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PUBLIC COMMENTS RECEIVED FOR  
ADJACENCY & SUBDIVISION REVIEW PROCESS: PART ONE OF THREE

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Maine Land Use Planning Commission  
Maine Department of Agriculture, Conservation and Forestry

This is **part one of three documents that include compiled written comments** about the Adjacency & Subdivision Review submitted between December 19, 2018, and January 22, 2019.

**Parts two & three**, are available for review on the [adjacency rules webpage](#).

The **audio recording of the January 10, 2019 public hearing** is available on the Commission's [Calendar and Meeting Materials webpage](#).

**Rebuttal Comments:** The comments in this part one document were posted on the Commission's website on Wednesday, January 23<sup>rd</sup>. The deadline for submissions in rebuttal to those comments is January 29, 2019. Rebuttal comments will be posted on the adjacency rules webpage following the close of the rebuttal period.

## Godsoe, Benjamin

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**From:** Robert F. Tomlins <iceman44robert@RIVAH.NET>  
**Sent:** Tuesday, December 18, 2018 7:57 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] New Land Use Proposal

Hello Benjamin,

The new proposal by the Land Use Commission, allowing new development near recreational resources is another way to bend the rules so people can develop where they should not! Do the animals get a vote on this new proposal because they will be the ones that are effected most by the new rules! Why is it that we only consider the human side of new rules because later there will come a time when the expansion of humans will come in conflict with the animals in that area and the only ones who will pay a price is the animals! They will be the ones killed because they are annoying the humans or getting into their garbage or straight up just being a pest because the humans invaded "their" environment and their habitats! Humans NEVER take into consideration the native population because they are to involved in themselves and don't care a bit about what will happen when they move into others environment! I find it unimaginable what the animals must think when they see their habitat being cleared for more houses and more people, yet that is never a consideration by the humans when they make new rules that mainly apply to the animals, just like humans do not care what other humans say, they just do whatever they dam want too! So I imagine what I am writing will not effect anyone except myself because I am concerned about the animals and how human expansion will effect them and it is too bad that it is that way, but that is today's world, we are only concerned about 1 thing, ourselves!

Thank you for your time,

Robert F. Tomlins

191 Great Pond Road

Aurora, Maine 04408

207-584-5255

# County of Aroostook

## COMMISSIONERS' OFFICE

### COUNTY ADMINISTRATOR

RYAN D. PELLETIER



### COUNTY COMMISSIONERS

PAUL J. ADAMS  
HOULTON

NORMAN L. FOURNIER  
WALLAGRASS

PAUL J. UNDERWOOD  
PRESQUE ISLE

December 19, 2018

Mr. Nicolas Livesay, Executive Director  
Maine Land Use Planning Commission  
18 Elkins Lane  
22 State House Station  
Augusta, Maine 04330

RECEIVED

DEC 27 2018

LUPC - AUGUSTA

RE: Proposed Adjacency Principle Rule Changes

Dear Mr. Livesay:

The Aroostook County Board of County Commissioners supports the proposed policy changes to the Land Use Planning Commission's Adjacency Principle. The Board believes that these changes will respond to the changing economy by planning for resource-based businesses near the resource, while encouraging most development proposals near communities.

We are cognizant of the changes in the Maine woods and we fully support the LUPC's efforts to plan for our future. Recreation based businesses and wood fiber processing will be critical components to Maine's future economic development and we believe these proposed changes make the most sense to support the evolving economy while still protecting our environment.

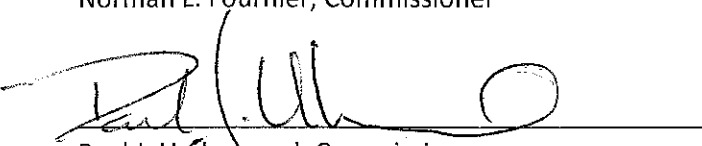
If you have any questions, please feel free to contact County Administrator Ryan D. Pelletier at 207-493-3318.

Sincerely,

Aroostook County Board of County Commissioners

  
Paul J. Adams, Chairperson

  
Norman L. Fournier, Commissioner

  
Paul J. Underwood, Commissioner

## Godsoe, Benjamin

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**From:** Renee Montillo <tabbyprinces@yahoo.com>  
**Sent:** Thursday, January 03, 2019 2:22 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Save the North Woods for wild life

To Benjamin Godsoe,

Please fight for the North Woods region from being turned in to residential communities. The North Woods have residents there such as the Canadian Lynx and other wild life that deserve to have land that is not disturbed for financial profit. Please keep the North Woods as is to preserve Mainer's most precious resource- our wooded land.

Thank you.

*Renee Montillo  
a resident from Glenburn, Maine*

## Godsoe, Benjamin

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**From:** Clifford Krolick <bcountry@psouth.net>  
**Sent:** Sunday, January 06, 2019 11:07 AM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] LUPC Submission Of Comments On Upcomming pubic Hearing

Hearing attendees:

Thanks for this opportunity to express my beliefs. It is a bit to far 4 hours,Parsonsfield Maine, for me to make the hearing so this is best I can do.

Maine is one of the few hold outs in the Eastern/North Eastern portion of the united state that offers our planet an VERY delicate sustainable balance between development and open green spaces that remain reserved for nature to still thrive. In the face of the present climate disruption here and across the globe, and the great need to hold the line and not to increase the carbon we humans generate, Maine shines as a bright star for a renewable low carbon state and economy. The importance of maintaining forestland and open undeveloped space is underestimated in our efforts, not only does preservation slow down carbonization but to greatly reduces carbon output on our planet.

We need to reserve large portions of unbroken open green space for a number of reasons: All life lives in a circular system, wildlife, trees, grasses, soils and humans depend upon eachother for a delicate renewable balance. If we begin to break up portions of lager circles all life forms within this system are at threat. Managed development has been a staple supply here in Maine. We have recognized that there is a balance, a delicate balance that cannot survive if we do not protect this balance. Existing large open/forestland must remain unbroken. Once this breach occurs, humans have a tendency to begin to disrespect that balance. With that in motion the beauty,solitude, and the many varieties of wildlife will be gone from Maine for good. Maines' managed forestry, cutting few trees and thinning does not break these life circles. Sub-divisions, larger developments will be a barrier to sustainability. Maine has a renewable history and why many of us live here. We have recognized the extraordinary value in preserving unbroken, large green spaces. I do not believe that it is in the best interests of majority of Maine citizens to have a major subdivision cut into the north woods and break the valuable circle there. Maines' most important part of its' economy is its green renewable history. We need to keep that history and not forget our roots.

Sincerely  
Clifford Krolick  
50 yeares here in Maine  
42 Woodward Road  
Parsonsfield, Maine 04047  
[www.bikebackcountry.com](http://www.bikebackcountry.com)  
Parsonsfield Planning Board

## Godsoe, Benjamin

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**From:** Esther Mechler <brunswick64@gmail.com>  
**Sent:** Monday, January 07, 2019 2:24 PM  
**To:** Godsoe, Benjamin  
**Cc:** Beth Gallie; Elaine Tselikis; Stephanie Feldstein; kieran@biologicaldiversity.org  
**Subject:** [EXTERNAL SENDER] Adjacency comments from Esther Mechler and Michael Grant to Land Use Planning Commission, c/o Ben Godsoe

***Because we cannot attend the January 10 meeting in Brewer we ask that our comments be submitted. We have followed the Audubon Society's study on the proposed changes and relied on many of their findings. Maine has the last of the great woods on the east coast. Much of what exists south of here, all the way to Key West, has been destroyed by entrepreneurs and developers. What we lose now going forward cannot ever be regained. We need to preserve what is natural and clean and works to counter climate change. It is stupid to destroy what nature has created over the centuries and then try to undo the mess. It does not work. People kill off all but a few of a species, then imprison the remaining ones in zoos (for later "reintroduction" to habitats that no longer exist - and spend millions in the process.***

***Preserve what is good and generations to come will thank you for it. We see that in the great national parks of the west, where people come from around the world to admire what is left of the natural world. Let us not cut and bulldoze and pave and urbanize what it took millions of years to create. Specifically in this case:***

- 
- ***Under the staff proposal, development could occur in nearly 1.85 million acres overnight.... Environmentally this is a disaster to be avoided at all costs. It is not consistent with the CLUP principle of "orderly growth and pace of development" and could potentially stress adjacent municipal services and infrastructure and deprive the Commission of the ability to carefully plan, reduce, and assess incremental impacts to natural and community resources and values across the jurisdiction.***
- We urge you to consider modifying the staff proposal in ways that are consistent with the overall goals of the Commission and input from respondents to the staff survey conducted in 2017. We encourage the Commission to explore alternative approaches through additional GIS analysis and mapping and conversations with stakeholders, including the following:
- Measure the distance from a retail hub from the center of the actual hub, instead of from the edge of the township. We understand that the 10-mile distance presented by staff is a reasonable distance for emergency services to travel, per conversations with those that provide such services. However, townships are six miles across, meaning that depending on where in the township the actual hub is located, under the staff proposal emergency services may have to travel as many as 16 miles to reach their destination.
- Narrow the development area to areas proximate to service centers, not retail hubs. We applaud the proposal's emphasis on locating development proximate to existing communities. However, we are concerned that retail hubs, which have been included in addition to service centers as areas from which to measure new development areas, do not meet this goal. Economic activity alone does not necessarily indicate community.
- Measure the distance from service centers by road mile, not as the crow flies. Crows do not create environmental problems, people do

**We do not need more resource-dependent subdivisions** - residential subdivisions are allowed if they are dependent on a specific recreational experience, such as a lake or a trail. This standard is highly subjective, will likely be interpreted differently by future staff and petitioners, and as such, would be difficult to defend legally should a Commission decision be appealed. Nearly all, if not all, second home owners in the jurisdiction make their purchase because of the surrounding resource—they desire to be in Maine’s beautiful North Woods. This does not amount to a dependency and will probably **result in sprawling, fast- paced development**. It has in Florida, California and many other places. It is our job to protect our treasure, not to destroy it.

**Please no more Development on lakes.** Under this proposal many lakes would be open for development. We are incredibly concerned about this aspect of the proposal, as increased development could negatively impact water quality, riparian habitat, stream habitat, and both aquatic and terrestrial connectivity, and homeowner and recreationist experiences. While the management classification system will help to balance the amount of development on these lakes, it cannot adequately address the pace of development, as all listed lakes will immediately become available for development if the rules are promulgated. Management Class 7 lakes are particularly vulnerable. Enough about these lakes is known to not classify them as high value (Management Class 1 or 2), but often not enough about these lakes is known to afford them protections more stringent than those assessed on more developed, lower quality lakes. Lakes are losing their loon populations and other wildlife because of boating and other human activities. Lets protect our wildlife.

**Please No 'Low density' subdivisions.** Allowing for low density (i.e. “kingdom lot”) subdivisions is an inefficient use of land and would represent a dramatic departure from current Commission policy. Between 1989 and 2001, the Legislature passed multiple bills to *limit this type of development, which it deemed inconsistent with the CLUP. “Large lot” subdivisions result in house lots that are no longer available for forestry and that fragment wildlife habitat*—uses that should be supported by the Commission under the CLUP. Fragile ecosystems are destroyed. People bring dogs and snowmobiles, pesticides and other poisons and garbage. We do not need more of that.

**Proposed residential subdivision rules must be considered in tandem.** It is nearly impossible to assess the proposed changes for siting development with little knowledge of the proposed changes to the subdivision rules. It may be that the proposed subdivision rules alleviate some, though probably not all, of our concerns. For instance, smart subdivision layout and design may protect lake quality. This “location of development” proposal and the proposed subdivision rules are so intertwined that they must be considered and approved together.

**More information, feedback, and time will lead to a better result. The Commission should complete a land use inventory.** Much of this proposal is difficult to assess because no one knows precisely what is currently “on the ground” in the jurisdiction. While the Commission has a record of permits, it does not have a record of which of those permits have been built out, begging the question of how many buildable lots are located in the jurisdiction, and what types of lots are/are not marketable, etc. A land use inventory would go a long way toward determining the desires of the marketplace. **The Commission should direct the staff to complete a series of alternative approaches to the revised adjacency proposal, based on our recommendations.** Several alternative approaches and analyses, such as those outlined above, should be mapped and shared with stakeholders and the public. And remember, once lost, once destroyed, these forests will never be the same.

**Continue public outreach and feedback before drafting proposed rules.** We also urge the Commission to continue their public outreach and seek feedback from multiple stakeholders and communities, specifically with nearby municipalities and service centers. We believe that the Commission would benefit from additional opportunities for the public to respond to this proposal and alternative analyses, which are likely more accessible to the average jurisdiction landowner,

resident, or recreational user that the previous, very broad ideas shared by staff. Continued conversation in advance of rulemaking will lead to a better result.

**Community Guided Planning and Zoning.** It remains unclear why Community Guided Planning and Zoning efforts cannot be replicated in different regions in the jurisdiction instead of moving forward with this wholesale new approach. These efforts have been very successful and would serve to avoid a “one size fits all” approach.

Save the Maine Woods, unique and precious.

Michael Grant and  
**Esther Mechler**  
**Brunswick, MAINE**  
**207-798-7955**



## Godsoe, Benjamin

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**From:** Mary Ellen Wilson <merw868892@gmail.com>  
**Sent:** Sunday, January 06, 2019 10:27 AM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Adjacent Principle

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Sir,

I wish to make known to you and the Commission that I am against any changes in the Adjacent Principle and Subdivision Standards in Maine. Protection of the Maine woods and waters should be the goal, not opening up beautiful, pristine areas for more development and logging.

Sincerely,

Mary Ellen Wilson

15 Sunset Lane

West Bath, ME 04530

## Godsoe, Benjamin

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**From:** Livesay, Nicholas  
**Sent:** Monday, January 07, 2019 9:58 AM  
**To:** Godsoe, Benjamin  
**Cc:** Horn, Samantha  
**Subject:** FW: [EXTERNAL SENDER] LUPC One Mile Adjacency Principle proposal  
**Attachments:** LUPC One Mile Adjacency Principle proposed rule revisions.pdf

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**From:** Patrice Crossman [mailto:[patrice.crossman@co.hancock.me.us](mailto:patrice.crossman@co.hancock.me.us)]  
**Sent:** Monday, January 07, 2019 8:33 AM  
**To:** Livesay, Nicholas <[Nicholas.Livesay@maine.gov](mailto:Nicholas.Livesay@maine.gov)>  
**Cc:** Rebekah Knowlton <[rebekah.knowlton@co.hancock.me.us](mailto:rebekah.knowlton@co.hancock.me.us)>  
**Subject:** [EXTERNAL SENDER] LUPC One Mile Adjacency Principle proposal

Good morning Nicholas,

Attached is the LUPC One Adjacency Principle proposal signed by two of our Commissioners'.

Thank you,

Patrice

Patrice L. Crossman  
[patrice.crossman@co.hancock.me.us](mailto:patrice.crossman@co.hancock.me.us)  
207-667-9542 x215

General Clerk  
County of Hancock  
[50 State Street, Suite 7](#)  
[Ellsworth, ME 04605](#)



## COUNTY OF HANCOCK

Commissioners' Office  
50 State Street, Suite 7  
Ellsworth, Maine 04605

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Commissioners:

William F. Clark, District I  
John. A Wombacher, District II  
Antonio Blasi, District III

Scott A. Adkins  
County Administrator

January 4, 2019

Nicholas Livesay, Executive Director  
Land Use Planning Commission

Subject: LUPC One Mile Adjacency Principle proposed rule revisions

Dear Mr. Livesay,

Enclosed is a *Resolution to the Land Use Planning Commission (LUPC) to retain the current one mile Adjacency Principle under the LUPC's statute 12 M.R.S.A §681 and consistent with the Comprehensive Land Use Plan* which was approved at the January 3, 2019 Commissioners' meeting. Per the Commissioners' direction, I am forwarding this to you and copying Governor Mills.

Respectfully,

Rebekah Knowlton

[Rebekah.knowlton@co.hancock.me.us](mailto:Rebekah.knowlton@co.hancock.me.us)

Cc: Governor Janet Mills



## COUNTY OF HANCOCK

Commissioners' Office  
50 State Street, Suite 7  
Ellsworth, Maine 04605

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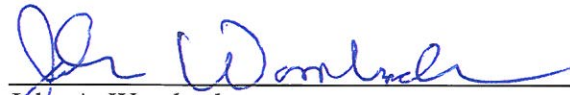
Scott A. Adkins  
County Administrator

*Resolution to the Land Use Planning Commission (LUPC) to retain the current one mile Adjacency Principle under the LUPC's statute 12 M.R.S.A §681 and consistent with the Comprehensive Land Use Plan*

We, the commissioners of Hancock County, are concerned about protecting water quality, wildlife habitat, and forests from expanded commercial, industrial, retail, and residential development, which would also impact county residents' outdoor recreation opportunities and the state's tourism industry. Resulting sprawl would damage natural resources and would place additional burdens on Unorganized Territory taxpayers. Water quality protection must become a top priority of all land use planning, and the one mile Adjacency Principle that has been in place should be retained to achieve that objective.


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William F. Clark,  
Hancock County Commissioner, District 1



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John A. Wombacher  
Hancock County Commissioner, District 2



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Antonio Blasi,  
Hancock County Commissioner, District 3



## COUNTY OF HANCOCK

Commissioners' Office  
50 State Street, Suite 7  
Ellsworth, Maine 04605

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Commissioners:

William F. Clark, District I  
John A. Wombacher, District II  
Antonio Blasi, District III

Scott A. Adkins  
County Administrator

January 4, 2019

I, William F. Clark, Hancock County Commissioner of District #1, do hereby submit to the LUPC this minority letter in support of the adjacency rule change from 1 mile to 7 miles. With strong environment regulations in place, I feel that increases in the development areas can be accomplished while at the same time our environment will be protected.

William F. Clark  
County Commissioner, District I

January 7, 2019

Maine Land Use Planning Commission  
Board of Commissioners  
Everett Worcester, Chair

**Re: Adjacency Review**  
Comments of Alan Michka

Attached are my comments on the Commission's revised rule proposal dated December 12, 2018.

While I still have substantial concerns over various aspects of the proposal, I appreciate the staff's dedication to this project and their efforts to address the concerns of the public.

Thank you for the opportunity to share my views.

Alan Michka  
Lexington Twp.

January 7, 2019

## Comments on the Maine Land Use Planning Commission's ***Proposed Rule Revisions: Revised Application of the Adjacency Principle & Subdivision Standards***

Generally, I welcome the change in the most recent proposal, which resulted in a reduction in the size of the area designated as primary and secondary locations. Clearly, the scale of the proposal is trending in the right direction, but I still have reservations about the extent to which the proposal opens the jurisdiction to new commercial, industrial, and subdivision development.

Perhaps a more cautious approach would be to further scale back the affected area – primary and secondary locations - with a plan to review the effect of the changes in five to ten years. After a review, consideration could be given to further incremental changes. Caution is indicated here. Once a new rule is in place, there will be little likelihood of a course reversal, even in the event of a negative outcome.

The Commission's recognition that certain townships are not suitable for designation as primary or secondary locations at this time is appropriate. I fully support the exclusion of those townships, listed in Section 10.08-A,C.5, from eligibility for such a designation.

Also, it is important that the Commission give some assurance that whatever action it takes on the proposed rule, the potential for future Community Guided Planning and Zoning efforts will be preserved.

More specific comments and suggestions follow.

### **10.02 DEFINITIONS**

#### **##. Agricultural Processing Facility:**

*A facility or operation, and associated site improvements or buildings, that is located on land where farm products are produced, and that processes raw farm products to reduce bulk or enable efficient transportation for sale or further processing. Agricultural processing facilities may include temporary or permanent structures, and may include bunkhouses or similar facilities for temporary worker housing. Agricultural processing facilities do not include agricultural management activities, or permanent worker housing. The term is further defined as small-scale and large-scale agricultural processing facilities as follows:*

***Small-scale agricultural processing facility:*** *An agricultural processing facility where all the raw agricultural products used in the processing are grown onsite **or on lands owned or leased by the operator**, and that utilizes no more than 2,500 square feet of gross floor area.*

***Large-scale agricultural processing facility:*** *An agricultural processing facility where a majority of the raw agricultural products used in the processing are grown onsite **or on lands owned or leased by the operator**, and that utilizes up to 5,000 square feet of gross floor area.*

The current definitions for small and large-scale agricultural processing facilities appear to allow a facility to process raw products procured *solely* from offsite locations, which may not even be nearby. In such an instance, the processing facility

would be more appropriately sited under rules regulating general commercial development. So, if these definitions are retained, I believe that all agricultural processing facilities should be allowed only in development subdistricts.

There are probably a number of ways to deal with this, but one possible remedy might be to redefine the terms. e.g.:

**Small-scale agricultural processing facility:** An agricultural processing facility where all the raw agricultural products used in the processing are grown onsite ~~or on lands owned or leased by the operator~~, and that utilizes no more than 2,500 square feet of gross floor area.

**Large-scale agricultural processing facility:** An agricultural processing facility where a majority of the raw agricultural products used in the processing are grown onsite ~~or on lands owned or leased by the operator~~, and that utilizes up to 5,000 square feet of gross floor area.

*##. **Natural Resource Processing Facility:** A facility or operation, and associated site improvements or buildings, that processes forest products to reduce bulk or otherwise enable efficient transportation for sale or further processing. Natural resource processing facilities may include temporary or permanent structures, or mobile processing equipment, and may include bunkhouses or similar facilities for **temporary worker housing**. Natural resource processing facilities do not include forest management activities, permanent worker housing, or further processing beyond what is necessary to do close to the source of the raw materials.*

Shouldn't there be some explanation for what differentiates temporary from permanent worker housing, in practice? Does it mean a temporary structure that must be removed when not in use? Can it mean a permanent structure temporarily occupied? Could housing be occupied year round by various temporary workers who turnover throughout the year? How long can a worker stay on site and still be considered a temporary worker? There seems to be some ambiguity here. Maybe defining the term *temporary worker* or *temporary worker housing* would help.

## **10.08 CRITERIA FOR ADOPTION OR AMENDMENT OF LAND USE DISTRICT BOUNDARIES**

***B.2.c. Character.** The land uses allowed in the proposed subdistrict shall not unreasonably alter the character of the area.*

As written, this criterion seems weak and open to a wide range of interpretations. It would benefit from more elaboration and definition. e.g.:

***Character.** The land uses allowed in the proposed subdistrict shall not unreasonably alter the character of the area. In making a determination on character, the Commission may consider, among other things, the proposed change's potential impacts on traffic, scenery, noise, lighting, odors, or other natural qualities or features.*



## 10.22,A GENERAL MANAGEMENT SUBDISTRICT (M-GN)

*3.c.(1) Agricultural activities:*

*a. Small-scale agricultural processing facilities;*

See previous comment on small and large-scale agricultural processing facilities.

*3.d.(4)*

*(a) Large-scale agricultural processing facilities; and*

See previous comment on small and large-scale agricultural processing facilities.

## 10.25,E NATURAL SCENIC CHARACTER, NATURAL AND HISTORIC FEATURES CULTURAL RESOURCES

Generally, I believe the proposed section addressing hillside resources is a significant and timely improvement, but do have reservations about some of its components.

**2.e. Structural Development.** The development must provide for building designs that will complement the site and topography (e.g., avoiding long unbroken roof lines; orienting buildings such that the greatest horizontal dimension of the structure is parallel with, and not perpendicular to, the natural contour of the land; stepping the building down the slope rather than creating building pads that require extensive excavation and filling, and sloping roofs in the direction and general angle of the natural slope on the project site).

How would this be applied in practice? Some of these examples seem inflexible and might be debatable with regard to their effectiveness in certain situations. Some design experts might find ways to site a project on a hillside that will accomplish the goals of this section while being contrary to the specific examples given. There needs to be some flexibility to allow for consideration of different sites and different designs

**2.f. Construction Materials.** The development must be designed to ensure that:....

How will this be regulated in the application phase of a project? How will it be enforced in perpetuity? I appreciate, and agree with, what the Commission is trying to accomplish here, but wonder whether it's realistic or not.

**2.h. Lighting.** All lighting for the development must comply with the standards of Section 10.25,F.

The Commission's existing lighting standards are outdated and somewhat rudimentary. They seem especially insufficient to accomplish the goals of the newly proposed hillside development standards. It seems that lighting in hillside development deserves at least as much special consideration as construction materials - maybe more.

## F. NOISE AND LIGHTING

The standards for noise and lighting are in need of updating, and the proposed rule changes should not be considered without addressing these standards simultaneously.

The noise standards could benefit from some refinement. While some aspects of the existing standards seem reasonable, they don't do enough to account for the many areas in the jurisdiction that are especially quiet.

The lighting standards haven't kept up with current technologies. For instance, the Commission is still using watts as a unit of measure for a fixture's light output. Newer lighting standards have abandoned this unit in recognition that it's of little value in more modern lighting appliances. (e.g. according to Efficiency Maine, an LED light bulb is almost five times brighter than an incandescent bulb of the same wattage.) The Commission's proposal to pursue greater development in some parts of the jurisdiction will make it particularly important to have modern lighting standards that are more comprehensive if the character of the jurisdiction is to be preserved.

### 10.27 ACTIVITY-SPECIFIC STANDARDS

**A.2.b. Lighting.** All exterior lighting shall be designed, located, installed and directed in such a manner as to illuminate only the target area, to the extent practicable. No activity...

Why don't the activities governed by this section have to comply with *all* applicable lighting standards? It doesn't seem like much is being accomplished by giving selected developments an abbreviated lighting standard. I would propose that this should be changed to read:

**A.2.b. Lighting.** Facilities must meet standards for lighting included in Section 10.25,F,2.

Of course, as mentioned above, the existing lighting standards need to be revised anyway. Doing so might also reveal a better way to address this.

**S.2.a. Resource Dependency.** A natural resource processing facility must be located on the same parcel of land as **or within ¼ mile of the raw materials** that will be used for processing activities.

This could benefit from some additional clarity. As written, it's open to various interpretations. Is it ¼ mile by road or as the crow flies? Does it mean ¼ mile from the boundary of a parcel of land where the raw material is located, or ¼ mile from the raw material itself? The latter would seem to be a significant limitation.

Perhaps it would be more effective to simply allow for the processing of raw materials from parcels of land adjacent to the parcel on which the processing facility

is located, regardless of who owns the adjacent parcels. To prevent this from inadvertently resulting in undesirable levels of traffic in certain situations, some limitation could be placed on how far materials from adjacent parcels could be transported over public roads.

S.2.c.(1) Upon completion of processing activities, the site must be **restored to pre-development conditions** to the extent practicable.

How does this apply to a facility with structural development? Does it include the removal of structures? It should, and it should be stated here.

S.3.b.Noise. All processing equipment must be located more than **900 feet from all property lines** shared with abutting residential uses, other non-commercial uses, or commercial facilities providing overnight accommodations, unless there is demonstrable data available on the noise generated by the equipment and the **setback distances of Table 10.27,S-1** are met:

It's not clear what noise limit the Commission is trying to achieve here, but the setback distances in the table seem reasonable for *daytime* operations up to and including the 86-95 dB(A) range. Above that, the 900' setback distance would seem to be inadequate as the noise source approaches the 100+ dB(A) range. Of course, it's possible that I'm misinterpreting the method used to estimate these distances.

These noise limits should also take into consideration the hours of operation, a differentiation that seems to have been omitted here. In general, the 900' setback doesn't seem adequate for non-development subdistricts, where the Commission's existing standards are 55 dB(A) and 45 dB(A) during the daytime and nighttime, respectively, according to 10.25,F.1.a.

S.6.d.(2) Lighting. All exterior lighting shall be designed, located, installed and directed in such a manner as to illuminate only the target area, to the extent practicable. No activity...

See previous comment on lighting, 10.27,A.2.b.

Alan Michka  
Lexington Township, Maine

## Godsoe, Benjamin

---

**From:** John Banks <John.Banks@penobscotnation.org>  
**Sent:** Tuesday, January 08, 2019 10:18 AM  
**To:** Godsoe, Benjamin  
**Cc:** Horn, Samantha  
**Subject:** [EXTERNAL SENDER] RE: LUPC Adjacency Review: Comments from residents of Argyle Twp

Hi Ben,

Thanks for sharing the comments from Argyle residents.

Here are my comments:

The Penobscot Nation's Trust lands in Argyle are zoned as "Wildlife Management" under our current Comprehensive Land Use Plan. This area is some of the tribe's most important traditional hunting grounds. I support the residents' request for an exemption from the new proposed adjacency regulations. The area has very special significance to the tribe, from the natural resources standpoint, and should be protected from inappropriate development that would potentially change the natural character of the township.

Thanks,

John S. Banks  
Director of Natural Resources  
Penobscot Nation  
12 Wabanaki Way  
Indian Island, ME 04468  
207-817-7330  
207-356-5022 (cell)  
john.banks@penobscotnation.org

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**From:** Godsoe, Benjamin [mailto:Benjamin.Godsoe@maine.gov]  
**Sent:** Tuesday, January 08, 2019 9:54 AM  
**To:** John Banks <John.Banks@penobscotnation.org>  
**Cc:** Horn, Samantha <Samantha.Horn@maine.gov>  
**Subject:** LUPC Adjacency Review: Comments from residents of Argyle Twp

Hi John,

I hope you are well. As you probably know, we are planning to have a public hearing at Jeff's Catering in Brewer on January 10, 2019 (starts at noon) on the Maine Land Use Planning Commission proposal to update the adjacency principle.

We are starting to receive comments on the proposal in advance of the hearing. I am forwarding a comment we received from residents of Argyle Township. (Please see attached document.)

When Samantha and I met with you and other Penobscot Nation representatives on this topic, it sounded like the Penobscot Nation was considering whether to bring to the Commission's attention any future land use plans that may influence the outcome of the adjacency process. We wanted to bring this comment about Argyle to your attention in

case you would like to do so. If this is something you decide to do, please send written comments to me by the end of the day on January 22, 2019, or comments that rebut other written comments by January 29, 2019.

Please feel free to give a call or e-mail if you have any questions or want to discuss this.

Best regards,

Ben

**Ben Godsoe**

Senior Planner, Land Use Planning Commission

22 State House Station, Augusta, Maine 04333-0022

Phone (Direct): (207) 287 - 2619; Fax: (207) 287 - 7439

Email: [Benjamin.Godsoe@maine.gov](mailto:Benjamin.Godsoe@maine.gov)

## Godsoe, Benjamin

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**From:** Steve Coghlan <stevecoghlan18@gmail.com>  
**Sent:** Monday, January 07, 2019 8:11 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Adjacency rule comment - Argyle Twp

A statement from citizens of  
ARGYLE TOWNSHIP, MAINE

Maine Land Use Planning Commission  
c/o Ben Godsoe  
18 Elkins Lane, 22 State House Station  
Augusta, ME, 04333

Re: proposed changes to Adjacency rules

We the undersigned citizens of ARGYLE TOWNSHIP value the continued protection & improvements of WATER QUALITY, WILDLIFE HABITAT, & QUALITY OF LIFE.

Under the proposed rule changes, the entirety of ARGYLE TOWNSHIP would be reclassified as Primary and Secondary Zones. We contend that any weakening of the current 1 mile adjacency rule would be detrimental to the process of protection & improvement of our natural resources. We feel we have been well served by the time-proven protection of the existing 1 mile adjacency rule.

With this 40 year history in mind We The People request that ARGYLE TOWNSHIP be held exempt from the proposed change of protective standards, & remain under the existing 1 mile adjacency rule.

Thank you for your consideration.

Steve Coghlan  
Jennifer Lund  
1433 Southgate Rd, Argyle Twp, ME 04468

To the Land Use Planning Commission:

Jan. 8, 2019

Maine's current and longstanding "adjacency policy" serves the Unorganized Territories and our state well by defending wild lands from sprawling development. The cost of services is also minimized by not having to extend them into wild country. This protects Maine's wildlife, rivers, forests, and lakes from the threats of development sprawl, maintaining our iconic Northern Forest, a feature no other state in the Lower 48 can boast about.

The proposed change in the adjacency rule, including the recent weak revisions, exposes our North Woods to decision making that might not have our state's values of conservation and protection foremost. The change will make us vulnerable to "act first, ask questions later" developers who might not share our core values.

Economic costs of sprawl are many all over Maine. But in the unorganized territories, this includes degrading pristine habitats that are impossible to restore to former pristine condition. What will happen to the lakes and ponds within the proposed development areas? What about the lakes and rivers outside of these areas that meet LUPC's proposed development criteria, which will then, like dominoes, become exposed? What about the roads and stream crossings necessary to access new locations, silting in headwaters that nurture our native Brook Trout population, the last home for these trout in the USA?

This process appears to be driven by agents intent on developing our North Woods, the last stronghold for moose, lynx, bobcat, woodfrog, and other boreal animal and plant species threatened by fragmentation and human encroachment. The one-mile adjacency rule plays an extremely important role in protecting what distinguishes our state from all the rest. The cautionary principle advises us not to open this Pandora's Box.

Cloe Chunn, Waldo, Maine  
Author, *Fifty Hikes in the Maine Mountains*  
Registered Maine Guide

## Godsoe, Benjamin

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**From:** Elaine Tselikis <etselikis@gmail.com>  
**Sent:** Wednesday, January 09, 2019 10:50 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Adjacency comments from Elaine Tselikis to Land Use Planning Commission\_c/o Ben Godsoe

Dear Mr. Godsoe:

Governor Janet T. Mills has stated that Climate Change is a top priority for her administration. On the night of her inaugural speech she noted that the waters of Casco Bay are warming at an alarmingly fast rate.

I wholeheartedly agree that Climate Change is the Number 1 issue. In my view, the era of 'paving paradise to put up a parking lot' must end, to protect our climate, the inhabitants of our Natural world, and our mental and physical health and survival. I would love to see Maine at the forefront of this new direction. Because we see too many areas of vast acreage in Maine, destroyed and paved over not too long ago, having made way for strip malls or other so-called "development" projects. Many of those structures are now empty and the decaying buildings and asphalt stand as dead ruins on what originally was earth teeming with pollinators, air-cooling trees, animal life and clean air.

We cannot address Climate Change without protecting the very foundation and life force of Nature, who endowed her animals – carnivores, herbivores and omnivores -- with unique abilities and superior skills that protect and balance healthy ecosystems. What we call "the environment" is not some abstract thing or object, but is the interconnected rightful HOME of forests, streams and wild animals – from the bee to the bear -- whose very lives re-create, strengthen and protect it. A growing body of serious scientists and peer-review studies verify that no serious solution for Climate Change can occur without recognizing, supporting and protecting wildlife, woods and waters.

Wildlife, woods and waters are the genuine protectors of our earth. They – and we -- need their habitats and corridors intact, not cut up. The man-made belief that carnivores are harmful, that Nature is to be eradicated or "managed," or that Nature somehow made a mistake in her creation, is outdated and destructive to life on earth, as more scientists echo and we see happening before our eyes, while we reduce rich biodiversity to weak monocultures. This patriarchal prejudice, consumptive avarice, sense of entitlement and outright violence has led to animal genocide, deforestation, the rise in human autoimmune disease and the mess we are in with our climate.

Carving up nearly 2 million acres of irreplaceable Maine wilderness will further deplete our ecosystems, kill wildlife and thereby rapidly escalate the damage we have already done. Instead, we should be working to mitigate, strengthen, protect and preserve undisturbed wildlife, woods and waters for the foundation of a healthy Maine; devise mass tree and native plantings, such as was done in the Civilian Conservation Corps of the 1930s with the Maine Forest Service; create innovative green jobs that value co-existence and community; and also preserve undeveloped places where humans can interact with Nature in peaceful quiet, communion and solitude.

To do otherwise -- to continue the old pattern of so-called "development" -- which is actually destruction, is to give the middle finger to the wisdom of Nature, to the citizens of Maine, and violate that which is our collective inheritance: The Earth.

It is well documented that human disruption of wild lands and carnivore populations had led to crop damage, altered stream structures, and changes to the abundance and diversity of birds, mammals, reptiles and invertebrates. Carnivores not only keep herbivores in check, they allow woody plants to flourish and store more carbon, and act as a buffer against Climate Change.

"Human tolerance of these species is a major issue for conservation. We say these animals have an intrinsic right to exist, but they are also providing economic and ecological services that people value. Nature is highly interconnected. The work at Yellowstone and other places shows how one species affects another and another through different



pathways. It's humbling as a scientist to see the interconnectedness of nature," says research Professor William Ripple, from the Department of Forest Ecosystems and Society at Oregon State University.

I respectfully ask you to look to innovation and replenishment, and not the old paths of subtraction, cutting down forests and habitats, and paving more asphalt over large tracts of land, which have led to the crisis we are now in. Respect wildlife and wilderness as rightful life-givers and inheritors with us of this one earth, and do not exploit them as consumptive objects. Animals, with brains and hearts and families of their own, do the best job of balancing our ecosystems in ways we simply cannot.

Learn from them to become leaders in a Green Revolution -- a new Green Economy -- for Maine and the nation.

Thank you for your time, Mr. Godsoe.

Elaine Tselikis

South Portland

*Source: 'Carnivore cleansing' is damaging ecosystems, scientists warn: Extermination of large predators such as wolves and bears has a cascading effect on delicate ecological balance <https://bit.ly/2H2y7pG>*

Comments by Jeffrey Pidot before the Land Use Planning Commission on  
Rulemaking Proposal affecting Adjacency of Development

Brewer, Maine  
January 10, 2019

Good afternoon, Commission members. My name is Jeff Pidot.

I appeared before you last year concerning what was then an earlier staff rulemaking proposal on adjacency. I am today conveying similar thoughts and concerns about this new proposal, which will likewise have significant negative impacts on the future of the unorganized territories. The sum of it is that, while slightly better because it modestly reduces the area in which new development can be located, this new proposal is subject to virtually the same set of problems and concerns as the original. *The areas that this proposal would newly open up to development are still far too expansive and unfettered and have no meaningful relationship to the concept of adjacency that is the core principle of your Comprehensive Plan.*

As some of you know, I have a long history with this Commission's work. For more than a quarter of a century during most of which I was head of the Natural Resources Division at the Attorney General's office, I served as this Commission's legal counsel. For several years in the 1980s, I served as this Commission's staff director. In short, I have spent much of my life living and breathing and sometimes dying for this agency.

Reluctantly emerging from retirement, I am speaking out because of the seriousness of this rulemaking proposal. As was true of the original staff proposal last year, and despite my long friendship and respect for your staff, my critical concern remains the same: I can recall no other matter before this Commission that carries so much potential for undermining your mission and program. As I see it, only modestly different from the original proposal, this new one is not a discrete and conservative refinement of your existing rules; it is a radical sea change.

In considering the reasons why adjacency has been and remains the essential, guiding principle for locating future development in your jurisdiction, let's start with your statute: This directs you to protect your jurisdiction for its economic, recreational, scenic and wildlife resources, and to prevent harm from development sprawl and the intermixing of incompatible uses. Your Comprehensive Plan

focuses on the adjacency principle as the primary tool to accomplish these statutory objectives. To quote from your Plan:

“In carrying out its mandate, the Commission has always been guided by the premise that most new development should occur in or near areas where development already exists. ... Th[is] premise is based on generally accepted planning principles of concentrating development near services to reduce public costs and minimizing development near productive natural resource-based activities to reduce land use intrusions and conflicts.” CLUP at 60

“The Commission expects to substantially strengthen and more comprehensively define adjacency, and will likely integrate this criterion into its improved approach to guiding growth.” CLUP at 128

Thus, under your Comprehensive Plan, adjacency was selected and remains as *the* primary guiding principle for locating new development. Why? If new development is located near existing development, there is no better way to control sprawl and fragmentation that are so destructive to all the economic and environmental values that the Commission was created to protect. There is no better way to efficiently provide for public services and the needs of the communities both within and near your jurisdiction. There is no better way to minimize the loss of productive forest and agricultural lands that are the economic backbone of your jurisdiction and even of the State at large. There is no better way to conserve scenic resources essential to all our communities and the vitality of Maine’s tourism industry.

While the staff’s rulemaking proposal pays lip service to the adjacency principle, the basic thrust of this proposal undermines, one could say eviscerates, the guiding principle of adjacency, which your Plan calls upon you to *strengthen*. Adjacency derives from the word *adjoin*, meaning to be contiguous, perhaps in its broadest sense to lie in close proximity, in this case to provide for future development contiguous or in close proximity to existing compatible development. Others will appear before you to explain how this rulemaking proposal vastly departs from any reasonable concept of adjacency, but let me just touch a few of the major problems as I see them.

First, just as with the original staff proposal, this new one enables the creation of residential subdivisions and commercial development in a wide array of areas that extend miles beyond any existing development, encompassing far more land than

the current rules permit for conversion to development uses, indeed far more land than anyone has any plans to develop. *In a manner that cannot be considered adjacent by any stretch of the imagination, the proposed rule enables new development within 7 air miles from a municipal or township boundary within which there exists an existing node of development. Recognizing that this distance is measured as the crow flies and extends from the township boundary (which may itself be miles from any development), this scheme creates an alarming expanse of land that will be subject to new development. By contrast, the existing standard, which your Plan calls upon you to strengthen, permits a far more limited one-mile determination of adjacency, as measured by road distance from an existing pattern of development. What good justification is there for this extraordinary expansion that can only result in the type of scattershot development that your Comprehensive Plan, rules and statute forbid?*

Second, the proposed rules allow still *more* development beyond these distances if their location is based upon a natural feature or amenity. Of course, as you know well, much of the development activity in your jurisdiction is based upon just such a feature, like a lake, stream, mountain or any of the natural resources that abound throughout the jurisdiction. For all this potential development, the adjacency criterion is abandoned entirely.

Third, this proposal also overrules the Legislature's determination years ago to forbid the creation of large lot subdivisions. Since the law on this subject was extensively debated and discussed in the Legislature when it enacted this ban, any significant policy change in the opposite direction should first be taken back to the Legislature, not made through the rulemaking process.

Finally, with each new iteration this proposal has become more complex. As a lawyer with an unusually deep background in these matters, I cannot fully fathom this monument of words and its complex interconnections and meanings. I cannot imagine how the affected public, or even the Commission itself, will be able to successfully navigate this scheme.

While each of the above described concerns is serious, it is the totality of them that renders this proposal so destructive to the adjacency principle that your Comprehensive Plan calls upon you to strengthen.

I want to close with a point bearing special emphasis. This fundamental change in your program, opening up vast areas to development without any perceivable need to do so, should not be viewed as an experiment to try out and see how it goes.

While the ultimate impacts of this proposal may take time to be fully realized on the ground, once these new rules are in place, repealing them in the future in order to return to closer adherence to the adjacency principle (as your Plan directs) will encounter serious political and potentially legal obstacles. If you adopt these proposals, major landowners will believe that they have been granted rights to develop and subdivide that have never before existed during the nearly half century of this agency's history; and not just in a few places but in broad swaths of your jurisdiction. Newfound landowner expectations and investments, and some will assert legal entitlements, will become formed by the changes you make. Please do not think these proposals should be considered an interesting experiment. Their potential irreversibility presents grave concern.

Thank you for your patience and courtesy in considering these comments. And thank you and your staff for all the hard work I know you do on behalf of all of us.



Comments for the Land Use Planning Commission  
on Behalf of Friends of Katahdin Woods and Waters  
Regarding the Proposed Changes to the Adjacency Principle  
Thursday, January 10, 2019

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501(c)3 nonprofit  
organization

Good afternoon, Members of the Maine Land Use Planning Commission,

My name is Andrew Bossie and I am executive director of the Friends of Katahdin Woods and Waters.

The Friends of Katahdin Woods and Waters is a member supported organization whose mission is "to preserve and protect the outstanding natural beauty, ecological vitality and distinctive cultural resources of Katahdin Woods and Waters National Monument and surrounding communities for the inspiration and enjoyment of all generations."

Consistent with our mission, we are supportive of new development that will add to the health and vibrancy of the communities surrounding the National Monument. Accordingly, from our beginnings, we have helped support the National Park Service's Visitor Contact stations at the Patten Lumbermen's Museum and on Penobscot Avenue in the heart of downtown Millinocket to encourage visitors to the National Monument to visit the communities and patronize local businesses. We would like to help the organized towns around Katahdin Woods and Waters National Monument grow and prosper as gateway communities to the National Monument.

Our review of the proposed rule revisions relating to the adjacency principle has raised significant concerns about the proposed "primary" and "secondary development areas" in the Katahdin region. The Katahdin Woods and Waters Scenic Byway winds its way through both organized towns and unorganized townships from the south gate of Baxter State Park, up route 11, and in to the north gate of Baxter State Park, encircling the Katahdin Woods and Waters National Monument. This route serves as the gateway approach for visitors to both the north and south entrances of Baxter State Park and both the north and east entrances of Katahdin Woods and Waters National Monument.

Significant portions of this gateway route, including land in T1R9 WELS, T1R8 WELS, T3 Indian Purchase Township, TA R7 WELS, Grindstone Township, T1R6 WELS, Soldiertown Townships, Herseytown Township, Mt. Chase Plantation, T5R7 WELS, T6R6 WELS, and T6R7 WELS are designated as primary development areas. The result of this designation would be scattered commercial and residential development along

virtually the entire length of these currently, largely undeveloped, forested roads leading into two of Maine's most prized public lands.

In addition to the primary development areas along the scenic byway, the proposed rule would designate the entire townships of T3 Indian Purchase, TAR7 WELS, Grindstone, T1R6 WELS, and Mt. Chase, and significant portions of T3R7 WELS and T4R7 WELS as either primary or secondary development, opening up these extensive areas to scattered residential development. These lands are, in many cases, miles and miles on private gravel roads from public services and existing development. Their designation for residential development is simply the result of a mathematical calculation (five miles from the border of a rural hub) and bears no relationship to whether the area is actually suitable for residential subdivision development. Scattered residential subdivisions throughout these extensive areas would significantly degrade the undeveloped, forested recreational experience that visitors to the region seek.

Attracting development into these primary and secondary development locations outside of the organized towns would have major, long-lasting negative impacts on the Katahdin region. In addition to the negative impacts on Baxter State Park and Katahdin Woods and Waters National Monument, it would also negatively affect the economic vitality of the neighboring organized communities. Designation of the primary and secondary development areas combined with the existing much lower tax rates in the unorganized townships would attract development out of the organized towns and into the unorganized area. Towns would lose the potential revenue that development within their boundaries would create but bear the additional costs the new development would generate.

The Katahdin region is currently in the midst of a region wide visioning process, the first step toward developing a region-wide land use plan. Friends of Katahdin Woods and Waters staff and board members have participated in this process. We have seen hundreds of citizens spending thousands of hours in this effort. They are focused on growing local jobs and a regional economy, encouraging walkable villages that serve as gateways to the wilderness, and attracting the next wave of forest products companies into existing industrial sites.

The Land Use Planning Commission should not undermine this locally driven effort by adopting rules that would be inconsistent with the strongly expressed desires to encourage both commercial and residential development in the downtowns of these communities and next to existing nodes of development, not miles away from town in currently undeveloped areas.

The Katahdin region is a mixture of organized towns and unorganized townships. Planning and zoning in this region should include representatives of both towns and unorganized townships. We strongly urge you to remove the Katahdin region from this proposed rulemaking and engage with the ongoing efforts to create a vision and associated planning for the region.

Thank you for your attention.

**Friends of Baxter State Park**  
**Testimony for LUPC Hearing on January 10, 2019**

5.F.11

My name is Aaron Megquier, and I live in Belmont, Maine. I'm a Registered Maine Guide, lifelong outdoorsman, and frequent visitor to the UT. I'm also the Executive Director of Friends of Baxter State Park. Thank you all very much for your service as stewards of the Unorganized Territories.

Since the last hearing on these proposed rules in June, we have been following this issue very closely. We really appreciate the sincere efforts of the staff to engage us and other stakeholders on this issue, but we remain extremely concerned about the magnitude of the proposed changes and the likelihood of negative, irreversible impacts on Baxter State Park and the communities of the Katahdin Region. The changes made since the last hearing in June 2018 have not resolved our concerns.

The Maine Woods have ecological value of national and global significance. They are at the heart of our recreation economy, our forest products economy, and a number of our most treasured outdoor traditions. Baxter State Park is not an island of conservation land, but rather an integral part of Maine's North Woods. It is ecologically, culturally, and economically connected to surrounding communities and landscapes.

Development under the proposed rules could negatively impact scenic values from Katahdin and other summits in Baxter State Park, as well as the two gateway routes to Baxter State Park. This would go against agency precedent, which has been to not allow development that would harm scenic views from important public lands and waters.

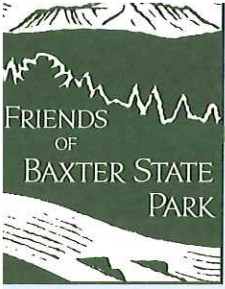
The proposed rules could harm Rural Hubs, including Millinocket and Patten, by encouraging development outside rather than within existing communities. This places a strain on municipal services while not adding property tax revenue. This would also undermine community-led initiatives to revitalize the economy of the Katahdin Region. Millinocket is working hard to revitalize its downtown, and to attract manufacturing and industrial tenants to the former Great Northern mill site. The mill rate in the UT outside of town is \$6 or \$8. The mill rate in Millinocket is over \$30. The proposed rules would open the door to capitalize on that powerful incentive. The good people trying to redevelop the mill site in Millinocket are already struggling with the IRS. They do not need to have the rug pulled out from underneath them at the state level as well. We believe that the proposed rules could be the nail in the coffin for Millinocket, Patten, and many other rural communities. Reducing the extent of the primary areas from 10 miles to 7 miles does not address this concern.

When coupled with the proposed rules for recreation-based and low-density subdivisions – which would affect an unknown number of lakes, trails, and other priceless features throughout the UT – we believe that the cumulative impacts of this proposal could result in 'death by a thousand cuts' for the Maine Woods. The concept plan option already in the LUPC rules provides an alternative to allow recreation-based residential development in remote areas if justifiable.

The Maine Woods and our rural communities are far too important to make changes of this magnitude without a full understanding of the potential impacts – which, in our view, could be negative, profound, and irreversible. We strongly oppose the proposed rule changes.

Thank you very much for your time and consideration.





PO Box 322 Belfast, ME 04915 (207) 975-3787 [www.friendsofbaxter.org](http://www.friendsofbaxter.org)

## Comments on Proposed Adjacency Rule Changes January 10, 2019

Members of the Land Use Planning Commission:

On behalf of the Board of Directors and more than 1,100 members of Friends of Baxter State Park, thank you for your service as stewards of the Unorganized Territories that make up the majority of Maine's great North Woods. We understand that each of you on the Commission and the LUPC staff cares deeply about our state, our communities, and our world-class natural resources. Thank you for your service to the State of Maine.

The LUPC is charged with stewardship of the public interest in a region of local, state, and global significance. Toward that end, we appreciate your efforts to refine the "adjacency principle." As you know, a rigorous approach to adjacency has been one of the bedrock principles guiding development in the Commission jurisdiction for almost 50 years. Evidence suggests that this approach has largely fulfilled the goals of the statute, which calls for "orderly development" rather than sprawl. Furthermore, we believe that the 'one-mile rule' for rezoning has been effective in allowing growth that is compatible with the world-class ecological, forestry, and recreation values of the Unorganized Territories. We are not opposed to some revisions to improve on that record and accommodate issues that have emerged in recent years. We are extremely concerned, however, about the magnitude of the proposed changes, the lack of specific information and analysis on the impacts of the proposed rule change, and the negative consequences these changes could bring to Baxter State Park as well as surrounding communities and ecosystems.

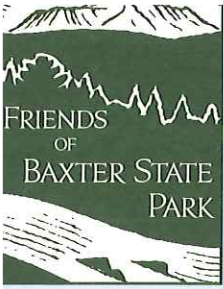
After considering the issues involved in some depth, the essence of our recommendation is that you put the proposed rules on hold, because despite your best intentions, we believe the proposed rules would have negative and irreversible impacts on Baxter State Park and the surrounding communities and ecosystems. The changes made to the proposed rules since the last hearing in June 2018 have not resolved our concerns.

### **Significance of the Maine Woods**

It's difficult to overstate the ecological, cultural, and recreational value of the Maine Woods. The Maine Woods are the heart of the largest globally important bird area in the continental United States, and the last stronghold for native brook trout in the eastern United States. Viewed at night from space, the Maine Woods are a unique region surrounded by a glowing web of development that sprawls along the entire U.S. East Coast, from Florida to Maine, and into Canada. On so many measures of ecological value – including connectivity and resilience to climate change – the

*The park is to be preserved in its wild state as unspoiled wilderness.*

*Governor Percival Baxter*



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Maine Woods are nationally and globally significant. They are at the heart of our recreation economy, our forest products economy, and our most treasured outdoor traditions.

### **Impacts on Baxter State Park**

Baxter State Park is not an island of conservation land, but rather an integral part of Maine's North Woods. It is ecologically, culturally, and economically connected to surrounding communities and landscapes. There are two road entrances to Baxter State Park: the Matagamgon Gate, which is accessed via Route 159 and the Grand Lake Road from Patten, and the Togue Pond Gate, which is accessed via the Lake Road and Baxter State Park Road from Millinocket. The proposed rules would make both of these road corridors "Primary Areas" for development to within a few miles of the Baxter State Park boundary. We believe that this would encourage strip development, creating negative visual impacts for Park visitors and degrading the remote experience. The approach roads to Baxter State Park are also part of the Katahdin Woods and Waters Scenic Byway. The strip development encouraged by the proposed rules would severely degrade or eliminate the scenic value of the Byway. We appreciate the removal of T2R9 WELS from the proposed Primary Area, but this does not fully address our concerns.

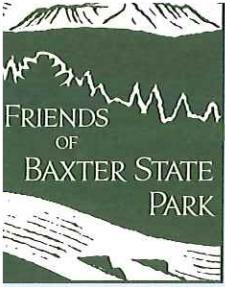
This rule change would affect scenic values inside Baxter State Park as well. The road corridors mentioned above are prominently visible from Katahdin, Traveler, and many other mountains in Baxter State Park. Several of the lakes included in the Primary and Secondary areas near Millinocket – including Ambajejus and Millinocket Lakes – are prominently visible from Katahdin and other mountains. Intensive development in these areas could have significant negative impacts on scenic views from Katahdin and other mountains in Baxter State Park. There is precedent in your past agency decisions to not allow developments that would have a tangible adverse impact on important scenic views from public lands and waters. Inviting development in these areas now would send the wrong message and be counter to your statutory mission and Comprehensive Land Use Plan.

### **Impacts on Katahdin-Region Communities**

We anticipate that the proposed rules would also have profound impacts on the economic vitality of those communities that were identified as Rural Hubs in the rules. Many of the towns identified as Rural Hubs – including Millinocket and Patten – are struggling with severe economic challenges, including mill closures, high unemployment, and vacant storefronts downtown. Mill rates are soaring as these towns attempt to survive, and many communities are struggling to provide basic services for residents. We suggest that the proposed rule changes be considered in this broader context.

After subtracting the acreage of conserved lands, the areas currently identified as Primary and Secondary areas cover an estimated 13% of the LUPC jurisdiction. The proposed changes are too drastic, over too large an area, to be made all at once. Furthermore, because of the way Primary

*The park is to be preserved in its wild state as unspoiled wilderness.*  
Governor Percival Baxter



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and Secondary locations are defined in the rules, these changes will be just outside some of Maine's rural towns most at risk. The idea that it would be economically and environmentally beneficial to encourage development near but outside the boundaries of the struggling communities of rural Maine is a concept that has not yet been proven, and is likely to have unexpected – and devastating – economic consequences.

