

Land Use Regulatory Review North Branch Park River Watershed

Connecticut Department of
Environmental Protection

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Manchester, Connecticut 06040

In Cooperation With:

**Farmington River Watershed Association
Park River Watershed Revitalization Initiative**

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1 Introduction

Municipal land use plans and regulations help shape the development patterns within a watershed and can play a significant role in protecting water quality and other natural resources at the watershed scale. These commonly include municipal plans of conservation and development, zoning regulations, subdivision regulations, inland wetland and watercourses regulations, and stormwater regulations, all of which influence the type and density of development that can occur within a watershed. Local land use regulations often vary by municipality within a watershed, and regulations are periodically revised in response to development pressure, shifts in attitude toward natural resource protection, and political and socioeconomic factors.

A key element in the development of a watershed management plan is to identify potential land use regulatory and planning mechanisms (i.e., new or modified land use regulations and planning approaches) that can be implemented by municipalities and other governmental entities to better protect water quality and other valuable natural resources within the watershed. This process opens an opportunity for communities to address, for example, the damaging effects of increased impervious cover and uncontrolled stormwater runoff from land development and suburban sprawl. In more urbanized areas, it also helps to address the mandate to meet State and Federal Phase II stormwater permit requirements under the National Pollutant Discharge Elimination System (NPDES) program.

Because a watershed management plan encompasses multiple municipalities, its regulation review also provides an opportunity for towns to compare their regulatory mechanisms to those of neighboring towns. By doing so, they can evaluate the relative merits of different approaches, adopt the best models, and not least, improve region-wide consistency in how the common water resource is managed. This review of land use regulations and land use plans by towns and other entities in the North Branch Park River Watershed is therefore a tool that can be used to achieve several objectives.

The review places most emphasis on Bloomfield, West Hartford, and Hartford, since the major portion of the North Branch Park River watershed lies in these municipalities. Tabular summaries of the existing regulations, plans, and policies for these three communities are provided in *Appendix A* (Relevant Regulations) and *Appendix B* (Relevant Plans and Policies). The watershed also includes small portions of Avon, Simsbury, and Windsor; summaries of regulations in these towns, along with recommendations, are covered in *Appendix C*. [Note that the narrative summaries, regulations, and recommendations for Avon, Simsbury, and Windsor, are excerpted from the March 2009 Municipal Plan and Regulation Review completed by Robinson & Cole, LLP, for the Farmington River/Salmon Brook Wild & Scenic Study Committee and are used with permission.] Including these more rural towns (which overlap the watershed by less than 3%) provides additional perspective on 20th century urban and suburban planning priorities.

Non-municipal regulatory entities, namely the Metropolitan District Commission and the Greater Hartford Flood Commission, are also included here as they are part of the overall framework for North Branch Park River watershed management.

The regulatory review considered existing regulatory and non-regulatory mechanisms that can affect land use, water quality and other related natural resources including wetlands and watercourses, biodiversity, and drinking water. The review also included regulatory and non-regulatory mechanisms that dictate impervious cover at the municipal, neighborhood, and site scales.

The review is organized in a way that shows how the various commissions, regulations, and planning documents are relevant to watershed-level management and how they complement one another. By bringing them together in a single document, and evaluating them according to present-day criteria for sound watershed management, the review is able to highlight gaps in watershed protection that might not be apparent otherwise, and point out specific changes that would close those gaps. In addition, this review reveals the emerging relationship of watershed management within the context of urban planning.

In the past, a watershed-level approach was not commonly used as an organizing principle for local planning and regulations. Transportation and business development has typically been the focus of regional planning. However, quality of life benefits provided by healthy natural environments ("ecosystem services") are increasingly recognized as important factors to individual health, neighborhood character, and sustainable, cost-effective, municipal vitality. Ensuring clean, healthy water resources throughout the North Branch of the Park River can enhance future real estate values, as well as downstream water quality in the Connecticut River and Long Island Sound. 21st century planning can provide successful guidelines for high-density development that includes watershed management design strategies. The intent of this review is to facilitate a shift to watershed-based planning and more comprehensive, integrated, and effective water resource protection for the North Branch Park River.

2 Municipal Land Use Governance

Local municipalities exert the most direct influence on land use and watershed development and redevelopment within their political boundaries. Typical local land use review functions that can affect water quality and natural resources include zoning, site plan review, subdivision review, sediment and erosion control, wetland and watercourse protection, vegetation protection, and open space preservation. Local land use regulations, plans, and policies are administered by various Town commissions, boards, and agencies. Land use commissions in the North Branch Park River watershed communities are summarized below (*Table 2-1*).

Table 2-1. Municipal Land Use Commissions by Town

Town	Land Use Commissions
Avon	<ul style="list-style-type: none"> • Inland Wetlands Commission • Natural Resources Commission • Planning and Zoning Commission • Recreation and Park Committee • Wild and Scenic Study Committee
Bloomfield	<ul style="list-style-type: none"> • Inland Wetlands and Watercourses Commission • Town Plan and Zoning Commission • Beautification Committee
Hartford	<ul style="list-style-type: none"> • Planning and Zoning Commission (includes Inland Wetlands) • Parks and Recreation Advisory Commission • Advisory Commission on the Environment • Design Review Board • Historic Properties Commission
Simsbury	<ul style="list-style-type: none"> • Conservation Commission/ Inland Wetlands Agency • Culture, Parks, and Recreation Commission • Open Space Committee • Planning Commission • Zoning Commission
West Hartford	<ul style="list-style-type: none"> • Conservation and Environment Commission • Town Plan and Zoning Commission • Park and Recreation Advisory Board • Design Review Advisory Committee
Windsor	<ul style="list-style-type: none"> • Conservation Commission • Inland Wetlands and Watercourses Commission • Town Plan and Zoning Commission • Historic District Commission

Table 2-2 summarizes the municipal land use regulations of the watershed municipalities and the year were adopted and last amended. Similarly, Table 2-3 summarizes the municipal land use plans and policies of the watershed municipalities and the year they were adopted and last revised, including municipal plans of conservation and development, open space plans, and stormwater management plans.

Table 2-2. Municipal Land Use Regulations – Year Adopted

Regulation	Avon	Bloomfield	Hartford	Simsbury	West Hartford	Windsor
Zoning	1957; revised 1983, 1986; latest amendments 2006	August 2009	Adopted 2005; amended 2008 Zoning Regulation changes recommended by POCD 2010	1990; amended to 2003	2005	1976, amended through 2007
Subdivision	1977, revised to 2005	1992	In Zoning	Amended 1995; reviewed for revision 2009	In zoning	1955, most recent update 2006
Inland Wetlands	1974, amended 2007	1974; amended 2004	Based on 2006 CTDEP Inland Wetlands and Watercourses Model Regulations	2006	2001	1989, latest revision 2008
Town Code/ Ordinances	Amended up to 2008	No single date; dated by ordinance	Amendments based on final report of Hartford Charter Revision Commission, and approved by electorate on Nov 5, 2002	1990	Adopted 1970; Entirely amended 1996; article amendments since then by regulation type	2007
Floodplain Management (if not in zoning or elsewhere)	In zoning	In zoning	In Municipal Code, Zoning and Greater Hartford Flood Commission	In zoning	In zoning	2008

Table 2-3. Municipal Land Use Plans and Policies – Year Adopted

Plans and Policies	Avon	Bloomfield	Hartford	Simsbury	West Hartford	Windsor
Plan of Conservation & Development	2006	2000; sections updated 2007	1996 POCD POCD update: June 3, 2010	2007	2008 For 2009-2019	2001
Open Space	2006 PCD	2000 PCD	1996 POCD POCD update: June 3, 2010	2007	2008 PCD	2007; Day Hill Corp. Area 2008
Phase II Stormwater Management*	2004 SWMP	2004 SWMP	2004 SWMP	2004 SWMP	2004 SWMP	2004 SWMP, amended 2009;

*The CTDEP General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4 General Permit) requires submission of Annual Reports to the CTDEP by January 1 of each year.

3 Summaries of Relevant Regulations, Plans, and Policies

The following sections summarize the relevant land use regulations, plans, and policies of the watershed municipalities and other land use planning and regulatory entities in the North Branch Park River watershed. Opportunities and recommendations to better protect water resources through new or modified regulatory mechanisms are also provided at the end of each section. Appendix

3.1 Bloomfield

Portions of the Bloomfield narrative summary are from the regulation review conducted by Robinson and Cole for the Farmington River / Salmon Brook Wild and Scenic Study in 2008, and used with permission.

Plans and Policies

Bloomfield is a suburban town in Connecticut's Capitol Region with a population of approximately 19,000 in 2000. It has experienced substantial residential growth over the past 5-7 years. Bloomfield has both a professionally staffed planning office and a professionally staffed engineering office. The Town Plan and Zoning commission is the duly authorized municipal entity with jurisdiction over land development and subdivisions and the Inland Wetlands and Watercourses Commission is the duly authorized municipal entity with jurisdiction over wetlands, watercourses, and the upland review area.

Bloomfield updated discrete sections of its Plan of Conservation and Development in 2007. For the most part, the Town readopted its 2000 PCD, making minor amendments to recognize and promote a new center for retail development along Cottage Grove Road, calling for new regulations to support the same. The PCD prioritizes the preservation of the Town's "small town character" and farmlands while also focusing on the development of single-family housing and the creation of retail centers, including a downtown market area. With respect to conservation, the PCD recognizes the Wintonbury Land Trust and identifies a goal to acquire parcels to create linkages between existing open space parcels. Bloomfield has not undertaken a build-out plan or a biodiversity plan. Bloomfield is in the process of making significant revisions to its PCD.

Regulations

Bloomfield adopted new Zoning Regulations in the summer of 2009. Features of the Zoning Regulations include specific mention of innovative stormwater management designs; recommendation for using the most recent update of the DEP Guidelines for Soil Erosion and Sediment Control; consideration of tree removal as a regulated erosion factor; and partial protection of steep slopes and hillsides through the use of the Talcott Mountain Overlay District. The Bloomfield Subdivision Regulations, including standard specifications and details

for the design and construction of subdivision improvements, were last modified in 1992 and are outdated with respect to stormwater quality management and storm drainage.

The following highlight the Town's regulatory measures to protect water quality:

- Allows for use of alternative water and sewage disposal systems in certain zoning districts.
- Zoning regulations recognize the importance of maintaining natural drainage systems. Stormwater management designs are encouraged that consider use of swales and other best management practices in lieu of storm sewers. Does not reference specific stormwater management standards, other than peak flow control, or reference to the CTDEP Connecticut Stormwater Quality Manual.
- Bloomfield has provided a good example of how to promote the preservation and restoration of vegetative buffers by offering recommended minimum buffer widths (100 feet for the North Branch Park River) and the preservation of natural buffers. Where vegetation is to be planted, it must be "suited to the local habitat."
- Bloomfield has a progressive upland review area, which is defined as 200 feet from watercourses and 100 feet from wetlands.
- Bloomfield also provides an explicit definition of vernal pools that list the types of proof of breeding and development.
- All development within the Flood Hazard Zone is subject to the Wetlands Regulations.
- Bloomfield has not adopted specific regulations related to the protection of aquifers but does provide for consideration of subsurface aquifers as part of the site plan/subdivision review process. Bloomfield does not have a DEP-designated aquifer protection area.

The following highlight the Town's regulatory measures to protect open space and promote sound land use policies:

- Alternative development designs may be approved by the Town Planning and Zoning Commission, including a density bonus up to 20% for open space subdivisions.
- The TPZC has discretion concerning site design for Open Space Subdivisions or (in any subdivision) preservation and enhancement of scenic points, vistas, ridgelines, and contours of land.
- Bloomfield allows for Conservation Developments with various provisions for maximizing open space to 50% or more and reducing impervious surfaces.
- Tree removal and clear-cutting are considered regulated erosion factors equivalent to grading and other soil disturbances.

Opportunities and Recommendations

- Promote watershed planning, smart growth, open space protection, green infrastructure, and LID principles in the revised Plan of Conservation and Development, including adoption of the North Branch Park River Watershed Management Plan.
- Modify the Stormwater Runoff section of its zoning regulations to include a set of stormwater management standards. Development of stormwater management

standards would allow Bloomfield to establish clearer, specific performance standards that all projects must meet in order to obtain P&Z approval. At a minimum, the revised standards should reference the Connecticut Stormwater Quality Manual (as amended). The stormwater standards could include LID practices recommended for use in Bloomfield and could be tailored to protect specific water bodies or sensitive resources in the Town of Bloomfield.

- Explore the feasibility of a stormwater utility or other stormwater program financing options, borrowing from lessons learned from the recent CTDEP stormwater utility pilot projects and the ongoing work by the CTDEP to incorporate LID into state permits and policy.
- Consider establishing an administrative process or public funding to support open space planning and acquisition.
- Bloomfield may require that due regard be given to the preservation and enhancement of scenic points and vistas, ridgelines, and contours of the land but does not specifically regulate development along ridgelines. Bloomfield should consider modifications to its zoning regulations to regulate development along ridgelines.
- Adopt regulations or make specific recommendations concerning the use of pesticides on town property.
- Consider limits on net increase in stormwater runoff volume in addition to peak flow as a result of development.
- Strengthen the landscape provisions of the Zoning Regulations by requiring maximum tree preservation, replacement and diversity of tree species.
- Review current setbacks and lot dimensions in subdivisions for potential to relax side yard setbacks and allow narrower frontages to reduce road length and site imperviousness, and to relax front setback requirements to reduce driveway length and lot imperviousness.
- Review existing parking ratios to see if lower ratios are warranted and feasible. The required parking ratio for a particular land use (other than commercial retail) should be enforced as both a maximum and minimum to limit excess parking space construction and impervious cover. Consider allowing the Commission to approve parking lots with more spaces than the allowed maximum provided all of the spaces above the maximum number are composed of a pervious surface, and where adequate stormwater management is provided. Also consider parking spaces held in reserve for phased developments, thereby avoiding the situation where unnecessary parking is not constructed if future phases of development do not occur.
- Modify the parking area landscaped area requirements in the zoning regulations to promote parking lot bioretention and other LID practices.
- Modify the Subdivision Regulations (last revised in 1992) to reflect updated stormwater quality standards, LID and green infrastructure, drainage design, and street design (complete or green streets).
- Revise storm drainage design standards and regulations such that new or modified stream crossings are designed consistent with the Connecticut DEP Stream Crossing Guidelines.
- Consider modifying the zoning regulations to promote the use of and remove common barriers to implementing smart growth principles. General recommendations include:

- Use urban dimensions in urban places to allow for more compact development
- Revise/reduce parking requirements to reduce unnecessary impervious cover (see above)
- Increase density and intensity in centers
- Modernize street standards
- Designate and support preferred growth areas and development sites
- Use green infrastructure and LID to manage stormwater (see above)
- Consider unique species or communities in regulations for open space, alternative or traditional subdivision regulations.
- Consider habitat fragmentation in regulations for open space, or for alternative/traditional subdivisions.

3.2 Hartford

Founded in 1623, the City of Hartford is an area slightly less than 18 square miles located at what was then the natural confluence of the Little River into the Connecticut River. The Little River became the Park River to commemorate the nation's first public municipal park, which was funded with voter approval in 1859 to complement a new State Capitol building. Today, Hartford is headquarters to four Fortune 500 companies. Over 80,000 people work within the city's central business district where there is a high concentration of arts and cultural institutions. Over 42% of that workforce, typically commuters from the surrounding suburbs, are categorized as upper-middle class to wealthy.

Hartford's population peaked in 1950 at over 176,000. Based on the 2000 US census statistics, the population is 121,578. Once prosperous, now approximately 30% of city residents live below the poverty level. The population is a diverse mix of African American (38%), Asian (1.5%), American Indian (0.5%); Anglo-European (28%) and Hispanic (40%) persons. With about 7,023 residents per square mile (based on US Census data 2000), Hartford is the second (after Bridgeport) most densely populated municipality in Connecticut.

The City of Hartford has a professionally-staffed planning office and a professionally-staffed engineering office. The updated Hartford Plan of Conservation and Development "One City, One Plan" was approved June 3, 2010. The City Planning and Zoning Commission is the duly authorized municipal entity with jurisdiction over land development and subdivisions and is also the duly authorized municipal entity with jurisdiction over wetlands, watercourses, and upland review areas. There is also a Zoning Board of Appeals.

The North Branch of the Park River flows between three Hartford neighborhoods: Blue Hills, Asylum Hill and the West End. Most North Branch Park River watershed areas within Hartford are either floodplain or residential district zones. Blue Hills is one-family R-6 and R-5; the West End is one-family R-8 and R-7. Asylum Hill is a Residence-Office District. Areas of the former floodplain south of Farmington Avenue, above the Park River conduit, are zoned public property (Hartford High School athletic fields) and high density Residence District (R-2). The city is divided into twenty-two zoning districts.

Plans and Policies

The recently approved “One City, One Plan” Hartford Plan of Conservation and Development (PCD) includes various general recommendations that will increase emphasis on watershed-level planning. Most importantly, the PCD recommends a city-wide stormwater management study that, if prepared with respect to watershed planning principles, can greatly help to integrate long-term green infrastructure improvements for comprehensive stormwater management into the urban fabric and scenic landscapes of Hartford. In addition, the PCD notes the need to “resolve shared stormwater responsibility” between the City and the MDC. Because the MDC has been responsible for the combined sewers system and wastewater treatment, the City of Hartford has often overlooked the impact of urban planning on water quality. The frequency of combined sewer overflows into the Park River conduit as well as the North and South Branches are increased by surface stormwater runoff. Reducing the quantity of rain water shunted into the city’s combined sewers from rooftops, roadways and parking lots can help to reduce combined sewer overflows throughout the city.

Transportation planning was a predominant political interest that culminated in the construction of two interstate highways, I-91 and I-84. The Park River conduit, which began as a flood control project, was extended in 1969 so that I-84 could be located along the former stream corridor. Prioritization of automobile convenience, intended to increase economic prosperity, has instead transformed much of the cityscape into commuter parking garages and surface parking lots. In 1999 Riverfront Recapture, a nonprofit organization, completed work on a plaza over I-91 that has restored pedestrian access as well as the city’s cultural relationship to the Connecticut River.

The “One City One Plan” City of Hartford PCD has outlined new “greener and sustainable” development values. The City Planning Department arranged for numerous public meetings and received PCD recommendations from Neighborhood Revitalization Zones (NRZ) and Civic Associations. While there is still considerable emphasis on street design and transportation planning, “sustainability” is an important aspect of the plan’s themes. Recommendations include zoning changes and overlay districts to promote walkability, as well as adoption of the North Branch Park River Watershed Management Plan.

Regulations

Hartford’s Zoning and Subdivision Regulations were adopted in 2005 and last amended in 2008. The 2010 PCD recommends comprehensive revisions to the City’s Zoning Regulations, including aspects related to historic preservation, transportation and parking, permitted uses, performance standards, and green infrastructure.

Hartford’s Inland Wetlands and Watercourses Regulations were originally adopted August 27, 1973. At that time an Inland Wetlands and Watercourses Agency was established by the City of Hartford. Since that time, the role of that Agency has been consolidated into the Planning and Zoning Commission. The City’s current regulations are based on the CTDEP Inland Wetlands and Watercourses Model Regulations.

Opportunities and Recommendations

As demonstrated through the recent PCD revision process, there is a significant opportunity, as well as expressed interest by the City of Hartford, to update the City's Zoning Regulations and Inland Wetlands and Watercourses Regulations, as well as stormwater management requirements consistent with the City's planning initiatives and the goals and objectives of the North Branch Park River Watershed Management Plan. Recommended actions include:

- Consider updating and maintaining a comprehensive online map of existing City of Hartford Inland Wetlands and Watercourses.
- Add definitions for watershed, vernal pools, and riparian buffers to the Inland Wetlands and Watercourses Regulations.
- Embrace a watershed perspective in its land use planning and/or its regulations.
- Amend the Inland Wetlands and Watercourses Regulations to promote the preservation and restoration of vegetative buffers, including recommended minimum buffer widths and the preservation of natural buffers. Ensure that new development occurs with respect to regulations that protect water quality, and outline conditions to address existing development that may be damaging to water quality, especially with respect to parking areas that are less than 25 feet from the stream corridor.
- Revise the zoning regulations to strengthen stormwater management requirements and require the inclusion of Best Management Practices and Low Impact Development Design techniques in stormwater management plans. Use regulatory site plan review as a tool to ensure stormwater quality measures are implemented in new developments.
- Explore the feasibility of a stormwater utility or other stormwater program financing options, borrowing from lessons learned from the recent CTDEP stormwater utility pilot projects and the ongoing work by the CTDEP to incorporate LID into state permits and policy.
- Promote "smart growth" principles that address stormwater management through LID and green infrastructure strategies.
- Revise storm drainage design standards and regulations such that new or modified stream crossings are designed consistent with the Connecticut DEP Stream Crossing Guidelines.
- Review the municipal code and regulations for potential regulatory barriers to implementing downspout disconnection and revise the ordinances/regulations accordingly.
- Consideration of habitat fragmentation in regulations for open space, or for alternative/traditional subdivisions.
- Conduct a comprehensive review of the "Soil Erosion, Sediment Control and Storm Water Runoff" section of the zoning regulations.
- Adopt the proposed City of Hartford Tree Ordinance. Include a comprehensive urban forest master plan that distinguishes sites and woodland ecosystems variations within parks, open spaces, and stream corridors as well as trees for street-scapes and parking lots that enhance LID and green infrastructure urban design benefits.
- Increase the fine for illegal dumping (currently \$100) to include cost of clean-up and restoration of environmental disturbance, which may involve a cooperative effort to update the state fines for illegal dumping.

