

## NATURAL RESOURCES ELEMENT

### 5.6.1 INTRODUCTION

Foster's natural resources are crucial in defining the town's character. The residents of Foster have relied on the land for many years. The land must accommodate buildings and septic systems and provide clean groundwater for wells. Many of the residents farm, and all enjoy the benefits of clear brooks and rivers, diverse wildlife habitats, and scenic natural features. Large portions of the town are currently zoned for 4.59-acre/residential-unit density to assist in preserving the significant acreage of environmentally sensitive land in Foster. At least two-thirds of Foster's land cover is of moderate to high constraint for development.

This Plan Element identifies:

- The natural resources of Foster, which are in need of protection, and
- The natural constraints, which limit the ability of the land to accommodate development.

These are discussed in the first of the following sections, Existing Conditions. The rest of this Element discusses Issues and Concerns, followed by an Approach to meet these needs.

### 5.6.2 EXISTING CONDITIONS - Environmental Inventory and Overlay Analysis

In developing this Element, the following resources and constraints were inventoried and evaluated as the *Environmental Inventory and Overlay Analysis* process based on published maps and reports:

- steep slopes
- bedrock outcrops
- floodplains
- soils
- agricultural lands and soils
- wetlands
- threatened/endangered species, important habitats
- surface water resources
- groundwater resources
- pollution sources

The features were mapped at a scale suitable for general planning (1:18,000 and 1:24,000). The maps were combined, as overlays to determine which areas in Foster are most sensitive to development impacts and/or most important to protect. Features were ranked based on the level of constraint to development or the importance of the natural resources:

<b>Feature</b>	<b>Constraint/Importance</b>
Public surface water supplies	very high
Significant habitats	very high
Diverse wetlands complexes/rare wetlands	very high
Other surface water	very high
Other wetlands as indicated by hydric soils (Soil group "D")	high
Floodplains	high
Public well recharge zones	high
Outwash deposits	moderate
Scituate Reservoir watershed*	moderate
Soil group "B" (High water table)	moderate
Soil group "C" (slopes, stones, bedrock)	moderate

*\* The Scituate Reservoir watershed is the drainage basin of a regional water supply and thus represents an important resource.*

Farmlands and important agricultural soils were mapped separately and compared with the overlay maps.

These maps have been combined to identify the degree to which areas are susceptible to development impacts:

- Areas of "very high" constraint/importance are considered especially vulnerable and are most suitable for conservation.
- Areas of "high" constraint include wetlands, floodplains, and wellhead protection zones, which represent a high risk of adverse impacts from development. State and federal laws impose significant restrictions on development in wetlands and floodplains, and wellhead zones are regulated by the State. The adjoining areas are best suited for low-density development with flexible lot dimensions, and strict review and design/performance standards.
- "Moderate" constraints include high water table, outwash deposits, and steep/rocky soils. These areas are so extensive that they cannot be avoided, but the risks of adverse impacts are lower than in high constraint areas. Many of the limitations can be addressed through engineering or careful selection of a site. Low-density land use will allow space for suitable sites for construction. Somewhat more intensive land uses may be possible with design or performance standards. All development in these areas should be reviewed for limitations.
- The remaining areas in town present low or no constraint and are appropriate to consider for less restrictive land use controls. There will be, however, regardless of soil type or limited constraints, the need to protect on-site wells from land use impacts to water quality.

Natural Resources/Constraints

Much of the land in Foster contains some constraints to development and/or important resources, described below. State and Federal agencies regulate many of them. However, enforcement is often limited, and certain resources receive little protection. The Town should review development applications for the presence of such resources/constraints to provide an extra level of protection.

*Steep slopes* - occur in the area of Moosup River/West Meadow Brook, along Quanduck Brook, south of the Westconnaug Reservoir, and north of the Barden Reservoir. Most steep slopes are between 15 and 30 percent slope, and a few small areas exceed 30 percent. Steep slopes represent a moderate constraint to development, posing potential problems of erosion and improper septic system function. Careful site design and review can minimize threats to resources. Where steep slopes occur near streams, they represent the highest risks of sedimentation into aquatic habitats.

*Bedrock outcrops* - are mostly found in the southern part of the town. Bedrock outcrop soil complexes were mapped together with the steep slope soil units. Outcrops pose moderate constraints, potentially interfering with septic system function. Structures are also difficult to erect. However, while not appropriate for dense development, such sites can be developed with proper engineering and review.

