



TOWN OF HULL
Town Manager's Office

253 Atlantic Avenue
Hull, Massachusetts 02045

781-925-2000
Fax: 781-925-0224

May 5, 2021

Dear Mr. Bell and Members of SPWA:

Attached is a report from Hull Conservation Administrator Chris Krahforst that details the efforts that have been made in the last year regarding Straits Pond. The focus has been to maintain operations in a manner consistent with established permits and to make operational adjustments that could have a positive impact on midge control, control flooding, and minimize eutrophication.

In addition to on-going operations the Straits Pond Technical Advisory Committee (SPTAC) has been reconvened to identify potential mitigation actions and next steps. The membership of the Committee includes the following:

- Tom Bell, President, Straits Pond Watershed Association
- Jason Burtner, South Shore Regional Coordinator, Comm. of MA- Coastal Zone Management (CZM)
- Todd Callaghan, Coastal and Marine Scientist, Comm. of MA- Coastal Zone Management (CZM)
- Sara Grady, Ecologist at Massachusetts Bays National Estuary Partnership and North and South Rivers Watershed Association
- Eric Hutchins, National Oceanic and Atmospheric Administration (NOAA)
- Nancy Putnam, Ecology Director, Comm. of Mass Department of Conservation and Recreation (DCR)
- Loni Fournier, Hingham Conservation
- Chris Krahforst, Hull Conservation
- Cohasset Conservation Agent invited but did not attend

The Advisory Committee is comprised of both State and local representatives that have a deep set of professional experiences and abilities. We are fortunate to have the time and effort of our partners to help guide next best steps. Straits Pond is part of an Area of Critical Environmental Concern; one of only 27 statewide. As such every action taken that could impact the Pond, whether it is to adjust flushing schedules to larger actions such as sediment removal is subject to intense Federal and State regulatory review. This has to be factored into the expectations that some may have regarding

proposed solutions. This is a complex ecosystem abutted by populations on both side of the Pond that impact the system in known and unknown ways.


The FY22 budget has been expanded considerably with participation from Hingham and Cohasset. This will help, in particular with the on-going research. The Town of Hull has expended enormous resources in the area to help to improve the water quality in the Pond. For instance we have recently added an additional two feet to the seawall that is adjacent to Atlantic Ave. The additional height not only provides for more storm protection for the homeowners in the area but also reduces the amount over wash debris that would routinely flow into the Pond and decrease its depth. This was a seven million dollar project. The sewer mains on Atlantic Ave have all been re-lined in the last year and the water main is about to be. Most importantly every storm drain that is located on the Hull side of the Pond will be upgraded to highest environmental standard (MS4) as part of the eight million dollar Atlantic Ave reconstruction project. This will mean that any storm drain run-off from Hull will meet Federal standards and be far cleaner than it is today. You may want to request a report from the Cohasset Sewer Commission and Public works Department regarding the conditions of the sewers system and status of storm drain upgrades for the entire catchment area that flows to the Pond.

As you can see from the attached historical documents the presence of midges has been a long standing issue with a variety of solutions attempted but with no clear long term permanency. In fact this issue goes back well over 150 years when the natural landscape was altered to create the Pond that exists today. We will continue to pursue the best strategies available that are acceptable to our Federal and State regulatory partners.

Lastly, citizens in Hull can contact either me or the Conservation Department; citizens in Cohasset should contact Cohasset Town Offices. I would hope that SPWA will also advise citizens that this is not the type of problem that will be resolved quickly nor can it be resolved with the introduction of pesticides or other invasive treatments because of the environmental status of the Pond as an ACEC.

I would also hope that everyone involved would acknowledge that because this is a vibrant and complex ecosystem with many changing variables that interact with each other to produce midges in any given year. The fact that there was a hiatus in midge swarms is not necessarily indicative that Pond had reached a perfect end point regarding this issue. It may just mean we had a hiatus and that one or many of the other variables, both known and yet to be identified has changed in value. We will continue to explore and seek a better outcome.

