plan includes similarly fragmented habitat associated with Route 201 and an east-west transmission line, comprising 705 acres and 147 acres of the proposed conservation

¹ Our Climate Common, NECEC Conservation Plan – Opportunity for Comment (June 12, 2025)

² Hagan, J., Shamgochian, B., Taylor, M., and Reed, M., 2024. Using LiDAR to Map, Quantify, and Conserve Late-successional Forest in Maine. Our Climate Common Report, Georgetown, Maine. 44 pp.

<https://ourclimatecommon.org/wp-content/uploads/2024/10/MAINE-LSOG-Report-October-2024b.pdf>

area, respectively. The Plan also includes two smaller blocks (approximately 3,900 acres combined) that do not comply with the Order's requirement that conservation blocks be 5,000 acres or larger. When both fragmented habitat and the two smaller blocks are removed, the Plan drops to 44,665 acres, which fails to meet the 50,000-acre requirement in the Orders.

- Continued forestry operations within the Plan area would be much more similar to "business as usual" than envisioned by the Orders, which include specific direction that "while conceivable that some wood could be commercially harvested within the conservation area, standard sustainable forestry operations commonly allowed in areas subject to working forest easements would not."³ The Plan, as proposed, allows harvesting across the entirety of the 50,063 acres, except for an estimated 2,400 acres within 100-foot riparian buffers. The most likely scenario is that all trees outside these riparian buffers would be subject to harvesting after they reach 50 feet tall.
- The proposed Conservation Easement is similar to a basic working forest easement and does not adequately protect and connect riparian habitat and mature forests as required by the DEP and BEP Orders. In addition, the Plan falls short of providing the type of conservation envisioned by the Orders because it is all Conservation Easement and no fee acquisition, which would ensure a higher and more easily verified level of habitat conservation.

In more detail, we urge the DEP to deny the Plan for the following seven reasons:

Reason 1: Flawed definition of "mature forest"

In accordance with Condition #39 in the DEP Order, the primary goal of the Plan is to compensate for "the fragmenting effect of the transmission line on habitat in the region of Segment 1 and the related edge effect by promoting habitat connectivity and conservation of mature forest areas." To achieve this outcome, the Order directs NECEC LLC to draft a Forest Management Plan with provisions to manage the conservation area to "provide blocks of habitat for species preferring mature forest habitat and wildlife travel corridors along riparian areas and between mature forest habitat."⁴

In the Plan, NECEC LLC proposes a definition of "mature forest habitat" using thresholds of "50 feet or greater height with a basal area of 60 square feet of native tree species." NECEC LLC claims that this definition is defensible based on "ample evidence in the record to support a threshold condition of those forest stands that achieve a minimum height of 35 feet."⁵

³ BEP Order pg. 56

⁴ DEP Order pg. 81

⁵ Plan pg. 4

For height, the use of 50 feet as a threshold is inadequate as mature trees of some of the most common species in the area (balsam fir, red spruce, American beech, yellow birch, and sugar maple) can reach heights ranging from 60-100 feet tall at maturity.⁶

For basal area, the use of 60 ft²/acre as a threshold for “mature forest” is severely inadequate (see Exhibit A for a representative photo). For context, the U.S. Forest Service recommends maintaining a residual basal area of 60-80 ft²/acre after an uneven age class harvest.⁷

Additionally, Maine law defines clearcuts using a basal area of 30 ft²/acre or less,⁸ which is just half of the Plan’s proposed criteria for “mature forest.” In comparison, the average basal area across 547 forest plots within Maine’s Ecological Reserves is 124 ft²/acre.⁹ This average includes a variety of forest types, which are known to have differing basal areas. In New England, the recommended basal area of live trees and snags for American martens is at least 80 ft²/acre.¹⁰ In addition to requiring a basal area of at least 80 ft²/acre (preferably >100 ft²/acre), marten also need an average of seven patches of forest >1,250 acres per township, each with at least 75% of the stands > 40 feet tall and 8-10 ft²/acre of dead trees, logs, and root mounds.

In claiming that there is evidence in the record to support using 35 feet as a threshold for mature forest, NECEC LLC is mischaracterizing testimony by experts and statements by Maine DEP. To the extent that the 35-foot threshold is mentioned in the record, it is done so in reference to areas within the “wire zone,” “tapered corridor,” or “wildlife areas.” In these cases, the 35-foot threshold is intended to either reduce habitat impacts or facilitate habitat connectivity, not to preserve mature forests. Additionally, the vegetation management requirements within the DEP Order make an explicit distinction between 35-foot minimum height and full-canopy height vegetation.¹¹ In this case, full-canopy height vegetation reflects a more mature forest condition, refuting the idea that 35 feet is the benchmark for mature forest established within the DEP and BEP Orders.

Since Condition #39 explicitly calls for the management of “blocks of habitat for species preferring mature forest habitat,” any established definition for “mature forest” within the Plan must be grounded in an ecological context rather than an economic one. Using height and total

⁶ The Audubon Society, Field Guide to North American Trees: Eastern Region (1980)

⁷ U.S. Forest Service, Silvicultural Guide for Northern Hardwoods in the Northeast (April 2014): https://www.fs.usda.gov/nrs/pubs/gtr/gtr_nrs132.pdf

⁸ 12 M.R.S. §8868

⁹ Kuehne, C., Puhlick, J.J., and Weiskittel, A.R., 2018. Ecological reserves in Maine: Initial results of long-term monitoring. General Technical Report. 62 p. https://www.maine.gov/dacf/mnap/reservesys/Maine%20ERM%20GTR%202018_Final.pdf

¹⁰ High Branch Conservation Services and Plymouth State University, Guidelines for Managing American Marten Habitat in New York and Northern New England: <https://rcngrants.org/sites/default/files/datasets/Compiled%20Guidelines%20for%20Managing%20Habitat%20for%20Regional%20SGCN%20in%20Northeastern%20and%20Mid-Atlantic%20Forests%20-%202017.pdf>

¹¹ DEP Order Appendix C

basal area alone is inadequate, as measurements of height can be taken and interpreted differently depending on whether you are using the tallest trees, an average of the dominant tall trees, or LiDAR. Instead, we recommend using a combination of minimum volume, total basal area, and basal area or number of trees greater than 12-16 inches Diameter at Breast Height (DBH) to ensure that there are not only a lot of trees on the site but numerous large, old trees as well.

