

HOW WE MEASURE UP

Gaining perspective on where the Town stands today can be achieved by looking not only at the changes that have occurred inside its borders but by benchmarking against other communities in development-related categories such as population size, geographic location, infrastructure and economic base. We can evaluate Putnam by looking at it from the perspective of its location in the northeast corner of Connecticut, in comparison to communities of comparable population size, compared to communities having comparable socio-economic characteristics (based on Educational Reference Group), and to the State as a whole. Appendix E contains benchmarking results for Putnam and eight communities to which it can be compared because of one or more shared characteristics.

The Northeast Corner

Putnam is one of eleven Connecticut towns in the northeast corner that form the Northeastern Connecticut Council of Governments, the regional planning organization for the region. These towns vary in population and economic base, with those most comparable to Putnam in these respects being Thompson (population) and Plainfield and Killingly (economic base). Three towns in Massachusetts – Dudley, Oxford, and Webster – are geographically close enough to be used for comparison purposes.

In most categories Putnam ranks in the mid-range among these communities; fourth in median household income (1999), educational attainment of high school graduate or higher, and percent of the population below the federal poverty level (1999), and fifth in the total number of housing units. Putnam ranks toward the bottom in two categories: sixth in population in 2000 and seventh in the value of the 2001 gross grand list (Killingly tops the list). These two rankings are of interest when considered in relation to the two categories in which Putnam ranks near the top: second highest median age and second lowest in residential real estate (Killingly was the lowest) as percentage of gross grand list (2001). These rankings would seem to indicate a potential gap between Putnam's resident work force and its expanding commercial/industrial tax base.

In order to evaluate Putnam’s competitiveness in attracting additional real estate development and resident businesses, comparative tax data for Windham County towns gathered by the Connecticut Policy and Economic Council (CPEC) was reviewed. Putnam compares well within the region in many respects, including:

- Per capita property tax: Putnam has a good business tax base and taxes do not fall as heavily on residents as in other communities: Putnam’s per capita tax burden was \$589 compared to \$976 for the county and \$1, 531 for the State.
- Change in property taxes: Putnam’s property taxes increased at a slower rate than that of the region: 17.5% vs. 22.4%.
- Equalized mill rate: Putnam ranked below the county and State averages, a positive indicator for business recruitment.

■ Similar Communities

Educational Reference Groups (ERGs) are a classification of the State’s public school districts into groups based on the characteristics of public school students’ families. The factors considered include median income; percentages of families with one or both parents having a bachelor’s degree; parents employed in executive, managerial or professional specialty occupations; poverty; single-parent and non-family households; non-English home language; and district enrollment. Each of the nine ERGs created is geographically diverse but considered to be socio-economically comparable.

Putnam is in ERG H, the second-lowest ranking ERG. ERG H is comprised of the following small, manufacturing-based cities shown with their 2000 census population figures.

• Ansonia	18,554
• Bristol	60,062
• Danbury	74,848
• Derby	12,391
• East Hartford	49,575
• Killingly	16,472
• Meriden	58,244
• Middletown	43,167
• Norwalk	82,951
• Norwich	36,117
• Norwich Free Academy	---
• Putnam	9,002
• Stamford	117,083
• West Haven	52,360

There is a great disparity in the size of these communities with Putnam being the smallest, followed by Derby, Killingly and Ansonia. When compared with these three districts in the benchmarking categories summarized in Appendix E, Putnam ranks third out of the four in the categories of educational attainment (high school graduate or higher) and median household income (1999); in both of these categories Killingly ranked fourth. Again, Putnam had the highest median age and lowest gross grand list (2001), and Killingly again tops the grand list category. Putnam had the second lowest percentage of population below the federal poverty level (1999) and was again second to Killingly in the lowest percentage of residential real estate as a percentage of gross grand list (2001).

■ The State

Several studies completed in recent years examined Connecticut's place in regional, national and world markets. By analyzing land use patterns and their relationship to economic vitality and quality of life, the state's competitive position was evaluated to identify challenges. Initial studies (conducted by the Connecticut Regional Institute) found that development in Connecticut, fueled by the completion of the state's limited access highways, had become highly decentralized, a **phenomenon** also known as sprawl. This has led to traffic congestion, disinvestment in cities and poorer urbanized towns, pollution and loss of agricultural land and open space. All of these issues affect quality of life, a major aspect in the state's competitive position, and place stress on individual communities.

Using public data sources, the areas of fiscal capability, service needs and costs for services and infrastructure were looked at in detail in a report entitled "Connecticut Metropatterns". Municipalities were grouped using the following characteristics: property tax base per household (2000) and growth in property tax base per household (1995-2000) to measure fiscal capability; the percentage of elementary students eligible for free lunches (2000) to measure service "needs"; population growth (1990-2000) and population density (2000) to evaluate per person costs for services and infrastructure. This classification system yielded a diversity of fiscal and social conditions that were clustered into six different community types: Central Cities (4 communities), Stressed (12 communities), At-Risk (43 communities), Fringe-Developing (31 communities), Bedroom-Developing (57 communities) and Affluent communities (22 communities). Communities by classification are summarized in Appendix F.

Putnam, its neighbors Thompson, Killingly, Brooklyn, Eastford and Plainfield, are categorized as At-Risk communities, meaning they are stable in many respects – below average poverty rates, average number of jobs per resident and greater-than-average job growth – but are showing signs of stress in the areas of tax resources or social and physical needs. School poverty rates increased faster in At-Risk communities than in the state as a whole and property tax base and property tax growth were below state

average in these communities. Twenty-eight percent of the state's population lives in At-Risk communities. The concern is that pressure to increase the tax base could lead to poor land use planning and discourage a regional approach to planning, contributing to sprawl. Neighbors Woodstock and Pomfret were both classified as Fringe-Developing communities, areas with slow-growing, below average tax bases; these communities are experiencing rapid population increases which result in pressure for major infrastructure investments. These types of communities contain only 6% of the state's population but 13% of the land that was urbanized between 1980 and 1990.

Conservation and Development Policies Plan for Connecticut

Many issues such as transportation networks, housing markets and natural systems are regional or statewide in scope. The State has established planning regions charged with preparing and maintaining regional plans of development; every five years the State Office of Policy and Management prepares a statewide Conservation and Development Policies Plan. Orderly growth can only be achieved if these plans are consistent with regard to land uses and densities of development. Regional and State policies, particularly with regard to infrastructure such as highway and sewer improvements, impact local development patterns. Some would say unwise policies and practices in these infrastructure areas have contributed to the sprawling development patterns threatening Connecticut.

The State Conservation and Development Plan puts forth the growth strategy for the State, serving as its policies guide for prioritizing state capital investments and coordinating planning among state agencies. State-funded projects over \$100,000, whether proposed by a State agency, a municipality or a private developer, are reviewed for consistency with the strategy policies of the State Plan. The likelihood of receiving funding for a project may therefore depend on whether the State funding agency can show that this consistency exists.

The State Plan consists of two components: a written document and a Locational Guide Map. The format of the written portion has been totally revamped in the 2004-2009 edition and is now presented in terms of the following six broad-based growth management principles, each of which has functional sub-sections and corresponding policies.

- Redevelop and Revitalize Regional Centers and Areas with Existing or Currently Planned Physical Infrastructure
- Expand Housing Opportunities and Design Choices to Accommodate a Variety of Household Types and Needs
- Concentrate Development Around Transportation Nodes and Along Major Transportation Corridors to Support the Viability of Transportation Options
- Conserve and Restore the Natural Environment, Cultural and Historical Resources, and Traditional Rural Lands

- Protect and Ensure the Integrity of Environmental Assets Critical to Public Health and Safety
- Promote Integrated Planning Across All Levels of Government to Address Issues on a Statewide, Regional and Local Basis

This new approach is intended to allow latitude in how the State's growth strategy is coordinated locally and regionally. The test of this latitude is the Locational Guide Map, where the State applies its strategy by designating areas in several categories of urban, rural or environmental concern.

