

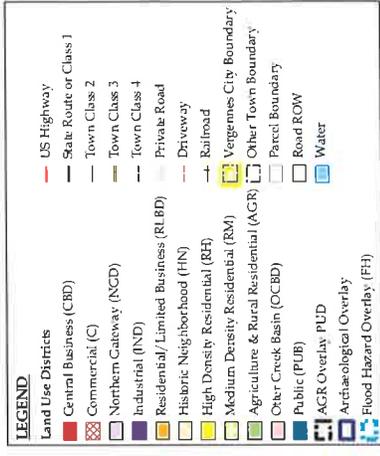
# APPENDIX

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**Recommended Resources**

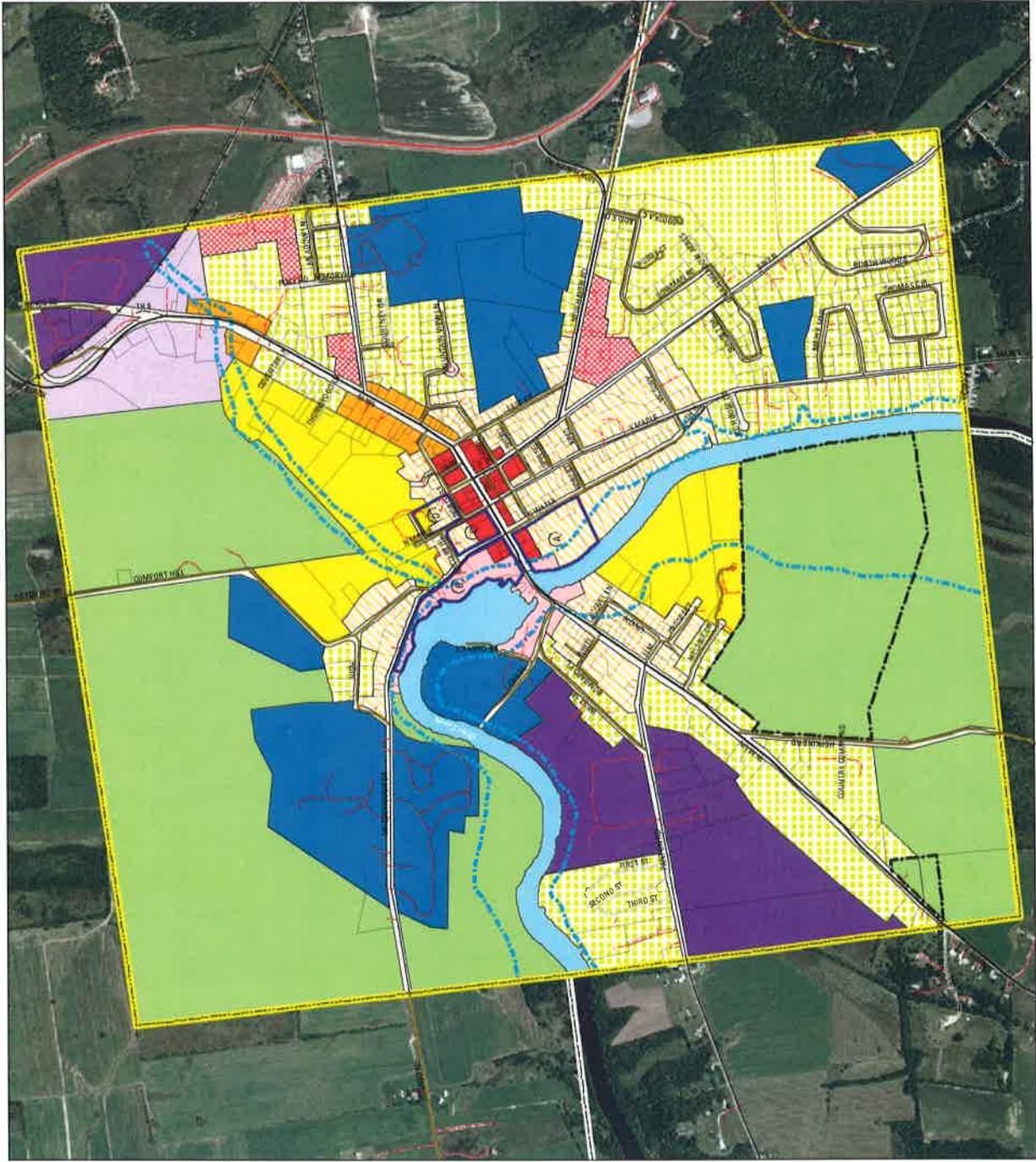
- Cultivating Community through Sustainable Transportation: Proposed Bicycle and Pedestrian Improvements in Vergennes, Vermont
- Vermont Council on Rural Development - Vergennes Community Visit Report