- Review parking regulations to ensure they are consistent with smart growth & sustainability, including opportunities to reduce parking ratios, parking space size, and other factors that would reduce impervious cover.
- Adopt a City-wide complete streets roadway design policy. Employ traffic calming techniques in residential areas where appropriate, and integrate stormwater management through green streets concepts (stormwater curb extensions, roadside bioretention and water quality swales).

3.3 West Hartford

West Hartford is characterized by a stable population size at about 61,000 and is the most densely populated town in the Greater Hartford area (after Hartford itself) at about 2,775 residents per square mile. It is seen as a highly desirable place to live because of its excellent school system, social and cultural amenities, prosperity, and a compact, walkable downtown surrounded by residential neighborhoods. Expected long-term trends include a stable population size, continued presence of families with young children and many retirees, and increasing ethnic diversity. West Hartford's Plan of Conservation and Development for 2009-2019 strongly emphasizes sustainability and quality of life, including preservation of remaining open space (with protection of state-listed species as one objective); accessible and welcoming streetscapes and public spaces; sound energy policies; and low impact development. The Town has a staffed Planning and Zoning division and a staffed Engineering division. The Inland Wetlands and Watercourses Agency is the authority which approves, modifies, or denies a final wetlands plan. In West Hartford, the Town Plan and Zoning Commission acts as the IWW Agency and the Town Planner acts as the Wetlands Administrative Officer.

The North Branch Park River watershed stretches across northern neighborhoods of West Hartford from the Metacomet Ridge to the intersection of Prospect Street and Farmington Avenue. Large areas along the ridge are owned and managed by the Metropolitan District to protect the Reservoir No.6 subwatershed. Other large properties – including the Renbrook School, the Wampanoag and Hartford Country Clubs, and two retirement communities– are set within West Hartford residential zoning districts (R-40, R-20, R-13 and R-10).

Plans and Policies

With respect to land use and water quality, highlights of West Hartford's 2009-2019 Plan of Conservation and Development include:

- Providing broader opportunities for private redevelopment.
- Encouraging shared parking and other shared infrastructure improvements.
- Attraction of mixed land uses where appropriate.
- Engaging the Design Review Advisory Committee in preserving and enhancing residential streetscapes, including trees.
- Protecting and increasing the presence of mature trees via several reviews and permitting processes.
- Developing bike routes and bike paths and connecting to regional greenways and multi-use trails.

- Preserving existing networks of open space, dedicating several existing areas as permanent conservation areas and encouraging dedicated open space in new development.
- Supporting the West Hartford Land Trust efforts to identify and acquire appropriate properties.
- Identification and protection of ridgelines, wildlife corridors, wetlands, and significant geologic and natural features.
- Incorporating measures to reduce non-point source pollution, including requirements for best management practices and low impact development designs; public education; ordinances that reduce impervious parking surface; managing and controlling stormwater runoff; and possibly development of conservation zones.
- Improved protection of wetlands and watercourses via incorporation into stormwater management plans; vigilant enforcement of wetlands regulations; and revisions to wetlands regulations as needed.
- Promotion of integrated pest management techniques to minimize pesticide use.
- Promoting the principles of smart growth.

Regulations

The following highlight the Town's regulatory measures to protect water quality:

- Requirement to use the CT Guidelines for Soil Erosion and Sediment Control (1985) as amended, in furnishing soil erosion and sediment control plans for developments.
- Upland review areas of 150 feet in the Inland Wetlands and Watercourses Regulations.
- Controls on development in floodplains and special flood hazard areas.
- Aquifer protection as one stated goal of establishing Open Space Developments.

The following highlight the Town's regulatory measures to protect open space and promote sound land use policies in its regulations:

- Discretion by P&Z to waive up to 50% of a parking area requirement if deemed reasonable for the time being.
- Discretion by town to permit Open Space Development as one way to maximize open space.
- A diversity of housing options that allow for more concentrated dwellings in addition to traditional neighborhoods of single-family houses.
- Zoning for concentrated business districts that favor pedestrian access.

Opportunities and Recommendations

The West Hartford PCD itself contains good recommendations for improving land use practices and water quality protection, such as the following:

- Strengthen landscape provisions of the zoning ordinance and the subdivision regulations to require maximum tree preservation and replacement.

- Amend zoning ordinance to authorize Town Planner to refer site plan applications to the Design Review Advisory Committee and for TPZC to refer Special Use Permit applications at discretion to the Design Review Advisory Committee.
- Conduct a comprehensive review of the parking requirement standards of the zoning ordinance, in particular as it relates to number of parking spaces required by use and size of parking stalls.
- Review zoning ordinance to determine if additional ridgeline protection is necessary;
- Revise zoning ordinance to strengthen stormwater management requirements and require the inclusion of Best Management Practices and Low Impact Development Design techniques in stormwater management plans.
- Conduct a comprehensive review of the "Soil Erosion, Sediment Control and Storm Water Runoff" section of the zoning ordinance.
- Review Subdivision Regulations to determine if the street design standards effectively promote the "complete street network."
- Review Subdivision Regulations to determine if ridgelines and other natural resources are adequately protected.
- Review the Inland Wetlands and Watercourses Regulations to determine if the current regulations are adequate to continue to protect the Town's natural resources and implement the policies of the PCD, in particular as outlined in the Open Space/Conservation section. Measures such as the possible adoption of conservation overlay zones should be evaluated.

In addition to the PCD's recommendations, we suggest consideration of these:

- Inclusion of a watershed-based approach in long-term planning, including adoption of the North Branch Park River Watershed Management Plan.
- Develop a "Metacomet Ridge Overlay District" to protect the natural character of the ridge, the National Historic Metacomet Monadnock Mattabesett (MMM) Trail, and to protect water quality within the MDC Reservoirs. Existing ridge protection overlay districts in Avon and Bloomfield can serve as a reference.
- Review Subdivision Regulations to determine if street design standards effectively promote best management practices for stormwater runoff and the principles of Low Impact Development.
- Consider limits on net increase in stormwater runoff volume in addition to peak flow as a result of development.
- Explore the feasibility of a stormwater utility or other stormwater program financing options, borrowing from lessons learned from the recent CTDEP stormwater utility pilot projects and the ongoing work by the CTDEP to incorporate LID into state permits and policy.
- Revise storm drainage design standards and regulations such that new or modified stream crossings are designed consistent with the Connecticut DEP Stream Crossing Guidelines.
- Review the municipal code and regulations for potential regulatory barriers to implementing downspout disconnection. Guidance provided by the West Hartford Department of Public Works recommends redirecting rain downspouts to lawn areas as one possible measure to alleviate flooding problems in areas with combined sewers.

However, the municipal code and regulations related to sewers may conflict with downspout disconnection and, if so, should be revised accordingly.

- Discretion to require an E&S plan as needed for certain sites where disturbance is less than ½ acre but erosion risk is high.
- Explicit protection of steep slopes from development.
- Specific regulations concerning engineered septic systems.
- Inclusion of unique species, natural communities, habitat continuity, and ecosystem services as protection goals in regulations.
- Amend the Inland Wetlands and Watercourses Regulations to incorporate revised stormwater management standards and LID practices, including reference to the Connecticut Stormwater Quality Manual (as amended).
- Amend the Inland Wetlands and Watercourses Regulations to promote the preservation and restoration of vegetative buffers, including recommended minimum buffer widths (100 feet for the North Branch Park River) and the preservation of natural buffers similar to the Bloomfield regulations.

3.4 Avon, Simsbury, and Windsor

Avon, Simsbury, and Windsor comprise less than 3 percent of the land area of the North Branch Park River watershed. Land use activities within these communities therefore have a significantly smaller influence on water quality and related natural resources in the North Branch Park River watershed compared to land use activities in Bloomfield, Hartford, and West Hartford. Nevertheless, narrative summaries, regulations, and recommendations for Avon, Simsbury, and Windsor, as excerpted from the March 2009 Municipal Plan and Regulation Review completed by Robinson & Cole, LLP, for the Farmington River/Salmon Brook Wild & Scenic Study Committee, are provided in *Appendix C*.

Some town plans and regulations may have been amended since the time of the Robinson & Cole review, which was conducted primarily in 2008. Recommendations in *Appendix C* should therefore be compared with the most recent versions of town plans and regulations.

3.5 Other Land Use Planning and Regulatory Entities

3.5.1 Metropolitan District Commission

Ordinances and Policies

The Metropolitan District Commission (MDC), a non-profit municipal corporation chartered by the Connecticut General Assembly in 1929, provides regional potable water and sewerage services to its member communities, which include Bloomfield, Hartford, West Hartford, and Windsor in the North Branch Park River watershed. The MDC Charter was most recently revised in January 2010. The MDC has jurisdiction over sanitary sewers and certain storm drain systems, including the combined sewer systems within Hartford and West Hartford.

The MDC Sewer Ordinance, which was originally approved in 1961 and last revised in January 2010, contains provisions for the use and maintenance of storm and sanitary sewers, including combined sewers in the MDC service area. Standards and procedures for the installation of main sewers, sewer house connections, storm sewers and other drainage connections are provided in the MDC Sanitary Sewer and Storm Drain Standards. These procedures include: District review and approval of plans and specifications, drain layer eligibility requirements, a sewer connection permit and the construction inspection. Activities undertaken by the MDC, as well as private and municipal development and redevelopment activities in the MDC service area that affect the District's sanitary sewers or storm drain systems, are subject to the MDC Sewer Ordinance and Sanitary Sewer and Storm Drain Standards.

Opportunities and Recommendations

The MDC is implementing a major infrastructure improvement program known as "The Clean Water Project" to address a federal consent decree and a CTDEP consent order to achieve the Federal Clean Water Act goals. The Clean Water Project includes three basic elements: (1) reduction of combined sewer overflows (CSOs) within the Hartford central sewer system, (2) elimination of sanitary sewer overflows (SSOs) in the sanitary sewers of Wethersfield, West Hartford, Windsor, Rocky Hill and Newington and (3) nitrogen reductions. Projects will range from repair of existing sewer pipe linings; new sewer and drainage systems; expanded wastewater treatment capacity; shifting the flow of Gully Brook out of the sewer system; to new tunnel storage and conveyance of the increasing sewage flow from surrounding suburbs. These projects will help to reduce sewage overflows within the South Branch and the buried Park River conduit, thus significantly improving water quality. A project goal is to eliminate combined sewage overflows within the North Branch of the Park River, although this has not yet been achieved.

The MDC and the City of Hartford are also evaluating the use of green infrastructure approaches and LID to further manage wet weather flows, including storm runoff volume and quality. Such practices include the installation of rain gardens, open channels/swales, downspout disconnection, and pervious pavements which promote the infiltration of runoff into the soil instead of directing it into the storm and/or combined sewer system. Because the MDC has been responsible for the combined sewers system and wastewater treatment, the City of Hartford has often overlooked the impact of urban planning on water quality. The frequency of combined sewer overflows into the Park River conduit as well as the North and South Branches are increased by surface stormwater runoff. Reducing the quantity of rain water shunted into the city's combined sewers from rooftops, roadways and parking lots can help to reduce combined sewer overflows throughout the city.

As part of its ongoing green infrastructure planning efforts, the MDC, working together with its member communities within the watershed, should conduct a comprehensive review of its sewer ordinance, standards, and policies to identify and remove potential regulatory barriers to green infrastructure and LID, including barriers to downspout disconnection. The MDC should also evaluate the feasibility of a stormwater utility or other financing mechanism for green infrastructure programs, as well as incentives for downspout disconnection by private property owners.

3.5.2 Greater Hartford Flood Commission

Regulations

The Greater Hartford Flood Commission adopted revised “Rules and Regulations Governing the Use of the Flood Plain District” with an effective date of September 26, 2008, which formally incorporate federal and state floodplain requirements. The regulations require that development activities within the Flood Plain District obtain approval by the Greater Hartford Flood Commission for the purposes of properly managing the flood plain district and flood control infrastructure in Hartford and to comply with Article I, Section 28-Drainage channels and floodplains, and Article III, Division 21-FP Flood Plain District of the City of Hartford Zoning Regulations, or the most current zoning ordinances adopted by the City of Hartford. A written certificate of approval is required prior to commencing an activity in the Flood Plain District unless a waiver is granted by the Commission.

The Flood Plain District includes areas along the North and South Branches of the Park River defined by the Flood Storage Area below Elevation 51.92 NGVD (51.15 NAVD) as noted in a Formal Agreement between the Army Corps of Engineers and the City of Hartford, or the most conservative FEMA flood zone classifications designated on the FIRM maps, whichever is greater. For areas outside of the Park River flood zone, it is defined as all Special Flood Hazard Areas on the FIRM maps. The flood zone on the North Branch Park River is primarily based on the hydraulic requirements contained in the Army Corps of Engineer’s report entitled, “Report on Review of Survey for Flood Control, Park River Basin, Connecticut, in two volumes, July 1966” specifically for the portion of the river south of Albany Avenue.

The primary purpose of the Greater Hartford Flood Commission regulations is to ensure that activity within the Flood Plain District is consistent with local, state, and federal floodplain requirements to minimize damage to life and property due to flooding. The regulations contain application requirements, site plan requirements, general standards, and specific standards for activities within the Flood Plain District including residential construction, commercial construction, subdivisions, drainage and flood control facilities, and other uses. The regulations also include provisions for variances, enforcement, and penalties.

Opportunities and Recommendations

Although the Greater Hartford Flood Commission regulations address potential erosion and sedimentation due to flooding, they do not directly address water quality or related issues such as riparian zone protection, impervious cover limits, etc. Opportunities exist to incorporate additional protection of the riparian zone within the Flood Plain District, which would provide additional water quality benefits for the North Branch Park River. Potential modifications to the regulations that should be considered include:

- Acknowledge the importance of maintaining native vegetation within the riparian zone. Healthy vegetation adjacent to surface waters is essential for maintaining bank stability and water quality. The disturbance of such vegetation destabilizes the banks of channels and other surface waters, which leads to increased erosion and sedimentation that

exacerbates the intensity and frequency of flooding. The loss of vegetation adjacent to surface waters also reduces filtration of stormwater runoff and thus degrades the quality of these waters. Such impacts adversely affect the health and habitat of fish and wildlife that depend upon clean surface waters and therefore disrupt the ecological balance that is necessary for life. Humans are ultimately affected by this imbalance, since clean water is essential for all life (New Jersey Department of Environmental Protection, Flood Hazard Area Control Act Rules, November 5, 2007). Invasive species removal and the restoration of native vegetation provides habitat for migratory songbirds that often connect urban residents to environmental values and an interest in natural sciences.

- Establish regulated riparian zones within the Flood Plain District.
- Establish maximum disturbance and include vegetation replacement and mitigation for various activities.
- Limit the area of vegetation that can be disturbed for various regulated activities. A permit for activity involving disturbance of the riparian zone would be issued only if specific conditions are met, such as:
 - The basic purpose of the project cannot be accomplished on site without disturbing vegetation in the riparian zone.
 - Disturbance to the riparian zone is eliminated where possible and minimized where not possible by relocating the project, reducing the size of the project, or situating the project in portions of the riparian zone where previous development or disturbance has occurred.
 - Any temporarily cleared area of vegetation must be replanted with indigenous, non-invasive vegetation.
 - Limits on the amount of disturbance allowed for specific activities.
- Limit disturbance within specified distances from the top of bank for certain activities.
- Where the standards cannot be met, providing greater than 1:1 compensation in the form of re-vegetation and placing a deed restriction on the compensation area.

3.5.3 Other Land Use Planning Entities

Additional government entities with significant land use planning roles in the North Branch Park River watershed include:

- Greater Hartford Transit District
- Hartford Housing Authority
- Capitol Region Council of Governments
- Board of Education (City of Hartford and all Towns)

These entities are encouraged to assist with the implementation of and support the recommendations of the North Branch Watershed Management Plan.

Appendix A

Tabular Summaries of Relevant Regulations Bloomfield, Hartford, and West Hartford

Water Quality / Wetland and Watercourse Protection

BLOOMFIELD	Source, Regulation	Summary
Erosion and sediment control plan	Zoning Regs. August 2009, pp. 124, 125, 128, 129, 169, a7 Subdivision Regs., p. 8	<ul style="list-style-type: none"> • Any development activity which will result in a cumulative disturbed area of more than one-half acre, or in other cases as determined by Planning and Zoning Department according to topographical conditions, shall prepare and submit a soil erosion and sediment control plan in accordance with standards in the DEP publication "Guidelines for Soil Erosion and Sediment Control (2002)" as may be amended from time to time. • The developer shall install the erosion and sediment control measures as shown and as scheduled on the plan prior to site development activity; inspections shall be made by the Commission or its agent during development to ensure compliance with the plan and proper installation and maintenance of measures. • Riding stables and areas used for the keeping of horses shall also be designed and managed to prevent soil erosion and runoff from leaving the property. • Excavation, grading, or other soil disturbance (including removal of trees or vegetative ground cover) are considered erosion factors and may require zoning signoff, other permits, or special permits. • In addition to erosion control measures, the Erosion and Sedimentation Control Plans must, among other things, delineate wetlands and vegetative cover
Slopes	Zoning Regs. August 2009, p. 24, pp. 85-86	<ul style="list-style-type: none"> • Slopes in excess of 25% are not buildable. Only 50% if the land area having such slope may be used to calculate density or building coverage. • The Talcott Mountain Overlay District establishes a process whereby property owner's interests can be balanced with the community's desire to protect environmentally sensitive steep slopes and hillsides from inappropriate development.
Stormwater management	Zoning Regs. August 2009, pp. 130-131	<ul style="list-style-type: none"> • Site plans shall be accompanied by plans prepared by a registered Professional Engineer licensed in CT, providing measures for detention and controlled release of stormwater runoff for: proposed commercial or industrial developments; proposed residential developments of 3 acres or more (except single, duplex, or triplex construction as part of a previously approved building lot); proposed impervious areas of 50% or more; any other cases as deemed necessary by the Commission. • Design of the stormwater management system shall consider use of such techniques as minimizing impervious areas; maximizing travel times by using grass or rock-lined channels in lieu of storm sewers, and use of rain gardens for roof drainage. • Measures for detention and release of runoff shall be designed in accordance with requirements in the CT Guidelines for Soil Erosion and Sediment Control (1985 and 2002) as amended. • When deemed practical by the Commission, the Commission may permit developers to construct joint facilities, given certain provisions and requirements. • Maintenance: All on-site facilities shall be properly maintained by the owner, who shall submit a yearly record to the Commission. Stormwater control structures on private property shall be accessible for Town inspection; all projects shall have a Stormwater Management / Best Management Practice Maintenance Agreement with the Town. Site Plan performance bond may be required to ensure maintenance of storm drainage system. • Management systems shall be visually compatible with the landscape and have sufficient vegetation to

BLOOMFIELD	Source, Regulation	Summary
	Wetlands Regulations, p. 6	<p>screen adjacent properties. Basin landscaping shall provide for water quality remediation.</p> <ul style="list-style-type: none"> • Additional permits may be required from the Inland Wetland and Watercourse Commission, or from CT DEP in accordance with Sections 22a-365 et seq. and 22a-209 of CT General Statutes. • Discharging of storm water within one hundred (100) feet of a wetland area, or two hundred (200) feet of a watercourse, is a regulated activity. • Site plan and special permit review require consideration of adequacy of provisions for stormwater management.
Upland review areas	Wetlands Regs., p. 5	<ul style="list-style-type: none"> • Upland Review Area defined as the areas 100 feet from a wetlands and 200 feet from a watercourse.
Vernal pools	Wetlands Regulations, p. 7	<ul style="list-style-type: none"> • Vernal pools are defined as a seasonal or permanent watercourse in a defined depression, or basin that lacks a fish population and containing fairy shrimp or their eggs, and/or in most years supports breeding and development of amphibian or invertebrate species recognized as obligate to such watercourses. These obligate species include: (a) Spotted salamander, (b) Jefferson salamander / Blue-spotted salamander complex, (c) Marbled salamander, or (d) Wood frog. • Acceptable proof of breeding includes: (1) breeding adults - breeding chorus and/or mated pairs of wood frogs and courting, individuals and/or spermatophores of obligate salamanders, or (2) two or more egg masses of any obligate species. • Acceptable proof of development includes: (1) tadpoles or larvae of any obligate species, or (2) transforming juveniles - tail stubs evident on wood frogs and gill remnants on obligate salamanders.
Riparian buffers	Wetlands Regulations, p. 9, 11-12	<ul style="list-style-type: none"> • Acknowledges the importance of vegetated areas adjacent to watercourses and wetlands, and establishes recommended riparian/watercourse and wetlands vegetated buffer zones. • All regulated activities shall be undertaken during the driest time of the year to minimize disturbance of the regulated areas. • Existing vegetated buffers are to be retained in their natural state or may be enhanced. • In areas where vegetated buffers do not exist, or are less than the minimum width, may require new buffers to be established which shall include canopy or shade tree, and shrub and herbaceous plant species suited to the local habitat. • Plans submitted are to identify existing vegetated buffers and include provisions to establish new buffers where they do not presently exist. • Recommended buffer distances: One Hundred (100) feet from the banks of rivers and named streams; Seventy-five (75) feet from the banks of perennial streams; and Fifty (50) feet from the banks of intermittent watercourses, and wetland areas. • Use of riparian or wetland buffers for passive recreation is permitted; however, accessways requiring regulated activities to construct or create, require a permit. • Applications for regulated activities within the buffer areas shall include an ecological and environmental assessment of existing buffers, specific justification for the regulated activities, and an analysis of the alternatives to the regulated activities.
Floodplain Management	Wetlands Regulations, p. 10	<ul style="list-style-type: none"> • Any development or construction within a flood hazard zone is also subject to the permit requirements of the Wetlands Commission.