Strip development and sprawl on roads outside the towns is very likely to harm Rural Hub communities. This type of development typically places a strain on municipal services while not adding property tax revenue. In many cases, there are already strong economic incentives in place to locate outside of town. The mill rates in the Unorganized Territory in the Katahdin Region are between \$6 and \$8. The mill rates in Millinocket and East Millinocket are well over \$30. This creates a powerful economic incentive to abandon the towns and develop in the UT. Meanwhile, the proposed rule changes would vastly expand the opportunity to capitalize on that incentive, making the problem worse.

Some Rural Hub communities are already in the midst of efforts that would be severely undermined by these rule changes. For example, Millinocket is working very hard, through an innovative public-private partnership, to attract manufacturing and light industrial tenants to the former Great Northern mill site, and to revitalize its downtown. The broader Katahdin Region is currently engaged in a major community visioning process (*The Katahdin Gazetteer*) about the future of the region with the assistance of a team of consultants. The proposed rule changes offer a 'one-size-fits all' approach to Maine's Rural Hub communities that is unlikely to be appropriate for their specific circumstances. We believe that, despite your good intentions, the proposed rules could be the nail in the coffin for Millinocket, Patten, and other communities that are struggling to revive their downtowns and attract businesses to their industrial sites. We strongly encourage LUPC to engage in a Community Guided Planning and Zoning or other regional planning process in conjunction with communities in the region before making any changes to the existing regulations surrounding Baxter State Park and the Katahdin Region.

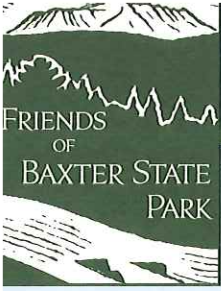
Baxter State Park depends on surrounding communities, including Millinocket and Patten, for a wide range of goods and services, as well as housing and livable communities for its staff. With an annual payroll of about \$2.5 million, the Park is one of the larger employers in the Katahdin region. When Millinocket and Patten are struggling, Baxter State Park often struggles to attract and retain qualified staff. This is a significant, long-term concern for the Park, and we believe that the proposed rules would exacerbate this challenge.

### **Recreation-based Subdivisions & Large-lot Subdivisions**

We believe that the concept of recreation-based subdivisions – as well as commercial development near recreational features – is generally incompatible with the values that bring people to recreational features in the first place. There may be limited circumstances where this

*The park is to be preserved in its wild state as unspoiled wilderness.*

*Governor Percival Baxter*



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type of subdivision makes sense (such as near a ski resort) but the proposed rules, as written, open the door to sprawl on a level that could completely change the character of the Maine Woods. Building houses or camps near permanent motorized, mechanized, and equestrian trails may benefit those homeowners, and create a short-term economic benefit to the landowner who sold the lots, but it would permanently degrade the experience for everyone else, and negate the values that drew people to the trail in the first place. There is already a mechanism in the LUPC rules to allow recreation-based development in remote areas if a justifiable case can be made by a developer. We believe that writing recreation-based subdivisions into the rules will encourage a pattern of sprawl that will irreversibly alter the character of our most precious areas. We also oppose the inclusion of low-density or “large-lot” subdivisions in the proposed rules. The Maine Legislature removed the exemption for large-lot residential subdivisions in the LUPC jurisdiction in 2001, recognizing that they cause habitat fragmentation and can cause severe and often irreparable damage to Maine’s natural resources.

### **Development on Lakes**

Lakes are critical to the remote character, biodiversity, and recreation economy of the Maine Woods. The proposed rules for recreation-based residential activity would affect an unknown number of Management Class 4, 5, and 7 lakes throughout the LUPC jurisdiction. Our understanding is that there are more than 1,000 lakes in Management Class 7 alone, and that LUPC remains unclear on exactly which lakes would be affected by this rule because of a lack of data on existing structures. This uncertainty and the lack of available analysis makes it impossible to evaluate the impacts of this proposal – which makes it impossible to know whether it meets LUPC’s legislative mandate or protects the broader public interest.

### **Cumulative Impacts**

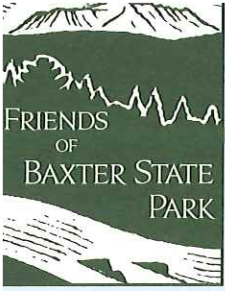
We urge the Commission to recognize the importance of cumulative impacts, which are already eroding the many values of the area. The Unorganized Territories have exceptional value precisely because they have been unfragmented by the sprawl that these proposed rule changes would facilitate. We believe that the cumulative impacts of this proposal would result in the ‘death by a thousand cuts’ phenomenon for the ecological, cultural, and economic values of the Maine Woods.

### **Summary**

- The Maine Woods have ecological value of national and global significance. They are at the heart of our recreation economy and a number of our most treasured outdoor traditions.
- We believe that, despite your good intentions, the proposed rules could have negative and irreversible impacts on Baxter State Park and the surrounding communities and ecosystems.

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- Development under the proposed rules could negatively impact scenic values from Katahdin and other summits in Baxter State Park, as well as the two entrance routes to Baxter State Park, running counter to agency precedent.
- The proposed rules could harm Rural Hubs, including Millinocket and Patten, by encouraging development outside rather than within the Rural Hub communities, and undermine community-led initiatives to revitalize the economy of the Katahdin Region.
- Recreation-based subdivisions and low-density subdivisions will encourage sprawl, create habitat fragmentation, and could permanently alter the character of important natural areas and recreational resources.
- The concept plan option already provides an alternative in the LUPC rules to allow recreation-based residential development in remote areas if justifiable.
- The cumulative impacts of this proposal could result in ‘death by a thousand cuts’ for the ecological, cultural, and economic values of the Maine Woods.

In conclusion, we urge the Commission to put the proposed rule changes on hold due to scenic impacts on Baxter State Park, potentially devastating economic impacts to rural service centers, and the near-certainty of sprawl near our lakes, trails, and natural areas. We urge the Commission to seek a third-party analysis of the location of existing development in the unorganized townships and whether development that has been approved under current rules is meeting the intent and purpose of the statute. The Maine Woods are far too important to make changes of this magnitude without a full understanding of the potential impacts – which, in our view, could be negative, profound, and irreversible.

Sincerely,

  
Aaron Megquier  
Executive Director

  
Richard Klain  
President

Attachments:

1. Earth at Night Map – East Coast of US and Canada (NASA)
2. Cover page of *Diversity, Continuity, and Resilience – the Ecological Values of the Western Maine Mountains* (Janet McMahon / Maine Mountain Collaborative)
3. Temperate Deciduous / Mixed Forests Then and Now (The Nature Conservancy)
4. U.S. Important Bird Areas Map (National Audubon Society)

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## DIVERSITY, CONTINUITY AND RESILIENCE – THE ECOLOGICAL VALUES OF THE WESTERN MAINE MOUNTAINS



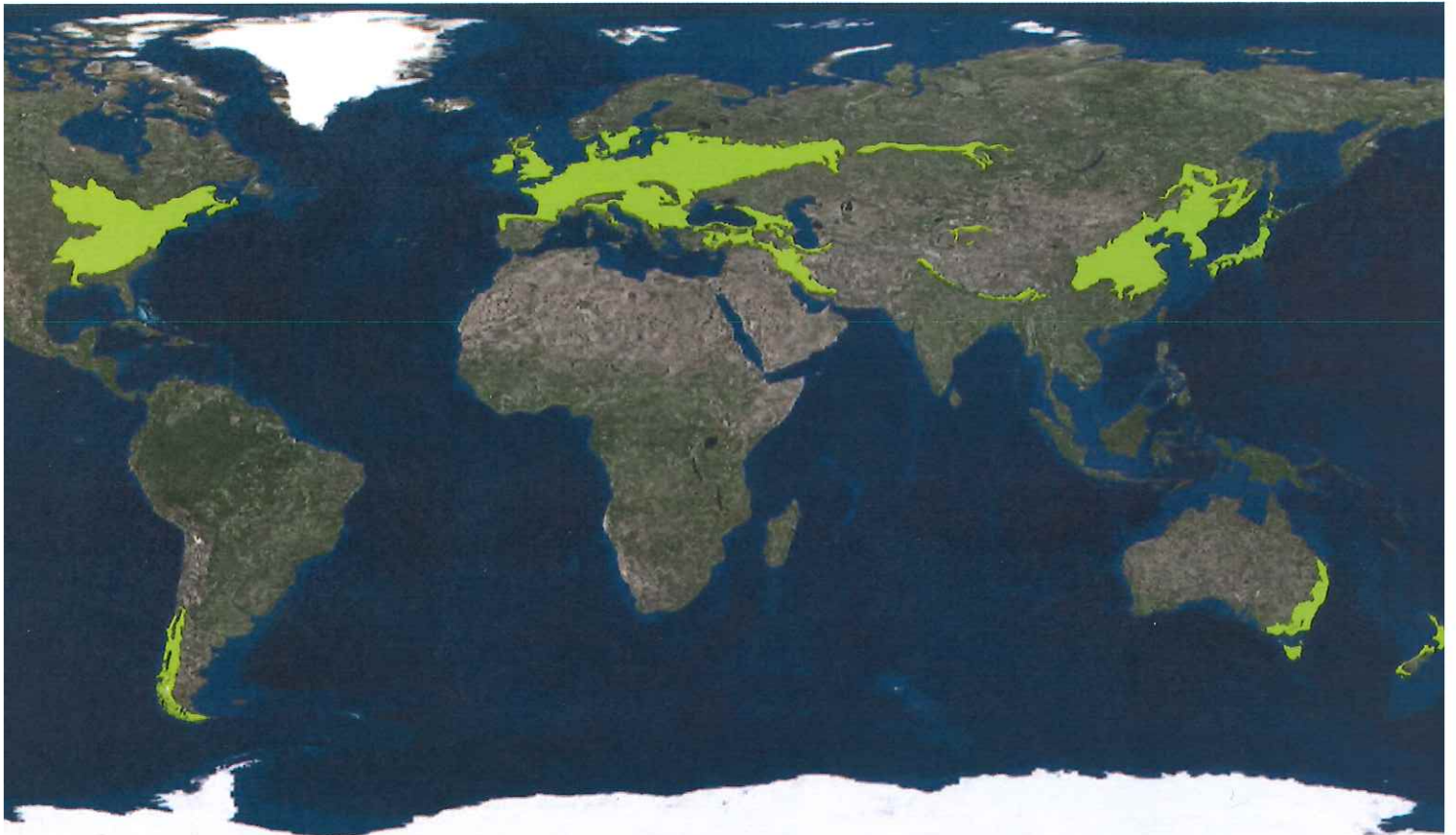
Dawn over Crocker and Redington Mountains

*Photo courtesy of The Trust for Public Land, Jerry Monkman, EcoPhotography.com*

### Abstract

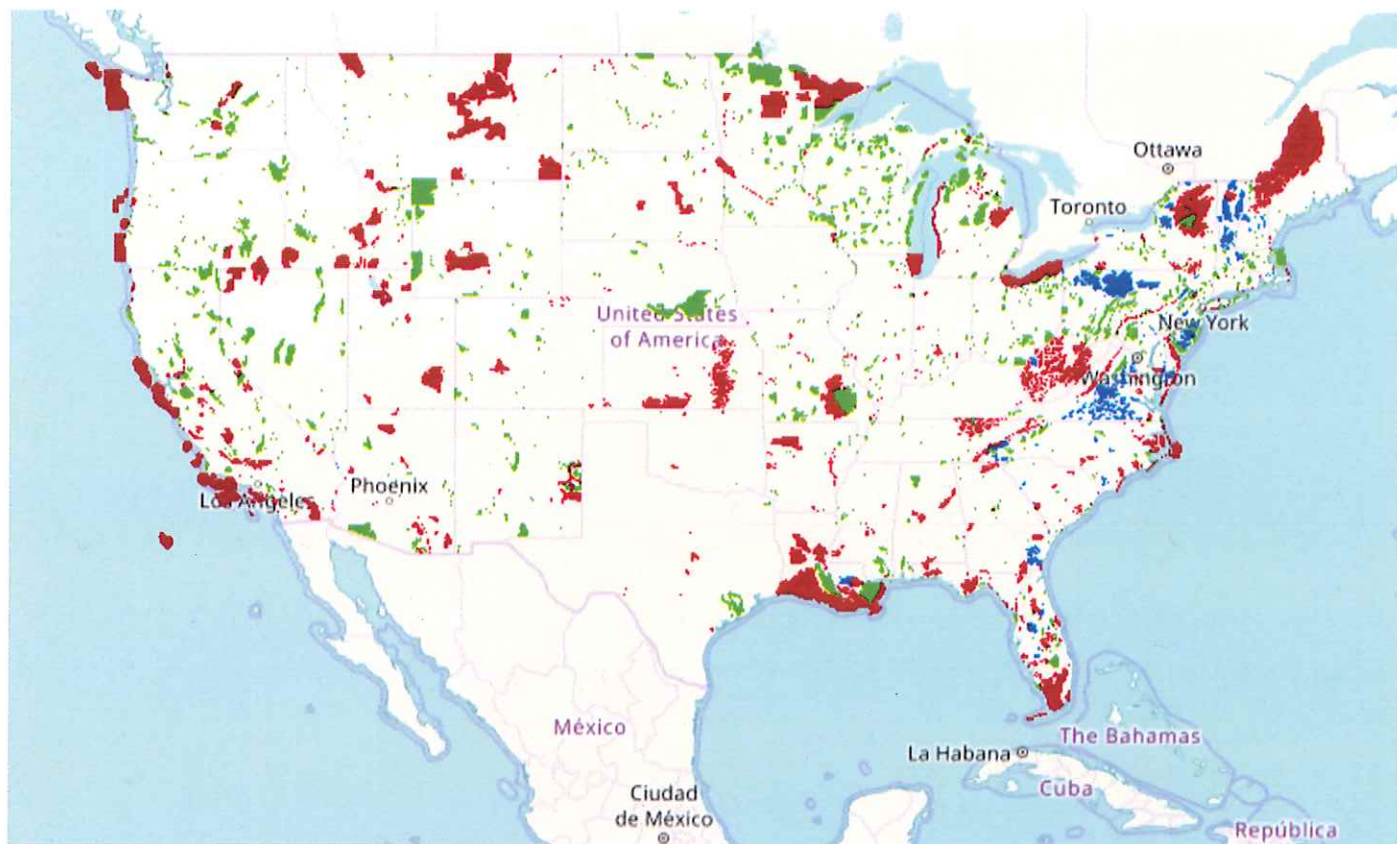
The five million acre Western Maine Mountains region is a landscape of superlatives. It includes all of Maine's high peaks and contains a rich diversity of ecosystems, from alpine tundra and boreal forests to ribbed fens and floodplain hardwood forests. It is home to more than 139 rare plants and animals, including 21 globally rare species and many others that are found only in the northern Appalachians. It includes more than half of the United States' largest globally important bird area, which provides crucial habitat for 34 northern woodland songbird species. It provides core habitat for marten, lynx, loon, moose and a host of other iconic Maine animals. Its cold headwater streams and lakes comprise the last stronghold for wild brook trout in the eastern United States. Its unfragmented forests and complex topography make it a highly resilient landscape in the face of climate change. It lies at the heart of the Northern Appalachian/Acadian Forest, which is the largest and most intact area of temperate forest in North America, and perhaps the world. Most importantly, the Western Maine Mountains region is the critical ecological link between the forests of the Adironcaks, Vermont and New Hampshire and northern Maine, New Brunswick and the Gaspé.

achment #3: Temperate Deciduous /Mixed Forests Then and Now (The Nature Conservancy)





Attachment #4: Map of U.S. Important Bird Areas (National Audubon Society).  
*Areas important at Global level in red, Continental level in blue, and State level in green.*



A statement from citizens of  
ARGYLE TOWNSHIP, MAINE

Maine Land Use Planning Commission  
c/o Ben Godsoe  
18 Elkins Lane, 22 State House Station  
Augusta, ME, 04333

Re: proposed changes to Adjacency rules

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With this 40 year history in mind We The People request that ARGYLE TOWNSHIP be held exempt from the proposed change of protective standards, & remain under the existing 1 mile adjacency rule.

Thank you for your consideration.

Name: <i>Mike Taylor</i>	Address: <i>1354 Southgate Rd. 04468</i>
<i>Galen Young</i>	<i>1281 Southgate, Argyle</i>
<i>Bernice Young</i>	<i>1281 Southgate Rd Argyle</i>
<i>Bonnie Young</i>	

*Richard A. Haymon*

Richard Haymon  
1350 Southgate Rd.  
Argyle TWP, ME 04468

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Name:	Address:
Peter A. Crockett	2782 Edinburg Rd ARGYLE TWP
Lester Martin	2747 Edinburg Rd, ARGYLE TWP
Paul J. Arseny	2354 Edinburg Rd
Jennifer Pust	2729 Edinburg Rd Argyle, ME 04468
Christina Sapie	2791 Edinburg Rd. Argyle Twp, ME
Everett Sapie	2791 Edinburg Rd. Argyle Twp, ME

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Name:	Address:
Don Bickmore	2052 Edinburg Rd Argyle TWP 04468
Georgeanna Bickmore	2052 EDINBURG RD, ARGYLE TWP, MAINE 04468
Dawn Bickmore	2052 Edinburg Rd. Lot B Argyle, ME 04468
Kathy Deans	1979 Edinburg Rd. Argyle Twp. ME 04468
Randy S Deans	1979 Edinburg Rd Argyle TWP. ME. 04468
Brenda Drake	1979 Edinburg Rd Argyle Township, ME 04468

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Name:	Address:
Elaine St. Louis	2304 Edinburg Rd, Argyle
Conor St. Louis	2301 Edinburg Rd, Argyle
MARY LEE	21 Boom Rock Way Argyle
John Lee	21 Boom Rock Way, Argyle
Mike Dowd + Penny	1908 Edinburg Rd.
Danielle Dos Santos	1774 Edinburg Rd, Argyle

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Name:	Address:
<del>Sandy MacArthur</del> <del>Sandy MacArthur</del> Daniel Woslyn	2945 Edinburg Rd Argyle, Twp,
<del>[Signature]</del>	2965 Edinburg Rd Argyle
David Simon	2061 Edinburg Rd, Argyle
David Thayer	2691 Edinburg Rd Argyle
Bea [Signature]	2691 Edinburg Rd Argyle ME
Andy [Signature] 2691	2734 Edinburg Rd, Argyle, ME

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Name:	Address:
Jessica Aldrich	2577 Edinburg Rd Argyle
<del>David C. Aldrich</del>	
Jeremy Aldrich	2577 Edinburg Rd Argyle
Melisa Hatch	1011 Southgate Rd Argyle Twp, ME 04468
Wesley Hatch	1011 Southgate Rd Argyle Twp, ME 04468
Donna Hatch	1012 Southgate Rd
Donna Hatch	Argyle Twp., Me. 04468



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Name	Address:
Deanna Dunn Deanna Dunn	1454 Southgate Rd. Argyle Me. 04468
Marilyn LaBelle Marilyn LaBelle	1456 Southgate Rd. Argyle Me. 04468
Bruce LaBelle 1 Bruce LaBelle 1	1456 Southgate Rd. Argyle Me. 04468
Larry Dunn Larry Dunn	1454 Southgate Rd Argyle Me 04468
Larry Dunn SR. Larry Dunn SR.	1454 Southgate Rd. Argyle Me. 04468

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Name:	Address:
Rose Drake	2603 Edinburg Rd. Argyle Twp.
Roxanne McLaughlin	2499 Edinburg Rd Argyle Twp
Marie Roy	2595 Edinburg Rd - Argyle Twp
Kiri Corliss	1395 Sgate RD. ARGYLE
Ryan Borello Ryan Borello	2560 Edinburg Road 04468

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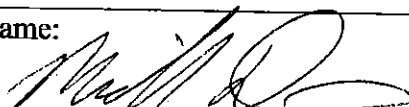
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Name:	Address:
	1892 Edinburg Rd
Melan'e Bernard	1892 Edinburg Rd
Stam Bohmiche	1908 Edinburg Rd.
John S. O'Neal	1981 Edinburg Rd
Russell O'Neal	1981 Edinburg Rd
Sharon O'Neal	1981 Edinburg Rd.

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Name:	Address:
Tinia Graham	1398 Southgate Rd
Sams Avery	2354 Edinboro Rd

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Name: <i>Michael Sapici Jr.</i> Michael Sapici JR.	Address: 2932 Edinburg Rd. Argyle, Maine 04468
Tracy Robbins Garry Robbins	2932 Edinburg Rd. Argyle, ME, 04468
Leo F. O'Connell <i>Leo F. O'Connell</i>	1142 Southgate Rd Argyle ME 04468
Richard Jordan Richard Jordan	1036 Southgate Rd Argyle Twp, ME 04468
Brent White <i>Brent F. White</i>	1036 Southgate Rd Argyle Twp Me. 04468
David R Murray <i>David R Murray</i>	856 Southgate Rd Argyle Twp me 04468

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Name:	Address:
Henry D'Angelo SR.	2089 Edinburg Rd, Argyle
Danny McPeters Danny McPeters	951 Southgate Rd. Argyle
Betty Kroby Betty J. Dof	762 Southgate Rd Argyle
————— ←	839 Southgate Rd Argyle
Selene LeClair	839 Southgate Rd Argyle
Steve Koenig	2966 Edinburg Rd Argyle

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Name:	Address:
Norme Tidwell	2923 Edingborge Road Argyle TWP
Ruben E. Tidwell	" "
Troy White	40 Broadview of Argyle
Cindy Ingalls	1251 Southgate Rd Argyle
Ann R. Johnson	1251 Southgate Rd
Cleaver How	" " " "

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Name: <i>Stacey Lee Cox</i> <i>Stacey Lee Cox</i>	Address: <i>2919 Edinburg Rd</i> <i>Argyle Township, ME 04468</i>
<i>Dana Cox Jr.</i>	<i>2919 Edinburg Rd</i>
<i>Dana Cox Jr.</i>	<i>Argyle Twp ME 04468</i>
<i>LOUISE E COX</i> <i>Louise E Cox</i>	<i>2919 EDINBURG RD</i> <i>ARGYLE TWP ME 04468</i>
<i>Jean Clark</i>	<i>2905 EDINBURG RD</i> <i>ARGYLE TWP ME 04468</i>
<i>Perry Clark</i>	<i>2905 Edinburg Rd</i> <i>Argly Twp me 04468</i>
<i>Cindy L Nadeau</i>	<i>2922 Edinburg Rd.</i> <i>Argyle Argyle Twp ME 04468</i>



To the Land Use Planning Commission:

Jan. 8, 2019

Maine's current and longstanding "adjacency policy" serves the Unorganized Territories and our state well by defending wild lands from sprawling development. The cost of services is also minimized by not having to extend them into wild country. This protects Maine's wildlife, rivers, forests, and lakes from the threats of development sprawl, maintaining our iconic Northern Forest, a feature no other state in the Lower 48 can boast about.

The proposed change in the adjacency rule, including the recent weak revisions, exposes our North Woods to decision making that might not have our state's values of conservation and protection foremost. The change will make us vulnerable to "act first, ask questions later" developers who might not share our core values.

Economic costs of sprawl are many all over Maine. But in the unorganized territories, this includes degrading pristine habitats that are impossible to restore to former pristine condition. What will happen to the lakes and ponds within the proposed development areas? What about the lakes and rivers outside of these areas that meet LUPC's proposed development criteria, which will then, like dominoes, become exposed? What about the roads and stream crossings necessary to access new locations, silting in headwaters that nurture our native Brook Trout population, the last home for these trout in the USA?

This process appears to be driven by agents intent on developing our North Woods, the last stronghold for moose, lynx, bobcat, woodfrog, and other boreal animal and plant species threatened by fragmentation and human encroachment. The one-mile adjacency rule plays an extremely important role in protecting what distinguishes our state from all the rest. The cautionary principle advises us not to open this Pandora's Box.

Cloe Chunn, Waldo, Maine  
Author, *Fifty Hikes in the Maine Mountains*  
Registered Maine Guide



**Natural Resources Council of Maine**  
3 Wade Street • Augusta, Maine • 04330 • www.nrcm.org

**Public Hearing on LUPC's Proposed Rule Revisions:  
Revised Application of the Adjacency Principle & Subdivision Standards  
Testimony of Catherine B. Johnson  
Jan. 10, 2019**

My name is Cathy Johnson and I am the Forests and Wildlife Project Director for the Natural Resources Council of Maine (NRCM). NRCM has over 20,000 members and supporters including people who reside in each of Maine's sixteen counties.

A new scientific report by one of Maine's most well-respected ecologists, Janet McMahon, was released this week about the impacts of roads, powerlines, and development on Maine's Western Mountains region. I urge you to review the full report and heed its cautions. One of the report's conclusions is specifically relevant to today's hearing: "the Land Use Planning Commission's proposed changes to the adjacency rule...have the potential to profoundly change the ecology of the region."

NRCM supports the goal of directing future development in the North Woods to areas where there is existing development and the public services needed to support future development. Those areas consist principally of the organized towns that border the unorganized territories (UT) along with some village centers within the UT where there is significant population.

NRCM also supports the goal of protecting the vast majority of the North Woods in its relatively undeveloped condition. The undeveloped forests, lakes, and rivers support Maine's forest products industry and outdoor recreation economy, protect our fisheries and wildlife, and provide Maine residents and visitors places for recreation and respite from our busy world.

NRCM thanks you for this additional public hearing and acknowledges the changes that have been made in this proposed rule. However, those changes do not dispel our fundamental concerns about the proposed rule. We do not support the proposed rule because we believe that it would harm both the natural resources of the jurisdiction and the economic viability of the communities that border the UT.

**There are flaws with the fundamental approach of this proposal:**

**1. Measuring the distance of primary development areas from the boundary of rural hubs is a cookie-cutter approach that has no relationship to what exists on the ground.** The actual existing development in the rural hub could be located anywhere within the rural hub township – including on the far edge away from the UT. Measuring from the boundary of the rural hub township instead of from the actual node of development means the proposed new development area could be up to 13 miles away from the existing development.

**2. Measuring the distance of the primary development areas “as the crow flies” also ignores what exists on the ground in favor of a mathematical calculation.** The “crow flies” provision would allow development even further away from existing development, depending on where the roads lie.

These and other flaws in this proposed system would allow development in places that are not suitable primary or secondary development areas when considering their natural resource values and the location of existing development nodes. A few examples of the inappropriate results of this system are proposed primary development locations in Elliottsville Plantation and Herseytown, Tomhegan, Sandy Bay, Bald Mountain, Riley, Freeman, and Madrid Townships.

Applying a mathematical formula instead of looking at what is on the ground also leads to inappropriate results like proposing Burnt Jacket Peninsula on Moosehead Lake as a subdivision development location despite the fact that this Commission found that that was an inappropriate location for a residential subdivision and denied a subdivision application in 2006.

The law requires this commission to apply principles of “sound planning [and] zoning.” Sound planning and zoning should start from what exists on the ground, not from lines on a map.

In addition to these fundamental flaws in the system, NRCM has many major concerns about the likely impacts of the proposed rule:

- **1.3 million acres and 20% (at least 317 according to LUPC’s calculations) of the UT’s lakes would be vulnerable to residential subdivision development.**
- **Commercial and residential subdivision development areas along any public road within 7 miles “as the crow flies” from the boundary of 41 “rural hubs” would lead to strip development.** These public roads include five scenic byways. These development areas would undermine efforts by neighboring, rural communities to keep development within their towns as they attempt to preserve the economic viability of their local businesses.

- **Commercial development would be allowed on 824,000 of these acres (and an unknown number of lakes) scattering commercial development across the landscape.**
- **Despite being eliminated by the Legislature in 2001, large lot subdivisions would again be allowed on hundreds of thousands of acres, eating up large parcels of forestland.**
- **Recreation supply businesses far from towns would commercialize the North Woods, undermine businesses in local communities, and compete with existing sporting camps.**
- **Subdivisions of up to 14 lots and 30 acres with only limited environmental review would be allowed on approximately 400,000 of the 1.3 million acres.**
- **Subdivision standards allowing developers to avoid the requirement to provide common open space if they locate near permanently conserved lands would attract development to permanently conserved lands.**
- **The rules are so complicated that it is extremely difficult for both experts and the public to figure out what uses would be allowed where.**
- **The proposal to review the rules in five years would be completely ineffective because once development opportunities are granted through the designation of primary and secondary locations, it could be legally and politically impossible to take them back.**

The current adjacency principle requiring development to be “one mile by road from existing, compatible development of similar type, use, occupancy, scale and intensity” may need to be strengthened as called for in your Comprehensive Land Use Plan, but the principle that future development should be near existing, compatible development by road should be retained.

We urge you to set this rule aside, gather up-to date data about the location of existing development in the UT, and engage in regional planning with towns that border the UT in order to guide development into those towns that want it. Only then, would it be appropriate to consider revising the current adjacency principle.

If the Commission believes that it does not have the funds to gather more current data or the authority to engage in regional planning with towns that border the UT, NRCM would be happy to work with you to request those funds and that authority from the Legislature.

Thank you for the opportunity to comment.



# Maine Professional Guides Association

55 Morrison Hill Road  
Wilton, ME 04294

[www.maineguides.org](http://www.maineguides.org)

January 10, 2019

My name is Don Kleiner and today I am here to represent the Maine Professional Guides Association. We have roughly 1000 members each operating a small business. As you might expect many if not most of them operate in the unorganized territories or on the waters of the state.

We support these proposed changes and are pleased to see the clear goals in the proposal.

Discouraging development in the most remote areas is in the interest of our members or their businesses. The economic viability of the surrounding towns and service centers though is critical to their success.

Keeping future development near the towns and service centers will help those towns remain viable and reduce costs.

In the case of many like our members; those who are trying to run successful small businesses that support their families and the local economy. These proposed changes make it possible for them to locate near the natural resources that they depend on.

Eliminating the one-mile rule everywhere except near existing communities takes millions of acres out of consideration for subdivision. This prospective approach simply allows rezoning on the fringes – areas where economic development is needed and appropriate to rural communities. I must caution though that this certainly does not mean that development will follow.

We are pleased by the thoughtful process that was undertaken in the development of this proposal and wish to acknowledge the efforts of your staff to include us and listen to our concerns.

From a land use planning and economic development prospective, these are good changes. They are from a guide's perspective as well.

Thank you for your time and attention.



Land Use Planning Commission  
Department of Agriculture, Conservation and Forestry  
22 State House Station  
18 Elkins Lane  
Augusta, ME 04333

January 10, 2019

Dear Commission:

Thank you for the opportunity to submit comments on the proposed rule revisions related to the application of the adjacency principle and subdivision standards. Maine Audubon has followed the progression of this rule making from its very beginning in 2014, from taking part in an earlier stakeholder process regarding the subdivision rules, to meeting regularly with Land Use Planning Commission (LUPC) staff as changes to the adjacency principle evolved from concept to proposed rule. While we greatly appreciate the time and attention the Commission and staff has given to this important matter, and the improvements that have been made since the last version, we feel strongly that more work must be done before the Commission approves final rules. As such, we oppose the proposed rule revisions dated December 12, 2018.

Broadly speaking, we are most concerned by the scope, scale and pace of the proposed changes. While it is clear that the staff aim to steer new development to areas that are close to existing development or hubs of activity, and away from high value natural resources, we believe the proposal should be adjusted to better meet these and other smart growth goals, the adjacency principle outlined in the Commission's Comprehensive Land Use Plan (CLUP), and in proposed rules stated "Purpose" (see *Proposed Section 10.08-A,A*). The "Purpose" states: "Locating most new subdistricts for commercial activities and residential subdivisions close to existing development and public services reduces public costs; improves the economic health of existing communities, protects important habitat; and minimizes interference with natural resource based activities such as forestry, agriculture, and recreation."

Our specific points of concern, as well as other comments regarding positive changes, are enumerated below.

### **What's at Stake**

Maine's unorganized territories (UT) are the heart and soul of the Northern Appalachian/Acadian Forest—the largest intact temperate forest in North America and perhaps the world. The forest contains ecosystems across a climate gradient as diverse as all of Europe. That diversity include plants, from hardwood forests full of sugar maples and yellow birch, boreal spruce-fir forests, fens and bogs, freshwater marshes, and floodplain forests, to alpine tundra. This landscape and plant diversity creates a mosaic of habitats for many species of wildlife, from the largest moose population in the lower 48 states,

the nation's largest population of Canada Lynx, and a Common Loon population second only to Minnesota. In the spring and summer, the UT is a veritable "baby bird factory" for many of our resident and migratory songbirds, making it the largest globally significant Important Bird Area in the continental United States.

The UT boasts such diversity for a number of reasons, including the fact that the UT is largely undeveloped or fragmented. Individual Black Bears, for example, have a home range of about 19,000 forested acres—bobcats 6,000 acres. Even smaller mammals like River Otters typically use 15 to 30 linear miles of waterways to search for their prey. Wildlife need these large areas, uninterrupted by human disturbance, to not only find prey but to maintain enough genetic diversity to maintain strong populations.

New development, including roads and other human activity, not only destroys habitat, but can alter when, where, and how animals move between habitats. Fragmented habitat limits natural dispersal of young animals, isolates populations, reduces genetic exchange, and lowers population levels over time. Roads and roadside areas are often avoided by wildlife, create barriers to movement, and can be fatal for many species as they attempt to cross. Undersized and poorly functioning culverts located where they cross streams and other waterways can restrict movement of aquatic and semi-aquatic species. Chemical runoff and sedimentation from roads and yards pollutes waterways. These chemicals can accumulate in both aquatic and terrestrial species to a point where the chemicals compromise species health or alter their behavior, and can create algal blooms toxic to fish and other aquatic life. Building roads, houses, commercial developments, and utility corridors often introduces invasive species into a region, which can have devastating impacts on native species. More people in relative remote areas means more access to and disturbance of all types of wildlife.

The many impacts on water quality, wildlife, and habitat from fragmentation often happens slowly, accumulating over time, and leads to degradation of ecosystems and loss of biological diversity. We encourage you to read the recent article titled *The Unique Nature of Maine's North Woods* in Maine Audubon's Winter 2018 issue of Habitat (attached) for an overview of this topic and *The Environmental Consequences of Forest Fragmentation in the Western Maine Mountains* from the Maine Mountain Collaborative for a more in-depth discussion on the topic.

This is the backdrop against which we review the proposed rules before you.

### **Specific Comments and Concerns**

- (1) *Proposed Section 10.02*, definition for "Home-based Business". We support this proposed change, because it provides more opportunity for business activity in the jurisdiction without incurring more development.
- (2) *Proposed Section 10.02*, definition for "Recreation Supply Facility". We are concerned that under the proposed rules "Recreation Supply Facilities" would be allowed across the landscape (not just in the primary and secondary locations), which could undermine businesses in local communities and compete with existing sporting camps. We recommend further limiting where these facilities can occur across the landscape or alternatively, promoting such facilities in or near to existing communities.

- (3) *Note in Section 10.08,A*. The proposed rules contain a note, not to be included in the final rule language, that states: “It is the intent of the Commission to review the effectiveness of the rulemaking, and any potentially unforeseen impacts that occur as a result of these changes. The Commission will conduct the review in each county within its service area when either five rezoning petitions have been approved in a county, or after five years from the effective date of the adopted rule.” While we appreciate the Commission’s intention to reflect on the effectiveness of this rule, if adopted, we are concerned that once the development opportunities are granted through the proposed primary and secondary locations and other areas, it would be challenging to scale back or remove development rights altogether. We recommend that the Commission modify the note to make more clear that the rules will be reviewed and modified based on results on the ground.
- (4) *Proposed Section 10.08,B,2,e, “Access to Development”*. We support the proposed requirement that land within a proposed subdistrict be accessible from a public road by legal right of access.
- (5) *Proposed Section 10.08-A,C, “Primary and Secondary Locations”*. Maine Audubon feels strongly that the primary and secondary locations—the areas where a great deal of development would be encouraged under this proposal—are both too broad and not nuanced enough to adeptly respond to the location of important natural resources and existing development already on the ground. We applaud the staff for trying to move most development closer to existing communities, but feel the current extent of the primary and secondary locations are too expansive and not specific enough to fully accomplish this. Specifically:
- We feel very strongly that the seven-mile distance by air from the boundary of the proposed towns, plantations, and rural hubs is too far. Unlike the current adjacency policy that allows similar types of development within one mile of existing, compatible development, but not necessarily along the entire mile-long area, the proposed rule would immediately open up the entire seven-mile stretch to development. We recommend that, should the Commission continue to pursue this measured-distance strategy, that the distance be reduced to 2 miles. Existing development outside of this distance could be “grandfathered” and should not be used to determine the extent of the primary and secondary areas.
  - We remain skeptical that the secondary locations are necessary, at the very least for residential development. We feel particularly strong that residential development should occur near to communities in order to limit public costs, improve the economic health of existing communities, protect important habitat, and minimize interference with natural resource based activities such as forestry, agriculture, and recreation. The proposed secondary locations, to be located up to five miles from a public road, are not consistent with the Commission’s goal of encouraging concentrated development and could unduly compete with existing communities. Elliotsville Township, described in detail below, is a good example of this concern.
  - Finally, we have identified a number of places we believe should be removed from either the primary or secondary locations, for a variety of reasons, and that are examples of how challenging it is to effectively apply this distance-based approach. Our list is not exhaustive, however; we are confident other examples exist that demonstrate that locating development based on a set measurement from towns, plantations, rural hubs, and public roads is not as



nuanced as locating new development should be.

- Elliottsville Township. Portions of this township fall within the proposed primary location because of its proximity to Greenville and the existence of public roads. The public roads that would be used to access this location do not directly connect to Greenville and are not widely used. This is contrary to the Commission's intent to locate new development in a manner that efficiently uses public services and makes emergency services reasonably available. Furthermore, increased traffic leads to increased wildlife mortality. The township contains a number of high value natural resources, including a cluster of Heritage Fish ponds, the Appalachian Trail corridor, and Borestone Mountain Sanctuary. These resources would be adversely affected by additional development. Finally, the secondary location within Elliottsville Township could unduly draw residential development from Greenville, an existing established community.
- Madrid Township. Portions of this township fall within the proposed primary location because of the township's proximity to Kingfield to its east. However, there is no direct way to drive from Kingfield to Madrid. Madrid is most readily accessible from Rangeley to the northwest, or from Phillips to the southeast, either one requiring extra traffic miles for emergency services or residents.
- Herseytown Twp. A small sliver of the north portion of this township is proposed to be a part of the primary location because of the township's proximity to Patten and the presence of a single public road. This pattern of development is not consistent with smart growth principles.
- Township 4 Range 7 WELS and Township 3 Range 7 WELS. The primary location within T4 R7 WELS and T3 R7 WELS is adjacent to the Sebois River. The Sebois is in a Beginning with Habitat Focus Area—a natural area of statewide ecological significance that contains unusually rich concentrations of at-risk and high value species and habitats. These areas have been identified by biologists from the Maine Natural Areas Program, Maine Department of Inland Fisheries and Wildlife, Maine Department of Marine Resources, U.S. Fish and Wildlife Service, The Nature Conservancy, Maine Audubon, and Maine Coast Heritage Trust. These areas support rare plants, animals, and natural communities; high quality common natural communities; significant wildlife habitats; and their intersections with large blocks of undeveloped habitat. This is a prime example of an on-the-ground natural resource at risk because of a proposed rulemaking scheme that is not nuanced enough.
- Fish River Chain of Lakes Area. In June 2018, Irving Woodlands, LLC proposed a Concept Plan for their land holdings in the Fish River Chain of Lakes area. That Concept Plan would allow for more residential and commercial development in that area, including directing additional development to areas that are most suitable for development, as long as that development is offset by conservation. The Concept Plan has yet to be approved. By contrast, the proposed primary and secondary locations in this area would encourage development in areas not as suitable for development, and

without requiring any concurrent conservation offset. If the Concept Plan is not approved, then development could occur in this area without taking into consideration the area's natural resource values, current character, and impacts to water quality and fisheries. We understand if the Concept Plan is approved, it will supersede these proposed primary and secondary locations, however we bring this issue up as an example of how some existing location of development tools, such as Concept Plans, are already working to direct development to the most appropriate areas, perhaps more effectively than these proposed rules.

- Albany Township. We believe that this township is not a good choice for the primary location all together, as it would encourage additional development near the White Mountain National Forest, even though there seems to be ample room for additional development in neighboring organized towns. This region's economic future is intimately tied to the outdoor recreational opportunities in the area, including the White Mountain National Forest. We believe additional development in Albany Township would detract from those opportunities and undermine local economic and community vitality.
- Plantations. Under this proposal, primary locations include areas within one mile of a public road in all plantations. In our experience, not all plantations have existing clusters of development suitable for additional development. Including all plantations has led, under this proposal, to a wide swath of primary location east of Medway that is anathema to smart, concentrated development. Furthermore, not all public roads within plantations are otherwise created equal. For example, Baring Plantation's public roads run right through Moosehorn National Wildlife Refuge, which is not a good location for more development. Each are examples of the nuance that is lost when using this "one size fits all" approach.
- Management Class 3 Lakes. Not all Management Class 3 lakes are suitable for the additional development that would be allowed under these new rules. Based on an initial evaluation of Google Earth images, the location of existing development on the shoreline or nearby, and a review of known aquatic and terrestrial natural resource values, we believe lands around the following Management Class 3 lakes should not be included in the primary location: Clayton Lake (T12 R8 WELS), Horseshoe Pond (Coburn Gore), Pocumsus Lake (T5 ND BPP), Bowlin Pond (T5 R8 WELS), Caribou Lake (T2 R12 WELS), Endless lake (T3 R9 NWP), Fish River Lake (T13 R8 WELS), Grand Lake West (T6 ND BPP), Jo-Mary Lake Middle (T4 Indian Purchase), and Onowa Lake (Elliottsville TWP).

(6) *Proposed Section 10.21, F, "Low-Density Development Subdistrict (D-LD)"*. Allowing for low density subdivisions is an inefficient use of land and would represent a dramatic departure from current Commission policy. Between 1999 and 2001, the Legislature passed multiple bills to limit this type of development, which it deemed inconsistent with the CLUP. "Large lot" subdivisions, even with the proposed low density subdivision guidelines, can still result in house lots that are no longer available for commercial forest management or public recreation, and that reduce and fragment wildlife habitat—uses that should be supported by the Commission under the CLUP. The proposed subdivision rules attempt to lessen the impact of these large lots by clustering houses

somewhat together rather than being randomly scattered, however they can still occur in areas far removed from the center of existing activity or communities, which in our view is inconsistent with the intent of the proposed rules – i.e. to guide development close to existing communities.

- (7) *Proposed Section 10.21,M*, “Residential Development Subdistrict (D-RS)”. We appreciate the evolution of this concept, including narrowing the type of trailhead near which residential development may occur. However, we remain concerned that allowing this will in some cases result in development that is inconsistent with smart growth principles (i.e. development located far from community centers) and could adversely impact natural resources (in particular, lake shorelines). Points of entry to permanent trailheads (an area where this type of development could occur under the proposed rules, see Section 10.08-A,D,2,c) are sometimes located in more remote areas of the jurisdiction and thus are more susceptible to negative development impacts.
- (8) *Proposed Section 10.25,E,1*, “Scenic Resources.” We appreciate the changes made since the last draft rulemaking to protect scenic byways.
- (9) *Proposed Section 10.25,Q,3,a,2*, “General Management Subdivisions”. Under the proposed rules, General Management subdivisions are subdivisions that are allowed without a rezoning. Currently, such subdivisions are allowed in the General Management (M-GN) subdistrict within 1,000 feet of a public road in certain townships. Under the proposed rule revisions, these new General Management subdivisions would be allowed in the M-GN subdistrict within all primary areas, as long as they are within a ½ mile of a public road. This represents a significant expansion of potential development area all at once, without rigorous oversight or ability to assess incremental impacts. A rezoning petition typically provides the opportunity for the Commission to assess incremental impacts. General Management subdivisions do not require a rezoning. We recommend significantly limiting, or eliminating, the General Management subdivisions.
- (10) *Proposed Table 10.25,Q-1*, “Location and Layout Overview”. Residential subdivisions in the UT should be designed to minimize the extent and sprawl of new development and associated infrastructure as a means to better protect natural resources, maintain large unfragmented forest and habitat blocks, and to facilitate efficient movement of both people and wildlife.

The proposed “FlexDesign” is by far the best subdivision layout in most situations. FlexDesign requires the developer to work proactively with Commission staff early in the design stage to identify the unbuildable areas, as well as the high value natural resources and connected natural landscapes that should be avoided, and to minimize the extent and sprawl of building lots, roads, septic systems, etc. that become part of the permanent built landscape. FlexDesign is similar, but different, from the proposed Clustered Design in that they both would require a portion of the development to be protected as open space, but the placement and quality of that open space could vary markedly: The proposed FlexDesign is more tailored to the resources on the ground, whereas Clustered Design just requires that the lots be close together on a parcel with the rest of the land set aside as open space, regardless of its value.

The proposed Basic Design is the least desirable, as it is the least efficient in terms of land use and infrastructure needs, though we recognize it could be appropriate along some shorelines, on which shorefront lot owners tend to desire their own access and/or viewshed of the lake.

While we appreciate the staff's interest in providing developers with options, based on experiences in organized towns, the proposed FlexDesign subdivisions (often called conservation subdivisions) have been most successfully used when they are required (at least in the rural portions of the town), rather than being offered as one of several options – particularly when both Clustered and FlexDesign are options.

Consequently, we recommend changing Table 10.25,Q-1 to allow only the proposed FlexDesign layouts at “Inland” (both Residential and General Management) and “Shoreland with Heavy Development” sites, and only Clustered and FlexDesign at “Shoreland” (Management Class 4 Lakes).

- (11) *Proposed Section 10.25,Q,4,a,2,a,i.* The proposed rules would allow a waiver of open space requirements if the subdivision is located within a quarter mile of permanently conserved land. We are concerned that this would drive some development adjacent to conserved land, because developers are motivated to avoid open space requirements. In these cases, there should be at least a 1000' undeveloped separation between the conserved land and the developed land (500' wildlife travel corridor plus 500' buffer from impacts from human activity).

Specifically, we recommend changing the wording as follows: “In cases where the subdivision abuts permanently conserved land, all building envelopes shall be at least 100' but preferably 500-1000' from the boundary line of the conserved parcel.”

This change reflects the following, from “Conserving Wildlife in Maine’s Developing Landscape”:  
“In urban/suburban areas, a study by Matlack (1993) found that human activity could extend up to 270 feet into natural areas on the edge of human development. These activities can reduce the value of the edge habitat for wildlife. Dumps, litter, pruned and hacked trees, cleared understory vegetation, established campsites and extensive firewood gathering, can all reduce the vegetation birds use to nest and cause general disturbance which may keep animals out of the area. In addition, habitat adjacent to residential housing often has elevated numbers of gray squirrels (due to supplemental feeding at bird feeders) and house cats, both of which are effective predators on nesting birds.<sup>1</sup>”

Other studies have shown that impacts from roads can extend beyond human development between 330' to more than 3300', depending on the species and habitat. Five hundred feet is a reasonable compromise and is consistent with other recommendations in the proposed rule.

- (12) *Proposed Section 10.25,Q 4,b,2,c and 4,d,4,e.* Subsurface wastewater disposal systems should be considered part of the infrastructure needed to support the subdivision and should not be allowed in the open space portions of the subdivision unless there are extenuating circumstances. The subdivision design should include adequate area and conditions for a fully functioning system or systems. The open space should be reserved for uses as described in Comment 13.

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<sup>1</sup> Matlack,G.E. (1993). "Environmental Auditing - Sociological Edge Effects: Spatial Distribution of Human Impacts in suburban Forest Fragments." *Environmental Management* 17(6): 829-835.

(13) *Proposed Section 10.25,S,3, “Uses of Common Open Space”*. We suggest that the proposed rules be modified to be more specific about what can and cannot be allowed in Common Open Space. We have drafted one possibility below, which was modified from an Environmental Protection Agency statement on what constitutes open space:

*Open space is undeveloped land that conserves woods, water, and wildlife, and is open and accessible to the public for passive recreation. In these subdivisions, open space may include vegetated green space (land predominantly covered with vegetation), community gardens, nonmotorized trails, and small playgrounds. It does not include ballfields or other semi-developed recreational facilities.*

We remain uncertain how to address the motorized and nonmotorized trails part of this proposed modification. The Commission may need to include both or to simply say “trails”, though we believe highly trafficked trails such as ITS snowmobile trails or multipurpose railroad-bed type trails are inappropriate uses in these open spaces.

Should the Commission continue with the general approach of the proposed rulemaking, we strongly recommend that the Commission significantly scale back the locations available for development, including, but not limited to: (1) Reduce the straight-line distance used to calculate primary locations from 7 miles to 2 miles; (2) Eliminate particularly problematic townships; (3) not include all plantations in the development locations; (4) strongly consider removing the secondary locations all together; (5) significantly limit or eliminate the proposed General Management Subdivisions; (6) not allow development on the suggested Management Class 3 lakes; and (7) eliminate the proposed Low-Density Development Subdistrict. We strongly believe that the Commission should start small and review and modify the rules as needed based on on-the-ground results over time.

### **Alternative Recommendation**

As an alternative to this proposed rule, we recommend that the Commission do the following to achieve its laudable goal of directing new development near to existing communities:

**(1) Complete a land use inventory of the jurisdiction.** It is difficult to assess the merits of this proposal as compared to existing policy because no one knows precisely what development is “on the ground” in the jurisdiction. We recommend that the Commission invest in a land use inventory so that staff and the public can clearly assess the benefits and risks of the current proposal. For example, a land use inventory would allow the Commission and stakeholders to understand the scale of this and future proposals as compared to development that could occur under the existing adjacency policy.

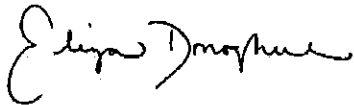
**(2) Engage in regional planning and zoning.** We believe that this proposal, in its effort to draft simple, accessible, jurisdiction-wide rules, overlooks important natural resources and does not yet meet the smart growth and adjacency principles outlined in the CLUP. We believe that regional planning would be a more effective way to achieve the Commission’s goals. We recognize that regional planning has been challenging in the past and not always produced the hoped-for results, and would require significant staff time to do well, but taking a pro-active approach with input from both local communities and professional planners and economists has

the potential to better meet the Commission's goals and support existing communities than the current complicated proposed rule. As such, we recommend that the Commission commit additional staff or consultant capacity to help communities and regions engage in community guided planning and zoning or prospective zoning as a way to directly respond to community needs and achieve Commission goals.

## **Conclusion**

Overall, we are concerned that the cumulative impacts from development in the proposed rule – including the proposed primary and secondary locations, large lot subdivisions, general management subdivisions, and lakeshore developments, combined with the continuance of the “2 in 5 rule” – will substantially fragment and degrade the nature of the north woods and does not adequately meet the Commission's goal to shift development from more remote areas to areas near existing communities while still protecting the jurisdiction's natural resources and natural-resource based industries. We urge the Commission to instead consider engaging in proactive regional planning, which we believe will better achieve the Commission's goals and be more responsive to the current and future location of the jurisdiction's natural resources, land uses, recreational activity, and development.

Signed,



Eliza Donoghue, Esq.  
Senior Policy & Advocacy Specialist

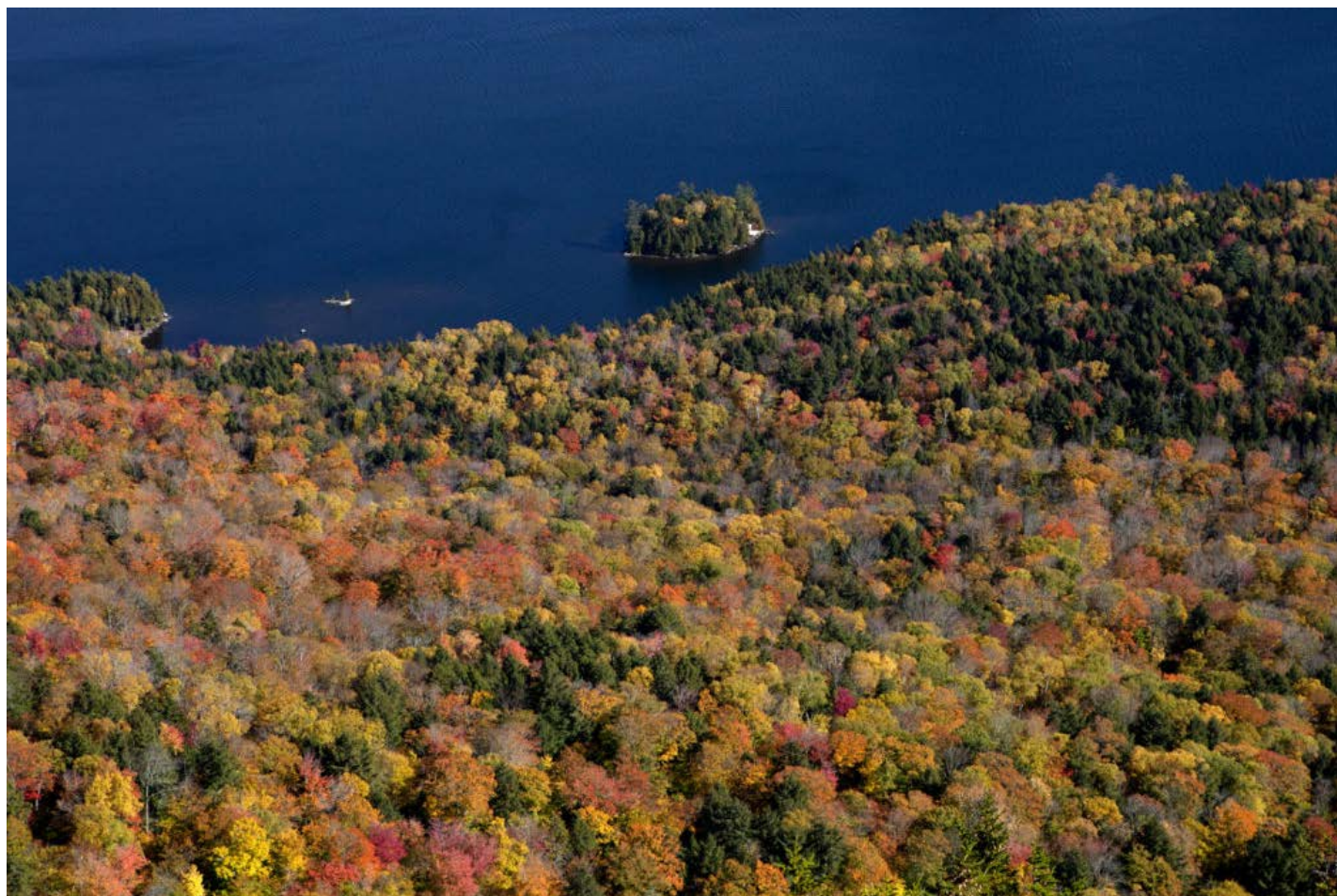


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# DIVERSE, RESILIENT, INTACT: THE UNIQUE NATURE OF MAINE'S NORTH WOODS

BY SALLY STOCKWELL

[HABITAT CONNECTIVITY](#), [HABITAT MAGAZINE](#) · DECEMBER 31, 2018



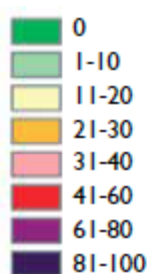
*This article originally appeared in the Winter 2018 issue of [Habitat](#) magazine.*

**Look up at night** and you see a sky filled with stars and planets, many melting into the expansive Milky Way above. Look down at Maine from the sky, and you see a massive dark spot, one of very few remaining on the night sky map.