# LAND USE DISTRICTS



Prepared by LandWorks, Middlebury, VT - April 20, 2009

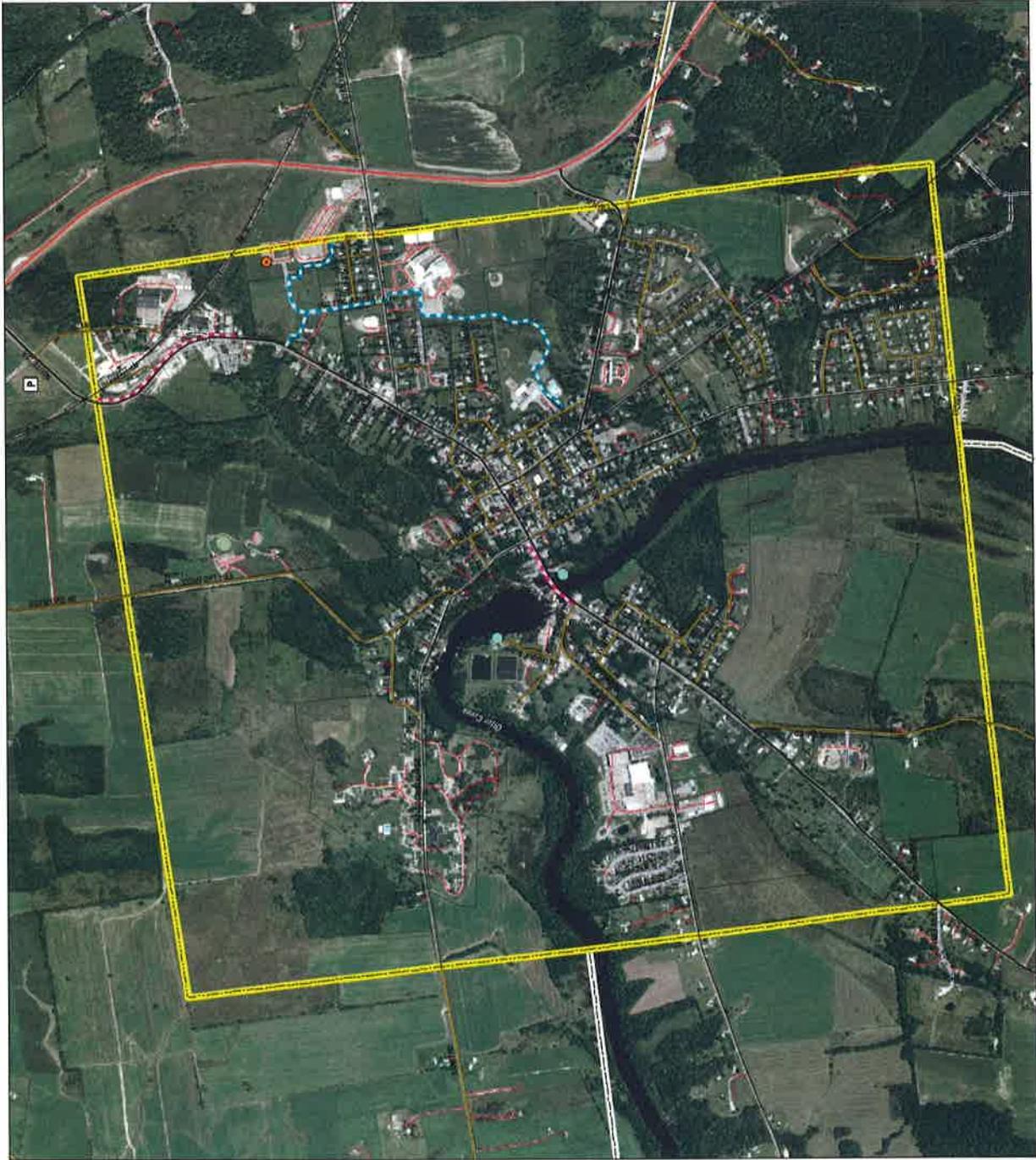
Sources:  
 Land Use Districts & Parcel Boundaries: ACRPC City of Vergennes  
 Roads, Railroad, City & Town Boundaries: VCCI



