



BURRILLVILLE



Photo Credit: Town of Burrillville, Patti McAlpine

Municipal Resilience Program Community Resilience Building Summary of Findings

December 2022



Town of Burrillville, Rhode Island

Community Resilience Building

Summary of Findings

Overview

The need for municipalities, regional planning organizations, corporations, states, and federal agencies to increase resilience to extreme weather events and a changing climate is strikingly evident amongst the communities across the state of Rhode Island. Recent events such as Tropical Storm Irene, Super Storm Sandy, severe winter storms (2013 & 2015), and even the recent severe flooding during the summer of 2022 (i.e., I-95 closure) have reinforced this urgency and compelled leading communities like the Town of Burrillville to proactively collaborate on planning and mitigating risks. Ultimately, this type of leadership is to be commended because it will reduce the vulnerability and reinforce the strengths of people, infrastructure, and ecosystems and serve as a model for other communities in Rhode Island, New England, and the nation.

In the summer of 2022, the Town of Burrillville embarked on certification within the state of Rhode Island's Municipal Resilience Program (MRP). As part of that certification, the Rhode Island Infrastructure Bank (RIIB) and The Nature Conservancy (TNC) provided the Town with a community-driven process to assess current hazards and climate change impacts and to surface projects, plans, and policies for improved resilience. In December 2022, Burrillville's Core Team helped organize a Community Resilience Building Workshop facilitated by TNC in partnership with RIIB. The core directive of this effort was the engagement with and between community members to define strengths and vulnerabilities and the development of priority resilience actions for the Town of Burrillville.

The Burrillville Community Resilience Building Workshop's central objectives were to:

- Define top local, natural, and climate-related hazards of concern.
- Identify existing and future strengths and vulnerabilities.
- Identify and prioritize actions for the Town.
- Identify opportunities to collaboratively advance actions to increase resilience alongside residents and organizations from across the Town and beyond.

The Town of Burrillville employed an “anywhere at any scale”, community-driven process called Community Resilience Building (CRB) (www.CommunityResilienceBuilding.org). The CRB’s tools, reports, other relevant planning documents, and local maps were integrated into the workshop process to provide both decision-support and visualization around shared issues and existing priorities across Burrillville. The Burrillville Local Hazard Mitigation Plan (July 2021) and the Burrillville Comprehensive (2018) were particularly instructive as references. Using the CRB process - rich with information, experience, and dialogue - the participants produced the findings presented in this summary report. This includes an overview of the top hazards, current concerns and challenges, existing strengths, and proposed actions to improve Burrillville’s resilience to hazards and climate change today, and in the future.

The summary of findings transcribed in this report, like any that concern the evolving nature of risk assessment and associated action, is proffered for comments, corrections and updates from workshop attendees and other stakeholders. The leadership displayed by the Town of Burrillville on community resilience building will benefit from the continuous participation of all those concerned.

Summary of Findings

Top Hazards and Vulnerable Areas for the Community

Prior to the CRB Workshop, the Burrillville Core Team identified the top hazards for the Town. The hazards of greatest concern included severe winter storms and blizzards, hurricanes and tropical storms, riverine flooding, and infectious disease outbreaks. Additional hazards highlighted by participants during the workshop included drought, as well as extended cold snaps and heat waves. These hazards have direct and increasing impacts on the infrastructure, environment, and residents of and visitors to Burrillville. These effects are seen in residential areas, natural areas (wetlands, rivers, lakes, forests, preserves), roads, bridges, businesses, transportation, municipal facilities, churches, schools, social support services, and other critical infrastructure and community assets within Burrillville.

Current Concerns and Challenges Presented by Hazards

The Town of Burrillville has several concerns and faces multiple challenges related to the impacts of natural hazards and climate change. In recent years, Burrillville has experienced a series of highly disruptive and damaging weather events including severe flooding (March 2010, FEMA DR-1894), Tropical Storm Irene (August 2011, FEMA DR-4027), Superstorm Sandy (October 2012, FEMA DR-4089), Nor'easter Nemo (February 2013, FEMA DR-4107), and Blizzard Juno (January 2015, FEMA DR-4212). Impacts from Irene and Sandy included widespread inland flooding along with tree damage and associated power outages. The winter storms Nemo and Juno dropped 2-3 feet of snow with 2-3 inches per hour of accumulation at their peak. The magnitude and intensity of these events and others across Rhode Island have increased awareness of natural hazards and climate change, while motivating communities such as Burrillville to proactively improve their resilience.

This recent series of extreme weather events highlight that the impacts from hazards are diverse. In Burrillville, these impacts include inland flooding from rivers and streams of critical infrastructure, roads, and low-lying areas; localized flooding from stormwater runoff during intense storms and heavy precipitation events; and property damage and utility outages (lasting several days or more) from wind, snow, and ice. Longer periods of elevated heat, particularly in July and August, have raised concerns about vulnerable segments of the population including elderly and disabled residents, as well as ill-prepared visitors. The combination of these issues present challenges to preparedness and mitigation priorities, and requires comprehensive, yet locally specific actions in Town.

The workshop participants were generally in agreement that Burrillville is experiencing more intense and frequent storm events and heat waves. Additionally, there was a general concern about the increasing challenges of being prepared for the worst-case scenarios (e.g., major thunderstorms and hurricanes (Cat-3 or above)) particularly in the late summer and in the fall/winter months when more intense storms coincide with colder weather (i.e., Nor'easters). The impact of the current Covid-19 pandemic was raised by workshop participants along with the potential for other forms of infectious disease outbreaks.

Specific Categories of Concerns and Challenges

As in any community, Burrillville is not uniformly vulnerable to hazards and climate change, and certain locations, assets, and populations have been and will be affected to a greater degree than others. Workshop participants identified the following items as their community's key areas of concern and challenges across several broad categories.

Roads, Bridges, Road Networks, & Dams:

- Dam failure concerns particularly in proximity to East Avenue due to lack of maintenance, age, and/or increased stress caused by precipitation events of increasing magnitude. The collapse of the Oakland Dam spillway was cited as an example of the consequences of declining dam integrity in Burrillville.
- Ongoing need to renovate and bring up to modern standards the Harrisville Mill Pond Dam (100+ year old dam). Partial funding has been secured via the Rhode Island Infrastructure Bank for this project, to date.
- Concerns about difficulties of navigating municipal roads in dark and stormy conditions due to the lack of road reflectors and limited lighting at intersections, despite the well-maintained conditions of the road network.
- Growing concerns around flooding of bridges and impacts to abutments and future structural stability and integrity.
- The main transportation corridor in and out of Burrillville is unsafe for automobiles during extreme precipitation events. Alternate routes off of this main corridor are compromised due to flooded bridges.
- Growing number of roadways with undersized culverts that are not able to convey the current and projected future increased stormwater volumes from more intense and longer duration precipitation events.

Stormwater, Wastewater Systems, Drinking Water Supply & Distribution:

- Many of the staff that manage the municipal utilities are at or approaching retirement age, leaving a need to attract and train the next generation of staff.
- Need for additional drinking water wells but concerns about placing new wells in proximity to old wells that could increase likelihood of cross-contamination during flooding events.
- Drinking water well fields flood frequently, raising concerns about potential contamination from flood waters. Eccelson Field Well was identified as having flood risk.

Specific Categories of Concerns and Challenges (cont'd)

- Wastewater Treatment facility located at the lowest elevation in the municipality directly next to a river, resulting in elevated flood risk along with the potential of direct discharge of untreated sewage into adjoining water bodies.
- Growing concerns about PFAS contamination of the aquifer with positive monitoring results in adjoining village. The most immediate concerns are focused on the potential for contamination in Harrisville.

Emergency Management and Preparedness:

- Growing concerns about the severity of the recent drought in Burrillville.
- Wildfire impacts on residents, private residences, and municipal facilities is a concern. This is of particular concern for new homes built directly adjacent to open space and therefore at higher risk from wildfires.
- State staffing for Forestry Division is severely lacking, resulting no capacity to help prevent or reduce the risk of major wildfires. State-owned and managed areas with increased risk of wildfires include Buck Mill, Black Hawk, and Spring Lake Management Area. Black Hawk Management Area experienced a wildfire in summer of 2022.
- Local wildfire management responsibilities rests with the Burrillville Fire Department which does not have the capacity to manage larger wildfires.
- Burrillville residents entirely dependent on individually owned automobiles due to the lack of public transit options.
- Over reliance on private citizens and their personal snowmobiles to rescue stranded residents in need of medical attention during major snowstorms.
- Existing limitations of availability of potable water during emergency situations.
- The geographic remoteness of Burrillville can increase vulnerability of residents and affect the Town's ability to provide services.
- Concerns about the proximity of the floodplain to the Village Center.
- Vulnerability and consequences for communication systems across the state in the event the Verizon Switching Station in the downtown area of Burrillville is compromised or rendered non-functional during an extreme weather event.
- Dependence of municipality on Pascoag Power to provide much of the local power who has a history of leaving residents and town facilities without power after major storm events.