Maine's dark spot is larger than any other in the eastern U.S. — larger than the Great Lakes, the Adirondacks, or the Everglades. While the North Woods is by no means untouched, with vibrant communities, active recreation opportunities, and a vigorous forest products industry, it nonetheless has the lowest "human footprint" score (defined by the Wildlife Conservation Society as the "most wild and least influenced" by people) across all of the Northern Appalachian Region.

From within this dark spot rise Maine's 14 highest peaks (all over 4,000 feet, including Mount Katahdin). Much of the state's five million acres of wetlands, 6,000 lakes and ponds, and countless streams are here, too. It holds the headwaters of all five of Maine's largest rivers: the Androscoggin, the Kennebec, the St. John, the Penobscot, and the St. Croix. It hosts the entirety of the Allagash Wilderness Waterway.

## Human Footprint

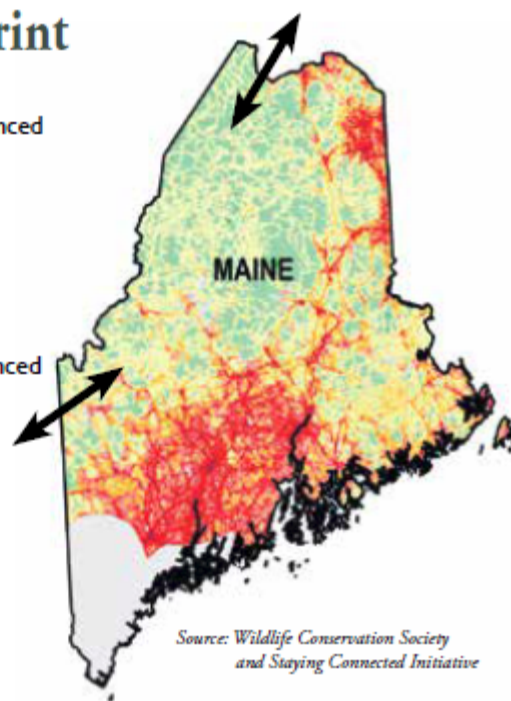


Most Wild  
Least Influenced



Least Wild  
Most Influenced

Arrows indicate key wildlife linkages between Maine's North Woods and neighboring regions.



Source: Wildlife Conservation Society  
and Staying Connected Initiative

Spanning over the northern and eastern two-thirds of the state, Maine's North Woods comprises around 11 million acres of largely unbroken forestland. This makes it the heart and soul of the Northern Appalachian/Acadian Forest — the largest intact temperate forest in North America, and perhaps the world. It is a myriad puzzle of ecosystems across a climate gradient as diverse as all of Europe, a gem akin



to some of the most important remaining intact tropical forests of the southern hemisphere.

What does this diversity look like? Let's start with the plants. Hardwood forests are full of sugar maples (think maple syrup) and yellow birch (think hardwood flooring) reaching skyward from nutrient-rich, well-drained soil; boreal spruce-fir forests (think lumber and paper) line the cool, rocky coastline and damp northern flats; ribbed fens and bogs (think peat moss) brim with colorful orchids and insect-eating plants; freshwater marshes (think ducks) and floodplain forests fill with species that like to get their feet wet; and alpine tundra hosts only the hardiest plants, bending in the wind and under the weight of rime and snow.

All this landscape and plant diversity in turn creates a mosaic of habitats for the many species of wildlife that call Maine's North Woods home. The largest moose population in the lower 48 states roams here, as does the nation's largest population of Canada Lynx and its second largest population of Common Loons (after Minnesota). Maine's North Woods is the only place in the east to host a full complement of predators, from coyotes to weasels. In spring and summer, it becomes a veritable "baby bird factory" for many of our resident and migratory songbirds, making it the largest globally significant Important Bird Area in the continental U.S.

Imagine you are a Black Bear with two cubs trying to make a go of it in Maine. Each individual bear has a home range of about 19,000 forested acres, which it needs to find the food, water, shelter, and den sites for its survival. Where would you prefer to live? In the forest patches of southern Maine that are interspersed with houses, stores, office buildings, and wide, paved roads with lots of traffic? Or in the dark spot on the night sky map?

If you prefer cats to bears, then imagine you're a bobcat. Now you only need about 6,000 acres for a home range...but if you want to find a mate — ideally within a big enough population so you can find the best match, with good genetic diversity and strong character — you will require hundreds of thousands of acres. Even smaller mammals, like River Otters, travel long distances. Each one typically uses 15-30 linear miles of waterways to search for their prey. Wood Turtles will move up to six



**A Wood Turtle crosses a road.**

miles along a river, and 500 feet from shore, to find their food and resting and nesting spots.

Just like humans, who need to travel between home, work, school, the garden or the grocer, restaurants, stores, and more to find food, water, shelter, and companionship, other animals need to move, too. Fish such as Brook Trout and Atlantic Salmon need to move up, down, and between streams and ponds to find spawning habitat, feeding habitat, nursery areas, deep water refuge pools, and cold water summer refuge reaches. Moose, bear, bobcat, mink, Black-throated Blue Warblers, Wood Turtles, and Wood Frogs all need to move between summer and winter habitat, and in search of feeding, watering, and denning, nesting, and resting habitat. Up to 85 percent of vertebrates use riparian habitat, the area adjacent to waterways, as both living and travel corridors.

We are lucky here in Maine. We still have a relatively intact and healthy forest landscape. That's why most of our native plant and wildlife species still call Maine home (we are missing wolves and Woodland Caribou). It's why we still have wide-ranging mammals and uncommon and specialized species like the Furbish Lousewort and Bog Lemming. It is why we are the only state with the abundant clean, cold water needed to support the last vestiges of wild Brook Trout, Arctic Charr, and Atlantic Salmon. It's why we still have Common Loons on almost every lake.

Maine is different from most other places in the east, where the list of missing or seriously depleted wildlife populations is long, and where habitat restoration — rather than habitat conservation and stewardship — is the norm.



**A Common Loon and chick.**

It is the largely unfragmented, undeveloped nature of our landscape that creates such invaluable habitat connectivity and biodiversity. Western and far northern Maine have been identified by the Staying Connected Initiative as an internationally significant wildlife corridor, and much of the North Woods has been identified as a highly resilient landscape by The Nature Conservancy. Because of its geographical variation and connectedness, the area will continue to support high biological diversity — in spite of changes brought about by a rapidly warming world.

But because it's our backyard, it can be easy to forget how special it is. As stewards of Maine's natural environment, we must not become complacent, lest we fail to protect this unique, invaluable resource.

The risk is very real. Roads, transmission lines, new development, and other human activity are knocking ever more loudly at the door. Development not only destroys habitat, but it can alter when, where, and how animals move between habitats. Fragmented habitat limits natural dispersal of young animals, isolates populations, reduces genetic exchange, and lowers population levels over time. Roads and roadside areas are often avoided by wildlife, create barriers to movement, and can be fatal for many species as they attempt to cross.

That's why Maine Audubon, along with many other partners, is working in the North Woods to:

- Protect the most important conservation and recreation places through land acquisition and conservation easements.
- Improve stewardship and habitat connectivity of the surrounding "matrix" forest.
- Assist others who are searching for new ways to support a diverse rural economy dependent on both forest products and nature-based tourism and recreation.
- Craft recommendations for how best to site and operate new subdivisions, development, and renewable energy.

We are helping landowners write wildlife-friendly forest management plans through our Forestry for Maine Birds program; helping towns and private landowners receive professional assistance and funding to replace poorly functioning culverts with Stream Smart crossings that allow fish and wildlife passage; working to ensure riparian areas retain the shade and shelter that trout and salmon need; and making recommendations to the Land Use Planning Commission and Central Maine Power on how to better site and manage new and proposed developments. We are also continuing our long tradition of bringing people out into nature to inspire a sense of wonder and build a culture of wildlife conservation in Maine.

My own personal experiences in the North Woods are as varied as the terrain and climate, and have provided me with a rich bank of memories, sounds, scents, and feelings. I've carefully picked my way



**A Black-throated Green Warbler.**

through the rock-strewn rapids of the Allagash, watching a moose cow and calf feeding in the shallows. I've been chased by a bear while on my way to conduct an early morning breeding bird

survey in a remote bog far north of Bangor. I've camped under a full moon at Thoreau's Island on the West Branch of the Penobscot, exactly 162 years after Thoreau was there himself. I've skied from Greenville to Kokadjo on a snowmobile trail without seeing another person for the entire 28 miles.

I've been blessed by these experiences. They take my breath away, make me stop and stare, stop and listen, stop and wonder, stop and yearn.

Beyond its ecological diversity, unusual land use history, and importance to recreation and timber production, the North Woods embodies an ethos unique to Maine. Those who have lived, worked, or traveled these woods and waters know there is a special spirit that keeps calling you back. There is always more to explore, more to see, more to listen to, more to learn. We cannot forget how special it is, how unique, how irreplaceable. Together, we must do whatever we can to keep it whole, keep it healthy, keep it productive, and keep it brimming with life.

*Sally Stockwell is Maine Audubon's Director of Conservation.*

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## Current Threats to North Woods Habitat Connectivity

### New England Clean Energy Connect (NECEC)

CMP's proposed transmission line would result in a long scar that fragments the North Woods from the Maine-Canada border to The Forks. As the proposal stands, we believe CMP has not done nearly enough

to address impacts to wildlife habitat. [Read our op-ed.](#)

## Proposed Changes to the Adjacency Rules by the Land Use Planning Commission (LUPC)

The LUPC is pursuing major changes to how development is sited in Maine's Unorganized Territories, which comprise the majority of the North Woods. We are actively sharing our concerns regarding the current plan's scope and pace, and making recommendations on how to better balance development and habitat. [Read our comments.](#)



FILED UNDER: [HABITAT CONNECTIVITY](#), [HABITAT MAGAZINE](#) TAGGED WITH: [ADJACENCY](#), [CMP](#), [LUPC](#), [NECEC](#), [NORTH WOODS](#)



**Sally Stockwell**

Director of Conservation

## Leave a Reply

Comment

Name \*

## Godsoe, Benjamin

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**From:** Mahar, Eugene <emahar@landvest.com>  
**Sent:** Thursday, January 10, 2019 9:17 AM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Rule revisions related to application of the adjacency principle and subdivision standards

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Members of the Maine Land Use Planning Commission,

My name is Eugene Mahar. I am a resident of Hermon and the Timberland Region Manager - Maine for LandVest, Inc. I am writing you regarding the proposed rule revisions related to application of the adjacency principle and subdivision standards. I have 20 plus years in the forest industry and in my current role as Timberland Region Manager for LandVest, Inc. I represent and have management responsibilities for a million plus acres of forestlands in the state of Maine covering a wide range of ownerships sizes and management objectives, most of which lies within the unorganized territories and will be subject to these changes.

First off, I applaud the Commission and staff for taking on the task to review and propose changes to modernize the adjacency rule and subdivision standards. The staff has worked diligently and strengthened relations with landowners and other stakeholders to incorporate concerns and work towards a workable solution.

While progress has been made that should lead to additional economic development opportunities for some areas under the jurisdiction, there remains a lot of work to be done by staff to further modify these rules before the landowner community can fully support the revisions. As with many major rule revisions, there are many language issues that will need further attention, but there are also a few larger policy issues that are concerning and should be a primary focus as the revision process progresses:

- **Visual Standards for Scenic Values.** Now referred to as *“Natural Character and Cultural Resources”*. The expansion of this category would not only be visual vantages from roads, but also from major water bodies, coastal wetlands, permanent trails or public property. No distance limitations and requirement to screen views with no-cut buffers. This will have unintended consequences by potentially limiting currently approved activities.
- **Subdivision rules.** Items referring to soils restrictions, open space requirements are prohibitive and not appropriate for most of the jurisdiction’s remote forested nature. Simply put, why is open space needed if a potential subdivision is surrounded by forest?
- **Adjacency rule elimination.** It was thought the intent of the process was to modify the outdated adjacency rules along the border of the jurisdiction where development pressure was viewed to be greatest. However, it seems that adjacency rules would be eliminated entirely within the interior of the jurisdiction without a proper mechanism in place for zoning options to act as a replacement, placing further limits beyond what is currently in place.

To reiterate, the effort by the Commission and staff to modernize the adjacency rule and subdivision standards, is appreciated and a step in the right direction. However, there is still a wide range of concerns to be addressed. I look forward to the collaborative work that has gone into this process with the landowner community continuing towards a more desirable outcome for all the jurisdiction.

Respectively submitted,

Eugene Mahar  
Hermon, ME

**Eugene Mahar**  
**Timberland Region Manager - Maine**

**LandVest** | TIMBERLAND



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## COUNTY OF HANCOCK

S.F. 22

Commissioners' Office

50 State Street, Suite 7

Ellsworth, Maine 04605

Learn more about *HANCOCK COUNTY* by visiting

[www.co.hancock.me.us](http://www.co.hancock.me.us)

Commissioners:

William F. Clark, District I

John A. Wombacher, District II

Antonio Blasi, District III


Scott A. Adkins  
County Administrator

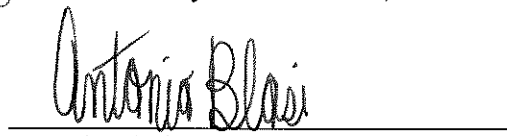
*Resolution to the Land Use Planning Commission (LUPC) to retain the current one mile Adjacency Principle under the LUPC's statute 12 M.R.S.A §681 and consistent with the Comprehensive Land Use Plan*

We, the commissioners of Hancock County, are concerned about protecting water quality, wildlife habitat, and forests from expanded commercial, industrial, retail, and residential development, which would also impact county residents' outdoor recreation opportunities and the state's tourism industry. Resulting sprawl would damage natural resources and would place additional burdens on Unorganized Territory taxpayers. Water quality protection must become a top priority of all land use planning, and the one mile Adjacency Principle that has been in place should be retained to achieve that objective.

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William F. Clark,  
Hancock County Commissioner, District 1

  
John A. Wombacher  
Hancock County Commissioner, District 2

  
Antonio Blasi,  
Hancock County Commissioner, District 3





20112

## Seven Islands Land Company

DATE: Jan. 10, 2019

TO: Everett Worcester, chair, Land Use Planning Commission

CC: Nick Livesay, Executive Director, Land Use Planning Commission

FROM: Hannah Stevens, Land Use Director, Seven Islands Land Company

We sincerely appreciate the effort that staff and commissioners have put into this important endeavor. As we collectively strive to build and maintain our rural economies, opportunities for development are vital, particularly on the edges of the 10.4 million acre jurisdiction. This proposal fittingly directs recreational, residential and commercial development to areas most appropriate, and near where services are most readily available. It creates opportunities for agriculture, agritourism, recreation facilities, and other resource dependent businesses, as well as residential and commercial development. To us and the owners whose land we manage, the proposed adjacency and subdivision rule revision is great progress, but we do have some concerns. I'll address a few specifics here and may submit further written testimony.

The Pingree family granted a conservation easement to the New England Forestry Foundation in 2001. Recognizing the easement is permanent and there might be need for "development" someday, approximately 20 percent of the family's land was not included. The family held out one or two parcels within each geographic region of ownership.

Non-eased parcels were carefully chosen in 2001 based on then current land uses (including existing development), LURC zoning, LURC policies and regulations, and region.

Whether or not development ever occurs, the value of development rights is an integral component of land value. LURC policy was relied upon to make decisions. Now a change in LURC policy would negate the Pingree family's logical planning process with NEFF and strip value from the non-eased parcels.

If in a conservation easement plan, provisions were made using existing criteria, it should be treated the same as a concept plan and the opportunity to rezone these areas should be retained under the One-mile rule of thumb provision.

Specifically, we propose changes in a few key areas:

Development Subdistricts – Chapter 10.21

Chapter 10.21, K The addition of Resource-Dependent Development Subdistrict (D-RD) is welcome, along with inclusion of natural resource processing in the General Management

Subdistrict (M-GN) – up to 3 acres and up to 4,000 sq. feet of gross floor area. Rezoning would not be required for M-GN but would be for D-RD. Facilities with structural development in the D-RD should allow for a larger maximum size to be utilized by the business. Forest product processing facilities require room for a log yard, safe truck turnaround, and the processor itself. We propose increasing the building footprint to 20,000 sq. ft. and the lot size to 10 acres for forest processing in the D-RD in order to make this zone useful.

Chapter 10.21, K. 2. a. (2) The Resource Dependent Development Subdistrict (D-RD) prohibits natural resource extraction within ½ mile of any major water body. For clarification, gravel extraction (per standards) should be listed as excluded. Gravel is scarce and typically found closer to water bodies than ½ mile. The Maine Forest Service is currently responsible for regulation of gravel pits under 5 acres.

#### Development Standards – Chapter 10.25

Chapter 10.25, D. 4. C. (1) Under Roadway Design, the proposal adds the phrase “minimize overall length.” This is an unnecessary and confusing addition which may run counter to other objectives listed such as “fit the natural topography” or is redundant (“minimize ditching” is already listed – which encourages minimizing length of the road). The phrase should be removed. It is common practice to minimize length and therefore expense.

Chapter 10.25, D. 4. d. (1) We have serious concerns pertaining to the subdivision standards for Emergency Egress. While we understand the need to consider the safety of lot owners in the case of a washout, fire, etc., the requirement for roads over ¼ mile to have “at least two ways of emergency egress from the development” puts an unnecessary burden on a developer, requires the construction of excess roadway, and is not consistent with many longer municipal subdivision roads which have only one way in or out. This paragraph also references using existing motorized trails as an option, but this raises other concerns -- if that trail only allows you get your ATV to a main road, which you are not permitted to drive on with an ATV anyhow, what benefit is there? This paragraph should be removed, or at the very least, the distance increased to 1 mile at a minimum.

Chapter 10.25, E. 1. a. The Scenic Resources (previously, Scenic Character) Section has been expanded greatly to include additional viewpoints from which the visual impact of development needs to be considered. Major water bodies, coastal wetlands, permanent trails, and public property have been added. We are concerned about visual restrictions from viewpoints that may be on or off the property we manage. This section makes no mention of distance limitations in the guidelines. The proposal is too far-reaching. Strike all of the expanded language.

Chapter 10.25 S. 5. Separate Lot of Record for Common Open Space. There should be an exception here for developers who own adjacent undeveloped land. In the case of many large landowners, some of their land is already traditionally open to foot traffic. In other cases, if a landowner has the parcel in Tree Growth or other Current Use Tax program, there should be an option to keep the common open space lot in the program without triggering a penalty for withdrawing and changing the use because the use will be the same. Harvesting, subject to standards, should be allowed to maintain a healthy forest, wildlife habitat, and scenic quality.

We ask LUPC to take another look at these areas. The details matter greatly here and will have an impact now and later as others interpret the guidelines. We appreciate the opportunity to work with staff to refine, clarify, and improve the proposed revisions. We are in favor of increased opportunities around communities as this is where our workforce ultimately lives and the areas to which we need to attract the next generation of workers.

Thank you

## Godsoe, Benjamin

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**From:** Jane Crosen <jcrosenmaps@gmail.com>  
**Sent:** Thursday, January 10, 2019 8:19 PM  
**To:** Godsoe, Benjamin  
**Subject:** FW: [EXTERNAL SENDER] RE: Revised Adjacency Proposal

Hi Ben, good talking with you today after the hearing! I'm just following up on pre-2011 editions of the DeLorme *Maine Atlas* as (I think) the best source for defining established downtown/service hub areas, which I would have specifically recommended in my comments (written and verbal) if not for space/time limitations. Please accept this email as supplemental testimony, or an additional recommendation.

As David DeLorme's in-house editor/ secretary in 1979–81 one of my central tasks was researching up-to-date information (recreation, habitat, parks, unique natural resources, etc.) from municipalities and state agencies for the all-new edition of DeLorme's *Maine Atlas and Gazetteer* published in 1981. Up to then the *Maine Atlas* had been based on MDOT maps, but in 1979/80 David DeLorme undertook to make a whole new edition from scratch based on USGS topos, satellite aerial photography, local road and trail information (from guides, loggers, sportsmen, hikers), etc., all put together by in-house cartographers and support staff. One of my first tasks was to send out letters to all the town clerks of Maine's municipalities asking for town maps and other information to help us prioritize and label downtown/service areas accurately using different size type indicating town center vs village and population. I collected and correlated these responses with the shading on then-current MDOT maps and worked with the cartographers in label specking and placement. I've just checked one of my several editions of the *Atlas* printed in this time frame, and can confidently recommend these older editions of the *Maine Atlas* (between 1981 and 2010) as an authoritative "snapshot in time" for defining commercial/service hubs in Maine's municipalities—better informed than Maine DOT maps, which the *Atlas* aimed to improve on. In the 2001 edition I'm now looking at, the established service/commercial areas are clearly defined and highlighted in orange, and I think they all still accurately reflect current developed municipal and rural hub service areas.

While most people hang on to their *Atlases* until threadbare, there are still plenty of the older editions available in decent condition on eBay <https://www.ebay.com/i/192779604383?chn=ps> along with Abe books, etc. These pre-2011 editions really are worth having for a second reason: they are much more detailed in showing and labeling (place names) streams, brooks, swamps, and other important hydrologic features like dams and pool surface elevation, which the later editions no longer show. (Of course with the recent trend of dam removals to restore fish passage and habitat, some of the hydrology mapping is now out of date, but it's still useful historical information.)

Please let me know if I can help further,  
Jane

Jane Crosen  
Penobscot, Maine  
326-4850, [jcrosenmaps@gmail.com](mailto:jcrosenmaps@gmail.com)  
[http://www.mainemapmaker.com/about\\_the\\_artist.html](http://www.mainemapmaker.com/about_the_artist.html)

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**From:** Jane Crosen [mailto:jcrosenmaps@gmail.com]  
**Sent:** Wednesday, January 09, 2019 5:34 PM  
**To:** 'Godsoe, Benjamin'  
**Subject:** RE: [EXTERNAL SENDER] RE: Revised Adjacency Proposal

Hi Ben, I've been meaning to thank you for your thorough response to my comments and questions including your very clear, helpful explanation of the lake management classification system and how it works. All things considered I agree it seems best to go by the Commission's "snapshot in time." As you can tell, I love and care about Downeast Maine's lakes and ponds, and yes, would be interested in looking through the original assessment findings sometime. I've gotten to know quite a few of the Downeast UT's lakes and ponds quite well (through exploring, paddling, map-reading) and would be glad to share info that would help protect them from inappropriate development.

While the new system's flex and cluster design standards as you've explained them are somewhat reassuring, I'm still concerned about the class 5 designation, especially affecting smaller lakes and ponds like those I mentioned. It doesn't take much more development for smaller places to feel overcrowded, with less area to absorb more use. I'll include this in my comments tomorrow. I'll bring a printout, but I can also email you the file if that makes distribution easier.

As for my concerns about potential development (especially wind) on the Mopang Lakes, do I need to resubmit that to the Commission in the form of a separate letter, or is the email I sent below sufficient?

I sincerely appreciate all your good communications and careful work. See you tomorrow,

Jane

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**From:** Godsoe, Benjamin [<mailto:Benjamin.Godsoe@maine.gov>]  
**Sent:** Friday, December 14, 2018 2:42 PM  
**To:** Jane Crosen  
**Subject:** RE: [EXTERNAL SENDER] RE: Revised Adjacency Proposal

Hi Jane,

Thank you for your thoughtful comments and sorry for the delayed response. I wanted to get back to you about your suggestion to change the resource ratings or management classifications for Mopang Lake, Peep Lake, and Penniman Pond (thanks for catching the spelling error!).

The information you shared about the physical and scenic characteristics of **Mopang Lake** and **Second Mopang Lake** will be helpful to the Commission when considering a specific development proposal on or near one of these waterbodies. However, the way the Lakes Management Program is currently set up, the Commission cannot change resource ratings for individual lakes unless it is clear that the findings in the Maine Wildlands Lakes Assessment, which was done in the late 80's and forms the basis for the lakes program, were in error.

The Lakes Management Program is meant to be a comprehensive approach to regulating development on lakes in the UT, and is based on a "snapshot in time" of what conditions existed on any given lake when the program was created. For example, it directs residential development to lakes that were already developed, or considered potentially suitable for development, and protects high-value, undeveloped, lakes. This "snapshot in time" helps form a baseline natural resource assessment for each lake, against which development proposals can be measured. Changing management classifications or resource ratings for a lake for reasons other than to correct an error could lead to reduced protections for lakes because incremental development would lead to a "downgraded" classification, which could then allow more development, and the cycle would continue. At the time this system was created, the Commission stated that the classifications were intended to be unchanged in the future except to correct errors. Someday, the system may need to be re-examined broadly, but until that time we are following the policy.

If it would be of interest, we could share with you the original assessment findings for the lakes you identified, and I'd be happy to discuss them further with you by phone if that would be helpful. Just let me know and I can scan and send you what we have.

You also mentioned that you are concerned about potential for residential development on two lakes currently classified as Management Class 5 (MC 5): **Peep Lake and Penniman Pond**. MC 5 lakes are considered heavily developed and were proposed for this management class if the density of development along the shoreline exceeded one dwelling per 400 feet of shoreline, or if it exceeded one dwelling per 10 acres of lake surface area.

My guess is that both Peep Lake and Penniman Pond have more than one dwelling per 10 acres of lake surface area and that is why they are classified as MC 5. It looks like Penniman Pond may also exceed the shore-mile-per-dwelling unit limit. Under the current and proposed systems, single lots (not in a subdivision) for family homes, or camps, could be created along the shoreline of these lakes without having to locate near other development – although a landowner could only create two such divisions from each parcel in any five-year period without creating a subdivision. If subdivisions are allowed, on MC 5 lakes, the Commission pays special attention to potential water quality issues, and currently requires clustering of lots to conserve shore frontage. For example, in a clustered subdivision design no more than 50% of the shore frontage can be reserved for development. There are many reasons to require this kind of design for a subdivision, including protection of water quality, to help retain the natural character of the lake, and to provide access to the lake for wildlife. The proposed subdivision standards continue to require clustering, and go farther in protecting wildlife than the current standards.

It looks like Penniman Pond likely has adjacency for a subdivision today. Peep lake probably does not meet the adjacency screen under the current system, but would meet the screen under the proposed system by virtue of being MC 5. However, if someone proposed a subdivision on Peep Lake, in addition to demonstrating that legal right of access for lot owners to their lots on the lake existed, and that emergency services could be provided by the nearest service provider, they would be limited to either a clustered or flex subdivision design. One purpose of the flex design is to account for situations where site constraints such as poor soils for development or the size or configuration of a parcel make it difficult to cluster lots. The proposed process for creating a flex design includes specific steps to assess resources at the site and then protect those resources through a custom design (e.g., configuring building envelopes in such a way that there is adequate room for wildlife to pass through or around the developed areas).

We appreciate your engagement in this process! I hope you find this information helpful. Please let me know if I can answer any additional questions, or if you would like to look through the baseline information we have on certain lakes.

Best,

Ben

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**From:** Jane Crosen [<mailto:jcrosenmaps@gmail.com>]  
**Sent:** Thursday, November 29, 2018 11:50 AM  
**To:** Godsoe, Benjamin <[Benjamin.Godsoe@maine.gov](mailto:Benjamin.Godsoe@maine.gov)>  
**Subject:** [EXTERNAL SENDER] RE: Revised Adjacency Proposal

Hi Ben, I've been meaning to thank you for your call and updates on the proposal as of LUPC's November meeting. I've finally had a chance to at least skim through most of the updates and memos—will read more carefully between now and January, but overall everything seems well thought out. I still would rather see primary location eligibility within 5 miles from rural hub, or 7 if measured from existing service development rather than from the township boundary. Otherwise the revisions seem to respond to concerns and suggestions raised in public comment, and I appreciate that.

After reading the **Appendix C lake classification** listings more carefully, I wanted to get back to you with **suggested revisions** for a few lakes and ponds I've gotten to know well in exploring Washington County's UTs within reach of our camp. I'll list them here and would be glad to write them in the form of a letter if needed.

**Mopang Lake** (Devereaux Twp) is, I think, is outstanding not just for its fisheries but its scenic character and water quality. The Appendix C classification gives it a S rating for scenery; I would suggest upgrading that to O and changing

the 1B to 1A. I was relieved to see on the LUPC wind map that this lake falls outside the expedited wind area, but I'm still concerned about potential wind development. If any wind project were to be proposed for Pleasant Mountain, I would strongly urge LUPC to deny this or any other industrial, commercial, or resource extraction project that would impact this highly scenic, high-value, undeveloped lake.

**Second Mopang Lake** (Devereaux Twp) is essentially a smaller arm of Mopang, not as scenic but pristine, undeveloped, and physically quite significant, I think, for its well-preserved glacial features, including kame & kettle sculpting and two end moraines dividing the lake in three bays, and an esker segment on the west side. I would suggest giving it an S for physical significance.

I am particularly concerned about two scenic kettle ponds designated management class 5. **Peep Lake** (T30) is semi-remote, with pristine water quality and, I think, significant (trout) fishery and shoreline characteristics. As I remember the pond has only a few camps (four at most) and would be adversely impacted by more development. I'm concerned that its MC 5 designation could open the door to subdivision development under the proposed rule changes, and urge LUPC to consider changing the MC to 4 as a high-value, semi-remote, relatively undeveloped lake, with an S for its fishery and scenic character.

The spelling of **Penman Pond** (T26) is incorrect—it's **Penniman** locally and on topos. This is the larger of two kettle ponds on either side of the kame ridge I drive along to get to my camp, so I know it quite well. Like most kettle ponds, it is steep sided with clear water, somewhat scenic but pretty well settled with camps along the east side. The topography and road/shore setbacks would probably rule out further development, but here again I'm concerned about its MC 5 designation under the proposed adjacency rule changes. I ask that LUPC consider changing it to MC 4 or whatever would restrict further development on/near Penniman. I know the pond was treated with rotenone in the past but am pretty sure it has recovered and is currently stocked with trout. It is also a water source for nearby camps with a dry hydrant for firefighting.

Thanks again, Ben, for the updates, which I'll share with others I know are following the proposed adjacency rule changes.

Jane

Jane Crosen Washburn  
110 McCaslin Road  
Penobscot, ME

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LUPC Hearing January 10, 2019

Good afternoon, my name is Joe DiAngelo and I live in Moosehead Junction Twp. I own a small real estate business in Greenville and am a Board Member of the Moosehead Lake Region Economic Development Corporation. Thank you for the opportunity to share my thoughts on the proposed changes to the adjacency principal.

While I feel the existing adjacency policies have guided us well, I do feel the time has come for updates to the policy, particularly given the changing economy in our State and in our communities. This is certainly the case in Greenville, where our rural community struggles to remain vibrant, attract employers, new families, and students to our school.

The proposed changes would help many of the small resource-based business that we seek to attract, and have taken the chance to "come to Greenville", like a new rock and mineral shop, that is now taking groups of area students out into the woods to see firsthand, where the gems are found. New guide services are giving our visitors the opportunity to enjoy the natural beauty of our unorganized territories. There is the wonderful work of AMC and the monumental efforts of the "Friends of Squaw Mountain", just to mention a few.

True that changes would allow for both commercial and residential development, which are needed... guidelines remaining in place, would assure that development remain near service centers and existing communities. The proposal would provide opportunity for exciting new development near recreational trails, but, would also protect against development on undeveloped lakes, changes to the policy that would be good for all.



In closing, while I do feel these proposals are needed, and a good update to the existing adjacency policy, I am pleased these new changes, perhaps more than anything, will continue to improve the predictability of zoning, and any future development in our Unorganized Territories.

Thank you for the chance to share my thoughts with you.

Joe DiAngelo

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# **The Environmental Consequences of FOREST FRAGMENTATION in the Western Maine Mountains**

Janet McMahon, M.S.



**Occasional Paper #2**

**Maine Mountain Collaborative**

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I thank Dr. Malcolm Hunter, Jr., Dr. Ray "Bucky" Owen and Barbara Vickery for their peer review of this paper. I also thank the many ecologists, biologists, foresters and others who provided information, analysis and, in some cases, early review of all or parts of this paper, including: Mark Anderson, George Appell, Maisie Campbell, Andrew Cutko, Thomas R. Duffus, Phillip deMaynadier, Merry Gallagher, R. Alec Giffen, Sarah Haggerty, Daniel Harrison, Peter McKinley, Michael Pouch, David Publicover, Jeffrey Reardon, Sally Stockwell, Karin Tilberg and Andrew Whitman. Finally, I give special thanks to Daniel Coker, senior spatial scientist at The Nature Conservancy, Maine for his analysis of state road and habitat block data and map preparation and to Ann Gosline, for her tireless logistical support and encouragement.

Cover photos:

Western Maine Mountain vista by Charlie Reinertsen Photography.

Photo-illustration of development by Waterview Consulting.

Photo on page 1:

Western Maine Mountains by Charlie Reinertsen Photography.

Photos on page 5:

Moose by Maine Department of Inland Fisheries and Wildlife.

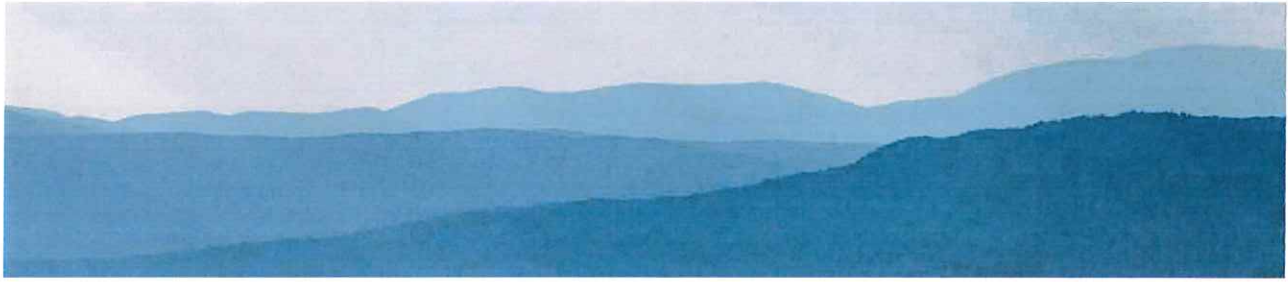
Black bear by Terry Spivey—Image Number: 1374239, CC BY-SA 3.0.

Canada lynx by Eric Kilby, <https://www.flickr.com/photos/ekilby/8154273321>

River otter and brook trout by U.S. Fish and Wildlife Service.

American marten by U.S. Department of Agriculture.

Spruce grouse by Dick Daniels (<http://carolinabirds.org/>)—Own work, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=10767940>



# The Environmental Consequences of Forest Fragmentation in the Western Maine Mountains

## ABSTRACT

The extraordinary ecological values of the Western Maine Mountains region are under threat from a process called “habitat fragmentation.” Habitat fragmentation occurs when habitats are broken apart into smaller and more isolated fragments by permanent roads, utility corridors, buildings, clearings or changes in habitat conditions that create discontinuities in the landscape. Research in Maine, the Northeast and around the world demonstrates unequivocally that fragmentation—whether permanent or temporary—degrades native terrestrial and aquatic ecosystems and reduces biodiversity and regional connectivity over time and in a number of ways. Negative effects include:

- increased mortality and habitat loss from construction of roads and other fragmenting features
- increased mortality and other direct impacts associated with infrastructure after construction
- changes in species composition and reduced habitat quality from edge effects
- changes in species composition and behavior as habitat patch size declines
- changes in hydrology and reduced aquatic connectivity
- introduction and spread of exotic species
- changes in the chemical environment
- pressures on species resulting from increased fishing, hunting, and foraging access
- loss of scenic qualities and remote recreation opportunities

Fragmentation has already significantly degraded ecosystems in much of the eastern United States and in temperate forests throughout the world. By contrast, in large part because historical forest management maintained vast connected forest blocks in the region, the Western Maine Mountains’ biodiversity, resilience and connectivity are unparalleled in the eastern United States. The region is a haven for populations of many of Maine’s iconic species, including moose, lynx, marten, brook trout, and rare forest birds, and provides an essential corridor for species to move to other northeastern states, the North Woods and Canada in a time of climate change. To maintain the region’s unique values, it is essential to avoid introduction of new fragmenting features, especially those that would permanently intrude into intact blocks of forest habitat, such as new utility corridors and new high volume roads. It is also critically important to find ways to support landowners who seek to maintain large intact forest blocks and to support them in managing forests for connectivity and structural complexity. If proactive steps are taken now, there is a tremendous opportunity to avoid habitat fragmentation and maintain the region’s many ecological values—values that have defined Maine for generations and are of critical importance in North America.

## INTRODUCTION

The Western Maine Mountains lie at the heart of the most intact and least fragmented landscape remaining in the eastern United States. This vast region lies near the northern terminus of the Appalachian Mountain range in the United States and includes some of its highest peaks. It extends from the Katahdin region 160 miles southwest to Boundary Bald Mountain and the Mahoosucs Range on Maine's western border, encompassing an area of more than five million acres. It is a region of extraordinary ecological importance, both because it is the key ecological linkage between the forests of the northern Appalachians and those to the north, south and west, and because of the biodiversity it harbors.<sup>1</sup>

The southern edge of the Western Maine Mountains region marks the divide between the most resilient<sup>2</sup> and connected landscapes of the Northern Appalachian-Acadian Forest Ecoregion<sup>3</sup> and more fragmented and less resilient landscapes to the south and west. This paper summarizes the potential deleterious impacts of forest fragmentation on the flora, fauna and ecosystems of the region. Fragmentation is generally defined as the breaking apart of a continuous landscape into smaller and more isolated fragments (Forman 1995). In the Western Maine Mountains, fragmentation occurs when permanent features such as roads, utility corridors, buildings or clearings create breaks in the forested landscape (Charry 1996). Recent work by Di Marco et al. (2018) shows that there is a direct correlation between the risk of species extinction and human footprint. Impacts such as direct habitat loss, habitat degradation through increased isolation of plant and animal populations, greater exposure to edge effects, and invasion by disturbance-adapted species are cumulative, leading to degraded ecosystems over time and, eventually, loss of regional connectivity and biodiversity (Watson et al. 2018; Lindenmayer and Fischer 2006; Haddad et al. 2015). This is the situation in much of the eastern United States and in temperate forests throughout the world.

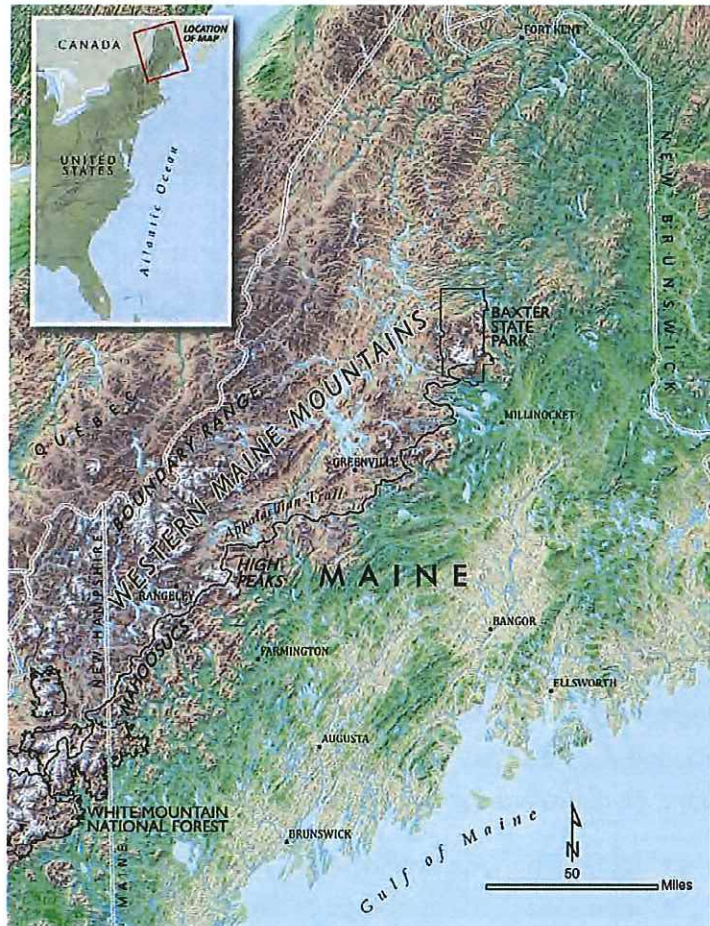


Figure 1. The Western Maine Mountains region.

<sup>1</sup> For a detailed description of the ecological values of the Western Maine Mountains, see McMahon (2016).

<sup>2</sup> Resiliency refers to the ability of a region to maintain species diversity and ecological function as the climate changes.

<sup>3</sup> Ecoregions are large units of land with similar environmental conditions—especially landforms, geology and soils, which share a distinct assemblage of natural communities and species. The Northern Appalachian-Acadian Forest Ecoregion includes the mountainous regions and boreal hills and lowlands in northern New England and Maritime Canada. The ecoregion includes the Adirondack Mountains, Tug Hill, the northern Green Mountains, the White Mountains, the Aroostook Hills, New Brunswick Hills, the Fundy coastal section, the Gaspé peninsula and all of New Brunswick, Nova Scotia and Prince Edward Island (Anderson 2006).

In the classic definition of fragmentation, habitat patches are surrounded by a “matrix”<sup>4</sup> of lands dominated by human activities, such as farmland or urban centers (Hunter and Gibbs 2007). By contrast, the Western Maine Mountains region is a forested landscape, largely unfragmented by major roads and other permanent features. This matrix of managed forestland provides valuable habitat for most of Maine’s forest species and generally serves to connect patches of mature or undisturbed habitat. However, changes in the forest landscape from harvesting can also have fragmenting effects, especially for species that require mature forest or forest interior habitat. The degree of impact depends on factors such as the species in question, harvest intensity, and the size of harvest blocks. Although these impacts are generally temporary, they are of concern—particularly in combination with impacts of permanent fragmentation—and are in need of further study.

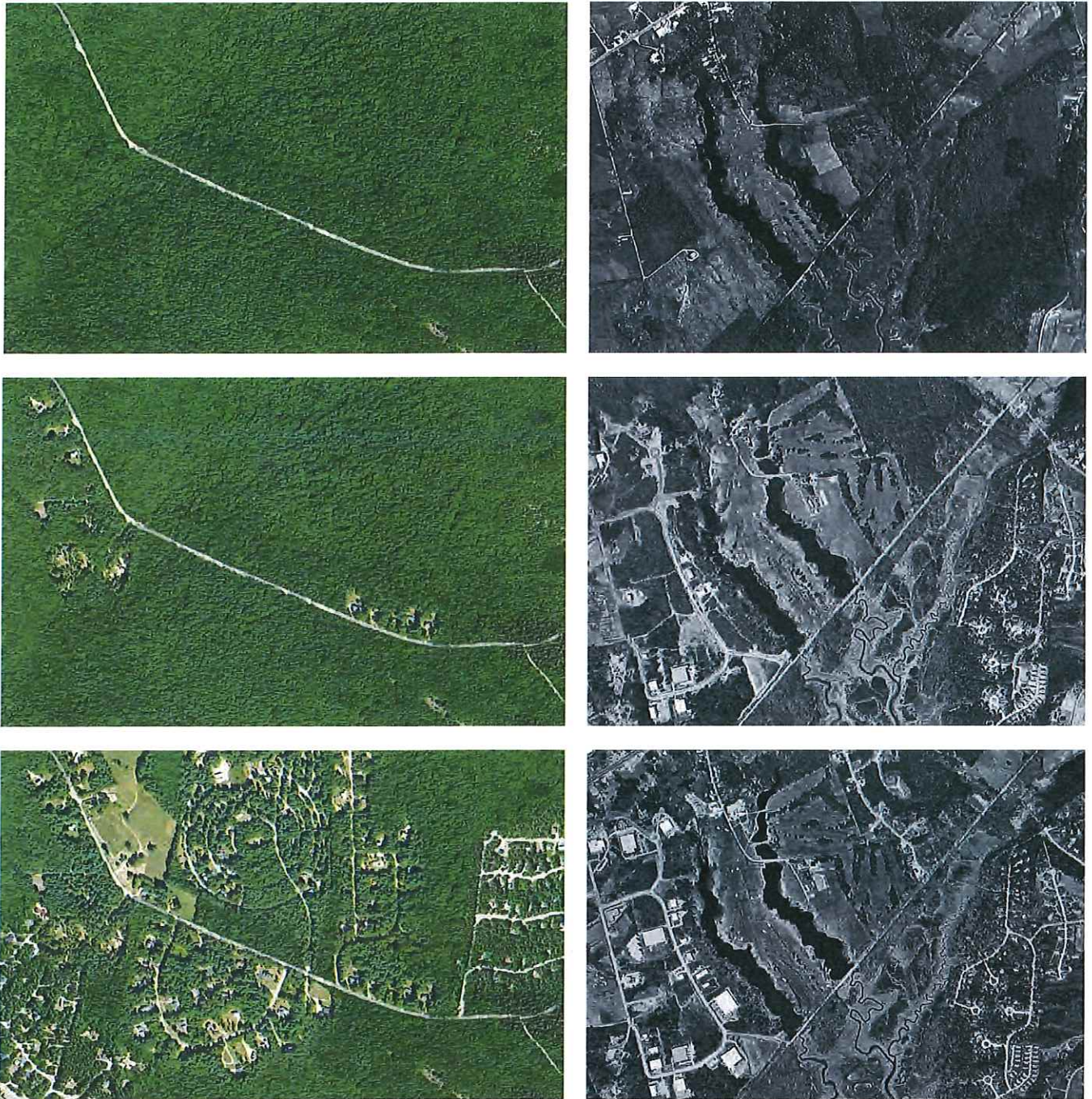
This paper begins with an overview of the ecological significance and condition of the Western Maine Mountains’ landscape and a brief review of how the region has changed over time due to forest fragmentation associated with land use change and forest management. This is followed by a summary of the potential impacts of current and future fragmentation on the region’s biodiversity, resilience in the face of climate change, and ability to serve as the critical link between the forests of the northern Appalachians and those to the north, south and west. To paraphrase Aldo Leopold (1966), the region needs to be viewed as an integrated whole rather than a collection of conservation lands and private commercial land holdings. Private and public landowners, through their land use decisions and management, will play a key role in maintaining the region’s ecological values into the future.

### **Habitat fragmentation and why it matters**

Hunter and Gibbs (2007) wrote that a modern traveler looking down from a plane generally does not see vast expanses of unbroken landscape but instead will likely see a landscape like a patchwork quilt—a mosaic of different land uses. Hunter and Gibbs define “habitat fragmentation” as the gradual breaking apart of a natural landscape into smaller habitat blocks. They wrote that fragmentation typically begins when people build roads into a natural landscape and then “perforate” the landscape further with associated development. This typically leads to additional roads, energy infrastructure and land conversion and, over time, results in “patches” of natural habitat that are smaller and farther apart (Fig. 2). Larger habitat patches in a landscape mosaic are better able to support stable populations of more species than small ones. Hunter and Gibbs attribute this to three things: First, larger patches have a greater variety of environments—different elevations, soils, geology, streams and wetlands, which in turn support a greater variety of species. Second, larger patches will support more species that require larger home ranges. Finally, animals and plants from other patches can more easily migrate in to replenish struggling or declining species if similar habitat patches are close by and if the areas in between (matrix habitat) are connected and allow for movement. Fragmenting landscapes into smaller habitat patches over time is a leading cause of degradation of ecosystems and loss of biodiversity.

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<sup>4</sup> Matrix forest can be defined as the largest background patch in a landscape and is characterized by extensive cover, high connectivity, and/or exerts a dominant role on ecological processes (Forman 1995). In the Western Maine Mountains, most of the region is considered matrix forest.



**Figure 2.** The left column shows a hypothetical progression from: (1) initial fragmentation by a new road or other linear feature, (2) a landscape fragmented by the road and associated development “perforating” the landscape and (3) a landscape with additional sprawling fragmenting features, resulting in progressive fragmentation of the landscape into smaller natural areas. The right column shows an actual example of change between 1956 to 1995 from a partially fragmented landscape to a highly fragmented landscape in a southern Maine community. Photo-illustrations in left column by Water-view Consulting. Photos in right column courtesy of the Greater Portland Council of Governments.

**Figure 3.** (following page) The Western Maine Mountains provide critically important core habitat for species that are iconic to Maine and a host of rare animals and plants. Photos are of moose, black bear, Canada lynx, river otter, American marten, spruce grouse, and brook trout. Photo credits, see inside front cover.

## THE REGION TODAY

### A diverse, resilient and connected landscape<sup>5</sup>

From the standpoint of biodiversity, the Western Maine Mountains region is exceptional. It includes all of Maine's high peaks and a rich diversity of ecosystems, from alpine tundra and boreal forests to ribbed fens and floodplain hardwood forests. It is home to more than 139 rare plants and animals, including 21 globally rare species and many others that are found only in the northern Appalachians. It includes more than half of the United States' largest globally important bird area,<sup>6</sup> which provides crucial nesting habitat for 34 northern woodland songbird species and critical habitat for high-elevation and coniferous-forest specialist birds such as Bicknell's thrush—a state endangered species—bay-breasted warbler and black-backed woodpecker. Maine is the last stronghold for wild brook trout in the eastern United States, supporting 97% of its intact lake and pond wild trout populations. Seventy-three percent of these wild brook trout lakes are in the Western Maine Mountains (Whitman et al. 2013; DeGraaf 2014). The region provides core habitat for umbrella species<sup>7</sup> such as American marten and Canada lynx—habitat that supports more than 85% of all of Maine's terrestrial vertebrate wildlife species, including iconic species of the north, such as the common loon, black bear, bobcat and moose (Hepinstall and Harrison in prep.; DeGraaf and Yamasaki 2001).

In addition to its remarkable biodiversity, the region is exceptional because it remains a largely unfragmented, lightly settled and connected landscape. It lies at the heart of the Northern Appalachian-Acadian Forest Ecoregion, which is the largest and most continuous area of temperate forest in North America, and perhaps the world (Haselton et al. 2014; Riitters et al. 2000). This high degree of connectivity, combined with large elevation gradients and a diversity of physical landscapes, makes the Western Maine Mountains a highly resilient landscape in the face of climate change and a critical ecological link between undeveloped lands to the north, south, east and west. Resilient sites are those that are projected to continue to support biological diversity, productivity and ecological function even as they change in response to climate change. In The Nature Conservancy's Conservation Gateway climate resilience map of the eastern United States, the Western Maine Mountains stand out in terms of biodiversity, climate flow<sup>8</sup> and

<sup>5</sup> This summary of the region's ecological significance is adapted from McMahon (2016).

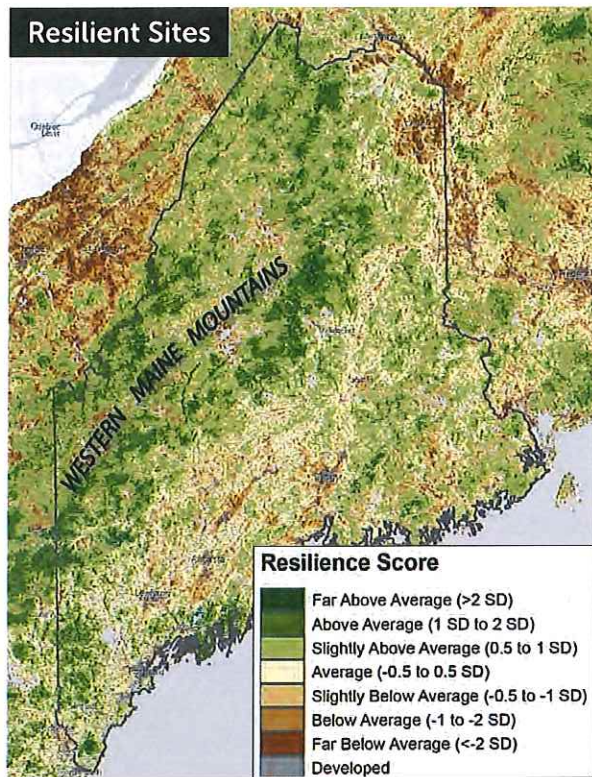
<sup>6</sup> The National Audubon Society gave this global designation to the region because of its high bird richness and abundance as well as the extent and intactness of its forests, which lie within the Eastern Atlantic Flyway—the major migratory route for hundreds of neotropical bird species.

<sup>7</sup> Hunter and Gibbs (2007) define umbrella species as those with large home ranges and broad habitat requirements. Protecting habitat for their populations protects habitat for many other species across a broad set of ecosystems.

<sup>8</sup> Climate flow is defined by The Nature Conservancy as the movement of species populations over time in response to the climate. Intact forested areas typically allow high levels of plant and animal movement.







**Figure 4.** This map shows that the Western Maine Mountains provide sites of above and far-above-average resiliency throughout the region. Resilient sites are expected to buffer their resident species from climate change and continue to support biodiversity, productivity, and ecosystem function even as they change in response to climate change. Analysis and graphic courtesy of The Nature Conservancy, Maine.

## Sources and Sinks

Hunter and Gibbs (2007) define “sources” as subpopulations that produce a substantial number of emigrants that disperse to other patches and “sinks” as subpopulations that cannot maintain themselves without a net immigration of individuals from other subpopulations. The Western Maine Mountains region harbors significant source populations of many species and already serves as a north-south and east-west link between peripheral sink populations in New Hampshire and Vermont and source populations in northeastern Maine and the Gaspé (Carroll 2007).

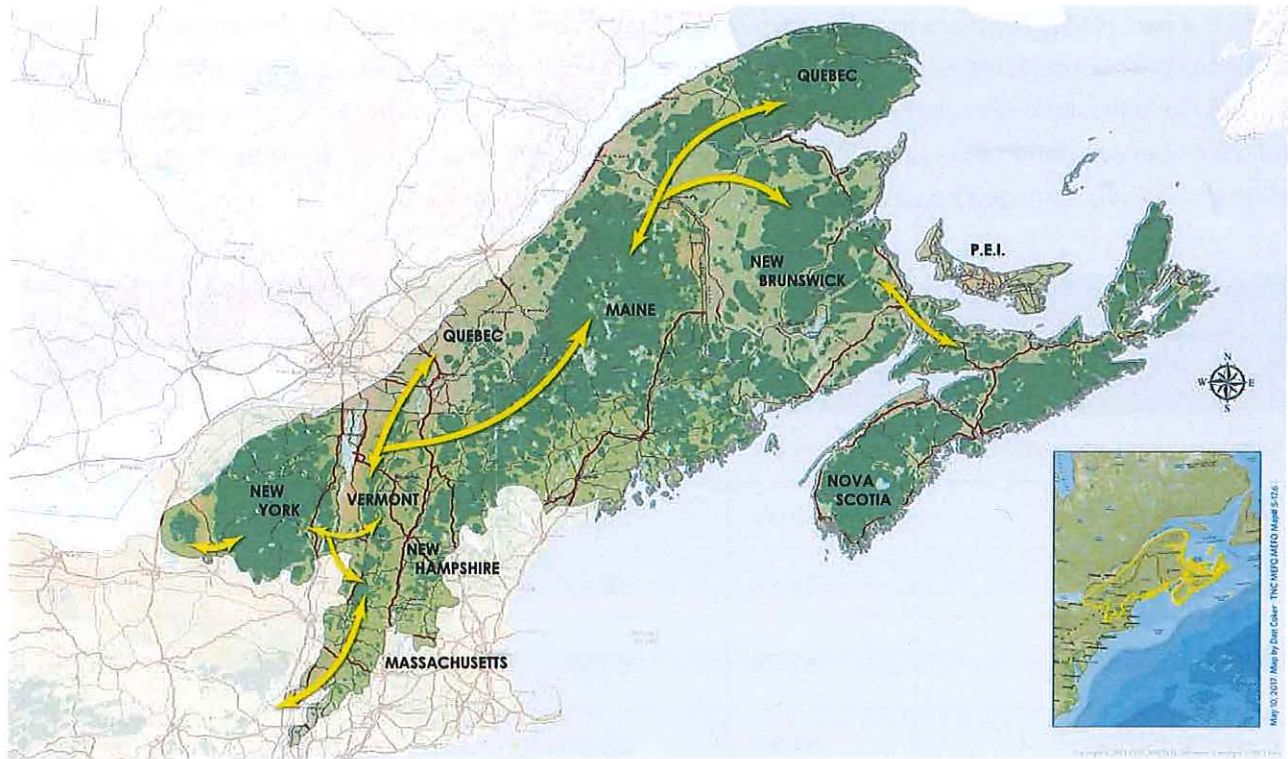
climate-resilient sites.<sup>9</sup> Eighty percent of the region is of above-average resiliency, based on geophysical setting and local connectedness (Fig. 4).<sup>10</sup> This compares to 60% for the state as a whole and an average of 39% in southern Maine. A review of The Nature Conservancy’s Conservation Gateway maps for the rest of New England and the eastern United States indicates that resiliency is even lower outside of Maine, making the Western Maine Mountains one of the most resilient and connected landscapes east of the Mississippi. In addition, it is the critical link between the other highly resilient areas in the Northern Appalachian-Acadian Forest Ecoregion—the Adirondacks, the St. John and Allagash valleys and the Gaspé.