BLOOMFIELD	Source, Regulation	Summary
	Zoning Regs. August 2009, pp. 16, 63-82	<ul style="list-style-type: none"> • “Regulatory floodway” defined as the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot. Synonymous with “floodway.” • Special Flood Hazard Area (SFHA) is defined as area where land is within a floodplain subject to a 1% or greater chance of flooding in any given year. The SFHA includes, but is not limited to, land in areas designated as Zones A, AE, AO, AH on the Flood Insurance Rate Map (FIRM). • The purpose of floodplain management regulations is, among other things, to discourage development in a floodplain if there is any practicable alternative to locate the activity, use, or structure outside of the floodplain and for Bloomfield to fulfill its role and comply with obligations as a participant in the National Flood Insurance Program.. • Floodplain regulations restrict or prohibit uses dangerous to health, safety and property due to flood or erosion, or result in damaging increases in erosion or flood heights/velocities; require that uses vulnerable to floods be protected against flood damage; control alteration of natural floodplains, stream channels, and natural protective barriers that accommodate floodwaters; control filling, grading, dredging and other development which may increase erosion or flood damage; prevent or regulate construction of barriers which will unnaturally divert floodwaters or increase flood hazards to other lands. • Guidance documents for complying with floodplain regulations should be obtained from FEMA. • Development that encroaches on a floodway is strongly discouraged; and prohibited unless and until demonstrated (in an engineering study by a Professional Engineer to be submitted by the developer) that there is no feasible alternative and that such encroachment does not increase the water surface elevation within the floodway by any amount in any location onsite or offsite for the base flood event. • Development shall not reduce the water holding capacity of a SFHA. • The alteration and/or relocation of any watercourse within a SFHA is not allowed, except under strictly defined conditions. • Every development subject to regulation under Floodplain Management Regulations requires a Floodplain Development Permit.
Watershed-level approach in regulations		<ul style="list-style-type: none"> • No relevant regulations identified.
Pesticide reduction		<ul style="list-style-type: none"> • No relevant regulations identified.
Municipal Sewer/WWTP Facilities	PCD, p. 53 Zoning Regs. August 2009, pp. 89, 93, 98, 103, 159	<ul style="list-style-type: none"> • PCD identifies areas for expansion of sewer service. • Public water and sewers must be provided in the Multi-Family Elderly Residential - Special Purpose Zone, Planned Luxury Residential, Planned Elderly Congregate, and in an Open Space Subdivision (see exception for alternate sewage disposal systems in discussion of On-Site Septic Systems) • Hospitals, sanitariums, rest homes, convalescent or nursing homes will not be approved unless they are on or may readily be connected to Metropolitan District water and sewer. • Design Development districts may have sewer phased in as distinct phases of a Design Development master plan are implemented

BLOOMFIELD	Source, Regulation	Summary
On-site Septic Systems	Zoning Regs. August 2009, p a10	<ul style="list-style-type: none"> • Special permit review includes consideration of adequate disposal of sewage.

Water Quality / Wetland and Watercourse Protection

HARTFORD	Source, Regulation	Summary
Erosion and sediment control plan	IW&WR, Sections 7.5 and 7.6, Section 11.9 Zoning Regulations, Section 2 (Definitions), Section 29, Section 68 (Application for Zoning Permits), Section 163 (Commission Site Plan Review)	<ul style="list-style-type: none"> • Applications must include proposed erosion and sedimentation controls and other management practices. • General provisions include implementing management practices consistent with the terms and conditions of the permit as needed to control stormwater discharges and to prevent erosion and sedimentation and to otherwise prevent pollution of wetlands and watercourses. • Soil erosion and sediment control plan required for proposed development that would disturb an area of more than one-half (½) acre. Plan must include provisions to control accelerated erosion and sedimentation and reduce the danger from storm water runoff on the proposed site. A single family dwelling that is not a part of a subdivision is exempt from the requirement to prepare and submit a soil erosion and sediment control plan. The plan must conform to the methods and techniques for minimizing erosion and sedimentation found in the "Connecticut Guidelines for Soil Erosion and Sediment Control," January 1985, as amended.
Slopes	IW&WR	<i>No relevant regulations identified.</i>
Stormwater mgt	IW&WR, Sections 7.5 Zoning Regulations, Section 68 (Applications for Zoning Permits)	<ul style="list-style-type: none"> • Applications must include proposed erosion and sedimentation controls and other management practices, which could include stormwater management measures. • Applications for zoning permits must include a site plan and narrative describing the design criteria, construction details, installation procedures, and operation and maintenance of proposed storm water management facilities.
Upland review areas	IW&WR, Section 2	<ul style="list-style-type: none"> • Upland Review Area defined as the area 100 feet from a wetlands or watercourse.
Vernal pools	IW&WR	<i>No relevant regulations identified. Vernal Pools are not identified in IW&WMR Section 2 "Definitions"</i>
Riparian buffers	IW&WR	<i>No relevant regulations identified. Riparian Buffers are not identified in IW&WMR Section 2 "Definitions"</i>
Floodplain Management	Zoning Regulations, p.23 Floodplain District FP Div 21 of Municipal Code Section 35-786 - 35-815 Municipal Code Article IV. Permitted Uses IW&WR p. A-6 (in Section 2 Definitions, and Section 4 Permitted	<ul style="list-style-type: none"> • Zoning regulations state that any "encroachment upon, filling or destruction of streams, drainage channels or floodplains" must be approved. The City Engineer, or where appropriate Greater Hartford Flood Commission, determines best use of properties for development. South of Albany Avenue, the floodplain district is at contour level fifty-four feet (MDC datum). Floodplain areas north of Albany Ave are determined by FEMA flood insurance study and the flood insurance rate map (FIRM). • Permitted uses include: go-cart tracks, golf driving ranges, miniature golf, botanical gardens and arboretums, historic monuments and sites, general recreational parks, leisure and ornamental parks, parkettes, camping and picnicking areas, marinas, playgrounds, playfields and athletic fields, outdoor archery and firing ranges, golf courses, ice skating, swimming pools, tennis courts, horticultural specialties. Permitted uses also include private, public and commercial parking lots. Highways and street right-of-way, such as freeways, expressways, parkways, arterial streets, collector/distributor streets, local access streets, alleys, and other highway and street rights-of-ways are all permitted uses of the Floodplain District.

	Uses as of Right and Nonregulated Uses)	<ul style="list-style-type: none"> • "Regulated Activity" within 100' of wetlands or watercourses. The permitted uses (described in Section 4) include the following: a) general farming operations on 3 acres or less; b) residential homes or subdivision lots approved for permit by municipal planning and zoning commission; c) boat anchorage or mooring (but not dredging or dock construction); d) uses incidental to enjoyment or maintenance of residential properties - but not removal or filling of "substantial amounts" of material.
Watershed-level approach in regulations	IW&WMR	<i>No relevant regulations identified.</i> Watersheds are not identified in IW&WMR Section 2 "Definitions" - however adoption of North Branch Park River Watershed Management Plan has been identified as a goal in the 2010 POCD
Pesticide reduction	2010 POCD	<i>No relevant regulations identified.</i> However, pesticide reduction has been identified as a goal in the 2010 POCD
Municipal Sewer/ WWTP Facilities	Municipal Code Sec 9-10	<ul style="list-style-type: none"> • All sanitary sewage facilities (including temporary facilities) must be permitted the Bureau of Licenses and Inspections and approved by the Director of Health.
On-site Septic Systems	Municipal Code Sec 9-11	<ul style="list-style-type: none"> • Structures not connected to a public sewer shall be used for human occupancy.

Water Quality / Wetland and Watercourse Protection

WEST HARTFORD	Source, Regulation	Summary
Erosion and sediment control plan	Zoning regulations: Section 177-13; 177-29; 177-34; ARTICLE VIII Soil Erosion, Sediment Control and Stormwater Runoff (§ 177-60 - § 177-67)	<p>A soil erosion and sediment control plan shall be submitted with any application for development when the disturbed area of development is cumulatively more than 1/2 acre. A single-family dwelling that is not a part of a subdivision of land shall be exempt. Exemption shall not affect the applicability of § 177-29.</p> <p>For certification, a control plan shall contain proper provisions to adequately control accelerated erosion and sedimentation and reduce the danger from stormwater runoff on and from the proposed site based on the best available technology. Principles, methods and practices necessary for certification are in the Connecticut Guidelines for Soil Erosion and Sediment Control (1985), as amended. Alternative principles, methods and practices may be used with prior approval of the Director of Community Services. Plans shall be certified by a qualified professional engineer.</p> <p>Plan shall contain but not be limited to 1) A narrative describing: the development; grading and construction schedule; design criteria for erosion and sediment control measures and stormwater management facilities; construction details, installation and/or application procedures; operation and maintenance program including obligation to deal with unforeseen erosion, sedimentation, and stormwater contingencies; and 2) a site plan map at sufficient scale to show location; adjacent upstream and downstream properties; existing and proposed topography including soils, wetlands, watercourses, waterbodies; existing structures; proposed alterations; location and design of proposed erosion and sediment control measures and stormwater facilities; sequences of grading, construction, and installation of measures; final stabilization; other as deemed necessary.</p> <p>Development shall not begin unless the soil erosion and sediment control plan is certified and control measures and facilities scheduled for installation prior to site development are installed and functional. Planned soil erosion, sediment control and stormwater runoff control measures and facilities shall be installed as scheduled.</p> <p>All control measures and facilities shall be maintained in effective condition to ensure the compliance of the certified plan.</p> <p>Inspections shall be made by the Director of Community Services or designated agent during development to ensure compliance.</p> <p>In developments not subject to Article VIII, where it is determined by the Director of Community Services that construction activity may cause erosion or sedimentation, the developer shall submit for approval by the Director of Community Services a plan indicating the control measures to be used by the developer to prevent or minimize said erosion or sedimentation. Such control measures shall be in accordance with the techniques contained in the Connecticut Guidelines for Soil Erosion and Sediment Control (1985), as amended. Other methods acceptable to the Director of Community Services may be permitted. The Director of Community Services may require a performance and/or maintenance bond.</p> <p>Erosion prevention is one stated purpose of regulations regarding open space development, Section 177-13. Also a stated purpose of screening and landscaping regulations, Section 177-34.</p>

WEST HARTFORD	Source, Regulation	Summary
	2009 PCD	Erosion and sediment control plan is identified as a tool for implementing policies in Open Space Plan in the Plan of Conservation and Development.
Slopes	2009 PCD	Zoning: no regs specific to slopes. PCD: Cluster development in R-80 zone mentioned as a way to avoid development on steep slopes
Stormwater management	See erosion regs above. 2009 PCD	Zoning: See erosion regs above; contain all references to stormwater PCD: Identified as a tool for implementing policies in Open Space Plan; Stormwater BMPs recommended.
Upland review areas	IWWC regulations amended 2001, p. 7	IWWC: Defined as all areas within 150 feet of boundary of wetland or watercourse
Vernal pools		IWWC: Not specifically defined or mentioned in IWWC regulations
Riparian buffers		Zoning: no reference IWWC: no reference
Floodplain Management	Zoning Regulations § 177-8, 177-8.1	<p>Zoning regs: Section 177-8 Special Flood Hazard Areas</p> <p>For the purpose of preventing damage from flood and other related dangers, the provisions of this section shall apply to all special flood hazard areas (SFHA) within the Town of West Hartford in addition to any land within the Town of West Hartford which is located within a floodplain. A <u>floodplain is defined</u> as:</p> <ul style="list-style-type: none"> • All land beneath the one-hundred-year storm event indicated in the West Hartford Flood Plain Management Study prepared by the Soil Conservation Service, dated August 1986. • All land within the established stream channel encroachment lines (SCEL) created by the State DEP and more particularly shown on maps entitled "Channel Encroachment Lines, Park River North Branch," dated September 25, 1964, and "Trout Brook, Channel Encroachment Lines," dated June 1968. • All other lands reserved by the state for flood protection, including but not limited to: Bugbee Flood Retention Reservoir; Talcott Mountain Flood Retention Reservoir; Burnt Hill Flood Retention Reservoir; South Flood Retention Reservoir. • Additional lands reserved by special development district approvals, subdivision approvals, inland wetlands and watercourse permits, site plan approvals, building plot plans and permits and/or special floodplain studies for floodwater conveyance or storage. • All other as yet undefined lands near to a watercourse which is susceptible to flooding, whether a floodplain study has been performed or not. <p>The <u>special flood hazard areas</u> (SFHA) identified by the Federal Emergency Management Agency (FEMA) in its Flood Insurance Study (FIS) for the Town of West Hartford, dated September 26, 2008, and accompanying Flood Insurance Rate Maps (FIRM), dated September 26, 2008, and other supporting data, and any subsequent revisions thereto, are adopted by reference. Said mapping must take precedence when more restrictive until a map amendment or revision is obtained from FEMA. The SFHA includes any area shown on the FIRM as Zones A, A1-30, AE, AO, and AH, including areas designated as a floodway on a FIRM or FBFM. Bas Flood Elevations on the flood Insurance Rate Map (FIRM) are approximate and should be verified with the BFEs published in the FIS. Also included are areas of potential, demonstrable or historical flooding, including any area contiguous with but outside the SFHA identified by FEMA, and where the land surface</p>

WEST HARTFORD	Source, Regulation	Summary
		<p>elevation is lower than the base flood elevation (BFE) as shown in the FIS, and the area is not protected from flooding by a natural or man-made feature.</p> <p><u>Standards.</u> In a floodplain, no structure shall be erected, expanded or structurally altered, no land use shall be established, and no landfill, excavation, paving or grading shall be initiated until the Director of Community Services approves the development application and advises the approving authority of the application's conformance with the following: In all special flood hazard areas (SFHAs),</p> <ul style="list-style-type: none"> • New construction, substantial improvements and repair to structures that have sustained substantial damage cannot be constructed or located entirely or partially over water unless they are a functionally dependent use or facility; • New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems [(CFR 60.3(a)(5)]. • New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters [CFR 60.3(a)(6)(i)]. • On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding [CFR 60.3(a0)(6)(ii)]. • Above-ground storage tanks (i.e., oil, propane, etc.) which are located outside or inside of the structure must either be elevated above the base flood elevation (BFE) on a concrete pad, or be securely anchored to prevent flotation or lateral movement with the top of the fill pipe extending above the BFE and having a screw fill cap that does not allow for the infiltration of floodwater. • Notify adjacent communities and the Connecticut Department of Environmental Protection prior to any alteration or relocation of a watercourse, and assure that the flood-carrying capacity within the altered or relocated watercourse is maintained [CFR 60.3(b)(6) and (7)]. • If any portion of a structure lies within the SFHA, the entire structure is considered to be in the SFHA and must meet the construction requirements of the flood zone. <p><u>Compensatory storage.</u> The water-holding capacity of the floodplain, except those areas which are tidally influenced, shall not be reduced. Any reduction caused by filling, new construction or substantial improvements involving an increase in footprint to the structure shall be compensated for by deepening and/or widening of the floodplain. Storage shall be provided on-site, unless easements have been gained from adjacent property owners and must meet hydraulic requirements set forth in the zoning regulations. Compensatory storage can be provided off-site with approval by the Director of Community Services.</p> <p><u>Equal conveyance.</u> Within the floodplain, except those areas which are tidally influenced, encroachments are prohibited unless the applicant provides certification by a registered professional engineer demonstrating that such encroachments shall not result in any (0.00 feet) increase in flood levels. Work within the floodplain and the land adjacent to the floodplain shall not be constructed in such a way so as to cause an increase in flood stage or flood velocity.</p> <p><u>All new construction and substantial improvements</u> in special flood hazard areas (SFHAs) shall:</p> <ul style="list-style-type: none"> • Be designed and adequately anchored to prevent flotation, collapse, or lateral movement of the structure

WEST HARTFORD	Source, Regulation	Summary
		<p>resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy [CFR 60.3.(a)(3)(i)];</p> <ul style="list-style-type: none"> • Be constructed with materials resistant to flood damage [CFR 60.3(a)(3)(ii)]; • Be constructed by methods and practices that minimize flood damages [CFR 60.3(a)(3)(iii)]; • Be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located to prevent water from entering or accumulating within the components during conditions of flooding [CFR 60.3(a)(3)(iv)]. <p><u>Construction standards</u> in special flood hazard areas (SFHA) Zones A and AE for residential and nonresidential construction. All new construction and substantial improvements of structures shall have the bottom of the lowest floor, including basement, elevated 2.0 feet above the base flood elevation (BFE) [CFR 60.3(c)(2) and (3)].</p> <ul style="list-style-type: none"> • Manufactured homes. In all special flood hazard areas (SFHA), any manufactured homes placed or substantially improved shall be elevated on a permanent foundation such that the bottom of the lowest floor is 2.0 feet above the base flood elevation (BFE) and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. • Recreational vehicles on sites within a SFHA shall be on site for fewer than 180 consecutive days and be fully licensed and ready for highway use. • In a regulatory floodway, no encroachments, including fill, new construction, substantial improvements and other developments shall be permitted unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any (0.00 feet) increase in flood levels during a base flood discharge. [CFR 60.3(d)(3)]. • In the absence of base flood elevation (BFE) and floodway data, the Director of Community Services shall utilize any data available from a federal, state, or other source to assure that new or substantially improved residential structures are elevated to or above the base flood elevation and nonresidential structures are either elevated or floodproofed to or above the BFE. If no BFE can be determined, the lowest floor, including basement, must be elevated to two feet above the highest adjacent grade next to the structure [CFR 60.3(b)(4)] <p>Until a regulatory floodway is designated, no new construction, substantial improvements, or other development, including fill, shall be permitted within Zones A1-30 and AE unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the base flood elevation more than 1.0 foot at any point in the community [CFR 60.3(c)(10)].</p> <p>Floodway data may be requested of an applicant for watercourses without FEMA-published floodways. When such data is provided by an applicant or available from any other source, the community shall select and adopt a regulatory floodway that must carry the waters of the base flood without increasing the BFE more than 1.0 foot at any point within the community [CFR 60.3(d)(2)].</p> <p>If a proposed subdivision is located in a special flood hazard area (SFHA), proposals shall:</p> <ul style="list-style-type: none"> • be consistent with the need to minimize flood damage [CFR 60.3(a)(4)(l)];

WEST HARTFORD	Source, Regulation	Summary
		<ul style="list-style-type: none"> • have public utilities and facilities located and constructed to minimize or eliminate flood damage [CFR 60.3.(a)(4)(ii); • have adequate drainage provided [CFR 60.3(a)(4)(iii); • provide BFE data for all new proposals and other proposed developments greater than 50 lots or five acres, whichever is the lesser [CFR 60.3(b)(3)]. <p>The application for approval of a development in a floodplain shall be submitted as part of a development application process to the approving authority. Minimum requirements for the application are set forth in the zoning regulations.</p> <p>Structures already in compliance: A structure or development already in compliance with this section shall not be made noncompliant. Where this section conflicts or overlaps with another ordinance, regulation, easement, covenant, or deed restriction, the more stringent restriction shall prevail.</p> <p>§ 177-8.1 Park River Project water storage area. [Added 1-26-1988] The purpose of this section is to recognize the agreement between the State of Connecticut, Department of Environmental Protection, and the United States Corps of Engineers concerning the construction of the Park River Conduit System; substantially preserve the storage pool of the Park River Conduit System; alert potential developers of the risk of development in the Park River Project water storage area. The Park River Project water storage area is defined as all lands below elevation 54 MDC (52 NGS) datum along the Park River, Piper Brook or Trout Brook in the Town of West Hartford. In this area, there are restrictions on construction, excavation, filling, grading, and paving as specified in the zoning regulations. Applications for development in the storage area to the approving authority must conform to specifications in the zoning regulations.</p>
Watershed-level approach in regulations	PCD, 2009	Zoning regs: No ref to watershed PCD: Development proposals should minimize development in drinking water watersheds
Pesticide reduction	PCD, 2009	Zoning : no reference PCD: Stormwater management plans should minimize discharge of pesticides into waterbodies; landscape and development plans should minimize pesticide use and use Integrated Pest Management programs.
Municipal Sewer/ WWTP Facilities		Zoning, land use, IWWC regs: no ref
On-site Septic Systems	Zoning: Section 177-13 PCD, 2009	Zoning: Section 177-13 provides for on-site septic installation as a part of open space use. Also floodplain regs (see above) contain provisions for on-site septic. PCD: Septic system maintenance identified as a tool for implementing open space plan.

