



# Fairfield Development Constraints Analysis

Prepared by Northwest Regional Planning Commission for the Town of Fairfield  
September 2024

## What is a development constraints analysis?

A development constraints analysis is a mapping tool that determines the development potential of land based on natural resource constraints and community preservation goals. The purpose of the analysis is to provide a general picture of the development potential of various areas for planning purposes. Each potential constraint is assigned a score by local planners based on its relative importance: minor, moderate, severe and absolute constraints.

## How will this analysis be used?

The constraints analysis is intended to be a resource for the Fairfield Planning Commission to refer to throughout the zoning bylaw update. Part of the bylaw update is determining which areas of Fairfield can support some future growth with appropriate zoning standards, and which areas should have relatively stronger restrictions on development. This analysis was weighted by the Planning Commission based on the importance of protecting each resource as identified in the 2021 Town Plan. For example, Primary Agricultural Soils are mentioned as an important resource to preserve throughout the Town Plan and were therefore weighted as a severe development constraint. The final analysis reflects the town's overall preservation priorities.

As the planning commission begins to think about which areas of Fairfield can support future development, this document will be used as a reference material. This constraints analysis is not a policy document and as such, the categories shown in the analysis will not translate into zoning boundaries. Rather, the constraints analysis will be one of many factors considered in determining appropriate development review standards that find the right balance between the town's preservation priorities and individual landowner interests.

Questions to consider in reviewing this analysis include:

- How do the existing zoning boundaries align with these constraints?
- Are there areas of significant constraints within the Agricultural/Rural Residential District that should be treated differently than others during development review (i.e. stronger development standards or restrictions)? And vice versa – are there areas with fewer constraints that may warrant more lenient standards?
- How should development be managed to limit impacts to these resources? Should there be specific development standards for areas that have a higher level of constraint?

## Methodology

NRPC staff identified a list of possible development constraints to include in the analysis. This list was then brought to the Planning Commission to place each constraint in a category based on prioritization. Categories are minor, moderate, severe, and absolute constraints. Areas with any absolute constraints are considered undevelopable and greyed out on the final map. Other categories are assigned the values shown in Table 1 for calculation of the final map.

<b>Table 1: Development Constraint Scoring for Each Criteria</b>	
<b>Type</b>	<b>Value</b>
Minor/Geographical Constraint- Minor constraints where excessive development could be a concern	1
Moderate Environmental- Constraints which may be mitigated through engineering/design	3
Severe Environmental Constraints- Environmental constraints which cannot be easily mitigated	6
Absolute Constraints: Areas where no new development should be (or is) allowed	Removed from analysis – considered not developable

The values in Table 2 were given to each constraint by the Fairfield Planning Commission based on priorities identified in the Town Plan.

<b>Table 2: Fairfield Planning Commission Criteria Prioritization</b>	
<b>Criteria</b>	<b>Value</b>
>1,000' Distance from Class 1, 2 or 3 Roads	1
Elevation > 1,000'	1
High Priority Wildlife Habitat Blocks	3

Vermont Significant Wetlands (Class I & Class II)	6
50 ft. buffer- Vermont Significant Wetlands (Class 1 & Class 2)	6
Source Water Protection Areas	6
Severe Septic Soils (Class IV)	3
Marginally Suited Septic Soils (Class III)	3
Prime Agricultural Soils	6
Statewide Agricultural Soils	6
Public & Conserved Land	Absolute Constraint
100 Year Floodplain	6
Lake Champlain Basin Lidar-Informed Flood Inundation Layer	6
River Corridors	6
Slopes 15-25%	6
Slopes >25%	Absolute Constraint
Current Use	1

*Descriptions and for each constraint are located in the appendix.*

All layers were then downloaded from VCGI and overlaid in ArcGIS Pro by NRPC staff. A new layer was calculated based on shared overlaps, and the values of each overlapping layer were added together to create a combined score for each area of the town. Based on these combined scores, the categories shown in Table 3 were assigned to the overall map.