Reason 2: Lack of existing mature forest within the conservation area

As stated in the DEP Order, Condition #39 requires that the primary goal of the Plan be “promoting habitat connectivity and conservation of mature forest areas.”¹² Condition #10 in the BEP Order updates the total amount of conservation needed to “a total of 50,000 acres.”¹³ Although the DEP and BEP Orders do not specify the exact method of conservation (i.e., fee acquisition vs. conservation easement), the BEP Order does state that “while commercial timber operations are not expressly precluded by the Order, typical commercial forestry operations are not conducted to achieve conservation of mature forest areas. Thus, while conceivable that some wood could be commercially harvested within the conservation area, standard sustainable forestry operations commonly allowed in areas subject to working forest easements would not.”¹⁴

Although including a significant fee acquisition of land with a substantial amount of existing mature forest would have been the most effective approach for complying with the Orders, NECEC LLC included no fee acquisition. The entire Plan is a working forest conservation easement.

The Plan states that the proposed conservation area contains “sizeable blocks of mature forest.”¹⁵ NECEC LLC claims that “trees under 35 feet in height comprise 60% of the acreage, with only 13% currently taller than 50 feet.”¹⁶

However, based on analysis of existing LiDAR data, the proposed conservation area contains very little mature forest. Although the Plan states that only 60% of the landscape is comprised of trees less than 35 feet in height, LiDAR data shows that 78% of the proposed conservation area is less than 35 feet in height, and 35% is less than 10 feet in height.^{17,18} This difference among estimates is likely methodological. The Plan estimate likely was derived through a method of generalizing tree heights across entire stands, compared with the high-resolution

¹² DEP Order pg. 81

¹³ BEP Order pg. 57

¹⁴ BEP Order pg. 56

¹⁵ Plan pg. 9

¹⁶ Plan pg. 12

¹⁷ Our Climate Common, NECEC Conservation Plan – Opportunity for Comment (June 12, 2025)

¹⁸ Derived from 1-m²-resolution growth-adjusted canopy height data from 2016

LiDAR data, which provides a more accurate characterization of the tree heights that are actually on the landscape. The LiDAR data reveals that the Plan area overwhelmingly is comprised of trees under 35 feet in height.

Compared to the Unorganized Territories as a whole, the proposed conservation area is one of the most heavily harvested landscapes in the last 20 years. The intensive forestry operations in the proposed conservation area are apparent in orthophotography from 2016 (see Exhibit B). Additionally, based on the LSOG dataset developed by Hagan et al. (2024),¹⁹ only 0.2% of the proposed conservation area contains LSOG forest whereas the average across the greater Unorganized Territories in Maine is 3%. This is aligned with the fact that virtually all of the proposed conservation area is actively used for commercial forestry operations, which as the BEP Order mentions, are not conducted to achieve conservation of mature forest areas.

To achieve substantial conservation of “mature forest habitat” as defined by NECEC LLC, the Plan states that specific management practices within the Conservation Easement will be implemented to attain this “mature forest” standard for 50% of the proposed conservation area by 2065 and in perpetuity thereafter. **In other words, the Plan is proposing that half of the acreage required for compensation for ongoing habitat fragmentation impacts today will not even have trees that are 50 feet or taller until 40 years from now.**

From an ecological perspective, this lag-time in compensation is ineffective as all the species impacted by this fragmentation have lifecycles shorter than 40 years. Additionally, we believe the proposed 50% target for “mature forest” is inadequate for a compensation project whose primary goal is “promoting habitat connectivity and conservation of mature forest areas.”²⁰ For the conservation and interconnection of this habitat type to more accurately reflect the primary goal of the Orders, a better target would be to conserve at least 75% of the non-wetland, non-high-elevation landscape in a “mature forest” condition to allow room for site variability and natural disturbances.

Reason 3: Fragmentation of the conservation area by transmission lines and roads

In accordance with Condition #39 in the DEP Order, the proposed conservation area must consist of blocks of “at least 5,000 acres unless the area is adjacent to existing conserved land or the applicant demonstrates that the conservation of any smaller block, based on its location and other characteristics, is uniquely appropriate to further the goals of the Conservation Plan.”²¹ The sum of these individual conservation blocks need to total at least 50,000 acres to adhere to the compensation requirement outlined in the BEP Order. According to NECEC LLC, the Plan

¹⁹ Hagan, J., Shamgochian, B., Taylor, M., and Reed, M., 2024. Using LiDAR to Map, Quantify, and Conserve Late-successional Forest in Maine. Our Climate Common Report, Georgetown, Maine. 44 pp.

