Connecticut Siting Council Docket No. 378

WASHINGTON CONSERVATION COMMISSION HEARING EXHIBITS

The following is a list of the exhibits The Town of Washington Conservation Commission presently intends to present at the public hearing on Docket No. 378.

| WCC 1 | Affidavit by Artist Polly Roberts |
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| WCC 2 | Affidavit by Artist Ed DeVoe |
| WCC 3 | Town of Washington Plan of Conservation and Development 2003 |
| WCC 4 | Excerpt, Washington, Connecticut Natural Resource Inventory Report and Recommendations, Town of Washington Ad Hoc Conservation Committee, November 2000, Section II. Natural Resource Inventory; III. Recommendations; V. Conclusions; Resource Maps Series: Slopes, December 1999; Water Resources; Critical Habitat and Listed Species; Cultural Features (including Historic Buildings, Archeological Sites, Industrial Sites and Historic Districts). |
| WCC 5 | Conservation and Development, Policies Plan for Connecticut, 1998-2003, Office of Policy and Management, Policy Development and Planning Division, pages 113-114, 121, 126-128 |
| WCC 6 | A: Preservation Areas: Conservation Priority 2: State Action Strategy Definitional Criteria. |
| WCC 7 | Affidavit of Joseph Abdella, 29 Rabbit Hill Road, New Preston |
| WCC 8 | Correspondence to Optasite/SBA |
| WCC 9 | Guideline Number 4: U.S. Fish and Wildlife Service |
| WCC 10 | Town of Washington Scenic Road Designations for Rabbit Hill, Couch Road, Whittlesey Road |
| WCC 11 | State Designation of Route 202 as Scenic, Pending application in |

Support.

| WCC 12 | Pre-filed Testimony: Susan Payne, Chairman, Washington Conservation Commission, former Board Member Steep Rock Association |
|--------|--|
| WCC 13 | Description of Macricostas Preserve by the Steep Rock Association from http://steeprockassoc.org/pdf/map_maccricostas.pdf |
| WCC 14 | Steep Rock Land Trust Macricostas Preserve Interpretive Trail Guide from http://steeprockassoc.org/pdf/macricostas_interpretive_trail.pdf Produced by the Washington Garden Club Conservation Committee, 2008 |
| WCC 15 | Steep Rock Association Spring 2007 Newsletter [4 pages] from http://steeprockassoc.org/pdf/vista_spring_2007.pdf , Fall 2006, Reporting CLCC Award for Land Acquisitions of Substantial Size for Land Conservation Protection; documenting nesting pairs of Goshawks [p.2] and Hooded Mergansers [p.4] and Spring 2009 |
| WCC 16 | Steep Rock Association publication: Hidden Valley Reservation guide from http://steeprockassoc.org/pdf/map_hidden_valley.pdf |
| WCC 17 | Reserved for Pre-filed Testimony: Diane Dupuis, Cell Tower Committee Chair, Town of Washington; Town of Washington Conservation Comm. |
| WCC 18 | Nature Journal by Diane Dupuis 2003-2006 |
| WCC 19 | DEP Letter Response to Washington Conservation Commission, Regarding NDDB map: desirability of EIS |
| WCC 20 | Washington Conservation Commission Request for DEP Study |
| WCC 21 | CROWW Pre-Hearing Conference Request for Consultations |
| WCC 22 | Connecticut Siting Council Denials in Decision Memo |
| WCC 23 | Council on Environmental Quality: April 2009 Meeting Minutes |
| WCC 24 | Council on Environmental Quality Statement |

| WCC 25 | Photos for Comparison with Application Photos: Photos by Diane Dupuis |
|--------|---|
| WCC 26 | Reserved for Pre-Filed Testimony of Elizabeth Corrigan: Field Biologist, Conservation Commission Member |
| WCC 27 | Elizabeth Corrigan Curriculum Vitae |
| WCC 28 | Map – NDDB Rare Species and Critical Habitats, Prepared by E. E. Corrigan, March 2009 |
| WCC 29 | Map – Watercourses Map Prepared by E Corrigan, March 2009 |
| WCC 30 | Map – Composite NDDB and Watercourses Map Prepared by E. Corrigan, March 2009 |
| WCC 31 | Macricostas Preserve Management Plan Sec.6.6.3Vernal Pool Inventoryl |
| WCC 32 | Macricostas/ Yale Study 6.7.3 Calcareous Wetlands, 6.8.2 Archeological Studies |
| WCC 33 | A Management Plan for the Steep Rock Association's Macricostas Preserve Yale University School of Forestry and Environmental Studies January 30. 2003; Executive Summary, Background, Goals, Ecological Context 4.7-4.8, table 2 |
| WCC 34 | Macricostas/Yale Study Appendix F: Wildlife |
| WCC 35 | Macricostas/Yale Study Appendix C Master Species Lists |
| WCC 36 | Steep Rock Bird Checklist May 2009 |
| WCC 37 | List of State Listed Species found in Diane Dupuis' Nature Journal 2003-2006 |
| WCC 38 | Sharp Shinned Hawk http://www.ct.gov./dep |
| WCC 39 | Bronze Copper http://www.butterfliesandmoths.org |
| WCC 40 | Sedge Skipper http://www/neartica.com, www.peabody.yale.edu/collections |
| WCC 41 | Jefferson Salamander (ambystoma Jeffersonian complex) http://www.ct.gov/dep |

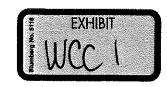
| WCC 42 | Spotted salamander (<u>Ambystoma maculatum</u>) http:ct.gov/dep |
|--------|--|
| WCC 43 | Green Frog (<i>Rana clamitans</i>) http:ct.gov/dep |
| WCC 44 | Wood frog (<u>Rana sylvatica</u>) http: ct.gov/dep |
| WCC 45 | Marbled salamander (<u>Ambystoma opacum</u>) UNEP-WCMC Species Database listing for Marbled salamander (<u>Ambystoma opacum</u>) from http://www.iucnredlist.org/details/59065 |
| WCC 46 | Wood Turtle (<u>Glyptemys</u> <u>insculpta</u>) http:ct.gov/dep |
| WCC 47 | Leopard Frog (Rana Pipiens) http:ct.gov/dep |
| WCC 48 | DEP List of Endangered, Threatened and State Listed Species in Litchfield County |
| WCC 49 | Migratory Bird Treaty Checklist by Diane Dupuis with summation |
| WCC 50 | Migratory Bird Treaty Checklist by Maggie Condon |
| WCC 51 | Connecticut Department of Environmental Protection State and Federal Listed Species and Significant Natural Communities Washington |
| WCC 52 | Excerpts from: Connecticut Department of Environmental Protection, A County Report of Connecticut's Endangered, Threatened and Special Concern Species List for Litchfield County, Marked indicating: Confirmed or Probable Nesting Areas, From: The Atlas of Breeding Birds Edited by Louis R. Bevier, Sponsored by the National Audubon Society and The Audubon Council of Connecticut, State Geological and Natural History Survey of Connecticut, Bulletin 113, 1994 Nesting Areas for Threatened Birds In Area of Site A and Site B |
| WCC 53 | Longcore, Travis, et al., "Height Guy Wires, and Steady-Burning Lights Increase Hazard of Communication Towers to Nocturnal Migrants: A Review and Meta-Analysis," The Auk (The American Ornithologists' Union, Vol. 125, Number 2, pages486-493. |

WCC 54 Washington Environmental Council letter to the Siting Council

WCC 55 The Habitat A Newsletter of the Connecticut Association of

Conservation and Inland Wetlands Commission, Inc. Fall 2008 Volume 20 Number 4 Land Use Applications Before the Connecticut Siting Council: Effective Involvement by Municipal conservation and Inland Wetlands

Commissions by S. Derek Phelps



AFFIDAVIT OF MARY J. (POLLY) ROBERTS

| State of Connecticut |] | |
|----------------------|---|----|
| |] | SS |
| County of Litchfield |] | |

MARY J. ROBERTS being duly sworn deposes and says:

- 1. My name is Mary J. (Polly) Roberts. I have lived at 8 South Street, Washington, Connecticut since 1986.
- 2. I am an artist and I earn my living by interior decorating and painting. I was trained as a painter at the Rhode Island School of Design, where I earned a BFA in 1976.
- 3. I paint landscapes in oils and oil pastels on paper or board.
- 4. As a landscape painter, I am particularly drawn to the open vistas and the charm of the rolling hills in Washington.
- 5. For more than 20 years I have painted the landscapes of Washington. Whether looking north from the top of the pinnacle in Steep Rock's Hidden Valley (Exhibit A) or looking northeast from the entrance to Steep Rock's Macricostas Preserve (Exhibit B) or a number of other spots around Macricostas Preserve (Exhibit C), I have enjoyed the unspoiled serenity of these views. Color images of these paintings can be seen on my website: www.pollyroberts.com/artwork
- 6. As a former trustee of the Steep Rock Association, I was involved in the acquisition and preservation of the Macricostas Preserve. A combination of State, Town and private funds secured this extraordinary parcel of land, which holds one of the oldest extant pieces of farmland (and the original house) in the Town of Washington, dating to some decades before the Revolutionary War. The sense of history and continuity this land provides is a rare respite from the "advances" of modern life.
- 7. As an artist and lover of scenic beauty, I consider locating the cell tower structure as proposed at either of the sites on Docket 378, to be a defilement of a particularly beautiful area of Washington. I feel it would be a repudiation and injury to the sense of heritage and timelessness unique to the Macricostas Preserve.
- 8. Attached are B&W print-outs of photos of paintings I have made as follows:

Exhibit A: "Hidden Valley Pinnacle"

Exhibit B: "Entrance to Macricostas Preserve"

Exhibit C: "Meeker Swamp in Macricostas Preserve"

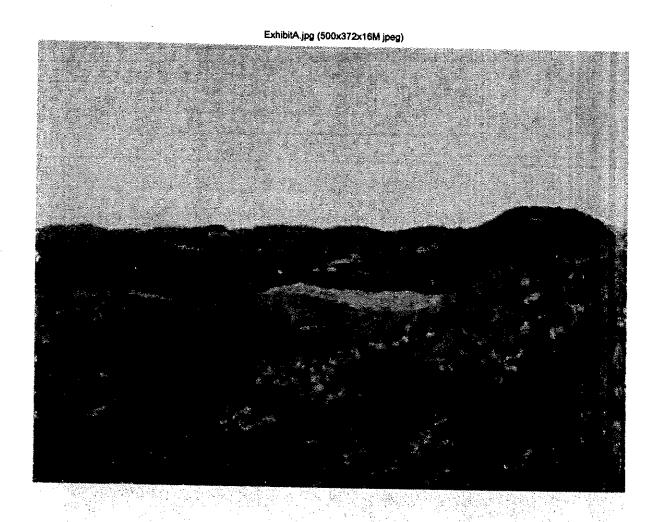
- 9. I hereby certify that the attached images of paintings are my own work as identified. I offer these for the use by the Siting Council in its deliberations on this docket, and I retain copyright to these images.
- 10. I ask that the Connecticut Siting Council accept these marked exhibits into evidence for consideration under Docket 378, as they are material evidence of the existence of a unique resource to artists and all who enjoy the natural beauty of Washington.

Sworn to before me

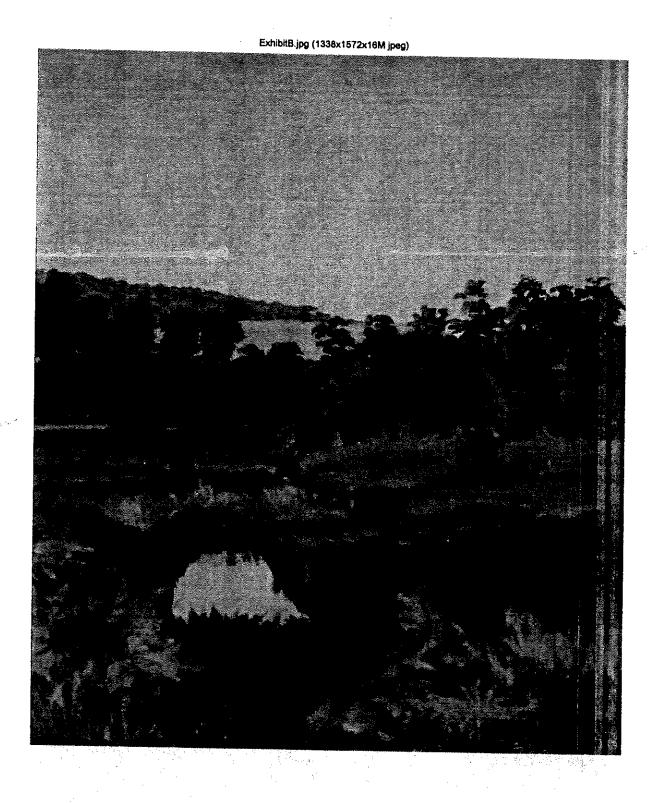
This 13th day of May, 2009

Notary Public

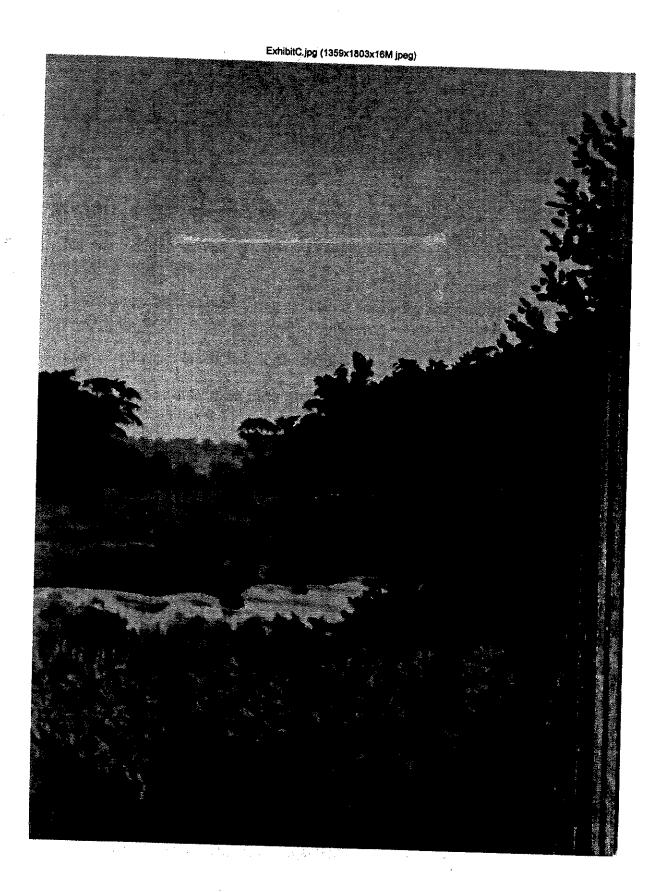
Com exp 5/31/14



Many J. Roberts Exhibit A "Hidden Valley Pinnade"



Mary J. Roberts Exhibit B



Many J. Roberts



AFFIDAVIT OF Edward S. DeVoe

| State of Connecticut |] | |
|----------------------|---|-----|
| County of Litchfield |] | \$5 |

Edward DeVoe being duly sworn deposes and says:

- 1. My name is Edward DeVoe. I live at 219 Main Street South, Bridgewater, CT.
- 2. I am a professional artist and I earn my living by painting.
- 3. My chosen media are oils on canvas and pastels on paper.
- 4. In addition to selling my paintings I teach painting for income in the American Landscape tradition.
- 5. I teach at the Washington Art Association to approximately 40 students per year between the ages of 15 and 92. My students come from the area and from as far away as New York City.
- 6. My first studies in landscape painting were in the 1950's with watercolorist Waldemar Neufeld who took his students to Rabbit Hill, I also studied oil landscape painting with Herbert E Abrams who brought me to Rabbit Hill. In 1974, I began teaching landscape painting at The West Point Military Academy and at the Washington Art Association. I have taught hundreds of students the effects of light shadow and atmosphere. I also studied with Frank Mason at the Art Students League and my curriculum vitae (or profile) is attached as Exhibit A.
- 7. For 50 years I have painted the landscape from atop Rabbit Hill, including views of the historic Tanner Farm and surrounding countryside.
- 8. This area is perhaps the least spoiled and the most like 'old' Connecticut, with a variety of views in all directions, which can be of value at all times of day.
- 9. Furthermore, this area's beautiful subject matter provides a quiet and safe location for students to paint because its quiet local roads.
- 10. As professional artist, I believe the construction and operation of a cell tower on the Tanner property would destroy its value as a painting resource.

- 11. As a professional art teacher, I consider the construction and operation of a cell tower on the Tanner property to be a travesty, and it would affect my ability to teach on this site as the tower would dwarf the old farm, the fields and the trees.
- 12. Attached is a partial list of students I have taken to Rabbit Hill and Jack Corner Roads. Exhibit B.
- 13. Additionally, I maintain a series of photographic references for painting of this important site, one of which, taken by me from Jack Corner Road during the summer of 2007 is attached as Exhibit C.
- 14. Few locations anywhere give artists and students such varied and unspoiled subject material.
- 15. As a professional artist, it is my opinion that if a cell tower structure as proposed were permitted to be constructed at either of the sites on Docket 378, it would ruin forever the awe-inspiring beauty of a very special place from which I have drawn artistic inspiration for 50 years.
- 16. As a professional art teacher, it is my opinion that if a cell tower structure were permitted to be constructed at either of the proposed sites on Docket 378, it would mar forever opportunities to teach about the sources of inspiration and use of light, structure, form and landscape, utilizing perspective of distance in a unique setting to teach art to future generations. It would also impair my ability to earn a living teaching art in this special place.
- 17. As a professional artist, it is my opinion that if a cell tower structure were permitted to be constructed at either of the proposed sites on Docket 378, it would destroy opportunities I currently have to seek inspiration and subject matter for my own paintings and work, from which I earn my living, and thereby remove a current resource I use, and destroy it forever.
- 18. I ask that the Connecticut Siting Council accept these marked exhibits into evidence for consideration under Docket 378, as they are material evidence of the existence of a unique resource to artists and art students.
- 20. I ask that the Connecticut Siting Council accept these marked exhibits into evidence for consideration under Docket 378, also as material evidence of the current scenic beauty of the place, and as evidence of the product of my chosen profession, which the placement of a tower on the proposed sites would permanently injure.