<b>Table 3: Overall Development Constraints Categories</b>					
	<i>No Constraints</i>	<i>Slight Constraints</i>	<i>Moderate Constraints</i>	<i>Severe Constraints</i>	<i>Absolute Constraints</i>
<i>Combined Score</i>	0	1-5	6-9	10+	N/A

On the final map, areas with no constraints are symbolized in bright green, slight constraints in white, moderate constraints in yellow, severe constraints in red, and absolute constraints in grey. Each color corresponds to the theoretical development potential of the area based on the priorities identified by the town.

An additional version of the map was prepared with existing and recent development overlaid on top as points. The large blue dots represent recent housing development that was permitted from 2020 to 2023 and complete as of July 2024. The small light blue dots represent existing E911 points prior to 2020.

# Fairfield Constraints Analysis

## LEGEND

### Constraints

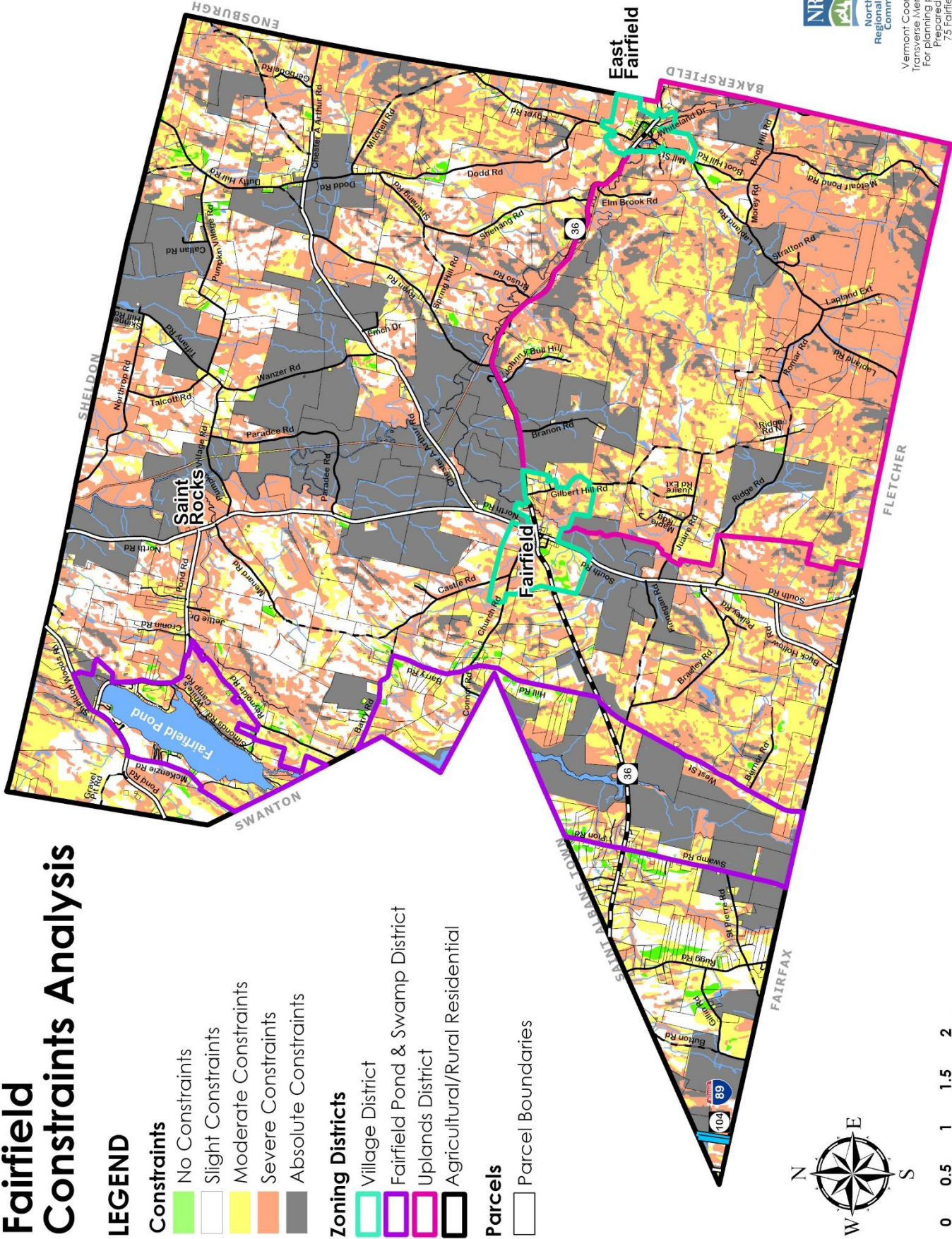
- No Constraints
- Slight Constraints
- Moderate Constraints
- Severe Constraints
- Absolute Constraints

