



PAUL R. LEPAGE
GOVERNOR

STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
LAND USE PLANNING COMMISSION
22 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0022

WALTER E. WHITCOMB
COMMISSIONER

NICHOLAS D. LIVESAY
EXECUTIVE DIRECTOR

Memorandum

To: Commissioners
From: Stacie R. Beyer, Chief Planner
Date: August 1, 2018
Re: Subdivision Rule Review, Update

Introduction

Since early 2014, the Commission has had a process underway to review and revise its subdivision rules. Staff presented, at the June 2018 Commission meeting, conceptual subdivision layout and design standards that were developed based on input received during facilitated stakeholder meetings, small focus group meetings, outreach with design professionals and wildlife biologists, and staff research. Since the June meeting, we have received additional input from stakeholders and have worked on draft language for revising the Commission's subdivision rules. At the Commission's August meeting, staff will review the proposed structure of the first draft of the rules, discuss key comments received on the conceptual standards, and request feedback from the Commission, including on two specific subdivision standards that are noted below.

Rule Revisions

Proposed revisions to the subdivision layout and design rules are being drafted and incorporate the subdivision conceptual standards, feedback from the Commission, and comments from stakeholders. The draft rules include changes to Sections 10.02, Definitions; 10.17, Expiration of Permit; and 10.25, Development Standards. Several parts of Section 10.25 are proposed for revision including:

- 10.25,D. Vehicular Circulation, Access and Parking
- 10.25,E. Scenic Character, Natural and Historic Features
- 10.25,P. Protected Natural Resources
- 10.25,Q. Subdivision and Lot Creation
- 10.25,R. Clustered Development
- 10.25,S. Open Space

In preparing the draft rule language, staff is including the conceptual standards relating to access management, traffic movement, and roads in Section 10.25,D to keep all of those standards

together, by adding a subsection for additional subdivision road standards. As suggested by Commissioners, conceptual standards for hillside development are being included in Section 10.25,E and are being drafted to apply to all development, not solely to subdivision proposals. Most of the proposed conceptual standards for subdivisions are being incorporated in the subdivision rules in Section 10.25,Q. Given that one of the proposed subdivision layouts is the clustered layout and to keep all of the layout specific standards together, staff is proposing to relocate and expand standards for that layout in Section 10.25,Q; repeal Section 10.25,R (which currently contains the clustering standards); and leave that section reserved for future use. Lastly, changes to update the open space standards are proposed for Section 10.25,S. The proposed revisions change the name for Section 10.25,S to Common Open Space to help distinguish the common open space standards associated with subdivisions and land use activities from the tax provisions for open space on individual properties.

Key Comments

Staff received a total of eight written comments in response to the Conceptual Subdivision Layouts and Standards document. A copy of all of the comments is attached to this memo. A number of specific comments submitted by stakeholders resulted in language clarifications from the conceptual standards to the proposed rule language. In talking with stakeholders, staff found it is important to separate the “where” of adjacency and proposed rule changes relating to zoning, from the “how” of the subdivision rule revisions. Staff will discuss key comments at the August meeting, including comments relating to rights-of-way for future road connectivity, changes to hillside development standards relating to view points, allowances for reduced open space in subdivisions near conserved land, allowing septic systems in open space, and lot sizes for LowDensity subdivisions.

Commission Feedback

There are a couple of topics raised in the written comments on which staff would like additional feedback from the Commission as staff work to finalize a draft of the proposed rule revisions. One of the comments relates to incorporating StreamSmart crossing principles into the subdivision road standards or the standards for all road crossings. Staff will present information on the StreamSmart principles; current Maine Forest Service, Department of Environmental Protection, and Army Corps crossing standards; and current LUPC road crossing standards. What crossing standards the Commission would like to include in the draft rule changes is a topic that would benefit from discussion.

Also, we received comments on the location of off-site recreational amenities. The conceptual subdivision standards included provisions for having onsite or near-by recreational amenities, such as water access points, recreational trails, or open fields. For recreational amenities to be considered near-by, the conceptual standards proposed the amenities be within ½ mile. We have received comments that the distance should be farther away. The intent of having these resources “near-by” was to ensure they would be sufficiently close to allow for frequent use. Although we consider ¼ mile as a walkable distance, some individuals can walk a distance of ½ mile, and resources that far away could easily be reached by bike. For over ½ mile (more than 1-mile round trip), most would have to access the resource by vehicle. The ½ mile distance, with an allowance for the Commission to extend that distance on a case-by-case basis, seems reasonable; however; staff would like input from the Commission as to whether the distance should be increased.

Next Steps

Considering the Commission's feedback, staff will make final changes to the draft rules. We expect to provide the Commission with a copy of the draft rules within a week after the Commission meeting, which will allow a couple weeks for Commissioners to review the draft rules, ask any questions, and provide input in advance of the next Commission meeting. We plan to have draft language ready for the Commission to consider in September for posting for public comment and a hearing. In September, the staff recommendation will also include a proposed schedule that takes into account the staff proposal for an extended comment period for the adjacency rulemaking and the rulemaking process for the subdivision standards.

Attachment: Written Comments Received

**WRITTEN COMMENTS RECEIVED ON THE CONCEPTUAL
SUBDIVISION LAYOUTS AND STANDARDS**

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

**Draft version dated: June 8, 2018
Comments received through: August 1, 2018**

From: [Godsoe, Benjamin](#)
To: [Beyer, Stacie R](#)
Subject: FW: Adjacency Cooments
Date: Monday, June 18, 2018 8:31:20 AM

From: Godsoe, Benjamin
Sent: Thursday, May 17, 2018 9:08 AM
To: Horn, Samantha <Samantha.Horn@maine.gov>
Subject: FW: Adjacency Cooments

FYI – Tony Barrett’s comments (met with us last week as a member of Maine Appalachian Trail Club).

From: A J Barrett [<mailto:barretttony@mac.com>]
Sent: Monday, May 14, 2018 9:53 AM
To: Godsoe, Benjamin <Benjamin.Godsoe@maine.gov>
Subject: Adjacency Cooments

Mr. Godsue—

Comments on the proposed zoning and subdivision changes.

1.) Can you list or summarize for the public the reasons for the Adjacency and subdivision changes now? Is it that the character of large landowners has changed from forestry products to land development companies? I understand that some landowners have requested changes for decades — less restrictive zoning — so why now?

2.) On the one hand the changes concentrate development (vs. the more dispersed development under current rules), but when I look at the statewide map of the primary and secondary development locations, it appears that development is being directed to areas along the Appalachian Trail corridor where there isn’t much development currently. In particular:

- Newry/Grafton Notch
-
- High Peaks — Madrid, Redington and Mt. Abrams townships. Limited road network and no power grid.
-
- Long Falls Dam Rd.— This road was only built for the Flagstaff dam and the power grid does not extend beyond Highland Plantation. Why focus development in the Dead River, Carry Ponds and Pierce Pond townships?
-
- The Forks — is the Forks truly a ‘service center’? It’s designation results in the Moxie pond area and Bald Mt. Township being designated where there is no power grid or major roads to be designated.

-
- Kingsbury/Mayfield — holds portions of the largest wind power development in New England. Yet along this section of Rt. 16 (the road anchoring the development areas) there is no extension of the power grid (Bingham to Abbott).
-
- Elliottsville Plantation — yes, geographically it is adjacent to the Greenville service center but the road access is much less direct. Just seems anomalous given the scenic and natural resources in this plantation.

Are these highlighted development areas in the above townships artifacts of the algorithm used for extending out the zoning? Just doesn't make sense.

3.) Can the subdivision changes include some standards on Mountain View homes to fit more harmoniously in the landscape? They are built to capitalize on the mountain view but what about the view from the mountain of the residential development? Perhaps these conspicuity standards could apply just to scenic resources of state and national significance like the ANST within some buffer distance — clearing size, house color, roof color so that they fit into the landscape. The Epstein house vs. the Griscom camps in Madrid township are in stark contrast, for example.

Thanks for your consideration.

—Tony Barrett



Written Comments on Conceptual Subdivision Layout and Design Standards

May 30, 2018

As a landowner and conservation organization in Maine, the Appalachian Mountain Club (AMC) has an interest in land use decision-making in the Unorganized Territories of the state. We appreciate this opportunity to participate in the process of reviewing the recently released conceptual subdivision layout and design standards. We work closely with the LUPC in our region and appreciate your efforts to balance appropriate land use with supporting Maine's nature-based economy.

AMC participated in the subdivision review stakeholder process back in 2014-2015. At that time we felt that LUPC taking on a comprehensive rule revision process was unnecessary. We were unable to find clear, jurisdiction-wide issues of concern with the current rules. Since then, we have actively followed the LUPC effort to update the Adjacency principle and understand the desire to align the two rule revisions. **After reviewing both sets of proposals, AMC continues to believe that the current planning and zoning scheme for the UT has worked well. We do not believe the major changes being proposed are needed or appropriate.**

We remain supportive of any effort to encourage development in or nearby UT communities. Any rule changes should meaningfully incentivize all types of development within these existing service centers to help bolster their vitality and protect them from the increased costs associated with providing services beyond their borders. We think criteria for subdivision development in the UT should encourage development in places that are already specified as appropriate by the current rules and are currently under-utilized.

As with any zoning ordinance, periodic reexamination and adjustment in response to changing circumstances and opportunities are warranted. However, these changes should be targeted at promoting smarter development, not more development. The core principles of promoting development in proximity to existing development and infrastructure while protecting the

undeveloped and remote nature of the core areas of the jurisdiction must be strengthened, not weakened.

We thank you for the opportunity to comment on these proposed concepts and look forward to a more thorough overview of these proposals at the June 20th LUPC meeting. Please do not hesitate to contact me (kbernard@outdoors.org) if you have any questions.

Sincerely,

Kaitlyn Bernard

Kaitlyn Bernard
Maine Policy Manager

Answers to LUPC Review of Subdivision Rules Survey Questions

Appalachian Mountain Club

1.) Bryan Wentzell, Maine Policy & Program Director, Appalachian Mountain Club

bwentzell@outdoors.org

15 Moosehead Lake Road

Greenville, ME 04441

(207) 899-0150

2.) Yes. AMC has applied to LUPC for multiple development permits for sporting camp redevelopment projects and a dam reconstruction project, and anticipate submitting a zoning petition in the near future. We worked closely with LUPC staff on the Recreational Facility rulemaking process. We were an independent intervening party in the Plum Creek Concept Plan, as well as with past commercial wind power development projects.

3.) The current standards are effective in meeting the outlined goals. We do not recommend any changes.

4.) If the road design and construction rules are updated, we believe they should match the “Stream Smart” principles currently being developed by Maine Audubon, the Army Corps of Engineers, and the ARMS Committee.

5.) The current rules for Level 2 Subdivisions allow for appropriate development in specific places. We think the criteria and streamlined process are fine and do not recommend any changes. If overall changes to subdivision rules are made, they should encourage development in places that are already specified as appropriate by the current rules rather than opening up more areas for subdivision development.

6.) The current layout and design standards for subdivisions are effective in promoting the Commission’s stated goals. We do not recommend any changes.

7.), 8.), 9.) We do not recommend any changes to the cluster development or design standards for subdivisions.

10.) If this process moves forward, our only recommendation would be to incentivize those areas which are already specified as appropriate by the current rules, as mentioned above in response to question 5. Rather than adding new areas to the list of those approved for subdivision development, the Commission should focus on those areas that are already approved and under-utilized.

11.) AMC supports efforts to minimize lapses in maintenance and non-compliance with LUPC standards and specifications. We think these upfront agreements are especially appropriate in cases where the property in question is in close proximity to high value natural resources.

From: [Beyer, Jim R](#)
To: [Bergeron, Mark](#); [Beyer, Stacie R](#)
Cc: [Stebbins, Mark N](#)
Subject: RE: LUPC Conceptual Subdivision Layouts and Standards
Date: Tuesday, June 12, 2018 1:33:08 PM

There are two potential conflicts with Site Law that I found reviewing the design standards. I hesitate to call it a conflict because there are no design standards like these in the Site Law, so an applicant may need to meet the proposed standards in order for LUPC to issue a certification.

1. In the General Standards, Section 2(a), the definition of a subdivision talks about divisions between 3 and 14 lots **or dwelling units**. A subdivision would trip Site Law jurisdiction if any of the lots are not restricted to single-family detached residential housing and it contains five or more lots on 20 or more acres. Also our definition of "aggregate land area" would include any private road to point where it meets a public road. Perhaps a note in whatever rule ultimately is adopted could point the reader to the Site Law definition of a subdivision.
2. Procedures-Sketch Plan Review Meeting Section I(4) requires the applicant to show any future phases during the sketch plan phase. Based on the Oxford Casino decision, this could be problematic for an applicant. If they trigger Site Law and there is something in the record that shows future phases, we would be compelled to require information and issue a permit for the entire development. If it is a subdivision that never gets to DEP, then it is not an issue. I am not quite sure how to deal with this one.

I didn't see anything else in the design standards that would conflict with Site Law standards or rules. The hillside development standards would complement our scenic character standard which is pretty vague. I can see the Department saying to an applicant, if you meet the LUPC's hillside standard, then the project would fit harmoniously into the natural environment.

James R. Beyer
Regional Licensing and Compliance Manager
Bureau of Land Resources - Eastern Maine Regional Office
Maine Department of Environmental Protection
(207) 446-9026
www.maine.gov/dep

From: [Carey, Phil](#)
To: [Beyer, Stacie R](#)
Subject: RE: LUPC Subdivision Conceptual Standards
Date: Thursday, June 14, 2018 1:01:05 PM

Hi Stacie,

As you know, the LUPC regulatory environment is very different from the municipal environment with which I'm familiar. That said, I hope you find these observations helpful.

SECTION I

C.4 Grouping of building envelopes to allow more open space - great!

D.1-3 Good emphasis on retention of open space and wildlife corridors. For I.D.3(b) consider establishing a fee in lieu of open space. Fees collected could be used by LUPC or other appropriate state agency to acquire open space in the general vicinity of subdivision.

E.3 The requirement to require reservation of ROW(s) for future connection(s) from dead-end road is a very important step towards avoiding cul-de-sac hell. However, more needs to be done here, because future residents are likely to will resist the development of a new connection once they've become accustomed to living on a dead-end road. Final provisions must require a strong mechanism that will not allow subdivision residents to block the future use of the ROW when the opportunity arises. For this reason, it would not be a good idea for the ROW to be owned by a lot-owners' association. Perhaps the State can hold the land in fee, or have rights in it that will allow LUPC to require a road connection when the time comes. Also, the private road documents approved with the subdivision will need to require that a connection to the already-constructed road be accommodated.

I think road connectivity is crucial for many reasons (emergency access, maintenance, reducing vehicle trips and vehicle miles, encouraging walking and biking, etc.). As part of my work on model subdivision standards for municipalities, I've drafted the following connectivity provision:

The proposed subdivision road system shall attain a minimum connectivity index score of 1.65. The score shall be calculated by dividing the total number of "nodes" (i.e. street intersections and cul-de-sac ends) into the total number of "links" (i.e. sections of road that connect two nodes; a node and an existing public road; or a node and an abutting property). The Board may accept an index score below the 1.65 standard if the applicant demonstrates that attaining the standard is not practicable due to natural features or existing development patterns on adjacent properties.

I've been told I should create a graphic to illustrate "nodes" and "links". In any event, it's based on ideas presented in the attached document entitled Roadway Connectivity. Just food for thought...

E.8 Review of the specifics of the association documents is key, for reasons such as the one noted above (I.E.3)

G.7 I think this is good, common sense language for dealing with this matter. If necessary, one can fashion something that relies on more objective measures of color and reflectivity, but I hope that won't be needed.

SECTION II

A.4 Anything that can encourage trail connections is great!

D.2 This outlines an ideal design process, but a not-so-well-organized design process may lead to an equally beneficial outcome. The ideal process is worth articulating, but will an applicant need to provide drawings demonstrating that each step of the process has been followed in sequence? I had experience administering a similar set of provisions, and found that, when a good design was submitted, requiring that additional materials be submitted to documents the design process amounted to penalizing the applicant for proposing a good project.

Good luck, and please let me know when you get to the next step.

Thanks,
Phil

From: Beyer, Stacie R
Sent: Monday, June 11, 2018 9:09 AM
To: Carey, Phil <Phil.Carey@maine.gov>; Dzenis, Ruta <Ruta.Dzenis@maine.gov>
Subject: LUPC Subdivision Conceptual Standards

Good morning.

Phil, the latest version of our Conceptual Subdivision Layouts and Standards is now available. The best way to get this version is the link to our webpage below.

Ruta, you expressed an interest in staying in touch with where we may be headed on hillside development standards. Our latest thoughts are included in the conceptual subdivision standards document. The conceptual hillside development standards are in Section I,G.

http://www.maine.gov/dacf/lupc/projects/subdivision_review/Policy_Issues/Conceptual_Subdivision_Layouts_Standards_JuneComMtg.pdf

Ultimately, the conceptual standards will be used as a basis for developing revised LUPC rules for subdivision layout and design. We welcome any feedback that you may have on the proposed concepts.

Thank you.

Stacie R. Beyer
Chief Planner, Land Use Planning Commission
22 State House Station,
Augusta, Maine 04333-0022
Cell- 207-557-2535

From: [Carey, Phil](#)
To: [Beyer, Stacie R](#)
Subject: RE: LUPC Subdivision Conceptual Standards
Date: Thursday, June 14, 2018 1:03:20 PM
Attachments: [Road Connectivity article.pdf](#)

Here's the attachment.

From: Carey, Phil
Sent: Thursday, June 14, 2018 1:01 PM
To: Beyer, Stacie R <Stacie.R.Beyer@maine.gov>
Subject: RE: LUPC Subdivision Conceptual Standards

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Stacie R. Beyer
Chief Planner, Land Use Planning Commission
22 State House Station,
Augusta, Maine 04333-0022
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Roadway Connectivity

Creating More Connected Roadway and Pathway Networks

TDM Encyclopedia
Victoria Transport Policy Institute

About This Encyclopedia

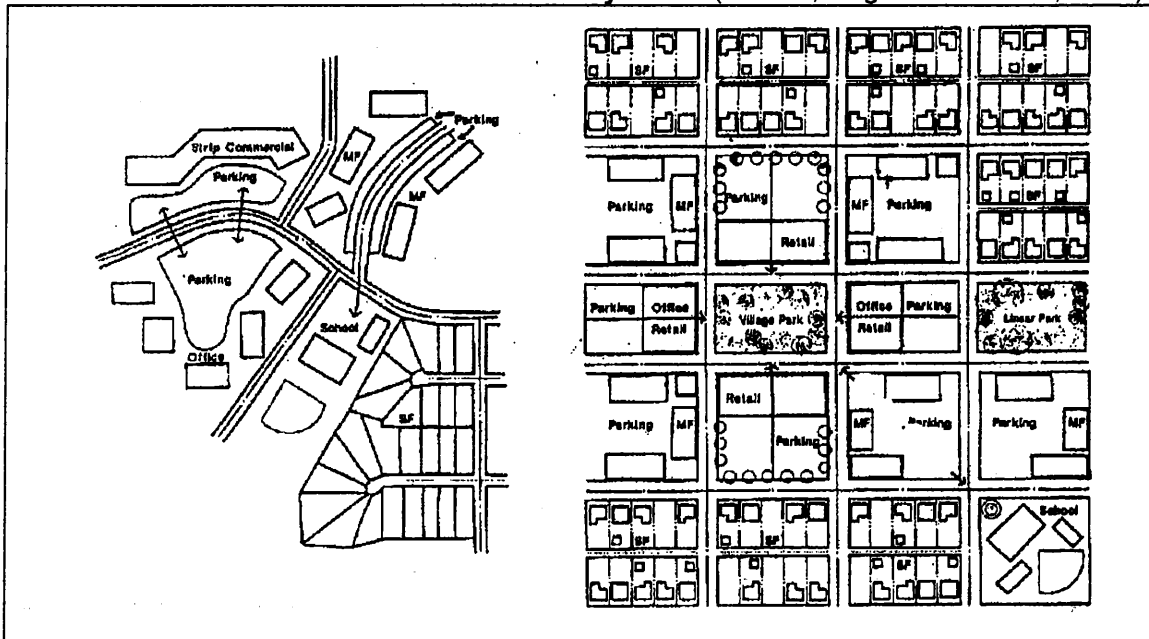
Updated May 9, 2005

This chapter describes how improved roadway connectivity can reduce vehicle travel.