<https://ourclimatecommon.org/wp-content/uploads/2024/10/MAINE-LSOG-Report-October-2024b.pdf>

²⁰ DEP Order pg. 81

²¹ DEP Order pg. 81

“greatly exceeds this requirement by conserving one largely contiguous block of approximately 50,063 acres, which itself is surrounded by already conserved land.”²²

Although NECEC LLC claims that the proposed conservation area is one “largely contiguous” block, a closer evaluation of the Plan reveals that it contains several fragmenting features that greatly reduce habitat connectivity. Most prominently, these include the NECEC line itself, Route 201, and a smaller east-west transmission line. When these three features are taken into consideration, the proposed conservation area is more accurately represented as six separate blocks rather than one contiguous area (see Exhibit C). Of these six blocks, two are smaller than 5,000 acres, even when adjacent conservation land is taken into consideration. NECEC has not provided any justification that would demonstrate that “conservation of any smaller block” (such as these two)²³ should qualify for inclusion in the Plan based on “location or other characteristics.”²³ Thus, these two smaller blocks, which total more than 3,900 acres, should be removed from the Plan for non-compliance with the Orders – bringing the overall acreage below the 50,000-acre requirement.

Using the same edge effect width for calculating fragmentation impacts from the NECEC line in the DEP Order (i.e., 330 feet on each side of the corridor), the total impact of these three fragmenting features (e.g., the NECEC Line, Rt. 201, and a smaller existing transmission line) can be calculated within the proposed conservation area (see Exhibit D). For the corridor itself, the amount of land within the Plan that will experience fragmentation impacts is approximately 1,066 acres, based on approximate boundaries of the proposed conservation area and the assumption that 150 feet on either side of the NECEC centerline is not included in the Conservation Easement. For Route 201 and the east-west transmission line, the fragmentation impact is approximately 705 acres and 147 acres, respectively. Accounting for overlap, the total habitat fragmentation impact of all three of these features within the proposed conservation area is approximately 1,909 acres. Due to fragmentation impacts, this total should be subtracted from the proposed 50,063 acres of mitigation, which would again result in the Plan falling short of the required 50,000 acres of conservation.

Removing non-compliant small blocks and fragmented habitat areas that should not be allowed as compensation for the NECEC’s fragmentation impacts within the compliant large blocks brings the Plan area to approximately 44,665 acres, which fails to meet the minimum requirement of 50,000 acres.

²² Plan pg. 8

²³ DEP Order pg. 81

Reason 4: Inadequate forest management practices for maintaining mature forest habitat and connecting riparian habitat with mature forest

As part of Condition #39, the DEP Order requires that the Plan include a draft Forest Management Plan with specific provisions to manage the conservation area to “provide blocks of habitat for species preferring mature forest habitat and wildlife travel corridors along riparian areas and between mature forest habitat.”²⁴ To that end, the Plan proposes to manage land within the conservation area so that 50% of the 50,000 acres meets the NECEC LLC definition of “mature forest” by the year 2065 and that this 50% threshold be maintained in perpetuity through a “shifting mosaic” forest management strategy.

From an ecological perspective, the problem with this approach is that much of the 50-foot tall, 60 ft²/acre basal area “mature forest” will move across the landscape over time. This means that no one area will necessarily be maintained and managed as a “mature forest” in the long term, greatly reducing and disrupting the vast variety of habitat features and benefits that accompany unmanaged mature forests. These features and benefits emerge and are sustained when there are at least three layers of vegetation composed of trees varying in age and size, dominant trees with DBH values above 12-16 inches (with many greater than 16 inches), large downed logs, large standing dead trees, pit-and-mound microtopography, and a well-developed leaf litter layer.

In addition, according to the Plan’s proposal, roughly 28% of the mature forest would be concentrated in the 0-100-foot riparian buffer and 100-330-foot riparian filter areas with only a few large patches of mature forest in the uplands. These mature forests in the uplands are necessary to support many of Maine’s interior forest nesting songbirds and the American marten, contrary to NECEC LLC’s suggestion that forests in riparian areas will do so.

Furthermore, under the current provisions outlined in the Plan, extensive harvesting will still be allowed within the 100-330-foot riparian filter areas so long as this harvesting maintains NECEC LLC’s definition of “mature forest.” This harvesting, even if done within the confines of their “mature forest” definition, would greatly reduce the habitat connectivity benefits of these areas.

Other problems with the proposed forest management practices within the Plan include the following:

- The details within the Forest Management Plan really matter, as this is where the interpretation of the Conservation Easement requirements gets put into play. However, **at this time, NECEC LLC has provided the DEP with only a table of contents for the Forest Management Plan, despite the explicit requirement in the Order that a Forest**

²⁴ DEP Order pg. 81

Management Plan be submitted and approved by the DEP before the transmission line can be operational.

- The Conservation Easement allows for the creation of new plantations on 4,000 acres (8%) of the proposed conservation area in addition to the maintenance of existing plantations. The location and total acreage of existing plantations within the area are not provided, although language within the Conservation Easement allows for existing plantations to be classified as “mature forest.” Plantation forestry provides very few benefits to wildlife, especially when compared to naturally regenerated areas.
- There are no constraints on pre-commercial thinning within the mature forests in the Plan area, which could result in a landscape with trees that reach 50 feet high but have little of the understory that can be critical for habitat.
- There are no specific limitations on herbicide use outlined in the Plan. Certain herbicides commonly used in forestry are known to impact habitat preferred by snowshoe hares and Canada lynx, both of which are common in the proposed conservation area.
- There are no established safeguards or parameters around salvage harvests in response to future infestations or diseases (e.g., spruce budworm). Spruce budworm insecticides not only kill spruce budworm caterpillars, but all caterpillars exposed to the insecticide. These caterpillars are the primary food source for most of our breeding forest birds and their young, especially three warblers (Cape May, Bay-breasted, and Tennessee) that are considered budworm specialists.