*Floodplains* - while floodplains generally occur in narrow bands near streams and rivers, some isolated or larger floodplains were identified in wetlands. Floodplains represent high constraint/importance due to the risks of property damage and downstream flooding associated with building in them.

*Soils constraints* - The Soil Conservation Service has defined five groups of soil constraints for use by the Rhode Island Geographic Information System. Group "A" represents a relatively low level of constraint, possibly including stony soils, or soils with slow or rapid permeability. Group "B" includes soils with a water table from 18 to 42 inches from the surface, containing areas where the water table is high. Group "C" includes steep slopes/ rocky soils. Group "D" includes hydric soils, where the water table is at or near the ground surface for a significant period of time during each year. Group "E" designates dumps, beaches, and other unusual features.

- Group "A" soils present relatively little constraint and make up 33 percent of the town area. These generally occur in the northeastern one-third of Foster (within the Scituate Reservoir watershed) and the southwestern corner. The rest of the soils in town present moderate to high constraints.
- Group "B" is approximately 34 percent of the town area, occurring along Howard and Cucumber Hills and extensively in western

Foster. These soils present moderate constraints. The possibility of a high water table indicates a greater potential for groundwater pollution from improperly designed or poorly functioning septic systems. In addition, these soils may contain federally-regulated wetlands. Again, such areas may be developed with careful engineering and town review.

- Group "C" soils occur in 12 percent of the town and are discussed above under steep slopes and rocky soils. They occur on Oak Hill and south of the hill, between Cucumber and Howard Hills, and south of the Westconnaug Reservoir.
- Group "D" soils occur as narrow bands along streams and in identified wetlands. Comprising approximately 18 percent of the town area, they represent a high level of constraint. Hydric soils generally indicate the presence of regulated wetlands. Structures, including septic systems, are generally not permitted in such soils.

*Agricultural Lands and Soils* - Clusters of agricultural soils of prime or statewide importance occur in the Moosup River Valley and along Winsor and Hemlock Brooks. They represent approximately 12 percent of the town's area. Many of Foster's active farms occur on important agricultural soils. Most of the farms are currently accessory uses on residential lots.

*Wetlands* - The *National Wetlands Inventory* and the *USDA Soil Conservation Service* mapping (group "D" - hydric soils) were used to identify the general location of wetlands. These are considered areas of high constraint/importance because of their value for habitat, groundwater recharge, and surface water storage and filtration. They are generally regulated by State and Federal agencies. Most wetlands in the town are associated with the stream systems and floodplains in Foster. Especially diverse or unusual wetland complexes were identified from the U.S. Fish and Wildlife Service National Wetlands Inventory maps and highlighted as "very high" importance. These areas occur along the Moosup River and Hemlock Brook and south of the Barden Reservoir and include marshes and scrub-shrub or evergreen wetlands.

*Surface Water* - **The Scituate Reservoir Watershed** and the two feeder reservoirs, the Barden and Westconnaug Reservoirs, dominate the eastern part of Foster. The Scituate Reservoir watershed occupies roughly the eastern two-thirds of Foster. The other drainage systems in Foster are the Moosup River/Quanduck Brook, Killingly Pond and the Flat River Reservoir system. According to reports by the Rhode Island Department of Environmental Management (DEM), the streams flowing into the Scituate Reservoir meet their class A standards *but are threatened by pollution from development*. The Moosup River system is considered a highly valuable pristine system. State and Federal regulations protect water quality. The Scituate Reservoir is further protected by a watershed protection plan and the Providence Water Supply Board's ownership of land next to the

reservoir.

*Threatened/Endangered Species, Important Habitats* - The DEM Natural Heritage Program identified several significant sites and habitats.

One is associated with Hemlock Swamp. The other two large sites occur on the slopes of Jerimoth Hill and Round Hill. Seven small sites were identified where threatened or endangered species were found. These areas are considered "very high" value due to the scarcity of such resources, but they receive little protection from regulatory agencies. These areas should be targeted for conservation.

*Groundwater* - The town relies on wells for drinking water. Foster does not have any groundwater resources *as defined* and mapped by RIDEM that have a high potential to be significant public drinking supply sources. However, the town does have outwash deposits that may yield a source of drinking water for *small-scale public systems*.