Description

Connectivity refers to the directness of links and the density of connections in path or road network. A well connected road or path network has many short links, numerous intersections, and minimal dead-ends (cul-de-sacs). As connectivity increases, travel distances decrease and route options increase, allowing more direct travel between destinations, creating a more Accessible and Resilient system.

Figure 1 Hierarchical and Connected Road Systems (Kulash, Anglin and Marks, 1990)

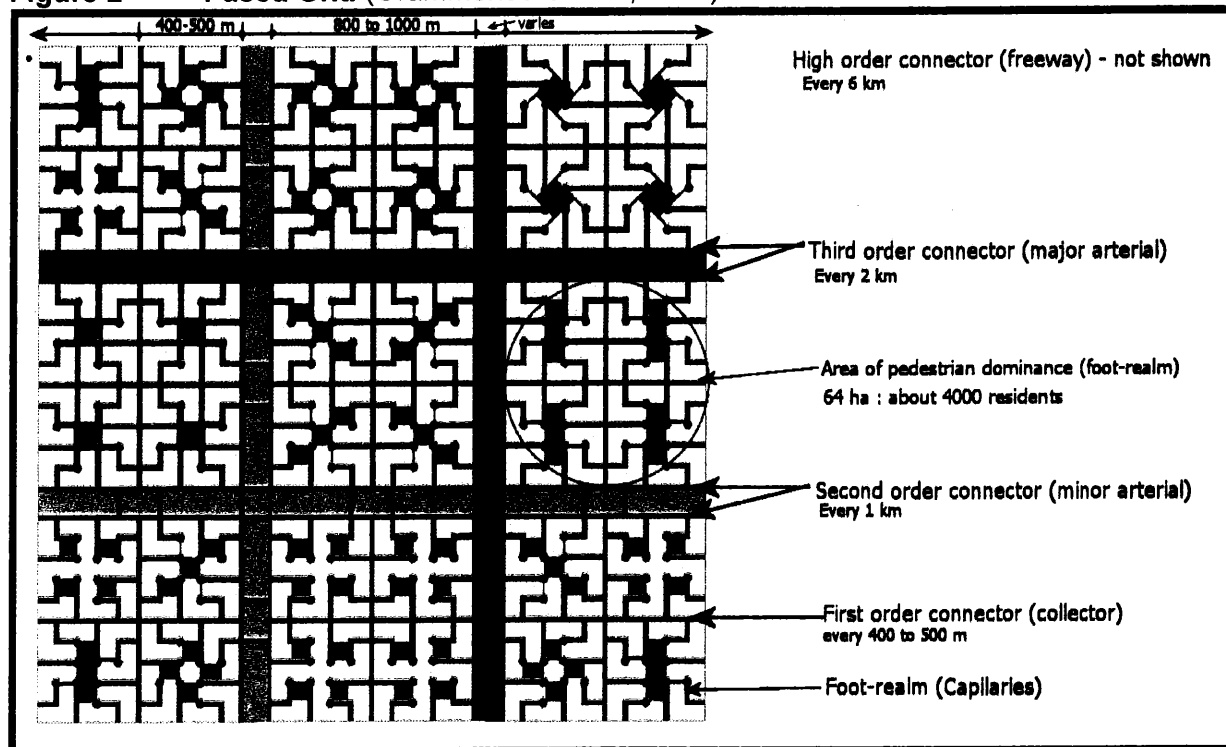


The hierarchical road system, illustrated on the left, has many dead-end streets and requires travel on arterials for most trips. A connected road system, illustrated on the right, allows more direct travel between destinations, offers more route options, and makes nonmotorized travel more feasible.

During the 1960s through the 1990s, roadway design practices favored a poorly-connected, “hierarchical” network, with numerous cul-de-sacs. This increases the amount of travel required to reach destinations, concentrates traffic onto fewer roads, and creates barriers to nonmotorized travel. A connected road network emphasizes Accessibility by accommodating more direct travel with traffic dispersed over more roads, while a hierarchical road network emphasizes *mobility* by accommodating higher traffic volumes and speeds on fewer roads. New Urbanism and Smart Growth land use policies support improved Connectivity as a way to increase land use accessibility. For a particular development or neighborhood, connectivity applies both internally (streets within that area) and externally (connections with arterials and other neighborhoods).

Sometimes, different levels of connectivity are intentionally applied to different modes. For example, some cities are divided into traffic cells with direct walking, cycling and transit connections, but require a longer trip to travel between by private automobile (Vehicle Restrictions). A *Fused Grid* street design (Figure 2), uses public squares at the end of cul-de-sac streets to provide pedestrian and cycling connections that are closed to vehicle traffic (CMHC, 2004). This helps improve community livability and encourage nonmotorized transportation.

Figure 2 Fused Grid (Grammenos/CMHC, 2004)



A Fused Grid street uses greenspace to connect cul-de-sac ends, improving connectivity for non-motorized travel (walking and cycling).

Efforts to increase connectivity must overcome the common preference for residential cul-de-sac street. Cul-de-sacs are popular because they have limited traffic volumes and speeds, and help create a sense of community and security. More connected residential streets can have these attributes if designed with short blocks, "T" intersections, narrower widths and other Traffic Calming features to control vehicle traffic speeds and volumes, and community design features to promote a sense of community and Security. Another objection to a connected street network is that it requires more road right-of-way land, but this can be offset by reducing street widths.

Connectivity Index

A *Connectivity Index* can be used to quantify how well a roadway network connects destinations. Indices can be measured separately for motorized and nonmotorized travel, taking into account nonmotorized shortcuts, such as paths that connect cul-de-sacs, and barriers such highways and roads that lack sidewalks. Several different methods can be used.

- The number of roadway links divided by the number of roadway nodes (Ewing, 1996). Links are the segments between intersections, node the intersections themselves. Cul-de-sac heads count the same as any other link end point. A higher index means that travelers have increased route choice, allowing more direct connections for access between any two

locations. According to this index, a simple box is scored a 1.0. A four-square grid scores a 1.33 while a nine-square scores a 1.5. Deadend and cul-de-sac streets reduce the index value. This sort of connectivity is particularly important for nonmotorized accessibility. A score of 1.4 is the minimum needed for a walkable community.

- The ratio of intersections divided by intersections and dead-ends, expressed on scale from zero to 1.0 (USEPA, 2002). An index over 0.75 is desirable.
- The number of surface street intersections within a given area, such as a square mile. The more intersections, the greater the degree of connectivity.
- An Accessibility Index can be calculated by dividing direct travel distances by actual travel distances. For example, if streets are connected, relatively small, and have good sidewalks, people can travel nearly directly to destinations, resulting in a low index. If the street network has many unconnected deadends and blocks are large, people much travel farther to reach destinations, resulting in a higher index. A WPDI of 1.0 is the best possible rating, indicating that pedestrians can walk directly to a destination. An average value of 1.5 is considered acceptable.

These indices are affected by how each area is defined, such as whether parklands and industrial areas are included in analysis. It is therefore important to use professional judgment in addition to quantitative measurements when evaluating connectivity.

The extreme of an unconnected road network is the gated community, a development or neighborhood surrounded by a fence, with access strictly restricted to residents and their guests. This tends to reduce roadway connectivity for residents and others, increasing motor vehicle travel and reducing nonmotorized accessibility (Blakely and Snyder, 1995; Burke and Sebaly, 2001).

How It Is Implemented

Connectivity can be increased during roadway and pathway planning, when subdivisions are designed, by adopting street connectivity standards or goals, by requiring alleyways and mid-block pedestrian shortcuts, by constructing new roads and paths connecting destinations, by using shorter streets and smaller blocks, and by applying Traffic Calming rather than closing off streets to control excessive vehicle traffic. New Urbanism development practices emphasize a high degree of street connectivity.

Typical street connectivity standards or goals include the features listed below. Of course, such standards must be flexible to accommodate specific conditions, such as geographic barriers.

- Encourage average intersection spacing for local street to be 300-400 feet.
- Limits maximum intersection spacing for local streets to about 600 feet.
- Limits maximum intersection spacing for arterial streets to about 1,000 feet.
- Limits maximum spacing between pedestrian/bicycle connections to about 350 feet (that is, it creates mid-block paths and pedestrian shortcuts).
- Reduces street pavement widths to 24-36 feet.
- Limits maximum block size to 5-12 acres.
- Limits or discourages cul-de-sacs (for example, to 20% of streets).
- Limits the maximum length of cul-de-sacs to 200 or 400 feet.
- Limits or discourages gated communities and other restricted access roads.
- Requires multiple access connections between a development and arterial streets.
- Requires a minimum connectivity index, or rewards developments that have a high connectivity index with

various incentives.

- Specifically favors pedestrian and cycling connections, and sometime connections for transit and emergency vehicles, where through traffic is closed to general automobile traffic.
- Creates a planning process to connect street “stubs,” that is, streets that are initially cul-de-sacs but can be connected when adjacent parcels are developed in the future.

Travel Impacts

Increased street connectivity can reduce vehicle travel by reducing travel distances between destinations and by supporting alternative modes. Increased Connectivity tends to Improve Walking and Cycling conditions, particularly where paths provide shortcuts, so walking and cycling are relatively faster than driving. This also supports transit use.

The SMARTRAQ Project (www.smartraq.net) analysis in Atlanta, Georgia found that doubling the current regional average intersection density, from 8.3 to 16.6 intersections per square kilometer reduces average vehicle mileage by about 1.6%, causing a reduction from about 32.6 to about 32.1 average weekday per capita (16+ years old) vehicle miles in the region, all else held constant. The LUTAQH (Land Use, Transportation, Air Quality and Health) research project sponsored by the Puget Sound Regional Council (www.psrc.org) also found that per household VMT declines with increased street connectivity, all else held constant. That study indicates that a 10% increase in intersections per square mile reduces VMT by about 0.5%.

Traffic modeling by Kulash, Anglin and Marks (1990) predicts that a connected road network reduces VMT within a neighborhood by 57% compared with conventional designs, although neighborhood travel only represents 5-10% of total vehicle travel, and shorter trip distances may be offset somewhat by increased trips (Crane, 1999).

A USEPA study (2004) found that increased street connectivity, a more pedestrian-friendly environment and shorter route options have a positive impact on performance, (per-capita vehicle travel, congestion delays, traffic accidents and pollution emissions). The Smart Growth Index (USEPA, 2002) describes a methodology for calculating the effects of increased roadway connectivity on vehicle trips and vehicle travel. However, current models are not very accurate at predicting how a particular change in roadway connectivity will affect travel patterns. Where other factors are conducive (a neighborhood contains services such as schools and stores, walking conditions are adequate, and there are incentives to use alternative modes), increased roadway connectivity can probably reduce total per capita vehicle mileage by a few percent (Land Use Impacts on Transport).

Table 1 Travel Impact Summary

Objective	Rating	Comments
Reduces total traffic.	2	Reduces travel distances and therefore VMT.
Reduces peak period traffic.	1	
Shifts peak to off-peak periods.	0	
Shifts automobile travel to alternative modes.	1	Tends to improve walking and cycling.
Improves access, reduces the need for travel.	3	
Increased ridesharing.	0	
Increased public transit.	0	
Increased cycling.	2	
Increased walking.	3	
Increased Telework.	0	

Reduced freight traffic.	1	
--------------------------	---	--

Rating from 3 (very beneficial) to -3 (very harmful). A 0 indicates no impact or mixed impacts.

Benefits and Costs

By improving Accessibility, increasing route options, improving walkability and reducing vehicle travel, improved roadway Connectivity can provide a variety of benefits. Improved Connectivity tends to increase transportation system Resilience by increasing route options, reducing problems when a particular link is closed. It improves emergency response by allowing emergency vehicles more direct access, and reduces the risk that an area will become inaccessible if a particular part of the roadway is blocked by a traffic accident or fallen tree. A more connected street system allows a fire station to serve about three times as much area as in an area with unconnected streets, increases the efficiency and safety of services such as garbage collection and street sweeping (crash rates and insurance costs for such vehicles tend to increase if they are frequently required to back up), and tends to reduce water quality problems that result from stagnant water in dead-end pipes at the end of cul-de-sacs (Handy, Paterson and Butler, 2004, p. 37 and p. 56). These can result in substantial government cost savings or service quality improvements.

Increased road and path connectivity reduces per capita vehicle travel and improves overall accessibility, particularly for non-drivers. It can therefore help reduce traffic congestion, accidents and pollution emissions, and improve mobility for non-drivers. It tends to be particularly effective at achieving TDM objectives where the connectivity of alternative modes is improved more than that of private automobile travel, for example, by providing Pedestrian shortcuts, or implementing Traffic Calming and Vehicle Restrictions to control vehicle traffic.

Costs include additional land and construction requires for additional facilities, increased design requirements, and increased conflicts with adjacent land uses (for example, when a new link is added through an existing property). Increased Connectivity may require lower traffic speeds, since there are shorter links and more intersections. Residential properties tend to have lower values on connected streets than on cul-de-sacs, but this may be offset by incorporating appropriate traffic control and security features into connected streets, as reflected in New Urbanist design practices.

Table 2 Benefit Summary

Objective	Rating	Comments
Congestion Reduction	1	
Road & Parking Savings	1	
Consumer Savings	2	Reduces travel distances and improves walking and cycling options.
Transport Choice	2	
Road Safety	1	
Environmental Protection	1	
Efficient Land Use	3	
Community Livability	2	

Rating from 3 (very beneficial) to -3 (very harmful). A 0 indicates no impact or mixed impacts.

Equity Impacts

Improved connectivity tends to help achieve equity impacts to the degree that it improves accessibility and travel options for people who are transportation disadvantaged. In some situations, adding new links to an existing roadway network may cause conflicts and seem unfair to nearby residents.

Table 3 Equity Summary

Criteria	Rating	Comments
Treats everybody equally.	0	
Individuals bear the costs they impose.	0	
Progressive with respect to income.	2	
Benefits transportation disadvantaged.	3	
Improves basic mobility.	3	

Rating from 3 (very beneficial) to -3 (very harmful). A 0 indicates no impact or mixed impacts.

Applications

Connectivity improvements can be applied in many situations, and are particularly appropriate for local planners and developers.

Table 4 Application Summary

Geographic	Rating	Organization	Rating
Large urban region.	2	Federal government.	1
High-density, urban.	3	State/provincial government.	2
Medium-density, urban/suburban.	3	Regional government.	2
Town.	3	Municipal/local government.	3
Low-density, rural.	1	Business Associations/TMA.	3
Commercial center.	3	Individual business.	2
Residential neighborhood.	3	Developer.	3
Resort/recreation area.	2	Neighborhood association.	3
College/university communities.	3	Campus.	2

Ratings range from 0 (not appropriate) to 3 (very appropriate).

Category

Land Use Management Strategy.

Relationships With Other TDM Strategies

Roadway Connectivity is an important component of New Urbanism, Smart Growth, and Location-Efficient Development. It supports and is supported by Clustering, Context Sensitive Design, Traffic Calming, Pedestrian and Bicycle Improvements, Road Space Reallocation, and Community Livability.

Stakeholders

Primary stakeholders include local planners, developers, and local residents impacted by changes in roadway and pathway design.

Barriers To Implementation

Increased Connectivity requires roadway and pathway system changes which can be costly and slow to implement, and often involve conflicts with nearby residents who fear increased traffic.

Best Practices

Handy, Paterson and Butler (2004) provide recommendations for improving roadway and pathway connectivity.

- Minimize dead-end streets, and where they exist limit their length to about 200 feet.
- Where dead-end streets exist, try to create paths that provide shortcuts for walking and cycling.
- A modified-grid street network with a high degree of connectivity should generally be used in urban areas.
- As much as possible, new developments and urban redevelopments should have a high degree of roadway and pathway connectivity.
- Use short street and small blocks as much as possible. An ideal for urban development is a 300 to 500 foot grid for pedestrians and bicycles networks and a 500 to 1,000 foot grid for motor vehicle streets.
- Planners should watch for opportunities to increase connectivity, particularly for nonmotorized paths.
- Traffic Calming should generally be used instead of street closures to control excessive vehicle traffic on urban streets.

Examples and Case Studies

Charlotte (NC) Sacks Cul De Sac

Charlotte Observer, October 18, 2003

“The reign of the cul-de-sac ended Wednesday, with a unanimous vote of the Charlotte City Council.” Under a change in the subdivision ordinance, the dead-end circles so common in suburbia can be constructed only when geographic barriers prevent street connections. Though existing cul-de-sacs won’t be affected, the idea, city planners and politicians say, is to alleviate traffic by better linking future communities.

“Charlotte went cul-de-sac happy in the 1970s and 1980s,” said Mayor Pat McCrory. “We failed to develop a grid system of roads and now we have gridlock.” The case against cul-de-sacs is the way they limit access to and from neighborhoods. Frequently, subdivisions of cul-de-sacs have only one or two connections to an adjacent road. When cul-de-sac communities are lined up along that road, it clogs with drivers who have no alternative route. Planners note that traffic flows better in and around neighborhoods such as Myers Park, built in the early 20th century on a grid system that gives drivers more choices.”

Street Connectivity Standards

Tables 5 and 6 summarize street connectivity standards and requirements in various U.S. cities. See original report for notes and additional information.

Table 5 Street Connectivity Standards (Handy, Paterson and Butler, 2004)

Location	Max. Local Street Intersection Spacing (feet)	Max. Arterial Intersection Spacing (feet)	Street Stubs Required?	Cul-De-Sacs Allowed	Max. Cul-De-Sac Length (feet)
Portland Metro	530	530	No	No (with exceptions)	200
City of Portland	530	530	Yes	No (with exceptions)	200
Beaverton, Or	530	1,000	Yes	No (with exceptions)	200
Eugene	600	none	Yes	No (with exceptions)	400
Fort Collins, CO	(Max. Block size 7-12 acres)	660-1,320	Yes	Limited	660
Boulder, Co	300-350	None	Yes	Yes,	600

	recommended			discouraged	
Huntersville, NC	250-500	No data	Yes	No (with exceptions)	350
Cornelius, NC	200-1,320		Yes	No (with exceptions)	250
Conover, NC	400-1,200	No data	Yes	Yes	500
Raleigh, NC	1,500	No data	Yes	Yes	400-800
Cary, NC	Index = 1.2	1,250-1,500	Yes	Yes	900
Middletown, DE	Index = 1.7	None	Yes	Yes, discouraged	1,000
Orlando, FL	Index = 1.7	None	Yes	Yes	700 (30 units)

Table 6 Street Connectivity Requirements (Handy, Paterson and Butler, 2004)

Location	Max. Spacing Between Bike/Ped Connections (feet)	Local Street Width (feet)	Private Street Allowed?	Gated Streets Allowed?
Portland Metro	330	<28	Not Regulated	Not Regulated
City of Portland	330		Limited	No
Beaverton, Or	330	20-34	Limited	No
Eugene	Connections required at cul-de-sacs	20-34	Limited	Limited
Fort Collins, CO	700	24-36	Limited	No
Boulder, Co	300-350 recommended	24-36	No	No
Huntersville, NC	None	18-26	No	No
Cornelius, NC	None	18-26	Yes	No
Conover, NC	None	22	No	No
Raleigh, NC	None	26	Discouraged	Discouraged
Cary, NC	If index waived	27	yes	No
Middletown, DE	No data	24-32	No	No
Orlando, FL	None	24 min.	Yes	No

City of Salem (www.cityofsalem.net)

The City of Salem Design Standards requires that “Local streets should form a well- connected network that provides for safe, direct, and convenient access by automobile, bicycle, and pedestrian.”