Climate-resilient sites are more likely to sustain native plants, animals and natural processes into the future. The region is expected to retain more species as the climate changes than other parts of the state because its varied topography offers ample microclimates and thus more options for rearrangement (Anderson et al. 2012; Anderson et al. 2013). Northern Maine already has the highest species richness of mammalian carnivores in the eastern United States,<sup>11</sup> and the Western Maine Mountains support the largest moose, lynx, and marten populations in the lower 48 states. Furthermore, the region is a stronghold for brook trout, land-locked salmon, spruce grouse and a host of other species. In addition to providing a refuge for northern and coldwater species, the region serves as a source of individuals that can recolonize new habitats as they become avail-

<sup>9</sup> Resilient sites buffer their resident species from the direct effects of climate change by providing temperature and moisture options in the form of connected microclimates that can differ by as much as 10–15°C. Sites with high microclimate diversity allow plants and animals to persist locally even as the regional climate appears unsuitable, thus slowing down the rate of change.

<sup>10</sup> Geophysical setting is a landscape classification that considers topography, elevation range, wetland density and soil variety. Local connectedness is the absence of barriers or fragmenting roads, dams, development, etc. that prevent plant and animal populations from taking advantage of local microclimates.

<sup>11</sup> The region supports breeding populations of 7 species of mustelids (fisher, marten, mink, ermine, long-tailed weasel, river otter, striped skunk), 3 species of canids (grey fox, red fox, coyote), and 2 cats (bobcat, lynx).



**Figure 5.** Northern Appalachian Region Forest Cover and Critical Linkages. Map courtesy of The Nature Conservancy, Maine.

able. For example, the region links moose populations at the southern edge of their range in New Hampshire and Vermont that are increasingly impacted by climate change and parasitic infections by ticks with larger, healthier populations in northern Maine and Quebec.

At a continental scale, northern Maine will become an increasingly important dispersal corridor as species move north into Canada (Trombulak and Baldwin 2010) (Fig. 5). Species survival may depend not only on the presence of refugia but also on how quickly the climate changes. Loarie and others (2009) modeled projected rates of temperature change in different ecosystems under different emissions scenarios during the 21st century. They found that the rate of change is expected to be lowest in mountainous biomes and temperate coniferous forests, suggesting that the landscapes of the Western Maine Mountains are more likely to effectively shelter many species into the next century than areas with low relief (Loarie et al. 2009; Loarie et al. 2008; Thuiller et al. 2005). Whitman et al. (2013) emphasize the importance of conserving cool refuges such as cold stream networks, mountains, and closed canopy forests to help species survive and transition as Maine’s climate changes.

### A forested landscape

The Western Maine Mountains region is ~97% forested (excluding water), which is about 8% higher than the average forest cover in Maine, the most forested state in the nation (Fig. 6, following page, for a regional comparison) (New England Forestry Foundation, NEFF, in press).<sup>12</sup> The North Woods of Maine, of which the

<sup>12</sup> Percentages of land in conservation ownership and forest management for the Western Maine Mountains are derived from other studies that focused on slightly different geographic boundaries. Schlawin and Cutko percentages were calculated for the Central-Western-White Mountains section of the USFS Bailey Ecoregion map of Maine (Bailey 1995). The 2018 NEFF analysis is of an area they refer to as the Mountains of the Dawn region.

region is a part, is the only place in the eastern United States where such a large area of contiguous land has remained continuously forested since European settlement. This is due to a variety of factors, including limited suitability for agriculture, soils that are productive for tree growth, remoteness from more heavily settled areas, and the timber and nontimber values of its vast forest—most of which has been in private and corporate ownership and actively managed for forest products for more than two centuries.

State/Region	% Forestland		% Change from 2007–2017	Approximate Change in Acres
	2007	2017		
Western Maine Mountains	96.8%	96.5%	-0.3%	-12,000
Maine	89.8%	89.2%	-0.6% <sup>13</sup>	-116,000
Connecticut	55.3%	58.4%	3.1%	95,000
Massachusetts	61.2%	60.6%	-0.5%	-26,000
New Hampshire	83.8%	82.8%	-1.0%	-57,000
Rhode Island	54.0%	54.4%	0.4%	3,000
Vermont	77.3%	76.0%	-1.3%	-80,000
New England (incl. ME)	80.3%	79.8%	-0.5%	-184,000
New England (excl. ME)	71.1%	70.8%	-0.3%	-67,000

**Figure 6.** Forested Area as a Percent of Total Area (excluding water) in the New England states. Percent change is change in percent of forestland from 2007–2017.<sup>14</sup> Adapted from NEFF (in press).

Managed forestland in the Western Maine Mountains is composed primarily of naturally regenerated forests. According to most recent FIA data,<sup>15</sup> only 2% is planted, and most of this is with native species (Ten Broek and Giffen 2018). Under natural conditions, forest types generally occur in predictable patterns associated with climatic gradients and soil conditions determined by glacial deposition (NEFF in press; Legaard et al. 2015). Northern hardwood species predominate across lower hilltops and mid-slopes, with higher site quality. Spruce-fir species predominate on ridge tops, high elevation slopes and poorly drained lowlands. Mixed wood stands commonly occur along ecotones or as a result of successional dynamics following disturbance.

<sup>13</sup> Considering just land area, Maine is 89% forested (FIA 2017 data).

<sup>14</sup> Data are from the Forest Inventory and Analysis (FIA) Program of the U.S. Department of Agriculture (USDA) Forest Service. Percentages are for forestland, as a percentage of sampled land area, as opposed to total area, which would include area in water. Percent change is measured from the first complete inventory cycle (generally 2002/3 to 2007) to the latest complete inventory cycle (2017 estimates) (NEFF, in press).

<sup>15</sup> The FIA Program of the USDA Forest Service annually surveys the country's forests to determine trends in forest area and location; tree species composition, size and health; total tree growth, mortality and removals by harvest; wood production and utilization rates by various products; and forest land ownership. The inventory has recently expanded to collect data on soils, understory vegetation (including invasives), tree crown conditions, coarse woody debris and lichen community composition on a subsample of plots.

Shade-intolerant hardwood species commonly follow intense disturbance. Periodic defoliation by spruce budworm is the most prominent large-scale natural disturbance. Small scale disturbances that result in small canopy gaps such as windthrow and senescence are also common (Legaard et al. 2015; Lorimer and White 2003; Seymour et al. 2002). Managed carefully, in time, these naturally regenerating forests should allow natural structural and successional processes to take place and provide habitat for a full suite of native wildlife species (NEFF in press).

## **A brief summary of current land use**

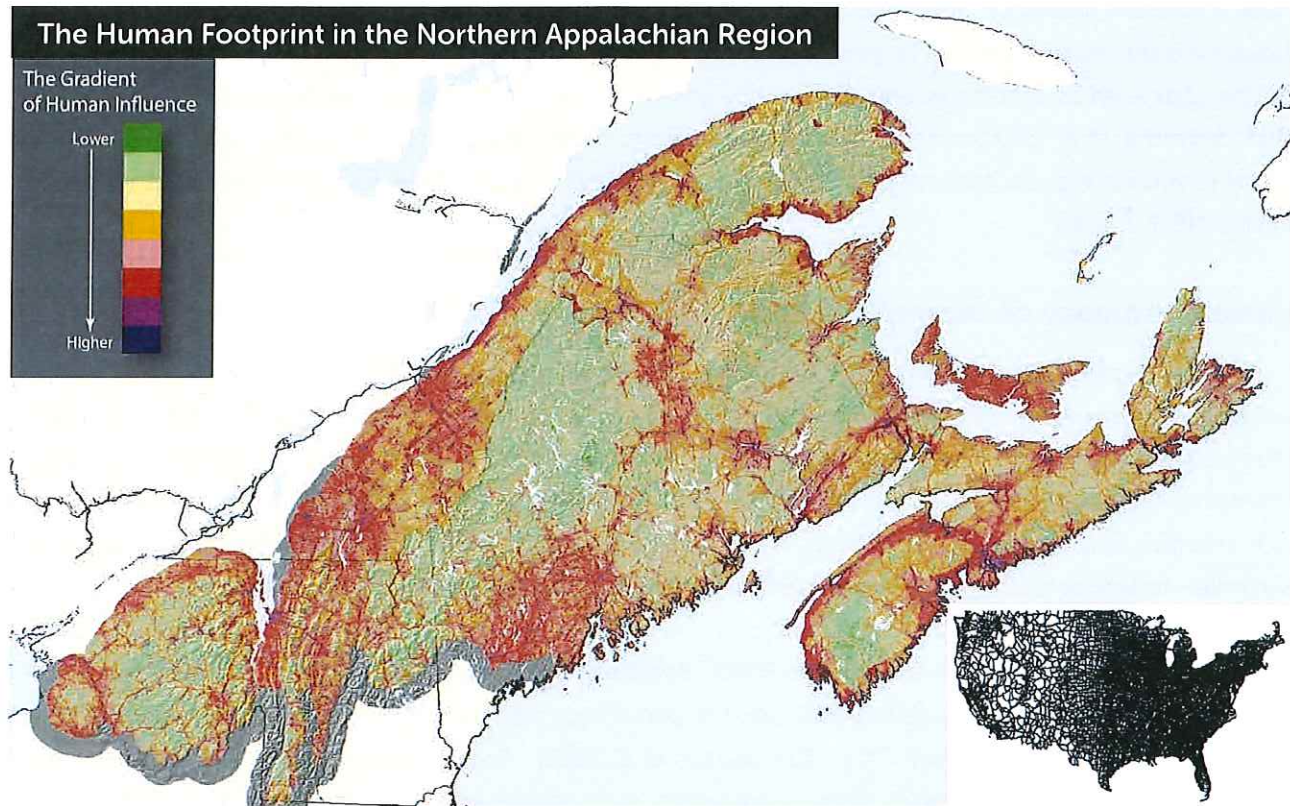
Virtually all of the forestland in the Western Maine Mountains not specifically set aside for reserves or other conservation purposes is commercially managed for a variety of forest products. About 88% of these managed lands are privately held (NEFF in press). Since the 1990s, the North Maine Woods, including the Western Maine Mountains region, has undergone a dramatic transition in ownership. Large swaths of the region have passed from industrial landowners—who had long-term management goals because their timberland supplied their own mills—to timber investment management organizations, real estate investment trusts and other financial investors, whose investment strategies usually involve holding land for a much shorter period (Ireland 2005; Lilieholm et al. 2010; Trombulak and Baldwin 2010). Between 1994 and 2005, forest products industry ownership of forestland declined from 59% to 16%, and the percentage held by investors such as publicly traded real estate investment trusts rose from 3% to 40% (Barton et al. 2012). Today, the majority of the Western Maine Mountains is owned by investors.<sup>16</sup> Some landowners, such as Weyerhaeuser (formerly Plum Creek), have secured rezoning of forestland to allow for resorts and residential subdivisions in remote, lightly settled landscapes (Lilieholm et al. 2010; Hagan et al. 2005). In addition to a shift in ownership, the number of landowners has increased and size of land holdings has decreased significantly in the past two decades (Hagan et al. 2005). For example, the 2.3 million-acre Great Northern Paper ownership of 1989 had been transferred to at least 15 different landowners as of 2005. The impacts of the increased parcelization and turnover of landholdings on biodiversity and connectivity are unclear, but likely to be negative.

Legally conserved lands<sup>17</sup> make up about 29% of the region's area. Forest management is allowed on 20 of this 29%. The remaining 9% is forever-wild or in reserves. Most conserved land that allows timber harvesting is privately held and under conservation easement. It is worth noting that most of Maine's forever-wild acreage is in the Western Maine Mountains, primarily in Baxter State Park, the White Mountain National Forest, The Nature Conservancy's Debsconeag Lakes Wilderness Area, Bureau of Parks and Land's Nahmakanta Ecological Reserve, Mahoosuc Unit and Bigelow Reserve, and additional lands within the 100-Mile Wilderness and the National Park Service's Appalachian Trail Corridor (Schlawin and Cutko 2014). Most of these reserves are centered around mountainous areas. They constitute some of the largest roadless areas in the state and New England (Publicover and Poppenwimer 2002) and contribute to the exceptional resilience of the region.

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<sup>16</sup> As of 2017, predominant landowners in the Western Maine Mountains included Weyerhaeuser, Wagner Forest Management, MacDonald Investment, BBC Land LLC, Katahdin Timberlands and E.J. Carrier (James W. Sewall Company 2017 map of Forest Land Owners of the State of Maine).

<sup>17</sup> Conservation lands include those where forest management can take place (Type 1) and those where extractive uses are not allowed (Type 2). The latter are sometimes termed "forever wild" or "reserve" lands. These lands include places such as Acadia National Park, the National Park Service's Appalachian Trail, federal Wilderness Areas in the White Mountain National Forest and Moosehorn Wildlife Refuge, State Ecological Reserves, many land trust ownerships and much of Baxter State Park (Schlawin and Cutko 2014).



**Figure 7.** The Human Footprint map of the ecoregion and the map of the U.S. highway system (inset), viewed together, show that the Western Maine Mountains and Maine's North Woods are much less fragmented than any other area in the eastern half of the country. Human Footprint data from Two Countries One Forest, map courtesy of The Nature Conservancy, Maine.

Currently, the Western Maine Mountains region has a far lower density of major permanent roads than more developed areas of Maine, and New England as a whole.<sup>18</sup> The Land Use Planning Commission (2010) estimate of public road density in the unorganized towns was 0.1 miles per square mile compared to an average of 1 to 3 miles per square mile in the organized towns. In settled portions of the northern Appalachians, public road building remains an ongoing process. Baldwin and others (2007) found that approximately 1,200 miles of roads were built in settled landscapes in Maine between 1986–2003, impacting more than 92,000 acres of adjacent habitats. Furthermore, they estimated that regular, public roads in the Northern Appalachian-Acadian Forest Ecoregion as a whole—especially those that provide access to subdivisions, would double by 2013 (Baldwin et al. 2007). The majority (93.5%) of these new roads perform local functions and are short (<1,000 feet in length) residential roads typical of sprawl. Increased permanent road and energy infrastructure development within and along the boundaries of the Western Maine Mountains has the potential to impact tens of thousands of acres through direct habitat loss and edge effects, which will have a significant impact on regional connectivity.

Prior to the 1970s, there were few logging roads in the region. Those that existed were largely primitive and narrow and used for supplying remote logging and sporting camps. This changed when the river drives

<sup>18</sup> Good data on private roads in the unorganized towns are lacking. 2010 estimates from the Land Use Planning Commission indicate that there are on the order of 1,500 miles of public roads and over 20,000 miles of private roads in the unorganized towns.

ended and salvage operations during the spruce budworm outbreak of the 1970s and 1980s began. In 1997, the Maine Department of Conservation estimated that there were ~20,000 miles of private roads on the approximately 10 million acres of unincorporated land in Maine, with an anticipated 500 miles of new road being added each year (Publicover and Poppenwimer 2002; Maine Department of Conservation 1997). If this trend is accurate, based on a simple proportion and not accounting for roads that are reclaimed or abandoned, there would be between 10,000 and 15,000 miles of private logging roads within the five million-acre Western Maine Mountains region today. Aside from major haul roads, most logging roads in the region are low-volume, unimproved, single-lane, dirt or gravel roads without significant, cleared verges. Compared to public roads, these roads receive episodic use from forestry machinery and relatively light use by the public for fishing, hunting and other recreation where these activities are permitted (Alec Giffen, personal communication). Major haul roads such as the Golden Road, Telos Road, and Ragmuff Road receive more use and have a larger footprint and hence a greater fragmenting effect.

The Western Maine Mountains region, along with the Adirondacks, contains the most extensive roadless areas in Maine and the eastern United States (The Nature Conservancy Conservation Gateway). Publicover and Poppenwimer (2002) conducted a detailed inventory of “roadless areas” in the Northeast, which they defined as areas greater than 5,000 acres with no public roads, discernable active private logging roads or areas that have been heavily harvested in the past two to three decades. They estimated that, in 1996–1997, 43 roadless areas in the Western Maine Mountains fit this definition, encompassing about 870,000 acres, 15% of the region. The largest areas were Baxter State Park, the Debsconeag Lakes area and White Mountains National Forest. An additional 55 areas (mostly smaller tracts on private land) were scattered throughout other parts of the state to the north and east. By 2000, the number of roadless areas in the Western Maine Mountains had shrunk to 40 areas encompassing about 720,000 acres (Publicover and Poppenwimer 2006). Currently, the region is estimated to contain 46 such areas encompassing about 603,000 acres,<sup>19</sup> and most areas outside of the Western Maine Mountains have been eliminated due to road building and harvesting over the past two decades (Publicover and Poppenwimer, unpublished data).

Today, although there is an extensive system of logging roads in place, approximately 48% of the region’s forest is more than one kilometer (3,300 feet) from the edge of a permanent public or major logging road,<sup>20</sup> which is beyond the distance where the most degrading road “edge” effects occur<sup>21</sup> (Laurance et al. 2002; Laurance et al. 2017).<sup>22</sup> This compares to only 5% of forestland beyond this threshold in southern Maine and a global average of 30% (Haddad et al. 2015) (Fig. 8a and 8b, following pages).

Rural development in the Western Maine Mountains is limited, occurring primarily along the region’s southern and eastern edges, on some lake shores, and along permanently paved roads. This development consists primarily of single-family camps and homes, sporting camps, small subdivisions and small businesses, such

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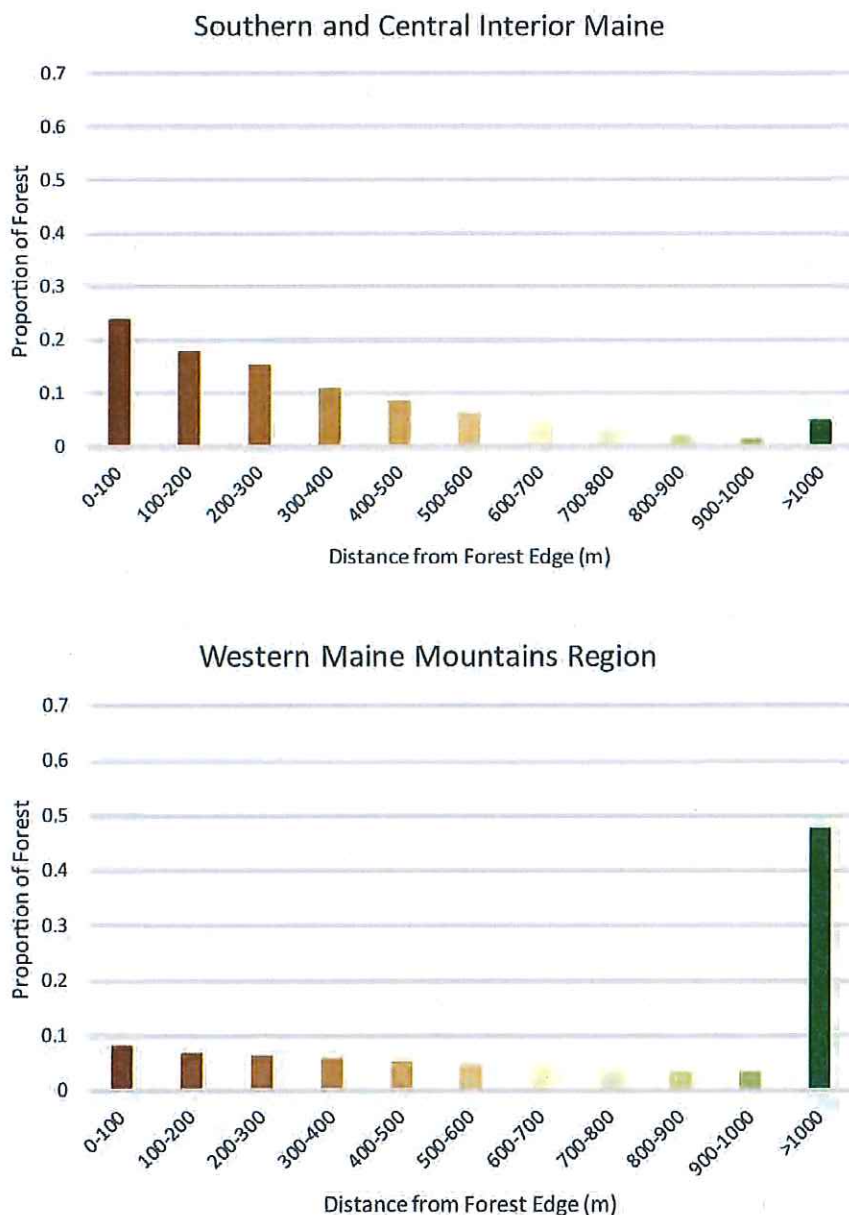
<sup>19</sup> In a classic example of fragmentation, the increase in the number of roadless areas is due to several formerly large contiguous areas being separated into multiple much smaller areas.

<sup>20</sup> The E911 roads dataset used here is the most comprehensive statewide dataset for permanent roads. It includes all public and major private roads in organized towns and should be a reasonable indicator of major/permanent roads in the North Maine Woods (Daniel Coker, senior spatial scientist, The Nature Conservancy, personal communication). It was not possible to determine which smaller roads were included or excluded.

<sup>21</sup> See page 17 for a fuller discussion of edge effects.

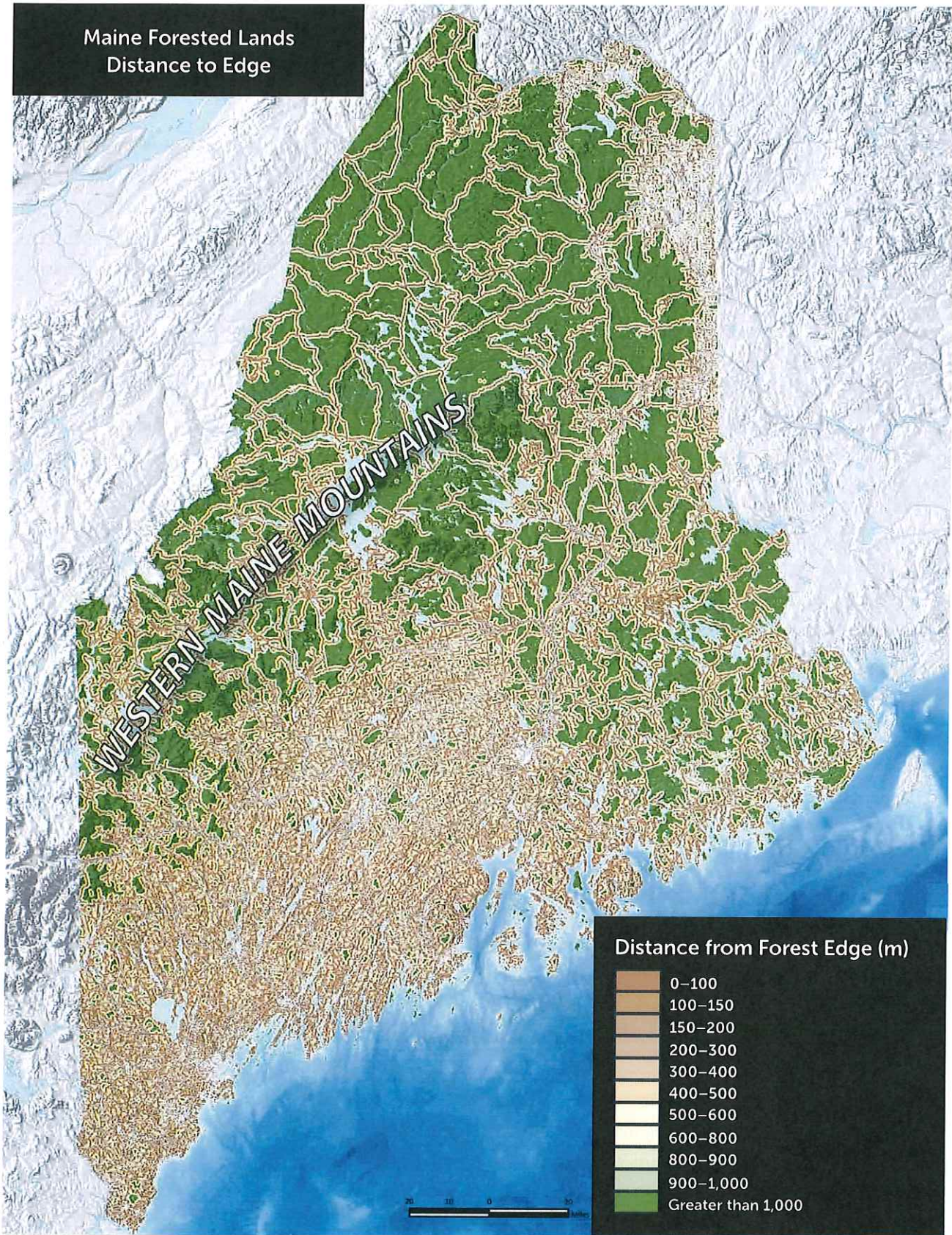
<sup>22</sup> The area included in the Western Maine Mountains region for purposes of this analysis include nearly all of the Central-Western–White Mountains biophysical section and approximately one third of the St. John Upland biophysical section, as defined in Bailey (1995).

as general stores. The only major highways in the region are Route 201, Route 6/15 and Route 16/27. There are no major transmission lines crossing the undeveloped portions of the Western Maine Mountains north of Indian Pond. Six wind farms have been constructed in the southwestern portion of the region (U.S. Energy Information Administration 2017).<sup>23</sup> Between 2007 and 2017, approximately 116,000 acres (0.6%) of Maine’s forest were converted to nonforest land uses. The Western Maine Mountains lost an estimated 12,000 acres during this period (NEFF in press).



**Figure 8a.** Comparative percentage of distance to edge in southern and central interior Maine and in the Western Maine Mountains region based on data reflected in Figure 8b, following page. Analysis courtesy of The Nature Conservancy, Maine.

<sup>23</sup> As of 2017, wind farms in the region include Kibby and Chain of Ponds, Bingham Wind, Record Hill, Saddleback Ridge, Spruce Mountain Wind and Canton Mountain (U.S. Energy Information Administration 2017).



**Figure 8b.** Habitat blocks (green) and major roads are shown. Forest distance from an edge varies dramatically from northern Maine to southern Maine. Analysis and graphic courtesy of The Nature Conservancy, Maine.



## A SUMMARY OF FOREST FRAGMENTATION IMPACTS

### Forest fragmentation defined

Forest fragmentation is often defined as the breaking apart of forested landscapes into smaller and more isolated pieces. Implicit in this definition are changes in habitat patch size and distance between patches, as well as changes in the condition of the surrounding forest. These changes typically occur simultaneously and continuously, resulting in a large cumulative impact over time. However, it is a much more complicated process than this. In the Western Maine Mountains, fragmentation is largely caused by permanent features such as public roads, subdivisions and energy infrastructure. These features not only reduce the total amount of forest in a landscape, but they alter the environment in adjacent habitat because of edge effects. Fragmenting a forest landscape significantly increases the amount of forest edge next to a road, clearing or other fragmenting feature, which, in turn, greatly increases the total amount of land impacted. In addition, connectivity is impacted by the quality of habitat that remains in the surrounding forest. The extent that this forestland retains habitat value and is “permeable” to the movement of plants and animals depends on how it is managed and the species in question.

Forest fragmentation has the potential to compromise the Western Maine Mountains’ biodiversity and connectivity and to drive ecological processes beyond the range of natural variability (Rowland et al. 2005). Different species are affected by fragmentation in different ways, depending on biological attributes such as habitat specialization, niche specialization, home range size, dispersal ability, mobility and a host of other factors (Lindenmayer and Fischer 2006). Some effects are immediate and local in extent while others occur at a landscape scale and are cumulative, playing out over decades or more. Other effects may be temporary, such as clearings created by timber harvests, or relatively minor, such as impacts associated with narrow, lightly used woods roads.

Research in Maine, the Northeast, and around the world demonstrates unequivocally that forest fragmentation—whether permanent or temporary—reduces native biodiversity and regional connectivity over time. A review of the literature indicates that fragmentation negatively affects terrestrial and aquatic ecosystems in a number of ways. The most severe effects, which are caused by roads, energy infrastructure, subdivisions and other permanent forms of fragmentation include:

- increased mortality and habitat loss from construction of roads and other fragmenting features
- increased mortality and other direct impacts associated with infrastructure after construction
- changes in species composition and reduced habitat quality from edge effects
- changes in species composition and behavior as habitat patch size declines<sup>24</sup>
- changes in hydrology and reduced aquatic connectivity
- introduction and spread of exotic species
- changes in the chemical environment
- pressures on species resulting from increased fishing, hunting, and foraging access
- loss of scenic qualities and remote recreation opportunities

In addition, forest management can have transitory fragmenting effects, such as acting as a barrier for species that need large connected areas of mature forest to thrive. New research suggests that this may compromise the ability of managed forestland to function as habitat or an ecological linkage for some species (see for example, Simons-Legaard et al. 2013).

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<sup>24</sup> The terms “habitat patch,” “patch,” and “fragment” are used interchangeably in this paper.

Although each of these impacts are described separately on the following pages, they are interrelated and occur to varying degrees depending on the type of fragmenting feature, whether the feature results in permanent loss of habitat, the time elapsed since fragmentation began, and the habitat requirements of the species involved. It is essential to keep in mind that fragmentation is a continuous and cumulative process where the impacts of many smaller fragmenting features combine to create a large and often unpredictable regional impact, resulting in ongoing environmental degradation and species loss over time.

## **Mortality and habitat loss from construction of roads and other human infrastructure**

Construction of roads, utility corridors and other human infrastructure kills any sessile or slow-moving animal and all vegetation in the path of the feature (Trombulak and Frissell 2000). Direct habitat loss from the footprint of these features can be significant. New projects have the potential to significantly increase the rate of fragmentation in the region. For example, the proposed New England Clean Energy Connect Project would destroy nearly 1,000 acres of wetland and forest habitat in the Western Maine Mountains, and edge effects from the permanently cleared utility corridor and access roads would increase the impacted area by an additional 13,000 acres, assuming a 1,000-foot edge effect on either side). In addition, during the 1–2 year construction period, an estimated 500 acres would be needed for roads and staging areas and additional wetlands would be filled. Other documented impacts of roads and utility corridor construction include elevated mortality of trees and other species in the adjacent forest, mortality of soil biota from physical changes in the soil under and adjacent to the roads, mortality of aquatic species from direct transfer of sediment into nearby streams and wetlands, and avoidance and other changes in behavior due to vehicle noise and light (Trombulak and Frissell 2000; Laurance et al. 2002; Laurance et al. 2017; Charry 2007).

## **Mortality and other impacts of infrastructure after construction is complete**

Mortality of animals from road collisions is well documented (Van der Ree et al. 2015; Charry 2007; Trombulak and Frissell 2000). Roads and other linear infrastructure negatively impact wildlife through increased mortality, decreased habitat amount and quality, changing species movement patterns, and fragmentation of populations into smaller subpopulations, which are more vulnerable to local extinction. Roads are considered a driving factor in the decline of many species globally, from moose and grey wolves to insects and other invertebrates (Van der Ree et al. 2015; Benitez-Lopez et al. 2010; Andrews et al. 2008; Glista et al. 2007; Muñoz et al. 2015). They can also impede restoration efforts. For example, a 1989–1992 effort to reintroduce Canada lynx to New York state failed because the released lynx were largely transient and suffered high road mortality throughout the region (Daniel Harrison, professor of wildlife ecology, University of Maine, personal communication).



**Figure 9.** Canada lynx crossing road. Road collisions can be a major cause of lynx mortality. Photo by Jeremiah John McBride, CC BY-ND 2.0, <https://www.flickr.com/photos/bullfrogphoto/3411471411>.

In Maine and elsewhere, research indicates that amphibians and reptiles are particularly susceptible to roadkill because many species, such as wood frogs and spotted salamanders, migrate between wetlands where they breed and uplands where they live during the nonbreeding season. In addition, individuals are generally inconspicuous and sometimes slow-moving, and in the case of turtles, it takes a long time for individuals to become sexually mature—which increases the likelihood that animals will be killed by collision before they are able to reproduce, and young are vulnerable after hatching (Baldwin et al. 2007; Gibbs and Shriver 2002; Rosen and Lowe 1994; Fahrig et al. 1995). Road size, density and traffic volume and distance from wetlands, streams and pools affect the magnitude of these impacts. For example, dense networks of wide roads with high traffic volume can have significant impacts on breeding populations of turtles. Roads are the major cause of decline of spotted and Blandings turtles in southern Maine (Beaudry et al. 2008) and are contributing to the decline of wood turtles in the state, since these species move from streams to uplands to nest (Compton 1999). According to Gibbs (2002), “as little as 2–3% additive annual mortality is likely more than most turtle species can absorb and still maintain positive population growth rates.”



**Figure 10.** Wood turtle crossing road. Declining turtle populations in many parts of Maine are attributed to road collisions. Photo by John Mays.

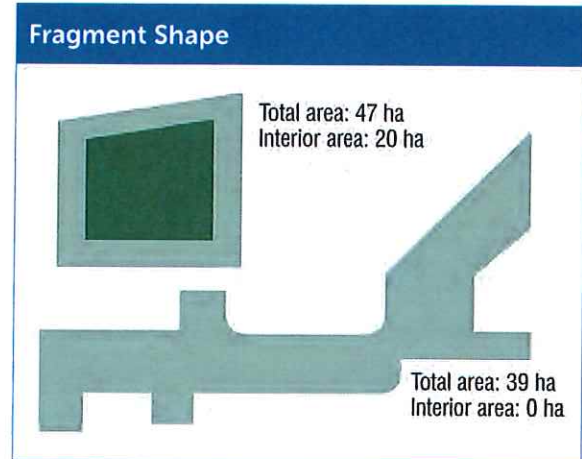
In addition to direct mortality, roads and utility corridors may serve as conduits for the movement of organisms across the landscape that are detrimental to native forest species—fostering the spread of alien plants and predators, or as a barrier or filter that prevents or impedes the movement of some sensitive species (Forman and Alexander 1998). For example, white-footed mice and some other rodent species are reluctant to cross roads (Merriam et al. 1989; Oxley et al. 1974). Others, such as black bears, have been documented to shift their home ranges away from areas with high road densities, and some predator and prey species may preferentially travel along road corridors, increasing the risk of collision and altering predator-prey interactions (Brody and Pelton 1989; Trombulak and Frissell 2000). Highly fragmented landscapes that result in unsuitable habitat around ponds at distances greater than 3,300 feet (1 kilometer) can preclude the recolonization of pools by amphibians and result in local extinctions of other wetland-dependent taxa, including small mammals, nonbreeding amphibians, and reptiles (Laan and Verboom 1990; Gibbs 1993). DeMaynadier and Hunter (2000) found that salamander populations avoid crossing wide (~40 feet) heavily used logging roads, while the impacts of narrow (<16 feet) woods roads were insignificant. Hung culverts and other drainage infrastructure associated with roads can also act as barriers, preventing upstream fish passage and access to breeding and feeding habitat for aquatic species. This is discussed further under aquatic connectivity.

As energy infrastructure expands in the Northeast and elsewhere, additional impacts are becoming apparent, such as avian and bat collisions with transmission lines and wind turbines; altered reproductive success and physiology of insects, mammals, birds, trout, and other species groups associated with electromagnetic radiation; loss of roosting sites; and altered movement patterns (Rytwinski and Fahrig 2015, Smallwood 2013; Jochimsen et al. 2004; Fensome and Matthews 2016; Van der Ree et al. 2015). In addition to direct collisions, there is growing evidence that electromagnetic radiation from transmission lines can have significant impacts on wildlife. For example, Fernie and Reynolds (2005) conclude that exposure of birds to electromagnetic radiation “altered the behavior, physiology, endocrine system, and the immune function of birds, which generally resulted in negative repercussions on their reproduction or development. Such effects were observed in multiple species, including passerines, birds of prey, and chickens in laboratory and field situations, and in North America and Europe.” Long-term and before-and-after studies are needed on other species groups.

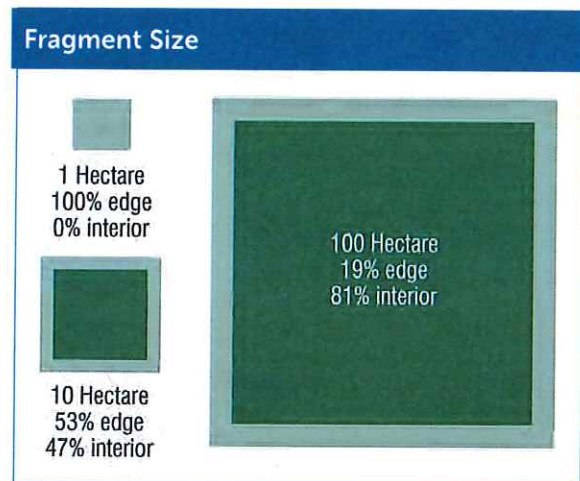
## Changes in species composition and reduced habitat quality from edge effects

When a forest is fragmented by a road, clearing or other disturbance, there will be a zone of impact along the forest edge.<sup>25</sup> Edge habitat is typically windier, warmer, and drier than the forest interior (Hunter and Gibbs 2007). The extent of this “edge effect” is greater along high contrast edges—such as between a utility corridor and a forest, than along low contrast edges—such as between a regenerating clearcut and adjacent uncut forest. The relative amount of edge increases as patches become smaller and more complex in shape (Fig. 11a and Fig. 11b). The amount of edge is also greater for long narrow clearings, such as roads and utility corridors, than for more compact clearings of the same size, such as clearcuts.

The habitat lost or altered by edge effects can be many times greater than the footprint of the fragmenting feature itself (Laurance et al. 2017; Harper et al. 2005; McGarigal et al. 2001; Tinker et al. 1997). The longest-running forest fragmentation study from the Amazon indicates that the impact zone of fragmenting features such as permanent roads can extend from 30 feet to more than 1,300 feet into adjacent forestland (Laurance et al. 2002; Laurance et al. 2017). Increased insolation, changes in air temperature and humidity, altered plant, animal and microbial species composition, species invasions, and a host of other edge effects were observed. South of the Western Maine Mountains, most forests are well within the range where human activities, altered microclimate, and nonforest species may influence and degrade forest ecosystems. Here, habitat fragmentation often leads to the establishment of early successional habitat along forest edges because plants adapted to interior mature forest conditions typically have low dispersal capacities compared to disturbance-adapted “weedy” plants (Harper et al. 2005). This favors generalist species at the expense of forest interior species. In the United States, there is a great body of research that documents the impacts of development and edge habitat on birds (see reviews by Forman and Alexander 1998, Lindenmayer and Fischer 2006, and Van der Ree et al. 2015). For exam-



**Figure 11a.** Shape affects the percent of area affected by edge effects, as is shown by a comparison of the interior area available in two different shaped blocks of land. Adapted by Barbara Charry for Maine Audubon, from Verner et al. *Wildlife* 2000 1986, reprinted by permission of Wisconsin Press.



**Figure 11b.** Size affects the percent of interior area affected by edge effects, as shown in this comparison of the interior area of three different sized blocks. As fragment (block) size increases, the relative proportion of edge habitat decreases and interior habitat increases. Adapted by Barbara Charry for Maine Audubon, from *Landscape and Urban Planning* (36) Collinge, pg. 64, reprinted with permission from Elsevier Science.

<sup>25</sup> The edge of a habitat patch can be broadly defined as a marginal zone where the microclimatic and other ecological conditions differ from the those in the patch's interior (Lindenmayer and Fischer 2006; Matlack 1993).

ple, the decline of many ground-nesting, forest-interior species in the Northeast, such as the ovenbird and wood thrush, have been attributed to increased predation pressure from raccoons, cats and other generalist species that thrive along forest edges (Ortega and Capen 1999; De Camargo et al. 2018). Increased nest predation and reduced reproductive success can extend more than 2,000 feet into the adjacent forest. Other forest species, such as interior-forest-feeding bats, are affected by changes in insect prey, roosting habitat and other habitat features in forest edges (Grindal and Brigham 1998). The relationship between edge effects and patch size is complicated. Rosenberg et al. (1999) found that tanager species respond differently in different parts of their range and that landscape features interact to create population sources and sinks. The more continuity of forest cover and presence of many forest age classes on the landscape may reduce some species' sensitivity to edge effects.

The following table (Fig. 12) provides a summary of penetration distances of different edge effects associated with permanent fragmenting features documented from a 22-year experiment on forest fragmentation in the Amazon (Laurance et al. 2002; Laurance et al. 2017). Although analogous studies have yet to be done in the Northeast, there is abundant evidence that many of these edge effects are contributing to species declines and extinctions in the region (see reviews by Pfieffer et al. 2017 and Harper et al. 2005). One type of edge effect—invasion by exotic species—is discussed in more detail on page 22.

Disturbances that penetrate > 100 m	Disturbances that penetrate 50–100 m	Disturbances that penetrate 20–50 m
Increased wind disturbance	Reduced soil moisture	Higher understory foliage density
Elevated tree mortality/damage	Lower canopy-foliage density	Increased seedling growth
Invasion of disturbance-adapted butterflies	Increased air temperature	Invasion of disturbance-adapted plants
Altered species composition of leaf-litter ants	Increased temperature and vapor pressure deficit	Lower leaf relative-water contents
Invasion of disturbance-adapted beetles	Reduced understory bird abundance	Lower soil moisture content
Altered species composition of leaf-litter invertebrates	Elevated litter fall	Higher vapor pressure deficit
Altered abundance and diversity of leaf-litter invertebrates	Increased photosynthetically active radiation in understory	Higher leaf conductance
Altered height of greatest foliage density	Lower relative humidity	Increased phosphorus content of falling leaves
Lower relative humidity	Increased number of treefall gaps	Reduced density of fungal fruiting bodies
Faster recruitment of disturbance-adapted trees	<p><b>Figure 12.</b> Documented Edge Effects Associated with Permanent Fragmenting Features from the Biological Dynamics of Forest Fragments Project. (Adapted from Laurance et al. 2002; Laurance et al. 2017.)</p>	
Reduced canopy height		

Although the Western Maine Mountains region has an estimated 10,000 miles of logging roads, the edge effects along most of these are less than that of typical roads in developed parts of the state because of lower traffic volumes, narrower road widths, unpaved surfaces, limited verge clearing and because some roads are gated when not in use. Nevertheless, studies in other areas suggest the cumulative impact of logging road networks can be significant (McGarigal et al. 2001; Forman and Alexander 1998). While the pace of private road construction has likely slowed as landowners have their modern transportation network mostly built out and some older roads have been abandoned, others are being replaced with newer, better and likely larger surfaces. The only place where road density is decreasing is in designated reserves where public agencies and conservation organizations have worked to close roads. More information is needed to evaluate the overall impacts of the logging road system on forest fragmentation in the region.

### **Changes in species composition and behavior as habitat patch size declines**

A habitat patch is a relatively homogeneous habitat area that differs from its surroundings. Hunter and Gibbs (2007) give three main reasons why large habitat patches have more species than small ones. First, a large patch will almost always have a greater variety of environments than a small fragment, and each will provide niches for different species. Second, a large patch is likely to have both common and uncommon species, but small fragments are likely to have only common species. For instance, species with larger home ranges, such as black bear or bobcat, are unlikely to survive in smaller fragments. Finally, small fragments will, on average, have smaller populations that are more susceptible to being extirpated than a large population.<sup>26</sup>

Habitat requirements are species-specific. In Maine, patch size appears to be particularly critical for species associated with mature forest conditions, larger patch sizes and forest interiors. Many Maine birds, such as red-shouldered hawk, black-throated blue warbler, Canada warbler, ovenbird and wood thrush, require hundreds of acres of continuous, relatively closed-canopy forest to reproduce successfully, as do mammals with large home ranges, such as moose, bobcat, black bear and American marten (Charry 1996; Askins 2002). For example, Chapin et al. (1998) found that resident American martens established home ranges in areas where median intact forest patch size ranged from 375 to 518 acres, for males and females respectively. These area-sensitive and habitat specialist species will start disappearing when the size of habitat blocks falls below a certain threshold (Askins 2002; Blake and Karr 1984; Whitcomb et al. 1981). Roads, clearings, residential development and other features can act as barriers, preventing animals from using habitat that is nearby for breeding or feeding. Populations can become subdivided, and eventually animal species are lost from an area as it gets too small to support an isolated population, or is too far from a source population for recolonization to occur (Lindenmayer and Fischer 2006; Charry 1996; Forman and Alexander 1998; Laurance et al. 2017; and others). Conversely, species sensitivity to fragmentation may be lower in regions with greater overall forest cover (Rosenberg et al. 1999).

Hanski (1998) hypothesizes that when the total amount of suitable habitat in the landscape falls below 20–30%, the viability of local populations is reduced. Other studies suggest that population declines accelerate when available habitat falls below even higher thresholds (Andr n 1994). For example, Homan et al. (2004) found that wood frogs were less likely to occupy breeding pools where the amount of suitable forest habitat

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<sup>26</sup> In 1967, MacArthur and Wilson put forward the groundbreaking theory that island size and degree of isolation are highly correlated with biodiversity. Hunter and Gibbs observed that while island biogeography theory does not always directly apply to terrestrial landscapes, it provided insights fundamental to understanding the effects of reducing patch size and connectivity in terrestrial landscapes.

within approximately ~3,300 feet (1 kilometer) was less than 45% and spotted salamanders were less likely where forest habitat within ~1,150 feet of a pool was less than 40%.

Forest fragmentation also influences plant populations. In their *State of the Plants* report, the New England Wildflower Society (2015) documented a mean 67% loss of previously recorded range for 71 rare plant species. One of the main contributing factors was fragmentation of habitat across species' ranges, which isolated populations and reduced their ability to disperse.

Small size combined with increased isolation of habitat patches can also affect behavior, biology and interactions of species. Impacts include reduced breeding success, changes in predator-prey relationships, changes in ability to disperse and increased competition for resources (Lindenmayer and Fischer 2006). For example, before their demise as a result of chestnut blight, it was believed that stands of American chestnut needed to be above a certain size to produce enough seed to overcome pressure from seed predators (Rosenzweig 1995; Lindenmayer and Fischer 2006).

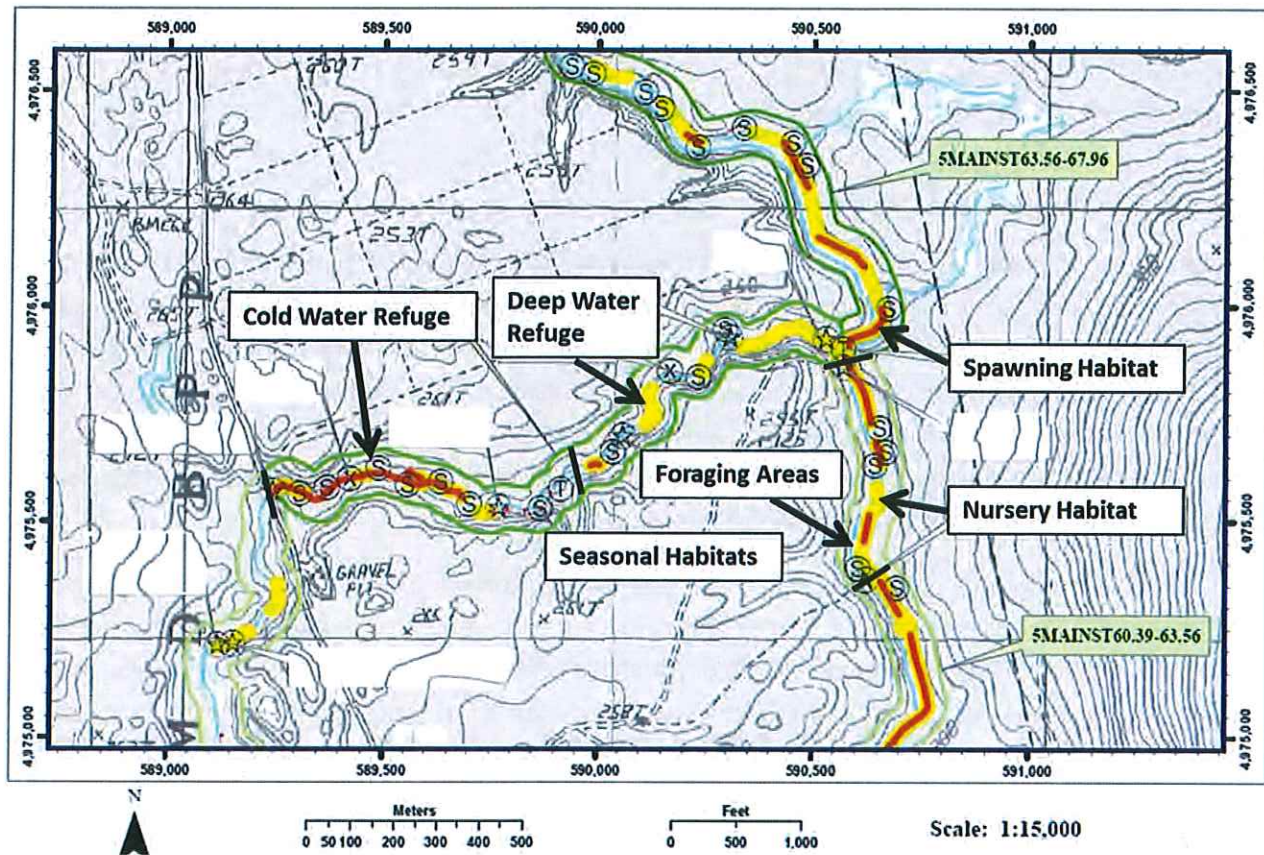
## Changes in hydrology and reduced aquatic connectivity

Fragmentation of terrestrial habitats often leads to fragmentation of river and stream networks. The division and isolation of watersheds and stream networks by dams, roads and culverts is one of the primary threats to aquatic species in Maine and the United States (Martin and Apse 2011). Intact forested blocks are essential to protecting stream networks. Forested stream corridors intercept sunlight, moderating water temperature (Moore et al. 2005). Riparian trees also contribute the majority of coarse organic material, in the form of leaves and downed wood, and fallen leaves frequently form the base of the food webs of small streams (Vannote et al. 1980). Large woody material generated from large fallen trees adjacent to streams has a major influence on stream ecosystem structure and function (Dolloff and Warren 2003).

The impact of aquatic fragmentation on aquatic species generally involves loss of access to quality habitat for one or more life stages of a species. For example, dams and impassable culverts prevent brook trout populations from reaching upstream thermal refuges, which are critically important as the climate warms. In addition, roads can have significant effects on the physical environment. Roads can interrupt subsurface flows and patterns in aquatic systems when water flows are rerouted into road ditches and culverts (Lindenmayer and Fischer 2006; Forman and Alexander 1998). The impervious nature of roads increases runoff, erosion, sedimentation and water-level fluctuations, and can flood adjacent wetlands (Andrews et al. 2008; Al-Chokhachy et al. 2016). Temporary pools in ditches and ruts can be population sinks for amphibians that breed there instead of higher quality vernal pools (Andrews et al. 2008).



**Figure 13.** Cool mountain streams, like this one in the High Peaks region of the Western Maine Mountains, provide critical habitat for brook trout and other coldwater species. Photo by Charlie Reinertsen Photography.



**Figure 14.** Fish need to move: brook trout use a variety of in-stream habitats to meet their daily and annual needs for feeding, resting and breeding. They often move up and down streams and into tributaries to find food and refuge. Graphic modified from the Maine Atlantic Salmon Atlas (2006) by Alex Abbot and the U.S. Fish and Wildlife Service's Gulf of Maine Coastal Program.

A bellwether species in the Western Maine Mountains is brook trout, which requires cool, clean, connected networks of streams and lakes (Fig. 14). A 2006 range-wide study of this species found that Maine is the only state in the eastern United States with extensive intact populations of wild, self-reproducing brook trout in lakes and ponds. Furthermore, Maine is the last true stronghold for stream-dwelling populations of wild brook trout, supporting more than twice the number of intact subwatersheds than the other sixteen states in their eastern range combined (Trout Unlimited 2006). Although wild brook trout waters are found elsewhere in northern Maine, they are most prevalent in the Western Maine Mountains (Trout Unlimited 2006; DeGraaf 2014). The high habitat integrity of the region is due to a combination of cool temperatures and an abundance of large, connected stream networks. The cooler region provides optimal conditions, with fewer competing, nonnative fish species than the southern or coastal parts of the state. Large patch size of intact brook trout habitat allows fish to migrate to cooler water when portions of their habitat grow too warm.

The Nature Conservancy's Conservation Gateway maps show a region with few dams and high stream connectivity. This is not the case for much of southern Maine, where many public- and private-road stream crossings in the region do not meet recommended standards.<sup>27</sup> Maintaining aquatic connectivity is critical to

<sup>27</sup> These include: (1) spanning the entire width of the natural stream; (2) setting the elevation to match the natural stream; (3) matching the slope to the natural stream; and (4) ensuring that the stream bed is made up of natural materials (see Maine Department of Transportation and [www.maineaudubon.org/projects/stream-smart](http://www.maineaudubon.org/projects/stream-smart)).



maintaining brook trout populations in northern Maine (Trout Unlimited 2006; Fesenmyer et al. 2017; Coombs and Nislow 2014). Conserving habitat for this umbrella species, in turn, will ensure the survival of other plants and animals that require pristine aquatic habitats.

## Introduction and spread of exotic species

Invasion by exotic plant species is a common and widespread impact of fragmentation that can result in displacement of native species. In general, non-native invasive plant species thrive in disturbed and early successional habitats. Invasive plants can become established in roadside ditches, along utility corridors, on soils disturbed by residential or commercial development and on soils disturbed by timber harvests that border developed areas. In addition, seeds can be introduced in road fill and through planting of exotic ornamental species. Common traits of invasives include rapid growth, light and drought tolerance, bird-disseminated seeds, and the ability to outcompete native plants (Webster et al. 2006).

