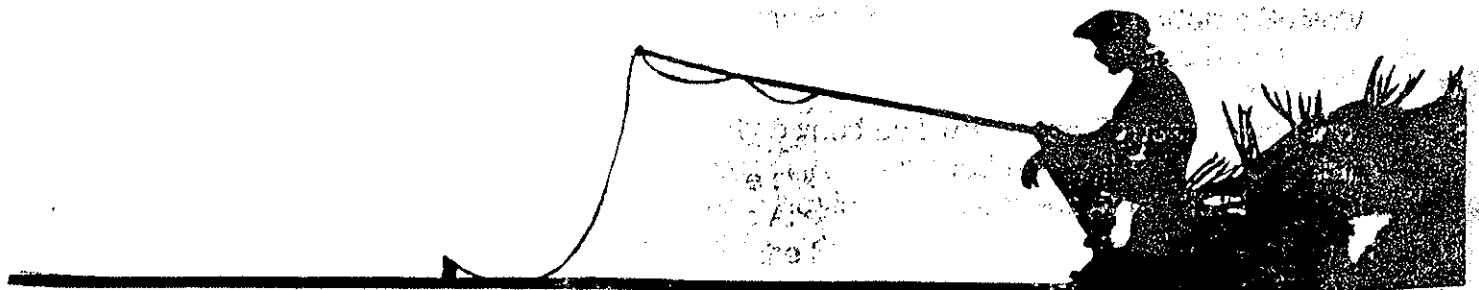


WHITMAN'S POND MANAGEMENT PLAN

Weymouth, Massachusetts

November 1998



WHITMAN'S POND TOWN OF WEYMOUTH MANAGEMENT PLAN

WHITMAN'S POND RESTORATION COMMITTEE WHITMAN'S POND ASSOCIATION

CONTACT PERSONS:

BARBARA JOHNSON
WHITMAN'S POND RESTORATION COMMITTEE

41 MASSASOIT ROAD
N. WEYMOUTH, MA 02191
(781) 337-3896

JAMES CUNNINGHAM
WHITMAN'S POND ASSOCIATION

58 LAKESHORE DRIVE
E. WEYMOUTH, MA 02189
(781) 331-0545

MEMBERS OF THE WHITMAN'S POND WHITMAN'S RESTORATION COMMITTEE (A MUNICIPAL COMMITTEE)

Arthur Mathews (Chairman)

Lorraine Larrabee (Vice Chairman)

Peg Goudy
Barbara Johnson
James Cunningham
Robert Loring
Robert Hanifan
John Zeigler
Bernard Edlestein

Associate Members
Maureen DelPrete
Jeffrey Gay

OFFICERS OF THE POND ASSOCIATION (A CIVIC ASSOCIATION)

James Cunningham (President)

Lorraine Larrabee (Vice President)

Arthur Mathews (Treasurer)

WATERSHED AFFILIATIONS

Weymouth Herring Run
Committee
Adopt-a-Stream Association
of old Swamp River
Back River Committee of
Hingham & Weymouth
Izaak Walton Association

WHITMAN'S POND MANAGEMENT PLAN

Table of Contents

	Page No.
I. INTRODUCTION	1
II. GATHERING DATA	2
Water Quality Data (Worksheet #1)	
1. Temperature Profile	3/6
2. Oxygen Profile	7/8
3. Secchi-Disk Transparency	9
4. pH	10/11
Biological resources (Worksheet #2)	
Endangered Species	14/15
1. Aquatic Plants	16
Plants in West Cove	17
2. Fish	18
3. Mammals	19
4. Aquatic waterfowl	20
5. Reptiles and Amphibians	21
6. Invertebrates	22
Pond/ Watershed Maps (Worksheet *3)	
A. Map of Watershed Area	23
B. Bathmetry Map	
1. Pond Depth	24/25
2. Pond Volume	26
C. Soil Survey Map	27
D. Zoning Map For Watershed Area	
1. Zoning for Watershed	28
2. Sewered Areas in Watershed	29
3. Storm Drainage Outfall into Pond	30
E. Land Use of Properties around the Pond	31/32/33
Lake Watershed Management History (Worksheet #4)	
A. History of Pond and Its Watershed	34/35/36/37
B. Current Lake and Watershed Uses	38
C. Description of Watershed Management Practices for Last Ten Years	38/57
III. IDENTIFYING POND/WATERSHED PROBLEMS AND CAUSES	
A. In-Pond Problems	
1. Water Quality	58
2. Plant Infestation	59
3. Algal Blooms	59
4. User Conflict	59
5. Lake Bottom Change	60
6. Changes in Fisheries	60
7. Shallowness	60

Table of Contents (continued)

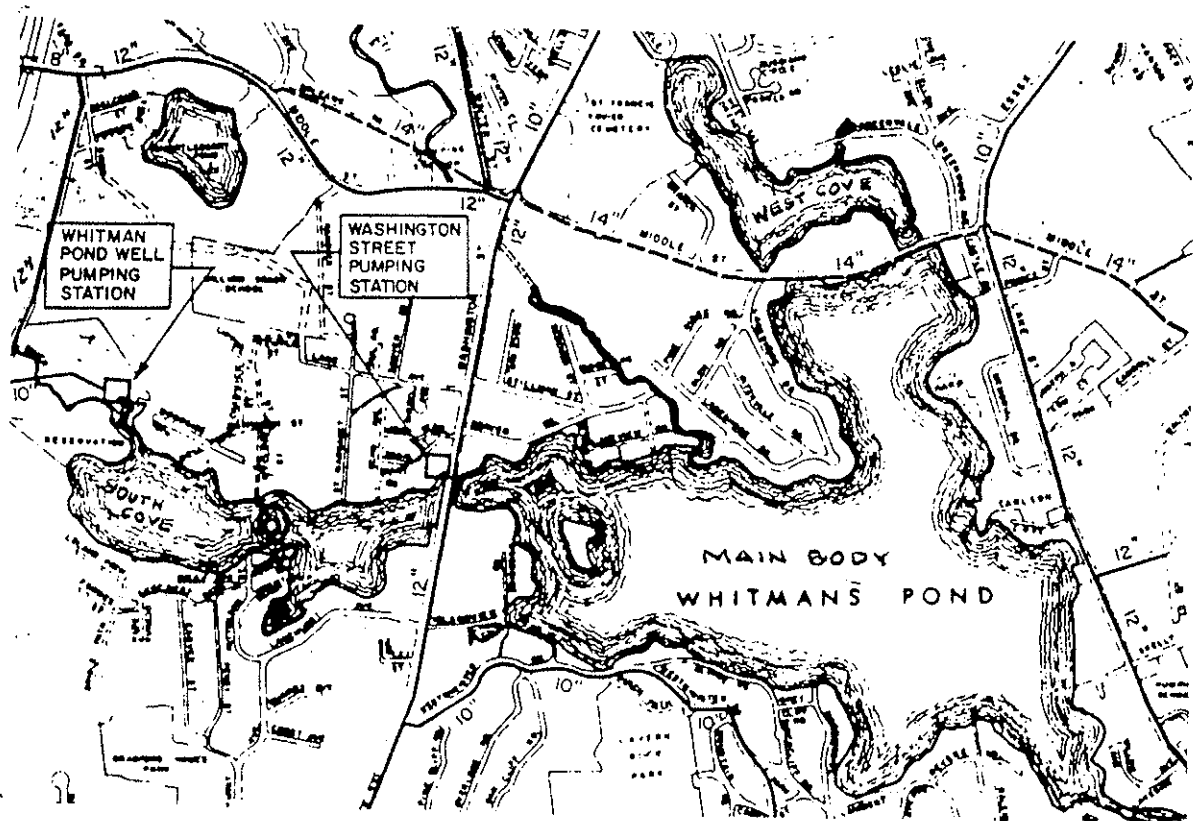
B. Watershed Problems	
1. Non-Point Source Pollution Profile	61
2. Point Source Pollution Profile	61
 IV. WHITMAN'S POND/WATERSHED MANAGEMENT PLAN FORMULATION	
 A. Management Goals for Pond and Watershed	62
B. Pond and Watershed Management Problems and Plans	62/68

I. Introduction

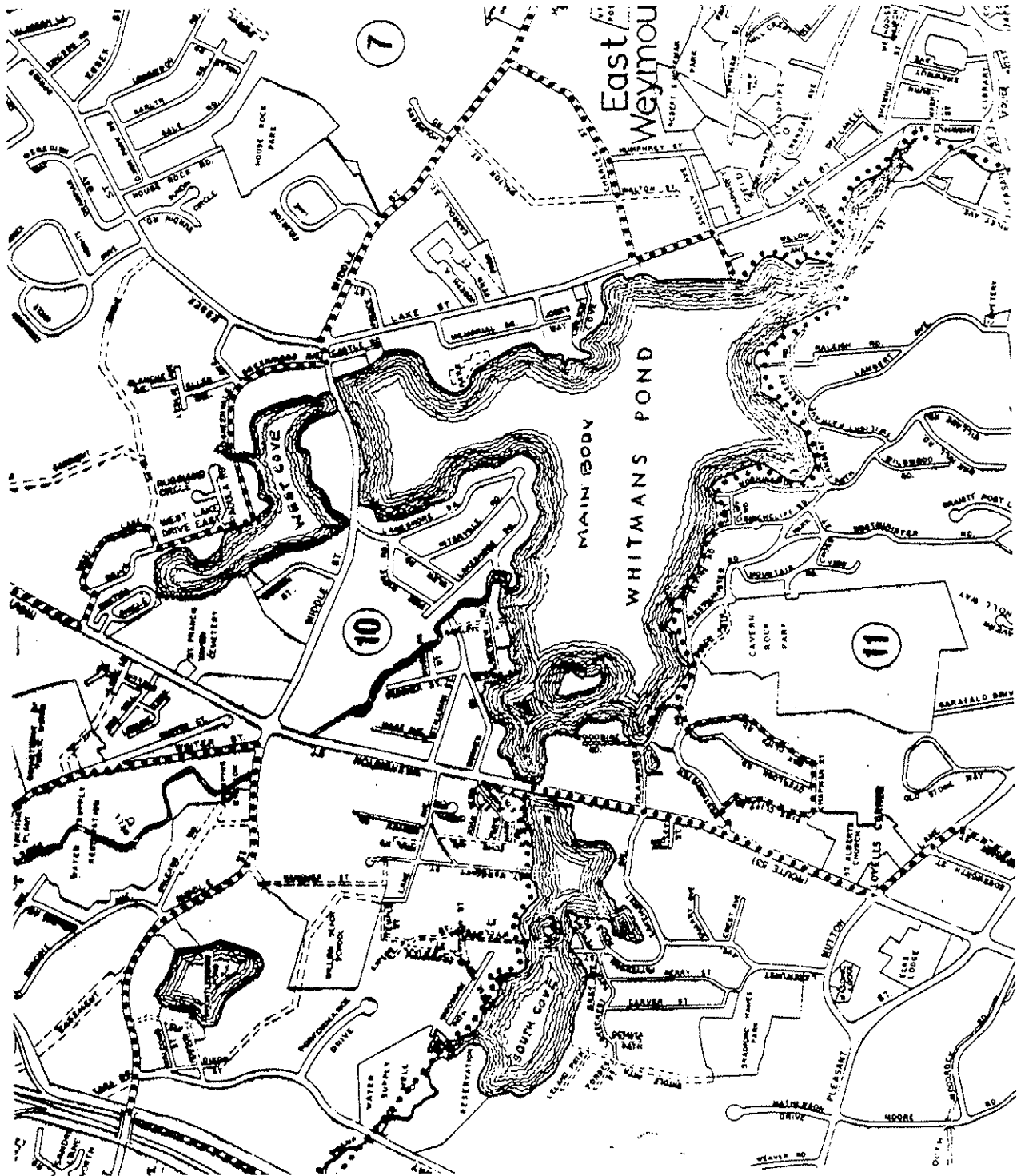
Weymouth is a heavily developed suburban town with all the customary uses of a metropolitan area. (roads, houses, apartments, condos, businesses and industry). It varies at census time as between MA's second or third largest town. It is also the State's second oldest town.

Whitman's pond's 205 acres (Metcalf & Eddy study) could qualify it as a lake. It is comprised of three sections, commonly called Main Body, South Cove and West Cove. The shoreline of all three are ringed with houses.

- (1) The water flows into the Main Body from South Cove, West Cove and Mill River. It exits the pond over the Herring Run flowing into the Back River which empties into the Atlantic Ocean. Swimming, fishing, boating, ice fishing provide recreation on the pond. It is designated as an emergency water supply for Weymouth. It is a fish hatchery for alewives, herring and other species. It is a natural habitat for wild fowl and small wild animals. It is the central scenic focal point of the town.
- (2) Water is drawn from South Cove to supplement the towns' drinking water. It is the junction of Old Swamp River, which originates in Rockland and runs through the closing Weymouth Naval Air Station to South Cove. It has passive recreation and wildlife habitat use. Single Homes, a large Nursing Home and businesses (Libby Office Park) are close by.
- (3) West Cove is primarily a scenic and wildlife habitat area. It has many single homes, a large cemetery and a trailer park on its border.

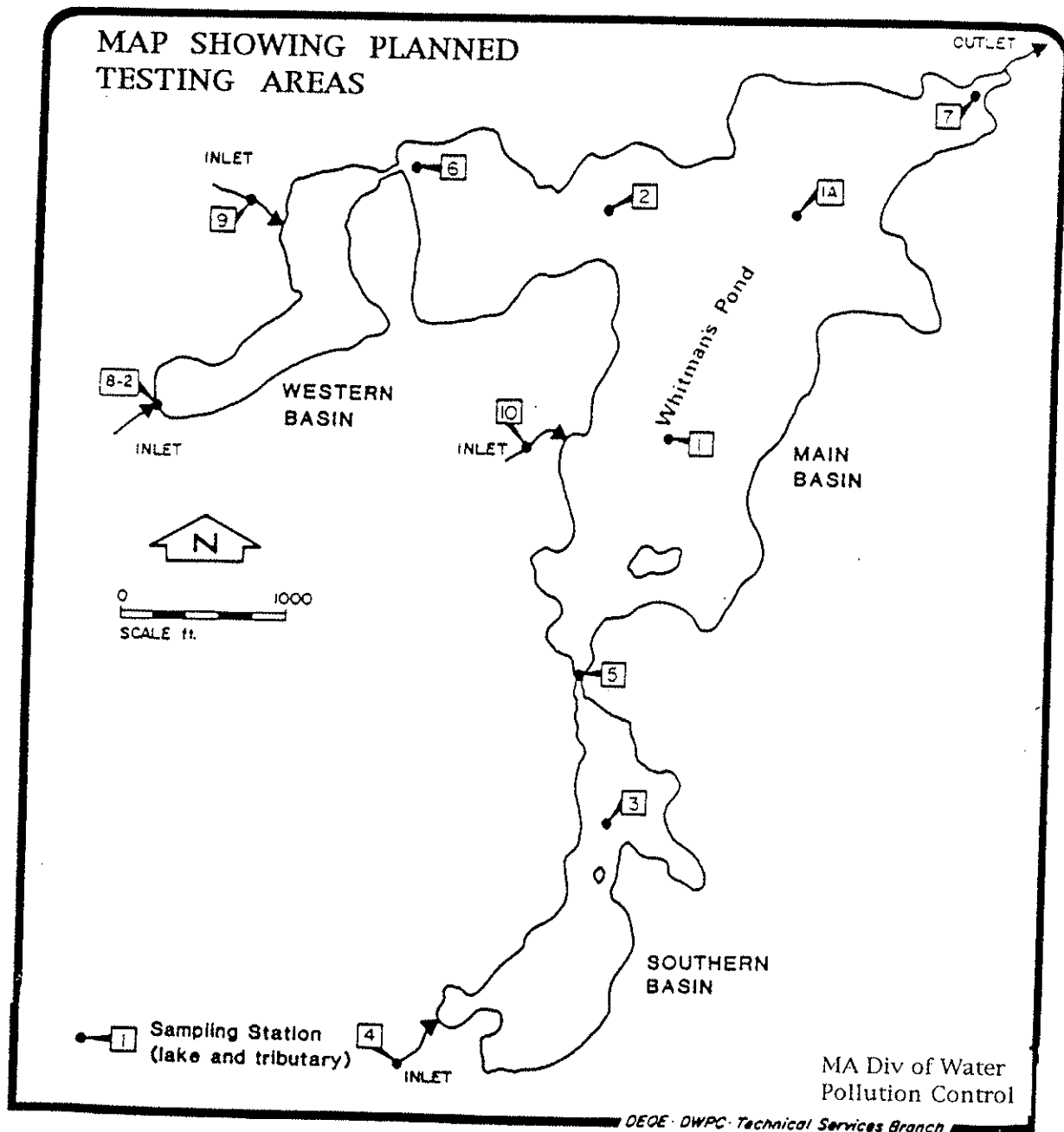


1996 Map of Whitman's Pond Area



II. Gathering Data

In 1980- 81 an extensive diagnostic study was done of Whitman's Pond by the MA Division of Water Pollution Control. Two years later another study was done by Metcalf and Eddy. Most of the information, reported here, is from those two surveys. We intend to use the material collected as a data base for our new tests planned by the Whitman's Pond Restoration Committee. We will therefore use their same test sites. We are receiving a gift from the Weymouth League of Women Voters for the Kemmerer test sampling bottles needed. We are working to acquire other testing equipment. We intend to do sample testing in April, August and October. Recent samples were taken by Ambient/ Ocean Ark's in South Cove. (pg.10)



A. WORKSHEET #1: WATER QUALITY DATA

1. SAMPLING STATION DESCRIPTION AND LOCATION

Sampling Station Description and Location

The following stations were sampled.

In-lake:

1. Maximum depth (6.5m) located in the main basin of the pond.
- 1A. Deep water station (6.5m) at another deep hole, main basin.
2. Surface water station in the main basin.
3. Surface water station in the center of the southern basin.
4. Old Swamp River inlet station taken from middle culvert under the dirt road.
5. Washington Street culvert connecting southern basin to the main basin.
6. Middle Street culvert connecting western sub-basin with the main basin.
7. Outlet station downstream from fish passage facilities and dam.
- 8-2. Inlet station taken from a culvert rear of the trailer park
9. Culvert upstream of the unnamed tributary in the northwest corner of the western sub-basin located off Greenwood Avenue.
10. Mill River inlet station upstream of confluence with the main basin.

Storm drains around the periphery of Whitman's Pond were also sampled at various times over the study period.

MA Div. of Water
Pollution Control

A. WORKSHEET #1: WATER QUALITY DATA

1. TEMPERATURE PROFILE

WHITMAN'S POND
TEMPERATURE (°C)

DATE OF COLLECTION		1980											
		14 Apr	30 Apr	12 May	22 May	11 Jun	25 Jun	7 Jul	21 Jul	4 Aug	19 Aug	2 Sept	
STATION NUMBER	DEPTH												
1 - Top	(0.5 m)	--	12.0	14.0	--	18.0	25.0	22.7	27.0	28.9	22.0	25.0	
	(2 m)	--	11.5	14.0	--	18.0	22.0	22.7	26.5	28.6	22.0	25.0	
1 - Middle	(3-3.5 m)	--	11.5	13.5	--	18.0	20.0	22.5	24.0	26.4	22.0	22.5	
	(4-5 m)	--	11.5	13.5	--	17.5	16.5	17.8	18.0	25.3	19.0	19.0	
1 - Bottom	(5.5-6.5 m)	--	11.0	13.0	--	15.5	13.5	17.2	14.0	23.1	14.5	16.5	
1A - Top	(0.5 m)	--	12.0	14.0	--	18.0	24.5	23.3	28.0	28.9	--	--	
1A - Middle	(3-4 m)	--	11.5	13.5	--	18.0	21.0	21.1	25.0	26.9	--	--	
1A - Bottom	(4.5-6.5 m)	--	11.0	13.0	--	17.5	15.0	15.6	17.5	25.8	--	--	
2		--	11.1	13.3	--	16.0	25.0	23.3	30.0	27.8	22.8	25.0	
3		--	11.7	13.3	--	18.0	29.5	24.4	28.9	--	21.1	--	
4	8.9		11.1	12.5	15.0	13.0	20.0	15.6	--	22.2	18.9	21.7	
5	11.1		10.0	13.9	18.0	18.0	27.5	23.9	28.9	27.2	22.2	25.0	
6	12.2		12.2	15.0	20.0	11.0	18.9	19.4	28.0	25.6	21.1	25.0	
7	10.6		12.8	15.5	19.0	17.0	18.3	20.6	--	--	--	--	
8-2	--		--	--	--	--	--	--	--	--	--	--	
9	10.6		11.1	15.0	18.0	--	--	--	--	--	--	--	
10	10.0		11.1	15.5	20.0	16.0	--	16.7	--	--	--	--	
								23.9	--	--	--	--	

MA Div. of Water
Pollution Control



A. WORKSHEET #1: WATER QUALITY DATA

1. TEMPERATURE PROFILE (CONTINUED)

DATE OF COLLECTION		1980				1981				
		23 Sept	6 Oct	20 Oct	19 Nov	15 Dec	12 Jan	9 Feb	16 Mar	30 Mar
STATION NUMBER	DEPTH									
1 - Top	(0.5 m)	22.5	16.0	14.0	--	--	--	5.0	4.0	7.5
	(2 m)	21.0	16.0	14.0	--	--	--	4.5	4.0	7.0
1 - Middle	(3.5 m)	19.0	16.0	13.5	--	--	--	4.5	4.0	7.0
	(5 m)	19.0	16.0	13.0	--	--	--	4.0	4.0	7.0
1 - Bottom	(5.5-6.5 m)	18.5	16.0	13.0	--	--	--	4.0	4.0	7.0
1A - Top	(0.5 m)	--	--	--	--	--	--	--	--	--
1A - Middle	(3.5 m)	--	--	--	--	--	--	--	--	--
1A - Bottom	(4.5-6.5 m)	--	--	--	--	--	--	--	--	--
2		23.9	13.3	14.4	--	--	--	3.0	5.0	9.0
3		--	--	--	--	--	--	3.0	5.0	11.0
4		20.0	12.2	12.2	3.3	1.7	3.9	0.0	5.0	12.0
5		23.9	13.3	15.6	1.7	3.3	2.2	--	5.0	10.0
6		--	--	--	4.4	3.3	--	3.0	4.0	13.0
7		--	--	--	--	--	--	1.0	5.0	10.5
8-2		--	--	--	--	--	--	--	9.0	9.0
9		--	--	--	--	--	--	1.0	5.0	12.0
10		--	--	--	3.3	--	--	2.0	5.0	13.0

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A. WORKSHEET #1: WATER QUALITY DATA

2. DISSOLVED OXYGEN PROFILE

WHITMAN'S POND

DISSOLVED OXYGEN (mg/l)

1980

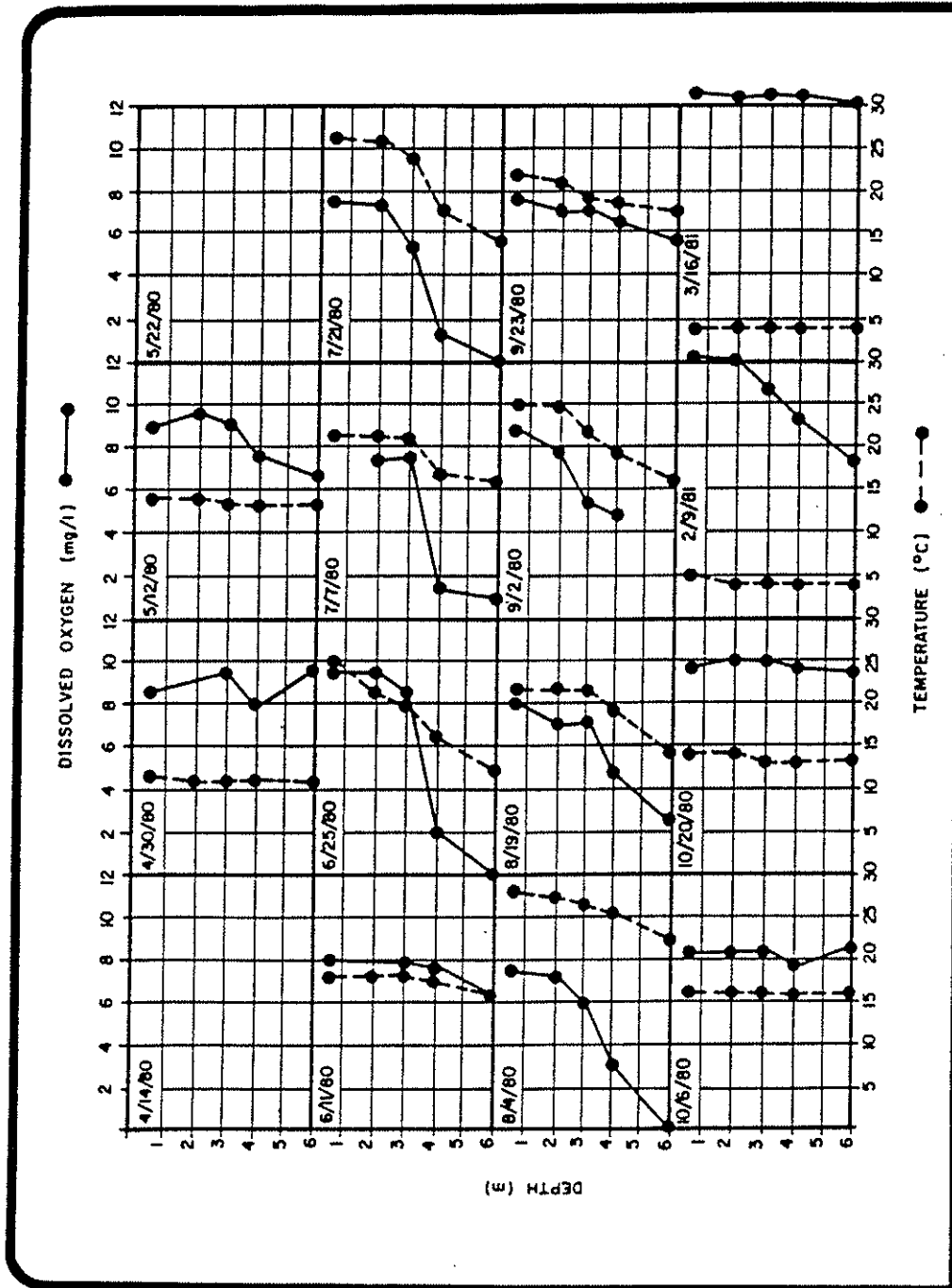
DATE OF COLLECTION 14 Apr 30 Apr 12 May 22 May 11 Jun 25 Jun 7 Jul 21 Jul 4 Aug 19 Aug 2 Sept