### Zoning Districts

- Village District
- Fairfield Pond & Swamp District
- Uplands District
- Agricultural/Rural Residential

### Parcels

- Parcel Boundaries



Location: Z/NRPC-GIS/Projects/County/Franklin/Fairfield/DevelopmentConstraints



Northwest  
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Commission

Vermont Coordinate System  
Transverse Mercator, NAD 83.  
For planning purposes only.  
Prepared by NRPC  
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September 2024



# Fairfield Constraints Analysis

## LEGEND

### Constraints

- No Constraints
- Slight Constraints
- Moderate Constraints
- Severe Constraints
- Absolute Constraints

### Zoning Districts

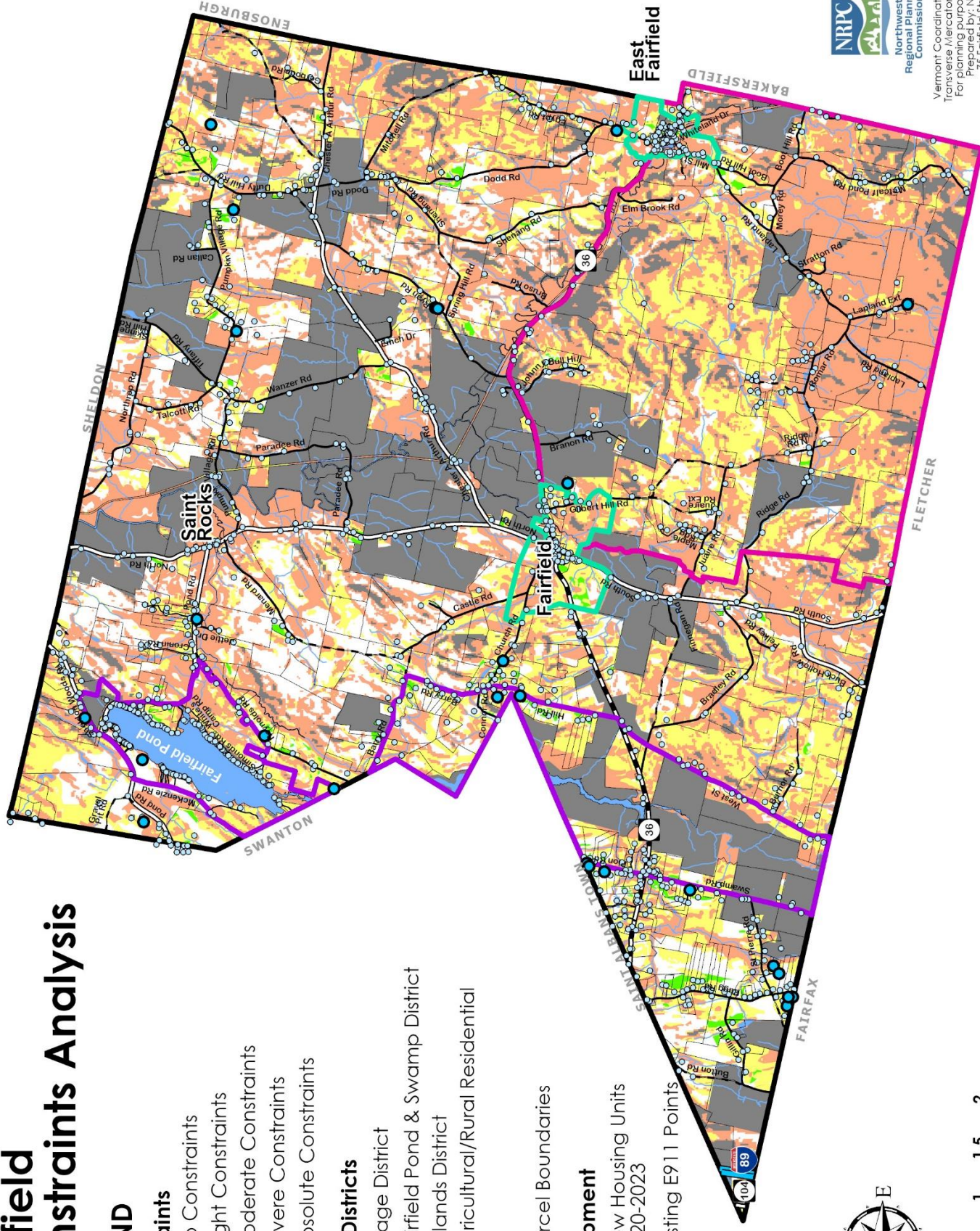
- Village District
- Fairfield Pond & Swamp District
- Uplands District
- Agricultural/Rural Residential

