



TO: South Burlington Planning Commission
FROM: Cathynn LaRose, City Planner
SUBJECT: Natural Resource Considerations
DATE: October 29, 2019 Committee meeting

The Commission in May (*see May 10 memo from PC leadership*) established a small working group to consider the implementation and impacts of natural resource protection goals within subdivisions and PUDs and throughout the City as part of the Chapter 12 amendments underway. Jessica, Bernie, and Alan Strong, chair of the SB IZ Open Space Committee, have met several times in the months since to work through these considerations. The natural resource working group has continued to discuss a wholistic approach to natural resource planning. The group has identified sources and methods for approaches to water quality and hazards. While PC leadership gave a brief overview in early September, the group is now ready to provide more detail and lead the discussion of the work to date.

Natural Resource Considerations:

Attached is the most recent outline of natural resource considerations produced by the working group. This is a bulleted overview of the main considerations and points. More detailed language will be incorporated into the standards, with some already in draft form through the subdivision language and chapter 12 re-write, early drafts of which have been reviewed by the Planning Commission.

These mark a point for commission discussion on policy. There does remain some small group work to be completed, particularly related to the treatment of existing and planned agricultural lands and the identification thereof.

Arrowood Environmental/ Habitat Block assesment:

Recognizing that more professional assistance would be needed to assess potential habitat blocks in the city, we solicited a proposal for assistance from Arrowood Environmental. The scope of that was reviewed by the Commission in early September; a contract has since been signed and work has begun, with a presentation date in late January or early February expected.

NATURAL RESOURCE CONSIDERATIONS

Regulatory Framework

Hazards

- Surface Waters
 - Streams & 50' buffers
 - River Corridors (2019)
 - Muddy Brook, Potash Brook, Winooski River with 100' buffer
- 100 year floodplain, special flood hazard area
- Class 1 Wetlands and 100' buffer
- Class 2 Wetlands and 50' buffer
- Slopes 20% or greater

Level 1 Resource

- Class 1 Forest Blocks*
- Rare, Threatened, Endangered Species
- Class 1 Ag Parcels*

Level 2 Resource

1. Class 3 wetlands and 50' buffer
2. Intermittent streams
3. Class 1 Forest Block buffer*
4. Class 2 Forest Blocks*
5. Prime Ag Soils

*To be compiled by City: Forest/ habitat blocks drafted as part of Arrowwood contract and ag areas to be identified)

Not yet assigned or mapped:

Aesthetics

Scenic Areas/ Scenic Views

Current overlay standards sufficient for now; study ongoing for additional areas. Likely not a Class level resource as they are so site-specific. Possible short term solutions: tones, etc.

Outline of Resource Function

Hazards

- No build area (including subdivision lots and building envelopes) except *restricted infrastructure encroachment*
- Cannot be counted towards buildable land density except where included as NRP zoning or a conservation PUD (if permitted)
- In subdivision:
 - subdivision boundaries and lot lines shall be configured to extend contiguous resource areas on adjoining parcels
 - a proposed building lot may only incorporate a level 1 resource area if the resource area is less than the minimum lot size for the underlying district
- Shall be designated in associated legal documents as protected open space to be maintained and managed in common or single ownership

Level 1 Resource

- Same as hazards but does not remove land from maximum density calculations in PUDs. For subdivision, no resources are counted towards density. For conservation PUD, no deductions for resources.

Level 2 Resource

- Balance with other city goals (neighborhood connectivity, walkable neighborhoods, affordable housing, higher density underlying zones, City Center objectives)
- Encroachments allowed but with policy/directions for avoidance and considerations in locating building envelopes (shall/should avoid)
- Priority areas for use of land use allocation requirement for open space

Encroachments

Restricted Infrastructure Encroachment- Can only be permitted by the Development Review Board if there is a finding that the encroachment:

[staff note: most of these will be guided by restrictions within Chapter 12- Natural Resources or within Overlay Districts chapter].

1. Is specifically regulated (permitted/restricted) elsewhere in the SBLDRs.
2. Is necessary to rectify a natural catastrophe for the protection of the public health, safety and welfare.
3. Functionally dependent purpose such as critical facilities.
4. Is a roadway, access drive, or recreation path for purposes of crossing a resource area (working group note: this may be amended with more restrictive guidelines to prevent fragmentation of Class 1 forest areas) to gain access to land on the opposite side of the area, or for purposes of

providing safe access in accordance with City roadway and connectivity standards to an approved use, only in cases where there is no feasible alternative for providing safe access

- a. In the case of stream buffers, the road infrastructure must be located at least twenty five (25) feet from the edge of the channel of the surface water for all water bodies listed in section 10.01(C)(1)(a) and (b) and ten (10) feet from the edge of channel of the surface water of all other streams.
- b. In the case of wetlands, the road infrastructure shall be as narrow as safely possible (insert other language here from adopted LDRS related to this).