STATION NUMBER	DEPTH	14 Apr	30 Apr	12 May	22 May	11 Jun	25 Jun	7 Jul	21 Jul	4 Aug	19 Aug	2 Sept
1 - Top	(0.5 m)	--	8.5	9.0	--	8.0	9.6	--	7.8	7.6	8.0	8.8
	(2m)	--	--	9.7	--	--	9.2	7.6	7.6	7.3	7.0	7.9
1 - Middle	(3-3.5 m)	--	9.5	9.0	--	7.8	8.2	7.6	5.1	6.0	7.0	5.7
	(4.5-5.0 m)	--	8.0	7.8	--	7.6	2.0	1.6	1.3	3.1	4.4	4.7
1 - Bottom	(5.5-6.5 m)	--	9.6	6.5	--	6.2	0.0	1.0	0.0	0.0	2.6	--
1A - Top	(0.5 m)	--	6.6	9.8	--	8.4	8.2	7.5	7.5	7.7	--	--
1A - Middle	(3.0-4.0 m)	--	11.4	9.2	--	--	9.2	6.9	6.4	6.5	--	--
1A - Bottom	(4.5-6.5 m)	--	9.7	9.0	--	8.0	1.1	0.0	1.5	2.4	--	--
2		--	6.8	9.0	--	8.3	9.1	8.1	8.8	7.0	7.6	8.3
3		--	9.3	9.6	--	8.9	7.9	8.6	6.5	--	6.5	--
4		9.8	10.5	--	10.5	10.0	6.5	7.2	6.1	5.7	8.8	8.2
5		9.5	10.1	--	8.1	8.8	8.9	8.0	7.7	7.2	5.1	8.3
6		9.3	9.4	--	8.1	7.6	4.3	3.0	3.8	--	3.9	5.2
7		10.4	10.9	--	8.6	9.4	7.7	8.0	7.2	--	--	--
8-2		--	--	--	--	--	--	--	--	--	--	--
9		6.3	4.0	--	1.4	--	--	1.0	--	--	--	--
10		9.2	10.0	--	8.6	7.0	--	7.5	--	--	--	--

MA Div of Water
Pollution Control

A. WORKSHEET #1: WATER QUALITY DATA

2. TEMPERATURE AND DISSOLVED OXYGEN



A. Worksheet #1: Water Quality Data

3. SECCHI-DISK TESTS

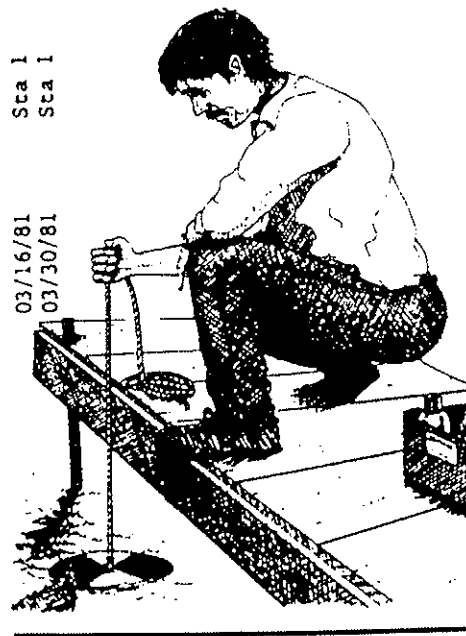
The Whitman's Pond Restoration Committee are building a secchi-disk according to the plans in chapter 3 of the EPA Volunteer Monitoring Manual.

Results of SECCHI DISK WHITMAN'S POND

April 1980 - March 1981

DATE	STATION	DEPTH	TIME	WEATHER	WATER COLOR
04/30/80	Sta 3	1.1m	10:30 am	overcast	yellow
	Sta 1	1.8m	N/A	overcast	yellow
	Sta 1A	1.8m	11:45 am	overcast	yellow
05/12/80	Sta 1	1.7m	11:50 am	hazy	orange-brown
05/12/80	Sta 1A	1.6m	11:05 am	hazy	orange-brown
06/11/80	Sta 1	1.9m	N/A	--	orange-red
	Sta 1A	1.6m	N/A	--	orange-red
06/25/80	Sta 3	Needs to Surface		hazy	red-brown
	Sta 1A	1.4m	AM	hazy	red-brown
	Sta 1	2.5m	AM	hazy	red-brown
07/07/80	Sta 1	2.0m	11:10 am	--	yellow
	Sta 1A	2.0m	10:30 am	--	yellow
07/21/80	Sta 1	1.2m	11:00 am	--	brown-green
07/21/80	Sta 1A	1.2m	12:00 noon	--	brown-green
08/04/80	Sta 1	1.6m	12:04 pm	hazy	brown
	Sta 1A	1.2m	12:01 pm	hazy	brown
08/19/80	Sta 1	1.4m	11:08 am	Lt. rain	brown
09/02/80	Sta 1	1.2m	10:45 am	mod. clouds	yellow-brown
09/23/80	Sta 1	1.6m	10:15 am	hazy	brown
10/06/80	Sta 1	2.0m	12:08 pm	dense clouds	brown
10/20/80	Sta 1	2.6m	12:47 pm	mod. clouds	brown-green
02/09/81	Sta 1	--	--	clear	ice cover
03/16/81	Sta 1	2.0m	10:47 am	cloudy	brown
03/30/81	Sta 1	1.6m	11:30 am	hazy	brown-green

MA Div. of Water
Pollution Control



B. WORKSHEET #1: WATER QUALITY DATA (OPTIONAL)

TOTAL PHOSPHORUS; PHOSPHATE; NITRATE AND TOTAL KJELDAHL
OF SOUTH COVE, WHITMAN'S POND DONE IN 1997 BY AMBIENT AND OCEAN ARKS

Average South Cove Summertime Nutrient Concentrations

Water		mg/l
Ammonia	NH ₄	0.18
Nitrate	NO ₃	0.27
Total Kjeldahl Nitrogen	TKN	0.92
Phosphate	PO ₄	0.05
Total Phosphorous	Total P	0.08
Sediment		
Ammonia	NH ₄	618
Nitrate	NO ₃	99
Total Kjeldahl Nitrogen	TKN	11,700
Phosphate	PO ₄	7.84
Total Phosphorous	Total P	724

Total nitrogen can be considered the sum of the TKN and Ammonia concentrations. At first glance, the resulting average total nitrogen concentration of 1.1 mg/l appears to agree well with the 1981 M&E average of 1.06 mg/l from the Old Swamp River station, and the estimated average total pond concentration of 1.0 mg/l.

Phosphorous, considered the limiting nutrient in Whitman's Pond, also demonstrates similar good agreement. The average total phosphorous concentration determined over the summer sampling period is 0.08 mg/l. The M&E study found the concentration over the whole pond to be 0.05 mg/l. the concentration taken from the Old Swamp River during the analogous June to October period in 1980 was 0.058 mg/l.

Most of the results obtained by the Ocean Arks sampling program however, were below detection limit for phosphorous and ammonia. To obtain average concentrations, one-half the detection limit value was used as an estimate of below detection level concentration.

A. Worksheet # 1: Water Quality Data

4. Phosphorus Levels (pH)

With grant money received in 1994 we purchased a phosphorus spectrophotometer (see page 50). We hope to acquire knowledge on its use in our test training. Recent testing in South Cove by Ocean Arks of Falmouth showed within acceptable levels of pH.

WHITMAN'S POND ESTIMATED ANNUAL PHOSPHORUS LOADING (APRIL, 1980 - MARCH, 1981)

	Average Annual Flow (cfs)	Average Total Phosphorus (mg/l)	Total Phosphorus Loading (gm/year)
Old Swamp River (Station 8)	4.9(2)	0.05(1)	219,000
Mill River (Station 10)	1.6(1)	0.05(1)	71,000
Unnamed Tributary (Station 9)	0.4(1)	0.06(1)	21,000
Stormwater	0.24(3)	0.25(4)	54,000
Outflow (Station 7)	2.5(1)	-	-
		Total	365,000

1. From MDWPC field measurement program, April, 1980 - March, 1981.
2. From USGS gage.
3. Based on annual rainfall and runoff coefficient of 0.1.
4. From field sampling.

The empirical trophic state assessments are subject to wide variations depending on the assumptions used to develop the inputs. A large amount of judgment is required to utilize the method.

Metcalf & Eddy

B. WORKSHEET #1: WATER QUALITY DATA (OPTIONAL)

FECAL COLIFORM;

TABLE 2-1. MEASURED COLIFORM CONCENTRATIONS IN
WHITMAN'S POND⁽¹⁾

Station	Fecal Coliform (Fecal Streptococcus)/Total Coliform (#/100 ml)						
	1	1A	2	3	5	6	8
4/14/80	-	-	-	-	10(90)/200	<10(80)/20	-
4/30/80	5(<5)/30	-	50(<5)/80	700(40)/1300	400(30)/1000	15(5)/80	-
5/12/80	10/20	5/70	5/100	15/60	100/200	100/200	-
5/22/80	-	-	-	-	20/320	70/420	-
6/11/80	5(<5)/30	5(5)/20	5(<5)/10	10(5)/40	20(5)/120	70(5)/1000	-
6/25/80	<5/10	5/30	5/20	5/10	200/250	5/800	-
7/07/80	5/25	5/10	10/20	10/20	10/20	120/400	-
7/21/80	20/40	-	10/20	5/30	50/100	20/120	-
8/04/80	15/60	-	30/50	-	10/200	1,500/20,000	-
8/19/80	<5/30	-	5/200	5/20	5/100	10/300	-
9/02/80	20(5)/20	-	<5(<5)/40	-	10(5)/100	30(10)/160	-
9/23/80	30/40	-	50/220	-	50/80	-	-
10/06/80	110/200	-	120/300	-	320/500	-	-
10/20/80	5/20	-	20/80	-	60/80	-	-
11/19/80	-	-	-	-	40/450	5/230	-
12/15/80	-	-	-	-	40/60	40/140	-
1/12/81	-	-	-	-	-	-	-
2/09/81	<10/ 20	-	<10/ <20	-	-	60/100	-
3/16/81	<5/10	-	<5/ 10	5/10	10/10	5/10	5/40
3/30/81	10/20	-	<5/5	5/5	5/10	300/360	5/5

1. Data from MDWPC field measurement program.

Metcalf & Eddy



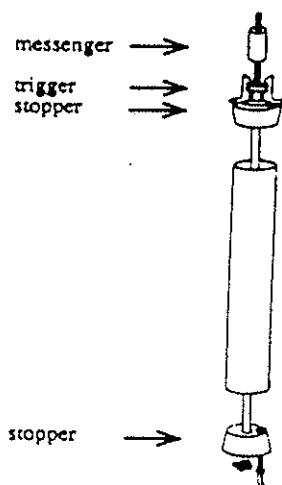
B. WORKSHEET #1: WATER QUALITY DATA (OPTIONAL)
 TOTAL KJEDAHN NITROGEN, PHOSPHORUS, ARSENIC, CADMIUM, CHROMIUM,
 COPPER, IRON, LEAD, MAGANESE, NICKEL, ZINC

TABLE 2-6. WHITMAN'S POND BOTTOM
 SEDIMENT ANALYSIS (FEB. 8, 1981)

Parameter	Concentration (mg/kg dry wt)			Massachusetts (2) lakes average
	Station 1 (1)	Station 2 (1)	Station 3	
Total Kjeldahl Nitrogen	8,400	9,400	6,550	7,100
Total Phosphorus	2,000	1,475	1,400	1,300
Arsenic	13	17	9.2	16
Cadmium	3.7	5.5	3.7	-
Chromium	75	94	73	43
Copper	73	111	123	137
Iron	31,000	32,200	18,300	24,600
Lead	475	442	311	249
Manganese	913	2,760	568	624
Nickel	201	221	167	76
Zinc	438	700	293	285

1. Whitman's Pond data from MDWPC.
2. Average values from sediment analysis conducted on samples from the following lakes: Attitash, Indian, Pearl, Upper Mystic, Pontoosuc, Washakum, Mattawa, Quinsigamond, White Island, Boon, Fort, Eagle, Winthrop, Norton, Red Badge, Wyman, East Lake Waushakum, and Whitman.

Metcalf & Eddy



Kemmerer sampler for collecting deep water

Worksheet #2 Biological Resources

A. List of endangered species in Pond/Watershed area

1. Copy of Letter of Known Species from Natural Heritage and Endangered Species Program.

Commonwealth of Massachusetts



Division of Fisheries & Wildlife

Wayne F. MacCallum, *Director*

January 28, 1998

Barbara Johnson
Whitman's Pond Committee
41 Massasoit Road
N. Weymouth, MA 02191

Re: Whitman's Pond
Weymouth, MA
NHESP File: 98-3021

Dear Ms. Johnson

Thank you for contacting the Natural Heritage and Endangered Species Program for information regarding state-listed rare species in the vicinity of the site identified above.

At this time we are not aware of any rare plants or animals or exemplary natural communities in the area of this site. Regarding the Secretary Bird, this species is native to Africa, and thus is not a listed species in the U.S.

This review concerns only rare species of plants and animals and ecologically significant natural communities for which the Program maintains site-specific records. This review does not rule out the possibility that more common wildlife or vegetation might be adversely affected if this site is developed, especially if it will modify currently undeveloped areas. Should site plans change, or new rare species information become available, this evaluation may be reconsidered.

Please call me at (508)792-7270 x154 if you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Andrea Arnold".

Andrea Arnold
Environmental Review Assistant



Natural Heritage & Endangered Species Program

Route 135, Westborough, MA 01581 Tel: (508) 792-7270 x 200 Fax: (508) 792-7273
An Agency of the Department of Fisheries, Wildlife & Environmental Law Enforcement
<http://www.state.ma.us/dfwelo>

Worksheet #2 Biological Resources

A. List of species that are endangered, threatened or of concern

2. Neighborhood Observations Around the Pond

- (a) Owners of a large lot of land, bordering the South Cove of Whitman's Pond, have observed at least two red spotted turtles in a vernal pool next to the Pond. We have supplied them with material to become red spotted turtle watchers. See vernal Pond on pg. 46
- (b) Osprey, which have a nest in nearby Great Esker, Park have been seen flying over the Pond on a regular basis.
- (c) A member of our committee asked the Fish and Wildlife people what we could do about the proliferation of fresh water mussels around Whitman's Pond. They told us to gather samples of the varieties and send shells to the for identification. Because of heavy rains we have not been able to finish but expect that some may be at least of concern.

Spotted Turtle Monitoring Project

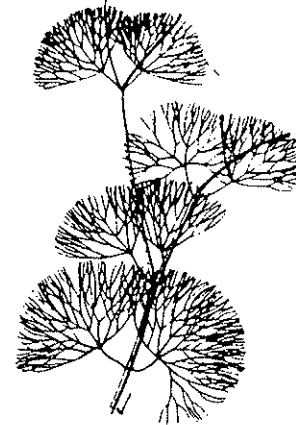
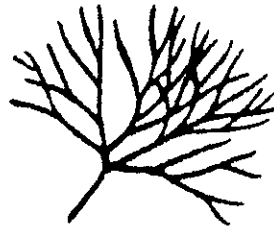
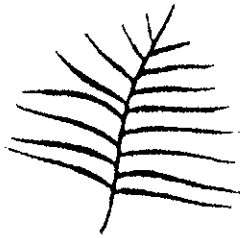


Volunteers are being sought to assist the NHESP in research on the Spotted Turtle which is listed as a Species of Special Concern. Volunteers will be provided with the localities of known or suspected Spotted Turtle populations in their area, and will be asked to inventory and monitor their adopted

populations over at least one year and preferably several. A protocol will be provided which will focus on field work to determine the location and extent of the habitat used, the size of the population, age structure, sex ratio, evidence of breeding, movements of individuals, and potential threats to the population.

Volunteers will be asked to choose sites near their home or work that can be visited on a regular basis. A permit authorizing the capture and handling of the turtles will be provided. If interested, contact Tom French at (508)792-7270, ext. 163 for more information.

-Tom French-

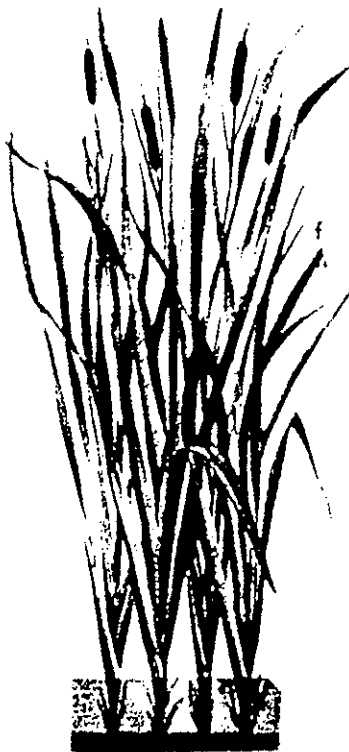


Worksheet #2

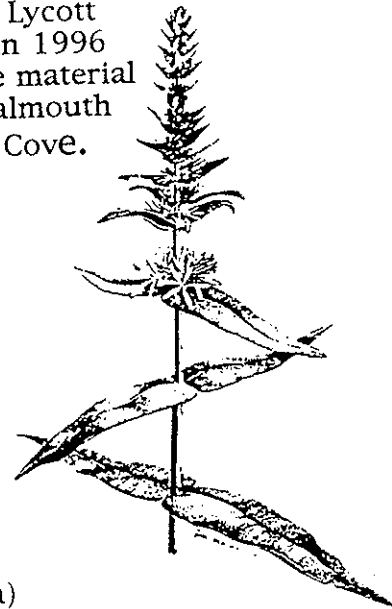
Biological Resources

1. Aquatic Plants:

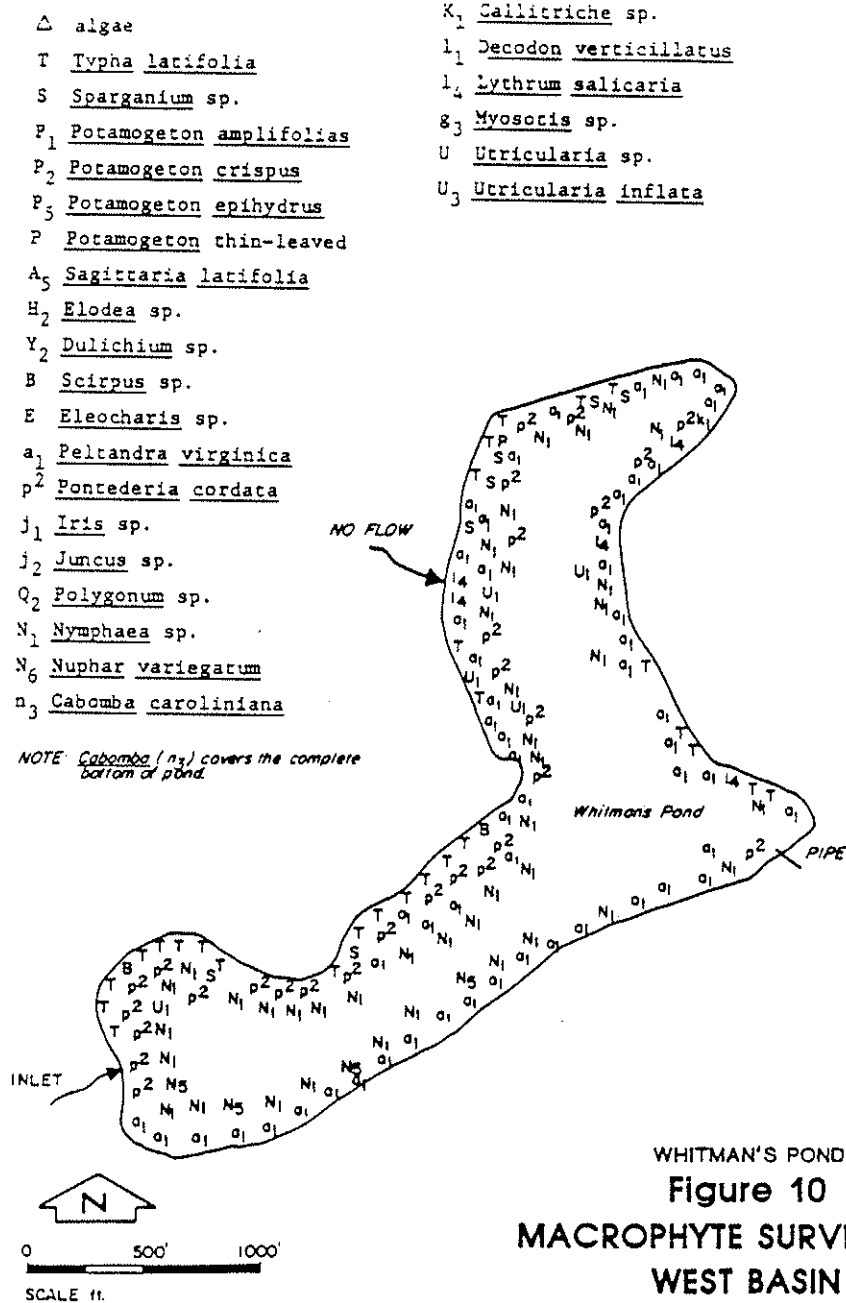
The survey of aquatic plants was acquired from four sources: First was the Metcalf and Eddy study of Whitman's Pond; Second was the Diagnostic Study by MA Div. of Water Pollution Control; Third was Lycott Environmental, Inc. survey in 1996 of West Cove; Fourth was the material supplied by Ocean Arks of Falmouth for their treatment of South Cove.



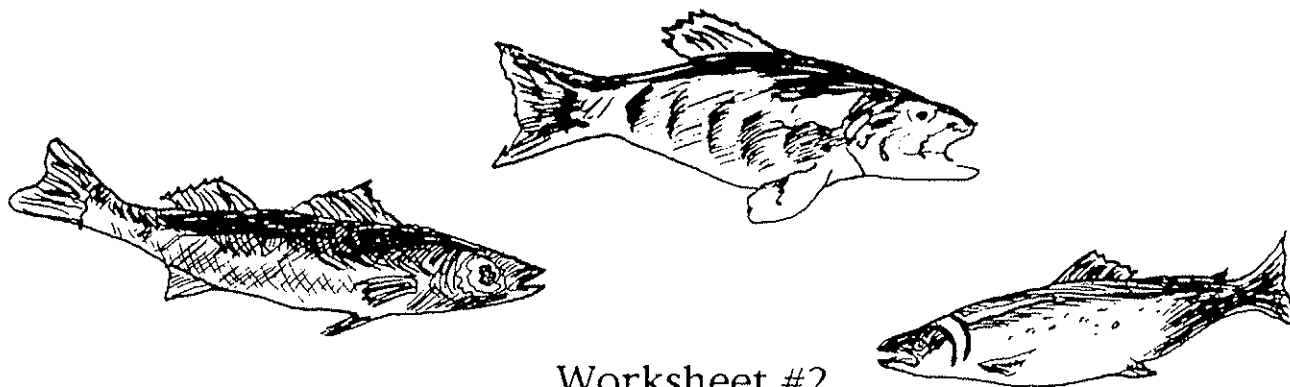
- (a) Water Milfoil
- (b) Fanwort
- (c) Sparganium
- (d) Nuphar
- (e) Bladderwort
- (f) Big Duck Weed
- (g) Arrow arum
- (h) Pickerel weed
- (i) Common cattail
- (j) Bulrush (scirpus)
- (k) Leafy Pond Weed
- (l) Cattails (*typha latifolia*)
- (m) Loosestrife
- (n) Phragmita
- (o) Cabomba



Aquatic Plants in West Cove



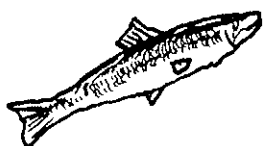
MA Div of Water
Pollution Control



Worksheet #2

Biological Resources

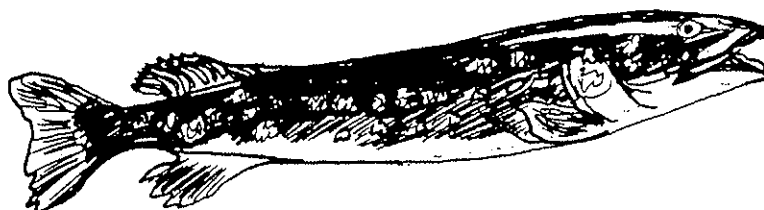
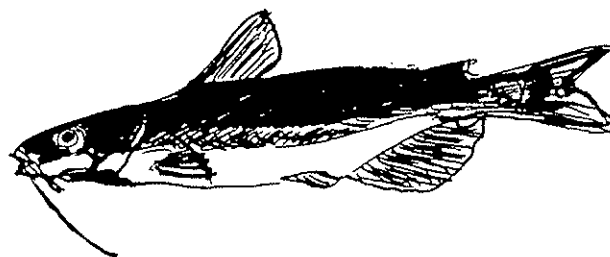
2. Fish:

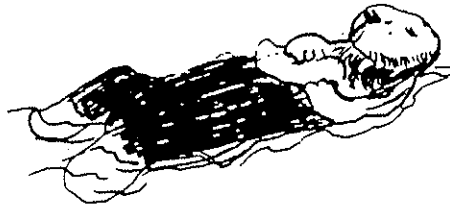


The data for fish swimming in Whitman's Pond was acquired by surveying the Bass Fishermen Association, who have fished that Pond on a regular basis for many years.