Invasive non-native woody plant species have the potential to profoundly alter the structure and function of forest ecosystems. Invasive woody and herbaceous plants rapidly colonize forest edges and may penetrate more than 330 feet into the forest interior, altering or eliminating habitat for native plants (Charry 1996). Wetland and aquatic invasives pose a similar threat in wetland and aquatic ecosystems. Because many invasive plant species have the ability to form dense monocultures, they have a competitive advantage in forest understories, particularly in edge habitat. In addition, most species have relatively few—if any—natural predators in their introduced ranges (Webster et al. 2006; Woods 1993). Other impacts include changes in soil chemistry and biota—which may suppress native tree regeneration—and reduced or eliminated foods used by pollinators, fruit and seed eaters and herbivores (Silander and Klepeis 1999; Charry 1996; Webster et al. 2006; Burnham and Lee 2010; Ehrenfield et al. 2001; Heneghan et al. 2006; Hunter and Mattice 2002).

Large forest blocks appear to resist woody plant invasions better than land that has a history of agricultural or residential use (Mosher et al. 2009). The resistance of large intact forest blocks to invasion probably stems from two main factors: the deep shade created by mature trees and the buffering effect of large block size, which serves to isolate interior portions of the forest from invasive seeds. If present land use trends continue, increased fragmentation of forest parcels may allow edge-adapted invasive plants such as glossy buckthorn, oriental bittersweet, Japanese barberry, and bush honeysuckles to get a deeper foothold into forest blocks. Eventually, this could allow woody invaders to take advantage of disturbances such as logging within the major forest blocks of the region, displacing native species as a result (Mosher et al. 2009; Webster et al. 2006; Silveri et al. 2001).



**Figure 15.** Oriental bittersweet infestation in Cape Elizabeth, Maine. Photo from Maine Natural Areas Program, [Maine.gov](http://Maine.gov).

Many terrestrial invasive plant species and wetland invasives, such as purple loosestrife and phragmites, are already well established in southern Maine and have expanded to the edges of the Western Maine Mountains (*iMapInvasives Database*). These species thrive in utility corridors and roadside ditches (Fig. 16). With roughly one third of Maine's flora comprised of non-native plant species (and most of these already established in the southern part of the state), the cause-and-effect relationship between fragmentation and the establishment of non-native plant species poses a significant threat to native species and habitats in northern Maine (Mosher et al. 2009; Charry 1996).

Woody invasive plants are part of a much larger invasion of alien species of plants, insects, and disease that has the potential to fundamentally alter the composition and structure of eastern forests (Webster et al. 2006). Invasions by insects such as emerald ash borer, Asian longhorn beetle, and browntail moth are tied to both inadvertent transport by people and climate change. The relationship between the spread of these species and forest fragmentation is unclear, although new roads will increase the likelihood of transport by people and vehicles into the region.

There is currently a low incidence of terrestrial invasives in the Western Maine Mountains, although invasive plant species are established along the southern border of the region. No aquatic invasive plant species, invasive insect pests or invasive tree species, such as Norway maple and black locust, are currently documented in the Western Maine Mountains. Three invasive herbs have been confirmed in the interior of the Western Maine Mountains and sixteen invasive herbs and shrubs have been confirmed at the region's margin, primarily in developed areas<sup>28</sup> (*iMapInvasives Database*) (Fig. 17, following page). Fragmentation from major utility corridors, roads and new residential and commercial development has the potential to open the region to these and other invasives.

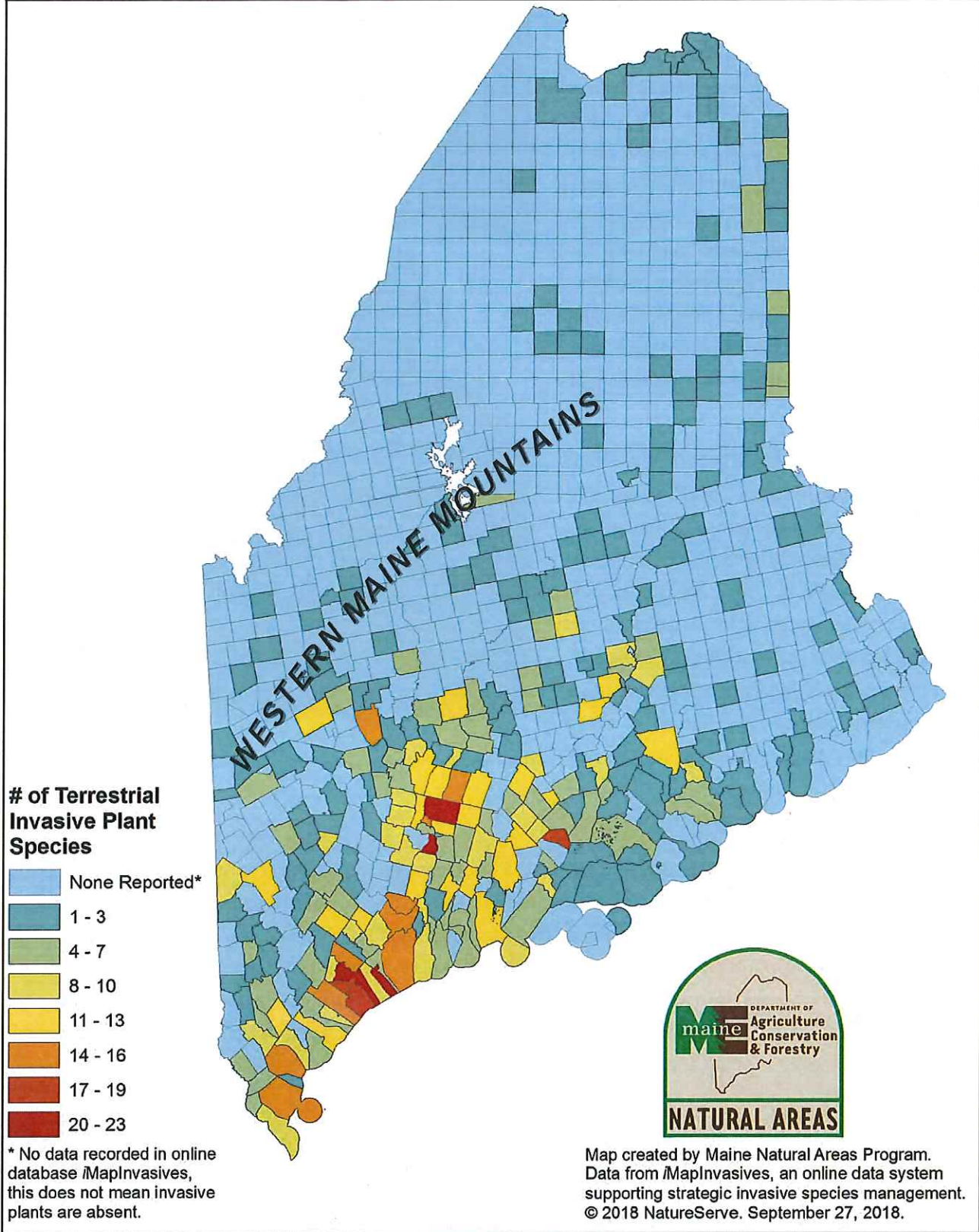


**Figure 16.** Phragmites, an invasive exotic grass, established along a southern Maine highway. Photo by Janet McMahon.

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<sup>28</sup> MNAP lists 68 species of invasive plant species that are currently documented in Maine or are probable. I reviewed MNAP's *iMapInvasives Database* to determine presence/absence of all documented species in the region. The three species confirmed in the Western Maine Mountains' interior include reed canary grass, common reed and coltsfoot. Because field effort in the region is low compared to other parts of the state, invasive species occurrences may be under-reported. I have not surveyed the Western Maine Mountains systematically, however, my observations in areas visited suggest that most terrestrial invasive plant species are absent or rare, especially in the region's interior.

## Number of Terrestrial Invasive Plant Species per Town



**Figure 17.** Documented terrestrial invasive plant species in Maine. The Western Maine Mountains are relatively free of terrestrial plant species. Fragmentation from major utility corridors, roads and new residential and commercial development has the potential to open the region to these invasives. Map courtesy of the Maine Natural Areas Program in the Maine Department of Agriculture, Conservation and Forestry.

## **Changes in the chemical environment**

Use and maintenance of roads, utility corridors and windfarms contribute at least five different general classes of chemicals to the environment: heavy metals, salt, organic molecules, ozone and nutrients (Trombulak and Frissell 2000). These are mostly derived from fuel additives, deicing salts and herbicides. Contamination of soils, plants and animals can extend tens to hundreds of meters from a road or power line right of way depending on the contaminant, wind, and if the chemicals reach flowing water. Trombulak and Frissell summarize a number of impacts on plants and animals, such as the poisoning of habitats so they no longer have adequate carrying capacity, mortality or reduced health and growth from exposure, bioaccumulation of chemicals that makes species toxic to predators and increased concentrations of salts that can attract large mammals to roadsides, increasing vehicle collision risk. The high skin permeability of amphibians make them particularly susceptible to toxins from road salts and other chemicals (Andrews et al. 2008).

## **Pressures on species resulting from increased fishing, hunting and foraging access**

Increased road density and access into remote areas can lead to increased hunting, trapping, fishing, poaching, disturbance to wildlife, trampling and other direct human impacts on biodiversity in forest and aquatic ecosystems (Laurance et al. 2002 and 2017; Haddad et al. 2015; Brocke et al. 1988). A study of the relationship between density of publicly accessible roads and moose populations in Nova Scotia found that natural populations declined when road density exceeded a threshold of 0.6 km/km<sup>2</sup> (~1.4 mi/mi<sup>2</sup>). This was attributed to the fact that most moose hunting occurred along roads (Beazley et al. 2004). They concluded that road density may be among the key factors influencing habitat productivity, and thus critical habitat area and population viability, for moose in mainland Nova Scotia, as well as for other species sensitive to the effects of roads, such as Canada lynx, American marten and black bear.

The USDA Forest Service has found that illegal introduction and harvest of fish species are more likely to occur in areas with ready access (Gucinski et al. 2000). Increased road density and improved access into remote ponds have been linked to regional declines of lake trout and introduction of invasive fish species such as smallmouth bass in northern Ontario (Kaufman et al. 2009). In Maine, unauthorized introductions of invasive fish species, such as small and largemouth bass, are threatening native fish species populations—especially brook trout—and can ultimately impact entire aquatic systems. In the past, the majority of introductions occurred in populated portions of the state, but in the past decade, introductions are occurring at a higher rate in western and northern Maine where most of the state's wild brook trout populations are located. Improved road access and development are likely contributing factors (Merry Gallagher, research fisheries biologist, Maine Department of Inland Fisheries and Wildlife, personal communication). Increased access is also likely to lead to overharvesting of species such as chaga, ginseng and ramps that are collected for food, medicine and other purposes.

## **Loss of scenic qualities and remote recreation opportunities**

Maine has a long tradition of hunting, fishing, guiding and remote camping that is closely bound to the undeveloped and scenic character of its northern forests, lakes and mountains. These uses are a major and growing economic driver in northern Maine (David Publicover, senior staff scientist, Appalachian Mountain Club, personal communication). Degradation of the skyline caused by utility corridors, major road right of ways, sprawl from development, wind farms and associated light pollution are general aesthetic impacts of for-



**Figure 18.** Fishing at Lake Mooselookmeguntic. Photo by Sarah Haggerty.

est fragmentation. These affect remote recreation and other human values associated with large undeveloped areas. Most vistas from mountains and water bodies in the Western Maine Mountains provide long scenic and unbroken views. Roads are generally screened by the forest canopy, but wind towers and transmission lines with wide, cleared right of ways are conspicuous features on the landscape. Other than Routes 201, 16/27 and 6/15, there are currently no major highways or transmission corridors impacting the high scenic value of the region. The proposed New England Clean Energy Connect Project transmission corridor would be one of the largest fragmenting features in the Western Maine Mountains region, dividing it in two and crossing 53.5 miles of forest.

### **Potential fragmenting effects associated with forest management**

Many species that need intact forest patches for their core habitat are also affected by the condition of the matrix forest surrounding these patches. It is well recognized that the condition of the matrix forest that surrounds intact mature habitat patches can affect regional biodiversity and landscape connectivity. In general, connectivity and biodiversity are reduced when the matrix forest becomes simplified in terms of species and structural diversity. Prevedello and Vieira (2010) found that a matrix that is more similar in structure to intact habitat patches will increase functional habitat and decrease isolation of patches. Timber harvesting can have a significant fragmenting effect, although the degree of impact depends on the extent, intensity and frequency of harvesting. As the extent and intensity of harvesting increases, the extent of interior forest habitat—especially large contiguous blocks—decreases. And while the impact of any individual harvest is temporary, cumulative harvesting patterns typically create a shifting mosaic of early successional stands, edge habitat and interior forest habitat across the landscape.<sup>29</sup>

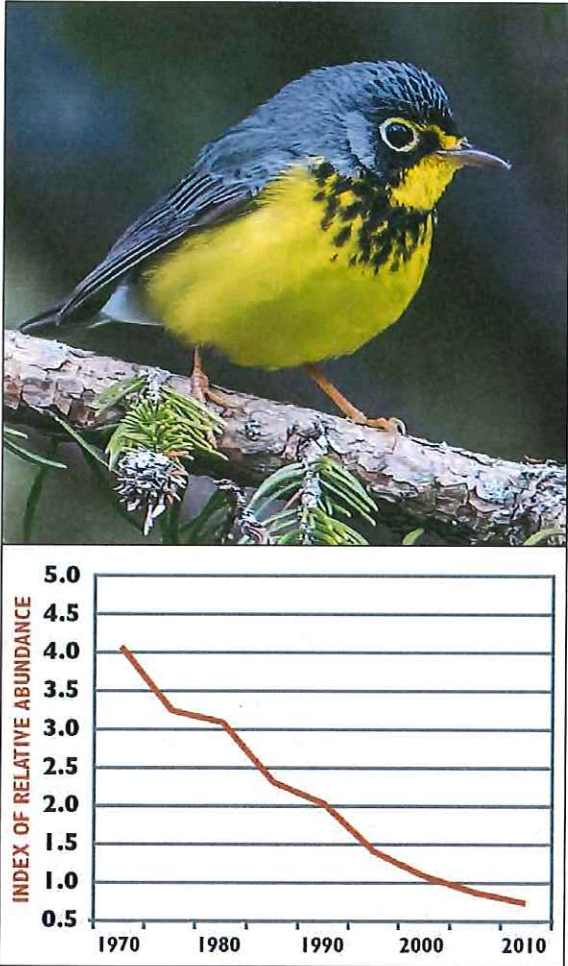
Managed forest makes up about 90% of the Western Maine Mountains. While this forest remains largely unfragmented by permanent features such as public roads and residential development, it has been greatly

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<sup>29</sup> It is important to note that forest management and timber harvesting can be practiced in a manner that maintains or enhances wildlife habitat over time (DeGraaf et al. 2007).

modified by forest practices in the past half century. In the presettlement forest, where large-scale stand-replacing disturbances were rare events, the majority of the landscape would have been composed of older stands that were allowed to develop uninhibited into a late-successional condition (Lorimer 1977; NEFF in press). Today, although a full suite of native tree species remains, there has been a broad ecological shift away from late successional taxa, such as red spruce and hemlock, in favor of early- and mid-successional taxa, such as red maple and aspens (Thompson et al. 2013). In the past half century, large areas of spruce-fir forest have been converted to deciduous and mixed types due to regeneration of hardwoods after high-intensity spruce-fir harvests. In addition, the total amount of mature forest on the landscape has decreased along with the patch sizes in which these mature forests occur, and there is a correspondingly larger amount of edge between intact mature forest and harvested forest (NEFF in press; Legaard et al. 2015). Today only 1.4% of Western Maine Mountains forests are in a late-successional condition<sup>30</sup> and only 3% are classified as large saw timber<sup>31</sup> by the Maine Forest Service (NEFF in press). This compares to a presettlement forest where 59% or more of the forest was older than 150 years (Thompson et al. 2013; Lorimer and White 2003; Barton et al. 2012). An initial assessment of Ecological Reserve Monitoring data quantifies differences in forest structure between older stands in reserves and Maine’s managed forests. Ecological reserves have greater average live-tree basal area, more large and very large trees, more standing dead trees, and more downed woody material (Kuehne et al. 2018). In short, the combination of spruce budworm era salvage cuts in the 1970s and 1980s and widespread partial harvesting<sup>32</sup> since the 1990s has created a modern forest that is younger, more homogeneous, and less coupled to local climatic controls (Thompson et al. 2013).<sup>33</sup>

The result of these structural changes is a change in both plant and animal species composition at all forest stages (Legaard et al. 2015).<sup>34</sup> Species that require larger connected patches of older forest are particularly susceptible. For ex-



**Figure 19.** Species requiring mature coniferous or mixed forest habitat, such as the Canada warbler, are decreasing due in part to loss of summer breeding habitat. Graphic courtesy of Maine Audubon.

<sup>30</sup> Late-successional stands are greater than 120 years old, have a multi-storied canopy, and have at least 15 trees per acre (either alive or standing dead) > 16" DBH (diameter at breast height). Unmanaged late-successional stands tend to have cohorts of trees of different ages, large living and dead trees, large-diameter logs on the forest floor, vertical structural complexity and different-sized canopy gaps (Franklin et al. 2002).

<sup>31</sup> Stands with > 100 ft<sup>2</sup> basal area in trees > 5.0" DBH in which trees > 15" comprise at least 50% of the basal area.

<sup>32</sup> Partial harvests are areas that have been subject to a commercial partial harvest, including shelterwood and any other harvest method involving partial overstory removal (McGarigal et al. 2001; Legaard et al. 2015). The result is typically a dispersed low-density canopy.

<sup>33</sup> See Legaard et al. (2015), Simons-Legaard et al. (2018) and NEFF (in press) for detailed analyses of current forest condition.

<sup>34</sup> Legaard et al. (2015) used a time series of Landsat satellite imagery (1973–2010) to evaluate cumulative landscape changes in an area of western and northern Maine that included about half of the Western Maine Mountains.

ample, Payer and Harrison (2003) found that forests with large patches of large trees in a mature condition, either deciduous or coniferous, generally provide the structural stand attributes required by a wide variety of species such as American marten, northern flicker, wood thrush and northern long-eared myotis (a bat) (NEFF in press). Although not researched in Maine, a similar pattern is evident for forest birds in boreal habitats to the north. For example, Schmiegelow et al. (1997) found that, as the acreage of older forest declined, neotropical migrant bird species that require mature forest conditions declined in both connected and isolated fragments of such habitat, and resident species declined in isolated fragments.

Changes in forest structure also impact pool-breeding amphibians, which in the Northeast are sensitive to harvesting practices that reduce overstory canopy levels to less than 50%. Canopy closure, along with natural litter composition and coarse woody material within 100 to 400 feet of vernal pools, are important habitat elements required by salamanders and other amphibians (deMaynadier and Houlihan 2008; Popescu and Hunter 2011; Ross et al. 2000).

Changes in the composition and structure of the matrix forest as a result of harvesting, although temporary, can also impact generalist species such as white-tailed deer. Near the northern edge of their geographic range, where snow can restrict mobility and access to forage, white-tailed deer depend on mature conifer forests for wintering habitat. In a 1975–2007 time-series Landsat imagery analysis, Simons-Legaard et al. (2018) documented that fragmentation and reduction of mature conifer forest habitat significantly reduced the amount of deer wintering areas<sup>35</sup> in the Western Maine Mountains. The extent of currently zoned deer wintering habitat and habitat under cooperative agreement in the region is currently estimated to be only 34% of what is recommended (Nathan Bieber, personal communication). Simons-Legaard et al. conclude that continued forest-type conversion is expected to extend the effects of habitat fragmentation on northern deer populations and other species that require mature conifer forest into the future (Simons-Legaard et al. 2018).

Other than research on forest trees, there has been little research on the impacts of patch size and condition on vascular and nonvascular plants. Some lichen, liverwort and bryophyte species are dependent on the woody debris and dead and dying trees associated with older stages of spruce-fir forest development. These structural features can require several decades to recover, unless the woody material is intentionally left (Selva 1994; Gawler et al. 1996; Rowland et al. 2005). Small isolated populations can become too far apart to recolonize the areas in between and exchange genetic information.

We are just beginning to understand the scope of these changes in the forest matrix and their long-term effects on species dispersal, richness, abundance and persistence, community composition and ecosystem function. While connectivity within the matrix forest of the Western Maine Mountains is currently high, there is growing evidence that American marten, forest birds and other species that require larger patches of mature forest are declining in the region as the stepping stones of suitable habitat become fewer and farther between. This topic is in urgent need of study by the scientific community.

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<sup>35</sup> The Maine Department of Inland Fisheries and Wildlife defines deer wintering areas as forested areas used by deer when (a) snow gets to be more than 12 inches deep in the open and in hardwood stands, (b) the depth that deer sink into the snow exceeds 8 inches in the open and in hardwood stands, and (c) when mean daily temperature is below 32 degrees Fahrenheit. Ideal wintering areas (primary winter shelter) are dominated by mixed or monospecific stands of cedar, hemlock, spruce and fir, with a stand height of 35 feet.

## LONG-TERM CONSEQUENCES OF FOREST FRAGMENTATION

Fragmentation is a continuous and cumulative process that leads to degraded habitats and loss of species over time. There is a growing body of research that suggests that the ecological dynamics in fragmented landscapes are a stark contrast to the dynamics in intact landscapes (Haddad et al. 2015). Although there are currently few long-term studies of the impacts of permanent forms of forest fragmentation on biodiversity and connectivity in the Northern Appalachian-Acadian Forest Ecoregion, research from elsewhere shows strong and consistent responses of organisms and ecosystem processes to fragmentation arising from decreased habitat patch size, decreased connectivity and the creation of habitat edges (Haddad et al. 2015; Lindenmayer and Fischer 2006). In general, the greater the difference between forested patches and their surrounding environment and the smaller and more isolated patches become, the greater the impact on biodiversity and ecosystem function. Haddad et al. (2015) identify three processes that drive long-term and progressive impacts of fragmentation: (1) temporal lags in extinction, (2) immigration lags and (3) ecosystem function debt.

### Extinction debt

Temporal lags in extinction, or “extinction debt” is simply the delayed loss of species due to fragmentation. Hagan and Whitman (2004) suggest that we may be accruing “extinction debt” in Maine forests, describing the process as follows:

Once old forest elements such as large trees or logs are lost from a stand (e.g., as a result of a clearcut, or even a selection cut), it can take centuries for the species [dependent on such features] to return to that location. A species first has to wait for these structural features to redevelop, and then the species has to find them. Scientists are beginning to understand that forest continuity is key to many forest species. [This temporal] continuity refers to the persistence of big trees and big logs in a forest stand over a very long period of time (centuries), even though the stand might be subjected to many different disturbances, such as fire, wind, disease, or even selection logging. Species that move or disperse slowly through the landscape, and prefer large old trees or logs, are the species most at risk to the loss of older forests.

In addition to the inability of organisms to disperse, extinction debt from fragmentation may be tied to genetic traits of populations, rarity, reproductive mode, life span and a host of other factors (Haddad et al. 2015). Extinction debt is often overlooked because many of the species lost tend to be small and uncharismatic, such as insects, fungi and mosses—and yet these species may be critical for ecosystem function. In the Western Maine Mountains, changing land use patterns from permanent and temporary forms of fragmentation have already caused changes in species composition and will likely cause changes in plant and animal abundance over time. Two of these changes include the increased proportion of early successional species and the large-scale reduction in the structural complexity of forest stands on which other forest organisms and ecological processes may depend (Rowland et al. 2005; Hagan and Whitman 2004). To fully understand the implications of extinction debt in the forests of the Western Maine Mountains, more long-term studies are needed.

### Immigration lag

In general, smaller and isolated fragments are slower to accumulate species after disturbance than large or connected habitat blocks. In other words, because it takes longer for species to recolonize small patches, the successional transition from cleared land to mature forest conditions may take longer to occur (Haddad et al. 2015; Cook et al. 2005). This phenomenon is called “immigration lag” (Haddad et al. 2015). Most fragmen-



tation studies have been done in agricultural or suburban landscapes, long after the onset of fragmentation. Research on industrial forest land suggests that the process of immigration lag is a complex one. For example, Hagan et al. (1996) found that densities of several forest-dwelling bird species can increase within a forest stand soon after the onset of fragmentation as a result of displaced individuals packing into remaining habitat. However, because forest songbirds are highly territorial during the breeding season they cannot simply shift elsewhere unless there is unoccupied habitat. Furthermore, it is widely thought that these species establish territories in the best habitat available. If displaced, they could be forced into poorer quality habitat resulting in reduced pairing success and productivity over time. This was the case for ovenbirds in the Hagan et al. (2015) study. Their models and data suggest that large tracts of forest are important because they are relatively free from the variety of plant and animal population dynamics that might take place near new edges, including the encroachment of individuals displaced by habitat loss. Immigration lag may also mask the risk of invasion by exotic species since there may be a long lag between introduction, colonization, and rapid range expansion of some invasive species (Webster et al. 2006).

### **Ecosystem function debt**

Ecosystem functions, such as nutrient cycling and decomposition rates, can also be reduced or lost over time—a process called ecosystem function debt. Evidence suggests that during forest succession, this delayed loss of function is greater in smaller, more isolated fragments (Cook et al. 2005; Billings and Gaydoss 2008). The mechanisms for this are complex. Functional debt can result when fragmentation causes food webs to be simplified as species are lost, or when altered forest succession patterns resulting from permanent fragmentation or forest practices that cause changes in tree density, light and moisture, which impair ecosystem function (Haddad et al. 2015).

While there is abundant evidence that the forests of the Western Maine Mountains continue to change as silvicultural practices interact with natural successional processes and a changing climate, Legaard et al. (2015) and Simons-Legaard et al. (2018) are the first two studies to document spatial changes in the forest over time in Maine. Their research suggests that the long-term processes described above are beginning to play out in the Western Maine Mountains. The American marten provides an example of how a species responds to long-term habitat changes associated with fragmentation. While the forests of the region currently support marten, recent research suggests that forest harvest practices on two-thirds of Maine's commercial forestland are creating habitat that no longer serves the needs of this umbrella species, and by implication the many other terrestrial forest vertebrate species that use similar habitat (Hepinstall and Harrison in prep.); Simons-Legaard et al. 2013; Fuller and Harrison 2005; Homyack et al. 2010; McMahon 2016).

### **A changing climate**

If left unchecked, increased fragmentation from permanent and temporary features is expected to exacerbate the impacts of climate change on biodiversity and connectivity in the region. Whitman et al. (2013) summarize how Maine's biodiversity and ecosystems are likely to change in the coming decades.

The region can anticipate shifting species distributions, with an increasing number of novel species moving in from the south and many species with northern distributions moving north. Changes in seasonal rainfall patterns may exacerbate late summer dryness and increase levels and frequency of drought stress for plant communities and aquatic systems. Increasing temperatures may allow wildlife parasites such as winter moose tick (*Dermacentor albipictus*) and forest pests such as hemlock woolly adelgid (*Adelges*



**Figure 20.** Northern Maine and the Western Maine Mountains are now a stronghold for moose in the eastern United States. Photo by Charlie Reinertsen Photography.

*tsugae*) to become more prevalent, stressing native wildlife populations and degrading their habitats. Because each species will respond individually to these threats, the composition of natural communities and wildlife habitats that we take for granted will change. While populations of some species and their habitats will increase, climate change could lead to extirpation of other species and significant changes to natural communities and wildlife habitats (Cahill et al. 2012).

Forest fragmentation increases the vulnerability of Maine's native flora and fauna to climate change (Fernandez et al. 2015; Rustad et al. 2012). For example, declines in the diversity of native flora in New England's mixed northern hardwood forests are attributed to a high degree of habitat specialization, a highly fragmented range, depauperate understories due to repeated clearing and barriers to dispersal (New England Wildflower Society 2015). Three of the top four stressors are caused or aggravated by forest fragmentation, including habitat conversion, invasives and succession. All of these stressors are expected to become more pronounced as the climate changes.

The resiliency of the Western Maine Mountains in the face of climate change is largely due to the extent and connectivity of the region's forests. These forests provide far greater benefits to climate stabilization than the alternative of land development (Fahey et al. 2010). Because heavily forested areas sequester more carbon than they emit and the wood they produce can be used to substitute for more energy- and emissions-intensive building materials, keeping forested lands intact will help mitigate climate change regionally. Conversely, developed lands are net sources of carbon dioxide to the atmosphere (Fahey et al. 2010).



**Figure 21.** Fall in the Western Maine Mountains. Photo by Charlie Reinertsen Photography.

## CONCLUSIONS

The Western Maine Mountains region is an ecological treasure that faces unprecedented threats from forest fragmentation. New land uses and policies that fragment the region's forests—such as the proposed New England Clean Energy Connect transmission corridor, the Land Use Planning Commission's proposed changes to the adjacency rule, which would allow new commercial and residential development to stretch for miles along currently undeveloped public roads, and large scale developments, such as Weyerhaeuser's Moosehead Lake concept plan—have the potential to profoundly change the ecology of the region by bringing extensive new human infrastructure into remote areas and creating new nodes of development (Liliehalm et al. 2010). In addition, forest practices have created a younger more homogeneous forest, conditions that threaten species that require large patches of older forest, such as American marten and many songbirds. However, when the land remains forested, even if harvesting temporarily modifies forest composition and structure, the potential for connectivity is retained because forest patches can regrow and expand. By contrast, once a utility corridor, road or development is in place, it effectively forever disrupts the connectivity of the landscape.

Fragmentation increases the risk of species extinctions and exotic invasions and decreases the ability of species to respond to a warming climate. The capacity of the Western Maine Mountains to sustain biological diversity and ecosystem integrity into the future will hinge upon the total amount and quality of its forests, wetlands and streams and their degree of connectivity. Unless proactive steps are taken, these changes have the potential to forever alter and degrade one of the most intact forested landscapes in the eastern United States and compromise its ability to serve as a critical ecological link between forests of the Northeast and Canada.

To maintain the region's unique values, it is essential to avoid introduction of new fragmenting features, especially those that would permanently intrude into intact forest blocks, such as new utility corridors, new

centers of development, and new high volume roads. It is also critically important to find ways to support landowners who seek to maintain large intact forest blocks and to find ways to support them in managing forests for greater spatial and temporal connectivity and structural complexity. Maintaining an unfragmented and intact forest is not only critical to the region’s biodiversity and ecological health, but it is crucial to Maine’s economy and a defining part of the Maine way of life.

The biodiversity, resilience and connectivity of the Western Maine Mountains are unparalleled in the eastern United States. The region offers one of the last opportunities for large landscape-scale conservation with protected areas connected through linkages and stepping stones embedded within an intact forest matrix (Keeley et al. 2018). As one of the few temperate forests in the world managed through natural regeneration, the Western Maine Mountains region continues to support a full complement of native forest wildlife and is the last regional stronghold for brook trout, moose, lynx, marten and a host of other species. It remains a highly connected forested landscape—one that is far less fragmented than increasingly developed lands to the south. The actions of landowners, conservation organizations, government officials and agencies, and local communities and citizens together will determine whether these species and the region’s many unique values persist into the future.



**Figure 22.** Canoeing on Flagstaff Lake. Photo by Sally Stockwell.



**Figure 23.** Unbroken view in the High Peaks region of the Western Maine Mountains.  
Photo by Charlie Reinertsen Photography.

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To LUPC Proposed Adjacency Rule Changes

January 8, 2019

I attended the first public hearing, and greatly appreciate the responsiveness of the board and staff in including several of the suggestions made at that time, and extending the review period to include a second public hearing. However the key question for me is why is LUPC and staff undertaking this endeavor at all? Supposedly the old rules are not adequate. They were written with the goal of reducing forest fragmentation by concentrating development within or very close to existing settlements. Isn't that mission of LUPC? The proposed rules do just the opposite, by encouraging development seven miles from a hub town border, which in the case of Ellsworth, jumps over two towns to the unorganized township Osborne, which is actually 24 miles by road to downtown Ellsworth.

I thought that perhaps I did not understand the mission of LUPC. So I looked up the Statute 680 and found language that would rule against subdivisions extending out seven miles from a hub town's border. I saw language that would suit a one mile development zone, not a seven mile zone. In fact the last item in the statute says to "Conserve ecological and natural value." Seven miles of subdivisions just does not do that.

So I explored the LUPC website and found that they have a Community Guided Planning and Zoning program.


*LUPC Commissioners and staff have sought to more proactively plan for development in the jurisdiction, instead of on a case-by-case basis. To date, the Commission has undertaken prospective zoning in the Rangeley Lakes region, as well as in several townships that have deorganized since the LUPC formed (Centerville, Greenfield, and Madrid).*

This seems like an excellent approach; tailor the planning to the needs and desires of the region, remembering that humans are only one of many species living there. So why create this new set of rules that apply to all of the unorganized townships? Why not stick with regional planning? Please keep in mind that planning does not just mean "for development" but also for no-development.

I looked at the next hub east of Ellsworth. As a regular citizen I am attempting to understand this complicated new system. The hub appears to consist of Winter Harbor, Prospect Harbor, Gouldsboro and Corea. That is the entire Schoodic Peninsula except for Acadia National Park. The seven mile zone extends across Route 1 all the way up to the Donnell Pond Public Reserve Land, encompassing the southeast side of Tunk Lake. How does a series of subdivisions on the other side of Rte 1 benefit Gouldsboro or Winter Harbor? How does a series of subdivisions conserve the ecological and natural values of that awesome cluster of mountains and lakes? The State of Maine recognized the value of this area when they created the Donnell Pond PRL. A better idea might be to add some of T7 SD BPP to the existing Donnell Pond Public Reserve Land.

Lastly I looked at the LUPC staff that would be responsible for the implementation of these new and complicated rules in the Downeast Region and there are only two staff members for the whole region! I wonder how many violations will slip through the cracks.

Finally, I would like to say to the LUPC Commissioners, you have a grave responsibility. You control the fate of the largest contiguous block of forest east of the Mississippi and north to the St. Lawrence Seaway. New Brunswick and southern Quebec are much more developed. So for the sake of all living things in this corner of North America, please work toward keeping it that way.

Thank you  
  
Jennifer Riefler  
38 Verona Park Road  
Verona Island, ME 04416

5.1.15

Land Use Planning Commission  
18 Elkins Ln., 22 State House Station  
Augusta, ME 04333

1/8/19

LUPC Commissioners and staff, thank you for listening and responding to our concerns by studying the class 7 lakes and scaling back the primary commercial and residential development areas to within 1 mile from public roads and 7 miles from rural hubs.

Primary areas would need to meet both criteria, within 7 and 1 mile, not or; however, this is not clear on your revised map, and I see some primary areas along public roads that are well over 7 miles from the nearest rural hub: in Osborn, for example, along Moose Hill on Route 179 and along the Katahdin (Whaleback) esker south of Route 9. The southwest corner of Osborn is barely 7 miles from Ellsworth's remote northeast corner on the opposite side of Graham Lake. To zone the entire township's public roads as primary is a long reach from Osborn's hub service area, and encourages strip development in two very inappropriate (steep, wet, heavily traveled) areas.

The problem is that your proposed new system is based on measuring from the *boundary* of each designated rural hub, rather than using its established service center as a benchmark. In most hubs, services are concentrated in one small corner of the town's total acreage, which in Ellsworth covers a large area. Locating primary and secondary areas by distance from a hub's political boundaries, rather than by adjacency to existing service areas and current uses and intensity, is large-scale leapfrogging that encourages commercial and residential sprawl, the very thing you're trying to avoid. This is alarmingly obvious between Sherman and Springfield.

Looking downeast at the coastal hub towns of Gouldsboro, Milbridge, and Jonesport: If you measured from these towns' actual downtown/service areas, instead of their political boundaries, it would rule out several other primary development areas on your map that don't make geographic or practical sense, such as around Tunk Lake in T7 and T10, between Schoodic Lake and the Great Heath in T18, and in Centerville's swampy southwest corner.

Please use adjacency, not peripheral distance, and use DOT and other maps to define and measure from established downtown/service areas; otherwise, use the township's geographic center as a benchmark, or reduce the distance from 7 to 5 miles from hubs.

Also you are still measuring not by public road, but as the crow flies, assuming roads will be built to primary and secondary areas. This, plus allowing large-lot subdivisions, previously banned by the legislature, will lead to large-scale fragmentation of Maine's natural landscape.

Meanwhile, do you realize what your new plan will do to the hub and neighboring towns? It expects them to extend emergency and fire response and other support while siphoning from their tax base, businesses, and civic lifeblood. It would kill the neighboring communities.

The proposal relies on Maine's lake management classification system, based on density. On smaller ponds the class 5 designation is quickly reached with just a few seasonal camps on grandfathered lots. Many class 5 ponds are already at carrying capacity, with minimal public

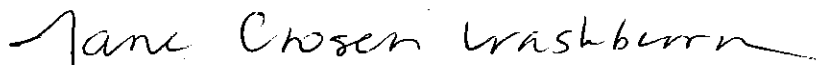
access, all desirable shorefront built out, and what's left undevelopable or marginal. The new plan would allow new subdivisions around class 5 ponds. While it calls for flex and cluster design to protect water quality and wildlife habitat, I'm concerned it will tip the balance, taking away the semi-remote character of some class 5 and nearby class 4 lakes and ponds with development of larger seasonal and year-round homes.

I appreciate the complexity of your work amid shifting land ownership and economics, and understand why you want a more comprehensive screening system to help streamline planning and permitting. What troubles me is not what I read in your plan, which for the most part seems carefully written and thought out. I am worried about loopholes and unforeseen or unintended consequences, especially in the new district allowing natural resource-based commercial and industrial development (shown in the map's white areas).

Recreational rentals and food trucks sound benign, but commercializing the North Woods is not what real outdoorspeople want and competes with Maine's heritage sporting camps. Processing of renewable materials, such as wood products, is traditional, environmentally sustainable, and helps local economies. Extraction of non-renewable resources like gravel, water, metallic minerals, and (God forbid) fossil fuels is definitely *not sustainable*, and could permanently damage entire watersheds and landscapes we treasure for recreation and wildlife habitat. Extractive industries threaten to spoil not just our landscape but Maine's brand and tourist economy with the money going elsewhere. We like to assume current landowners will remain good stewards like their predecessors, but we have no way of knowing what investors or multinational corporations will acquire and manage these lands in the future, or what global economics, trade deals, and shortages will demand of Maine's natural resources. If you must go forward with the proposal and this new natural-resource-dependent district, please make these zoning rules as strict as possible; use utmost care in scrutinizing proposed development in these areas; and if there's any doubt, just say no. Maine's natural resources are essential to our way of life; we count on you and future commissions to protect them from commercial extraction.

This raises the question of staffing, environmental review, and enforcement. Adding all these new zones and new types of adjacency adds layers of complexity to what has been a simple, straightforward adjacency principle. How would development under the new system be administered, documented, monitored, and enforced?

The current adjacency policy has served well for a long time to assure slow, sensible development and prevent fragmentation of Maine's undeveloped wild places and working forests. I support keeping it. Your new proposal, however well intended, is complex, based on criteria that seem to be at odds with each other and regional landscapes, open to interpretation and difficult to understand. Most people have no idea how to interpret your map or how much commercial, residential, and industrial development could happen in the white areas. Please postpone your vote until you have worked out benchmark criteria based on adjacency, not peripheral distances, and carefully examined the proposed new system for any implications, conflicts, loopholes, or vulnerabilities you may not have thought of.



Jane Croser Washburn, Penobscot  
326-4850, jcrosermaps@gmail.com

S.F. 1

**To:** NRCM  
**Subject:** FW: Opposition to LUPC Adjacency Rollback  
**Importance:** High

Attn.:  
Cathy Johnson, Forests and Wildlife Project Director  
Carly Peruccio, Forests and Wildlife Outreach Coordinator

FYI, we sent this email today to LUPC.

Jane Whitney & Richard Hero

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**From:** Jane Whitney [mailto:janewhitney@midmaine.com]  
**Sent:** Sunday, August 12, 2018 3:33 PM  
**To:** 'Benjamin.Godsoe@maine.gov'  
**Subject:** Opposition to LUPC Adjacency Rollback

Mr. Godsoe and other members of LUPC:

As year-round residents and landowners in Brooklin ME and in Ebeemee TWP, we are dismayed by the very confusing and seemingly arbitrary proposal to roll back the "one-mile rule" currently protecting the Maine North Woods from sprawling development.

1 - This proposal goes against every guiding principle of responsible development. ***What mandate drives LUPC to think this is appropriate?***

2 – The proposal ignores the jeopardy of fragmented development adjacent to our pristine lakes and waterways, which are a huge attraction not only to Maine’s wildlife, but also to the tourists so important to Maine’s economy. ***What is LUPC’s financial impetus for the State of Maine to undertake this proposal?***

3 – The proposal provides a roadmap for potentially abusive development in areas of our state adjacent to conserved land. ***Where is the manpower to oversee these developers?***

4 - The proposal is too complex to be foisted on Maine property owners without months—if not years—of a multitude of public meetings and hearings throughout Maine. The less-populated northern half of Maine, and its Unorganized Territories, must not be the sole audience for LUPC's presentation of this proposal. The northern half of Maine is virtually defenseless. The repercussions of this proposal will damage the entire state. ***Does LUPC have the authority to forever change the Maine Woods & Waters that are such a significant part of Maine’s history and its future?***

**We urge LUPC to continue with the one-mile policy.**

Jane Whitney & Richard Hero  
PO Box 294  
Brooklin, ME 04616

**Godsoe, Benjamin**

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**From:** Kathy Letsch <kaletsch1949@gmail.com>  
**Sent:** Thursday, January 10, 2019 6:54 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Adjacency participation

DEPARTMENT OF AGRICULTURE, CONSERVATION AND  
FORESTRY MAINE LAND USE PLANNING COMMISSION

CHAPTER 10, *LAND USE DISTRICTS AND STANDARDS* **Proposed Rule Revisions:  
Revised Application of the**

**Adjacency Principle & Subdivision Standards**

*Date: December 12, 2018*

These proposed rule revisions will weaken the one big advantage Maine has as an east coast state and that is of a truly broad wild wilderness area. When development is allowed in an undeveloped area, roads, bridges culverts and other services will need to be extended at a cost to the local municipality. Even when the developer absorbs the initial cost, the future costs always fall to the municipality. Speculative development is not and it is not easily reversible. The current safe guards are prudent and should be maintained.

I oppose any change to the adjacent provision of the land use standards.

Respectfully,

Kathy A. Letsch  
396 Stevenstown Road,  
Litchfield, Maine



## Godsoe, Benjamin

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**From:** Lucy Heft <lucy.heft@yahoo.com>  
**Sent:** Thursday, January 10, 2019 7:23 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Say NO to the elimination of the one mile rule

Mr. Godsoe, I am a long time Mainer having a farm in Aroostook county where I could See our Crown of Maine shining in the distance. I now live in Brooks Maine.

One of the reasons I live in Maine is for its lack of people in the North Woods . A place where we can gaze at and visit from time to time. My friend and I take our yearly trip up to Dole Pond and revel in the fact that we see no other human beings for the time we are there. A place , like it should be, quiet and unspoiled. Yes we see logging but we don't see strip malls, which to me are a scourge upon the land to begin with, gas stations where there are 20 different coffees to choose from and a Dunkin Donut counter selling fat food that contributes to this nations obesity.

Towns like Millinocket and Houlton, and all the little towns in between, they need the help with in the one mile range. Give some of these old mill towns a chance don't take it away from them. Don't rape the land and cause sprawl. Do something GOOD for our earth and our state that we love for its endless land and peace and quiet. We don't need housing developments around our lakes and all the other building that comes with it. We don't need out of staters coming here either and bringing their laws with them. If you push for this , our state will NEVER be the same again. Give the towns a chance to survive by keeping the business in the one mile rule.

Do this for our EARTH if not for her people. PLEASE say no to the elimination of the one mile rule.Be known for someone who cherishes the land not destroys it.

Sincerely,

Lucy Maiolini Heft

DATE: January 10, 2019

TO: Everett Worcester, Chair, Land Use Planning Commission (LUPC)

CC: Nick Livesay, Executive Director, LUPC

FROM: Luke Muzzy

RE: Comments in favor of the proposed adjacency principle

Good Afternoon and thank for the opportunity to comment on this proposal.

My name is Luke Muzzy and I am the land asset manager for Weyerhaeuser. I am also a life long resident of Greenville and I have been very involved in rural economic development for the past 35 years. I have served on local, regional and statewide organizations that deal with this issue and I am very passionate about it to the point that it keeps me up at night worrying about it. Today I would like to speak with you with my economic development hat on.

The rural communities that border the Unorganized Territory play a very important role in our State's economy and heritage. They are the gateway to over 10 million acres of forest land where people from all over go to work, recreate and for a few, to live. These communities act as service centers to this vast area and offer essential services such as health care, education, shopping and the like.

Yet these communities are unique because they almost function like islands only in their case they are surrounded by trees instead of water. Most of this land is situated in the Unorganized Territory and for almost 50 years has been either zoned for timber management or for protection and very little has changed.

However, during this same time period there have been a lot of changes in these communities, many of them negative. They have lost population. They have seen hospitals and schools close. Some towns have even closed their doors and deorganized.

These communities are struggling and they want to turn this around. They want to embrace the changing rural economy. They want to attract families to relocate there and to become part of their community and workforce. The bottom line is that they want to survive. For this to happen these communities need to have a chance to grow and that means creating opportunities in their region, not just within their town borders.

Because they are similar to islands they have unique planning challenges. Take Jackman for example. Jackman is located in northern Somerset County and consists of approx. 820 people. It has a school, a health center, an economy based on forest products and recreation, a major lumber mill, and much more. Other than the town of Moose River, population 210, it is surrounded by unorganized territory. The next nearest towns are over 50 miles away.

As this community and others like it that border the Unorganized Territory embrace the changing economy, they need to know that they are not constrained by their town borders. For instance, what if a resource-based business wanted to locate in Jackman but couldn't find a suitable site to build upon. However, just up the State Highway in the unorganized township of Dennistown they could. The jobs created from this business would benefit Jackman in so many ways even though the actual facility was not located within the town borders.

For reasons like this I believe there's got to be a better way to address future needs than what we have now and I am grateful that the Land

Use Planning Commission has taken the time, nearly 4 years, to address it.

In summary, I strongly believe that the proposed revisions to the Adjacency Principle will greatly benefit the long term outlook for these communities. It will improve predictability and allow for meaningful planning to occur. It could be the difference maker for their future.

Thank you very much for the opportunity to speak.

5.F.17

*Lynne Williams, Esq.*

*13 Albert Meadow, Bar Harbor, Maine 04609  
(207)266-6327, LWilliamsLaw@earthlink.net  
Maine Bar No. 9267*

January 11, 2018

To: Commissioners of the Land Use Planning Commission  
RE: Adjacency Proposal

I, Lynne Williams, live and work, as an attorney, on Mount Desert Island. I was heavily involved, for a lengthy period of time, with what was then called LURC, in their consideration of the Plum Creek Master Plan, during which time I represented some environmental groups. I am also the former chair of the Bar Harbor Planning Board, and the current Vice-Chair of the Harbor Committee. I am here testifying as an individual, not as a representative of any group.

I have reviewed the proposed Adjacency Rule changes, and have some significant issues with them. As an overall comment, I find them extremely complicated and, as an attorney, know from experience that complications lead to a lack of clarity, which very often leads to unfair and arbitrary decision-making. Zoning must be clear and consistent, as opposed to tantamount to spot zoning.

In my brief comments, I would like to focus on the failure of LUPC to engage in Regional Planning activities in conjunction with county planning boards and, in particular, with the planning boards of those municipalities that border on Unorganized Territories. If towns designated as "Rural Hubs," towns like Ellsworth and Gouldsboro in my county, are to be used as justification for commercial and residential development, they deserve to be included in planning that impacts such development. And, in addition to being justifications for arbitrary and unwise development, "Rural Hubs" would attract commercial and residential development along designated scenic byways, such as the Schoodic Scenic Byway, which runs through Primary Locations, as they are called in the proposed rules. Allowing development of that undeveloped road would not only cause blight, but would also allow commercial development that would compete with businesses in the "Rural Hub" of Gouldsboro. Yet LUPC has made no effort to work together with such potentially impacted towns when drafting the rules changes being considered here today.

Because of this, and other reasons that others here today have discussed, I oppose the proposed Adjacency Rules changes and ask that the Rules remain as they are until such time that LUPC works with the planning boards of the impacted counties and municipalities to draft more appropriate Rules changes.

Sincerely,  
/s/Lynne Williams, Esq.

cc: Commissioners, Hancock County Commission  
Rep. Billy Bob Faulkingham  
Rep. Nicole Grohoski  
Sen. Louis Lucchini  
Sen. Marianne Moore

## Godsoe, Benjamin

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**From:** Mark Albert <albertmark61@yahoo.com>  
**Sent:** Thursday, January 10, 2019 9:04 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Proposed development rules

**Please do not allow more development in unorganized territory ,This will only allow more development sprawl in Maine's woods and could infringe more wildlife habitat then what is already going on!Stop changing Maine's rule to accommodate out of state interests!**

**Testimony to the LUPC on behalf of the New England Forestry Foundation**  
**January 10, 2019**

These comments are submitted in behalf of the New England Forestry Foundation (NEFF) a nationwide land trust holding over a million acres of conservation easements in Maine, as well as a practitioner of and advocate for good forestry.

These comments focus on the big picture and topics perhaps not covered by others rather than the many details involved in the current proposal as important as they may be.

You may recall that New England Forestry Foundation submitted comments at your earlier hearing. This testimony covered a number of points including:

- NEFF's appreciation for your work on behalf of the citizens in Maine;
- celebrating the Commission's success in land-use planning for this region – one of the most noteworthy in the entire nation;
- Maine's forests remain a strong hold for the forest products industry in the Northeast in part because of the large parcel sizes and limited development in the unorganized territory. We further noted that the forest products industry reports that it contributes \$8.5 billion and 33,000 jobs to Maine's economy;
- the wildlands of Maine have **extraordinary ecological** as well as economic significance; and
- the existence of the wildlands define Maine as a special place and contribute to its brand recognized worldwide.

The big picture problems that we identified with the rules proposed at that time were:

- An inadequate analysis of the impacts of the development and fragmentation that would be allowed by the proposed changes;
- Creation of incentives for strip style development outside rural hubs undermining their viability; and
- The likelihood that additional development would create opposition to local forest management and traditional Maine activities.

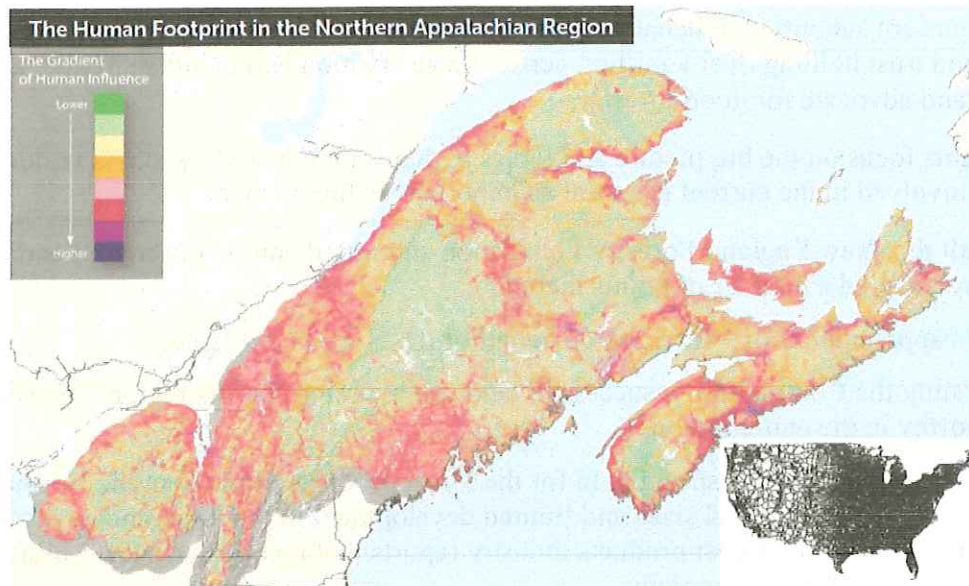
We concluded by stating that the changes proposed to the rules would almost certainly have adverse effects on the values of Maine's Wildlands. We also noted that, in our view, it is critical to the future of Maine's economy, nationally significant forest ecological values, and the livelihood of residents in and near the UT that revisions to the LUPC rules help maintain forest cover, reduce fragmentation, and support continued Forest sector jobs.

The changes made to the proposal since your last hearing have not changed our views in these regards.

Since providing that testimony a new report on the importance of avoiding fragmentation of intact forests has been developed. It is entitled "The Environmental Consequences of Forest Fragmentation in the Western Maine Mountains." I am providing a summary of the key points in that report as part

of this testimony. The full text can be found at the website maintained by the Maine Mountain Collaborative. It states in part:

- The western Maine mountains lie at the heart of the most intact and least fragmented landscape remaining in the eastern United States;

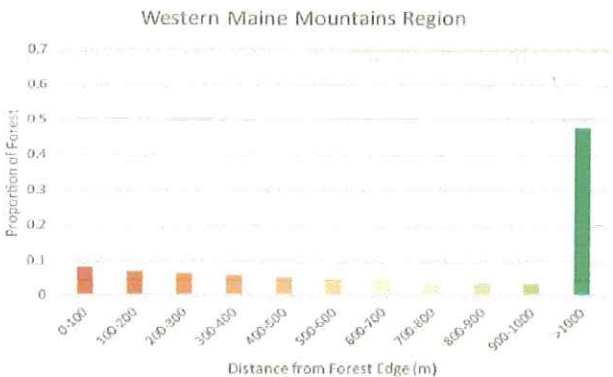
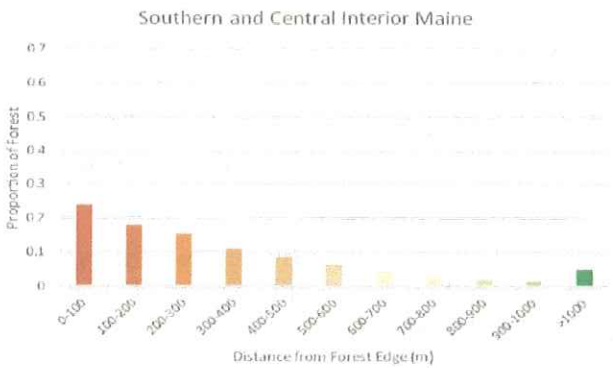


**Figure 7.** The Human Footprint map of the ecoregion and the map of the U.S. highway system (inset), viewed together, show that the Western Maine Mountains and Maine's North Woods are much less fragmented than any other area in the eastern half of the country. Human Footprint data from Two Countries One Forest, map courtesy of The Nature Conservancy, Maine.

*Source: McMahon (2018).*

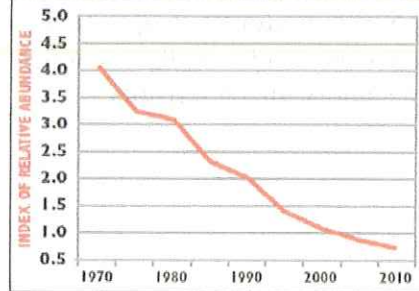
- biodiversity resilience and conductivity in Maine western mountain region are unparalleled in the broader region;
- “The extraordinary ecological values of Western Maine’s mountain region are under threat”;
- “Research in Maine, the northeast and around the world demonstrate unequivocally that fragmentation – whether permanent or temporary – degrades native terrestrial and aquatic ecosystems, biodiversity and regional conductivity”
- The report cites the following negative effects of fragmentation:
  - increased mortality and habitat destruction from construction;
  - increased mortality and other direct impacts after construction;
  - changes in species composition and reduced habitat quality (see Figures 8b and 19 below);
  - changes in species composition and behavior with decreasing habitat patch size;
  - changes in the hydrology and reduced aquatic conductivity;
  - introduction and spread of exotic species;
  - changes in the chemical environment; and
  - loss of scenic qualities and remoteness.