Sworn to before me

Edward DeVoe

This //_ day of May, 2009

Notary Public

CHERYL L. PINKOS
NOTARY PUBLIC
MY COMMISSION EXPIRES APR. 30, 2010

Exhibit A

EDWARD SPAULDING DEVOE

Current Galleries

- Art Services International, Westport, Connecticut
- · Diana Levine, Fine Art, Boston, Massachusetts
- Lily Pad Gallery, Watch Hill, Rhode Island
- Arleen G. Becker Gallery, NYC
- Wit Gallery, πLenox, Massachusetts

Selected Solo Exhibitions

- 2004 "Selected Landscapes" A. S. I. Gallery, Westport, CT
- 2003 "Romance with Solitude" Minor Library, Roxbury, CT
- 2002 Featured Artist, United Nations Ambassador's Ball; Work auctioned by Christie's, NY "Hollander Series" River Road Gallery, Wilton, CT
- 2001 Featured Artist, United Nations Ambassador's Ball; Work auctioned by Christie's, NY
- 2000 "Beyond Chaos: The New Realism of E. S. DeVoe" Duracell Corporate HQ, Bethel, CT
- 1997 "Studies in Form and Void" Marion Art Center, Marion, Massachusetts "Mountains and the Moon" Highland Gallery, Highland, New York
- 1994 "Prometheus Series" DeVoe Studio-Gallery, Bridgewater, Connecticut
- 1991 "Black and White Series" Lublin Collection Gallery, New York, NY
- 1989 "Old Havana" Havana Viega private showing, Havana, Cuba
- 1987 "The Colors of Landscape" Bel-Eden Gallery, Bristol, Connecticut
- 1986 "Selected Oil Paintings" U.S. Military Academy, West Point, New York
- 1985 "Still Life and Landscape" Park Lane Gallery, New Milford, Connecticut
- 1983 "Still Life Studies" Fox Hill Gallery, Ridgefield, Connecticut
- 1982 "New Realism" The Silo Gallery, New Milford, Connecticut
- 1981 "Paintings and Drawings" Pomeroy Pavilion, Waterbury, Connecticut
- 1980 "Oil Paintings" International Alliance for Children, Danbury, Connecticut
- 1979 Commission of Murals, Danbury Arts Commission, Danbury, Connecticut
- 1978 "Portrait Studies" Housatonic Art League, New Milford, Connecticut
- 1977 One-Man Show, US Military Academy Library, West Point, New York
- 1976 "Collected Works" Washington Arts Association, Washington, Connecticut

Selected Group Exhibitions and Galleries

- 2003 12x12 Show, Gallery at Avalon Island, Orlando, Florida
- 2002 12x12 Show, Gallery at Avalon Island, Orlando, Florida ArtSource, Indianapolis, Indiana
- 2002 Gregory James Gallery, New Milford, Connecticut
- 2001 Wit Gallery, Lenox, Massachusetts
- 2000 Arleen G. Becker Gallery, New York, New York
- 1999 Lily Pad Gallery, Charlestown, Rhode Island
- 1998 Group Benefit Show, "Save the Shepaug" Coalition, Washington, Connecticut
- 1996 Roxbury Bicentennial Celebration, Minor Memorial Library, Roxbury, Connecticut
- 1992 International Contemporary Art, Art Expo, Javits Center, New York, New York
- 1991 Featured Artist, Group Show, Harris Gallery, West Cornwall, Connecticut
- 1990 "Annual Exhibition" National Arts Club, New York, New York
- 1986 "Contemporary Artists: Group Show" Westport Gallery Ltd. Westport, CT
- 1985 Group Exhibition, Candlewood Valley Art Gallery, Candlewood Valley, CT
- 1983 "Studies in Light and Composition" Beaux-Arts Gallery, Southbury, Connecticut
 1982 Group Exhibition Benefit, Int'l Alliance for Children, New Milford, Connecticut
- 1981 Selected Artists, Grand Central Art Galleries, New York, New York
- 1979 Annual Exhibition, National Arts Club, New York, New York

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1976 "Top Young Realists" Marshall Fields Bicentennial Show, Chicago, Illinois Bicentennial Tribute, "Caravan of Freedom" National Society of Mural Painters Art Institute of Pittsburgh, Pittsburgh, Pennsylvania Long Beach Museum of Art, Long Beach, New York Bridge Gallery, Boston City Hall, Boston, Massachusetts Bennington Museum, Parmelee Gallery, Old Bennington, Vermont Southern Vermont Art Center, Manchester, Vermont Grand Opera House Galleries, The Mall, Wilmington, Delaware Vermont State House, Montpelier, Vermont Rhode Island School of Design, Providence, Rhode Island National Academy of Design, New York, New York Cayuga Museum of History and Art, Auburn, New York 1975 American Institute of Architects, Headquarters Galleries, New York, New York Wood Art Gallery, Montpelier, Vermont Arts and Science Center, Nashua, New Hampshire National Arts Club, New York, New York John Slade Ely House, New Haven, Connecticut

Selected Corporate and Private Collections

Ritz-Carlton Hotel, Washington D.C. House of Representatives, US Congress, Offices of Honorable Nancy Johnson State Department, Saudi Arabia Smithsonian Museum, Peter A. Joley Collection, Washington D.C. Union Carbide, New York, New York Boehringer Ingelheim, Ridgefield, Connecticut Natalie Marcus, Trump Tower, New York, New York William Styron, Roxbury, Connecticut Readers' Digest, Private Collection of DeWitt Wallace, Pleasantville, New York Riva Castleman, New York, New York

Selected Corporate and Private Collections con't

Colgate University, Hamilton, New York Marshall Field, Chicago, Illinois Mr. and Mrs. William MacArthur, Bridgewater, CT; Paris, France Mr. and Mrs. Richard Tisch, Pound Ridge, New York National Arts Club, New York, New York Dr. Henry Jacobs, West Hartford, CT

Bibliography

Litchfield County Times Magazine, "Modern Master in Bridgewater", March, 2004 The Artful Home, Vol. 1, 2003

The Guild.com website and Designer's Sourcebook XV International Registry of Artists and Artwork, Internet

"Art Listens to Literature," Danbury News Times, April 10, 2003

"Bridgewater Artist Brings Music to Life on Canvas," The New Milford Times, August 2, 2002

"Bridgewater Painter's Oils in a Salon Music Series," The Litchfield County Times, August 2, 2002

- "The Look of the Old Masters with Modern Sensibilities, "The Sentinel, October, 1997
- "Art Profile: Edward Spaulding DeVoe," Northeast Journal of Arts and Antigues, June 1997
- "Bridgewater Artist Draws from New Inspiration, Old Technique, "Danbury NewsTimes, Sept., 1994

Selected Awards and Honors

- "House of Heydenryk Award" National Arts Club, New York, NY
- "Reader's Digest Scholarship" Art Students League, New York, NY
- "Adriana Zahn Award" National Arts Club, New York, NY
- "Best in Show" Wilton Arts Festival, Wilton, Connecticut,
- "Grumbacher Silver Medallion" Kent Art Association, Kent, Connecticut,
- "Best in Show" Kent Art Association, Kent Connecticut
- "Best in Show" Bainbridge Island, Washington
- "Board of Control Scholarship" Art Students League, New York, NY
- "Louis Bouche Scholarship" Art Students League, New York, NY
- "Danbury Arts Commission Grant" Danbury, Connecticut
- "Wier and Murphy Award" Housatonic Arts League, New Milford, Connecticut

Lectures/Public Speaking Engagements

West Point Military Academy, Art Instructor, 1974-1987 Adirondack Mountain Club Washington and Kent Art Associations Artists and Writers of Connecticut Channel 10, Interview

Professional Societies and Affiliations

Art Student's League, New York, New York National Society of Mural Painters, New York, New York The Guild.com

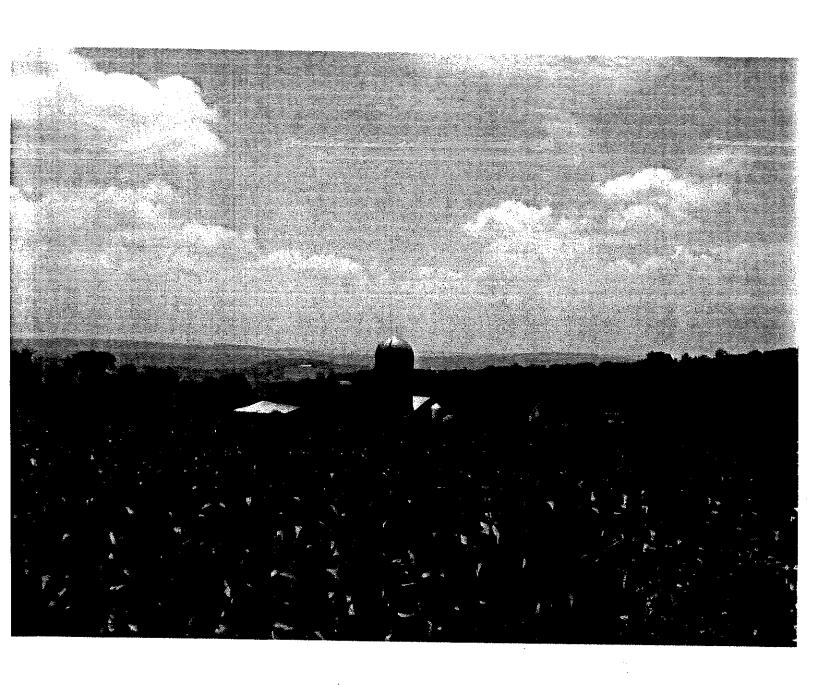
Education

1970-1976 Art Students League, New York, New YorkStudied under Frank H. Mason and Herbert E. Abrams1966-1970 Colgate University, Hamilton, New York, BA Fine Arts

Exhibit B

- 1. Frank Milligan
- 2. Belle Levin
- 3. Jeff Ferris
- 4. Joyce McKenna
- 5. Jeanette Marlow
- 6. Michael Piccirillo
- 7. Harriet Carew
- 8. FrancesMorris
- 9. Lynn Wellings
- 10. Ted Dove
- 11. Philip Stone
- 12. Tina Underwood
- 13. Maria Reilly Goldstein
- 14. Trytje Seymour
- 15. Ilene Leff
- 16. Mary Adams
- 17. Missy Stevens
- 18. Carolyn Hartman
- 19. Wendy Shami
- 20. Frances Owles
- 21. Jody Porco
- 22. Morgan DeVoe
- 23. Carol O'toole
- 24. Billie Mullen
- 25. Carol Murray
- 26. Wendy Walker
- 27. Paul Laird
- 28. Diane Gallo
- 29. Terry Gillettte
- 30. Nancy R. Pistone
- 31. Linda Allard
- 32. Sara McGarr

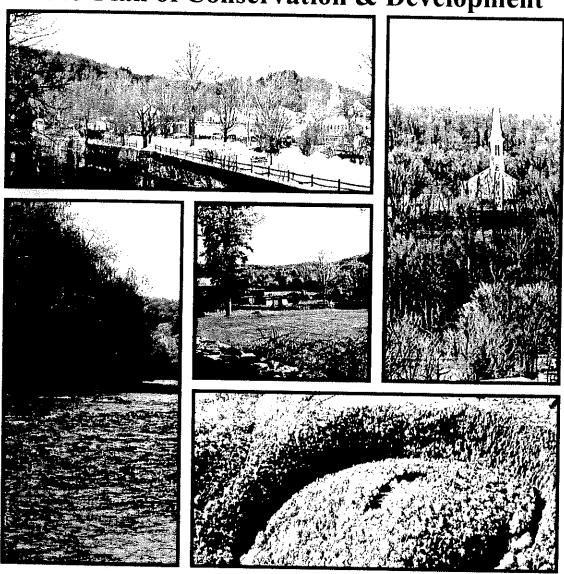
Exhibit C





WASHINGTON

2003 Plan of Conservation & Development



December 2003

Approved by Washington Playuing Comm.

A TRUE COPY

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Land Use Administrator

PRESERVE RURAL **CHARACTER**



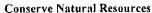
Overview

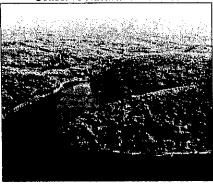
Washington is defined and distinguished by its rural character. Preservation of this encompassing but vulnerable attribute has been the dominant planning theme of the Town of Washington since the first Plan of Development in 1963. In several surveys over the past decade and during public meetings on this Plan, this continuing objective was strongly supported by Washington residents.

The extent of that support was also evidenced by the significant efforts undertaken by Town residents over the past ten years to identify and understand the foundation of the Town's character and to protect it.

The next ten years may prove crucial for the longer term preservation of Washington's rural character. Many of the strategies identified in this Plan will lay the foundation for community actions to help retain the qualities that today's residents clearly value and future residents will cherish.

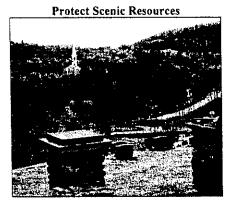
In Washington, community character includes features that contribute to the inherent quality of life for residents by enhancing the quality of the physical environment.



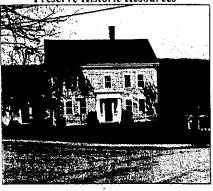


Protect Open Space





Preserve Historic Resources



From the 1993 Plan...

Rural character "is identified as being the Town's farming heritage, pastures, stone walls, fields and barns, single family residences dispersed through Town, pastoral open spaces, rural road system, lack of suburban style subdivisions, identifiable community centers and the friendly and neighborly attitudes of the townsfolk."

> CERTIFIED A TRUE COPY UHH 5/15/09

"The nation behaves well if it treats resources as assets which it must turn over to the next generation increased, and not impaired, in value."

Theodore Roosevelt

Protect Important Natural Resource Elements

Primary among the goals of this Plan is the protection of the functionally and environmentally important natural systems that help make up community character, preserve environmental functions, and enhance the quality of life for residents. Community efforts in this area should be coordinated with open space strategy and implementation, municipal land use regulations, State and Federal regulatory programs, and municipal land management.

The Natural Resource Inventory Report identifies in detail the natural resources and functions that should be preserved or conserved.

| Resources for 2 Preservation | Resources so important to environ- mental quality or community charac- ter that alterations to these areas should be avoided to the extent feasi- ble and prudent. | Watercourses / Waterbodies |
|---------------------------------|--|---|
| Resources for Conservation | Resources with important functions that can be maintained while compatible activities take place nearby if development occurs in an environmentally sensitive way. | |
| Resources for Protection | Resources with important functions that can be permanently protected under the open space plan objectives. | Desirable open space shown on the Open Space/Greenway Plan map on page 3-9. |

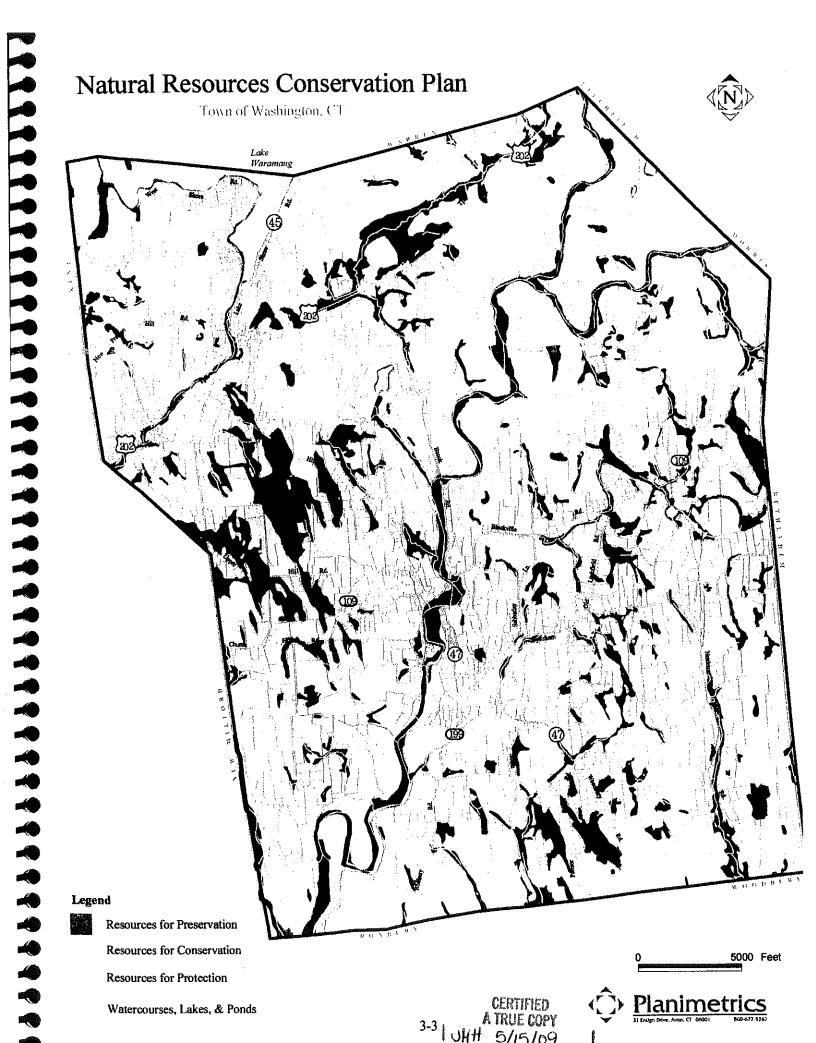
Resources identified for preservation already have some measure of protection in Washington since the soil-based residential density zoning regulation does not allow most of these areas to be included when determining the number of housing units that may be built on a given site. Washington should continue to encourage the permanent protection of sensitive natural resource areas through conservation easements, open space set asides in new developments, and by other appropriate means. Natural resource features are mapped on the following page.