# CITY OF VERGENNES

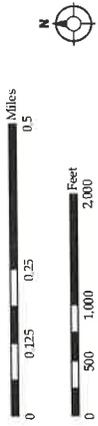
Municipal Development Plan

# TRANSPORTATION



**LEGEND**

- Railroad
- Proposed Multi-Use Path
- Proposed Sidewalk
- Heliport
- US Highway
- State Route or Class 1
- Town Class 2
- Town Class 3
- Town Class 4
- Private Road
- - - E911 Driveway
- Vergennes City Boundary
- Other Town Boundary
- Parcel Boundary
- Park & Ride
- Boat Launch



Prepared by LandWorks, Middlebury, VT - April 20, 2009

Sources:  
 Parcel Boundaries: ACRPC  
 Roads, Driveway, Railroad, Heliport, Boat Launch, City & Town Boundaries: VCGI  
 Proposed Sidewalk & Multi-Use Path: City of Vergennes

# CITY OF VERGENNES

Municipal Development Plan

# COMMUNITY FACILITIES AND UTILITIES

**LEGEND**

⚡	Electrical Line
🚂	Proposed Rail Trail
⚡	Cemetary
🚰	Substation
🏫	School
🛣️	US Highway
🛣️	State Route or Class 1
🛣️	Town Class 2
🛣️	Town Class 3
🛣️	Town Class 4
🛣️	Private Road
🚂	Railroad
🚂	Cable Line
🚰	Antenna/Tower
⚡	Cemetary
🚰	Substation
🏫	School
🛣️	US Highway
🛣️	State Route or Class 1
🛣️	Town Class 2
🛣️	Town Class 3
🛣️	Town Class 4
🛣️	Private Road
🚂	Railroad
🚂	Cable Line

- Public/semi-Public Facilities:**
- F-1 City Hall/Police
  - F-2 Fire Station
  - F-3 Rescue Squad
  - F-4 Recycling Center
  - F-5 Public Works
  - F-6 Wastewater Treatment Plant
  - F-7 Water Supply Storage Reservoir
  - F-8 Bixby Memorial Library
  - F-9 Green Mountain Power - Hydro
  - F-10 Vermont Railway Stop
- Public Parks:**
- P-1 City Green (0.6 ac.)
  - P-2 MacDonough (1.2 ac.)
  - P-3 Vergennes Falls (6.5 ac.)
  - P-4 Pump House (0.2 ac.)
  - P-5 Macintosh Memorial (11.9 ac.)
  - P-6 Fisher Memorial (7.1 ac.)
  - P-7 Veterans Memorial (2.7 ac.)
  - P-8 Western School District (0.2 ac.)
  - P-9 Settlers Park (0.9 ac.)

