



Avon has significant natural resources which are worthy of protection for many important reasons, as they:

- Contribute to the quality of life of Avon residents who may enjoy the recreational benefits that these protected natural assets offer;
- Positively affect human health;
- Provide environments that are essential to the survival of certain plant and animal communities;
- Protect public drinking water supplies, critical to all residents. (The source of all public and private water supplies in Avon are from groundwater wells); and
- Maintain scenic vistas which help define community character and connections to the Town's rural past.

As Avon has developed, many valuable natural resources have been protected and many acres of open space have been preserved (see Chapter 5, Open Space and Recreation). However, as the amount of vacant land is reduced, there are additional pressures to develop more difficult parcels, many of which contain resources that are worthy of protection.

Over the past 50 years there have been many regulations adopted to better protect natural resources at the Federal, State, and local level. There are many areas where the State of CT has passed legislation and assigned regulatory responsibilities to individual towns. Avon has done a commendable job in complying with each of these mandates. In some instances the Town has taken the initiative to adopt added measures, which provide even greater levels of protection; as discussed later in this Chapter. Living in a sustainable manner means utilizing these resources in a responsible manner and protecting them such that they may also be available, in as close to their natural state as possible, for future generations as well.

Since the adoption of the first Plan of Conservation and Development in 1956, there have been several very significant local ordinances adopted to protect natural resources. It is important to note that these ordinances were both innovative and controversial at the time of passage; innovative because they offered protection to valuable resources and controversial because they place restrictions on the development of private property. Although these rules are still not free from controversy even today, they have, generally, become an accepted part of the Town's regulatory framework and offer levels of environmental protection and elements of public safety that residents and business owners now depend on.



Table 4-1 presents a list of Town Regulations aimed at protecting natural resources, a summary of each, and their date of adoption.

ORDINANCE	SUMMARY	YEAR ADOPTED
Floodplain Regulations	Greatly restricts filling of and construction in flood-prone areas	1955
Storm Water Management including Erosion Control	Requirements for detailed site grading plans including stormwater management that meets specific design criteria	1957
Wetlands and Watercourses	Restricts the filling of wetland soils and places limits on grading and construction within 100 feet of a wetland or watercourse	1974 Amended through 2007
Ridgeline Protection	Restricts grading and construction on certain portions of Avon Mountain and Pond Ledge to protect these traprock ridges	2001
Aquifer Protection	Prohibits certain uses that have the potential to contaminate major groundwater aquifers used for public drinking water supply.	2006
Illicit Stormwater Discharge Ordinance	Establishes fines for illegally connecting to, or discharging into, the municipal stormwater system	2013

Table 4-1 Town Regulations Relating to Natural Resource Protection

The following is a more detailed discussion of these Regulations and recommendations for future policy and change.

1. Floodplain Regulations

Floodplain Regulations were first adopted following the historic flood of 1955 and have been amended several times. They establish a comprehensive program, which greatly restricts construction and/or the filling of land in flood prone areas. As required, these rules are in strict compliance with standards set by the Federal Emergency Management Agency (FEMA). This program also permits private owners in flood-prone areas to purchase insurance through FEMA’s Flood Insurance Program.

In fact, Avon’s Regulations are more restrictive in one significant area. Flood-prone areas are defined in terms of the statistical risk that an area may be subject to flooding in any given year. An area within the 100-year floodplain has the statistical probability of 1 in 100 of being flooded in any given year. Similarly, an area within the 500-year floodplain has a probability of 1 in 500 of being flooded in any given year. FEMA Regulations mandate that the first floor elevation of any residence be at or above the 100-year floodplain elevation. Avon’s Regulations are more restrictive and require that the first floor be above the 500-year floodplain elevation.



Fortunately, there are only a modest number of homes in Avon that are located in flood-prone areas, and no new homes with living space below the 500-year floodplain have been permitted since the historical flood of 1955. According to official FEMA mapping, there are currently 136 homes located within the 100-year floodplain. However, some of these homes may not actually be in the floodplain. In 2008 FEMA provided to the Town digital mapping which defines the 100-year and 500-year floodplains. This mapping is used as the basis to determine whether flood insurance will be required as part of home mortgage financing. However, the data used to prepare these maps is not based on actual field study in some locations. This has resulted in some inaccuracies which depict certain structures within the 100-year flood zone (making flood insurance mandatory) when a more detailed evaluation sometimes proves otherwise. In order to amend this official map, a private homeowner must petition FEMA through a process known as a Letter of Map Amendment (LOMA). A homeowner must hire a private engineer or surveyor to conduct a study to petition for this change. The Town Engineering Department has also helped to facilitate this process in many instances. **Exhibit 4-1** shows a portion of a FEMA Flood Map.

