

**PLANNING BOARD RECOMMENDATION
TO THE RICHMOND TOWN COUNCIL
Zoning Ordinance and Zoning Map amendments
for the Aquifer Protection Overlay District**

Date: October 25, 2022

Proposed amendments to the zoning ordinance:

- Repeal of Ch. 18.37, Aquifer Protection Overlay District (adopted Dec. 19, 1994, amended Nov. 16, 2002, Aug. 12, 2014)
- Adoption of Ch. 18.21, Aquifer Protection Overlay District
- Amendments to Ch. 18.12, Districts and Maps
- Amendments to Ch. 18.16, Use Regulations
- Amendments to Ch. 18.26, Planned Development Resort District
- Amendments to the Zoning Map

Richmond obtains all of its drinking water from the Wood-Pawcatuck River basin watershed aquifer, an underground reservoir of potable water. The purpose of these proposed amendments is to promote the public health, safety and welfare by better protecting the quality and quantity of the water in the aquifer.

The proposed amendments were developed with the assistance of GZA GeoEnvironmental, Inc., an environmental engineering and consulting firm. Todd R. Greene, P.E., a principal in the firm's Providence office and a Richmond resident, assisted the Planning Board by attending several board meetings to answer questions. Lorraine Joubert of URI's Department of Natural Resources Science provided training on aquifer protection and assisted in our evaluation of aquifer protection ordinances enacted by other towns.

Ch. 18.21, Aquifer Protection Overlay District

An overlay district provides more stringent regulation in some parts of a zoning map. The provisions of the underlying zoning district and the provisions of the overlay district both apply in the places on the zoning map where the overlay district is located.

The aquifer protection overlay district boundaries in the current ordinance, Ch. 18.37, are based on the groundwater classification system that was developed by the Department of Environmental Management (DEM) in the 1980s. The new overlay district boundaries in Ch. 18.21 are based on more recent DEM mapping of the boundaries of the aquifer itself, the wellhead protection areas for public wells, and the groundwater recharge areas. The new ordinance creates two sub-districts, one over the aquifer and the wellhead protection areas, and one over the groundwater recharge areas. Regulation is more stringent in the sub-district that overlays the aquifer and the wellhead protection areas. The ordinance requirements apply to all new uses except one-family and two-family homes.

Ch. 18.21 includes more specific requirements for places where hazardous materials will be stored or used. Permitted uses that are undergoing development plan review (a Planning Board review of a new building's exterior site plan) will be required to identify every hazardous material that will be used or stored on the premises, and will be required to describe the proposed source of water and the estimated volume of water use. Major land development projects (including residential subdivisions) that are going through the required multi-stage approval process will have to submit a preliminary hydrogeologic evaluation to determine how the proposed uses will affect water quality and the quantity of water in the aquifer.

Ch. 18.16, Use Regulations

Ch. 18.16 includes the use code table, which shows the uses that are permitted, prohibited, or allowed by special use permit in each zoning district and overlay zoning district. The proposed amendments to Ch. 18.16 include two new columns, one for each aquifer overlay sub-district. Some of the uses previously allowed are prohibited, and some of the uses previously prohibited are allowed or allowed by special use permit.

Ch. 18.26, Planned Development Resort District

This chapter of the zoning ordinance was created in 2016 for The Preserve at Boulder Hills, which as you know includes a number of commercial and recreational uses as well as residential uses. Because of the new aquifer overlay district boundaries, some uses that are now permitted would be prohibited, and some uses that are now prohibited would be permitted by special use permit. Existing uses and uses shown on an approved land development project final plan are vested, so the proposed ordinance amendments would not affect them. Proposed amendments to the definitions of "brewpub" and "helipad" are intended to safely allow those uses in the aquifer overlay district.

Ch. 18.12, Districts and Maps

This chapter describes each zoning district. The proposed amendments include a new definition of the aquifer protection overlay district, consistent with the text of proposed Ch. 18.21.

Ch. 18.37, Aquifer Protection Overlay District

This is the current ordinance. It would be repealed and replaced by Ch. 18.21.

Zoning Map

The zoning map shows the boundaries of all the zoning districts and overlay districts. The proposed amendments to the map show the new district boundaries and the two sub-districts.

