



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Watershed Management

**BRP WM 08A NPDES Stormwater General Permit**  
**Notice of Intent for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)**

1231  
COPY FOR Herrick  
SWPPP Meeting  
REVIEW  
Transmittal Number  
MS4s # 4 & #5  
SURRENDERED  
Facility ID (if known)

**A. Instructions**

**Important:** When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Submission of this Notice of Intent constitutes notice that the entity named at item B1. of this form intends to be authorized by the DEP General Permit issued jointly with EPA for stormwater discharges from the small municipal separate storm sewer system (MS4), in the location identified at item B2. of this form. Submission of the Notice of Intent also constitutes notice that the party identified at item B1. has read, understands and meets the eligibility conditions of Part I.B. of the NPDES Small MS4 General Permit, agrees to comply with all applicable terms and conditions of the NPDES Small MS4 General Permit, and understands that continued authorization to discharge is contingent on maintaining eligibility for coverage. **In order to be granted coverage, all information required on BRP WM 08A, including the Stormwater Management Program Summary and Time Frames form, must be completed. Please read the permit and make sure you comply with all requirements, including the requirement to develop and implement a stormwater management program.**

**B. Applicant Information**

1. Small MS4 Operator/Owner Information:

Town of West Newbury - Board of selectmen      Contact: Gary Bill, Highway Superintendent  
Name  
381 Main St.      (978-363-1106)  
Mailing Address  
West Newbury      Mass. 01985  
City/Town      State  
978-363-1100  
Telephone Number      Email (if available)

2. Municipality Name

Town of West Newbury  
City/Town

3. Legal Status:

Federal       City/Town       State       Tribal       Private  
 Other public entity: \_\_\_\_\_  
Specify Public Entity

4. Other regulated MS4(s) within municipal boundaries:

Route 113 (state highway)

5. Based on the instructions provided in Part I of the NPDES Small MS4 General Permit, have the eligibility criteria for "listed species" and critical habitat been met?

yes       pending       no

**JUL 31 2003**  
**MUNICIPAL ASSISTANCE UNIT**

**B. Applicant Information (cont.)**





**Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Watershed Management**

**BRP WM 08A NPDES Stormwater General Permit  
Notice of Intent for Discharges from Small Municipal Separate  
Storm Sewer Systems (MS4s)**

Transmittal Number \_\_\_\_\_

Facility ID (if known) \_\_\_\_\_

**1. Public Education:**

1A

BMP ID # \_\_\_\_\_

Public education seminars

Specify Best Management Practice \_\_\_\_\_

Board of Selectmen

Responsible Dept./Person Name \_\_\_\_\_

Number of seminars

Specify Measurable Goal \_\_\_\_\_

1B

BMP ID # \_\_\_\_\_

Storm Water flyers/pamphlets

Specify Best Management Practice \_\_\_\_\_

Board of Selectmen

Responsible Dept./Person Name \_\_\_\_\_

Flyers distributed/materials  
collected

1C

BMP ID # \_\_\_\_\_

Web page

Specify Best Management Practice \_\_\_\_\_

Board of Selectmen

Responsible Dept./Person Name \_\_\_\_\_

No. of visits

Specify Measurable Goal \_\_\_\_\_

BMP ID # \_\_\_\_\_

Specify Best Management Practice \_\_\_\_\_

Responsible Dept./Person Name \_\_\_\_\_

Specify Measurable Goal \_\_\_\_\_

BMP ID # \_\_\_\_\_

Specify Best Management Practice \_\_\_\_\_

Responsible Dept./Person Name \_\_\_\_\_

Specify Measurable Goal \_\_\_\_\_

**2. Public Participation:**

2A

BMP ID # \_\_\_\_\_

Comment and question and  
answer sessions at seminars

Board of Selectmen

Responsible Dept./Person Name \_\_\_\_\_

No. of seminars

Specify Measurable Goal \_\_\_\_\_

2B

BMP ID # \_\_\_\_\_

Volunteer cleanup and  
monitoring

Open Space Committee

Responsible Dept./Person Name \_\_\_\_\_

No. of activities per year

Specify Measurable Goal \_\_\_\_\_

BMP ID # \_\_\_\_\_

Specify Best Management Practice \_\_\_\_\_

Responsible Dept./Person Name \_\_\_\_\_

Specify Measurable Goal \_\_\_\_\_

BMP ID # \_\_\_\_\_

Specify Best Management Practice \_\_\_\_\_

Responsible Dept./Person Name \_\_\_\_\_

Specify Measurable Goal \_\_\_\_\_

BMP ID # \_\_\_\_\_

Specify Best Management Practice \_\_\_\_\_

Responsible Dept./Person Name \_\_\_\_\_

Specify Measurable Goal \_\_\_\_\_

**D. Stormwater Management Program Summary (Cont.)**



**Massachusetts Department of Environmental Protection**  
 Bureau of Resource Protection - Watershed Management

**BRP WM 08A NPDES Stormwater General Permit**  
**Notice of Intent for Discharges from Small Municipal Separate**  
**Storm Sewer Systems (MS4s)**

Transmittal Number \_\_\_\_\_

Facility ID (if known) \_\_\_\_\_

**3. Illicit Discharge Detection and Elimination:**

**3A**

BMP ID # \_\_\_\_\_

Storm drain system map  
 Specify Best Management Practice

West Newbury Road  
 Superintendent

Produce the map  
 Specify Measurable Goal

**3B**

BMP ID # \_\_\_\_\_

Ordinance prohibiting illicit  
 discharges

Board of Selectmen  
 Responsible Dept./Person Name

Adoption  
 Specify Measurable Goal

BMP ID # \_\_\_\_\_

Specify Best Management Practice

Responsible Dept./Person Name

Specify Measurable Goal

BMP ID # \_\_\_\_\_

Specify Best Management Practice

Responsible Dept./Person Name

Specify Measurable Goal

BMP ID # \_\_\_\_\_

Specify Best Management Practice

Responsible Dept./Person Name

Specify Measurable Goal

**4. Construction Site Runoff Control:**

**4A**

BMP ID # \_\_\_\_\_

Regulating erosion and  
 sediment control at sites

West Newbury Planning Board  
 Responsible Dept./Person Name

Success rate identified  
 Specify Measurable Goal

BMP ID # \_\_\_\_\_

Specify Best Management Practice

Responsible Dept./Person Name

Specify Measurable Goal

BMP ID # \_\_\_\_\_

Specify Best Management Practice

Responsible Dept./Person Name

Specify Measurable Goal

BMP ID # \_\_\_\_\_

Specify Best Management Practice

Responsible Dept./Person Name

Specify Measurable Goal

BMP ID # \_\_\_\_\_

Specify Best Management Practice

Responsible Dept./Person Name

Specify Measurable Goal

**D. Stormwater Management Program Summary (Cont.)**



**Massachusetts Department of Environmental Protection**  
**Bureau of Resource Protection - Watershed Management**

**BRP WM 08A NPDES Stormwater General Permit**  
**Notice of Intent for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)**

