Town Plan Natural Areas - Priorities
RCC, October 2016

The purpose of this document is to place priorities on Natural features in Richmond, for consideration for the revised Town Plan. With this, steps are proposed that should be considered with regard to what land uses are permitted in a limited number of priority areas.

Appendix-I describes the background material that was reviewed and from which the following was derived.

"Richmond: Or Town, Our Future"

Key considerations came from Steering Committee deliberations in general and particularly input from deliberations at the Natural Resources / Areas "Table" that took place at the May 4, "Mapping the Vision" Workshop.

The group specified the importance of core forest habitat, the floodplain, the Camels Hump view from the Park-And-Ride and the VYCC view from the I-89 on the map. The following bullets were forthcoming:

- Density based zoning / cluster development;
- Core forest overlay district (and identified connections);
- Design review, conditional use that respects the natural features developed by the Conservation Commission;
- Identify on future land use maps potential and existing trail networks connecting all neighborhoods to the village;
- Explore options for financially incentivizing large land owners to conserve large parcels of land
- Protect riparian / floodplain areas.

The map that was developed focused on core forest, as identified by maps provided by the CCRPC. The draft maps have evolved into the "Draft-Richmond-Natural-Lands-Map-Sept-2016" (Appendix-II).

A second outgrowth of this process is the recent "Planning-Map-Questionnaire", also attached. Combining and consolidating the bullets under the heading Natural and Working Lands:

- Protect critical wildlife habitat blocks, steep, slopes and most prominent ridgelines.
- Encourage land-based business such as agriculture and forestry.
- Allow future residential development.
- Encourage sub-division development that clusters housing sites close together and sets aside larger areas of undeveloped land.
- Protect critical wildlife, habitat blocks.

- Encourage forestry management activities along with new conserved land and new trail systems that connect with existing trails.
- Allow commercial activities that are directly related to the cultivation and management of the natural lands, such as wood processing and sales.
- Limit future residential development.

- Encourage commercial activities that directly support the economic viability of agricultural and forestry uses, such as agricultural and forest product processing and agro-tourism.
- Encourage subdivision development that clusters housing sites close together and sets aside areas of rural undeveloped land.

A number of features of our natural landscape are identified for protection by State Statute, permitted uses defined for each. These include the following:

- FEMA floodways & ANR river corridors.
- Federal wilderness.
- Rare and irreplaceable Natural Areas
- Vernal Pools (including a 600 foot buffer)
- Class 1 and 2 wetlands (Not including buffers)
- Existing transportation infrastructure

The main issue for Town Planning is not framed in terms of legislated State statute for protection, but rather non-legislated features must be defined by local deliberation and prioritization.

Recommendations coming from the State resources cited above together with Science to Action were used to develop a list of top priorities. Those priorities were then matched with land areas identified by the aforementioned sources. Land areas were then identified as of Tier-1 priority in terms of future land use. That then led to the generation of a list of restrictions that should considered for Tier-1.

The identified priority features in order of relative importance were as follows. Definitions are provided within the reference materials (Appendix-I) and are excerpted in Appendix-III.

- Core Forest
- Wildlife Habitat
- Contiguous Habitat Units
- Natural Communities
- Ridgelines
- Connectivity
- Wildlife Corridors
- Ledge / Talus / Cliff habitat
- Bear habitat
- Deer Habitat
- Forested Riparian Communities
- Size
- Vistas

Priority Natural Areas

Three areas in Richmond were identified where future human development should be assessed carefully. These are visualized on the map identifying Highest priority Wildlife Habitat and Contiguous Habitat Units (Appendix-IV).

- The Gillett Pond Area
- Bryant Hill

- The forested area north of VYCC and the Andrews forest area north of Route 2.

Strategies

When development is contemplated, the following strategies should be considered to minimize its impact.

General

- Use as guiding principle protection of the integrity of tier-1 priority areas.
- Prohibit large scale commercial ventures such as wind and other towers.
- Employ strategies that cluster development in such ways as minimize intrusion on identified priority natural features.
- Seek advice of a professional biologist to evaluate the impact of proposed land uses other than for forest management.

More Specific

- Discourage fragmentation.
- Roads, housing and other such human activities should be restricted to the periphery.
- Use forest management strategies that support a diversity of forest and early succession communities. Support forest clearing and land development strategies that avoid hard breaks between forested and un-forested areas. Utilize selective harvesting only, in ways that maintain continuous forest cover.
- Revegetate roads used for forest management.
- Maintain natural connectivity between wildlife habitats / elements.
- Protect and avoid harvesting mast stands and forested wetlands from development by use of buffers.
- Discourage human development in Ledge / Talus / Cliff Habitat. Utilize buffers where such development occurs.
- Use buffers to protect identified deer wintering areas
- Create buffers around verified and priority corridors.
- Prioritize corridor importance for potential conservation. Limit development to outside edge of identified corridors and preserve their integrity with natural screening. Protect the integrity of vegetated buffers along rivers and streams.