### Parcels

- Parcel Boundaries

### Development

- New Housing Units  
2020-2023
- Existing E911 Points

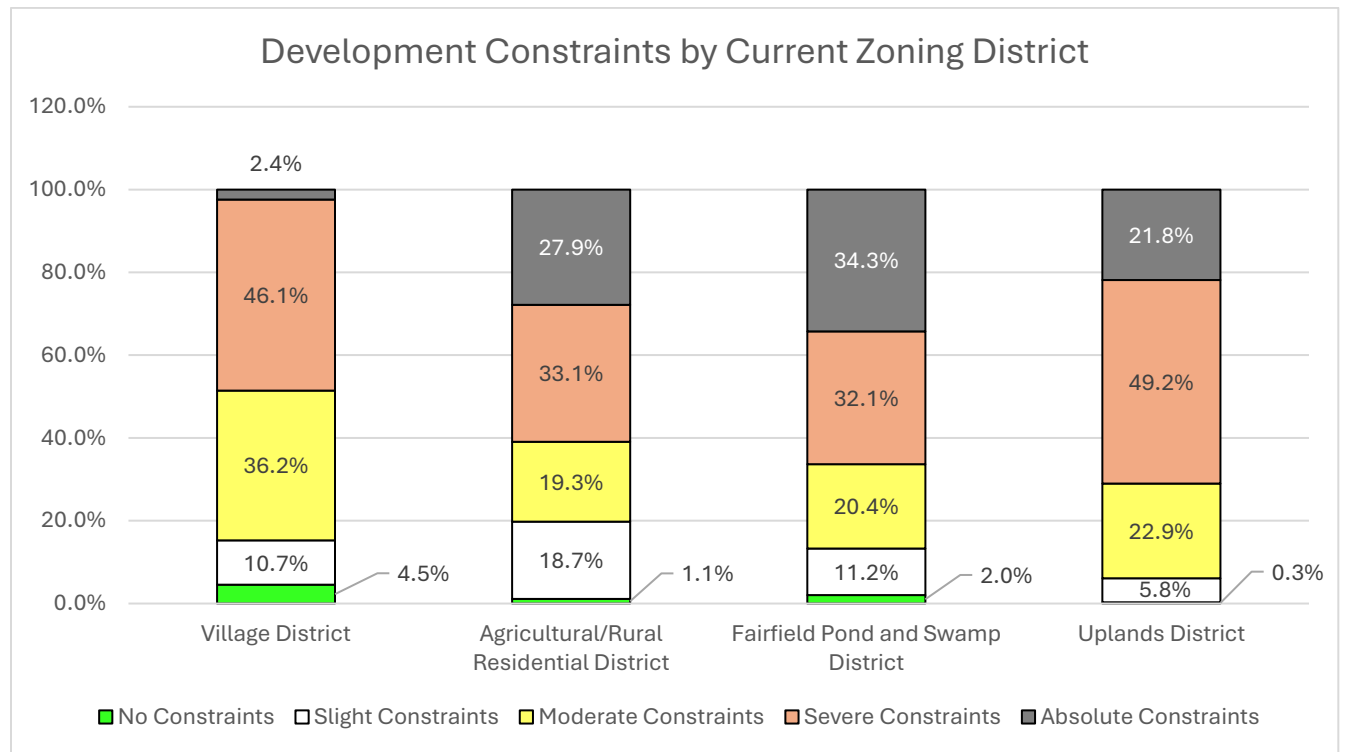


Northwest  
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Vermont Coordinate System  
Township and County Roads  
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## Preliminary takeaways



### **Village District:**

Nearly half of the current Village District area has severe or absolute development constraints (48.5%). This is lower than other districts, but still poses potential challenges for development in the villages. Only 15% of the village areas are unconstrained or only have slight constraints. However, it should be noted that the town may have different preservation priorities in the Village District that are not reflected in this analysis, which was completed with the lens of preserving important resources in the rural areas of town. This District consists of the town's historic settlements with concentrated mixed uses and the Town Plan identifies the district as the location where future development should be encouraged.

### **Agricultural/Rural Residential:**

The large amount of conserved land in the center of town prevents development in a large portion of the Agricultural/Rural Residential District (27.9%), and an additional 33.1% of the district has severe development constraints. However, there are individual areas of the current Agricultural/Rural Residential District that have fewer constraints, such as the Menard Road area, the southwest corner of the town, and other green and white areas on the map.

**Fairfield Pond and Swamp District:**

The Fairfield Pond and Swamp District has the largest portion of absolute constraints due to the majority of land in Fairfield Swamp being conserved as a Wildlife Management Area. Overall, the results of the analysis are consistent with the description of this area in the Town Plan as an area where development must be carefully controlled. However, small portions along the edges of the district are relatively unconstrained according to the priorities of the analysis, such as the areas along Hill Road and Barry Road.