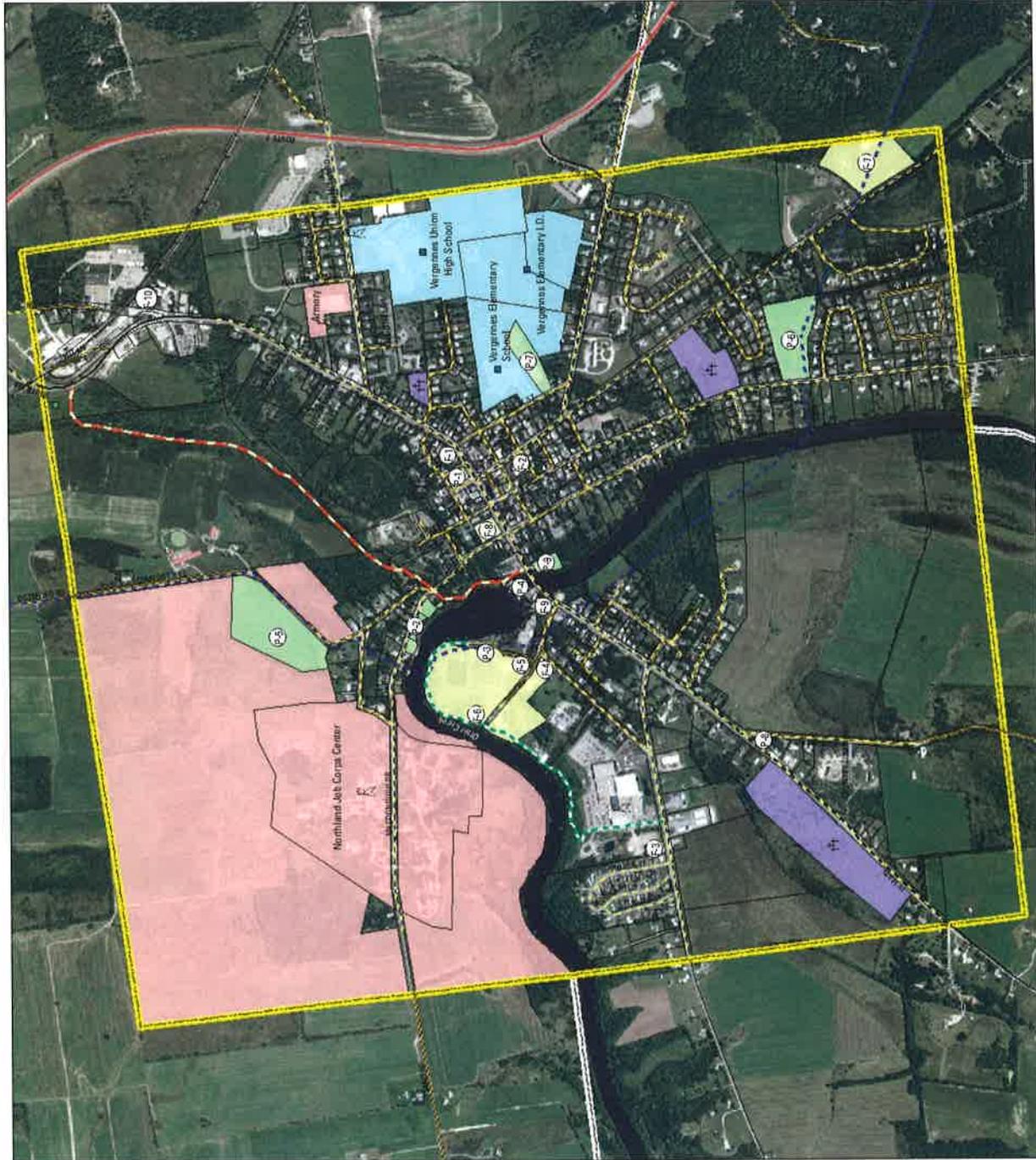


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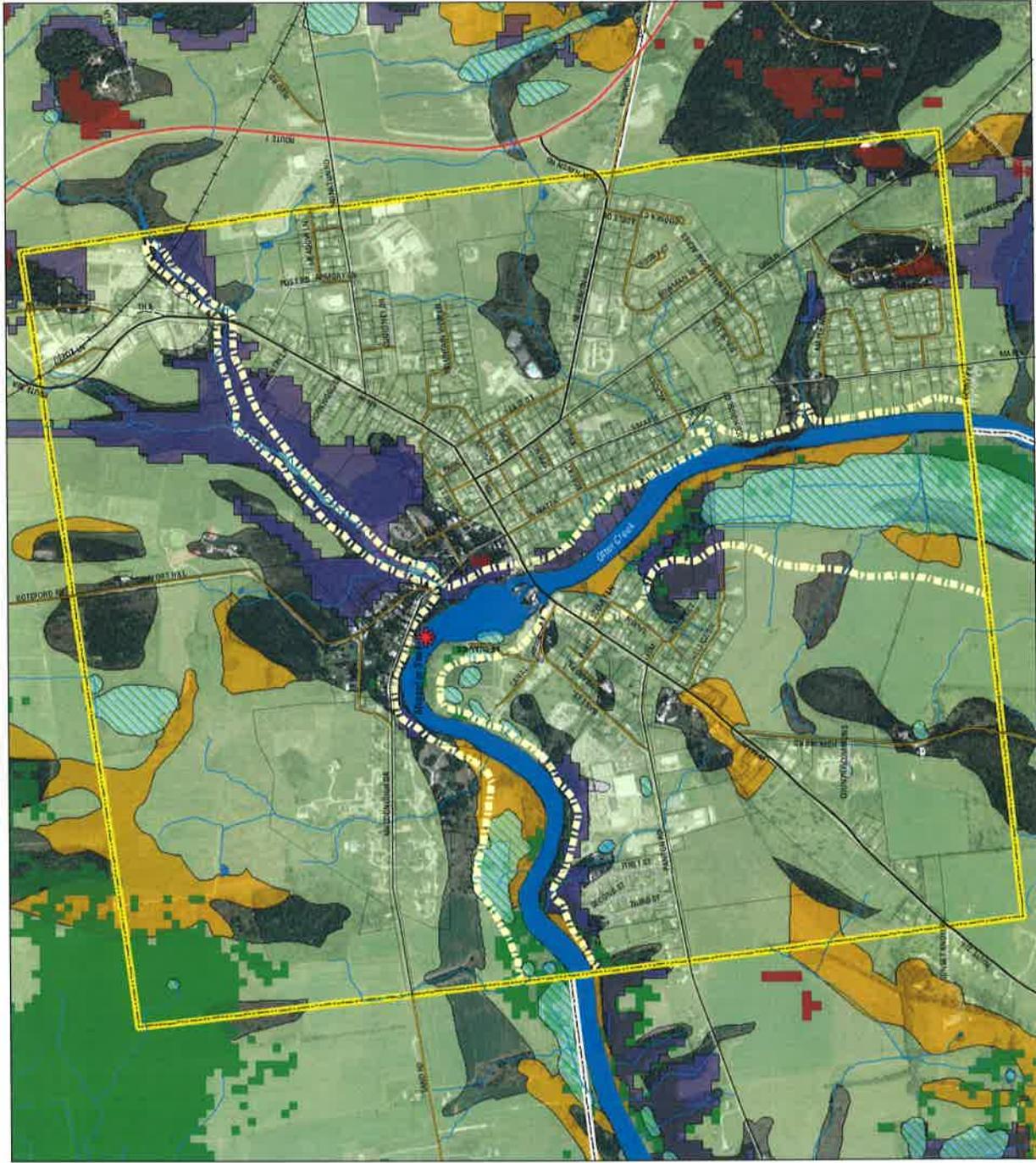
**Sources:**  
 Parcel Boundaries: ACRPC  
 Cemetary, School, Roads, Railroad, Antenna/Tower, Electrical Line, Cable Line, City & Town Boundaries: VCCJ  
 Proposed Goodrich Trail & Rail Trail: City of Vergennes