It is recommended that the Town engage the services of a consultant to prepare more detailed flood studies for selected “non-studied” areas and to acquire higher quality, certified elevation (contour) data. The Town could then petition FEMA to modify official mapping to more accurately reflect real world conditions.

Avon’s more restrictive rules requiring the first habitable floor elevation to be above the 500-year floodplain should remain in place and be strictly enforced, as they offer an added measure of public safety. Finally, current Zoning Regulations permit modest activities to be conducted within the floodplain often requiring compensation by removing material elsewhere within the same general area. These activities should be kept to a minimum and impacts reviewed in detail so as to not adversely affect downstream properties.

2. Wetlands and Watercourses

Wetlands and watercourses have been a protected/regulated resource in Avon since 1974. A comprehensive set of Regulations consistent with State law is administered and enforced through the Inland Wetlands and Watercourses Commission. In accordance with State law, wetlands are defined by soil type.

In 2006 the State Department of Energy and Environmental Protection (DEEP) published the fourth edition of a model set of regulations. These were used as a guide to draft Avon’s current Regulations adopted in 2007. A change was incorporated increasing the regulated buffer area adjacent to all wetlands and watercourses from 40 and 80 feet, respectively, to 100 feet.

Any construction, grading, or filling within 100 feet of any mapped wetland or watercourse is regulated by the Commission and requires the submission of an application for review. Filling of wetlands is strongly discouraged. In order to be approved, proposed work within the buffer area must demonstrate that there will be little to no adverse impact to the wetland.



There are a total of 2,519 acres of mapped wetlands in Avon, or about 17% of the Town. Over the past 10 years the Inland Wetlands and Watercourses Commission has reviewed 122 applications; less than 4 acres of wetlands have been permitted for filling. The Commission also concurred with 13 staff approvals authorized by the appointed wetlands agent involving more modest activities.

Wetlands offer significant value in both maintaining and improving water quality. The State Department of Energy and Environmental Protection, as well as the U.S. Army Corps of Engineers, list 13 important functional values of wetlands as follows:

1. Groundwater recharge/discharge
2. Floodwater storage
3. Fish habitat
4. Sediment retention
5. Nutrient removal/retention/transformation
6. Production export
7. Sediment and shoreline stabilization
8. Wetland wildlife habitat
9. Recreation
10. Educational/scientific value
11. Uniqueness
12. Visual/aesthetic quality
13. Threatened and endangered species habitat

Map 4-1 depicts all wetlands and watercourses in Avon. Initially (1974) wetlands were mapped using generalized soil data supplied by the US Department of Agriculture (USDA). Most applications which are submitted to the Inland Wetlands and Watercourses Agency for review require more accurate mapping of wetland soils by utilizing the services of a licensed soil scientist and licensed surveyor. About 25% of the mapped wetland areas have been accurately defined through this process over the past 40 years. Map 4-1 also depicts these delineated wetlands, as well as water bodies and water courses, intermittent streams, floodplain and alluvial soils. **Table 4-2** summarizes the number of acres of wetlands in each of these categories.

Field delineated wetlands	240 acres
Wetlands as mapped by USDA	928 acres
Water bodies	346 acres
Floodplain and alluvial soils (regulated as wetlands)	1,002 acres
Filled wetlands (> 2006)	4 acres
TOTAL	2,520 ACRES

Table 4-2 Summary of Mapped Wetlands

The final decision of the Inland Wetlands and Watercourses Commission to approve or disapprove an application to conduct “regulated” activities is a function of analyzing the value of the wetland resource (some wetlands are much more environmentally valuable than others) and then evaluating projected adverse impacts that the proposed regulated activities may have on the wetland.



The Commission may find it useful to conduct a study and analyze wetlands associated with remaining vacant, privately-owned land parcels with development potential, that contain significant wetland resources. The relative value of these wetlands could be established using the aforementioned 13 functional values. This information may be an additional aid to the Commission by establishing a wetland “value”, which can be compared to other wetland resources in Avon. In addition, the development of a searchable database for past wetland applications, mapping, and related information would be useful to both the Commission and applicants.