Transmittal Number \_\_\_\_\_

Facility ID (if known) \_\_\_\_\_

**5. Post Construction Runoff Control:**

5A		
BMP ID # _____		
Enforcement of Storm water policy _____	West Newbury Conservation Commission _____	Success rate identified _____ Specify Measurable Goal _____
BMP ID # _____		
Specify Best Management Practice _____	Responsible Dept./Person Name _____	Specify Measurable Goal _____
BMP ID # _____		
Specify Best Management Practice _____	Responsible Dept./Person Name _____	Specify Measurable Goal _____
BMP ID # _____		
Specify Best Management Practice _____	Responsible Dept./Person Name _____	Specify Measurable Goal _____
BMP ID # _____		
Specify Best Management Practice _____	Responsible Dept./Person Name _____	Specify Measurable Goal _____

**6. Municipal Good Housekeeping:**

6A		
BMP ID # _____		
Dev. a municipal O&M plan _____ Specify Best Management Practice _____	West Newbury Road Superintendent _____	No. of structures and streets cleaned _____
6B		
BMP ID # _____		
Upgrade drainage systems _____ Specify Best Management Practice _____	West Newbury Road Superintendent _____	No. of upgrades per year _____ Specify Measurable Goal _____
BMP ID # _____		
Specify Best Management Practice _____	Responsible Dept./Person Name _____	Specify Measurable Goal _____
BMP ID # _____		
Specify Best Management Practice _____	Responsible Dept./Person Name _____	Specify Measurable Goal _____
BMP ID # _____		
Specify Best Management Practice _____	Responsible Dept./Person Name _____	Specify Measurable Goal _____

**D. Stormwater Management Program Summary (cont.)**



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Watershed Management

**BRP WM 08A NPDES Stormwater General Permit**  
**Notice of Intent for Discharges from Small Municipal Separate**  
**Storm Sewer Systems (MS4s)**

Transmittal Number \_\_\_\_\_

Facility ID (if known) \_\_\_\_\_

7. BMPs for Meeting TMDL:

_____	_____	_____
BMP ID #		
_____	_____	_____
Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal
_____	_____	_____
BMP ID #		
_____	_____	_____
Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal
_____	_____	_____
BMP ID #		
_____	_____	_____
Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal
_____	_____	_____
BMP ID #		
_____	_____	_____
Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal
_____	_____	_____
BMP ID #		
_____	_____	_____
Specify Best Management Practice	Responsible Dept./Person Name	Specify Measurable Goal

**E. Certification**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name R. H. Knowles ; Chair, Board of Selectmen

Signature *[Handwritten Signature]* Date 28 July 09

## **2.0 DESCRIPTION**

## **2.0 DESCRIPTION**

West Newbury is located approximately 35 miles north of Boston in the Merrimack Valley region. Encompassing an area of roughly 14 square miles, it is bordered on the north and west by the Merrimack River, on the east by Newburyport, and on the south by Newbury and Groveland. The Town falls primarily within the Merrimack River watershed, but the southeastern portion of Town lies within the Parker River watershed. The town is just inland of the coastal zone, and is characterized by a rolling landscape of hills, open fields, and woods interlaced by freshwater wetlands.

### **Community Character**

West Newbury is, for the most part, a semi-rural residential community which once boasted many working farms. Today, as old agricultural fields and wood lots are sold to developers, the Town is becoming increasingly suburbanized. During the 1990s, West Newbury lost a great deal of open space, particularly along the Merrimack River and off of Route 113 (Main Street), to new housing developments.

### **Commerce**

There are no industries in West Newbury, and there are relatively few commercial establishments. Aside from individuals who farm their own lands, work at small local businesses, or telecommute, most residents drive to work in other nearby towns, or to more distant jobs via nearby freeways (Routes I-95 and I-495). These roads offer easy access to Boston and Route 128 and Route 495 corridors, making West Newbury an attractive location for commuters.

### **Growth**

Like West Newbury, several of its smaller neighboring communities (Newbury, Groveland and Merrimac) are experiencing unprecedented growth, which is having a major impact on schools and Town services. The communities are grappling with this issue in a variety of ways which include current Open Space Planning efforts, Master Plan efforts, Master Plan efforts, and proposed growth management bylaws.

## **Government**

West Newbury was incorporated in 1819 and has an Open Town Meeting form of government and a three member elected Board of Selectmen. There are 2,343 registered voters in the community. The town is presently building a safety complex on Main St. to incorporate the fire and police departments.

## **Water**

Our source of drinking water comes from well field #1, which is located at 999 Main St. The well field is comprised of eight individual driven wells that are manifolded together. We have approximately twenty-eight miles of water main, two water storage tanks and one booster transfer station. We supply eight hundred and eighty services, which is approximately sixty-four percent of the town. In addition, we purchase water from the City of Newburyport. Their water supply is comprised of eighty percent surface water and twenty percent ground water. The surface water comes from the Indian Hill Reservoir, located on Moulton Street in West Newbury and the Artichoke Reservoir, located next to the West Newbury well field at 999 Main St. Their ground water comes from two separate gravel packed wells located at Ferry Rd. in Newburyport. During the 1999 Fall Special Town meeting, the residents of West Newbury voted to adopt the Ground Water Protection Bylaw that was presented to the Town by the Planning Board on behalf of the Water Department.

## **Stormwater**

West Newbury has no municipal sewage system and any storm water runoff for the streets is handled by MS4's or country drainage.

### **3.0 MINIMUM CONTROL MEASURES**

### 3.0 MINIMUM CONTROL MEASURES

According to the NPDES phase II Rule, small MS4 owners must reduce pollutants in storm water to the maximum extent practicable. This is accomplished by developing a storm water management program that addresses six minimum control measures by defining Best Management Practices (BMPs) and associated measurable goals for each of the control measures. The measurable goals selected are used to evaluate the effectiveness of each control measure and the purpose of the storm water management program as a whole.

