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May 16, 2021

**VIA ELECTRONIC MAIL**

South Burlington Planning Commission  
City of South Burlington  
575 Dorset Street  
South Burlington, VT 05403

Re: Public Hearing on amendments to the City's Land Development Regulations

Dear Commissioners:

South Burlington residents petitioned for IZ out of a concern that the LDRs do not sufficiently protect South Burlington's precious natural resources, particularly in the SEQ. While the current draft of the proposed amendments to the LDRs provides some incremental protection for natural resources in the City, it also removes some protections. The level of protection for natural resources in the City needs to be dramatically strengthened to meet the ecological challenges that we face and fails to meet the expectations of the citizens that petitioned for IZ.<sup>1</sup>

How much of South Burlington's remaining natural resources should be protected, and how much should be developed? What is the right balance? It's pretty clear we have already consumed most of South Burlington's natural resources, and "balance" was likely achieved some time ago.

With the 9500 existing homes, commercial and municipal infrastructure, around 75 percent of the agricultural soils that at one time existed in South Burlington have already been paved over with highways, airport runways, parking lots, buildings, lawns, sports fields, solar farms, or fragmented into tiny parcels. On top of this, there are at least (even with IZ, and according to City staff) an additional 1150 new additional homes in the pipeline to be built on mostly rural lands. Over-development has left every watershed in South Burlington impaired.

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<sup>1</sup> Planning & Zoning has published materials showing that 950 acres of land City-wide, and 164 acres of land in the SEQ, have been "newly regulated", which would on its face appear to be quite a bit of new protection. The issue is that "newly regulated" does not necessarily mean "newly protected". Eyeballing the map of what is "newly regulated", it is apparent that many of those areas are not buildable, so should not be considered "newly protected". In the SEQ, the chunky "newly protected" acres that I can observe are circled in green in Attachment A. It does not appear to me that these areas add up to more than – roughly - 30 or so acres. Some of the buffers are also probably potentially buildable and thus "newly protected" – which would add some acreage – but most appear not to be. The red circled areas are the areas that I observe have lost protection in the SEQ (by eyeballing this map against the conservation areas shown in the Comprehensive Plan).

Our few remaining open spaces provide extensive public health, social and economic benefits that include energy conservation and climate cooling, habitat for pollinators, water filtration, absorption of air pollutants, improved wildlife habitat, recreational enjoyment, aesthetic relief and noise reduction. The Earth Economics report commissioned by the City estimates the value of the ecosystems in the priority open spaces — those identified by the Interim Zoning Open Space Committee — would be between \$73 and \$240 million over the next twenty years. Our open spaces provide life and nourish our souls.

More broadly, the world is facing a series of grave ecological crises: 41 percent of insect species have seen steep declines in the past decade in the US, North American butterflies have declined by 53 percent, grasshoppers and crickets by 50 percent and bee species by 40 percent. Between 1970 and 2014 the planet has lost nearly 60% of its mammals, birds, fish, reptiles and amphibians. The rate at which Earth is losing its biodiversity is comparable only to the mass extinctions. Human sprawl is top of the list for these declines.

The climate crisis accelerates and deepens our ecological crises, but preservation of open space can combat climate change. The 2014 Chittenden County Regional Planning Commission Climate Action Guide set as a priority strategy for Chittenden County the maintenance of “vegetative landscapes to support carbon sequestration” stating that “[m]aintaining vegetated landscapes – forests, wetlands, agricultural lands and urban trees and vegetation – is important for continued carbon sequestration. Vegetated landscapes also help with climate adaptation by absorbing precipitation, reducing stormwater runoff, maintaining natural habitats, and reducing the urban heat island effect.”

It is sometimes hard to feel these crises in Vermont as we are so blessed with natural resources, and things seem business as usual. But, they are not.

For all of the reasons above, we owe to our children as stewards of the land under our watch to make every decision under the regulations with a strong bias in favor of natural resource protection and to strengthen the existing draft regulations.

So, how should the regulations be strengthened?