Portland Regional Connectivity Policies (www.metro-region.org/library_docs/trans/streetconnect.pdf)

The Portland Regional Transportation Plan includes specific policies to increase roadway connectivity in new developments, as well as various strategies to improve the connectivity of nonmotorized networks in existing urbanized areas.

Bremen, Germany (Glutz-Richter, 2003)

In the early 1960s, the city of Bremen was divided into four sectors, or “traffic cells.” Automobiles are allowed to travel within each cell, but to travel between these cells they must use a circumferential ring road. Pedestrian, bicycle and transit vehicles can travel directly between these cells. As a result, vehicle traffic volumes are significantly reduced and travel by other modes is significantly improved.

Gothenburg, Sweden (Vuchic, 1999)

The city of Gothenburg is Sweden’s second largest city, with almost half a million residents. In the late 1960s, the city’s historic center was divided into five traffic cells. As in Bremen, automobiles can travel within each cell but not directly between cells, they must use a ring road. Pedestrian, bicycle and transit vehicles can travel directly between cells. The result has been a 48% reduction in vehicle traffic despite increased vehicle ownership by

residents, improved pedestrian and cycling conditions (and a 45% reduction in pedestrian accidents), and improved transit service.

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#116

From: [Sally Stockwell](#)
To: [Beyer, Stacie R](#)
Cc: [Horn, Samantha](#); [Eliza Donoghue](#)
Subject: Conceptual Subdivision Layout Standards
Date: Thursday, July 05, 2018 2:37:10 PM
Attachments: [Conceptual Subdivision Layouts Standards JuneComMtg word doc ss annotations.docx](#)

Hi Stacie:

Here is an annotated version of your draft conceptual subdivision layout standards with comments from us about what you have presented so far.

There are many good things in this draft, but we do have some questions, concerns and suggestions for improving them that I have included in this annotated version.

Hope this is helpful. Please let me know if you have any question about what I've written.

Thanks for all your hard work,
Sally

--

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Maine Land Use Planning Commission

Review of Subdivision Rules

Conceptual Subdivision Layouts and Standards

June 8, 2018 DRAFT

Conceptual Subdivision Layouts and Standards

Summary of Key Changes

The Maine Land Use Planning Commission has subdivision layout and design standards in Chapter 10, Section 10.25, Q,3 of its rules. Review of these standards has been underway since 2014. Incorporating what has been learned to date, staff have drafted conceptual layout and design standards. These concepts, subject to further public input and revision, could be incorporated into rule and replace the existing Chapter 10 standards. The proposed conceptual layout and design standards:

- Add new subdivision layout options, increasing flexibility for subdivision design and replacing the existing community center model.
- Incorporate open space requirements across all subdivisions, tailored based on the location of the subdivision and proposed layout, with a focus on protecting rural character and natural resources, and providing continued wildlife passage.
- Replace Level II subdivisions with General Management subdivisions, and simplify the layout and design standards for these small-scale subdivisions which are located near roads and service communities, and away from major water bodies.
- Provide for preliminary, sketch plan review to help property owners with the siting and design of subdivisions, and minimize up-front technical costs.
- Remove the shared driveway requirement.
- Include access management standards that minimize new entrances onto existing roadways, plan for future access and connection of roadway systems, and provide for emergency egress.
- Ensure building envelopes are sited and sized to minimize direct and indirect impacts to natural resources, including wildlife habitat, and to fit with the overall character of the area.
- Create a new option, as part of the “Basic” subdivision layout, for identifying and incorporating land reserved for the creation of future back lots (i.e., non-waterfront lots) into the subdivision design, as an alternative to creating back lots today, if a market for the lots does not exist.
- Establish standards to ensure lot owners have reasonable access to recreational opportunities without overburdening existing public resources.

Introduction

Since early 2014, the Commission has had a process underway to review and revise its subdivision rules. Current LUPC layout and design standards focus on a community centered design concept as a way to ensure subdivisions fit harmoniously into the natural environment by avoiding linear placement of lots along roadways and shorelines. Larger Level 2¹ subdivisions and certain subdivisions located on Management Class 4 or 5 lakes² must meet cluster development standards. During facilitated stakeholder meetings, participants indicated that the current LUPC subdivision layout and design standards are a high priority for review and possible revision.

The highest priorities relating to subdivision layout included the appropriateness of the layout and design standards for the area served by the Commission, incorporating more flexibility, and allowing more design options for different areas/ regions of the unorganized territories. The Commission's Review of Subdivision Rules webpage provides reference materials and further details:

http://www.maine.gov/dacf/lupc/projects/subdivision_review/subdivision_review.shtml

From extensive research and outreach with design professionals, LUPC staff has developed these draft concepts for new subdivision layouts and design standards to further the discussion. Ultimately, the concepts will be translated to draft language for a rulemaking proceeding to revise the Commission's subdivision rules.

The Commission has also been conducting a review of its adjacency principle, a policy that guides where new zones for development, including subdivisions, can be created. The Comprehensive Land Use Plan (CLUP) describes the adjacency principle and how it should be applied (2010 CLUP, pg. 62). To fully understand the conceptual layout types discussed in this proposal and where they may be allowed in the Commission's service area, see the complete information on the adjacency principle review found on the Commission's website at:

<http://www.maine.gov/dacf/lupc/projects/adjacency/adjacency.html>

A key component of the adjacency review process is the proposed identification of primary and secondary locations, which will help determine where new development zones may be allowed. Primary and secondary locations, in general, will be near existing services and public roads. Outside of the primary and secondary locations, as presently proposed, rezoning to a residential subdistrict to allow for subdivision would only be an option for recreation-based subdivisions that satisfy specific requirements for location and connection to recreational resources.

¹ Current identification criteria for Level 2 subdivisions, subdivisions allowed in General Management subdistricts without rezoning, are found in the Commission's Chapter 10 Rules, Section 10.25,Q,2.

² See Chapter 10, Appendix C and the Commission's Comprehensive Land Use Plan, Appendix C for information on lake management classes.

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Conceptual Subdivision Layouts and Standards

I. General Standards for All Subdivision Layouts

The following conceptual standards in Section I apply to all subdivision layouts unless otherwise stated in the layout specific standards that follow in Section II.

A. Locations and Layouts

1. Residential Subdivisions

a) Subdivisions in Primary/ Secondary Locations

Residential subdivisions may be located in and designed for primary and secondary locations³ in accordance with the rezoning standards for primary and secondary locations proposed for Chapter 10, Sections 10.08 and 10.08-A, and consistent with the Location and Layout Overview Table below.

³ Identification of primary and secondary locations, and what constitutes a recreation-based subdivision and where they may be located, is being considered as part of the Commission’s adjacency policy review. See the Commission’s website at <http://www.maine.gov/dacf/lupc/projects/adjacency/adjacency.html> for more details on the adjacency review process.

b) Subdivisions Outside Primary/Secondary Locations – Recreation-based Subdivisions Only

- 1) Recreation-based subdivisions³ may be located in and designed for areas outside primary and secondary locations in accordance with the rezoning standards for location-dependent activities proposed for Chapter 10, Sections 10.08 and 10.08-A, and consistent with the Location and Layout Overview Table below.
- 2) In addition, recreation-based subdivisions must have sufficient connection to an existing recreational resource, such as: Class 4 or 5 lakes, Class 7 lakes with existing development above a certain threshold⁴, or trailheads for permanent trails⁵, to facilitate use, and include safe legal right of access to, the resource by lot owners in the subdivision⁶.

c) Location and Layout Overview Table

Residential Subdivision Location	Allowed Conceptual Layouts			
	Basic	Clustered	LowDensity	FlexDesign
In Primary/Secondary Locations (High, Medium, and Low Densities*)				
Inland (More than ½ mile from a major water body)	X	X	X*	X
Shoreland (Class 3, 4, and 7 Lakes)	X	X		X
Shoreland with Heavy Development (Lakes exceeding density guidelines ^{7,8})		X		X
Outside Primary/Secondary Locations – Recreation-Based Subdivisions Only (Medium Density)				
Inland (More than ½ mile from a major water body)	X	X		X
Shoreland (Class 4, and 7 Lakes)	X	X		X
Shoreland with Heavy Development (Lakes exceeding density guidelines ^{7,8})		X		X

Commented [SS2]: I suggest removing this option for Inland sites.

Commented [SS1]: A half mile is not that far – perhaps this should be 1+ miles.

Commented [SS3]: For subdivisions outside Primary and Secondary areas I suggest offering only Clustered and FlexDesign for all Shoreland areas and only FlexDesign for all Inland areas, to minimize intrusion into forest and agricultural lands and to ensure better protection of natural resources.

⁴ This minimum density threshold is being developed in the Commission’s adjacency principle review. It is currently proposed as: 1 dwelling unit per half mile of shoreline, at least one existing dwelling per 50 acres of lake surface area, and a minimum of five existing dwelling units.

⁵ The definition for permanent trails is proposed in the Commission’s Adjacency rulemaking as: A trail that is owned, managed, and maintained by one or more organizations or public entities for the purpose of allowing public access, and the location of which may vary slightly, but generally remains in the same physical location within a designated corridor.

⁶ This language may be moved to the D-RS use listings depending on the final development of draft rule revisions.

⁷ Lakes exceeding density guidelines are lakes having more than one development unit per 10 acres of lake surface area, or having more than one development unit per 400 feet of shore frontage, taken as an average around the entire lake shore.

⁸ This category includes, but is not limited to Management Class 5 lakes.

*Low density layouts must be >2 miles from a service community and > ½ mile from a major water body.

2. General Management Subdivisions

Any subdivision that meets all of the criteria below is considered a General Management subdivision. A General Management subdivision:

- a) Is a division within any 5-year period of an existing parcel of land within a single contiguous ownership into 3 to 14 lots or dwelling units, and occupies an aggregate land area less than 30 acres. For the purposes of this section, “aggregate land area” includes lots or parcels to be offered, and all roads and infrastructure associated with the subdivision, but excludes open space.
- b) Is located within a primary location and within ½ mile of a public road.
- c) Is located more than ½ mile from a major water body⁹.
- d) Is located wholly on land within an M-GN subdistrict, except that up to 20 percent of the aggregate land area may be designated or identified as minor flowing water or wetland at the time of the filing of a subdivision application.
- e) Is designed for a moderate or high-density subdivision in accordance with the standards for a Basic, Clustered, or FlexDesign layout as provided in Section II, Layout Specific Standards.

B. Subdivision Lots, Sizes and Density

Density relates to the number of dwelling units per given area of land. In making sure that a subdivision fits with the existing character of an area, taken with other factors such as lot coverage, open space, and road design, the density of the proposal is a significant consideration. Medium density layouts are more common in the Commission’s service area. However, high density developments can fit in growth areas closest to established service communities. Although low density development raises concerns about increased habitat fragmentation and negative impacts on delivery of services, in certain places, this level of density provides important opportunities for small family farms and woodlots.

The subdivision location determines what density is allowed. Density is generally measured by averaging the size of all lots in the subdivision, excluding common areas. The subdivision location also determines what subdivision layouts are allowed. See the Location and Layout Overview Table above. For Basic and LowDensity¹⁰ layouts, the density calculation is straightforward following the general method. However, for Cluster and FlexDesign layouts, because individual lots may be smaller and the open space larger, the density measurement is modified to take this into account. In the Cluster and FlexDesign layouts, density (average lot size) is calculated by dividing the acreage of the entire subdivision, including common areas, by the number of lots or units.

⁹ Major water body includes bodies of standing water greater than 10 acres in size and major flowing waters.

¹⁰ The design for a LowDensity layout must meet the low density subdivision standard, and that layout is the only option for a low density design.

1. Lot sizes must be designed to fit harmoniously with the natural and community character of the proposed location for the subdivision.
2. High density subdivisions are allowed in primary and secondary locations, and must meet the following: minimum lot size, 20,000 sq. ft.; maximum lot size, 3 acres; average lot size, < 2 acres.
3. Moderate density subdivisions are allowed in primary and secondary locations, and for recreationbased subdivisions outside primary and secondary locations, and must meet the following: minimum lot size, 1 acre; maximum lot size, 10 acres; average lot size, between 2 and 4 acres.
4. **Low density layouts** are allowed in certain primary and secondary locations¹¹, and must meet the following: minimum lot size, 11 acres; maximum lot size, 25 acres; average lot size, >15 acres.
5. All subdivision and lot boundary corners and angle points must be marked by suitable, permanent monuments as required by the Maine Board of Licensure for Professional Land Surveyors.

Commented [S54]: See our comments on low density subdivision in our Adjacency Rule comments. We do not support these in general, and believe the 25-acre maximum size is especially questionable.

C. Building Envelopes

Building envelopes are areas of land within a lot that are designated on the subdivision plan and indicate where development can occur. They serve several planning purposes in the design of a subdivision, including showing that suitable area exists on each lot for development and all applicable dimensional requirements can be met, as well as ensuring the pattern of development will contribute to the design goals for the subdivision and fit with the overall character of the area.

1. Building envelopes must be identified on each lot designating suitable areas where structural development and permanently maintained cleared openings may occur. Activities not counted as permanently maintained cleared openings include a single driveway for access to the building envelope, cleared areas that are mowed less than twice a year, areas used for agricultural management activities, and trails for recreational access.
2. Building envelopes must be shown and labeled on the subdivision plan. Building envelope requirements must also be referenced in deed covenants for each lot specifying that structural development and maintained cleared openings must be located within the building envelope as shown on the Commission approved subdivision plan, as it may be amended from time to time.
3. Building envelopes must be located and sized to allow conformance with the Commission's dimensional requirements in terms of minimum setbacks and lot coverage, and vegetation clearing standards for shorelines and public roads.
4. Where practicable, building envelopes must be arranged:
 - a) In groups, allowing for larger open areas between groups of building envelopes;
 - b) To avoid placement along ridge lines, on prime farm land soils, in wetlands or drainage areas, on sustained slopes greater than 20 percent, or over any other topographic or natural features important to the site; and

¹¹ Low density layouts are allowed in primary and secondary locations provided they are also more than 2 miles from the boundary of a service community, and more than ½ mile from major water bodies.

- c) To maximize privacy afforded to each dwelling unit.

Commented [SS5]: Do you want to provide any more guidance here as to what this means? e.g. does a buffering vegetation screen work or does it need to be a certain distance away from other development? These two different options have very different implications for the overall design.

D. Open Space

Open space is defined in Chapter 10 as “any parcel or area of land essentially unimproved and set aside, dedicated, designated, or reserved for the public use, for the common use of owners and occupants of land adjoining or neighboring such open space, or for purposes intended to preserve important natural features of the site.” Open space can serve many functions such as protecting rural character and natural resources, treating stormwater runoff, allowing for wildlife passage, and providing active or passive recreational opportunities. Given indirect impacts on wildlife from human disturbance, wildlife passages are intended to be open space areas that allow for the movement of wildlife around, between, or through areas of development.

The Commission recognizes that providing for common open space may be difficult for small subdivisions. However, the development of several small subdivisions along the same road could adversely impact rural character and wildlife movement, if there is no remaining open space. Land owner equity, in terms of who provides the necessary open space, is an important consideration. In certain limited situations (see Section I,D,3,a), and b)), the Commission may allow designs without provisions for wildlife passage.

1. Reasonable efforts must be made to locate any common open space in large contiguous blocks and connecting with off-site undeveloped land to form a continuous integrated open space system.
2. Significant wildlife habitats, imperiled and critically imperiled natural plant communities, and a minimum 250-foot undisturbed buffer around those resources must be included in common open space.
3. The subdivision design must include suitable open space for wildlife passage, at least 500 feet in width, around or through the development. The wildlife passage must be located adjacent to flowing waters or wetlands, in a way that links high value wildlife habitats on or off the property, or adjacent to one of the boundary lines of the subdivision, to the extent practicable. In addition, lots must be configured so that groups of lots are separated by at least 500 feet of undeveloped land such that lots within a group do not extend more than 1,320 feet along the existing access road or shoreline.
 - a) In cases where the subdivision design consists of four or fewer lots encompassing the entire existing parcel, and where the Commission has determined provision for wildlife passage exists within ¼ mile of the parcel, the Commission may allow subdivision designs without open space for wildlife passage.
 - b) In cases of subdivisions that constitute “in-fill” development, on parcels surrounded by existing development, for which designated open space would be an isolated pocket providing little longterm value, the Commission may also allow subdivision designs without open space for wildlife passage.
4. In cases where an existing recreational resource, such as a motorized or non-motorized trail managed for public access, is located in or within 1000 feet of the project boundary, the subdivision design must include provisions for all lot owners in the subdivision to safely access the resource without crossing private land outside the limits of the recreational resource, unless a legal easement is established for that use.

Commented [SS6]: Yes! Thank you.

Commented [SS7]: I think this means 250' beyond the 250' area around a waterbody included under the definition for SWH of an Inland Waterfowl and Wading Bird Habitat, which we would support. But please clarify for applicants.

Commented [SS8]: As we discussed before, it probably makes sense to create separate standards for access to motorized versus nonmotorized trailheads. If I am heading out for a somewhat remote hike, the last thing I want to see is a subdivision within 1000' of the trailhead.

5. Common open space within the subdivision must be preserved and maintained in accordance with the Commission's Chapter 10 rules, Section 10.25,S.
6. Where layout specific open space requirements reference net developable land and net developable shorefront, the terms are defined in Chapter 10, Section 10.25,R,2,a.
7. Open space must be clearly shown and labeled on the final plat as to its use or uses, ownership, management, method of preservation, and the rights, if any, of the owners in the subdivision to such land or portions thereof. The plat must clearly show the open space land is permanently reserved for open space purposes, indicating the book and page of any conservation easements or deed restrictions required to be recorded to implement such reservations or restrictions.

E. Access Management, Traffic Movement, and Roads

Access management, relating to the regulation of new roadway intersections, proper roadway designs, and long-term maintenance, can ensure safe and efficient movement of people, goods, and services. In case of an emergency, when the principal access to a development could be blocked by downed trees or flooding, it is important to plan for a secondary egress to ensure that everyone can exit safely.