- (a) Pumpkinseed (type of sunfish)
- (b) Hornpout
- (c) Large mouthed bass
- (d) Blue gilled perch
- (e) Blue back Herring
- (f) Alewife
- (g) Brook Trout *
- (h) Rainbow trout
- (i) Carp
- (j) Minnows
- (k) Perch
- (l) Sunfish





Worksheet #2

Biological Resources

3. Mammals:

The research on mammals living in or around the watershed was done by interviewing a number of residents living in the Pond area. The otter is a favorite, as he floats on his back and cracks mussels on his chest.

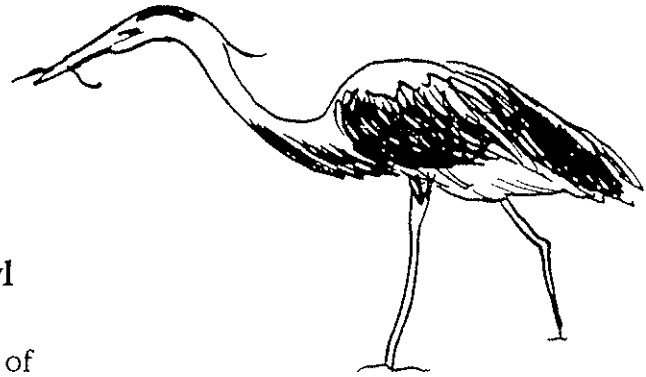


- (a) Otter
- (b) Raccoon
- (c) Eastern Cottontail Rabbit
- (d) Woodchuck
- (e) Mole
- (f) Eastern Chipmunk
- (g) Gray Squirrel
- (h) Opossum
- (i) Muskrat
- (j) Little Brown Bat
- (k) Striped skunk
- (l) Field Mouse



Worksheet #2

Biological Resources

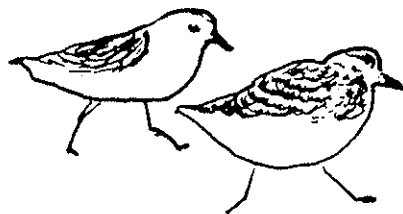
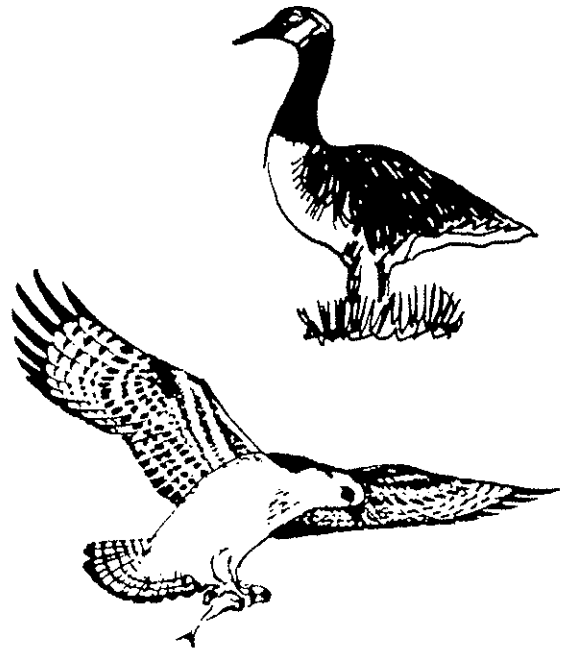


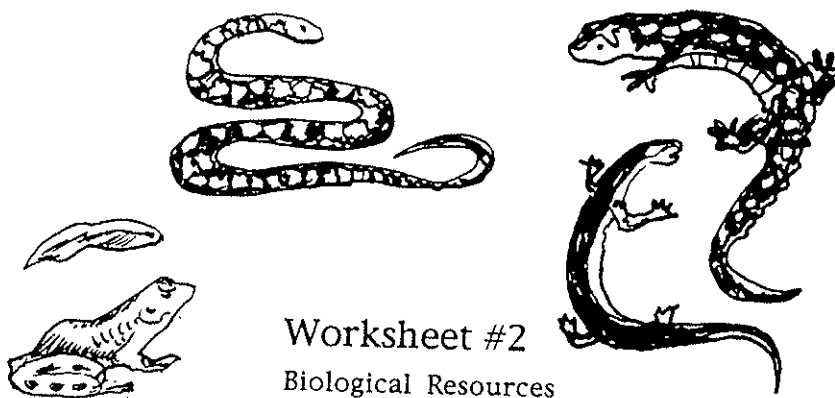
4. Aquatic waterfowl

The year long (1997) survey of waterfowl at Whitman's Pond was witnessed and recorded by bird-watcher and Whitman's Pond Restoration Committee member Bernard Edlestein.

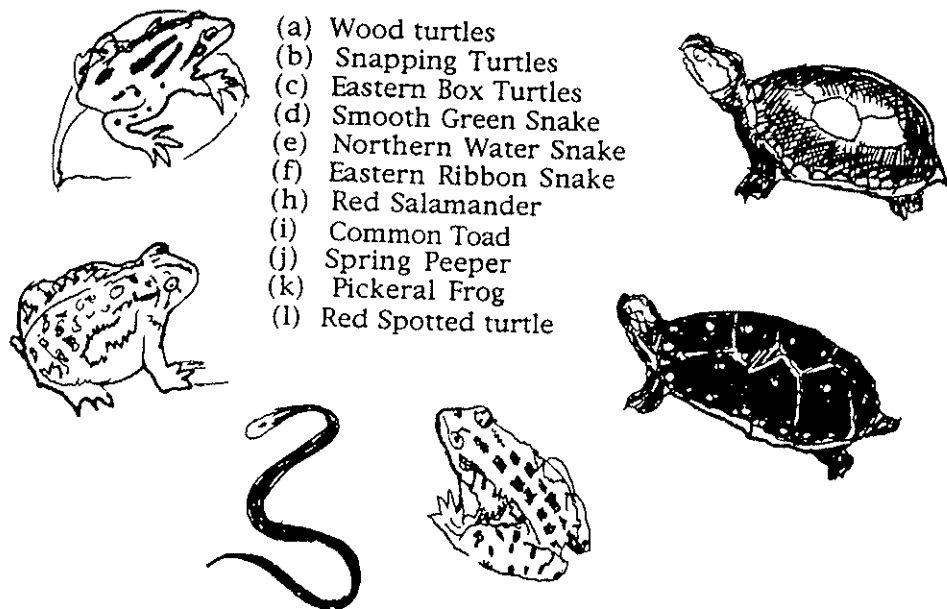


- (a) Canada Goose
- (b) Mute Swan
- (c) Great Blue Heron
- (d) Sharp-shinned Hawk
- (e) Mallard duck
- (f) Hooded Merganser
- (g) American Egret
- (h) Common Merganser
- (i) Double Crested cormorant
- (j) Semi Palmated Plover
- (k) Sanderling
- (l) Spotted sandpiper
- (m) Sparrow Hawk
- (n) Coot
- (o) Shoveler Duck
- (p) Herring Gull
- (q) Wood Duck





5. Reptiles and Amphibians:





Worksheet #2

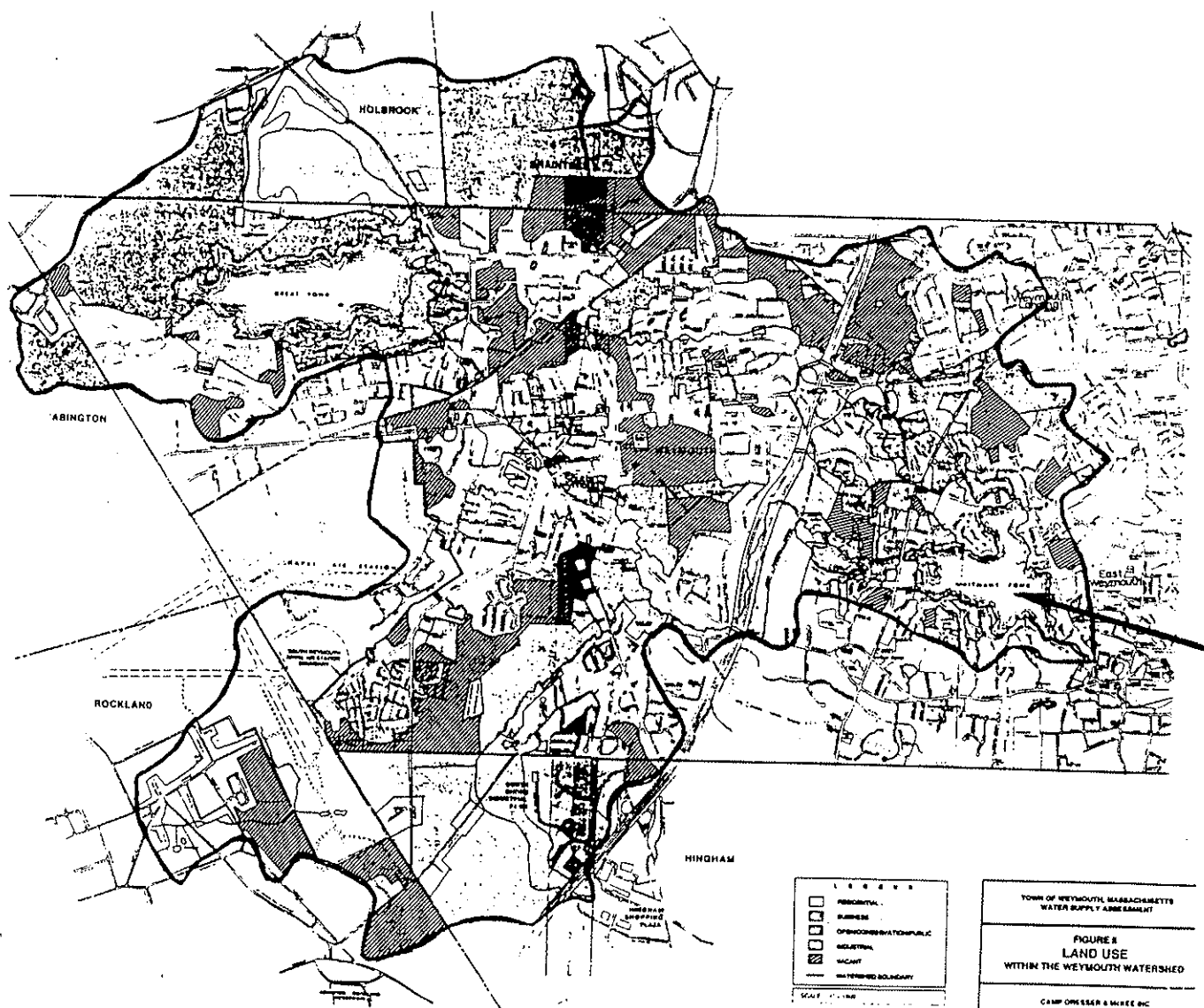
Biological Resources

6. Invertebrates:

- (a) Great Slugs
- (b) Common Blue Mussel
- (c) Great Pond Snail or
Lymnsea stagnalis Snail
- (d) Little Pond Snail or
Amnicola limnosa
- (e) Leeches (bloodsuckers)
- (f) Winkle viviparus infertxtus snail

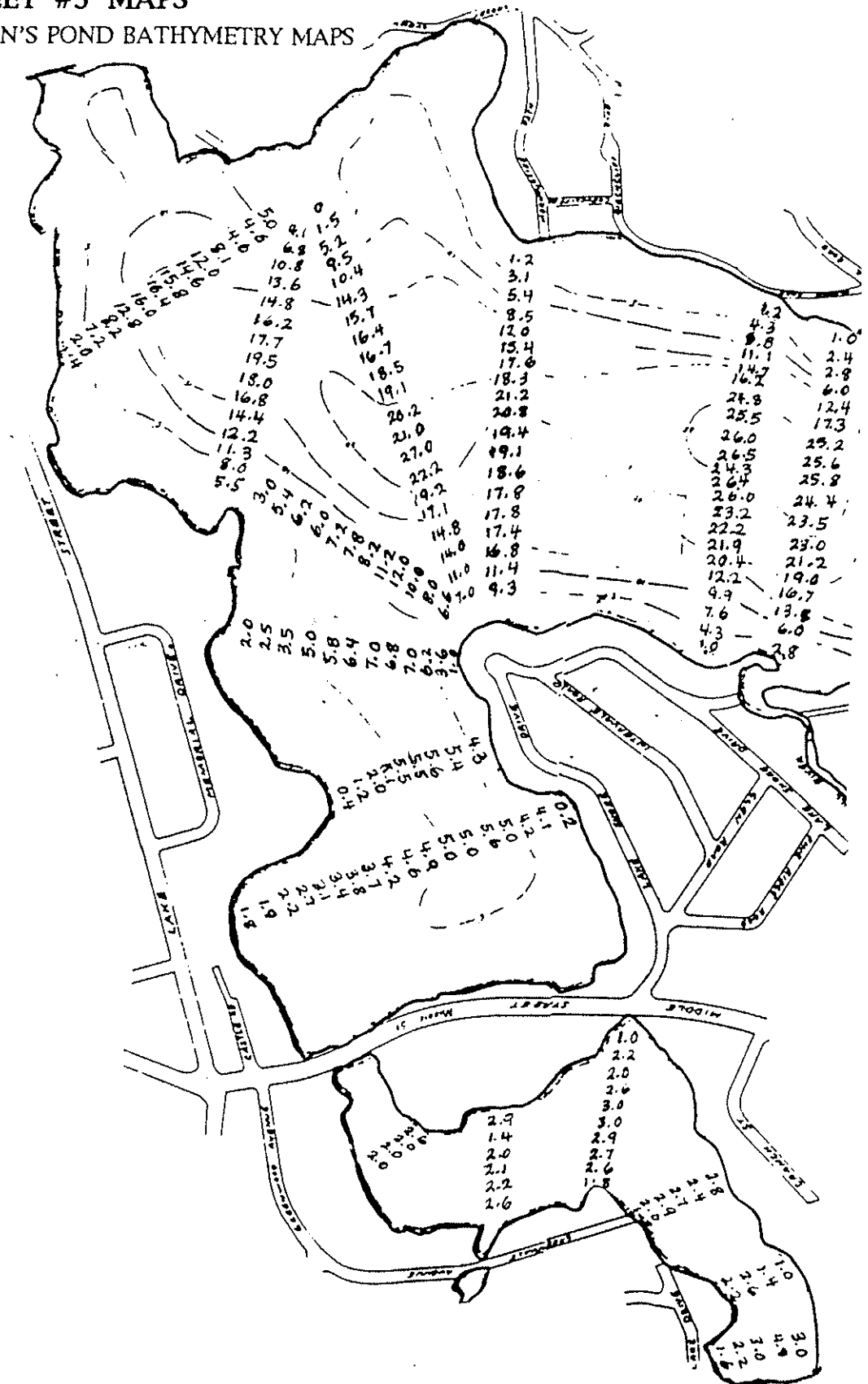


A. Worksheet # 3: Pond/Watershed Maps 1. Map of Whitman's Pond Watershed Area



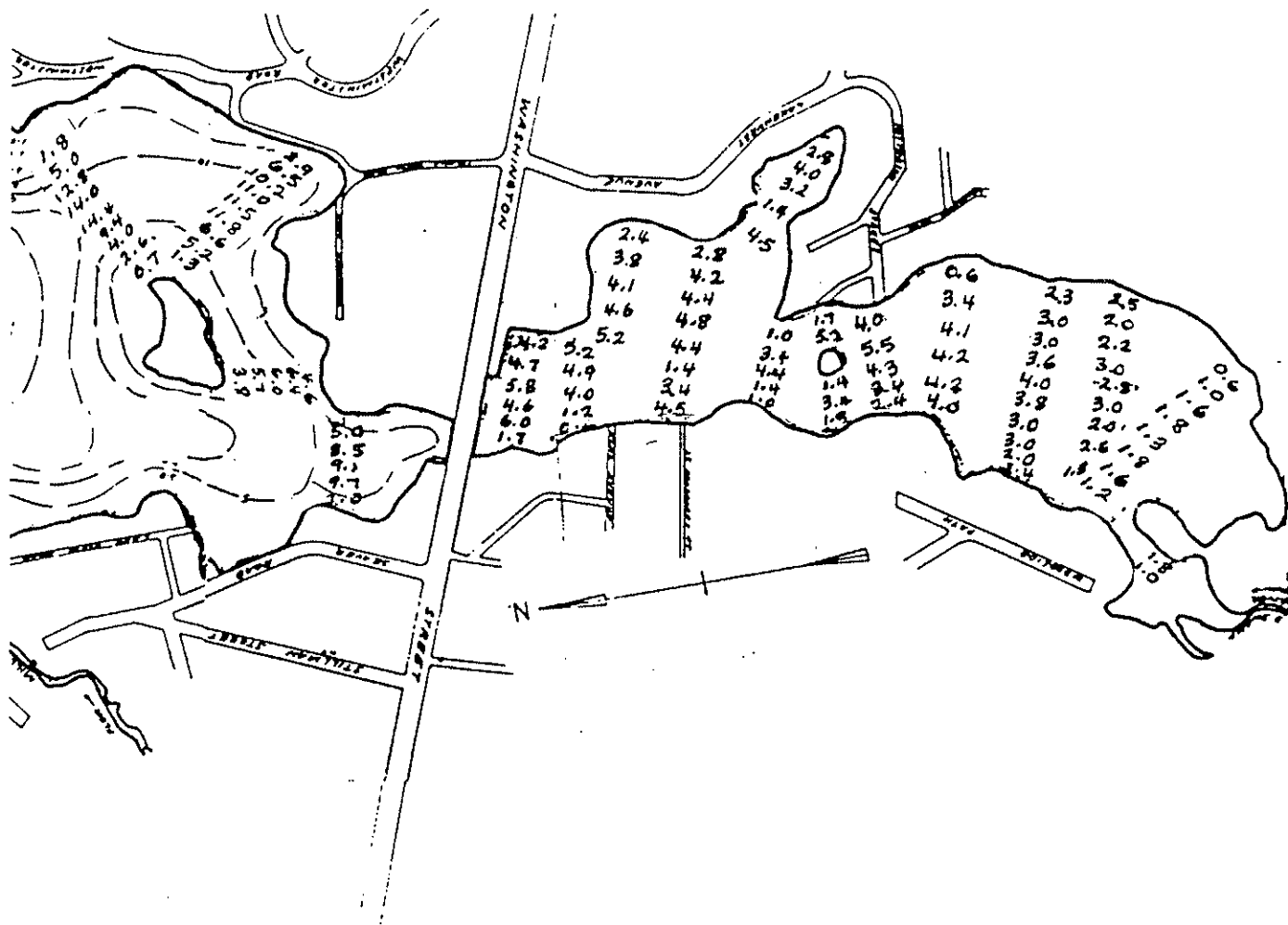
B. WORKSHEET #3 MAPS

1. WHITMAN'S POND BATHYMETRY MAPS



B. WORKSHEET #3 MAPS

1. WHITMAN'S POND BATHYMETRY MAPS (continued)

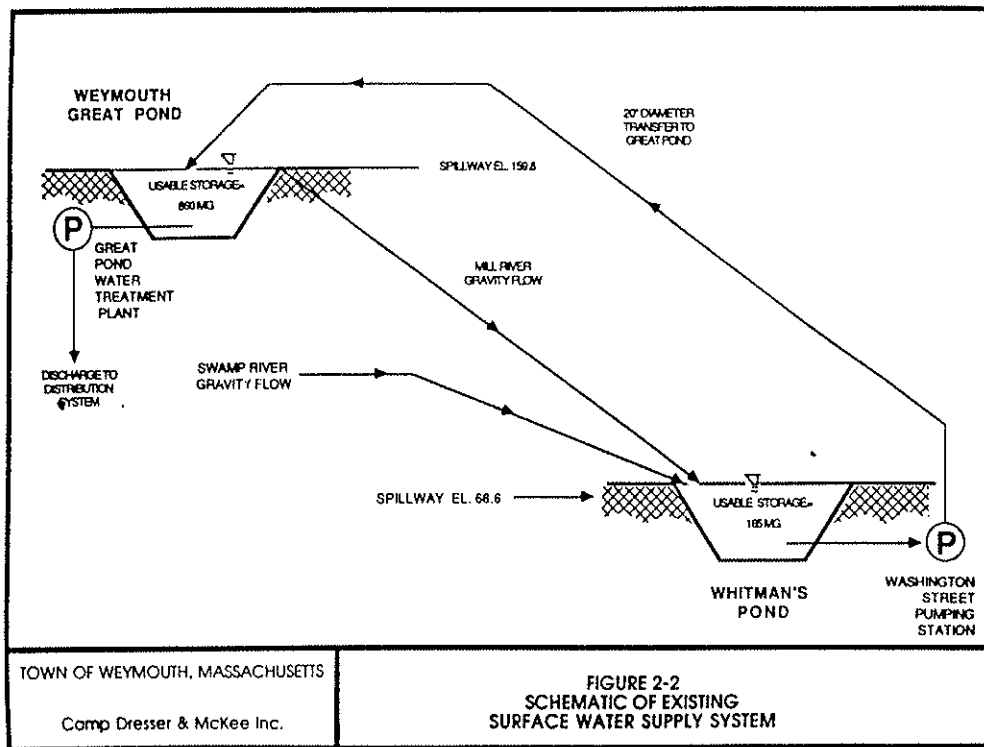


WHITMAN'S POND

SCALE 1"=100' ELEVATION OF POND SURFACE AT TIME OF SURVEY 71.2 DWN BY REM.

WEYMOUTH

B. WORKSHEET #3: MAPS
2. LAKE VOLUME

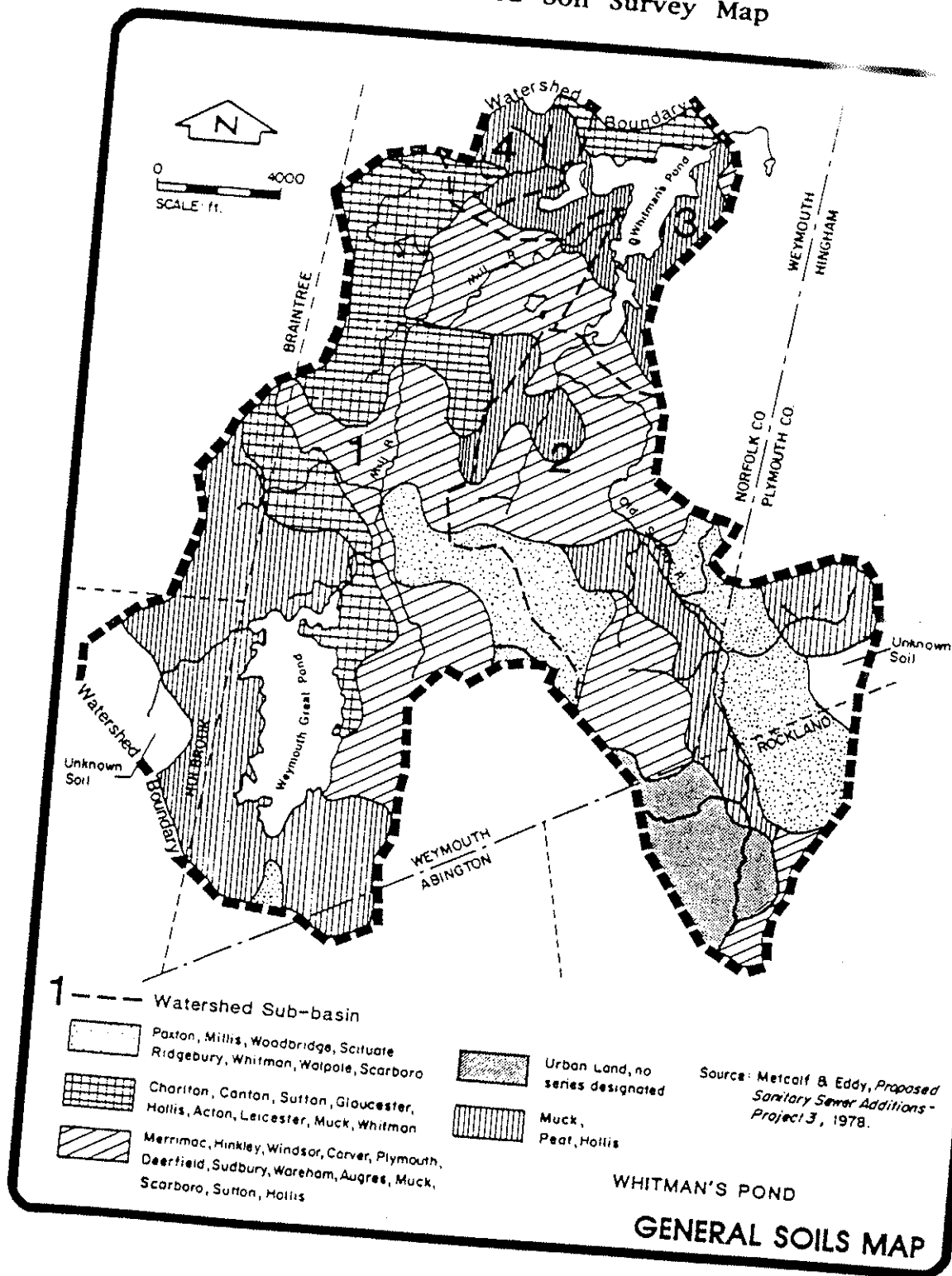


WHITMAN'S POND
WEYMOUTH, MASSACHUSETTS
MORPHOMETRIC DATA

Area (Total Pond)	72.0 hectares (177.9 acres)
Basin 1 - Main basin	51.8 hectares (128.0 acres)
Basin 3 - Southern basin	12.1 hectares (29.9 acres)
Basin 8 - Western basin	8.1 hectares (20.0 acres)
Volume (Total Pond)	1,537,422 m ³ (1246 acre-feet)
Basin 1 - Main basin	1,424,931 m ³ (1155 acre-feet)
Basin 3 - Southern basin	72,671 m ³ (60 acre-feet)
Basin 8 - Western basin	39,820 m ³ (32 acre-feet)
Maximum Depth (Z _m)	7.9 m (26.0 feet)
Mean Depth (\bar{Z})	2.1 m (6.9 feet)
Maximum Length	1443.0 m (4734.0 feet)
Maximum Effective Length	1443.0 m (4734.0 feet)
Maximum Width	888.0 m (291.0 feet)
Maximum Effective Width	888.0 m (291.0 feet)
Shoreline Length	9.546 km (5.932 miles)
Development of Shoreline	3.173
Development of Volume	0.797
Mean to Maximum Depth Ratio	0.266
Elevation Above Mean Sea Level	20.0 m (66 feet)
Latitude	42° 12' 15" N
Longitude	70° 56' 15" W