**Uplands District:**

71% of the land area in the Uplands District has severe or absolute development constraints. This is consistent with the description of this area in the Town Plan as “poorly suited for future community growth and development” with “severe limitations because of environmental characteristics, location or potential social costs if misused” (pg. 64).

## Appendix: Layer descriptions

### **>1,000' Distance from Class 1, 2 or 3 Roads**

Roads of Class 1, 2, or 3 are state or local roads that are maintained year-round to be passable for passenger vehicles. Development far away from the existing road system would require long driveways or private roadways.

### **Elevation > 1,000'**

Areas over 1000' in elevation which may be more environmentally sensitive.

### **High Priority Wildlife Habitat Blocks**

The Vermont Agency of Natural Resources has identified areas of natural cover that are not fragmented by roads, development and agriculture as potential habitat blocks. These habitat blocks were ranked according to their importance in terms of size and connection to other large blocks. Large, connected areas of habitats are important to allow for the survival of species. Those that are highest priority are typically larger blocks or those that provide an important connection in between larger areas of habitat. See

<https://anr.vermont.gov/maps-and-mapping/biofinder>

### **Vermont Significant Wetlands (Class I & Class II) & Buffer for Vermont Significant Wetlands**

The Vermont Significant Wetlands Inventory is an inventory of wetlands statewide, divided into two classes. Class 1 wetlands are those of exceptional or irreplaceable value to Vermont, while most other wetlands fall into Class 2. Note that not all Class 2 wetlands are in the inventory, only a qualified wetlands scientist can determine the presence, absence and exact boundaries of a wetland on a given site. Beyond the borders of the wetland, the state also regulates the 50 ft buffer around the wetland, as development in this area may impact the wetland. See: <https://dec.vermont.gov/watershed/wetlands/jurisdictional>