Historic Preservation, Cultural Landscapes, and Biodiversity

BLOOMFIELD	Source, Regulation	Summary
Forest Management / Tree Preservation	Wetlands Regulations, p. 9	<ul style="list-style-type: none"> Timber harvesting, forest management practices, or any other use that includes the creation of skidder roads or trails, landing areas or other disturbance of a regulated area, including temporary crossings, requires a wetlands permit.
Invasive species control	Wetlands Regulations, pp. 11-12	<ul style="list-style-type: none"> In areas where vegetated buffers do not exist, or are less than the minimum width, may require new buffers to be established which shall include canopy or shade tree, and shrub and herbaceous plant species suited to the local habitat.

HARTFORD	Source, Regulation	Summary
Historic Preservation	Hartford Historic Preservation Ordinance, adopted May 2005	<ul style="list-style-type: none"> This new law protects every property designated on the State or National Register of Historic Places from unauthorized demolition or alteration. All work requiring a building permit on properties individually listed or within a historic district must gain the approval of the Historic Preservation Commission before the permit is issued.
Cultural Landscapes		<i>No references in Zoning, Land Use, IWWC regs., or Plan of Conservation and Development</i>
Forest Management / Tree Preservation	Proposed Tree Ordinance, to amend Section 35-163 of the Municipal Code, pending final edits and approval summary 2010	<ul style="list-style-type: none"> The Proposed Tree Ordinance recommends the establishment of a Tree Master Plan for Parks, Open Space and Streets. The Ordinance also recognizes the need to protect Legacy Trees of unique value. A City Forester is to have the responsibilities of a Tree Warden as defined in S.23-59 of Ct General Statutes. The City Forester will be advised by a Tree Advisory Commission and will prepare an annual 'State of the Forest' inventory of the city's trees. A minimum canopy coverage of 66% for new parking lots is required.
Invasive species control		<i>No references in Zoning, Land Use, IWWC regs., or Plan of Conservation and Development</i>

WEST HARTFORD	Source, Regulation	Summary
Forest Management / Tree Preservation	PCD, 2009	<ul style="list-style-type: none"> Tree preservation and planting specified in the open space policies of the Plan of Conservation and Development.
Invasive species control		<i>No references in Zoning, Land Use, IWWC regs., or Plan of Conservation and Development</i>

Drinking Water / Aquifers

BLOOMFIELD	Source, Regulation	Summary
Aquifer Protection Area Designation OR Aquifer Protection Zone Regulation	Zoning Regs. August 2009, p. 173, a8	<ul style="list-style-type: none"> • CT DEP has not designated an Aquifer Protection Area in Bloomfield. • A recognized goal of site plan review and special permit review is to protect and preserve the supply of potable drinking water by protecting and preserving subsurface aquifers.
Local Aquifer Protection Agency		<ul style="list-style-type: none"> • Bloomfield does not have a DEP-designated Aquifer Protection Area.
Aquifer Protection Regulations	Subdivision Regulations, p. 4	<ul style="list-style-type: none"> • Bloomfield does not have a DEP-designated Aquifer Protection Area. • Allows TPZC consideration of subsurface aquifers as part of the subdivision review process.

HARTFORD	Source, Regulation	Summary
Aquifer Protection Area Designation OR Aquifer Protection Zone Regulation	DEP Aquifer Protection Program	City of Hartford does not have a DEP-designated Aquifer Protection Area. <i>No relevant regulations identified.</i> Note that Batterson Pond is a property within the City of Hartford parks system. Batterson Pond was once part of the City of Hartford drinking water supply. After water supply system was transferred to the MDC, Batterson Pond Park was given by the MDC to Hartford, which sold parts of the property to Ct DEP and the Town of Farmington.
Local Aquifer Protection Agency	The Metropolitan District http://www.themdc.com/2wtf.htm	The Metropolitan District manages the drinking water supply for city residents either of two reservoirs located in the Farmington River watershed. There are eight MDC Board Members from Hartford (three of which are Governor appointments)
Aquifer Protection Regulations		<i>No references in Zoning, Land Use, IWWC regs., Municipal Code or Plan of Conservation and Development</i>

WEST HARTFORD	Source, Regulation	Summary
Aquifer Protection Area Designation OR Aquifer Protection Zone Regulation		<i>No references in Zoning, Land Use, IWWC regs., or Plan of Conservation and Development</i>
Local Aquifer Protection Agency		<i>No references in Zoning, Land Use, IWWC regs., or Plan of Conservation and Development</i>
Aquifer Protection Regulations		<i>No references in Zoning, Land Use, IWWC regs., or Plan of Conservation and Development</i>

Land Use

BLOOMFIELD	Source, Regulation	Summary
Low Impact Development / Green Infrastructure	Zoning Regs. August 2009,	<ul style="list-style-type: none"> Zoning regulations recognize the importance of maintaining natural drainage systems. Stormwater management designs are encouraged that consider use of swales and other best management practices in lieu of storm sewers. Does not reference specific stormwater management standards, other than peak flow control, or reference to the CTDEP Connecticut Stormwater Quality Manual.
Impervious Cover		<ul style="list-style-type: none"> No relevant regulations identified.
Design Review	Zoning Regs. August 2009, pp. 203-204	<ul style="list-style-type: none"> Design review for the Bloomfield Center District: Applicants with projects requiring design review are required to contact the Planning and Zoning Dept. for new construction of significant renovations, to review the proposal between property owner, developer or architect, and the Town's professional staff. An informal review must be scheduled with the Bloomfield Design consultant to determine if the proposal meets all design guidelines before a formal application is submitted.
Alternative Development Designs	Zoning Regs. August 2009, pp. 87-104, 156-158	<ul style="list-style-type: none"> Multi-Family Elderly Residential - Special Purpose Zone and the Planned Elderly Congregate Zone permits increased densities for qualifying elderly residential developments. Planned Luxury Residential Zone permits increased densities for residential developments furthering the policies of the PCD with respect to increasing the stock of single-family homes that are comparable with neighboring communities. Designed Development Zone permits a master plan process for a mixed-use development. TPZC may permit up to a 20% density bonus for an Open Space Subdivision where it promotes the purposes of the Open Space Subdivision regulations.
Density Bonus	Zoning Regs. August 2009, pp. 156-158	<ul style="list-style-type: none"> The TPZC may permit up to a 20% density bonus for an Open Space Subdivision where it promotes the purposes of the Open Space Subdivision regulations.
Minimum Buildable Area	Zoning Regs. August 2009, pp. 78, 102, 155	<ul style="list-style-type: none"> No relevant regulations identified. The zoning regulations give minimum floor areas for structures in residences, planned elderly congregate district dwellings, and shopping centers.
Unbuildable Land	Zoning Regs. August 2009, p. 24	<ul style="list-style-type: none"> Only 50 % of the total area of lands with inland wetland soils which are very poorly drained, lands subject to flooding, water bodies or water courses, or lands with slopes in excess of 25 % may be used to calculate density or building coverage. TPZC may modify this condition in nonresidential zones when the location or configuration of such lands in may warrant such a modification.
Mixed Land Use	Zoning Regs. August 2009, p. 105	<ul style="list-style-type: none"> Design Development Zone permits a master plan process for a mixed-use development.
Interior / Rear Lots	Zoning Regulations, August 2009, pp. 10-11	<ul style="list-style-type: none"> Development of rear lots allowed by special permit in the R-80, R-40, and R-30 residential zones for the development of single-family homes.

BLOOMFIELD	Source, Regulation	Summary
Bond Requirements	Subdivision Regulations, p. 9 Wetlands Regulations, p. 32	<ul style="list-style-type: none"> • A surety is required to assure installation, proper construction, and maintenance for 12 months (from time of acceptance by Town) for all improvements in an approved subdivision. • Inlands Wetlands & Watercourses Commission may require a bond, prior to any construction, conditioned on compliance with the Wetlands Regulations and with conditions of permit approval. • Inlands Wetlands & Watercourses Commission may also require the applicant to certify public insurance against liability covering damage that might occur within 2 years of the regulated activities.
Open Space Requirements	Subdivision Regulations, p. 3 Zoning Regulations, August 2009, p. 85	<ul style="list-style-type: none"> • Open space dedications in an Open Space Subdivision must be at least 30% of the total area of the subdivision and must be either (1) deeded to Town, (2) established legally as part of a homeowner's association, or (3) deeded to a land trust. • Public open space or recreation space, including recreation facilities, may be required where, in the judgment of the TPZC, a conventional subdivision is of such size and /or location to require such space. • Such dedication shall not exceed 15% of the total land in the subdivision, except for Open Space Subdivisions where the dedication may be in addition to open space land required by those regulations. • Open space dedications shall include dry land suitable for recreation and where the land to be subdivided includes farmland, this requirement may be met by the contribution of farmland. • Authorizes Open Space Subdivision for various purposes, including flexibility in site design to allow for preservation of ridge tops and rock outcrops. • Public open space may be required to preserve scenic points and vistas and ridgelines where, in the judgment of the TPZC, a subdivision is of such size and /or location to require such space. • As a condition of approval of any subdivision, the TPZC may require that due regard be given to the preservation and enhancement of scenic points and vistas, ridgelines, and contours of the land.
Fees in Lieu of Open Space		<i>No relevant regulations identified.</i>
Transfer of Development Rights		<i>No relevant regulations identified.</i>
Planned Residential Developments	Zoning Regulations, August 2009, pp. 55-59	<ul style="list-style-type: none"> • Planned Luxury Residential Zone permits increased densities for residential developments furthering the policies of the PCD with respect to increasing the stock of single-family homes that are comparable with neighboring communities.

Land Use

HARTFORD	Source, Regulation	Summary
Low Impact Development / Green Infrastructure	2010 POCD	<i>No relevant regulations identified.</i> However, low impact development has been identified as a goal in the 2010 POCD
Impervious Cover		<i>No relevant references identified.</i>
Design Review	Zoning Regulations	The Design Review Board is advisory to the Hartford Planning and Zoning Commission.
Alternative Development Designs	Municipal Code Article VIII.	<ul style="list-style-type: none"> • “Planned” and “Special” Development districts are permitted to allow flexibility with respect to open space, structures and circulation patterns. The total usable open space area is greater to or equal the open space requirements of the district or districts where the development is located. Common open space within “Planned” or “Special” developments must be used for an amenity or recreational purposes only - and are to be improved with respect to the intended use. • Hartford Business Improvement District is outside of the North Branch Park River Watershed
Density Bonus	Municipal Code definitions	<ul style="list-style-type: none"> • One of the eleven improvements for which projects are eligible for a bonus in B-1 Zoning Districts is an “Urban Park” largely covered with plantings at ground level (unlike a “Plaza,” which is paved). There are no specific bonus area percentages requirements to increase the floor to area ratio (FAR).
Minimum Buildable Area		<i>No relevant references identified.</i>
Unbuildable Land		<i>No relevant references identified.</i>
Mixed Land Use	Municipal Code definitions	Mixed use means any combination of commercial and residential units The B-2 “Downtown Development Perimeter” District encouraged mixed use residential and commercial development that preserves views to landmarks such as Bushnell Park, the State Capitol and the downtown skyline. Within B-2 areas there are no limitations on persons per acre; permitted lot coverage; required lot area; lot width; side setback; or rear setback. However there is a minimum 40 square feet of open space, usable landscaped” per person.
Interior / Rear Lots	Zoning Regulations (p.223)	<ul style="list-style-type: none"> • Parking spaces can be included as part of the required open space for a rear setback, only if it does not occupy the required usable open space defined per district.
Bond Requirements	Municipal Code Article III.	<ul style="list-style-type: none"> • A bond (\$10,000 or as established by the Director of Public Works) is required for any excavations into or digging below street surfaces and sidewalks.
Open Space Requirements	Zoning Regulations, definition of Open Space (p. 13) and (p 19-20) Municipal Code definitions Zoning Regulations	<ul style="list-style-type: none"> • Zoning Regulations include usable roof gardens available to residents of the building - and the area of usable balconies - as open space. No relevant regulations identified. The Zoning Regulations describe physical architectural characteristics of decks and plazas that are recognized as open space - rather than natural conditions. • Municipal Code definition of open space includes roof gardens, land developed and maintained for recreational purpose as well as landscaped areas, yet excludes off-street parking and loading areas. • Open Space and usable landscape requirements are determined per district (e.g. requirements range

HARTFORD	Source, Regulation	Summary
		<p>from 40 sq'/person in B-2 to 500 sq'/ person in zoning districts R-6, R-7 and R-8). However there are no specific natural environmental conditions outlined within the open space requirements, such as the combination of open space to the protection of wetlands and watercourses.</p> <ul style="list-style-type: none"> Planned Area Developments must provide the total usable open space area is greater to or equal the open space requirements of the district or districts where the Planned Area Development is located.
Fees in Lieu of Open Space		<i>No relevant references identified.</i>
Transfer of Development Rights		<i>No relevant references identified.</i>
Planned Residential Developments	Municipal Code Sec. 35-1037	<ul style="list-style-type: none"> City Council approves special permit land use decisions with recommendations from the Planning and Zoning Commission. Planned residential developments are allowed with special permit. In R-8 Zoning Districts (most the West End, along the North Branch of the Park River, is R-8) only lots of record containing not less than 10 acres and not more than 20 acres can be utilized for "planned residential development"

Land Use

WEST HARTFORD	Source, Regulation	Summary
Low Impact Development / Green Infrastructure	PCD, 2009	<ul style="list-style-type: none"> Stormwater management plans should incorporate LID designs such as pervious pavement, rain gardens, etc. to reduce non-point source pollution. Green infrastructure mentioned briefly as an asset and a goal.
Impervious Cover	PCD, 2009	<ul style="list-style-type: none"> See above, Low Impact Development
Design Review	PCD, 2009	<ul style="list-style-type: none"> Design Review Committee charged with maintaining community character such as walkability, sense of neighborhood
Alternative Development Designs		<i>No references in Zoning, Land Use regs, or PCD.</i>
Density Bonus		<i>No references in Zoning, Land Use regs, or PCD.</i>
Minimum Buildable Area		<i>No references in Zoning, Land Use regs, or PCD.</i>
Unbuildable Land		<i>No references in Zoning, Land Use regs, or PCD.</i>
Mixed Land Use	PCD, 2009	Mixed land use seen as a way to diversify tax base
Interior / Rear Lots		<i>No references in Zoning, Land Use regs, or PCD.</i>
Bond Requirements		<i>No references in Zoning, Land Use regs, or PCD.</i>
Open Space Requirements	PCD, 2009	<ul style="list-style-type: none"> No specific requirements in town regs. PCD: Preservation of open space identified as a guiding principle of Smart Growth; defined as undeveloped or predominantly open, such as parks, reservoir/watershed property, or private property. 27.7% of town classified as open space. Goal of Open Space Plan: maintain and increase quality of life; preserve and protect natural systems, achieve sustainable community. Policies: Continue to provide and preserve open space; preserve, enhance and maintain parks, open space, recreational facilities; evaluate opportunities to expand open space; ID and protect ridgelines, wildlife corridors, wetlands and significant geologic and natural features; reduce non-point source pollution; ID and protect wetlands and watercourses; promote awareness and best practices. No specific requirements in town regs.
Fees in Lieu of Open Space		<i>No references in Zoning, Land Use regs, or PCD.</i>
Transfer of Development Rights		<i>No references in Zoning, Land Use regs, or PCD.</i>
Planned Residential Developments		<i>No references in Zoning, Land Use regs, or PCD.</i>

Appendix B

Tabular Summaries of Relevant Plans and Policies Bloomfield, Hartford, and West Hartford

Plan/Policy	Bloomfield	Hartford	West Hartford
Plan of Conservation & Development	<p>2000 Plan of Development:</p> <ul style="list-style-type: none"> • Prioritizes preservation of “small town character” and farmlands. • Promotes ridgeline protections through zoning regulations and land acquisitions. • Recommends extension of public sewer lines and protection of underground aquifers. Identifies areas for expansion of sewer service. • Identifies three mixed-use and neighborhood centers outside of the traditional downtown, including a Mixed-Use center that links with the University of Hartford Master Plan. • Promotes the use of rights of first refusal, purchase of fee simple properties, and the purchase of development rights to foster the redevelopment of the existing industrial park as a mixed-use development. • Encourages zoning regulations to promote mixed-use retail development in identified area outside of the traditional downtown. • Recommends developing a Town Center Action Plan to create a pedestrian-friendly commercial center. • Supports retention of professional engineering staff to ensure provision of infrastructure improvements in support of economic development. 	<p>2010 Plan of Conservation and Development (“One City, One Plan”)</p> <p>Strong emphasis on livability and sustainability, protection of natural and built environment. Key recommendations include:</p> <ul style="list-style-type: none"> • Significant revisions to zoning regulations • Adopt a complete streets roadway design policy at the City level • Develop a “Green Print” plan for vacant and underutilized buildings and surface parking lots • Conduct a city-wide stormwater management study • Resolve the issue of shared storm water responsibility between the City and the MDC • Utilize NEMO stormwater best practices • Implement the NPDES Phase II stormwater management plan • Implement an environmentally sensitive reuse plan for the landfill • Utilize the river for recreation to help increase awareness of water quality issues • Work with the MDC on the Clean Water Project to reduce sewage Discharges • Work with the MDC on the Clean Water Project and a comprehensive stormwater management program • Increase awareness of the watershed & water systems • Regulate the use of herbicides and pesticides in maintenance of municipal facilities • Improve water quality in all park ponds and the Park River • Support the efforts of existing organizations to expand public awareness of the watershed boundaries and to improve water quality within them • Use regulatory site plan review as a tool to ensure stormwater quality measures are implemented in new developments • Implement the recommendations outlined in the 	<p>2008 Plan of Conservation and Development (for 2009-2019):</p> <p>Sustainable practices recommended in PCD, and especially relevant to watershed management, include:</p> <ul style="list-style-type: none"> • Preserving and expanding the towns networks of open space; • Identifying and protecting ridgelines, wildlife corridors, wetland areas, and other significant natural features, in part by encouraging cluster development; • Reducing non-point source pollution through requirements for Best Management Practices and Low Impact Development designs, homeowner education, reductions in requirements for impervious surfaces, stormwater runoff control, and possible use of conservation zones; • Protecting wetlands and watercourses from development through use of watercourses as public trail corridors, review/enforcement of existing regulations, & consultation with Conservation and Environment Commission; • Promotion of sustainable practices such as minimal use of chemical pesticides; • Maximizing the preservation and planting of street trees; • Promoting the principles of Smart Growth. <p>In support of these recommendations, specific actions for reviewing, revising, and strengthening Zoning, Subdivision, and IWWC regulations are listed in the PCD.</p>