Maintain Soil-Based Zoning

Washington has excellent soil-based residential density zoning regulations in place to manage the intensity of residential development in the community (see sidebar on page 1-8). In fact, Washington has received an award from the Connecticut Chapter of the American Planning Association for these regulations. Town officials are unanimous that these regulations must be maintained in order to relate development intensity to the natural capacity of the land to handle septic infiltration, stormwater run-off, water quality, and other environmental impacts of development.

The Zoning Commission recently modified these regulations to:

- refine the soil classifications, and
- include a density regulation that reduces the total number of houses that can be developed in a subdivision.



Water Quality

Protection of water quality is Washington's most important natural resource preservation priority because:

- water is a basic requirement of human, plant, and animal life,
- Washington relies on ground water resources for its drinking water, and
- water contributes to the natural beauty, the recreational pleasures and the quality of life in Town.

Biologic Resources

The Connecticut Department of Environmental Protection (CTDEP) maintains a Natural Diversity Database to help preserve and protect important natural resources.

Specific information about the type of resource and its precise locations is released by CTDEP in response to a written request associated with a particular project. While such areas are not precluded from land use change, design modifications may be necessary to mitigate potential adverse impacts.

Additional information can be obtained by contacting the CTDEP Natural Diversity Database at 860-424-3550.

Protect Water Quality

Water Quality Monitoring – As recommended in the 1993 Plan of Development, Washington should develop, through its Conservation Commission, a regular water quality testing program for key surface waterbodies. Such a program would provide advance warning of potential contamination threats to surface water and aquifers. A test program of five to seven sites may cost \$2,000 to \$4,000 per year, depending on frequency.

<u>Public Education</u> - Public education and involvement are essential elements of any strategy to protect water quality. Educational programs related to reducing or eliminating sediment runoff, septic maintenance, hazardous materials, lawn and garden fertilizers/chemicals, yard composting, clear-cutting and clearing of understory, wetlands protection and similar issues may be sponsored by the Conservation Commission. Such programs will help to educate residents on threats to water quality and the cumulative impacts of individual decisions.

Non-Point Pollution - In recent years, water quality protection efforts throughout the nation have turned to reducing "non-point" pollution (pollution that does not originate from a specific point). This includes storm drainage discharges, lawn fertilizer, septic systems, agricultural runoff, and similar sources. The recently revised subdivision regulations addressed some of these issues, and Washington should continue to seek to reduce non-point source pollution. Possible tools include strengthened zoning and street design regulations pertaining to impervious surfaces.

<u>Septic Management</u> - Although there has been no indication of widespread septic failures or problems in Washington, improperly operating septic systems are a potential threat to water quality and public health. Washington should encourage programs to educate property owners about proper septic operation and maintenance. If problems arise in the future (especially in sensitive watersheds like Lake Waramaug), Washington should consider adopting regulations that:

- require septic tanks to be pumped and inspected periodically with information on septic tank pumping and condition reported to the Town, and/or
- require all improved properties to be inspected every three years for system failures.

<u>Erosion and Sediment Control</u> - Erosion and sediment controls are required in all new developments in Washington. However, adequate inspection and maintenance is necessary to ensure appropriate protection of water quality and water resources. Careful inspection and maintenance should be continued until areas are completely stabilized.

Lake Waramaug - While Washington has some excellent regulations in place related to the density of development, there is increasing concern in the community about the amount of development around Lake Waramaug and its impact on water quality in the lake. This Plan recommends that the Zoning Commission consider extending the boundaries of the R-3 residential zone to include the entire watershed that drains to Lake Waramaug. (On November 24, 2003 the Zoning Commission adopted regulations effectuating this recommendation.)

Protect Scenic Assets

The Natural Resource Inventory Report contains a comprehensive list of scenic resources, which may be found on virtually every road in Washington. Scenic resources contribute to community character, but are threatened by insensitive siting of development, installation of privacy fences (especially around Lake Waramaug), and indiscriminate tree cutting.

Scenic Protection

The Planning Commission and the Zoning Commission should consider regulations to include scenic resources (such as ridgelines) in development reviews. Such regulations can also include provisions to encourage preserving or relocating scenic resources such as stone walls, barns, and rustic fences. (The Viewshed/Watershed section of Woodbury's Subdivision Regulations may be a useful reference to consider.)

The Natural Resources Inventory Report recognized the significance of barns and farm outbuildings to local scenery and community character. The report also recommended the Town investigate ways to reduce the assessment on such structures as one example of the available tools to protect such structures. The 1993 Plan also included this recommendation. Regulations relating to such reductions should specify standards for maintenance of historic and scenic values.

Ridgelines are an important and sensitive scenic asset, because the enticement of homes with dramatic views is powerful in Washington. Strategies to preserve the scenic character of ridgelines may include:

- discouraging or preventing activities with negative visual impacts (such as communication towers as addressed in the current Zoning Regulations or indiscriminate tree clearing),
- adopting a special application review process to consider subdivision designs and proposed improvements (including fences) in sensitive scenic areas, and
- discouraging or preventing unnecessary lighting on or near ridgelines.

Scenic Roads

The Conservation Commission prepared and the Town has adopted a scenic road ordinance. Improvements or alterations to roads or scenic features, such as stone walls or significant trees, along roads designated as scenic by the Planning Commission will be balanced with the impact on the visual character. The Natural Resources Inventory Report provides a complete and detailed listing of Town roads and their scenic qualities.

Connecticut General Statutes Section 13b-31 allows the Department of Transportation to designate a State highway as a scenic road to ensure that any alteration to the State highway maintains the scenic character of the road. This designation should be considered by the Conservation Commission for parts of the State Routes in Washington and proposed to the State if found appropriate.

CERTIFIED A TRUE COPY Preservation of historically significant buildings, properties, and places will help enhance community character.

National Register

Listing on the National Reginter of Historic Places (NRHP) is largely ceremonial. People typically assume the National Register of Historic Places is a protective program when it is actually only a recognition program.

This recognition entitles a property owner to display a commemorative plaque but only directly affects activities involving federal and/or state funding. It has little or no impact on the activities of the private sector.

State Register

Listing on the State Register of Historic Places (SRHP) is also largely ceremonial. This recognition also only directly affects activities involving federal and/or state funding and has little or no impact on the activities of the private sector.

However, such federal and state designations provide important recognition and this could benefit community character and spirit.

Encourage Preservation of Historic Resources

Washington's history, and the physical presence of many historic, architectural, and archeological assets, is another key component of the rural character that defines the community. Preservation of historic buildings, sites, and artifacts, as well as archeological resources, is an important way for Washington to provide a sense of identity and stability, preserve community character, and enhance the Town's historical heritage.

The map on the facing page identifies where historic and archeological resources are located or where they may be expected based on historic indications.

Historic Districts / Areas

| Туре | Location | |
|--|--|--|
| Local Historic District | Sunny RidgeWashington Green | Calhoun - Ives Street |
| National Register of Historic Places* | Sunny RidgeWashington Green | Calhoun - Ives StreetNew Preston Hill |
| State Register of Historic Places* | New Preston | • |

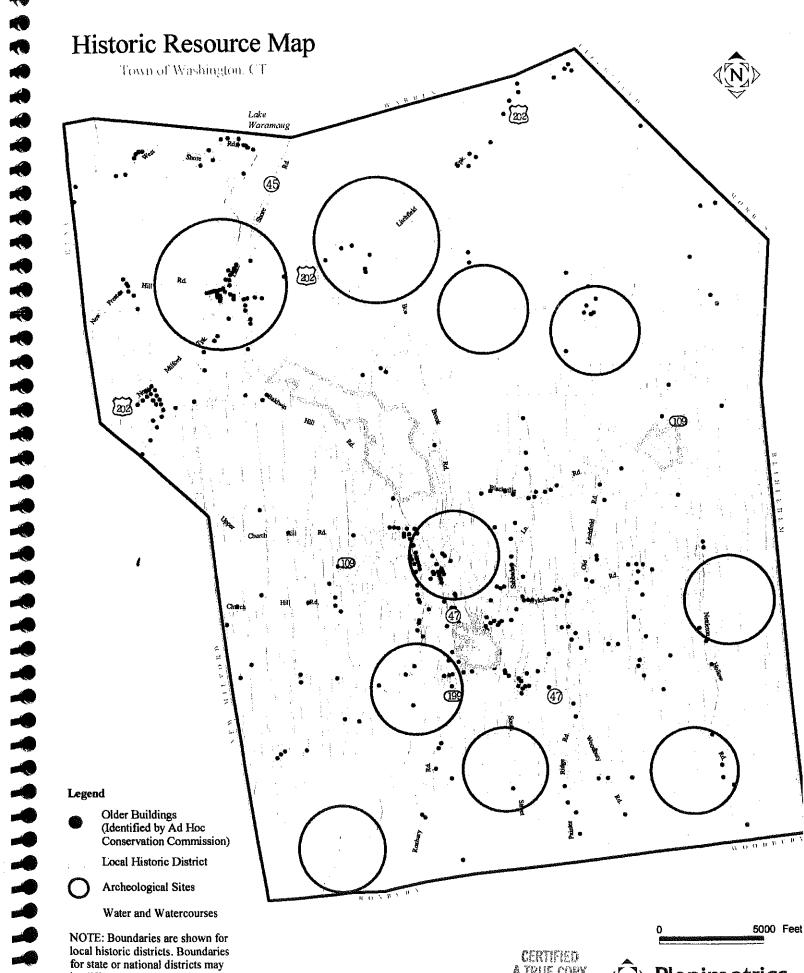
*Districts and areas on the National Register are automatically listed on the State Register.

Historic Buildings / Places

| Туре | Location | |
|--|--|--|
| Local Register of Historic Places | • None | |
| National Register of Historic Places* | Mount Tom Tower | St. Andrews Episcopal Church |
| State Register of Historic Places* | Averill Homestead Bushnell House Cogswell Tavern Congregational Church Litchfield Iron Works Noble Dayhouse Parish House | East Street School New Preston School "Stonewalls" house Washington Green house Marbledale house Christian Street house Sprain Brook Sawmill |

*Buildings and places on the National Register are automatically listed on the State Register.

Washington needs an organization to help coordinate the preservation of historic resources. The Historic District Commission is primarily a regulatory body and is not prepared to undertake this effort. This Plan recommends that establishing a Washington Historical Society (possibly with the assistance of the Gunn Historical Museum) be considered.



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be different.

Encourage "Sensitive Stewardship"

The most effective means of preserving historic resources is ownership by people or organizations that are sensitive to the historic significance of the resource and are financially and emotionally committed to maintaining that resource. Fortunately, most Washington residents have exhibited sensitive stewardship over the years and the community is richer as a result of their efforts.

Sensitive stewardship should continue to be encouraged and supported. In particular, the Town should investigate ways to provide educational programs and technical assistance related to historic preservation as effective tools to assist owners of historic resources. Such a task would be appropriately assigned to a volunteer historic society, which this Plan recommends.

Maintain Local Historic Districts

Washington has established three historic districts. Exterior alterations in these areas which are visible from a public street must receive a "certificate of appropriateness" from the Historic District Commission. These districts were established by local ordinance after recognition of their historic significance and ratification by the affected property owners.

These existing districts should, of course, be maintained since they are the most effective means of preserving historic character. Any potential new districts that are identified and that are endorsed by property owners should be considered favorably by the Board of Selectmen.

In addition, if a Historical Society is established, it should be encouraged to contact the State Historical Commission about participating in the Certified Local Government program. This program provides grants for partial funding for historic resource inventories and other projects.

Consider Adopting a Demolition Delay Ordinance

In order to help preserve historic structures, Washington may wish to consider adopting a demolition delay ordinance. While such an ordinance does not appear to be needed at this time, it may become a valuable tool in the future. A demolition delay ordinance allows up to ninety days to evaluate alternatives if a building or structure slated for demolition is found to be historically significant.

Preserve Archeological Resources

Evidence of habitation by Native Americans has been found in Washington. A number of archeological investigations by the Washington based Institute for American Indian Studies and others have found archeological artifacts from Native Americans living in this area thousands of years ago.

Activities in areas with archeological potential should be preceded by a responsible archaeological investigation so that additional information on the archeology and settlement history of Washington can be collected and catalogued. Such investigation could be made a requirement of zoning and subdivision regulations.

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Promote Appropriate Architectural Design

Beyond its historic structures and features, much of Washington's character and its pleasing appearance come from the New England architectural styles that exist in the community. Washington is very fortunate to have some very attractive buildings, especially in its village center areas.

However, Washington does not have any architectural guidelines or review procedures to ensure that future buildings contribute to (and do not detract from) the rural and historic character that is revered by residents and visitors.

Washington should consider establishing a design review process with accompanying standards to help ensure that new and existing architectural styles are compatible. The Town could establish a design review board with members, having appropriate skills, appointed from the community at large. This board would review plans for uses in the village center areas and for special permit uses in residential zones submitted to it by the Zoning Commission. The design review board would then provide comments to that Commission about how to improve the design of buildings and sites.

Similarly, the Town should also investigate the need for standards to apply to lighting and noise pollution.

Since the design review comments would occur during the time period between receipt of an application and action by the Zoning Commission, it would not extend the decision timetable for an applicant. In addition, since the comments from the design review board are advisory to the Zoning Commission, it could choose to not impose conditions that it considered impractical or unrealistic.

Summary

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Issues associated with preserving rural character – natural systems, open space, scenic, agricultural, historic, and other assets – dominated the priority listing based on public meetings and Commission discussions. The importance of these values carries through virtually all the Plan's components, but several relevant strategies were identified: conserve natural systems, protect open space, preserve scenic assets, support agricultural land and farming, preserve historic assets, and assure architectural integrity.

Design Review

New development should enhance local architectural style and character.

However, regulating architectural design can be problematic because it can be a subjective issue. What qualifies as "good design" to some, others see as visually incompatible or inappropriate.

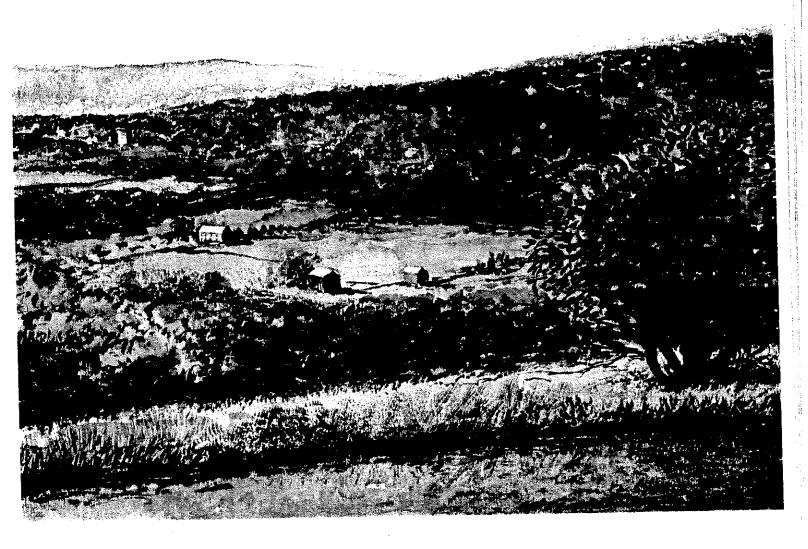
On the other hand, a well-developed design review process can foster an improved and deeper understanding of community design and mitigate the subjective nature of reviewing architectural design.

The design review process would generally be utilized for development of:

- multi-family uses,
- business uses,
- institutional uses,
- special permit uses, and
- other uses that could have a significant impact on the community.



WASHINGTON, CONNECTICUT



NATURAL RESOURCE INVENTORY REPORT AND RECOMMENDATIONS

Approved by existington Planning Comm as incorp.

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TOWN OF WASHINGTON, CONNECTICUT AD HOC CONSERVATION COMMITTEE

NATURAL RESOURCE INVENTORY REPORT AND RECOMMENDATIONS

NOVEMBER, 2000

II. NATURAL RESOURCE INVENTORY

A. GEOLOGY

Washington lies in the southernmost foothills of the ancient Berkshire Mountains. Our bedrock is intensely folded as a result of past continental plate collisions and outcrops are frequently seen to punctuate the countryside.

Cameron's Line, an ancient fault, slices through the northwest corner of the Town, roughly running along the East Aspetuck River and Meeker Swamp hollows. This deep fault demarcates the plate contact zone between the Paleo-North American and European Continental plates. Soft Stockbridge marble bedrock follows the East Aspetuck River valley up through the abandoned quarries of Marbledale and onward into Meeker Swamp. The lowland marble is flanked by highlands of gneiss to the northwest, which can also be seen in rock outcrops from Central Park through Putnam County, and highlands of mica schist to the southeast, seen throughout southern Connecticut. The marble is the remains of sea creatures deposited on an ancient ocean bed; the gneiss and mica schist are folded metamorphic rock pushed up during

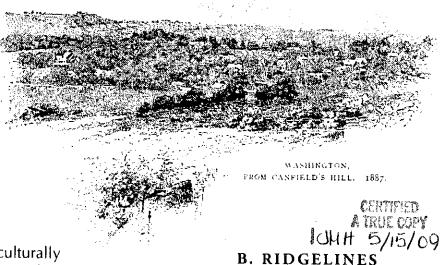
ancient continental formations. Other areas of bedrock, such as quartz and Ratlum schist, can also be found. Quartz is present in enough quantity to have supported a small mining industry in the 19th century. Abandoned quartz mines can be found in Hidden Valley as well as in the West Church Hill Road area.