**Figure 8a.** Comparative percentage of distance to edge in southern and central interior Maine and in the Western Maine Mountains region determined based on data reflected in Figure 8b, following page. Analysis courtesy of The Nature Conservancy, Maine.

Source: McMahon (2018).



**Figure 19.** Species require mature coniferous or mixed forest habitat, such as the Canada warbler, are decreasing due in part to loss of summer breeding habitat. Graphic courtesy of Maine Audubon

The report concludes that “it is **essential to avoid introduction of new fragmenting features**” to this landscape and that it is “critically important to find ways to support landowners who seek to maintain large intact forest blocks and support them in managing forests for connectivity and structural complexity” it goes on to say that “unless proactive steps are taken **fragmentation has the potential to forever altar and degrade a region with unique ecological values** on the continent and a region that in many ways defines Maine.” The report specifically identifies “the Land Use Planning Commission’s proposed changes to the adjacency rule which would allow new commercial and residential development to stretch for miles along currently undeveloped roads” as one of the policies that would lead to forest fragmentation.

This confirms our belief that it is extremely ill advised to open up approximately 1,300,000 acres, as well as an unknown number of lakes and trailheads, to additional development without ensuring that such development is an orderly expansion of existing patterns by applying the adjacency test.

Without conducting a comprehensive analysis of where such issues may exist, a couple of examples come to mind:

- Elliotsville Plantation—despite the fact that to get to this area from Greenville one has to go south to Monson and then East, it is designated as qualifying for development without considering “adjacency” because it qualifies by distance from Greenville as the crow flies.
- Perham Stream area west of Mount Abraham near Sugarloaf—essentially the same issue in a different location.

While these examples are obvious to those of us who know these particular areas; others are not, and remedying a few problems with a flawed proposal is not sufficient in our view. Instead the prudent path forward is to **undertake community-led planning efforts** in areas that support hosting additional development.

NEFF agrees with additional flaws in the current proposal as pointed out by others—for example, the comments of the Friends of Baxter State Park on the potential impacts of the proposed changes to the character of the area around Baxter and their emphasis on strengthening rather than weakening the organized towns that lie in and around the unorganized territories.

Thus, NEFF continues to oppose the changes in LUPC rules currently before you as we do not feel they are consistent with the Commission's legislative charge or protect the exceptional values of Maine's unorganized territory.

## Godsoe, Benjamin

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**From:** Nicolette Robson <nc.ocasio5834@gmail.com>  
**Sent:** Thursday, January 10, 2019 5:49 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] North Woods

Mr. Godsoe, I implore you to reconsider the rule revisions proposed for the North Woods. 10.4 millions acres seems like larger number than it is when considering the ranging habits of all the wildlife in the area. Temperate forests are unique and essential ecosystems and as a former resident of California, I have seen first hand what opening an area to development without proactive regional planning and careful dedication.

In less than 2 years the scrub desert I hiked as a child was lined with tract homes, warehouses, and widened roads because regional planning was considered too costly. The endangered desert tortoises I counted for the local wildlife conservation group disappeared almost overnight, in spite of assurances they would not be impacted.

Humans bring with them not only housing and vehicles, but pets. Domestic cats account for a significant amount of damage to bird populations across the world, and putting them too close to a place known as a bird haven could bring devastating effects.

I recognize that there is never an easy solution, but I hope that together with the public an agreeable one can be found.

Thank you for your time.

N. Robson  
Hallowell, ME

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**Testimony of Nancy Smith, Executive Director of GrowSmart Maine**

**Regarding proposed changes to LUPC rules of adjacency and subdivision**

January 10, 2019

Good afternoon Commissioners of Maine's Land Use Planning Commission,

My name is Nancy Smith and I am the Executive Director of GrowSmart Maine. We are a statewide non-partisan, non-profit organization working to create lasting prosperity without sacrificing the quality of life that defines Maine. I bring to this issue my experience as a forester, a farmer, a legislator and now as an advocate for the mission of this organization.

GrowSmart Maine has engaged with staff and other stakeholders throughout this process. Our intention is to advocate for rural economic growth and the viability of communities adjoining the unorganized territories (UT). Conservation, wildlife, environmental issues are equally important, and in my experience they are addressed by others with greater capacity and relevant expertise.

Sprawl, unmanaged development outside of already settled areas, damages both built and natural environments, and risks diverting from nearby towns much-needed economic and residential growth while diminishing rural Maine's quality of life for those who live in the area and those who visit. Destination tourism must be included in our view of the rural economy of the UT, along with the forest products sector. Maine needs both for these rural areas to thrive.

We support the stated purpose of defining land use districts on page 16 of the proposal. *"Locating most new subdistricts for commercial activities and residential subdivisions close to existing development and public services reduces public costs; improves the economic health of existing communities; protect important habitat; and minimizes interference with natural resource-based activities such as forestry, agriculture, and recreation. In some cases, land uses that must be conducted near a natural resource or are closely tied to a natural resource should be allowed to locate away from development to ensure a continued natural resource-based economy and a reasonable opportunity for residential development in select locations."*

My testimony outlines overall support the direction with a few concerns. I also highlight key issues to be addressed in the Basis Statement and an issue outside of the jurisdiction of the LUPC in which we will continue to engage.

**GROWSMART MAINE SUPPORTS:**

Many of the changes proposed effectively support the stated purpose of this proposal and we support them:

- Defining adjacency based on proximity to communities rather than to similar development: This will pull development towards towns eager for it and away from unique natural areas.

- Requiring provisions for emergency services and legally enforceable access: These provisions acknowledge realistic expectations of the developer but more importantly, of the first and future property owners.
- Updating rules to accommodate agricultural and forestry based economic opportunities: This can be done to foster economic activity while still protecting the unique landscape from sprawl.
- The public engagement process of LUPC staff has been very strong: They engaged in meaningful discussion with stakeholders and responded to issues raised by adapting rules to additional information and further explanation of their reasoning
  - They engaged in a new level of outreach with municipalities, through Maine Municipal Association (MMA). Though the natural inclination would be for LUPC staff to focus only on the UT and for municipal staff to focus only on organized towns, this is not the most effective way to plan for the region. Both parties seem enthusiastic to build on recent interactions and GrowSmart is willing to support this engagement in any way that would be helpful.
  - We encourage one component of this new coordination of effort; for LUPC staff to attend regional planning meetings and regularly engage with municipalities within the region.
  - MMA has offered to provide LUPC with time at their annual convention as well as to facilitate an online presence where rural hub communities can access information such as contract templates for agreements to provide ambulance service. LUPC should fully engage with MMA in these efforts.

#### GROWSMART MAINE HAS CONCERNS:

There are components of this proposal that raise concern and should be addressed.

- Primary locations definition at 7 miles out may still impede growth within these rural hub communities and create sprawl. As explained by staff, they believe this is the most workable as a 5-mile distance results in much adding in of areas already developed. I'd suggest this method reflects current growth patterns rather than the intended purpose of the rule. We support narrowing this distance during the initial five-year period so impact can be measured and addressed without requiring a rollback of rules, but rather could allow for an expansion this distance if this is an issue.
- Secondary locations at a 5 mile distance may be excessive. Allowing development 5 miles from a public road in towns, townships, or plantations that share a border with certain towns opens a great deal of area for development far from the towns seeking this growth. The "2-in-5" rule is still in play and may be enough to accommodate the proposals that seek these locations. We recommend putting a hold on these secondary areas for the first five years, pending the scheduled review.
- The emergency services requirement defined on p 9 includes a waiver for certain areas in proximity to existing development, including Class 3 lakes. The intent of this requirement is legitimate, even in these areas with existing development, and the waiver should be eliminated.
- LUPC staff should ensure that towns have resources to negotiate an emergency services agreement that accurately reflect the true costs to the town. We've been part of discussions outlining potential for working with MMA to provide templates and guidance to these communities. LUPC should continue to work with MMA to provide best practices.
- Scenic byways have been designated because of their unique value for destination tourism and quality of life for nearby residents. These roads are valuable in their current state to communities in these areas and are a vital component of destination tourism plans being implemented by Maine Woods Consortium. We are not recommending a ban on development along these roads, but rather that the Commission prioritize efforts to prevent development that would diminish their esthetic and economic value. LUPC staff say that each scenic byway is unique and that local leaders place varying degrees of value on them. They recommend development of design standards as a solution, as was done along the Bold Coast in Aroostook County. This is an acceptable solution if done in a timely manner and are initiated through regional planning initiatives such as work underway by regional planning commissions, Katahdin Gazetteer, and the Maine Woods Consortium.

- Recreation Supply Facilities and Day Use Facilities: Some accommodation for uses that truly must be near the resource is a valid goal. They too would be allowed within “2 in 5 rule.” We still have concerns that these ventures may work against related businesses in the rural hub communities.

#### SPECIFICS TO BE HIGHLIGHTED IN THE BASIS STATEMENT

Our conversations with staff have been respectful, productive, and responsive. Samantha Horn should be commended for setting this tone and devoting department resources to this outreach. It is important to capture within the Basis Statement much of the sentiment and intention expressed during these meetings.

- Purpose and process for review in five years or sooner the trigger of five re-zonings in any one county is met and that the review would be for the entire UT, not just for the impacted county. Be clear in the process, purpose and intended outcome of the review. When a review is triggered notice should be given, and rezoning requests should be suspended while rules are reviewed.
- The unique nature of scenic byways should be noted. While we do not call for a ban on development in proximity to these assets, consideration for their unique value must be prioritized. The basis statement should outline a plan and a timeline for establishment of design standards for scenic byways, incorporating into ongoing regional planning effects where possible.
- Outline the process for tracking of data to ensure re-zonings are being tracked and this information is publicly and readily available. Interested parties likely include the public, Legislators and county commissioners with UT in their borders and the Legislative Committee with oversight over the LUPC.

#### PROPERTY TAX / SERVICES DISPARITY MUST BE ADDRESSED OUTSIDE OF LUPC

- Though outside of LUPC jurisdiction, the significant property tax mil rate differential between municipalities and surrounding UT creates a significant disincentive for development within these towns yet reflects the true costs of providing valued municipal services. This mirrors the challenges of the larger service centers less rural parts of Maine for the same reason; municipalities are providing services for those living beyond the town boundaries with only property taxes to fund them. GrowSmart Maine is committed to working with others to address this issue.

January 10, 2019  
Re: Land Use Planning Commission  
Adjacency Principle

My name is Patsy Shankle and I moved to Maine from Ohio in 1996 (nearly 23yrs ago). I decided to move here after visiting and seeing the natural beauty of the state. Its beauty is a direct result of its careful management of its forests & waters. Tourism in addition to farming, forestry, and fishing is what drives Maine's economy. Unfortunately, changing the Adjacency Rules has the potential of destroying the very Maine resources that make Maine attractive to visitors and its residents. The original rules have worked well for more than 40 years. The new rules are confusing and overly complex to understand how they will be implemented in the real world. The wording and maps seem very unclear as to what this will really mean for Maine in years to come.

As I noted, I came to Maine from Ohio and I have seen the results of sprawl and it is not a good thing. Sprawl strips towns of any local identity or cohesiveness. Taxes continually increased to accommodate the services and infrastructure these developments required. Beyond the economic/financial impact to local areas, the natural environment and beauty were completely lost.

Assuring Maine's water and forest resources are protected should be the number one priority for all Mainers. LUPC's stated objectives are to support our natural resource-based economy and environment. However, the sprawl that would occur with these new rules contradict that objective. The rules would allow for stripping local areas of their water or other natural resources that are the very life blood of our tourism. Another LUPC objective is to encourage the healthy development centers and regional economic viability. Allowing more sprawl will cost local residents more in taxes to provide town services to these distant developments whether commercial or residential. There is a likelihood that these developments will bring any positive outcomes to local areas is highly suspect.

I fear that most Mainers are not aware of these changes and if they are aware do not fully understand the potential impact of these new rules. The LUPC seems intent on rushing the rule changes through quickly and I cannot fathom why it is being pushed through without more clarification that would assure all Mainers are fully informed on the potential consequences.

I therefore implore the LUPC to maintain the One-Mile Rule. Even if changes are to be adopted, it is critical for the final drafts to be clear and able to be easily integrated for all Mainers. These rule changes have the potential to change the very character of this area and all of Maine. This is therefore nothing to be unduly rushed.

Respectfully submitted,  
Patsy Shankle  
Surry, Maine



Maine Municipal  
Association

60 COMMUNITY DRIVE  
AUGUSTA, MAINE 04330-9486  
(207) 623-8428  
www.memun.org

5. F. 5

To: Members of the Land Use Planning Commission (LUPC)

Fr: Rebecca Graham, Maine Municipal Association

Re: Proposed Amendments to the Land Use Planning Commissions proposed changes to the application of the adjacency principle and subdivision standards.

Date: January 10, 2019

Please accept the following as the comments of the Maine Municipal Association with respect to the proposed changes to the Land Use Planning Commission's (LUPC) proposed changes to the application of the adjacent principle and subdivision standards.

The Maine Municipal Association (MMA) is a non-partisan, non-profit, member driven organization providing an array of services such as legal, advocacy, insurance, communications, and training, to Maine's 490 municipalities.

While the LUPC generally works with the deorganized communities, such decisions do not function in a vacuum or without impacts on adjacent towns and cities. Land use planning in deorganized regions can have an enormous effect on the surrounded organized communities who struggle to provide services like public safety with in their existing tax base and could bear increased burdens associated with development adjacent to their communities. Additionally, development may also provide expanded opportunity to increase student enrollment and local economic activity.

Over the past few months, Maine Municipal Association has worked closely with Samantha Horn and Benjamin Godsoe to connect with municipalities where these proposed changes may have such impacts. Along with sharing announcements, attending meetings with municipal officials, and issuing surveys to community members, we worked hard to resolve misconceptions regarding the changes to adjacency and adequately address the municipal concerns expressed. This type of collaboration is not only beneficial to the work of the LUPC, but to the municipalities who serve as service centers in areas around LUPC activity.

Samantha and Ben worked diligently to find ways to distill complex planning concepts into easy to understand concepts that allowed municipal officials to respond to the proposed changes in an informed way. They held multiple meetings with rural hub communities to communicate the proposals and provide answers to questions directly to stakeholders. This is the type of effort Maine Municipal Association members and municipalities would like to see continue in the future.

Maine Municipal Association has no comments with regard to the proposed changes. Through these direct municipal communication efforts, we believe that LUPC staff adequately heard the concerns of our membership and have incorporated these concerns in their recommendations to the commission.



5.F.21

January 10, 2019

**TO:** Everett Worcester, Chair, Land Use Planning Commission  
**CC:** Nick Livesay, Executive Director, Land Use Planning Commission  
**FROM:** Sarah Medina, Seven Islands Land Company  
**RE:** Comments in general support of the proposed adjacency rule and subdivision revisions

Thank you for your thoughtfulness and resolve in dealing with this very important review of the adjacency principle in particular, and the subdivision standards as well. LUPC is, after all, the zoning and planning board for over half the entire state of Maine.

It is appropriate to channel most development to the fringes of the jurisdiction where public services are more available, and where moderate development is essential to the economies of rural areas. Allowing development does not mean development will occur. It simply means choices.

Development trends over the past 40 years, in fact, show most of this area will never be developed. In many areas, the land will not be suitable for development, in some it has a higher use (zoned deer wintering area), in some a conservation easement precludes development, in others the landowner has no intent to develop.

Rezoning would still be required before a subdivision permit could be granted - no simple task – and there are many safeguards and standards in place.

Demand for services on local and county government can be mitigated by subdivision conditions and deed covenants. Deeds, for example, can and have been structured to inform lot owners that public services (ambulance, fire, police) are limited, and access road conditions may vary.

When this process began four years ago, landowners were anxious for the adjacency principle to be refined in order to

- Increase areas where subdivisions are an allowable use
- Deem that, in these areas, adjacency is met
- Create flexibility to design types and size of lots to meet market demand and landowner objectives and
- Have LUPC function similarly to rural Maine municipalities' planning boards.

We did not anticipate, however, that the 1 mile rule would be scrapped entirely without creating some mechanism for subdivision in the interior.

The Pingree family specifically reserved areas that were most appropriate for future development, and met the adjacency principle, from their ¾ million acre+ conservation easement in 2001. Now, without adjacency, those reserved areas lose value and potential, whether for actual development or further conservation easements. Other large landowners, who have land in the “interior” but not in the orange areas have similar circumstances. There ought to be some mechanism for consideration of a subdivision in the 9+ million acres that are not in “the orange.”

We have great concern about the significant broadening of the scope and standards for scenic values. The vantage points from which scenic resources are deemed important

to protect is seemingly all inclusive – from roads, trails, waterbodies, public property etc. – and viewshed distance is unlimited/ unspecified.

We are also concerned about creating expectations around trails. Our landowners now have essentially a “no trails” policy, because of bad experience with the once voluntary Appalachian Trail corridor to the now federally and state regulated corridor that has shadow effects on a 16 mile swath. Prohibiting trails is a shame because hiking is a natural fit in a forest. Snowmobilers make no demands on us, so winter trails are “safe” for now.

We also have specific concerns about some of the subdivision language, for example making the D-RD more useful for in-woods processing, dictating road standards for private logging roads servicing D-RDs, and allowing timber harvesting and road construction by standards rather than a permit in a D-LD or D-RD. We will follow-up with written comments.

We are grateful for the commission’s willingness to work with all stakeholders, and to make this a very deliberate thoughtful process. As of now, the potential loss to our landowners outweighs the gains (due to dropping the 1 mile rule of thumb altogether.) but we are supportive of the process and much of the progress. We look forward to finishing the work, and to the opportunities the new rules will create for rural economies, including communities where our employees live and recreate..

**Testimony For LUPC Hearing on Adjacency**  
**January 10, 2019, Brewer Maine**  
**D. Gordon Mott, Forester**

My name is D. Gordon Mott. I live in the Town of Lakeville in Eastern Penobscot County, an organized Town within LUPC jurisdiction. Together with my wife we own 325 acres of land containing 53 acres of old-growth timber registered with Maine Natural Areas, 270 acres of working forest and some building lot potentials. All of the land lies within the proposed expanded Development Area. I have 37 years in private forestry, forest policy and land management practice here in Maine, much of it for landowners in the Unorganized Territory. I agree that a good alternative to the one-mile adjacency rule for development is desirable. The one-mile rule inhibits development where it would be rational to take place and in the cases where I manage, it encourages some development to take place where it is undesirable.

I find some positive aspects in the principles of the proposal and commend the staff for the thoughtful, thorough way in which the proposal has been developed. **In the end I find that I cannot support the proposal and speak to urge the Commission to refrain from going forward with this form of the proposal.** Instead, I urge consideration be given to revise the proposal to shift it from a blunt broad-brush approach with strict inflexible dimensional characteristics to a proposal that incorporates the highly desirable principles that are articulated and adopted in the Comprehensive Land Use Plan or CLUP.

There is sufficiently diverse language in the “Guidance for Interpreting the 2010 Comprehensive Land Use Plan” that it’s clear a case can be made for almost any particular narrow point of view. But I find the following language to be particularly encompassing and broadly appropriate: *“The Legislature declares it to be in the public interest, for the public benefit, for the good order of the people of this State and for the benefit of the property owners and residents of the unorganized and deorganized townships of the State, to encourage the well-planned and well-managed **multiple use, including conservation**, of land and resources and to encourage and facilitate regional economic viability. The Legislature acknowledges the importance of these areas in the continued vitality of the State and to local economies.”*

I see the problem that the current proposal uniformly designates a very broad development area dedicated to one use without examination within it to set aside the multiple uses in the zone that should be expected from the Land Use Planning Commission.

I find because the considerations and circumstances vary so much and are so unique as the proposal is applied from region to region and place to place in the UT as it mingles with the organized municipalities, lakes, reserved areas and arbitrarily defined retail hubs, that it is not possible for me to offer constructive input that would have generality over the entire proposal. Therefore I offer a few particular conclusions that I find apply in this local region of Eastern Penobscot and adjacent Aroostook and Washington Counties in the hope the thoughts have some value.

I find this Adjacency proposal has the following flaws in this region:

- It is proposed to suddenly expand the areas for development zoning in several local townships to an overwhelming extent without any comprehensive planning by LUPC accompanied by any provision for an opportunity for local voters and property taxpayers to provide thoughtful input for the local planning that would identify where development is desirable and where it should be restrained in the interests of shaping future growth in those. For example: 16% of the area of Lakeville, 65% of Carroll Plantation, 29% of Webster, 81% of Prentiss, 33% of Drew are suddenly defined to be entirely opened to development.
- At the same time, in opposite fashion, development is disabled in about an equivalent extensive adjacent area near Danforth, a 172 year old municipality that started as a plantation and has been a town for 159 years with full local downtown facilities including a funeral parlor and a school that is dependent to remain viable upon a future sustainable student population. Development in the adjacent regions should be enabled. A second school exists in Topsfield where the same local economic and cultural considerations exist. No development is enabled in Kossuth east of Carroll Plantation. That is, development is capriciously disabled in a rural region where the economy needs to be sustained – presumably because particular spatial features are being adopted to define development areas in which definitions are rational in some particular conceptual ways – but which regretfully fail to recognize the way life should be in some of our rural communities. Comprehensive planning is needed as an alternative I submit.
- The third and final overarching concern I would offer is that this broad-brush proposal to define areas for development **fails to even begin to recognize and provide development and non-development standards for all the multiple-use natural resource elements that should be properly defined and managed in the proposed development zones.** The proposed standard that building and visibility on steep terrain should be managed is attractive – it affects several of our most valuable building lots and we endorse it. That standard will be incorporated in the deeded restrictions that will accompany any sale. Well done. As a forester who has seen the North Woods change since 1946, I wish that standard could be applied in forest harvesting on all steep ground and ridges – except in some places where it's nice to get good views if the public is permitted.
- But, **where are appropriate restrictions against development on the prime agricultural soils we will need for future farm economies and future food for expanding populations? Where are appropriate considerations for known deer yards? Where are designations and standards to sustain motorized and non-motorized recreational trails which could be incompatible with development? Where would our local residents want to promote village development and facilities and where not? Should the algebraic map prevail – or thoughtful natural resource and human planning?**

I strongly recommend the following changes be considered to the proposal:

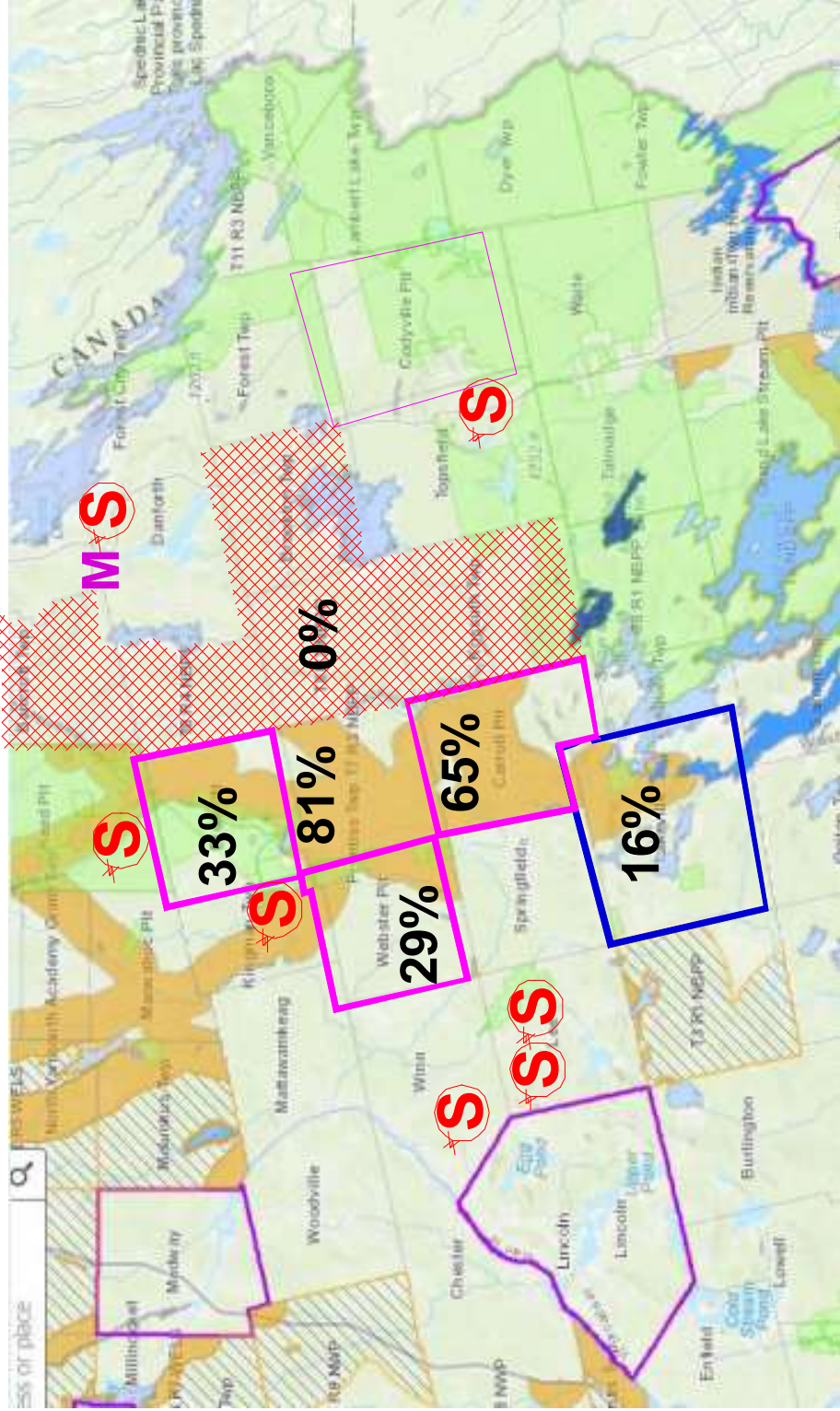
- In the LUPC regions where there are Organized Towns, Plantations and Deorganized former municipalities, consider having LUPC as the organization responsible for planning, perform local comprehensive planning to the standards that are required by statute in Organized Municipalities. There is no reason why the State should do any less than Towns and Cities do.
- Would it be helpful to recognize that there are rights of Home Rule in Towns and Plantations as stated in MRSA Title 30-A § 3001 and The Maine Constitution Article VIII Part Second, which would require approval for these zones from Towns and Plantations? Should the provisions of Title 30-A § 5223 concerning Development Districts be observed where there are organized municipalities? Is it correct that the provisions of Title 12 § 206-A provides LUPC authority only in unorganized and deorganized territory and does not grant universal primary authority to rezone in this way in Towns and Plantations within LUPC? Would it follow to be necessary to refrain from imposing the extended orange development regions in Towns and Plantations and to leave it to the local voters who may have the right to adopt or reject the liberal development proposal – as some surely will?
- Should LUPC go forward region by region to take the initiative to require and implement regional Community Guided Planning & Zoning as formulated now in LUPC standards?
- Or go forward to initiate throughout the UT the excellent comprehensive concept developed in Prospective Planning and Zoning in Rangeley? There is no need to reinvent the wheel – LUPC precedents are working. Blunt broad-brush planning is not needed.

In alternatives more appropriate for local development zoning, Local Municipal Hubs could be designated as fits the local configuration, local people could be participants in producing the kinds of model land-uses that comply with local school taxation and economic considerations, downtowns could be scaled to the nature of local areas rather than to the current commercial hub designations, agricultural interests, local land trusts, desirable development for existing and future neighborhoods, areas for preservation and all the other diverse configurations that are real parts of the Maine experiment can be implemented.

In conclusion, I recognize that LUPC is understaffed and unable to incorporate everywhere the good models for planning that already exist in the work of the agency in some particular places. And that the efforts and time and attention of everybody who is involved in the Commission and management of the UT, this precious part of our Natural Maine, are not compensated properly.

I urge and plead that the Commission and everybody at this hearing who has influence in our agencies and Legislature work to renew the ability and strength of this LUPC agency and sustain our ability to do good work on our watches.

# Local Region Eastern Penobscot and Northern Washington



- Organized LUPC Town
- LUPC Plantation
- S Existing School
- M Local Downtown
- LUPC Area where development is not enabled

## Godsoe, Benjamin

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**From:** John Lesko <jvlesko@gmail.com>  
**Sent:** Friday, January 11, 2019 7:40 AM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Adjacency participation Keep the 1 Mile Principle!

Hello,

**I am in favor of keeping the "adjacency principle" at the current one mile.** I fully understand how critical it is to keep the rural parts of Maine rural! That is, the one mile principle is there to make sure the development is not so market driven that it creates pock marks of development all over what is rural and to make sure development is not driven by only one or a narrow special interest. The current one mile adjacency principle allows for growth and development without destroying what keeps Mainers in Maine and preserves our heritage, i.e., our undeveloped forests.

John V. Lesko  
Parsonsfield, ME

*Lynne Williams, Esq.*

*13 Albert Meadow, Bar Harbor, Maine 04609*

*(207)266-6327, LWilliamsLaw@earthlink.net*

*Maine Bar No. 9267*

January 11, 2018

To: Commissioners of the Land Use Planning Commission  
RE: Adjacency Proposal

I, Lynne Williams, live and work, as an attorney, on Mount Desert Island. I was heavily involved, for a lengthy period of time, with what was then called LURC, in their consideration of the Plum Creek Master Plan, during which time I represented some environmental groups. I am also the former chair of the Bar Harbor Planning Board, and the current Vice-Chair of the Harbor Committee. I am here testifying as an individual, not as a representative of any group.

I have reviewed the proposed Adjacency Rule changes, and have some significant issues with them. As an overall comment, I find them extremely complicated and, as an attorney, know from experience that complications lead to a lack of clarity, which very often leads to unfair and arbitrary decision-making. Zoning must be clear and consistent, as opposed to tantamount to spot zoning.

In my brief comments, I would like to focus on the failure of LUPC to engage in Regional Planning activities in conjunction with county planning boards and, in particular, with the planning boards of those municipalities that border on Unorganized Territories. If towns designated as "Rural Hubs," towns like Ellsworth and Gouldsboro in my county, are to be used as justification for commercial and residential development, they deserve to be included in planning that impacts such development. And, in addition to being justifications for arbitrary and unwise development, "Rural Hubs" would attract commercial and residential development along designated scenic byways, such as the Schoodic Scenic Byway, which runs through Primary Locations, as they are called in the proposed rules. Allowing development of that undeveloped road would not only cause blight, but would also allow commercial development that would compete with businesses in the "Rural Hub" of Gouldsboro. Yet LUPC has made no effort to work together with such potentially impacted towns when drafting the rules changes being considered here today.

Because of this, and other reasons that others here today have discussed, I oppose the proposed Adjacency Rules changes and ask that the Rules remain as they are until such time that LUPC works with the planning boards of the impacted counties and municipalities to draft more appropriate Rules changes.

Sincerely,  
/s/Lynne Williams, Esq.

cc: Commissioners, Hancock County Commission  
Rep. Billy Bob Faulkingham  
Rep. Nicole Grohoski  
Sen. Louis Lucchini  
Sen. Marianne Moore





Maine Wilderness Guides Organization  
126 Western Avenue #155  
Augusta, Maine 04330  
info@mwgo.org  
www.mwgo.org

## Maine Wilderness Guides Organization

### LUPC Adjacency Rules testimony

Jan. 8, 2018

My name is Mac Davis. I live in Albany Township. I am a registered guide and a board member of the Maine Wilderness Guides Organization. The Maine Wilderness Guides Organization is a 100-plus member association of wilderness guides and lodge owners across Maine. Our goal is to ensure the continued protection of the state's wilderness areas and provide training and educational opportunities to our members.

The livelihood of Maine's wilderness guides depends greatly on access to unspoiled and pristine areas of lakes and forest lands. Visitors seeking an authentic outdoors experience have no desire to see development encroaching on the state's wilderness areas.

These proposed changes to the Adjacency Rule would allow both commercial and residential subdivision development on hundreds of thousands of acres of undeveloped forests and hundreds of lakes in primary and secondary development areas, many of which are currently undeveloped. Allowing large-lot subdivisions for "trophy homes" would be particularly harmful because they needlessly spread development all across the forest, destroying wildlife habitat.

*Maine Wilderness Guides Organization*

*Our mission is to provide a unified voice for the profession of wilderness guiding while maintaining ethical, education and environmental standards, and advocating for the conservation of remote woods and waters.*

MWGO is a 501c(6) non-profit membership advocacy organization.



Maine Wilderness Guides Organization  
126 Western Avenue #155  
Augusta, Maine 04330  
info@mwgo.org  
www.mwgo.org

Developmental sprawl as is likely under these new regulations would have a permanent and detrimental effect on the wilderness character of large parts of the state. Expanding development opportunities on Class 3 Lakes, many of which remain undeveloped, as well as on Class 7 lakes, would destroy forever the unique wilderness experience visitors now enjoy as well as threaten fisheries and outstanding lake resources.

We recognize the need for economic development in the state. But it is important to recognize that the outdoor recreation economy of which guides, outfitters, and wilderness lodge owners are a crucial part, depends on beautiful, undeveloped areas. Protecting those areas protects the economy.

Designation of scenic byways as primary development locations would spoil the beauty of some of the state's best preserved natural areas. It would degrade the experience of visitors who come to see beautiful scenery, undeveloped forests, lakes and rivers. Visitors don't come to see commercial and subdivision development sprawl 5 or 7 miles "as the crow flies" outside the boundaries of 41 so-called "rural hubs."

Commercial and residential subdivision development should be located in existing communities or within a mile of already developed areas. These are the areas that can provide essential community services in a cost efficient manner. Designating development areas by measuring from town boundaries makes no sense. Town

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boundary lines on a map have no relationship to where development exists or is appropriate on the ground.

There exist solutions to achieving a balance between the need for carefully regulated development and maintaining a first-class wilderness experience in the state, while also enhancing the economic viability of existing communities. But these rules are not the solution.

Finding those solutions will ensure a wilderness experience is available to both Maine residents and visitors to the state forever. Do not destroy what makes Maine great.

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## Godsoe, Benjamin

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**From:** mail@micstan.us  
**Sent:** Wednesday, January 09, 2019 8:26 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Adjacency Proposal

To the LUPC,

Unfortunately, my husband and I will not be able to attend the rescheduled public hearing this week. Michelle has previously sent some comments but we wanted to once again comment on what we feel is a bad change of rules for the state of Maine.

We totally agree with the points NRCM has brought forth already including these below and the others they have submitted already.

- Areas targeted for development would be expanded to any area within 7 miles as the crow flies from any one of 41 "rural hubs," an arbitrary term LUPC created that has never been used before in the region's planning.
- Lengthy stretches of five designated scenic byways would be impacted by potential development.
- More than 1.3 million acres and 20 percent of the lakes in the North Woods would be opened to residential subdivisions. 824,000 of those acres would be targeted for commercial development.
- Large lot subdivisions referred to as "kingdom lots," which were banned by the Legislature in 2001, would be allowed.

We have a camp in Elliottsville overlooking the Wilson River which is on a county road. This area would all fit within the new 7 mile rule and all the land along the Drew Valley Road. It would also include much of Lake Onowa. Wow! That brings brings development to the 100 mile wilderness of the Appalachian Trail, much of Borestone Mountain and big parts of Lake Onowa. This does not make any sense.

Getting services out in these types of areas is not a quick trip for police or emergency services. The burden would fall on smaller communities like Monson or Willimantic. I'm sure if we looked at all the area within 7 miles of the border of these hub communities we would find many examples of this travesty in sprawl away from the services.

The 1 mile rule along any road would create the same type of problem. We have many county or town roads that go far out from service centers. Do we really want to add developments that will require more services from these communities. I'm sure many of them are already struggling to handle what is needed in their areas.

With sprawl comes the dividing of large lots, encroachment into habitat and more of our forest lands being lost to development. Our lakes are bound to be impacted with development. The wild parts of Maine people love to come and visit would be changed in a negative way. We want tourists to come visit our state, stay in our hotels, cabins or go out in the wilderness with a guide - not necessarily build a new home here.

We hope you will reconsider these rule changes.

Thank you,

Michelle and Stanley Moody  
237 Foreside Road  
Topsham, ME 04086  
207-406-5221



## **Comments to the Land Use Planning Commission**

**By Thomas Abello, Director of External Affairs for The Nature Conservancy**

**January 10, 2019**

### **Re: Proposed Rule Revisions: Revised Application of the Adjacency Principle and Subdivision Standards**

Chairman Worcester, Commissioners of the Land Use Planning Commission my name is Thomas Abello and I am the Director of External Affairs for The Nature Conservancy in Maine. I appreciate this opportunity to provide comments on the proposed Rule Revisions: Revised Application of the Adjacency Principle and Subdivision Standards.

The Nature Conservancy is a science-based nonprofit organization dedicated to conserving the lands and waters on which all life depends. The Conservancy has been working in Maine for some 60 years and is the 12<sup>th</sup> largest landowner in the state, owning and managing some 300,000 acres. We also work across the state to restore rivers and with fishermen in the Gulf of Maine to rebuild groundfish populations. In 2018, the Conservancy paid more than \$450,000 in property taxes.

In the Unorganized Territory, The Nature Conservancy owns and manages some 240,000 acres, including 160,000 acres along the Upper St. John River, 10,000 acres along Spring River, and the 46,000-acre Debsconeag Lakes Wilderness Area just north of Millinocket. All of this land is open to the public for a wide variety of uses, including hiking, hunting, canoeing and fishing.

At just over 10.5 million acres, this region represents the largest block of well-connected forestland east of the Mississippi River. It also forms the core of a larger block of 30-million acres running from the Adirondacks in New York to the Gaspé Peninsula. It is the fiber resource for our forest products industry. It contains the highest concentration of remote ponds and high-quality lakes in the Northeast. It is home to a remarkable tradition whereby landowners provide public access on private lands for abundant and diverse recreational pursuits, many of which are not found elsewhere in the Northeast. It is also home to many Maine citizens who have built their lives and raised their families there.

The Conservancy applauds the hard work of LUPC staff on what is clearly a lengthy and involved process. We appreciate the open, honest dialog and willingness to seek feedback from stakeholders and user groups across the region. That includes municipalities, community organizations, sportsmen, recreational groups, business leaders, and many others.

Although The Nature Conservancy supports the original adjacency principle and its role in balancing residential and commercial development with our natural assets, we acknowledge that it is a blunt tool. There are opportunities to provide more flexibility to meet changing needs while maintaining core natural resources and environmental protections. The strict one-mile guideline is not a nuanced enough tool to accommodate certain new commercial uses, for which there are valid reasons to consider locations farther from towns and closer to natural or recreational resources.

The current system tends to treat all commercial development the same, when in reality, uses can be pretty different from each other and a more nuanced approach would lead to better outcomes. The economy in the Maine woods is changing. Recreation-based businesses and new types of wood fiber processing operations sometimes have difficulty finding suitable locations that are near the resources they need and also within one road mile of similar development. Existing development may not be in locations needed to support the evolving economy while still protecting the environment.

The Conservancy supports the overall objectives for the proposal:

1. Guide new development near town. Instead of basing new zones on existing development – which may be remote – focus rezonings to areas within a mile of a public road and within seven miles of rural hub communities that provide services. In townships and plantations directly abutting a rural hub, some zones for residential subdivision could locate within five miles of a public road.
2. Limit new development farther from town, while recognizing the changing economy. Limit rezonings farther from rural hubs to types that depend on proximity to natural resources or are connected to recreation.
3. Continue to protect the environment and natural resources. New development zones would not be allowed on undeveloped or lightly developed lakes, even if within one mile of existing development.
4. Improve predictability of rezoning for property owners and the public. Locations where rezonings could be considered would be tied to predictable factors such as the location of designated rural hubs and public roads, instead of to a shifting pattern of scattered development.

Here are specific elements of the proposal the Conservancy supports:

1. Fewer Rural Hubs: The updated proposal removes 6 originally identified rural hubs from consideration. This reduction helps encourage growth and development in the service center communities.
2. The 7-mile Primary Location standard: The new standard is a reduction from the original 10-mile measurement from the boundary of a retail hub. This new standard will help curb strip development, focus growth toward service centers, reduce costs, and limit impacts to natural resources, including wildlife habitat.

3. Creation of the Resource Dependent Subdistrict: The new subdistrict sets in place the criteria for resource-dependent development, directing these to locations near natural resources that would not be suitable for other types of commercial development. Resource-dependent development may be located near raw materials to facilitate extraction, processing, or refinement to reduce bulk before transportation, or near recreational resources, provided development does not result in undue adverse impacts to existing uses or resources.

The D-RD subdistrict is designed to allow for the location of recreation supply facilities, recreation day use facilities, natural resource extraction, or natural resource processing facilities in areas that are distant from other development, but where the location of such a land use will not unreasonably interfere with existing uses, such as forestry and agricultural activities, or with fish and wildlife habitat or other recreation opportunities, and will not substantially increase the demand for public services.

4. Reversion of Subdistrict. Once a Resource Dependent subdistrict is no longer used for the land use for which it was created, it will automatically revert to the prior subdistrict.
5. Wildlife Passage Guidelines: In previous rounds of comments to the Commission, the Conservancy encouraged the consideration of wildlife corridors and connections when considering potential projects. This proposal sets in place strong wildlife passage standards (p.91) for all commercial businesses, including: the establishment of open space for wildlife passage, around or through the development, of at least 500 feet in width; requiring wildlife passage to be located along the side of flowing waters or wetlands, in a way that links high value wildlife habitats on or off the property, along the property line of any abutting conserved land, or adjacent to one of the boundary lines of the parcel, to the extent practicable. These guidelines strike the right balance between development and natural resource protection.
6. Standards for All Recreation Supply Facilities: As Maine's natural resource economy and recreational pursuits change, provide more flexibility to meet these needs while maintaining the core natural resources and environmental protections. These proposed standards provide that flexibility by allowing these facilities to be located near recreational activities on recreational resources such as trails that support motorized vehicle, non-motorized vehicle, or equestrian use, or on bodies of standing water greater than ten acres in size.
7. Standards for Natural Resource Processing Facilities: Locating the Natural Resource Processing Facility on the same parcel of land as (or within ¼ mile of) the raw materials that will be used for processing activities makes good planning sense to increase flexibility and limit environmental impacts. The proposal requires a facility to be located ½ mile from residential development, ½ mile from the normal high-water mark of any major waterbodies, and requires wooded buffer strips must be maintained.

8. Recreational development proposal: The proposed definitions and guidelines provides flexibility and clarity to meet the changing recreation needs. For example, the Recreation Supply Facility definition allows a facility or operation that provides equipment rental, guide services, or pre-prepared food to the recreating public at or near the location of the recreational activity. Recreation supply facilities may be located in a permanent or temporary structure, or in a parked vehicle or trailer, and excludes restaurants, general stores, repair shops, and other more intensive uses.
9. Establishment of a 5-year review period: Given the complexity of the proposal, the 5-year check in to gauge the impact and effectiveness of the proposal. provides an opportunity to address unintended consequences, limitations and weak points in the proposal.
10. Requiring provisions for emergency services and legally enforceable access: These provisions acknowledge realistic expectations of the developer but more importantly, of the first and future property owners.

Here are recommendations to improve the draft proposal:

1. Work with other relevant state agencies and stakeholders to focus development within the rural hubs: As the economy continues to evolve in rural Maine, concentrating growth *within* rural hubs supports rural communities, enhances the local tax base, and minimizes impacts to the surrounding landscape.
2. Although the Conservancy supports the proposed wildlife passage standards, we encourage additional consultation with the Maine Department of Inland Fisheries and Wildlife regarding review and input on the design of wildlife corridors associated with specific projects. This more-specific consultation could identify priority areas for avoidance or elevated planning consideration.
3. Work with other relevant state agencies and stakeholders to develop companion legislation to incentivize viability of the surrounding municipalities: tax incentives, equitable property tax treatment through some mechanism of revenue sharing, impact fees and/or tangible benefits agreement.
4. Consider special consideration for scenic transportation corridors: perhaps limit new development closer to town and eliminate secondary areas along these roadways.
5. Regardless of the outcomes of the current proposal, and following in the footsteps of Washington and Aroostook Counties, continue to encourage Community Guided Planning and Zoning throughout the jurisdiction.

Once again, The Nature Conservancy appreciates the work of LUPC staff and the Commission on this important issue. Thank you for the opportunity to participate and I am happy to answer any questions now or in the future.



## Godsoe, Benjamin

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**From:** David Gillaspie <gillaspiedavid351@yahoo.com>  
**Sent:** Saturday, January 12, 2019 7:27 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] LUPC Proposal

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Maine's North Woods should remain forever wild. People come here for a reason, to experience the great wilderness of Maine, so I reject LUPC's policy changes.



Virus-free. [www.avast.com](http://www.avast.com)

## Godsoe, Benjamin

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**From:** Lindy Moceus <lindy@fairpoint.net>  
**Sent:** Saturday, January 12, 2019 3:45 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] My Comments on LUPC Proposed Adjacency Principle

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

The unorganized and deorganized territories in Maine are unique in that property in these regions fall under a set of rules that controls all development. This is not the case in the rest of Maine. And, consequently, the uncontrolled development in the southern half of the state has resulted in urban sprawl where farms used to be, shorelines of many lakes crammed with camps and docks, and houses and camps on back roads even in the most rural areas. I have lived in Maine my entire life and have seen these changes.

Sadly, it appears from these proposed rule changes that the plan for northern Maine is headed in that same direction. These new rules will open up over 1 million acres for development in our most remote and pristine areas in Maine for the same old reason.... to spur economic growth. The Maine north woods has not been overrun yet with 'progress' like the rest of the state, but the stage is being set to take the same worn path using economic growth as justification to fragment and spoil this extensive forest land. This is not progress. It is poor planning. Now is the time to keep large tracts of land intact and undeveloped. We have a serious environmental concern looming which is climate change. It is critical to keep areas forested to combat that. While we in the northern hemisphere condemn those in the southern half of the globe for cutting down the rain forests, we continue to destroy our own forests.

One of the saddest days in Maine was the day the acid ore mining bill was passed. Throughout LUPC's proposed rules, mining is mentioned, presumably because these rules have to tie in with the DEP's mining rule. Metal mining in acid ores is the worst kind of mining. They don't call it acid ore for nothing. When brought to the surface and exposed to moisture and the elements, the sulfur in the ore forms sulfuric acid. The acid causes severe leaching of heavy metals from the ores which gets in the run off water. Nearby vegetation is burned (along with cars in the parking lot) when ore dust turns to acid. The tailing ponds at these mines are lethal to birds and other wildlife. We have brought this to a state that has 6000 lakes and ponds, millions of acres of wetlands, and that gets over 40 inches of rain annually. Hopefully, the protective measures the environmental groups fought hard to get included in the rule will be enough. Only time will tell. The unorganized territories are open to this mining now and while most areas have yet to be tested, there are many places in northern Maine already verified or with very high potential for metal deposits rich enough to attract mining.

Mining tests are now being conducted on Pickett Mountain which extends into T6 R6 WELS, Moro Plantation, and Patten. This is also near areas that would be greatly expanded for development under LUPC's new rules. So this region will soon be hit hard by human intrusion.

Maine's northern forests are not only a large wildlife habitat region with Maine's best freshwater fishing, it now also plays an important role in fighting climate change. While the proposed adjacency expansions may be restricted only to designated hub areas, over 1 million acres of forests will still be lost to development under the new rules. This, in addition to the region now being open for acid ore mining under the State's new mining bill. With all that, our north woods will be fragmented and scarred all in the name of progress and economic growth. Please don't follow the usual trend. Take the brave step in the direction that makes sense especially with our present serious climate change problem. You are the gatekeepers. Please don't give in to pressure from landowners who are only out to make profits. Further development of our north woods is the wrong way to go.

Lindy Moceus  
Vienna

## Godsoe, Benjamin

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**From:** Walter Mugdan <waltermugdan@aol.com>  
**Sent:** Saturday, January 12, 2019 11:15 AM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Comments on revised rule regarding Adjacency

Dear Mr. Godsoe,

I am writing to express deep concern with the LUPC's revised proposed rule amending the adjacency test for new development, and I urge that it not be adopted.

The proposal to allow development within 7 miles from one of 41 "rural hubs," which will open up large portions of the north woods to poorly planned and widely dispersed, patchy development. This is precisely what the adjacency principle was designed to avoid. Some of the area's most scenic roadways would be adversely affected. It is my understanding that 1.3 million acres would be affected, with over 800,000 acres targeted for possible commercial development. While it is certainly appropriate to facilitate additional suitable development in designated areas, the existing rules allow that, and this proposal goes much too far.

I own a camp on Moosehead Lake in a well planned subdivision of Beaver Cove Township, that followed the existing adjacency rules. Nearby is the Burnt Jacket peninsula, which is largely undeveloped. Several years ago the owner of most of the land proposed to create a subdivision on the far end of the peninsula, miles from the nearest roadway and existing development. That proposal was wisely rejected as being inconsistent with the existing adjacency rule. The owner instead created a subdivision near the roadway, a significantly better location that has avoided the patchwork quilt effect, and that has provided the owner with a fair return.

In summary, the existing adjacency rule makes eminently good sense, requiring that new development occur within one mile by road from compatible development that is of similar "type, use, occupancy, scale and intensity." The existing rule has allowed appropriate development and has not unreasonably hampered economic growth. I respectfully ask that it be retained.

Walter Mugdan  
718-224-7256

## Godsoe, Benjamin

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**From:** william owens <wowens@maine.rr.com>  
**Sent:** Sunday, January 13, 2019 9:58 AM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] LUPC rules

I was unable to attend the hearings on 1/10 to submit comments on the proposed new rules.

I am writing to express my opposition to the current revision. In spite of much public input about the initial proposal, the new revision has done little to mitigate the vast majority of the public's concern. Specifically the change of the "adjacency" rule would have potentially devastating impact not the North Woods. Fragmentation of this precious resource, the largest remaining intact forest east of the Mississippi would have a lasting and negative impact. I suggest you once again revisit the public comment and revise the new rules consistent with the public input..

Thanks

Tony Owens  
Cape Elizabeth

## Godsoe, Benjamin

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**From:** Andrew Cadot <aacaac73@gmail.com>  
**Sent:** Monday, January 14, 2019 10:36 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] I oppose LUPC's proposed rule because it threatens the special ecology and character of the North Woods.

Dear Ben:

I understand that under the proposed rule, there would be a Revised Application of the Adjacency Principle & Subdivision Standards, which would result in more than 1.3 million acres of land and 20 percent of lakes in Maine's Unorganized Territories would be vulnerable to sprawling residential subdivision development. I also understand that the majority of people and organizations who attended the hearing held in January urged the Commission to drop its far-reaching proposal.

I write to raise my concerns because the future of Maine's North Woods is at stake. This proposed rule could forever harm the land, waters, and wildlife in Maine's North Woods. I join with all who have asked the Commission to drop its proposed rule.

Thank you for taking my views into consideration.

Sincerely,

*Andy*

Andrew A. Cadot  
45 Eastern Promenade Apt. 9E  
Portland, ME 04101

## Godsoe, Benjamin

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**From:** Bill Carter <bcarter5@maine.rr.com>  
**Sent:** Monday, January 14, 2019 3:43 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Expansion of development locations

To whom it may concern,

I write to express my concern about the proposed expansion of development locations in Maine's North Woods. Please consider the following:

1.3 million acres and 20% of the Unorganized Territories' lakes would be vulnerable to residential development. Residential subdivision development would be allowed on over 1.3 million acres (after subtracting out the lands that are already conserved) and on at least 317 lakes (20%) in LUPC jurisdiction—and we don't know how many of these lakes are currently entirely undeveloped.

Allowing development along any public road within 7 miles "as the crow flies" from the boundary of 41 "rural hubs" would lead to strip development. The seven mile by one mile primary development areas would allow commercial and residential strip development along currently forested, undeveloped roads (many of them scenic byways) and would undermine efforts by neighboring, rural communities to keep development within their towns as they attempt to preserve the economic viability of their local businesses.

Commercial development would be allowed across the landscape. Commercial development would be allowed on approximately 824,000 acres and an unknown number of lakes in LUPC jurisdiction. Given that commercial development currently can only occur near development of a "similar type, use, occupancy, scale or intensity" or a "village center," this is one of the most far-reaching proposed changes. It would forever change the character of municipalities near Unorganized Territories.

Loosening the rules to allow large lot subdivisions risks fragmentation of the North Woods. Sprawling large lot residential subdivisions (15 – 25 acres), also called kingdom lots, were abolished by the legislature in 2001. Under this proposal, large lot subdivisions would once again be allowed on an unknown percentage of the 1.3 million acres, likely hundreds of thousands of acres. Sprawling development would eat up large parcels of forestland.

Recreation supply businesses far from towns would commercialize Maine's North Woods, undermine businesses in local communities, and compete with existing sporting camps. "Recreation supply facilities" would be allowed across the landscape, within ¼ mile of public access points on most lakes (classes 4, 5, and 7) and on Class 3 lakes. This would degrade the undeveloped character of forests and lakes, threaten communities by encouraging development far out of town, and compete with existing sporting camps.

Subdivisions with limited environmental review would be allowed across the landscape. Subdivisions of up to 14 lots and 30 acres would be allowed with only limited environmental review on approximately 400,000 acres.

Requirements for open space associated with residential subdivisions would attract development to permanently conserved lands. Subdivision standards allowing developers to avoid the requirement to provide common open space if they locate near permanently conserved lands will attract development to them.

The rules are complicated, making it difficult to fully understand, evaluate, or predict their potential impacts. The proposed new system is so complicated that it is difficult to understand what activities would be allowed where and to evaluate the likely impacts.

The proposal to review the rules in five years would be completely ineffective. The proposal to include language in the basis statement relating to a future review of the rules is completely insufficient and would be entirely ineffective in ensuring the protection of the resources. Once development opportunities are granted through the designation of primary and secondary locations, it could be legally impossible to take them back.

The wilderness for which our state is so famous will be changed for the worse forever. Please cancel all planning for this proposal.

Thank you,  
Bill Carter  
Yarmouth



## Godsoe, Benjamin

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**From:** Carole Boothroyd <ckbteach@gmail.com>  
**Sent:** Monday, January 14, 2019 5:31 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] LUPC adjacency principle for Maine's North Woods

Sent from my iPad

Dear Benjamin Godsoe,

I attended the public hearing on the proposed change to the one-mile adjacency rule in Maine's unorganized territories. I have listened to both sides of the issue and I conclude that at this time revised rules are not acceptable. They would allow development in places that are not suitable or desirable for development and which have a much greater value to Mainers for our natural resource-based economy.

This is not a well-supported plan. I urge that there be no change in the adjacency principle at this time.

Best regards,

Carole Boothroyd

Dover Foxcroft

## Godsoe, Benjamin

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**From:** Christy Stout <clsmaine@gmail.com>  
**Sent:** Monday, January 14, 2019 6:11 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] LUPC Proposed rule change

Dear Mr. Godsoe,

I am writing to oppose changes to LUPC zoning rules as they are currently proposed.

I think proposed changes would lead to sprawl through both allowing development 7 miles from current hub boundaries, and allowing larger lot sizes.

Too much development is proposed near lakes.

Additionally, I believe proposed changes would be detrimental to current towns and commercial hubs by decreasing tax base (because development was allowed outside those areas). This would result in harming the existing towns and hubs instead of helping them.

Instead I would suggest development allowed 7 miles outside the center of current towns/hubs, as opposed to 7 miles from the boundary of those towns/hubs.

It would be more favorable to leave lot size unchanged, and severely downsize development near lakes from what is proposed to little or no change at all.