## CITY OF VERGENNES

Municipal Development Plan



# NATURAL RESOURCES



LEGEND	
	US 1 Highway
	State Route or Class 1
	Town Class 2
	Town Class 3
	Town Class 4
	Private Road
	Railroad
	Vergennes City Boundary
	Other Town Boundary
	Parcel Boundary
	Rare Plant/Animal Site
	100 Yr. Floodplain
	Rivers & Streams
	Surface Water
	Wetland (WSWT)
	Clayplain Forest
	20% Slope and Greater
	Wildlife Suitability Analysis
	Prime Agricultural Soils
	Seasonal Agricultural Soils



Prepared by LandWorks, Middlebury, VT - April 20, 2009

Sources:  
 100 Yr. Floodplain & Parcel Boundaries: ACRPC  
 Rare Plant/Animal Site, Rivers & Streams, Surface Water, Wetland, Slope, Agricultural Soils, Roads, Railroad, City & Town Boundaries: VCC1  
 Wildlife Suitability Analysis & Clayplain Forest: VT Dept. of Fish & Wildlife

# CITY OF VERGENNES

Municipal Development Plan

# VERGENNES FALLS AND OTTER CREEK BASIN PLAN

## Background and Purpose of the Basin Plan

In 1993, the City Council, in recognition of the Otter Creek Basin's distinct natural and historic features, created the Otter Creek Basin Committee, a nine-member, grassroots organization. The Committee's mission was to plan for and develop the basin area as a multi-use, recreational, and economic asset for the community and the surrounding region. The *Vergennes Falls and Otter Creek Basin Plan* ("the Basin Plan") was a result of the Committee's work.

While the Basin Committee is no longer active, their planning and work has led to the following improvements made by the City:

- Completed the construction of floating docks and reconstructed the City dock on MacDonough Drive.
- Improved electrical service and potable water supply at the docks on both sides of the river.
- Constructed a footbridge over Potash Brook.
- Installed lighting at Vergennes Falls Park.
- Received designation as a "Scenic Byway".
- Developed architectural plans for establishing a "Gateway" to the city at the bridge over Otter Creek, which includes a three-phase improvement plan.
- Received National Scenic Byways grants to implement the three phases of improvements.
- Improved parking and the small-boat launch facilities on the upper basin at Settlers' Park as Phase I of the "Gateway" project.
- Improved pedestrian walkways and viewing areas along the eastern side of the upper falls as Phase II of the "Gateway" project.
- Restored the Pumphouse exterior and grounds.
- Opened Pumphouse Island to the public.
- Added informational signs about the area and improved public access.
- Begun work on the "Rail Trail" connecting the lower basin to the Park and Ride adjacent to Route 7.
- Worked jointly with Goodrich Corporation to improve the trail along the west shoreline.

In recognition of the extensive planning and work, which has already been completed in the basin, the Otter Creek Basin Plan was updated to account for these efforts.