C. Worksheet # 3: Maps

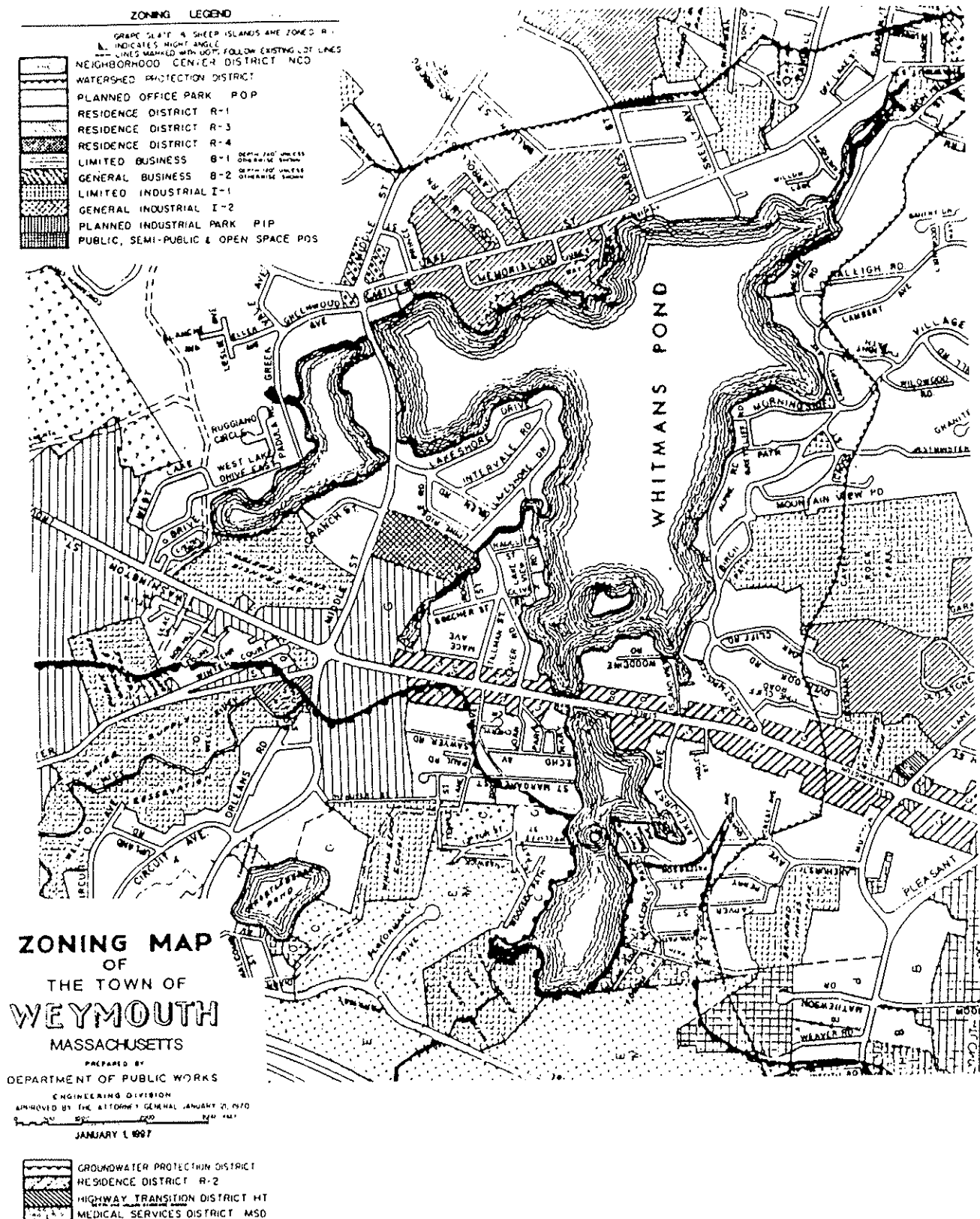
1. Whitman's Pond Watershed Soil Survey Map



MA Div of Water
Pollution Control

D. WORKSHEET #3: MAPS

1. ZONING MAP FOR WHITMAN'S POND AREA

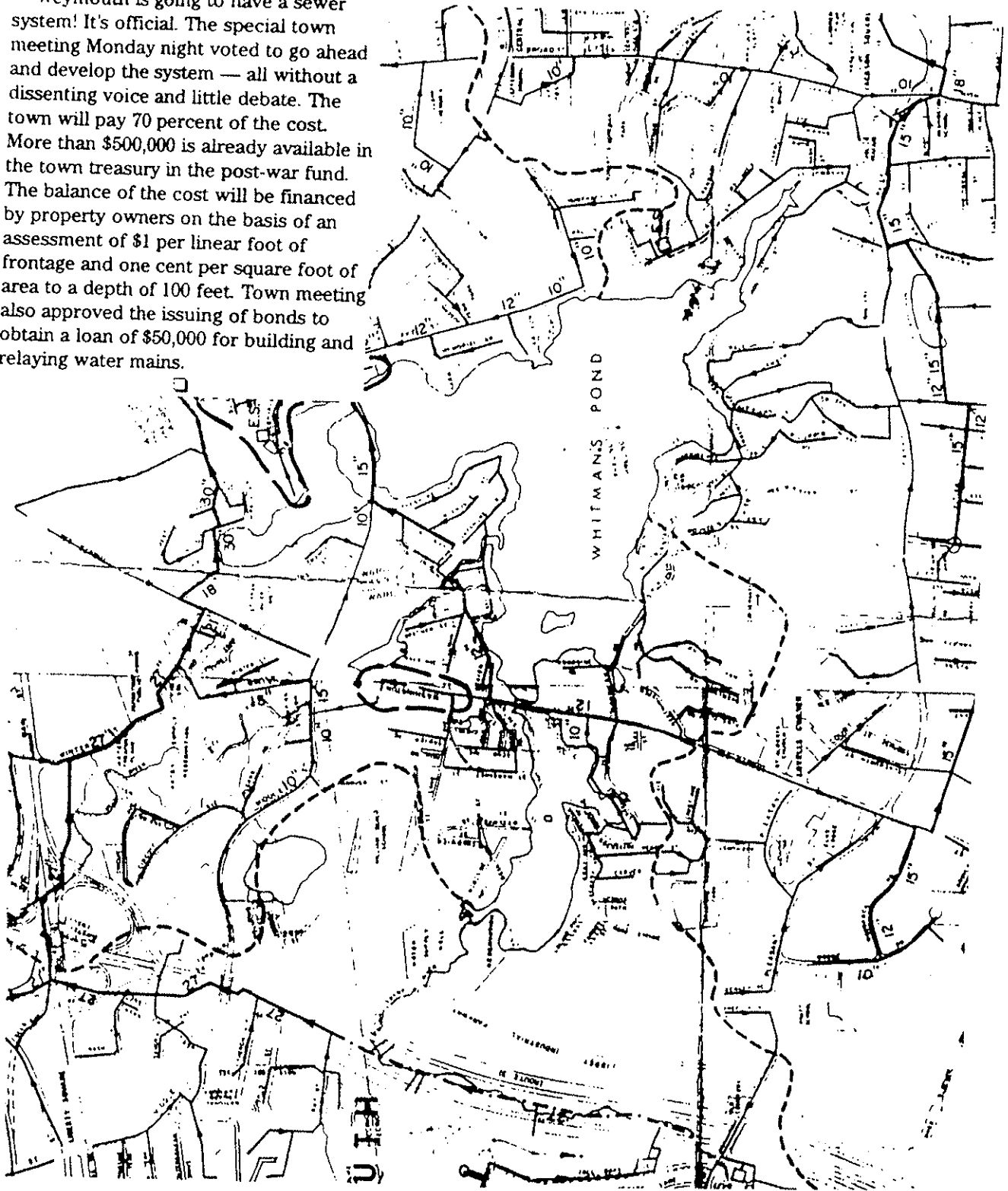


D. WORKSHEET #3: MAPS

2. SEWERED AREAS - 98% OF WEYMOUTH STREETS ARE SEWERED

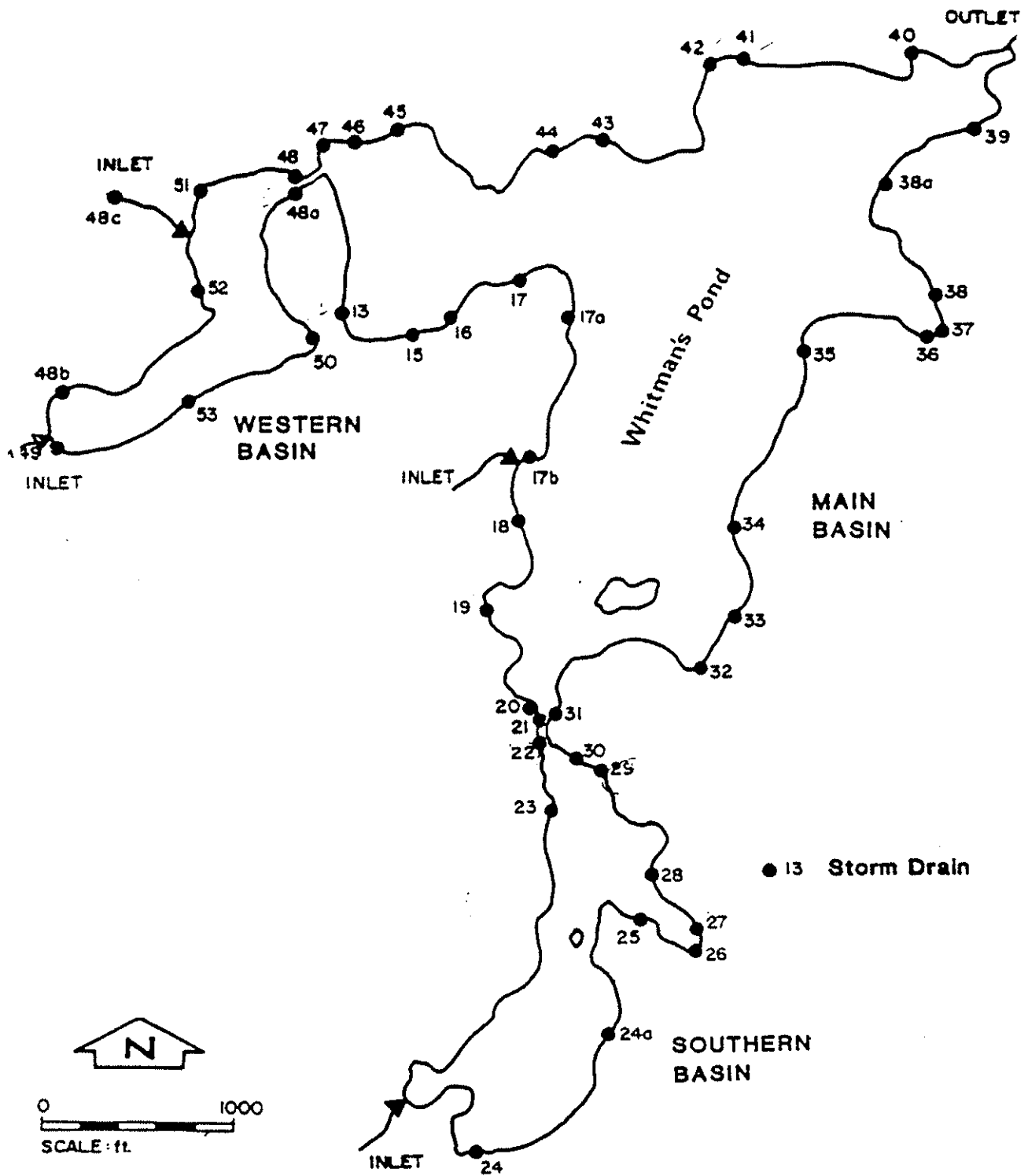
50 years ago, June 6, 1946

Weymouth is going to have a sewer system! It's official. The special town meeting Monday night voted to go ahead and develop the system — all without a dissenting voice and little debate. The town will pay 70 percent of the cost. More than \$500,000 is already available in the town treasury in the post-war fund. The balance of the cost will be financed by property owners on the basis of an assessment of \$1 per linear foot of frontage and one cent per square foot of area to a depth of 100 feet. Town meeting also approved the issuing of bonds to obtain a loan of \$50,000 for building and relaying water mains.



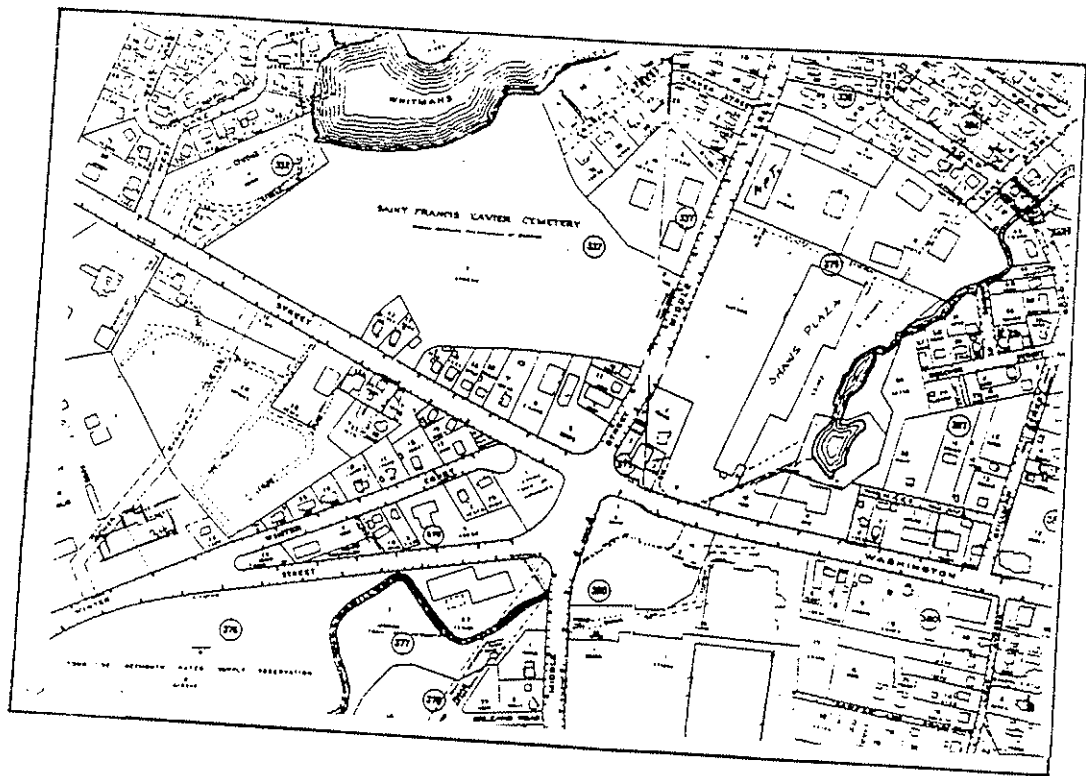
D. WORKSHEET #3: MAPS

3. WHITMAN'S POND STORM DRAIN OUTFALLS



E. Worksheet # 3: Maps

1. Commercial Use of properties around the Pond



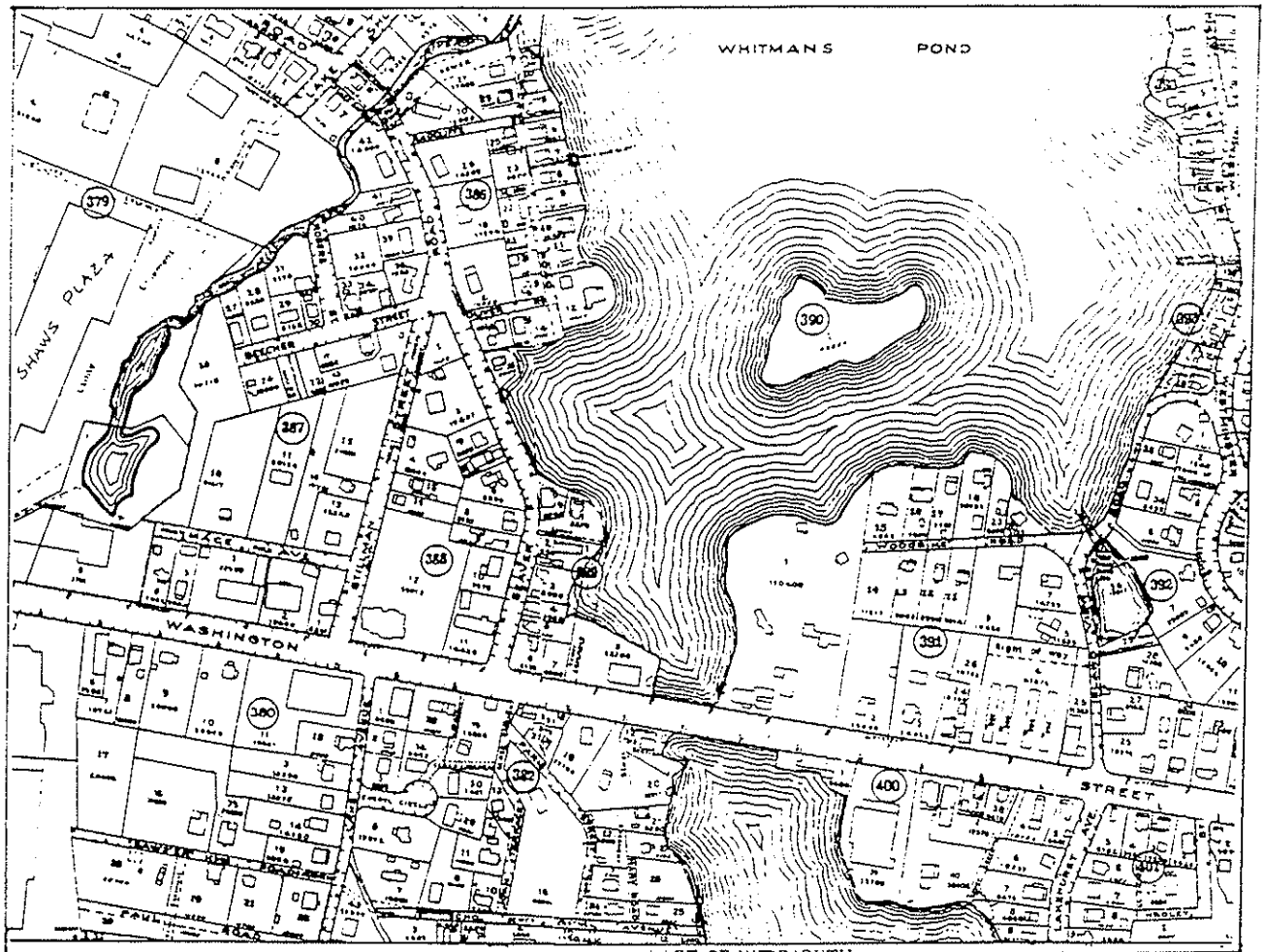
Middle St
 Zeoli's Junk Yard (see Pg. 53)
 Ben's Garage & Auto Sales
 Donut King- Doughnut Shop
 Jumbo's Market
 LaunderMat
 Salvator's Deli
 The Meeting House (#416)
 Colonial Tower Apts.
 South Shore Manor Apts.
 Saint Francis Cemetery
 Asphalt Excavation Co.(rear #661)
 Sunoco Gas Station (cor. Wash & Middle)
 Invernizzi Construction Co. (#661)
 Dunkin' Donuts
 Stop & Shop Super Market

Winter Street
 Brookside Condos (#215)
 Sinnott Computer Training
 Interconnect Cable Co.(#200)
 HealthSouth
 Halstead's Haircutters (#158)
 Weymouth Police Station(#140)
 Weymouth Dept. Public Works (#120)
 Weymouth Water Treatment Plant

Washington Street
 Bank of Boston
 Pappa Gino's (#770)
 Spataro Plumbing (#760)
 Computer Clinic
 Boston Market (#836)
 Pasta Eleganza Restaurant
 Hair Salon
 Colonial Savings Bank
 Waltham Chemical Termite Control

E. Worksheet # 3: Maps

1. Commercial Use of properties around the Pond (continued)



Middle Street

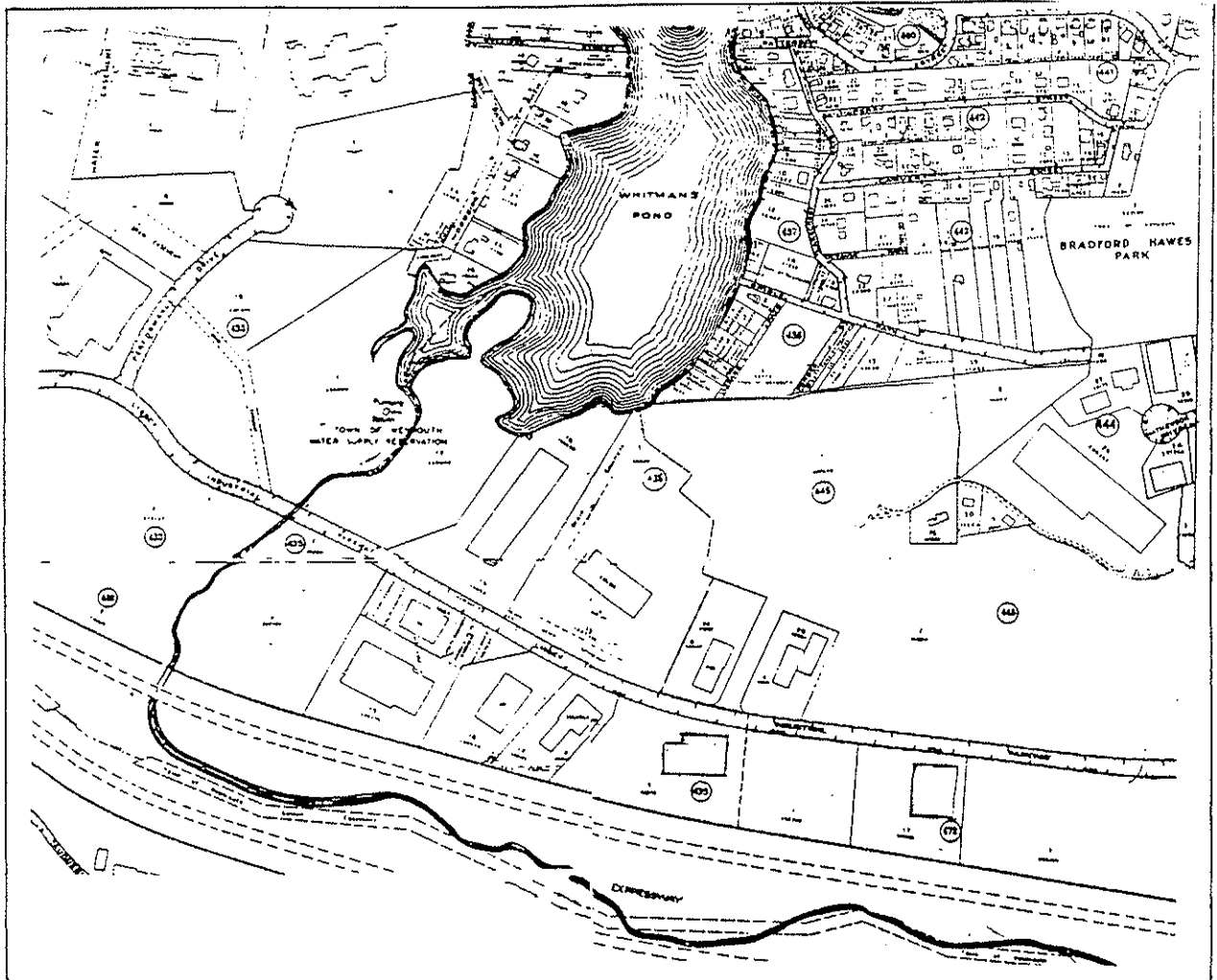
Storage
Shaws Super Market (#610)
Granite Liquor (#616)
Hallmark Cards
Walgreens (#620)
Payless Shoes (#622)
ABC Clothing
Cards n' Kids
Shop & Wash Launderette
Cellularone
Dunkin' Donuts
Jewels
Fashion Nails
Sally's Beauty Supply
Athens Pizza (#642)
Video To Go (#646)
Mail Boxes, Inc.
So. Shore Bank
Spring Water Express

Washington Street

Robert R. Photographs (#850)
Aquaknot Pools (#850)
Ann's Window Shop
So. Shore Insurance Agency
So. Shore Auto (#866)
Larry's Glass (#875)
Lynn's Variety Store (#915)
Silver Star Restaurant #920)
Weymouth Pumping Station
Hajjar's Resturant (#969)
That's Italian II (#957)
Taylor Rental (#1059)

E. Worksheet # 3: Maps

1. Commercial Use of properties around the Pond (continued)



World Gym (294 Middle St.)

Libbey Parkway

Fisher Pierce (Photo Electric Co.) (#90)

Capitol Paper Recycling

Fatex Corp. (#185)

Spider Staging Corp. (#200)

Mayline Tile Co.

CF Data Systems (#220)

Republic Floor (#222)

Top-Qual Inc. (#224)

Ascu Print (#226)

McDonald's Deli Service (#228)

OMS Service (#230)

LHSA (#232)

Larkin (#234)

Mediplex of Weymouth (Nursing Home)
(64 Performance Drive)

Libbey Parkway

Libbey Park Well/ Whitman's Pond Well

Kennedy Carpet Cleaning (#221)

Shaw's Contact Flooring

McKee's Moving & Storage

Edward Sawyer Co. (#260)

LCN Inc.