Comprehensive Community Plan Consistency

Amendments to a zoning ordinance must be consistent with a community's comprehensive community plan. These proposed zoning ordinance amendments are consistent with the following

provisions of the Richmond Comprehensive Community Plan update, approved earlier this year, in the following ways:

Natural and Cultural Resources

Policy NCR 1: Limit the development of environmentally sensitive areas.

Action NCR 1: Determine appropriate uses for environmentally sensitive areas and develop land acquisition and management programs to protect them.

Policy NCR 3: Protect the quality of the Town's surface and groundwater resources.

Action NCR 4: Compare the location of the Aquifer Protection Overlay District with current GIS mapping to insure that all crucial areas are protected.

The proposed ordinance amendments update the boundaries of the aquifer protection overlay district to reflect the most recent DEM mapping, and place reasonable and appropriate restrictions on uses that are permitted, allowed by special use permit, or prohibited in the overlay district.

Economic Development

Policy ED 4: Optimize the supply and choice of land capable of supporting business and industries.

Action ED 7: Review current land development regulations and recommend amendments that will complement economic development goals.

The proposed amendments create two sub-districts with different levels of protection to promote economic growth by providing more flexibility in application of the restrictions that are necessary to protect potable water quality and quantity.

Public Services and Facilities

Policy PSF 1: Protect the quality of the Town's water and reduce water consumption

Action PSF 3: Amend land use ordinances and regulations to increase groundwater quality protection.

The proposed amendments ensure the long-term viability of the sole-source aquifer by establishing review and approval procedures that focus on protecting the quality and quantity of available potable water.

Recognition and consideration of the purposes of zoning ordinances

R.I. Gen. Laws § 45-24-30(a) requires that when adopting amendments to a zoning ordinance, a municipality must recognize and consider the general purposes of zoning ordinances. The proposed amendments consider the following applicable purposes of zoning ordinances:

1. They promote the public health, safety, and general welfare;
2. They provide for a range and intensity of uses that are appropriate to the character of Richmond and reflect its current and anticipated future needs.
3. They provide for orderly growth and development that recognizes the natural characteristics of the land, including its suitability for use based on susceptibility to surface and groundwater pollution;

the value of unique and valuable natural resources; and the availability and capacity of existing and planned public and private services and facilities.

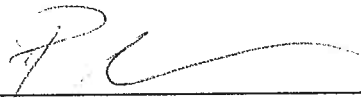
4. They provide for the control, protection, and abatement of groundwater pollution.
5. They provide for the protection of public investment in the town's water system.
6. They promote implementation of the comprehensive community plan.
7. They provide for coordination of land uses with the adjacent town of Hopkinton, with the state, and with other agencies.
8. They provide for efficient review of development proposals.

Recommendation

Based on the above findings, the Planning Board recommends that the Town Council repeal Ch. 18.37, enact Ch. 18.21, and enact the proposed amendments to Ch. 18.12, Ch. 18.16, Ch. 18.26, and the zoning map.

Voting:

Chair Phil Damicis: yes
Vice-Chair Nancy Hess: yes
Andrea Baranyk: yes
Dan Madnick: yes
Bryce Kelley: yes
Melissa Chalek: yes



