Trees, Forests, and the Future of Your Town: Collaboration Is Key!

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VERMONT ARBOR DAY CONFERENCE, VERMONT TECHNICAL COLLEGE - MAY 19, 2023

Vermont's 11 Regional Planning Commissions



Regional planning commissions (RPCs) are political subdivisions of the State created by their member municipalities (24 VSA §4341). RPCs provide technical assistance to municipalities, and since Vermont does not have county governments, RPCs act as a link between municipal affairs and state government. RPCs work in fields that directly and indirectly affect the public at large: land use, transportation, housing, economic development, environmental quality, and more.

Planning is about identifying community needs, desires, and achieving related goals and objectives. How community is defined matters.



"Community, then, is an indispensable term in any discussion of the connection between people and land. A healthy community is a form that includes all the local things that are connected by the larger, ultimately mysterious form of the Creation. In speaking of community, then, we are speaking of a complex connection not only among human beings or between humans and their homeland but also between human economy and nature, between forest or prairie and field or orchard, and between troublesome creatures and pleasant ones. All neighbors are included." – Wendell Berry, Sex, Economy, Freedom & Community: Eight Essays

"A community is the mental and spiritual condition of knowing that the place is shared, and that the people who share the place define and limit the possibilities of each other's lives. It is the knowledge that people have of each other, their concern for each other, their trust in each other, the freedom with which they come and go among themselves." – Wendell Berry, The Long-Legged House

Vermont has a highly distributed and diffuse land use planning context. Towns have the ability to manage development, conservation, and natural hazard resilience, but it's a choice.

In Vermont, municipalities are given the power to choose their own fates. It is their CHOICE to:

- Create & adopt a town plan.
- Ask for regional planning commission approval of a town plan (NOTE: RPC approval has no bearing on town plan standing in Act 250, and only has bearing on standing in Section 248 if they want "substantial deference" rather than "due consideration" in PUC decisions, and what that really means in terms of PUC decision outcomes remains a question.)
- Follow state planning goals.
- Implement their plans by regulatory or non regulatory means.
- Adopt and effectively administer zoning bylaws.
- Participate in state land use and energy project review proceedings (Act 250 and Section 248)
- Raise revenue and appropriate funds and direct funding towards planning and planning outcomes.

Three pillars to planning resilient communities.

- Compact settlement
- Hazard mitigation and adaptation
- Habitat connectivity

Together these identify where development is to occur; how to make that development climate resilient, especially in anticipation of increasing flood events and intensity; and what lands are essential to preserve and improve habitat integrity and resilience as the climate changes.

They tie together human and natural systems at work in the landscape.

They also <u>make use of existing policy and planning frameworks</u> (town planning, local hazard mitigation planning, Vermont Conservation Design), and planning products (town plans, local hazard mitigation plans, town plan language related to forest continuity and connectivity).

Trees are the answer. ...or a big part of it.



Why these three?

- Compact Settlement: Reduces consumption of land, forest blocks, and habitat, and achieves a community form that enables mobility options that are not reliant upon cars, and that can achieve economies of scale related to housing development and energy use (district heating and cooling; microgrids). It's the alternative to rural sprawl, and it is a statewide policy imperative.
- Hazard Mitigation & Adaptation: Local hazard mitigation plans identify risks to and within the community, and can provide foundational information as to what lives, property, and infrastructure are at risk, where development is safe, and how risks might be mitigated – including the importance of "green infrastructure."
- Habitat Connectivity: More than just land conservation, it identifies the ecological systems and habitats and how these are connected, or not. By knowing how flora and fauna "flow" through the landscape, it can help us identify not only habitat areas but what corridors need to be preserved and created at a variety of scales. Also tells the story of soils and hydrology.

COMPACT SETTLEMENT

- Compact settlement planning informs how to retain what already exists (too often taken for granted), and where and how to grow.
- It identifies where in the future housing, commerce, and civic institutions will generally be located.
- By extension, it informs where infrastructure investments must be made to make compact settlement happen, and where it should be avoided to preclude sprawl.
- It makes economies of scale in development (especially housing), energy, and mobility possible, and facilitates the planning for each.
- It informs where and what hazard mitigation investments must be made, and what policies must be in place.
- ▶ Form and design matter; "placemaking."