Plan/Policy	Bloomfield	Hartford	West Hartford
		<p>North Branch Park River Watershed Management Plan consistent with the goals of One City, One Plan</p> <ul style="list-style-type: none"> • Ensure that development is limited in floodplains and riparian corridors • Update design guidelines to promote rain gardens, green roofs and permeable paving to reduce storm water runoff • Review parking regulations to ensure they are consistent with smart growth & sustainability 	
<p>Open Space Plan</p>	<p>2000 Plan of Development:</p> <ul style="list-style-type: none"> • Designated Farmland Site Assessment Committee to evaluate open space use designation for purposes of Public Act 490. • Promotes collaboration with the State and EPA in brownfields redevelopment. • Promotes preservation of the Great Drain (Griffin Brook Watershed), aquifer protection, and ridgeline protection. • Recognizes the Wintonbury Land Trust and identifies goal to acquire parcels to create linkages between existing open space parcels. <p><i>Other Open Space provisions are in Zoning and Subdivision regulations; see Table 3.3.</i></p>	<p>2010 Plan of Conservation and Development ("One City, One Plan")</p> <ul style="list-style-type: none"> • Link open spaces to provide safe pedestrian walking & bike paths • Designate existing parks as "Green Space/Open Space/Conservation" in the City's Generalized Land Use Plan • Complete a City-wide tree canopy assessment and create a targeted tree planting program • Monitor, maintain, replace and enhance existing trees as part of the City's maintenance plan 	<p>2008 Plan of Conservation and Development (for 2009-2019):</p> <ul style="list-style-type: none"> • Preservation of open space identified as a guiding principle of Smart Growth; defined as undeveloped or predominantly open, such as parks, reservoir/watershed property, or private property. 27.7% of town classified as open space. • Goal of Open Space Plan: maintain and increase quality of life; preserve and protect natural systems, achieve sustainable community. Policies: Continue to provide and preserve open space; preserve, enhance and maintain parks, open space, recreational facilities; evaluate opportunities to expand open space; ID and protect ridgelines, wildlife corridors, wetlands and significant geologic and natural features; reduce non-point source pollution; ID and protect wetlands and watercourses; promote awareness and best practices. <p><i>Other Open Space provisions are in Zoning and Subdivision regulations; see Table 3.3.</i></p>
<p>Phase II Stormwater Mgt</p>	<ul style="list-style-type: none"> • Streets and municipal parking lots in Bloomfield are swept at least once per year as soon as possible after snowmelt. Catch basins throughout the municipality are cleaned at least once per year, and more frequently if needed. • Town-owned catch basins located in 	<p>The City of Hartford's Stormwater Management Plan applies to the areas in the City that have separate sewer and stormwater drainage systems. Compliance with the MS4 General Permit has been a combined effort between the City of Hartford and the MDC. The City works collaboratively with the MDC in implementing their</p>	<p>The Town of West Hartford has implemented best management practices to meet each of the six minimum control measures including but not limited to public education, post-construction stormwater management, and pollution prevention and good housekeeping.</p>

Plan/Policy	Bloomfield	Hartford	West Hartford
	<p>recreational and high pedestrian traffic areas are targeted for stenciling to identify the catch basin as draining to a watercourse, and will include approximately 30% of the total number of catch basins in Bloomfield.</p> <ul style="list-style-type: none"> • Two MDC-sponsored household hazardous water disposal days are held per year in Bloomfield. • Stormwater outfalls and structures of the stormwater system have been mapped in support of the Town's illicit discharge detection and elimination program. 	<p>Stormwater Management Plan. This collaborative effort is documented in a Memorandum of Understanding (MOU) between the City and MDC. The City's stormwater management-related activities and practices include:</p> <ul style="list-style-type: none"> • The MDC has developed ordinances against illicit discharges to the stormwater system. The City is in the process of developing procedures for eliminating illicit discharges. • Trash is collected along river corridors during summer months, and the MDC participates as a partner in the annual Connecticut River Watershed Council's volunteer-based "Source to the Sound" cleanup. • A goal of stenciling or re-stenciling 1,000 catch basins per year, beginning in 2004, is set to identify catch basins which drain to a watercourse. The stenciling is intended to discourage illegal dumping into storm drainage systems. • The MDC implements a catch basin inspection and maintenance program. During inspections, the MDC evaluates the catch basin for structural damage and cleanliness. Work Orders are generated as needed for maintenance requirements. • Catch basins in the drainage system throughout the City are maintained through catch basin cleaning using vacuum trucks. Over 4,000 (more than 60 percent) catch basins were cleaned in 2008. • Street sweeping is performed regularly throughout the City. Downtown streets are swept three times per week, residential streets once per week, and major City facilities once per year. • The City conducts annual stormwater training for DPW staff, while the MDC conducts stormwater training for selected operational staff. • In 2008 the MDC began "the MDC Community Forum Series" to allow communities to meet 	<ul style="list-style-type: none"> • All paved streets are swept once per year at a minimum, and in 2007 approximately 2,800 catch basins were cleaned. • Magnesium chloride is used for roadway de-icing in West Hartford to reduce the use of road sand. • An effort to replace existing catch basin covers with new covers labeled "Drains to Watercourse" is underway throughout the town.

Plan/Policy	Bloomfield	Hartford	West Hartford
		<p>with MDC management to discuss the Clean Water Project, which includes a component on stormwater management.</p> <ul style="list-style-type: none"> The MDC and the City of Hartford are evaluating the use of green infrastructure approaches and low impact development (LID) to further manage wet weather flows, including storm runoff volume and quality. 	

Appendix C

Land Use Regulatory Review – Avon, Simsbury, and Windsor

Narrative summaries, regulations, and recommendations for Avon, Simsbury, and Windsor, as excerpted from the March 2009 Municipal Plan and Regulation Review completed by Robinson & Cole, LLP, for the Farmington River/Salmon Brook Wild & Scenic Study Committee. Used with permission.

Note: Some town plans and regulations may have been amended since the time of this review, which was conducted primarily in 2008. Recommendations in this Appendix should therefore be compared with the most recent versions of town plans and regulations.

Narrative Summaries for Avon, Simsbury, and Windsor

Avon

Plans and Policies

Avon is a suburban town in Connecticut's Capitol Region with a population of approximately 17,000. Avon has a professionally staffed planning office and a professionally staffed engineering office. Overall, Avon's policies show a commitment to maintaining its historic character and providing open space opportunities for its residents while also promoting an enhanced Town Center.

The Planning and Zoning Commission is the duly authorized municipal entity with jurisdiction over land development and subdivisions and it also serves as the designated Aquifer Protection Agency. The Inland Wetlands Commission is the duly authorized municipal entity with jurisdiction over wetlands, watercourses, and the upland review area.

Regulations

The following highlights the Town's measures to protect water quality:

- Avon has established a Ridgeline Protection Overlay Zone (the "RPO") for which all development is subject to special exception. The requirements for granting a special exception in the RPO are heightened and require the applicant to demonstrate safeguards to: minimize visual impacts; protect wildlife habitat; preserve groundwater quality and recharge potential; preserve archaeological resources; and, minimize changes to topography to protect ridgeline stability and minimize erosion potential.
- Avon has landscape regulations that govern commercial and industrial uses and require landscaped buffers and setbacks as a means to provide water recharge areas. The landscape regulations also require the preservation of large trees.
- Under its Wetlands Regulations, Avon defines regulated activities to include all activities within the 100-foot upland review area and "*any other activity... in any other non-wetland or non-watercourse area... if it finds... than such activity is likely to impact or affect wetlands or watercourses in a substantial and detrimental manner.*"
- Avon provides for a variety of alternative development patterns but does not permit mixed commercial and residential development.
- Municipal sanitary sewer service is available in the eastern portion of Avon (including the area where the Farmington River crosses the eastern section of town) but not in the western portion (near the other reach of the Farmington traversing Avon). Thought additional capacity is planned for the current service areas, there is no plan to expand the service area.

Opportunities for Improved Water Quality Protection

- Avon allows for clustering and flexible siting to protect natural resources but does not require open space as part of the development plan and does not offer a density bonus to encourage the use of clustering.
- Avon's requirements for a special permit require conservation of natural drainage patterns; however, this requirement is not found in the general zoning regulations.
- Avon recognizes the use of biofilters, detention ponds, retention ponds, and other methods of storm water management in its Special Exception criteria for development within Ridgeline Setback Area but does not recognize the use of these alternative stormwater management methods in other areas of its regulations.
- Wetlands Regulations do not reference CT Stormwater Management Guidelines and decision-making criteria do not reference use of innovative techniques or encourage applicant to consider using such techniques.
- Avon has adopted a system of transferable development rights but a portion of the receiving zone appears to fall within its Aquifer Protection Zone.
- There are no tailored requirements for the preservation or use of vegetative buffers to protect wetlands and watercourses.
- Avon does not regulate the use of invasive species.
- No secure source of funding to support open space planning and acquisition has been developed. In particular, the application of fee-in-lieu is at discretion of Planning and Zoning Commission.
- Avon does not have a policy promoting a watershed approach to planning.

Simsbury

Plans and Policies

Simsbury, a town of approximately 23,000, is a suburban town that has been steadily growing in recent decades. Generally, its regulations reflect a town trying to stay apace with its changing landscape.

The Simsbury Plan of Conservation and Development, adopted in 2007, seeks to preserve open space through acquisition and to manage future growth to reduce the impacts on environmentally sensitive areas. To this end, the Open Space component of the PCD identifies a Proposed Open Space Corridor along the Farmington River and encourages economic development that harmonizes with the natural surroundings. The PCD also encourages siting future development away from conservation areas and promotes the use of the Farmington Valley Biodiversity Project's Conservation Area Map as a guide for the land use review processes.

There are multiple Town initiatives focusing on land acquisition, protection of open space and the preservation of cultural resources. These tend to be advisory and have no regulatory component but contribute to the future development of Simsbury. Those efforts that are

non-regulatory and do not appear in the Plan of Conservation and Development are not reflected in the Regulation Review.

Regulations

The following highlights the Town's measures to protect water quality:

- The subdivision regulations protect natural drainage systems and prohibit development within 50 feet of a stream or watercourse.
- The storage of pesticides, fertilizers, and manure is prohibited within 100 feet of any watercourse.
- Within the local Aquifer Protection Overlay Zone (the "APZ"), certain intense land uses are prohibited and other uses are subject to special permit review.
- Loading, storage, or disposal of road salts and pesticides (in amounts greater than would be used for residential purposes) is prohibited within the local APZ.
- All application made in the APZ must be reviewed by the Conservation Commission for their consistency with the "General Design Standards for Land Use Activities in an Aquifer Protection Zone."

Opportunities for Improved Water Quality Protection

- The zoning regulations do not have a provision for protecting natural drainage systems and prohibiting development within 50 feet of a stream or watercourse.
- The regulations do not promote or recognize innovative stormwater management designs.
- Simsbury may consider updating its regulations to require preparation of an Erosion and Sediment Control Plan in accordance with the most recent (2002) CT Guidelines for Soil Erosion and Sediment Control.
- Enhance protection for vegetation along watercourses, in wetlands and within the Upland Review Area.

Windsor

Plans and Policies

Windsor, by virtue of its history and location, has an interesting balance of agriculture and commercial and light industrial uses. Recent trends may indicate a slight increase in residential development. Overall, Windsor is well situated with a fairly recent PCD, new updates to that PCD, and a recent overhaul of its zoning regulations.

The 2004 PCD reveals a desire to retain agricultural uses as a way of preserving open space while also directing additional development into existing commercial and industrial areas. There is some recognition of the tremendous potential to develop connected greenways along the Connecticut and Farmington Rivers while protecting additional open space and critical

floodplains. There appear to be several distinct implementation strategies to cultivate those opportunities, none of which include a coordinated public-private undertaking. The 2007 Open Space and Agricultural Preservation Plan Update, adopted in 2008, provides more detail on proposed strategies for the acquisition and protection of open space and the preservation of agricultural lands. The Update does not address certain open space protection tools, such as enacting a density bonus incentive for developments that protect open spaces or using its transfer of development rights program to direct density transfers away from agricultural lands and the river corridors to high density areas. Although Windsor has many business/commercial uses to support initiatives, there is no clear coordinated commitment to agricultural preservation and the preservation of open space along both river corridors.

Regulations

The different regulatory frameworks are fairly consistent with the goals and policies of the PCD and are up-to-date, including floodplain ordinances and implementing regulations. Despite the presence of both the Farmington and Connecticut Rivers, Windsor does not have a river corridor or floodplain overlay zone designed to protect the water quality, agricultural uses, scenic vistas and other attributes of those river corridors.

Zoning Regulations do permit construction of access ways and roads on slopes subject to engineering design approval and provide no protection provided for ridgelines or hilltops. Due to the fairly flat topography, this may not have a significant effect. Wetlands Regulations include a 150 foot upland review area, broad impact regulation for indirect activities, and include vernal pools. Agricultural activities appear to be fairly unregulated; however, there is very little protection provided to help maintain the viability of that industry. Effort to develop viable programs for transfer of development rights is commendable; greater incentives should be included to direct density transfers away from environmentally sensitive areas, including the river corridors.

Opportunities for Improved Water Quality Protection

- Revise Floodplain Management regulations to require greater consideration of cumulative effect of development or substantial improvements in floodplains and watershed.
- Include regulations that work in conjunction with state laws concerning the use of invasive plant species in landscaping and erosion and sedimentation control plans.
- Extend prohibition on construction of permanent obstructions along natural banks to Farmington River and Connecticut River; local regulations can operate concurrently with DEP regulations.
- Address application and storage of pesticides currently regulated by DEP within designated buffer area along river corridors without increasing regulatory burden on existing farming operation.
- Tree preservation regulations encourage, but do not require, retention of existing trees and apply primarily to residential development.

- Creation and implementation of a program for acquisition of land as permanently protected opens space along the river corridors to create a connected greenway, preserve a critical wildlife corridor, and protect the floodplain.

Municipal Plans

Plan	Responsible Agency	Source	Summary
Plan of Conservation and Development (PCD)			
Avon	PZC	2006 PCD	<ul style="list-style-type: none"> The PCD sets forth specific recommendations to strengthen subdivision and zoning regulations in the area of environmental protection; create regulations to protect aquifer resources; construct needed roadways; enhance Town Parks; add to the Town's open space assets, and make various enhancements to Avon Center.
Simsbury	PC	2007 PCD	<ul style="list-style-type: none"> PCD seeks both to preserve open space through acquisition and to manage future growth to reduce the impacts on environmentally sensitive areas. PCD clearly identifies community assets and resources deemed worthy of protection including: <ul style="list-style-type: none"> Natural resources; Scenic vistas; Open Space; Agriculture; Historic resources; Community character. Goals for future growth are balanced against those resources and include: <ul style="list-style-type: none"> Economic development; Transportation; Housing; Infrastructure. Plan identifies "special areas" that merit additional attention. These include: <ul style="list-style-type: none"> Simsbury as a town center; Tariffville as a Village Center; West Simsbury as a hamlet; Development of gateways to north and south emphasizing design and retention of the character of those areas (neighborhood to north and rural to south); Creation of single-use office/light industrial zone in southeastern corner; Maintain Wolcott Road area as commercial/industrial zone and preserve viability of Simsbury Airport as a transportation hub for goods and people.
Windsor	PZC	2004 PCD 2007 Open Space and Agricultural Preservation Update	<ul style="list-style-type: none"> Values its history as oldest town in CT and seeks to protect its agricultural heritage and quality of life while seeking to protect its assets as desirable location for light industrial, warehousing and corporate office parks. 2007 Open Space & Ag Pres Update: <ul style="list-style-type: none"> Update to 2004 PCD adopted in 2008 Focuses on greenways, open space acquisition and protection of the agricultural zone. Recommendation for protection of agricultural zone includes: development of purchase of development rights program, strengthen the residential transfer of development rights regulations and transfer of non-residential coverage regulations to encourage transfer of density away from agricultural zone, adopt a right to farm

Plan	Responsible Agency	Source	Summary
		2008 Day Hill Corporate Area Update	<ul style="list-style-type: none"> • policy. • Update for major light industrial-corporate park district (Day Hill Corporate Area) adopted in late 2008.
Open Space Plans			
Avon	PZC	PCD, p. 25	<ul style="list-style-type: none"> • Parcels with the highest priority for acquisition are shown on the Future Land Use Plan.
Simsbury	ZC PC	Zoning Regulations, p. 23 PCD, pp. 23-28	<ul style="list-style-type: none"> • Adopted in 2007 as part of the PCD and identifies a Proposed Open Space Corridor along the Farmington River. • PCD supports the "Open Space Committee in its goal of identifying, prioritizing, and acquiring open space for the Town." • Identifies acquisition of open space and easements as goal. • Encourages heightened efforts to create interconnected town-wide trail network and connect existing open spaces including recreation areas. • Stated goal is to increase access to Farmington River and create more opportunities for river-based recreation.
Windsor	PZC	2004 PCD, pp. 4-2 to 4-7 2007 Open Space and Agricultural Preservation Update	<ul style="list-style-type: none"> • Windsor has 2,215 acres (5% of total land area) of dedicated or managed open space. • Goal is to acquire parcels to connect existing open space parcels. • Encourages protection of agricultural lands and discourages upzoning through use of PDR, restricting development in Ag zone, implementation of Use Value Assessment, outright purchase by Town and land trusts. Recognizes that some farmland land has been upzoned to industrial and is critical to economic development and therefore will be lost. • 2007 Open Space & Ag Pres Update: <ul style="list-style-type: none"> ▪ Elaborates on the tools available to acquire open space (e.g. open space set-asides; fees in lieu; flexible development regulations such as transfer of development rights, density bonuses, open space and cluster developments; enhancement of the open space fund through annual budget contributions, bonds, fees in lieu, real estate conveyance fees, inland wetlands fines and private donations; open space grants from CT DEP; purchase of development rights (PDR); conservation easements; and the Use Value Assessment tax abatement program (P.A. 490)). ▪ Delineates role that Town Council and various commissions should play to coordinate efforts to identify, acquire and maintain open space. ▪ Identification of organizations (e.g. Windsor Land Trust, Riverfront Recapture) capable of assisting in public-private partnership.
Greenway Protections			

Plan	Responsible Agency	Source	Summary
Avon	PZC	PCD, p. 33	<ul style="list-style-type: none"> PCD includes policy to preserve an open space corridor along the entire Farmington River.
Simsbury	PC	PCD, pp. 25-27 Farmington River Trail, http://www.townofcantonct.org/content/142/default.aspx	<ul style="list-style-type: none"> Open Space Plan in PCD identifies a Proposed Open Space Corridor along the Farmington River. Proposes extending the Farmington River Greenway trail and the Farmington River canoe/kayak trail in Tariffville Park. Encourages expansion of existing trails and connectivity with other regional trails to create interconnected greenways.
Windsor	PZC	PCD, pp. 4-2 - 4-7; 10-8 2007 Update to 2004 PCD - Open Space and Agricultural Preservation Plan	<ul style="list-style-type: none"> 17.5 miles of disconnected greenway trails. Identified goal to link existing open space parcels and acquire parcels and public access easements to create town-wide trail network and greenways along Connecticut and Farmington Rivers. Encourages use of existing tools such as subdivision set-aside or fee-in-lieu requirements, continued funding of open space fund and use of fund to leverage additional grants and state money, designation of Conservation Commission as lead open space municipal entity, reactivation of Windsor Land Trust as private cooperative partner. 2007 Open Space & Ag Pres Update: <ul style="list-style-type: none"> Identifies creation of greenway along CT River as most productive open space strategy; Includes map depicting potential greenway and possible connections to existing rail trails, greenways and river access points. 2008 Day Hill Corporate Area Update: <ul style="list-style-type: none"> Promotes walkable, mixed use development Encourages creation of trail system within Day Hill Corporate Area.
Economic Development Plan			
Avon	PZC	PCD, pp.62-63	<ul style="list-style-type: none"> PCD promotes economic development while encouraging development of policies and regulations to guide the design of future development and to maintain that current geographic extent of Avon's commercial areas. PCD promotes development of overlay regulations for Town Center.
Simsbury	PC	PCD, pp. 105-116	<ul style="list-style-type: none"> PCD encourages economic development to harmonize with the natural surroundings. Economic Development section focuses on improving the development approval process, improving local regulations, providing appropriate incentives and encouraging the use of green building technologies as part of development process.
Windsor	PZC	PCD, pp. 8-1 - 10-8	<ul style="list-style-type: none"> Encourages full utilization of the Day Hill Corporate Area near Bradley Airport and the older village centers of Windsor, Poquonock, Windsor Center and Wilson for commercial and business growth to balance residential development.