#### 3.1 Control Measure #1: Public Education and Outreach

**BPM ID #1A:** Public education seminars

**Responsible Party:** West Newbury Board of Selectmen

**Measurable Goal:** Number of seminars per year

Most contamination generated in town comes from the residents themselves. Through the use of seminars focusing on what the homeowner can do to protect water supplies will contribute greatly in stopping this problem. The Conservation Commission already sets their own guidelines to keep wetlands protected through the use of erosion control, no-disturb zones and best manage practices but could enhance its message by joining in to help sponsor the seminars.

**BPM ID #1B:** Storm water educational flyers and pamphlets

**Responsible Party:** West Newbury Board of Selectmen

**Measurable Goal:** Number of flyers distributed per year and amount of hazardous materials collected

West Newbury has available educational materials located at the Conservation, Health and Water offices indicating the importance of proper use and disposal of fertilizers, pesticides, gas, oil and other hazardous materials. The Water Dept. currently has on display in the lobby materials related to lawn care and how to protect our water resources. Since the town does not have any industrial base, education is limited to the small number of business and the general public. Currently the town offers a hazardous materials collection day once a year. The town will create flyers/pamphlets which are relevant to storm water issues.

- Grammar School - W. Newbury
- Regional School (Merrimack, Lowell)
- Con. Com. Ed. Program

**BPM ID #1C:** Storm water information on the town web page

**Responsible Party:** West Newbury Board of Selectmen

**Measurable Goal:** Document web page visits

The town will add to their existing web pages material generated from the creation of flyers and pamphlets to enhance the availability of such materials.

### **3.2 Control Measure #2: Public Involvement/Participation**

**BPM ID #2A:** Comment and Q&A sessions at seminars

**Responsible Party:** West Newbury Board of Selectmen

**Measurable Goal:** Number of seminars per year

Time will be allocated at the end of information seminars to allow the public to ask questions with the goal being to educate and involve the public as to their responsibilities in helping the town keep our discharges clean. An important part of effective public education has to do with whether or not the audience understands the subject matter and if they are part of the discussion.

**BPM ID #2B:** Volunteer cleanup and monitoring

**Responsible Party:** Open Space Committee

**Measurable Goal:** Number of activities per year

As the public becomes more and more involved with the storm water management program, activities can be planned to clean up and monitor streams, wetlands, and roadside swales. These activities can be posted or advertised and be directed towards specific community service groups, such as the Boy Scouts.

### **3.3 Control Measure #3: Illicit Discharge, Detection and Elimination**

**BPM ID #3A:** Storm Drain System Map

**Responsible Party:** West Newbury Highway Superintendent

**Measurable Goal:** produce a map

The first step for illicit discharge and elimination is to map the entire municipal drainage systems and locate all discharge areas

**BPM ID #3B:** Development of an ordinance prohibiting illicit discharges

**Responsible Party:** West Newbury Board of Selectmen

**Measurable Goal:** Adoption of an ordinance

An ordinance will be developed and implemented which defines and prohibits illicit non storm water discharges into the system and include enforcement, procedures and actions. Examples of illicit discharges and who and where to report them will be discussed at public forums and information pamphlets will be mailed.

### 3.4 Control Measure #4: Construction Site Runoff Control

**BPM ID #4A:** Regulating erosion and sediment control at construction sites

**Responsible Party:** West Newbury Planning Board

**Measurable Goal:** Success rate identified

During the site plan review process the town will work to outline the BMPs which may be implemented at a given construction site that are appropriate based on conditions including soil characteristics, topography and downstream wetlands and waters. It will also outline the control of wastes, including but not limited to, discarded building materials, vehicle wash out, chemicals and sanitary wastes. The Planning Board and Conservation shall work on more defined procedures for erosion and control inspection, time frames for inspection, enforcement of control measures and monetary penalties for noncompliance.

### 3.5 Control Measure #5: Post Construction Runoff Control

**BPM ID #5A:** Enforcement of the Mass DEP, Wetland Protection Act Storm Water Management Policy on projects disturbing greater than one acre.

**Responsible Party:** West Newbury Conservation Commission

*SEE  
LTR 12/4  
w/ Revised  
3.4 & 3.5  
re: Bylaws.*



**Measurable Goal:** Success rate identified

X  
The Town of West Newbury already enforces the DEP Wetland Protection Act Stormwater Management Policy. The current and new operation and maintenance plans will be checked to include storm water management system owners, parties responsible for operation and maintenance and if schedules and tasks are outlined and completed on time. The Commission will identify and review the requirements of the operation and maintenance plans that are currently operating successfully and incorporate them into its requirements and upgrade those in need of improvement.

### 3.6 **Control Measure #6: Municipal Good Housekeeping**

**BPM ID #6A:** Development of a municipal Operation and Maintenance Plan

**Responsible Party:** West Newbury Road Superintendent

**Measurable Goal:** Number of structures and streets cleaned

The plan will show streets, catch basins, manholes and culvert pipes. All catch basins shall be cleaned and documented annually. Catch basins will be inspected annually for damage or illicit pollution. Streets will be swept annually.

**BPM ID #6B:** Upgrade of inadequate drainage systems

**Responsible Party:** West Newbury Road Superintendent

**Measurable Goal:** Number of upgrades per year

The Highway Department is responsible for the maintenance and upgrades to all town drainage. We have been working on this for several years and have been trying to locate and fix the drainage areas that pose the worst pollution and erosion problems. Areas mainly targeted are old rusted culverts and replacing them and doing away with open ditches, replacing them with catch basins and new piping to prevent erosion. ✓

## **4.0 IMPLEMENTATION TIME FRAME**



Massachusetts Department of Environmental Protection  
Bureau of Resource Protection - Watershed Management  
**BRP WM 08A NPDES Stormwater General Permit Notice of Intent**  
for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)  
**F. Storm Water Management Program TIME FRAMES**