Underlying rocks are important for four reasons:

1. The marble valley land is agriculturally rich. Marble bedrock creates neutral, or basic, soil pH chemistry. This in turn enhances the efficiency of nutrient uptake

- 2. Bedrock outcrops are scenic. Our rocky landscape creates considerable visual interest and, often, some of the best views occur from major outcrops such as the Pinnacle and Steep Rock.
- 3. Rock outcrop zones provide specialized habitat for some forms of plant and animal life.
- Significant areas of rock outcrops often require blasting and rock excavation to accommodate development. Blasting, if uncontrolled, can damage adjacent properties and impact adjacent wells.

The geology map depicts bedrock geology as delineated by the Connecticut Department of Environmental Protection (DEP) Natural Resource Inventory mapping. In addition, surficial rock outcrop features of note such as Steep Rock, The Pinnacle (Waramaug's Rock) and the ravine along Nettleton Hollow are shown based upon field inventory.



Ridgelines are a dominant feature of our scenery. Washington has approximately eight

plus many smaller, more peak-like heights. In their natural state — i.e., unbuilt and forested — they are vital to the overall rural quality of our Town's appearance, an appearance which changes dramatically with the four seasons.

Some feel they ought to be preserved at all cost in order to retain the scenic character of our landscape. But on closer examination, we see they are not now totally preserved, but have been built on over the course of our history. However, for the most part, the buildings now existing on our ridgelines manage to be in harmony with our scenic values and do not detract from the Town's rural character.

In Washington, one cannot simply select areas over a certain elevation above sea level and call them "ridgelines." Unlike the Trap Rock ridge region of Central Connecticut, many of our highest points are broad, level and plain-like. The Popple Swamp hilltop, Fenn Hill and Calhoun Hill are all of high elevations but are not necessarily ridge-like. Here houses do exist without significant scenic impact. However, these higher elevations are desired by telecommunications companies for tower sites, which could have negative visual impact.

It is primarily where higher elevations lie adjacent to steeply dropping slopes that "ridgelines" become an area of concern for Washington. Large houses, perched on hilltops over steep slopes with large areas of clearing, can seriously impact scenic character. Yet these

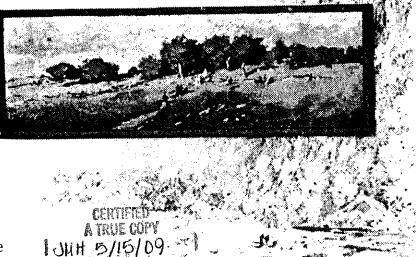
places are in great demand for the views they afford. A sensitively designed house with a beautiful view from a hilltop is not automatically unappealing; a poorly planned house on a hilltop or hillside with excessive clearing and extensive earthwork is.

The accompanying map illustrates ridgelines and ridge areas adjacent to steeper slopes (prominence areas), as well as the highest elevations of our flatter, more

C. SLOPES

The topography of Washington is one of its most endearing features. The variety of land-form, from hilltops to hollows and the steep hillsides in between, creates a great diversity of spatial character. Varying slopes and terrain increase the apparent extent of the landscape. If one were to stretch this small but corrugated town out flat, it would likely cover a Nebraska county! Intimate, inward-oriented hollows lie in contrast to expansive, outward-viewing hilltops and ridgelines.

The predominant event (aside from plate tectonics) that created our terrain was glaciation. The ice sheets, a mile thick, moved down from the north pushing tons of rock and earth in their paths. This movement created the general pattern of northsouth ridgelines separated by parallel valleys. North-facing slopes are often more moderately pitched than their south-facing counterparts, having received the full brunt of the plowing effects of the glaciers.



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The terrain, more than anything else, has influenced the layout of the Town and its roadways. The level hilltop Green area was developed first, with farm fields radiating outward over moderate slopes. The development of water-powered industries and later, the railroad, brought construction next to river-centered hollows such as Marbledale, New Preston and Washington Depot. Steep woodlands remain largely free from development and offer us extensive forest buffers, such as Steep Rock Reservation, to this day.

The slope map identifies three categories of slope, each important because of its impact on development. The first category represents areas possessing gentle to moderate slopes ranging from 0 to 15 % (a one-foot rise or drop over approximately six-feet eight-inches horizontally). This category of slopes covers approximately 66.65% of

the Town and is chiefly important to identify given Washington's driveway ordinance, which stipulates that no driveway may be built with a finished gradient steeper than 15 %. Although a driveway can be built where the grade is in excess of 15%, its construction will require earthwork cuts, fill and, in some instances, retaining walls and/or "switchback" alignments.

The second category comprises those slopes ranging from 15 % to 25%; slopes of this type cover approximately 25.60% of the Town. Development within these areas should incorporate architectural and site plan solutions for irregular terrain. Sedimentation and erosion control planning become more important here.

The third category of slopes shown are those exceeding a 25% gradient (a one-foot rise or drop over four-feet horizontally). This category of slopes encompasses approximately 7.75% of the Town's area. While development can feasibly occur on these steep slopes, it is not recommended. Soil erosion control is critical for work

for development within 25% slopes is excessive in most instances. Development within areas of 25% and greater slopes should proceed with extreme caution, if at all, and only after thorough engineering and planning.

D. RIVERS, BROOKS, LAKESHAND PONDS A TRUE COPY

Washington is graced with a multitude of waterways including the Shepaug, Bantam and East Aspetuck Rivers, approximately half of the shoreline of Lake Waramang, an abundance of

the 18th and 19th centuries, and numerous ponds of varying sizes. Today these waterbodies contribute to plant and animal life, the water supply, the natural beauty, the recreational pleasures and hence, the quality of the Town. Preservation of these abundant water resources requires ongoing monitoring, sensitive land use regulations and development planning in order to guarantee their quality and availability to future generations.

Some steps have already been taken:

- The Steep Rock Association, a private land trust founded in 1925, continues to seek protection of the river corridors through conservation easements and gifts of land.
- The 1974 and 1993 Washington Plans of Development support streambelt protection.
- In April of 1998 Washington's Inland Wetlands and Conservation Commission adopted a uniform 100 foot wide regulated area surrounding all wetlands and watercourses. The Commission also reserved the right to extend review further into upland areas in applicable instances.

The Shepaug River

The Shepaug River slices diagonally across the Town from northeast to southwest. This river is a primary component of our Town's identity and has played a major role in shaping our history. The West Branch originates in Cornwall and flows through the Upper Shepaug Reservoir. The East Branch originates in Goshen and flows through Litchfield on its way to its confluence with the West Branch at the Lower Shepaug Reservoir. From this reservoir, a single river flows through the towns of Washington, Roxbury and Southbury, joining the Housatonic at Lake Lillinonah in Southbury. Sometimes placid and slow moving, at times rocky and filled with rapids, the river provides wildlife habitat, recreational opportunity, scenic value, floodwater conveyance, atmospheric cooling and water supply,

In 1921 Washington entered into an agree-

ment with the Town of Waterbury, authorizing Waterbury to store and divert water from the Shepaug for use by the growing city. It was agreed that the City of Waterbury would release no less than 1.5 million gallons of water per day to areas downstream of the Shepaug Reservoir. While 1.5 million gallons might sound like an immense amount of water, when spread over miles of riverbed the river is reduced to a small trickle. Dry hot summers further reduce the river to a warm, lethargic shallow stream. Scenic values are reduced, fisheries habitat is significantly compromised and recreational use is hampered. Research indicates that Waterbury has sufficient water resources to accommodate growth while allowing a far greater quantity of water to be released during the drier summer months. In February 2000, following a lengthy and technically complex lawsuit, a decision was handed down requiring the city of Waterbury to release substantially more water into the river.

In 1955, a fall hurricane combined with extended precipitation resulted in a disastrous flood which changed the face of Washington Depot. Floodwaters raced through the Depot, washing roads out, floating homes downstream and killing two townspeople. Damage to the Depot was almost irreparable. What was once a vibrant commercial district with shops and housing along River Road is now a park. The current 1950's era brick architecture, which won a national planning award, replaced many of the 18th and 19th century buildings destroyed by the flood.

Flood disaster and low flow issues notwithstanding, the Shepaug remains a centerpoint of our scenic landscape. Fortunately, much of the river's course through Washington is permanently protected in the Steep Rock and Hidden Valley Preserves.

Bantam River

The headwaters of the Bantam River arise in southern Goshen, and the river flows south into Litchfield. After flowing through an extensive wetland system south of the center of Litchfield, the river enters Bantam Lake in Morris. From

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Bantam Lake, the river flows westward through the borough of Bantam to Mt. Tom State Park in Morris and then into the northeast corner of Washington to a confluence with the Shepaug just north of Rumsey Hall School. Without the contribution of the Bantam River during low flow periods, the Shepaug would undoubtedly nearly disappear each summer. Although often

surrounded by commercial, recreational and residential areas in Litchfield and Morris, the river runs through quite remote and natural areas in Washington.

East Aspetuck River

The East Aspetuck
River originates at Lake
Waramaug and flows
southwest along the
Route 202 corridor into
New Milford where it
joins the West Aspetuck
River and then flows into
the Housatonic River.

This river has been significantly worked and surrounded by development since the 18th century. At one time, there were approximately nineteen water-powered mills in the short stretch from New Preston to Marbledale. Although no mills exist today, the rocky, steeply pitched river continues to be sur-

rounded by development impacts in the form of houses and commercial development. However, it offers fishing and beautiful views along its entire length and is an important conduit for floodwaters.

Bee, Kirby, Mallory, Sprain and Walker Brooks

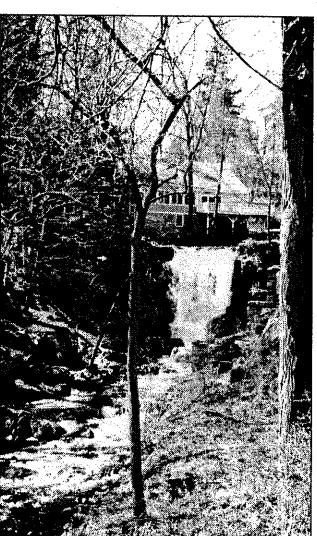
After our rivers, there are five brooks which are important resources for the Town. All but

the Sprain Brook are tributary to the Shepaug. The Sprain Brook, located in the southeastern valley known as Nettleton Hollow, flows to the Weekeepeemee River of Woodbury. The Bee Brook originates in the valley along Route 202, flows westward through Meeker Swamp and then southward to a confluence with the Shepaug at the southwest corner of the Hidden

Valley Preserve. Kirby Brook originates in a wetland system off Wykeham Road and flows southwest along Wykeham, past the Gunnery School and the Mayflower Inn, along Roxbury Road and to a confluence with the Shepaug south of the Riding Ring at Steep Rock. Mallory Brook arises in swamps along Romford and Nettleton Hollow Roads and then flows westerly along Blackville Road to a confluence with the Shepaug just east of the Depot. Walker Brook occupies a long narrow valley running between New Milford and Washington, It winds through both towns beginning just north of Route 109, joining the Shepaug River in Roxbury. In addition to these brooks, there are

many other intermittent and perennial streams throughout the Town.

These brooks and streams are important scenic assets, wildlife corridors, flood conduits and water supplies. They vary from slow-moving muddy-bottomed streams within large wetland systems to rocky, fast-moving, almost river-like conditions. Portions of Mallory Brook along Blackville Road, Kirby Brook along Roxbury



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Road, Bee Brook off of Route 47, and Sprain Brook off Nettleton Hollow Road offer great scenic beauty for the abutting residences as well as motorists traveling about Town.

the lake is Lake Waramaug State Park, which provides campsites and public access to the lake. There is also a limited public access boat ramp at the Washington Town Beach. Warren

and Washington each have town beaches, which are available to the residents of those two towns.

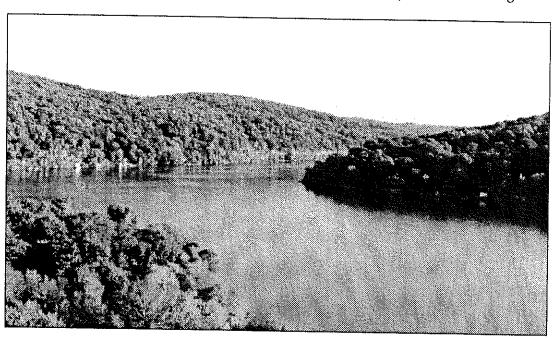
Lake Waramaug has long been known as a summer destination. Residents and visitors alike derive pleasure from walking, biking and driving around the shore of the lake because the surrounding roads afford a multitude

of scenic views. Throughout the past century there has been several inns that have taken advantage of these scenic views.

Lake Waramaug is valued for many other reasons. It provides habitat for many species of flora and fauna and serves as a valuable recreational fishery resource. Its waters offer opportunities for educational studies and scientific research, and for some it even serves as a supply of household water.

Numerous boaters, under sail, oar or motor, enjoy the waters. The crew teams of local schools can often be seen practicing on the placid waters of the lake.

Although nutrient rich, characterized as either eutrophic (CT College Arboretum, 1995) or late mesotrophic (CT DEP, 1996), the 680-acre lake has reasonably clean and clear water which is currently free from invasive aquatic plant life of the type that hinders boating and swimming. The Lake Waramaug Task Force has for many years promoted watershed management as well as a lake cleanup program, both of which have contributed to steady water quality improvements.



Lake Waramaug

The three towns of Washington, Warren and Kent share the shores of Lake Waramaug, the second-largest natural lake in Connecticut. The State of Connecticut designated Lake Waramaug as the state's first Heritage Lake in September, 2000. Possessing a surface area of approximately 680 acres and depths down to 40 feet (with an average depth of 22 feet), Lake Waramaug impounds approximately 4.8 billion gallons of water (CT DEP and USGS, 1987). It is fed by groundwater, numerous small intermittent streams and six perennial brooks, the largest of which is Sucker Brook (also known as Lake Waramaug Brook) in Warren. The watershed contributing to the lake is a little over 14 square miles (9,190 acres), a figure which is considered to be small for a lake of this size. Information from 1987 indicates that 74% (6,800 acres) of the watershed is forested, 10% (920 acres) is wetland or watercourse while 16% (1,470 acres) has been developed (low density residential, commercial or agricultural use) (CT DEP and USGS, 1987).

Located on the northwestern-most end of

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A potential threat to the health of the lake has been identified: nonnative invasive aquatic plants and animals such as Eurasian Milfoil, Water Chestnut, Zebra Mussel, etc. Once these aggressive species establish a toehold, they can dramatically change the character and quality of the lake in a few short years, drastically limiting the types of activities that can be enjoyed in and around the lake. Sites of public access to lakes are where these invasive species are most often introduced, having hitched a ride on trailered boats. With increased demand for public boat launches, we must be ever vigilant for these pests and take whatever measures are necessary to prevent their introduction. If introduction does occur, they should be vigorously fought. Attention should be focused on the two major public access areas on Lake Waramaug: Washington Town Beach and Lake Waramaug State Park. The Town of Washington has recently adopted an inspection policy at the Town Boat Launch.

The lake is part of a larger system of wetlands and watercourses. At its southernmost end it empties into the East Aspetuck River which flows to a confluence with the West Aspetuck River in New Milford and then into the Housatonic River. Eventually, the water from Lake Waramaug finds its way into Long Island Sound after passing through a number of communities. Any land use organization or other group or individual making decisions about the lake and its watershed obviously needs to consider how their actions will affect all aspects of Lake Waramaug so that many people, in a diversity of ways, can continue to enjoy the lake in the future.

Mt. Tom Pond

While located primarily in Morris, this 31.5 acre natural pond with a well-utilized State Park lies partially in the northeast corner of the Town of Washington. Mt. Tom Pond was formed during the last glaciation; the pressure of the overlying ice sheet formed a localized depression termed a glacial kettle, and when the glacier retreated, the small basin filled with meltwater; currently, it is fed predominantly by

springwater. Despite its relatively small surface area, the pond itself is quite deep with an average depth of 21 feet and maximum depth nearing 46 feet (CT College Arboretum, 1995). Its water quality is quite good, characterized as early mesotrophic by CT DEP (1996). As a result, it affords great habitat and recreational value. The protected forest land ringing the majority of the pond should continue to protect the water.

Smaller Ponds

There are numerous ponds scattered throughout the Town. Varying from small excavated farm ponds to large stream-fed impoundments, ponds act as important water supplies, flood storage basins, fire-fighting water sources and wildlife habitats. Ponds can be quite susceptible to negative impacts and wildly fluctuating water quality.

Ponds should never be created on a whim. Their health and sustainability require proper study, siting and construction. Wherever possible, ponds should be protected from nutrient-rich farm and residential landscape runoff. While a well-manicured lawn running down to the edge of a beautiful pond may be an alluring sight, the lawn's fertilizer-laden runoff can have undesirable impacts upon the pond.

E. AQUIFERS AND WETLANDS

Aquifers

We live in a region of relatively generous rainfall. The lush forest that surrounds us and the many streams, rivers and ponds throughout the region are the most tangible evidence of our well-watered province. Out of view, but no less abundant, are underground rivers and streams known as aquifers. These aquifers are grouped into two major categories: bedrock and stratified drift.

First, like streams on the land's surface, are bedrock aquifers; these are the small streams of water flowing through a complex network of fractures in the bedrock. Bedrock aquifers of varying capacities are present in every part of Washington. The Town's most significant

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bedrock aquifer follows the Route 202 corridor.

Our household wells draw upon these underground streams. At lower housing densities, bedrock aquifers can generally be counted

on to produce adequate water for

single family homes.