Plan	Responsible Agency	Source	Summary
		2008 Day Hill Corporate Area Update	<ul style="list-style-type: none"> • Recommends rezoning excess industrial land in the Day Hill Corporate Area to reduce expansion of public infrastructure and to lessen traffic impacts that reduce marketability. • Discourages development that will create traffic congestion and encourages transit oriented development along Wilson Avenue. • Encourages revitalization of older downtown area and neighborhood village centers. • An update of the development plans for the Day Hill Corporate Area was adopted in late 2008.
Build Out Plan			
Avon	PZC	PCD, p. 44	<ul style="list-style-type: none"> • Analyzes parcels greater than 5 and 10 acres in size, and finds the potential for approximately 1,200 more homes.
Farmington	TPZC	PCD, pp. 121- 142	<ul style="list-style-type: none"> • No detailed documentation of a “build-out” analysis provided. The neighborhood plans each contain a population projection for “build-out condition,” based on proposed densities outlined in the Future Land Use section. • A separate build-out analysis was prepared by Planimetrics in 2005.
Simsbury	PC	PCD, pp. 171-173	<ul style="list-style-type: none"> • <i>No plan identified.</i> • PCD includes future land use map that identifies land by use and by level of resource protection.
Windsor	PZC	PCD, pp. 2-12 thru 2-15	Includes data and map of amount of developable land by census tract and zoning district and projected population growth. Calculation of approximately 2,700 new housing units on remaining 3,000+ acres of land zoned residential or agricultural.
Biodiversity Plan			
Avon	FRWA	Farmington Valley Biodiversity Project, Farmington River Watershed Association, http://www.frwva.org/FVBP.html PCD, pp. 23-24	<ul style="list-style-type: none"> • Though the PCD discusses this project, there is no clear policy for using the Biodiversity Project in the town’s future planning or regulation.
Simsbury	RFWA PC	Farmington Valley Biodiversity	<ul style="list-style-type: none"> • FRWA, through a cooperative agreement, completed a draft biodiversity analysis and the Simsbury Biodiversity Map in 2007.

Plan	Responsible Agency	Source	Summary
		Project, Farmington River Watershed Association, http://www.frw.a.org/FVBP.html PCD, p. 18	<ul style="list-style-type: none"> The PCD encourages the siting of future development away from conservation areas and promotes the use of the Farmington Valley Biodiversity Project's Conservation Area Map as a guide for land use review processes.
Windsor			<ul style="list-style-type: none"> <i>No plan identified.</i>

Municipal Regulations

GEOLOGY	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
Natural Resource Extraction			
Avon	PZC	Zoning Regulations, pp. III-8 to III-9	<ul style="list-style-type: none"> Permits removal of 100 cubic yards or less of earth materials off site from any lot or parcel. Permits by special exception removal of more than 100 but less than 1,000 cubic yards of earth materials off site from any lot or parcel is permitted provided such removal occurs in conjunction with a construction operation which has a valid approval from the Planning and Zoning Commission or which has a valid building permit. The applicant must post a bond to guarantee the restoration of the site and to cover erosion and sedimentation control during the operation. The bond shall guarantee the completion of earth removal, stabilization, and restoration of the site and adjacent areas within the period covered by the earth-removal permit.
Simsbury	ZC	Zoning Regulations, pp. 38, 74-76	<ul style="list-style-type: none"> Stone, sand, and gravel quarries are permitted in the I-3 Earth Excavation Zone subject to conditions set forth in the Zoning Regulations, which include, among other things, the grading of the excavation area and the re-spreading of arable topsoil. Special Exception required for excavation and removal of less than 25 cubic yards of material from any single parcel. Application requires plans showing contours of area to be excavated and proposed contours after excavation; must show topography of entire area to be excavated plus 300 feet from all sides of area; details of regrading and revegetation of area after conclusion of excavation operations. After operations have terminated, excavated area must be regarded to slope of 3:1, covered with at least 4 inches of topsoil and seeded with perennial rye grass. Commission may impose additional conditions regarding drainage, erosion, dust and stockpiling of materials on site.
Windsor	PZC	Zoning Regulations, §§ 2.4.15L & 2.4.15M	<ul style="list-style-type: none"> Removal or fill of up to 250 cubic yards of soil, gravel, clay, sand or stone from any one parcel in any one 12 month does not require approval by Commission. Removal or fill of materials greater than 250 cubic yards not related to an approved site plan development or subdivision may be allowed as a Special Use by Commission. Prohibition against screening, sifting, washing, crushing or other processing of such materials. Restoration of site, which includes restoration of topsoil to depth of 4 inches and re-vegetation with perennial grasses and/or trees, required upon termination of removal or fill activities.
Erosion & Sediment Control Plans			
Avon	PZC	Zoning	<ul style="list-style-type: none"> Any development disturbing more than ½ acre, except for a single-family development not part of a

GEOLOGY	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
		Regulations, pp. III-9 to III-11	<p>subdivision, must submit a soil erosion and sediment control plan.</p> <ul style="list-style-type: none"> • Minimum Standards - The Connecticut Guidelines for Soil Erosion and Sediment Control (2002), as amended, shall be the minimum standards by which plans shall be reviewed for certification. • Certification of the plan is necessary prior to any approval of a relevant development application by the Commission. The Commission through the Town Planner shall certify that the soil erosion and sediment control plan complies with the regulations. • The Commission may require a performance bond or other assurance.
Simsbury	ZC PC	Town Charter, Section 403 Town Code, Section 20 Zoning Regulations, p. 19 Subdivision Regulations, pp. 16-17	<ul style="list-style-type: none"> • Board of Selectmen is designated as the Flood and Erosion Control Board with authority to delegate its duties to Zoning Commission, Planning Commission and Inland/Wetlands Commission. • All development subject to site plan approval must provide an Erosion and Sediment Control Plan prepared in accordance with the document entitled "CT Guidelines for Soil Erosion & Sediment Control" prepared by the Connecticut Council on Soil and Water Conservation, dated January 1985. <ul style="list-style-type: none"> ▪ Zoning Commission is responsible for certification of submitted plans and for designating its agents to inspect site for compliance with said plan. • Planning Commission shall evaluate site plans for the subdivision of land above 250 feet in elevation in the eastern part of town (the Talcott Mountain ridge), and of land above 350 feet in elevation in the western portion (including the Onion Mountain and Hedgehog ridges and western upland slopes), for soil erosion by wind or water loss, loss of vegetative cover, and destabilization of steep slope areas.
Windsor	PZC	Subdivision Regulations, § 4.9.10 Zoning Regulations, § 3.3	<ul style="list-style-type: none"> • Proper control measures shall be used consistent with the CT Guidelines for Soil Erosion & Sediment Control (dated 1985, as amended). • Erosion and sedimentation control measures consistent with the more stringent standards provided in Town of Windsor Highway Engineering Standards & Specifications (dated 1987) and CT Guidelines for Soil Erosion & Sedimentation Control (dated 1985, as amended) required for all Site Development. • New erosion & sediment control ordinance was adopted in 2009.
Ridgelines/ Traprock Ridges			
Avon	PZC	Zoning Regulations, pp. IX-17 to IX-23	<ul style="list-style-type: none"> • Delineates a Ridgeline Protection Overlay Zone • Development within ridgeline setback area is allowed only by special exception. • In addition to other special exception requirements set forth in the regulations, development in the ridgeline setback area must: <ul style="list-style-type: none"> ▪ Safeguards to minimize visual impacts; ▪ Protect wildlife habitat;

GEOLOGY	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
			<ul style="list-style-type: none"> ▪ Preserve groundwater quality and recharge potential; ▪ Preserve archaeological resources; and, ▪ Minimize changes to topography to protect ridgeline stability and minimize erosion potential. • Prohibited uses: quarrying, lighting poles 10 feet or more in height, and equipment that projects above the plan of any roof surface (except chimneys). • Commission may require bond to assure compliance with these provisions.
Simsbury	PC	Community Design Guidelines, http://www.simsbury-ct.gov/public_documents/simsburyCT_Downloads/community_design/DesignGu.pdf Subdivision Regulations, pp. 16-18	<ul style="list-style-type: none"> • Avoiding development on a ridgeline or hilltop is included as a General Standard in the Town of Simsbury Guidelines for Community Design. • Requires visual impact analysis (impact of reflective glare, disruption of natural setting, and preservation of scenic areas, vistas, ridgelines, wildlife corridors, or significant geological features) as part of site plan for the subdivision of land above 250 feet in elevation in the eastern part of town (the Talcott Mountain ridge), and of land above 350 feet in elevation in the western portion (including the Onion Mountain and Hedgehog ridges and western upland slopes).
Windsor			<ul style="list-style-type: none"> • <i>No relevant regulations identified.</i>
Slopes			
Avon	PZC	PCD. p. 25 Zoning Regulations, p. III-3	<ul style="list-style-type: none"> • Review Zoning and Subdivision Regulations and consider regulatory changes which place limitations on the re-grading of steep slopes in order to create buildable lots. • Land with slopes in excess of 25% shall not be used to calculate density.
Simsbury	ZC PC CC	Zoning Regulations, pp. 28, 59, 64 Subdivision Regulations, pp. 7, 16-17 Wetlands	<ul style="list-style-type: none"> • Lands having a slope greater than 20% are not buildable. • The Planning Commission shall evaluate site plans for the subdivision of land above 250 feet in elevation in the eastern part of town (the Talcott Mountain ridge), and of land above 350 feet in elevation in the western portion (including the Onion Mountain and Hedgehog ridges and western upland slopes), for destabilization of steep slope areas. • Topography of the land, specifically slopes in excess of 20%, is factor for consideration in wetlands permit application.

GEOLOGY	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
		Regulations, § 10.2, pp. 20-21	
Windsor	PZC	Subdivision Regulations, § 4.5.3 Zoning Regulations, § 3.3.2	<ul style="list-style-type: none"> Residential subdivision application may be denied if steep slopes or erosion make land unfit for building purposes. No embankment shall exceed a slope of 1:2 ft. vertical to horizontal, unless suitable stabilization methods are provided and approved by Director of Public Works. Applies to the embankments of swales or created/alterd watercourses.
Drainage			
Avon	PZC	PCD, p. 26 Zoning Regulations, p. VIII-2 Subdivision Regulations, p. 24	<ul style="list-style-type: none"> Not specifically regulated in the zoning regulations. PCD encourages development of a Town-wide storm water control plan to minimize the impacts of flooding and protect the quality of the Town's watercourses and wetlands. Special Exception criteria require conservation of natural drainage basins. Requires lot design to provide positive drainage away from all buildings and individual lot drainage shall be coordinated with the general storm drainage pattern for the area.
Simsbury	ZC PC	Zoning Regulations, pp. 19 Subdivision Regulations, p. 10	<ul style="list-style-type: none"> The Subdivision Regulations require: (1) the preservation of natural land contours within fifty (50) feet of all streams and watercourses; (2) no stream or watercourse shall be diverted, filled, or enclosed in pipe; and, (3) no building or structure is erected within fifty (50) feet of any stream or watercourse. The Zoning Commission's site plan review considers existing and proposed drainage facilities as well as the location, nature, and extent of watercourses and water bodies.
Windsor	PZC	Subdivision Regulations, § 4.9.4 Subdivision Regulations, § 4.10.3	<ul style="list-style-type: none"> Existing drainage characteristics on site shall be maintained. No watercourse shall be disturbed, rerouted or otherwise altered unless approved by Director of Public Works.

WATER QUALITY	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
Storm Water Management			
Avon	PZC	Zoning Regulations, pp. III-9 to III-11, VII-1 to VII-6, IX-21 Wetlands Regulations, p. 6-7, 9	<ul style="list-style-type: none"> • Any development disturbing more than ½ acre, except for a single-family development not part of a subdivision, must submit a soil erosion and sediment control plan, which must include storm water control facilities. • Landscaping Regulations: <ul style="list-style-type: none"> ▪ Applies to Commercial and Industrial development. ▪ In part, purpose is to provide water recharge areas. ▪ Requires landscaped setbacks and buffers. ▪ Existing trees in good condition over 12 inches in caliper shall be preserved unless approved for removal by the Zoning Enforcement Officer. • Special Exception criteria for development within Ridgeline Setback Area recognizes the use of biofilters, detention ponds, retention ponds, and other methods of storm water management • Regulates discharge of stormwater within upland review area.
Simsbury	ZC	Zoning Regulations, pp. 83-94	<ul style="list-style-type: none"> • Within the APZ, site stormwater drainage in the secondary and tertiary aquifer recharge areas shall be designed for maximum aquifer recharge in compliance with the Town's Master Drainage Study except where stormwater may be contaminated. • Site Plans within the APZ must include construction details for all containment facilities and drainage facilities, including catch basins and detention basins. • Innovative stormwater management designs are not specifically mentioned in the Regulations.
Windsor	PZC	Zoning Regulations, § 3.3.1	<ul style="list-style-type: none"> • Runoff flows at peak periods based on 25 year storm extending across any property line shall not exceed the level of flow when the parcel was unimproved; PZC may allow an increase in the amount of runoff if an equivalent increase in runoff from total vacant land within watershed would not burden any portion of the watershed drainage system and said increase will not result in flood danger or property damage. • Drainage devices may include drywells, catch basins, retention ponds or any combination of devices approved by Director of Public Works. • New stormwater management ordinance was adopted in 2009.
Upland Review Areas			
Avon	IWC	Wetlands Regulations, p. 6	<ul style="list-style-type: none"> • Upland Review Area defined as the area within 100 feet measured horizontally from the boundary of any wetland or watercourse. Agency may rule that any other activity located within such upland review area <i>or in any other non-</i>

WATER QUALITY	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
			<i>wetland or non-watercourse area</i> is a regulated activity if it finds, after a hearing for which the landowner is provided adequate notice, that such activity is likely to impact or affect wetlands or watercourses in a substantial and detrimental manner.
Simsbury	CC	Wetlands Regulations, p. 6	<ul style="list-style-type: none"> Upland Review Area defined as all areas located within one hundred (100) feet of the boundary of any wetland or watercourse; and, any upland area that if disturbed is likely to impact or affect wetlands and watercourses.
Windsor	IWWC	Wetlands Regulations, § 2.1(cc) - Definitions	<ul style="list-style-type: none"> Defined as all areas within 150 feet of the boundary of any wetland or watercourse. Allows regulation of any activity regardless of location if it is likely to impact or affect wetlands or watercourses and is regulated activity.
Vernal Pools			
Avon	IWC	Wetlands Regulations, p. 7	<ul style="list-style-type: none"> Included within the definition of watercourses.
Simsbury	CC	Wetlands Regulations, p. 16	<ul style="list-style-type: none"> Conservation Commission may require a complete environmental assessment for sites identified as potentially containing one or more vernal pools; or unique, diverse, or otherwise desirable wildlife habitat.
Windsor	IWWC	Wetlands Regulations, § 2.1(nn) - Definitions	<ul style="list-style-type: none"> Included in definition of watercourse so regulated by Wetlands Regulations.
Flood Plain Management			
Avon	PZC	Zoning Regulations, p. III-3, III-5 to III-8	<ul style="list-style-type: none"> Land designated as Flood Plain shall not be used to calculate density. All permitted uses are contingent on no re-grading or filling is necessary: <ul style="list-style-type: none"> Agriculture, forestry, nurseries Allowed by special exception <ul style="list-style-type: none"> Golf courses, playgrounds, recreation areas, parks, and open spaces; Municipal or public utility uses not subject to major flood damage; Parking areas; Buildings, structures, and signs accessory to a permitted principal use located outside the Flood Plain; Filling above the 100-year flood plain, subject to special standards; Re-grading of land below 100-year flood plain but outside the floodway

WATER QUALITY	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
Simsbury	ZC	Zoning Regulations, pp. 43-44	<ul style="list-style-type: none"> • The Floodplain Zone is defined as all land adjacent to the Farmington River that falls at/or below the FEMA 100 Year Flood elevation as identified by the Federal Emergency Management Agency Study dated April 15, 1986. • Open space and recreational uses are allowed within the Floodplain Zone. • Agricultural uses including farming, nurseries, forestry, and grazing are allowed by special exception within the Floodplain Zone provided fertilizer, manure, and chemicals are stored at least one hundred (100) feet away from any stream. • Buildings, structures, signs, roads, and parking related to a permitted use area are allowed by special exception. • In no case shall any new buildings or structure intended for human occupancy be permitted.
Windsor	Town Engineer PZC	Town Ordinances, § 3-32 Zoning Regulations, § 2.1.11	<ul style="list-style-type: none"> • Regulates activities, including deposition, removal or storage of materials, construction of structures or buildings likely to be dangerous to health, safety or property during flood, increase flood height or velocity, or likely to pollute ground water. • Administered and enforced by Town Engineer; requires review of all development applications to ensure compliance with regulations. Enforced by Inland Wetland Commission where proposal involves a watercourse. • Requirement that all subdivision and any new development proposal involving more than 50 lots or five acres, whichever is less, include base flood elevation data. • Requirement that all new water and sewer systems, including on-site septic, be located and designed to minimize infiltration into and out of system. • Requirement to obtain and maintain records concerning elevations and floodproofing levels for all new or substantially improved structures, regardless of whether such structures include a basement. • Requirement that adjacent communities and state be notified if watercourse is altered or relocated; and submit such notification to [federal] Flood Insurance Administration. • Requirement that any type of structure or development be anchored to prevent flotation and lateral movement. • Substantial improvements or additions to existing structures or buildings or fill permitted only by special exception provided: <ul style="list-style-type: none"> ▪ Lowest floor of all residential structures or improvements within unnumbered A zones or within zones A1-A30 on FIRM be elevated to or above base flood elevation; ▪ Lowest floor of non-residential structures within unnumbered A zones must be elevated or floodproofed to or above base flood elevation and if within zones A1-A30 must be elevated or floodproofed to or above the base flood level. ▪ Area of site to be covered by proposed addition, improvement or accessory structure may be no more than 25% of the area of the site covered by the existing building or buildings of principal use. • No variances permitted for principal or accessory structure after 1980. • Variances for principal or accessory structure permitted within flood fringe areas provided no increase in flood height or velocity.

WATER QUALITY	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
			<ul style="list-style-type: none"> The basement or first floor elevation of any building except those for agricultural or recreational purposes in areas associated with Phelps and Mill brooks or other watercourses outside the limits of HUD Flood Study shall be 2 feet above flood levels as established by studies accepted by IWWC. Ordinances were updated to in late 2008 to be consistent with new FEMA standards for floodplain management.
Aquifer Protection			
Aquifer Protection Area Designation or Aquifer Protection Zone Regulation			
Avon	DEP	CT DEP Aquifer Protection Areas, http://www.ct.gov/dep/lib/dep/aquifer_protection/apamaps/stateAPA.pdf	<ul style="list-style-type: none"> CT DEP has identified and approved a Final Aquifer Protection Area (Level A) in Avon and Avon has delineated the aquifer protection area boundary on its town zoning map.
Simsbury	DEP	CT DEP Aquifer Protection Areas, http://www.ct.gov/dep/lib/dep/aquifer_protection/apamaps/stateAPA.pdf	<ul style="list-style-type: none"> Only Level B mapping has been completed showing three preliminary aquifer protection areas. Final Level A mapping is in progress. [CT DEP provides conflicting information regarding Simsbury's status. See http://www.ct.gov/dep/cwp/view.asp?a=2685&q=329220&depNav_GID=1654 as compared to http://www.ct.gov/dep/lib/dep/aquifer_protection/trackingtable.pdf]
Windsor			<ul style="list-style-type: none"> CT DEP has not identified any Aquifer Protection Areas in Windsor.