Specific Categories of Concerns and Challenges (cont'd)

Municipal Functions, Operations, & Growth:

- Decline in the number of volunteers for critical municipal functions such as at the Fire Department, as well as on various boards and commissions.
- More regional and multi-municipal, collaboration opportunities can be a challenge to initiate despite the potential for better services and cost savings.
- Concerns about effective representation of Burrillville's interests and level of awareness of challenges and issues at the state capital.
- Growing societal issues like drug use and overdose as well as mental health concerns that place greater stress and responsibility on the Burrillville Police Department.
- Senior citizens within Burrillville need to receive meals and services routinely (as evident during the Covid-19 pandemic); however, the municipality does not have the capacity to provide this critical service due to staffing shortages, currently.

Watersheds, Wetlands, Rivers, Open Space, Forests, Trees:

- Continued loss of forested, undeveloped lands due to sale of privately owned parcels and subsequent subdivision and development of residential homes as well as installation of solar panel arrays.



Credit: Weichert

Current Strengths and Assets

Just as certain locations, facilities, and populations in Burrillville stand out as particularly vulnerable to the effects of hazards and climate change, other features are notable assets for Burrillville's resilience building. Workshop participants identified the following items as their community's key strengths and expressed interest in centering them as the core of future resilience building actions.

- Clearly, the responsive and committed engagement exhibited by leaderships, staff, and residents is a very appreciated strength within and across Burrillville. Ongoing collaboration between municipal staff, committee/commission volunteers, business community, faith-based organizations, NGOs, municipal utilities, adjoining municipalities, and various state-level organizations, among others, on priorities identified herein will help advance comprehensive, cost-effective, community resilience building actions.
- Burrillville's Town Council members are committed to improving the quality of life of the community and maintaining the rural character of the Town complete with an abundance of recreational opportunities in public open spaces.
- Town staff are professionals of the highest caliber who place a great deal of emphasis on collaborative and creative problem solving.
- Municipal staff and community members work collaboratively despite sometimes competing goals and objectives to find solutions for the betterment of Burrillville.
- Proactive problem solving at the Wastewater Treatment Facility where municipal staff secured funding (i.e., Rhode Island Infrastructure Bank Loan, Rhode Island Department of Environmental Management grant) to complete pump improvement project at pump station near Clear River.
- Exemplary commitment to volunteerism amongst residents driven by a strong sense of community and work ethic.
- Active Burrillville volunteer Facebook page that helps with communications about volunteer opportunities and helps to make connections with residents looking to assist.
- Burrillville is run as a fiscally responsible municipality resulting in a high financial rating and the ability to finance key strategic initiatives when needed.

Current Strengths and Assets (cont'd)

- Comprehensive Plan and municipal building codes work in unison to support resilience and protect the environment. Municipal staff and various community members regularly refer to the Comprehensive Plan in making decisions about the future of Burrillville.
- Relatively large amount of land protected by a multitude of owners ranging from the state of Rhode Island to local land trust. Protected lands include forested lands as well as agricultural lands within important watersheds in Rhode Island. Protected lands help with maintaining a relatively low amount of impervious surface cover, filtering and storing flood waters, and providing opportunities on agricultural lands for local food production for residents.
- Large amount of open space protected in the 1980s, including Spring Lake, White Mill, Nipmuc River Conservation Area, and Town Bike Path.
- An abundance of municipal parks and preserves present opportunities for residents to recreate and improve health and wellbeing.
- Burrillville is relatively unique for Rhode Island in that it that owns and operates its own electrical utility and drinking water utility. This local ownership, with many employees of the utility living in Burrillville, results in extensive understanding of the distribution system, relatively lower power outages, and much quicker response times than the larger more regional private utilities operating in the state of Rhode Island and beyond.
- WellOne Health & Dental Center & Behavioral Health centers in four Burrillville locations have been instrumental in helping residents be more resilient during the pandemic as well as helping with other community issues such as addiction.
- Emergency Management and Fire Department respond in a highly professional and rapid manner to community needs and look to be involved in community events (i.e., putting up the annual Christmas lights in Town).
- Relatively large municipality geographically with low population density resulting in good quality of life and connectedness amongst many long-time residents who value the town's rural character.
- Outstanding quality of the drinking water supply served to residents via a municipal-owned utility.

Current Strengths and Assets (cont'd)

- Formation and management of infrastructure subcommittee to examine and define how American Recovery Plan Act (ARPA) funds are allocated provides a structure for engaging a diverse group of community members. This approach can be leveraged to further address resilience-related challenges and solutions going forward including cross walking priorities identified during the Community Resilience Building workshop and the Burrillville Hazard Mitigation Plan.
- Sheltering facilities at the High School, Middle School, and Library have been approved by the Health Department and Federal Emergency Management Agency.



Credit: Burrillville Uncensored



Credit: Town of Burrillville



Credit: Sotheby's International

Recommendations to Improve Resilience

A common theme among workshop participants was the need to continue community-based planning efforts focused on developing adaptive measures to improve Burrillville's strengths and reduce vulnerability to extreme weather, climate change and other common concerns raised. To that end, the workshop participants helped to identify several priority topics requiring more immediate and/or ongoing attention including:

- **Long-term vision and growth** (i.e., sustainable growth, volunteerism, conservation & recreation, affordable housing);
- **Infrastructure improvements** (i.e., road/bridge network, stormwater management systems, green stormwater infrastructure, dams and reservoirs, Wastewater Treatment Plant, well fields, water supply lines, culverts);
- **Quality of life improvements** (i.e., parks and recreation, open space & accessibility, sustainability, health & safety, economic prosperity, transportation);
- **Emergency management** (i.e., communication system, Dispatch Center, outreach, education, continuation of services, sheltering, evacuation, vulnerable populations, wildfire risk).

In direct response, the Community Resilience Building workshop participants developed the following actions and identified (but did not rank) them as priorities or additional actions. Mitigation/adaptation actions from the Burrillville Local Natural Hazard Mitigation Plan (2021 updated) are provided in Appendix A for cross reference with the following actions generated during the Burrillville Community Resilience Building process.

Priority Actions

- Review the resiliency plan for pump stations to ensure all precautions, procedures, and projects are being addressed to prevent any type of flooding that could result in interruption of services. This should include replacing the two pump stations (ejector-style) that use compressed air.

Priority Actions (cont'd)

- Install an additional drinking water well (Harrisville) in a location away from existing well fields. Install a second supply line near Clear River to increase redundancy in the current drinking water supply system.
- Continue to work towards making the Wastewater Treatment Plant more resilient to current and future flooding scenarios, including securing funding to resolve known issues at the Facility.
- Advance land acquisition projects that favor conservation and protection of natural resources and watersheds, versus pursuing additional development on these types of properties. Support the Burrillville Land Trust's potential acquisition of targeted high priority properties for conservation including the Sweet Hill parcel (\$2.2M for 150 acres connected to Black Hut).
- Excavate the drinking water main line buried at the bottom of Harrisville Dam to help improve monitoring and management of this critical infrastructure. Alternatively, install additional secondary water main lines around this critical juncture in the existing system.
- Inadequate and outdated stormwater drainage infrastructure needs to be updated after a town-wide condition and impairment assessment.
- Conduct education for individual homeowners and landlords on risk of wildfire so residents can learn about existing and potential vulnerabilities of their properties from climate-related changes.
- Look to increase the amount of parking (for cars and bikes) at various parks and recreational areas to reduce risks associated with parking along roads near trailheads.
- Improve safety and avoid accidents on well-travelled, municipally-managed roads by upgrading signage, installing reflectors, and enhancing lighting at major intersections.

Priority Actions (cont'd)

- Increase the development of wells in the Pascoag Utility District.
- Complete all necessary engineering assessments and conduct identified repairs at the East Avenue and Pascoag Bridges.
- Advance efforts to make improvements to the Harrisville Dam.
- Work towards installing a new spillway at the Wallum Lake Dam.
- Carry out repairs and improvements as needed at the two dams on the Pascoag Reservoir.
- Direct funding (i.e., American Recovery Plan Act in particular) towards improving emergency communication systems, including the purchase of an 800mhz radio system. Improvements will help ensure communications reach more residents and increase reliability of system during major events.
- Assess, prioritize, and complete the replacement of existing problematic culverts with culverts that convey greater volumes of runoff to help correct current issues and prepare for anticipated increased magnitude of precipitation events.
- Look to find funding to make improvement or replace Stone Arch Bridge with structure that can withstand extreme flooding events (i.e., March 2010 floods).
- Make needed repairs to the crossing between Sherman Farm Road and Cherry Farm Road.