## Description of the Otter Creek Basin Area

The Otter Creek Basin Area occupies approximately 36 acres at the junction of Route 22A and Otter Creek, about 7 miles inland from Lake Champlain. The

Otter Creek Basin Map outlines the boundary of the area, which includes about 10 acres of water surface, the Vergennes Falls, and 26 acres of adjoining land.

The Basin Area logically divides into the upper and lower basin, each with its own unique characteristics. The upper basin consists of the Vergennes Falls, Otter Creek just above the falls, the Otter Creek bridge over the river, two operating hydropower plants, several historic buildings, Settlers' Park, and the riverside properties that reach approximately 200 yards upstream from the falls.

The lower basin covers about 30 acres and includes the Green Mountain Power substation and transmission lines, the City's wastewater treatment plant, public works facilities, recycling center, historic buildings, two City parks, boat access, dock facilities, natural shoreline, and the wide expanse of Otter Creek below the falls.

The basin area is rich in natural resources. Despite the high sediment load carried by Otter Creek, water quality is good, supporting varied warm-water and cold-water fisheries throughout the year. Otter Creek is deep and wide below the falls. Wildlife, birds, amphibians, and threatened mollusks all live in the Basin. The riverbanks are largely undeveloped and natural, lined with wetland vegetation and various hardwood trees. The banks are subject to erosion, ice, and flood damage. Several of the mature trees are dead or severely stressed and some have fallen over. This creates river obstructions, aggravates erosion of the riverbanks, and restricts public usage of the area.

### **History of the Otter Creek Basin Area**

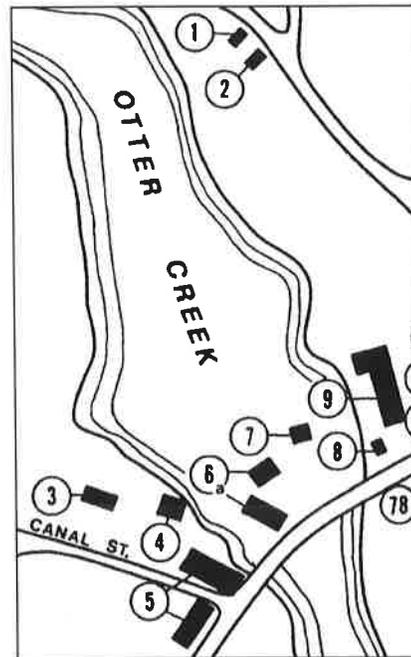
Otter Creek drops 37 feet at the falls, which is the last impediment to direct access to Lake Champlain. Boaters can easily navigate the 7-mile trip from the lake to reach the falls and municipal docks. The waterpower created by the falls combined with direct access to the lake provided the basis for economic growth in Vergennes throughout the nineteenth century. Many of the existing and past buildings were built to harness the industrial and commercial potential of the falls. For example, around 1812, the Monkton Ironworks Company diverted water from the falls via a tunnel blasted through solid rock to serve nine forges, blast and air furnaces, a rolling mill and a wire factory. The Green Mountain Power substation and the public works buildings are located on that site today. A branch of the Rutland and Burlington railroad extended from the main line at the north end of the city along Potash Brook and across Otter Creek via a railroad bridge to the iron yards. There are virtually no visible signs of this past railroad era left now in the basin.

Shipbuilding also thrived in the lower basin, figuring prominently in the defeat of the British in the War of 1812, and later in the construction of four lake steamboats for the Lake Champlain Transportation Company. Otter Creek provided a navigable waterway for trade and movement of cargo from all over the

world, and led to the commercial and residential development in Vergennes. The falls became the site of industry, manufacturing, milling and hydroelectric power generation through the mid-1900s.

Over time, manufacturing left the falls and several of the original buildings were destroyed or fell into disrepair. Nearly all of the remaining buildings are listed in the National Register of Historic Places as part of the Vergennes Historic District (shown as numbers 1 through 9 in the figure at right). These buildings have a strong and logical connection to the many historic buildings along Main Street.

Beginning in 1992, the City and Green Mountain Power collaborated on the restoration of Pumphouse Island on the falls, which included stabilization of the historic Pumphouse building. New lights, decorative railings, and landscaping now brighten the exterior and grounds of the building. In 2007, the Grist Mill building was purchased by a private entity; the building now houses offices and four apartments. The Grist Mill improvements make access to Pumphouse Island more appealing. Signs, walking paths, and fishing access have also been improved over the last 15 years.