The Town should consider discussing with the Wetlands Commission the possibility (pros and cons) of adopting a “no net loss” regulation. Although this has generally been the policy of the Inland Wetlands Commission, adopting such a standard by regulation makes it clear that an equal or greater amount of wetland creation will be required to offset wetland impacts.

Finally, the adoption of Low Impact Development Regulations (LID), as a means to manage stormwater will greatly benefit wetlands by more closely matching natural conditions. This is discussed in greater detail later in this Chapter.

3. Ridgeline Protection

In 1995, the State of Connecticut passed regulations which identified important traprock/ridgetop areas within the State and granted municipal governments the option of adopting zoning regulations to protect these resources at the local level. Avon adopted Ridgeline Protection Overlay Zone Regulations in 2000. Areas along the ridgeline on both Avon Mountain as well as Pond Ledge have been established as an overlay zone. Any “regulated activities” proposed within 150 feet of the uphill side of the mapped areas or within 75 feet of the downhill side of the ridge may only be approved through a special permit application process. Regulated activities include clear cutting an area over 200 square feet, building a structure within the regulated area, or altering the natural topography within this area. **Map 4-2** depicts the Ridgeline Protection Overlay Zone.

During their review of various applications to conduct regulated work, the Planning and Zoning Commission is often challenged by requests from applicants to open up views to the Valley below (believing such activity will increase the monetary value of the lot) with the stated objective of protecting this resource. This often results in conflict with the goals established in State law, which is to preserve the ridge because of its unique trap rock geology and the special plant and animal communities which it supports. Consideration should be given to establishing an evaluation checklist which might assist the Commission in evaluating and ranking the quality of the resource and the predicted impacts from proposed activities. After a large enough data set is created, the Commission may then compare a proposal to conduct regulated activities with past applications reviewed by the Commission (both approved and denied). The Commission may also consider an amendment to the Ridgeline Protection Overlay Zone Regulations referencing these evaluation criteria.

There have been many new homes constructed since the adoption of the last Plan (2006) in close proximity to commercial broadcast facilities located on Deercliff Road and Montevideo Road. These homes, as well as a substantial number of existing homes, have resulted in an incompatible dynamic. Residents have voiced substantial concern over perceived harmful effects of electromagnetic radiation on human health as well as the incompatibility of commercial uses in an otherwise residential area.



Zoning Regulations currently do not permit the establishment of new broadcast facilities for this reason; however, certain “modifications” are permitted. The Commission should consider amending these Regulations to better define what types of modifications are permitted. The Regulations should also be amended to address needs in the communications industry that exist today, as well as what changes in technology are predicted for the future. Regulations must be responsive to the needs of these commercial facilities such that they can remain current with requirements of Federal and State Regulations, and meet consumer demands, while at the same time addressing concerns of nearby residential property owners.

In 2009 the Commission adopted rules relating to the construction of small wind energy systems (wind turbines). These rules require special permit approval by the Commission and adherence to a strict set of guidelines aimed at minimizing adverse impacts of adjoining properties. To date, one wind turbine has been approved, located at 40 Gibraltar Lane. All areas of higher elevation in Avon are located in established residential zones. Commercial wind farms are not permitted by Avon Zoning Regulations. The Connecticut Siting Council has jurisdiction over certain large (greater than one megawatt) commercial facilities. The Commission has determined that such facilities are clearly not appropriate in residential areas. The Town may wish to consider initiating a dialogue, with adjoining towns and/or the Capitol Region Council of Governments seeking to improve upon Connecticut Siting Council Regulations giving better protection from possible adverse impacts resulting from the conflict of commercial broadcast and energy production facilities and single-family residences.

4. Stormwater Management and Erosion Control

As development applications are received, all proposed stormwater management systems are evaluated with regard to their effect on the Town’s drainage system. A zero-rate increase policy is maintained by requiring new developments to detain stormwater on site and slowly meter it out. This policy prevents adverse impacts to the Town’s stormwater infrastructure. It may be advisable to consider a possible amendment to the Zoning Regulations, which would require developers to also make an equitable contribution to downstream improvements if any increase is proposed.