As comforting as they may be, maps often contain errors of location and description. As well, definitions are continually refined, and new classifications developed over time. Accordingly, there will be situations where a “boots-on-the ground” approach must be used to verify the existence of mapped features. An example here is the difference in the locations of specific natural features in State-level maps as compared with those produced more locally at “lower altitude”.

Vistas

The Richmond Planning Commission, in 2002, mounted an effort to establish guidelines regarding the development of ridges by creating an overlay district. A side benefit of the study was identification of important vistas within the Town. A detailed study of locations of potential vistas that included ridgelines provided a long list from which to choose those that should receive top priority. Three vistas rose to the top.

First and foremost is the aforementioned vista from I-89, Exit 11 Park-And-Ride that encompasses still-preserved views of Camel's Hump and Bryant Hill in particular overlooking undeveloped prime in-production agricultural lands (Figure 1). This vista has prominent consideration in the current Town Plan, to wit with regard to the Gateway District:

The second vista is that from the brow of Wes White Hill, overlooking undeveloped agricultural lands to Mount Mansfield (Figure 2).

The third vista is along Kenyon Road looking east over undeveloped agricultural lands and low hills to Camel's Hump (Figure 3).

Other vistas unquestionably are of importance. One example is that provided at the curve in Route 2 just east of the Village that looks over undeveloped forest land at the mountains to the east, including Camel's Hump and Robbins Mountain. A second example is the views along Route-2, near VYCC, as noted in the "Mapping the Vision" Workshop.

Strategies

Borrowing language from the current Town Plan as a starting point, human development that affects these vistas should be undertaken in such a fashion that respects the "character of the neighborhood" and retains the flavor of vistas in accord with a dynamic yet rural and historic small town.

Appendix-I: Sources

- The current Richmond Town Plan.
- The deliberations of the Town Plan revision Steering Committee, specifically, the priorities for Natural Resources / Areas that have been proposed as part of the still ongoing planning process, “Richmond: Or Town, Our Future”.
- A careful review of material at the Vermont Agency of Natural resources (ANR: http://anrmaps.vermont.gov/websites/anra/).
- A careful review of materials provided by the CCRPC, the State Agency of Natural Resources and like organizations; and including BioFinder (http://biofinder.vermont.gov./).
- A careful review of the findings of the recent Science to Action Report (http://www.richmondvt.gov/wp-content/uploads/2014/03/2014-Science-to-Action-Natural-Resource-Report.pdf; http://www.arrowwoodvt.com/STA/).
- A review of the Vermont Fish and Wildlife document regarding Endangered / Threatened Species (http://www.vtfishandwildlife.com/learn_more/critter_cirriculum/endangered_and_threatened_species/).
- Extensive use of the data bases and maps found at the Vermont enter for Geographic Information (VGIS: http://vcgi.vermont.gov/).
- The Vermont Natural resources Council (VNRC) Community Planning Toolbox (http://vnrc.org/resources/community-planning-toolbox/).
- The April 14, 2015 Report from the Vermont Department of Fish and Wildlife Report: Vermont habitat Blocks and Habitat Connectivity: An Analysis using Geographic Information Systems (http://www.vtfishandwildlife.com/common/pages/DisplayFile.aspx?itemId=111635).
- The State Shoreline Protection Act. (http://dec.vermont.gov/sites/dec/files/wsm/lakes/docs/Shoreland/lp_Shoreland%20Protection%20Act%20Summary.pdf)
- Municipal requirements part of Act-171, with emphasis on forest integrity. (http://fpr.vermont.gov/forest/act-171-study-committee)
- The CCRPC Regional Energy Plan Presentation to Richmond Planning Commission, September, 2016.

Appendix-II
"Draft-Richmond-Natural-Lands-Map-Sept-2016"

Appendix-III: Definitions

Connectivity

Areas identified as road crossings heavily used by wildlife traveling between habitats that provide for connectivity.

Contiguous Habitat Units (CHUs)

These are defined as patches of habitat that should be expected to provide a range of critical habitat function for a variety of wildlife species including mammals, birds, reptiles and amphibians. They have been compiled from a group of feature layers, including: core forest units, deer winter habitat, early succession areas, forested riparian corridors, wetlands and ledges, cliffs & talus.

Core Forest.

Defined as land 100 meters or more from regular human disturbance. Usually includes a lesser percentage of forest edge habitat. Remote habitat within these core areas can include fisher, bobcat, bear. These tracts often are mountainous or hilly and are critical “source areas” where reproductively active wildlife can defend their territory and contribute to overall population of the species.

Bear habitat

Comprised of Core Forest, including wetlands important for early spring vegetation, and mast stands.

Deer Habitat

Forests critical to limiting winter energy expenditure, especially evergreen forests.

Early Succession Habitat

Habitat with vigorously growing grasses, forbs, shrubs and trees which provide excellent food and cover for wildlife, but need disturbance to be maintained. Examples of early successional habitats include weedy areas, grasslands, old fields or pastures, shrub thickets (e.g. dogwood or alder), and young forest. If these habitats are not mowed, brush hogged, burned, cut, grazed or disturbed in some other fashion, they will eventually become forest over time. Grasslands will revert to old fields. Old fields will eventually grow into young forest. Young forest will grow into mature forest. This process is referred to as *succession*. As such, grasslands, old fields, and young forests are often referred to as *early-successional habitats*.