Thank you,


Philip E. Lemnios
Hull Town Manager

Cc: Town Administrator Tom Mayo, for distribution to Hingham Officials
Town Manager Chris Senior, for distribution to Cohasset Officials
Hull Board of Selectmen
Chris Krahforst, Hull Conservation Administrator for distribution to SPTAC



Conservation Department
253 Atlantic Ave.
Hull, MA 02045
Phone: 781-925-8102
Fax: 781-925-8509

Town of Hull

Memo

To: Philip Lemnios, Town Manager
From: Chris Krahforst, Conservation Administrator
Date: 4/22/21
Re: 2020 – 2021 Activities re: Straits Pond

Below is a report on activities regarding Straits Pond

OPERATIONS

Tide gate has been operated manually following a schedule that has been reviewed by the Straits Pond Technical Advisory Committee (SPTAC). The SPTAC has recommended the gates be operated to accomplish several objectives:

- Maintain 2.8 ft mean water level (NAVD88) as per SP Tide Gate O&M
- Avoid flooding (SP professional studies indicate upper level 3.3 ft (NAVD))
- Maintain maximum allowable exchange to minimize nutrient buildup, keep salinity levels high, and improve ecosystem continuity with Weir Estuary
- Tide gate operations log are attached; as supported by TAC operational objective (see immediately above)
- Pond salinity is at targeted protective levels to inhibit midge larvae to pupate (> 28 ppt) **with manual operation of tide gate system.**
- Annual Water Quality Survey conducted (see attached)
- Developed strategy for quick qualitative survey

ON-GOING RESEARCH

- \$40,000 Funding requested in FY22 Budget for Sediment Survey and additional environmental services
- Explore options to improve flushing (proposed action by SPTAC, Proposal submitted to Towns for funding, see attached)
- Midge larvae and adult samples preserved and sent to Dr. Ferrington, U Minnesota, June 2020 (no results as of 4/15/2021)
- Correspondence with Dr. Gratton, U Wisconsin for guidance on how to get this species identified (April 2021)
- Review of historical documents (see attached PDF)

TIDE GATE AUTOMATION STATUS:

Repairs Completed to date:

- Pond level sensor on-line
- Sensors for tide gate controls have been acquired mounting structures built
- Electrical components -wiring and connections are being evaluated and corrected
- Controller waiting on critical parts. Supply chain issue with electronics

*Please note that while gate system is being manually operated in the same frequency as the automated gate would be while final repairs are made.

Attachments:

- Tide Gate repair and maintenance Status Submitted request for FY22 funding (01/20/2021) -Funds for operation, investigation and capital repairs
- Tide Gate Log copy
- Repair Invoice by Charybdis Group
- 2020 Salinity Survey
- 2021 Salinity Survey
- Historical SP Articles (Courtesy of the McNamara Family)
- Pictures of samples sent to University of Minnesota.

FY22 STRAITS POND BUDGET

(7/1/21-6/30/22)

Budget Item	Description	FY22	Hull Share	Cohasset Share	Hingham Share
Straits Pond Environmental Coordinator	Management of Pond and Committee Participation	\$6,000	\$3,000	\$1,500	\$1,500
Hull Public Works Labor Costs	Overtime Costs to manage Pond Levels	\$2,000	\$1,000	\$500	\$500
Tide Gate Keeper Stipend		\$4,000	\$2,000	\$1,000	\$1,000
	PERSONNEL COSTS	\$12,000	\$6,000	\$3,000	\$3,000
Sediment Survey	Examine feasibility of removing or dredging upstream from the tide gates	\$30,000	\$15,000	\$7,500	\$7,500
Environmental Services	Funds to hire environmental consulting services as needed (incl testing)	\$10,000	\$5,000	\$2,500	\$2,500
	PROFESSIONAL SERVICES	\$40,000	\$20,000	\$10,000	\$10,000
Other Costs	Utilities	\$750	\$375	\$188	\$188
Upgrade Sluice gate actuators feedback	Upgrade actuators function with positive feedback, Repair Memo, Invoice	\$5,275	\$2,638	\$1,758	\$1,758
Assessment Gatehouse Climate Control	Invoice	675	\$338	\$225	\$225
Restore Tidegate Auto Function; sensors and logic control	Repair and Maintenance Memo and Invoice, Repair Memo, Invoice	23675	\$11,838	\$7,892	\$7,892
Assessment, Auxillary sluice gate restoration	Functioning Auxillary Sluice Gate, Repair Memo, Invoice,	2500	\$1,250	\$833	\$833
	CAPITAL COSTS	\$32,125	\$16,063	\$10,708	\$10,708
	TOTAL	\$84,875	\$42,438	\$23,896	\$23,896