1. All subdivisions that include a new interior road(s) exceeding ¼ mile in length must include provisions for all lot owners to have at least two ways for emergency egress from the development.
Emergency egress may include egress by water for subdivisions on water bodies provided there is a legal right of egress off the water body such as a public boat ramp or dock, and may include existing motorized trails maintained for public access, provided all lot owners have a legal right of access to the trail.
2. The subdivision design must include no more than two entrances onto an existing roadway within any ½ mile section of road. Also, where practicable for the proposed development site, subdivision roads must be designed such that entrances onto existing roads are located directly across from existing entrances on the roadway, allowing for safe cross movement of traffic at the intersection.
3. If the subdivision layout includes a dead-end subdivision road, include in the design a reserved right-of-way for future connectivity offsite, unless existing site constraints make that impracticable. Also, where practicable, locate the reserved right-of way so that it does not cross the designated area for wildlife passage.
4. Whenever there is remaining land on a parcel proposed for subdivision that is not included in the subdivision layout and design, include in the subdivision design provisions for future access to the remaining land allowing opportunity for activities such as timber harvests, further lot development, or recreation.
5. Design roadways to fit the existing topography, minimize the need for cuts and fills, and meet the Commission's road design standards.
6. Design right-of-way widths for internal subdivision roads with sufficient room for future expansion, if needed. Rights-of-ways should be at least 50 feet in width.
7. Include provisions for long-term maintenance of the subdivision access road(s) such as maintenance of drainage structures, water crossings, and road grading or resurfacing.

Commented [SS9]: These should include meeting the four principles of Stream Smart crossing (let the stream act like a stream, e.g. span the stream, set the elevation right, slope matches the stream, substrate in the crossing) or should be required here separately.

Commented [SS10]: Are you talking about adding length or width or both here?

- 8. If a lot owners' association is proposed for maintenance of common infrastructure or open space, the subdivision application must include draft documents necessary for establishing the association, providing for mandatory lot owner membership, lot owner rights and privileges, association responsibilities and authority, operating procedures, proper capitalization to cover operating costs, and the subdivision developer's responsibilities until development sufficient to support the association has taken place. Responsibilities of the association must include the maintenance of common property or facilities, levying annual charges against all owners to defray expenses, and the power to place liens on property of members who fail to pay assessments.

F. Shoreland Development

Shoreland areas are valuable resource assets and limited in extent. To ensure efficient use of these limited resources and minimize pressure on more remote areas, the Commission allows for some water front development in appropriate locations, while providing and balancing opportunity for nonwaterfront development that has common water access. Where development is allowed, protection of surface water quality must be of utmost importance.

- 1. Shoreland subdivisions must include one of the following, except as allowed in this section below:
 - a) Non-waterfront lots that equal or exceed the number of waterfront lots in the layout;
 - b) An area reserved for future layout and development of non-waterfront lots that is equal to or exceeds the area of waterfront lots in the layout; or
 - c) A non-linear design that incorporates a majority of the waterfront in common ownership.

In cases where the Commission finds site specific constraints such as sustained steep slopes or wetlands do not allow for development of non-waterfront lots, the Commission may allow an alternative layout for a project site.

- 2. Shoreland subdivisions must also include provisions for useable common access to the water for all lots in the subdivision and for any future lots in reserve areas. Common water access must avoid open space designated for wildlife passage to the extent practicable.
- 3. Proposed permanent docks, trailered ramps, hand-carry launches or water-access ways must comply with the requirements of Section 10.27,L,2.
- 4. Designs must include best management practices for control of phosphorus in accordance with Section 10.25,L.

Commented [SS11]: This should only be allowed if there is not a reasonable alternative on other adjacent or nearby land already owned by the applicant.

G. Hillside Development

[LUPC Staff is seeking input from Commissioners and stakeholders on whether these standards should apply to all development not just subdivisions.]

Development activities on hillsides can have significant impacts on scenic resources and users of those resources, and pose challenges for stormwater and erosion control. Particular attention to structural exteriors, buffers and screening vegetation, and stormwater best management practices can minimize those impacts.

Commented [SS12]: Short answer – yes! We think that's a good idea.

1. Definitions

- a) Hillside - Areas of two or more contiguous acres within a project area having sustained slopes of 15% or greater.
- b) Ridgeline - the line formed by the meeting of steeply sloping surfaces of land that are dropping away from each other. Significant ridgelines are ridgelines which, in general, dominate the landscape and are highly visible from public view points.
- c) Public view points - publicly travelled roadways, non-tidal water bodies and coastal wetlands, trails maintained for public access, public properties, and other public gathering places where observation and appreciation of the existing scenic character plays an important role in the public use of the place.

Commented [SS13]: We wonder if this should be closer to 1 1/2 acres?

Commented [SS14]: We wonder why tidal waters are not addressed here or elsewhere? What about coastal and island views?

2. General Provisions. Except provisions for stormwater best management practices, hillside standards do not apply to developments or portions thereof that will be completely visually obstructed from public view points by topographic features or other existing natural conditions (such as slope or vegetation) that create visually obstructing conditions. In such cases, at the time of filing of a permit application, the applicant must demonstrate that these obstructing features or conditions will not be altered by any uses allowed with or without a permit.

Commented [SS15]: This is helpful within the context of the subdivision property but what about future alterations of adjacent areas that would then allow visibility? Is there any way to plan for that as well?

3. Stormwater Management. The proposal must include plans for the construction and maintenance of stormwater best management practices designed to slow down and spread runoff from developed areas and ensure that increased runoff does not cause downstream soil erosion.

Commented [SS16]: Not sure whether these BMPs are designed to protect hillsides in addition to other settings or if there are additional standards that should be added for this particular setting?

4. Ridgeline Protection. The development must be designed to ensure buildings, structures, and other improvements will not extend above the existing ridgeline or alter the ridge profile significantly when viewed from public view points.

5. Vegetative Clearing. The proposal must include a vegetation management plan that establishes and provides for long-term maintenance of clearing limits that will be sufficiently protective of public view points. The vegetation management plan must ensure:

- a) There will be a sufficient area of clearing allowed around buildings to maintain the minimum extent needed for a fire safety defensible space.
- b) There will be sufficient vegetation maintained on steep slopes to protect long-term slope stability.
- c) Existing forest cover will be maintained to interrupt the façade of buildings, provide a forested backdrop to buildings and reduce or eliminate the visual impact of new development from public view points.
- d) Clearing for views will be limited, with narrow view openings between trees and beneath tree canopies being a desirable alternative to clearing large openings adjacent to building facades.
- e) If clearcutting is allowed outside the building envelope, such as clearing for views, the plan must include a quantifiable standard for limiting that clearing such as: any trees removed for views will not exceed a 25-foot width of clearcutting and extend, outward therefrom at an

Commented [SS17]: It's unclear how this intersects with b) above. There needs to be adequate understory vegetation within these view openings to slow erosion and catch pollution and sediments.

angle of 45 degrees or less on both sides, beyond a point down-slope where the tops of the trees are at the same elevation as the lowest adjacent grade for the principal building. The 25-foot opening may be located at any point along the down-slope boundary of the building envelope.

- f) The Commission may require additional vegetative clearing limitations or standards in cases where the public view point is a significant scenic resource.

Commented [SS18]: Is this a general term or does it refer to something specific?

Commented [SS19]: Good addition!

- 6. **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).

- 7. **Construction materials.** The proposal must ensure that:

- a) **Colors.** The exterior colors of structures, including but not limited to siding, roofing, retaining structures, foundations, trim, gutters, vents and chimneys, will be earth tones naturally found at the specific site or in the surrounding landscape.
- b) **Reflectivity.** Structures use only low or non-reflective exterior building materials, including but not limited to windows, roofing, gutters, vents, and chimneys. If a highly reflective material, such as aluminum or other smooth metal, must be used for an essential component of the structure because no other material is reasonably available for that component, reduced reflectivity must be incorporated and maintained to the greatest extent practicable by, for example, painting the component with a neutral or earth tone color, boxing in the component with non-reflective material, or using a textured or pre-weathered version of the component.

- 8. **Infrastructure.** The proposal must include provisions for roads, driveways, utility corridors, and other similar linear infrastructure to be located and designed so as to minimize the visibility of corridor openings from public view points to the extent practicable (by, for example, following topographic contours and retaining existing vegetation).

H. Recreational Amenities

Recreational resources, whether water access points or multi-use trails, provide a number of benefits to seasonal and full-time residents of a local area. For subdivisions with limited on-site recreational opportunity, it is important to ensure that off-site opportunities within a reasonable distance are available for use by the lot owners. Also, where recreational resources are not located on-site, provisions are needed to ensure that added use of off-site resources by new lot owners does not overwhelm the resources, adversely impacting existing users.

Commented [SS20]: This is good, but a bit unclear as to how you might apply.

- 1. Unless an existing publicly-available, recreational resource is (i) located within one-half mile of the project boundary, (ii) safely accessible for all subdivision lot owners, and (iii) has sufficient capacity to accommodate the lot owners, the proposed subdivision must include one of the following:

- a) Provisions to increase the capacity at an existing, publicly-available recreational resource, that can be safely accessed by all lot owners, within one-half mile of the project boundary;

Commented [SS21]: This seems good for the lot owners but maybe not so good for other members of the public?!

- b) An on-site recreational amenity accessible to and able to accommodate all lot owners such as a common trail, common water access, or an open field; or
- c) Permanent rights of access for all lot owners to a new off-site recreational resource located within one-half mile of the project boundary.

Examples of publicly available recreational resources include a public boat ramp, motorized or nonmotorized trails managed for public access, downhill ski resorts, and other outdoor recreation centers.

Commented [SS22]: Distances may be ok for all but nonmotorized trails.

- 2. Upon showing of good cause, the Commission may increase the distance an off-site recreational resource may be located from the subdivision.

I. *Procedures- Sketch Plan Review Meeting*

Commented [SS23]: Great! Very important first step.

The purpose of a sketch plan review meeting is to discuss the characteristics of the site and the plan for development in conceptual terms at the earliest possible stage with the intent to streamline the formal application process and minimize the applicant’s costs for technical experts. The Commission may elect to hold a site visit at this preapplication stage.

- 1. Prior to submitting a permit application for a subdivision, the applicant must request and attend a sketch plan review meeting.
- 2. A sketch plan with no engineering details and with supporting submissions must be provided in advance of the meeting in conformance with guidance provided by the Commission.
- 3. The permit application for the subdivision must be submitted within 12 months after the sketch plan review meeting. If the application is not submitted within 12 months, the Commission may require a new sketch plan review.
- 4. Applicants may present a subdivision in phases, provided that the first phase contains at least 25% of the total number of lots as shown on the sketch plan.

Commented [SS24]: What’s included/expected here? Need to be more specific (which you may be planning on doing in the rules...) At a minimum, from a wildlife perspective, need available info from MNAP/IFW.

Commented [SS25]:

Commented [SS26]: We suggest including a preliminary plot of all lots in all phases, not just the ones for Phase I, especially if those are only 25% of the final number, as this could affect the selection and layout of the open space, habitat connectivity, and trail access.

II. Layout Specific Standards

A. Basic Subdivisions

Basic subdivision layout provides a straight-forward, simplified subdivision design while still meeting the Commission’s subdivision objectives including maintaining rural character and protecting natural resources.

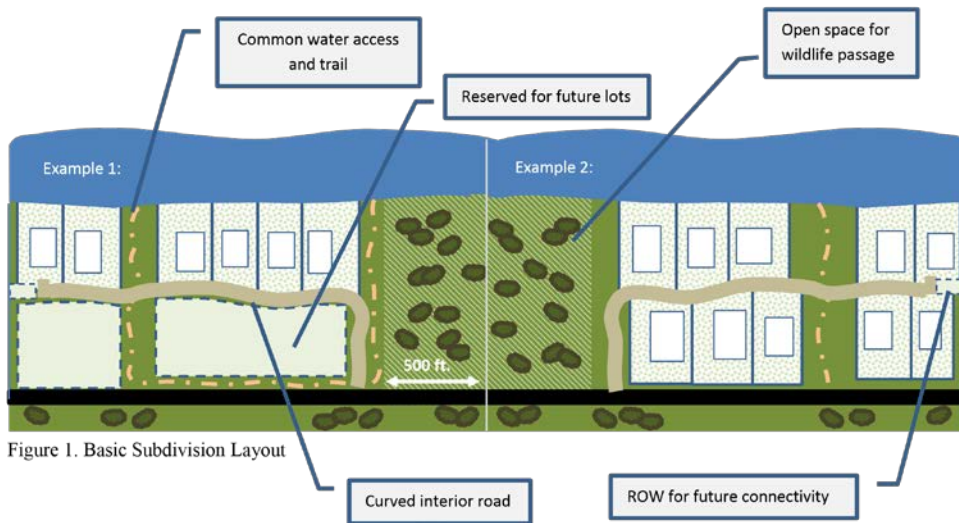


Figure 1. Basic Subdivision Layout

All general standards must be met, in addition to the following standards:

1. Building envelope size must be limited to no greater than 40% of the size of each lot.
2. Recreation-based subdivisions (which would be located outside primary or secondary locations) must meet the required open space percentage in Section II,A,3, below, unless the subdivision:
 - a) Abuts or is located within 1/4 mile of permanently conserved land, or
 - b) Includes provisions for the preservation of near-by, off-site conserved land.

Either of these options must include a total contiguous area and shore frontage on the same waterbody for shoreland developments that exceeds the open space percentage requirement for the subdivision.

3. Open space percentage—For recreation-based subdivisions, the total common open space must include at least 40% of the net developable land area and 40% of the net developable shoreline for shoreland developments.
4. Recreational trail incentive—For recreation-based subdivisions, the total open space percentage

Commented [SS27]: Note: illustration missing 2nd egress

Commented [SS28]: You could have smaller building envelopes and more open space.

Commented [SS29]: We are concerned this may inadvertently push development next to conserved land rather than somewhere else, probably not a good idea. We would like to see a bigger buffer between the subdivision and the conserved land.

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Commented [SS30]: Unclear if these are two separate requirements or if they can be overlapping? If overlapping, does this result in adequate protection of open space within the subdivision in a manner that encourages large interconnected open spaces or does it result in disconnected, smaller open spaces?

Commented [SS31]: May want to add: Designated open space and wildlife passage areas should be adjacent to other existing or future such areas (as depicted in illustrations but not spelled out in text).

Commented [SS32]: In these cases, the trails seem integral to the definition of the recreation-based subdivision, so why get credit for them as part of the open space? We think the open space requirement should be in addition to the existing trails.

for the subdivision may be reduced by 5% if an existing trail on the property is included in common open space or a new trail is constructed in common open space. An additional 5% reduction may be allowed if the on-site trail connects with an existing off-site trail managed for public access. Open space requirements for habitat protection and wildlife passage must still be met, and trail construction must minimize impacts to open space designated for wildlife passage.

B. Clustered Subdivisions

This layout offers an opportunity to create a subdivision, particularly in highly developed or higher growth areas, with a reasonable balance between development and conserving open space. In this layout, smaller lots are grouped together to allow use of the rest of the project area for open space, recreation, or agriculture.

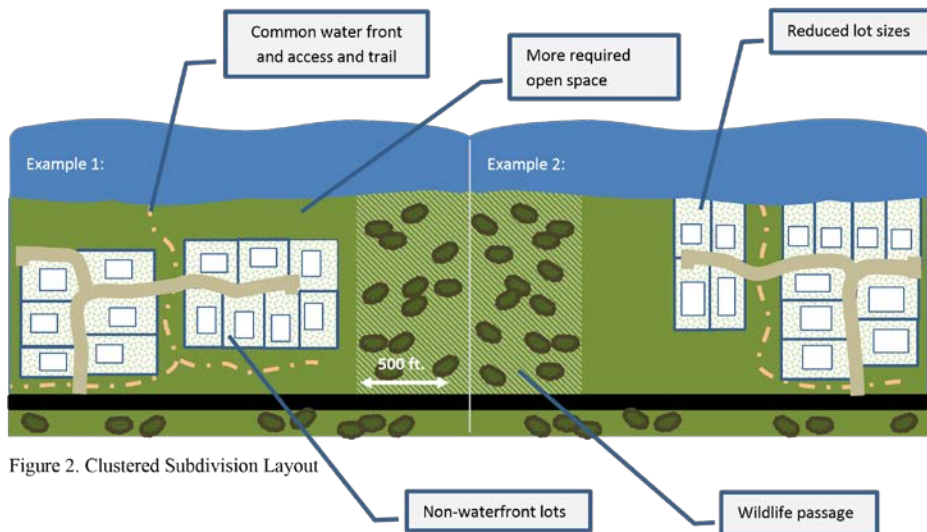


Figure 2. Clustered Subdivision Layout

All general standards must be met, in addition to or as otherwise stated in the following:

1. Density and Dimensional Requirements for Clustered Layouts

- a) The Commission may reduce the minimum lot size for moderate density designs provided the lot density requirement for the subdivision is met in the aggregate, inclusive of proposed common open space; and may reduce the minimum road or shore frontage for individual lots in both moderate and high density designs, provided, in the aggregate, these dimensional requirements are met within the subdivision.
- b) In addition, the Commission may reduce dimensional requirements in the aggregate, provided:
 - 1) Dimensional requirements, in the aggregate, are not reduced by more than 50%;

- 2) Site conditions are suitable for more concentrated development on some portion of a site and such concentrated development will not adversely affect existing resources; and
- 3) The specific benefits afforded by the cluster approach will prevent the loss of or enhance the conservation of important natural features.
- ~~3~~4) Desire to create more of a “neighborhood” type feel (which appeals to certain demographics.)

2. Open Space

- a) Open space percentage– the total designated open space must include at least 50% of the net developable land area and 50% of the net developable shoreline for shoreland developments.
- b) Subsurface disposal systems may be allowed in designated open space provided appropriate legal provisions are made for maintenance, access, and replacement; and the systems do not encroach on areas designated for wildlife passage or habitat protection.

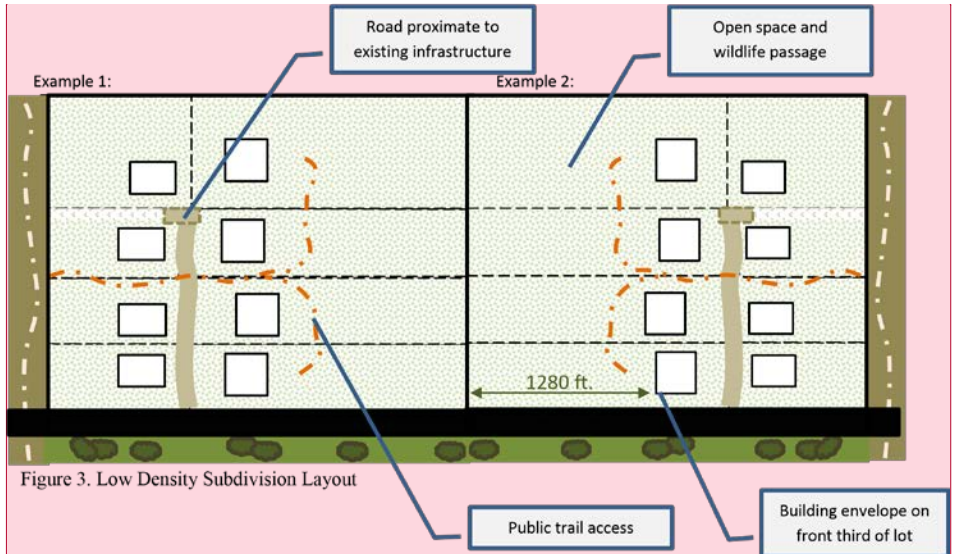
Commented [SS33]: These are part of the development and should not be allowed in the open space, especially as they need to be regularly disturbed and serviced.