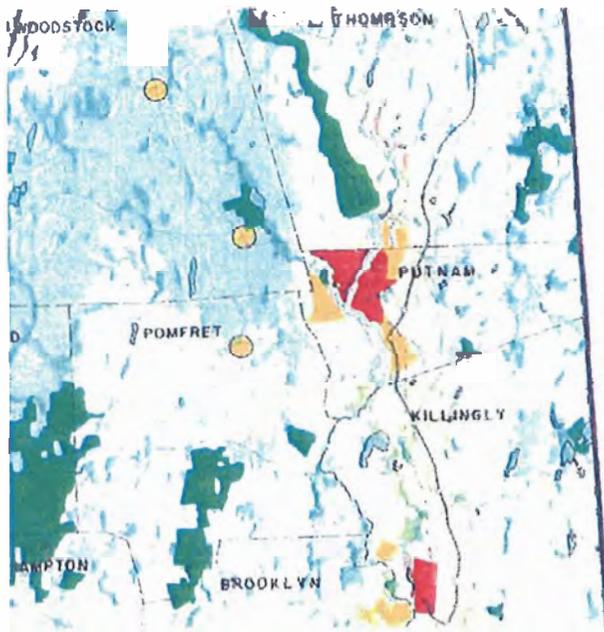
Each map category is assigned a development priority and a state action strategy indicating State policy toward support of development or conservation activities in that category. The State's policy continues to be to target public investment resources to support development first in "Regional Centers" (through a revitalization/rehabilitation strategy), then in "Neighborhood Conservation Areas" (a maintenance/intensification strategy) and then to "Growth Areas" (concentrate new growth and densities in areas close to Regional Centers). These designations are based on characteristics and suitability for various types of development. The most urbanized designations are based on quantifiable considerations such as extent of built up area, age and tenure of housing, and poverty. This visual format is where inconsistencies with the State Plan are clearly identifiable.

A comparison of the State's Locational Guide Maps for Putnam for 1987 and 2004 (Figure 8) shows the growth of areas around the I-395 exits as well as changes of classification made in several areas in the 1998 State Plan. The proposed map for the 2004 edition of the State Plan is unchanged from 1998.

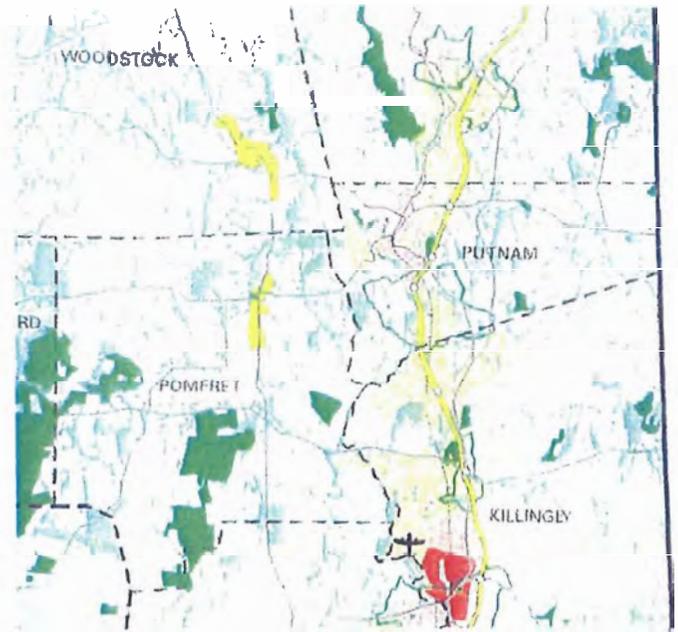
- The Special Services District was reclassified from an Urban Center (traditional core area commercial, industrial, transportation and specialized institutional services and facilities of inter-town significance areas) to a Neighborhood Conservation Area (significantly built-up and well-populated), a priority category one level below Regional Centers.
- Slight expansion of the Neighborhood Conservation Area boundary in the vicinity of Sabin Street and Heritage Road, a change from Long Term Urban Potential designation.
- Slight reduction in the Urban Growth Area west of Sabin Street by changing to a Conservation/Rural designation.
- Expansion of Growth Area designation south and east of Exit 95 to Killingly, a change from Rural designation.
- Growth Area boundary of Route 44, I-395, Heritage Road and Route 21 area amended to limit to Exit 97 area only; changes involved Conservation/Rural designations.

PLAN OF CONSERVATION AND DEVELOPMENT

PUTNAM, CONNECTICUT



1987



2004

URBAN AREAS

Urban Centers

Urban Conservation Areas

Urban Growth Areas

Long Term Urban Potential

AREAS OF ENVIRONMENTAL CONCERN

Existing Preserved Open Space

Preservation Areas

Conservation Areas

RURAL AREAS

Rural Community Centers

Rural Land

URBAN AREAS

Regional Centers

Neighborhood Conservation Areas

Growth Areas

AREAS OF CRITICAL ENVIRONMENTAL CONCERN

Existing Preserved Open Space

Preservation Areas

Conservation Areas

Level A/B Aquifer Protection Areas

Historic Areas

RURAL AREAS

Rural Community Centers

Rural Land



LOCATIONAL GUIDE MAP

Source: CT Conservation & Development Policies Plan

FIGURE 8

- Added Level A/B Aquifer Protection Area east and west of Exit 95 south to Killingly.
- Eliminated Long Term Urban Potential Area in southwest corner between River Road and the Quinebaug River; area changed to Rural/Conservation.

The following inconsistencies between the 2004 State Plan and the 2005 Land Use Plan proposed for Putnam are noted.

- The local plan extends its Growth Area designation (defined as areas suitable for more intense development with sufficient infrastructure availability and capacity) further west and north along Route 44 at I-395 Exit 97 than the State Plan does, based on the designation in the local Plan of the interchange area as a “Regional Retail Node” and the establishment of the Mary Crest Drive/Route 44 intersection as the Town’s urbanized area limit.
- The local plan also identifies the area around I-395 Exit 96 as a Growth Area based on the designation of this interchange area as a “Gateway Node” linking to downtown and having potential for multi-family housing development.
- The area west of I-395 south of Exit 95 has also been designated in the local Land Use Plan as a Growth Area to allow future use for industrial development consistent with the existing industrial park uses east of I-395 that are approaching build-out. The proposed area falls within the preliminary boundary limits established for an aquifer protection area, the actual extent of which will not be determined until more detailed evaluations are completed.

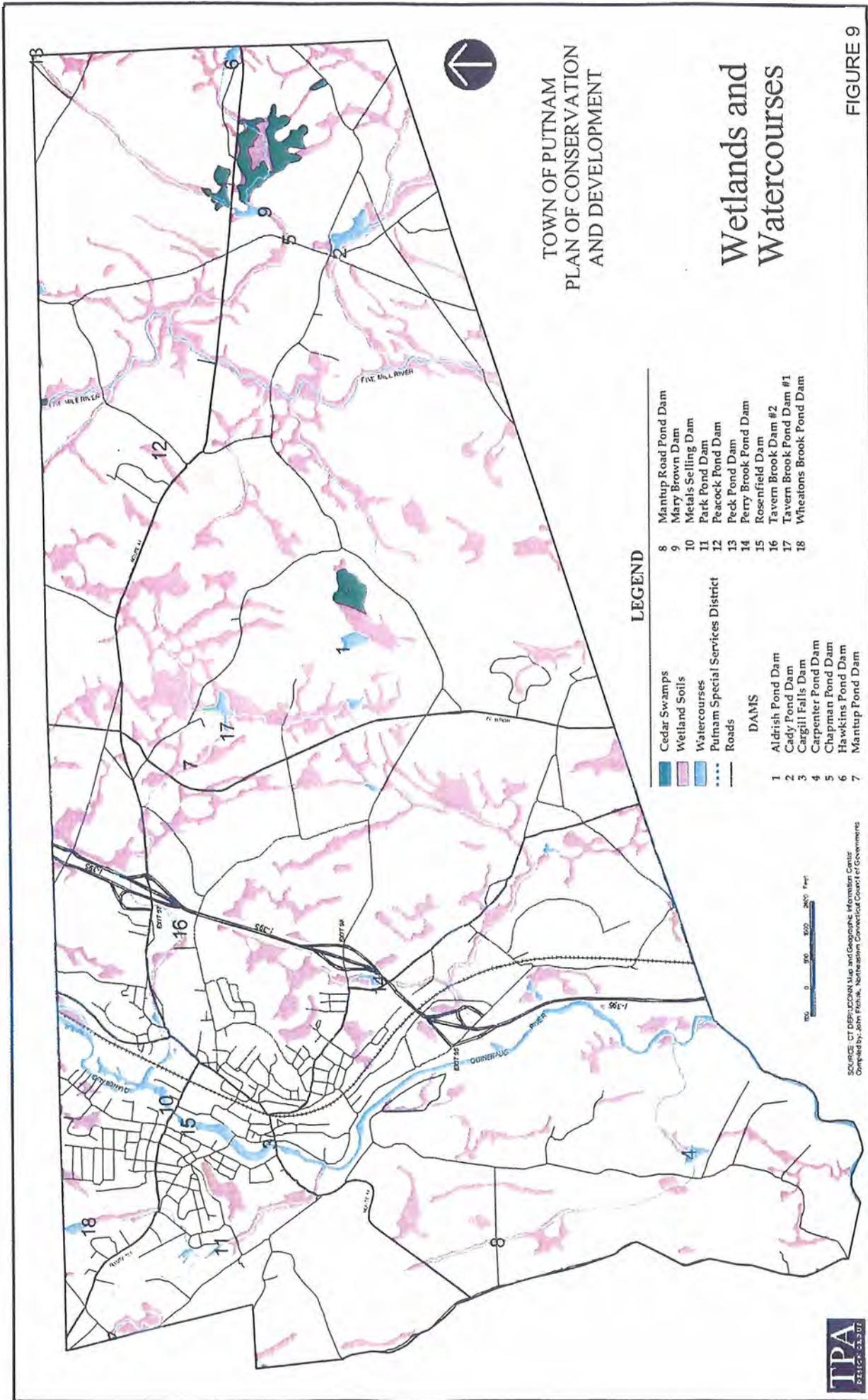
PHYSICAL CHARACTERISTICS

Physical characteristics influence a town's development patterns. Some characteristics may constrain or limit development while others attract and encourage it. Historically, Putnam's development patterns were influenced by the water power of the Quinebaug River, the desire to use that water power for economic gain, and the practical need to work and live close to the growing economic hub even when that meant overcoming the challenges of building on the hillsides along the river.