Forested Riparian Communities

Areas key for species that use aquatic habitat together with the vegetation and cover provided.

Horizontal Diversity

A measure of the variety of vegetative types and conditions.

Ledge / Talus / Cliff habitat

Southwest facing ledges may see higher use by certain species (e.g. bobcat).

Natural Communities

These are assemblages of plant species that regularly or often occur in association with each other in certain landscapes, such as hemlock forests, northern hardwood forests and dry red oak/ pine forests.

Ridgelines

The topmost edge along a mountain ridge silhouetted against the sky.

Size

Acres

Travel Corridors

These are areas where wildlife can move across roads between different habitat areas and are necessitated by need for new territory, food resources and mates. Example: Black Bear seasonal movement from high, remote dens to bear wetlands to berry patches, to beech mast stands. Identified as areas with limited development, large contiguous habitat areas, lack of human disturbance.

Appendix-IV – Arc-GIS Map Overlays
Highest Ranked Wildlife habitat (Green) over Contiguous Habitat Unit (CHU-Brown)

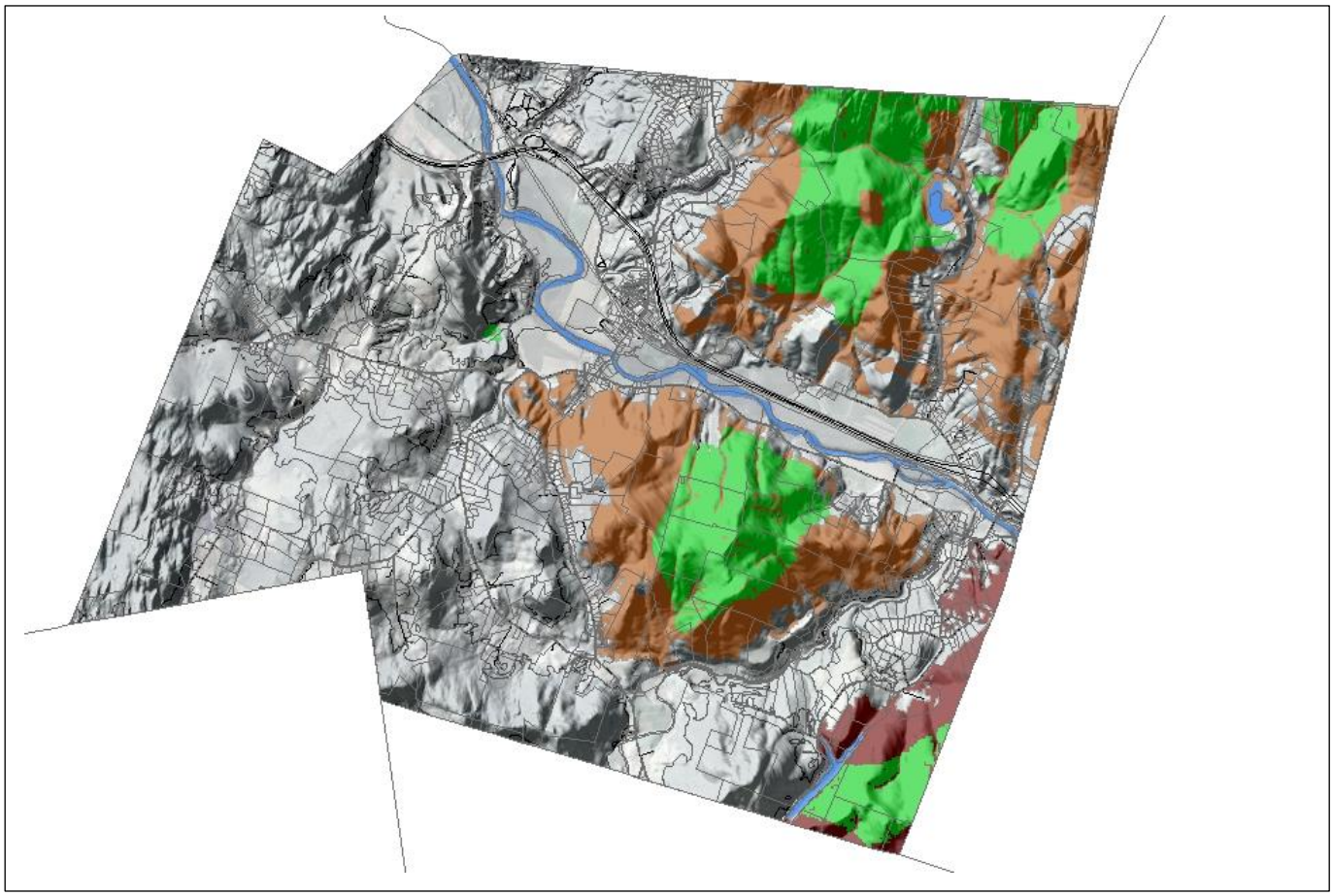

Figure 1: Exit-11

Figure 2: Wes White Hill

Figure-3: Kenyon Road