3. Shoreland Development

- a) Shoreland subdivisions using a clustered subdivision layout must include non-waterfront lots that equal or exceed the number of water front lots in the layout. The general standard provision for using reserved area for future growth in lieu of non-waterfront lots is not allowed in this layout (reference Section I,F,1).

C. LowDensity Subdivisions

The LowDensity Subdivision layout, allowed in certain primary and secondary locations, offers larger lot sizes than other layouts and provides opportunity for rural land uses such as small woodlots and family farms.



Commented [SS34]: Consider limiting the length and width of the road and driveways off the way to reduce fragmentation and excessive use of land.

All general standards must be met, in addition to or as otherwise stated in the following:

1. All building envelopes must be located in the front third of the lot to leave the back two thirds available for open space and wildlife passage.
2. Building envelopes must be no greater than 2 acres in size.
3. Design of the subdivision road must minimize fragmentation and indirect impacts on wildlife habitat by using practices such as minimizing the length and width of new roads and driveways, less than ¼ mile for roads and XXX feet for driveways where practicable, locating new roads proximate to existing on-site or off-site development or infrastructure, and locating new roads closer to one of the existing parcel lines.
4. The design must include suitable open space for wildlife passage. The open space may be on individual lots, must be outside designated building envelopes, must be at least 500 feet in width, extending around or through the development, and should be located adjacent to flowing waters or wetlands, in a way that links high value wildlife habitats on or off the property, or adjacent to a property line, to the extent practicable.
5. The access provision for existing trails in Section I,D,4 applies to low density subdivisions. Otherwise, the common open space provisions in Section I,D do not apply to this layout.
6. Also, the Commission may approve a low-density subdivision that does not include provisions for an on-site or off-site recreational amenity.

Commented [SS35]: This is good as riparian areas are used by at least 85% of our vertebrates some time during the year and roads near wetlands have the highest mortality rate for wildlife of any roads. However, the unbuildable wetlands and shoreland zones should not be used as a substitute for other open space. The common open space must include significant buildable acreage in addition to the nonbuildable acreage.

D. FlexDesign Subdivisions

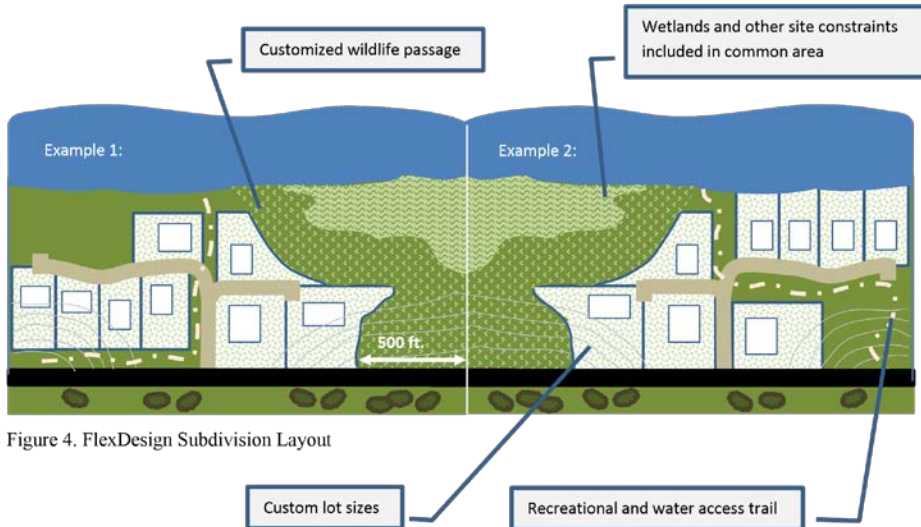


Figure 4. FlexDesign Subdivision Layout

FlexDesign Subdivisions allow for a customized subdivision layout and design, provided the following standards and procedures are met.

1. Subdivision Objectives. The proposed layout and design must meet the Commission's local scale subdivision design objectives, as follows:
 - a) **Good Fit.** Ensure well thought-out subdivision designs and quality infrastructure construction that are consistent with the local area's character, culture, land uses, and housing market; fit into the landscape to minimize the footprint and complexity of infrastructure, encourage continued timber and wood fiber production where appropriate, and protect existing resources where appropriate. Good fit recognizes the diversity of different regions.
 - b) **Limited Resources.** Provide for efficient use of limited land resources such as shorelines, frontage on public roads, and suitable soils to encourage more capacity for residential development in appropriate locations and create efficiencies in the provision of services such as roads, communication infrastructure, emergency services, schools, solid waste disposal, and recreation.
 - c) **High Value Resources.** Protect on-site and nearby high value resources including important farmlands, scenic resources, cultural features, wildlife habitats, waterbodies, wetlands, and other natural areas through good design, open space connectivity, and off-site conservation when appropriate to mitigate adverse impact on these resources.
 - d) **Recreational Resources.** Ensure that subdivision designs provide adequate access to on-site or off-site recreational opportunities to accommodate new residents and prevent negative impacts on existing public or private recreation resources, and encourage designs that

Commented [SS36]: Good!

Commented [SS37]: This is a good idea but within 1000' or ¼ mile is too close – perhaps 1+ mile better.

provide access to a variety of, and interconnectivity between, recreational opportunities, where available.

- e) Adequate Infrastructure. Ensure adequate infrastructure that has been designed to efficiently and effectively maximize public health and safety, allow efficient provision of public services, and minimize the cost of operation and maintenance, including provisions for systems that have interconnectivity, sufficient capacity, and resiliency in extreme weather events.

2. *Subdivision Design.* The development of the sketch plan must be consistent with the following design approach:

- a) Step One: Identify Priority and Supplemental Conservation Areas. Identify the priority conservation areas, using existing information from State natural resource agencies and landowner knowledge, that must be considered for inclusion within common open space. Priority conservation areas include those areas of the parcel containing or supporting protected natural resources such as significant wildlife habitat, water bodies and wetlands; buffer areas to protect those resources; areas needed for wildlife passage around or through the development; imperiled and critically imperiled natural plant communities; special flood hazard areas; and sustained steep slopes (greater than 20%). Also, identify any supplemental conservation areas, features that the landowner has determined warrant secondary consideration for inclusion within common open space or protection from development, including other areas not well suited for development, areas with connection to off-site open space, open fields, or other special features of the property that are important to maximize opportunities such as protecting significant view sheds and providing solar access, and meet the applicant’s design goals for the subdivision.
- b) Step Two: Locate Building Envelopes. Building envelopes must be located outside of priority conservation areas, and to the maximum extent feasible, should be located outside of supplemental conservation areas, as delineated in Step One. Building envelopes need to include sufficient area suitable for development and be located to reflect the Commission’s local scale subdivision design objectives, outline in Section II, D, 1 above, as well as the applicant’s design goals for the subdivision. The placement of building envelopes and lot lines must consider minimizing the creation of edges¹² between developed areas and open space, and consider the natural features of the landscape to the greatest extent possible, e.g., follow stone walls, lines of boundary trees, and streams. Locations of building envelopes should also consider the privacy provided for individual homeowners.
- c) Step Three: Align Roads and Trails. The minimum length and network of roads necessary to access each lot must be identified, subject to the road standards of the Commission, with consideration given to conforming roads to the natural landscape and to minimizing the creation of edges between developed areas and open space. Roads must be located in such a

Commented [SS38]: How does this relate to the 15% steep slope used in the hillside definition? Is it a problem that they are different?

Commented [SS39]: It would be helpful to require “feathering” of edges between developed areas and open space. This is where the vegetation along the edge gradually changes from tree height to shrubs to grass, which better limits disturbance and intrusion by predators into the interior of the forest. See page 3 here: <https://static1.squarespace.com/static/585424f4d2b8575a1d1d02t/59637913e6f2e172e35124ab/1499691287629/Fac+t+Sheet+for+Web.pdf>

¹² In this context, “edge” relates to the boundary between areas of human activity such as lawns and roads, and undeveloped natural areas, such as meadows and forests. Where an edge exists along a natural area, native wildlife species can be adversely affected for a distance from the edge, often called “the edge effect.”

way that avoids or at least minimizes adverse impacts on those areas delineated in Step One. Where practicable for the proposed development site, entrances onto existing roads should be located to line-up directly across from existing entrances on the roadway, allowing for safe cross movement of traffic at the intersection. Proposed trails should be identified where access to designated open space or recreational resources on or off the development is appropriate.

- d) **Step Four: Draw Lot Lines.** Proposed lot lines must be identified. The placement of the lot lines should consider those areas identified in Step One, as well as conform to the cultural and natural features of the landscape to the greatest extent possible. The delineation of lots also should consider the privacy provided for individual lot owners and opportunity for future owners to reasonably expand the structures on the lot.

When a subdivision will not utilize the entire parcel and there are potential plans for future subdivision or development of the parcel, the request for sketch plan review also must include a conceptual long range development plan showing the potential utilization of the balance of the parcel not being subdivided. The conceptual long range development plan is intended to show that the current subdivision proposal will not compromise the long-term development of the parcel or important conservation values. This plan should show the relationship of the proposed subdivision area to the balance of the parcel and to adjacent land, as well as, in general terms, the potential road network and other infrastructure, development areas, and open space areas for the long-range development plan.

Commented [SS40]: We recommend requesting a preliminary sketch of all potential future lots for the entire parcel, not just Phase I lots, not just generalized areas.

3. Procedures- Sketch Plan Review Meeting

Sketch plan submissions for FlexDesign Subdivisions, based on existing information available from State natural resource agencies and landowner knowledge, must be provided in advance of the meeting and must conform with guidance provided by the Commission, including the submission of a site context map; a site inventory map, site analysis map, conceptual sketch plan, and alternative design sketch developed using the four-step approach described above; and a project narrative discussing the applicant's design goals for the subdivision. Additional, site-specific survey work, wetland delineations, etc. is not expected and should not be a part of the sketch plan review.

4. Open Space

- a) The area to be designated as common open space or otherwise preserved as part of the development must include all identified Priority Conservation Areas. Supplemental Conservation Areas may also be included in common open space or conserved as needed to ensure the Commission's subdivision objectives and the applicant's design goals for the subdivision are met.
- b) Sufficient Supplemental Conservation Areas must be included in the common open space to meet at least the minimum area percentage requirement for common open space.

- c) Unless site conditions indicate less open space will meet the Commission's local scale subdivision design objectives in Section II,D,1, the open space percentage for FlexDesign Subdivisions must be at least 50% of the net developable land area, and 50% of the net developable shoreline for shoreland developments.
- d) All open space areas must be part of a larger continuous and integrated open space system within the parcel being developed, and connected to off-site undeveloped land to the fullest extent practicable.
- e) **Subsurface disposal systems** may be allowed in designated open space provided legal provisions are made for maintenance, access, and replacement; and the systems do not encroach on areas designated for wildlife passage or habitat protection.
- f) **Common open space must be preserved and maintained in accordance with Section 10.25,S.**

Commented [S541]: Disagree – think should be included in development windows. See earlier comment.

Commented [S542]: Not sure what Section 10.25,S says but this is very important to get right! Having a third party holder of the open space seems key to us; can't just be left in the hands of the homeowners association.

From: evan@richertplanning.com
To: [Beyer, Stacie R](#)
Subject: RE: LUPC Subdivision Rule Review
Date: Thursday, July 12, 2018 4:13:48 PM
Attachments: [Conceptual Subdivision Layouts Standards JuneComMtg ER.pdf](#)

Hi, Stacie,

I only had a couple of hours to review, so I don't pretend I absorbed everything or put it into the broader context of Ch 10 to see how everything fits. But attached is the document with my comments scattered through it. Overall, it appears sound, with balance between LUPC's mandate and what developers might consider feasible for their clients. A couple of overarching comments, more cautions or questions than anything else:

1. Subdivision standards usually are not a tool for specifying dimensional and density standards for development; that is usually zoning's job. I know Ch 10 is more or less an integrated Land Use ordinance, but there is heightened possibility that if there are dimensional standards by zoning district but other standards in the subdivision section that differ from the district standards (a) there will be confusion and (b) in the future when today's drafters aren't involved, amendments to one section or the other might occur without updating the other section, in needed, creating internal conflicts in the ordinance. Just a caution.
2. I'm not sure there is much substantive difference between Clustered Development, Low Density Subdivision (except location, in this case), and Flex Design. Someone coming in under Clustered Development might end up with something that looks and feels like Flex Design. How does a developer decide, or how does a staffer provide guidance as to which is the appropriate one; and I did not digest whether standards are significantly different in these two cases – if so why; and if not, why distinguish between the two? I may have missed the essence of one of these types, but that is a first impression.

Best,
Evan

From: Beyer, Stacie R <Stacie.R.Beyer@maine.gov>
Sent: Thursday, July 05, 2018 11:13 AM
To: 'evan@richertplanning.com' <evan@richertplanning.com>
Subject: FW: LUPC Subdivision Rule Review

Evan,

It looks like I may have left the link out of the message below. I am sorry about that.

Here is the link to the document:
[LUPC Subdivision Conceptual Standards](#)

I look forward to hearing from you.

Thank you.

Stacie

From: Beyer, Stacie R
Sent: Monday, July 02, 2018 2:18 PM
To: 'evan' <evan@richertplanning.com>
Subject: RE: LUPC Subdivision Rule Review

Evan,

Thank you for speaking with me today. As discussed, we are moving forward on the LUPC subdivision rule review process again. Based on all the early feedback that we received, we have developed Conceptual Subdivision Layouts and Standards, and would appreciate your feedback. We welcome any comments that you may have, but would like to hear, in particular, if the concepts meet the goals that we have for the process. The goals are:

- Adopting standards allowing for subdivision layouts that fit well and meet market demand in the LUPC service area, recognizing the diversity of the places we serve
- Making sure the standards are consistent with the statutory mandate for sound planning and resource protection
- Including flexibility for design options for different places
- Maintaining a set of detailed/ standardized performance standards that small landowners can follow with the goal of a faster, more straight forward process
- While including an option for a “customized” layout that may take time upfront, but allows for a more flexible approach

Once you have had a chance to review these, can we set up a time to discuss your thoughts? We are hoping to have any initial comments by July 18th, so we can work on draft rule language for the August Commission meeting.

If you have any questions, please feel free to contact me.

Thank you.

Stacie

From: evan [<mailto:evan@richertplanning.com>]
Sent: Friday, June 29, 2018 5:14 PM
To: Beyer, Stacie R <Stacie.R.Beyer@maine.gov>
Subject: RE: LUPC Subdivision Rule Review

I can call you. Talk to you at 1:30 Mon.

Evan

Sent from my U.S. Cellular® Smartphone

----- Original message -----

From: "Beyer, Stacie R" <Stacie.R.Beyer@maine.gov>

Date: 6/29/18 3:13 PM (GMT-05:00)

To: evan <evan@richertplanning.com>

Subject: RE: LUPC Subdivision Rule Review

Evan.

Great, thank you. How about Monday at 1:30 PM? Would you like me to call you or do you want to call me? My telephone number is 207-557-2535.

Stacie

From: evan [<mailto:evan@richertplanning.com>]

Sent: Friday, June 29, 2018 3:10 PM

To: Beyer, Stacie R <Stacie.R.Beyer@maine.gov>

Subject: RE: LUPC Subdivision Rule Review

Thanks for getting back to me. If you are working next week. I'm available Monday at 1 or 1:30, any time Tues morning, Friday at 11:30. Any of those times work?

Evan

Sent from my U.S. Cellular® Smartphone

----- Original message -----

From: "Beyer, Stacie R" <Stacie.R.Beyer@maine.gov>

Date: 6/29/18 1:19 PM (GMT-05:00)

To: evan@richertplanning.com

Subject: RE: LUPC Subdivision Rule Review

Hi, Evan.

I hope all is going well. Has your schedule firmed up since the last time we exchanged messages? Would you have time to talk about the LUPC subdivision rule review when you return?

Thank you.
Stacie

From: evan@richertplanning.com [<mailto:evan@richertplanning.com>]
Sent: Tuesday, June 19, 2018 4:44 AM
To: Beyer, Stacie R <Stacie.R.Beyer@maine.gov>
Subject: RE: LUPC Subdivision Rule Review

Jo. Stacey.

I'd be glad to talk. Right now we are getting ready to travel for the next week, returning at the end of the month. I'm fairly open after that but with a couple of appointments pending. Could you ping me again toward the end of next week, when I will know my schedule better and we can arrange a time? Thanks.

Evan

From: Beyer, Stacie R <Stacie.R.Beyer@maine.gov>
Sent: Monday, June 18, 2018 2:40 PM
To: evan@richertplanning.com
Subject: LUPC Subdivision Rule Review

Good afternoon, Evan.

We talked late 2015 about the LUPC's subdivision rule review process. If you have time, I would like to talk with you again to catch you up on the process and see if you may have an interest in providing additional feedback. Could we set up a time to talk?

Thank you.

Stacie R. Beyer
Chief Planner, Land Use Planning Commission
22 State House Station,
Augusta, Maine 04333-0022
Cell- 207-557-2535

Maine Land Use Planning Commission

Review of Subdivision Rules

Conceptual Subdivision Layouts and Standards

June 8, 2018 DRAFT

Conceptual Subdivision Layouts and Standards

Summary of Key Changes

The Maine Land Use Planning Commission has subdivision layout and design standards in Chapter 10, Section 10.25,Q,3 of its rules. Review of these standards has been underway since 2014. Incorporating what has been learned to date, staff have drafted conceptual layout and design standards. These concepts, subject to further public input and revision, could be incorporated into rule and replace the existing Chapter 10 standards. The proposed conceptual layout and design standards:

- Add new subdivision layout options, increasing flexibility for subdivision design and replacing the existing community center model.
- Incorporate open space requirements across all subdivisions, tailored based on the location of the subdivision and proposed layout, with a focus on protecting rural character and natural resources, and providing continued wildlife passage.
- Replace Level II subdivisions with General Management subdivisions, and simplify the layout and design standards for these small-scale subdivisions which are located near roads and service communities, and away from major water bodies.
- Provide for preliminary, sketch plan review to help property owners with the siting and design of subdivisions, and minimize up-front technical costs.
- Remove the shared driveway requirement.
- Include access management standards that minimize new entrances onto existing roadways, plan for future access and connection of roadway systems, and provide for emergency egress.
- Ensure building envelopes are sited and sized to minimize direct and indirect impacts to natural resources, including wildlife habitat, and to fit with the overall character of the area.
- Create a new option, as part of the “Basic” subdivision layout, for identifying and incorporating land reserved for the creation of future back lots (i.e., non-waterfront lots) into the subdivision design, as an alternative to creating back lots today, if a market for the lots does not exist.
- Establish standards to ensure lot owners have reasonable access to recreational opportunities without overburdening existing public resources.

Introduction

Since early 2014, the Commission has had a process underway to review and revise its subdivision rules. Current LUPC layout and design standards focus on a community centered design concept as a way to ensure subdivisions fit harmoniously into the natural environment by avoiding linear placement of lots along roadways and shorelines. Larger Level 2¹ subdivisions and certain subdivisions located on Management Class 4 or 5 lakes² must meet cluster development standards. During facilitated stakeholder meetings, participants indicated that the current LUPC subdivision layout and design standards are a high priority for review and possible revision.