Enterprise Equipment Inc. (#276)

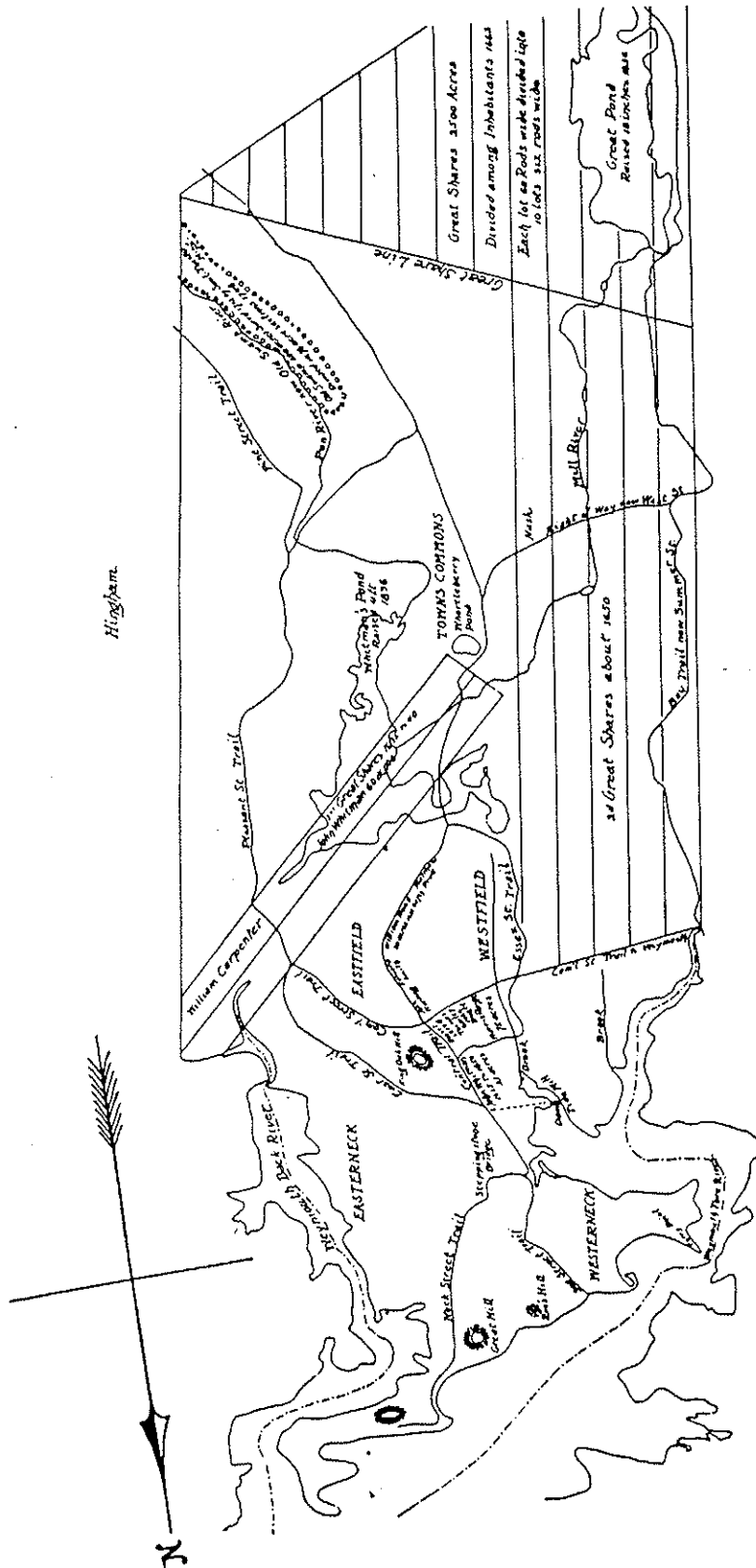
Klear Solution Inc. (#276)

George T. Wilkenson Inc.

N. E. Combustion Products, Inc. (#276)

Libbey Corporate Park (Vassa Properties)

1665 map showing John Whitman's land



March 31st, 1907.

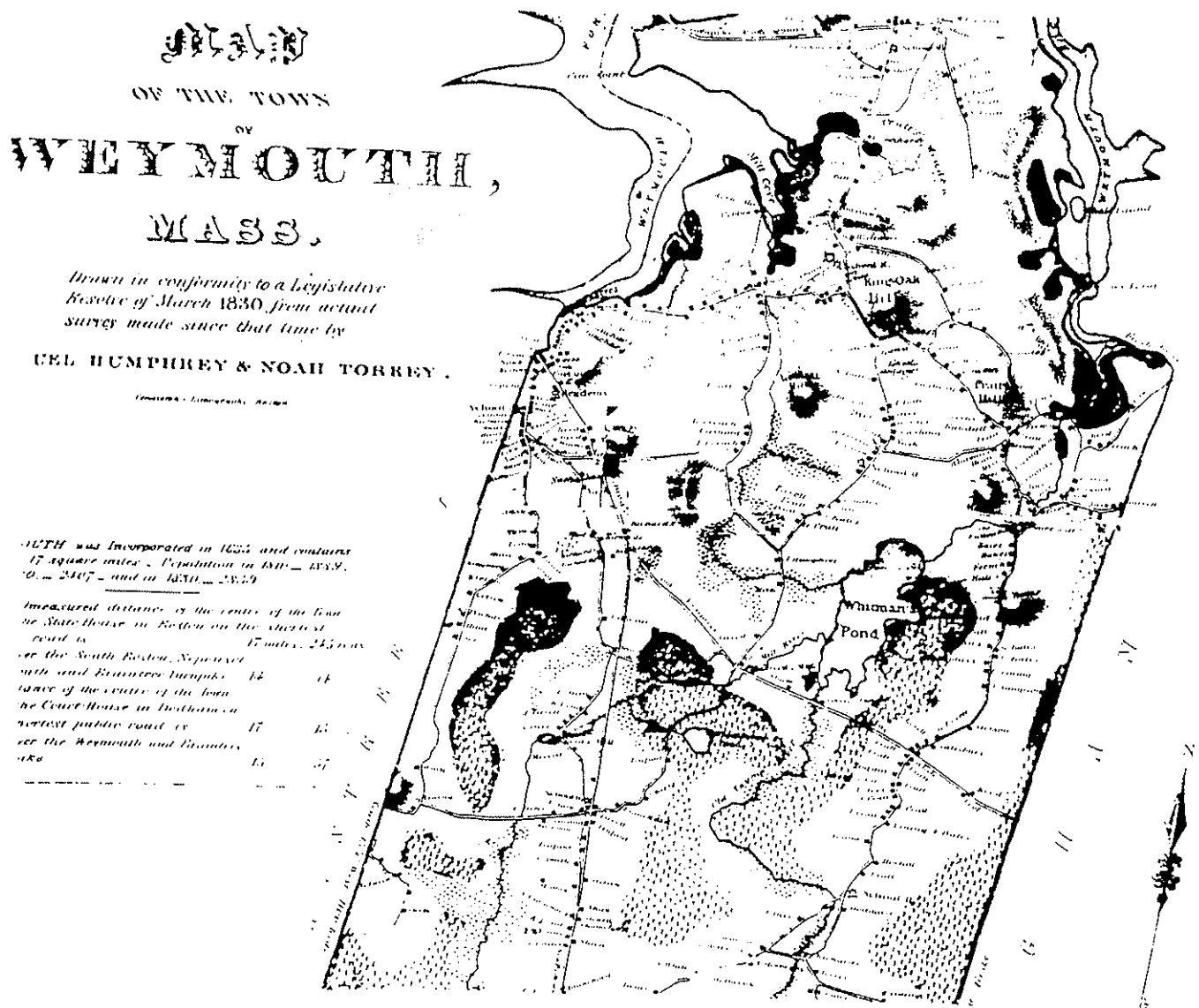
Map of portion of Weymouth showing land allotted to John Whitman by the
Town of Weymouth about 1635, with reference to ancient Metes, Boundaries,
Landmarks, &c.

Allotment later recorded in Weymouth Town Records, 1642.

Worksheet #4: Lake Watershed History

A. Historical Uses of the Whitman's Pond and its Watershed

- (1) Weymouth early settler, John Whitman, received an allotment in 1635 for a large tract of land from the Town of Weymouth. Included in the tract was the major part of a large pond. His son, John Whitman Jr. married and settled next to the pond. It was thereafter called Whitman's Pond. (Whitman's Genealogy, Weymouth Tufts Main Library). See map of allotted area (see map on pg. 34.).
- (2) In 1836 the Pond was flooded raising the depth and increasing the size of the Pond. Trees of an apple orchard, in place when flooded, can be seen up right under water(from boats) about 100 ft. off Middle St. In a recent Pond clean-up one tree was pulled up, roots intact, and was identified by an arborist on site, as indeed an almost petrified apple tree. See date of flooding on Whitman's early map by Edward Rowe (see above for flooding date)



1830 Map showing Whitman's Pond before it was enlarged

In 1887 a flood broke the dam, at the junction of Whitman's Pond and the Herring Run. The Iron Works Buildings were destroyed.



One of an Orchard of old Apple trees, pulled from the Pond at clean up time.

- (3) On Iron Hill Street, beside the junction of Whitman's Pond and the Herring Run, an Iron Mill operated from 1837 to 1889. It employed hundreds of people. In 1889 a flood broke the dam and the mill, badly damaged, never reopened. (See photo on pg. 36).
- (4) Two ice houses existed in the 19th century, one near the corner of Lake Shore Drive and Middle Street, and one on Lake Street.(See 1888 Atlas map below)
- (5) In the watershed of Whitman's Pond, Howe and French Co. ran a paint and varnish business near where Shaw's Market Plaza exists today. See 1888 map (see map below). An Isinglass Co. was nearby.
- (6) Summer cottages ringed the Pond but most have been converted for year round residential use. On the shore was a popular dance hall.



B. Current Lake and Watershed Uses

- (1) Veterans' Housing was built adjacent to the Pond following World War II. This development of apartments was later converted to low cost housing, now called Lake View Manor.
- (2) The Washington Street dam at South Cove was built in 1957. Water was drawn through the pumping station from Whitman's Pond in 1966.
- (3) In 1985 the SNUP-(Sediment Nutrient Uptake Pond) was installed near South Cove to naturally filter impurities from Old Swamp River, as an alternative wetlands for Libbey Office Park.
- (4) In 1971, in the watershed of Whitman's Pond, Libby Park was developed. It was originally planned as an office park. Because a major aquifer existed underneath a portion of the area, the State limited what could be built there. Of late, it is referred to as an Industrial Park.
- (5) On June 6, 1946 the Town meeting voted, without a dissenting vote, to start installing a sewer system in the town. To date, 97 % of the streets in Weymouth, have public sewers. 83% of the houses are hooked up to the sewer system

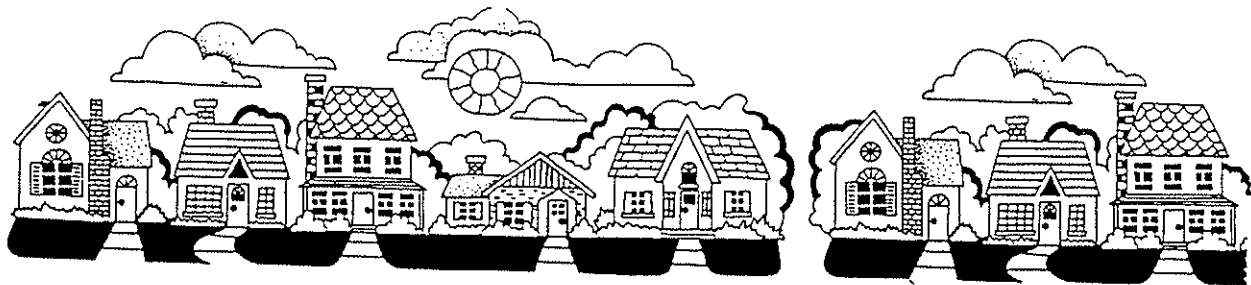
C. Description of Lake/Pond Management Practices Ongoing for the Last Ten Years

- (1) The Washington Street Pumping Station was modernized and rebuilt in 1990. It now can pump 1-1/2 million gals. per day into Great Pond.
- (2) A Johnson Screen was installed in 1994 in South Cove. This screen prevented the algae, small fish, sticks and debris, that continuously hampered the pumping operation, from entering the pump.(see page 56)
- (3) In 1990 Town meeting unanimously voted to transfer ten town owned lots bordering the South Cove, to the Conservation Commission. (see page 46)
- (4) Money was obtained in September 1994 from the State Lakes & Ponds Grant Account: the SNUP was cleaned and repaired; 2 Enviroscape Models were purchased for both Intermediate Schools; (see pg.50) 45 publications, 5 posters, and two full page ads in our local papers, 12,200 two sided photocopies were distributed, as part of our educational program to teach residents how to protect our Pond: (see pg.51) . We purchased a phosphorus Spectrophotometer, a current Flow Meter and 1 high speed pump.
- (5) Among the eight bidders to clean up the Pond, using some funds voted by Town Meeting some time ago, Ambient and Lycott were chosen by DPW as having the most acceptable plans. Ambient used Ocean Arks as a sub-contractor to build a non chemical biofiltration raft in South Cove. 100,000 gallons of water per day were pumped through the raft. Phosphorus levels, a big problem, dropped well below acceptable levels. Their new, environmentally safe, method of treating milfoil showed a drop in this evasive weed. Mid summer 200,000 gallons per day were

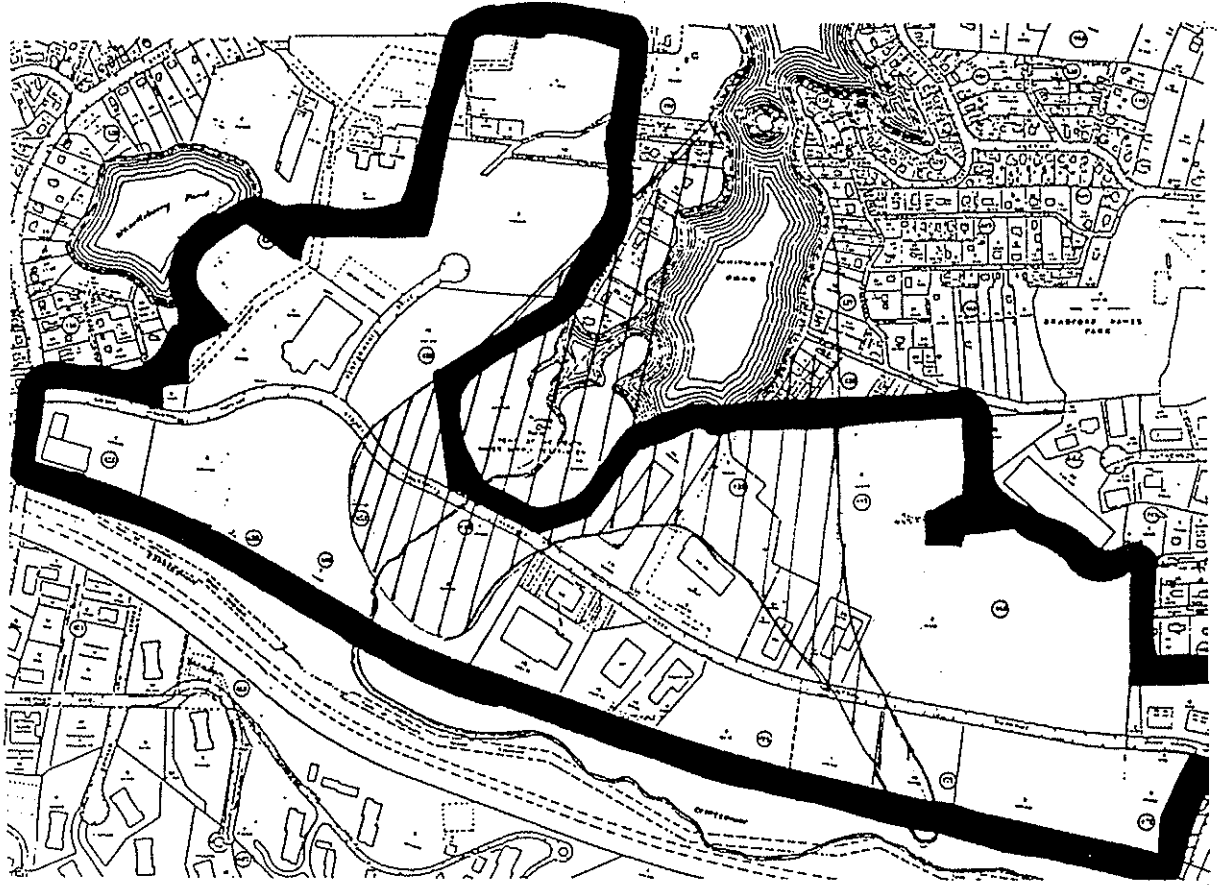
C. Description of Lake /Pond Management Practices Ongoing for the Last Ten Years (Continued)

pumped through the raft. Ambient also installed thirteen Suntree Isle filters (see pg. 55) in storm drains showing the worst pollutants emitting from the 43 drains going into Whitman's Pond. Lycott's plan treated West Cove with a herbicide called Sonar.(see page 45). It visually lessened the rapid eutrophication of that area.

- (6) Each year in 1996,1997 and 1998 at least 300 people took part in giant clean-ups of the pond. This effort was headed by the Whitman's Pond Association. Tons of debris were removed.(see pgs.48 & 49).
- (7) The Weymouth DPW is planning a scenic park on Middle Street. Handicap access, benches and attractive bushes will enhance the area. (see page 47) Another exciting activity Park is under way by the Lake View Manor Association.(pg. 48)
- (8) Signs, warning residents not to feed the wild fowl were placed around the Pond. As the geese seem still on the increase, accelerating the area pollution our committee is appealing to the town to place a fine on those caught feeding the fowl.
- (9) A Pond beach called the Lake Street Beach, has been closed by the Board of Health for four years because of "Swimmers Itch". Although the itch only lasts a few days on average, some severe cases have been noted. After some research, Dr. Mertz, director of the New England Wildlife Center, in Hingham was hired to try to resolve the crisis. 620 survey flyers were dropped at Whitman's Pond area houses, to see the extent of swimmers itch. We hope that the pond will again have swimming for the summer of 1999.
- (10) The Whitman's Pond Restoration Committee submitted an article for May 1998 Town meeting to ban jet skis on Whitman's Pond.(page 43)
- (11) Town meeting voted in 1990 to require home owners around Whitman's Pond to hook up to the sewer system if their septic tank did not comply with MA State regulations. Title 5 has led to the enforcement of our Town by-law.



Libbey Park Aquifer as a Source of Water



Water supply lies beneath

from South Shore Mirror Feb. 15, 1979

A high-yield aquifer exists in the center of the proposed industrial park, roughly beneath the path of Old Swamp River, and is approximately 1,000 feet wide.

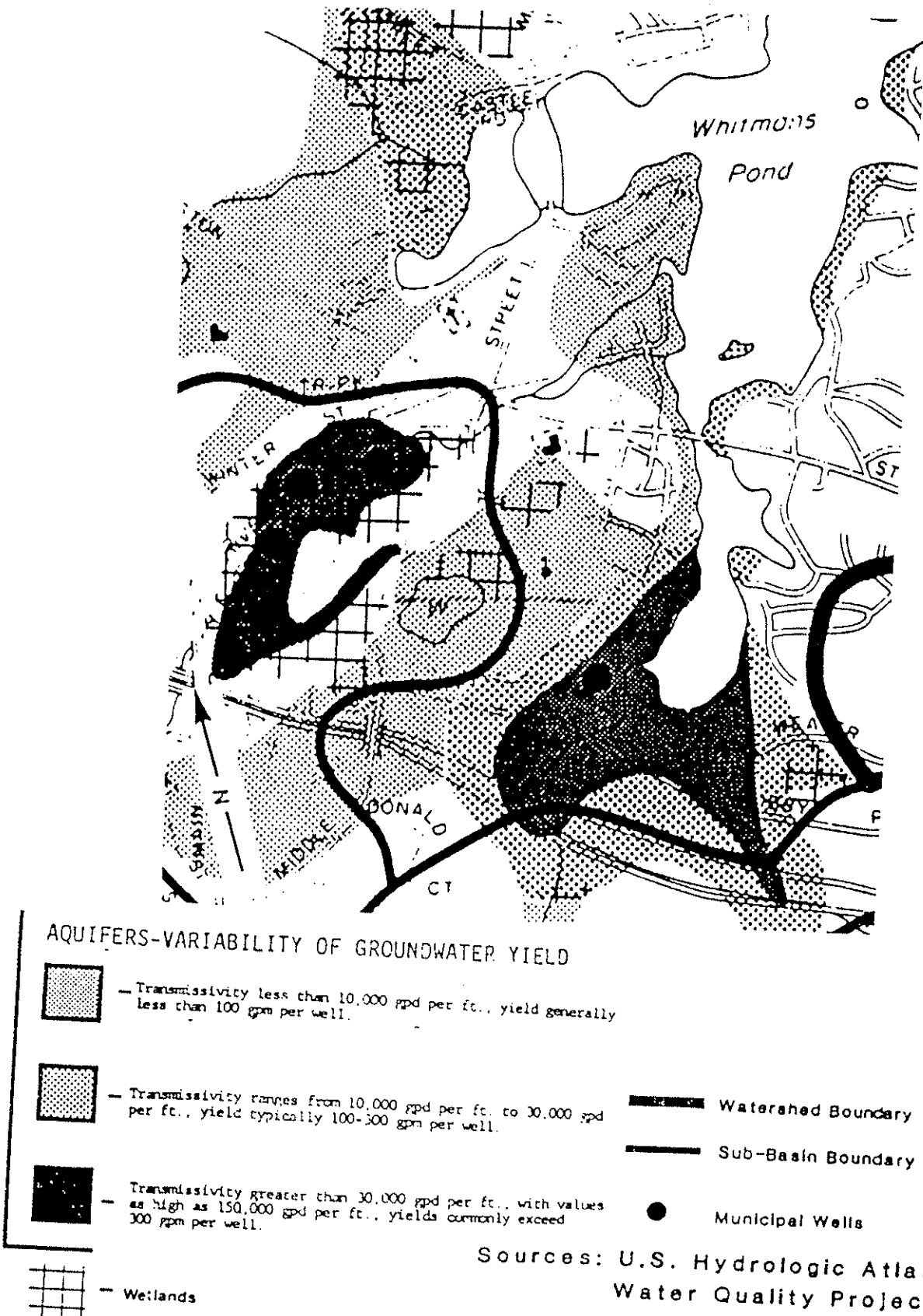
"This aquifer," states the memorandum, "is especially critical to the town since drinking water is drawn from wells on the north side of the parkway (the unpaved road bisecting the park). Recharge takes place principally from surface drainage in the presently undeveloped industrial park."

If the park is developed, much of the recharge area will be covered with impervious macadam, buildings and artificial surface drainage to surface streams, and according to the planning board, "the aquifer will no doubt be affected and may be depleted partially or completely. Obviously, some water will still drain into the aquifer, but it may be contaminated by oils, chemicals, salts and other impurities."

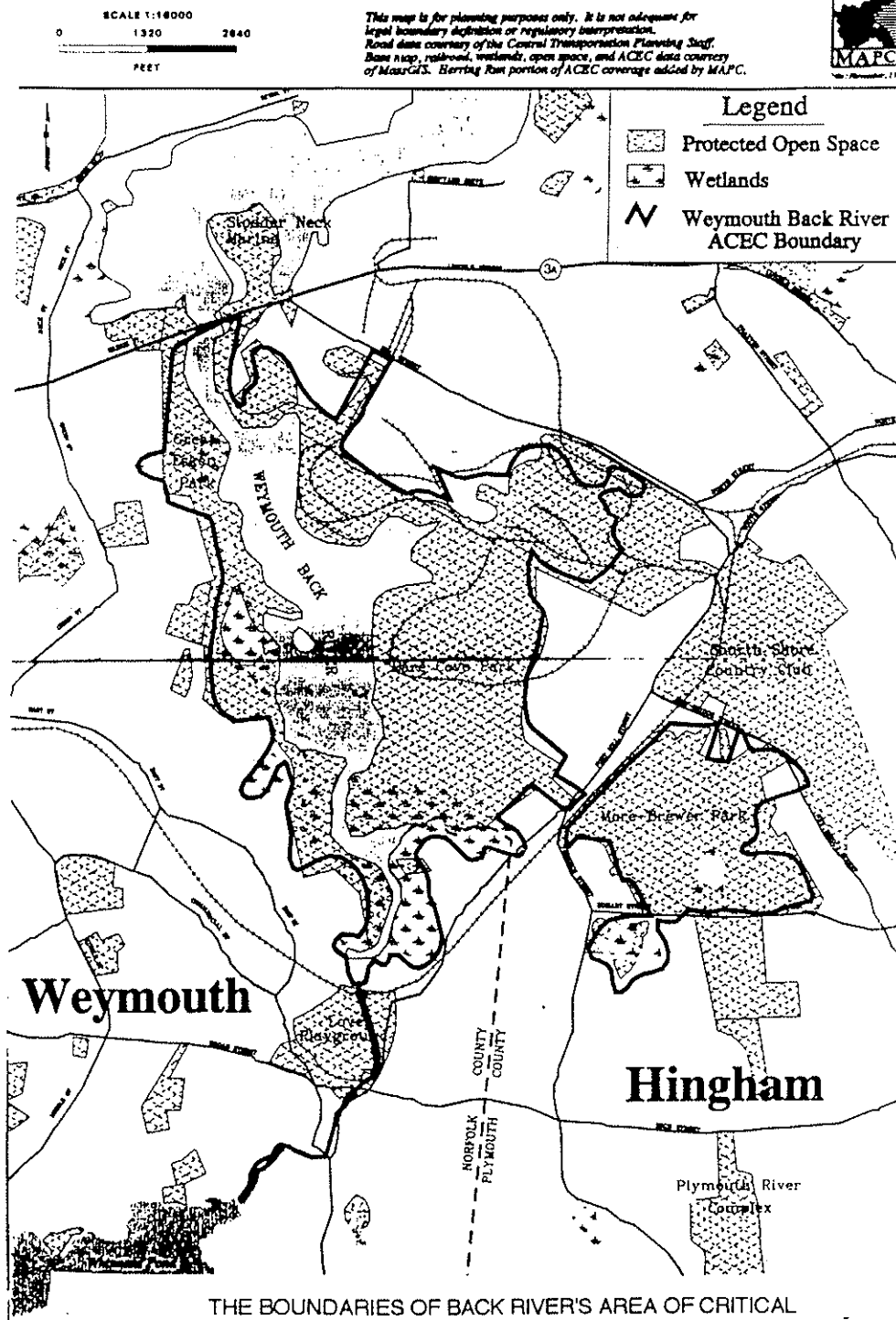
The planning board, in this 1977 document, predicts that the consequences of loss of recharge capability and/or contamination, could be varied and far-reaching, ranging from depleted water supplies to outright shortages during periods of drought.