The State of Rhode Island has not mapped significant aquifers in Foster. Limited outwash deposits, generally occur in major river valleys. These resources are shown on the following *Groundwater Resources Map* based upon USGS surficial geology mapping of outwash deposits. Because water moves quite freely through these deposits, they are well-suited to supply or recharge public water, but they are also *easily polluted*. A large deposit underlies and surrounds the Barden and Westconnaug Reservoirs, Paine Brook, and Foster Center. Other relatively large outwash deposits are located in southwestern Foster and the Moosup River valley. The town also contains several public wells (those serving 25 or more residents or 15 or more people per day). The state wellhead protection plan requires land use controls within 1750-2000 feet of each public well. The wellhead protection zones and outwash deposits are considered high constraints. Their use or potential use as public water supplies should be protected with strict performance standards or other land use controls.

*Pollution sources* - Rhode Island Department of Environmental Management (DEM) has mapped several potential sources of groundwater pollution, including the former Nike sites, the former Town dump on Salisbury Road, a former industrial site in Scituate, and several surface impoundments in western Foster. Other potential pollution sources include:

- Land uses that store or generate toxic material, such as dry cleaning establishments or junkyards. Many of these uses are currently permitted in various zones in Foster. There are two junkyards in the vicinity of the Barden Reservoir.
- Agricultural uses where erosion or animal waste wash off is not controlled.
- Dense residential or commercial development could pose a pollution risk from runoff of parking areas or septic systems.

- Improperly designed septic systems in areas of a high water table could cause health risks.

#### Overlay Analysis

Based upon the aforementioned inventories, maps were combined as overlays to determine areas of moderate, high, and very high constraint/importance as they occur together along river valleys. These areas should be a high priority for conservation. The Town could also seek to develop the North/South hiking and recreational trail and conservation area along these corridors.

- Clusters of important farmland soils tend to occur in areas of high constraint/importance. Policies that encourage agricultural use and discourage development would also help preserve the resources in these areas. Performance standards or erosion control measures should be required to protect water bodies near agricultural uses.
- High constraint areas are generally narrow bands of hydric soils and floodplains associated with streams. By requiring undisturbed buffers from surface waters and wetlands, many of these areas would remain undeveloped while allowing construction elsewhere on each lot. The buffers would protect surface waters from sedimentation and runoff.
- Areas of moderate constraint represent most of Foster's land. Development should be allowed, subject to design review. The *Scituate Reservoir Watershed Management Plan* recommends limitations on uses within the watershed, especially in areas of high water table. The high water table soils (Group "B") would be appropriate areas to allow development by special exception and/or require water quality performance standards. This would allow development while protecting groundwater and surface water.
- Areas of low constraint occur along Cucumber Hill Road, southeast of Foster Center, southwest of the Balm of Gilead Swamp, and near the Ponagansett River. Two of these areas are adjacent to significant habitat areas. The other two fall entirely within the Scituate watershed.

The environmental studies (see *Technical Memorandum #4 Natural Resources Inventory and Analysis* in the Technical Appendix) undertaken for the Plan, including the *Environmental Inventory* and the *Overlay Analysis*, indicate that Foster has an abundance of significant and sensitive resources that are in need of protection. Many of these resources fall within the *Scituate Reservoir Watershed*, which supplies recharge to the State's most important drinking water supply. Foster has already taken major land use regulatory steps to protect the water supply by adopting land use density provisions that enable suitable building areas to be found on residential lots, many of which are characterized by an abundance of wetland, hydric or high water table soils, steep slopes or other unbuildable environmental conditions.

#### 5.6.4 CURRENT REGULATIONS/PROGRAMS

##### Federal/State Regulations/Programs

Many of the inventoried resources or constraints are regulated, in part, by Federal and/or State agencies, including wetlands, floodplains, and water quality. The State septic system requirements address soils limitations, slope, depth to water table, and distance to wells. The State's wellhead protection program requires protection zones around public wells. In addition, the State's *Scituate Reservoir Watershed Management Plan* is a guide for State agencies and towns to aid in the protection of Scituate Reservoir, a vitally important public water supply.