*Historic Buildings within the Otter Creek Basin*

### **Guiding Principles for Future Basin Improvements**

The City of Vergennes will follow **five guiding principles** to plan for future development in the Otter Creek Basin area:

1. Preserve and enhance the natural beauty of the upper and lower Basin for public enjoyment. Encourage public and private enterprises that have a minimal impact on the environmental character of the area.
2. Preserve, restore, and enhance the basin's historic buildings architectural and archeological heritage in order to encourage appreciation by city residents and support for cultural tourism.
3. Protect and improve public access to basin's recreational and historically significant resources.
4. Continue to support the improved identity and prominence of the Otter Creek Basin for public and private enjoyment.
5. Continue to support improvements to pedestrian, vehicular and educational linkages between the upper and lower basins, and between the basin and historic downtown Vergennes, Lake Champlain, and other historic places in Addison County.

## Problems and Opportunities in the Upper Basin Area

With strong community input, the Basin Committee identified major problems and opportunities facing both the upper and lower basin. The following table lists remaining problems and opportunities for the upper basin area.

### The Upper Basin Area

REMAINING PROBLEMS	OPPORTUNITIES
Lack of identity and recognition of the historical significance of the falls area	Continue working to improve signage, educational displays, grounds, and pathways
Poor or dangerous pedestrian connections	Continue working to improve bridge and pathway connections, including a possible sidewalk along the North side of the bridge or a pedestrian bridge to the pumphouse
Excessive traffic speeds on Rt. 22A	Install traffic calming measures to slow highway speeds
Need for capital improvements to buildings	Owners are currently seeking assistance
Inadequate vehicular parking	Undeveloped land may meet the need for parking
Stairs leading to the Lower Basin on the east side of the falls are in disrepair	The City has received a grant to reconstruct the stairway

### A Vision for Upper Basin Improvements

While many improvements have been made to the area since the early 1990s, the plan for the upper basin will continue to build on the increased visibility and vitality at this historic junction of Otter Creek and Main Street. The Vergennes Pumphouse and island will be completely restored and open to the public. Improved parking, signs, historical/decorative lighting, and attractive plantings and flowers will welcome businesses and the public to the city, as well as guide visitors and pedestrians to the lower basin. A possible new sidewalk along the north side of Main Street and the bridge will help connect Canal Street and MacDonough Drive to each other and to the renovated historic island properties, drawing pedestrians to and from the basin, and linking them to other services and downtown attractions.

Principal components of the envisioned improvements include transportation infrastructure improvements and adaptive reuse of historic buildings. These plan elements are described more fully in the following sections.

### *1. Transportation*

Managing the safe movement of people, bicycles, and motor vehicles in and through the upper basin presents tough challenges. Route 22A, the former Vergennes stage road to Whitehall, New York, is a major thoroughfare for traffic traveling the western border of Vermont. The Otter Creek Bridge is located at the base of hills going northeast and southwest, which contributes to the problem of excess speed by motor vehicles. Speed should be controlled to allow safe traffic circulation of people and vehicles to upper basin parking areas, as well as to other attractions in the lower basin.

An engineering/architectural design study was undertaken to develop the specifics of the Vergennes Gateway Project. The study included development of alternative designs for establishing a scenic gateway with emphasis on the historic amenities of the city and the basin. The Gateway study proposed designs and costs for a pedestrian walkway on the north side of the bridge, traffic "calming" devices and other speed management strategies, public parking, stairway reconstruction to the lower basin, decorative lighting on or adjacent to the bridge, landscaping, and signs. Some of these improvements have been completed but more remains to be done.

### *2. Adaptive Reuse of Historic Structures*

A collaborative effort between the City and private property owners is underway to make the historic buildings in the upper basin come alive again.

The Vergennes Pumphouse Island has been improved with decorative lighting, railings, and landscaping completed in the last several years by Green Mountain Power. Costs to restore the interior of the Pumphouse are unknown and depend on potential uses. The Pumphouse offers great potential as a location for a historical museum, which chronicles the rich cultural heritage of the basin and the City of Vergennes.

In 2008, the Vergennes Development Review Board issued permits for the conversion of the Shade Roller (white) building and Annex on the west side of the falls to housing. Interior improvements have also been made to other privately owned buildings in the upper basin.

## Problems and Opportunities in the Lower Basin Area

The following table lists remaining problems and opportunities for the lower basin area as originally identified by the Basin Committee.