Many different activities and land-use patterns can create non-point source (NPS) pollution. Commonly, NPS pollutants are carried by rain and snowmelt that run into lakes, streams, and other water bodies. Stormwater runoff can carry soil, fertilizers, pesticides, oil, and other car fluids, trash, and other materials that affect water quality. Runoff increases when natural vegetation, which captures and uses much of the rainwater, is removed. Non-point source pollution has been identified by the State of Connecticut’s Department of Energy and Environmental Protection (DEEP) and the U.S. Environmental Protection Agency (EPA) as one of the major contributions to water quality problems. The best way to reduce NPS pollution is to reduce the amount of impervious, non-absorbent, and minimally absorbent ground cover. Chapter 8 discusses the possibility of modifying the Zoning Regulations to reduce parking requirements in certain instances. Where necessary, Best Management Practices (BMP) should be implemented to mitigate the potential for contamination of surface or groundwater. Further, the Town should also work closely with the State Department of Transportation (DOT) to incorporate appropriate BMP’s into any improvements undertaken along Route 44 or any State highway.



5. Municipal Storm Water

In 1999 the Federal government, through the Environmental Protection Agency (EPA), published rules relating to the treatment of stormwater from municipal storm drainage before it discharges into water bodies and wetlands. These rules require that all municipalities take steps to treat stormwater to reduce adverse impacts to rivers, streams, and wetlands. In Connecticut, the EPA has assigned the responsibility of permitting to the State DEEP. The Town currently operates with a general permit effective until July 1, 2017

The Town utilizes the services of a private consultant to ensure compliance with these regulations. The following is a partial list of measures which have been undertaken by the Town in this regard:

- Adoption of an illicit discharge ordinance which establishes fines for illegally connecting to, or discharge into, the Municipal Storm Drainage System (2013).
- Conducting household hazardous waste collection days.
- Cleaning of all catch basins yearly (approximately 3,000) to remove sediments
- More frequent sweeping of Town roads and public parking lots to reduce the amount of sand draining into wetlands.
- A training program to reduce stormwater pollution from park and open space maintenance (including application of pesticides and fertilizer), fleet and building maintenance, and land disturbance.

6. Site Grading and Erosion Control

In accordance with State law, the Planning and Zoning Commission is charged with the responsibility to adopt rules aimed at controlling soil erosion during construction. A comprehensive set of regulations currently exist. Much of the remaining land which is currently undeveloped and in private ownership has steep slopes, which can require a substantial amount of regrading. This sets the stage for soil erosion if not properly controlled. As a means to better control erosion during construction, the Commission should consider regulatory changes which may include some or all of the following additional measures in connection with the review of subdivision applications:

- Require that certain lots be graded at the time of road construction.
- Require that the site feasibility plan presented at the time of subdivision approval be controlling.
- Require that the building lots be rough graded and stabilized prior to the issuance of a building permit.
- Require the preparation of an as-built survey map demonstrating compliance with approved site feasibility plan.
- Require the posting of a cash bond for each building lot.
- Require the preparation of a full graded “as built” site grading plan prior to the issuance of a Certificate of Occupancy (CO) to demonstrate compliance with the approved site grading plan. Require this plan for all new house construction as well as significant changes to existing single-family homes.
- Restrict the maximum change permitted to current topography in reviewing site grading plans for residential subdivisions including road construction and grading for individual lots.

7. Low Impact Development (LID)

Low Impact Development (LID) is an innovative stormwater management approach with a basic principle that is modeled after nature; managing rainfall at the source using uniformly distributed decentralized controls. LID's goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source. Techniques are based on the premise that stormwater management should not be seen as storm water disposal. Instead of conveying and managing/treating stormwater in large, costly end-of-pipe facilities located at the bottom of drainage areas, LID addresses stormwater through small, cost-effective landscape features located at the lot level. Many components of the urban environment have the potential to assist in LID. This includes not only open space but also rooftops, streetscapes, parking lots, sidewalks, and medians. LID is a versatile approach that can be applied equally well to new developments and redevelopment/revitalization projects. LID techniques include measures such as rain gardens, green roofs, permeable pavers, tree boxes, and bio retention.

LID has numerous benefits and advantages over conventional stormwater management (catch basins and pipes). In certain instances, managing stormwater by utilizing LID techniques can result in improved protection of natural resources at a lower cost. LID techniques may also be used to meet State and Federal mandates relating to stormwater management.