Federal/State regulations are a basis for protecting sources. However, the regulations may not be consistently applied or enforced by the agencies. Federal and State agencies regulate important natural resources, however, as documented in the *Scituate Reservoir Management Plan*, these regulations are not adequate to protect sensitive natural resources from the impacts of development. For example, RIDEM can prevent the alteration of a wetland but can't prevent land use impacts within the watershed from having an impact on the water quality and wildlife of the wetland. In many communities there is an over reliance on Federal and State regulatory programs to protect resources that should or must be protected at the local level. The adoption by the State Assembly of the new (1991) zoning enabling act explicitly grants communities the authority to protect certain natural resources that would have been questionable or not possible to regulate through zoning in the past.

##### Municipal Regulations/Programs

The Town's zoning and subdivision regulations currently require 4.59-acre lots and certain setbacks from lot lines and streams. While the density of development these regulations dictate is appropriately based upon the "carrying capacity" of the land, there is a need for additional alternate development patterns which would enhance environmental protection. The subdivision regulations require delineation of watercourses and site suitability for septic systems. Frontage lots in any quantity have been exempt from subdivision review, although the town is enforcing zoning dimensions in frontage lots. This exemption essentially encourages development with few controls along existing roads, making it difficult to protect resources from damage.

Foster has a commercial/industrial site review process, which includes requirements for runoff and erosion control, delineation of wetlands and floodplains, site suitability for septic systems, and protection of water quality and habitats. Foster has an erosion and sedimentation control ordinance, which applies to multiple residence developments. Oversize residential lots and wetland lots receive a discount on property taxes.

#### 5.6.5 ISSUES AND CONCERNS

Foster's residents have emphasized the importance of protecting the town's natural resources and ensuring that development is responsive to the natural capability and constraints of the land - the "carrying capacity". These concerns are especially important because of the significant amount of resources and constraints found in the town.

Most of the town contains some form of development constraint or natural resource. The highest constraint areas are relatively small and scattered through the town. It is appropriate to limit the type and density of development in these areas. Where it is impractical to restrict development, strict performance standards would reduce risks of adverse impacts. Moderate constraint areas are extensive, containing steep slopes, rocky soils, high water table, or outwash deposits. Restricting development would prove impractical in these areas; it is much more appropriate to minimize impacts through design standards and review.

#### Water Resources Issues

A specific concern is the need to protect the town's water resources. Two-thirds of Foster drains to the Scituate Reservoir, a regional public water supply. Both inside and outside the reservoir's watershed are valuable streams and rivers that are important to the town's scenic qualities and natural habitats. All residents rely on groundwater for potable water. Many of these water resources are connected; all can be threatened by inappropriate development or poorly designed or maintained septic systems. Although the water quality in the town is generally good, there have been localized problem areas (groundwater contamination) and indications of potential problems (apparent degradation of ponds).

Federal, State, and local agencies regulate many of the resources and constraints. However, current regulations, including local regulations, should be improved to provide better protection of the natural resources.

Federal and State regulations may not be applied or enforced consistently. Many of the Town's current regulations do not apply to the majority of development projects (frontage development) or do not focus on protecting specific resources.

#### **5.6.6 APPROACH**

The Citizen's Advisory Committee of 1991 identified the following issues concerning environmental regulations:

- The rights of property owners should be protected.
- Environmental controls must be strengthened.
- The Town's small staff and boards must be able to enforce the regulations.

The Town will strengthen its environmental protection requirements to address locally many of the resources that are protected at State and Federal levels. Town regulations can be locally enforced, and developers must already identify features such as floodplains, water bodies, wetlands, and water table levels for State and Federal review. The Town's small staff must be able to easily administer the regulations that are developed. The regulations should provide some flexibility to developers so they may avoid high constraint areas on a site.

**A Farmland - Rural Conservation Overlay zoning District** is a necessity for town management of sensitive environmental resources. The Town should consider adoption of a set of incentives for this approach. The overlay district includes areas of very high, high and moderate constraint and are extremely important in defining the rural character of the town. These resources need a high level of protection for the adverse affects of insensitive development. This overlay district will not change the development density programmed by underlying zoning districts. It is simply a mechanism to provide the additional protection required for those environmental resources deemed most significant and sensitive to development. It will include protection for:

- Hydric soils and wetlands, streams and water bodies
- Aquifers, well heads and ground water resources
- Unique natural habitats
- Prime agricultural soils and farmland
- Character-defining historic and scenic resources

An overlay map depicting all these constraints is located in the Town Hall.

