

# The Fantasy of Compact Settlement in the Absence of Infrastructure

A Discussion About Translating Policy Goals Into Public Investment In  
New England

# Panelists

- Chris Company, Windham Regional Commission
- Juli Beth Hinds (AICP), Birchline Planning
- Amy Macrellis, Stone Environmental
- Jim Sullivan, Bennington County Regional Commission

## Goal of this panel.

To have a discussion among panel attendees about your experiences developing compact settlement-supporting infrastructure, including barriers and successes, and whether there might be a New England regional approach to some issues including funding, but also programmatic or regulatory reform.

# Setting the stage for the discussion. (30 minutes)

- Introduction: Policy and smart growth planning basis for compact settlement, and the absence of wastewater and water infrastructure that compromises existing compact settlement and precludes new.
- Bennington County experience with implementation after the planning.
- Examples of what's worked, and what hasn't, to move forward on infrastructure design, engineering, and building.

# Policy Basis for Compact Settlement in VT

# 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;...”

# However, in the absence of community wastewater or water systems...

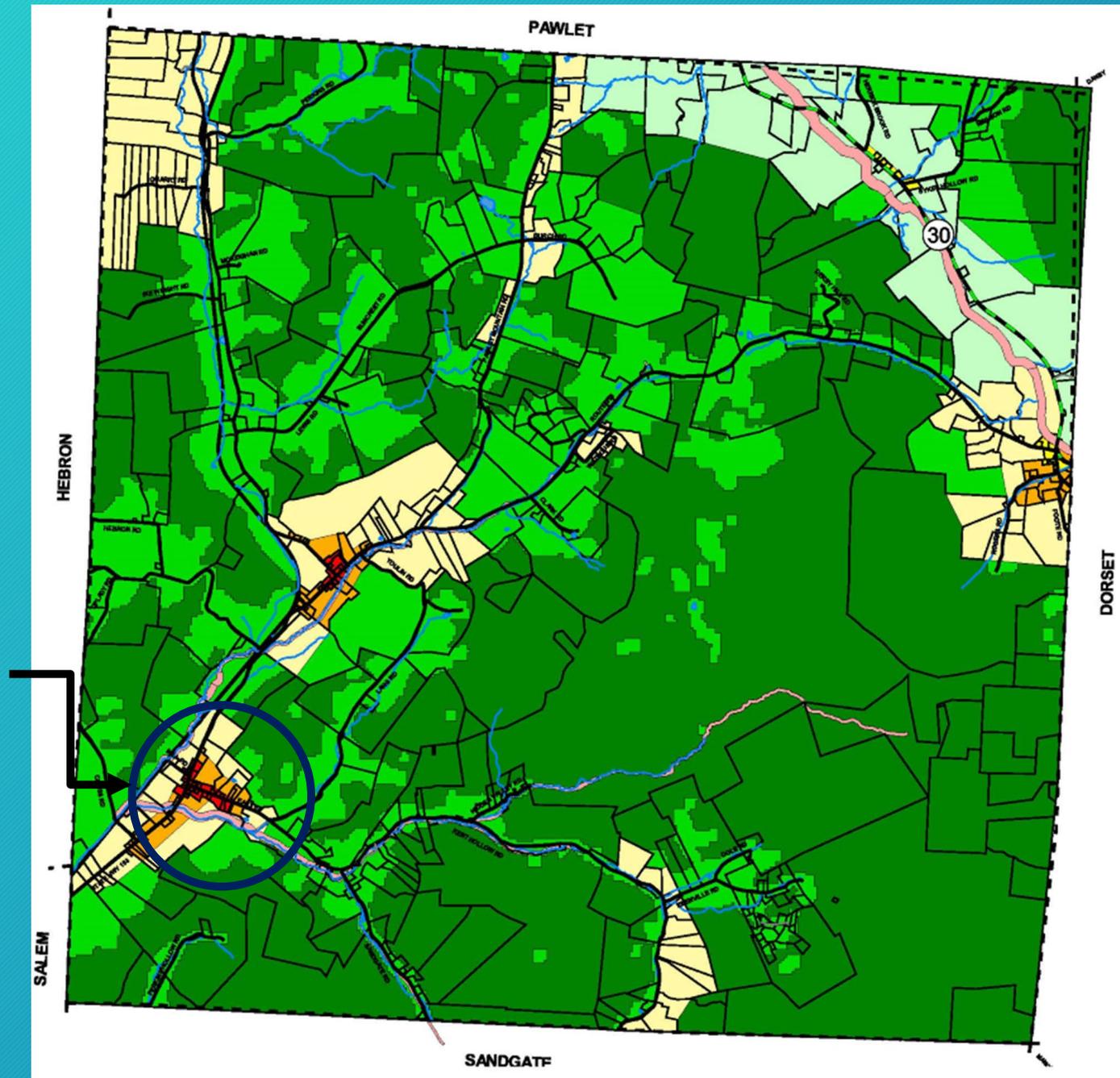
- On-site systems in existence as of 2007 are “grandfathered,” but small lot sizes and septic-well “shadowing” make any expansion of wastewater or water demands challenging if not impossible.
- In many if not most of the state’s villages without community water or wastewater it would be difficult to 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.