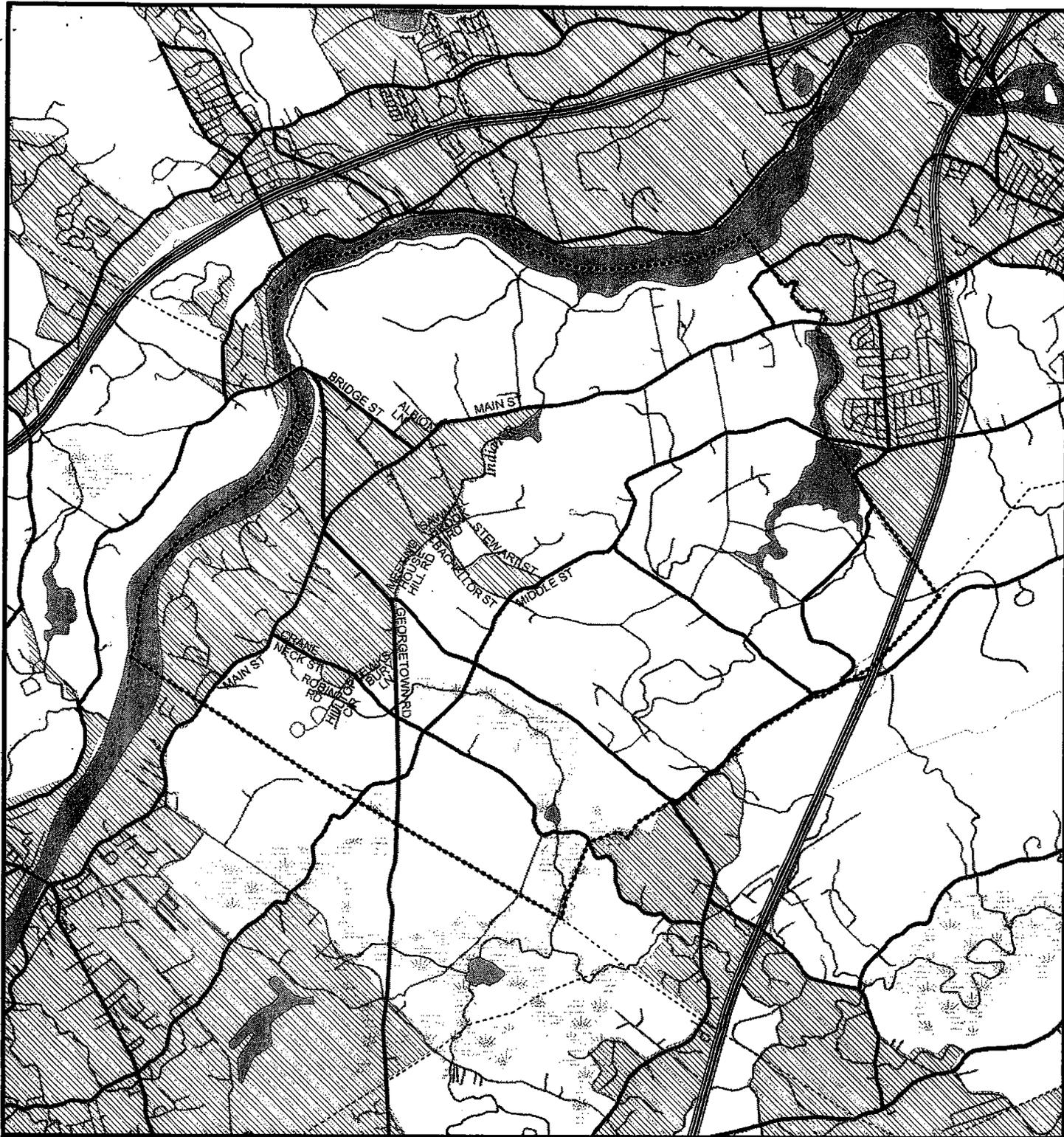
BMP ID #	PERMIT YEAR ONE				PERMIT YEAR TWO				PERMIT YEAR THREE				PERMIT YEAR FOUR				PERMIT YEAR FIVE				Next Permit
	Spring 03	Summer 03	Fall 03	Winter 03-04	Spring 04	Summer 04	Fall 04	Winter 04-05	Spring 05	Summer 05	Fall 05	Winter 05-06	Spring 06	Summer 06	Fall 06	Winter 06-07	Spring 07	Summer 07	Fall 07	Winter 07-08	
1A					X				X				X								
1B																					
1C																					
2A					X				X				X								
2B																					
3A																					
3B																					
4A																					
5A																					
6A																					

Transmittal Number \_\_\_\_\_

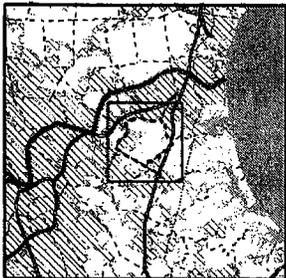
Facility ID (if known) \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_

## **FIGURES**



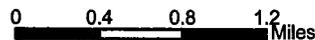
Area of Focus:



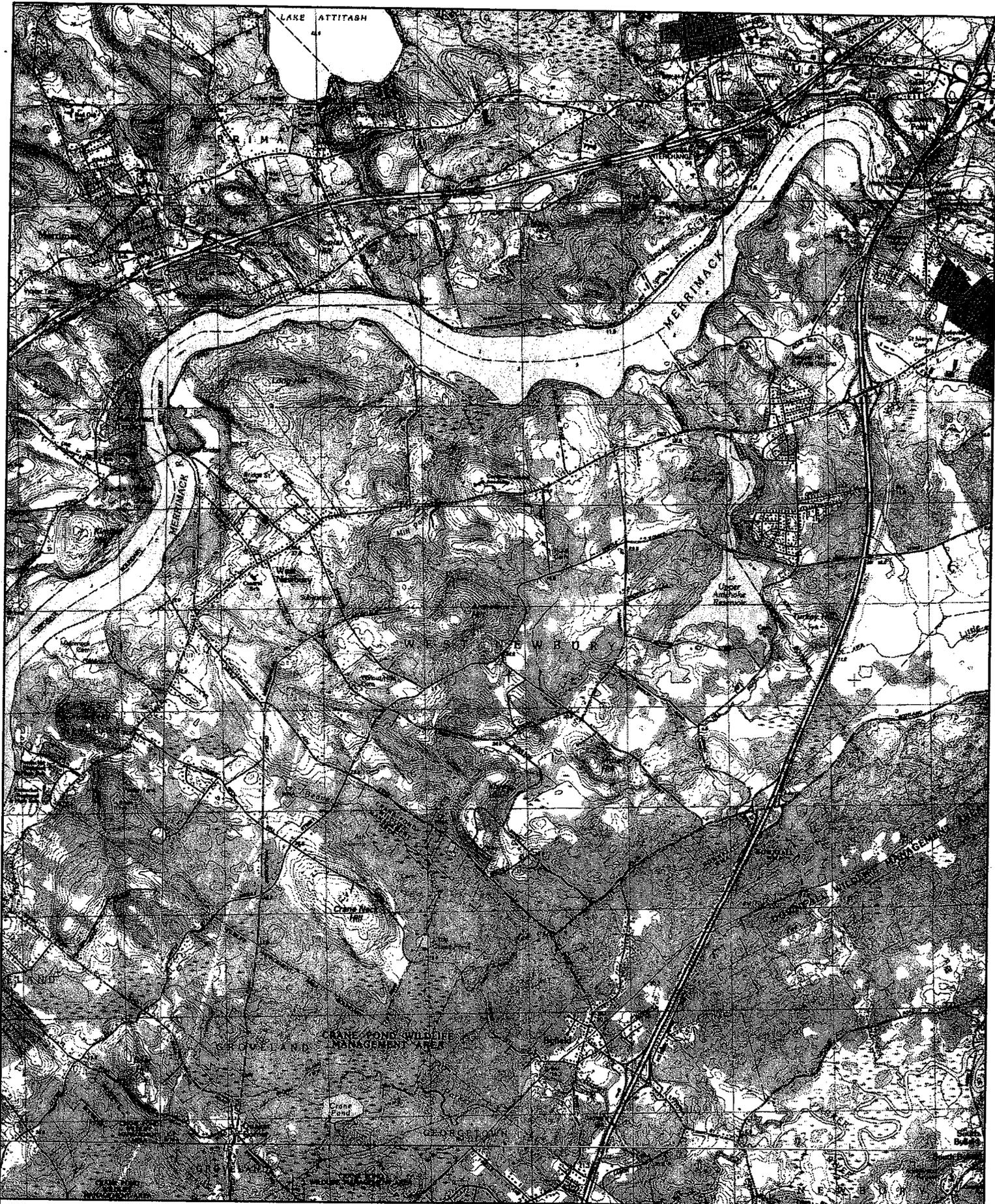
**NPDES Phase II Stormwater Program  
Automatically Designated MS4 Areas  
*West Newbury, Massachusetts***