Although there are often added costs associated with landscape materials, studies have shown savings compared to conventional approaches due to reduced infrastructure and site work, including reductions in clearing, grading, pipes, ponds, inlets, curbs, and paving. In the case of private development, such as commercial parking lots and roadway infrastructure associated with residential condominiums, maintenance responsibilities should be assigned to these private owners or associations. **Exhibits 4-2, 4-3, and 4-4** illustrate three LID techniques including a rain garden; porous concrete pavers as an alternative to bituminous pavement; and the use of a vegetated swale adjacent to a commercial parking lot.

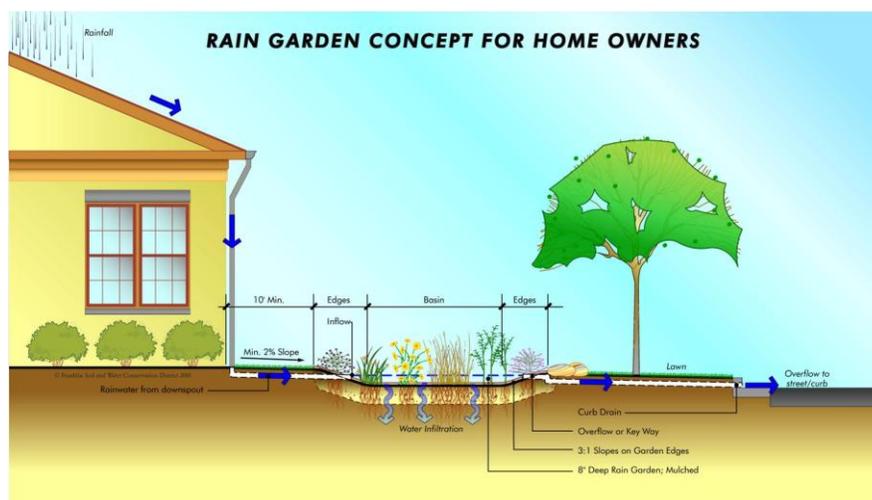


Exhibit 4-2 Sketch of a Rain Garden



Exhibit 4-3 Detail for Porous Concrete Pavers



Exhibit 4-4 Vegetated Swale Adjacent to a Commercial Parking Lot

A study, funded through a grant from the State DEEP, was conducted in 2011 for the Planning and Zoning Commission by Milone and McBroom, Inc. Recommendations were made to incorporate changes to both the Subdivision and Zoning Regulations to implement the principles of LID. In addition, the study suggested the incorporation of LID mandates in the Avon Village Center Zone Regulations. These were adopted in July 2011. Developing a mixed use compact development in the Village Center will, in fact, result in added runoff. Utilizing LID management techniques can, in fact, achieve a positive environmental outcome.



In 2012 a 5-lot subdivision known as “Hidden Oaks” was approved by the Commission utilizing LID drainage techniques. The project included the construction of a new public road, 685 feet in length. It was designed as a curbless road with a road swale used for infiltration and only 3 catch basins with storm drainage outlets to a level spreader adjacent to wetlands. The effectiveness of this approach is being monitored by the Town.



Hidden Oaks Subdivision



The Commission endorses LID as a means to better protect water quality and reduce adverse effects from flooding. The following changes should be considered by the Commission for incorporation into Zoning and Subdivision Regulations.

Possible LID Amendments to Subdivision Regulations

- Site grading
 - a. require that site grading keep lot and fill areas to a minimum. Consider restriction on depth of cut to less than 10 feet from natural grade unless an alternative design is acceptable to the Commission (would require a finding by the Commission that the overall result would be superior).
- Stockpiling and storage areas
 - a. soil under stockpile areas to be returned to pre-development permeability levels through soil restoration and soil amendments.
- Amend design standards
 - a. require a planted island at center of cul-de-sac. Island to be depressed to include bio-retention features. Maintenance of island to be assigned to homeowners association or one (1) or more adjoining lots.
 - b. curbs to be used where slope of roadway exceeds 6%. Where roadway slope is 3% or less and where the Right-of-Way (ROW) is sufficient to support natural stormwater drainage elements, Commission may require curb breaks.
 - c. consider curbless sections of roadway where appropriate along with curbless catch basins.
- Drainage Design
 - a. encourage Low Impact Development (LID) design strategies as a primary means of stormwater management.
 - b. use of roadside swales with a minimum depth of 18" and a maximum side slope of 3:1.
- Volume Control Design Criteria
 - a. the post-development total runoff volume should be equal to 90 to 110% of the pre-development total runoff volume (based on 2-year, 10-year, 25-year, and 50-year, 24-hour storms).
- Operations and Maintenance Plan
 - a. Require a detailed plan to include:
 - maintenance schedules
 - identify responsible parties
 - as-built plans for completed structures
 - post construction documentation which demonstrates compliance with required maintenance activities