NATURAL RESOURCES

■ Water Resources

The Town's main rivers are the Quinebaug and the Five Mile. Each of these has an associated network of small rivers, brooks and wetland systems that drain into it. Figure 9 shows the Town's Wetland and Watercourses. The drainage areas of these two rivers are sub-drainage basins of the Thames River. In general terms, more than two-thirds of the town is located on the Quinebaug sub-basin and the eastern one-third of town is on the Five Mile regional sub-basin. Within Putnam the Little River and Carpenter Brook feed into the Quinebaug from the west, while Little Dam Tavern and Perry/Culver Brooks feed in from the east. Several of these streams have ponds associated with them including Tavern Brook Pond and Aldrich Pond (Little Dam Tavern Brook), Wheaton's Brook Pond and Park Pond (associated with the Little River tributary) and Mantup Road Pond and Carpenter Pond (Carpenter Brook). Little Dam Tavern Brook also has an extensive wetland system associated with it. Tributaries to the Five Mile River include Munson Brook, Mary Brown Brook, Torry Brook and Cady Brook. Associated ponds include Hawkins Pond and Chapman Pond (Mary Brown Brook) and Cady Pond. All of the tributaries have associated wetland systems, with the river itself and Mary Brown Brook having relatively extensive systems. Understanding these resources and their interrelationship is important because they serve various public functions such as sources of water supply for residents (whether from the public water company or private wells); support for aquatic resources, wildlife, and recreation; and support the state's economic growth.



TOWN OF PUTNAM
PLAN OF CONSERVATION
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Wetlands and Watercourses

FIGURE 9

LEGEND

- Cedar Swamps
- Wetland Soils
- Watercourses
- Putnam Special Services District
- Roads
- DAMS**
- 1 Aldrich Pond Dam
- 2 Cady Pond Dam
- 3 Cargill Falls Dam
- 4 Carpenter Pond Dam
- 5 Chapman Pond Dam
- 6 Hawkins Pond Dam
- 7 Mantup Pond Dam
- 8 Mantup Road Pond Dam
- 9 Mary Brown Dam
- 10 Metals Selling Dam
- 11 Park Pond Dam
- 12 Peacock Pond Dam
- 13 Peck Pond Dam
- 14 Perry Brook Pond Dam
- 15 Rosenfield Dam
- 16 Tavern Brook Dam #2
- 17 Tavern Brook Pond Dam #1
- 18 Wheatons Brook Pond Dam



SOURCE: CT DEP/UDAN Map and Geographic Information Center
Compiled by: John Fishak, Northeastern Connecticut Council of Governments



■ Water Quality

As part of its management of the State's resources the State has established existing and projected water quality classifications in both surface water and groundwater categories, depending on intended use. The highest classification applies to existing or potential drinking water supply sources and tributaries, fish and wildlife habitat, recreational use, and agricultural and industrial supply. The classifications work downward from there, with designations reflecting diminishing public health functions/uses and increasing degradation of existing water quality. Classifications are reported in terms of present condition and future goals to be achieved or maintained if already at an appropriate water quality for intended use. Figure 10 is a guide to the water quality classifications for surface water and groundwater in Putnam as published by the State. In the majority of cases in the Quinebaug sub-basin present conditions (represented by the first letter symbol) do not meet water quality criteria that support designated uses (see map legend). The second letter symbol indicates the classification that is the goal for water quality in that resource area.

Existing or potential water supply areas are of course of most concern for maintaining high water quality. Note that the classifications for the Little River (the surface supply source for the Putnam Water Company) indicate that the raw water in the river presently does not meet the criteria for use as a public water supply without treatment, which is provided at the plant on Peake Brook Road. Land uses on the watershed upstream of the water treatment plant that may be contributing to degradation of the water quality include salt storage areas of the State DOT and the Town of Woodstock, runoff from agricultural uses such as manure piles and milk waste lagoons, the Woodstock landfill, and industrial discharges. Appropriate stormwater management and source protection measures need to be in use throughout the watershed area to assure protection of water quality even though treatment is being provided.

The second public water supply source for the Putnam Water Company is the Park Street Well Field. As an active water supply its classification is GAA. The well field's proximity to the Quinebaug River makes it vulnerable to the effects of historic and current land uses that have impacted the river's water quality. These include sewage treatment plants in Putnam and Thompson, Putnam salt storage and landfill areas, DOT salt storage and industrial and agricultural discharges. Most of these are non-point sources (occurring as leachate or as runoff rather than direct discharge to the river via a piped system). Groundwater protection is important throughout the community because those parts of town not served by public water depend on groundwater sources for individual wells. These areas are designated and need to be maintained as GA areas by controlling the sources of degradation and pollution. At present the Town has only minimal and informal source protection measures in place to protect the quality of its public and private drinking supply sources.

WATER QUALITY CLASSIFICATIONS

This sheet summarizes information presented in Connecticut's WATER QUALITY STANDARDS published by the Water Compliance Unit of DEP. This sheet should be used only as a guide. Refer to the current edition of the STANDARDS for more detailed information. Classification symbols separated by a diagonal line (B/A) indicate the present condition (B) and the future goal (A).

SURFACE WATER CLASSIFICATIONS

INLAND SURFACE WATERS (freshwater rivers, streams, lakes and ponds)

CLASS AA
Designated Class AA waters are potential public drinking water supply, fish and wildlife habitat, recreational use, agricultural and industrial supply and other purposes. Recreational uses may be restricted.

AA
Areas of potential to meet water quality criteria which support the above listed uses.
All surface waters within existing or potential water supply watershed or Class A waters otherwise classified.

B/A
May not be meeting Class AA water quality criteria or designated uses. The goal is Class AA.

CLASS A
Designated Class A waters are potential drinking water supply, fish and wildlife habitat, recreational use, agricultural and industrial supply and other purposes including navigation.

A
May not be meeting Class A water quality criteria or one or more designated uses. The goal is Class A.

CLASS B
Designated Class B waters are fish and wildlife habitat, agricultural and other uses, and other recreational uses including navigation.

B, B⁺, B⁻, B₁, B₂, B₃
Areas of potential to meet water quality criteria which support designated uses. B₁ - special classification for 1 and 2 foot lake; B₂ - restricted navigation; B₃ - cold water fisheries; B₁ - combined B₁ and B₂.

C/B or D/B
Presently not meeting Class B water quality criteria or one or more designated uses. The goal is Class B.

GROUND WATER CLASSIFICATIONS

ALL GROUND WATERS OF THE STATE

CLASS GAA
Designated Class GAA waters are potential public drinking water supply.