Additional Actions

- Conduct educational outreach to residents about the conservation and beneficial use of natural systems (i.e., green stormwater infrastructure, bioswales, wetlands, etc.) to improve water supply, increase infiltration, and help reduce localized flooding.
- Review and compare mitigation actions (see Appendix A) from the Burrillville Hazard Mitigation Plan against priority and additional actions generated during the Community Resilience Building workshop, herein.
- Continue to advance projects identified in current municipal-based plans (Comprehensive Plan, wastewater infrastructure plan, etc.) with a coordinated and collective process across various municipal departments, in a way that is adaptive to the municipal needs over time (i.e., “planning to engineering to action”).
- Conduct education on invasive species identification and management with residents and landowners in Burrillville.
- Examine ways via building codes, municipal ordinances, and/or zoning regulations to reduce the quantity of impervious surfaces associated with new development or redevelopment projects.
- Conduct assessment of locations and opportunities to increase the number and length of bike lanes and paths in Burrillville to help encourage healthier lifestyles and diversify transportation options for residents and visitors.
- Work with local land trusts to identify problematic culverts (damaged or outdated) and replace with wildlife friendly crossings. Avoid the installation riprap or equivalent which is not conducive to promoting wildlife and ecosystem health.
- Explore options to increase energy security and reduce power outages in Burrillville, particularly during the winter heating season.
- Continue to support collaboration between Fire and Police Departments to secure FEMA funding and complete improvements to the Dispatch Center in Burrillville.

Additional Actions (cont'd)

- Continue to discuss ways to increase the amount of available and affordable housing for senior citizens in Burrillville (i.e., “Burrillville Village”). Look to integrate the Aging Stronger Committee in discussion as well as replicate applicable existing programs or models for seniors in Burrillville (i.e., Providence, Rhode Island example).
- Fund a study to determine where nature-based solutions to reducing localized flooding can be installed (i.e., green stormwater infrastructure, bioswales, wetland restoration/creation, etc.).
- Engage with neighboring municipalities regarding priority actions generated during Community Resilience Building workshops to help foster more regional approaches and projects over time.



Credit: Trails & Walks in Rhode Island (Branch River Park)

CRB Workshop Participants: Department/Organization

Town of Burrillville – Planning Department

Town of Burrillville – Emergency Management Agency

Town of Burrillville – Engineering Department

Town of Burrillville – Department of Public Works

Town of Burrillville – Burrillville Sewer District

Town of Burrillville – Planning Board

Town of Burrillville – Conservation Commission

Town of Burrillville - Resident

Harrisville Fire Department

Pascoag Utility District

Burrillville Land Trust

Northern Rhode Island Conservation District

Clark University

Burrillville Core Project Team

Ray Goff – Planning Director – Town of Burrillville

Glenn Biddiscombe – Emergency Management Agency Director - Town of Burrillville

Jeff McCormick – Town Engineer & Dept. of Public Works Director – Town of Burrillville

Online CRB Workshop Facilitation Team

Rhode Island Infrastructure Bank - Kim Koriath (MRP Lead)

The Nature Conservancy - Adam Whelchel, Ph.D. (Lead Facilitator)

The Nature Conservancy - Sue AnderBois (Small Group Facilitator)

RI Dept. of Environmental Management – Jennifer West (Small Group Facilitator)

The Nature Conservancy - Kai Lo Muscio (Workshop IT Manager/Scribe)

The Nature Conservancy – Catherine Campbell (Scribe)

Brown University – Zane Ruzicka (Scribe)

University of Rhode Island – Dasan McElroy (Scribe)

Recommended Citation

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Appendix A

Town of Burrillville Local Hazard Mitigation Plan (July 2021)

Mitigation Actions

Section 5.0 Mitigation Actions

The Town of Burrillville has made mitigation a cornerstone of development within the community. As shown below, they have made significant investments in mitigation since the last Plan update. The result has been significant reducing flooding risk within the Town and increased public education. The chart below details the actions taken since the last plan update. Please note that completed actions are shaded in grey, while new actions are highlighted in light green:

Hazard	Potential Program or Activity	Description of Potential Strategy(ies)	Current Status	Point of Contact	Update Since Last Plan
All	Emergency Operations Plan Update and Training	Annually review and update the Emergency Operations Plan. Hold drills and mock emergency exercises with Burrillville's departments. Make a list of contacts that can assist (Red Cross etc.)	This action is complete.	Emergency Management	The EOP is annually updated and regular drills take place, including shelter drills. The Town has created MOUs with the appropriate NGOs and those are reviewed annually as well. Finally, the Town's Emergency Management Leadership Group meets each year at the beginning of Hurricane Season to review its preparedness. Given that this strategy has been ingrained in the culture of the Town, it is being marked as complete.
All, Extreme Temperatures	Promotion of Shelters – Red Cross	Make public aware of shelter availability and rules through direct mail, e-mail, and website updates. Demarcate evacuation routes based on disaster type also identify heating and cooling centers since their addition to the EOP in 2009.	This action is complete.	Emergency Management	Warming and coiling shelters have been updated and are publicized via multiple modalities (Town website, RIEMA website, Burrillville Bugle, Social Media, and CodeRed). Additionally, the Police Department's Administrative Aide calls to check on the Elderly to see if they need sheltering assistance during any time of extreme temperature or snowstorms.
All	Identify potential	Continue to evaluate the potential for water contamination within	The LHMC will continue this action in this plan update.	Water Department, Public Works	Currently updating vulnerabilities and Emergency Response Plans

	threats to Water Supply	sensitive areas to protect the drinking water supply.	Annually the water departments have training and also assess their vulnerabilities for contamination. Time Frame- once a year		<p>Threats to the water supply were identified, including Perfluorooctanoic Acid (PFOA) and other Perfluorinated items contamination identified in the Oakland/Mapleville Aquifer. The wells were deactivated and connected to Harrisville Water Department. Groundwater remediation action pending</p> <p>Implemented an annual active monitoring for the two closed/capped landfills in town to ensure they do not cause groundwater contamination.</p> <p>Town has completed a study for a new sewer line (1500') between river street and union avenue on Route 107 to eliminate substandard septic systems and cesspools. Has begun preliminary design as of January 2020.</p>
Aquifer Protection	Identify potential threats to Water Supply	Study the drinking water system in the town to include aquifers, supply, and infrastructure	New Action Timeframe- 0-3 Years		
Aquifer Protection	New Well Head/Potable Water Source	Create a new well head/potable water source along with associated infrastructure to improve service and enhance for redundancy	New Action Timeframe- 0-5 Years		
Aquifer Protection	New Supply Pipe	Need new above ground 12" supply pipe for Cherry Farm Road Tank as the current pipe goes through Clear River and is impossible to maintain.	New Action Timeframe- 0-5 Years		

Flood	Wetland Buffering	Continue to regulate development according to local wetland setback regulations	This action is complete.	Building Department	The Town regularly educates builders on the ordinance when applying for permits, further regular community assistance visits are held with RIEMA to ensure that the Town is staying up to date on the latest floodplain management techniques and regulations. This action is being marked complete.
All	Provide disaster preparedness public outreach.	Perform public outreach program to inform public of loss prevention measures.	This action is complete.	Emergency Management	The public is advised to obtain information regarding loss prevention and mitigation by utilizing a government web-site, www.ready.gov.org . Burrillville EMA also promotes this activity via their website, the Burrillville Bugle and Code Red. Overall, the town views this as a completed action as a culture of preparedness has been created within the Town.
All	Train Officers on Hazardous Materials Suits and Protocol	Have received equipment through Homeland Security Grant	This action is no longer viable.	Police Department	Due to changes in the State protocols and process, the Town is no longer providing Hazardous Materials Suits to officers and instead maintains capability through the RI Statewide Mutual Aid Plan and the RI Statewide WMD Tactical Team. Overall the Fire and Police Departments maintain vigilance on hazardous materials through annual refresher training. Action Marked Complete as there is no further action.
All	Develop a COOP Plan	Finalize the draft COOP for the Town to include all departments. Once finalized disseminate to all necessary personnel.	No action taken. Time Frame- 0-5 Years	Emergency Management	Due to other planning priorities, this action was delayed and will be completed during this update cycle.
All	Enhance the MEDS/PODS plan and train and exercise the plan	Continue to meet the annual MEDS contract deliverables, as defined by HEALTH.	Continued Action Needed. Time Frame- once a year	Emergency Management	Burrillville continues to participate in the MEDS/PODS program with the Rhode Island Department of Health. RIDOH evaluates and approved the POD program via a full scale drill conducted on an annual basis. Continued participation is required to continue to enhance the Town's capabilities.