2021 Tide Gate Operations Log

Gate Keeper: Conservation

Datum: mean sea level (NAVD 88)

Date	Time	Tide	Auto	Manual	Open	Closed	Partial Close %	screw inches	Reasoning
12/19/2020	7:30	outgoing mid		X	X		81%	47	
12/28/2020	8:00	incoming high		X	X		100%	58	Request by CZM for temporary Pond level datalogger monitoring
1/4/2021	12:00			X	X		79%	46	Significant surge in BH
1/15/2021	12:30	incoming mid		X		X	71%	41	
1/16/2021	6:30	outgoing mid		X	X		98%	57	opened one cycle to allow max drain
1/16/2021	11:30	incoming mid		X		X	78%	45	
1/19/2021	16:00	incoming mid		X	X		100%	58	period of weak neap, CZM testing
1/26/2021	15:00	outgoing mid		X		X	74%	43 (3' 7")	
2/1/2021	8:55	outgoing low		X		X	60%	35 (2' 11")	Nor'easter caution
2/2/2021	6:45	outgoing high		X	X		100%	58	Allow for Pond drainage
2/2/2021	11:42	incoming low		X		X	14%	8	Flood protection, low pond drainage, high BH surge (3')
2/3/2021	7:00	outing mid		X	X		100%	58	
2/3/2021	11:15	outgoing low		X		X	76%	44	
2/3/2021	17:30	incoming high		X		X	57%	33	
2/4/2021	8:30	outgoing mid		X	X		100%	58	
2/4/2021	13:00	outgoing low		X		X	78%	45	
2/17/2021	11:00	outgoing low		X	X		84%	49	minor adjustment to damping
2/27/2021	20:45	outgoing low		X		X	75%	44	Minor full moon
3/28/2021	9:35	outgoing low		X	X		83%	48	improve flush,
3/29/2021	8:00	outgoing mid		X	X		69%	40	high Spring Tides
4/3/2021	14:15	incoming high		X		X	100%	58	
4/12/2021	16:00	outgoing high		X	X		72%	42	Unusual and not predicted tidal surge in BH, peaked at 10.9 ft above MLLW
4/15/2021	15:50	incoming near slack high		X		X	50%	58	
4/18/2021	15:10	incoming mid		X	X		100%	29	Nor'easter predicted, neap tides condition
4/25/2021	15:45	outgoing mid-low		X		X	79%	46	high Spring Tides
4/26/2021	8:11	outgoing low		X	X		69%	40	high Spring Tides
4/28/2021	10:30	incoming mid		X	X		75%	44	too much dampening (?)
4/29/2021	8:03	outgoing low		X		X	70%	41	too little dampening (?) plus slightly higher highs and rain coming



Committed to Science and Technology

INVOICE

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INVOICE NO **20201002**
DATE October 2, 2020
CUSTOMER ID **[THULL]**
ORDER NO Email order

TO **Dow James**
Town of Hull
253 Atlantic Avenue
Hull, MA 02045
Ph.: (781) 738-2518
jdow@town.hull.ma.us

Chris Krahforst
Town of Hull
253 Atlantic Avenue
Hull, MA 02045
ckrahforst@town.hull.ma.us

QUOTE #	PROJECT	AMOUNT	PAYMENT TERMS
	Tide Gauge Repair/upgrade	\$20,000.00	Due upon receipt

QTY	DESCRIPTION	UNIT PRICE	DISC	LINE TOTAL
1.00	Integration of new microwave radar Tide Gauge: All-inclusive replacement of microwave radar transducer, 2mm accuracy, NOAA protocol, 4-parameter output: water level relative NAVD88, standard deviation, number of outliers, sensor internal voltage. Also included: 1 year service maintenance (unlimited calls), cellular data telemetry, and data warehousing.	\$20,000.00	0.0%	\$ 20,000.00
				\$ -
				\$ -
				\$ -
SUBTOTAL				\$ 20,000.00
SALES TAX				-
TOTAL				\$ 20,000.00

If tax exempt, ID#: 046-001-189



Thank you for your business!