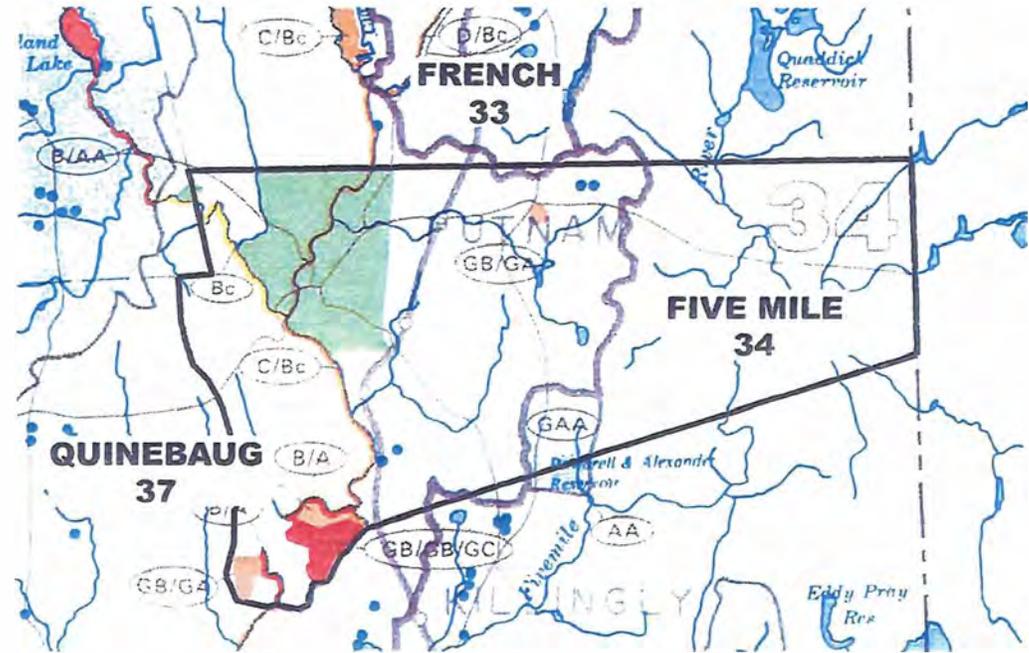
GAA
Class GAA waters within public water supply catchments or within the area of protection of public water supply systems. The goal is to maintain drinking water quality. All surface waters within existing or potential water supply watershed are Class GAA waters otherwise classified.

G/B
Class G/B waters may not be suitable for direct human consumption without good treatment due to water chemistry, levels of levels of contaminants or land use practices. The groundwater quality is appropriate for use in agriculture and other uses. The goal is to maintain drinking water quality.

CLASS GB
Designated Class GB waters are fish and wildlife habitat, recreational use, agricultural and other uses, and other recreational uses including navigation.

GB
Class GB waters may not be suitable for direct human consumption without good treatment due to water chemistry, levels of levels of contaminants or land use practices. The goal is to maintain drinking water quality.

GB/A, B/A
Areas which have been found to be contaminated or where contamination has been introduced into the ground water. Water quality is known or presumed suitable for direct human consumption. The groundwater goal is to restore water quality to the level of Class B. The present use of these ground waters is the same as for Class B water. The present use of these ground waters is the same as for Class B water. The present use of these ground waters is the same as for Class B water.



THAMES MAJOR BASIN

- 33 French Regional Basin
- 34 Five Mile Regional Basin
- 37 Quinebaug Regional Basin

TOWN OF PUTNAM PLAN OF CONSERVATION AND DEVELOPMENT

Drainage Basins & Water Quality Classifications



SOURCE: Connecticut Department of Environmental Protection

FIGURE 10

■ Topography

Land with the fewest constraints is usually developed first, so that as a community matures undeveloped areas dwindle to the land that is more difficult, and therefore often more costly, to develop. These areas are usually environmentally sensitive such as steep slopes, wetlands or floodplain, requiring engineered solutions to overcome these natural development constraints.

Putnam is located in the Eastern Uplands of Connecticut, an area of rugged terrain characterized by north-south running hills. Areas of Significant Slopes in Putnam are shown on Figure 11. Putnam is surrounded by the rolling Windham Hills on the west and the more rugged Mohegan Range on the east. The Quinebaug River runs through lowlands that extend south all the way to Griswold. There is also an area of relatively flat topography east of I-395 which includes extensive wetland areas. Torry Hill and Elmwood Hill bracket this flat area through which the Five Mile River flows.

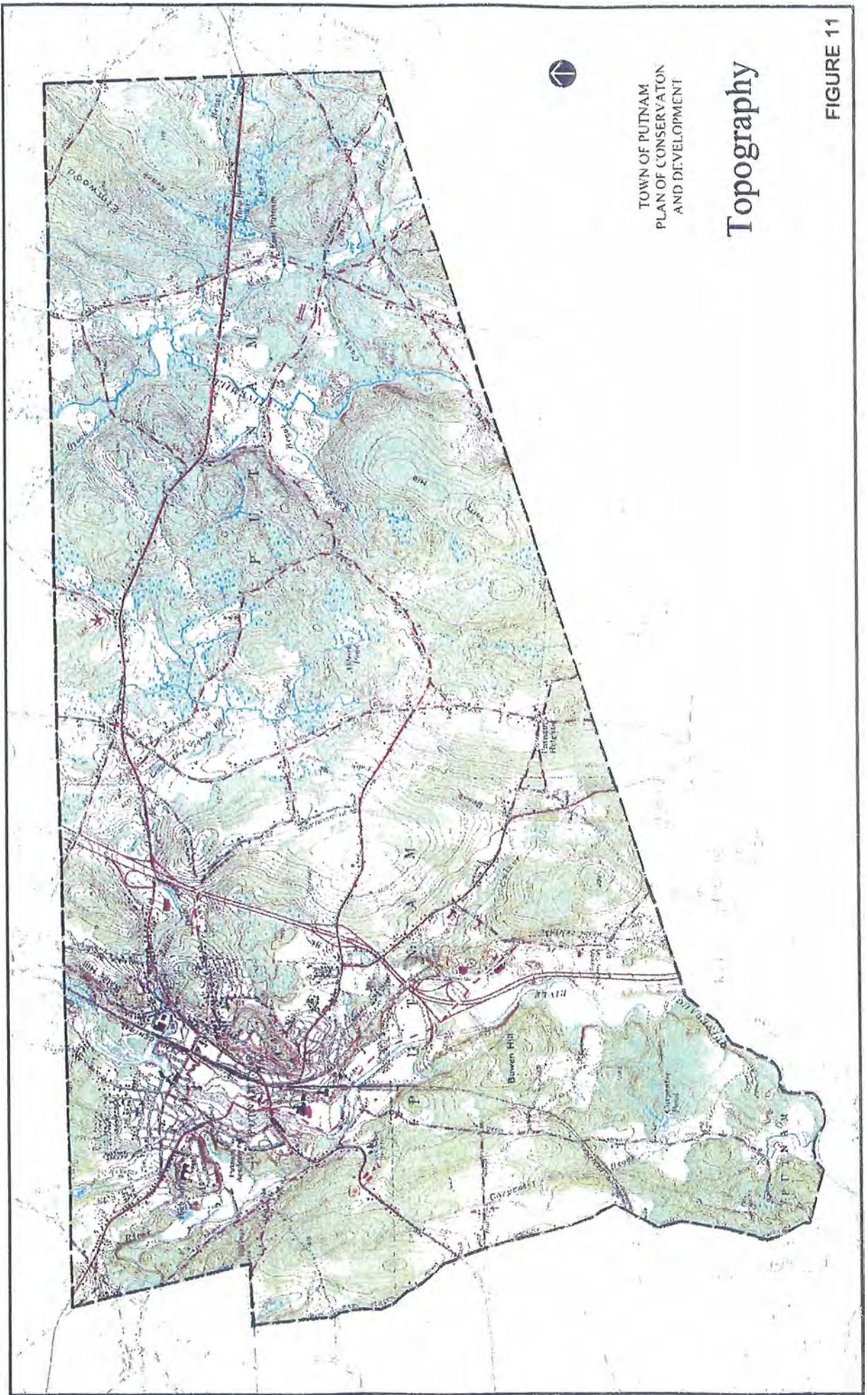
■ Soils

Soils vary in characteristics that impact their suitability for development such as slope, drainage or stoniness. The soils in Putnam are the result of the geologic forces that created its landscape of hills and rivers. Because of these characteristics it is not surprising to find that like much of the County, many areas contain soils that are impacted by slope, have a stony quality or are wet or poorly drained. Some of these soil properties can be mitigated through engineering solutions, at an added development cost. Figure 12 shows soils in Putnam.