# Bennington County-An RPC Director's Decades of Experience

# West Rupert Village Aspirational Plans VS Physical Realities

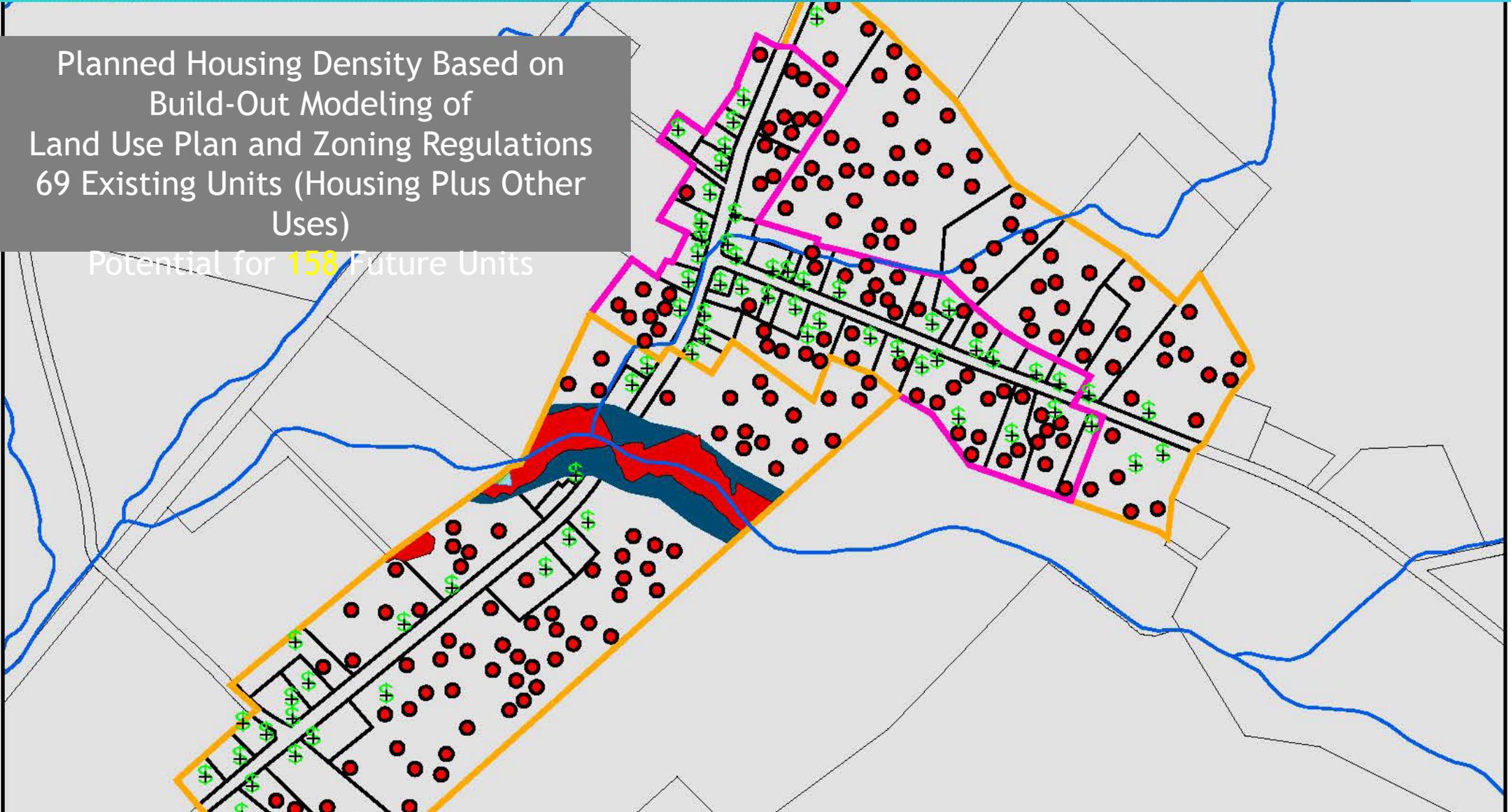


West Rupert  
Village