WATER QUALITY	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
<i>Local Aquifer Protection Agency</i>			
Avon	PZC	Appendix A to Town Charter and Ordinances	<ul style="list-style-type: none"> Planning and Zoning Commission is the designated Aquifer Protection Agency.
Simsbury	ZC	Town Code, Sec. 4-1 CT DEP, Aquifer Protection Area Program Status, http://www.ct.gov/dep/cwp/view.aspx?cid=2685&q=329220&depNav_GID=1654	<ul style="list-style-type: none"> Zoning Commission is the designated Aquifer Protection Agency. The Zoning Enforcement Officer/Inland Wetlands Enforcement Officer is also the designated staff member concerning the APZ.
Windsor			<ul style="list-style-type: none"> Windsor does not have a DEP-designated Aquifer Protection Area.
<i>Aquifer Protection Regulations</i>			
Avon	PZC DEP	Aquifer Protection Regulations CT DEP, Aquifer Protection Area Program Status, http://www.ct.gov/dep/cwp/view.aspx?cid=2685&q=329220&depNav_GID=1654 See Reg. Conn. State Agencies § 22a-354i-1. Zoning Map	<ul style="list-style-type: none"> Avon has adopted local aquifer protection area regulations that the DEP has found to be consistent with C.G.S. §§ 22a-354a to 22a-354bb. All regulated activities are prohibited in the aquifer protection area, unless they meet certain exceptions that comply with the DEP regulations. In general, regulated activities include businesses that use hazardous materials such as RCRA hazardous wastes, hazardous substances regulated under CERCLA, pesticides, and petroleum products. <ul style="list-style-type: none"> Examples of regulated activities include some manufacturing industries, chemical wholesale storage industries, gasoline stations, auto and engine service stations, dry cleaners, and furniture strippers. Installation of new underground storage tanks for storage or transmission of oil or petroleum or hazardous materials is prohibited, with allowances for replacement of existing tanks. Portion of TDR Receiving Area within Aquifer Protection Zone.
Simsbury	ZC	Zoning	<ul style="list-style-type: none"> Definition of the local Aquifer Protection Overlay Zone and delineation of its boundaries as all land

WATER QUALITY	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
		Regulations, pp. 83-94	<p>areas identified on a map entitled, "Town of Simsbury Aquifer Protection Zones, as amended, dated 3/19/90."</p> <ul style="list-style-type: none"> • Uses allowed in the underlying zoning district are subject to site plan review within the APZ. • Prohibited Uses: <ul style="list-style-type: none"> ▪ The use of road salt, fertilizer, herbicides, or pesticide in amounts greater than would be used for residential purposes is prohibited in the APZ. ▪ Burial of underground petroleum liquid, diesel fuel, and gasoline storage tanks is prohibited in the APZ. • Restricted Uses: <ul style="list-style-type: none"> ▪ Certain uses in the APZ, such as dry cleaning and commercial painting operations, which are deemed potentially damaging to an aquifer or aquifer recharge area, are subject to the regulations for a special permit. • All applications made to the Zoning Commission for development within the APZ are submitted to the Conservation Commission, which will review the application for consistency with the "General Design Standards for Land Use Activities in an Aquifer Protection Zone." • Where public water supply is available, all subdivisions must connect to such facilities. • When an application is made for an Inland Wetlands and Watercourses Permit for a regulated activity within the Aquifer Protection Overlay Zone, the applicant must provide written notice of the application to the water company. • * NOTE: These regulations pertain to the local Aquifer Protection Overlay Zone and are not consistent with the new state regulations for designated Aquifer Protection Areas.
Windsor			<ul style="list-style-type: none"> • Windsor does not have a DEP-designated Aquifer Protection Area.
Watershed Approach			
Avon			<ul style="list-style-type: none"> • <i>No relevant regulations identified.</i>
Simsbury	PC	PCD, p. 16	<ul style="list-style-type: none"> • Promotes coordination with other towns in the Farmington River and Pequabuck River Watersheds to improve quality of surface water prior to discharge into the Farmington River.
Windsor	Town Council CT DEP	Town Ordinances, § 9-7 Town	<ul style="list-style-type: none"> • Prohibition against erection or placement of any permanent obstruction within visible natural banks of any watercourse other than the Farmington or Connecticut rivers except by written permission of Town Council or Commissioner of Environmental Protection. • Prohibition against deposition or accumulation of debris along visible banks of any watercourse or

WATER QUALITY	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
		Ordinances, § 9-8	upon land adjoining such watercourse.
Pesticide Reduction			
Avon	PZC	Zoning Regulations, p. IX-20	<ul style="list-style-type: none"> As part of the standards for granting a special exception for activities within the ridgeline setback area, the Commission may limit or restrict the use of pesticides.
Simsbury	ZC	Zoning Regulations, pp. 43-44, 83-84	<ul style="list-style-type: none"> The use of pesticides in amounts greater than would be used for residential purposes is prohibited in the Aquifer Protection Zone. Any fertilizer, manure, and chemicals associated with agricultural uses must be stored at least one hundred (100) feet away from any stream.
Windsor			<ul style="list-style-type: none"> <i>No relevant regulations identified.</i>
Vegetation Restoration/ Preservation			
Avon			<ul style="list-style-type: none"> <i>No relevant regulations identified.</i>
Simsbury	CC	Wetlands Regulations, §§ 6.2: 10.2	<ul style="list-style-type: none"> Wetlands Regulations control clearing, clear-cutting timber and grubbing of land within the Upland Review Area (100 ft. of any wetland or watercourse). Criteria for decision include effect of development on natural capacity to support biological life and degradation of habitat [which can include removal of shade cover, food sources, etc.].
Windsor	PZC	Subdivision Regulations, § 4.10.1 Zoning Regulations, § 3.1.1 Zoning	<ul style="list-style-type: none"> Natural features shall be preserved and felling of trees shall be held to a minimum. Developer must leave two naturally growing trees in the front yard of each lot or shall plant two trees with trunk diameter not less than two inches in front yard of each lot. Requires planting of one major tree and two bushes or shrubs for every 25 feet of property line or any combination of contract limit line and property line for any site development. At completion of any re-grading operation, the regarded area, except portions affected by structural or parking improvements, shall be covered with no less than 4 inches of soil and re-vegetated with a perennial crop cover.

WATER QUALITY	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
		Regulations, § 3.3.2C	
Municipal Sewer System / Waste Water Treatment Facilities			
Avon	PZC	PCD, p. 56 Zoning Regulations, pp. IX-2, IX-5, IX-10, IX-14 Subdivision Regulations, pp. 8, 29	<ul style="list-style-type: none"> • Municipal sanitary sewer service is available in the eastern portion of Avon (including the area where the Farmington River crosses the eastern section of town) but not in the western portion (near the other reach of the Farmington traversing Avon). • Though additional capacity is planned for the current service areas, there is no plan to expand the service area. • Special Regulations for Multiple-Dwelling Development, Cluster Development, Planned Residential Development, Planned Elderly Residential Development, and Transfer of Development Rights require development in these zones to be connected to the public sanitary sewer system. • All subdivisions proposing a connection to the public sanitary sewer system must provide a sewer feasibility study with the application. • All storm water drainage systems shall be separate and independent of the sanitary sewer system.
Simsbury	ZC PC	Town Code, § 130-5 Town Code, § 130-46 Zoning Regulations, p. 86 Subdivision Regulations, pp. 3, 9	<ul style="list-style-type: none"> • All development within a public sewer service area may be required to install a building sewer to connect their building drain to the public sewer within 90 days after date of official notice. • Simsbury Water Pollution Control Authority is authorized to enter all properties for the purpose of inspection, observations, measurement, sampling and testing and to enter all private properties through which the town holds a duly negotiated easement for the purpose of, but not limited to, inspection, observation, measurement, sampling, repair and maintenance of any portion of the sewage works, if any, on said easement. • No building sewer may be constructed within twenty-five (25) feet of a water supply well. • Within the Aquifer Protection Zone, apartment buildings or clustered development must be served by public sewer. • All subdivisions must provide adequate sewage treatment facilities. • Subdivisions developed within the municipal sewer service area must connect to the public sanitary sewer system unless exempted by WPCA.
Windsor	PZC	Subdivision Regulations, § 4.11	<ul style="list-style-type: none"> • Subdivisions with less than 1 acre parcels must be connected to sanitary sewer. Sewer connection may be required for residential subdivisions with lots greater than one acre or for commercial and industrial subdivisions if soil conditions warrant; area or portion thereof is a designated wetland; area is associated with flooding; area or portion thereof is within stream belt; area or portion thereof is within

WATER QUALITY	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
			an aquifer and has potential value for water supply, for groundwater recharge or drains into water body with recreational potential. Any structures built within an existing subdivision that has capped sewers must be built to allow for future connection to the public sewer system.
On-Site Septic Systems			
Avon	PZC Farmington Valley Health District	Zoning Regulations, pp. IV-7, IV-10 Subdivision Regulations, p. 8 Farmington Valley Health District, http://www.fvhd.org/eh_subsurfacewage.htm	<ul style="list-style-type: none"> • Zoning Regulations do not specifically address on-site septic systems but require a special exception applicant for an additional residential unit or accessory dwelling unit to meet all applicable sanitary requirements for multiple unit residential development. • Where not connected to the public sanitary sewer system, a subdivision application must show that the site has suitable physical characteristics to adequately satisfy the Town and the State Department of Health requirements for subsurface sewage disposal. • Farmington Valley Health District inspects final construction before issuing Permit to Discharge.
Simsbury	ZC PC	Town Code, § 130-46 Town Code, § 130-6 Zoning Regulations, pp. 84-87 Subdivision Regulations, pp. 3, 9	<ul style="list-style-type: none"> • No building sewer may be constructed within twenty-five (25) feet of a water supply well. • Development outside of a public sewer service area must have a suitable private sewage disposal system. • All private septic systems are subject to the inspection and approval of the Director of Health as required by the CT Building Code. • Within the Aquifer Protection Zone: <ul style="list-style-type: none"> ▪ The minimum lot size for lot served by on-site septic is 40,000 square feet. ▪ Residential sanitary wastewater discharge to on-site septic systems at a rate greater than 450 gallons per 40,000 square feet per day is prohibited. ▪ Community Septic Systems are restricted in the Aquifer Protection Zone. ▪ Apartment buildings or clustered development must be served by public sewer. • All subdivisions utilizing on-site sewage disposal must provide a Sanitary Report demonstrating feasibility and conformance with Connecticut Health Code and Sanitary Specifications.
Windsor	PZC	Subdivision Regulations, §§ 4.11.3 thru 4.11.6	<ul style="list-style-type: none"> • On-site systems may be used for residential subdivisions greater than one acre and for industrial and commercial subdivisions provided soil conditions are appropriate, no wetlands present and not within designated flood zone, streambelt or aquifer or area with potential value for water supply or recreation. Developer may construct sewer system which will be capped until trunk line to public sewer system becomes available. Individual or communal septic systems may be provided but shall be discontinued

WATER QUALITY	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
			within one year from date when capped sewer is unsealed and access to public sewer system becomes available. If capped system exists and any of the conditions of § 4.11.1 are applicable then must discontinue use of private systems within 90 days of when access to public system becomes available.
Public Works			
Avon	PZC	Zoning Regulations, p. III-5	<ul style="list-style-type: none"> Municipal and public utility uses, buildings, and structures, including governmental and emergency services communication towers and/or antennas, may be authorized by the Commission as a Special Exception in any Zone under the applicable Special Exception criteria and further, among other things, provided that: Plants generating power and plants disposing of sewage and/or garbage are not permitted in residential zones. These requirements shall not apply to standard utility distribution systems.
Simsbury	PC ZC	Town Code, Ch. 137 Zoning Regulations, p. 84	<ul style="list-style-type: none"> Scenic road designation is available for highways that parallel notable natural features. The use of road salt is prohibited in the Aquifer Protection Zone.
Windsor			<ul style="list-style-type: none"> <i>No relevant regulations identified.</i>

BIODIVERSITY	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
Forest/Timber Management			
Avon			<ul style="list-style-type: none"> <i>No relevant regulations identified.</i>
Simsbury			<ul style="list-style-type: none"> <i>No relevant regulation identified.</i>
Windsor			<ul style="list-style-type: none"> <i>No relevant regulation identified.</i>
Invasive Plants			
Avon			<ul style="list-style-type: none"> <i>No relevant regulation identified.</i>
Simsbury	CC	Wetlands	<ul style="list-style-type: none"> All applications for an Inland Wetlands and Watercourse Permit must provide a description of the

BIODIVERSITY	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
		Regulations, p. 14	<p>proposed activity and proposed erosion and sedimentation controls and other management practices and mitigation measures which may be considered as a condition of issuing a permit for the proposed regulated activity including, but not limited to, measures to:</p> <ul style="list-style-type: none"> ▪ prevent or minimize pollution or other environmental damage, ▪ maintain or enhance existing environmental quality, such as managing non-native invasive plants, or ▪ restore, enhance and create productive wetland or watercourse resources.
Windsor	PZC	Zoning Regulations, § 3.1.1A(7)	<ul style="list-style-type: none"> • Plantings shall not include invasive species listed in CGS §§ 22a-381b thru 22a-381d, as amended. Preference shall be given to native species that are similar in appearance and function to non-native species whenever possible.

RECREATION	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
Recreation Limitations within Floodplain			
Avon	PZC	Zoning Regulations, p. III-6	<ul style="list-style-type: none"> • The following uses are allowed by special exception in the Flood Plain: golf courses, playgrounds, recreation areas, parks, and open spaces.
East Granby	PZC	Zoning Regulations § III.E, p. 16	<ul style="list-style-type: none"> • Golf courses and recreational facilities are special permit uses within the Flood Plain overlay zone.
Simsbury	ZC	Zoning Regulations, pp. 43-44	<ul style="list-style-type: none"> • Recreational uses are permitted within the Floodplain Zone. • Improvements associated with recreational use are allowed by special exception.
Windsor			<ul style="list-style-type: none"> • <i>No relevant regulations identified.</i>
Public Access to Farmington River			
Avon	FRWA	Farmington River Watershed Association, <u>The</u>	<ul style="list-style-type: none"> • Alsoop Meadows, at the Route 44 Bridge, provides access to the Farmington.

RECREATION		ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE	
	Responsible Agency	Source	Summary
		<u>Farmington River Guide</u> (2002), p. 57	
Simsbury	FRWA	Farmington River Watershed Association, <u>The Farmington River Guide</u> (2002), pp. 55-57	<ul style="list-style-type: none"> Tariffville Park provides access to the Farmington River. Additional access points can be found at the Route 185 Bridge/sycamore Tree, River Road and Curtis Park.
Windsor	FRWA	Farmington River Watershed Association, <u>The Farmington River Guide</u> (2002), pp. 69-71	<ul style="list-style-type: none"> River Street boat launch at Strawberry Hills Park East Barber Street boat launch Pleasant Street Park on Rt. 159 in center of Windsor Rainbow Reservoir boat launch, Merriman Road

CULTURAL LANDSCAPE		ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE	
	Responsible Agency	Source	Summary
Historic District			
Avon			<ul style="list-style-type: none"> <i>No relevant regulations identified.</i>
Simsbury	Board of Selectmen	Town Code, Ch. 25 Handbook of the HDC (1991) - advisory only	<ul style="list-style-type: none"> Historic District Commission is the administrative regulatory body. Boundaries of the East Weatogue Historic District are delineated in Town Code. HDC is empowered to hear and determine applications for certificates of appropriateness regarding the erection, alteration, or demolition or removal of a building or structure or the use of premises for parking within the East Weatogue Historic District. <ul style="list-style-type: none"> HDC is also empowered to adopt rules of practice and regulations to provide guidance to property owners as to factors to be considered in preparing an application for a certificate of appropriateness. Guidelines for Community Design set forth land use design standards to guide review of projects with direct or indirect impacts on historic resources.
Windsor	HDC	Town	<ul style="list-style-type: none"> Palisado Historic District includes land area running from Bissell Ferry Road south to the Farmington

CULTURAL LANDSCAPE	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
		Ordinances, §§ 14-50 thru 14-58	River, 250 foot strip on either side of North Meadow or Great Meadow Road from Palisado Green to Farmington River and 250 foot wide strip on either side of Pierson Lane for 500 feet from Palisado Avenue. <ul style="list-style-type: none"> • Authorizes HDC to adopt regulations consistent with statutes regulating new construction and modification of existing buildings.
Historic Preservation			
Avon	PZC	Zoning Regulations, pp. IX-21, IV-5, VI-9	<ul style="list-style-type: none"> • Standards for granting a special exception in the ridgeline setback area include identifying areas of archaeological and historic importance have been identified and adequate steps have been taken to preserve and/or record these areas. • Within the Neighborhood Business and Commercial-Specialized zones, which are commercial zones, when appropriate, the building design should reflect local historic detailing related to the history of the Town and, in particular, Avon's colonial past.
Simsbury	Building Official HDC Design Review Committee	Town Charter, Ch. 72 Zoning Regulations, pp. 23-24 Guidelines for Community Design, http://www.simsbury-ct.gov/publicdocuments/simsburyCT_Downloads/communitydesign/DesignGuidelines.pdf	<ul style="list-style-type: none"> • Demolition delay ordinance for buildings larger than 500 sq. ft. and greater than 50 yrs. old: <ul style="list-style-type: none"> ▪ applicants for a demolition permit must provide legal notice; ▪ objections may be filed within 15 days of that legal notice; ▪ if no objections are filed, permit will be issued; ▪ if objections are filed, permit will be delayed for 90 days. • Applications to rehabilitate and convert structures listed on the Town Inventory of Historic Places will be referred to the Simsbury Historical Society. <ul style="list-style-type: none"> ▪ Simsbury Historical Society will provide an advisory report to the HDC indicating whether the plans comply with the Secretary of the Interior's Standards for Rehabilitation. ▪ If the HDC finds that the conversion would detract from the architectural character of the original structure, it may condition approval of the special exception upon deletion of the detracting feature. • Guidelines for Community Design recommend treatment consistent with Secretary of the Interior's Standards for Treatment of Historic Properties and incorporation of historic resources into site design for commercial developments.
Windsor	PZC	Town Ordinances, §§ 3.30 thru 3.42 Zoning Regulations § 2.4.15S	<ul style="list-style-type: none"> • Flood Plain Management ordinances provide that 1 year limitation for variance is not applicable for reconstruction, rehabilitation or restoration of structures on National Register or state inventory of historic places. • Buildings listed on the National Register that is unsuitable and unused for original purpose for which it was zoned may be adaptively re-used for any purpose allowed by underlying zoning, as a tea room to serve no more than 15 persons, or as a retail antique, art gallery and workshop provided such building

CULTURAL LANDSCAPE	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
			is located in an area more conducive to commercial uses and where the surrounding area is commercial in nature.
Archaeology			
Avon	PZC	Zoning Regulations, p. IX-21	<ul style="list-style-type: none"> Standards for granting a special exception in the ridgeline setback area include identifying areas of archaeological and historic importance have been identified and adequate steps have been taken to preserve and/or record these areas.
Simsbury		Guidelines for Community Design, http://www.simsbury-ct.gov/public_documents/simsburyCT_Downloads/community_design/DesignGu.pdf	<ul style="list-style-type: none"> <i>No relevant regulations identified.</i> Guidelines for Community Design recommend treatment consistent with Secretary of the Interior's Standards for Treatment of Historic Properties and incorporation of historic resources into site design.
Windsor			<ul style="list-style-type: none"> <i>No relevant regulations identified.</i>
Tree Preservation			
Avon	PZC ZEO	Subdivision Regulations, p. 23 Zoning Regulations, pp. IX-21 to IX-22, VII-4	<ul style="list-style-type: none"> Shade trees of varieties acceptable to the Commission shall be provided along existing and proposed streets by planting new trees or preserving existing trees. Trees shall be provided at the rate of one per 50' on either side of the right-of-way. Such trees shall be located between the building line and 10 feet inside the lot line. New trees shall be not less than 3-3 1/2 inches in caliper and shall be guaranteed for one season's growth by the developer. As a standard for a special exception within the ridgeline setback area, the applicant must demonstrate that adequate safeguards have been taken to minimize the visual impact of proposed activities. Such safeguards may include but are not limited to (a) restricting the removal of trees and other vegetation and (b) requiring supplemental landscaping. Landscaping Regulations require that existing trees in good condition over 12 inches in caliper shall be preserved unless approved for removal by the Zoning Enforcement Officer.

CULTURAL LANDSCAPE	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
Simsbury	PC	Subdivision Regulations, pp. 8-9, 16-18	<ul style="list-style-type: none"> Subdivision site plans must comply with the tree replacement program if activities disturb the existing tree cover. Major trees (defined as those with 24" caliper or greater and at least 3' feet off ground) that are cleared or found to be in jeopardy from site disturbance must be replaced at a ratio of 2:1 Where replacement trees are planted on private property, conservations restrictions must be placed upon the private property to protect those trees. The PC evaluates site plans for the subdivision of land greater than 250 along the Talcott Mountain ridge), and of land greater than 350 feet in elevation in the western portion of town (including the Onion Mountain and Hedgehog ridges and western upland slopes), for loss of vegetative cover.
Windsor	PZC	Subdivision Regulations, § 4.10.1 Subdivision Regulations, § 4.16.3 Town Ordinances, § 8-128	<ul style="list-style-type: none"> Trees on site shall be preserved to the extent possible and a minimum of two pre-existing trees in front yard shall be preserved or replaced as necessary. Requirement that existing plant materials be retained and street trees be planted as part of passive solar energy plan. Retention of dead, decayed or damaged trees creating a hazard or danger to adjacent properties or to public properties constitutes a public nuisance. For Site Development, existing trees shall be saved if at all possible; existing trees left in a condition indicating likely survival will be counted as two required trees.