DEVELOPMENT PATTERNS

■ Growth Patterns

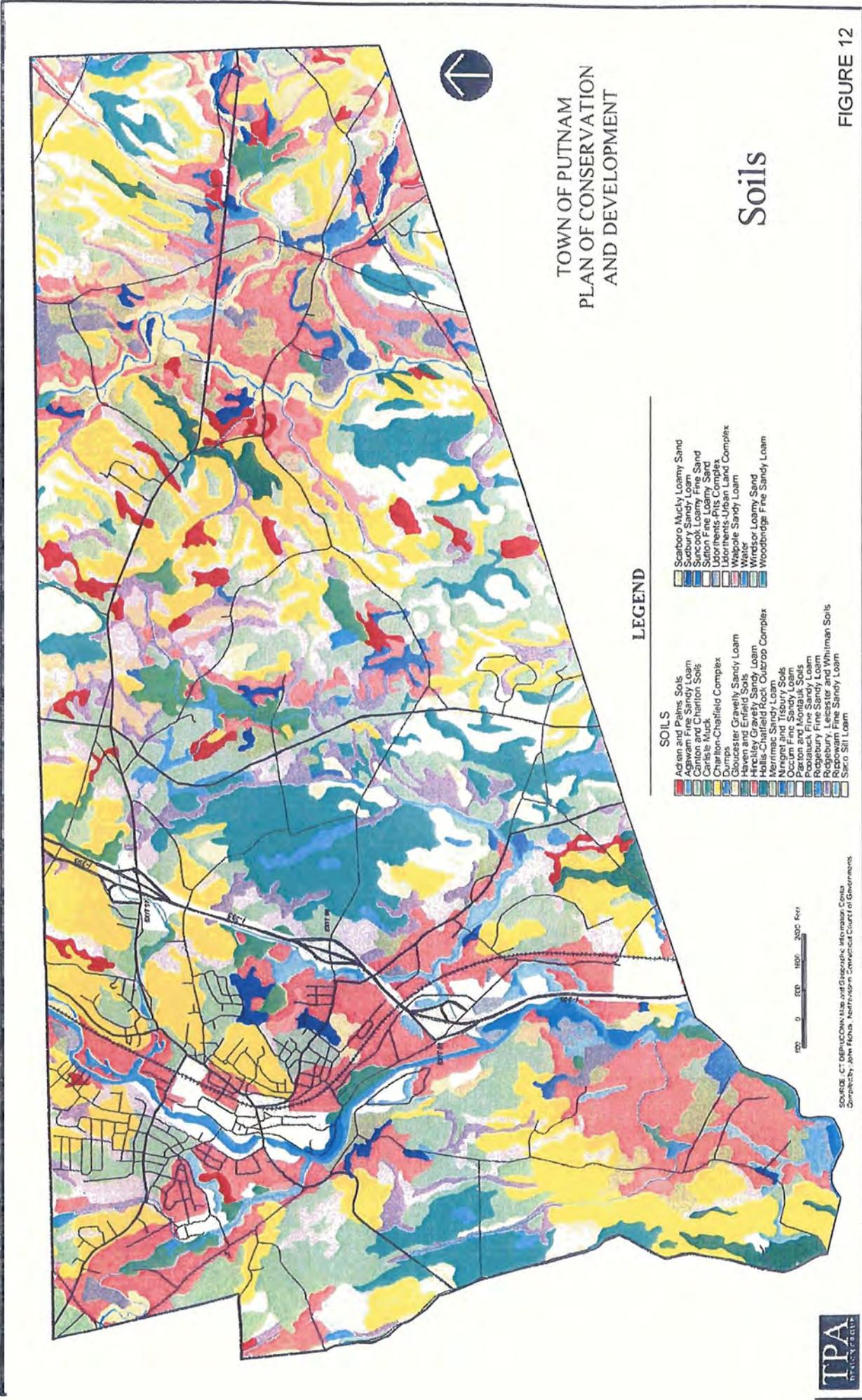
From its very beginning Putnam has grown as a commercial and industrial center for surrounding rural areas. Putnam's early settlers were farmers and the town's early development occurred in a typical agrarian pattern of farms supported with village centers that grew up around early stage coach routes (such as Putnam Heights), and saw and grist mills along the Quinebaug River. The coming of the railroad heightened opportunities and led to construction of large industrial mills along the river. These areas then became the focus of development as workers needing houses, schools, churches and shops close to their workplaces were drawn to the mills. Figure 13 includes an 1893 USGS map showing the area shortly before it incorporated as a City in 1895. The core area grew in a traditional grid pattern, its density eventually supported by physical and social infrastructure and full services. Most of Putnam's growth continued to radiate out from this core (the incorporated city) until the 1950s. Today this area is known as the Special Services District. Figure 13 also includes a 1945 USGS map that shows the growth of the City.



TOWN OF PUTNAM
PLAN OF CONSERVATION
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Topography

FIGURE 11



TOWN OF PUTNAM
PLAN OF CONSERVATION
AND DEVELOPMENT

Soils

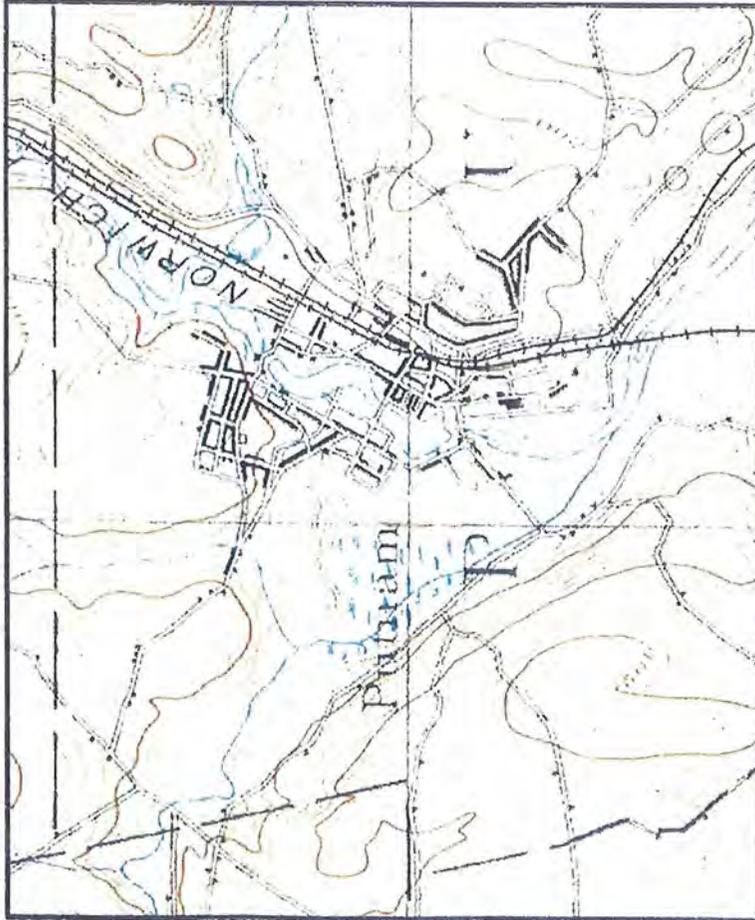
LEGEND

- | | |
|--|----------------------------|
| Adrian and Palms Soils | Scarboro Mucky Loamy Sand |
| Agawam Fine Sandy Loam | Sudbury Sandy Loam |
| Canton and Charlton Soils | Suncook Loamy Fine Sand |
| Carlisle Muck | Sutton Fine Loamy Sand |
| Charlton-Chatfield Complex | Udorthens-Pits Complex |
| Chumpester Gravelly Sandy Loam | Windsor Open Land Complex |
| Haven and Enfield Soils | Waterbury Sandy Loam |
| Hirskley Gravelly Sandy Loam | Windsor Loamy Sand |
| Halls-Chatfield Rock Outcrop Complex | Woodbridge Fine Sandy Loam |
| Merrimac Sandy Loam | |
| Norfolk and Sudbury Soils | |
| Parson and Montauk Soils | |
| Poosauk Fine Sandy Loam | |
| Redgebury Fine Sandy Loam | |
| Redgebury, Leicester and Whilman Soils | |
| Saco Silt Loam | |

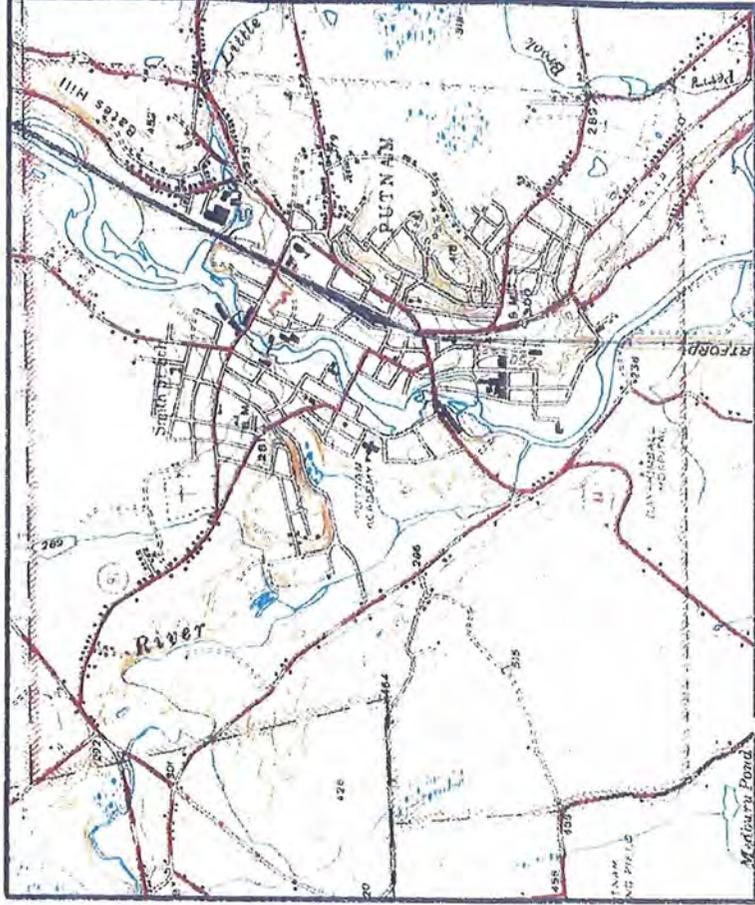
SOURCE: CT DEPT. OF CONN. MAPS AND GEOGRAPHIC INFORMATION SYSTEMS
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FIGURE 12