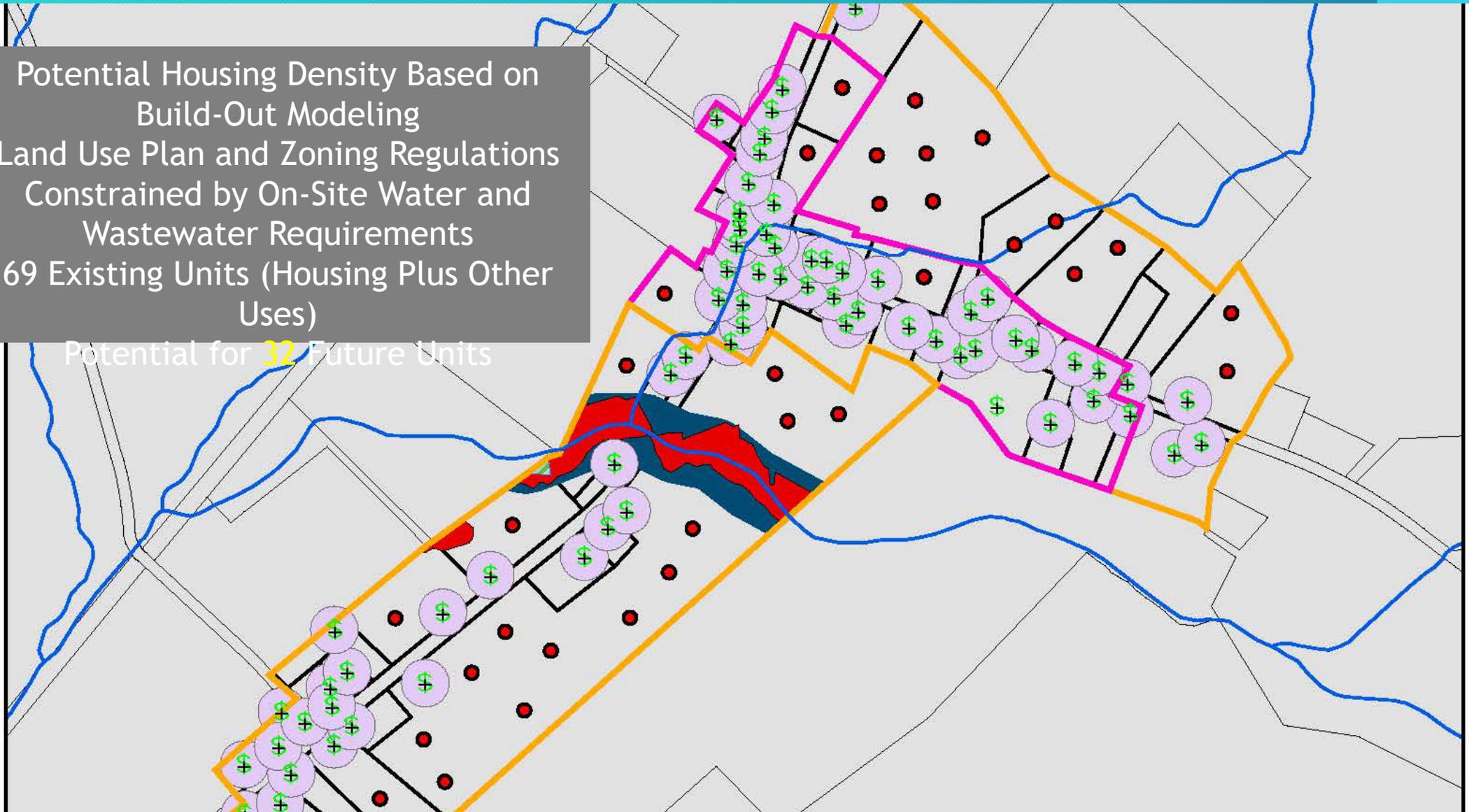
Planned Housing Density Based on  
Build-Out Modeling of  
Land Use Plan and Zoning Regulations  
69 Existing Units (Housing Plus Other  
Uses)