Flood, Sever Winter Storms, Hurricanes & Tropical Storms	Implementation of capital improvement projects	Implement the recommended capital improvement projects from the Clear River Watershed Study	This action is complete.	Planning Department, Public Works	In 2017, the Town implemented the necessary recommendations identified within the plan including installing a new spillway on a critical point of Wilson Reservoir and addressing other drainage issues through installation of new pipe and rerouting of infrastructure. The Town self-funded the entire project because it recognized the benefits of completing this mitigation action.
Flood	Drainage Study	Conduct study to develop a strategy for the Centennial Street flooding.	Waiting on Additional Data. Time Frame- 0-5 years depending on funding	Planning Department	Area from Wilsons Reservoir into this area along with Slatersville Reservoir are being remapped by FEMA, according to RIEMA. The Town decided to hold action on this until those maps are complete and will develop a plan of action afterwards.
Flood	Strategy Study	Conduct study to develop a strategy of the Mowry Street/Harrisville Main Street culvert area. Video footage may assist in determining the problem.	Continued Monitoring Needed. Time Frame- 0-5 years depending on funding	Planning Department	Completed the study 2016 and full design between 2016/2017. Installed Trash Rack and the State cleaned two pipes. Private Property ownership issues preventing the implementation of the design. Town will continue to monitor conditions, which have improved since the installation Trach Rack and pipe cleaning.
Flood, Hurricanes & Tropical Storms	Evacuation Routes	Work with RIEMA and RISP to identify evacuation routes.	This action is complete.	Emergency Management, Police	Recently reviewed and approved by the Burrillville Town Council and implemented in the town EOP. This action is complete.
Aquifer Protection, Dam Failure, Flood	Repair Mill Pond Dam	Dredge and clean the basin of silt and debris to increase capacity of Town-owned dam.	This action was reworded based on review and changed from dredging the basin to repairing the dam. Time Frame- 0-5 years depending on funding	Public Works	In coordination with RIDEM, the Town conducted a study to identify issues with the dam and if dredging and cleaning would be needed. Based on the state study, the dam needed remediation, not cleaning, and subsequent investigations identified issues with the low-level orifice that will necessitate a larger design remediation. Wingwall replacement, riprap re-armoring and re-piping of discharges will all need to be done.

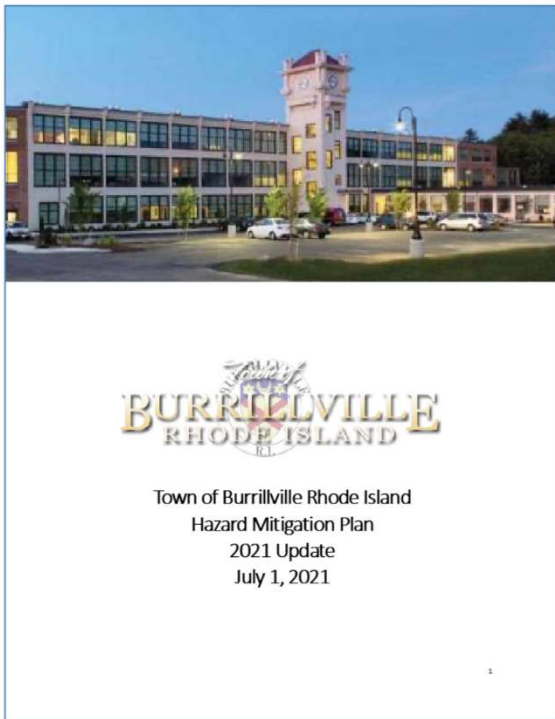
					<p>Currently, the project is in preliminary design. Also investigating including a 12" water main replacement as part of the project.</p> <p>During the discussion, this was emphasized as the most critical mitigation action for the Town due to multi-system impact of a potential failure.</p>
Flood	Implementation of Flood Control Projects	Implement strategy with assistance from Army Corps of Engineers (USACE) to reduce flooding of Eccleston Field well site	The plan is complete and the Town is ready to move forward with implementation but is dependent on USACE Time Frame-0-5 years depending on funding	Water Department	The Town needs assistance from the Army Corps of Engineers to proceed with this project. At this time, assistance is not able to be provided. The Town will continue to monitor this project.
Dam Failure, Flood, Tropical Storms & Hurricanes,	Update Dam Emergency Action Plans (EAPs)	Update the Dam EAPs on a continual basis	Continued work needed. Time Frame- Review once a year	Emergency Management, Public Works	Burrillville EMA receives reports of dam EOP's from RIDEM and/or engineering agencies. Additionally, RIEMA also notified and reviews the plan for compliance. The Town is currently working with the State to identify needs of review and update.
All	Communication Tower Generator Project	Install generators at all communication towers	This action is complete.	Police Department	All three towers now have generators.
Critical Incidents, Wildfire	Install 3 Communication Towers	Install three communications towers to address communication issues amongst Police, Fire and Emergency Management	This is a new mitigation action. Time Frame- 0-5 years depending on funding		<p>The Town has conducted significant radio testing over a two year period beginning in 2017 and identified the need for additional towers due to lack of signal.</p> <p>One tower at Burrillville Middle School has been procured and scheduled to be installed Spring 2020. Two additional towers are still needed. One tower will be installed at West Rd. The Tower at Buck Hill needs to be replaced with a higher tower.</p>

Critical Incident, Dam Failure	Upgrade Town Dispatch Center	Update and upgrade Burrillville's Townwide Dispatch Center to address antiquated technology ensuring effective communication	This is a new mitigation action. Time Frame-0-5 years		
Flood, Winter Storms, Hurricanes & Tropical Storms	Glendale Water Association Project	Install generator at Glendale Water Association	Action is not feasible.	Planning Department	Identified that due to funding restrictions, the Town was unable to invest in this privately owned water system. Further, no assistance was requested. This action will be eliminated.
Flood, Nor'easters, Tropical Storms & Hurricanes	Community Rating System (CRS)	Gain entrance into the Community Rating System	Action is not feasible.	Emergency Management, Planning	After investigation, the costs to the Town's residents outweighed the benefits of joining the Community Rating System. There were too few policies with too low of premiums. This action is being marked as not feasible.
Wildfire	Wildfire Safety Zones	Create wildfire safety zones around critical facilities by managing and altering landscaping and vegetation	This action is complete.	Emergency Management, Fire Departments, Planning	The Fire Districts work with RI Forestry each mark and have incorporated these items into their pre-plans. This action is complete.
Flood	Construction	Renovate the Wilson Reservoir Spillway to allow for more rapid discharge of water	This action is complete.	Public Works	This was completed in 2017 with Town Funds.
Earthquakes, Tornadoes	Safety Campaign	Create a public education and safety campaign to educate residents on individual mitigation actions they can take to prevent damage.	On-going	Emergency Management	Burrillville EMA website has been updated to include this information, but additional work is still needed. This action will remain a part of the plan.
Drought	Drought Public Information	Create drought public information campaign.	This action is complete.	Emergency Management, Planning Dept.	Processes are in place for communication of water restriction and cessation of burn permits and have been communicated to residents.