Putnam Center
1893 U.S.G.S Mapping



Putnam Center
1945 U.S.G.S Mapping

TOWN OF PUTNAM
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FIGURE 13

Putnam is fortunate that the suburbanization that has occurred to date has not been in the form that marks so many Connecticut communities - the large, cookie-cutter subdivision. In contrast, the residential areas of Putnam outside the Special Services District have predominantly developed along existing streets, retaining much of the rural landscape. However, residential development outside the Special Services District can be expected to increase in the next ten years which could place pressure on the retention of this rural character. Figure 14 is a 1995 aerial photo of the town showing the town's overall growth pattern.

Figure 15 indicates types of land cover in Town showing extensive areas of forested and open space lands. These undeveloped land areas in Putnam have the potential to be impacted by slope or wetland soil conditions, essential elements of Putnam's natural landscape. As the man-made landscape continues to expand the Town must be vigilant against adverse impact or loss of these areas. In addition to scenic and cultural value, they play critical roles in maintaining safe water supply. Remaining undeveloped areas, particularly areas outside the Special Services District, will therefore increasingly be impacted by physical characteristics that will make factors such as erosion control, stormwater management, stormwater pollution control, groundwater recharge, on-site sewage disposal and wetland and watercourse protection, important considerations for reviewing and approving development proposals.

■ Existing Land Use Patterns

Putnam's land use patterns, as shown in Figure 16, are very distinct. Even before I-395 cut the town in two, industrialization had created a city within a town, leading to the establishment of two distinct governmental units. This governmental separation lasted nearly 90 years, during which time the city versus town land use patterns became firmly established.

A diversity of uses in the city provided employment and services for the town, which remained rural and primarily residential with some commercial areas on major travel routes. Industrial and commercial development was centered in the core area with its mills and downtown until I-395 interchanges induced non-residential development outside its boundaries. The focus of industrial development has now shifted to an industrial park setting at the Exit 95 interchange. The mills continued as active industrial facilities until fairly recently. Though several are now vacant and will probably never again be used for the large-scale manufacturing uses they once housed, several are being adaptively reused for non-manufacturing uses. More of this type of activity will be necessary if the mills are to remain a viable part of the landscape. Table 14 is an inventory of Putnam's major mills.



TOWN OF PUTNAM
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1995 AERIAL

LEGEND

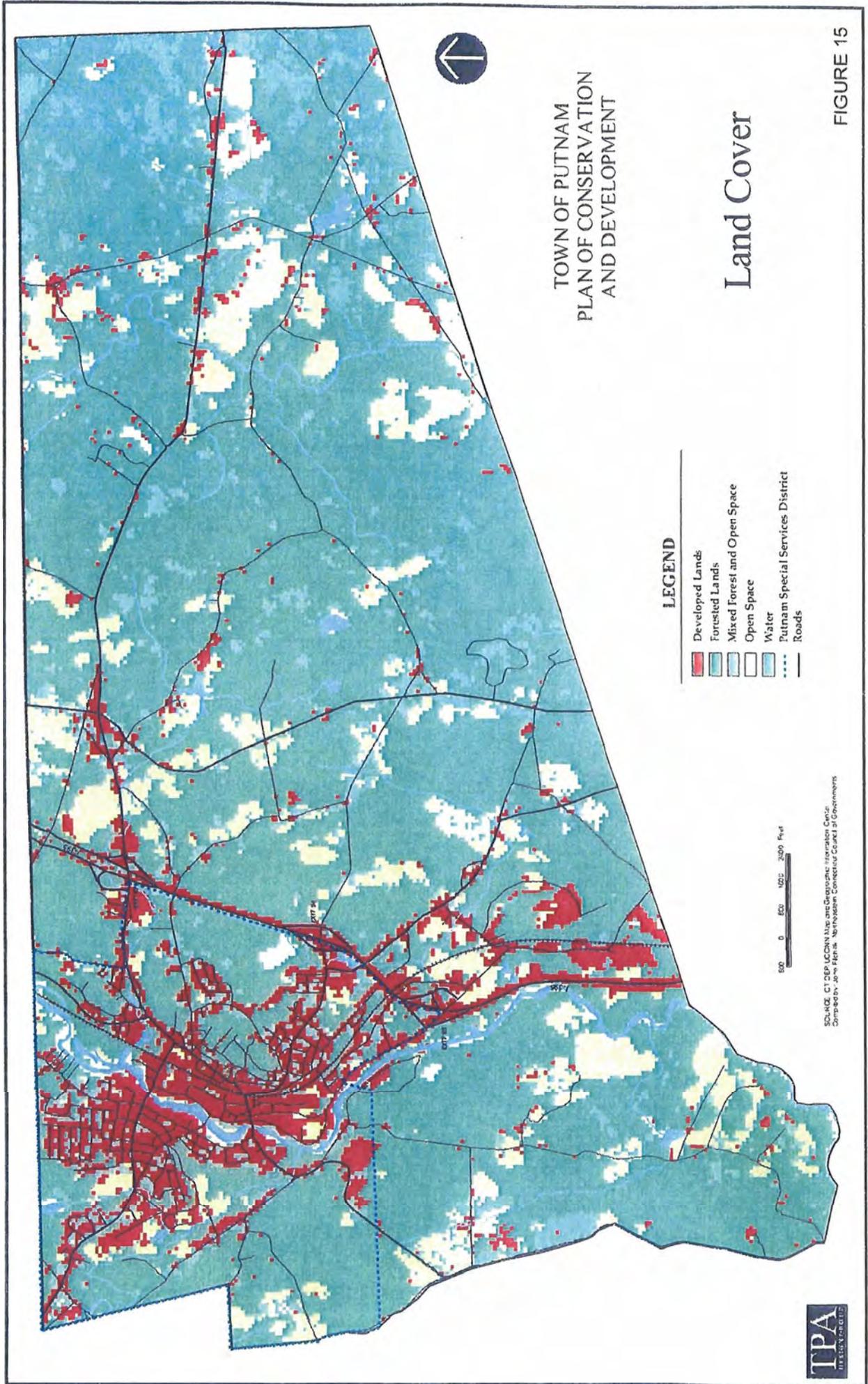
- Putnam Special Services Districts
- Roads



Source: CT DEEP/CDDOT Map and Geographic Information Center
 Courtesy: John Pappas, Northwestern Connecticut Chapter of Government



FIGURE 14



TOWN OF PUTNAM
 PLAN OF CONSERVATION
 AND DEVELOPMENT

Land Cover

LEGEND

- Developed Lands
- Forested Lands
- Mixed Forest and Open Space
- Open Space
- Water
- Putnam Special Services District
- Roads

0 50 100 200 Feet

SOURCE: CT DEP UCCDN Map and Geographic Information Center
 Compiled by John Florin, Northwestern Connecticut Council of Governments

