TECHNICAL PLANS
natural resources

**VISION CONNECTION**

* **Affordability + a Reasonable Cost of Living**: A healthy environment saves us money in many ways, whether providing clean water or controlling temperatures and absorbing floodwater.
* **Community for All Ages:** Residents of all ages and backgrounds enjoy outdoor recreation and nature in Richmond.
* **Economic Opportunity**: Outdoor recreation and working lands enterprises are big opportunities for economic growth, if we protect the natural resources they rely on.
* **Natural + Working Lands:** Community members value their environment for its own sake – landscapes, water resources, wildlife, and sustainable working lands.
* **Safety + Resilience**: Healthy lands and intact ecosystems can make us safer and more resilient, allowing the environment to adjust for storms and other hazards.
* **Small-Town Character:** Natural lands are central to Richmond’s character, whether scenic landscapes or remote forests and ponds.

Richmond’s natural and working lands form the landscape of our community, enriching our lives and drawing many visitors, residents, and businesses to the area. This landscape provides ecological services, habitat for countless plants and animals, outdoor education laboratories for local schools, and a wide range of economic, recreational, and scenic benefits.

In this technical plan, Natural Resources refers to “natural areas” and “working lands”. Natural areas are areas that are mostly undeveloped, and working lands are agricultural or forestry lands. In natural areas, the appearance and functions of the environment are conserved. These may include waterbodies, wetlands, vernal pools, floodplains, river corridors, watershed basins, cliffs, gorges, and steep slopes. These areas provide benefits such as habitat, waterbody buffering, groundwater resources, recreational opportunities and scenic views.

In some cases, natural areas can also be working lands; forests are one example. These working lands, forests and fields, are natural resources that contribute directly to Richmond’s economy. Forests and fields provide ecosystem services such as air and water filtration and flood storage. They also provide employment, food, and fuel, and they preserve rural character. The term open spaces refers to areas free of buildings, even if the land is developed fully or partially. Examples of this could be hydroelectric dams, renewable energy projects, or geological extraction areas.

Richmond is home to some of the richest natural lands in the state, thanks to its location between the high peaks of the northern Green Mountains and the fertile lowlands of the Champlain Valley. Its many acres of working lands are a critical part of our history and our modern economy. More than 600 acres are conserved in the Richmond Land Trust, and over 20 parcels are considered agricultural lands. Richmond is also home to a variety of unique natural communities or ecosystems, such as wetlands, vernal pools, and upland forests. Areas of special interest include the Huntington Gorge, the Silver Maple-Ostrich Fern Floodplain Forest, the Snipe Island and East Cliffs, Contiguous Habitat Units, and significant wetlands and vernal pools.

The town has recently acquired its first town forest, also known as the Andrews Forest. Nearly 430 acres of forest will be conserved, and traditional uses such as hunting, hiking, snowmobiling, and logging will be continued.

Richmond is home to a few notable conservation organizations. The first being the Richmond Conservation Commission who inform government decisions and expenses from the conservation fund. We also have the Richmond Land Trust that has conserved the Willis Sledding Hill, the VYCC Monitor Barn and Farm, and the Ruth and Warren Beeken Rivershore Preserve. Richmond is home to an extensive outdoor recreation community, including a trail system which the Richmond Trails Committee manages.

While community members widely benefit from and appreciate natural lands, the integrity and quantity of natural lands is declining across the world. Poorly planned development or invasive land uses can have cascading effects on the environment and community, such as increased erosion and flood damage. Our natural lands also face threats like climate change, severe storms, and invasive species. Vermont as a whole is facing a forest fragmentation crisis, and with a large natural cover percentage in Richmond, the community has the opportunity to mitigate its impact on this statewide issue. Protecting our environment and natural lands is one of the best investments we can make in the future of Richmond, with benefits for our people, our economy, and our character.

Richmond’s natural resources are broken down into categories for the purposes of this plan; the following tables describe these areas, and priorities for further conservation efforts. Current protections, policies, and plans for these areas include Richmond Zoning Regulations, Federal Floodplain Regulations, the Richmond Water Supply Protection Ordinance, Act 17, Act 250, Act 64, the Current Use program, the CCRPC ECOS Plan, Chittenden County Uplands Conservation project, Lake Champlain and Winooski River Tactical Basin Plans, etc.

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| **Category** | **Conservation Priorities** |
| Geology and Landforms | * Steep slopes (over 15% grade)
* Huntington River Gorge
* East Cliffs along Dugway Road and cliffs west of Snipe Island Brook
* Scenic viewsheds
* Ridgelines
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| Soils and Deposits  | * Primary agricultural soils (state mapped)
* Sand and gravel deposits not yet identified
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| Agricultural and Forestry Lands | * Soil erosion prevention
* Flood mitigation
* Current Use Program
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| Groundwater Resources | * State Source Protection Areas
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| Wetlands, Riparian Areas, Surface Waters | * Winooski River floodplain
* Gillette Pond, Richmond Pond, Lake Iroquois
* 6 significant wetland natural communities and 8 vernal pools
* Additional wetlands and vernal pools
* Huntington and Winooski Rivers Riparian Areas
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| Unique, Rare, and Sensitive Ecological Communities | * Thirteen significant natural communities
* Silver Maple-Ostrich Fern Floodplain Forest, dry oak forests, and rich northern hardwood forests
* Broad beech fern and slender cliff brake fern
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| Habitat and Wildlife | * Eleven Contiguous Habitat Units (CHUs) and critical habitats
* Habitat for species identified in Vermont’s Wildlife Action Plan
* Habitat Connectors
* Forest Blocks
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#### **GOALS & ACTIONS**

**GOAL 1: Richmond will have ecologically thriving and diverse natural areas**

* Identify opportunities to conserve lands containing or adjoining to above mentioned conservation priorities
* Continue to protect floodplain, steep slopes, wetlands, and waterbodies through zoning regulations
* Utilize best environmental management practices on town owned lands
* Finalize the stormwater master plan, and implement identified achievable projects
* Encourage conservation or protection of above mentioned conservation priorities on private lands
* Utilize the best available science to inform the creation of supplemental land use regulations that would further conserve or protect unique priority natural resources
* Continue to support the efforts of the Richmond Conservation Commission, Richmond Land Trust, and Richmond Trails Committee
* Create and maintain a library of ecological studies and maps
* Partner with state and regional organizations to secure funding and collaborate on projects that would support conservation efforts

**GOAL 2: Richmond will have healthy and resilient working lands, agricultural soils, and thus a strong farm and forest economy**

* Encourage the implementation of best environmental management practices in farm or forest businesses
* Explore amending zoning regulations to allow for value-added or accessory enterprises, that are not currently exempt through state law, on farm or forest properties
* Incentivize on-site projects or developments that provide ecosystem services or mitigate runoff
* Continue to support the farmers market, VYCC, and Richmond Community Kitchen
* Encourage Richmond residents and businesses to buy or procure locally grown foods or value-added products

**GOAL 3: Richmond will have a sustained rural character and scenic beauty**

* Continue to prohibit development on steep slopes and conserved lands
* Adopt zoning regulations that mitigate noise pollution and light pollution
* Adopt zoning regulations that limit development in scenic viewsheds
* Adopt zoning regulations that limit development on ridgelines
* Adopt zoning regulations that support “smart growth” principles such as concentrated downtown development

(see also Future Land Use, Community Development, Energy, Economic Development, Housing, Emergency Resilience)