Planning Board Chair

Dated: 12/13/22

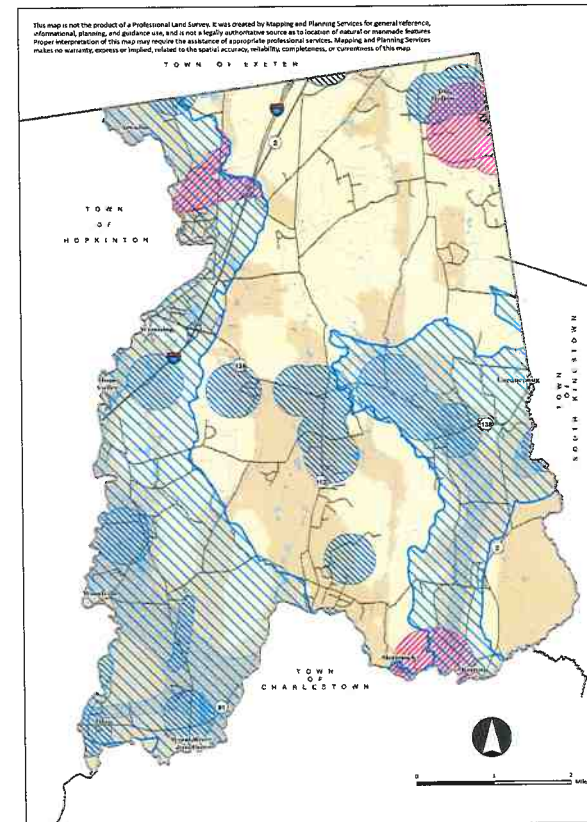
Attachments

1. Ch. 18.21, Aquifer Protection Overlay District, draft of September 28, 2022.
2. Ch. 18.16, Use Regulations, draft of September 28, 2022.
3. Ch. 18.12, District and Maps, draft of September 28, 2022.
4. Ch. 18.26, Planned Development Resort District, draft of September 17, 2022.
5. Ch. 18.37, Aquifer Protection Overlay District, draft of September 19, 2022.
6. Zoning Map revisions dated June, 2022.

Town of Richmond Update to Aquifer Protection Overlay District regulations

Presentation Overview:

- Summary of Richmond's Aquifer Protection Overlay District (APOD)
- Timeline of work performed in support of groundwater protection
- Summarize changes to updated regulations and related ordinances
- Feedback



RICHMOND COMPREHENSIVE COMMUNITY PLAN 2021

Map 3 - Geology and Groundwater



Data sources: Richmond GIS, RIGIS

Map 3/2023

1/17/2023



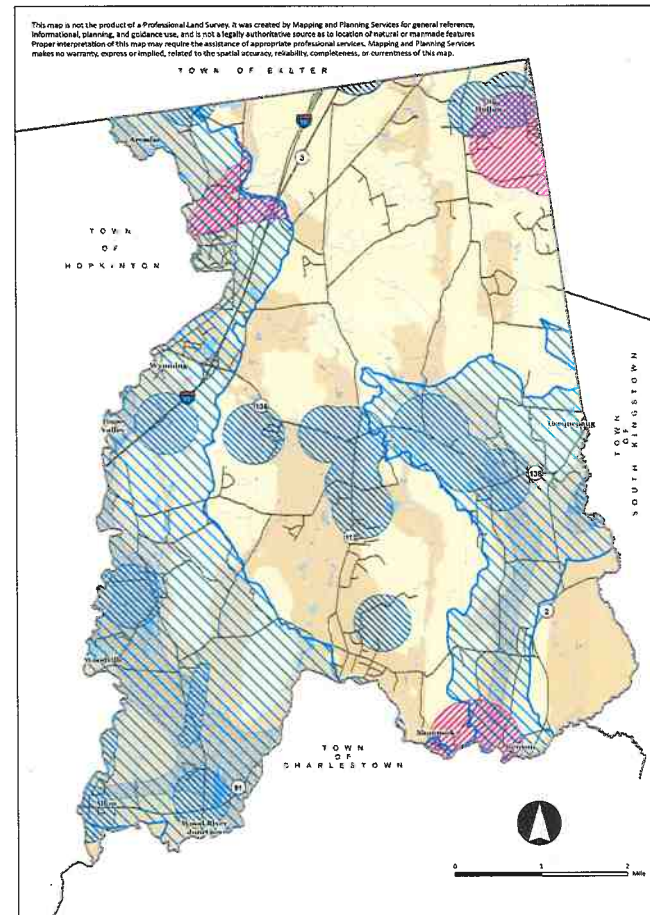
Aquifer Protection Overlay District Overview

- All of Richmond's drinking (potable) water comes from groundwater
- To protect the quality of its groundwater, Aquifer Protection Overlay District was adopted in 1994 with periodic updates in 2002 and 2014
- Purpose of the APOD is to promote the health, safety, and welfare to all residents by protecting the quality and quantity of its groundwater

Geology and Groundwater Map

Three primary groundwater categories

- Groundwater Reservoirs
- Groundwater Recharge Areas
- Wellhead Protection Areas
 - Community Wellhead
 - Non-Community Wellhead
- Each of these categories play a role in protecting groundwater from potential contaminants