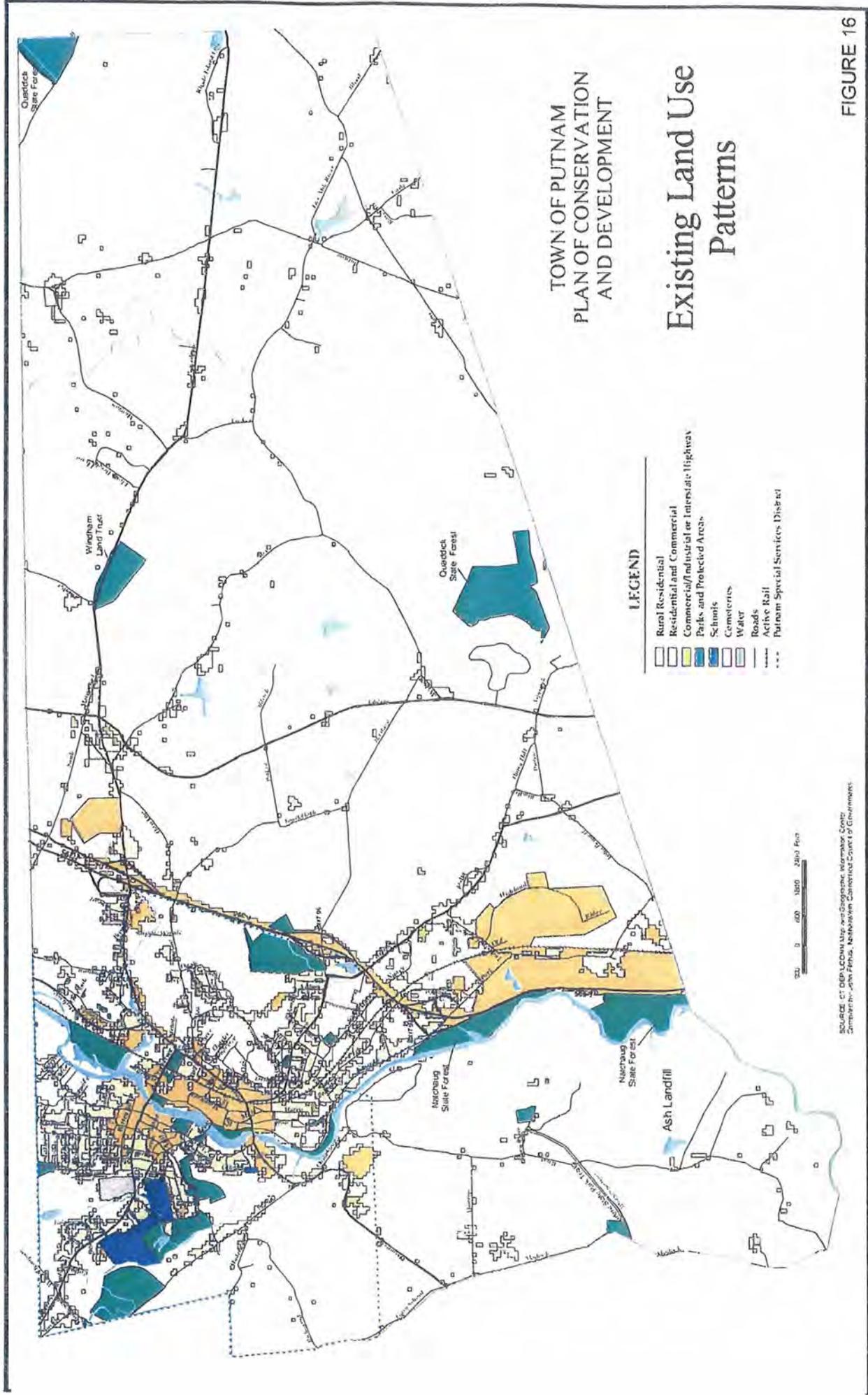


FIGURE 16

**Table 14
Town Of Putnam
Mill Inventory**

Address	Owner	Parcel ID	Lot Size	Bldg. ID	No. Stories	Building Size*	Basement	Yr. Built	Building Type	Zoning
350 Kennedy Drive (Nightingale Mill)	Nightingale Mill of Putnam	13 - 19	1.27 ac.	Bldg. 1	1	960 s.f.	Full	1940	Retail store	I
				Bldg. 2	3	14,220 s.f.	Slab	1850	Warehouse	
				Bldg. A1	1	2,080 s.f.	Slab	1890	Office	
				Bldg. A2	1	<u>1,762 s.f.</u> 19,022 s.f.	Slab	1920	Warehouse	
328 Kennedy Drive (Rhodes Mill)	U.S. Button Corporation	13 - 18	3.43 ac.	Main	4	38,392 s.f.	Full	1850	Office /	I
				Bldg. A1	2	21,426 s.f.	Slab	1918	Industrial	
				Bldg. A2	2	<u>29,326 s.f.</u> 89,144 s.f.	Slab	1978	Industrial Industrial	
107 Providence Street (Powhatan Mill/ Belding Mill)	107 Providence Street Associates LLC	7 - 30	2.00 ac.	Main	4	53,336 s.f.	Full	1872	Industrial	I
				Bldg. A1	2	13,966 s.f.	Half	1941	Industrial	
				Bldg. A2	3	7,560 s.f.	Full	1872	Industrial	
				Bldg. A3	2	5,600 s.f.	Full	1940	Industrial	
				Bldg. A4	1	1,117 s.f.	Full	1942	Industrial	
				Bldg. A5	1	3,487 s.f.	Slab	1940	Warehouse	
				Bldg. A6	1	2,695 s.f.	Full	1933	Industrial	
				Bldg. A7	1	1,636 s.f.	Full	1925	Industrial	
				Bldg. A8	1	3,554 s.f.	Full	1940	Industrial	
				Bldg. A9	1	150 s.f.	Full	1872	Industrial	
				Bldg. A10	1	<u>1,768 s.f.</u> 94,869 s.f.	Slab	1940	Industrial	
245 Church Street	Quinebaug Valley Cold Storage Assoc.	13-24-1	1.15 ac.	Main	1	5,800 s.f.	Slab	1957	Industrial	I
				Bldg. A1	1	<u>(1,554 s.f.)</u> 5,800 s.f.	Slab	1957	Canopy/Dock	

**Table 14
Town Of Putnam
Mill Inventory**

Address	Owner	Parcel ID	Lot Size	Bldg. ID	No. Stories	Building Size*	Basement	Yr. Built	Building Type	Zoning
241 Church Street (Morse Mill)	241 Church Street LLC	13 - 24	0.91 ac.	Main	4	33,664 s.f.	Full	1847	Industrial	C-2
				Bldg. A1	3	6,438 s.f.	Full	1878	Industrial	
				Bldg. A2	1	<u>1,830 s.f.</u>	Full	1995	Retail store	
				Bldg. 2	2	1,760 s.f.	Half	1963	One Family Residence	
58 Pomfret Street (Pomfret Cotton Mills / Saxon Woolen Mills)	Greg A. Renshaw	18 - 49	5.77 ac.	Main	3	71,160 s.f.	Slab	1869	Industrial	I
				Bldg. A1	4	21,380 s.f.	Slab	1848	Industrial	
				Bldg. A2	1	1,720 s.f.	Slab	1943	Industrial	
				Bldg. A3	2	24,298 s.f.	Slab	1869	Industrial	
				Bldg. A4	1	2,586 s.f.	Slab	1936	Industrial	
				Bldg. A5	2	3,440 s.f.	Slab	1884	Industrial	
				Bldg. A6	3	30,372 s.f.	Slab	1849	Industrial	
				Bldg. A7	2	2,444 s.f.	Slab	1953	Industrial	
				Bldg. A8	1	168 s.f.	Slab	1953	Industrial	
				Bldg. A9	1	<u>(728 s.f.)</u>	Slab	1953	Dock	
52 Pomfret Street (Saxon Woolen Mills)	Greg A. Renshaw	18-49-1	0.23 ac.	Main	2	5,592 s.f.	Full	1869	Office	C-3
				Bldg. A1	1	51 s.f.	Full	1869	Office	
				Bldg. A2	1	<u>(30 s.f.)</u>	Slab	1869	Enclosed Frame	
83 Canal Street (Monohansett Mill)	Global Manufacturing LLC	23-5	2.01 ac.	Main	3.5	36,519 s.f.	Slab	1847	Industrial	I
				Bldg. A1	2	<u>3,404 s.f.</u>	Slab	1890	Industrial	

*Building size column does not include basement area.

Source: Putnam Property Record Cards, Office of the Assessor

The downtown remains remarkably intact, its elevation saving it from the devastating flood of 1955 (Figure 17). Those areas that were destroyed by the flood were rebuilt in typical urban renewal era designs and site layouts: low rise strip buildings set back from the street, with extensive asphalt parking lots in front of the buildings. This design is in sharp contrast to the adjacent buildings of the downtown. A niche market in antiques has become the major economic force in the downtown. This market has supported revitalization of the downtown consistent with its traditional architecture. However, the real retail focus has shifted to the Exit 97 interchange on Route 44, where the development has been in the form of big-box, and chain stores, with their standard corporate design features. A number of older neighborhood retail areas located along Providence Street and School Street west of Exit 97. These areas contain clusters of small businesses trying to compete with the Town's two established retail hubs, the downtown and Exit 97, in the areas of variety of goods and services, parking, operating hours and cost competitiveness. This struggle is often reflected in lack of investment in property improvement and many of these areas have a tired, run-down appearance.