In general, the consumptive use of water extracted from wells drilled into the bedrock is somewhat offset by septic systems returning water to the soil and thence, after renovation, into underlying bedrock fractures. However, extensive blasting can potentially disrupt the subtle network of fractures, and improperly maintained or poorly designed and constructed septic systems can fail to renovate domestic sewage prior to its entry into the bedrock. Excessive well development in zones of low yield bedrock aquifer can impact existing wells and result in water shortages during times of drought. Excessive large-scale irrigation using groundwater can also have a major impact on local water levels in times of drought.

The second type of aquifer is a stratified drift, aquifer; these aquifers are the major rivers of our underground waterways. Past glacial periods have deposited layers of porous gravel along valley bottoms which allow for the accumulation and flow of water, often associated with surface rivers.

Just as in the bedrock, these stratified drift aquifers are of variable capacity. Where gravel deposits are well-graded, possessing a well-developed full array of particle sizes, these aquifers can yield up to 50 - 2,000 gallons per minute. Where gravel deposits are less well developed and surficial water less abun-

dant, these aquifers produce lower, although still considerable, volumes of water.

These aquifers are subject to extreme impact from surface events. Leaking fuel tanks, oil

spills, salt and urban runoff can all enter the aquifer through permeable soils with long-lasting and serious consequences. Although it will ultimately be resolved, the salt contamination present in the soil beneath the former Town Garage site is one example of improper surface activities over stratified drift aquifers. In Washington, stratified drift aquifers can be found in gravel deposits beneath the Depot, beneath the Meeker Swamp area along Route 202, under the East Aspetuck in Marbledale, beneath certain stretches of the Shepaug and Bantam Rivers in the Romford section of Town, as well as under the intersection of Nettleton Hollow Road and Route 109.

Wetlands

Wetlands in Connecticut are defined by soil type (see Soil Based Zoning Classes A-F, wetland soils are Class F). Underlying geology, past glaciation and alluviation have created pockets where water accumulates and soils hold water. The presence of water for extended periods reduces the oxygen content of the soil resulting in color variations referred to as mottling; a soil scientist uses an auger to look

for these signs when identifying wetlands in the field. Saturated wetland soils can vary from Adrian's peat and muck, which are thick organic deposits of decomposing plants (Meeker Swamp) to Ridgebury and Whitman, poorly drained soils which possess thin layers

of organic soils over oxygen-reduced mineral soils (Popple Swamp). Wetland soils are easily identified by the marshes and swamps which cover them. They can be found wherever tussock sedge, red maples, cattail, spicebush or skunk cabbage are present.

Another important wetland type consists of the well-drained floodplain soils. These wetlands are difficult to identify at a casual glance because they often look no different than surrounding upland soils. However, they are quite important for a variety of reasons. Since they occur in floodplains they should be avoided for development. They are quite permeable and are prone to rapid infiltration of pollutants. Lastly, they are rich agriculturally. Loaded with nutrient-rich sediments and host to seasonally extended biologic and microbial action, these soils often produce our greatest crop yields. Well-drained floodplain wetlands are found along our major valley bottoms such as the Shepaug and the Sprain Brook in Nettleton Hollow.

Wetlands are important for the following reasons:

- Wetlands are one of the most productive ecosystems on the planet.
- They function as the kidneys and bladders of the earth's water cycle by trapping sediments and nutrients as well as filtering pollutants.
- Wetlands are host to specialized plant life.
 These plants are uniquely adapted to filter
 nutrients and heavy metals from water
 before it enters the soil and ultimately, the
 bedrock.
- Cation exchange (a type of chemical reaction) occurring within wetland soils acts to bind pollutants, contributing further to the cleansing effect of a wetland.
- Wetlands act as storage basins during periods of heavy rainfall, moderating the effects of heavy flood-causing rainfall and allowing for infiltration.

- Wetlands slowly release their stored waters during times of drought.
- Some wetlands contribute waters which recharge the water table.
- Recent research has revealed wetlands to be an important carbon sink in the form of decaying trees.
- The role of wetlands in the nitrogen cycle has been documented and is known to be an important element contributing to the air we breathe.
- Wetlands provide essential habitat for numerous wildlife species (obligate species); a number of birds and amphibians are especially dependent.
- Many other wildlife species use wetlands (facultative species) for protective cover, breeding areas, foraging areas or important corridors for movement.
- Wetlands can be areas of great scenic beauty and can provide opportunities for aesthetic appreciation, not to mention educational benefits.

What were once considered noxious places and derelict wastelands are now known to be vital parts of the landscape. Accordingly, wetland regulation must be considered a responsibility rather than a restriction. Without wetlands, our world would be a desolate and parched place.

F. SOIL TYPES

The soil covering the land of Washington is like a complex quilt of varying texture, permeability, fertility and stoniness. The Natural Resource Conservation Service (NRCS) has identified and classified 38 varieties of soils in the town of Washington. In addition to several types of wetland soils, these soils range from excessively-drained Hinckley Gravels found along waterways to Hollis rock outcrops on stony hilltops to well-drained Charlton sandy loams on ridges and hilltops and moderately

" No at 100 to 1

H. WILDLIFE HABITAT AND LISTED SPECIES

Washington's varied topography and land cover provides visual beauty, cherished by residents and visitors alike. A closer examination of the Town's relatively well-preserved landscape reveals a diversity of habitat types which complement the other natural features discussed in this document.

Biodiversity, the variety and variability of all living things and their roles within their natural systems, is at the core of our physical existence.

on protection and management of our temperate northeastern forests and flyway stopovers as well as overwintering areas in the tropics.

Another illustration of the importance of biodiversity can be seen by the role played by wild gene pools within the agricultural system. The United States' wheat crop, which feeds an international population, is under constant threat from blights. Scientists continually search for disease resistant wild populations of plants which are related to our domestic food crops. Without this source of related wild grasses for breeding resistance back into the wheat crop,

the potential for pandemic disaster exists.

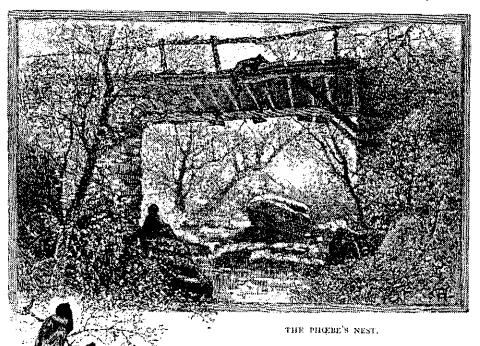
These are only two of the countless examples illustrating the importance of biological diversity. There is another aspect, however, that must be mentioned: the sheer joy and fascination that comes from the exploration of nature.

In addition to outright habitat loss through destruction, the two major threats to biodiversity are habitat fragmentation and introduced (non-native) invasive species. As development pressures mount and land

becomes increasingly fragmented, plant and animal populations become isolated and diminish due to such factors as over-competition for limited food and cover. Populations of sensitive species eventually disappear while those tolerant of wide ecological amplitudes—those that are more adaptable to a range of conditions—become abundant. For example, the native Bullfrog (Rana catesbiana) can easily overpopulate a degraded wetland by outcom-

Some species (particularly non-native invasives) can alter the physical characteristics of natural areas and can become pests to humans. Locally, Japanese Barberry (Berberis thunbergii) and Honeysuckle (Lonicera sp.)

peting other amphibian populations.



While the term
"biodiversity" might
immediately conjure up images
of a tropical rain
forest, the urgency for
preservation cannot be limit-

ed to those geographic regions; equally worthy of preservation are our temperate ecosystems.

Migrating songbirds clearly exemplify the connection between distant ecological realms. Most of our songbirds are tropical migrants that winter in the neotropics, but their breeding grounds are located here in our temperate forests. Efforts to conserve songbirds must focus

are overwhelming native understory shrub communities. European Starlings (Sturnus vulgaris) and Brown-headed Cowbirds (Molothrus ater) compete with native songbirds. The Zebra Mussel (Dreissena polymorpha) is moving into our area from the Great Lakes region via boats. The end product of these perturbations is a homogenous biota that severely limits our options for resources such as pharmaceuticals, new crops and basic raw materials.

Connecticut's northwestern region has the highest biodiversity in the state due to a largely undeveloped and relatively unfragmented landscape (Preston, 1996). Washington's biologically diverse habitat types are part of this larger landscape. The following sections of this natural resource inventory identify those areas possessing high concentrations of biodiversity within Washington as well as other features, including "notable trees".

Vernal Pools

In the northeast, vernal pools (temporary woodland ponds) usually fill with the autumnal rains and not in the spring as the name implies; a more accurate terminology would be "ephemeral woodland pond," "seasonal pool," or "autumnal pool." (As it is familiar to most audiences, "vernal pool" will be used in this report).

Spurred by recent scientifically documented global declines of amphibians - a known indicator of environmental health - vernal pools have finally been recognized as critically important habitats which host an unusual array of organisms that contribute tremendously to regional biodiversity. Previously considered by many to be stagnant swamps fit to be filled, vernal pool ecology is now at the forefront of conservation biology.

Vernal pools differ from other freshwater wetlands, deriving their energy from decaying leaf-litter provided by the surrounding forest; the basis of the food chain in other wetland types is green plants beginning with microscopic algae. Fed directly by precipitation, surface run-off, and/or groundwater, vernal pools typically lack a permanent inlet or outlet. They cannot sustain permanent fish populations because they tend to dry out. Free from fish predation, vernal pool organisms can successfully complete their life-cycle. Those whose entire existence depends on vernal pools are referred to as "obligate" species. Good examples are the Wood Frog (Rana sylvatica), mole salamanders (Ambystoma sp.) and Fairy Shrimp (Eubranchipus sp.).

Wakened from hibernation by the first warm spring rains, Spotted Salamanders (Ambystoma maculatum) migrate en masse, sometimes from a distance of a quarter mile and sometimes by the hundreds, to their natal pools to breed. Anyone witnessing this spectacular natural phenomenon is sure to have their interest piqued and become attuned to this annual event.

Some organisms are also specially adapted to the extremes of the vernal pool way of life. For example, eggs of the fairy shrimp can remain dormant in a dried-out condition, successfully surviving lengthy desiccation for as much as 20 years before "reactivating" again.

From a generalized topographical perspective, New England's vernal pools tend to appear in areas with a combination of shallow soils, swales, and exposed bedrock and/or groundwater where glacial sediments and eroded materials have accumulated and drainage is consequently poor. They also can occur in floodplain areas and in close proximity to other wetland systems.

Due to a preponderance of topographical and geological characteristics, the Nettleton Hollow/Carmel Hill area has an outstanding example of an extensive vernal pool system, with many pools in close proximity to each other. Other areas include the Mt. Tom and Lower Church Hill regions.

Consequently, these areas are extremely diverse and productive biologically. For example, species such as the mole salamanders and Wood Frogs spend more than 90% of their adult lives in the surrounding forests. Invertebrates (such as insects) that use vernal pools abound as well, attracting and sustaining a diversity of forest dwelling birds. In addition, vernal pools serve as "watering holes" in what

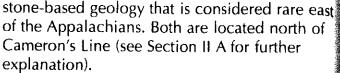
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otherwise may be dry upland woods, attracting other types of animals, such as mammals.

The data layer represented on the map includes both "verified" and "potential" pools. It must be noted that the term "verified" refers to pools that were either directly field inspected or those that are historically known to be vernal

pools either through land-use documents such as survey maps, land-use related site inspections or simply through "local knowledge."

"Potential" vernal pools include those that were identified



Meeker Swamp is an extensive wetland complex located in the Northwest Hills ecoregion. It is one of the last remaining, relatively unfragmented calcareous wetlands of significant size in the area. The system comprises an area of over 300 acres including part of the Bee Brook stream belt, wet meadows, agricultural fields and the talus areas and rocky outcrops of the adjacent ridge. Tucked away from the Route 202 corridor, this wetland is a significant natural resource. It is underlain by Washington's largest aquifer, and according to a Nature

Conservancy report, its surficial water appears to be of high quality (Farnsworth and Preston, 1998).

Field observations during the course of this project revealed its importance as a significant bird habitat. Two Species of Special Concern, the Whippoorwill (Caprimulgus vociferous) and the Brown Thrasher (Toxostoma rufum) appear to be using the habitat for

extended periods, possibly even for breeding as habitat requirements for both species are met. The Brown Thrasher prefers open areas such as old fields with brushy growth while scrubby growth in immature woodlands with a more open canopy is favored by the Whippoorwill. The American Woodcock (Scolopax minor), a sensitive, habitat restricted species requiring moist soils near field's edge for nesting and having specific feeding requirements, can be seen regularly. Waterfowl such as the Green-Winged Teal (Anas crecca), though a northern species, passes through during migration, utilizing the swamp for food and cover. Meeker Swamp is also ideal habitat for the spectacular Wood Duck (Aix sponsa), an obligate tree nester, which requires low human disturbance, and forested, shrub or riparian wetlands. 3.5



from aerial photos but
were not field inspected;
those that may eventually
prove not to be vernal pools will
be removed from the map as landuse applications are submitted and/or
as land-ownership changes and permission to field-inspect is granted.

The "potential" category also includes some field-inspected wetlands that may function as vernal pools such as those fragmented by roads where drainage is poor but water accumulates and remains for sometime.

Calcareous Wetlands

Ash and Meeker Swamps are unique calcareous wetlands (fens) associated with limeThe diversity of vegetation in Meeker Swamp also includes a variety of berry and mast-producing plants sustaining and providing cover for breeding bird populations and late fall migrants passing through. However, invasive introduced plants such as Multiflora Rose (Rosa multiflora), Purple Loosestrife (Lythrum salicaria), and Japanese Barberry (Berberis thunbergii) have a good foothold and are on their way to displacing native flora, thereby negatively impacting habitat values. See Appendix M for a listing of Connecticut's invasive plant species.

Ash Swamp is the other calcareous wetland in Washington, but it is significantly smaller than the Meeker Swamp system. This backwater of Lake Waramaug is fragmented from most of its natural upland areas by roads and lawns. Purple Loosestrife has invaded the central and northern sections of the swamp, threatening its native flora. Although largely unexplored, Ash Swamp is included in this report as a potentially important calcareous habitat. Field investigations are warranted, especially in the swamp's southerly, well-vegetated areas, to assess its biological integrity.

Lake Waramaug

Lake Waramaug, Connecticut's second largest natural lake, is another ecologically valuable resource. Located in the Western Uplands, it is an ecological anomaly in that it has not yet been impacted by non-native plants that are choking so many of the region's lakes and ponds. A bird-watcher's paradise, it is an important stopover for migrating waterfowl. The water is relatively clear and visibility is unobstructed by weeds that would otherwise interfere with the feeding habits of fish-eating birds like the Common Merganser (Mergus merganser) which can be seen by the hundreds when the ice is open in winter and early spring. Other species seen include the Hooded Merganser (Lophodytes cucullatus), Red-Breasted Merganser (Mergus serrator) and Ruddy Duck (Oxyura jamaicensis); occasionally a Pied-Billed Grebe (Podilymbus podiceps) or even a Bald Eagle (Haliaeetus leucocephalus) is present. Fish species known to be present in the

lake are Largemouth Bass (Micropterus salmoides), Smallmouth Bass, Calico Bass, Lake Trout (Salvelinus namaycush), Rainbow Trout (Salmo gairdneri), Yellow Perch (Perca flavescens), White Perch, Pickerel (Esox sp.), Alewives (Alosa pseudoharengus), Sunfish (Centrarchidae family) and Bullheads (Ictalurus nebulosus) (CT DEP & USGS, 1987).

Wildlife Corridors

Wildlife corridors are routes that animals use as they move through an area to reach breeding sites or food sources. They also provide connectivity between different habitat areas. Rivers, wetland systems and ridges are generally considered to be linear corridors because animals tend to travel parallel to these features. Hawks, for example, follow ridgelines during their annual migration. Linear corridors are traditionally considered in conservation efforts while radial corridors are often overlooked. Radial corridors are analogous to the spokes of a wheel. The routes that amphibians follow each spring to their breeding pools from the surrounding upland forest is a good example.

Corridor widths tend to be species-specific. Beavers, for example, remain within approximately 330 feet of a wetland, thus defining their home range. The buffer concept may work for species with linear habitat requirements along a wetland corridor, but not for vernal poolbreeding amphibians whose habitats are in the surrounding upland forest. Protection of their migration routes is problematic if traditional buffer concepts are applied.

Plants are an important component of the corridor concept primarily because they provide cover and protection for wildlife on the move. But they, too, have width limits. American Beech (Fagus grandifolia) for example, cannot reproduce successfully in narrow corridor strips.

The corridors indicated on the map are of the linear type, based on the general concepts noted above and on wildlife sightings noted by locals; widths are estimates based on natural and man-made landscape features that may promote or inhibit wildlife movement. These

aspects warrant further scientific investigation. The Bantam River corridor, however, is used by state-listed species as indicated by the DEP circle near the Morris town line. Other corridors include Nettleton Hollow, the Wyant Pond/ Kirby Brook area, Walker Brook valley, the Poplar Swamp ridgeline and the Bee Brook valley.

Radial corridors, especially those associated with vernal pools, also require further scientific studies to determine amphibian dispersal patterns.



Talus and Ledge Areas

Talus areas are composed of dislodged rock accumulating at the base of ledges and rock outcrops. The crevices and spaces between the rocks provide hibernacula for animals spending their winter months in dormancy, as well as temporary shelter and nesting sites for an assortment of species. Also, the generally cooler climatic conditions in these rocky locations and the rich soils produced by the perpetual weathering of the rocks are favorable microhabitats for interesting floral communities.

Good examples of this habitat type include the ridge adjacent to, or north of, Meeker Swamp and the numerous sites along the Shepaug River as it winds through Steep Rock and Hidden Valley.