"Also, the water supply may suffer increased salinity to more serious contamination requiring increased and more costly purification by the town, or in a most extreme case, the abandonment of the wells and Whitman's Pond as drinking supplies," the report

Libbey Park Aquifer as a Source of Water (continued)



Area Of Whitman's Pond Protected by the Area of Critical Environmental Concern



THE BOUNDARIES OF BACK RIVER'S AREA OF CRITICAL ENVIRONMENTAL CONCERN INCLUDE THE HERRING BROOK IN WEYMOUTH FROM THE SOUTH OF THE RAILROAD CULVERT TO A POINT IN WHITMAN'S POND 25 FEET ABOVE THE UPPER END OF THE HIGHEST FISH LADDER, USING A BANK ELEVATION OF THE ANNUAL HIGH WATER MARK IN THE FRESH WATERS AND THE 10-YEAR FLOOD ELEVATION (10.5') IN THE TIDAL PORTIONS.

Jet Skis Banned at Annual Town Weymouth, May 1998

Whitmans Pond jet ski, boat ban considered

By Sonia Lelli
The Patriot Ledger

Weymouth

WEYMOUTH — For some, Whitmans Pond is a great place to canoe and fish for trout or large-mouthed bass. And for others, the 205-acres of scenic water is becoming an attractive place to jet ski and cruise with high-powered boats.

The problem is these two kinds of water lovers have a hard time sharing the same body of water.

Now, the Whitmans Pond Committee is forming a subcommittee to investigate whether jet skis and speed boats should be banned or restricted on the pond, which is the town's secondary water resource.

"It's probably long overdue," said Bob Woodward, of the Conservation Commission. "It's a good idea. The pond is not big enough and not deep enough (for jet skis and high-powered boats)."

Woodward said the issue needs to be discussed because more and more towns are instituting bans or some form of restrictions on ponds and lakes, so people are looking for unrestricted areas to jet ski and cruise high-powered boats.

It's becoming more evident on Whitmans Pond because more high-powered boats can be seen on the launching area on Middle Street.

"You used to see one a week," he said. "Now, you see two, three or four a week. We are a non-restricted area, as it goes right now."

Selectman Peg Goudy said currently the issue is under review.

"We are looking into it," she said.

Town to discuss banning jet skis, boats from pond

■ POND

Continued from Page 13

The subcommittee members will talk to neighbors in the Whitmans Pond area to get their opinions and people who use the lake will also be asked to comment. Harbormaster Paul Milone will be asked for advice.

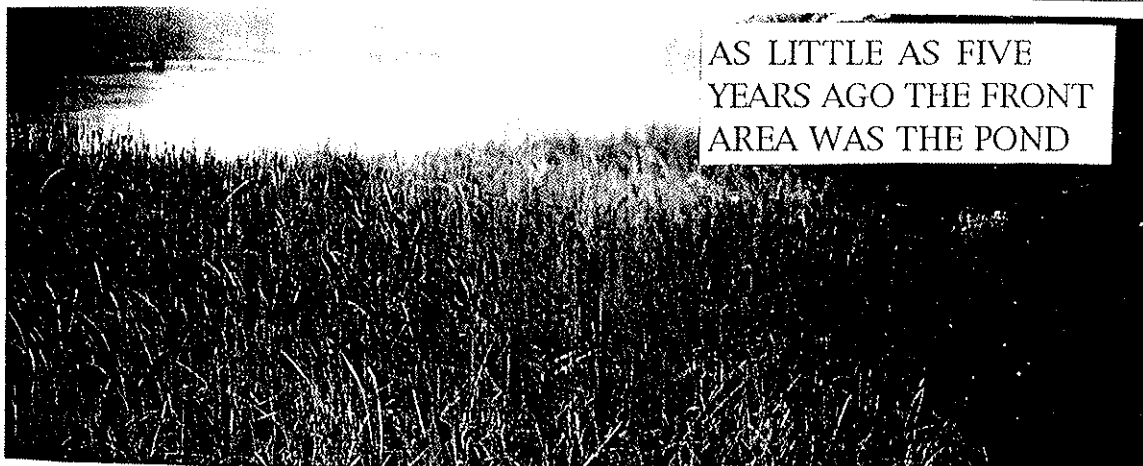
The committee may also look at restricting water skis, said committee member James Cunningham. But jet skis seemed to be getting more attention.

"We are going to look at all aspects," Cunningham said. "There are a lot of people complaining about the noise from large powered boats and the wakes from jet skis. There is concern that jet skis are operating at all hours and they generally don't go very slowly."

Barbara Johnson, also a member of the Whitmans Pond Committee, said she's not sure what solution she'll favor until something is put in written form. But Johnson agrees jet skis and high-powered boats can be a problem, especially for people who want to canoe.

She said the subcommittee may look into how jet skis were banned from the Back River several years ago.

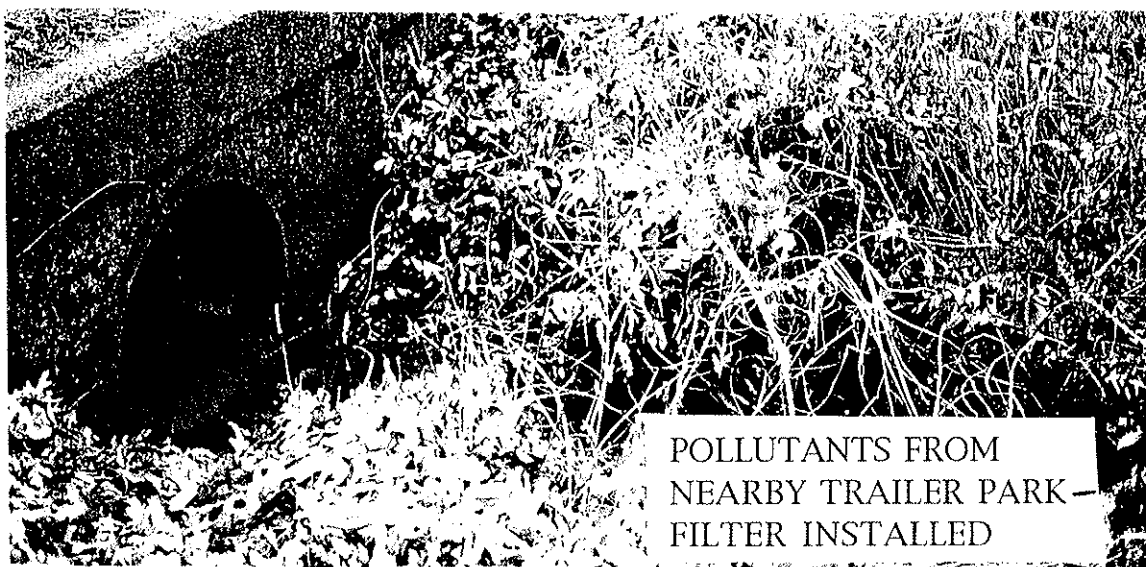
"It was a problem on the Back River. Little kids were learning how to canoe and these jet skis would come by and tip them over. The Coast Guard was horrified," she said.



AS LITTLE AS FIVE
YEARS AGO THE FRONT
AREA WAS THE POND



EUTROPHICATION OF SOUTH COVE



POLLUTANTS FROM
NEARBY TRAILER PARK —
FILTER INSTALLED

Sonar Used In South Cove to Eliminate Some Overgrowth

Sonar*

Humans who are exposed to Sonar-treated water are at negligible risk



Drinking Sonar-Treated Water

A 70-kg adult (about 154 pounds) would have to drink over 1,000 gallons (child - 285 gallons) of water daily, containing the maximum legally allowable concentration of Sonar in potable water (0.15 ppm), for a significant portion of their lifetime to receive a dose equivalent to the NOEL.



Swimming in Sonar-Treated Water

At the maximum allowable concentration of Sonar in water (0.15 ppm), an adult would have to swim for 24 hours every day for over 57 years to receive an amount equal to the NOEL.



Eating Fish from Sonar-Treated Water

Adults would have to consume 2,467 pounds (child - 705 pounds) of fish daily, at the maximum allowable tolerance limit in fish (0.5 ppm), for a significant portion of their lifetime to receive the dose equal to the NOEL.



Eating Food Crops Irrigated with Sonar-Treated Water

Adults would need to eat over 8,250 pounds (child - 2,300 pounds) of these foods daily, at the maximum allowable tolerance limit (0.1 - 0.15 ppm), for a significant portion of their lifetime to receive the dose equal to the NOEL.



Eating Livestock Exposed to Sonar from Drinking Treated Water

Adults would need to eat 25,000 pounds (child - 7,000 pounds) of these foods daily, at the maximum allowable tolerance limit in meat, poultry, eggs, and milk (0.05 ppm), for a significant portion of their lifetime to receive the dose equal to the NOEL.

WHAT IS NOEL?

No Observable Effect Level (NOEL) - the highest dose at which no adverse effects are observed in laboratory animals.

The maximum non-toxic dose is usually established by laboratory studies in animals and is reported as the NOEL.

The dietary NOEL for Sonar is approximately 8 milligrams per kilogram of body weight per day (8mg/kg/day). This NOEL was determined from a study in rats that were fed Sonar in their regular diets every day for their entire two-year lifetime.

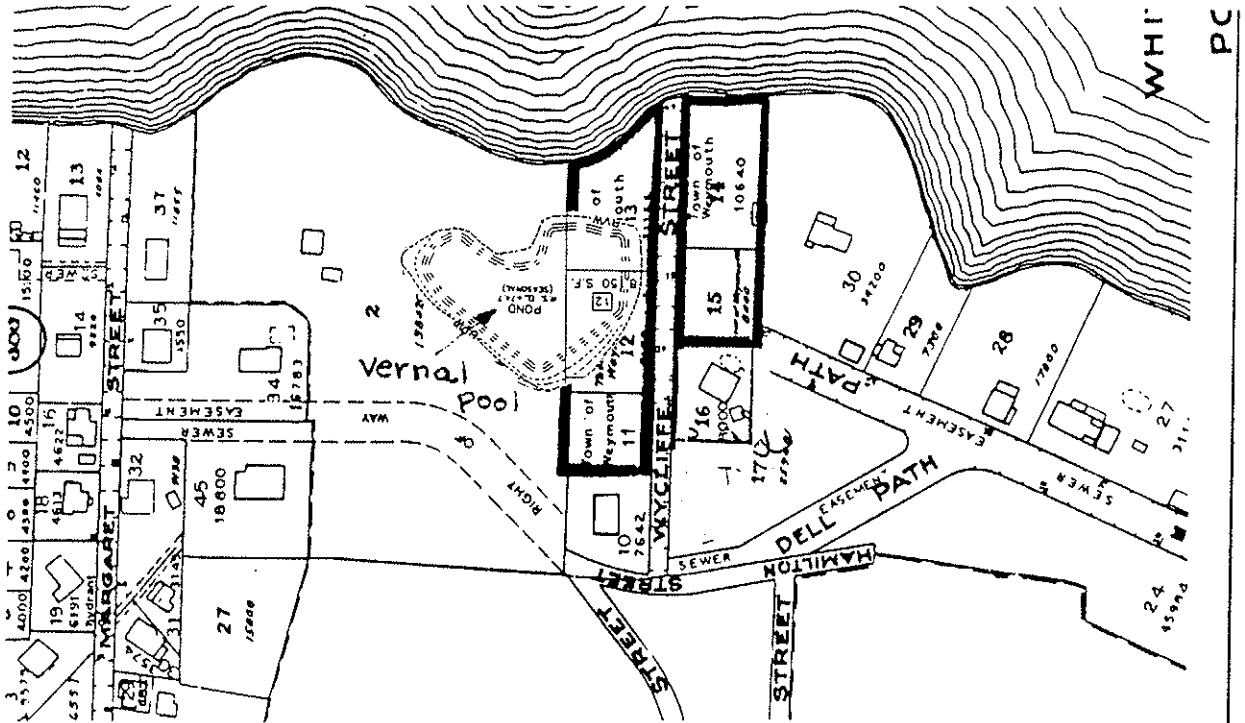
WHAT IS NEGLIGIBLE RISK?

This term is used because it is beyond the capabilities of science to prove that a substance is absolutely safe, i.e., that the substance poses no risk whatsoever. Any substance, be it aspirin, table salt, caffeine, or household cleaning products, will cause adverse health effects at sufficiently high doses. Normal exposure to such substances in our daily lives, however, are well below those associated with adverse health effects. At some exposure, risks are so small that, for all practical purpose, no risk exists. We consider such risks to be negligible or insignificant.

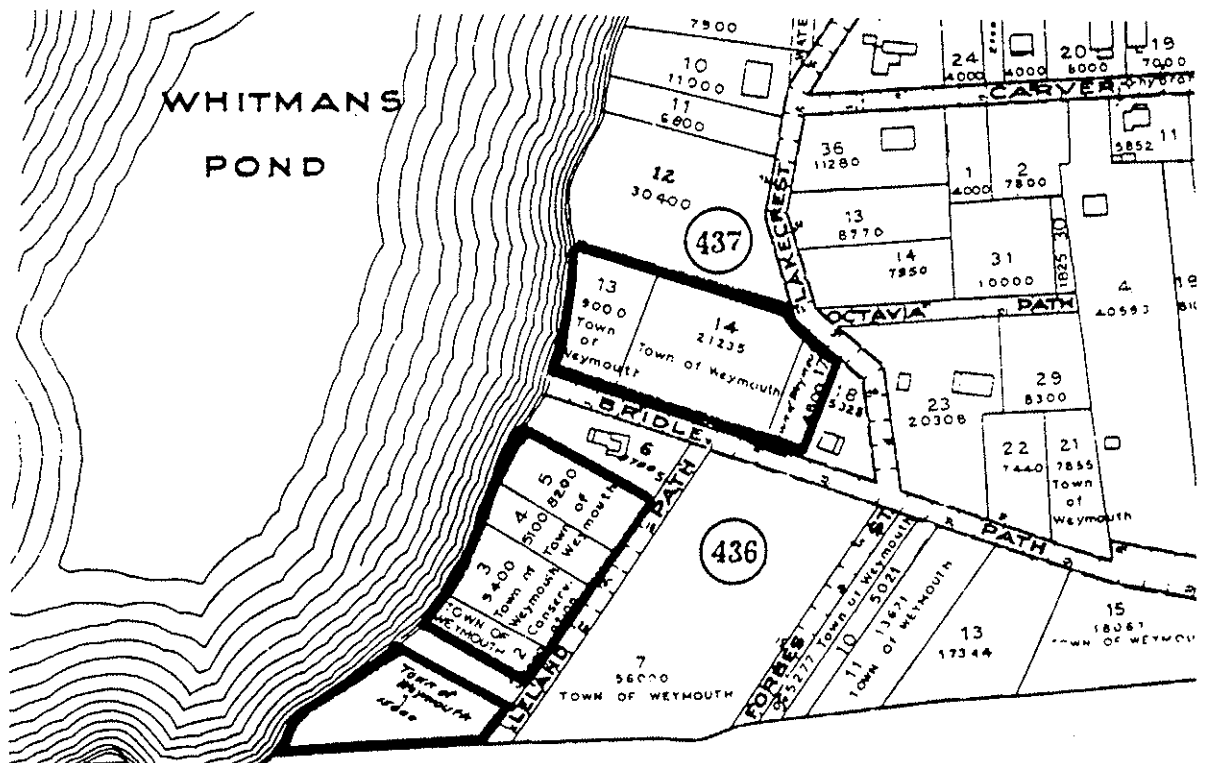
B. WORKSHEET # 4 POND/WATERSHED HISTORY

TOWN LOTS ABUTTING WHITMAN'S POND THAT WERE CHANGED
TO CONSERVATION TO PROTECT THE WATER AT TOWN MEETING 1990

APPENDIX H (cont.)



APPENDIX H - ARTICLE 38



A black and white photograph showing a large flock of waterfowl, possibly geese, gathered on a grassy bank. The birds are scattered across the foreground and middle ground, some standing and others resting. To the right, a calm body of water reflects the sky. In the background, a line of trees and some buildings are visible under a bright sky. The overall scene depicts a natural habitat for waterfowl.



YEARLY CLEAN-UP OF WHITMAN'S POND AN EVENT TO REMEMBER

The Patriot Ledger, Wed., Oct. 7, 1998

Weymouth

11 tons of debris pulled from pond

By Joy Davis
The Patriot Ledger

WEYMOUTH — A rotted raft, a 100-pound gas container, bicycles, lawn mowers, tires, furniture, Christmas trees, car parts and 14 shopping carts.

Those were some of the items pulled from Whitman's Pond during the third annual pond cleanup last month.

Volunteers ran out of time before they could remove a Volkswagen.

"We're going to have to work on getting that out," said Lorraine Larrabee, vice president of the Whitman's Pond Association.

Six of the shopping carts were in good condition and returned to Shaw's supermarket, Larrabee said.

All 11 tons of debris collected was deposited and weighed at the town transfer station, except for the gas container, which the fire department disposed of, Larrabee said.

Although there were fewer volunteers than at the two previous clean-ups, this year's group removed a ton more than last year's, Larrabee said.

About 150 people — including Boy Scout Troop 8, six National Guardsmen from the 721st Maintenance Co., and pond neighbors — volunteered.

The National Guard supplied trucks equipped with winches, which were used to drag rubbish from the pond, Larrabee said.

The department of public works supplied a truck equipped with a front-loader and gloves, rakes, trash bags and barrels for volunteers to use. The park and recreation department supplied canoes for rowing to tough-to-reach trash.

Whitman's Pond supplies 40 percent of Weymouth's water and draws visitors every year during the herring spawn. Residents also use the pond for fishing and boating.

It was a great day at Whitman's Pond

They turned out last Saturday morning starting at 9 o'clock and continuing throughout the day, 150 volunteers concentrated on cleaning up Whitman's Pond and all around its perimeter.

Under the leadership of Lorraine Larrabee, vice president of the Whitman's Pond Association, this marvelously enthusiastic band worked with single-minded determination for six straight hours.

By their efforts they removed 11 tons — YES, you heard right! — one whole ton more than a year ago when the cleanup was carried out by a larger group of volunteers.

The volunteers included six National Guard members who brought along two 2 1/2 ton trucks with winches attached. With them, large pieces of debris could be lifted into trucks. Two volunteers from the DPW provided a pair of trucks to help with the task of carting away all the trash. A worker at the town's refuse transfer station made himself available all day long to receive the truckload's of debris.

The town provided the pond volunteers with six canoes so they could to go out onto the water and remove trash and debris.

Members of Troop 8 provided willing Boy Scout power.

"It was just incredible. We had a smaller amount of volunteers than last year, but we worked harder," said the elated organizer. "It was incredible what we pulled out."

All of us owe a thank you to Lorraine and her hard-working helpers who turned out on a beautiful fall day last Saturday and spent every minute cleaning up one of the town's treasures. It's not easy to pick up someone else's mess. That's just what these volunteers were doing.

NEW PARK UNDER WAY NEAR LAKEVIEW MANOR

Batting Cages, Rollar Blade Ramps and Play Equipment Make This Park Unique

Weymouth News

August 13, 1997

Page 13

Playground is planned for Lakeview kids

The newly formed Lakeview Manor Playground Committee will meet tomorrow (Thursday) at 7 p.m. in the housing complex office at 77 Memorial Drive to further plans for a playground for children of low income families.

If you'd like help with planning, fund raising and construction to build swings, slides and a climbing apparatus, pave a tennis-handball court and build a baseball backstop, Cong. Bill Delahunt has a job for you.

"Here's a chance to lend a hand to make life just a little better for kids down the street who have no suitable place to play," said Delahunt, who initiated the plan last month at the behest of Charlie Foley.

Foley, a Lakeview Manor resident and a member of the Housing Authority, brought the need for a place for youngsters from the low income com-

"Here's a chance to lend a hand to make life just a little better for kids down the street who have no suitable place to play," said (Cong. Bill) Delahunt, who initiated the plan last month at the behest of Charlie Foley.

plex to play to Delahunt shortly after the election last fall.

Delahunt assembled and convened an organizational

meeting for individuals he thought might be interested, including Sen. Bob Hedlund, Rep. Paul Haley and the five selectmen, Sue Kay, Dave Chandler, Greg Hargadon, Bill Ryan and Peg Goudy.

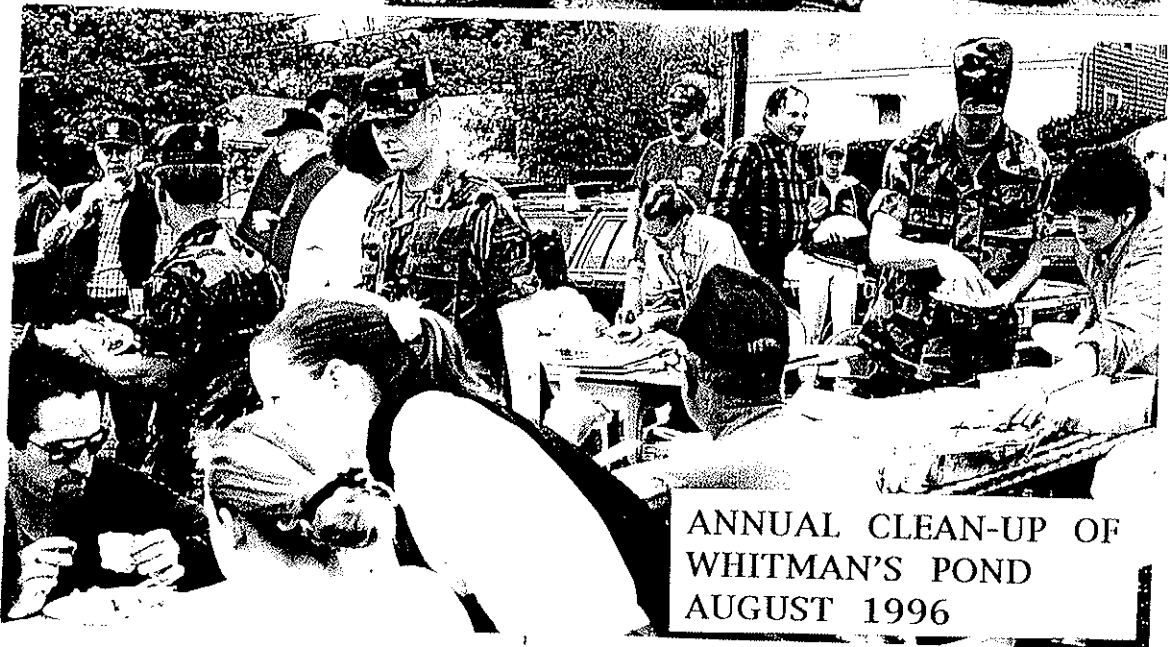
The committee, is reaching out to a variety of local and regional entities for technical and financial assistance. People who can supply "elbow grease" are also welcome

for the construction phase.

"It's been exciting to see the energy and momentum building from such a diverse group of local people, all committed to such a terrific project," said Delahunt. "There's room for anyone who thinks he or she can help."

Delahunt said he hopes construction can begin next spring.

If you want to help, call Bill Fried or Charlie Foley at 331-5909 or Delahunt's office at 1-800-794-9011.



ANNUAL CLEAN-UP OF
WHITMAN'S POND
AUGUST 1996

Whitman's Pond 1994 Grant
WITH MANY THANKS TO HELENA MURRAY WHO HEADED
SUB-COMMITTEE FOR THIS GRANT

GRANT MONIES TO
PROTECT THE POND

September 21, 1994

Ernest Williams
Director of Public Works

Re: Small Lakes and Ponds Grant

Dear Ernie:

The following items have been charged against the Lakes and Ponds Grant Account.

PUBLIC EDUCATION

2 - Enviroscope Models.	\$1560.00
45 - Publications and 5 - Posters.	473.75
12,200 - 2 sided photocopies (blue)	518.08
1 - Pennysaver Full Page Add.	476.25
1 - Weymouth News Full Page Add.	192.00
total	\$3220.08
original budget	\$2500.00

ENGINEERING EQUIPMENT

1 - Phosphorus Spectrophotometer.	\$2995.00
1 - Current Flow Meter.	\$3965.00
total	\$6960.00
original budget	\$5500.00



SNUPPS CLEANING

1 - Labor and Equipment.	\$2699.68
total	\$2699.68
original budget	\$12000.00

total expenditures	\$12879.68
Balance in account	\$7120.32

cc: file
D. Jensen
H. Murray
WHIPON17

12,500 Copies of this Poster Distributed in 1994.
To be Redistributed this Month



DO YOU KNOW WHAT
WHITMAN'S POND
MEANS TO THE TOWN OF WEYMOUTH???