HAZARD MITIGATION

- Hazard identification, especially flood and fluvial erosion hazard identification, informs where adaptive and resilient development is most possible, and what hazards need to be mitigated.
- This is particularly important for compact settlements on or near rivers and streams: it informs what defensive measures are needed, the importance of floodwater attenuation both upstream and downstream, and how to grow compact settlement away from hazards.
- Connection: flood water attenuation and drought mitigation/aquifer recharge.



Friends of the Winooski River Facebook page.

HABITAT CONNECTIVITY

- ► Habitat connectivity tells a story.
- It is the story of how plants and animals move through the landscape and increases understanding as to how lands and landscapes are connected. By extension, this is also the story of soils and waters.
- This creates a strong policy basis for land conservation beyond land and habitat "types," and can inform where development is to be avoided.
- Often habitat connectivity and hazard mitigation overlap and can inform infrastructure design as well as priorities.
- Corridors may be in close proximity to compact settlements, and this can inform compact settlement design to include accommodations for such. Should be part of compact settlement DESIGN.



Compact Settlement

Compact settlement is THE principal land use planning policy goal.

- > 24 V.S.A. § 4302 Purpose & Goals of Municipal & Regional Planning & Development
- ...this chapter shall be used to further the following specific goals:
- (1) To plan development so as to maintain the historic settlement pattern of compact village and urban centers separated by rural countryside.
- (A) Intensive residential development should be encouraged primarily in areas related to community centers, and strip development along highways should be discouraged.
- (B) Economic growth should be encouraged in locally designated growth areas, employed to revitalize existing village and urban centers, or both, and should be encouraged in growth centers designated under chapter 76A of this title.
- (C) Public investments, including the construction or expansion of infrastructure, should reinforce the general character and planned growth patterns of the area.
- (D) Development should be undertaken in accordance with smart growth principles as defined in subdivision 2791(13) of this title.

It's everywhere.

Vermont Comprehensive Energy Plan Guiding Goals

First Goal: "Ensure an affordable and stable cost of living through improving the energy fitness of Vermont homes, strategic electrification, focusing development in compact villages and urban centers, and substituting fossil fuels with renewable alternatives that have lower long-term costs."

2040 VT Long-Range Transportation Plan

- "Vermont's planning goals, (24 V.S.A. § 4302) require that all state agencies are responsible for supporting and reinforcing Vermont's historic settlement pattern of compact village and urban centers separated by rural countryside. The statute further clarifies that all public investments, including the construction or expansion of infrastructure, should reinforce the general character and planned growth patterns of an area."
- Vermont Global Warming Solutions Act of 2020 (Act153)

 "The Plan shall include specific initiatives, programs, and strategies that will: (1) reduce greenhouse gas emissions from the transportation, building, regulated utility, industrial, commercial, and agricultural sectors;
(2) encourage smart growth and related strategies;..."

The lack of community wastewater systems precludes compact settlement policy from becoming reality.

- On-site systems in existence as of 2007 are "grandfathered," but small lot sizes and septic-well "shadowing" make any expansion of wastewater or water demands challenging if not impossible.
- In many if not most of the state's villages without community water or wastewater it would be difficult to add a single new dwelling unit due to small lot sizes and septic-well "shadowing."
- Similarly, expansion of existing businesses, especially markets, restaurants, inns, etc. is difficult if not impossible.
- Further complicated by frequent proximity of settlements to streams and rivers.
- Takeaway not only is the expansion of compact settlements difficult, but the retention of EXISTING homes and businesses is at risk.

Achieving compact settlement – retention, infill, expansion, new – is dependent upon basic community wastewater and water infrastructure necessary to make it possible regardless of what a plan or bylaw/ordinance says.



Rural sprawl is the default development pattern in Vermont.

The alternative is developing the plans, establishing the rules, & building the infrastructure to make compact settlement possible.

Theoretical outcome of zoning regulation



Zoning is an important land use tool but not a panacea.







Marlboro Historical Village Existing Structures



Historical Village 2 acre buildout



Historical Village 1 acre buildout



Historical Village Center .5 acre



Local Hazard Mitigation Plans

What are they?

Local Hazard Mitigation Plans (LHMP) form the foundation for a community's long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction, and repeated damage.

FEMA's Local Mitigation Plan Review Guide describes what is required for an LHMP to receive formal FEMA approval, and both VEM and FEMA use the Local <u>Mitigation Plan Review Tool</u> to review LHMPs for completeness.