-  West Newbury Town Boundary
-  Regulated Area (2000 Urbanized Area)

Town Population: 4,149  
Regulated Population: 1,819



Data Sources: Urbanized Areas from US Census Bureau (2000). Political boundaries from MassGIS. Hydrography from NHD. Transportation data from GDT at 1:24,000.  
Map Created: 11/25/02; US EPA- New England GIS Center  
L:/projects/stormwater/phase2/matowns/new/



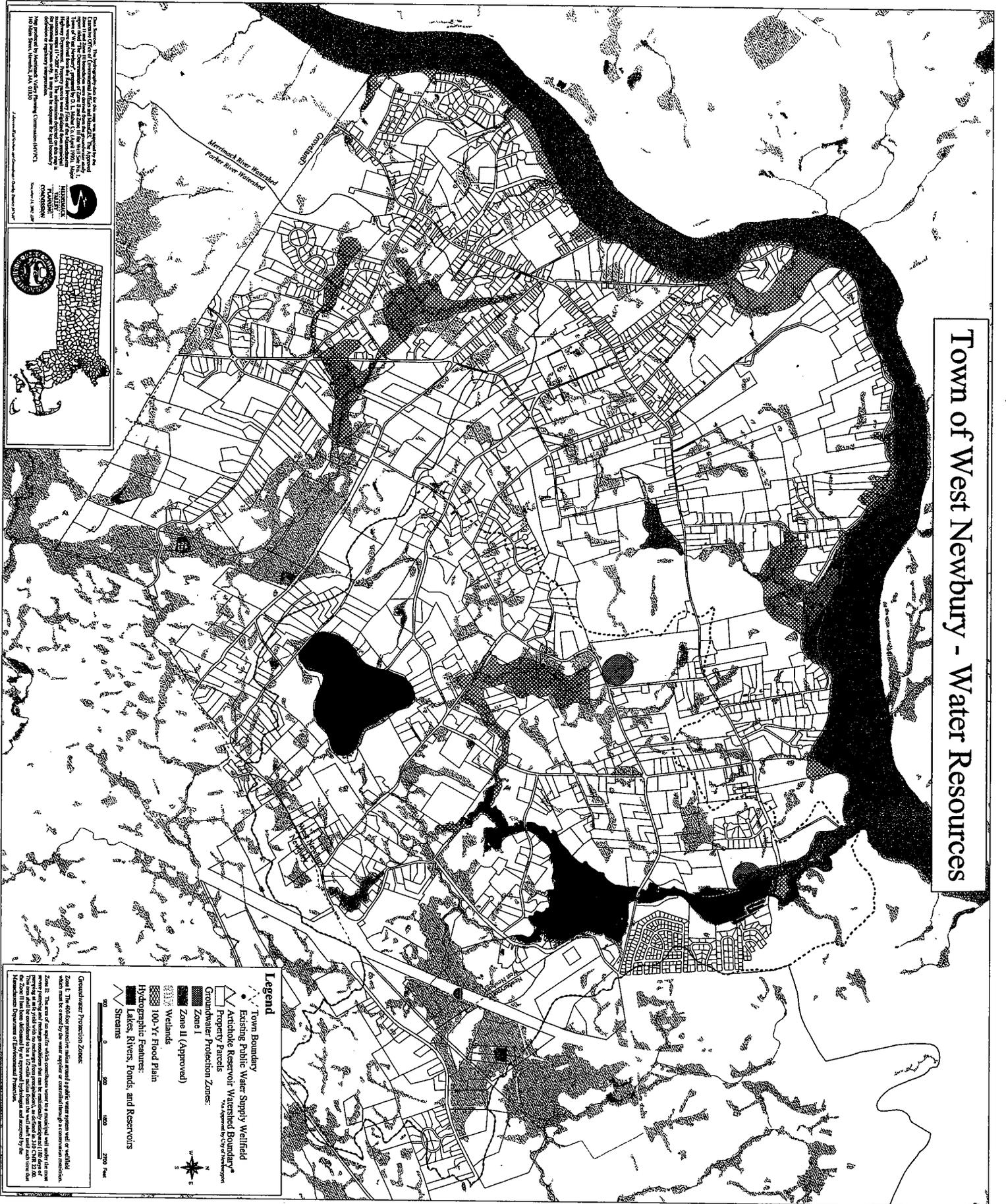
Name: NEWBURYPORT  
Date: 7/17/2003  
Scale: 1 inch equals 4000 feet

Location: 042° 47' 52.5" N 070° 57' 34.8" W  
Caption: WEST NEWBURY



**ESTIMATED HABITATS OF RARE WILDLIFE  
AND CERTIFIED VERNAL POOLS**

# Town of West Newbury - Water Resources



This map was prepared for the Town of West Newbury, Massachusetts, by the Massachusetts Department of Environmental Protection (MassDEP) under a contract with the Town of West Newbury. The map was prepared under the supervision of the Town of West Newbury and the Massachusetts Department of Environmental Protection. The map was prepared under the supervision of the Town of West Newbury and the Massachusetts Department of Environmental Protection. The map was prepared under the supervision of the Town of West Newbury and the Massachusetts Department of Environmental Protection.