Reason 5: Insufficient protection of riparian areas

To offset habitat fragmentation impacts, Condition #39 in the DEP Order requires that the proposed conservation area be managed to provide “wildlife travel corridors along riparian areas.”²⁵ The Plan proposes to accomplish this through a “100-foot no-harvest buffer around perennial streams beginning at the normal high-water line (totaling approximately 2,400 acres), and perpetual management as mature forest habitat from 100 feet to 330 feet from the normal high-water line (totaling approximately 4,500 additional acres).”²⁶

While the 100-foot no-harvest buffer around all perennial streams will provide substantial habitat benefits, including protecting water quality, facilitating wildlife travel, and enabling the development of truly mature forests, the Plan’s proposed approach has shortcomings. One deficiency is that NECEC LLC proposes to measure the 100-foot no-harvest buffer from the normal high-water line of the stream channel. Instead, these buffers should be measured from the edge of the associated floodplain or connected wetland to better facilitate habitat protection and wildlife travel. Additionally, the protection provided by these no-harvest buffers

²⁵ DEP Order pg. 81

²⁶ Plan pg. 16

should extend to intermittent streams, which are often the source of important cold water and nutrient inputs for downstream waters and cold-water fisheries. In addition, the data source for mapping these perennial streams should be provided and their locations should be ground-truthed, as there are many perennial streams in Maine that do not appear in mapped datasets (see Exhibit E for a map of known perennial streams in the proposed conservation area). Also, the 100-foot to 330-foot riparian filter area with 50-foot-tall trees at 60 ft²/acre of basal area has limited value for other riparian habitat species that need more mature, closed canopy forests for feeding, nesting, denning, cover from predators, and moving between the riparian areas and other mature forest areas.

Furthermore, the Plan does not outline adequate measures to protect wildlife travel within aquatic habitats. For example, **the Plan does not limit new stream crossings nor require any new or replacement crossings to follow Stream Smart standards outlined in the Maine Forest Service's Best Management Practices for Forestry.**²⁷

Reason 6: Failure to include any fee acquisition as part of the Plan

As outlined above, Condition #10 in the BEP Order requires that NECEC LLC conserve “a total of 50,000 acres” to compensate for the fragmenting effect of the transmission line.²⁸ Although the DEP and BEP Orders do not specify the exact method of conservation (i.e., fee acquisition, conservation easement, or a combination of both), the BEP Order does state that “while, as noted above, commercial timber operations are not expressly precluded, standard sustainable forestry operations commonly allowed in areas subject to working forest easements would not be consistent with the primary goal of the Conservation Plan.”²⁹

Given this language and considering the heavily harvested current condition of the landscape, as well as the limitations of the proposed Plan and Conservation Easement, we believe that **it will be essential for NECEC LLC to include a significant amount of fee acquisition in its Plan in order to comply with the Orders.** This is the case because it is highly unlikely that Weyerhaeuser (or a successor commercial landowner) will be able to meet the Orders' requirements for conserving and connecting ecologically mature forest and riparian habitats over time due to other commercial goals and constraints.

The Plan could and should be improved by conserving existing LSOG and transitioning late-successional forest stands in the Plan area through no-cut zones around such areas (including substantial buffers) within the Conservation Easement provisions. This would help ensure that close to 2,000 acres of such stands would become and be managed in perpetuity as mature

²⁷ Maine Forest Service and Maine Department of Agriculture, Conservation & Forestry, 2017. "Best Management Practices for Forestry: Protecting Maine's Water Quality - Third Edition". Forest Service Documents. 53 pp. https://digitalmaine.com/for_docs/53

²⁸ BEP Order pg. 57

²⁹ BEP Order pg. 56

forest. However, such changes would not be sufficient to meet the intent of the DEP and BEP Orders to protect mature forest, as they would constitute only a tiny fraction of the landscape.

Reason 7: Flawed Conservation Easement provisions that allow habitat fragmentation

As outlined above, Condition #39 in the DEP Order requires NECEC LLC to develop a Forest Management Plan that “provide[s] blocks of habitat for species preferring mature forest habitat and wildlife travel corridors along riparian areas and between mature forest habitat.”³⁰ The Forest Management Plan is the integral component to how the land within the Conservation Easement would be managed to meet the requirements outlined in the DEP and BEP Orders.

However, the working forest Conservation Easement outlined in the Plan does not protect the ecological values outlined in the Order. Specifically, the Conservation Easement falls short of the requirement to promote habitat connectivity, for the following reasons:

- A lack of restrictions on new logging roads and skid trails, particularly in riparian areas.
- Allowance of commercial sale of gravel, sand, and rock to any third party.
- Allowance for water extraction.
- Allowance for new rights-of-way, easements of ingress or egress, driveways, roads, utility distribution or service lines, towers, or other easements.
- A lack of sufficient monitoring and enforcement of provisions within the easement, with one example being that holder approval is not needed for subsequent 10-year updates to the Forest Management Plan.

Additionally, in terms of natural resource protection, the Conservation Easement outlined in the Plan falls short of other recent working forest easements in Maine that require minimum stocking levels; have stronger riparian habitat management and road crossing standards; include special management areas for high-value, rare, and endangered species, and/or LSOG forest areas; and/or define ecological reserves that are off-limits to harvesting.

Recommendations

For the reasons outlined above, **we request Maine DEP deny the Plan as presented.** Upon close examination, it is clear that the Plan presented by NECEC LLC fails to comply with the high standards for conserving habitat connectivity and managing for mature forests set forth in Condition #39 of the DEP Order and Condition #10 of the BEP Order. For a Conservation Plan to meet the intent and specifics of the DEP and BEP Orders, NECEC LLC must submit a revised Plan, for further DEP review, that includes the following:

1. A definition of “mature forest” based on sound ecological principles. If using height and basal area as benchmarks, more accurate thresholds for “mature forest” would be a

³⁰ DEP Order pg. 81

canopy height of at least 75 feet and a basal area of at least 110 ft²/acre. However, as outlined above, our recommendation for a more comprehensive ecological definition of “mature forest” using commonly measured forestry metrics would include a combination of minimum volume (cords/acre), total basal area (ft²/acre), and basal area or number of trees within specific DBH classes ranging from 12-16 inches (ft²/acre or total number). The specific “mature forest” criteria for these three metrics should vary by forest type (e.g., northern hardwood, mixed wood, and spruce-fir), and specific percentages of the landscape meeting these requirements explicitly stated. In the context of the DEP and BEP Orders, appropriate “mature forest” thresholds for these metrics would be a minimum volume of 25-40 cords/acre, total basal area of 80-120 ft²/acre, and a basal area of trees ≥ 12 inches DBH of 40-60 ft²/acre (depending on forest type) on 55% of the landscape and ≥ 16 inches DBH of 40 ft²/acre on another 20% of the landscape, together covering 75% of the landscape.