#### **A. Revert to Habitat Block Mapping Identified by Arrowwood for 3 Critical Areas**

Arrowwood mapped the forested habitat blocks in the City. Arrowwood defined a habitat block for this purpose as “contiguous forested and adjacent unmanaged shrubby areas of old field, young forest, and unmanaged wetland.” In reviews that were undertaken in September and October of 2020, the planning commission decided to eliminate some portions of these habitat blocks. Three of the revisions (circled in red on Attachment B) seem inappropriate:

1. 1720/1730 Spear Street: There was a fairly substantial, forested area at 1720/1730 Spear Street that was removed from habitat block protection (see red circled area in Attachment C). This forest is part of the Great Swamp habitat, which was found by Arrowwood to be part of the most important habitat block in the City of South Burlington. I also understand from neighbors that

this area is frequented by coyotes and bobcats. If this is not prime habitat that deserves protection, what does?

2. Meadowlands Area: A portion of shrub and grassland in the Meadowlands area was removed “to allow for future development”. Staff described the area removed as “not really a forested area”. But, it was recently a forested area (see Attachment D which shows the same area as of 2006 – from Google Earth). It would be perverse to reward a developer for cutting down a forest prior to your review. Presumably the forest would grow back if not bulldozed! Even in its current state, Arrowwood included these shrub areas in the habitat blocks on the basis that “early and mid-successional old-fields ... are known to contribute, and are probably critical, to South Burlington’s current wildlife diversity.”
3. Wheeler/Hill Farm Area: – a shrub area adjacent to the forest was removed because there seemed to not be trees under the area removed and staff suggested to “tilt the balance” to a future neighborhood. But, as above, these shrub areas were found by Arrowwood to be “probably critical” to South Burlington’s current wildlife diversity. Why hire experts to provide advice on what is critical to achieve the City’s natural resource goals if that advice is disregarded?

#### **B. Add Buffers around Habitat Blocks**

The 2020 study prepared by Arrowwood recommends protecting “supporting habitat” around the habitat blocks. Arrowwood states that the supporting habitats “function as a buffer, or padding from human disturbance around the [habitat block] and provide additional area wildlife use to fulfill their requirements, venturing into them for food, and to a lesser degree cover, space and water. In South Burlington, supporting habitats are notable for their ability to function as habitat for prey-base species, such as rabbits, rodents, and turkey, which contribute to the survival of wider-ranging wildlife occupying the [habitat blocks]”. In their presentation to the City Council, Arrowwood said “supporting habitat plays a big part in the success of the habitat blocks”.

To clarify the importance of the supporting habitat, Jeff Parsons, a managing partner with Arrowwood, has submitted to the City a supplemental letter concluding that “providing buffers to habitat blocks goes a long way towards ensuring the success of South Burlington’s habitat blocks in enhancing wildlife diversity and populations within the town.” The regulations should be revised consistent with Arrowwood’s conclusions and provide for some buffer around the habitat blocks.

#### **C. Add protections for Grasslands, Prime and other Agricultural Soils**

Article 9.06B(3) of the current LDRs provides protections in the SEQ for the conservation areas shown in the Comprehensive Plan, including Prime Agricultural Soils (“Prime AG”), Grasslands and Farmlands. The revised draft eliminates this provision, but does not replace the protections that the provision afforded. I eyeballed these areas and note them as circled red areas on Attachment A.

The draft regulations presently provide no explicit protections for these resources and the LDRs should protect these important resources City wide, and not just in the SEQ.

Grasslands. The 2014 report prepared by the South Burlington Open Space Committee notes that “endangered, threatened and rare or uncommon bird species rely on [grasslands] for their survival, including the Upland Sandpiper, Grasshopper Sparrow, Sedge Wren, Vesper Sparrow, Savannah Sparrow, Bobolink and Eastern Meadowlark.” The 2016 Biofinder report from the Vermont Agency of Natural Resources states that “most of Vermont’s grassland habitats occur in the Champlain Valley “and “[g]rasslands and shrublands, whether of natural origin or resulting from active land management, are critical to the survival of a suite of bird species in Vermont. Most of these species will continue to decline in Vermont if grassland habitat is not maintained.”

Arrowwood should be asked to map the Grassland habitat (and potential grassland habitat) City-wide -- similar to how it was asked to map the forested habitat blocks -- and these areas should be protected.