**Legend**

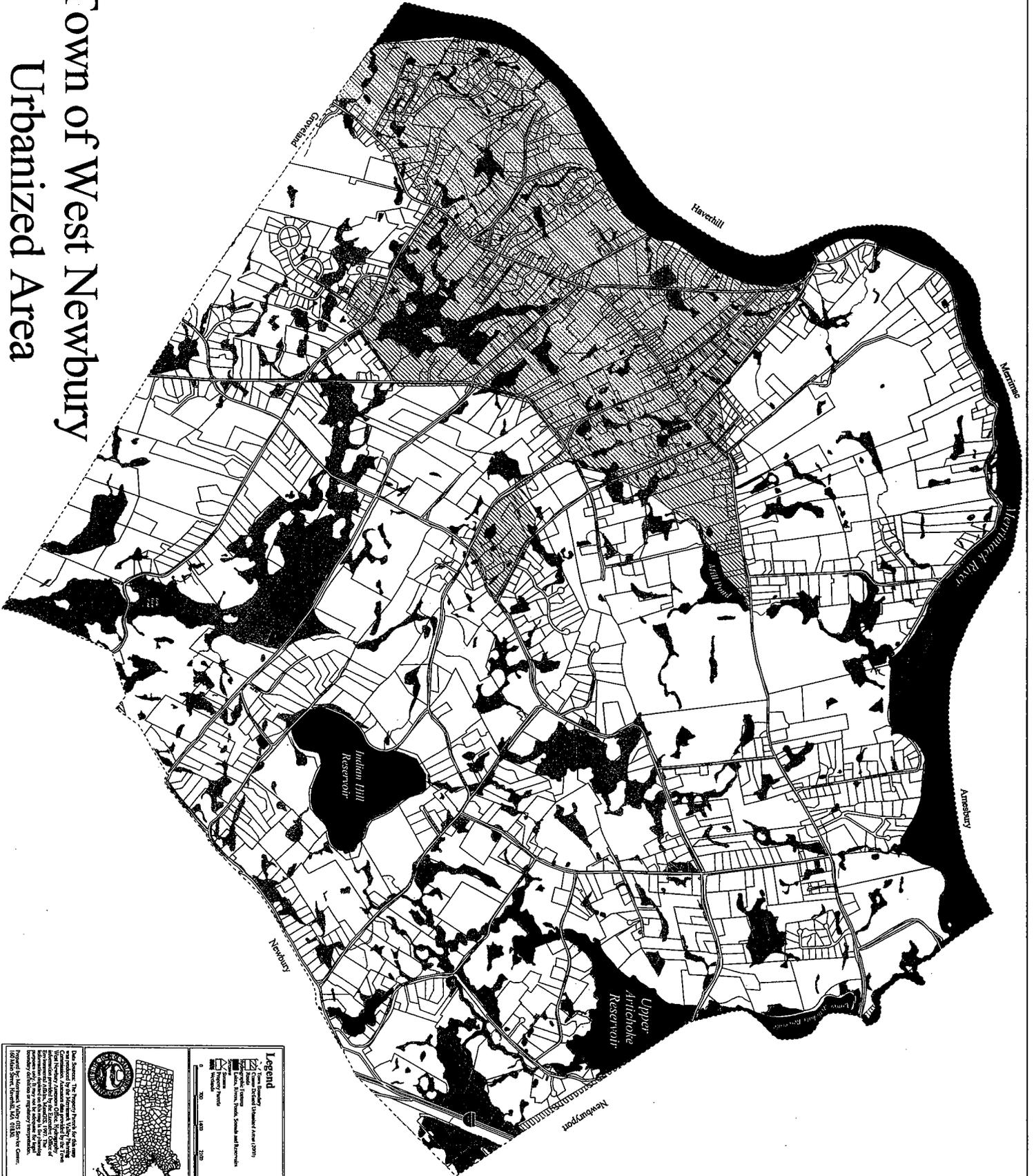
- Town Boundary
- Existing Public Water Supply Wellhead
- Anticline Reservoir Watershed Boundary
- ▭ Property Parcels
- ▨ Groundwater Protection Zones:
  - Zone I
  - Zone II (Approved)
- ▨ Wetlands
- ▨ 100-Yr Flood Plain
- Hydrographic Features:
  - ▭ Lakes, Rivers, Fords, and Reservoirs
  - ▭ Streams

Scale: 0 50 100 150 200 Feet

North Arrow

Zone I: The 100-year flood plain, also known as the 100-year flood plain, is the area that is expected to be flooded once every 100 years on average. Zone II: The 500-year flood plain, also known as the 500-year flood plain, is the area that is expected to be flooded once every 500 years on average. Zone I and Zone II are shown on this map as shaded areas. Zone I is shown as a darker shade and Zone II is shown as a lighter shade. Zone I and Zone II are shown on this map as shaded areas. Zone I is shown as a darker shade and Zone II is shown as a lighter shade. Zone I and Zone II are shown on this map as shaded areas. Zone I is shown as a darker shade and Zone II is shown as a lighter shade.