Straits Pond Salinity Survey 5.26.2020

Massachusetts

Bay



27.0 ppt Top

29.1 ppt Top
30.3 ppt Bottom

32.3 ppt

27.0 ppt Top

31.3 ppt Top

29.4 ppt Top

Hull

Bay

0 0.1 0.2 0.4 0.6 0.8 1 Miles



Salinity (ppt)
03 May 2021

Massachusetts Bay



31.6

25.9

26.1

27.4

26.9

30.4

23.7



Salinity (ppt)
04 May 2021

Massachusetts Bay



31.3

30.5

25.7

24.0

26.6

26.5

25.6



THE HULL TIMES



1 *****CAR-RT LOT**C-001
1 W. MCNAMARA
5 RICHARDS RD
HULL MA 02045-3314

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Thursday, June 9, 2011

75¢

Blue skies and fair winds mark Class of 2011 commencement



The weather was perfect as Principal Michael Devine gave the opening remarks at the 2011 Hull High graduation ceremony, held at Hull Gut for the first time in several years.



Valedictorian Brandon Sprague gave the Honor Essay.



Straits Pond management 'hiccup' allows algae bloom

By Catherine Goldhammer

A recent buildup of algae on Straits Pond has elicited complaints from some residents and concern from others. The water level has also been reportedly low.

The pond, in the midst of a long process of ecological rehabilitation, has, in recent weeks, sported a swath of pale green algae that in some areas completely covers its surface. The buildup has abated in some areas following last Wednesday's storms.

Conservation Administrator Anne Herbst says that the bridge construction

project of last year meant that there was no water exchange between the pond and the river for the duration of the construction, and that this may have had a temporary effect on the ecology of the pond. Although the construction was completed last fall, the tide gates were not fully automated until this past month.

Town Manager Philip Lennius says that P.A. Landers, the contractor for the bridge project, has been finishing up the "punch list" of items on the bridge and that the automation and alarming of the tide gates ended up later on that list.

Continued on page 11



choir area. Coffee afterwards.

Weekday Eucharist Rite II is celebrated every Wednesday at 10 am. Bible study and coffee follows the service.

Last Wednesday of the month is a Healing Eucharist Rite II.

The church hall is available for rental for parties of 100 people or less. Contact the church.

To add information to *The Hull Times' Worship Calendar*, email notices to hulltimeseditor@aol.com.

Straits Pond

continued from page 1

"The new tide gate is fully functional and automated, but it is not alarmed," says Herbst.

She explains that the alarm system will alert town officials to a malfunction that could lead to flooding or excessive draining if unnoticed.

The alarm should be installed and operational within the next week or two.

Herbst says that, in the interim, she has been putting the gates on their automated setting during her workdays but that at all other times the gates have been left in a half-open position, allowing for some – but not optimal – water exchange. The new computerized gates would have necessitated the hiring and training of gate operators, she explains.

Herbst says that the current algae buildup is not the same odiferous material the pond accumulates in the late summer, but may be the result of slight changes in water quality due to the closure of the bridge during construction last year.

Straits Pond abutter and former tide gate operator Bill McNamara says, "If these gates are in such a state that they are inoperative, why didn't they get people to hand crank them?"

McNamara's house is situated in a cove-like area at the northeast end of the pond that has been completely covered by algae. He says that when the full tidal flow is restored, it still won't move the algae because the water movement isn't strong enough in that area.

McNamara opened and closed the tide gates by hand for many years, using a system of wooden boards and cranks.

Lemnios says that it is important to remember that the pond restoration is a "work in progress" and that while much progress has already been made [in terms of salinity, widgeon grass control, and midge abatement], it is an ongoing process.

"If people can be patient for a little longer," Herbst says, they will see the pond clear and water levels return to normal. She says that the current water levels and algae are a "hiccup" in the ecological restoration process.

CALENDAR

Galluzzo, Hull historian, will talk about Straits Pond. The meeting will be in the community room of McTighe Manor, 150 West Court [senior housing complex], 1000 West Court hall. Please park at there or at Atwood. The meeting does not inconvenience the residents.