**The Agricultural - Residential (AR) zoning district** currently in effect will be *enhanced* by the Farmland - Rural Conservation Overlay District. It will also be enhanced by protection provisions for moderate level constraints - high water tables (18-42") and steep slopes. The density provisions of the AR zoning district (4.59 acres/dwelling unit) will not be affected. These density provisions are considered to be appropriate for the level of environmental constraints existing throughout the town.

These two primary initiatives will provide significant additional protection for the Scituate Reservoir Watershed in accordance with the *Scituate Reservoir Watershed Management Plan*.

The following are specific goals and policies for action:

Goals:

- Assure that the unique recreational, environmental and cultural resources of the town, including the historic resources of the town, landscape and scenic features, rivers, lakes, ponds, groundwater resources, agricultural soils, community facilities and open space are protected from potential adverse affects of future growth and development.

- Promote the efficient use and re-use of the town's energy and environmental resources, including ground and surface water supplies, fossil fuels and electricity, use of solar and renewable energy resources, and the recycling of waste materials in an efficient manner.

Policies:

- Adopt the **Farmland - Rural Conservation Overlay zoning District** to provide for the protection of environmental resources and guide development away from environmentally sensitive areas. This overlay district will be tailored to reflect the limitations present and will include appropriate design or performance standards to be met such as flexible siting requirements for building, flexible lot frontage requirements and subdivision road design criteria.

*The Farmland - Rural Conservation Overlay District will include protection for hydric soils and wetlands, ground water resources and wellheads, unique habitats, agricultural soils and farmland, scenic and historic areas.*

The boundaries of the Overlay District will be determined through the Environmental Inventory and Overlay Analysis to include all existing platted lots of record which have at least 50% coverage by any one of the features listed above or a combination thereof.

- Retain the **Agricultural - Residential (AR) Zoning District** enhanced by protection provisions for high water table areas and steep slopes.
- The Town should review all development applications to identify the presence of environmental resources and constraints to development. The Town should:
  - Enhance *The Planner's Database*<sup>1</sup>, (obtainable in Town Hall) to reflect the Environmental Inventory and Overlay Analysis.
  - Use the *Database* to assist in selecting areas for conservation (highest value areas), strictest design standards (high value areas), or design standards/review based upon constraints and opportunities for development (moderate value areas). The *Database* should be used in conjunction with the Environmental Inventory and Overlay Analysis maps to indicate these areas and types of concerns for review.
  - Develop a list of permits required for each resource and the permitting agencies. This will help the Town review proposals and will help developers understand the requirements that apply to them.

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<sup>1</sup>Fusco, Phillips and Whalen; The Planner's Database; Foster, RI; 1990

- Increase development review by the Town, to allow additional review of all development, including frontage lots, the most common development presently occurring. The Town will require review for any land division to ensure zoning criteria are met. The Town will use design standards, such as flexible setback and frontage requirements, which will be specified in the Zoning Ordinance, and will be required for all lots in the Farmland - Rural Conservation Overlay District. By employing such measures, the Town will require developers to delineate natural features on plans, which are already required for Federal and State permits. For example, by requiring setbacks for structures (buildings and ISDS) from streams and wetlands in addition to frontage, front, side and rear yard setbacks, the Town will require these setbacks and features such as wetlands, water bodies, forests, significant habitats and soil characteristics to be shown on the plans submitted for land divisions and subdivision. The Town Planner will coordinate an internal coordinated review of the submitted plans between department heads and appropriate Boards and Commissions to ascertain whether or not the zoning and subdivision requirements have been met.

This review will reinforce and enhance current Planning Board review of land division and subdivision applications. The Town will use outside professional agency resources as a supplement where necessary to aid in the local review process: the Soil Conservation Service (sedimentation and erosion control, and Environmental Review Team review), the State Division of Planning (Local Planning Assistance), and RIDEM (wetlands, Natural Heritage, and ISDS). The Town will explore a fee schedule to be paid by applicants for appropriate professional consulting services assisting in project review. The Town will explore using a stepped review process, with Town staff and Boards and Commissions reviewing the least complex sites and outside agencies assisting in reviewing more complex sites. The need for review may be triggered by the size and type of development or the severity of constraints on the site based upon *The Planner's Database* and the *Overlay Analysis*.