Possible LID Amendments to Zoning Regulations

Residential Zones

- Residential driveways - require pervious pavement for portions of paved driveways that are over 12 feet in width.
- Buildable Square – In an effort to create lots with a relatively uniform shape, require that within the R40 and RU2A zones individual lots contain a contiguous developable land area of at least 10,000 square feet within which a square with dimensions of 90 feet by 90 feet can be situated. Also require that at least 75% of the house footprint then be located within this area.

Commercial and Industrial Zones

- Lot Coverage Bonus of Addition 10%
Authorize the Commission to permit a lot coverage bonus of an additional 10% if one of two criteria is satisfied:
 1. At least 50% of all paved surfaces (parking and driveways) utilize pervious paving. Develop enforcement mechanisms to ensure that this area is maintained properly and not repaved using conventional pavement.
 2. Encourage construction of a “disconnected impervious area” of substantial size which is separated from other impervious areas utilizing Low Impact Development Best Management Practices, such as swales, filter strips, or other vegetated buffers.
- Parking Lot Design
 - a. Require that landscaped end islands be depressed and contain bio-retention features consistent with the Connecticut Stormwater Quality Manual.
 - b. Require a maintenance plan that identifies planned maintenance methods and responsible parties for insuring proper upkeep of landscaping and LID BMPs.
 - c. Specify clear standards to ensure proper installation of base material.
- Parking Space Requirements
 - a. Reduce required rate of parking for retail, office, and medical office uses to better reflect parking demand as a means to reduce impervious surfaces.
- Parking Lot Surface Treatment
 - a. Authorize and encourage alternative pavement materials including porous asphalt, porous concrete, plastic and concrete grid systems, and block pavers.
- Structured Parking Incentive
 - a. Authorize the Commission to grant a building coverage bonus of up to 20% if structured parking (garage) is provided to satisfy at least 50% of required parking or provides at least 250 parking stalls.



8. Forestry Management/Town Open Space

The Town has an active Forestry Management Program for 5 major Town-owned open space assets. These include Alsop Meadows, Fisher Meadows, Found Land, Huckleberry Hill, and Hazen Park. These areas are depicted on **Map 4-3**. These areas comprise 722 acres with the largest area being Huckleberry Hill at 282 acres.

Utilizing the services of a licensed forester, the forest in each of these areas has been inventoried and a plan developed for selected timber harvesting. Strategically selecting a limited number of trees for removal actually adds a substantial benefit to the health of the remaining trees, as each competes for water, nutrients, and light. To date the Town has awarded a contract, on 4 occasions, to private logging companies to selectively cut trees in accordance with these plans.

The following is a summary of when and where timber harvests have been completed.

Huckleberry Hill - 1999, 2003
Found Land - 2002, 2006

Revenue generated from the sale of timber to private logging companies has been used for various improvements within these parks. This policy should be continued.

As discussed more in Chapter 5, there are more than 28 miles of hiking trails in the Town open space system. These trails require periodic maintenance and capital improvements to bridges, culverts, parking areas, information kiosks, etc. This forestry management plan may be used as a starting point to develop a plan for each of these parks to help define routine maintenance needs and more significant capital projects. The Commission recognizes that funding these needs can present a challenge. The Commission recommends, in addition to funds derived from timber sales, that a portion of the assets in the Town's fee-in-lieu of open space account (currently estimated at \$600,000) be used for priority capital projects, which are related necessarily to open space.

9. Aquifer Protection

The vast majority of residences and businesses in Avon depend on groundwater for their drinking water. About 77% of homes in Avon are supplied with drinking water from one of two private utility companies. The Avon Water Company supplies 4,859 homes, utilizing 10 public supply wells. The Connecticut Water Company supplies water to 1,056 homes utilizing 4 wells located outside of Avon, as well as the Nepaug Reservoir owned by the Metropolitan District Commission. All other homes are provided with water from private, individual supply wells.