LAND USE	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
Design Review			
Avon	PZC	PCD, pg. 62	<ul style="list-style-type: none"> No design review board or guidelines established. Sets forth policy in Business and Industry section of PCD to "develop an informative design guidelines booklet which details town policies regarding design, layout, access, signage and architectural treatment for commercial development."
Simsbury	Design Review Board	Simsbury Guidelines for Community Design, http://www.simsburyct.gov/public_documents/simsbury	<ul style="list-style-type: none"> The Design Review Board was established by the Board of Selectmen to serve as an advisory body to the Planning and Zoning Commissions on matters of site and building design. The Board is charged with reviewing applications for commercial development submitted to the Zoning and Planning Commissions so that it may suggest ways to preserve, enhance and add to the design and/or aesthetics of proposed projects. The Board consists of and benefits from members with backgrounds and expertise in the fields of architecture, site planning, landscape architecture, historic preservation, professional engineering and

LAND USE		ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE	
	Responsible Agency	Source	Summary
		CT_Downloads/community_design/DesignGu.pdf	<ul style="list-style-type: none"> graphic design. The Guidelines for Community Design set forth land use design standards to guide the Board's review of projects.
Windsor	PZC	Zoning Regulations, § 4.5.3(B)(1)(f) Zoning Regulations, §§ 11.0 thru 11.6	<ul style="list-style-type: none"> Planning and Zoning Commission may consider building design in any cluster subdivision. Design Development provisions to allow for more flexible site design for development of multiple buildings or related groupings of buildings on a single lot or parcel; detailed site plans must include site and building drawings, elevations, sections and models of proposed buildings. <ul style="list-style-type: none"> New Neighborhood Design Development: residential development aimed at inclusive housing - allows for design review of site plans, building design, building location and orientation relative to streets, parking areas and other buildings. Center Design Development: redevelopment of Windsor Center and Wilson Center with strict design review to encourage balanced mixed use development based on historic pattern. Peripheral Neighborhood Design Development: residential development focused on recreational opportunities with specific design standards for landscaping and building design. Neighborhood Design Development: residential development requiring inclusion of at least 15% affordable housing units with design review of all buildings. Recreational Neighborhood Design Development: residential development focused on recreational opportunities with design review of all buildings.
Alternative Development Designs			
Avon	PZC	Zoning Regulations, p. IX-1 to IX-4; IX-4 to IX-7; IX-7 to IX-12; IX-13 to IX-16	<ul style="list-style-type: none"> Multiple-Dwelling Developments are permitted by special exception in certain specified zones. They "permit variations in height, bulk, density, and residential use types which would not otherwise be possible; and permit flexible site design so that the development may be constructed in harmony with and preserve natural site features." Cluster Developments are only permitted by special exception in residential zones, except the R-15 Zone. The Cluster Development regulations "permit variations in residential developments which would not otherwise be possible; permit flexible site design so that development may be constructed in harmony with and preserve natural site features; and permit residential developments which are sensitive to parcel configuration, topography, natural features, and the surrounding neighborhood." Planned Residential Developments are permitted by special exception in certain specified zones. The governing regulations "permit variations in height, bulk, density, and residential use types which would not otherwise be possible; permit flexible site design so that development may be constructed in harmony with and preserve natural site features; and assist and provide for the orderly

LAND USE	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
			<p>development and management of moderately priced housing for low- and moderate-income families.”</p> <ul style="list-style-type: none"> Planned Elderly Residential Developments are permitted by special exception in certain specified zones. The governing regulations “permit variations in height, bulk, density, and residential use types which would not otherwise be possible in order to meet the special needs of the elderly and handicapped; and permit flexible site design so that development may be constructed in harmony with and preserve natural site features.”
Simsbury	ZC PC	Zoning Regulations, pp. 52-62 Subdivision Regulations, pp. 5-8	<ul style="list-style-type: none"> Designed Development Districts permits development of groups of principal buildings on a single lot. The Village Cluster Zone and Single-Family Cluster Zone provide alternative methods to calculating density but limit the overall density to that allowed by the underlying zoning district. Subdivision Regulations set forth reduced dimensional requirements for building lots in Open Space Subdivisions.
Windsor	PZC	Zoning Regulations, § 4.5.3	<ul style="list-style-type: none"> Open Space subdivisions permitted: <ul style="list-style-type: none"> Only in single-family residential (A and AA) zones. Calculate density by multiplying total acreage (excluding wetlands, watercourses and any slopes > 25%) by 1.3 AA residential (min. lot = 27,500 sq. ft.) zones and 1.6 in A residential (min. lot = 20,000 sq. ft.) zones. All other bulk, setback, height regulations set by underlying zone apply. Cluster subdivisions permitted: <ul style="list-style-type: none"> In any single-family residential zone. Calculate density by multiplying total acreage (excluding wetlands, watercourses and any slopes > 25%) by 1.3 to determine number of lots. Other bulk and setback regulations set by underlying zone apply; max. height is 35 ft. regardless of zone. Site plans must demonstrate adequate natural site features (e.g. landscaping, topography) to provide privacy and screening and design must be appropriate for natural features (e.g. soil types, wetlands, scenic vistas).
Density Bonus			
Avon			<ul style="list-style-type: none"> <i>No relevant regulations identified.</i>
Simsbury	ZC	Zoning Regulations, pp. 52-62	<ul style="list-style-type: none"> Village Cluster Zone and Single-Family Cluster Zone provide for alternative methods of calculating density but limit the overall density to that allowed by the underlying zoning district.
Windsor			<ul style="list-style-type: none"> <i>No relevant regulations identified.</i>

LAND USE	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
Minimum Buildable Area			
Avon			<ul style="list-style-type: none"> <i>No relevant regulations identified.</i>
Simsbury	ZC PC	Zoning Regulations, pp. 28 Subdivision Regulations, p. 7	<ul style="list-style-type: none"> Every buildable lot must contain a rectangle exclusive of required side, front and rear yards, of the dimensions established for each zone. The buildable rectangle cannot include inland wetlands, floodplains, and land with an average slope over any distance of 50 ft. > 20%.
Windsor	PZC	Zoning Regulations, § 2.1.14	<ul style="list-style-type: none"> No lot width may be reduced below 25 feet for 1 and 2 family residential lots or below 35 feet for lots in any other use. All areas within any wetland or watercourse designated as Zone A by FEMA maps or with slopes greater than 25% shall not be counted for density calculations in any residential subdivision.
Unbuildable Land			
Avon	PZC	Zoning Regulations, p. III-3	<ul style="list-style-type: none"> Land designated as Flood Plain, Inland Wetlands, Watercourse, or with slopes in excess of 25% shall not be used to calculate density. Commission has discretion to waive this requirement.
Simsbury	ZC	Zoning Regulations, p. 17	<ul style="list-style-type: none"> Where the Town Zoning or Planning Commission judges an area unfit for human habitation for health reasons, the Health Officer must provide written approval before a building permit can be issued.
Windsor	PZC	Subdivision Regulations, § 4.5.3	<ul style="list-style-type: none"> Planning Commission may deem land unfit for building purposes where land conditions, improvements, lack of access to public services or other health or safety conditions warrant unless Commission is satisfied that proposed engineering will eliminate the hazards.
Mixed Land Use			
Avon			<ul style="list-style-type: none"> <i>No relevant regulations identified.</i>
Simsbury	ZC	Zoning Regulations, pp. 32-34; 39-42a	<ul style="list-style-type: none"> Mixed use development is permitted in the General Business Zone and Designed Business Development Zone. It is also permitted in the Simsbury Center Zone which is focused along Hopmeadow Street.
Windsor			<ul style="list-style-type: none"> <i>No relevant regulations identified.</i>
Interior/Rear Lots			

LAND USE	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
Avon	PZC	Zoning Regulations, Amended p. IV(4)(p)	<ul style="list-style-type: none"> Development of rear lots allowed by special permit in R-30 residential zones for residential purposes only.
Simsbury	PC	Zoning Regulations, pp. 27-28	<ul style="list-style-type: none"> Planning Commission may grant a Special Exception to allow the rear portion of a lot of record in the low density residential zones (R-40, R-80 and R-160) to be divided to create one new residential lot with no street frontage where all of the listed conditions are satisfied: <ul style="list-style-type: none"> Lot of record existed prior to 1969; Lot met all applicable setback requirements when the new lot was created; An easement at least 20 ft. wide must be granted over the original lot to provide access; The front lot line for the rear lot will be the lot line from which the right of access leads and both lots shall conform to the applicable zoning requirements; No additional subdivision or re-subdivision will be permitted until a 50 ft. right of way is created for all subsequent lots and all subdivision regulations are met.
Windsor	PZC	Zoning Regulations, § 4.5.13	<ul style="list-style-type: none"> Flag lots may be developed provided: <ul style="list-style-type: none"> Minimum area and yard requirements shall be 2x the required minimums if in AA or A residential zones and 3x minimums in R-13, R-11, R-10, and R-8 zones; front yard measured from rear lot line. Residential structure shall not be located more than 750 feet from town street providing access to lot; shall provide 25 foot access strip from town street to buildable area and driveway shall be at least 12 feet wide with additional 3 foot clearance on each side for emergency vehicle access. Flag lot must be screened from any lots in front of it by evergreen buffer to reach minimum of 6 feet in height at maturity with 75% obscenity.
Bond Requirements			
Avon	PZC IWC	Subdivision Regulations, p. 12 Zoning Regulations, pp. X-3, III-9, III-10 Wetlands Regulations, p. 19	<ul style="list-style-type: none"> In lieu of requiring the completion of public improvements previous to the final approval of a subdivision plan, PZC may accept a bond in an amount and with surety or other security and conditions satisfactory to it. PZC may require a bond to ensure that the improvements shown on a Site Development Plan are implemented. For all earth removal activities requiring an application, and before any excavation occurs, a bond must be posted to guarantee the restoration of the site and to cover erosion and sedimentation control during the operation.

LAND USE	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
			<ul style="list-style-type: none"> Commission may require a performance bond to cover the estimated costs of the measures specified in a certified Erosion and Sedimentation Control Plan.
Simsbury	CC	Town Code, § 130-42 Town Code, § 137-6 Wetlands Regulations, p. 25	<ul style="list-style-type: none"> A surety bond is required for all activities related to installing, repairing, altering, or removing a public sewer connection. A bond is required to guarantee to completion of excavation activities related to town highways and to restore the disturbed portion of the highway and the drainage system. The Inland Wetlands and Watercourses Commission may require a maintenance or performance bond covering any and all damage that might result from the proposed operation or use of the wetlands and watercourses, or that might occur within 2 years of completion of such operations upon approval of an application and prior to its issuance.
Windsor	PZC	Subdivision Regulations, § 8 Zoning Regulations, §§ 2.4.15L & 2.4.15M Zoning Regulations, § 15.5	<ul style="list-style-type: none"> Requirement of bond equal to amount of any remaining improvements but not less than 10% of cost of all improvements. Performance bond required for all natural resource extraction or fill activities involving more than 250 cubic yards of material. Performance and maintenance bonds required for site development approval and issuance of certificate of use.
Open Space Requirements			
Avon	PZC	PCD, p. 33 Subdivision Regulations, Amended § 5.01.03	<ul style="list-style-type: none"> PCD includes policy to increase the required open space dedication in subdivisions from the current five percent and fee to ten percent, consistent with Connecticut General Statutes regarding payment of fee in lieu of open space. Allows Commission to require the applicant to dedicate a maximum of ten percent (10%) of the total tract proposed for subdivision as open space.
Simsbury	PC	Subdivision Regulations, p. 4	<ul style="list-style-type: none"> 20% of each subdivision or re-subdivision must be dedicated to the Town as public open space, parks, or playgrounds. The dedicated land can include wetlands and slopes in excess of 30% provided that the percentage of the dedicated land in these categories is no greater than the percentage of the land in the remaining portion of the subdivision or re-subdivision. Land included in above-ground power transmissions, roads and other access easements or land set aside for drainage structures can not be included in open space calculations.
Windsor	PZC	Subdivision Regulations, §	<ul style="list-style-type: none"> Requirement that no less than 15% of total land area to be subdivided be dedicated to Town as public open space, park or playground; the percentage of the open space land designated as wetlands,

LAND USE	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
		4.7.1	steep slopes in excess of 25% and areas within FEMA Flood Zone A shall not exceed the percentage of the entire parcel to be subdivided. Requirement not applicable to subdivisions of less than 5 parcels where the lot is transferred to an immediate family member without compensation; affordable housing development under C.G. S. § 8-30g; retail, office, warehouse and industrial subdivisions.
Open Space Acquisition			
Avon	PZC	PCD, p. 34	<ul style="list-style-type: none"> • PCD promotes acquisition of parcels identified in Open Space Plan through fee simple purchase or purchase of development rights. • PCD also encourages the Town to seek state and federal funds to acquire open space and cautions the Commission to be selective regarding the quality and usefulness of the open space dedicated through the subdivision process. • PCD advises the Commission that priority should be given to acquisition of open space that would connect immediately, or in the future, with existing open space assets and land which has the ability to be used for active recreation without the need for a significant amount of regrading. • Overall, PCD sets a priority for the mechanisms to be used to preserve open space as follows: <ul style="list-style-type: none"> ▪ Acquire fee simple rights. ▪ Acquire development rights. ▪ Acquisition of public easements. ▪ Deed restriction
Simsbury	PC	Town Code, Ch. 21 PCD, p. 25	<ul style="list-style-type: none"> • An Open Space Committee exists to assist the Board of Selectmen with land acquisition and preservation efforts; the Committee applies the criteria listed in the Code and makes recommendations based on its prioritization of available lands. • A Fund for Land Acquisition and Preservation exists to generate funds for the purchase of properties prioritized by the Committee. • PCD supports the "Open Space Committee in its goal of identifying, prioritizing, and acquiring open space for the Town."
Windsor	PZC	Zoning Regulations, § 2.1.13	<ul style="list-style-type: none"> • PZC authorized to secure conservation easements or restrictions on land that it has determined would be in public interest to retain, maintain and conserve in its natural state.
Fee in Lieu of Open Space			
Avon	PZC	Subdivision Regulations, pp.	<ul style="list-style-type: none"> • Commission is authorized to accept a fee to the Town or a fee to the Town and transfer land (which may include land outside the boundaries of the subdivision) to the Town in lieu of or in addition to any

LAND USE	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
		21-22	requirement to provide open space.
Simsbury			<ul style="list-style-type: none"> <i>No regulations identified.</i>
Windsor	PZC	Subdivision Regulations, § 4.7.2	<ul style="list-style-type: none"> Fee may not exceed 10% of FMV of land prior to subdivision and fee shall be used to preserve or acquire land for open space, recreational or agricultural purpose.
Transfer of Development Rights			
Avon	PZC	Amended Zoning Regulations, p. IX(F) Zoning Map	<ul style="list-style-type: none"> Authorizes a TDR system and identifies sending and receiving zones as overlay districts to the zoning map. Sending Area located along Farmington Valley. Portion of Receiving Area lies within Aquifer Protection Zone.
Simsbury			<ul style="list-style-type: none"> <i>No relevant regulations identified.</i>
Windsor	PZC	Zoning Regulations, § 2.4.15R Zoning Regulations, § 4.5.8	<ul style="list-style-type: none"> PZC is authorized to approve the transfer of lot coverage (defined in § 3.3.14 as maximum area covered by roofs and paving) from one nonresidential parcel to another nonresidential parcel as a Special Use provided: <ul style="list-style-type: none"> No more than 50% of the allowable coverage of the sending parcel may be transferred and the maximum coverage of the receiving parcel shall not exceed 67%; Factors concerning the location of the sending parcel and public access to it if it is to be used for recreational or cultural purposes, the existing value of the sending parcel as a cultural, recreational, natural or agricultural asset or amenity and whether the transfer is preferable to conventional development warrant approval of the Special Use; Sending parcel shall be dedicated to the Town or to another grantee such as the State, a land trust or other nonprofit entity whose primary purpose is to convey a public benefit; Commission may waive site plan requirements under § 3 of Zoning Regulations to facilitate transfer. Transfer may be reversed upon petition of owners of both the sending and receiving parcels. Residential density transfers are permitted between all residential zones, the agricultural zone and Design Development areas provided: <ul style="list-style-type: none"> Sending parcel shall be appropriate for future development or public purpose, equal in area to the number of units transferred times density of underlying zone and shall be dedicated to the Town as condition of transfer. Receiving parcel shall be appropriate to accommodate additional density considering physical, geologic and geometric conditions, located to maximize advantages of proximity to public and

LAND USE	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE		
	Responsible Agency	Source	Summary
			<p>private facilities, streets, mass transit without overburdening and resulting density shall be no greater than the sum of the density of the underlying zone plus transferred density.</p> <ul style="list-style-type: none"> ▪ Densities for receiving parcel may not exceed 2x the existing density for single-family zones; 2x the existing density for agricultural zone; one additional dwelling unit per acre in new Neighborhood Design Development; up to five additional dwelling units per acre in Center Design Development.
Planned Residential Developments			
Avon	PZC	Zoning Regulations, pp. IX-7 to IX-12 and IX-13 to IX-16	<ul style="list-style-type: none"> • Planned Residential Developments are permitted by special exception in certain specified zones. The governing regulations "permit variations in height, bulk, density, and residential use types which would not otherwise be possible; permit flexible site design so that development may be constructed in harmony with and preserve natural site features; and assist and provide for the orderly development and management of moderately priced housing for low- and moderate-income families." • Planned Elderly Residential Developments are permitted by special exception in certain specified zones. The governing regulations "permit variations in height, bulk, density, and residential use types which would not otherwise be possible in order to meet the special needs of the elderly and handicapped; and permit flexible site design so that development may be constructed in harmony with and preserve natural site features."
Simsbury			<ul style="list-style-type: none"> • <i>No relevant regulations identified.</i>
Windsor	PZC	Zoning Regulations, §§ 11.2 & 11.4 Zoning Regulations, § 18	<ul style="list-style-type: none"> • New Neighborhood Design Development & Peripheral Neighborhood Design Development anticipate integration of single family and multi-family units with shared amenities on one site with comprehensive site plan. • Planned Urban Development zone allows for planned development integrating residential and business uses: <ul style="list-style-type: none"> ▪ Minimum of 60 contiguous acres; ▪ Public sanitary sewer and public water supply service required; ▪ Residential development shall commence only after initial development of at least 60,000 sq. ft. commercial building floor area; ▪ Maximum residential density = 4 units per acre;
Agricultural Provisions			
Avon	PZC	Zoning Regulations, pp. III-5, IV-11, IV-15	<ul style="list-style-type: none"> • Permitted by right in any residential zone. • Sale of farm products and construction of farm buildings is allowed by special exception in rural and residential zones.

LAND USE	Responsible Agency	ZONING, SUBDIVISION, INLAND WETLANDS AND WATERCOURSE REGULATIONS, AND TOWN CODE/ORDINANCE	
		Source	Summary
		to IV-17	<ul style="list-style-type: none"> • Agricultural zone along eastern edge of Farmington River where it crosses the eastern side of town.
Simsbury	ZC	Zoning Regulations, pp. 43-44, 83-85	<ul style="list-style-type: none"> • Treated as a restricted use and permitted only by special exception in the APZ. • Fertilizer, manure, and chemicals must be stored at least one hundred (100) feet away from any watercourse.
Windsor	IWWC PZC	Wetlands Regulations, § 4.1 Zoning Regulations, § 10	<ul style="list-style-type: none"> • Agricultural activities are permitted as of right in wetlands and watercourses. • Agricultural zone - recognition of strong history and current agricultural economy. <ul style="list-style-type: none"> ▪ Permitted uses include: nurseries, orchards, greenhouses, field crops, tobacco, livestock, excluding commercial pig farming, poultry raising, truck or market gardening and veterinary offices; owner occupied dwellings, dwellings for owner's family member employed on farm or permanent paid employee; residential subdivisions of ten lots or less with density as for AA residential zone (3 acre zoning). ▪ Accessory uses include: warehouses, processing plants, refrigeration plants and housing for permanent workers not to exceed 2 workers per cultivated acre. ▪ Special uses include: residential subdivisions of more than 10 lots; single-family cluster subdivisions; hospitals, sanatoriums, nursing homes; commercial kennels, animal hospitals; riding clubs, stables; cemeteries; social clubs, fraternal organizations; garages or open storage of commercial vehicles; farm stands; sale of nursery stock and related products; congregate housing, active adult subdivisions; places of assembly.