Prime and Other Agricultural Soils. South Burlington commissioned the “Sustainable Agriculture/Food Security Action Plan” in 2013. That report describes that of the 10,600 acres of land in South Burlington, 8,238 acres are agricultural soils, with 873 of those acres considered “Prime”. According to the report, prime soils have:

*“. . . the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, and oilseed crops and are also available for these uses. Prime Farmland has the soil quality, growing season, and moisture supply needed to economically produce sustained high yields of crops when treated and managed according to acceptable farming methods.”*

There are far-reaching benefits of preserving agricultural soil. A recent article in Independent Science News, stated, “Sustainable, local, organic food grown on small farms has a tremendous amount to offer. Unlike chemical-intensive industrial-scale agriculture, it regenerates rural communities; it doesn’t pollute rivers and groundwater...it preserves soil and it can restore the climate.” The City recognized the importance of preserving agricultural land in the interim bylaws which specifically direct the review of “working landscapes such as the City’s remaining large farms”.

For agricultural soils, developments should be required to maintain all or some portion of the agricultural soils intact, perhaps through the use of mandated Conservation PUDs.

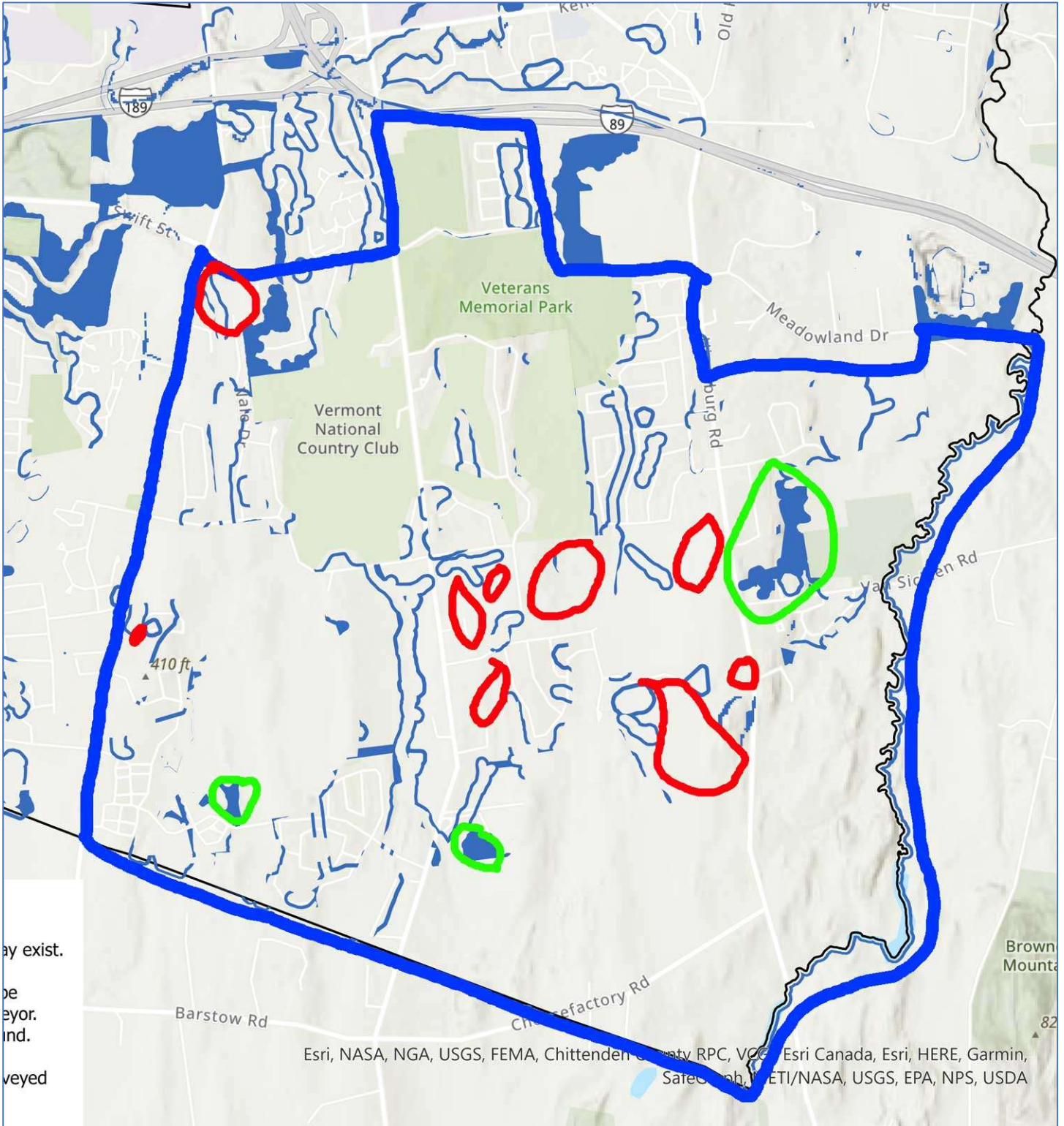
Respectfully submitted,

*Andrew Chalnick*

Andrew Chalnick

# Attachment A – Changes to the SEQ

Green Circled areas are Newly Protected  
Red Circled Areas have lost Protection



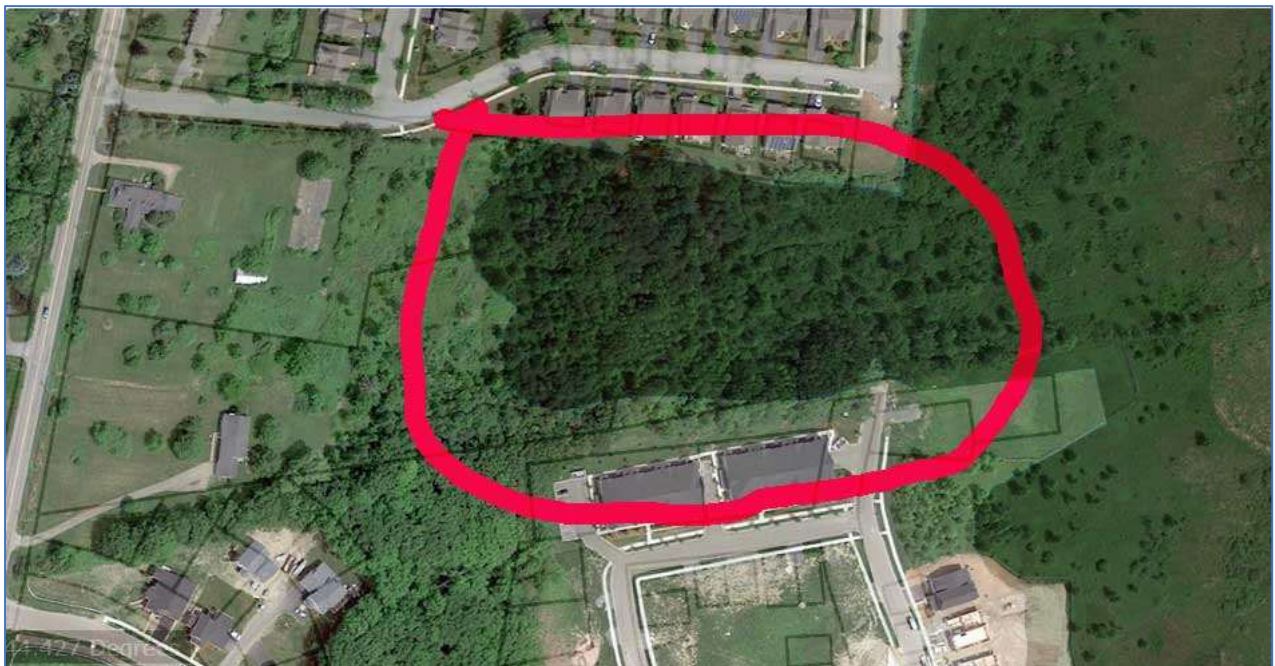
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## Attachment B – Habitat Block Revisions



## Attachment C - 1720/1730 Spear Street Habitat Block Area with Google Map Overlay



# Attachment D – Google Earth View of Meadowlands Area (from 2006)