Recognizing the need to protect groundwater aquifers from potential sources of contamination to public water supply wells, the State legislature passed rules in 2004 assigning responsibilities to private water utilities to model and map aquifers which directly contribute to all public supply wells. The State published model regulations and assigned regulatory authority to the Town; mapping was completed in 2008. In Avon the Planning and Zoning Commission has been given this responsibility and adopted Regulations in 2009, consistent with the State's model. An aquifer protection overlay zone was created and is shown on the official Zoning Map.



Map 4-4 depicts major aquifer areas in Avon which are subject to these Town Regulations.

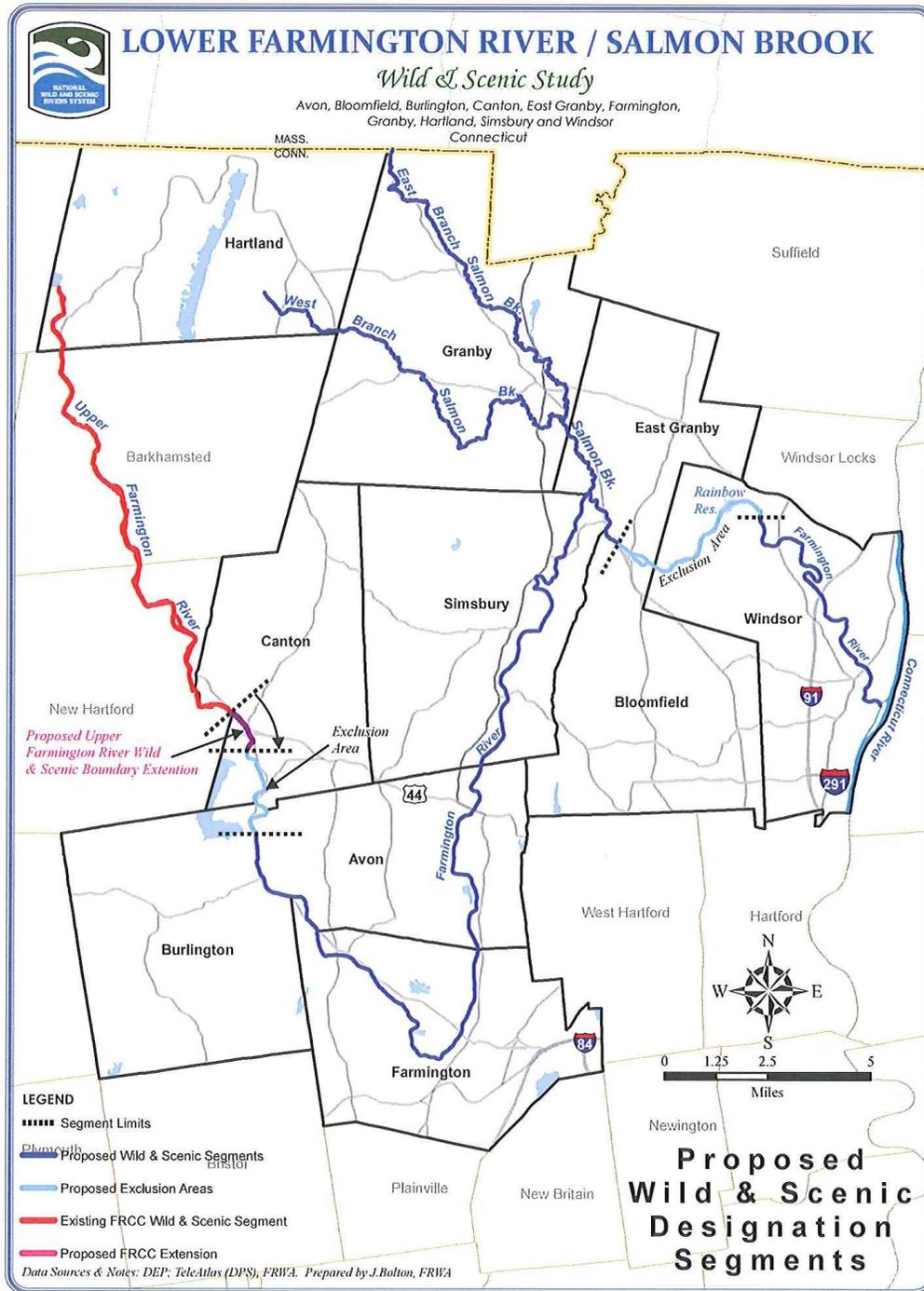
Under these Regulations certain activities which have the potential to contaminate these aquifers are prohibited. Some examples of prohibited uses include commercial petroleum storage; commercial car and truck washing; furniture stripping; pest control services; and storage of large amounts of de-icing chemicals. Fortunately, there are no such established facilities within these defined areas that would otherwise have been prohibited.