Small rock outcrops, though locally important, were not mapped as they are too numerous, but must still enter into the land-use decision-making process as they are integral parts of the landscape.

Notable Trees

After years of researching historical records and scouring the state to locate and measure Connecticut's largest cultivated and non-cultivated trees, the Connecticut Botanical Society published its findings in a booklet entitled "Connecticut's Notable Trees." The state's largest trees and "runners-up" located in Washington were added to the map from this source along with additional "runners-up" discovered during fieldwork for this conservation effort. The location of these trees is indicated on

the map by large green arrows; all locations are approximate.

This section was added to the report to raise public awareness of these interesting specimens in an effort to prevent their untimely destruction. Sadly, one of Washington's notables was cut down by a utility company working on the Green. Connecticut's largest Red Horsechestnut (Aesculus x carnea), a hybrid non-native, measured 60 inches in circumference and was 29

feet tall, when it met its demise in 1998. Another notable tree, Connecticut's largest Dwarf Alberta Spruce, was cut down as this report was being finalized.

As living monuments gracing our landscape and having withstood the ravages of time for generations, Washington's Notable Trees deserve special recognition and protection (see Appendix K for a complete listing).

State-Listed Species

Plants and animals can be rare for a number of reasons. Habitat destruction and over-collecting are the most common causes of rarity, but natural events such as fire and erosion, to name a few, can also be contributing factors. Also, some species may be restricted to rare habitat types and therefore are regionally rare. One example is Labrador Tea (Ledum groen-landicum), a plant species that was abundant in New England during the ice-age, but has become restricted to peat bogs since the glacier retreated (Dowhan and Craig, 1976).

The Connecticut Natural Diversity Database is a compilation of the State's imperiled flora and fauna. The first Endangered Species list for Connecticut was finalized in 1992, subsequently reviewed in 1997 and a revised list was officially adopted in 1998. Based upon the number of occurrences in the State (or designation at the federal level) listed species are assigned into the following categories:

- Endangered fewer than 6 occurrences
- Threatened 6 to 9 occurrences
- Species of Special Concern species possessing either a naturally restricted range or habitat, a low population level, high demand by humans or extirpation from the state.

Information from the State's database was transferred to the map, represented by red circles a half mile in radius. This convention is used to "flag" a species' presence while protecting its exact location; certain plants and animals are subject to thievery by collectors as well as poaching for the black market.

Also included on the map are species discovered during the course of this project. Those undergoing documentation and verification are indicated by paler circles.

Washington is only a part of a much larger picture. As previously noted, the northwest corner of Connecticut contains the highest concentration of biological diversity in the state (Preston, 1996). To preserve this biodiversity, protection must focus on ecosystems and habitats in the larger landscape, not just on individual species. A universal approach considers the full complexity of natural systems that affect and sustain our span of existence, from economics to personal well-being.

It is everyone's duty to practice and to hand down a legacy of stewardship. With a strong conservation ethic, Washington can set the stage for other towns to join together to establish a regional conservation effort that protects biodiversity.

I. ARCHAEOLOGICAL, HISTORICAL AND ARCHITECTURAL RESOURCES

Prehistoric Resources: Native American Habitation

Washington was settled over 10,000 years ago. From the early 1970's to the late 1980's the Institute for American Indian Studies (IAIS), formerly the American Indian Archaeological Institute, began studying the prehistory of the area through surveys and excavations along the Shepaug River, Kirby Brook, Sprain Brook, the shores of Lake Waramaug and other sites in town. This archaeological research illuminated much of Washington's prehistory. For example, near Meeker Swamp, in the northern part of Washington, researchers found evidence of the area's use "by different populations of huntergatherers between 7,000 and 2,500 years ago," revealing evidence to suggest the particular importance of wetlands, in addition to other natural resources, in the lifeways of prehistoric cultures. Excavations at other sites found evidence of native Americans living in what is now Washington at least 10,000 years ago. Many of these prehistoric artifacts are preserved at the IAIS on Curtis Road.

The importance of protecting the archaeological sites marked on the map is summarized in a report written by Dr. Russell G. Handsman, former director of research at the IAIS:

Of all the towns in Litchfield County, Washington's prehistoric and archaeological resources (sic) are among the best known.... Although preliminary [they] have given us knowledge about patterns of prehistoric land use: how these landscapes were settled and used by Native Americans over the past 10,000 years – and have indicated where important archaeological sites are located. This work has also allowed us to understand the archaeological potential of some localities: what research questions might be explored at certain sites and how future excavations might be conducted...

Obviously, the identification of these sites means that their development should not take place without at least an opportunity for further responsible archaeological investigation first.

L. SCENIC ROADS, SCENIC AREAS AND VISTAS

Scenic Roads

Washington has many stretches of scenic roadways and roads that offer noteworthy and often dramatic views. In addition, the Town has a number of unimproved and dirt roads that emphasize and contribute to the rural atmosphere of the area. The scenic nature of these roads helps to define the character of the Town and enhances the general quality of life for residents and nonresidents alike. If scenic roadways are inappropriately developed, the ambiance of Washington is in danger of being destroyed.

Two issues need to be addressed when developing a scenic road inventory for the Town of Washington: 1) the term "scenic road" by definition implies a value judgment and is therefore highly subjective and 2) almost every road in Washington has some qualities that can be considered scenic.

For the purposes of this document, roads within Steep Rock were considered protected as scenic roads. Two of Washington's state roads, East Shore Road and West Shore Road, were designated as scenic roads by the State in the 1990s (see Appendix E).

According to the Connecticut General Statutes, Sec. 7-149a(b), a (non-state) highway, to be considered scenic:

"must be free of intensive commercial development and intensive vehicular traffic and must meet at least one of the following criteria: (1) It is unpaved; (2) it is bordered by mature trees or stone walls; (3) the traveled portion is no more than twenty feet in width; (4) it offers scenic views; (5) it blends naturally into the surrounding terrain; or (6) it parallels or crosses over brooks, streams, lakes or ponds."

Because almost every road in Washington meets at least one of the above State criteria, the subcommittee developed a set of criteria specific to the Town.

To be considered scenic, a local road must:

- be unpaved
- have stone walls and/or buffer zones
- have tree canopy/ies
- be winding
- run parallel to, cross or afford views of wetlands and waterways
- have long views
- traverse rural, open areas, meadows, farmland etc.
- be narrow or have no shoulders
- be undeveloped/lightly settled
- conform to geography
- have steep ascent(s)/descent(s)
- afford views/traverse scenic area, intersection, hollow or hilltop
- have dramatic slopes on road sides or other unusual geologic features
- pass by/afford views of historic sites and/or structures which complement or blend naturally into surrounding terrain

It is important to remember that these criteria are guidelines. As a general rule, roads possessing eight or more of the fourteen criteria listed above have been designated as scenic. In some instances, roads with fewer than eight criteria were given scenic designation. Conversely, certain roads with eight or more elements were not.

Many roads have a substantial number of these scenic elements in localized areas. If the majority of a road meets the qualifications, the road is determined to be scenic. If the scenic value of a given road is extremely localized, said area has been included in the "Scenic Areas" category.

The complete listing of roads designated as scenic under this classification system can be found in Appendix E. The accompanying scenic road grids can be found in Appendix E.

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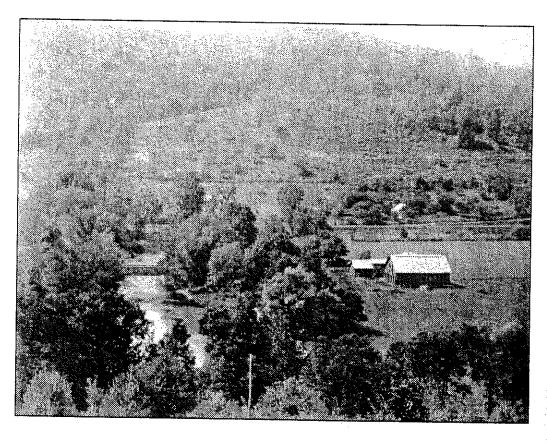
Scenic Areas and Vistas

As a guideline to quantify Scenic Areas, a system of criteria similar to Scenic Roads, but applicable to off-road views, has been used:

o Scenic Areas, a Sabbaday Lane/Blackville Road/Turner Road area

Painter Ridge Farm area

- stone walls and/or buffer zones
- wetlands and waterways
- long and/or semilong views
- pastoral, rural and open areas, meadows, farmland etc.
- undeveloped/lightly settled
- hollows, hilltops, and/or other geologic features
- historic sites and/or structures which complement or blend naturally into surrounding terrain



The Scenic Areas (see appendix G for the narrative descriptions) identified by the application of the criteria and delineated on the map include the following:

Baldwin Hill area

Calhoun Street/Ives Road area

Carmel Hill area

Church Hill Road/Popple Swamp Road area

Judea Cemetery Road/East St./Potash Hill area

New Preston area

Nichols Hill Road/Painter Ridge intersection

Nichols Hill Road/South Street intersection

Sabbaday Lane/Mallory Brook area
Steep Rock (and Hidden Valley) areas
Sunny Ridge area
Washington Green area
West Church Hill/South Fenn Hill/Shinar
Mountain/Lower Church Hill area
West Morris Road/Smokey Hollow area
West Mountain Road area
Whittlesey Road area

The Scenic Vistas included on the map, indicated by blue arrows, represent all long and semi-long views from vantage points along either the Town's roadways or major walking trails.

III. RECOMMENDATIONS

The following recommendations are offered for consideration by the land use commissions of the Town. However, it is important to consider that additional regulation is not a long term solution; education of the public is.

A. GEOLOGY

- Strictly control development within rock outcrop zones to preserve scenic character and minimize the possibility of land disturbance and impacts to neighboring properties.
- Encourage the preservation of rocky talus slope areas and significant zones of rock outcrops in order to conserve their specific habitat qualities.
- 3. Require pre-blast surveys prior to significant blasting activities to protect adjacent property owners.
- 4. Require applicants proposing to blast more than 200-300 cubic yards to submit a professionally prepared study detailing the potential impact on adjacent wells and properties as well as the alternatives considered which could minimize or avoid blasting. Qualified experts include hydrologists and professional engineers.

B. RIDGELINES

- 1. Control the number of houses on the widely visible ridgelines, through zoning, by acreage requirements. The look of an occasional house up on a hill is very different from that of a row of development houses marching across a ridgeline at 100-foot intervals.
- Consider the use of varied setbacks to create an irregular building line or varied distances from the road approach in order to make a development's appearance com-

- patible with the irregularities of nature. Encourage the use of natural materials and colors where buildings are to occupy visible ridgelines. Encourage low spreading architecture in lieu of vertical and massive design.
- 3. Require the use of vegetation to provide screening: i.e. obligations to minimize clearing, and obligations to plant trees, shrubs, and hedges.
- 4. Acquire ridgeline areas as part of the Town's Open Space Inventory.
- Encourage the use of conservation easements on ridgeline lands.
- Establish buffer zones along steep slopes abutting ridgelines in order to protect the most widely visible areas from building, and especially over-building.
- 7. Confront the telecommunications antennae issue in a proactive manner. Identify locations in Town where they would be most effective as well as least visible. Consider creative solutions to placement (i.e. existing towers, Town-owned buildings, and church steeples).
- 8. Require that detailed health, environmental and visual impact assessments be provided by antennae/ tower applicants. Information to be included: viewshed analysis, health concerns (human and wildlife) and regional efficiency.

C. SLOPES

- 1. Encourage the avoidance of development on slopes in excess of 25%.
- 2. Require detailed erosion control plans for development in upland review areas possessing slopes in excess of 15%. Specify periodic environmental monitoring with frequent reports to the land use departments.

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- 3. Utilize bonding for erosion control projects involving large areas of disturbance within steeply sloped areas. This will provide an incentive to execute the approved plan in a proper and timely fashion; it also provides a way to repair those projects not completed properly.
- 4. Require applicants to address feasible and prudent alternatives to building on steep slopes as part of the building/subdivision permit process.
- 6. Consider the value of the higher elevation scenic vistas as well as street level views of the Lake when making decisions about the height of fences and other barriers to views. Balance needs to be found between the two competing issues of public safety vs. privacy of the lakeside property owners. A continuous band of privacy fencing protecting private owners would be a severe detriment to public enjoyment of the Lake.

D. RIVERS, BROOKS, LAKES AND PONDS

- 1. Establish regional cooperation among the land use commissions of Washington, Kent, and Warren to coordinate efforts to preserve and enhance Lake Waramaug's resources. The various Lake groups should be actively involved as well.
- Support the Lake
 Waramaug Association in their ongoing efforts to monitor and improve the Lake's water quality and clarity.
- Support the Lake Waramaug Invasive Species Control Program which is being initiated by the Lake Waramaug Association and the Lake Waramaug Task Force.
- Investigate technological advances in septic system design that will insure the continued health of the Lake and its residents.
- Limit boat access to the Lake to avoid overcrowding and consider prohibiting jet skis.



- 7. Establish size limits for new docks and floats.
- 8. Explore alternative technologies such as created wetlands for treatment of stormwater runoff or sewage effluent where warranted.
- 9. Encourage vegetated buffer zones along rivers and streams to preserve water quality and habitat value.
- 10. Discourage or minimize maintained landscapes adjacent to rivers, brooks, lakes and ponds.
- Strictly control fertilizer, herbicide and pesticide use adjacent to any waterbody.

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- 12. Encourage the installation of dry hydrants in ponds throughout Town for fire protection.
- 13. Require seasonal ground water monitoring and water budget analysis for proposed pond sites to ensure long term viability and health.

E. AQUIFERS AND WETLANDS

- Minimize or avoid wetland disturbance or filling.
- 2. Adhere to proper erosion and sedimentation controls.
- Require/encourge native buffer plantings where development is proposed to occur near wetlands.
- 4. Strictly regulate commercial uses near wetlands and stratified drift aquifers.
- 5. Require/encourage ground water recharge of storm water runoff where feasible.
- 6. Require that new development yields a "zero increase" in stormwater peak runoff rates (based on 2-100 year storm events).
- 7. Require stormwater biofiltration where large scale residential or commercial development is to occur near wetlands.
- 8. Encourage the use of bioengineered detention/retention basins.
- Prohibit discharge transfers from one watershed to another, which could alter the hydrology of both areas.
- Consider the use of mitigation measures (wetland enhancement, wetland restoration and possibly wetland creation) to offset unavoidable wetland disturbance.
- 11. Encourage alternatives to traditional road salting practices near major wetland systems and stratified drift aquifers.
- 12. Require logging projects to submit detailed erosion and sedimentation control plans where wetlands are involved.

- 13. Require restoration of wetland impacts caused by logging impacts.
- 14. Encourage farmers to use agricultural BMPs to limit impacts to watercourses. Limit uncontrolled access of livestock to wetlands and watercourses. Encourage stream buffers within agricultural land.
- 15. Encourage the management/eradication of nonnative invasive plant species in or adjacent to wetlands and watercourses.
- 16. Discourage large scale pumping of groundwater for nonessential uses to avoid impacts to groundwater levels, wetlands and watercourses. Consider requiring permits for irrigation systems covering areas greater than one acre.
- 17. Encourage native plantings and droughttolerant plantings to minimize the need for widespread domestic irrigation.
- 18. Strictly control fertilizer, herbicide and pesticide use adjacent to any wetland or stratified drift aquifer.
- 19. Encourage public awareness and appreciation of wetland functions. They are no longer considered waste places.
- 20. Protect valuable or unique wetland systems through open space acquisition.

F. SOIL TYPES

- Preserve soil-based zoning as an effective tool in matching development densities with the carrying capacity of the land itself.
- 2. Encourage the preservation of both existing and prime agricultural soils as part of open space acquisition programs.
- 3. Encourage agricultural and forestry BMPs.
- 4. Encourage the minimization of land disturbance. Excessive land clearing and grading can destroy soil structure built over many years as well as cause unnecessary sedimentation.

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- 5. Preserve calcareous wetlands and limestone-based agricultural land as part of an open space acquisition program.
- Encourage protection of floodplain soils due to their unique fertility and biological productivity.
- 7. Strictly enforce erosion and sedimentation plans.
- Require detailed restoration plans for new or ongoing mining operations.



G. FARMLAND AND WOODLAND

- Continue to utilize and support Connecticut's Farmland Protection program.
- 2. Encourage the purchase of locally grown produce, thereby supporting local farmers.
- 3. Establish buffer requirements separating existing farms from areas of new residential development, thus limiting potential conflicts.
- 4. Enact a "Right to Farm" ordinance consistent with the State of Connecticut's enabling legislation.
- 5. Explore ways to promote corn and hay production on private lands
- Encourage governmental action that will counter the current trend toward agricultural centralization in areas remote from our region.
- 7. Explore the adoption of local tax support to farmers and tax assessments aimed at farm preservation, maintenance and establishment of new farms.
- 8. Streamline governmental regulations for the copy

- farmers and foresters who follow proper environmental and agrarian policies.
- 9. Explore a Town Farm concept as has been practiced in Weston, Massachusetts as a means of creating farm awareness.
- 10. Encourage Forest Stewardship Improvement Programs and the forestry operations that include them.
- 11. Prohibit/discourage logging operations that do not consider impacts to neighboring properties, wetlands and the long term health of the forest itself.
- 12. Support initiatives to control nonnative insects such as the Asian Long Horned Beetle and the Wooly Adelgid. Encourage the proper treatment and reclamation of forestland impacted by catastrophic infestations.
- 13. Encourage forest management that protects existing and future forest diversity.
- 14. Encourage and manage for habitat diversity. Identify areas suitable for strip clearing to promote shrub habitat favored by woodcock and others. Encourage a full spectrum of plant cover from woodland to shrub thickets to hedgerows and meadows.