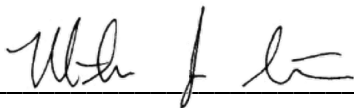
2. A shorter timeframe than 40 years for achieving a majority “mature forest” state within the conservation area. To align with the timeframe of impacts, the desired “mature forest” habitat benefits of the project should be more immediate. Given the current condition of the forest inside the proposed conservation area, this outcome can only be achieved by acquiring and permanently conserving land outside of this area that is already in or closer to a mature forest condition. We believe that at least 15,000 to 20,000 acres of fee acquisition of such lands will be required to comply with the Orders.
3. No additional fragmentation of the proposed conservation area by transmission corridors or paved roads.
4. A larger percentage of the conservation area to be managed in perpetuity as ecologically mature forest, without shifting mature forest across the landscape. In the current Plan, only the 100-foot buffers around perennial streams provide this permanent ecologically mature forest protection. To better achieve the goal of conserving existing mature forest habitat, additional no-cut areas could be established surrounding existing LSOG and transitioning late-successional forest stands within the proposed conservation area.
5. Stronger riparian protections, including extended no-cut buffers around intermittent streams, expanded mature forest buffers around all streams, Stream Smart crossings, and improved connections between riparian habitat and other mature forest areas.
6. More appropriate ownership and management of mature forest and riparian-connected mitigation lands to meet the requirements of the DEP and BEP Orders, such as by the Bureau of Parks and Lands (BPL).
7. The removal of specific provisions within the Conservation Easement that would allow habitat fragmentation and degrade existing natural resources through the allowance of new rights of way, roads, distribution or service lines, commercial sale of gravel, etc.

To conclude, we believe that NECEC LLC’s proposed Conservation Plan and Conservation Easement clearly and broadly fail to meet the spirit, intent, and specifics of the requirements outlined in the DEP and BEP Orders and must be denied. The Plan provides almost no protection for the small amount of transitioning late-successional, late-successional, and old-growth forest stands within the Plan Area; it proposes waiting 40 years for 50% of the area to reach a definition of “mature forest” that is not ecologically defensible; and even then – in 2065 and beyond – the portion of the Plan area that is “mature” would be constantly shifting – which cannot be what the DEP and BEP envisioned in requiring that 50,000 acres of land in the vicinity of Segment 1 be managed in large blocks of habitat for species that prefer mature forest habitat—the compensation requirement for the impacts of the project on wildlife and wildlife habitat.

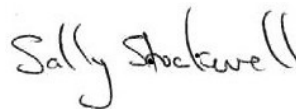
To meet these Orders, compensation for the loss of mature forest and habitat fragmentation should be in the form of the permanent protection of comparable high-value habitat, not just the conservation of commercially managed forest lands using a working forest conservation easement and a proposed definition of “mature forest” that is not defensible on ecological grounds.

To achieve the compensation purposes set out by the Orders, we urge the Maine DEP to deny the proposed Plan and require NECEC LLC to submit a revised version that meets the standards set forth in Condition #39 of the DEP Order and Condition #10 of the BEP Order. While we recognize that NECEC LLC seeks to commission the NECEC project near the end of 2025, we observe that the company has had more than five years to develop this Conservation Plan since the DEP Order (May 11, 2020) and more than three years since the BEP Order (July 21, 2022). Any timing challenges that NECEC LLC may now face could have been avoided if the company had devoted more attention to this permit requirement over the past few years and submitted a proposed Conservation Plan in 2023 or 2024, rather than waiting until May 9, 2025.

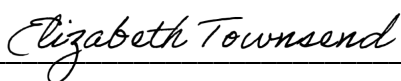
Sincerely,



Matt Streeter
Chair,
Maine Council of Trout Unlimited



Sally Stockwell
Director of Conservation,
Maine Audubon



Eliza Townsend
Maine Conservation Policy Director,
Appalachian Mountain Club



Pete Didisheim
Senior Director of Advocacy,
Natural Resources Council of Maine

Exhibit A:
Representative Basal Area Photographs



Forest stand with a residual basal area of approximately 60 ft²/acre after a recent harvest.³¹ **Under NECEC LLC's definition, this stand would be considered a "mature forest" if the trees are 50 feet high.**



Representative photo of a northern hardwood forest in Maine's Duck Lake Ecological Reserve.³² Of the 26 forest plots that were remeasured at Duck Lake, the average basal area was 135 ft²/acre.³³

³¹ U.S. Forest Service, Silvicultural Guide for Northern Hardwoods in the Northeast (April 2014): https://www.fs.usda.gov/nrs/pubs/gtr/gtr_nrs132.pdf

³² Maine Natural Areas Program, Duck Lake: <https://www.maine.gov/dacf/mnap/reservesys/ducklake.htm>

³³ Kuehne C., Puhlick J.J., and Weiskittel A.R., 2018. Ecological reserves in Maine: Initial results of long-term monitoring. General Technical Report. 62 p. https://www.maine.gov/dacf/mnap/reservesys/Maine%20ERM%20GTR%202018_Final.pdf