### The Lower Basin Area

REMAINING PROBLEMS	OPPORTUNITIES
Lack of playground	Recreation plans have been developed by Basin Committee
Erosion and problems with tree health along stream bank	Stream stabilization measures are available. Plantings along shoreline and near bank appear feasible
Some shoreline degraded due to overuse and lack of planning to manage use	Public and private landowners willing to work on management plans
The "Rail Trail" has been left incomplete; the "Goodrich Trail" needs more improvements	Public and private landowners willing to work on plans for the trails

### A Vision for Lower Basin Improvements

The plan for the lower Otter Creek Basin will establish the area as a natural haven and low-impact recreational area to be discovered in the midst of the city. Otter Creek is a scenic waterway for residents and visitors alike. Boaters will find ample modern dockage with water and electrical services, picnic tables, grills, fishing access and education materials about Vergennes and other area attractions written in French and English.

Park visitors will walk on designated trails around the entire perimeter of the Basin, as well as out of the basin, and will find easy directions to Main Street. Excessive erosion and sedimentation of Otter Creek from slumping banks will be monitored and controlled by vegetative or other low impact measures. Vegetation to attract and keep area wildlife and birds will be planted.

The principal elements of the plan include utilities and facilities, recreation, and erosion control and debris cleanup.

#### *1. Utilities and Facilities*

The City will continue to operate its wastewater treatment plant to protect water quality in Otter Creek, and to control offensive odors that may be caused by plant

operations, or waste receiving practices. Public works facilities and the recycling center are not expected to expand or change significantly in the foreseeable future.

Green Mountain Power (GMP) will continue to operate the dam at the falls as a run-of-the-river generating station and is required by their FERC license to provide a minimum quantity of flow over the falls to enhance aesthetics, fisheries, and water quality.

Grills, with permanent bases and removable grill tops, and picnic tables have been purchased. Public works will continue to install these after spring flooding has ended. Bicycle racks should be installed at MacDonough and Vergennes Falls Park. Bicycle trail maps should be added to the information board at the park.

## *2. Recreation*

A pedestrian walkway connects the Goodrich property with the Vergennes Falls Park encouraging employees to walk to the basin and Main Street Vergennes. Vegetation, which benefits wildlife, ducks, and other birds should be planted along the walkway and as part of a solution to riverbank erosion and to screen the walk other development. The "rail trail" should also be completed and connected to the lower basin. A management plan should be developed for the lower basin in collaboration with GMP, the City, and other landowners, which will access human uses and impacts, trails, tree/vegetation plantings, and erosion control.

## *3. Erosion Control and Debris Cleanup*

Erosion of the riverbank, particularly along the east bank, should be evaluated, in consultation with experts such as the Vermont Department of Forest, Parks and Recreation, the New Haven River Anglers Association, and the George D. Aiken Resource Conservation District. A plan for erosion control should focus on low-impact and vegetative management solutions to the problems, and should take the pedestrian walkway location and construction into account.

Spring flooding and natural attrition of trees in the lower basin require a coordinated effort for efficient clean-up and regular maintenance of the area. The City should be responsible for developing an annual spring cleanup effort, in cooperation with GMP who can help provide equipment for tree and debris removal. Area volunteers, civic groups, and high school workers could be assembled at a designated time to complement the City cleanup and maximize the size of the work force and effort. The cleanup should be publicly noticed to alert citizens of the concern and energy being spent to improve and maintain the basin.

## **Implementation Strategies for Improvements**

### *1. Otter Creek Basin Zoning District*

The unique character of the falls and Otter Creek Basin can be protected and managed by maintaining the area as a mixed-use district. The district should allow public, residential, commercial, industrial and recreational uses as conditional uses, and support reduced space requirements for parking at the upper basin buildings. Regulations to support mixed usage in the Otter Creek Basin District are explained in the Land Use chapter of this Municipal Development Plan.

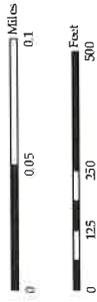
### *2. Major Plan Actions*

Overtime the City will continue to maintain and upgrade docking facilities, lighting, picnicking, fishing, and walking trails in and around the basin. Much of the work and plans of the original Basin Committee has been completed. However, a new management plan needs to be developed in order to create a new strategic plan and a timeline for management and upgrades to the basin as a whole. The group responsible for this effort should be the Planning Commission or a subcommittee designated by the Planning Commission. This group should also assess the status of private lands leased to the City in order to secure permanent public access to the basin shoreline and docks.

# OTTER CREEK BASIN



LEGEND	
	US Highway
	State Route or Class 1
	Town Class 2
	Town Class 3
	Town Class 4
	Private Road
	Other Creek Basin
	Parcel Boundary



Prepared by LandWorks, Middlebury, VT - April 20, 2009

Sources:  
Other Creek Basin & Parcel Boundaries: ACRPC  
Roads: VCGI

# CITY OF VERGENNES

Municipal Development Plan 2009-2014