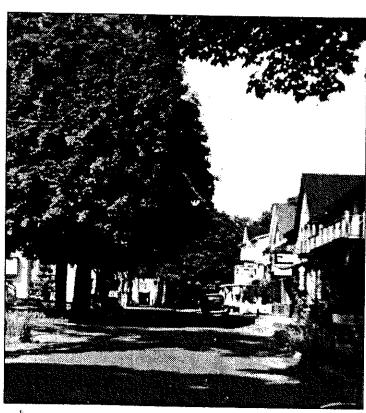
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- 15. Prohibit "High Ending" (the practice of selectively clearing only the oldest and strongest trees on a woodlot).
- 16. Discourage/prohibit the indiscriminate clearing or thinning of tree canopy and shrub understory within residential properties. Actively educate the public about the detriments of this type of clearing and the benefits of preserved forest stratification. Creating so-called "park-like" open woodland, if uncontrolled, can cause severe impacts to both flora and fauna as well as accelerating forest fragmentation. Depauperate woodlands, choked with invasive plants, frequently result from such unnecessary clearing and thinning. Our forests have rebounded in the last 100 years; it would be a travesty to see these gains eroded by misguided aesthetic aims.
- 17. Encourage forest stewardship programs that include provisions for control of non-native invasive shrubs (i.e. barberry, burning bush, honeysuckle and oriental bittersweet). Encourage the preservation of native forest understory plants and shrubs. See Appendix M for a listing of invasive species.
- 18. Limit forest fragmentation. Seek open space acquisitions that provide connectivity between large forested areas.

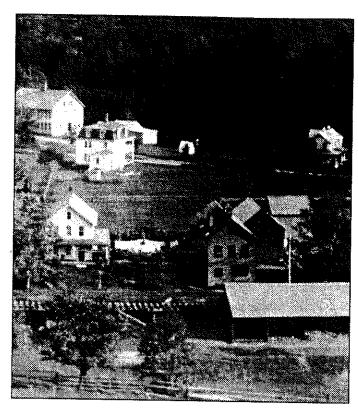
H. WILDLIFE HABITAT AND LISTED SPECIES

- Incorporate ecological considerations into the zoning regulations.
- 2. Prohibit "tract" developments in favor of open-space subdivisions. Consider open space density to be as important as housing density.
- 3. Develop a strong upland review policy for sensitive areas.
- 4. Require land-use applicants to prove that an intended project will not cause long-term negative impacts; decisions

- should be based on scientific fact.
- 5. Require thorough biological inventories for large development proposals to properly assess what is at risk. These must be conducted during the growing season to adequately evaluate possible impacts.
- 6. Institute a non-native invasive plants management policy. Refer to Appendix M for a listing of invasive plants.
- 7. Require wetland and forest management violators to restore damaged and disturbed areas by replanting with vegetation local to the area and/or allowing native vegetation to become reestablished. This must be done in conjunction with non-native invasive plant monitoring and management.
- 8. Prohibit activities that fragment or isolate habitats such as deep driveway cuts and fills engineered to simply meet grade requirements, clearing of the forest understory and creation of vast expanses of unnecessary lawn.
- Implement a sound forestry policy that protects and enhances biodiversity.



LOHH PUPING



- 10. Educate the public on such issues as the value of protected lands and their role in moderating taxes, why natural systems and biodiversity are economically important and the myriad other ways they enhance our quality of life.
- 11. Promote open space acquisition for areas possessing valuable wildlife habitat and wildlife corridors. Define minimum acreage for preservation of native species and minimum widths for wildlife corridors.

I. ARCHAEOLOGICAL, HISTORICAL AND ARCHITECTURAL RESOURCES

- 1. Use land protection tools such as conservation easements and sale of development rights to protect these resources.
- 2. Where appropriate, foster clustering of new construction through flexibility of subdivision regulations to encourage the maximum protection of the surrounding landscape.
- 3. Concentrate suitable new development in existing centers, especially in the Depot.

- Protect rural roads, old stone walls and old trees which contribute to the character of the landscape.
- 5. Require proposed development near historic districts to limit its impact upon the Historic Districts.
- 6. Promote open space acquisition that acts as a buffer to Historic Districts and preserves archaeological sites where prudent.

J. OPEN SPACE

- 1. Conduct an open space needs analysis and evaluate the most desirable use of land in the Town.
- 2. Assess public support for the permanent protection of additional open space and the priorities of the community for desirable land use.
- 3. Establish a Land Aquisition Fund.
 Opportunities to purchase critical land will arise, and those opportunities, once missed, may never return. There are several ways by which the Town may establish such a fund:
 - Property Tax: The Town, by vote of its legislative body (Town Meeting) may deposit up to two mils of its property assessment into a Land Acquisition Fund. (CGS Section 7-131r).
 - Fees in Lieu of: The Planning Commission, through the adoption of the relevant regulation, may collect a fee in lieu of an open space set aside in a subdivision. These fees would then be put into a Land Acquisition Fund designated for open space for recreational or agricultural purposes. (CGS Section 8.25 and 8.25b)
 - Municipal Bonding: The Town may issue a bond; the funds raised in this manner could be earmarked for a Land Acquisition Fund.
 - Land Conveyance Tax: As of this writing, Connecticut has not enacted enabling legislation allowing towns to

RECOMMENDATIONS

In support of the 1993 Plan of Development, the Ad Hoc Conservation Committee offers the following recommendations:

- 1. Conduct a balanced housing needs assessment. We must continually plan for the accommodation of a wide range of housing types, meeting a wide range of economic needs. A diverse population has always been a vital component of our *Quality of Life*.
- 2. Promote sustainable smart growth that considers the needs of all the citizens of our Town.
- Encourage commercial, elderly and moderate/affordable housing development within and around our existing village centers. Diversity of use, varied spatial character and increased activity promotes healthier and more attractive communities.
- 4. Study special "village zones" which allow existing village centers to be made more dense and active as opposed to spreading developments throughout Town or along our highways in strip fashion. We have attractive riverfronts, groundwater supplies, gravel for sewage treatment and regional demographics that would support additional retail shops, offices, moderate income housing, apartments for the elderly

- and luxury apartments in a mixed use, village setting. Our village centers such as Marbledale and Washington Depot offer significant opportunity to meet special housing and commercial needs while creating jobs and substantial tax revenue.
- 5. Conduct a detailed study of Cluster/Open Space housing as a way to satisfy some of the requirements for moderate cost and / or elderly housing. (Small neighborhoods of affordable traditional housing, built near existing village centers, with reduced site costs and possessing large areas of preserved Open Space buffers may help us to meet this need).
- 6. Promote limited commercial growth in order to provide local employment, tax revenue and the support of existing businesses. Increased commercial activity in our village centers would be a return to something that once existed. A more diverse and enlarged commercial mix could help existing businesses go beyond the constraints of current seasonal swings and limitations. Properly planned, unique and vibrant commercial centers would benefit residents and business owners alike.
- 7. Last but not least, it is imperative that natural resource-based land management incorporate a long range view.

V. CONCLUSIONS

In the 1970's, Ian McHarg, a landscape architect at the University of Pennsylvania, promoted an overlay system of natural resource planning. Various resources such as wildlife habitat, water resources, agricultural land and scenic areas were mapped and overlain. Areas of convergence were identified as valuable multiple resource zones to be protected.

Since the 1970's Carl Steinitz of the Harvard School of Design has promoted the use of computer technology to process and portray this

overlay system. Recent advances in computer software and the widespread availability of satellite imagery have created a powerful planning tool. For the first time in human history, we can stand back and take a long view of our evolving landscape. We can share our own information with others, compare historic maps and photos and map our own assessments using computer technology available to and recognizable by all. Painstaking mapping has been eased and updates of information made less labor intensive by GIS technology.

Our maps have been created using ArcView and ArcInfo software by ESRI. Each map contains geographic information regarding individually mapped resources. These resources can be individually or collectively compared against proposed developments. Where convergence of multiple valuable resources conflict with proposed development, efforts should be made to revise development plans to preserve important zones worthy of conservation and protection. Better yet, the maps can be studied to determine guidelines for protecting important natural resources before development knocks on the door.

With the publication of this report and its maps, this data is now available in Town Hall for use by all land use commission volunteers, their staff and the public. The information can be easily updated or expanded, thus maintaining accuracy or enhancing the level of detail. Natural resource information is a critical and powerful tool in assessing possible development impacts. Accurately mapped and quantified information is one of the most powerful and objective tools of all.

The Ad Hoc Conservation Committee advocates collaboration among the public and private sectors in the preservation of Washington's irreplaceable natural resources, while providing for balanced growth that sustains the rural character, diverse population and economic viability of the Town. Through unified natural resourcebased land use management, we believe a balance between conservation and development can be achieved.

As First Selectman Alan Chapin noted in the April 1999 Washington Times "there is a delicate balance to preserving our 'rural character' while protecting the rights of landowners and still providing the services and infrastructure with a reasonable tax base."

If there is one thing we have learned from the development of environmental science, it is that everything is interconnected and interdependent. Although we cherish the rights of property ownership, we must accept that our properties are part of larger environmental systems, and that what is done on one property affects all others. The development of land and its use must be considered in the context of this greater whole. It is incumbent on all land use management agencies to assess the pressures on these systems and to craft plans and regulatory innovations that protect and preserve the natural resources and Quality of Life in the community they serve.

This report will provide our land use commissions with the information they need to make carefully considered decisions and to better inform the public about what is at risk if proper planning is not undertaken.

We have a wonderful opportunity to all work together on "place-based conservation." To quote Mark Van Putten, president of the National Wildlife Federation, "Place-based conservation" is "sensible people working to save places they know and love and to build better communities for themselves, their families and

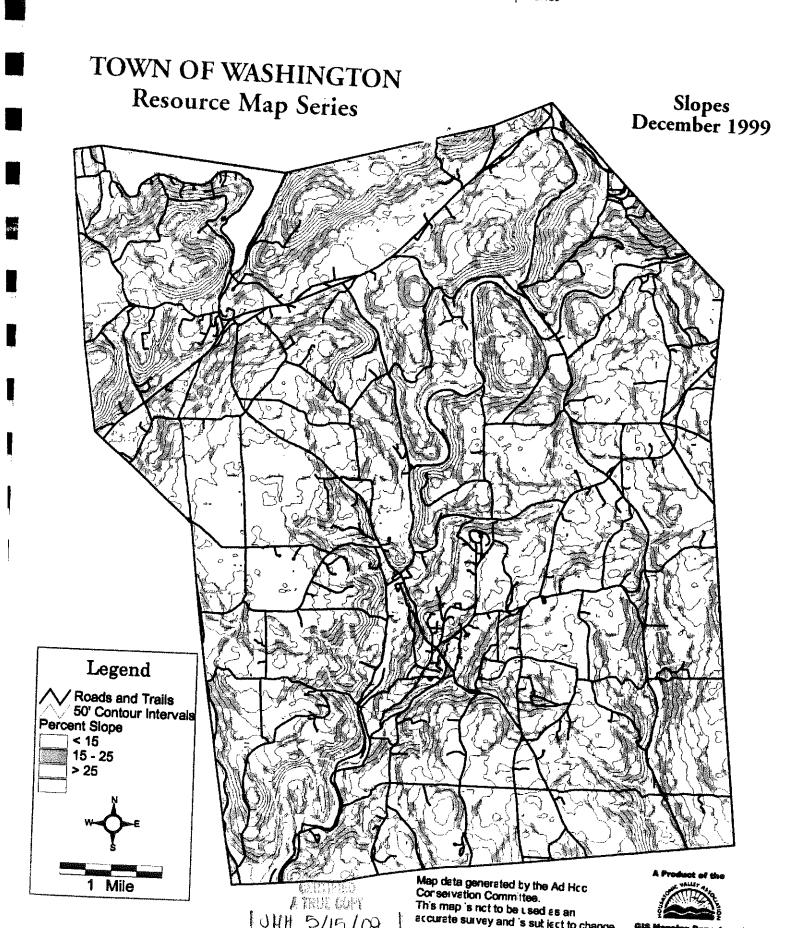
their neighbors."

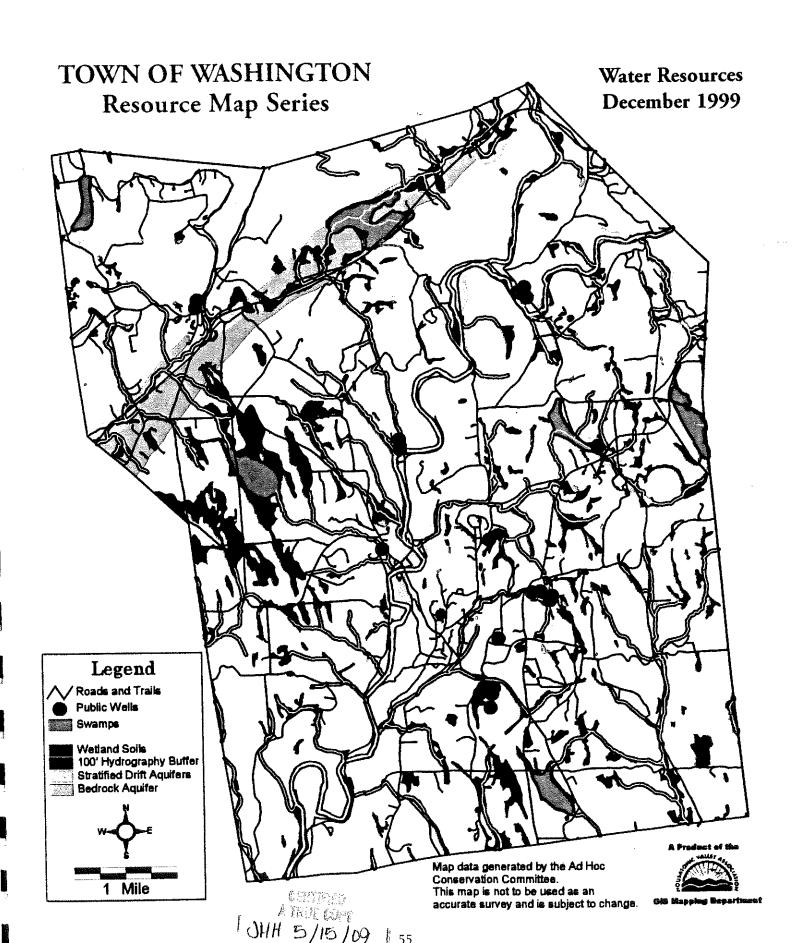


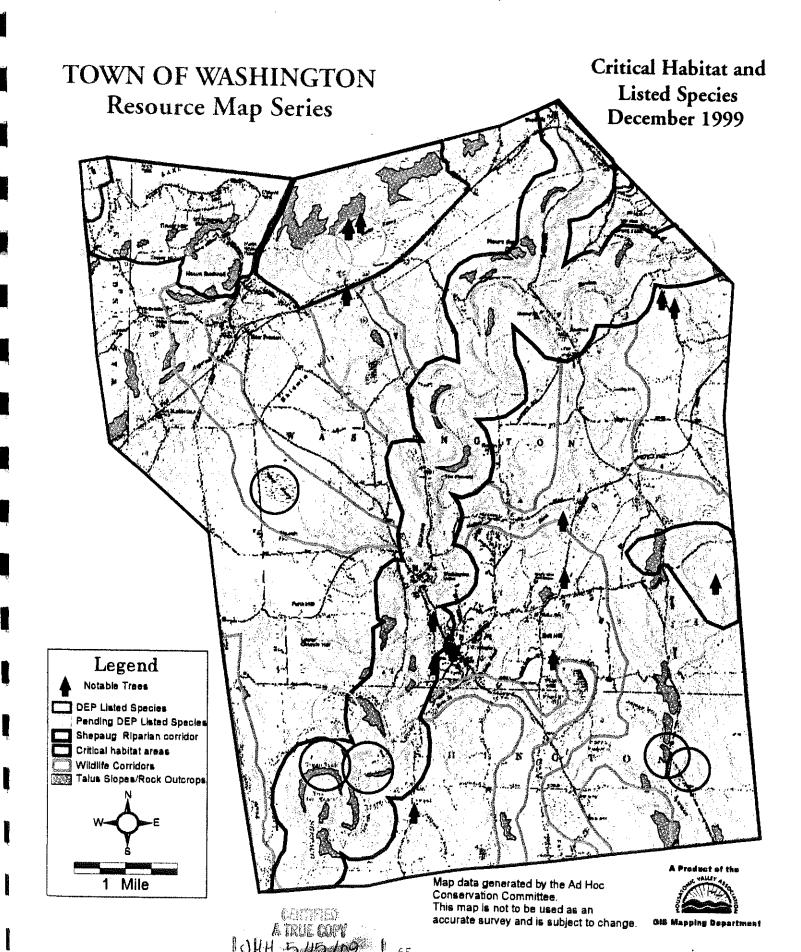
We hope you find this documentation of Washington's natural resources informative. If you have additional information or corrections, let us know.