The State Department of Energy and Environmental Protection lists 71 potentially contaminated sites in Avon. Most of these sites have been remediated. There are 5 sites which are still in the process of being remediated. None of these sites are within a mapped aquifer associated with a public supply well. For more detail on these sites please refer to the State Department of Environmental Protection's webpage at www.ct.gov/deep

Although not mandated by State law, it is recommended that Avon Zoning Regulations be amended to require that Best Management Practices also be followed, as outlined in Section 12 of the Aquifer Protection Regulations, for all new commercial and industrial uses even when located outside the aquifer protection overlay zone. This will provide an added level of protection for all groundwater resources.

10. Wild and Scenic Designation

In 2004 Avon, along with the Towns of Bloomfield, Burlington, Canton, East Granby, Farmington, Granby, Hartland, Simsbury, and Windsor, supported the Farmington River Watershed Association in their efforts to have portions of the Farmington River designated as "wild and scenic" under a program administered by the National Park Service. This includes all portions of the River as it travels through Avon. A bill was passed in both the Senate and House of Representatives in 2005 and 2006 to conduct a feasibility study, which is currently underway. If approved, the designation will provide added protections to the River if Federal funding is sought to advance a project with negative consequences to the River. The designation will also provide annual funding to be used for River conservation efforts. The Commission continues to support this designation. **Map 4-5** depicts those portions of the River that are proposed to be included in the wild and scenic designation.



Map 4-5 Proposed Boundaries Wild and Scenic River Designation



Goal and Policies

Goal: Avon's natural resources are of tremendous value as they help define community character; provide recreational resources for residents to enjoy; positively influence human health; provide environments necessary to the survival of certain animal and plant populations; and must be protected for future generations.

Policies:

1. Floodplain Regulations

Maintain current rules requiring that all living space be located above the 500-year floodplain. Strictly enforce rules limiting fill within the 100-year and 500-year floodplain. Consider conducting a detailed flood study for certain non-studied areas to more accurately define the limits of the 100-year floodplain. Work with FEMA to prepare revised flood maps for these areas.

2. Wetlands and Watercourses

Develop a searchable database for wetlands applications, mapping, and related information. Consider adopting regulations requiring "no net loss".

3. Ridgeline Protection

Consider amending Zoning Regulations to clarify what types of "modifications" are permitted to existing communication towers and associated facilities. Consider developing a methodology for ranking the value of ridgetop resources and the impact of proposed regulated activities, as an aid to the Commission when reviewing applications.

4. Storm water Management and Erosion Control

Continue with all program elements to manage municipal storm drainage consistent with requirements of the Environmental Protection Agency.

5. Municipal Storm water

Continue with all program elements, as outlined in Town's general permits issued by the State DEEP.

6. Site Grading and Erosion Control

Consider changes to Subdivision Regulations requiring site grading procedures that will reduce erosion problems and guarantee compliance with approved site grading plans. Consider changes to both Zoning and Subdivision Regulations to implement Low Impact Development techniques. Consider amendment to Zoning Regulations to require that a developer to make an equitable contribution for downstream improvements in order to mitigate impacts from increased runoff.

7. Low Impact Development (LID)

Continue to monitor the effectiveness of the Hidden Oaks Subdivision which utilized LID techniques to manage storm water. Consider adopting both zoning and subdivision regulations which either mandate or incentivize applicants to utilize LID techniques.

8. Forestry Management/Town Open Space

Continue the practice of selective cutting to promote timber stand improvement on five Town open space assets. Reinvest revenues from timber sales to maintain and improve each of these parks.



9. Aquifer Protection

Consider amendments to Zoning Regulations to require Best Management Practices, currently required within the aquifer protection outlay zone only, also be applied to commercial and industrial uses located outside the zone.

10. Wild and Scenic Designation

Continue to support efforts to designate the Farmington River in Avon as a wild and scenic River, under a program managed by the National Park Service as a means to add to the protection of this resource.