RICHMOND COMPREHENSIVE COMMUNITY PLAN 2021

Map 3 - Geology and Groundwater



Data sources: Richmond GIS, RIGIS

MH 1/2021

1/17/2023



Threats to groundwater

Common contaminants and stresses in RI wells

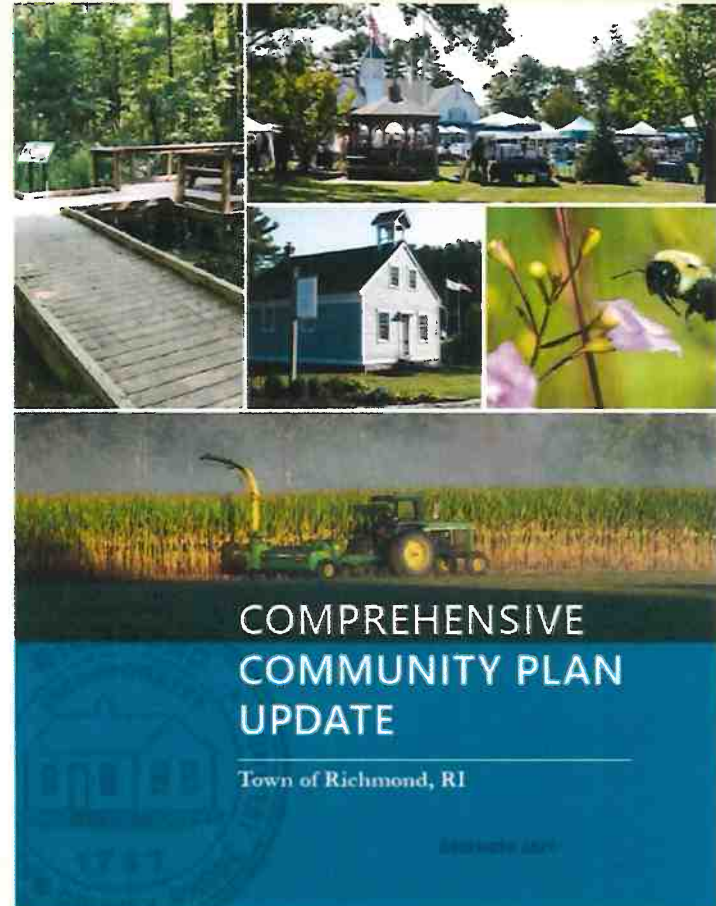
- Petroleum products
- Organic solvents -15 to 30% of wells report VOC detects.
- Road salt
- Nitrate
- Pesticides
- Loss of recharge

Sources

- Leaking underground fuel tanks -leading cause of new contamination.
- Hazardous and industrial waste disposal sites.
- Spills & improper waste disposal.
- Septic systems.
- Fertilizer and pesticide application.
- Increased runoff and water withdrawals