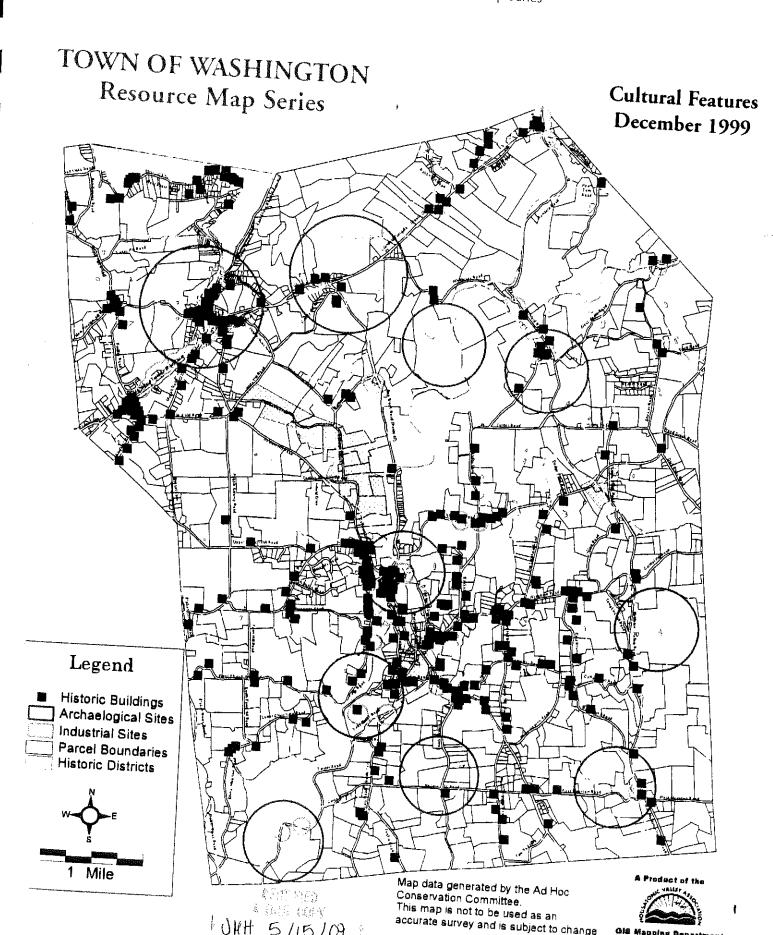
This report is a beginning, not an end.

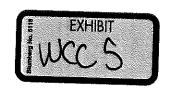
Please contact: **Washington Conservation** Commission Bryan Memorial Town Hall Washington Depot, CT 06794







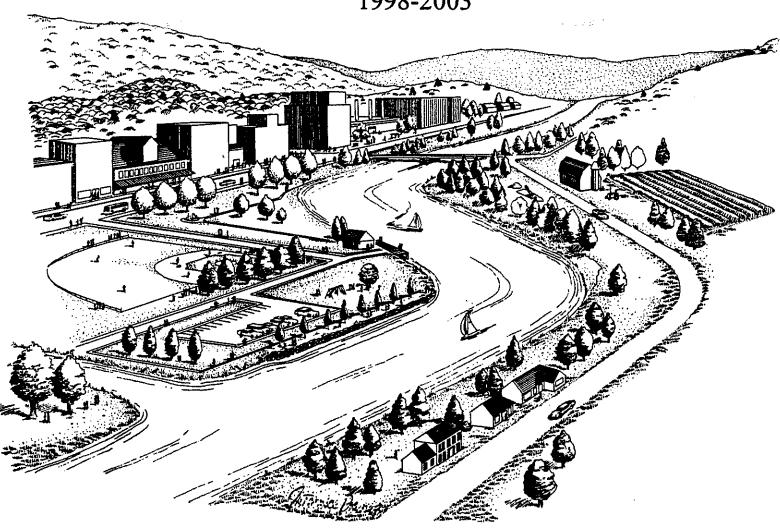




Conservation and Development

Policies Plan for Connecticut

1998-2003



Office of Policy and Management
Policy Development and Planning Division
450 Capitol Avenue - MS#52ASP
Hartford, Connecticut 06106-1308

Solution Local

Plan Locational Gu

Purpose

The Plan Locational Guide distills the foregoing discussion into a general statewide conservation and development strategy. The Guide further intends to ensure that the state's major capital investments achieve a policy impact consistent with that strategy. The Guide apportions the state into eight land categories according to each area's characteristics and suitability for different forms of development or conservation action. The categories, with associated strategies, priorities, and guidelines, demonstrate the Plan's different applications and impacts relative to an area's character of development, social structure, economic base, natural conditions, and public service facilities. The Guide therefore both interprets the goals and policies of the state and provides an important tool for their unified, coherent, and effective implementation.

Overview of Long-Term Development and Conservation Priorities

The Guide seeks a balance between the growth and conservation objectives of the state. The overall Plan strategy is to reinforce and conserve existing urban areas, to promote staged, appropriate, sustainable development, and to preserve areas of significant or conservation because of investments in infrastructure, real property, physical facilities, and human services should conform to this strategy. Regions and municipalities also need to consider this strategy when updating their plans of conservation and development.

Areas that have valued intrinsic qualities, perform useful natural functions, or that have existing or potential value for significant public use need to be protected from degradation or uncontrolled development that causes irreversible damage to important resources. However, protecting the environment is not simply identifying areas where no growth should occur. In many cases, development is possible that is compatible with the basic environmental or renewable resource values or physical safety problems of the land.

Implementing this strategy requires orienting state plans and investments to reflect a unified, coherent, and effective decision process. The state may consider proposals not in general conformance with the Plan when an analysis of environmental, economic, social, urban and energy impacts demonstrates positive public benefits over costs. Likewise, projects may be considered when there is general conformance but some project specifics such as site boundaries and other factors are not completely in agreement with the Plan. However, the long-term impact of plans and investments should reflect the relative development or conservation priorities assigned to each of the following Locational Guide categories.

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Primary considerations in defining and selecting Guide categories are to:

- Identify the existing urban environment to be conserved and enhanced and to identify specific places where public investment resources need to be targeted based on indicators of need.
- 2. Evaluate opportunity areas for low-cost urban infill and expansion, preferably in urban patterns sensitive to environmental quality objectives and energy efficiencies, and supportive of integrated multimodal transportation systems.
- 3. Group site-specific areas of environmental concern into categories reflecting the relative priority for public action, based on scarcity, significance, or other criteria.

Application of these produces the following categories and priorities:

| Guide Category | Development Priority | Conservation Priority |
|---------------------------------|-------------------------|--------------------------|
| <u>Urban Development</u> | | |
| Regional Centers | 1 (Highest) | |
| Neighborhood Conservation Areas | 2 | |
| Growth Areas | 3 | |
| Areas of Environmental Concern | | |
| Existing Preserved Open Space | | 1 (Highest) |
| Preservation Areas | | 2 |
| Conservation Areas | | 3 |
| Rural Development | | |
| Rural Community Centers | . 4 | |
| Rural Lands | | 4 |

Locational Guide Map

The Locational Guide Map, developed as part of this Plan, is a geographical interpretation of the categories. It provides a basic tool for coordinating the numerous relevant activities of state government. The map reflects the best available standardized, statewide data most reflective of each category's definitional criteria. However, statewide mapping and analysis continually change and improve. In addition, the character of particular sites may change subsequent to the development of the Plan. Detailed, up-to-date information sources that most closely reflect the definitional criteria of the Plan should therefore be used in site specific analyses and reviews. As an example, there may be instances where intensive development has occurred since the last statewide mapping of land use. These, if known, will cause an area to be changed to an urban category in mapping revision. Likewise, the current Locational Guide Map contains Level B mapping for the recharge areas of major public water supply wells. More detailed Level A mapping, upon approval, will supersede the Level B designations.

 recognize the expanding significance of nonpoint pollution sources in water quality concerns. In rebuilding or expanding urban infrastructure, incorporate appropriate stormwater management technologies to minimize adverse impacts of runoff on surface or ground waters. For new development, promote design and engineering approaches to stormwater handling that minimize the amount of impervious cover that results, and incorporate nonstructural design features and management techniques to renovate runoff.

Rural Development

Connecticut is fortunate in that the landscape and historical growth patterns have concentrated urban development largely within defined corridors, such as the Central Valley from New Haven to Hartford, the Naugatuck Valley, and the shoreline. Consequently, the western and eastern uplands of the state and areas along the lower Connecticut River offer some of the last major rural expanses in the heavily urbanized Washington-Boston corridor. They also embrace much of the state's remaining active farmland, vital environmental resources, and numerous historic villages and town centers.

However, the urban-rural distinction increasingly blurs as urban scale development spreads farther into the countryside. Many rural towns now grapple with development controls ill suited to the task of preserving the community character that makes them unique and attractive. Uniform large lot zoning, road standards based mainly on traffic movement, strict on-site parking requirements and similar measures are implicated in creeping suburbanization of the landscape, degradation of valued natural and cultural resources, loss of prime agricultural land, increasing dependence on the automobile, and perhaps even growing social isolation. Development at "in between" densities also tends to increase the demand for public services but make their provision inefficient and expensive. Accommodating future growth while maintaining the desirable qualities of rural towns is thus a critical planning concern at state, regional and local levels. Tourism's emergence as a major economic cluster in the state makes this balancing act increasingly significant.

The landscape is not the sole focus of rural concerns. In small industrial towns, particularly in eastern Connecticut, economic development, job creation, and diversification of the industrial base are important. Access to needed social services and availability of public transportation are also statewide rural concerns.

Goals

To improve coordination of federal and state programs in rural areas the following goals, originally contained in Executive Order No. 31 (October 1980), are set forth for rural areas:

-- to preserve and protect the land, water, farm open space, and forest resources which characterize the state's rural areas, and effectively coordinate such preservation with

Plan Locational Guide

Areas of Environmental Concern

Connecticut has a strong history of protecting the environment. It has strict anti-pollution laws as well as statutory and regulatory protections for important natural resources. Significant acreage has been set aside as open space to protect resources and provide recreational opportunities. Yet, the scope and intricacies of regulation and the limits on our ability to continue to set aside land leave an undesirable margin for environmental degradation.

Planning affords an opportunity to address these issues; and implementing identified strategies will help ensure protection of our quality of life. Recognizing and planning to avoid impacts to environmentally sensitive areas not only offers protection but is generally much more cost-effective than attempting to clean up or mitigate impacts after the fact. This does not necessarily mean halting all development in such areas, but it does involve careful attention to ensure that the resources of concern are not harmed.

Goals

In recognition that the natural resources of the state were finite and precious and that a growing population and expanding economy were having a profound impact on the life-sustaining natural environment, the General Assembly declared in Section 22a-1 of the Connecticut General Statutes that the policy of the state "is to conserve, improve and protect its natural resources and environment and to control air, land, and water pollution in order to enhance the health, safety, and welfare of the state." The General Assembly further directed state government to use all practical means to improve and coordinate state plans, functions, programs, and resources to the end that the state may:

- 1. "fulfill the responsibility of each generation as trustee of the environment for succeeding generations;
- 2. assure for all residents of the state safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- 3. attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
- 4. preserve important historic, cultural, and natural aspects of our Connecticut heritage and maintain, where possible, an environment which supports diversity and variety of individual choice;
- 5. achieve an ecological balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities;
- 6. enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources; and

7. practice conservation in the use of energy, maximize the use of energy efficient systems, and minimize the environmental impact of energy production and use." (Section 22a-1a(b)).

Strategies

In light of the above statutory policy, the following Existing Preserved Open Space, Preservation, and Conservation categories provide more specific environmental area definitions, strategies, and guidelines for the coordination of state plans, functions, programs, and resources.

EXISTING PRESERVED OPEN SPACE

CONSERVATION PRIORITY 1

Support for permanent continuation as public or quasi-public open space, and discouragement of sale and structural development of such areas except as may be consistent with the open space functions served.

Existing Preserved Open Space

Existing Preserved Open Space represent areas in the state with the highest priority for conservation and permanent use as open space. They include:

- federal, state, and municipal parks, forests, trail and greenway corridors and other selected open spaces;
- major open space preserves in quasi-public ownership;
- Class I water utility owned lands and state owned lands that meet the definition for Class I land as contained in regulations of the Department of Public Health for existing and potential reservoir and diversion sites.
- Class I water utility owned lands within Aquifer Protection Areas (Sec. 22a-35h(10) C.G.S.

PRESERVATION AREAS CONSERVATION PRIORITY 2

Foster the identification of significant resource, heritage, recreation, and hazardous areas of statewide significance and advocate their protection by public and quasi-public agencies in their planning and investment decisions. Avoid support of structural development except as directly consistent with the preservation values.

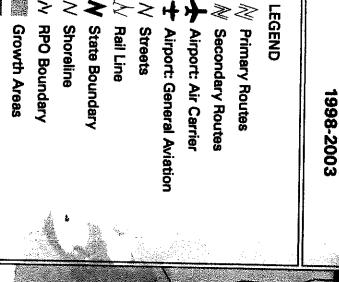
Preservation Areas

Preservation Areas are lands that do not reflect the level of permanence of Existing Preserved Open Space but which nevertheless represent significant resources that should be effectively managed in order to preserve the state's unique heritage. They include:

- water supply watershed lands that conform to the Department of Public Health's Class I criteria, except are not owned by a water utility or the state, as related to both existing and potential surface water supplies;
- land not in water utility or state ownership that is within 200 feet of a well in an Aquifer Protection Area;
- floodways/wave hazard areas include lands which are or may be defined under the National Flood Insurance Program/the state's Channel Encroachment Line Program/the Coastal Area Management Program;
- inland wetlands;
- tidal wetlands and other coastal resource areas as designated by the Connecticut Coastal Area Management Program;
- existing water bodies;
- agricultural or forest lands for which the development rights have been acquired;
- locations of State Endangered, Threatened and Special Concern species and their essential habitats (not currently mapped);
- potential major outdoor recreational areas including impoundments, diversion pools, recreational streams, and public beaches, as identified by the Connecticut Water Resources Planning Program and/or the Statewide Comprehensive Outdoor Recreation Plan;
- open space areas including areas designated in local plans and approved by the local legislative body to permit reduced value assessments; and
- designated natural or archaeological areas of regional or statewide significance.

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Conservation and Development State of Connecticut WARREN Area Policies Plan



Conservation Areas

Rural Community Centers

Regional Centers

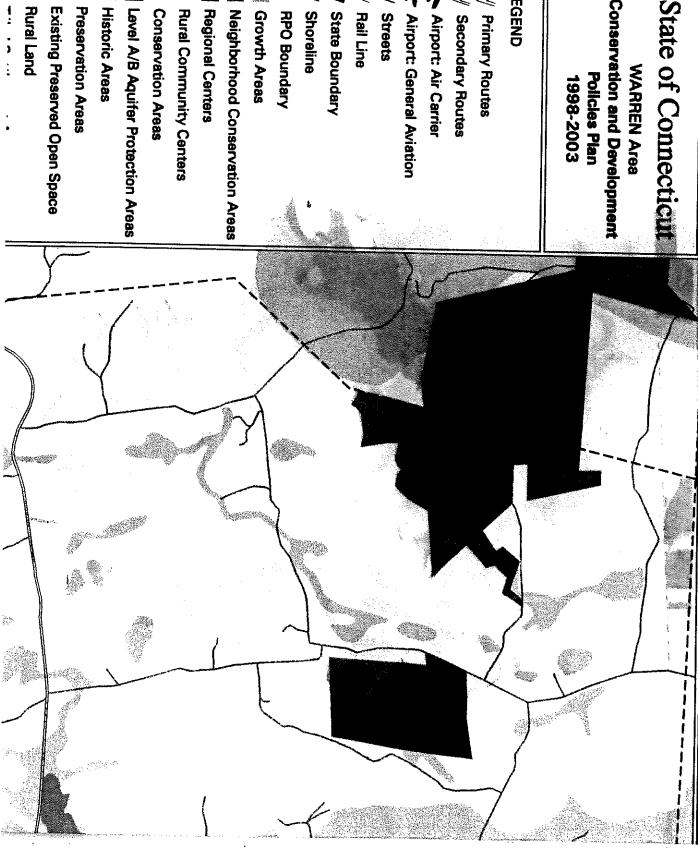
Rural Land

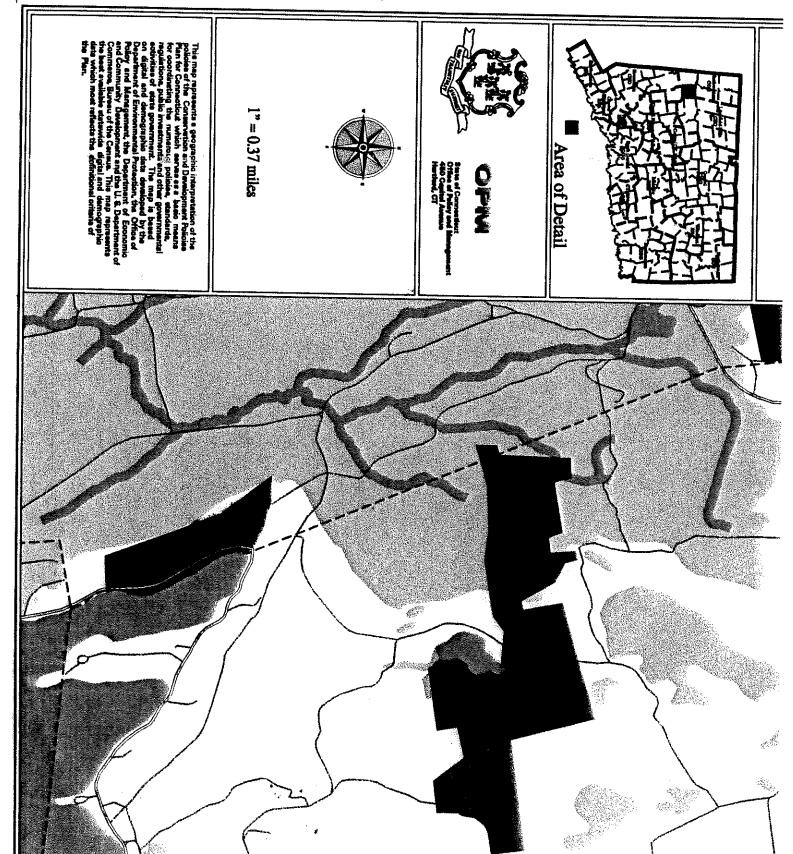
Preservation Areas

Existing Preserved Open Space

Historic Areas

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