The highest priorities relating to subdivision layout included the appropriateness of the layout and design standards for the area served by the Commission, incorporating more flexibility, and allowing more design options for different areas/ regions of the unorganized territories. The Commission's Review of Subdivision Rules webpage provides reference materials and further details:

http://www.maine.gov/dacf/lupc/projects/subdivision_review/subdivision_review.shtml

From extensive research and outreach with design professionals, LUPC staff has developed these draft concepts for new subdivision layouts and design standards to further the discussion. Ultimately, the concepts will be translated to draft language for a rulemaking proceeding to revise the Commission's subdivision rules.

The Commission has also been conducting a review of its adjacency principle, a policy that guides where new zones for development, including subdivisions, can be created. The Comprehensive Land Use Plan (CLUP) describes the adjacency principle and how it should be applied (2010 CLUP, pg. 62). To fully understand the conceptual layout types discussed in this proposal and where they may be allowed in the Commission's service area, see the complete information on the adjacency principle review found on the Commission's website at:

<http://www.maine.gov/dacf/lupc/projects/adjacency/adjacency.html>.

A key component of the adjacency review process is the proposed identification of primary and secondary locations, which will help determine where new development zones may be allowed. Primary and secondary locations, in general, will be near existing services and public roads. Outside of the primary and secondary locations, as presently proposed, rezoning to a residential subdistrict to allow for subdivision would only be an option for recreation-based subdivisions that satisfy specific requirements for location and connection to recreational resources.

¹ Current identification criteria for Level 2 subdivisions, subdivisions allowed in General Management subdistricts without rezoning, are found in the Commission's Chapter 10 Rules, Section 10.25.Q,2.

² See Chapter 10, Appendix C and the Commission's Comprehensive Land Use Plan, Appendix C for information on lake management classes.

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Conceptual Subdivision Layouts and Standards

I. General Standards for All Subdivision Layouts

The following conceptual standards in Section I apply to all subdivision layouts unless otherwise stated in the layout specific standards that follow in Section II.

A. Locations and Layouts

1. Residential Subdivisions

a) Subdivisions in Primary/ Secondary Locations

Residential subdivisions may be located in and designed for primary and secondary locations³ in accordance with the rezoning standards for primary and secondary locations proposed for Chapter 10, Sections 10.08 and 10.08-A, and consistent with the Location and Layout Overview Table below.

b) Subdivisions Outside Primary/Secondary Locations – Recreation-based Subdivisions Only

- 1) Recreation-based subdivisions³ may be located in and designed for areas outside primary and secondary locations in accordance with the rezoning standards for location-dependent activities proposed for Chapter 10, Sections 10.08 and 10.08-A, and consistent with the Location and Layout Overview Table below.
- 2) In addition, recreation-based subdivisions must have sufficient connection to an existing recreational resource, such as: Class 4 or 5 lakes, Class 7 lakes with existing development above a certain threshold⁴, or trailheads for permanent trails⁵, to facilitate use, and include safe legal right of access to, the resource by lot owners in the subdivision⁶.

³ Identification of primary and secondary locations, and what constitutes a recreation-based subdivision and where they may be located, is being considered as part of the Commission's adjacency policy review. See the Commission's website at <http://www.maine.gov/dacf/lupc/projects/adjacency/adjacency.html> for more details on the adjacency review process.

⁴ This minimum density threshold is being developed in the Commission's adjacency principle review. It is currently proposed as: 1 dwelling unit per half mile of shoreline, at least one existing dwelling per 50 acres of lake surface area, and a minimum of five existing dwelling units.

⁵ The definition for permanent trails is proposed in the Commission's Adjacency rulemaking as: A trail that is owned, managed, and maintained by one or more organizations or public entities for the purpose of allowing public access, and the location of which may vary slightly, but generally remains in the same physical location within a designated corridor.

⁶ This language may be moved to the D-RS use listings depending on the final development of draft rule revisions.

c) Location and Layout Overview Table

Residential Subdivision Location	Allowed Conceptual Layouts			
	Basic	Clustered	LowDensity	FlexDesign
In Primary/Secondary Locations (High, Medium, and Low Densities*)				
Inland (More than ½ mile from a major water body)	X	X	X*	X
Shoreland (Class 3, 4, and 7 Lakes)	X	X		X
Shoreland with Heavy Development (Lakes exceeding density guidelines ^{7,8})		X		X
Outside Primary/Secondary Locations – Recreation-Based Subdivisions Only (Medium Density)				
Inland (More than ½ mile from a major water body)	X	X		X
Shoreland (Class 4, and 7 Lakes)	X	X		X
Shoreland with Heavy Development (Lakes exceeding density guidelines ^{7,8})		X		X

*Low density layouts must be >2 miles from a service community and > ½ mile from a major water body.

2. General Management Subdivisions

Any subdivision that meets all of the criteria below is considered a General Management subdivision. A General Management subdivision:

- a) Is a division within any 5-year period of an existing parcel of land within a single contiguous ownership into 3 to 14 lots or dwelling units, and occupies an aggregate land area less than 30 acres. For the purposes of this section, “aggregate land area” includes lots or parcels to be offered, and all roads and infrastructure associated with the subdivision space.
- b) Is located within a primary location and within ½ mile of a public road.
- c) Is located more than ½ mile from a major water body⁹.
- d) Is located wholly on land within an M-GN subdistrict, except that aggregate land area may be designated or identified as minor flow time of the filing of a subdivision application.
- e) Is designed for a moderate or high-density subdivision in accordance with Basic, Clustered, or FlexDesign layout as provided in Section II, I

⁷ Lakes exceeding density guidelines are lakes having more than one development unit per 10 acres or more than one development unit per 400 feet of shore frontage, taken as an average around the entire lake.

⁸ This category includes, but is not limited to Management Class 5 lakes.

⁹ Major water body includes bodies of standing water greater than 10 acres in size and major flowing waters.

B. Subdivision Lots, Sizes and Density

Density relates to the number of dwelling units per given area of land. In making sure that a subdivision fits with the existing character of an area, taken with other factors such as lot coverage, open space, and road design, the density of the proposal is a significant consideration. Medium density layouts are more common in the Commission's service area. However, high density developments can fit in growth areas closest to established service communities. Although low density development raises concerns about increased habitat fragmentation and negative impacts on delivery of services, in certain places, this level of density provides important opportunities for small family farms and woodlots.

The subdivision location determines what density is allowed. Density is generally measured by averaging the size of all lots in the subdivision, excluding common areas. The subdivision location also determines what subdivision layouts are allowed. See the Location and Layout Overview Table above. For Basic and LowDensity¹⁰ layouts, the density calculation is straightforward following the general method. However, for Cluster and FlexDesign layouts, because individual lots may be smaller and the open space larger, the density measurement is modified to take this into account. In the Cluster and FlexDesign layouts, density (average lot size) is calculated by dividing the acreage of the entire subdivision, including common areas, by the number of lots or units.

1. Lot sizes must be designed to fit harmoniously with the natural and community character of the proposed location for the subdivision.
2. High density subdivisions are allowed in primary and secondary locations following: minimum lot size, 20,000 sq. ft.; maximum lot size, 3 acres; and average lot size, 10,000 sq. ft.
3. Moderate density subdivisions are allowed in primary and secondary locations based subdivisions outside primary and secondary locations, and must meet the following: minimum lot size, 1 acre; maximum lot size, 10 acres; average lot size, 5 acres; and average lot size, 10,000 sq. ft.
4. Low density layouts are allowed in certain primary and secondary locations following: minimum lot size, 11 acres; maximum lot size, 25 acres; average lot size, >15 acres.
5. All subdivision and lot boundary corners and angle points must be marked by suitable, permanent monuments as required by the Maine Board of Licensure for Professional Land Surveyors.

C. Building Envelopes

Building envelopes are areas of land within a lot that are designated on the subdivision plan and indicate where development can occur. They serve several planning purposes in the design of a subdivision, including showing that suitable area exists on each lot for development and all applicable dimensional

¹⁰ The design for a LowDensity layout must meet the low density subdivision standard, and that layout is the only option for a low density design.

¹¹ Low density layouts are allowed in primary and secondary locations provided they are also more than 2 miles from the boundary of a service community, and more than ½ mile from major water bodies.

requirements can be met, as well as ensuring the pattern of development will contribute to the design goals for the subdivision and fit with the overall character of the area.

1. Building envelopes must be identified on each lot designating suitable areas where structural development and permanently maintained cleared openings may occur. Activities not counted as permanently maintained cleared openings include a single driveway for access to the building envelope, cleared areas that are mowed less than twice a year, areas used for agricultural management activities, and trails for recreational access.
2. Building envelopes must be shown and labeled on the subdivision plan. Building envelope requirements must also be referenced in deed covenants for each lot specifying that structural development and maintained cleared openings must be located within the building envelope as shown on the Commission approved subdivision plan, as it may be amended from time to time.
3. Building envelopes must be located and sized to allow conformance with the Commission’s dimensional requirements in terms of minimum setbacks and lot coverage, and vegetation clearing standards for shorelines and public roads.
4. Where practicable, building envelopes must be arranged:
 - a) In groups, allowing for larger open areas between groups of building envelopes
 - b) To avoid placement along ridge lines, on prime farm land soils, in wetlands or drainage areas, on sustained slopes greater than 20 percent, or over any other topographic features or natural features important to the site; and
 - c) To maximize privacy afforded to each dwelling unit.

erichert
2018-07-12 15:35:48

Is there a standard for "practicable"?
lands or drainage areas, on
or natural features

D. Open Space

Open space is defined in Chapter 10 as “any parcel or area of land essentially unimproved and set aside, dedicated, designated, or reserved for the public use, for the common use of owners and occupants of land adjoining or neighboring such open space, or for purposes intended to preserve important natural features of the site.” Open space can serve many functions such as protecting rural character and natural resources, treating stormwater runoff, allowing for wildlife passage, and providing active or passive recreational opportunities. Given indirect impacts on wildlife from human disturbance, wildlife passages are intended to be open space areas that allow for the movement of wildlife around, between, or through areas of development.

The Commission recognizes that providing for common open space may be difficult for small subdivisions. However, the development of several small subdivisions along the same road could adversely impact rural character and wildlife movement, if there is no remaining open space. Land owner equity, in terms of who provides the necessary open space, is an important consideration. In certain limited situations (see Section I,D,3,a), and b)), the Commission may allow decisions without provisions for wildlife passage.

erichert
2018-07-12 15:40:55

Not sure what "reasonable efforts" means. Is there a reason not to require contiguousness unless, in the judgment of the Commission, there is a clear legal or physical obstacle that prevents it? The soft, somewhat ambiguous standard in this item 1

1. Reasonable efforts must be made to locate any common open space in large lots connecting with off-site undeveloped land to form a continuous integrated

2. Significant wildlife habitats, imperiled and critically imperiled natural plant communities, and a minimum 250-foot undisturbed buffer around those resources must be included in common open space.
3. The subdivision design must include suitable open space for wildlife passage, at least 500 feet in width, around or through the development. The wildlife passage must be located adjacent to flowing waters or wetlands, in a way that links high value wildlife habitats on or off the property, or adjacent to one of the boundary lines of the subdivision, to the extent practicable. In addition, lots must be configured so that groups of lots are separated by at least 500 feet of undeveloped land such that lots within a group do not extend more than 1,320 feet along the existing access road or shoreline.
 - a) In cases where the subdivision design consists of four or fewer lots encompassing the entire existing parcel, and where the Commission has determined provision for wildlife passage exists within $\frac{1}{4}$ mile of the parcel, the Commission may allow subdivision designs without open space for wildlife passage.
 - b) In cases of subdivisions that constitute “in-fill” development, on parcels surrounded by existing development, for which designated open space would be an isolated pocket providing little long-term value, the Commission may also allow subdivision designs without open space for wildlife passage.
4. In cases where an existing recreational resource, such as a motorized or non-motorized trail managed for public access, is located in or within 1000 feet of the project boundary, the subdivision design must include provisions for all lot owners in the subdivision to safely access the resource without crossing private land outside the limits of the recreational resource, unless a legal easement is established for that use.
5. Common open space within the subdivision must be preserved and maintained in accordance with the Commission’s Chapter 10 rules, Section 10.25,S.
6. Where layout specific open space requirements reference net developable land and net developable shorefront, the terms are defined in Chapter 10, Section 10.25,R,2,a.
7. Open space must be clearly shown and labeled on the final plat as to its use or uses, ownership, management, method of preservation, and the rights, if any, of the owners in the subdivision to such land or portions thereof. The plat must clearly show the open space land is permanently reserved for open space purposes, indicating the book and page of any conservation easements or deed restrictions required to be recorded to implement such reservations or restrictions.

E. Access Management, Traffic Movement, and Roads

Access management, relating to the regulation of new roadway intersections, proper roadway designs, and long-term maintenance, can ensure safe and efficient movement of people, goods, and services. In case of an emergency, when the principal access to a development could be blocked by downed trees or flooding, it is important to plan for a secondary egress to ensure that everyone can exit safely.

1. All subdivisions that include a new interior road(s) exceeding $\frac{1}{4}$ mile in length must include provisions for all lot owners to have at least two ways for emergency egress from the development.

Emergency egress may include egress by water for subdivisions on water bodies provided there is a legal right of egress off the water body such as a public boat ramp or dock, and may include existing motorized trails maintained for public access, provided all lot owners have a legal right of access to the trail.

2. The subdivision design must include no more than two entrances onto an existing roadway within any ½ mile section of road. Also, where practicable for the proposed development site, subdivision roads must be designed such that entrances onto existing roads are located directly across from existing entrances on the roadway, allowing for safe cross movement of traffic at the intersection.
3. If the subdivision layout includes a dead-end subdivision road, include in the subdivision design a reserved right-of-way for future connectivity offsite, unless existing site constraints make this impracticable. Where practicable, locate the reserved right-of way so that it does not cross a natural barrier to wildlife passage.
4. Whenever there is remaining land on a parcel proposed for subdivision, include in the subdivision design provision for the remaining land allowing opportunity for activities such as timber harvests or recreation.
5. Design roadways to fit the existing topography, minimize the need for cuts and fills, and meet the Commission’s road design standards.
6. Design right-of-way widths for internal subdivision roads with sufficient room for future expansion, if needed. Rights-of-ways should be at least 50 feet in width.
7. Include provisions for long-term maintenance of the subdivision access road(s) such as maintenance of drainage structures, water crossings, and road grading or resurfacing.
8. If a lot owners’ association is proposed for maintenance of common infrastructure or open space, the subdivision application must include draft documents necessary for establishing the association, providing for mandatory lot owner membership, lot owner rights and privileges, association responsibilities and authority, operating procedures, proper capitalization to cover operating costs, and the subdivision developer’s responsibilities until development sufficient to support the association has taken place. Responsibilities of the association must include the maintenance of common property or facilities, levying annual charges against all owners to defray expenses, and the power to place liens on property of members who fail to pay assessments.

erichert
2018-07-12 15:46:29
Also,
An important provision. Question will arise as to who is responsible for building the connection in the area reserved. Will an adjacent property owner developing the adjacent land (a) have the legal right to connect (presumably yes, but there would need further to development.

F. Shoreland Development

Shoreland areas are valuable resource assets and limited in extent. To ensure efficient use of these limited resources and minimize pressure on more remote areas, the Commission allows for some water front development in appropriate locations, while providing and balancing opportunity for non-waterfront development that has common water access. Where development is allowed, protection of surface water quality must be of utmost importance.

1. Shoreland subdivisions must include one of the following, except as allowed in this section below:
 - a) Non-waterfront lots that equal or exceed the number of waterfront lots in the layout;

- b) An area reserved for future layout and development of non-waterfront lots that is equal to or exceeds the area of waterfront lots in the layout; or
- c) A non-linear design that incorporates a majority of the waterfront in common ownership.

In cases where the Commission finds site specific constraints such as sustainable wetlands do not allow for development of non-waterfront lots, the Commission shall provide an alternative layout for a project site.

erichert
2018-07-12 15:50:10

This is the kind of language that might be included vis a vis a couple of my earlier comments (who decides what is "practicable" or "reasonable effort"? Should be the Commission.)
water access must avoid

- 2. Shoreland subdivisions must also include provisions for useable common open space designated for wildlife passage to the extent practicable.
- 3. Proposed permanent docks, trailered ramps, hand-carry launches or water-access ways must comply with the requirements of Section 10.27,L,2.
- 4. Designs must include best management practices for control of phosphorus in accordance with Section 10.25,L.

G. Hillside Development

[LUPC Staff is seeking input from Commissioners and stakeholders on whether these standards should apply to all development not just subdivisions.]

Development activities on hillsides can have significant impacts on scenic resources and users of those resources, and pose challenges for stormwater and erosion control. Particular attention to structural exteriors, buffers and screening vegetation, and stormwater best management practices can minimize those impacts.

1. Definitions

- a) Hillside - Areas of two or more contiguous acres within a project area having sustained slopes of 15% or greater.
- b) Ridgeline - the line formed by the meeting of steeply sloping surfaces of land that are dropping away from each other. Significant ridgelines are ridgelines which, in general, dominate the landscape and are highly visible from public view points.
- c) Public view points - publicly travelled roadways, non-tidal water bodies and coastal wetlands, trails maintained for public access, public properties, and other public spaces that provide observation and appreciation of the existing scenic character plays a role in the public use of the place.

erichert
2018-07-12 15:53:11

Only caution here is that "trails maintained for public access" should mean: trails for which the public has the legal right of access, by easement or whatever. Should not include trails that are privately owned and simply used by the public because the

- 2. General Provisions. Except provisions for stormwater best management practices, hillside standards do not apply to developments or portions thereof that will be completely obscured from public view points by topographic features or other existing natural conditions (such as dense vegetation) that create visually obstructing conditions. In such cases, at the time of filing of a permit application, the applicant must demonstrate that these obstructing features or conditions will not be altered by any uses allowed with or without a permit.

3. Stormwater Management. The proposal must include plans for the construction and maintenance of stormwater best management practices designed to slow down and spread areas and ensure that increased runoff does not cause downstream soil erosion.
4. Ridgeline Protection. The development must be designed to ensure building improvements will not extend above the existing ridgeline or alter the ridgeline when viewed from public view points.
5. Vegetative Clearing. The proposal must include a vegetation management plan that provides for long-term maintenance of clearing limits that will be sufficient to protect public view points. The vegetation management plan must ensure:
- There will be a sufficient area of clearing allowed around buildings to maintain the minimum extent needed for a fire safety defensible space.
 - There will be sufficient vegetation maintained on steep slopes to protect long-term slope stability.
 - Existing forest cover will be maintained to interrupt the façade of buildings, provide a forested backdrop to buildings and reduce or eliminate the visual impact of new development from public view points.
 - Clearing for views will be limited, with narrow view openings between trees and beneath tree canopies being a desirable alternative to clearing large openings adjacent to building facades.
 - If clearcutting is allowed outside the building envelope, such as clearing for views, the plan must include a quantifiable standard for limiting that clearing such as: any trees removed for views will not exceed a 25-foot width of clearcutting and extend, outward therefrom at an angle of 45 degrees or less on both sides, beyond a point down-slope where the tops of the trees are at the same elevation as the lowest adjacent grade for the principal building. The 25-foot opening may be located at any point along the down-slope boundary of the building envelope.
 - The Commission may require additional vegetative clearing limitations or standards in cases where the public view point is a significant scenic resource.
6. 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).
7. Construction materials. The proposal must ensure that:
- Colors. The exterior colors of structures, including but not limited to siding, roofing, retaining structures, foundations, trim, gutters, vents and chimneys, will be earth tones naturally found at the specific site or in the surrounding landscape.

erichert
2018-07-12 15:56:05

But would allow net increase in rate and volume of runoff? Is this consistent with other stormwater management standards in the jurisdiction?
plan that establishes and is highly protective of public

- b) Reflectivity. Structures use only low or non-reflective exterior building materials, including but not limited to windows, roofing, gutters, vents, and chimneys. If a highly reflective material, such as aluminum or other smooth metal, must be used for an essential component of the structure because no other material is reasonably available for that component, reduced reflectivity must be incorporated and maintained to the greatest extent practicable by, for example, painting the component with a neutral or earth tone color, boxing in the component with non-reflective material, or using a textured or pre-weathered version of the component.
8. Infrastructure. The proposal must include provisions for roads, driveways, utility corridors, and other similar linear infrastructure to be located and designed so as to minimize the visibility of corridor openings from public view points to the extent practicable (by, for example, following topographic contours and retaining existing vegetation).