All	Develop a debris management plan	Develop a debris management plan to minimize cleanup costs and minimize storm damage	This is not complete. The Town has not identified funding or staffing to complete the project. Time Frame- 0-5 years depending on funding	Public Works	The Town has not identified funding or staffing to complete the project. It was discussed that this will be prioritized in this update cycle.
Lightning	Conduct a lightning protection survey	Survey all town infrastructure to identify needed lightning protection; address lightning protection	This is a new mitigation action. Time Frame-0-3 years	Public Works	
Infectious Disease	Planning Updates	Update Town Plans, Policies and Procedures to lessen the impact of an infectious disease outbreak	This is a new mitigation action. Time Frame-0-3 years	Town Manager; Emergency Management	
Infectious Disease	Identify Regulatory and Legal Changes	Conduct a review of the regulatory and legal changes necessary to effectively respond to a pandemic	This is a new mitigation action. Time Frame-0-3 years	Town Manager	

Appendix B

Burrillville Map Resource Packet* Used During Workshop



TOWN OF BURRILLVILLE
COMPREHENSIVE PLAN

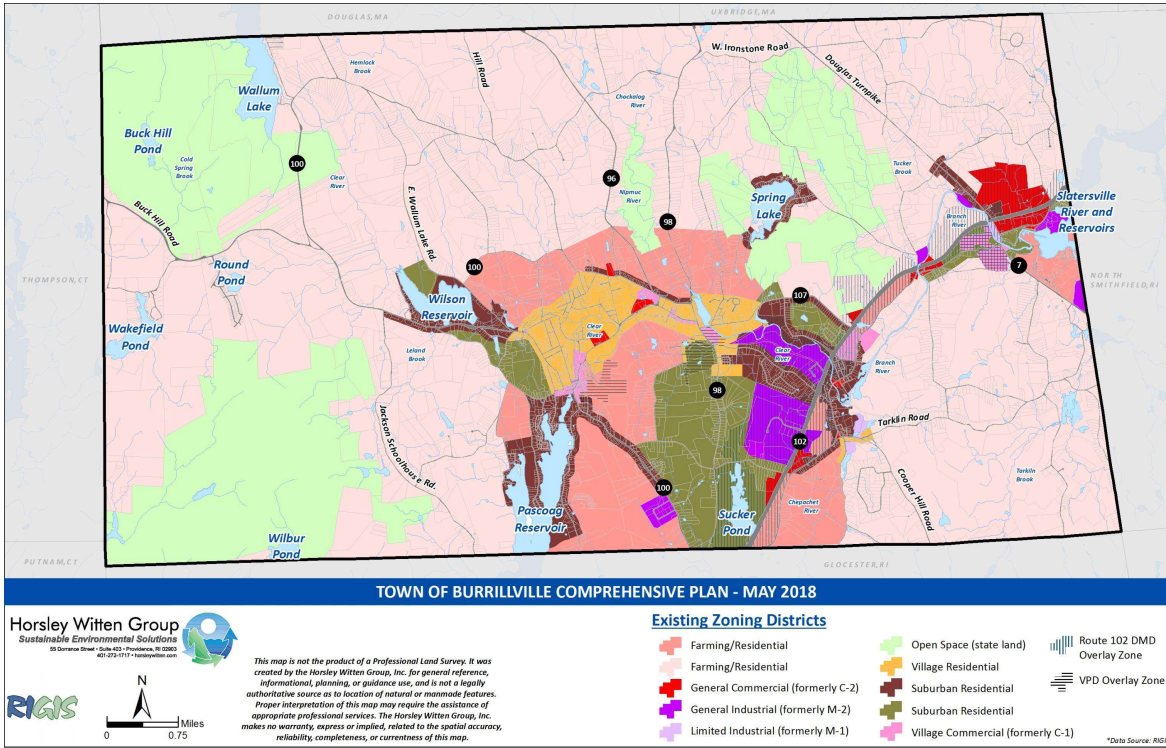


August 6, 2018

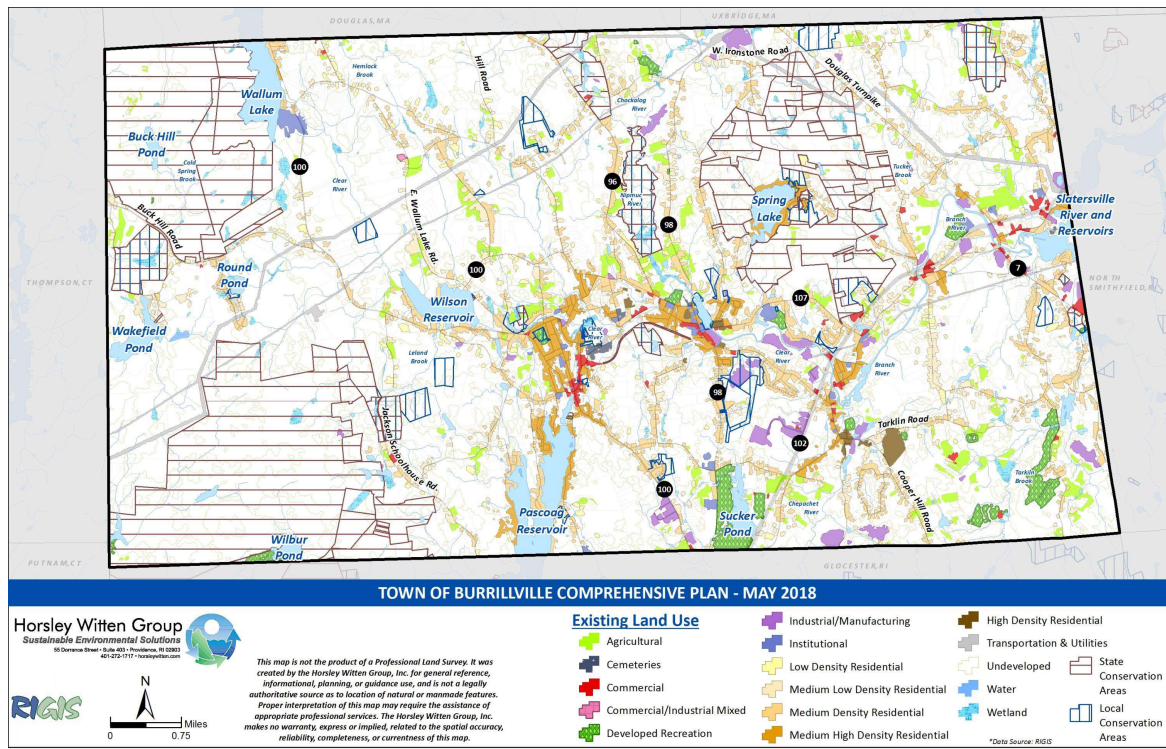
Prepared by: Burrillville Planning Department
and Horsley Witten Group, Inc.

Prepared for: Burrillville Town Council
and
Burrillville Planning Board

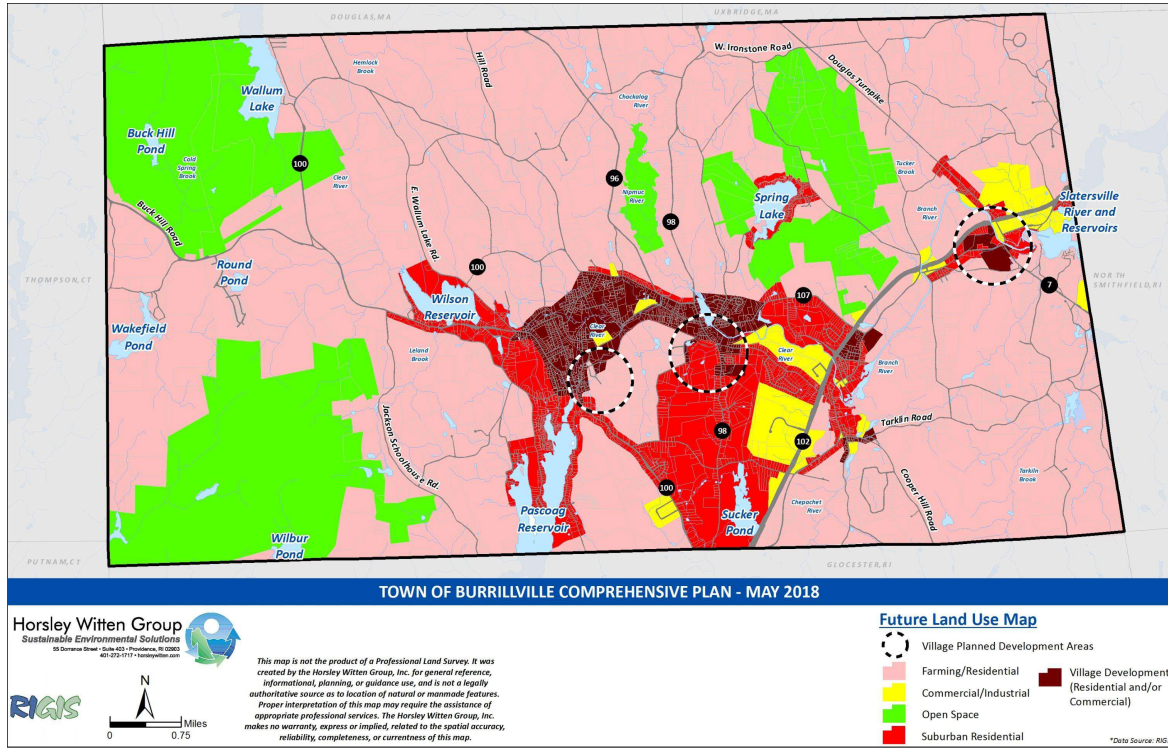
***Gathered from Burrillville's Hazard Mitigation Plan (2021) and Comprehensive Plan (2018)**