Potential for 158 Future Units

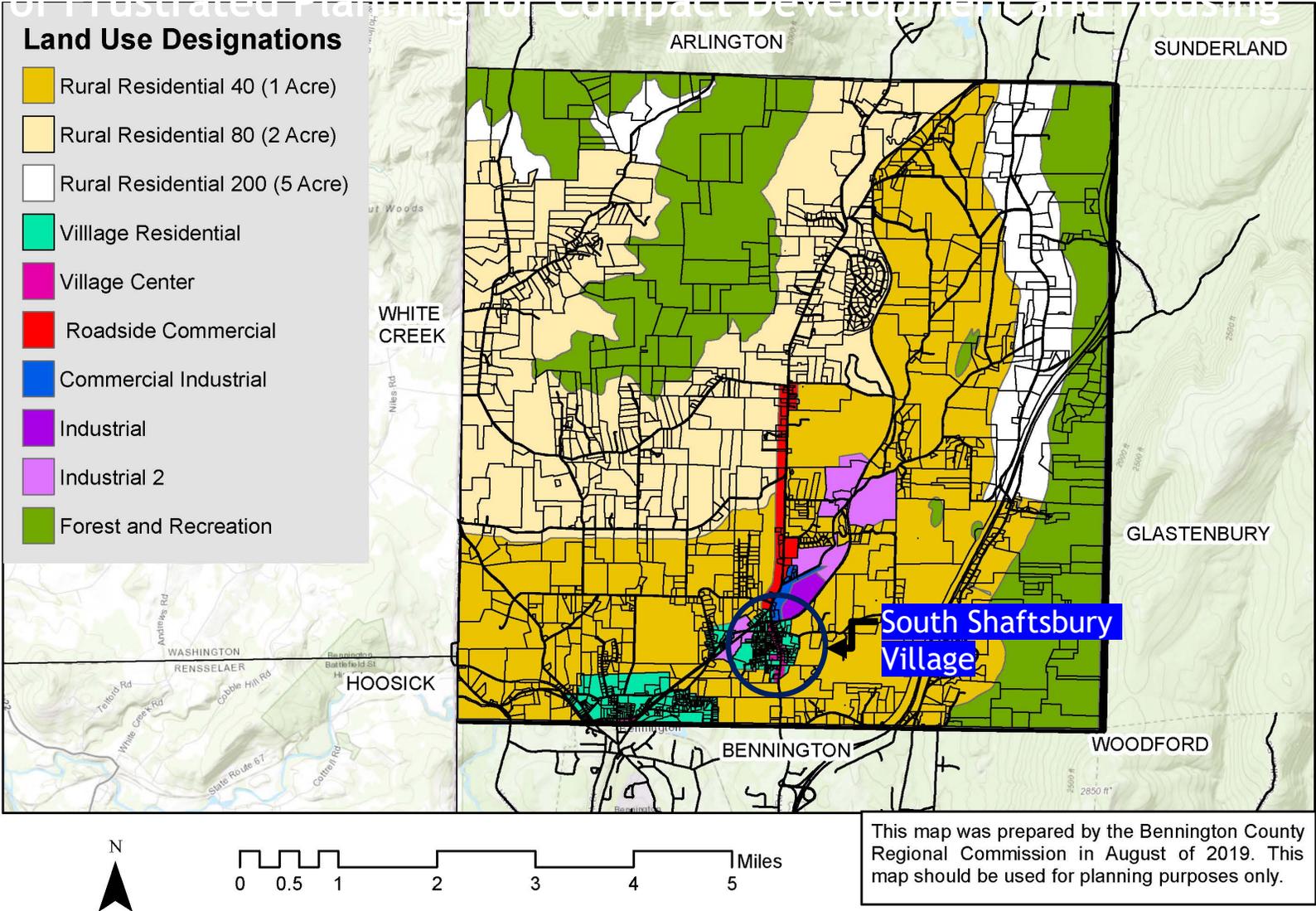


Potential Housing Density Based on  
Build-Out Modeling  
Land Use Plan and Zoning Regulations  
Constrained by On-Site Water and  
Wastewater Requirements  
69 Existing Units (Housing Plus Other  
Uses)

Potential for 32 Future Units



# South Shaftsbury Village: Political and Financial Reckonings, a History



- **1980s** - “Act 200” era Town Plan update and visit from Governor Kunin emphasizes compact settlement and rural open space goals.
- **1990s** - Shaftsbury featured as a town in Vermont characterized by rural sprawl; early assessment of village wastewater options considers connection to Bennington sewer system or construction of new village wastewater system @ cost of \$3 million plus.
- **2000s** - Comprehensive Town Plan update results in decision to expand the Village Residential district outward since infill is not possible without a wastewater system. Idea for a new mixed-use Village district at historic Shaftsbury Center rejected since village-type development would not be possible there. Idea to extend commercial/higher density zoning along Route 7A to Arlington is defeated.
- **2010s** - Plan and Land Use Bylaw updates eliminated many archaic standards and requirements, but the village wastewater and related density issues remained unresolved. Closing of the iconic Shaftsbury Country Store and other business impacts associated with on-site wastewater limitations prompts another look at wastewater options, but costs are still too high to justify the investment “risk.” Select Board says that they have “given up on the village” and revive the idea of extending commercial/higher density zoning along rural state highways (dropped again, but still brewing).
- **2020s** - ARPA??? Current plan is to spend ARPA funds on deferred maintenance of water distribution network.