Misc notes or next steps for working group:

- Ag lands- will need to produce map of valued agricultural lands beyond what soil types indicate
- What if a property is predominantly (>75% as an example) covered by a Level 1 resource?
 - Options for level 1 resources- zoning district designation as NRP?
 - List as high priority for conservation?
- Restoration/mitigation for impacts- require in exchange for impacts to a certain level of resource?
- Conservation PUD trigger: >50% of land in hazards? Class 1 resources? Or all resources?

Assessing lands for future agricultural suitability:

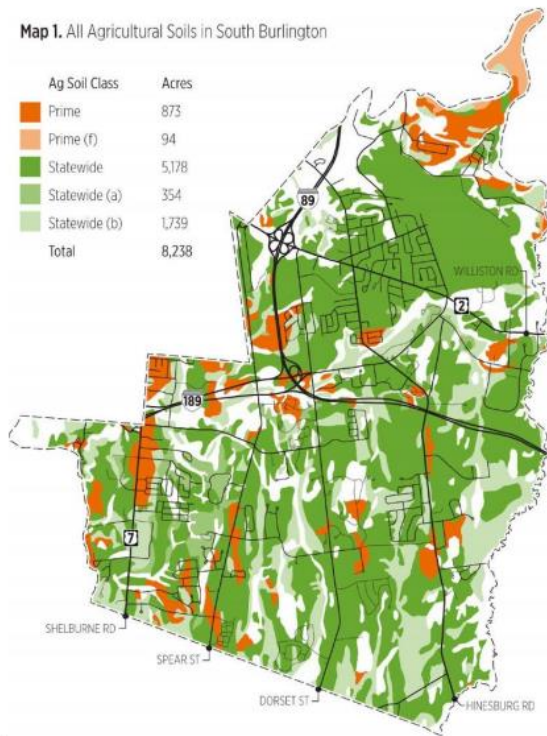
What and Why:

(p63) The future of farming in South Burlington will likely be closer to the model of urban agriculture, than to the dairy farms that dominated the city's landscape a century ago. Urban agriculture incorporates a range of techniques from container gardening on windowsills and or balconies to commercial, production-scale greenhouses. Urban agriculture focuses on farming activities that have a relatively small footprint and that can comfortably co-exist with neighboring residents and businesses. Urban agriculture contributes to a sustainable and secure food supply by producing, processing and selling food within a community. Urban agriculture includes a number of land use activities that fall outside the scope of 'farming' as defined in state law and exempted from local zoning.

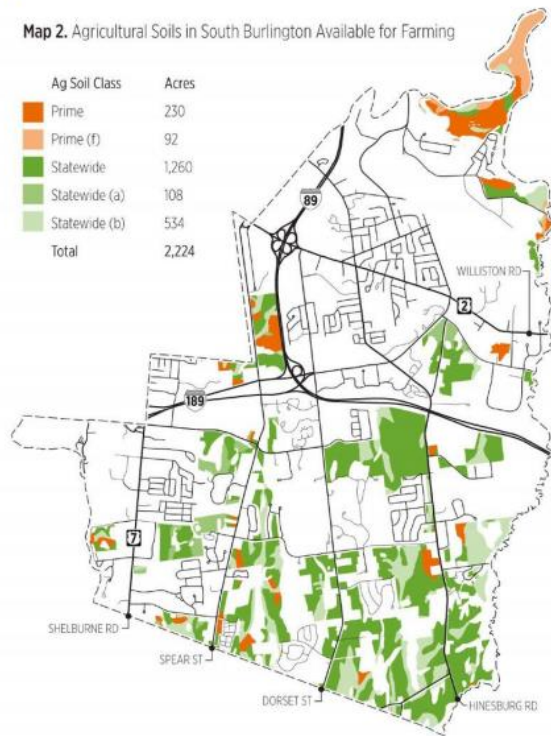
South Burlington Sustainable Agriculture / Food Security Action Plan

FINAL • April 11, 2013

Map 1. All Agricultural Soils in South Burlington



Map 2. Agricultural Soils in South Burlington Available for Farming



Current Use: Limited and voluntary.

According to the Sustainable Agriculture report (p 46), to reach the median household income in SB:

According to Hendrickson's well-known and respected (2005) study²³, there appears to be "sweet spot" of viable market farms in the range of 3 to 12 acres.

Dairy: 73 acres/farm

Grain: 773 acres/farm

Meat: 479 acres/farm

Options (see full list on page 85, but other references from body of report are included below):

1. Identify for conservation:

By Soil type (prime)

Benefit: Predictable and quantifiable; fair; already largely regulated by the state where there is Act 250 jurisdiction

Concern or limitation: some of these soils exist in areas where more intense development is desired (transit routes); does not capture valued sites already in agricultural production, including the UVM Horticulture Farm, Belter Farm

2. LDR amendments (support urban agriculture)

See recommendations on pages 63-69 of Ag report which includes recommendations related to definitions, allowed uses, keeping even conserved land in productive use (p 70), protection of topsoil, backyard ordinances beyond chickens, edible landscaping, wastewater capacity (this has additional implications that should be discussed)

3. PUD implications

By including prime/primary ag soil types on the Level 2 resource list, these can be prioritized for use in meeting civic space requirements.