Not surprisingly housing characteristics reflect the Town's development pattern. 80% of all of the Town's housing units are located in the densely developed Special Services District. More than one-half of these units are located in multi-unit structures, predominantly structures containing 2 to 4 units. Some 41% of units in the District are single family detached units. In contrast, 89% of the units outside the District are single-family detached dwellings.

■ Landfill Areas

The amount of land in Putnam devoted to community and commercial landfills represents a substantial amount of land resources. Continued productive use of the land, as well as determination of environmental and health issues that may be associated with the landfill use, are important considerations for the future of Putnam. Many communities have succeeded in creating opportunities and deriving economic or community benefit from areas once devoted to landfill operations. Turning what many consider a liability into an asset begins by changing the way the community thinks about the area – for example dropping public use of the name “landfill” or “dump” in favor of a use neutral name for the site. This begins to dissociate the former use from the land resource, and begins the process of consideration of potential positive reuses.

Many technical considerations to identify development limitations must precede actual reuse planning. Design expertise will be required to address issues associated with closure, capping and monitoring, as well as to develop a realistic reuse vision, determine costs and assure protection of public health and safety. Though challenging, it is critical that the Town plan for and follow through on implementation of beneficial reuse of these areas.

■ Gateways

Because gateways are the main entrances to the community for visitors and residents, they are like a home's front door. They provide identity and make a statement about the pride and self-image of those who live there. Tidy, attractive entrances make a better impression and offer more of a sense of welcome than do cluttered and poorly maintained ones. Its gateways are the opportunity to for a community to offer a sense of arrival; to distinguish itself from surrounding communities, to convey its community confidence and quality of life, and to leave a positive and lasting impression that will make people want to come back.

Each of Putnam's gateways is related to a facet of community life. Some directly support identifiable economic functions while others are primarily access points for residents and visitors. Each has its own "audience" and physical setting. The state routes – 44, 171, 12 and 21 – primarily serve local and regional workers and shoppers, with Route 44 providing connections to I-84 and Rhode Island. The three exits from I-395 are the primary links by which manufacturing and business users and tourists arrive in town. For these visitors, directional and services available signage are particularly important if they are to have a comfortable and welcoming stay. The following is a summary of Putnam's primary gateways.

- Route 44 at Quinebaug Avenue

A standard CT DOT sign at this location signifies that you are entering downtown Putnam. One emerges from the rural character of Route 44 in Pomfret and the steep, winding section of roadway near the Dempsey Center and Day-Kimball Hospital into a stretch that is in transition in a land use sense. This part of the Route 44 corridor increasingly houses medically-related offices while the section closer to downtown Putnam contains vacant mill buildings and older commercial structures. This primary gateway from the west brings you directly to the center of Town at the Cargill Falls via the historic Pomfret Street Bridge.

- Exit 95 from I-395 (Kennedy Drive)

This gateway presents the corporate face of Putnam. Businesses are clearly visible from I-395 but there is limited directional signage at the Kennedy Drive interchange, which serves as access to the Putnam Industrial Park and other industrial development to the south, and the downtown on the north. As one proceeds north on Kennedy Drive toward downtown land uses transition from corporate and industrial to small-scale professional offices and the rear facades of large mill complexes which frame the river, the trail and the access to the town center.

Exit 97 from I-395 (Woodstock/East Putnam/Route 44)

This gateway serves a regional commercial area that is a mixture of large-box retailers, fast food franchises and local businesses. CT DOT signs on I-395 announce the availability of “food, phone, gas and diesel” but directional signage is lacking at the end of the exit ramp to direct those unfamiliar with the area. This is a missed opportunity to present the area to southbound travelers on I-395 as a travel center and to generally promote Putnam as a service center and community.

- Exit 96 from I-395 (Route 12/Putnam Heights)

This gateway primarily serves as access to residential areas, historic areas and a route to the downtown from the east. CT DOT signs on I-395 announce the availability of “food, phone, gas and lodging” but again directional signage at the end of the ramp is limited, lacking or in poor condition. The route to downtown traverses a neighborhood of Putnam with historic character and provides an attractive view of the town and some of its historic resources from the vicinity of Grove and Main Streets. Traveling east from the interchange leads to residential areas and the historic Putnam Heights area. There is no signage to indicate the presence of these historic resources.

- Route 171/Providence Street

Traffic from Woodstock traverses Route 171 into Putnam. A good opportunity to create an attractive gateway would be in the vicinity of Wicker Street. At this point there is a visual transition to an established, densely developed mixed-use area. Establishing a welcoming gateway here would not only alert drivers to the change in character, but could serve as a catalyst to foster public and private physical improvements to upgrade and promote the corridor’s many small businesses located in a village context.

HISTORIC / CULTURAL RESOURCES

In the last few years it has become clear that Putnam has a lot of positive things to offer because it has a rich history: an impressive mixture of scenic river landscapes, waterfalls, old mill buildings, well-preserved Victorian period houses and a late 19th/early 20th century downtown that retains its pedestrian scale. This setting proved a perfect match for the establishment of an antiques district. This in turn focused attention on the myriad of benefits that can derive from preserving and sharing the town’s history and led the Town to become proactively involved. As a result, the Putnam River Trail was built along the east bank of the Quinebaug River with a connection across the river at the southern end to allow future link-up with the Airline

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Trail. The River Mills Heritage Trail is planned as a loop extending to the west side of the river between Pomfret Street (Route 44) and Providence Street (Route 171).

The River Mills Heritage Trail will be a walking tour that will not only provide the opportunity to tell the stories of the town's historic mills but to incorporate some of the related history of Putnam. As the trail moves along Church Street one will pass the Victorian Gothic Putnam Town Hall (the Old High School) listed on the National Register of Historic Places and the Gothic Revival Baptist Church (at Woodstock Avenue), identified as being eligible for listing on the National Register. There are also several eye-catching residential structures located in the area (undoubtedly once belonging to prominent families) whose "stories" should be referenced for visitors in the trail's guide and map. The Pomfret Street Bridge has also been determined to be eligible for listing in the National Register of Historic Places and its historic significance should also be noted.

Initial information on the significance of these structures can be obtained from the Historic Resource Survey of 181 properties completed in 1987 for the Putnam Redevelopment Agency. This survey encompassed much of Central Putnam and identified structures which appeared to meet the criteria to be eligible for listing on the National Register, as well as potentially eligible districts. These recommendations are summarized in Appendix G.

At the time of the survey most of the structures were found to be in good condition. The Town Historian and the Aspinock Historical Society will prove invaluable resources in identifying areas, historic significance and related stories on which to build a number of self-guided walking tours, guided school tours and printed materials to tell the stories.

While completing the 1987 survey in its target area the consultants took note of areas outside the study area that contained historic structures. Areas recommended for further study as summarized in the 1989 Plan of Development are summarized below.

- Some two dozen buildings on Church Street, Woodstock Avenue, and adjacent side streets. Primarily large Victorian houses of leading families, most are fairly well-preserved and potentially constitute a National Register-eligible district.
- Quinebaug Avenue, an area with several Greek and Gothic Revival houses.
- Streets leading out of town (Grove Street, Woodstock Avenue, Route 12), which have houses from a variety of periods.
- Putnam Heights, the old town center of Killingly, which includes a number of fine houses and a c. 1815 meeting house. State Register forms and extensive research material produced by the Aspinock (Putnam) Historical Society are available on this area.

The statewide Inventory of Historic Engineering and Industrial Sites (Matthew Roth 1981) includes five mills in Putnam:

- Morse Mill, 241 Church Street, 1846
- Rhodes/Nightingale Mills, 328 Kennedy Drive, 1841±
- Monohansett Mill, Monohansett Street, Second Empire style, 1868
- Pomfret Cotton Mills/Saxon Woolen Mills, Pomfret Street, 1824±
- Powhattan Mill, 107 Providence Street, Second Empire style, 1872

These mills are the focus of the River Mills Heritage Trail. Small adjacent areas of associated worker housing are present at most of these mill locations and provide an added opportunity to discuss the social history aspects of the development of the textile industry in Putnam. The creation of the River Mills Heritage Trail also provides the opportunity to formalize a thematic resource nomination of the mills to the National Register of Historic Places. At the present time only two properties in Putnam have been listed on the National Register: the Israel Putnam School (corner of School and Oak Streets, listed in 1984) and the Cady-Copp Cottage (115 Liberty Highway, listed in 2001). This designation affords the property certain protections from state and federal actions (accorded once the eligibility designation is made) and opens up benefits such as potential tax credits.

Evaluation of archaeological sensitivity and resources has been limited to several site-specific archaeological surveys completed in conjunction with development projects. Another often overlooked historic/cultural resource is cemeteries. Putnam has a number of historic cemeteries and family plots that contribute to the Town's cultural landscape.