H. Recreational Amenities

Recreational resources, whether water access points or multi-use trails, provide a number of benefits to seasonal and full-time residents of a local area. For subdivisions with limited on-site recreational opportunity, it is important to ensure that off-site opportunities within a reasonable distance are available for use by the lot owners. Also, where recreational resources are not located on-site, provisions are needed to ensure that added use of off-site resources by new lot owners does not overwhelm the resources, adversely impacting existing users.

1. Unless an existing publicly-available, recreational resource is (i) located within one-half mile of the project boundary, (ii) safely accessible for all subdivision lot owners, and (iii) has sufficient capacity to accommodate the lot owners, the proposed subdivision must include one of the following:
 - a) Provisions to increase the capacity at an existing publicly-available recreational resource that can be safely accessed by all lot owners, within one-half mile of the resource;
 - b) An on-site recreational amenity accessible to and able to accommodate all subdivision lot owners, such as a common trail, common water access, or an open field; or
 - c) Permanent rights of access for all lot owners to a new off-site recreational resource within one-half mile of the project boundary.

erichert

2018-07-12 16:01:32

This 1a) item sounds like a form of impact fee. Its implementation in any given situation may be complex -- certainly doable, but a procedure has to be followed, and the procedure probably should be built into this document.

Examples of publicly available recreational resources include a public boat ramp, motorized or non-motorized trails managed for public access, downhill ski resorts, and other outdoor recreation centers.

2. Upon showing of good cause, the Commission may increase the distance an off-site recreational resource may be located from the subdivision.

I. Procedures- Sketch Plan Review Meeting

The purpose of a sketch plan review meeting is to discuss the characteristics of the site and the plan for development in conceptual terms at the earliest possible stage with the intent to streamline the formal

application process and minimize the applicant's costs for technical experts. The Commission may elect to hold a site visit at this preapplication stage.

1. Prior to submitting a permit application for a subdivision, the applicant must request and attend a sketch plan review meeting.
2. A sketch plan with no engineering details and with supporting submissions must be provided in advance of the meeting in conformance with guidance provided by the Commission.
3. The permit application for the subdivision must be submitted within 12 months after the sketch plan review meeting. If the application is not submitted within 12 months, the Commission may require a new sketch plan review.
4. Applicants may present a subdivision in phases, provided that the first phase contains at least 25% of the total number of lots as shown on the sketch plan.

II. Layout Specific Standards

A. Basic Subdivisions

Basic subdivision layout provides a straight-forward, simplified subdivision design while still meeting the Commission’s subdivision objectives including maintaining rural character and protecting natural resources.

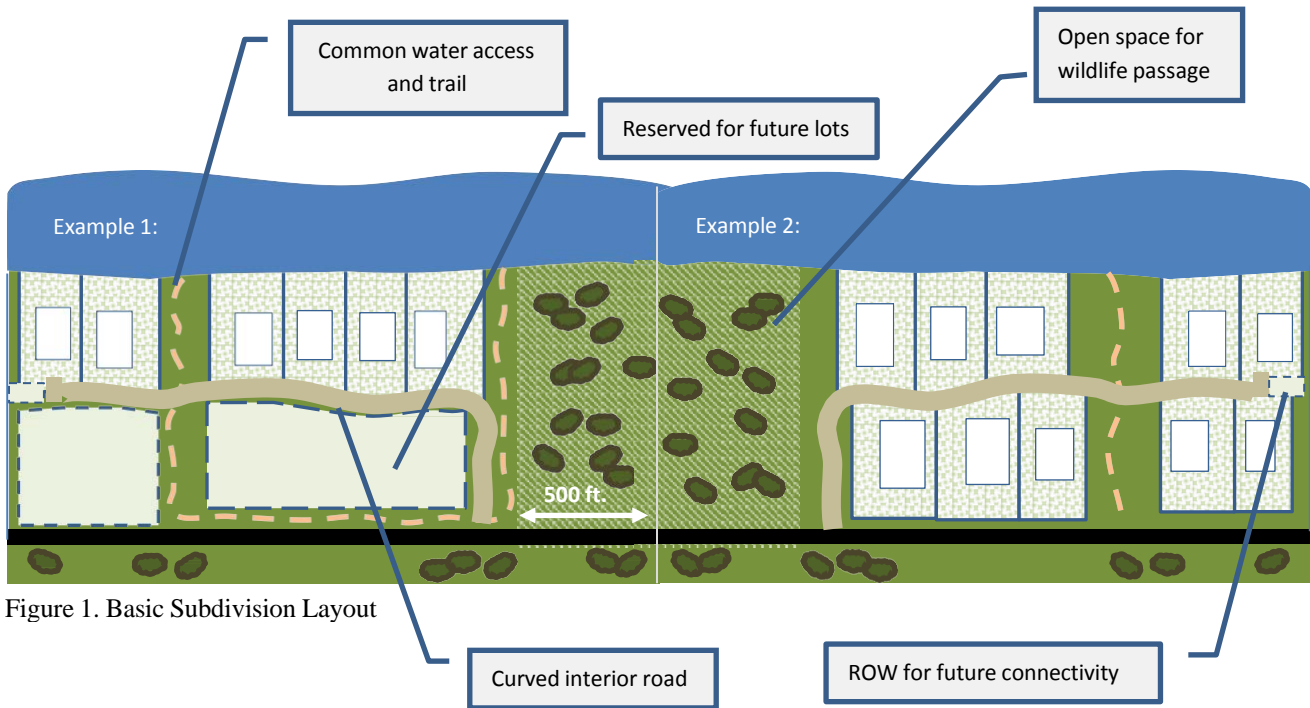


Figure 1. Basic Subdivision Layout

All general standards must be met, in addition to the following standards:

1. Building envelope size must be limited to no greater than 40% of the lot area.
2. Recreation-based subdivisions (which would be located outside primary shoreline) must meet the required open space percentage in Section II,A,3, below:
 - a) Abuts or is located within 1/4 mile of permanently conserved land.
 - b) Includes provisions for the preservation of near-by, off-site conserved land.

Either of these options must include a total contiguous area and shore frontage on the same waterbody for shoreland developments that exceeds the open space percentage requirement for the subdivision.

3. Open space percentage—For recreation-based subdivisions, the total open space must include at least 40% of the net developable land area and 40% of the shoreline for shoreland developments.
4. Recreational trail incentive – For recreation-based subdivisions, the total open space percentage

erichert
2018-07-12 16:03:42
May want to differentiate between "building envelope size" and "lot coverage" - assuming that "building envelope" does not mean "maximum impervious area"

erichert
2018-07-12 16:04:41
Assume "net developable" is defined somewhere?
total open space percentage

for the subdivision may be reduced by 5% if an existing trail on the property is included in common open space or a new trail is constructed in common open space. An additional 5% reduction may be allowed if the on-site trail connects with an existing off-site trail managed for public access. Open space requirements for habitat protection and wildlife passage must still be met, and trail construction must minimize impacts to open space designated for wildlife passage.

B. Clustered Subdivisions

This layout offers an opportunity to create a subdivision, particularly in highly developed or higher growth areas, with a reasonable balance between development and conserving open space. In this layout, smaller lots are grouped together to allow use of the rest of the project area for open space, recreation, or agriculture.

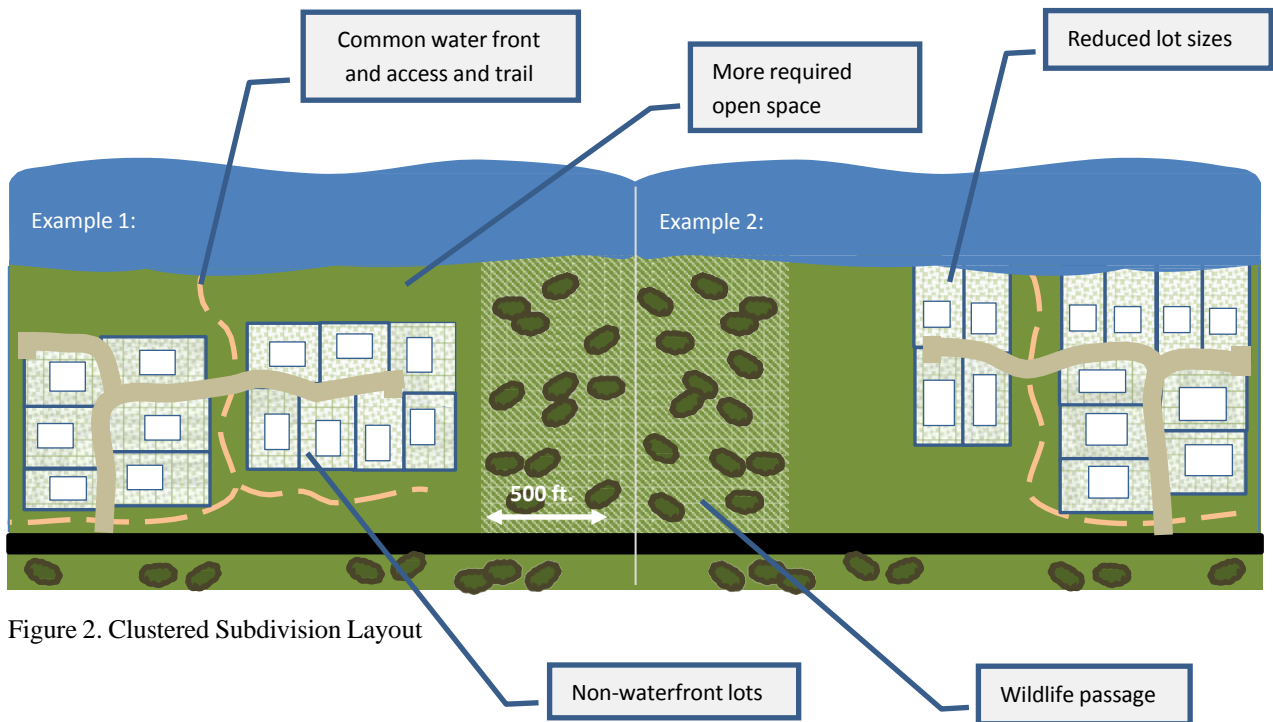


Figure 2. Clustered Subdivision Layout

All general standards must be met, in addition to or as otherwise stated in the following:

1. *Density and Dimensional Requirements for Clustered Layouts*

- a) The Commission may reduce the minimum lot size for moderate density subdivisions if the lot density requirement for the subdivision is met in the aggregate, and the subdivision contains common open space; and may reduce the minimum road or shoreline requirements in both moderate and high density designs, provided, in the aggregate, the minimum requirements are met within the subdivision.
- b) In addition, the Commission may reduce dimensional requirements for subdivisions provided:
 - 1) Dimensional requirements, in the aggregate, are not reduced by more than 50%;

erichert
2018-07-12 19:49:50
Clustering often is used as an incentive device to secure more open space, habitat, etc. It has been an effective device in some communities. I gather the decision is not to provide an incentive for density in these standards.

- 2) Site conditions are suitable for more concentrated development on some portion of a site and such concentrated development will not adversely affect existing resources; and
- 3) The specific benefits afforded by the cluster approach will prevent the loss of or enhance the conservation of important natural features.

2. Open Space

- a) Open space percentage– the total designated open space must include at least 50% of the net developable land area and 50% of the net developable shoreline for shoreland developments.
- b) Subsurface disposal systems may be allowed in designated open space provided appropriate legal provisions are made for maintenance, access, and replacement; and the systems do not encroach on areas designated for wildlife passage or habitat protection.

3. Shoreland Development

- a) Shoreland subdivisions using a clustered subdivision layout must that equal or exceed the number of water front lots in the layout. provision for using reserved area for future growth in lieu of non-allowed in this layout (reference Section I,F,1).



erichert
2018-07-12 19:52:56

This is a good provision but a disincentive to cluster. Should it be offset have allowing a little more density than would otherwise be permitted -- i.e., use clustering as an incentive?

C. Low Density Subdivisions

The Low Density Subdivision layout, allowed in certain primary and secondary locations, offers larger lot sizes than other layouts and provides opportunity for rural land uses such as small woodlots and family farms.

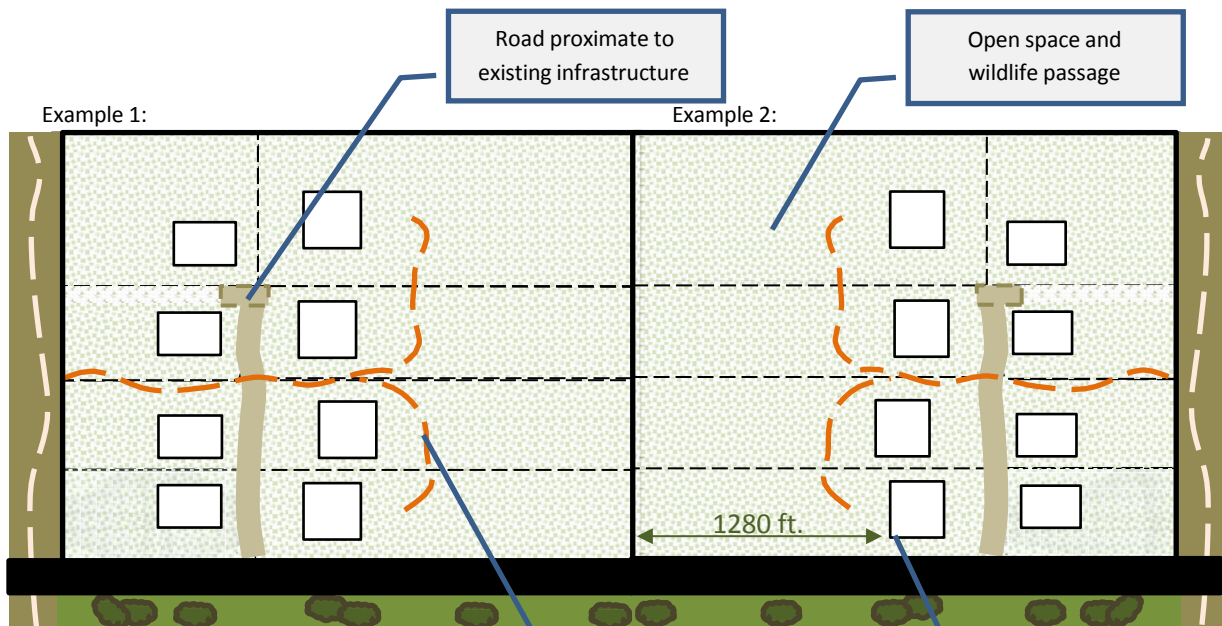


Figure 3. Low Density Subdivision Layout

Public trail access

Building envelope on front third of lot

All general standards must be met, in addition to or as otherwise stated in the following:

1. All building envelopes must be located in the front third of the lot to leave the back two thirds available for open space and wildlife passage.
2. Building envelopes must be no greater than 2 acres in size.
3. Design of the subdivision road must minimize fragmentation and indirect impacts on wildlife habitat by using practices such as minimizing the length of new roads, less than ¼ mile where practicable, locating new roads proximate to existing on-site or off-site development or infrastructure, and locating new roads closer to one of the existing parcel lines.
4. The design must include suitable open space for wildlife passage. The open space may be on individual lots, must be outside designated building envelopes, must be at least 500 feet in width, extending around or through the development, and should be located adjacent to flowing waters or wetlands, in a way that links high value wildlife habitats on or off the property, or adjacent to a property line, to the extent practicable.
5. The access provision for existing trails in Section I,D,4 applies to low density subdivisions. Otherwise, the common open space provisions in Section I,D do not apply to this layout.
6. Also, the Commission may approve a low-density subdivision that does not include provisions for an on-site or off-site recreational amenity.

D. FlexDesign Subdivisions

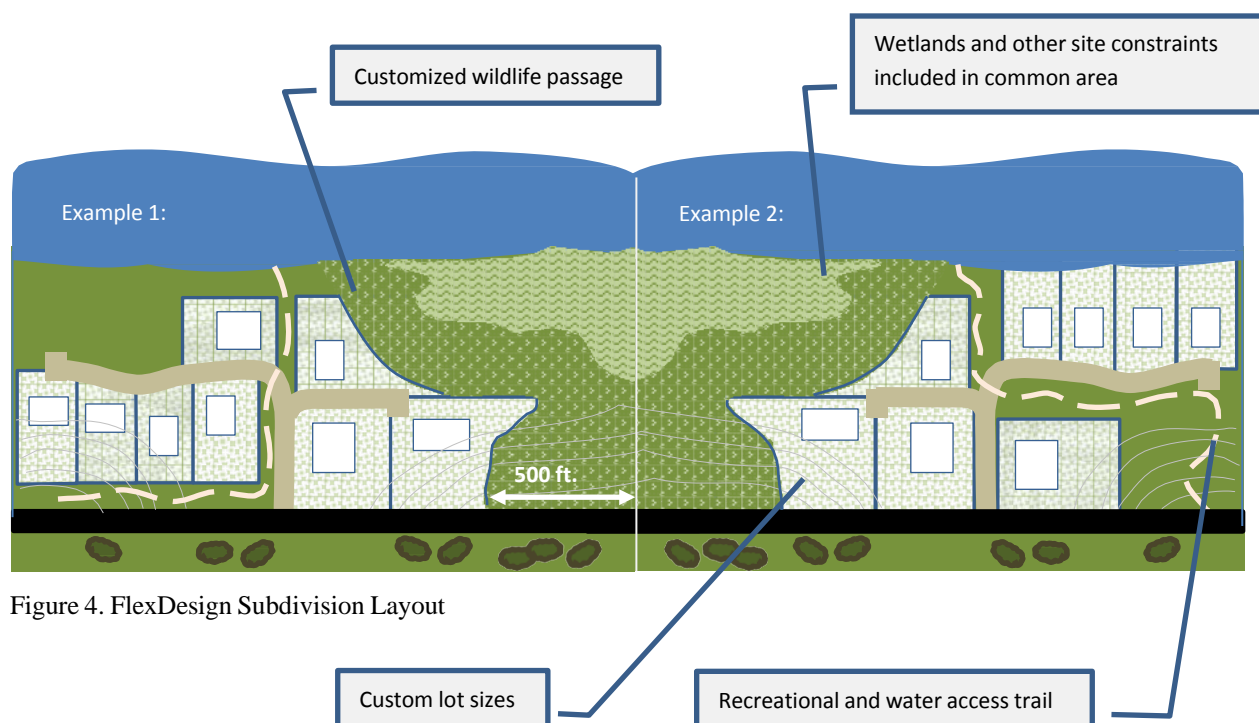


Figure 4. FlexDesign Subdivision Layout

FlexDesign Subdivisions allow for a customized subdivision layout and design, provided the following standards and procedures are met.