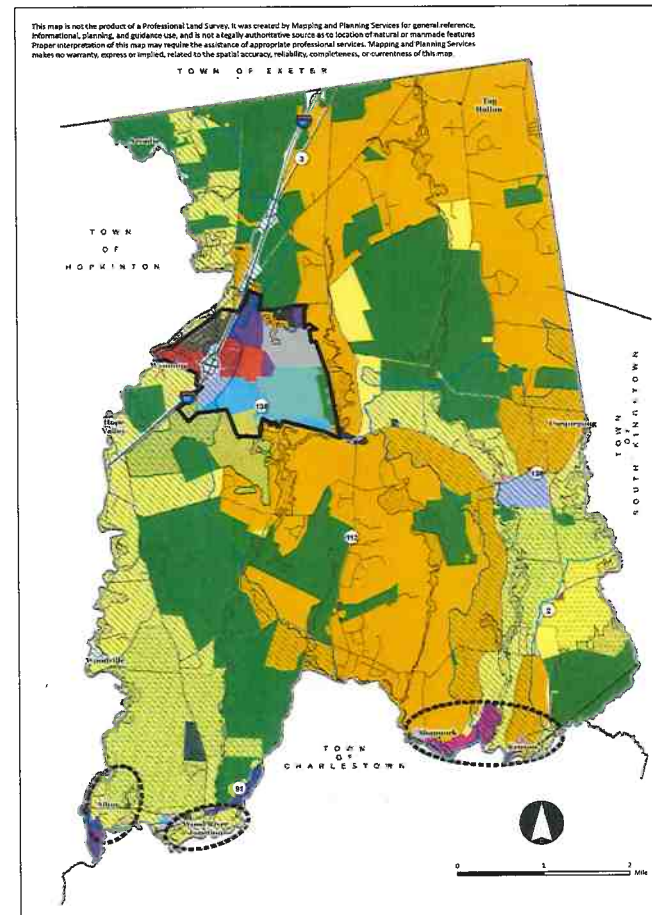
Timeline of APOD changes

- Original APOD ordinance adopted in 1994, with minor amendments made in 2002 and 2014
- Town adopts its Comprehensive Community Plan on Feb. 15, 2022 (certified by State on Apr. 14, 2022)
 - Common themes repeated in CPP include protection & monitoring of natural resources (including groundwater), economic development, and responsible land use policy
 - Themes and goals within CCP are not mutually exclusive
- Planning Board and staff begins implementing actions within the CCP by reviewing the Zoning Ordinance



Updates to APOD Summarized

- Broader range of uses permitted within the Wyoming/Route 138 Infill & Growth Area
 - Examples include housing, retail, restaurants, education, medical, trades, warehousing, hospitality
- Uses within Alton, Wood River Junction, Shannock and Kenyon remain mostly intact
- Uses that create higher risks to groundwater contamination are prohibited within APOD overlay
- Regulations prescribe standards and a process for permitting new activities within APOD



RICHMONT COMPREHENSIVE COMMUNITY PLAN 2021

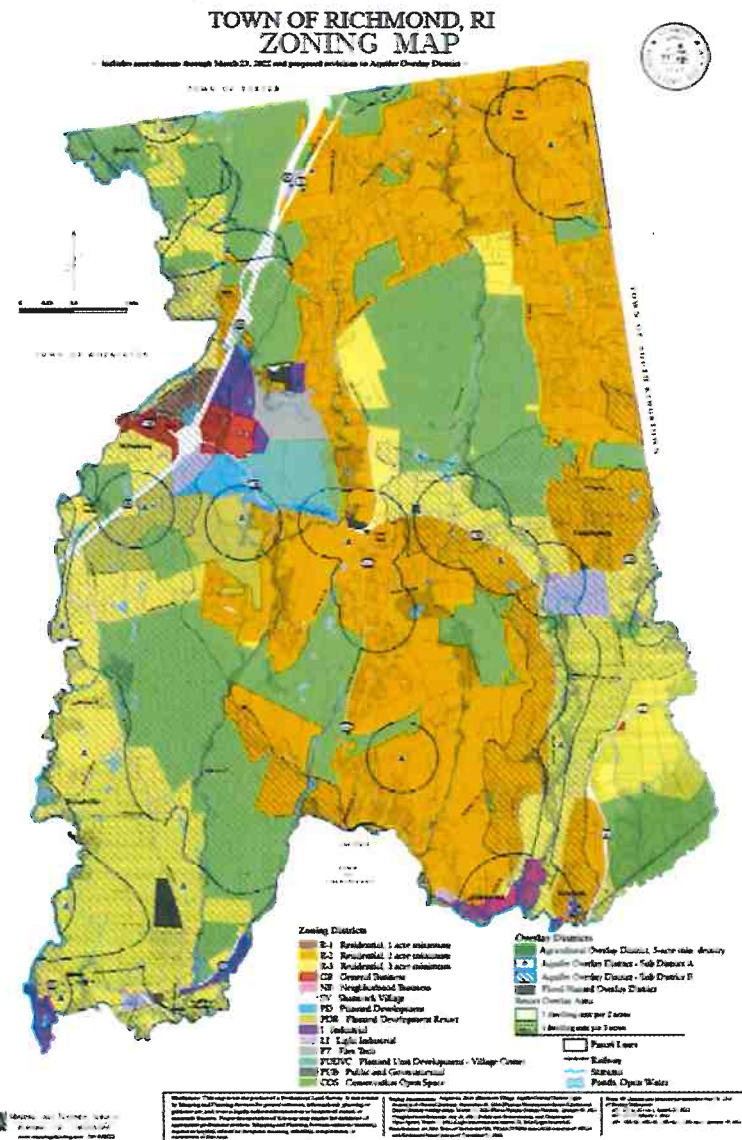
Map 13 - Future Land Use Plan



1/17/2023

Impacts to Zoning Ordinance and Zoning Map

- Current Chapter 18.37, Aquifer Protection Overlay District repealed
- New Chapter 18.21, Aquifer Protection Overlay District created
- Amendments to Chapter 18.12, District and Maps
- Amendments to Chapter 18.16, Use Regulations
- Amendments to Chapter 18.26, Planned Development Resort District
- Amendments to Zoning Map