# Town of West Newbury Urbanized Area



**Legend**

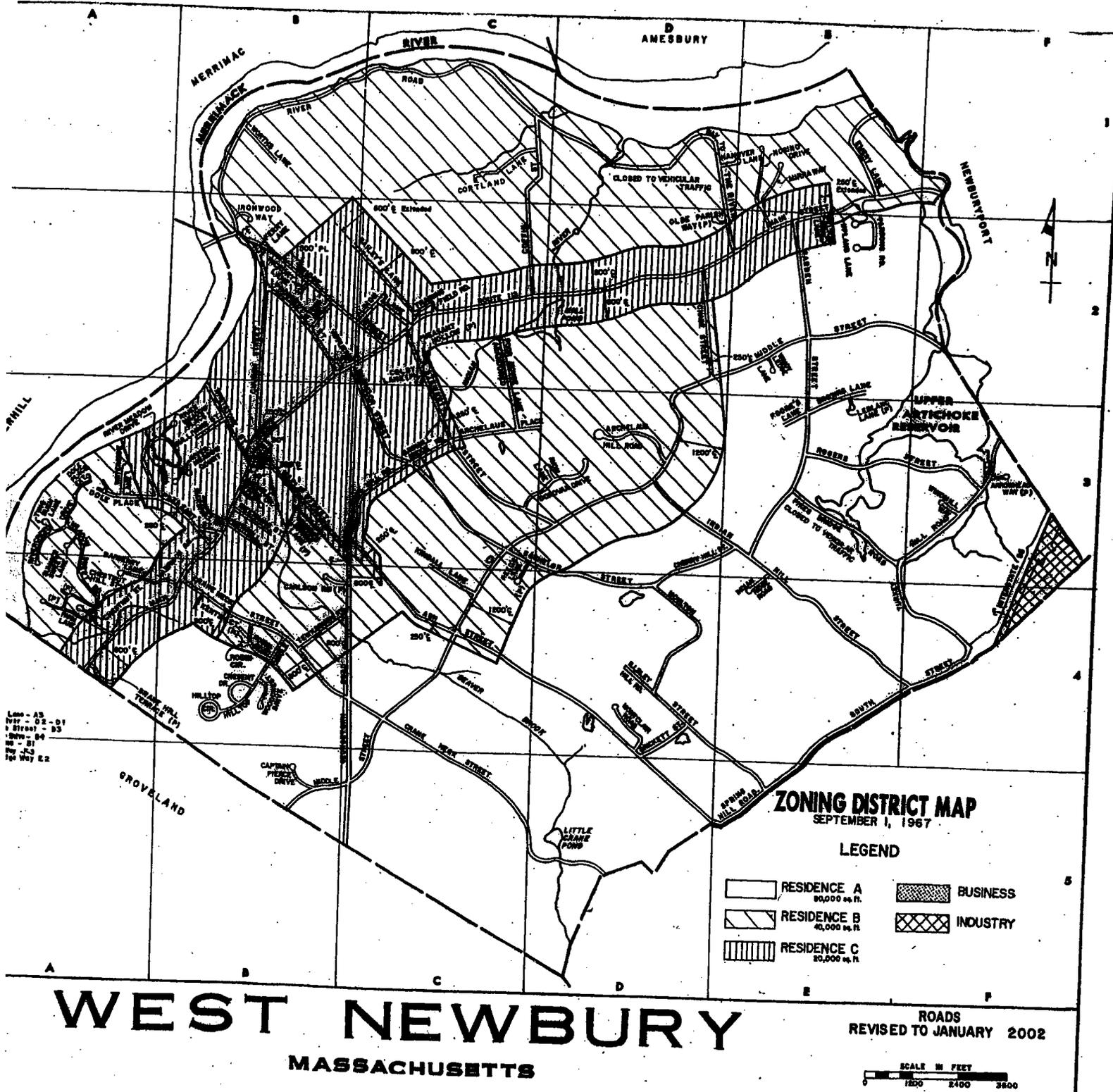
- Town Boundary (Dashed line)
- Water
- Road
- Property Lines

Scale: 0 100 200 300 Feet

This document is the property of the Town of West Newbury. It is provided for the use of the Town of West Newbury and its residents. It is not to be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of the Town of West Newbury. The Town of West Newbury is not responsible for any errors or omissions in this document. The Town of West Newbury is not responsible for any damages, including consequential damages, arising from the use of this document. The Town of West Newbury is not responsible for any claims, including consequential claims, arising from the use of this document. The Town of West Newbury is not responsible for any claims, including consequential claims, arising from the use of this document.