1. **Subdivision Objectives.** The proposed layout and design must meet the Commission's local scale subdivision design objectives, as follows:
 - a) **Good Fit.** Ensure well thought-out subdivision designs and quality infrastructure construction that are consistent with the local area's character, culture, land uses, and housing market; fit into the landscape to minimize the footprint and complexity of infrastructure, encourage continued timber and wood fiber production where appropriate, and protect existing resources where appropriate. Good fit recognizes the diversity of different regions.
 - b) **Limited Resources.** Provide for efficient use of limited land resources such as shorelines, frontage on public roads, and suitable soils to encourage more capacity for residential development in appropriate locations and create efficiencies in the provision of services such as roads, communication infrastructure, emergency services, schools, solid waste disposal, and recreation.
 - c) **High Value Resources.** Protect on-site and nearby high value resources including important farmlands, scenic resources, cultural features, wildlife habitats, waterbodies, wetlands, and other natural areas through good design, open space connectivity, and off-site conservation when appropriate to mitigate adverse impact on these resources.
 - d) **Recreational Resources.** Ensure that subdivision designs provide adequate access to on-site or off-site recreational opportunities to accommodate new residents and prevent negative impacts on existing public or private recreation resources, and encourage designs that provide access to a variety of, and interconnectivity between, recreational opportunities, where available.
 - e) **Adequate Infrastructure.** Ensure adequate infrastructure that has been designed to efficiently and effectively maximize public health and safety, allow efficient provision of public services, and minimize the cost of operation and maintenance, including provisions for systems that have interconnectivity, sufficient capacity, and resiliency in extreme weather events.
2. **Subdivision Design.** The development of the sketch plan must be consistent with the following design approach:
 - a) **Step One: Identify Priority and Supplemental Conservation Areas.** Identify the priority conservation areas, using existing information from State natural resource agencies and landowner knowledge, that must be considered for inclusion within common open space. Priority conservation areas include those areas of the parcel containing or supporting protected natural resources such as significant wildlife habitat, water bodies and wetlands; buffer areas to protect those resources; areas needed for wildlife passage around or through the development; imperiled and critically imperiled natural plant communities; special flood hazard areas; and sustained steep slopes (greater than 20%). Also, identify any supplemental conservation areas, features that the landowner has determined warrant secondary consideration for inclusion within common open space or protection from development, including other areas not-well suited for development, areas with connection to off-site open space, open fields, or other special features of the property that are important to maximize

opportunities such as protecting significant view sheds and providing solar access, and meet the applicant's design goals for the subdivision.

- b) **Step Two: Locate Building Envelopes.** Building envelopes must be located outside of priority conservation areas, and to the maximum extent feasible, should be located outside of supplemental conservation areas, as delineated in Step One. Building envelopes need to include sufficient area suitable for development and be located to reflect the Commission's local scale subdivision design objectives, outline in Section II, D, 1 above, as well as the applicant's design goals for the subdivision. The placement of building envelopes and lot lines must consider minimizing the creation of edges¹² between developed areas and open space, and consider the natural features of the landscape to the greatest extent possible, e.g., follow stone walls, lines of boundary trees, and streams. Locations of building envelopes should also consider the privacy provided for individual homeowners.
- c) **Step Three: Align Roads and Trails.** The minimum length and network of roads necessary to access each lot must be identified, subject to the road standards of the Commission, with consideration given to conforming roads to the natural landscape and to minimizing the creation of edges between developed areas and open space. Roads must be located in such a way that avoids or at least minimizes adverse impacts on those areas delineated in Step One. Where practicable for the proposed development site, entrances onto existing roads should be located to line-up directly across from existing entrances on the roadway, allowing for safe cross movement of traffic at the intersection. Proposed trails should be identified where access to designated open space or recreational resources on or off the development is appropriate.
- d) **Step Four: Draw Lot Lines.** Proposed lot lines must be identified. The placement of the lot lines should consider those areas identified in Step One, as well as conform to the cultural and natural features of the landscape to the greatest extent possible. The delineation of lots also should consider the privacy provided for individual lot owners and opportunity for future owners to reasonably expand the structures on the lot.

When a subdivision will not utilize the entire parcel and there are potential plans for future subdivision or development of the parcel, the request for sketch plan review also must include a conceptual long range development plan showing the potential utilization of the balance of the parcel not being subdivided. The conceptual long range development plan is intended to show that the current subdivision proposal will not compromise the long-term development of the parcel or important conservation values. This plan should show the relationship of the proposed subdivision area to the balance of the parcel and to adjacent land, as well as, in general terms, the potential road network and other infrastructure, development areas, and open space areas for the long-range development plan.

¹² In this context, "edge" relates to the boundary between areas of human activity such as lawns and roads, and undeveloped natural areas, such as meadows and forests. Where an edge exists along a natural area, native wildlife species can be adversely affected for a distance from the edge, often called "the edge effect."

3. *Procedures- Sketch Plan Review Meeting*

Sketch plan submissions for FlexDesign Subdivisions, based on existing information available from State natural resource agencies and landowner knowledge, must be provided in advance of the meeting and must conform with guidance provided by the Commission, including the submission of a site context map; a site inventory map, site analysis map, conceptual sketch plan, and alternative design sketch developed using the four-step approach described above; and a project narrative discussing the applicant's design goals for the subdivision. Additional, site-specific survey work, wetland delineations, etc. is not expected and should not be a part of the sketch plan review.

4. *Open Space*

- a) The area to be designated as common open space or otherwise preserved as part of the development must include all identified Priority Conservation Areas. Supplemental Conservation Areas may also be included in common open space or conserved as needed to ensure the Commission's subdivision objectives and the applicant's design goals for the subdivision are met.
- b) Sufficient Supplemental Conservation Areas must be included in the common open space to meet at least the minimum area percentage requirement for common open space.
- c) Unless site conditions indicate less open space will meet the Commission's local scale subdivision design objectives in Section II,D,1, the open space percentage for FlexDesign Subdivisions must be at least 50% of the net developable land area, and 50% of the net developable shoreline for shoreland developments.
- d) All open space areas must be part of a larger continuous and integrated open space system within the parcel being developed, and connected to off-site undeveloped land to the fullest extent practicable.
- e) Subsurface disposal systems may be allowed in designated open space provided legal provisions are made for maintenance, access, and replacement; and the systems do not encroach on areas designated for wildlife passage or habitat protection.
- f) Common open space must be preserved and maintained in accordance with Section 10.25,S.

erichert

2018-07-12 20:02:08

General comment - Low Density and Flex Design are close cousins to clustered development -- I suppose a bit more customized types of clustered development, based on location (low density). In the time I've had to give this review, I am not sure a clustered

From: [Bronson, Brian N.](#)
To: [Beyer, Stacie R](#)
Subject: Re: LUPC Subdivision Conceptual Layouts and Standards
Date: Monday, July 16, 2018 10:14:51 AM

Yes that should work

Get [Outlook for iOS](#)

From: Beyer, Stacie R
Sent: Monday, July 16, 2018 8:12:50 AM
To: Bronson, Brian N.
Subject: RE: LUPC Subdivision Conceptual Layouts and Standards

Brian,

That is great input. Thank you. If we change "easement" to "legal right of access" would that address the arrangements that you make with land owners?

Stacie

From: Bronson, Brian N.
Sent: Saturday, July 14, 2018 9:16 AM
To: Beyer, Stacie R <Stacie.R.Beyer@maine.gov>
Subject: RE: LUPC Subdivision Conceptual Layouts and Standards

I am off next week but will be getting my e-mails and responding to issues.

So your answers give me a better understanding. The one question I am still wondering about is the piece highlighted below. Most of the time we don't have easements for trail but we do have permits and licenses. I would ask you to consider whether they are required to have an easement or whether working with us as part of a licensed state trail on a landowner would also suffice?

Just a thought since most of the trails are not on easements.

Thanks for letting us comment.

Brian

From: Beyer, Stacie R
Sent: Friday, July 13, 2018 2:05 PM
To: Bronson, Brian N. <Brian.N.Bronson@maine.gov>
Subject: RE: LUPC Subdivision Conceptual Layouts and Standards

Brian,

Thank you very much for taking the time to review the conceptual standards. I have provided responses to your questions below. If you would like to set up a time to discuss these or follow-up questions, I would be happy to come down.

Any additional input that you may have after reviewing the responses is also welcome.

Regards,

Stacie

From: Bronson, Brian N.
Sent: Thursday, July 12, 2018 8:36 AM
To: Beyer, Stacie R <Stacie.R.Beyer@maine.gov>
Subject: RE: LUPC Subdivision Conceptual Layouts and Standards

So I have a few questions.

1. Does open space allow for trails? I think it does but it doesn't say that on page 8.

Typically, allowed uses in the open space is addressed during development of the documents for preserving the area and the permit application review. The LUPC standards for open space (Section 10.25,S) indicate that low-intensity, non-commercial recreational uses may be allowed. We would look to make sure proposed uses don't conflict with any specific natural or cultural resource values in the open space.

2. If the open space is near water is a trail allowed?

We would have to make sure our vegetation clearing, filling and grading, and erosion control standards will be met. Trails are allowed uses in our shoreland protection subdistricts provided those types of criteria are met.

3. On page 9 it refers to a trail within 1000 feet of the boundary but on page 13 it refers to them within half a mile of the boundary. Why the difference? I am confused as to what the intent is?

It seems like the paragraph 4 on page 9 and paragraph H 1 on page 13 conflict?

The standards on page 9 and the standards on page 13 serve different purposes. The standards on page 13 require that there be a recreational opportunity within a reasonable distance from all subdivisions (1/2 mile). There are many options on what that resource could be. The last sentence in H.1. provides a list of examples. The recreational resource doesn't have to be a trail. It could be a public boat ramp on a lake. The standards on page 9 are intended to address informal trail building when a trail is located really close to the subdivision. **We want lot owners to be able to get to the trail without crossing other lots (unless there is an easement for that purpose).** We have used the figure of 1000 feet to help define what "really close" means. We are open to suggestions, if there is a better way to define when an existing trail may encourage informal trail building.

Brian Bronson
Supervisor Off Road Recreational Vehicle Program
Bureau of Parks and Lands
State House Station 22
Augusta, Me 04333-0022
207-287-4958

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From: Beyer, Stacie R
Sent: Tuesday, July 10, 2018 4:00 PM
To: Bronson, Brian N. <Brian.N.Bronson@maine.gov>
Subject: LUPC Subdivision Conceptual Layouts and Standards

Brian,

Thank you for agreeing to take a look at the LUPC's conceptual subdivision standards. As we discussed, these concepts will ultimately form the basis for a rulemaking to revise the Commission's current subdivision layout and design standards for new subdivisions in the unorganized territories. It would be helpful to us, if you could in particular, look at the sections relating to open space and recreational amenities. Any feedback that you may have is welcome. If you have any questions, please feel free to give me a call.

The conceptual standards have been posted at this web address:

http://www.maine.gov/dacf/lupc/projects/subdivision_review/Policy_Issues/Conceptual_Subdivision_Layouts_Standards_JuneComMtg.pdf

Thank you.

Stacie R. Beyer
Chief Planner, Land Use Planning Commission
22 State House Station,

Augusta, Maine 04333-0022

Cell- 207-557-2535

From: [Hank McPherson](#)
To: [Beyer, Stacie R](#)
Subject: Adjacency & subdivision
Date: Tuesday, July 17, 2018 1:25:42 PM
Attachments: [LUPC Letter review of subdivision rules.docx](#)

Dear Stacie

Pursuant to our conversation please find attached my comment as we discussed.

The below mentioned websites are a few that promote combined recreational & residential leisure opportunities.

www.blackberryfarm.com

Google clayoquot wilderness resort

www.pawsup.com

www.enchantmentgroup.com this one does resort planning and may be a good source

I know of some other good planning resources, if I can be helpful in the future do not hesitate to contact me.

Warmest regards,

Hank



07/17/2018

Hank McPherson
McPherson Timberlands
1182 Odlin Rd.
Hermon, Me 04401

RE: Review of Adjacency and Subdivision Rules

LUPC needs to provide assurances that the new development proposals attached to the proposed revisions to adjacency are not a burden just to property owners, but to the LUPC staff as well.

LUPC says that the new adjacency principle “will bring more certainty to the rezoning process”, but this seems overbroad and not a well-considered conclusion. I suspect LUPC staff that adopted the original adjacency principle mode came to that same assertion.

It is unnecessary for planning criteria and the appurtenant development regulations to be in conflict with one another. This conflict defeats the idea that development, when done properly, could benefit local economies and surrounding areas. It will be difficult for LUPC staff members from different departments to work together.

All parties in this debate want certainty; either certainty that they may develop their land, or certainty that land about which they have no ownership interest may not be developed. On its face, the map entitled “Location of Development; Primary and Secondary Locations” appears to provide that certainty, but apart from the certainty of areas where development will not occur, this “certainty” is misplaced. The map depicts only an approximation of areas where a rezoning would be permitted.

There are two problems with this approach. First, rezoning should not be wholly prohibited in areas outside of the Primary and Secondary Locations. For example, the general rezoning criteria in 10.08 does not adequately address – particularly when read in the context of 10.08B – how LUPC would address rezoning’s from M-GN to D-RS. LUPC must adequately address rezoning’s outside of Primary and Secondary Locations. Saying nothing and relying only on the statutory language in 12 M.R.S.A. § 685-A(8-A) has the effect of prohibiting rezoning outside of Primary and Secondary Locations. LUPC must provide a comparable mechanism for rezoning areas outside the Primary and Secondary Locations.

LUPC should be affirmatively tasked with mapping the Primary and Secondary Locations. It is disingenuous to purport to map such areas, yet state that such a visual depiction is only an

approximation, thereby requiring petitioners and staff to wade through the criteria in Chapter 10. Show us where the Primary and Secondary Locations are.

Another over-riding issue is the need for regulated public to readily understand and evaluate what a particular parcel of land's development potential may be. To date, LUPC staff have essentially required that rezoning petitions be accompanied with development or subdivision applications. This is overly burdensome. LUPC must amend the adjacency principle to provide a cost effective and meaningful way for LUPC to advise petitioners whether a particular proposal or particular parcel of land supports a rezoning. The question LUPC needs to be able to address is: Can I do a 20-lot subdivision at X?

Certain provisions in the proposed adjacency rule are problematic. For example:

1. Few landowners in the jurisdiction are benefitted by deeded easements from the nearest public road and utility structures to their ownership. A requirement that requires deeded access for rezoning's, even if only certain rezonings, effectively prohibits rezoning in the jurisdiction. The more sensible rule – and the rule that LUPC has complied with to date – is to allow rezonings regardless of legal access. Instead, legal access or the lack of it, should be addressed via disclosure. LUPC should formally codify the "Rule of the West". LUPC should recognize that development in the jurisdiction is not like development in, for example, Falmouth, and that access to such development should be consistent with the condition in the jurisdiction.
2. The statements of average lot size in the 10.02 Subdivision Density are too restrictive and should be deleted. It is enough to specify a range of lot size without further limiting the comparative size and layout of lots.
3. LUPC should define with specificity what is meant by "not unreasonably". At a minimum, LUPC must attach certain objective standards to this so-called standard. It is not enough to say "You'll know it when you see it".
4. Low density subdivisions should not be excluded from having water frontage. To do so renders low density subdivisions meaningless and even the most cursory of glances at Maine mapping makes that clear.
5. D-RD should include subdivisions as a use requiring a permit.
6. D-RS should not be limited to areas where public services may be provided efficiently or have close connection to recreational resource. As with access, LUPC's proposed requirement that certain new development be approximate to public services ignores the conditions and history of the jurisdiction. People go to the

jurisdiction to get away from public services, neighbors and so on. To necessitate that rezoning's occur only if previously unprovided public services are made available, ignores a defining characteristic of the jurisdiction.

7. Low density subdivision should be allowed in M-GN.

Density: The proposed subdivision rule and standards could imply that high density means something in the neighborhood of 14 to 30 lots. If a developer wanted to create a significant development with amenities, he or she would be required to create several willy-nilly subdivisions over time under the current proposal. LUPC should assign a senior member of its planning staff to create guidance for true high-density development. Depending on the scope, these developments may be up to 150+ lots, built in two or three phases. There is an emerging market for lodges and recreational areas of this kind and there are several consultants that can assist with this kind of planning. The LUPC jurisdiction has a number of areas where this kind of development could take place and it would be a boom to local economies.

Public view points: These areas should be defined by experts if the property in question is to be restricted based on this. The definition should be eliminated as the definition of a ridgeline is adequate for this purpose.

Page 12 5(f) should be eliminated. What additional requirements should there be after A through E are considered?

Sketch Plan: After consideration, the commission should indicate to the property owner that the plan is acceptable and that the applicant can move to full subdivision review.

Open space requirements are too aggressive, and the non-developable land area should have a tighter description. Are the back two-thirds of building envelopes counted, for example, if there is more than 20,000 square feet per lot?

Subdivision objectives should be reviewed during the sketch plan and indicate that they have been reviewed to meet commission objectives.

From: [Andrew Cutko](#)
To: [Beyer, Stacie R](#)
Cc: [Thomas Abello](#)
Subject: LUPC Subdivision Standards
Date: Wednesday, July 18, 2018 8:20:33 AM

Hi Stacie –

Thanks for the opportunity to review and comment on the June 8 version of LUPC's Conceptual Subdivision Layouts and Standards. It's clear that this has been a lengthy process with multiple rounds of revision, so I commend LUPC staff on your due diligence. I haven't tracked the process in detail over the past few years, and as a result, I focused my quick comments below primarily on the open space provisions.

General comment:

It would be useful to briefly describe the *desired condition* of the open space, particularly in situations where the open space is serving as a functional wildlife connection (i.e., particularly around streams and wetlands but also between upland habitat blocks). It's not clear in these guidelines (or in Section 10.25,S) whether the open space could be a maintained ball field, pasture, or other non-forested area, but most Maine wildlife would benefit from forest cover. I suggest that developed fields, septic systems, lawns, or pastures should not count as 'open space'. In addition, I'd suggest that forest management should be allowed in the open space but should be done only in accordance with a forest management plan approved by a licensed forester, with the plan recognizing the important wildlife functions the open space may provide.

Specific Comments:

1. P. 7, Low density subdivisions: A subdivision of 25 acre lots could seem to occupy/fragment a lot of area; I suggest a smaller maximum size (20 acres or even 15).
2. P. 9, Buffers within open space: I suggest expanding the list of buffered items to include all rare plants listed as S1 or S2 by the Maine Natural Areas Program, vernal pools, and rare animals listed by IFW as Threatened, Endangered, or Special Concern. See also comment below about MNAP and MDIFW involvement.
3. P. 13, Sketch Plan Meeting: In cases where MDIFW or MNAP resources are present, I encourage LUPC to allow for enhanced protection of those resources, depending on input from those agencies. In particular, MDIFW and MNAP resource experts should be encouraged to participate in the sketch plan review meetings when relevant resources are present.
4. P. 15, Recreation based subdivisions: I have some concern that the exemption for adjacency to conserved land might actually encourage development right next to that conserved land. I suggest eliminating that exemption.

Thanks again for reaching out on this, and please keep me in the loop as this work progresses.

- Andy

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