- Create development design standards based upon the environmental limitations of each area of town identified in the *Environmental Inventory and Overlay Analysis*. These standards will include design guidelines and requirements to mitigate adverse impacts to sensitive environmental resources.
- The Town will provide an extra level of protection for environmental resources in addition to that provided by the State and Federal agencies. Protection should be provided for:

#### Steep slopes

- Require steep slopes to be mapped on Land division, subdivision and development project plans.
- Discourage development on steep slopes (greater than 15%).

- Review any development on steep slopes for erosion control in accordance with the Soil Erosion and Sediment Control Plan.

#### Bedrock outcrops

- Require bedrock outcrops to be mapped on all subdivision and development project plans.

#### Floodplains

- Require floodplains to be mapped on all subdivision and development project plans.

#### Poor soils (B, C, D constraints categories)

- Require B, C, D constraints categories to be mapped on land division, subdivision and development project plans based upon the most current SCS soils classifications and mapping.
- Develop updated erosion/sedimentation ordinance.

#### Prime agricultural soils and farmland

- Require prime agricultural soils and farmland to be mapped on land division, subdivision and development project plans.
- Promote agricultural conservation easements for active farms or agricultural soils of prime - statewide importance. These easements could help protect other high value natural resources as well. This should be done in conjunction with the application of the Farmland - Rural Conservation Overlay zoning District.
- Change the way we tax land to encourage agricultural land use; consider tax disincentives for converting agricultural land to non-agricultural uses.
- Require updated erosion/sedimentation controls for agricultural lands; consider implementing tax incentives to encourage farmers to use appropriate erosion/sedimentation controls. Require Best Management Practice (BMP) plans for farm animal waste disposal for appropriate agricultural developments.

#### Wetlands

- Require RIDEM verified wetlands to be mapped on land divisions, subdivisions and development project plans within the Farmland - Rural Conservation Overlay District and for projects of a significant scale in the AR District and other zoning districts not affected by the Overlay.

- Require unbuildable buffers between wetlands and development, maintaining natural vegetation where possible.
- Require drainage retention/detention basins, drainage swales or appropriate impact mitigation and no net increase in runoff to wetlands from new development.
- Require updated erosion/sedimentation and storm water controls for all appropriate development projects.

#### Surface water - Water Resources

- Continue requiring a density ratio of one dwelling unit for 4.59 acres with setbacks from streams in the AR zoning district and Farmland - Rural Conservation Overlay District to accommodate the extensive environmental constraints in Foster. This density is in line with densities recommended in the *Scituate Reservoir Management Plan*.
- Include significant and sensitive environmental resources within the watershed in the Farmland - Rural Conservation Overlay zoning District, including hydric soils, wetlands, and surface water systems and enhance the AR district for additional protection of high water table soils and steep slopes.
- Adopt nodal type planned commercial development zoning districts on Route 6 with specific development standards and site plan review criteria to promote small scale, mixed use residential and commercial development design that mitigates impacts to the Watershed. Rezone remaining Highway Commercial and Neighborhood Commercial areas to the AR district west of Foster Center Road.
- Include specific hazardous use restrictions and performance standards in the Industrial zone between Windsor Road and Hartford Pike for Watershed protection. Limit this zone to the present size of the Turnquist Lumber Company property (east of Windsor Road).
- Require unbuildable buffers along water bodies and waterways.
- Cooperate with surrounding communities to protect common surface and groundwater.
- Consider adopting in phases many of the use restrictions and development standards in the Scituate Reservoir Watershed Management Plan town-wide when the Town is able to implement such restrictions and standards. These restrictions and standards are designed to protect vulnerable surface and groundwater resources, and such resources are important throughout the town. The standards include:
  - Requiring setbacks and vegetated buffers from surface water and wetlands,

- Prohibiting storage or disposal of high-risk substances, continuing reduced road-salting program,
  - A town endorsed continuous program of recycling hazardous waste material,
  - Prohibiting underground fuel tank storage, and
  - Requiring water quality protection measures in new developments.
  - The Scituate Reservoir Watershed Management Plan also recommends establishing a wastewater management program.
- A phased ISDS program should be considered which would begin with an educational program first, to be followed by a septic system maintenance program funded by individual homeowners, homeowners' associations, developers or with incentives provided by the Providence Water Authority. A complete list of *Scituate Reservoir Watershed Management Plan* recommendations is provided in the Plan Technical Appendix.
  - *Many of the use restrictions recommended are included town-wide as part of the Farmland - Rural Conservation Overlay District.*
  - Require updated erosion/sedimentation and storm water controls. Include in performance standards adopted for new agricultural development the requirement of Best Management Practice (BMP) plans for farm animal waste consistent with the recommendations made in Section 5.5 of the 1982 Comprehensive Plan. (Copy available for viewing in Town Hall.)