Benefits to the Town

Local governments and their communities benefit from hazard mitigation planning by:

- Identifying cost effective actions for risk reduction that are agreed upon by stakeholders and the public
- Focusing resources on the greatest risks and vulnerabilities
- Building partnerships by involving people, organizations, and businesses
- Increasing education and awareness of hazards and risk
- Communicating priorities to state and federal officials
- Aligning risk reduction with other community objectives

Incentives for the Town

Financial benefits for local governments that have a FEMAapproved LHMP include:

A FEMA-approved LHMP is required for local governments that wish to receive federal funds from the FEMA Hazard Mitigation Grant Program (HMGP) and Building Resilient Infrastructure and Communities (BRIC) program.

The LHMP is also one of the mitigation actions needed to qualify for additional post-disaster funding through the <u>Emergency Relief and</u> <u>Assistance Fund</u> (ERAF).

BRIC Grant Program - Building Resilient Infrastructure and Communities

The Fiscal Year 2022 BRIC program's priorities are to:

- Incentivize natural hazard risk reduction activities that mitigate risk to public infrastructure and disadvantaged communities
- Incorporate nature-based solutions, including those designed to reduce carbon emissions
- Enhance climate resilience and adaptation
- Encourages hazard mitigation projects that meet multiple priorities

LHMPs are often the story of natural systems at work in the community, and how human settlement comes into conflict with those systems.

1938 Flood



Source: The Reformer http://www.reformer.com/portlet/article/html/imageDisplay.jsp?contentItemRelationshipId=3937990

Today

Habitat Connectivity

Good tools to use to inform town planning efforts.

- Vermont Conservation Design
- ANR Atlas
- ► Biofinder
- Use Act 171 "Vermont's forestlands should be managed so as to maintain and improve forest blocks and habitat connectors." 24 V.S.A. § 4302(c)(6)(C)

Conservation Commission engagement is essential, and ideally would translate into direct engagement with the planning commission and town planning efforts.

Windham Connectivity Collaborative

Funded by the High Meadows Fund.

Regional conservation planning will happen in the Windham Region (at 920 square miles), and localized conservation implementation work will be supported in the roughly 90 square miles regionally-significant habitat linkage referred to as the "Southeast Connector."

The Windham Connectivity Collaborative project has two tracks operating at two different scales in the Windham Region, informally referred to as the "bird'seye view," and the "bug's-eye view."

The main premise of this project is that, together, these two operational scales can provide a comprehensive view of conservation planning in southeastern Vermont. We'll explore:

- How does regional conservation planning translate to local action?
- What local action is relevant to our communities, and how does that inform regional policy?
- By working at these two scales, this project functions in both theory and practice, generating a solid foundation for future conservation, and connecting the many disparate conservation efforts in the Region.



WRC is in discussion with the UMass Amherst Designing Sustainable Landscapes Project to support the collaborative and our regional plan update.



Purpose of project is to provide guidance for strategic habitat conservation by assessing ecological integrity and landscape capability for suite of focal species across the landscape. Assessments are done for both the current landscape and potential future landscapes, as modified by models of growth and climate change.

Conservation Commissions

- Consider active and consistent engagement with the Planning Commission.
- Included among statutory roles:
 - Inventory of natural resources
 - inventory of lands within the municipality which have historic, educational, cultural, scientific, architectural, or archaeological values
 - assist the local planning commission or zoning board of adjustment or the District Environmental Commission, by providing advisory environmental evaluations where pertinent to applications made to those bodies, for permits for development
 - cooperate with the local legislative body, planning commission, zoning board of adjustment, road committee, or other municipal or private organizations on matters affecting the local environment or the natural resources of the municipality
 - prepare, collect, publish, advertise, and distribute relevant books, maps, and other documents and maintain communication with similar organizations; and encourage through educational activities the public understanding of local natural resources and conservation needs.

Also consider involvement in your town's Local Hazard Mitigation Plan development.

In summary...

- Focus on achieving compact settlement, making those compact settlements climate resilient, and maintaining and improving habitat and habitat connectivity.
- Doing so harnesses existing policy and planning frameworks, and planning products such as town plans, local hazard mitigation plans, and forest continuity and connectivity elements of the town plan.

Will it be easy? Not likely. It takes a commitment of time and patience.

But it is necessary to achieve an adaptive, resilient future.

"Available futures are not just those that we can passively forecast, but those that we can actively create....They are futures which do not simply happen of themselves, but can be made to happen, if we meanwhile adopt wise attitudes and policies." – Stephen Toulmin, Cosmopolis