Exhibit B:
2016 Aerial Photography of the Proposed Conservation Area

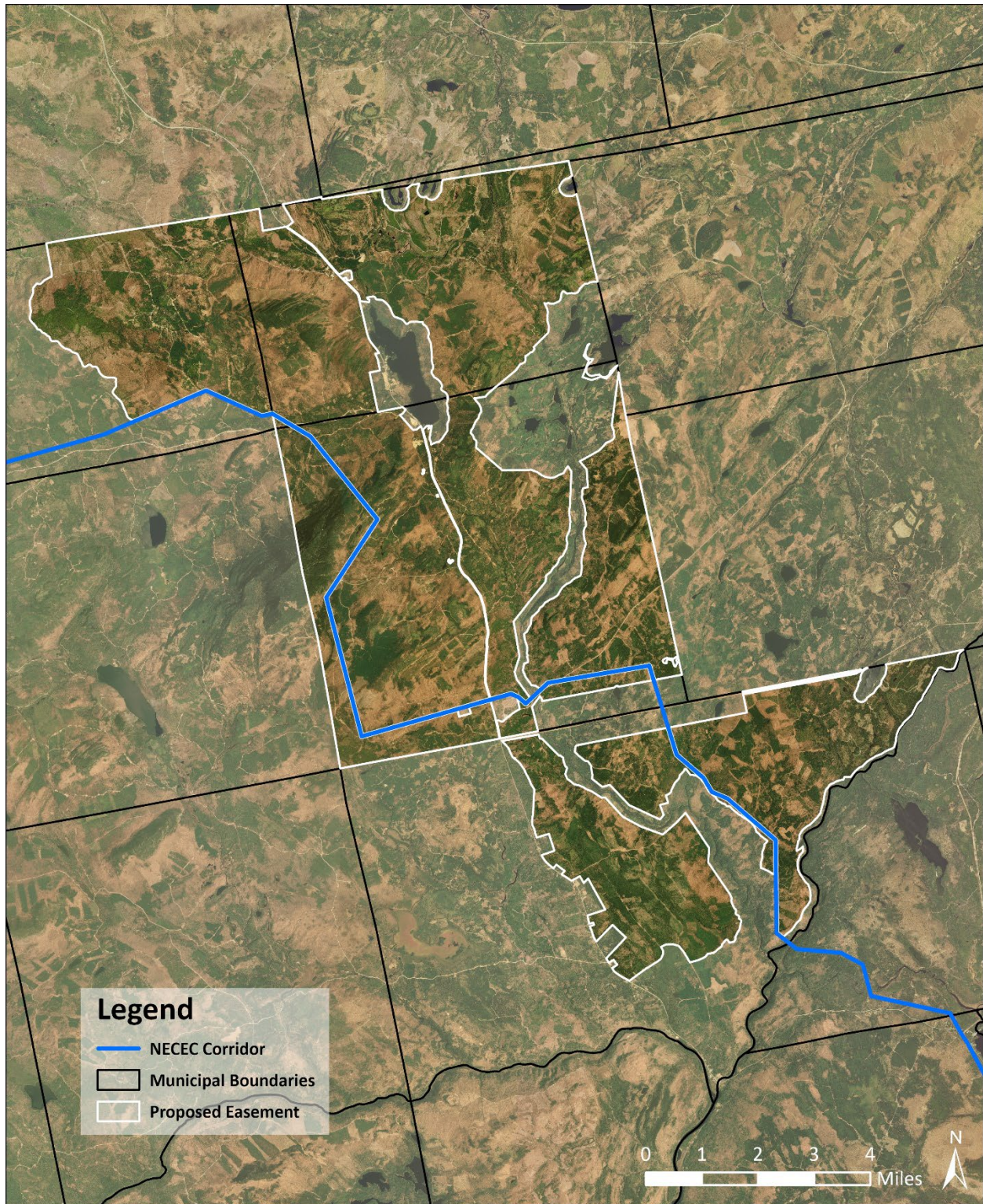


Exhibit C:

Map of the Six Blocks Within the Proposed Conservation Area and Adjacent Conservation Land