Groundwater - aquifers, outwash deposits, wellheads, existing and potential groundwater reservoirs.

- To protect groundwater quality for private wells, do not allow hazardous waste generators or sources that are presently allowed in the zoning regulations in residential or industrial uses.
- Encourage homeowners near pollution sources to have their wells tested. The Town should work with RIDEM to designate high-risk areas for study by EPA, DEM, or the Department of Health.
- Require non-point source pollution control for all development. Provide incentives for non-point source pollution control for existing development.

#### Threatened/Endangered Species

- Protect unusual and significant habitats (Natural Heritage sites; unusual/diverse NWI wetlands complexes). Include a review requirement for all projects that development not harm unique natural areas; include the RIDEM Natural Heritage Program in the site review process

for developments near significant sites. These areas will be included for protection in the Farmland - Rural Conservation Overlay District.

#### General

- Encourage Creative Land Development and other flexible development design tools (e.g. Planned Unit Development, Planned Commercial Districts, Residential Compounds) which locate development on suitable land, preserve environmentally sensitive areas and large contiguous areas of open space and maintain overall low density (4.59 acres/dwelling unit).
- Encourage development in patterns appropriate to the land utilizing Planned Unit Development, Planned Commercial Districts, and Residential Compounds. Emphasize the importance of avoiding areas of high constraint and high environmental importance.
- Avoid uniform or strip residential or commercial development along roads.
- Allow certain small scale types of development such as Residential Compounds to have private roads which will not open up back lots to future frontage lot development but will provide for limited back lot development as residential compounds or other forms of Creative Land Development. This could be done in conjunction with the Farmland - Rural Conservation Overlay Zoning District.
- Target river valleys for conservation.

#### Dedication of Open Space

- Require open space land dedication or fee-in-lieu of as specified in subdivision regulations. The Town will target high value areas on site or off site for dedication, such as significant habitats, uplands adjacent to wetlands, or property for recreational purposes.
- Require 100 ft. wide conservation easements for lands in new subdivisions bordering rivers and streams and associated wetlands. The conservation easements would be required for linear buffers along these resources.

#### Acquisition of Land or Development Rights

- Target vulnerable or highly valued areas for acquisition through donation purchase of development rights, conservation easements or dedication. Fee simple acquisition should be viewed as an alternative when others are not appropriate. Focus on rivers and adjacent land within the *Scituate Reservoir Watershed* and elsewhere for conservation, thus protecting valuable resources and providing passive visual recreational use. Work with the Providence Water Supply Board

through the Scituate Reservoir Watershed Communities Council to identify and negotiate funding sources and responsibility for acquisition of critical watershed lands.

- Acquire development rights to large contiguous parcels funded in part by private donations and State open space bond issue funds. Enhance other incentives to preserve these parcels as open space (e.g. tax incentives) or include penalties for conversion.
- Utilize the Land Trust as the key Town agency in the program of coordinating land or development rights acquisitions.

Further develop North-South Hiking and Recreational Trail.

- Develop conservation corridors or designated preserves to include areas identified as "very high" constraints and importance including the Moosup and Ponagansett Rivers. These areas could be incorporated into a North-South hiking and recreational trail, or tributaries thereof, with Glocester and Coventry.
- Monitor the quality of water bodies and identify sources of contamination through review of DEM water quality permits, State of the State's waters (published every two years), other published material, and observations. Consider establishing a watershed watch.
- Maintain an inventory of surface and groundwater pollution sources (known and potential) through published reports and land use information.
- Promote Foster as a whole as a *Greenway*. Together with neighboring towns in Rhode Island and Connecticut to the north, south, east and west, Foster is part of the last large greenbelt existing in the Boston-Washington Northeast Megalopolis. Foster's green spaces and open rural character are significant elements of an important greenway and should be promoted and protected as resources of regional significance.