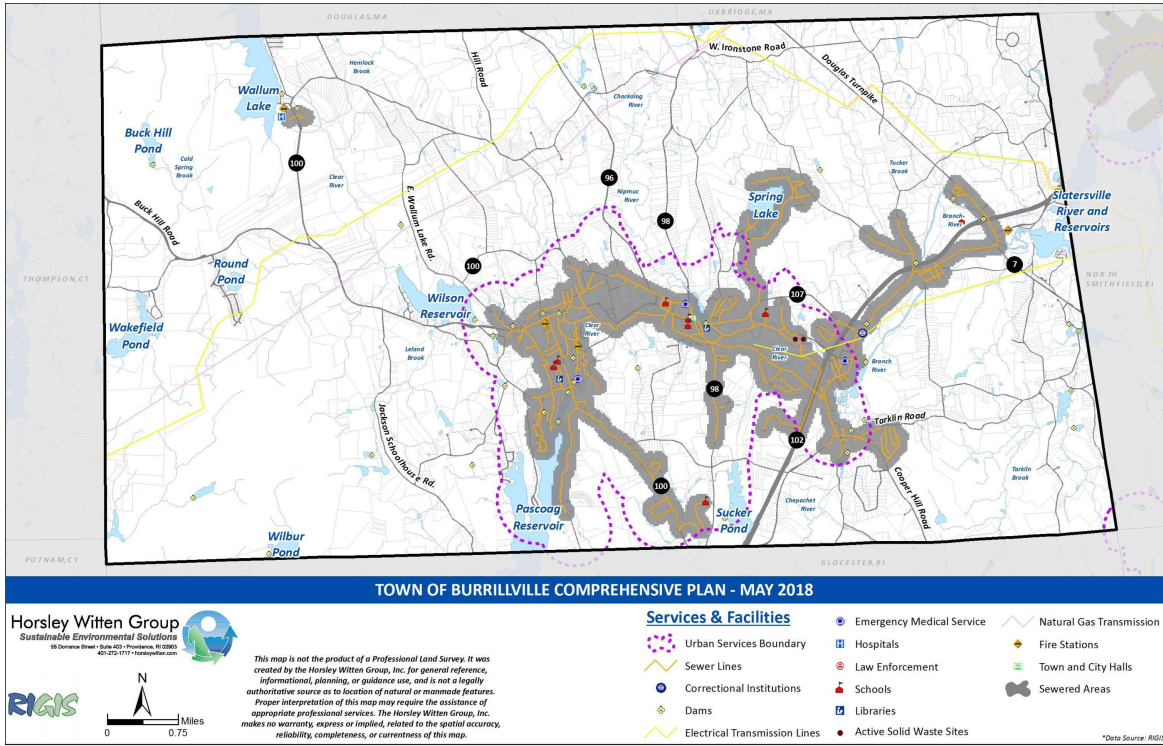
Map XI-2. Existing Zoning Districts



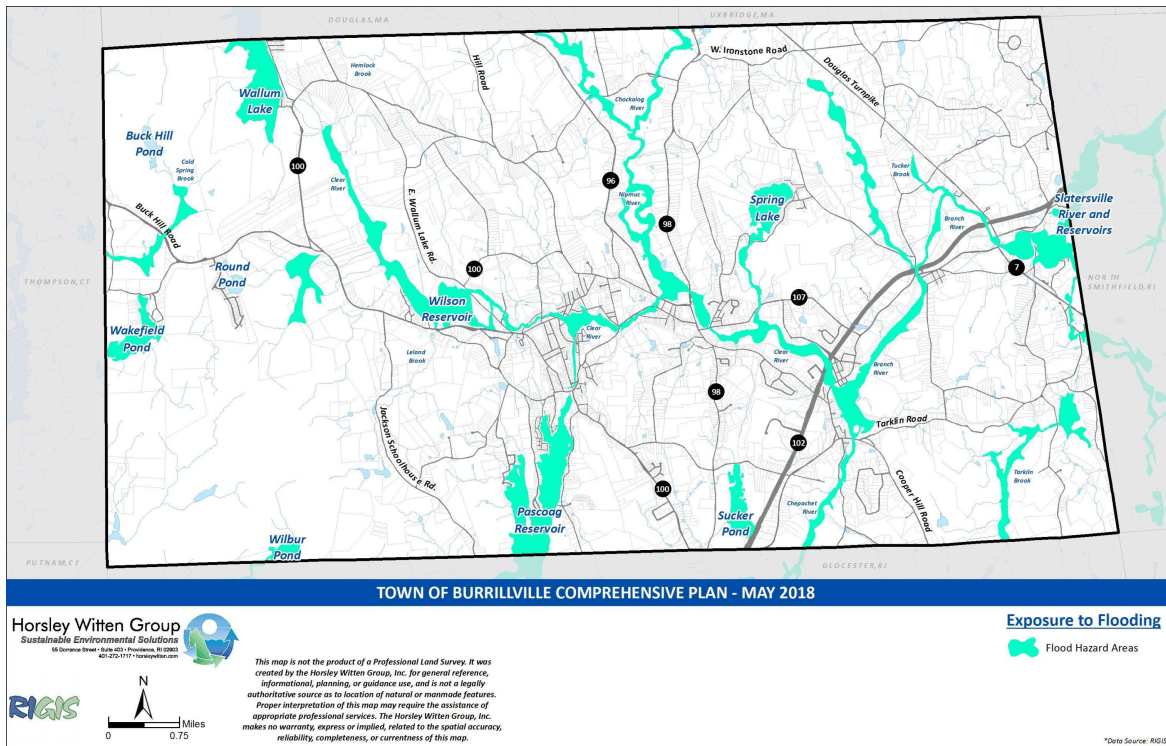
Map XI-1. Existing Land Use