The James W. Richardson Post will meet at 7 p.m. at the Scully Senior Center, 1000 West Court. Note: There will be no meeting in August. For details, Bill Henderson

THURSDAY, JUNE 16

Sea Dog Brew Pub hosts a night of Hull's own Jason Vittorini and other musicians to benefit The Seat Swap, a charity raffles sporting event tickets for ill children. Doors open at 6 p.m. The event is at Sunset Bay Marina, 2 A. VIP ticketing available. For info call 919-25-2200 or www.theseatswap.com.

Upcoming ••

FRIDAY, JUNE 18

7-9 p.m. at the South Shore Bowling Center, which includes shoes. Free refreshments for food, fun, and prizes. For more info, please call Greg Grey at 781

SATURDAY, JUNE 19

The Hull Yacht Club offers a day for sailors and would-be sailors. The club will cruise local waters, and learn about the club. Open House today from 11 a.m. to 4 p.m. is located at Mariners Park, 500 West Court. Club members will stage a Fall marine flea market that day. For details, www.hullyc.org.

SUNDAY, JUNE 20

Family Day Celebration. Celebrate "Family Day" with the Hull Family Day Puppets at 6:30 p.m. in the school gym with children up to age 12. A concert takes place on the school playground. Other activities will be inside the cafeteria. All activities are free. Please call 781 925-

MONDAY, JUNE 22

Hull Football's annual carnival will be from 5-11 p.m. each day at the Hull Redevelopment Authority.

Insecticide to be applied to pond

4/1/98

By Wesley Holmes

The conservation commissions of Hull and Cohasset have approved the application of a pesticide to Straits Pond on April 1 to control the population of Chironomid midges.

According to Hull Public Health Director Kevin O'Brien, the pesticide application will be made at approximately 8:30 a.m. by boat, weather permitting. A spreader fixed to the front of the boat will disperse the pesticide onto the pond's surface. The product used is called Abate 1SG, which will be applied in granular form to ensure that the pesticide falls to the bottom of the pond and pesticide drift is avoided.

Straits Pond was last sprayed to control the pesky midges on April 4 last year. O'Brien said that the state Department of Environmental Protection recently granted a new three-year permit for annual pesticide appli-

cation to the pond.

According to O'Brien, a crucial factor in alleviating the annual need for pesticide spraying will be Cohasset's tying homes abutting the pond into the sewer system instead of discharging either into the pond or into leaching fields that abut the pond. This would sharply decrease the nutrients the midges feed on and, thus, diminish their population.

If Cohasset completes planned sewer tie-ins in two years, and the pond has a year free of sewage discharges that provide nutrients, there would be no further need to apply pesticides when this three-year permit expires, O'Brien said.

If the weather doesn't cooperate next Wednesday, the spraying would be done Thursday or the first suitable day. The health agent said it is essential to make the application within the first two weeks of April to interrupt midge breeding patterns. ∞

Whipps, Inc.

WATER CONTROL GATES & EQUIPMENT

Mark Johnson

TEL: (508) 249-7924
FAX: (508) 249-3072

P.O. BOX 1058
39 SO. MAIN ST.
ATHOL, MA 01331

Straits Pond meeting

Norman Rogers, manager of the Hull sewer plant, restated Hull's offer to allow Cohasset Straits Pond residents to connect to Hull's extensive, nearly townwide sewer system, but only under financial arrangement reached by the two towns and under permanent limitation to a daily flow between 20,000 and 110,000 gallons.

Rogers explained that Hull's selectmen had voted to authorize up to 110,000 gallons per day from an anticipated joint pumping station at West Corner, tying in both Rockland Street to the north in Hingham and lower Jerusalem Road to the south in Cohasset. Lemnios emphasized that Hull's two sister communities could realize substantial "economies of scale" by coordinating their sewer projects along the Weir River system.

Lemnios denied one Cohasset resident's claim that Hull and Cohasset had entered into a binding contract in the 1980s, obliging the former to accommodate the latter's sewerage needs. Lemnios said that either Hingham or Cohasset might contract with Hull for the entire 110,000-gallon "reserve capacity", thereby excluding the other entirely.

"It's first come, first serve," Lemnios said.

Lemnios complained to Pratt and Callahan that, year after year, Hull provides more than 82 cents of every dollar expended on the pond – for studies, spraying, and substantially refurbishing, maintaining, and operating sluice gate at West Corner, separating Straits Pond from the Weir River.