I believe these suggestions are more balanced, and will allow our current town/hubs 7 times greater chance/distance to develop; while also protecting the current nature of Maine.

This would encourage growth while preserving our lands and waters. We have all experienced rural sprawl and other States and it has never been favorable.

Please reconsider the current rule changes as proposed.

Sincerely,

Christy

Dedham, Maine

## Godsoe, Benjamin

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**From:** david a Woolsey <woolsey.david.violinmaker@gmail.com>  
**Sent:** Monday, January 14, 2019 3:21 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Revised Application of the Adjacency Principle & Subdivision Standards

This proposal which could forever harm the land, waters, and wildlife in Maine's North Woods. I oppose proposal because it threatens the special ecology and character of the North Woods. Opening more than 1.3 million acres of land and 20 percent of lakes in Maine's Unorganized Territories is a poor choice for Maine's future. We don't need any sprawling residential subdivision or commercial development in these vulnerable areas.  
David A. Woolsey  
36 Brimmer Point Way  
Ellsworth, ME



Land Use Planning Commission  
Department of Agriculture, Conservation and Forestry  
22 State House Station  
18 Elkins Lane  
Augusta, ME 04333

January 10, 2019

Dear Commission:

Thank you for the opportunity to submit comments on the proposed rule revisions related to the application of the adjacency principle and subdivision standards. Maine Audubon has followed the progression of this rule making from its very beginning in 2014, from taking part in an earlier stakeholder process regarding the subdivision rules, to meeting regularly with Land Use Planning Commission (LUPC) staff as changes to the adjacency principle evolved from concept to proposed rule. While we greatly appreciate the time and attention the Commission and staff has given to this important matter, and the improvements that have been made since the last version, we feel strongly that more work must be done before the Commission approves final rules. As such, we oppose the proposed rule revisions dated December 12, 2018.

Broadly speaking, we are most concerned by the scope, scale and pace of the proposed changes. While it is clear that the staff aim to steer new development to areas that are close to existing development or hubs of activity, and away from high value natural resources, we believe the proposal should be adjusted to better meet these and other smart growth goals, the adjacency principle outlined in the Commission's Comprehensive Land Use Plan (CLUP), and in proposed rules stated "Purpose" (see *Proposed Section 10.08-A,A*). The "Purpose" states: "Locating most new subdistricts for commercial activities and residential subdivisions close to existing development and public services reduces public costs; improves the economic health of existing communities, protects important habitat; and minimizes interference with natural resource based activities such as forestry, agriculture, and recreation."

Our specific points of concern, as well as other comments regarding positive changes, are enumerated below.

### **What's at Stake**

Maine's unorganized territories (UT) are the heart and soul of the Northern Appalachian/Acadian Forest—the largest intact temperate forest in North America and perhaps the world. The forest contains ecosystems across a climate gradient as diverse as all of Europe. That diversity include plants, from hardwood forests full of sugar maples and yellow birch, boreal spruce-fir forests, fens and bogs, freshwater marshes, and floodplain forests, to alpine tundra. This landscape and plant diversity creates a mosaic of habitats for many species of wildlife, from the largest moose population in the lower 48 states,

the nation's largest population of Canada Lynx, and a Common Loon population second only to Minnesota. In the spring and summer, the UT is a veritable "baby bird factory" for many of our resident and migratory songbirds, making it the largest globally significant Important Bird Area in the continental United States.

The UT boasts such diversity for a number of reasons, including the fact that the UT is largely undeveloped or fragmented. Individual Black Bears, for example, have a home range of about 19,000 forested acres—bobcats 6,000 acres. Even smaller mammals like River Otters typically use 15 to 30 linear miles of waterways to search for their prey. Wildlife need these large areas, uninterrupted by human disturbance, to not only find prey but to maintain enough genetic diversity to maintain strong populations.

New development, including roads and other human activity, not only destroys habitat, but can alter when, where, and how animals move between habitats. Fragmented habitat limits natural dispersal of young animals, isolates populations, reduces genetic exchange, and lowers population levels over time. Roads and roadside areas are often avoided by wildlife, create barriers to movement, and can be fatal for many species as they attempt to cross. Undersized and poorly functioning culverts located where they cross streams and other waterways can restrict movement of aquatic and semi-aquatic species. Chemical runoff and sedimentation from roads and yards pollutes waterways. These chemicals can accumulate in both aquatic and terrestrial species to a point where the chemicals compromise species health or alter their behavior, and can create algal blooms toxic to fish and other aquatic life. Building roads, houses, commercial developments, and utility corridors often introduces invasive species into a region, which can have devastating impacts on native species. More people in relative remote areas means more access to and disturbance of all types of wildlife.

The many impacts on water quality, wildlife, and habitat from fragmentation often happen slowly, accumulating over time, and leads to degradation of ecosystems and loss of biological diversity. We encourage you to read the recent article titled *The Unique Nature of Maine's North Woods* in Maine Audubon's Winter 2018 issue of Habitat (attached) for an overview of this topic and *The Environmental Consequences of Forest Fragmentation in the Western Maine Mountains* from the Maine Mountain Collaborative for a more in-depth discussion on the topic.

This is the backdrop against which we review the proposed rules before you.

### **Specific Comments and Concerns**

- (1) *Proposed Section 10.02*, definition for "Home-based Business". We support this proposed change, because it provides more opportunity for business activity in the jurisdiction without incurring more development.
- (2) *Proposed Section 10.02*, definition for "Recreation Supply Facility". We are concerned that under the proposed rules "Recreation Supply Facilities" would be allowed across the landscape (not just in the primary and secondary locations), which could undermine businesses in local communities and compete with existing sporting camps. We recommend further limiting where these facilities can occur across the landscape or alternatively, promoting such facilities in or near to existing communities.

- (3) *Note in Section 10.08,A*. The proposed rules contain a note, not to be included in the final rule language, that states: “It is the intent of the Commission to review the effectiveness of the rulemaking, and any potentially unforeseen impacts that occur as a result of these changes. The Commission will conduct the review in each county within its service area when either five rezoning petitions have been approved in a county, or after five years from the effective date of the adopted rule.” While we appreciate the Commission’s intention to reflect on the effectiveness of this rule, if adopted, we are concerned that once the development opportunities are granted through the proposed primary and secondary locations and other areas, it would be challenging to scale back or remove development rights altogether. We recommend that the Commission modify the note to make more clear that the rules will be reviewed and modified based on results on the ground.
- (4) *Proposed Section 10.08,B,2,e*, “Access to Development”. We support the proposed requirement that land within a proposed subdistrict be accessible from a public road by legal right of access.
- (5) *Proposed Section 10.08-A,C*, “Primary and Secondary Locations”. Maine Audubon feels strongly that the primary and secondary locations—the areas where a great deal of development would be encouraged under this proposal—are both too broad and not nuanced enough to adeptly respond to the location of important natural resources and existing development already on the ground. We applaud the staff for trying to move most development closer to existing communities, but feel the current extent of the primary and secondary locations are too expansive and not specific enough to fully accomplish this. Specifically:
- We feel very strongly that the seven-mile distance by air from the boundary of the proposed towns, plantations, and rural hubs is too far. Unlike the current adjacency policy that allows similar types of development within one mile of existing, compatible development, but not necessarily along the entire mile-long area, the proposed rule would immediately open up the entire seven-mile stretch to development. We recommend that, should the Commission continue to pursue this measured-distance strategy, that the distance be reduced to 2 miles. Existing development outside of this distance could be “grandfathered” and should not be used to determine the extent of the primary and secondary areas.
  - We remain skeptical that the secondary locations are necessary, at the very least for residential development. We feel particularly strong that residential development should occur near to communities in order to limit public costs, improve the economic health of existing communities, protect important habitat, and minimize interference with natural resource based activities such as forestry, agriculture, and recreation. The proposed secondary locations, to be located up to five miles from a public road, are not consistent with the Commission’s goal of encouraging concentrated development and could unduly compete with existing communities. Elliotsville Township, described in detail below, is a good example of this concern.
  - Finally, we have identified a number of places we believe should be removed from either the primary or secondary locations, for a variety of reasons, and that are examples of how challenging it is to effectively apply this distance-based approach. Our list is not exhaustive, however; we are confident other examples exist that demonstrate that locating development based on a set measurement from towns, plantations, rural hubs, and public roads is not as

nuanced as locating new development should be.

- Elliottsville Township. Portions of this township fall within the proposed primary location because of its proximity to Greenville and the existence of public roads. The public roads that would be used to access this location do not directly connect to Greenville and are not widely used. This is contrary to the Commission's intent to locate new development in a manner that efficiently uses public services and makes emergency services reasonably available. Furthermore, increased traffic leads to increased wildlife mortality. The township contains a number of high value natural resources, including a cluster of Heritage Fish ponds, the Appalachian Trail corridor, and Borestone Mountain Sanctuary. These resources would be adversely affected by additional development. Finally, the secondary location within Elliottsville Township could unduly draw residential development from Greenville, an existing established community.
- Madrid Township. Portions of this township fall within the proposed primary location because of the township's proximity to Kingfield to its east. However, there is no direct way to drive from Kingfield to Madrid. Madrid is most readily accessible from Rangeley to the northwest, or from Phillips to the southeast, either one requiring extra traffic miles for emergency services or residents.
- Herseytown Twp. A small sliver of the north portion of this township is proposed to be a part of the primary location because of the township's proximity to Patten and the presence of a single public road. This pattern of development is not consistent with smart growth principles.
- Township 4 Range 7 WELS and Township 3 Range 7 WELS. The primary location within T4 R7 WELS and T3 R7 WLES is adjacent to the Sebois River. The Sebois is in a Beginning with Habitat Focus Area—a natural area of statewide ecological significance that contains unusually rich concentrations of at-risk and high value species and habitats. These areas have been identified by biologists from the Maine Natural Areas Program, Maine Department of Inland Fisheries and Wildlife, Maine Department of Marine Resources, U.S. Fish and Wildlife Service, The Nature Conservancy, Maine Audubon, and Maine Coast Heritage Trust. These areas support rare plants, animals, and natural communities; high quality common natural communities; significant wildlife habitats; and their intersections with large blocks of undeveloped habitat. This is a prime example of an on-the-ground natural resource at risk because of a proposed rulemaking scheme that is not nuanced enough.
- Fish River Chain of Lakes Area. In June 2018, Irving Woodlands, LLC proposed a Concept Plan for their land holdings in the Fish River Chain of Lakes area. That Concept Plan would allow for more residential and commercial development in that area, including directing additional development to areas that are most suitable for development, as long as that development is offset by conservation. The Concept Plan has yet to be approved. By contrast, the proposed primary and secondary locations in this area would encourage development in areas not as suitable for development, and

without requiring any concurrent conservation offset. If the Concept Plan is not approved, then development could occur in this area without taking into consideration the area's natural resource values, current character, and impacts to water quality and fisheries. We understand if the Concept Plan is approved, it will supersede these proposed primary and secondary locations, however we bring this issue up as an example of how some existing location of development tools, such as Concept Plans, are already working to direct development to the most appropriate areas, perhaps more effectively than these proposed rules.

- Albany Township. We believe that this township is not a good choice for the primary location all together, as it would encourage additional development near the White Mountain National Forest, even though there seems to be ample room for additional development in neighboring organized towns. This region's economic future is intimately tied to the outdoor recreational opportunities in the area, including the White Mountain National Forest. We believe additional development in Albany Township would detract from those opportunities and undermine local economic and community vitality.
- Plantations. Under this proposal, primary locations include areas within one mile of a public road in all plantations. In our experience, not all plantations have existing clusters of development suitable for additional development. Including all plantations has led, under this proposal, to a wide swath of primary location east of Medway that is anathema to smart, concentrated development. Furthermore, not all public roads within plantations are otherwise created equal. For example, Baring Plantation's public roads run right through Moosehorn National Wildlife Refuge, which is not a good location for more development. Each are examples of the nuance that is lost when using this "one size fits all" approach.
- Management Class 3 Lakes. Not all Management Class 3 lakes are suitable for the additional development that would be allowed under these new rules. Based on an initial evaluation of Google Earth images, the location of existing development on the shoreline or nearby, and a review of known aquatic and terrestrial natural resource values, we believe lands around the following Management Class 3 lakes should not be included in the primary location: Clayton Lake (T12 R8 WELS), Horseshoe Pond (Coburn Gore), Pocumsus Lake (T5 ND BPP), Bowlin Pond (T5 R8 WELS), Caribou Lake (T2 R12 WELS), Endless lake (T3 R9 NWP), Fish River Lake (T13 R8 WELS), Grand Lake West (T6 ND BPP), Jo-Mary Lake Middle (T4 Indian Purchase), and Onowa Lake (Elliottsville TWP).

(6) *Proposed Section 10.21, F, "Low-Density Development Subdistrict (D-LD)"*. Allowing for low density subdivisions is an inefficient use of land and would represent a dramatic departure from current Commission policy. Between 1999 and 2001, the Legislature passed multiple bills to limit this type of development, which it deemed inconsistent with the CLUP. "Large lot" subdivisions, even with the proposed low density subdivision guidelines, can still result in house lots that are no longer available for commercial forest management or public recreation, and that reduce and fragment wildlife habitat—uses that should be supported by the Commission under the CLUP. The proposed subdivision rules attempt to lessen the impact of these large lots by clustering houses



somewhat together rather than being randomly scattered, however they can still occur in areas far removed from the center of existing activity or communities, which in our view is inconsistent with the intent of the proposed rules – i.e. to guide development close to existing communities.

- (7) *Proposed Section 10.21,M*, “Residential Development Subdistrict (D-RS)”. We appreciate the evolution of this concept, including narrowing the type of trailhead near which residential development may occur. However, we remain concerned that allowing this will in some cases result in development that is inconsistent with smart growth principles (i.e. development located far from community centers) and could adversely impact natural resources (in particular, lake shorelines). Points of entry to permanent trailheads (an area where this type of development could occur under the proposed rules, see Section 10.08-A,D,2,c) are sometimes located in more remote areas of the jurisdiction and thus are more susceptible to negative development impacts.
- (8) *Proposed Section 10.25,E,1*, “Scenic Resources.” We appreciate the changes made since the last draft rulemaking to protect scenic byways.
- (9) *Proposed Section 10.25,Q,3,a,2*, “General Management Subdivisions”. Under the proposed rules, General Management subdivisions are subdivisions that are allowed without a rezoning. Currently, such subdivisions are allowed in the General Management (M-GN) subdistrict within 1,000 feet of a public road in certain townships. Under the proposed rule revisions, these new General Management subdivisions would be allowed in the M-GN subdistrict within all primary areas, as long as they are within a ½ mile of a public road. This represents a significant expansion of potential development area all at once, without rigorous oversight or ability to assess incremental impacts. A rezoning petition typically provides the opportunity for the Commission to assess incremental impacts. General Management subdivisions do not require a rezoning. We recommend significantly limiting, or eliminating, the General Management subdivisions.
- (10) *Proposed Table 10.25,Q-1*, “Location and Layout Overview”. Residential subdivisions in the UT should be designed to minimize the extent and sprawl of new development and associated infrastructure as a means to better protect natural resources, maintain large unfragmented forest and habitat blocks, and to facilitate efficient movement of both people and wildlife.

The proposed “FlexDesign” is by far the best subdivision layout in most situations. FlexDesign requires the developer to work proactively with Commission staff early in the design stage to identify the unbuildable areas, as well as the high value natural resources and connected natural landscapes that should be avoided, and to minimize the extent and sprawl of building lots, roads, septic systems, etc. that become part of the permanent built landscape. FlexDesign is similar, but different, from the proposed Clustered Design in that they both would require a portion of the development to be protected as open space, but the placement and quality of that open space could vary markedly: The proposed FlexDesign is more tailored to the resources on the ground, whereas Clustered Design just requires that the lots be close together on a parcel with the rest of the land set aside as open space, regardless of its value.

The proposed Basic Design is the least desirable, as it is the least efficient in terms of land use and infrastructure needs, though we recognize it could be appropriate along some shorelines, on which shorefront lot owners tend to desire their own access and/or viewshed of the lake.

While we appreciate the staff's interest in providing developers with options, based on experiences in organized towns, the proposed FlexDesign subdivisions (often called conservation subdivisions) have been most successfully used when they are required (at least in the rural portions of the town), rather than being offered as one of several options – particularly when both Clustered and FlexDesign are options.

Consequently, we recommend changing Table 10.25,Q-1 to allow only the proposed FlexDesign layouts at “Inland” (both Residential and General Management) and “Shoreland with Heavy Development” sites, and only Clustered and FlexDesign at “Shoreland” (Management Class 4 Lakes).

- (11) *Proposed Section 10.25,Q,4,a,2,a,i.* The proposed rules would allow a waiver of open space requirements if the subdivision is located within a quarter mile of permanently conserved land. We are concerned that this would drive some development adjacent to conserved land, because developers are motivated to avoid open space requirements. In these cases, there should be at least a 1000' undeveloped separation between the conserved land and the developed land (500' wildlife travel corridor plus 500' buffer from impacts from human activity).

Specifically, we recommend changing the wording as follows: “In cases where the subdivision abuts permanently conserved land, all building envelopes shall be at least 100' but preferably 500-1000' from the boundary line of the conserved parcel.”

This change reflects the following, from “Conserving Wildlife in Maine’s Developing Landscape”:  
“In urban/suburban areas, a study by Matlack (1993) found that human activity could extend up to 270 feet into natural areas on the edge of human development. These activities can reduce the value of the edge habitat for wildlife. Dumps, litter, pruned and hacked trees, cleared understory vegetation, established campsites and extensive firewood gathering, can all reduce the vegetation birds use to nest and cause general disturbance which may keep animals out of the area. In addition, habitat adjacent to residential housing often has elevated numbers of gray squirrels (due to supplemental feeding at bird feeders) and house cats, both of which are effective predators on nesting birds.<sup>1</sup>”

Other studies have shown that impacts from roads can extend beyond human development between 330' to more than 3300', depending on the species and habitat. Five hundred feet is a reasonable compromise and is consistent with other recommendations in the proposed rule.

- (12) *Proposed Section 10.25,Q 4,b,2,c and 4,d,4,e.* Subsurface wastewater disposal systems should be considered part of the infrastructure needed to support the subdivision and should not be allowed in the open space portions of the subdivision unless there are extenuating circumstances. The subdivision design should include adequate area and conditions for a fully functioning system or systems. The open space should be reserved for uses as described in Comment 13.

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<sup>1</sup> Matlack,G.E. (1993). "Environmental Auditing - Sociological Edge Effects: Spatial Distribution of Human Impacts in suburban Forest Fragments." Environmental Management 17(6): 829-835.

(13) *Proposed Section 10.25,S,3, “Uses of Common Open Space”*. We suggest that the proposed rules be modified to be more specific about what can and cannot be allowed in Common Open Space. We have drafted one possibility below, which was modified from an Environmental Protection Agency statement on what constitutes open space:

*Open space is undeveloped land that conserves woods, water, and wildlife, and is open and accessible to the public for passive recreation. In these subdivisions, open space may include vegetated green space (land predominantly covered with vegetation), community gardens, nonmotorized trails, and small playgrounds. It does not include ballfields or other semi-developed recreational facilities.*

We remain uncertain how to address the motorized and nonmotorized trails part of this proposed modification. The Commission may need to include both or to simply say “trails”, though we believe highly trafficked trails such as ITS snowmobile trails or multipurpose railroad-bed type trails are inappropriate uses in these open spaces.

Should the Commission continue with the general approach of the proposed rulemaking, we strongly recommend that the Commission significantly scale back the locations available for development, including, but not limited to: (1) Reduce the straight-line distance used to calculate primary locations from 7 miles to 2 miles; (2) Eliminate particularly problematic townships; (3) not include all plantations in the development locations; (4) strongly consider removing the secondary locations all together; (5) significantly limit or eliminate the proposed General Management Subdivisions; (6) not allow development on the suggested Management Class 3 lakes; and (7) eliminate the proposed Low-Density Development Subdistrict. We strongly believe that the Commission should start small and review and modify the rules as needed based on on-the-ground results over time.

### **Alternative Recommendation**

As an alternative to this proposed rule, we recommend that the Commission do the following to achieve its laudable goal of directing new development near to existing communities:

- (1) Complete a land use inventory of the jurisdiction.** It is difficult to assess the merits of this proposal as compared to existing policy because no one knows precisely what development is “on the ground” in the jurisdiction. We recommend that the Commission invest in a land use inventory so that staff and the public can clearly assess the benefits and risks of the current proposal. For example, a land use inventory would allow the Commission and stakeholders to understand the scale of this and future proposals as compared to development that could occur under the existing adjacency policy.
- (2) Engage in regional planning and zoning.** We believe that this proposal, in its effort to draft simple, accessible, jurisdiction-wide rules, overlooks important natural resources and does not yet meet the smart growth and adjacency principles outlined in the CLUP. We believe that regional planning would be a more effective way to achieve the Commission’s goals. We recognize that regional planning has been challenging in the past and not always produced the hoped-for results, and would require significant staff time to do well, but taking a pro-active approach with input from both local communities and professional planners and economists has

the potential to better meet the Commission's goals and support existing communities than the current complicated proposed rule. As such, we recommend that the Commission commit additional staff or consultant capacity to help communities and regions engage in community guided planning and zoning or prospective zoning as a way to directly respond to community needs and achieve Commission goals.

## **Conclusion**

Overall, we are concerned that the cumulative impacts from development in the proposed rule – including the proposed primary and secondary locations, large lot subdivisions, general management subdivisions, and lakeshore developments, combined with the continuance of the “2 in 5 rule” – will substantially fragment and degrade the nature of the north woods and does not adequately meet the Commission's goal to shift development from more remote areas to areas near existing communities while still protecting the jurisdiction's natural resources and natural-resource based industries. We urge the Commission to instead consider engaging in proactive regional planning, which we believe will better achieve the Commission's goals and be more responsive to the current and future location of the jurisdiction's natural resources, land uses, recreational activity, and development.

Signed,

A handwritten signature in cursive script that reads "Eliza Donoghue".

Eliza Donoghue, Esq.  
Senior Policy & Advocacy Specialist

An aerial photograph of a vast, dense forest in Maine's North Woods. The forest is a mix of green and blue-green, with a winding lake visible in the lower right. The terrain is hilly and covered in trees, extending into the distance under a clear sky.

# Diverse. Resilient. Intact.

The Unique Nature of Maine's North Woods

by Sally Stockwell



*Photo: Lincoln Benedict*



## Look up at night

and you see a sky filled with stars and planets, many melting into the expansive Milky Way above. Look down at Maine from the sky, and you see a massive dark spot, one of very few remaining on the night sky map.

Maine's dark spot is larger than any other in the eastern U.S. — larger than the Great Lakes, the Adirondacks, or the Everglades. While the North Woods is by no means untouched, with vibrant communities, active recreation opportunities, and a vigorous forest products industry, it nonetheless has the lowest “human footprint” score (defined by the Wildlife Conservation Society as the “most wild and least influenced” by people) across all of the Northern Appalachian Region.

From within this dark spot rise Maine's 14 highest peaks (all over 4,000 feet, including Mount Katahdin). Much of the state's five million acres of wetlands, 6,000 lakes and ponds, and countless streams are here, too. It holds the headwaters of all five of Maine's largest rivers: the Androscoggin, the Kennebec, the St. John, the Penobscot, and the St. Croix. It hosts the entirety of the Allagash Wilderness Waterway.

Spanning over the northern and eastern two-thirds of the state, Maine's North Woods comprises around 11 million acres of largely unbroken forestland. This makes it the heart and soul of the Northern Appalachian/Acadian Forest

— the largest intact temperate forest in North America, and perhaps the world. It is a myriad puzzle of ecosystems across a climate gradient as diverse as all of Europe, a gem akin to some of the most important remaining intact tropical forests of the southern hemisphere.

What does this diversity look like? Let's start with the plants. Hardwood forests are full of sugar maples (think maple syrup) and yellow birch (think hardwood flooring) reaching skyward from nutrient-rich, well-drained soil; boreal spruce-fir forests (think lumber and paper) line the cool, rocky coastline and damp northern flats; ribbed fens and bogs (think peat moss) brim with colorful orchids and insect-eating plants; freshwater marshes (think ducks) and floodplain forests fill with species that like to get their feet wet; and alpine tundra hosts only the hardiest plants, bending in the wind and under the weight of rime and snow.

All this landscape and plant diversity in turn creates a mosaic of habitats for the many species of wildlife that call Maine's North Woods home. The largest moose population in the lower 48 states roams here, as does the nation's largest population of Canada Lynx and its second largest population of Common Loons (after Minnesota). Maine's North Woods is the only place in the east to host a full complement of predators, from coyotes to weasels. In spring and summer, it becomes a veritable “baby bird factory” for many of our resident and migratory songbirds, making it the largest globally significant Important Bird Area in the continental U.S.

Imagine you are a Black Bear with two cubs trying to make a go of it in Maine. Each individual bear has a home range of about 19,000 forested acres, which it needs to find the food, water, shelter, and den sites for its survival. Where would you prefer to live? In the forest patches of southern Maine that are interspersed with houses, stores, office buildings, and wide, paved roads with lots of traffic? Or in the dark spot on the night sky map?

If you prefer cats to bears, then imagine you're a bobcat. Now you only need about 6,000 acres for a home range...



Each individual bear has a home range of about 19,000 forested acres, which it needs to find the food, water, shelter, and den sites for its survival.



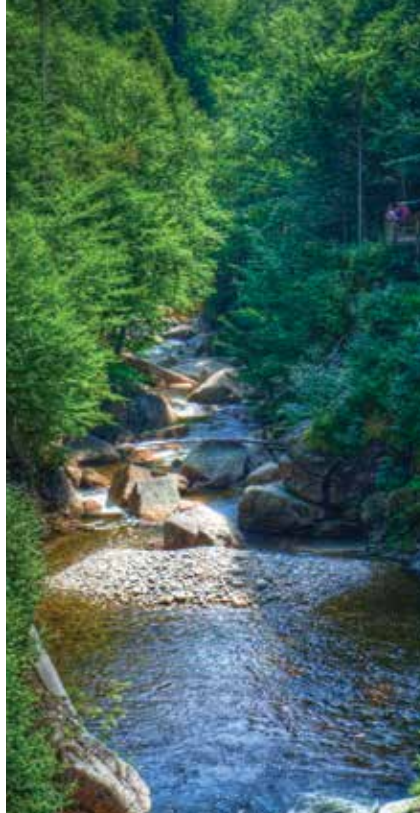
but if you want to find a mate — ideally within a big enough population so you can find the best match, with good genetic diversity and strong character — you will require hundreds of thousands of acres. Even smaller mammals, like River Otters, travel long distances. Each one typically uses 15-30 linear miles of waterways to search for their prey. Wood Turtles will move up to six miles along a river, and 500 feet from shore, to find their food and resting and nesting spots.

Just like humans, who need to travel between home, work, school, the garden or the grocer, restaurants, stores, and more to find food, water, shelter, and companionship, other animals need to move, too. Fish such as Brook

**Development not only destroys habitat, but it can alter when, where, and how animals move between habitats.**

Trout and Atlantic Salmon need to move up, down, and between streams and ponds to find spawning habitat, feeding habitat, nursery areas, deep water refuge pools, and cold water summer refuge reaches. Moose, bear, bobcat, mink, Black-throated Blue Warblers, Wood Turtles, and Wood Frogs all need to move between summer and winter habitat, and in search of feeding, watering, and denning, nesting, and resting habitat. Up to 85 percent of vertebrates use riparian habitat, the area adjacent to waterways, as both living and travel corridors.

We are lucky here in Maine. We still have a relatively intact and healthy forest landscape. That's why most of our native plant and wildlife species still call Maine home (we are missing wolves and Woodland Caribou). It's why we still have wide-ranging



*Photo: Elizabeth Haslam/Flickr*

mammals and uncommon and specialized species like the Furbish Lousewort and Bog Lemming. It is why we are the only state with the abundant clean, cold water needed to support the last vestiges of wild Brook Trout, Arctic Charr, and Atlantic Salmon. It's why we still have Common Loons on almost every lake.

Maine is different from most other places in the east, where the list of missing or seriously depleted wildlife populations is long, and where habitat restoration — rather than habitat conservation and stewardship — is the norm.

It is the largely unfragmented, undeveloped nature of our landscape that creates such invaluable habitat connectivity and biodiversity. Western and far northern Maine have been identified by the Staying Connected Initiative as an internationally significant wildlife corridor, and much of the North Woods has been identified as a highly resilient landscape by The Nature Conservancy. Because of its geographical variation and connectedness, the area will continue to support high biological diversity — in spite of changes brought about by a rapidly warming world.

But because it's our backyard, it can be easy to forget how special it is. As stewards of Maine's natural environment, we must not become complacent, lest we fail to protect this unique, invaluable resource.

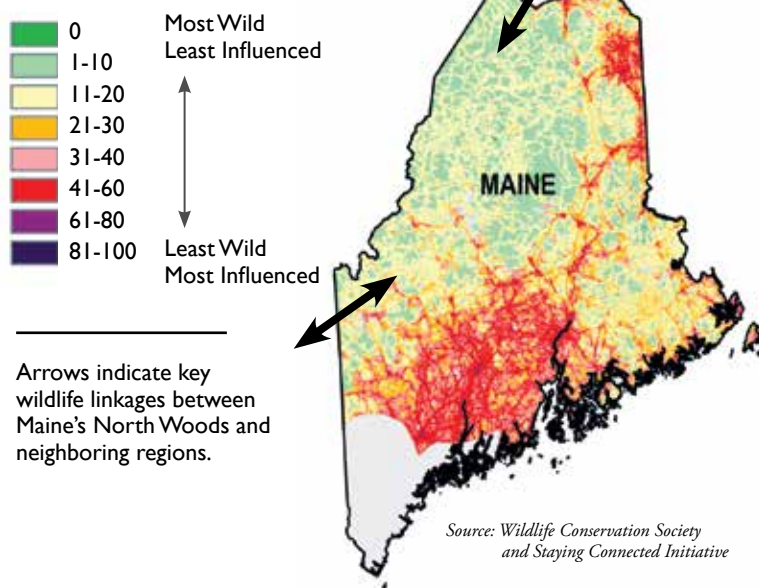
The risk is very real. Roads, transmission lines, new development, and other human activity are knocking ever more loudly at the door. Development not only destroys habitat, but it can alter when, where, and how animals move between habitats. Fragmented habitat limits natural dispersal of young animals, isolates populations, reduces genetic exchange, and lowers population levels over time. Roads and roadside areas are often avoided by wildlife, create barriers to movement, and can be fatal for many species as they attempt to cross.

That's why Maine Audubon, along with many other partners, is working in the North Woods to:

- *Protect the most important conservation and recreation places through land acquisition and conservation easements.*

- *Improve stewardship and habitat connectivity of the surrounding "matrix" forest.*
- *Assist others who are searching for new ways to support a diverse rural economy dependent on both forest products and nature-based tourism and recreation.*
- *Craft recommendations for how best to site and operate new subdivisions, development, and renewable energy.*

## Human Footprint



We are helping landowners write wildlife-friendly forest management plans through our Forestry for Maine Birds program; helping towns and private landowners receive professional assistance and funding to replace poorly functioning culverts with Stream Smart crossings that allow fish and wildlife passage; working to ensure riparian areas retain the shade and shelter that trout and salmon need; and making recommendations to the Land Use Planning Commission and Central Maine Power on how to better site and manage new and proposed developments. We are also continuing our long tradition of bringing people out

## Current Threats to North Woods Habitat Connectivity

### New England Clean Energy Connect (NECEC)

CMP's proposed transmission line would result in a long scar that fragments the North Woods from the Maine-Canada border to The Forks. As the proposal stands, we believe CMP has not done nearly enough to address impacts to wildlife habitat.

Read our op-ed:  
[maineaudubon.org/necec2018](http://maineaudubon.org/necec2018)

### Proposed Changes to the Adjacency Rules by the Land Use Planning Commission (LUPC)

The LUPC is pursuing major changes to how development is sited in Maine's Unorganized Territories, which comprise the majority of the North Woods. We are actively sharing our concerns regarding the current plan's scope and pace, and making recommendations on how to better balance development and habitat.

Read our comments:  
[maineaudubon.org/adjacency2018](http://maineaudubon.org/adjacency2018)

into nature to inspire a sense of wonder and build a culture of wildlife conservation in Maine.

My own personal experiences in the North Woods are as varied as the terrain and climate, and have provided me with a rich bank of memories, sounds, scents, and feelings. I've carefully picked my way through the rock-strewn rapids of the Allagash, watching a moose cow and calf feeding in the shallows. I've been chased by a bear while on my way to conduct an early morning breeding bird survey in a remote bog far north of Bangor. I've camped under a full moon at Thoreau's Island on the West Branch of the Penobscot, exactly 162 years after Thoreau was there himself. I've skied from Greenville to Kokadjo on a snowmobile trail without seeing another person for the entire 28 miles.

I've been blessed by these experiences. They take my breath away, make me stop and stare, stop and listen, stop and wonder, stop and yearn.

Beyond its ecological diversity, unusual land use history, and importance to recreation and timber production, the North Woods embodies an ethos unique to Maine. Those who have lived, worked, or traveled these woods and waters know there is a special spirit that keeps calling you back. There is always more to explore, more to see, more to listen to, more to learn. We cannot forget how special it is, how unique, how irreplaceable. Together, we must do whatever we can to keep it whole, keep it healthy, keep it productive, and keep it brimming with life. ☺

**I've been blessed by these experiences. They take my breath away, make me stop and stare, stop and listen, stop and wonder, stop and yearn.**



*Sally Stockwell*  
Director of Conservation

## Godsoe, Benjamin

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**From:** Everett Leland <ebleland1@comcast.net>  
**Sent:** Monday, January 14, 2019 3:56 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] LUPC changes

Mr. Godsoe,

Please hear my opposition to the discussed changes to the LUPC policies which would allow strip development due to the seem mile rule, kingdom lots, and development on Unorganized Territories lakes. I believe these changes would be disastrous to the "woods" as we know them today.

You are the ones we rely upon to protect the woods and waters of this fine state. Please don't let us down.

Everett Leland  
12 Water Street  
Kittery  
207/332-4004

Sent from my iPad

## Godsoe, Benjamin

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**From:** Gail Fanjoy <gfanjoy@kfimaine.org>  
**Sent:** Monday, January 14, 2019 4:51 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Comments on LUPC's Proposed Adjacency Rule  
**Attachments:** LUPC public comments 01.2019.docx

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Hi Ben – I was intending to deliver the attached comments in person, but the interstate in my neck of the woods was still too dicey for me to consider making the trek to Brewer. Thank you for taking my comments into consideration.

Best,  
Gail Fanjoy

My name is Gail Fanjoy and I am a lifelong resident of Millinocket. I am the CEO of a non-profit agency headquartered in Millinocket which provides supports to people with disabilities in Penobscot and Cumberland Counties; civically, I serve on the Board of Directors of the Katahdin Area Chamber of Commerce as Past President, I am a former Millinocket Town Councilor, and have been involved in economic development activities in various groups and initiatives. I am speaking today as a private citizen and as a concerned taxpayer of the town of Millinocket.

I am concerned about the LUPC's proposed rules changing the criteria for adjacency. Adjacency rules provide powerful parameters which determine the general location of all development in Maine's Unorganized Territory. Communities in the Katahdin region are surrounded by unorganized territory. It's not that I am against development. On the contrary; this is a very difficult statement for me to make considering we are desperate for more jobs, more population, more children in our schools, more homes occupied, more infrastructure used. But in our desperation for development we should be mindful that the proposed 1x7 adjacency rule does nothing to protect the shrinking tax bases in our communities, does nothing but jeopardizes our scenic and natural assets that must be protected both in terms of community character and sustainable tourism, and strains our communities' emergency response personnel and equipment without adequate reimbursement.

Picture the Katahdin region as a series of hubs (communities) connected by spokes (the Katahdin Woods and Waters Scenic Byway).

The Byway begins at the southern entrance of Baxter State Park and winds its way through Millinocket along Route 11 and the Penobscot River to Patten, ending at Baxter's northern entrance at Grand Lake Matagamon. The communities of Millinocket, East Millinocket, Medway, Sherman, Stacyville, Patten, Mount Chase, and Shin Pond are the hubs - communities with struggling economies.

The proposed adjacency rule, which would allow for development along any public road within 7 miles from the boundary of these rural hubs, could result in commercial and residential strip development. The "scenic byway" could become a strip of blight without further consideration as to how new development would fit into the existing landscape, how it would complement or contend with our regional brand, or how it could destroy or detract from our area's assets.

But the most egregious result of development in the UT would be the loss of tax dollars to our struggling communities – communities with an abundance

of housing stock, empty buildings for small businesses, and unoccupied industrial parks. Adding insult to injury would be the cost of emergency response services imposed upon these communities to serve the residents and businesses in the UT.

The Katahdin region's economy is dependent upon the vast amounts of forestland surrounding us. Traditional wood harvesting and recreational uses coexist in the shadow of Mt. Katahdin. Our economies are growing more and more dependent upon the scenic beauty of our region's woods and waters and the recreational opportunities they afford. The proposed rules could result in large lot subdivisions eating up large parcels of forestland. Imagine the impact on our economy when tourists view McMansions through the trees?

I urge the LUPC to give singular consideration to the Katahdin region. With all of your good intentions, one size does not and cannot fit all. Please come to our table, share your values and voice with entities such as the Katahdin Collaborative comprised of many volunteer groups, businesses, organizations, and municipalities working in collaboration to create a unifying regional vision and an action plan that translates the regional vision into local, actionable items. One important item could be determining the parameters of new development in the unorganized territory surrounding the Katahdin region.

Thank you.

## Godsoe, Benjamin

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**From:** Hannah McGhee <hannahmcghee@gmail.com>  
**Sent:** Monday, January 14, 2019 3:19 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] LUPC's Adjacency Principle for Maine's North Woods

Hello Benjamin,

I'm writing to you today to express my concern about the LUPC's proposal to change the criteria for adjacency in Maine's North Woods.

The forests and waterways of Maine's North Woods are vital to climate resiliency, water quality, and wildlife. The sheer scale of this wild, unfragmented area makes it unique and irreplaceable.

Once protections of Maine's North Woods are removed, it won't be possible to bring them back.

I would urge the LUPC to reconsider the proposed rule changes, and to maintain current development policies.

Thank you for your consideration,  
Hannah McGhee  
Newcastle, ME



## Godsoe, Benjamin

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**From:** Julia.bassett <julia.bassett@yahoo.com>  
**Sent:** Monday, January 14, 2019 9:49 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Come on guys

There is so much already modified land to target for further development we do t need to target undeveloped land  
Thanks,

Julia

Julia Bassett Schwerin

Broker and Realtor

Coldwell Banker Residential Brokerage

Email [Julia.bassett@nemoves.com](mailto:Julia.bassett@nemoves.com)

Cell 207.730.0276

Office 207.799.5000

*Green, Smart, Luxury, and Investment Property Certified Specialist Since 2006 in Southern Maine*

Sent from my iPhone

## Godsoe, Benjamin

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**From:** Jamie Gaudion <gaudionj@husson.edu>  
**Sent:** Monday, January 14, 2019 5:07 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] January 15, 2018

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Writing to ask that you carefully consider before allowing all of our heritage of the Maine North Woods to be divided and subdivided into parcels. The expanse is one of the primary reasons my family moved to Maine from PA and Maryland where private sectors abound with restriction.....even for hiking. Thank you for your work.  
Regards, Jamie Gaudion, Dover-Foxcrot, Maine

Sent from my iPad

RECEIVED

JAN 14 2019

LUPC - AUGUSTA

Land Use Planning Commission  
Chairman Everett Worcester  
18 Elkins Lane  
22 State House Station  
Augusta, Maine 04330

John Nicholas  
208 Gayton Lane  
Winthrop, Maine 04364

Subject: Opposition to the proposed seven-mile rule to the Adjacency Principle/Rule

Date: January 10, 2019

Dear Chairman Worcester:

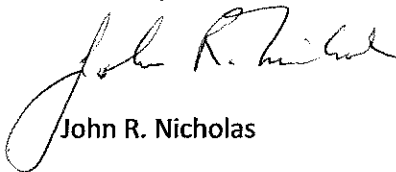
I am writing to express my continued, sincere opposition to the 7-mile rule change to the proposed Adjacency Principle/Rule. I have reviewed the information related to the 7-mile proposal and am still convinced that the proposed change is still wrong and will result in negative and irreversible impacts to the unique character and attractiveness of the North Maine Woods.

The proposed 7-mile change would still clearly benefit only large landowners and out-of-state land purchasers, not the average Mainer.

The proposed 7-mile rule change would lead to the development of the Great Ponds in the Unorganized Territories, resulting in the gating off of vast areas from hunting, fishing and recreation by Maine citizens. A clear threat would also result from the development of Maine's heritage waters that contain the largest population of wild and native brook trout in the United States.

I encourage the Land Use Planning Commission to adopt the compromise proposal from the Natural Resources Council of Maine the

Sincerely,



John R. Nicholas

## Godsoe, Benjamin

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**From:** Janet Ordway <jordway1@maine.rr.com>  
**Sent:** Monday, January 14, 2019 3:26 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] The North Woods

Around Portland trees are being cut down willy nilly for more and more homes or apartments. Please save the North Woods from destruction.

Janet Ordway  
[jordway1@maine.rr.com](mailto:jordway1@maine.rr.com)

**From:** [York, Mary](#)  
**To:** [Godsoe, Benjamin](#)  
**Cc:** [Beyer, Stacie R](#); [Carrier, Laura](#)  
**Subject:** RE: [EXTERNAL SENDER] North Woods  
**Date:** Monday, January 14, 2019 4:20:17 PM

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FYI...

Mary York  
Land Use Planning Commission  
22 State House Station  
Augusta, ME 04333  
207-287-2631  
[www.maine.gov/dacf/lupc](http://www.maine.gov/dacf/lupc)

-----Original Message-----

From: DACF  
Sent: Monday, January 14, 2019 4:03 PM  
To: York, Mary <[Mary.York@maine.gov](mailto:Mary.York@maine.gov)>  
Subject: FW: [EXTERNAL SENDER] North Woods

Thank you!!!

-----Original Message-----

From: [jcomreel@myfairpoint.net](mailto:jcomreel@myfairpoint.net) [<mailto:jcomreel@myfairpoint.net>]  
Sent: Monday, January 14, 2019 3:29 PM  
To: DACF <[DACF@maine.gov](mailto:DACF@maine.gov)>  
Subject: [EXTERNAL SENDER] North Woods

Hello!

I am against any plan for letting developers loose on our North Woods. This kind of land use is out of date and bad for many reasons. You don't want to see what would happen to Maine if they have a free hand.

Any residential expansion needs to be done in a strictly controlled way and not on our North Woods. Once they are gone, they are gone.

Thank you,

Judee Reel and Warren Lewis  
Lubec

## Godsoe, Benjamin

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**From:** Jean Sideris <siderisjean@gmail.com>  
**Sent:** Monday, January 14, 2019 3:18 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Land Use Planning Commission (LUPC) proposal to expand development locations in Maine's North Wood

LPUC - I am writing to oppose the proposal to expand development locations in Maine's North Woods. I would like to express my agreement with NRCM's testimony in at the public hearing. <https://www.nrcm.org/environmental-testimony/nrcm-testimony-lupcs-proposed-revision-adjacency-principle/>

**There are flaws with the fundamental approach of this proposal:**

1. **Measuring the distance of primary development areas from the boundary of rural hubs is a cookie-cutter approach that has no relationship to what exists on the ground.** The actual existing development in the rural hub could be located anywhere within the rural hub township – including on the far edge away from the UT. Measuring from the boundary of the rural hub township instead of from the actual node of development means the proposed new development area could be up to 13 miles away from the existing development.
2. **Measuring the distance of the primary development areas “as the crow flies” also ignores what exists on the ground in favor of a mathematical calculation.** The “crow flies” provision would allow development even further away from existing development, depending on where the roads lie.

These and other flaws in this proposed system would allow development in places that are not suitable primary or secondary development areas when considering their natural resource values and the location of existing development nodes. A few examples of the inappropriate results of this system are proposed primary development locations in Elliotsville Plantation and Herseytown, Tomhegan, Sandy Bay, Bald Mountain, Riley, Freeman, and Madrid Townships.

Applying a mathematical formula instead of looking at what is on the ground also leads to inappropriate results like proposing Burnt Jacket Peninsula on Moosehead Lake as a subdivision development location despite the fact that this Commission found that that was an inappropriate location for a residential subdivision and denied a subdivision application in 2006.

The law requires this commission to apply principles of “sound planning [and] zoning.” Sound planning and zoning should start from what exists on the ground, not from lines on a map.

In addition to these fundamental flaws in the system, NRCM has many major concerns about the likely impacts of the proposed rule:

- **1.3 million acres and 20% (at least 317 according to LUPC’s calculations) of the UT’s lakes would be vulnerable to residential subdivision development.**

- **Commercial and residential subdivision development areas along any public road within 7 miles “as the crow flies” from the boundary of 41 “rural hubs” would lead to strip development.** These public roads include five scenic byways. These development areas would undermine efforts by neighboring, rural communities to keep development within their towns as they attempt to preserve the economic viability of their local businesses.
- Commercial development would be allowed on 824,000 of these acres (and an unknown number of lakes) scattering commercial development across the landscape.
- Despite being eliminated by the Legislature in 2001, large lot subdivisions would again be allowed on hundreds of thousands of acres, eating up large parcels of forestland.
- Recreation supply businesses far from towns would commercialize the North Woods, undermine businesses in local communities, and compete with existing sporting camps.
- Subdivisions of up to 14 lots and 30 acres with only limited environmental review would be allowed on approximately 400,000 of the 1.3 million acres.
- Subdivision standards allowing developers to avoid the requirement to provide common open space if they locate near permanently conserved lands would attract development to permanently conserved lands.
- The rules are so complicated that it is extremely difficult for both experts and the public to figure out what uses would be allowed where.
- The proposal to review the rules in five years would be completely ineffective because once development opportunities are granted through the designation of primary and secondary locations, it could be legally and politically impossible to take them back.

The current adjacency principle requiring development to be “one mile by road from existing, compatible development of similar type, use, occupancy, scale and intensity” may need to be strengthened as called for in your Comprehensive Land Use Plan, but the principle that future development should be near existing, compatible development by road should be retained.

We urge you to set this rule aside, gather up-to date data about the location of existing development in the UT, and engage in regional planning with towns that border the UT in order to guide development into those towns that want it. Only then, would it be appropriate to consider revising the current adjacency principle.

## Godsoe, Benjamin

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**From:** Lou Graceffa <l.graceffa@georgestevens.org>  
**Sent:** Monday, January 14, 2019 7:46 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] rezoning

Mr. Godsoe,

I wrote you in the early fall to express my concern over proposed changes to the zoning rules for the Unorganized Territories. My expressed concern was that the proposed zoning changes were too broad and would lead to scattered development in the north country. I was unable to attend the latest meeting regarding the proposal on January tenth, but I did read the latest revisions to the original proposal which were aired at that meeting, and from what I can gather, not much has changed; the current modifications still leave the north country vulnerable to wide spread development. I will not reproduce my preceding letter here, but in summary, I stated that the wild lands of the north county will increasingly become the backbone of the region's economy, but not if it is compromised by fragmented development, which will inevitably occur if the currently proposed zoning rules are enacted. I stand in firm opposition to the original and latest proposed, zoning changes for the wild lands of Maine's Unorganized Territories.

Sincerely,  
Louis Graceffa  
218 Bay Road  
Brooklin, Maine 04616



## Godsoe, Benjamin

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**From:** Lindsay Knowlton <lknowwt@myfairpoint.net>  
**Sent:** Monday, January 14, 2019 3:20 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Proposed development of the Maine North Woods

Dear Governor Godsoe:

Please do not vote to develop the Maine's North Woods. It is a terrible plan that would ruin so much of the valuable habitat there.

The animals and insects would suffer irreparably. It is one of the truly great last places.

Thank you for listening.

Sincerely,

Lindsay Knowlton  
44 Harbourview Drive  
Stockton Springs, Maine

## Godsoe, Benjamin

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**From:** outlook\_3211DEFAA530D377@outlook.com  
**Sent:** Monday, January 14, 2019 6:08 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Northwoods project

Dear Sir,

I am totally opposed to continually surrounding any form of waterfront with any kind of dwellings. Haven't we polluted this planet enough? Isn't it time to conserve and protect the natural resources we have? The additional problem if one projects down the road, is that if we make this a preserve of sorts, then we will attract tourists, and again that can be devastating to this environment. Acadia National Park is suffering the repercussions of short term vision.

This is not a topic for an A or a B scenario because it is way too complex if one projects. Thus far this country likes to administer band-aids which only work for a short duration. I urge you to reconsider the future of Northwoods very carefully.

Sincerely,  
M. Pedreschi

Sent from Mail for Windows 10

## Godsoe, Benjamin

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**From:** Mary Sohl <mary@mainerealestatechoice.com>  
**Sent:** Monday, January 14, 2019 3:32 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] RE: Land Development

Dear Mr. Godsoe,

I'm writing to oppose the development of the Maine North Woods. This is a terrible idea that would forever negatively impact our precious State and NO development project is worth that. My friends and family are also opposed to this idea and I've urged them to write to you as well.

Thank you,  
Mary Sohl

*Mary E. Sohl*

Associate Broker

Maine Real Estate Choice  
18 Olde Village West  
Naples, ME 04055  
Cell: 1-207-749-0775  
Office: 1-207-693-5200  
Fax: 1-207-693-5205  
Email: [mary@mainerealestatechoice.com](mailto:mary@mainerealestatechoice.com)  
Company Website: [www.mainerealestatechoice.com](http://www.mainerealestatechoice.com)

***Emails sent or received shall neither constitute acceptance of conducting transactions via electronic means nor shall create a binding contract in the absence of a fully signed written agreement.***

## Godsoe, Benjamin

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**From:** Mariana Tupper <catalpa.girl@gmail.com>  
**Sent:** Monday, January 14, 2019 4:28 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Comments regarding North Woods

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

Greetings,

I understand that proposals have been forthcoming to promote development on 1.3 million acres in northern Maine. Wholeheartedly I oppose such efforts.

The waterways, forests, and associated creatures—including humans—depend on this area staying vital, clean, healthy, and valuable. The LUPC needs to protect this acreage accordingly.

I suggest “pushing the pause button” on the current talks about development in northern Maine. Take time to reassess. And come to our senses?

The unorganized territories are an important part of our state. The “domino effect” of intense development would harm the area irrevocably.

Sincerely,

M.S. Tupper

**Godsoe, Benjamin**

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**From:** NeilG <hollowtree0511@gmail.com>  
**Sent:** Monday, January 14, 2019 3:38 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Protect the North Woods, please

I urge you and the other members of LUPC to reject the proposal to turn a huge area of Maine's North Woods into a hunting ground for developers. The North Woods are one of the glories of Maine--of the nation--and should not be turned into a giant development. The proposal before you would fragment the ecosystem permanently, depriving future generations of this irreplaceable treasure.

Thank you,  
Neil Gallagher  
4 Stowe Lane  
Brunswick, ME 04011  
207-838-2932

## Godsoe, Benjamin

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**From:** Phyllis Coelho <liscoe@roadrunner.com>  
**Sent:** Monday, January 14, 2019 6:59 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] No Development in ...

Dear Mr Godsoe:

As a resident in our beautiful State, I urge you to please work to support no development of the millions of acres in our unorganized territories...This incredibly beautiful land with its forests, many lakes, mountains, and wildlife is a gem - it is what makes people, both residents and tourists hold their breath in awe.

Large untouched tracks of land, are virtually non existent in the lower states - We have evidence from our Monument how exceptional wild lands are and how this land is revered by all visitors from around the world.

To build roads in the Territory will be the first huge mistake. It will disturb the wildlife, create excess carbon, damage the continuity of this flawless tract of land. There is no need to develop it!! Unless you and the others on the Board are climate change deniers, then you're aware of the enormous damage that will occur if this area is developed. This Territory with all its trees helps to absorb carbon and the particulates that exacerbate breathing problems suffered by many Mainers. We already suffer from high rates of asthma - including myself & my husband.

To massacre this wilderness that will use enormous amounts of carbon in the process, will only make the health of Mainers worse and add to the already devastated climate change that will, if not corrected and mitigated soon, will destroy our planet.

Why destroy something so beautiful - for what end - greed? Ignorance? Fear of developers? There is no reason to do something that is so heartless to a region that is pristine. Leave it alone - reach out enjoy and appreciate it! Hold its entirety in your hearts and have compassion for all those beautiful creatures that call it home!

Thank you, Phyllis Coelho, Belfast

Sent from my iPhone

## Godsoe, Benjamin

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**From:** Peter Kalajian <alnitak@gwi.net>  
**Sent:** Monday, January 14, 2019 6:39 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] LUPC input into Norther Maine development

Greetings,

I am writing to let you know that I am opposed to increased development in Maine's North Woods. It is a place that has far more value to humanity in its relatively undeveloped state than subdivision lots could ever provide. As an avid canoeist, winter traveller, and generally environmentally conscious citizen, I would like to have my voice recorded in opposition to any changes to land use in the Northern Maine Woods.

Cheers,

Pete Kalajian  
Camden

## Godsoe, Benjamin

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**From:** Phil Provost <rascalprovost@gmail.com>  
**Sent:** Monday, January 14, 2019 9:23 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Development of North Woods

Do not expand development locations in the more than 1.3 million acres of land and 20% of lakes in Maine's Unorganized Territories.



## Godsoe, Benjamin

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**From:** RFRITSCH1@myfairpoint.net  
**Sent:** Monday, January 14, 2019 9:00 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Fw: LURC Proposal

Please correct "LURC" to read "LUPC". Thank you Robert Fritsch

**From:** RFRITSCH1@myfairpoint.net  
**Sent:** Monday, January 14, 2019 8:57 PM  
**To:** Benjamin.Godsoe@maine.gov  
**Subject:** LURC Proposal

Dear Commission members,

I am opposed to LURC's Adjacency Proposal for the following reasons:

1. 1.3 million acres and 317 lakes would be vulnerable to residential development.
2. Allowing 7 mi X 1mi primary development would allow strip commercial and residential development thus undermining local efforts to keep development within respective towns to bolster local economies.
3. Commercial development could mushroom across the landscape; currently commercial development can only occur near development of a similar type, use, occupancy, scale, intensity, or near a village center.
4. Rules are skewed to allow large lot subdivisions risking fragmentation of the North Woods. Residential subdivision, (Kingdom Lots = 15 to 25 acres) banned in 2001 would once again, be allowed on to happen on an unknown percentage of the 1.3 million acres. Development sprawl would eat up large parcels of forest land.
5. Subdivisions with limited environmental review would be the rule across the landscape; subdivisions with 14 lots on 30 acres would be allowed across 400,000 acres with only limited environmental review.
6. It is ludicrous to propose that this proposal be reviewed in 5 years. You can't take the destruction back!
7. The rules are way too complicated allowing for multiple interpretation and bogging down any appeal process.

Thank you,

Robert Fritsch  
255 Upper Garland Road  
Dexter, ME 04930



Virus-free. [www.avast.com](http://www.avast.com)

## Godsoe, Benjamin

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**From:** ROSALIND IVENS <ros100@verizon.net>  
**Sent:** Monday, January 14, 2019 5:36 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Public Comment to LUPC

Green Greetings from 2 forest dwellers,

We are adamantly opposed to any expanded or other development in Maine's North Woods. Since we've lived in Maine 1.5 years we are forever enchanted by the beauty of the forests and sincerely hope that this quest for development is ended.

There are so few wild places left in our country that we need to worship and protect the few still intact keeping them undeveloped permanently.