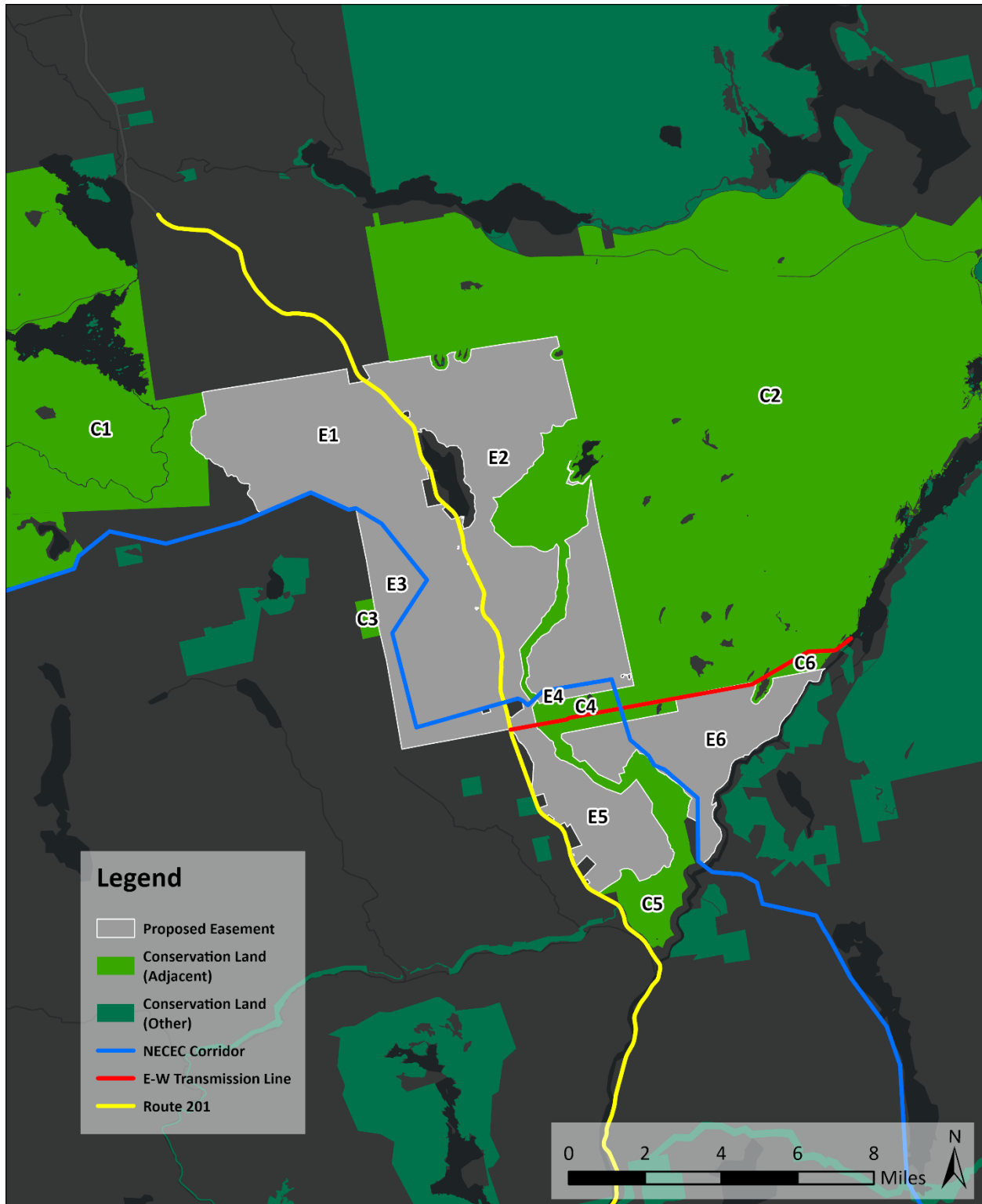


Table C-1. Estimated acreages of the six blocks within the proposed conservation area and adjacent conservation land, with total block areas less than 5,000 acres highlighted in red.

Block Name	Easement Area (acres)	Adj. Conservation Name	Adj. Conservation Area (acres)	Total Block Area (acres)
E1	18,021	C1	>58,000	>76,021
E2	16,803	C2	>85,000	>101,803
E3	3,392	C3	301	3,693
E4	514	C4	737	1,251
E5	6,185	C5	4,063	10,248
E6	5,348	C6	723	6,071

Exhibit D:

Map of Fragmented Habitat Within the Proposed Conservation Area

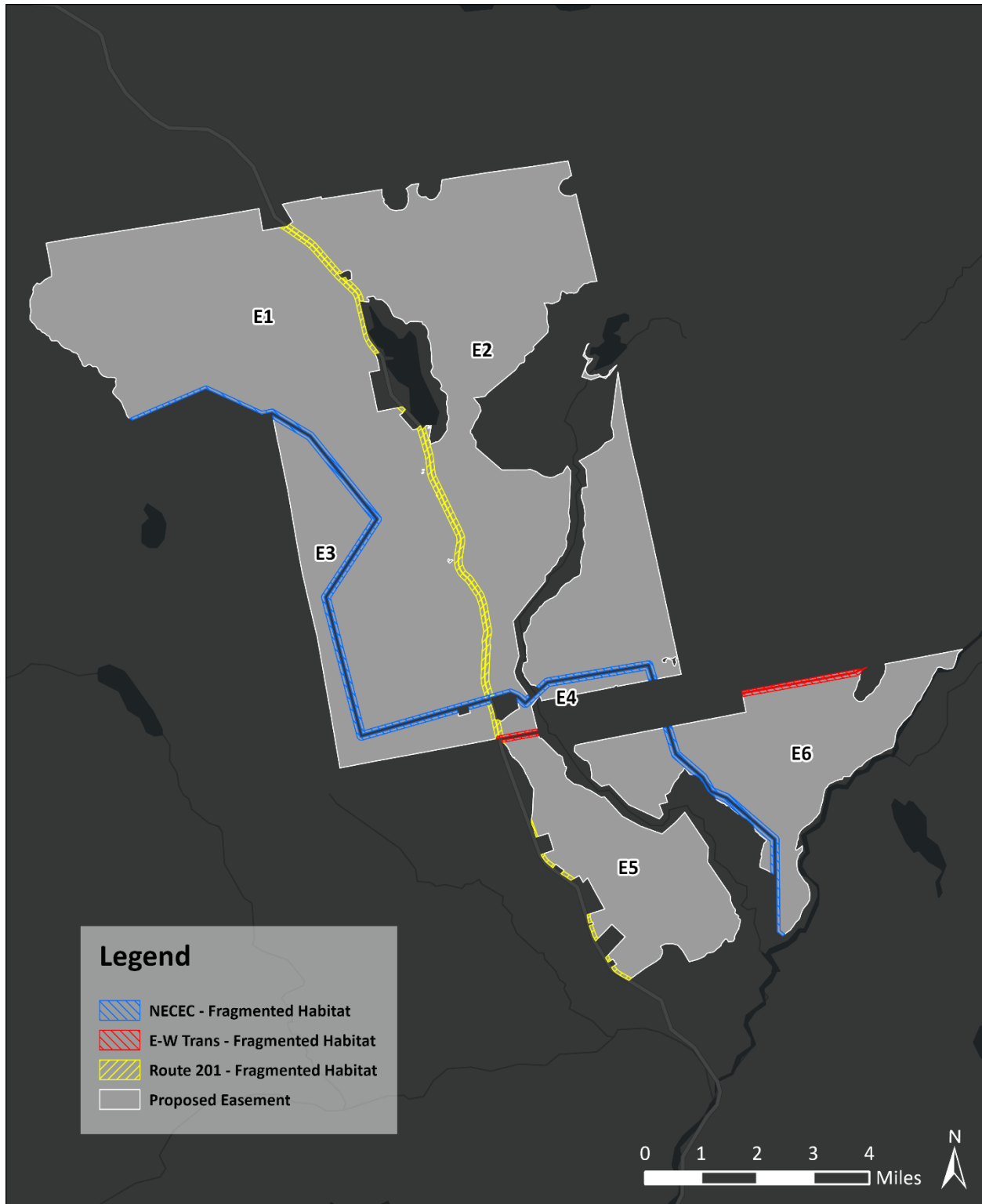
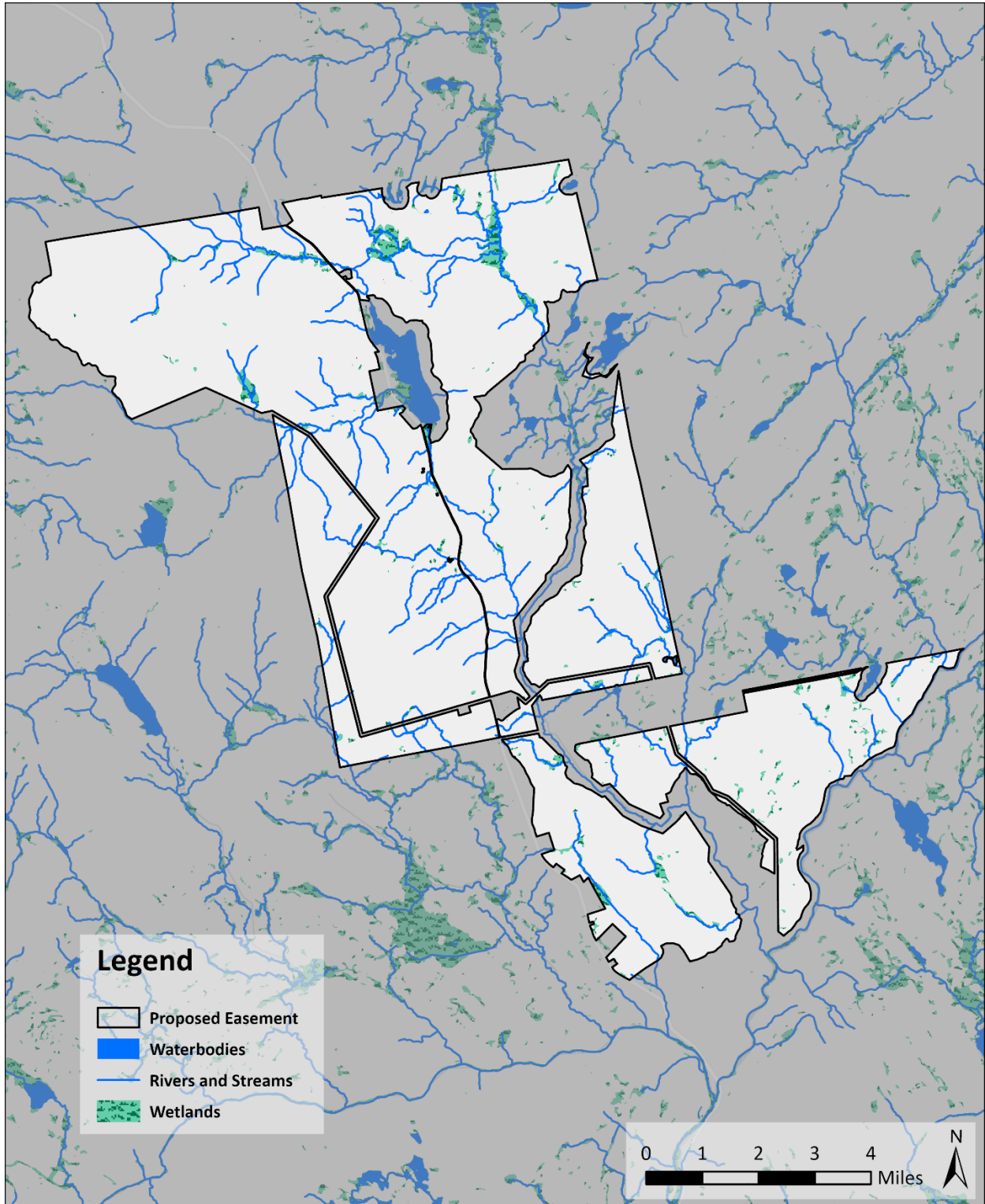


Table D-1. Estimated acreages of fragmented habitat and associated 10:1 compensation within the proposed conservation area.

Block Name	Easement Area	NECEC Frag.	E-W Trans. Frag.	Rt 201 Frag.	Rt 201 Overlap	Total Frag.	Compensation (10:1)	Unfragmented Easement Area
	(acres)							
E1	18,021	370		327	2	695	6,950	17,326
E2	16,803	98	44	279	2	419	4,194	16,383
E3	3,392	280	1	26	3	304	3,044	3,088
E4	514	84	16	13	2	112	1,116	402
E5	6,185	91	14	60	1	164	1,642	6,021
E6	5,348	143	71			214	2,139	5,134
Totals	50,263	1,066	147	705	9	1,909	19,086	48,354

Exhibit E:

Map of Perennial Streams and Wetlands Within the Proposed Conservation Area³⁴



³⁴ Data from the National Hydrography Dataset (NHD) and the National Wetlands Inventory (NWI)