- *IT IS AN HISTORIC SPAWNING GROUND FOR HERRING AND SMELT
- *ITS TRIBUTARIES, OLD SWAMP RIVER AND MILL RIVER
CONTRIBUTE TO THE TOWN'S DRINKING WATER SUPPLY
- *IT PROVIDES A RECREATIONAL AREA FOR RESIDENTS, SWIMMING, FISHING
AND BOATING
- *IT IS A LARGE PART OF THE NATURAL BEAUTY OF THE TOWN

*IT IS DEFINED BY THE COMMONWEALTH OF MASSACHUSETTS GENERAL LAWS AS
A
"GREAT POND"

WE THINK SO, TOO!!

THAT'S WHY WE ALL NEED TO WORK TOGETHER TO KEEP IT
GREAT!!



HOW CAN YOU HELP??

- *KEEP LITTER, PET WASTES, LEAVES AND DEBRIS OUT OF STREETS AND GUTTERS
WHERE THEY CAN BE WASHED INTO STORM DRAINS WHICH FLOW INTO
WATERWAYS AND WETLANDS
- *APPLY LAWN & GARDEN CHEMICALS SPARINGLY AND ACCORDING TO
DIRECTIONS BECAUSE THEY LEACH INTO UNDERGROUND WATER SOURCES
- *DISPOSE OF USED OIL, ANTIFREEZE, PAINTS AND OTHER HOUSEHOLD
CHEMICALS PROPERLY (USED MOTOR OIL IS ACCEPTED AT THE DPW, 120
WINTER STREET--MOST CONTAMINANTS ARE ACCEPTED AT THE TOWN'S ANNUAL
HAZARDOUS WASTE DAY)
- *CLEAN UP SPILLED BRAKE FLUID, OIL, GREASE AND ANTIFREEZE--DON'T HOZE
THEM INTO THE STREETS WHERE THEY CAN EVENTUALLY REACH OUR WATERWAYS
- *CONTROL SOIL EROSION ON YOUR PROPERTY BY PLANTING GROUND COVER AND
STABILIZING EROSION-PRONE AREAS
- *THOSE WITH SEPTIC SYSTEMS SHOULD USE LOW OR PHOSPHATE-FREE
DETERGENTS UNTIL THEY CAN HOOKUP TO THE TOWN SEWER SYSTEM

THANK YOU FOR YOUR SUPPORT

THE BOARD OF PUBLIC WORKS & THE WHITMAN'S POND COMMITTEE

FOR INFORMATION ON MOTOR OIL, HAZARDOUS WASTE/LEAF DISPOSAL CONTACT DPW AT 337-5100



An EnviroScape was Presented To Both Weymouth Intermediate Schools

Order NOW for Earth Day! (202) 833-3380!

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"I've seen some wonderful publications and posters out there, but when I saw EnviroScape, it said it all — there should be one in every school across the country."

"Worth every penny. Most valuable tool in environmental education."

"Our SWCD has been looking for something like this to share with the community."

EnviroScape began as an interactive, portable model of a watershed that dramatically demonstrates water pollution and its prevention — a community with houses, lawns, golf course and recreation areas, forest, farm, industrial site, highways, rivers and streambanks, all draining into your nearest lake, ocean or bay. It takes a hands-on approach that has proven highly effective in communicating to people of all ages that we all share in the solution to water pollution.



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Makes learning fun! Works well in classrooms, county fairs, community workshops for local government officials and citizen groups.

An educational tool that communicates basic environmental concepts linked with language, behavior, sociology and science.

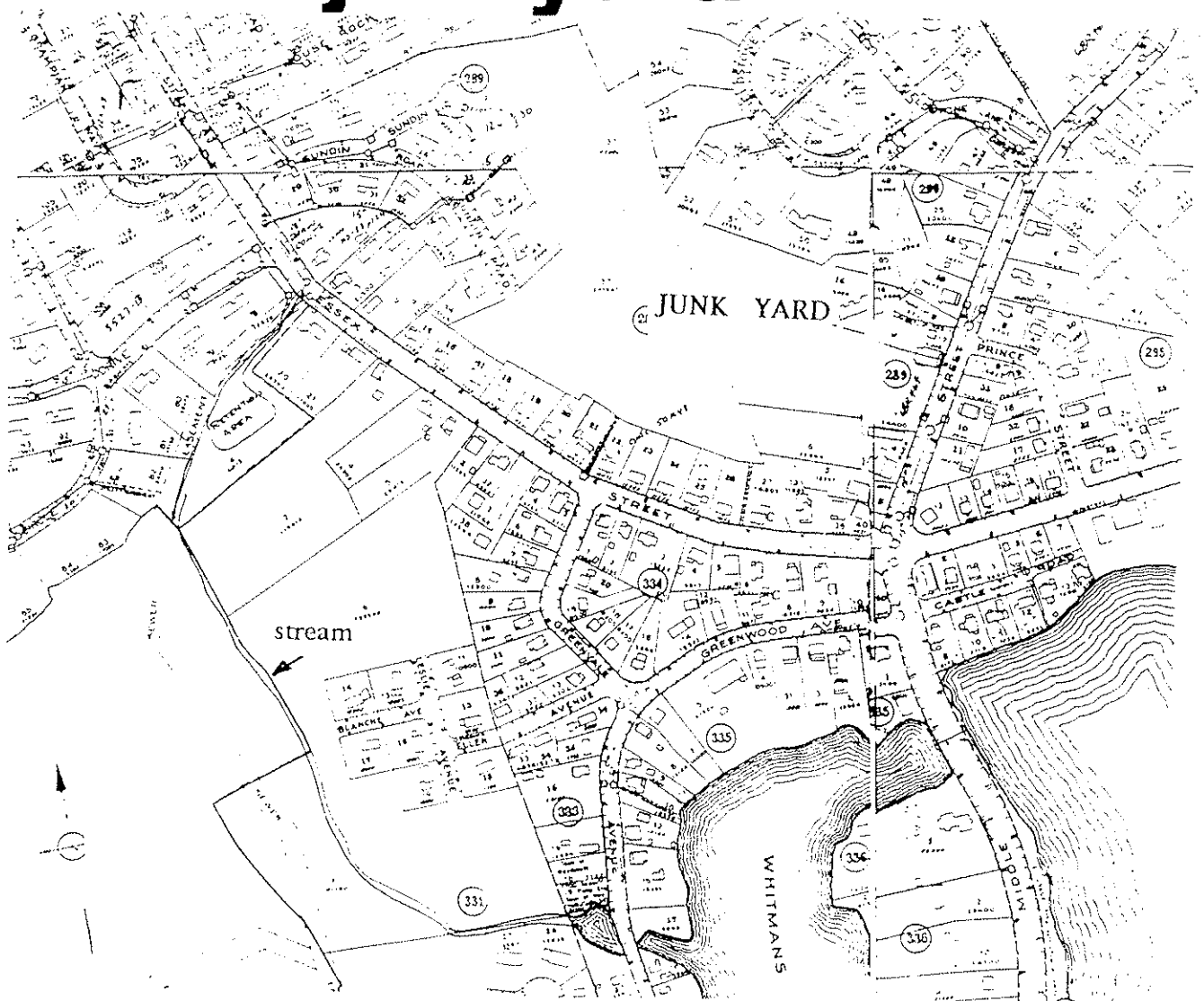
For a product brochure, call, fax or write to JT&A, inc.,

1000 Connecticut Avenue, NW, Suite 802, Washington, DC 20036
Ph (202) 833-3380
Fx (202) 466-8554

Junk Yard Pollutants Feed Into Whitman's Pond West Cove

Weymouth closes junkyard

Tuesday
January 14, 1997



LIVING MACHINE HELPS FILTER POND

The Patriot Ledger, Mon., Oct. 13, 1997

'Living machine' helps revive pond

By Robert Lee
The Patriot Ledger

WEYMOUTH — Scientists hope a "living machine" that filters and cleans 100,000 gallons of water a day will help eliminate weeds threatening Whitman's Pond.

The "machine," which floats on a raft anchored in the pond's South Cove, is actually a collection of 20 different plants and hundreds of microbes chosen to bring the pond's biochemistry back into balance.

The plants and microbes break down organic waste, pesticides and nutrients that feed the harmful weeds.

The 15-by-30-foot raft was launched in June by biologists from the Ocean Arts Co. of

Water quality said to be improving

Weymouth

Falmouth.

Members of the Whitman's Pond Improvement Association, which paid for the living machine, say they are encouraged by early test results that show phosphorus levels in the pond declining. Phosphorus is an indication of leaking septic systems, a source of the weeds' nutrients.

"It absolutely has made a difference. The quality of the water has improved in that area,"

association Vice President Lorraine Larrabee said.

"The raft is a perfect solution for us because we cannot use chemicals in the pond because it goes into our water supply."

The town gets 40 percent of its drinking water from the pond. The water is treated at the Washington Street pumping station before it is piped to homes.

Biologist Christine Graziano, the project manager for Ocean Arts, said the main problem in the pond is an infestation of a European pond weed called milfoil.

The leafy grass is growing in such abundance

that when it decays it leaves deposits on the bottom of the pond that can turn large areas into bog and swampland.

The plant grows so quickly that it has absorbed virtually all the nitrogen and ammonia from the pond. The amount of oxygen also has declined, although not to dangerously low levels.

Graziano said the milfoil infestation is a symptom of pollution caused by leaking septic tanks and tainted stormwater runoff — pollution that has created an ideal growing environment for the weed.

Ecological Raft to Rescue Whitman's Pond

Weymouth News

That raft you may have noticed floating in the South Cove of Whitman's Pond is not for swimming.

It's a floating biological filter, which is being used as a possible long-term solution to the eutrophication (i. e. oxygen deficiency) in the pond.

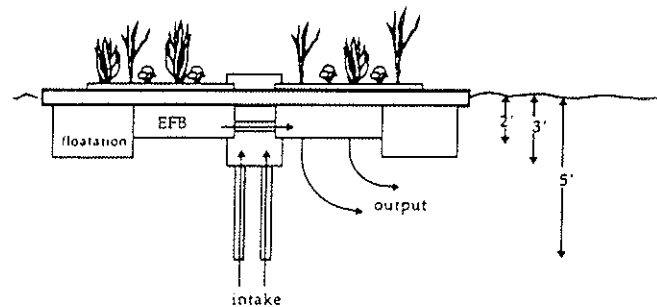
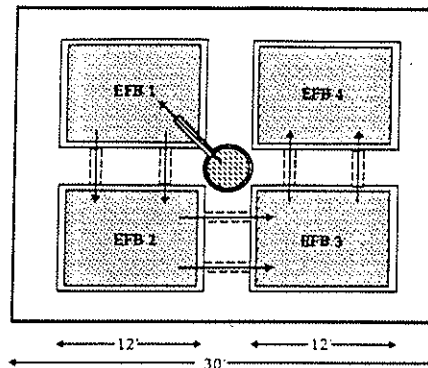
The raft contains vegetation (plant) cells that manufacture oxygen to control algae and excess growth of weeds, reduce nutrient accumulation and coliform contamination.

In effect, the raft, called a

"Lake Restorer," replaces natural wetlands with a floating wetland, harboring snails to graze on algae and fish to filter suspended particles from the water.

Installation of the raft was done by Ambient Engineering, Inc., which has reported considerable success with a similar contrivance on Flax Pond in Harwich.

Another such raft is proposed for the West Cove of the pond.

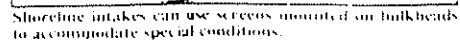
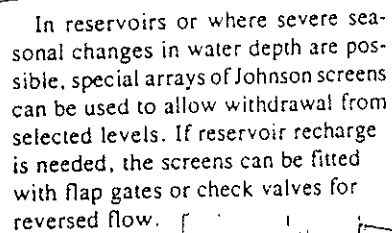


This may look like just a raft in the South Cove of Whitman's Pond but actually it's a floating ecological filter, an innovative solution to chronic eutrophication of the pond.

Thirteen Suntree Isles filters Installed in Whitman's Pond Street drains and DPW Building drains.

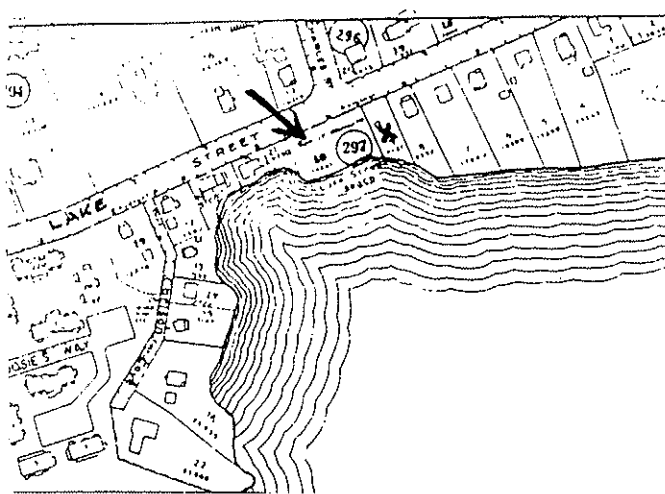


To Solve Your Intake Problems We Study Them In Depth.



Lake Street Beach and Swimmers's Itch

Wednesday, July 6, 1994



Group wants to eliminate Weymouth pond itch problem

The eggs hatch into a larvae that swims around until comes in contact with a snail.

Another larvae is produced, and 30 days later it comes out of the snail and swims around to search for a wildlife and penetrate its skin, beginning the reproductive cycle again.

Oftentimes, it will mistake a human for a bird. People get swimmer's itch when the parasite imbeds itself in their skin.

Experts say one way to treat the problem is to drop copper sulfate in the water. But that's not possible in Whitman's Pond since it's the town's secondary water supply and the chemical is toxic.

"It would also kill anyone who drinks the water," Mertz said. "It's not a reasonable approach."

Blankespoor said the most successful method he has found is to catch the host birds and inject them with drug that kills the parasite.

The question now is whether the Common Merganser inhabit Whitman's Pond?

Johnson said she is not sure. An avid bird watcher who lives on Whitman's Pond has never seen the duck.

The Common Merganser is an exotic, wary bird. The males are black and white, with a salmon-colored breast. The females are grey with a white bib, red head and plume of feathers.

According to the Audubon Society Field Guide of North American Birds, the waterfowl lives in Maine, Michigan, Alaska, Manitoba and New Foundland. In the winter, it travels to Mexico.

But Johnson said catching the birds and treating them would be far too costly. She thinks the best route to take is to remove the snails in the water — the question how.



III. Identifying Pond/Watershed Problems and Causes

A. In Pond/Lake Problems

1. Water Quality:

- (a) The biggest problem facing our town is the lack of sufficient drinking water. We are using more gallons of water per day more than we are able to replenish. The State has placed Weymouth under the restriction of finding any leaks and/or finding a new source of water. The closed Naval Air Base land use plan will require substantial amounts of additional water, but are required to find their own source, possibly from an aquifer under the base. New private developments will add to that burden. Consultants were hired by the DPW to try to locate additional feasible water sources.
- (b) Libbey Office Park is located just below Whitman Pond South Cove. (see map pg. 33) When it was planned restrictions were placed on the type of businesses allowed to locate in its perimeter, because of a large aquifer that lay just beneath the park.(pg.40/41) We know that some types of businesses were not allowed to build there. We want to assure that the aquifer remains unpolluted.
In 1977 Libbey/Whitman's Pond well was closed because of the levels of radon found there. High salt levels were also detected. We found on the Air Base high salt levels from a small rubbish site that drains into Old Swamp River. A plan was presented to allow businesses to locate in Libbey Park. Because of the fragile aquifer, an EIR was placed on the site. Although those limitations were too lengthy to reprint here, we are studying this protect the aquifer.(pg.66)
- (c) We are very aware of a need to protect bodies of water in our watershed. Old Swamp River is one in case. It runs through the closed Naval Air Base. Two members of our committee are on the RAB (Restoration Advisory Board). Many thousands of dollars were spent to bore test wells all over the base and evaluations were made from these tests. When a fire occurred, years ago on the base, burning the PX, theater and gym, rubble from the three fires was placed in a rubbish disposal area near the banks of Old Swamp River. The team that did the evaluation printed their 600+ pages of their findings. In evaluating the rubbish disposal area next to our river, they were not aware that Old Swamp was part of Weymouth's drinking water. They did state, however that children should not wade in the water, workers in the area should wear protective gear. Even after they were made aware the Weymouth residents drank the water, they made no plans to remove the contaminated rubble from the banks. Drains from the rubble area run into Old Swamp River. We are still protesting this at every meeting and comment period.
- (d) The eutrophication of the entire Whitman's Pond is one of our biggest problems. We would like to dredge the area that we were advised to have done by Metcalf and Eddy (pg., 64).

A. In Pond/Lake Problems

1. Water Quality (continued)

The dredging of South Cove would add greatly to its rain water holding capabilities as a water supply source.

- (e) In our watershed we have a recently closed auto junk yard called Zeoli's Junk Yard. It was classified by the state as a hazardous waste site. The selectmen refused to renew the license. The owner has been incarcerated for many years. It is 650 ft. from the Whitman's Pond. A stream in back of the yard runs into West Cove. We plan to (pg. 53) formulate a remedial plan. We are investigating the Brownfield Law.
- (f) As Whitman's Pond is a flowing body of water, we are trying to have our Pond reclassified, so that it can be afforded the protection of the Rivers Act.
- (g) The greatest pollution-causing problem in Whitman's Pond is periodic releases of raw sewage into the pond. The issue is very complicated. Weymouth's sewage is handled by the MWRA through an outfall pipe in Braintree/Weymouth, where sewage from several towns comes together. During times of excessive rains and sewer usage, the increased quantity cannot pass through this constricted area fast enough and sewage backs up in Weymouth's pipes and sometimes into people's houses. To relieve this backup selected covers on sewer mains are opened, and the sewage is allowed to run off into a wetland area that feeds Whitman's Pond through West Cove. Overflows also occur at Pine Street where the sewage flows directly into Old Swamp River, a source of the Town's drinking water. Federal, State, and local authorities are aware of this problem. We hope for a solution.

2. Plant Infestation:

Despite many precautions followed, the plant infestation seems to be on the increase each year. Two plants, milfoil and purple loosestrife, new to the pond since the last studies, have greatly magnified the problem. Sonar, tried for one year in West Cove has had some success, but because of state restrictions cannot be used in South Cove.

3. Algae Blooms:

The alewives and the blueback herring feed on algae and we feel keep excessive blooms down. In South Cove, the self-cleaning Johnson screen filters prevent algae from clogging the pump. It also decreases the need for copper sulfate and alum.

4. User conflict

An article has been submitted to the May 1998 Weymouth Town Meeting by the Whitman's Pond restoration Committee to add to the Back River ban on Jet Skis to include Whitman's Pond. The article was passed.

5. Lake Bottom Changes:

The bottom sediment of Whitman's Pond in the tests done by Metcalf and Eddy in 1983 found much to be desired (see pg. 13). In our volunteer testing to determine more recent findings, cost would be a big question.

6. Changes in Fisheries:

The lack of alewives making the climb to spawn in Whitman's Pond, has been more due to illegal massive netting of those fish in the Back River, the Herring Run Committee feels. We do not know why the drop in the number of hornpout, once so prevalent, has persisted. Other fish, reported by the fisherman, seem to be abundant.

7. Shallowness

The depths of the Pond, (pgs. 24/25) are diminishing every year. Dredging appears to be the only solution.

The Patriot Ledger, Mon., July 20, 1991

Town closes well; radon found

By Jay Weaver and Scott Allen
The Patriot Ledger

Weymouth

WEYMOUTH — The town has shut down a municipal well after discovering that it contains a potentially dangerous level of the radioactive gas radon, local officials said yesterday.

The Libbey Park well contains more radon than the U.S. Environmental Protection Agency considers safe.

Stan Rydell of the EPA said the radon concentration in the well would pose at least a two-in-10,000 risk of cancer if people relied on that well alone for their water.

However, since the Libbey Park well, located off Pleasant Street, accounts for less than 5 percent of Weymouth's water supply, the actual risk is much less, Rydell said.

"This is a precautionary measure until the town finds out what the safety standards for radon are going to be," department of public works Director Frank Lagrotteria said yesterday.

Radon, the second leading cause of lung cancer, is an odorless, colorless gas that seeps into homes from beneath the Earth's surface. In extreme cases, people may be inhaling the equivalent of two packs of cigarettes a day from the radon gas in their homes.

The major problem with radon in drinking water is that the gas will escape into the air as it is used in washing machines, showers, sinks and toilets.

Under proposed safety standards published by the EPA July 18, drinking water supplies can contain no more than 300 picocuries of radon per liter of water. Rydell said a 300 picocuries concentration would cause 2 cancer cases in every 10,000 people who relied on it for water.

Weymouth water superintendent John Buckley informed the Public Works Board last week that the Libbey Park well radon levels are "above the proposed regulatory standard."

Despite the radon readings, Lagrotteria said, the well "is not a public health hazard."

The EPA's Rydell said he was surprised that the town had decided to shut down the water source. "We're going to have a water shortage in Massachusetts if everyone shuts off the water that is not in compliance," he said.

Rydell estimated that 80 percent of the water supplies in the state would have to take action to reduce radon levels. Nationwide, the EPA expects 26,000 drinking water sources to be in non-compliance with the proposed rule.

Rydell said reducing radon levels in drinking water can cost anywhere from a few hundred dollars to several hundred thousand, depending on the severity of the problem.

For minor violations, Rydell said the public works department could simply pump air bubbles into the water storage tank to force the radon gas out.

In his letter to the public works board, Buckley said this process, called aeration, would bring the Libbey Park well into compliance with the proposed regulation.

Local environmentalist said they were also surprised that the department of public works closed the well, claiming it has been indifferent to environmental issues in the past.

"The department of public works has never taken a pro-active stand on the quality of water in this town, and

now they are being pro-active about radon when there are no regulations for it," Robert Loring of South Weymouth said. "This is mind-boggling."

The Libbey Park Well is one of five municipal wells in Weymouth. The public works department treats the Libbey Park Well water with chlorine, but lacks the facilities needed to remove the radon, Lagrotteria said.

Water from the town's other four wells, located in the Mill River Valley aquifer, is treated at a plant off Winter Street. Radon in those wells is aerated out, Buckley said.

The public works department is not pumping water from two of the Mill River Valley wells — Winter Street well No. 1 and the Main Street well — because they are contaminated with high levels of iron and manganese.

That leaves only other two municipal wells in operation. Both of those wells were polluted with chemical solvents between 1985 and 1990, according to a town report released by the public works department last month.

Officials said most of the solvents were removed at the water treatment plant, so the levels in the drinking water were not unsafe.

B. Watershed Problems

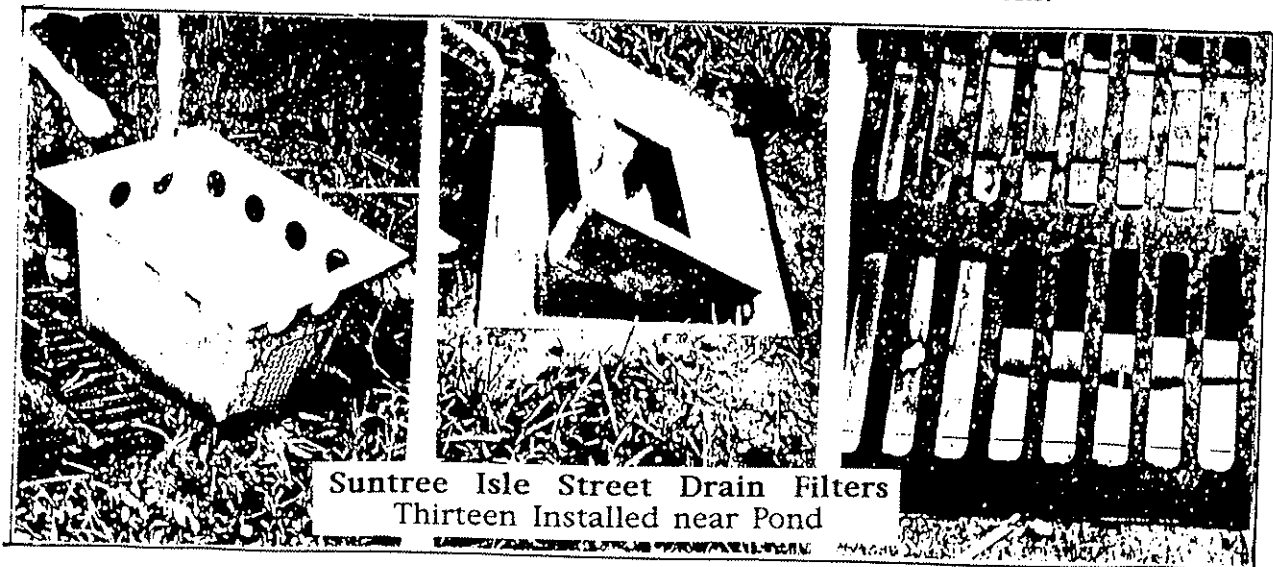
1. Nonpoint Source Pollution Profile:

Nonpoint source pollution reaches the Pond from Middle Street and Washington Street Highway runoff and from the last few remaining houses around the pond which have not yet been "hooked up" to the town sewer system. The Department of Public Works has an aggressive program encouraging all residents to attach to the central sewer system. Highway runoffs have been partially addressed by the installation of Suntree Isle catch basin inserts at selected points. (pg. 55) There is additional pollution in the streams that feed the pond which has yet to be identified and resolved.

2. Point Source Pollution Profile:

Over the past two centuries, several commercial enterprises, including an iron mill, a tanning factory, a paint factory, an automobile junk yard, and an electronics factory were all established on or near the pond. While these may seem to be point sources, the nature of their possible pollution effects has not been documented. The location of the junk yard, paint co. and electronics factory are known, but their effect on the groundwater, and consequently the pond is unknown. There are approximately fifty-three catch basins that drain directly into the pond. In 1997 a program was initiated to install thirteen Suntree Isle filter inserts in the worst of these polluters in an effort to clean the street run off going into the pond.

Possibly the most serious pollution of Whitman's Pond comes from overflowing sewer mains next to the watercourses that feed the pond. To relieve the pressure in the sewer mains, and therefore reduce the possibility of flooding in nearby houses, sewer main covers are opened during periods of heavy rains, thereby releasing great quantities of raw sewage directly into a wetlands area that feeds the West Cove of the pond. Also at the Pine Street pumping station in South Weymouth, sewage is released directly into Old Swamp River during heavy rains. These sewer overflows have a direct bearing on the eutrophication of the pond. Resolutions are now under study by the Department of Public Works.