WEST NEWBURY, MASSACHUSETTS  
TOWN ENGINEER  
1998

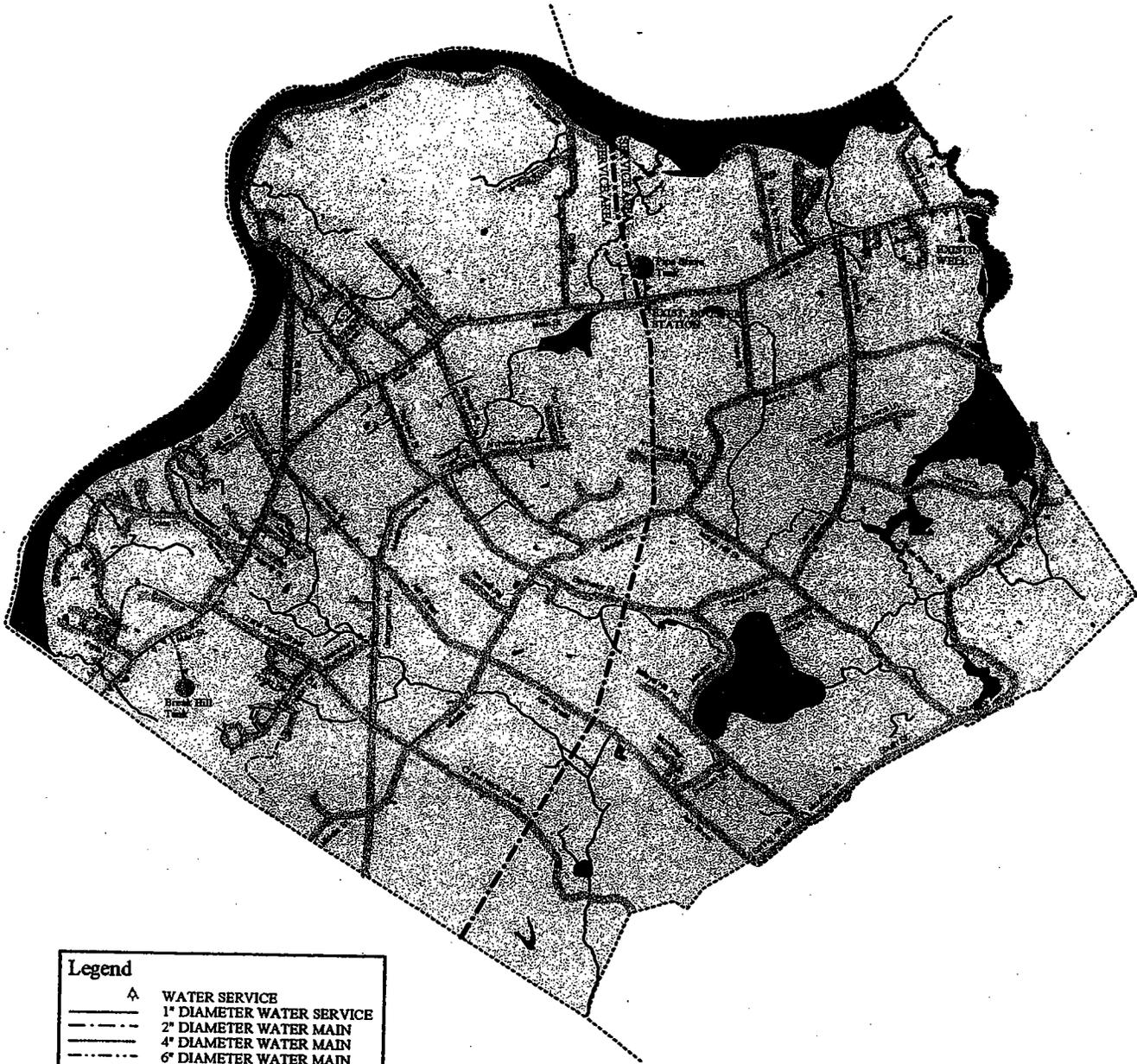
Figure 6



Law - A5  
Rev - 02 - 01  
1 Street - 03  
2 Street - 04  
3 Street - 01  
4 Street - 02

Figure 7 Road and Water Service, West Newbury 2002  
from the Water Distribution System Map, Tata & Howard, Inc. April 2002

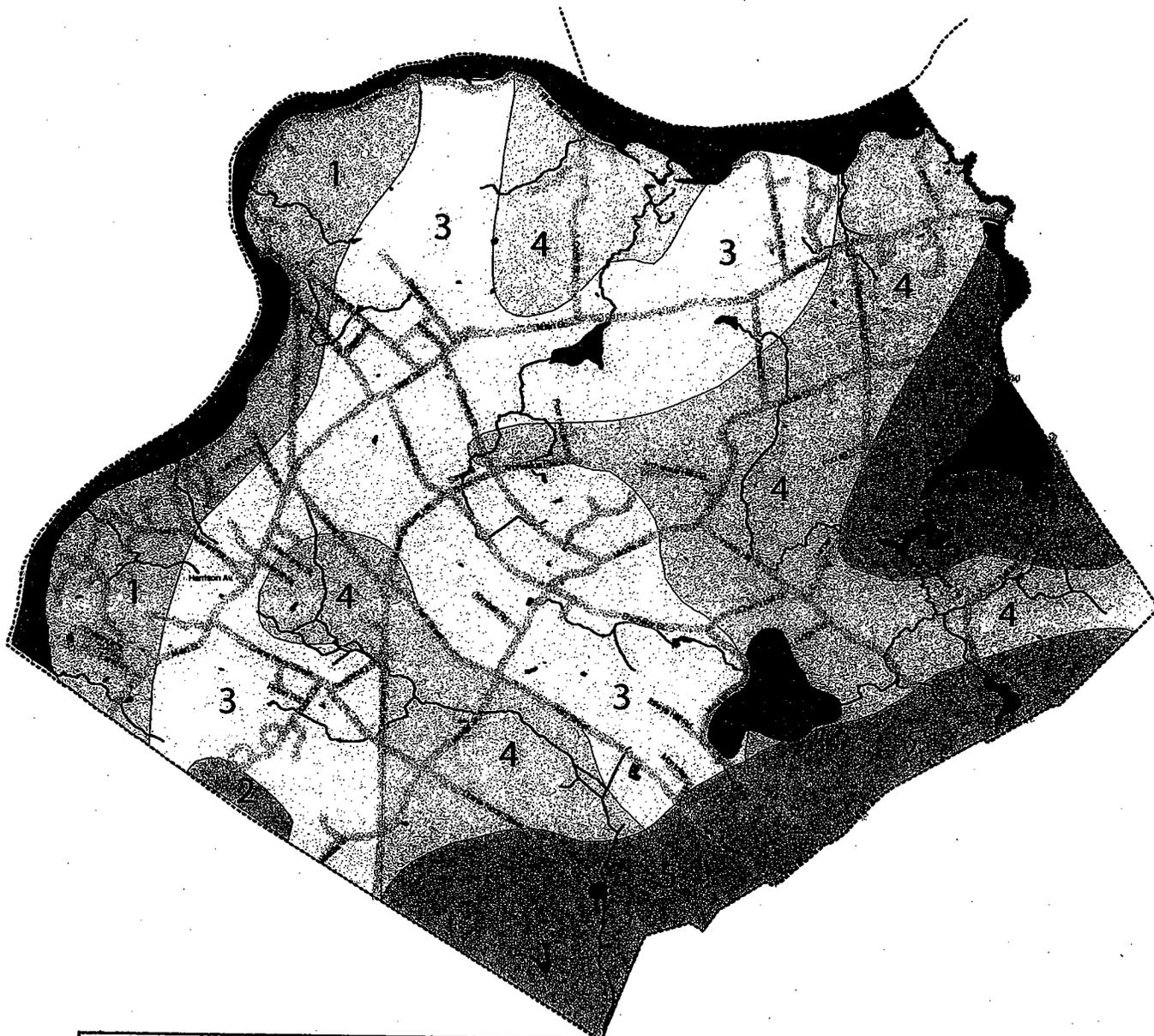
## Town of West Newbury Road and Water Service



Legend	
△	WATER SERVICE
—	1" DIAMETER WATER SERVICE
- - - - -	2" DIAMETER WATER MAIN
— · — · —	4" DIAMETER WATER MAIN
— · — · — · —	6" DIAMETER WATER MAIN
— · — · — · — · —	8" DIAMETER WATER MAIN
— · — · — · — · — · —	10" DIAMETER WATER MAIN

**Figure 8 Soil Types Grouped by Development Limitations**  
*from the Soil Survey of Essex County, MA; USDA Soil Conservation Service; 1981*

## Town of West Newbury



### Legend

-  Generally suitable for farming and residential development; some areas droughty and steep; some areas have seasonal high water table.
-  Suitable for dairy farming, apples, and truck crops. Suited to residential development if municipal sewage system is available. Main residential limitations are: slow permeable fragipan, and in some areas steep slopes and a seasonal high water table.
-  Suitable for dairy farming, orchards, and truck crops. Most areas well suited for residential development. Primary residential limitations include: areas of steep slopes and stones in the surface layer, also seasonal high water table.
-  Suitable for hay and pasture, some areas suitable for cultivated crops. Poorly suited for residential development; wetness is the main limitation for most uses of these soils.
-  Suitable for woodland and woodland wildlife habitat, some areas have good potential for wetland wildlife habitat. Some drier areas are suited for residential development; the major limitations of the drier areas are frequent rock outcroppings and slope.