# Lessons Learned From System Design, Engineering & Building

# Vermont Village Wastewater Solutions Initiative

- State recognizes gap between conventional approach, funding and everything you've just heard for villages
- <https://dec.vermont.gov/village-wastewater>
- Information resources & moral support - fundamentally, doesn't change the square hole for our trapezoidal pegs
- Same financing and approval process

# Vermont ARPA Funding - Village Water and Wastewater Infrastructure

- \$30M to help municipalities develop or expand community drinking water and wastewater systems
- Intended to keep user fees <\$1,000/yr (too high for many villages)
- “Co-funding” with State Revolving Loan Funds, USDA -Rural Development, or local funding
- Primarily grants, but pending eligibility determination, may include refinancing for planning, design, land purchase, or construction of active but not-complete projects
- Anticipated to support up to 10 systems
- Eligible: Designated villages and neighborhoods ranked thru Priority System for CW and DW SRF / Intended Use Plan (IUP)
- <https://anr.vermont.gov/content/arpa-vermont> to learn more

# OPTIONS and SOLUTIONS that can be used to meet village needs

- Community loan funds for upgrading/building privately-owned systems
- Hybrid systems, with multiple on-site and small cluster systems managed and funded together
- Integrating multiple funding streams
- Re-financing debt on existing on-site systems (including privately owned ones)

WESTFORD, VT

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## Why are we talking about community wastewater in the Westford Town Center?

Because *none* of these things can happen until we find a solution ...

CLICK SURVEY BELOW TO VIEW!

**Westford's 250<sup>th</sup> Celebration:**  
What would you like to see happen in our Town Center?  
Survey Results

Ranking	Topic	# of Votes
1	Improve water quality and quantity	20
2	Improve water quality	18
3	Improve water quantity	18
4	Improve water quality and quantity	18
5	Improve water quantity and quality	18
6	Improve water quality and quantity	18
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49	Improve water quantity and quality	18
50	Improve water quality and quantity	18

Prepared by: Westford Planning Commission  
Reviewed by: Westford Planning Commission & Board of Selectmen

## Wastewater Solutions for Vermont Communities

Vermont Department of Housing and Community Affairs



# MANY PATHS to Infrastructure Sufficiency

## System or Systems Operating

- Brownsville: Had pump station leading to West Windsor treatment plant
- Warren: Got lots of federal money & innovated its way to Yes, in stages
- Waitsfield: Necessity - and the threat of repaying \$672,000 without any users to fund it - is the mother of invention
- Bristol
- Rochester
- Addison Four Corners
- Peacham

## Activity:

- Westford
- Wolcott
- East & West Burke
- Montgomery
- Highgate
- Grafton
- Greensboro
- Fairlee
- Londonderry
- Huntington
- ...and more! At least 35 the State's aware of...

# Things EVERYONE has to navigate:

- Shared systems
- Using public funds on private property
- Site control for your dispersal (leach) field
- Explaining, explaining, explaining
- Staff limitations at VT DEC
- Catch-22 process requirements
- Uncertain, chicken-and-egg financing process through CWSRF
- Sufficient grant funding for enough up-front work to chart a path through preliminary engineering (you need \$125k OR a decade of MPGs to know what your unique “system” will look like)
- Inertia & New England-ness

# COMMONALITIES IN SUCCESS

- CATALYST: Someone needs to need to do something. Who is it and what do “they” want to do?
- CUSTOM SIZES: Sometimes “tiny” is all you need *and that is ok!*
- LOCAL COMMITMENT: There is no Vtrans coming to assess structural deficiency and build something for you
- MULTI-DISCIPLINARY TEAM: you need financial illustrations, writing, outreach, engineering, soils, ordinance language
- PERSISTENCE: It’s going to take YEARS in the \*best\* case

# Questions, Discussion, Barbed Remarks

What's working

What's not

What can we, as professionals, do to prompt *action*?