Using a plywood model, William McNamara Jr. demonstrated the function of the gate periodically to flush the pond with the outgoing ocean tide, and to introduce comparatively cleaner and saltier river estuary water on the incoming.

A recent complaint made by several Cohasset residents alleged that high pond water recently had overflowed their retaining walls. On-site observations by Lemnios, however, only confirmed the presence of raw sewage – not pond water – that apparently emanated from one or two failed septic systems and had been trapped within the walls.

Under continuing, unacceptable levels of pond pollution, Lemnios said, occasional high water might occur with the maximal flushings required. William McNamara Sr. indicated that he and his fellow pond neighbors, directly impacted by the effects of pond pollution, felt no sympathy for Cohasset property

owners whose failed septic systems contributed to the problem.

Selectman Carl Katzeff supported Lemnios' challenge to Callahan and Pratt to produce a definitive report within 30 days, outlining Cohasset's probable course of action. Callahan responded with a promise to spearhead the requested effort, employing the full regulatory authority of the conservation commission.

"I will twist a few arms by raising our jurisdictional axe over their heads," Callahan offered with mixed metaphor.

The outspoken Katzeff, defying an early call by Callahan for an even-tempered discussion of the issues, decried the lack of representation by the Cohasset Sewer Commission, at a meeting called to tackle septage problems surrounding Straits Pond. He also characterized the absence of an invitation to the Hull selectmen as a direct insult – a statement repeated by Hull Selectman Mark Burns.

With Hull Selectman John Reilly also in attendance, Pratt was outnumbered by his Hull counterparts three-to-one.

Concluding the meeting, Katzeff strongly agreed with Lemnios, ridiculing a joint suggestion of Pratt, Callahan, Beres, and Hull ConCom Chairman Kathleen Bogdan, that a tri-town citizens' commission on Straits Pond might provide more solutions than more "bureaucracy."

Straits Pond-area resident Walter Schroeder told his town fathers "to set up to the plate, take the bat, and swing it." ∞

Officials demand action from Cohasset on pond issues

By Rod Young

Genteel Cohasseters came face-to-face with their less-than-genteel neighbors from across the pond last Wednesday at Cohasset Town Hall.

At issue before the Cohasset Conservation Commission, facing an audience mostly of Hullionians, was the ecological future of Straits Pond. The ConCom chairman and selectmen vice chairman - Thomas Callahan and Peter Pratt, respectively - jointly acknowledged that over the years responsible agencies of Cohasset government had failed to coordinate on the matter.

Callahan reported that while "democracy" prevails in his town - each body going its separate way - effective government under an executive secretary apparently has not.

Hull Town Manager Philip Lemnios berated the Cohasset officials in attendance for that town's failure, he alleged, to adequately inspect and sanction failing residential septic systems adjacent to the pond. Hull Health Agent Kevin O'Brien added that his agency routinely inspects unsewered pond properties on the Hull side, and just the

previous week cited three owners for seepage violations, requiring immediate correction.

Linda Beres, a marine biologist who has headed up an ongoing, three-year study of Straits Pond for Hull, described the devastating impact that untreated effluent has on the pond's ecology - accounting for perennial infestations of

midges, and hence, for swarms of complaints by pond residents most every year for decades.

Cohasset currently is under court decree to solve townwide inadequacies in waste disposal by 1999. The northeast corner of the town, low-lying along the pond, is perhaps the least accessible area to connect to its existing waste-

water treatment plant, if upgraded to handle all or more of the town than the modest 10 percent that is currently served.

Cohasset must either force individual residents to recondition inadequate, private facilities or provide the alternative of public sewerage. The

Please turn to page 16

unresolved debate in Cohasset is which approach, or combination, would be cheaper. Adding to the confusion is the ongoing statewide debate over uncompromising provisions of the state's Title V, which currently might force a Cohasset homeowner to incur up to \$25,000 in bringing his or her private system up to state code.

CONTINUED

Midge-blackened houses, midges on children, midge-blackened ice cream are abominations -- by Dianne Goode

I was standing outside of Mary Lou's News in Hull, on Atlantic avenue, when I saw a tiny child come out of the store with his ice cream. Within seconds it was blackened with midges.