### **Source Water Protection Areas**

The source water protection areas are areas that pass or recharge groundwater used in public water supplies. Under state law, there are few protections for source water protection areas not owned by the water system. Certain types of development may lead to contamination that negatively affects the water system. Fairfield has two SPAs for its two fire districts. See: [https://dec.vermont.gov/water/drinking-water/public-drinking-water-systems/source-water-protection#:~:text=Source%20Protection%20Area%20\(SPA\),are%20identified%20in%20the%20SPP](https://dec.vermont.gov/water/drinking-water/public-drinking-water-systems/source-water-protection#:~:text=Source%20Protection%20Area%20(SPA),are%20identified%20in%20the%20SPP).

### **Severe Septic Soils (Class IV & Class III)**

Using the data of the USDA Natural Resources Conservation Service (NRCS) soil survey, soils in Vermont have been divided into four categories based on their suitability for septic soils. Class IV are generally not suited for septic systems due to being too wet, rocky or steep for soil-based septic. Class III soils are soils with limitations that may require



additional site investigation or more sophisticated septic designs to overcome limitations. See:

<https://anrmaps.vermont.gov/websites/SOILS/2008%20Soil%20Suitability%20Groups%20for%20Soil-based%20Residential%20Wastewater%20Disposal-January2008.pdf>

### **Prime and Statewide Agricultural Soils**

Based on data from the USDA Natural Resources Conservation Service (NRCS) soil survey, the state has classified soils based on their suitability for agricultural purposes. The best soils are designated as prime agricultural soils, while the soils which are highly suitable for agricultural purposes but may have one or more limitations are designated as soils of statewide importance. See:

[https://efotg.sc.egov.usda.gov/references/public/VT/Important\\_Farmlands\\_Narrative-update-April2018-Final.pdf](https://efotg.sc.egov.usda.gov/references/public/VT/Important_Farmlands_Narrative-update-April2018-Final.pdf)

### **Public & Conserved Land**

Public and conserved lands are tracked in the Vermont Protected Lands Database (VPLD). Lands conserved through land trusts are generally conserved in perpetuity via conservation easements, although limited land swaps may sometimes be permitted. Lands held in federal, state or local control are conserved based on the policies and laws of those entities.

### **100 Year Floodplain**

Based on past incidences of flooding and topography, FEMA has identified areas that have a 1% chance of flooding in a given year. The last flood maps for Fairfield were completed in 1985. See: <https://www.fema.gov/glossary/flood-zones>

### **Lake Champlain Basin Lidar-Informed Flood Inundation Layer**

Inundation flood hazard research conducted by University of Vermont researchers that shows risks from 2-year floodplain (50% chance of flooding in a given year) to 500-year floodplain (.2% chance of flooding in a given year). See: <https://vcgi.vermont.gov/data-release/lake-champlain-basin-lidar-informed-flood-inundation-layer-now-available>

### **River Corridors**

The Vermont Agency of Natural Resources developed maps of river corridors based on the area of the stream or river needed to maintain the physical/geomorphic equilibrium of the stream/river, that is, providing space for the natural meander of the river over time. See: [https://floodready.vermont.gov/flood\\_protection/river\\_corridors\\_floodplains/river\\_corridors](https://floodready.vermont.gov/flood_protection/river_corridors_floodplains/river_corridors)

### **Slopes 15% and Greater**

Slope is calculated based on topographic maps. Development on steep slopes can cause issues such as run-off, environmental concerns and erosion.

**Current Use**

The current use program is a program of Vermont Department of Taxes which allows owners of agricultural and forest land to be taxed on the basis of the actual use of the land, rather than its value if it was developed. If land in the current use program is removed and developed the owner must pay a Land Use Change tax (LUCT). See:

<https://tax.vermont.gov/property/current-use>