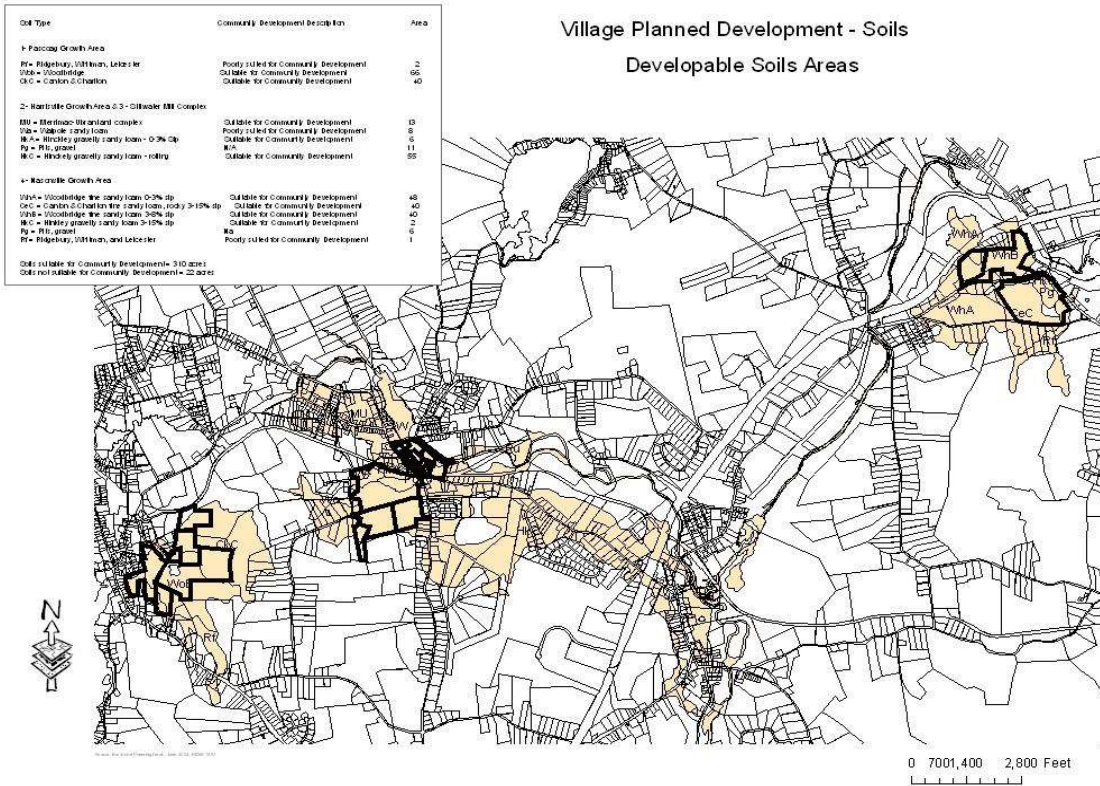
Map XI-3. Future Land Use Map



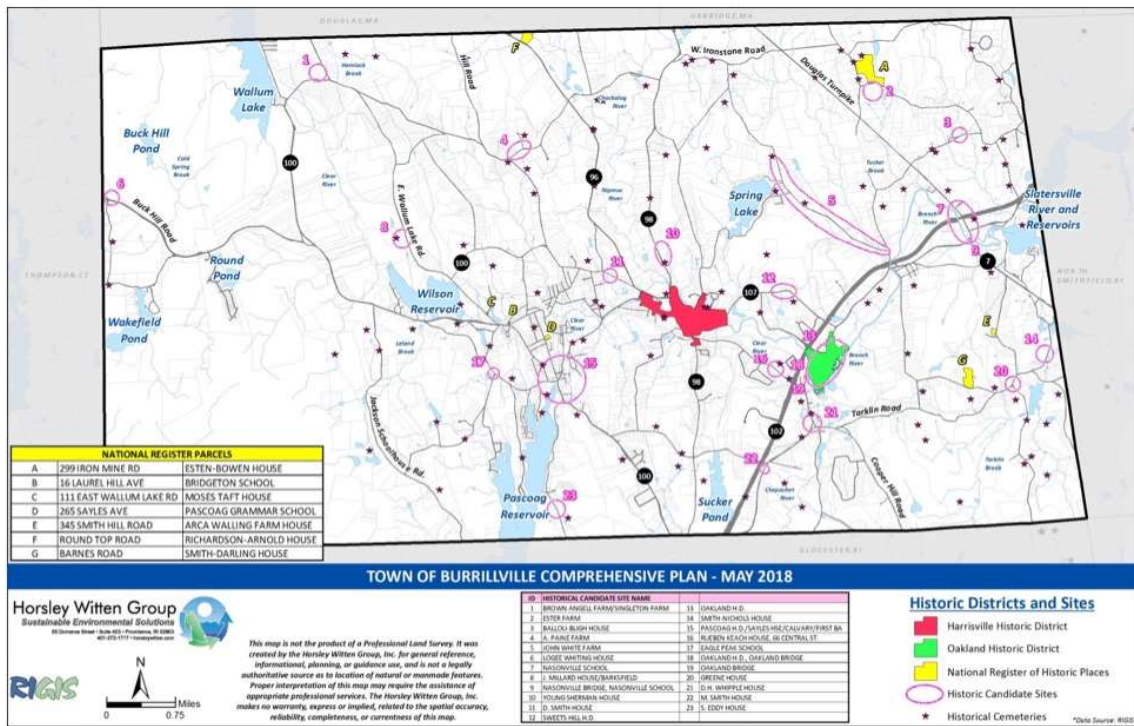
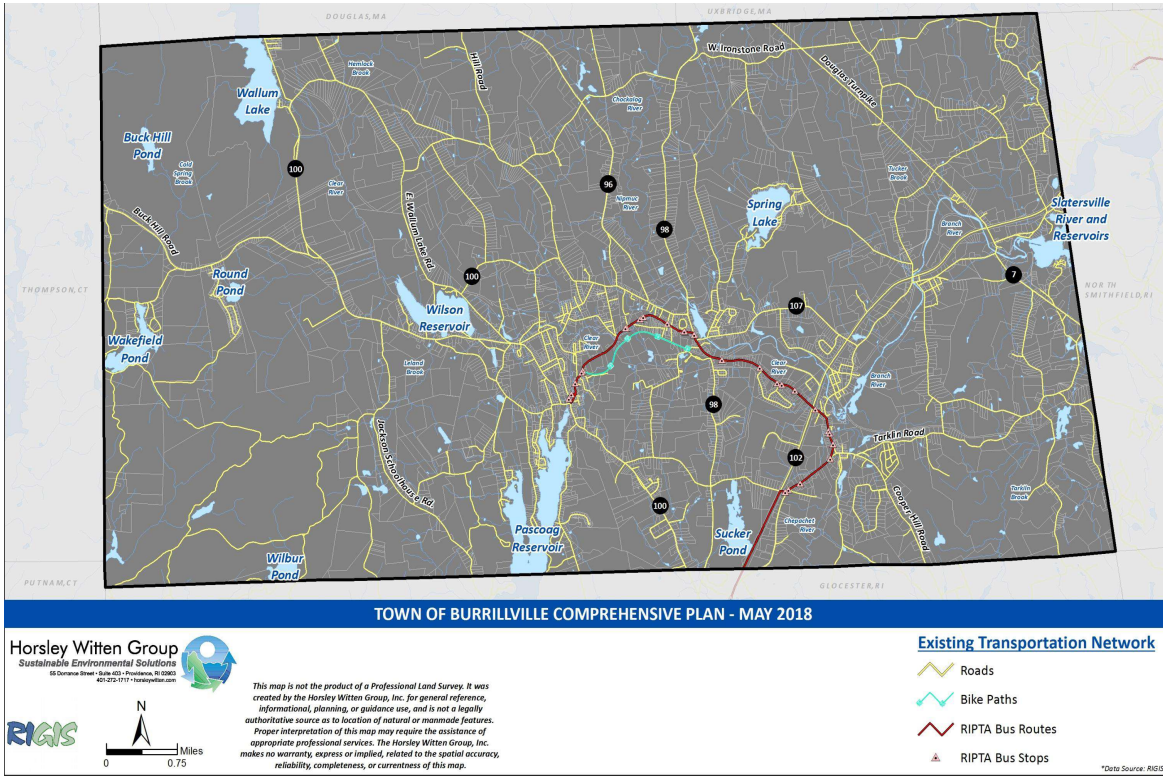
Map III-1. Services and Facilities