IV. Pond and Watershed Management Plan Formulation

A. Identify Management Goals for the Lake and Watershed

1. Survey of members goals:

When taking a survey of members at a recent meeting dredging, bottom silt testing, aeration and opening the beach were needed, if the money can be found. Dredging led the list.

2. Some progress:

The banning of phosphorus from soap detergents; the successful elimination of pollutants coming from a Hingham Industrial site into Old Swamp River; the closing of a near-by auto junk yard, that had been deemed a hazardous waste site; the continual increase toward our goal of to have 100 % of homes hooked up to the sewer system; the herbicide Sonar applied in West Cove by Lycott; a management plan for the SNUP in South Cove; the natural filtering of 200,000 gallons of water daily in South Cove by Ocean Arks, decreasing the milfoil; the very recent installation of thirteen Suntime Isle street drain filters leading to Whitman's Pond; the successful yearly clean ups of the Pond due to the leadership of Lorraine Larrabee; all add hopefully diminishing of the eutrophication of the pond.

B. List of Management Goals:

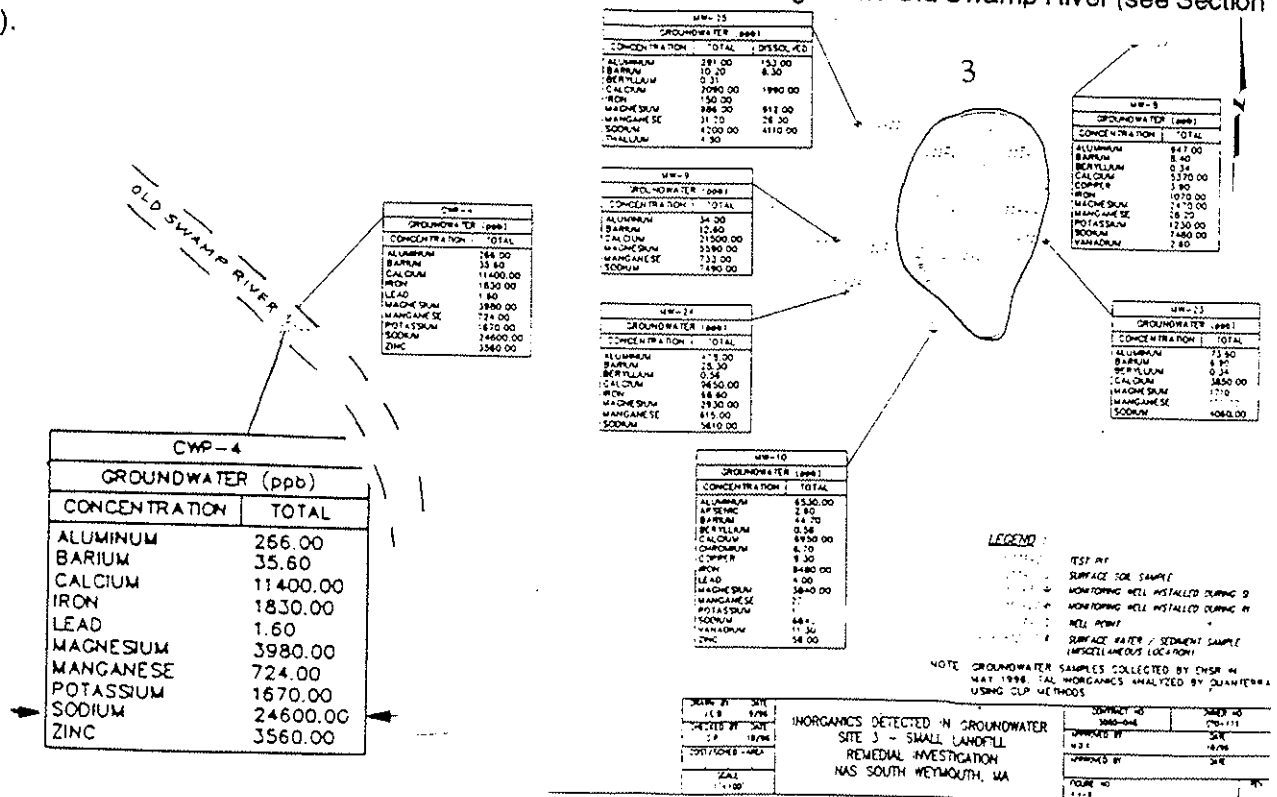
- (a) Closer monitoring of Libbey Park.
- (b) Making Town aware of Air Base contaminants near Old Swamp River
- (c) Supporting efforts to cap Zeoli's Junk Yard.
- (d) Trying to find a cure for Swimmer's Itch and open the Lake St. Beach
- (e) Continue the successful yearly clean-ups.
- (f) Continue trying to rid the Pond of growing evasive weeds.
- (g) Try to get much needed money from grants to continue our work.
- (h) Trying to get money to dredge Whitman's Pond as noted on pg. 64.
- (i) Trying to discourage the growing number of Canadian Geese on the pond.

High Water Sodium Levels Found In 13 Area Towns

Stoughton 14
Walpole 36
Wellesley 33
Westwood 27
Weymouth, tap on system, 10
G.P. well Whitman's Pond 45
Whitman, tap on system, 19

SITE 3 - SMALL LANDFILL

The stratigraphy of the SL generally consists of sandy till, overlain by sand and gravel, then fill and debris. Groundwater is relatively shallow, at an average depth of approximately 7 feet bgs in areas of fill and debris, and approximately 3 feet bgs downgradient of the fill and debris; its flow direction is westerly at a relatively steep gradient (relative to the other IRP sites), and discharges into Old Swamp River (see Section 3.0).

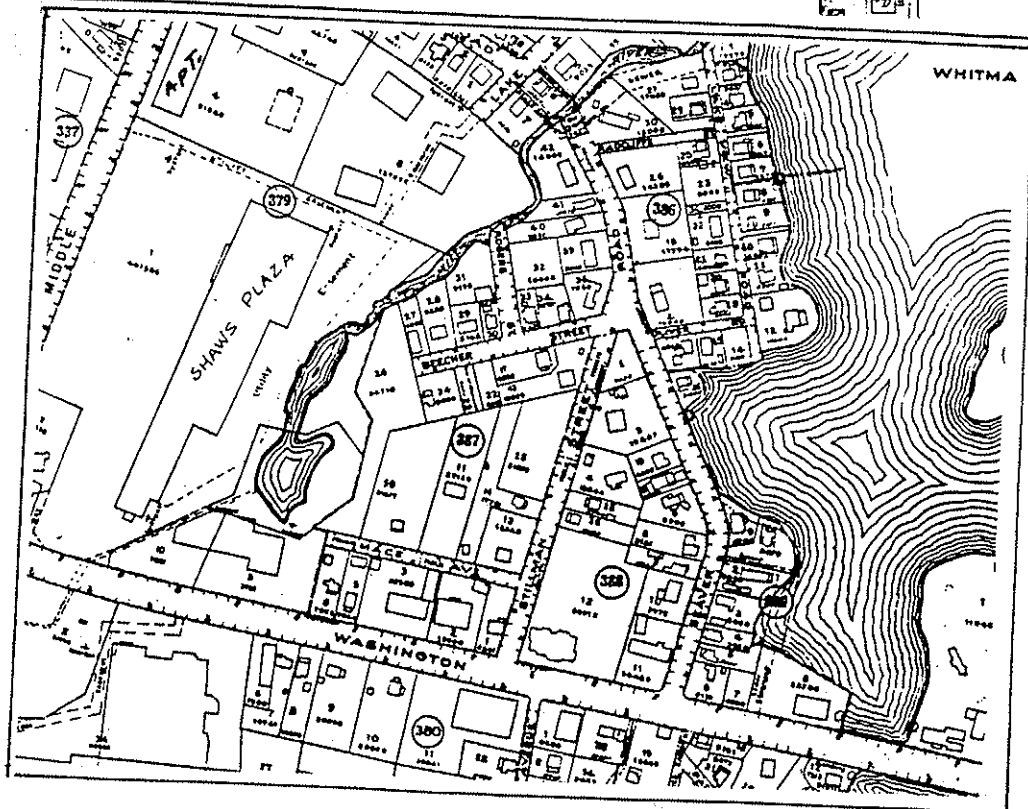
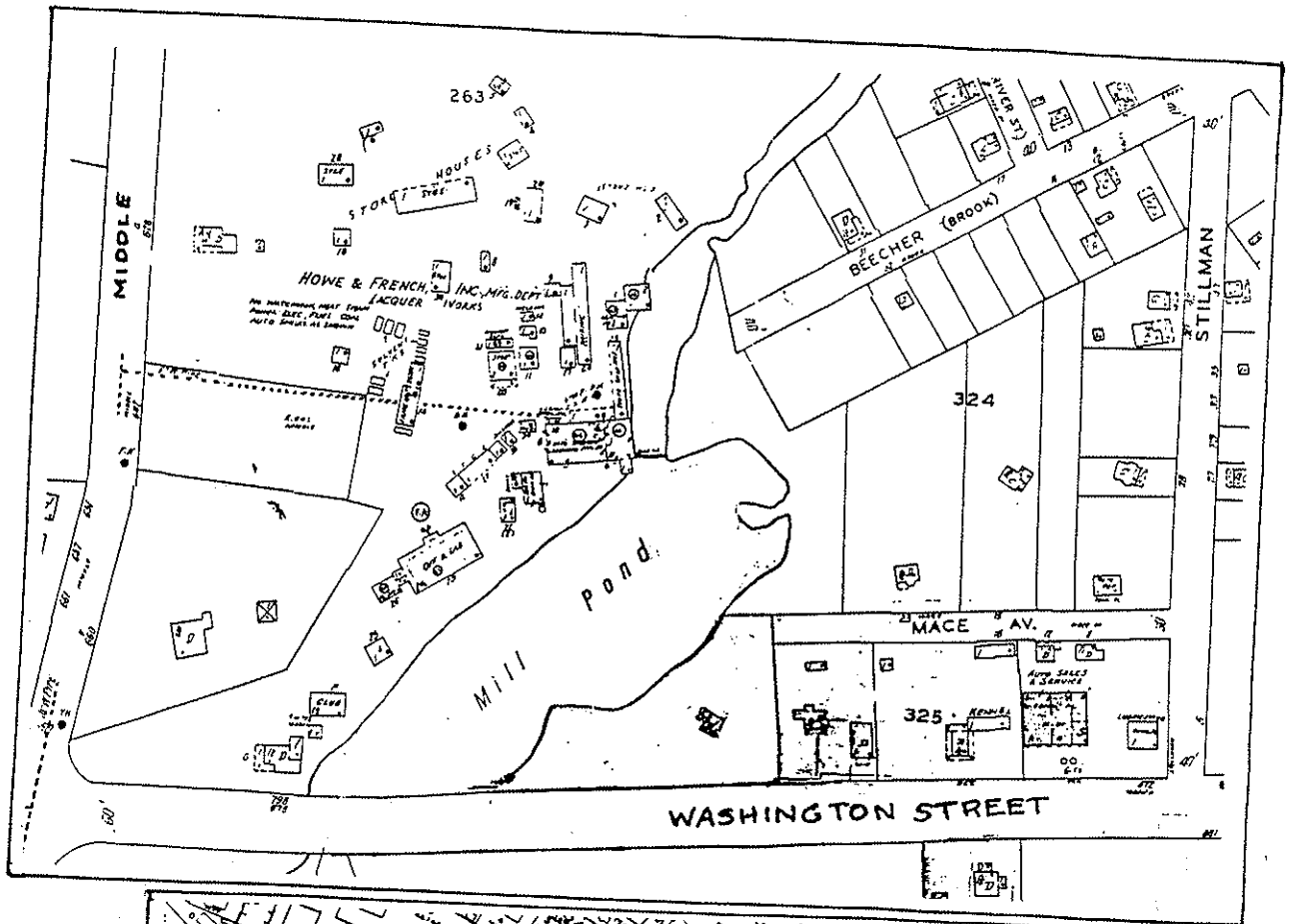


Metcalf & Eddy

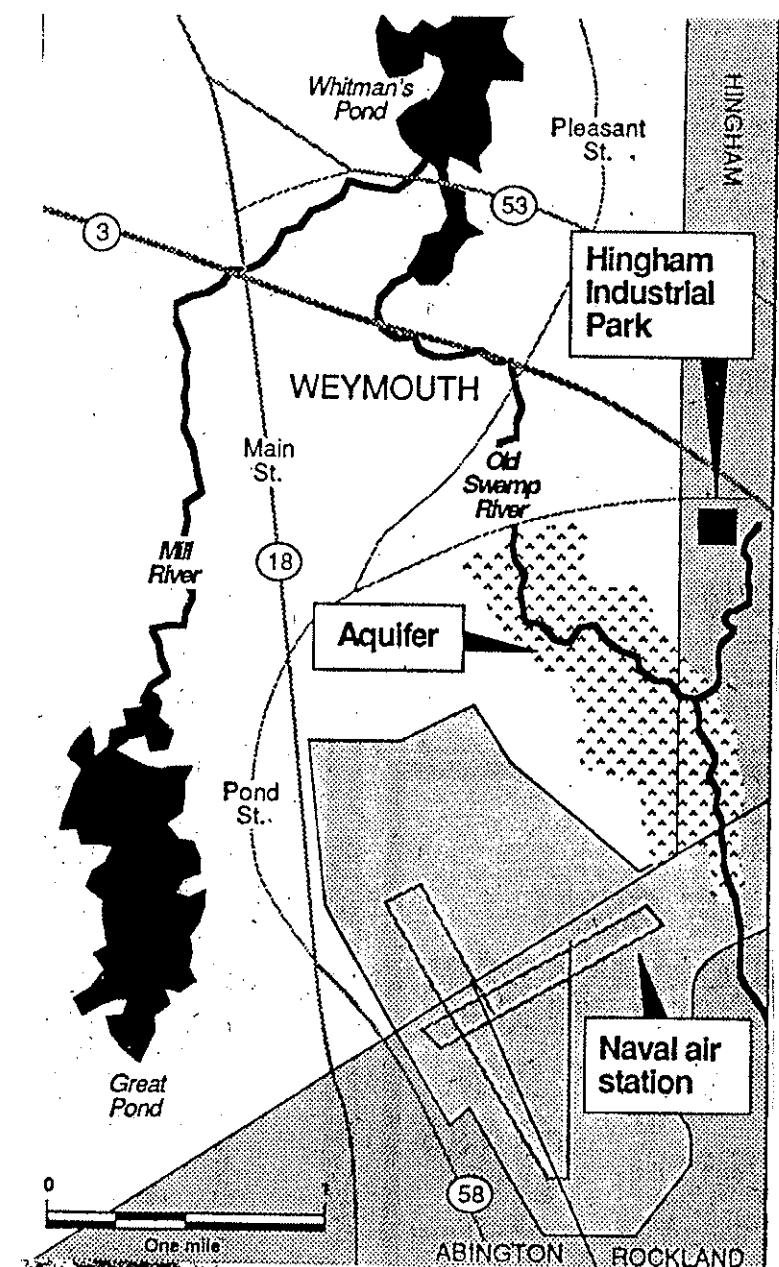


METCALF & EDDY

Howe & French, Inc. Lacquer Works
 Stood until around 1968 where Shaws Plaza is to-day



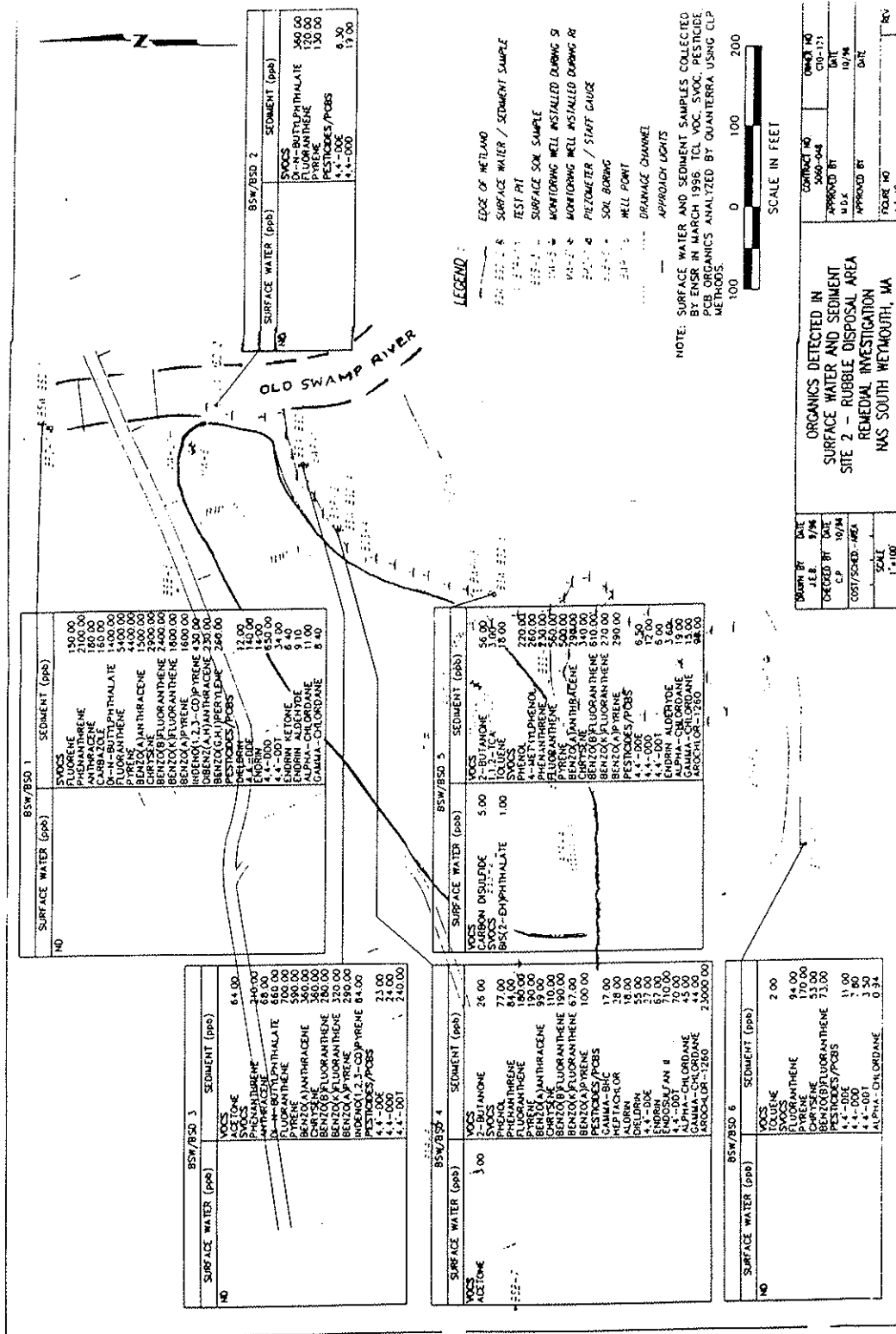
Air Base Problems in Our Watershed



Whitman's Pond Committee and Association Touring the Air Base (see pg.58-c)



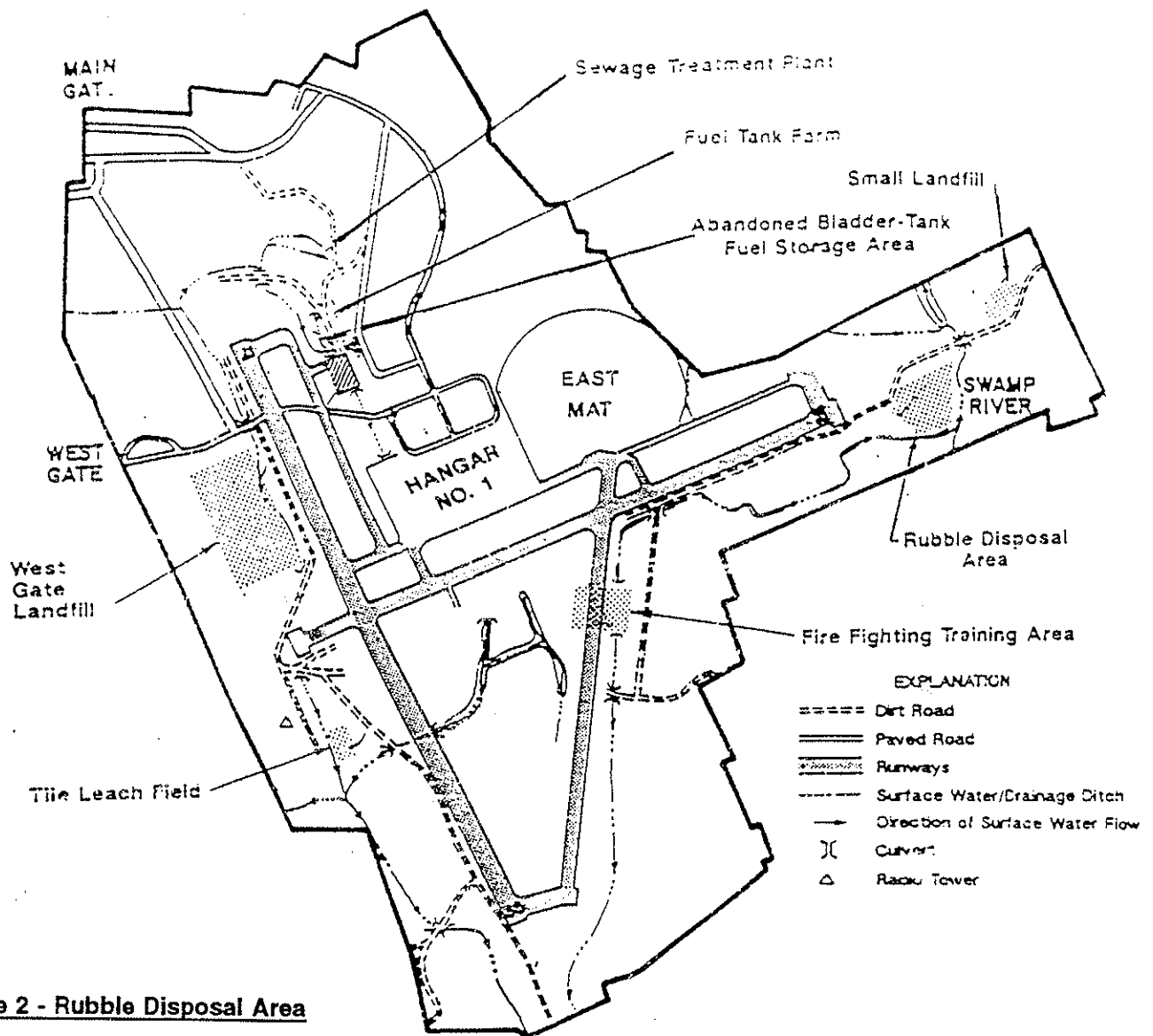
Air Base Problems in Our Watershed



Estimation of Potential Sediment Exposure

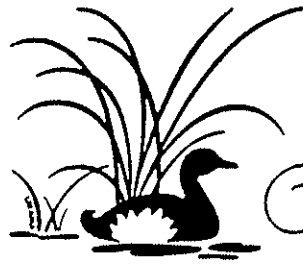
It was assumed that the on-site worker (RME only), trespasser, and hypothetical future on-site resident could be exposed to sediment in the portions of Old Swamp River and French Stream that intersect the sites. The CTC scenario for the on-site worker assumed no exposure to sediment, because in reality there is little reason for workers to contact sediment in these surface water bodies.

Air Base Problems in Our Watershed



Site 2 - Rubble Disposal Area

Future Scenario - Risk estimates for the construction worker receptor were below EPA's acceptable risk benchmarks. However, potential cancer risks for the RME and CTC on-site resident were above EPA's upper-bound cancer risk level of 1×10^{-4} . Noncarcinogenic risks for the RME and CTC on-site resident also exceeded EPA's target HI of 1. These exceedances were due mainly to PCBs in sediment and inorganics and heptachlor epoxide in groundwater. Lead in surface soil and groundwater was evaluated using EPA's IEUBK model (EPA, 1994d). The percent population predicted to exceed blood lead levels of 10 ug/dL was 7.8%. This level is greater than the exceedance probability of 5% that has been used by EPA in evaluating the potential need for remedial actions.



Whitman's Pond Association

Mr. Steve Asen
Department of Environmental Management
Lakes and Ponds Program
100 Cambridge Street - 19th Floor
Boston, MA 02202

October 28, 1998

Dear Mr. Asen:

Forwarded please find two copies of the Whitman's Pond Management Plan. This document was produced to correspond to the format outlined in DEM's "The Lake Management Plan Workbook".

Mrs. Barbara Johnson, a well known and respected environmental activist in Weymouth (and a member of many local committees and societies) has been the leading contributor and author of this Management Plan, and as such is well appreciated by the community, and especially by the Whitman's Pond Association.

Over the last few months Mrs. Johnson has been conversing with Mr. Bob Hartzel of your office, and he approved a deadline extension for DEM's receipt of this plan. I understand that Mr. Hartzel has recently left DEM, and that he has coordinated the deadline extension with you. We hope that this Management Plan will help in bringing our pond restoration efforts into focus, and will meet all the requirements needed to apply for lake management grants.

If you have any questions regarding this plan, or if additional information is needed, please contact either Mrs. Johnson or me, and we will be happy to respond.

Yours for a cleaner environment,

James M. Cunningham, President
Whitman's Pond Association
58 Lake Shore Drive
Weymouth, MA 02189

(781) 331-0545

Enclosure

cc: Weymouth Board of Selectmen
Weymouth Board of Public Works
Whitman's Pond Restoration Committee
Mrs. Barbara Johnson

Worst-Case Scenario - Risk estimate

... However, potential

upper-bound estimate of risk

... of

... water

... (EPA 1994)

... is

... for

...