There are those that feel that development is profitable and the State of Maine needs revenue but they need to find other ways to make money. We need to modernize and explore Green Energy sources such as solar and wind. If people were more open to newer things I'm sure many things could be made profitable without endangering our beautiful land.

Truly yours,

Rosalind Ivens  
Property Owner, Garden/Landscape Designer (organic gardening!), Artist Lawrence Van Abbema Property Owner, Artist  
117 Bucksmills Road  
Bucksport, Maine 04416

## Godsoe, Benjamin

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**From:** r s <sailing4me@hotmail.com>  
**Sent:** Monday, January 14, 2019 6:44 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] north woods

Please leave the north woods as they are

Sent from [Mail](#) for Windows 10

## Godsoe, Benjamin

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**From:** Rebecca Tripp <ptarzan80@gmail.com>  
**Sent:** Monday, January 14, 2019 3:26 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] North Woods

Dear Mr. Godsoe and the LUPC,

I submitted a comment last year, but wanted to resubmit it to ensure that it would be heard as you continue to accept feedback from the people of this state.

As a proud lifelong citizen of the state of Maine, I am writing to express my deep opposition to any efforts that would jeopardize our legendary North Woods. Your proposal to eliminate or rework the adjacency principle's one-mile rule would be devastating not only for the people who love this untarnished wilderness for its beauty and recreational opportunities, but also for the countless plant and animal species who make it their home.

Forests are the lungs of our planet, and provide a wealth of benefits and services that keep us all healthy - free of charge. The growing human population is taking a huge toll on our natural resources, as evidenced by extreme habitat loss, water, soil and air pollution, rampant deforestation, alarming rates of species extinction, rapidly escalating climate change and more. Wild, unadulterated places that are safe from destructive human activity are few and far between, and having such a place in Maine, in our own North Woods, is a gift we should cherish, not one we should seek to mar irreparably in the name of profit.

Our health and well being is directly dependent upon the health and well being of our planet and her natural resources. When we harm our forests and wildlife, when we sacrifice our rich (yet rapidly dwindling) biodiversity to irresponsible development, we ultimately harm ourselves.

As a citizen of this state and of this earth, I implore you to do the right thing. We need healthier forests, greater biodiversity, and more places that are truly wild and free from human interference. If we take care of our forests, rivers, lakes and streams, they will take care of us. For the betterment of all Mainers, including our children, grandchildren, all the generations to come, and the countless species who call the North Woods home, I urge you to keep the one-mile adjacency rule in effect. What a shameful and tremendous loss it would be if we shortsightedly sacrificed one of the last great unspoiled wildernesses in this country just to make a buck.

Thank you for your time and consideration,  
Rebecca Tripp

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**How wonderful it is that nobody need wait a single moment before starting to improve the world. -  
Anne Frank**

## Godsoe, Benjamin

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**From:** Susan Downes Borko <sdownesb@icloud.com>  
**Sent:** Monday, January 14, 2019 7:01 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Proposal to change adjacency

Dear Ben:

We are writing to express our opposition to a current proposal that would change adjacency criteria in Maine's UT. We support maintaining the current policy of allowing Unorganized Territories development one mile by road from existing, compatible development until LUPC engages in regional planning.

Our concerns include fragmentation of the Northern Woods to the detriment of its' special ecological character, residential development sprawl, commercial building in inappropriate places, and economic threats to existing remote businesses.

Sincerely Yours,  
Susan and Victor Borko  
Rangeley, ME

## Godsoe, Benjamin

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**From:** Sarah Brown <sarah@greenalliance.biz>  
**Sent:** Monday, January 14, 2019 3:44 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Protect the North Woods

Dear Mr. Godsoe,

Its my understanding that last week in Brewer, the Land Use Planning Commission (LUPC) held a public hearing on a major proposal to expand development locations in Maine's North Woods. Under the proposed rule, more than 1.3 million acres of land and 20 percent of lakes in Maine's Unorganized Territories would be vulnerable to sprawling residential subdivision development. Please reject this proposal and protect the North Woods.

At the hearing the majority of people and organizations who attended were in opposition to this proposal. This is further proof that this is not good for Maine. The future of Maine's North Woods is at stake.. This proposal could forever harm the land, waters, and wildlife in Maine's North Woods.

As you know, the well-respected Natural Resource Council of Maine opposes LUPC's proposal because it threatens the special ecology and character of the North Woods.

Thank you,

Sarah Brown,  
Organizer, The Resistance Seacoast  
Owner, Sarah Mae Brown Consulting LLC  
Founder, Green Alliance  
22 Main St. Kittery ME 03904

603.817.4694

[www.TheResistanceSeacoast.com](http://www.TheResistanceSeacoast.com)

[www.facebook.com/theresistancesecoast](https://www.facebook.com/theresistancesecoast)

## Godsoe, Benjamin

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**From:** S <stephanie.g.hampton@gmail.com>  
**Sent:** Monday, January 14, 2019 8:17 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] RE: Proposal by the Land Use Planning Commission to change criteria for adjacency

Dear Ben,

I am very worried about the impacts of the proposal by the Land Use Planning Commission to change criteria for adjacency.

I strongly oppose the proposed rule changes. These rules could irreversibly harm the forests, waters, and wildlife of Maine's North Woods. I support maintaining the current policy of allowing Unorganized Territories development one mile by road from existing, compatible development until LUPC engages in regional planning together with municipalities that share a border with the Unorganized Territories.

Allowing commercial development on around 824,000 acres would negatively alter the character of municipalities near Unorganized Territories and degrade the undeveloped character of forests and lakes. This proposal would destroy the solace of the special places where we and our families, neighbors and friends all love to walk and hike, ride bikes, jog, camp, ski, snowshoe, paddle and fish.

"... in solitude, or in that deserted state when we are surrounded by human beings and yet they sympathise not with us, we love the flowers, the grass and the waters and the sky. In the motion of the very leaves of spring in the blue air there is then found a secret correspondence with our heart." Percy Shelley

Stephanie Hampton  
537 Congress Street, unit 504  
Portland, Maine 04101

Sent from my iPad

## Godsoe, Benjamin

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**From:** SUSAN RUCH <scruch@aol.com>  
**Sent:** Monday, January 14, 2019 4:22 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] Strongly oppose LUPC approving development in Maine North Woods

Dear Ben,

We strongly urge the LUPC's board's to drop the proposal to open up more than 1.3 million acres of land in the North Woods to random development.

Protecting the fabric of the forest in a responsible manner is of great import to the future of Maine especially when one sees how uncontrolled growth has ruined other states' forests when subdivisions are located in inappropriate areas.

Maine forests are one of the state's great assets and having a real vision for their development is critical to the state. The commission serves just a moment in time yet has the power to ruin a legacy by making bad decisions.

We urge you to drop this poorly conceived proposal.

Sincerely,  
Frank E. Ruch, Ph.D  
Susan C. Ruch  
Falmouth, ME



## Godsoe, Benjamin

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**From:** William Leavenworth <william.leavenworth@gmail.com>  
**Sent:** Monday, January 14, 2019 4:32 PM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] LUPC

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

We already have one New Jersey. We don't need a second one in the North Woods. If you want greater population density, move to CT, RI, or NJ.

very truly yours,

Dr. William Burgess Leavenworth, Ph.D., retired environmental historian, 6th generation college graduate, 10th & 12th generation Yankee WASP.

**From:** [Anne Winchester](#)  
**To:** [Godsoe, Benjamin](#)  
**Subject:** [EXTERNAL SENDER] Adjacency proposal  
**Date:** Tuesday, January 15, 2019 10:06:17 AM

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Dear Mr. Godsoe,

I am very concerned about the LUPC's proposal to change the existing Adjacency requirements for development.

Please do not open our unique and valuable wilderness to development sprawl. The very treasure that Maine alone possesses (the largest tract of undeveloped wilderness east of the Mississippi) will be greatly compromised forever. In this world of vanishing wilderness, our state's natural beauty becomes more and more valuable.

Further, struggling towns such as Millinocket, Greenville, and Patten would be harmed by decentralizing commercial/residential development. We've seen that happen in the past with many Maine downtowns that were gutted after the explosion of suburban malls. Some 40-50 years later, downtowns are reviving but now the outskirts of many towns are paved over with half-empty, poorly cared-for, and obsolete malls. Please don't let Maine make the same mistake with our North Woods.

I also worry about sporting camps. I've visited West Branch Pond Camps in TA-R12 for the past 55 years. One of its many draws is its remote location, but even in these past 55 years I've witnessed the development of camps all along the access road that edges Roach Pond. What once was 12 miles of wilderness road from Kokadjo in to West Branch Pond is now a well-traveled camp road. Fortunately West Branch Pond itself is nestled in a well-preserved tract of undeveloped land, but other sporting camps may not be as lucky.

I grew up in Brunswick and have spent most of my summers in Dexter at our family camp. Much of my summertime was spent climbing mountains, canoeing, swimming, hiking, and reveling in Maine's spectacular outdoors.

I implore you to protect this incredible resource for the rich diversity of wildlife that thrives in our North Woods and for the benefit of future generations of Mainers who so love the natural bounty of this state. Most of us have not chosen to stay in Maine for economic gain, but rather quality of life.

Thank you for your consideration.

A. S. Winchester  
Pemaquid, Maine

**From:** [cblount](#)  
**To:** [Godsoe, Benjamin](#)  
**Subject:** [EXTERNAL SENDER] Fwd: land use proposal  
**Date:** Tuesday, January 15, 2019 2:06:56 PM

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it was suggested i forward this link from Brookings institute to you. FYI

----- Forwarded message -----  
**From:** **cblount** <[cblount88@gmail.com](mailto:cblount88@gmail.com)>  
**Date:** Mon, Jan 14, 2019 at 3:18 PM  
**Subject:** land use proposal  
**To:** <[nrcm@nrcm.org](mailto:nrcm@nrcm.org)>

Didn't know if you all are aware of a 2006 Brookings institute study regarding how Maine is losing its "brand" to reckless development, and the economic dangers that face Maine if this continues.

Suggest someone read and submit that to the Land Use Commission asap.  
find it here:

<https://www.brookings.edu/research/charting-maines-future-an-action-plan-for-promoting-sustainable-prosperity-and-quality-places/>

Thanks for all you do.  
catherine

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NEED LITTLE - WANT LESS - LOVE MORE

*Work while you still have the light. — Marcel Proust*

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NEED LITTLE - WANT LESS - LOVE MORE

*Work while you still have the light. — Marcel Proust*

# EXECUTIVE SUMMARY

**For all its challenges Maine stands within reach of a new prosperity**—if it takes bold action and focuses its limited resources on a few critical investments.

The moment is urgent. After decades of industrial restructuring and drift, the pace of transformation is quickening, and the slow replacement of the old order is yielding a new one that may bring better lives for Mainers.

New population growth is bringing new people and new wealth to the state.

The ongoing and still painful shift to a more diversified service-oriented economy means that the state has less to lose in the future and more to gain. And for that matter, population growth is in some cases restoring life to towns and regional centers that have been sagging for decades.

Moreover, the wheel may now be turning in Maine's direction. As the search for quality places grows in importance, Maine possesses a globally known "brand" built on images of livable communities, stunning scenery, and great recreational opportunities. Likewise, as "innovation" drives more of the economy, Maine's reputation for Yankee ingenuity and resourcefulness matters more. On several counts, in short, Maine is surprisingly well-positioned for the future.

And yet, for all that, Maine's future success is by no means assured.

Workers see quality jobs—their own and others'—being replaced with lower-paying ones yet often lack the skills or opportunity to trade back up. Policymakers tout the promise of Maine's traditional and high-tech industry clusters, but meanwhile the hoped-for future of plentiful, good-paying new jobs seems to come too slowly—especially in rural areas. And all the while unplanned, haphazard suburban development rushes along too fast, in many places taking something away—a cherished woodlot or open field, a favorite point of water access for fly-fishing, the way a certain small town felt.

Adding to these complaints are the state's high taxes, ongoing fiscal challenges, and continued partisan bickering over

such issues as the efficiency of state and local government and the direction of state economic policy.

In sum, a state with much promise seems stuck: surprisingly pessimistic about its future, aware that great change is

*As the search for quality places grows in importance, Maine possesses a globally known "brand" built on images of livable communities, stunning scenery, and great recreational opportunities.*

upon it, but fearful that it isn't adapting as well as it needs to.

This report takes the measure of this moment. Sponsored by GrowSmart Maine and funded by a wide array of Maine foundations, businesses, conservation groups, and private citizens, "**Charting Maine's Future: An Action Plan for Promoting Sustainable Prosperity and Quality Places,**" assesses the current state of the state and suggests a route forward.

More specifically, the analysis offers the state a unifying view of its situation followed by a focused agenda for state-level policy reform aimed at promoting a new era of "sustainable prosperity" in Maine.

In that vein, the pages that follow draw a number of conclusions about the state:

**1. Maine is changing in dramatic, sometimes surprising ways.** In this respect, Maine's current demographic, economic, and development trends describe a state in the midst of significant transformation. These dynamics confirm that Maine is neither what it once was nor quite what it thinks it is:

- **Once stagnant, Maine's population is growing again.** In the standard view (which has some truth to it), Maine is an aging state that almost always grows slower than the rest of the country and New England. And it's true that Maine's population virtually stopped growing in the 1990s while the number of 25- to 34-year-olds residing in Maine has continued to decline. However, a closer look reveals that Maine is now experiencing a significant increase in population growth. Since 2000, the state's annualized growth rate has nearly doubled, jumping 20 places from 46th in the 1990s to 26th since 2000—by far the biggest acceleration among the 50 states. Driving this growth, meanwhile, has been the nation's fifth-highest domestic in-migration rate since 2000. Every county in Maine witnessed net gains of transplants from outside the state between 2000 and 2004, and because of that Maine is now growing faster than all other New England states except New Hampshire. Every major region is now participating in the growth. Two positive results of this acceleration include the arrival of newcomers with relatively higher household incomes, and the attraction of more young adults to the state. A more troubling related development has been rapid home-price appreciation, especially along the coast and in Southern Maine
- **Once based on goods production and natural resources industries, Maine is becoming a diverse, innovation-oriented services economy.** On the economy, the conventional wisdom assumes Maine is in crisis because its fortunes revolve around manufacturing and natural resource-based industries that are now collapsing. And it's true enough that manufacturing and natural resources industries continue to shed significant numbers of jobs. However, a closer look confirms that Maine outperformed the nation on job creation during the last economic cycle, and now enjoys a per capita income at a 50-year high compared to the U.S. average. Shaping all of this, meanwhile, is a dramatic and ongoing restructuring of the economy that has seen Maine's goods-production "super sector" shrink to essentially the same size of

the nation's as a share of employment even as its consumer and business-services sectors have grown. Also shaping Maine's fortunes is the increased organization of key industry "clusters"—groups of interrelated or similar firms in "traded" (or export) sectors such as boat-building, forest industries, information technology, biotechnology, tourism, or agriculture whose success or failure at innovation will determine the state's ability to produce greater numbers of higher-quality jobs over the long haul. These shifts have together allowed the state to add jobs even as traditional industries contracted. But they have so far resulted in modest pay increases (especially in rural Maine). The reason: Many high-paying manufacturing and forest jobs have been replaced by lower-paying consumer services positions given that massive job growth has yet to emerge in good-paying "export" clusters or the professional services sector

- **Once mostly rural, Maine is suburbanizing.** Finally, the conventional view of Maine's development status also needs revising. In the conventional wisdom, Maine remains overwhelmingly rural—a "place apart" from the vast waves of development sweeping much of the Atlantic Coast. However, the standard view does not account for the fact that more than 65 percent of the state—more than 860,000 Mainers—now lives in the 164 towns that comprise Maine's more-populated metropolitan and "micropolitan" areas. Within and beyond this populous metropolitan zone, moreover, dispersed, low-density suburban-style development has become the state's dominant settlement pattern. Overall, just 23 percent of Maine's post-2000 population growth has occurred in regional hub towns. By contrast, 77 percent of recent growth has taken place in surrounding towns, newer emerging towns, and rural areas distant from traditional centers. As a result, the state is converting extraordinary quantities of rural fields and woodlots to residential uses. From 1980 to 2000, for example, Mainers altered the character of 869,000 acres, or more than 1,300 square miles, of rural land—a territory roughly the size of Rhode Island. In the 1990s only Virginia lost a greater share of its rural land than Maine as every region consumed rural territory

**2. These changes have brought some benefits to the state—but on balance they pose serious challenges.**

These challenges represent urgent problems as the state strives to usher in sustainable growth:

- **Demographic change is raising education levels and may be replenishing the workforce . . . However, many workers remain unprepared for tomorrow's jobs.** In this regard, recent gains in in-migration and higher-education attainment do not change the fact that Maine's aging population includes too few young workers and too few highly skilled or educated people. In the near term, these factors are producing both labor shortages in some areas and low pay for many as more of the best jobs require higher skill levels. Going forward, continuing shortcomings in the size and skill levels of Maine's workforce could complicate efforts to upgrade the state's economy and improve the livelihoods it provides to Maine workers

*Economic restructuring is producing quality jobs in emerging innovation clusters . . . However, these clusters remain very small.*

- **Economic restructuring is producing quality jobs in emerging innovation clusters . . . However, these clusters remain very small.** On this front, too, the continued progress of Maine's traditional and emerging export sectors and clusters cannot obscure the fact that these industries lack critical mass and are not yet generating large volumes of jobs. To be sure, Maine's more traditional export industries—tourism, healthcare, non-store retailing, and finance and insurance—all slightly outperformed their national counterparts between 2000 and 2004 in terms of job creation. Moreover, this growth and growth in other innovation clusters like boat-building, advanced materials, and biotechnology is producing jobs that pay more than the state average. And yet, despite these gains, many of Maine's most important industry sectors and clusters remain modest in size, populated by few companies, and sometimes very loosely organized. This "thinness" across Maine's most promising sources of good-paying future growth limits the state's prospects for economic progress

- **Recent development patterns are beginning to give some cities and towns new life . . . However, suburbanization is increasing government costs and degrading the state's small towns and environment—its true "brand."** The good news here is that the state's overall quickening growth has brought new population to many of the state's traditional regional hubs—many of which were losing population in the 1990s. But for all that, widespread suburbanization and sprawl are driving up costs and may well be damaging the state's top calling card—its scenic beauty, the feel of its towns, its quality of place. On the cost side, the state's sprawling development patterns necessitated the construction of

more than one dozen new schools statewide in the last decade at a cost of \$200 million—more than one-quarter of the state's total school-capital outlay. Additional costs are being imposed on once-rural towns as new growth requires them to provide more expensive suburban-type services and on households forced to drive farther out to find an affordable home. But what matters even more than these costs is the fact that Maine's development patterns are undermining the state's alluring brand, so important to its current and future economy. Crucial to this brand is the integrity of Maine's distinctive towns and villages and the stunning natural areas that lie between them. Unfortunately, far-flung, often-haphazard residential development is more and more blurring those crisp scenes as it impinges on forests, fields, and waterfronts all around the state

### Maine is changing in dramatic, unexpected ways, generating both opportunities and anxiety

20	Number of places Maine moved up in its population growth rank since 2000. Maine's jump from 46th to 26th was the biggest turnaround in the nation
5th	Maine's rank on the rate of per-capita net domestic in-migration since 2000. Only Nevada, Arizona, Florida, and Idaho outpaced Maine's growth on this measure
32,000	Net number of migrants who moved to Maine from out-of-state between 1999 and 2004. More than half of the new residents came from Massachusetts and New Hampshire
12 percent	Share of Maine employment in goods production. That share is almost exactly the same as the national share
21 percent	Total share of Maine's employment in consumer services. That share exceeds the U.S. average by 6 percent
\$13,000	Difference in average annual wages between higher-paying business services jobs and the average Maine wage
91 percent	Maine's 2004 per-capita income as a percentage of the U.S. average. This matches the state's 50-year high
\$300,000	Median home sale price exceeded by 17 towns in Maine in 2005. Only one town reached this mark in 2000
77 percent	Percent of population growth between 2000 and 2005 that occurred outside of Maine's regional hubs
869,000	Number of acres converted from rural to suburban use between 1980 and 2000
2nd	Maine's rank among states on the loss in share of rural land in the 1990s. Only Virginia converted a larger share of its rural land
\$200 million	Cost of 13 new schools built between 1995 and 2005 in response to population dispersal
7th	Maine's rank on K–12 expenditure as a share of total personal income
11.1	Number of teachers for every school or district administrator in Maine. The state's administrator-to-teacher ratio is ninth-highest in the country
48 percent	Average property tax rate differential between higher-tax regional hubs and fast-growing emerging communities in 2003

Source: Brookings analysis of data from: U.S. Census Bureau; Internal Revenue Service; Bureau of Labor Statistics; Bureau of Economic Analysis; Maine State Housing Authority; National Center for Education Statistics; David Theobald, Colorado State University; Philip Trostel, Margaret Chase Smith Policy Center, University of Maine; Matthew Murray, University of Tennessee at Knoxville

**3. Exacerbating these problems are at least three serious state-level policy challenges.** In each case, shortcomings of state policy—accumulated over many years—must be counted either indifferent or negative influences on the state's chances of shaping a new era of “sustainable prosperity.”

- **An inconsistent economic-development stance over many years has weakened the state's efforts to improve its economy.** Maine has had no shortage of thoughtful leaders and bold ideas on economic development over the years. However, the state has frequently failed to stick to and sustain its ideas, with the predictable result that it has undercut the effectiveness of numerous intelligent but under- or un-funded initiatives that might have otherwise made a larger difference. In this respect, numerous state or quasi-public institutions intended to promote economic development remain small or under-funded, while other promising innovation- and development-finance programs and funds have been under-capitalized. This short-funding has limited the

impact of otherwise valid efforts to grow the state's small economy and enlarge “thin” export and innovation clusters

- **Maine's often-high costs of government and the unbalanced revenue system that supports them hinder the state's ability to promote sustainable prosperity.** On the spending side, Maine's unusually high expenditures on a number of state-level administrative functions as well as on K–12 education are likely squeezing out necessary spending in other areas even as they contribute to high taxes. (For its part, local government appears rather frugal by comparison to national and rural-state norms, though this may be because peer states rely more heavily on county governments that have wider responsibilities. In any case, it is noteworthy that municipal spending on services like police and fire goes up sharply in rapidly suburbanizing areas like Southern Maine—an indication that as sprawl forces growing towns to convert from mostly volunteer to mostly paid staffs the costs of redundant small governments goes up.) On the revenue side, meanwhile, Maine's high state-local

tax burdens and how they fall on various taxpayers may well be contributing to negative economic and land-use outcomes. High overall burdens, the second-highest property taxes in the nation, and the state's low thresholds for its very high personal income tax top rate all may well be sending negative signals to workers, entrepreneurs, and retirees about the state as a place in which to live and do business. Likewise, the wide 48-percent differential between the average property tax rates in regional-hub communities and those in outlying emerging communities serves a significant added spur to sprawl

- **Barriers to development in traditional regional hubs combined with weak local and regional growth management are eroding the state's unique character and contributing to sprawl.** On the one hand, Maine's convoluted state and local construction rules combined with the absence of significant catalyzing investment serve to discourage development in older places and discourage the reuse of historic structures. Along these lines, Maine's crazy-quilt of differing local and state building-code regimes, the orientation of most codes toward new construction, and the variable quality of code interpretation virtually guarantee that most development veers away from the state's traditional centers. It does not help that key state programs aimed at spurring redevelopment are grossly under-funded. On the other hand, Maine's ineffective state and local planning system leaves most Maine localities unable to manage growth and vulnerable to region-scaled sprawl. In this respect, the combination of Maine's intensely localistic planning system and the absence of sufficient support and incentives for municipal and regional planning efforts has left most Maine towns and regions susceptible to sprawl that further weakens town centers and degrades rural landscapes

**4. Given these challenges, finally, Maine must seize this moment to make urgent investments in its future that will enhance its distinctive strengths.** To guide these investments, "Charting Maine's Future" proposes—and suggests how to pay for—the following "Action Plan for Promoting Sustainable Prosperity in Maine." Three major strategies, each encompassing a number of initiatives, are crucial:

**Invest in a place-based, innovation-focused economy.**

To foster economic growth, Maine should adopt a two-pronged investment strategy focused both on protecting and enhancing the state's quality of place and spurring business innovation by supporting the emergence of new ideas and vibrant industrial clusters.

To that end we recommend that Maine:

- Establish a \$190-million **Maine Quality Places Fund** to promote the revitalization of Maine's towns and cities; augment land and farm conservation; protect traditional uses of and access to Maine forests, farms, and lakes; and promote high-quality tourism and outdoor recreation given their importance to Maine's economic well-being. The fund could be financed as a revenue bond supported by a 3-percent hike in the state's lodging tax, which is primarily paid by Maine visitors
- Support a \$200-million **Maine Innovation Jobs Fund**, \$180 million of which should support job-creating R&D in promising scientific and technical disciplines, while another \$20 million goes to a new **Maine Cluster Development Fund** to foster the business-led partnerships that catalyze cluster-based job creation through collaborative work on key challenges like workforce development and marketing. Both of these funds would be financed by government efficiency savings located by the Maine Government Efficiency Commission (described below). Candidate areas for investment include:
  - forest products
  - agriculture, organic farming, and specialty foods
  - coldwater aquaculture
  - marine research
  - information technology
  - biotech
  - toxicology
  - advanced composite materials
  - outdoor recreation and tourism

**Trim government to invest in Maine's economy and finance tax reduction.**

To redirect scarce resources toward the investments it needs to make, Maine should seek cost savings in state and local government that can be applied either to financing the Maine Innovation Jobs Fund and the Cluster Development Fund or tax reduction. Here, Maine should adopt a high-level business plan that demands hard-nosed cost-cutting as well as determined investment.



On the spending side we recommend that Maine:

- Establish a **Maine Government Efficiency Commission** to propose specific reforms to produce between \$60 and \$100 million a year in cost savings in state government through the elimination of structural redundancies and excess administrative overhead. The recommendations would be subject to an up-or-down vote by the Maine Legislature within a specified time period. Savings should be applied entirely to investments in future prosperity and tax reductions
- Fully fund and enlarge the **Fund for the Efficient Delivery of Education Services** to promote voluntary collaborations between schools and districts to reduce K–12 costs
- Reduce its **K–12 administrative expenditures** to the vicinity of the national average of \$195 per pupil, and so save about \$25 million a year
- Appoint a high-level **school district reorganization committee** to substantially reduce the number of school administrative units
- Develop the state’s first-ever state **school capital plan** to ensure that the state’s future investments in construction and renovation are made rationally
- Fully fund and enlarge the **Fund for the Efficient Delivery of Local and Regional Services** to promote voluntary collaborations to reduce service costs
- Support one or two major **pilots in regionalized service delivery** to explore and showcase far-reaching efforts at multi-municipal reorganization and cost reduction. The pilots can be funded by \$1 or \$2 million a year gleaned from the Government Efficiency Commission’s work

On the revenue side we recommend that the state:

- Apply to **property and income-tax reductions** any state-government spending savings located by the efficiency commission that exceed the \$27 million needed to support the innovation and cluster funds as well as the local government pilots. Tax reductions might include, in order of priority:
  - reimbursements to towns with large amounts of tax-exempt property
  - extensions of the homestead and circuit-breaker programs
  - increases in the state’s low threshold for its top income-tax rate
  - reductions in the top income-tax rate
- Explore ways to **“export” tax burdens** onto Maine visitors and non-resident second-home owners



**Support the revitalization of Maine’s towns and cities while channeling growth.** Finally, Maine needs to tend to how its rules and policies shape communities. To accomplish this, the state should support its investments in place-making by making development easier in its traditional towns and cities and fostering improved local and regional planning.

Concerning redevelopment and revitalization, we recommend that Maine:

- Perfect and champion the state’s **new model building and rehabilitation codes**; support their wide adoption with technical assistance, training, and outreach; and campaign over time for code uniformity
- Create and disseminate as a local option a new **model zoning ordinance** specifically designed to complement and enhance the special value of Maine’s historic, densely built, traditional centers
- Better **fund and use existing revitalization and redevelopment-oriented programs and organizations.**

Three programs in need of bolstering are the Municipal Investment Trust Fund (MITF), the Maine Downtown Center (MDC), and the state’s historic preservation tax credit. Most critically, MITF should garner \$90 million from the Maine Quality Places Fund to support matched grants to communities for catalytic investments in downtown-type infrastructure projects—riverfront parks, sidewalks, public reconstruction projects

Concerning local and regional planning we recommend that Maine:

- Provide substantial new **visioning and planning resources** to individual towns to help them reach consensus on how they wish to grow, and then implement their vision with ordinances. Funding for these and other planning activities could come from a new **Maine Community Enhancement Fund**, supported by a reasonable \$20 increase in deed recordation fees
- Foster much more **regional planning** by providing grants from the Community Enhancement Fund to groups of towns that agree to plan together. Even bolder collaboration could be encouraged by offering even stronger incentives for towns to actually implement regional growth-management plans. These incentives might include giving priority in the awarding of key state grants and aid flows to towns engaged in cross-boundary planning, or awarding authority for a local-option sales tax to towns that implement truly regional plans

*Maine should make development easier in traditional towns and cities while doing much more to support and stimulate local and regional planning.*

In the end, this report affirms Mainers’ abiding intuition that economic success and quality places matter equally and can be fostered by effective, frugal government. Along those lines, “**Charting Maine’s Future**” concludes that a more prosperous, more sustainable, and ultimately more equitable future can be Maine’s if it sets gridlock aside and moves decisively to invest in its economy and quality places, while taking tough steps to trim government and streamline its land-use and development rules.

Move along these lines and Maine people will achieve a good measure of what they so earnestly desire. ■

# AN ACTION PLAN FOR PROMOTING SUSTAINABLE PROSPERITY IN MAINE

## ACTION

### MAINE QUALITY PLACES FUND

This 10-year \$190 million revenue bond fund will support:

- Community revitalization
- Land and farm conservation
- Access to forests and lakes
- Tourism promotion

### MAINE INNOVATION JOBS FUND

Some \$180 million of this \$200-million bond fund—financed by savings located by the Government Efficiency Commission—will support research and development in promising areas like:

- Forest bioproducts
- Biotechnology
- Information Technology
- Organic farming/specialty foods
- Advanced composite materials
- Precision manufacturing

A related Maine Cluster Development Fund of \$20 million will support industry-led partnerships that catalyze job growth through workforce development, network-building, and marketing

### FUND FOR THE EFFICIENT DELIVERY OF LOCAL AND REGIONAL SERVICES

An annual stream of \$2 million—derived from savings located by the Government Efficiency Commission—will fully fund this existing program which promotes efficiency through inter-governmental cooperation on service delivery

### TAX REDUCTIONS

Savings from the Maine Government Efficiency Commission in excess of \$27 million per year should go toward easing tax burdens through:

- Reducing property taxes
- Lowering the top income tax one-half point
- Increasing the income threshold for the top income tax bracket

### MAINE COMMUNITY ENHANCEMENT FUND

Grants will support:

- Full implementation of building code reform
- The Maine Downtown Center
- Better visioning assistance and planning tools for towns
- Incentives for multi-municipal and region-scale planning

## HOW TO PAY FOR IT

### LODGING TAX

Three-point increase  
(\$20 million per year)

### MAINE GOVERNMENT EFFICIENCY COMMISSION

A bipartisan commission that will:

- Locate program savings of \$60 to \$100 million
- Propose reforms
- Send proposals to the legislature for an up or down vote

Savings will be invested in economic development activities and tax reduction

### DEED TRANSACTION FEE

\$20 increase (\$5 to \$8 million per year)

**From:** [Carole](#)  
**To:** [Godsoe, Benjamin](#)  
**Subject:** [EXTERNAL SENDER] Public comment on proposal threatening the North Woods from Carole, Portland, Maine  
**Date:** Tuesday, January 15, 2019 9:26:04 AM

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Dear Mr. Godsoe,

As a 3rd generation Mainer, I am writing you in reference to a meeting in Brewer last week, I was unable to attend, the Land Use Planning Commission (LUPC) held a public hearing on a major proposal to expand development locations in Maine's North Woods.

Under the proposed rule, more than 1.3 million acres of land and 20 percent of lakes in Maine's Unorganized Territories would be vulnerable to sprawling residential subdivision development.

I am urging you to and the [Commission to PLEASE drop its far-reaching proposal](#).

**By a small stroke of a hand and signatures, you would forever harm the land, waters, and wildlife in Maine's North Woods.**

As soon as Maine's beautiful trees come down, habitats for animals and birds will be forever destroyed, the natural beauty of these lands will never come back.

And as soon as pavement is laid, our legacy of being rural will be forever changed and the North Woods will become just another town on the map.

The Commission needs to drop this development idea and **allow for Maine's future generations to enjoy what we now love.**

Thank you,

Carole

Carole G. Jean  
36 Glenridge Drive  
Portland ME 04102  
207 838 9204

## Godsoe, Benjamin

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**From:** Glen and Dave Bridges <Bothbridges@fairpoint.net>  
**Sent:** Tuesday, January 15, 2019 6:00 AM  
**To:** Godsoe, Benjamin  
**Subject:** [EXTERNAL SENDER] LUPC North Woods Development Proposal

I am opposed to opening any more of the North Woods to further development. "Development" is actually a euphemism for destruction when applied to our forested lands, for wherever humans dwell they change the surrounding land and therefore ecology making it undesirable for the organisms that attracted man's development of the area. Our country has few places left like The North Woods. Cherish it and preserve it rather than destroy it through "development."

Sincerely,

David W. Bridges, Ph. D.  
Assoc. Prof. Fisheries Retired

**From:** [Sally Kwan & Duane Hanson](#)  
**To:** [Godsoe, Benjamin](#)  
**Subject:** [EXTERNAL SENDER] Comment on proposed adjacency and subdivision changes  
**Date:** Tuesday, January 15, 2019 8:17:37 PM

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Mr. Godsoe,

My wife and I live 12 miles from the paved road at Whipple Pond in T5 R7 BKP WKR.

I am writing to you about this most critical time for the Maine Woods. What is happening now will determine the future of these woods and the important species of animals, fish and plants that live here. This last wilderness in the east has remained undeveloped for hundreds of years because of the timber industry. Now this is all changing because the land is being sold out.

Once we lose it to progress and development, it will be gone forever. We need to preserve this land for future generations to come to a place of quality where people can find peace, to camp, hike, canoe, hunt, fish, and enjoy! A place to connect with nature. This is what we would lose if we don't fight rampant development. The accessibility of the pristine Maine Woods is what attracts recreational visitors.

It seems strange and very disturbing that we would be fighting the CMP power line which we are realizing is much much more than a power line and now to have laws that control development of these woods possibly change to encourage development!

Why is it the money that can be made by big business is more important than the last wilderness for people to enjoy?

Duane Hanson  
T5 R7 BKP WKR

**From:** [Elizabeth Parsons](#)  
**To:** [Godsoe, Benjamin](#)  
**Subject:** [EXTERNAL SENDER] Public comment on LUPC's proposed changes to criteria for adjacency  
**Date:** Tuesday, January 15, 2019 12:05:55 PM

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Greetings from Portland which seems quite far from the State's Unorganized Territories. Why would someone from down here want to chip in on matters up there? Well, a few years ago our Planning Department changed R6 zoning requirements in ways they said would allow homeowners to do small construction projects such as add on decks. Proponents praised the classic triple decker model, implying that was the sort of increased housing density they had in mind via the changed rules.

What has ended up happening, though, is that developers have used the changes to do things like maximize footprint sizes on small lots, even tear down older buildings that contribute to Portland's architectural character in order to construct new, characterless (in my view) boxy structures.

So, the point is that unintended consequences can result from even the best intentioned rules changes. Commission staff planners may mean well by suggesting shifts for the adjacency rules. But I urge the State to listen to the people who live in the areas potentially affected, I also urge the State to take a lesson from what's happened here in Portland. Most especially, I urge the State to recognize what an unparalleled jewel the Unorganized Territories represent to Maine and the rest of the country. Are the envisioned benefits of these rule changes really worth the risk of unintended consequences economic development can entail? Most crucially, are the proposed benefits worth the assured consequences of losing more natural habitat in this era of climate crisis?

Thank you for considering these comments.

Elizabeth Parsons  
44 Winter Street  
Portland

**From:** [Eileen Purdy](#)  
**To:** [Godsoe, Benjamin](#)  
**Subject:** [EXTERNAL SENDER] Development in the North Woods  
**Date:** Tuesday, January 15, 2019 9:19:00 AM

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Dear Mr. Godsoe,

I stand with the Maine Natural Resources Council and many others in strongly opposing changing the development parameters in the North Woods. It's imperative that we protect the wonderful forests and wooded lands in our beautiful state. Seemingly small changes will, development but development, destroy the woodlands.

Eileen Purdy  
Portland



**From:** [jmfunk@twc.com](mailto:jmfunk@twc.com)  
**To:** [Godsoe, Benjamin](#)  
**Subject:** [EXTERNAL SENDER] Maine's North Woods  
**Date:** Tuesday, January 15, 2019 11:58:13 AM

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Please count this message as an urge for a NO decision on allowing commercial or residential development in our North Woods. Such spaces are unique — they are treasures that must be protected for the sake of the universal environment and for the generations that come behind us. Once destroyed, they are not retrievable. Thank you.  
Sent from my iPad

**From:** [Joyce Harrison](#)  
**To:** [Godsoe, Benjamin](#)  
**Subject:** [EXTERNAL SENDER] Comments on revised rule regarding Adjacency  
**Date:** Tuesday, January 15, 2019 9:41:14 AM

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Dear Mr. Godsoe,

I am writing to express deep concern with LUPC's revised proposed change to the adjacency criteria for Maine Unorganized Territories and strongly feel it should not be adopted.

As a 35 year resident of Beaver Cove on Moosehead Lake, as a science teacher with a background in Wildlife Biology and environmental sciences, and as a business owner who rents property to visitors on Moosehead; I see no advantages to the new proposal.

Greenville and the local towns are already struggling to make town a destination for tourists. The shops are full on a rainy day, restaurants draw crowds in who walk around town. It is very important to our visitors to sightsee without sprawl marring the landscape, and find it special to head into town for local activities.

A fragmented landscape would detract in every way, from the idea of wilderness so many visitors come for, and for the ecosystem as well. It's a no win for all.

Thank you for taking my viewpoint into consideration,

Joyce Harrison  
Beaver Cove, Maine

**From:** [James J Kinnealey](#)  
**To:** [Godsoe, Benjamin](#)  
**Subject:** [EXTERNAL SENDER] Expand Development locations in Maine (LUPC) / North Woods  
**Date:** Tuesday, January 15, 2019 9:32:17 AM

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Dear Benjamin, (the Land Use Planning Commission);

NORTH WOODS

I have heard that you are considering and (forgive me if I have the wrong terminology) to 'rezone' parts of the Great North Woods of Maine to allow Residential subdivision development.

I am writing you to urge caution. I am strongly against this idea but if it must 'be' please have Maine pride and great love for Maine's North Woods. I think if you proceed to expand and allow development

It should be a slow and carefully crafted plan. It would be a terrible and irreversible tragic 'for ever' error to allow development of Maine's North Woods and its many pristine lakes and ponds.

The North Woods was visited by Henry David Thoreau in the 1800's. In Massachusetts there is the Waldon Pond State Reservation. This is a National Landmark! It is just a 335 acre parcel of the idea of wilderness.

Please consider how important is the wilderness of Maine's North Woods in its pristine natural state. There is nothing left in New England to compare to our great North Woods. It is part of our collective Maine identity.

Sincerely, Jim Kinnealey

Hope, Maine

**From:** [mermaidlady@zwi.net](mailto:mermaidlady@zwi.net)  
**To:** [Godsoe, Benjamin](#)  
**Subject:** [EXTERNAL SENDER] Fwd: Re: January 22: Public comment deadline on proposal threatening the North Woods  
**Date:** Tuesday, January 15, 2019 11:00:25 AM

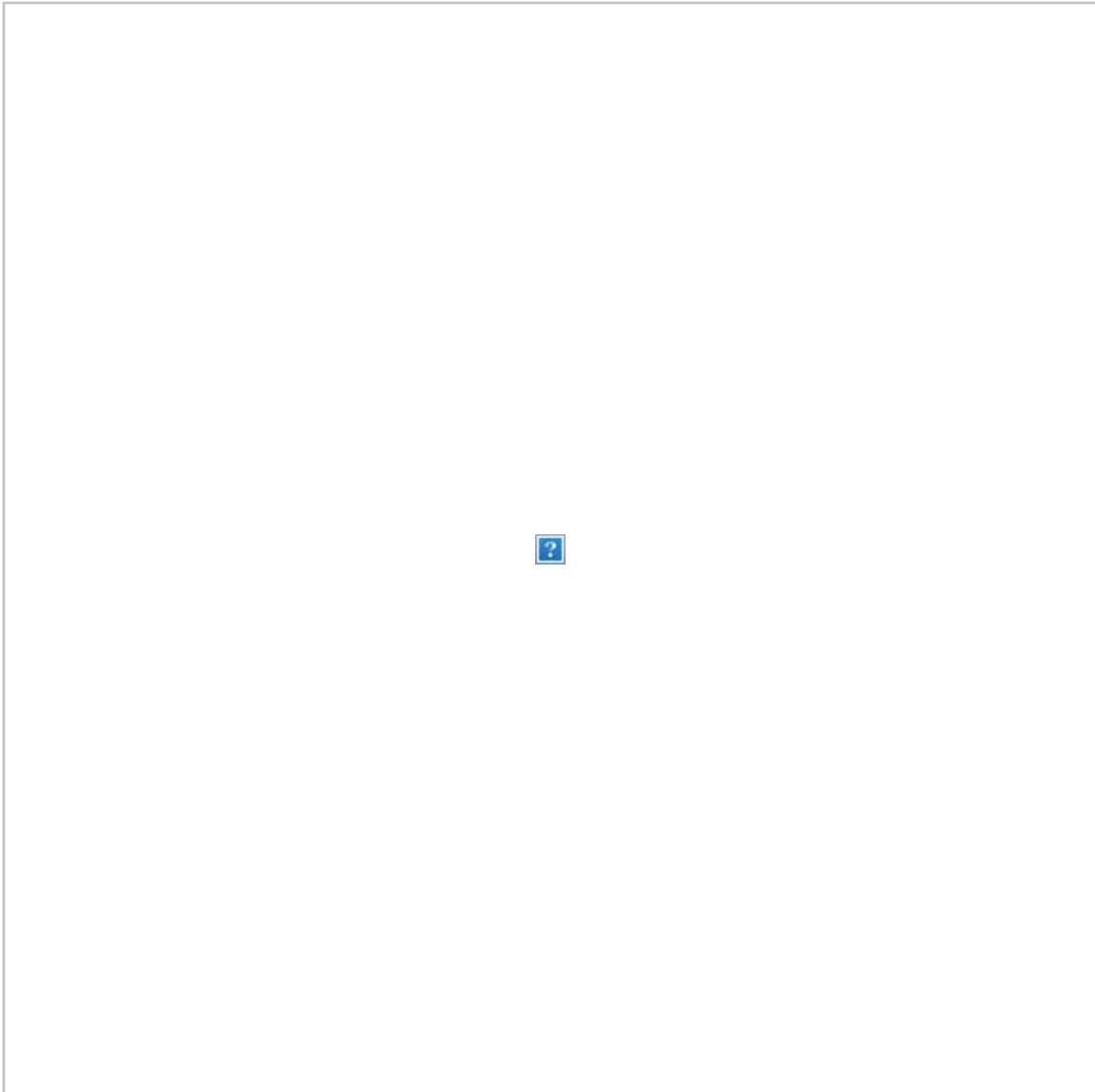
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Hello Benjamin,

I would rather see Maine work towards sustainable energy projects for our own use, that will bring good jobs to our state, benefiting our economy. Please do not pursue this damaging project that is of no long term benefit to our state.

Thank you for your service, Joelle Webber

On 2019-01-14 14:59, NRCM Forests and Wildlife Project wrote:



Dear Joelle,

Last week in Brewer, the Land Use Planning Commission (LUPC) held a public hearing on a major proposal to expand development locations in Maine's North Woods. Under the proposed rule, more than 1.3 million acres of land and 20 percent of lakes in Maine's Unorganized Territories would be vulnerable to sprawling residential subdivision development.

[NRCM testified in opposition to this proposal at the hearing](#), where [the majority of people and organizations who attended urged the Commission to drop its far-reaching proposal](#).

NRCM strongly encourages you to [submit written comments to LUPC](#) by **Thursday, January 22** to raise your concerns because the future of Maine's North Woods is at stake.

This is your last chance to have your voice heard on this proposal which could forever harm the land, waters, and wildlife in Maine's North Woods. After receiving public comments, LUPC is planning to deliberate and make a decision on this proposal in March or April.

NRCM opposes LUPC's proposal because it threatens the special ecology and character of the North Woods. [You can read more about our concerns on our website](#).

We hope you will take a few minutes to submit your comments to LUPC today.

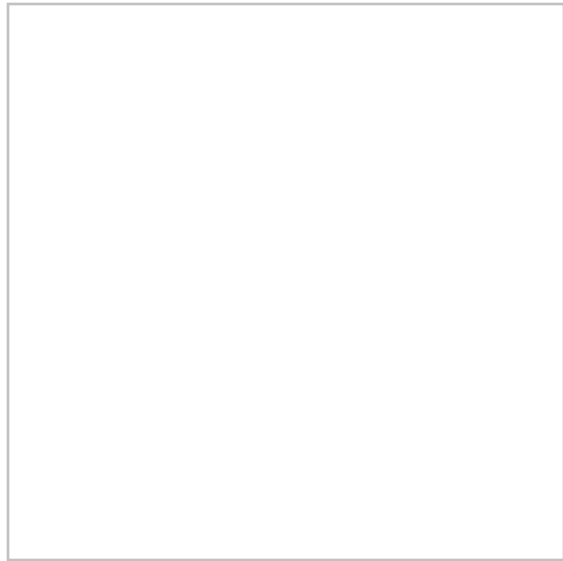
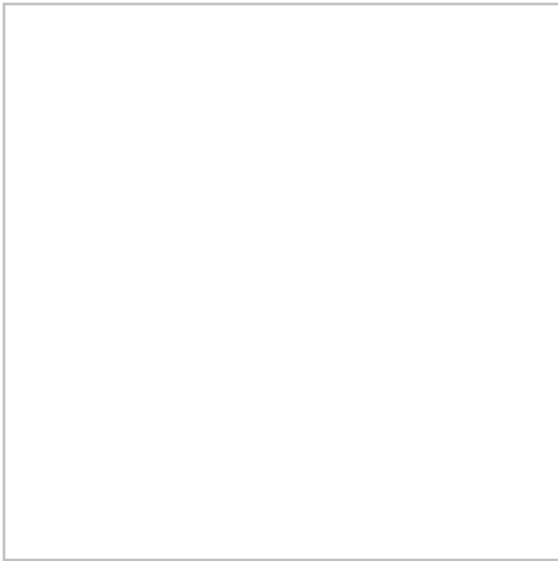
Please [contact us](#) if you have questions in advance of the January 22 deadline.

Thank you,

Cathy Johnson, NRCM Forests and Wildlife Project Director  
Carly Peruccio, NRCM Forests and Wildlife Outreach Coordinator

[Invite others to submit comments](#)





3 Wade Street  
Augusta, Maine 04330  
1-800-287-2345  
nrcm@nrcm.org

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**From:** [Kevin Macdonald](#)  
**To:** [Godsoe, Benjamin](#)  
**Subject:** [EXTERNAL SENDER] North Maine woods development proposal  
**Date:** Tuesday, January 15, 2019 12:05:41 PM

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Dear Mr. Godspeed,

I write today to go on record opposing the proposal to expand development locations in the North Maine Woods. Under the proposed rule, more than 1.3 million acres of land, and 20 per cent of the Lakes in Maine's unorganized territories would become vulnerable to sprawling residential subdivision development, forever altering the fundamental character of the region. In its present state the North Maine Woods has its own intrinsic value, and provides a benefit to all of the citizens of the state;

Its development primarily benefits the developers, and perhaps the affluent few who could afford to buy into the development. The rest of us will be shut out, and an important part of our heritage as Mainers will be degraded beyond repair.

I urge the Land Use Planning Commission to reject this proposed rule.

Respectfully submitted,  
Kevin Macdonald  
P. O. Box 198  
62 Lakeshore Drive  
Belgrade Lakes, ME 04918

**From:** [Leda Beth Gray](#)  
**To:** [Godsoe, Benjamin](#)  
**Subject:** [EXTERNAL SENDER] Objection on revised criteria for adjacency  
**Date:** Tuesday, January 15, 2019 10:43:21 AM

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Dear Maine Land Use Planning Committee—

I am writing to oppose the revised criteria for adjacency in Maine's North Woods. For a number of reasons I think criteria should be tightened, not loosened on development. Maine has some of the most extensive remote and undeveloped natural areas in New England, if not the entire eastern US and a lot of our state's future potential will come from this, especially eco-tourism, but also wise use of taxpayer money and investing that money for the best future for our state, not throwing it away on the subsidizing of sprawl.

Allowing sprawl, which is what this planned loosening of criteria is, would cost taxpayers more and more, as we have to finance the infrastructure to go along with development, including roads, road maintenance and plowing, fire departments, police departments, and on and on. Many Mainers are struggling— why raise our taxes just to subsidize corporations and rich people? Even if it is set up initially to keep more police and fire departments from having to come into existence, it is a step toward that, and at a time when many towns are struggling and could use the tax revenue from potential new development that would under these new criteria be allowed in the more remote areas.

I am not only talking about the loss of open space, but also potential harm to wildlife, scenery, and especially lakes, with many more of them being opened up for development, as well as the loss of remoteness. Much of the East has squandered its wild areas and many people look to Maine to get away, recreate and enjoy remote wild areas. Let us protect our wild areas by keeping development confined. We should be tightening development restrictions not loosening them.

I strenuously object to these proposed criteria. I don't want more lakes developed, I don't want "kingdom lots" to be allowed and I don't want sprawl over any more of our beautiful state.

Sincerely,

Leda Beth Gray  
PO Box 1122/ 58 Larnus Hill Lane  
Blue Hill ME 04614



**From:** [DACF](#)  
**To:** [York, Mary](#)  
**Cc:** [Godsoe, Benjamin](#)  
**Subject:** FW: [EXTERNAL SENDER] Extending development in unorganized territories  
**Date:** Tuesday, January 15, 2019 8:09:24 AM

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-----Original Message-----

From: Linda [<mailto:lindasilk@zwi.net>]  
Sent: Monday, January 14, 2019 6:10 PM  
To: DACF <[DACF@maine.gov](mailto:DACF@maine.gov)>  
Cc: Cardone, Barbara <[barbara.cardone@legislature.maine.gov](mailto:barbara.cardone@legislature.maine.gov)>  
Subject: [EXTERNAL SENDER] Extending development in unorganized territories

To extend the developing area in the woodlands to 10 miles from its current one mile is a terrible idea.

Buildings and human movement should be clustered in common areas and leave the other places wild and unbroken. Take a lesson from the Europeans. This protects flora and fauna. These are things that make our state inviting to outsiders, welcoming to those who wish to make a home here.

Infrastructure is already in place. Build around and near it. Any other decision destroys habitat, creates sprawl for the benefit of the very few. What is the motive for this change? The benefit?

Linda Stearns

**From:** [Richard Moore](#)  
**To:** [Godsoe, Benjamin](#)  
**Subject:** [EXTERNAL SENDER] North Maine Wood  
**Date:** Tuesday, January 15, 2019 9:41:27 AM

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Dear Mr. Godsoe,

I am writing to condemn the idea of development in the North Maine Wood. My reason is thus- years ago as a young teacher in a at-risk school we trained students in first aid, wilderness survival, and white water canoeing, and that changed lives. We took eighth, ninth, and tenth graders who struggled in traditional classrooms, primarily caused by poor or even volatile homes, and trained them to leave it all behind to seek the healing power of the woods. The wilderness they encountered made a profound impact on their lives. I have reconnected with many of these students, and they are now leading lives any one of us would be proud to lead. If you know the grisly details of their young lives, you would cringe. The sheer remoteness and beauty of the NMW was essential to gaining confidence and a different perspective on life. It is a rare treasure that should be left as it is. Please do not allow development in this pristine area.

Respectfully submitted,

Richard Moore  
3 Dove Lane  
Eliot ME 03903

JAN 16 2019

LUPC - AUGUSTA

January 15, 2019

To Land Use Planning Commission,

As a year round resident of Maine for over 40 years, I am concerned about LUPC's revised proposed policy changes to expand development locations in Maine's North Woods. The potential negative impacts of these major proposed changes and the lack of sufficient information to fully evaluate the potential impacts of the rules are considerable drawbacks. These rules could irreversibly harm the forests, waters, and wildlife of Maine's North Woods. Once a resource is gone it's difficult to restore it.

Many of the communities bordering the North Woods are struggling to retain existing population and businesses. As someone with many camping experiences around Millinocket and Greenville I know the issues these towns face. Making development easier outside of the towns would result in the loss of potential tax revenue, undermining efforts currently underway to revitalize the economies of these communities. I would suggest that the LUPC should be engaging local towns in a comprehensive planning process for the region. The very heart of Maine is its towns whether coastal, inland or the North Woods.

Of special concern are large lot subdivisions called "kingdom lots". Quite honestly this brings to mind Florida and Arizona—enclaves of people with no real connection, or sense of responsibility, to the Maine place they are in. The Legislature was correct in banning this idea in 2001.

The "one-mile-by-road" requirement has, for decades, required new proposals for development to be located in areas that are within one-mile-by-road from compatible development that is of a similar "type, use, occupancy, scale, and intensity." This is a common sense approach which helps build our towns instead of hurting them. PLEASE support this approach and not the satellite suburb plan which unnecessarily disrupts our woodlands, animals and their habitat, and our beautiful lakes and streams.

Sincerely, 

Siri Beckman

39 Andrews Rd.

Bath, ME 04530

**From:** [Sally & Jon](#)  
**To:** [Godsoe, Benjamin](#)  
**Subject:** [EXTERNAL SENDER] development in Maine's North Woods  
**Date:** Tuesday, January 15, 2019 9:45:58 AM

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Hello,

I am writing to express my disapproval of changes in the LUPC policy regarding Maine's North Woods. The North Woods are a unique aspect of Maine of which we can be proud. While many people would love to live there or have luxurious get-aways there, it should be left intact using the rules that exist already. I heard about these changes from the Natural Resources Council of Maine, an organization that I appreciate to alert me about damage that could happen to Maine's environment. We need all the forest land that there is!

Sally Chappell  
Bridgton, Maine

**From:** [steve](#)  
**To:** [Godsoe, Benjamin](#)  
**Subject:** [EXTERNAL SENDER] maine"s north woods - leave them be.  
**Date:** Tuesday, January 15, 2019 8:07:36 PM

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Sent from [Mail](#) for Windows 10

**From:** [btair1](#)  
**To:** [Godsoe, Benjamin](#)  
**Subject:** [EXTERNAL SENDER] north woods  
**Date:** Tuesday, January 15, 2019 6:55:47 AM  
**Attachments:** .. [btair1 \(All\).vcf](#)

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Hello,

if you really need to open the north woods up to more development, then make it within 2 miles, not 10 miles.

or leave it as is for future generations to enjoy peacefully, or loggers to harvest someday when it grows back.

call my cell and old NH number 603-496-3942 if you wish to discuss.

William Turner  
President, Air Diagnostics & Engineering Inc.  
110 Alpine Village Rd.  
Harrison, ME 04040

fax 207-583-4572