1/17/2023



Recommendation and Next Steps

- Town Council and Planning Board review and discuss updated regulations tonight
- Authorize staff to advertise for future public hearing
- Conduct the public hearing at future Town Council meeting (date to be determined)
- Following the public hearing, adopt the updated regulations and Zoning Map

Uses in the aquifer overlay protection district that are currently prohibited
but would be permitted or allowed by special use permit with the proposed amendments

Uses currently prohibited (not including those prohibited in all districts)	Permitted by proposed amendments	
	A - Aquifer, wellheads	B - Recharge areas
104 Multi-family building(s): 3-4 dwelling units	yes	yes
105 Multi-family building(s): 5 -12 dwelling units	yes	yes
106 Multi-family building(s):13-28 dwelling units	yes	yes
224 Keeping, breeding swine	no	no
240 Indoor commercial aquaculture or fish hatchery	special use permit	special use permit
420 Recreational campground	no	special use permit
462 Stadium, arena, or other outdoor privately-owned public gathering place	no	no
464 Race track for motorized vehicles	no	no
502 Power generation	no	special use permit
532 Transportation terminal	no	special use permit
534 Airport, helipad	no	no
536 Towing with vehicle storage	no	special use permit
540 Vehicle leasing with outdoor vehicle storage	special use permit	special use permit
558 Septic pumping business with vehicle storage	no	special use permit
560 Wood waste product composting	no	no
562 Junkyard	no	no
604 Fuel sales and delivery	no	no
622 Vehicle repair, auto body shop	no	no
624 Vehicle service station with convenience store	no	no

Uses currently prohibited	Permitted by proposed amendments	
	A - Aquifer, wellheads	B - Recharge areas
626 Vehicle service station with body or automotive repair shop	no	no
628 Car wash	no	special use permit
642 Warehouse sales with indoor storage only	special use permit	yes
644 Warehouse sales with outdoor storage	no	special use permit
802 Supermarket	no	special use permit
817 General retailer in a building 20,000 sq. ft. or more gross floor area	no	special use permit
820 Package store	yes	yes
832 Farm, gardening, or landscaping supplies, including plants, seed, mulch, stone	no	special use permit
834 Lumber, construction materials	no	no
842 Vehicle sales, service	no	no
854 Artisan studio	special use permit	special use permit
863 Microbrewery	no	no
870 Retail uses not otherwise classified	no	special use permit
902 Food, beverage manufacturing, processing	no	no
906 Brewery	no	no
910 Millwork, wood products, furniture manufacturing	no	no
912 Sawmill	no	no
914 Commercial printing, manufacture of paper products	no	no
918 Textile manufacturing, processing	no	no
920 Metals fabrication, machinery manufacturing	no	no
930 Pharmaceutical, chemical product manufacturing	no	no
932 Glass manufacturing or processing	no	no

Uses currently prohibited	Permitted by proposed amendments	
	A - Aquifer, wellheads	B - Recharge areas
934 Rubber, plastic, petroleum products manufacturing	no	no
938 Electronics, scientific equipment manufacturing	no	no
952 Producing, processing mulch, compost, potting soil, soil amendments	no	no
954 Concrete manufacturing	no	no
958 Manufacturing or processing not otherwise classified	no	no
962 Warehousing, general storage	no	special use permit
972 Gravel, earth removal	no	no
976 Processing of extractive materials	no	no
Uses currently allowed by special use permit		
602 Construction trades contractor	special use permit	special use permit
732 Hotel, motel	special use permit	special use permit
740 Repair services	special use permit	permitted
754 Dog boarding or breeding kennel	special use permit	permitted
756 Pet cemetery	no	no
762 Laundry, laundromat	no	no
765 Dry cleaner, on-site cleaning facility	no	no
772 Self storage facility	no	special use permit
774 Equipment rental with on-site outdoor storage	no	special use permit
776 Funeral home, mortuary	no	no
904 Winery	no	special use permit
905 Winery at a vineyard	special use permit	special use permit