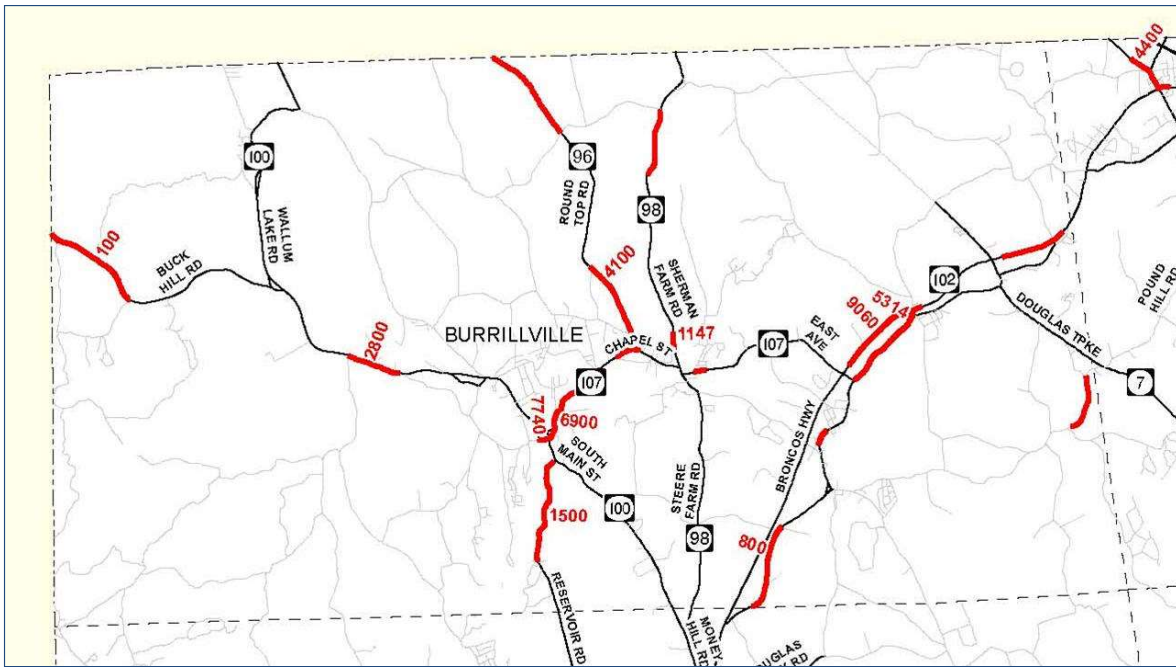
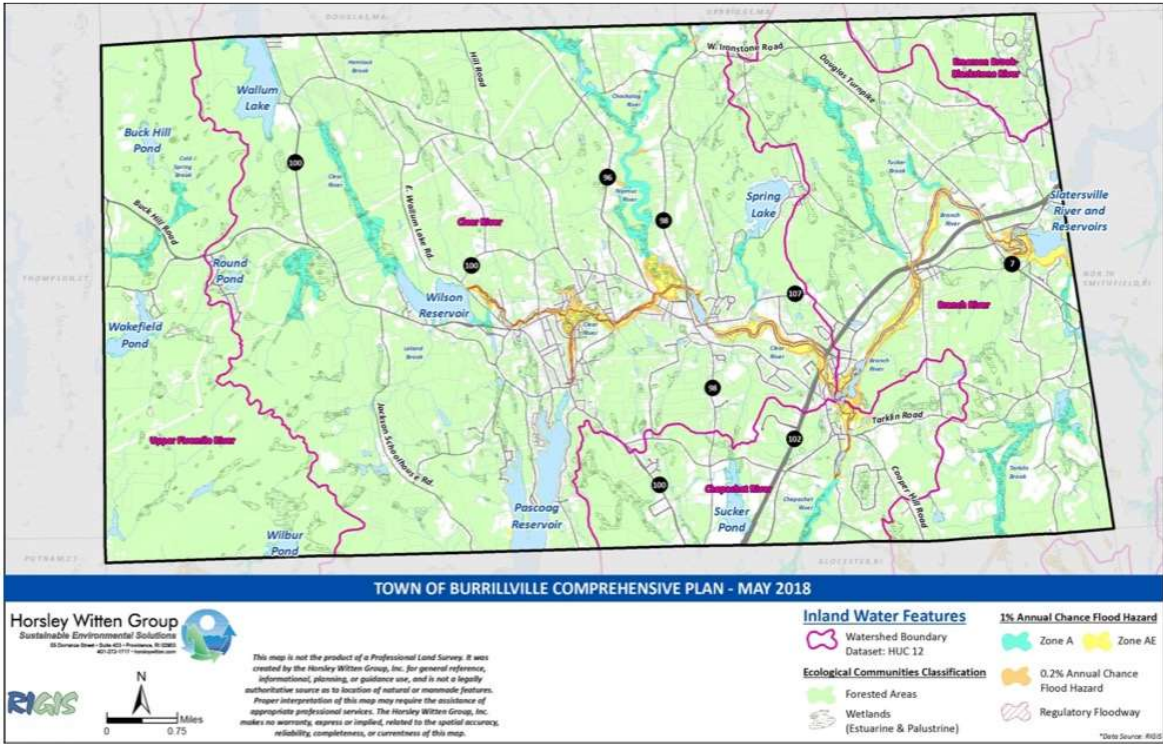


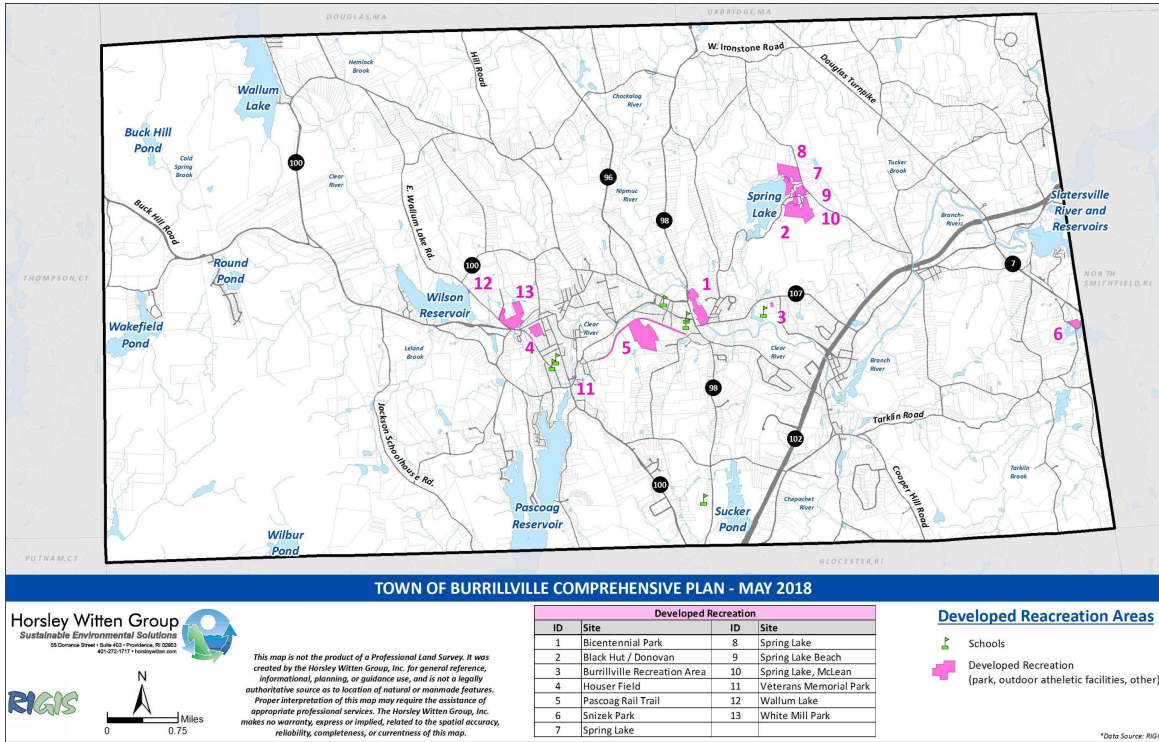
Map II-1. Exposure to Flooding



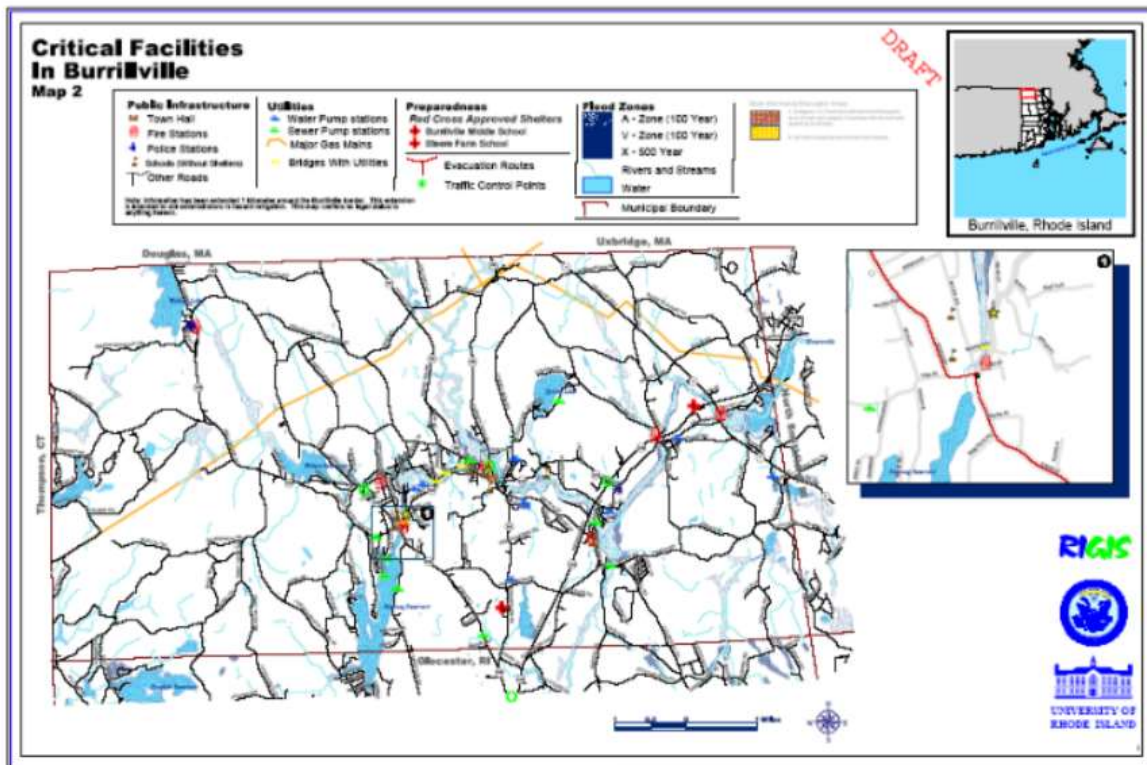
Map V-1. Developable Soils Areas of Village Planned Development Overlay District







Map VIII-1. Developed Recreation Areas



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