The towns of Hull, Cohasset and Hingham are having a difficult time solving the midge infestation problem which emanates from the Straits Pond area. The reason being -- nature changes and research done in the 50s and 80s may need serious update.

Nature reconstructs. The midge solution may well require a golden goose magic egg solution, and not the Canadian Goose kind.

Opening up Straits Pond would require researching coastal pond regulations. Under state river and stream regulations opening of the pond could be permitted for agriculture use (i.e., fish farm). Mechanical gates would have to be able to block storm over wash.

On the bottom of Straits Pond there are fourteen inches of toxic mud in the area, which it was suggested might have to be capped, but this would raise the elevation of the bottom. It was doubtful that the state would

like this.

The tidal pond is definitely changing, as evidenced by the plant community. Increasing phragmites growing at the pond indicate a fresh water increase. Phragmites will not grow in

salt water, which means siltation and filling in must be occurring. Grass clippings are no no's around ponds..pesticides and insecticides kill fish.

Lowering water levels in the pond must be carefully monitored; reducing water levels kills the fish by changing oxygen available in water. Small silver Kili fish eat midges, lots of midges. Fish Hawks (Osprey) eat fish.

During our last town meeting in Hull the Osprey birds tried to build nests on the electric polls at the dump and turned off the electricity which interfered with the election computers and which momentarily halted the election.

Spiders trap midges. But spiders also have toxic bites.

Bats eat midges but there are three kinds of bats -- fish-eating, vegetation-eating and insect eating.

Bats infest attics. Bats carry rabies as one Hull citizen and her cat can attest. Bat wings are abrasive and can incur bleeding. Bats also pollute streams.

After attending one million midge meetings, I have come to the conclusion that the gate sounds like the best solution.

The state has designated the pond as an Area of Critical Environmental Concern.

Midge spraying must be done on or before April 15 of every year. This past year it was not done in Hull. So residents of Green Hill collected jars of midges and then went to town hall and let the midges go in all the offices.

Midges really are disgusting.

Hull wants more help on pond

By Molly Hochkeppel
The Patriot Ledger

COHASSET — Hull officials want to know within 30 days what steps Cohasset intends to take to clean up its side of Straits Pond.

At a meeting called by the Cohasset Conservation Commission, Hull Town Manager Philip Lemnios said that if he doesn't get a timetable for either the adding of sewers in the section of Jerusalem Road that borders the pond or the repairing of septic systems there to prevent waste from leaching into the pond, "we will be forced to take this to another level of government. We can't wait forever."

Hull officials also want Cohasset to start picking up more of the tab for maintenance of the pond, which includes spraying to kill midge larvae and having someone open the tidal gates several times a month to flush the pond.

ties were being caused by malfunctioning septic systems rather than a high pond level.

The pond level was lowered recently, but Lemnios said that was because of predicted rain, not residents' requests.

Lemnios said the pond level cannot be allowed to drop too low because shallow water gets too warm, encouraging algae growth, which takes oxygen out of the water and leads to a fish kill. Fish are needed to eat the midge larvae.

Hull Conservation Commission Chairwoman Kathy Bogdan suggested banning fishing at the pond as a midge-control measure. Both towns intend to adopt the suggestion at future town meetings.

Lemnios said the most serious problem at the pond continues to be septic waste. He said Hull Health

Agent Kevin O'Brien conducted tests and cited all the systems on the Hull side of the pond that were suspected of malfunctioning. There has been no testing on the Cohasset side, he said.

Cohasset Conservation Commission Chairman Thomas Callahan said one reason the Cohasset health board may be reluctant to require septic system repairs on that side of the pond is that the sewer commission plans to lay sewer lines in the area.

That project may include a small, self-contained treatment plant in Cohasset for the Straits Pond area or a connection to the Hull sewer system at West Corner.

Sewer plant operator Norm Rogers said if any connections to Hull are planned, the town must act quickly because the plant has only 110,000

gallons per day of excess capacity and Hingham is interested in connecting a small section of that town.

Callahan said he would ask to meet with the sewer commission to get a timetable for the sewer project. He also assured Bogdan that the Cohasset commission will try to communicate better with its Hull counterpart on the issue.

A suggestion was made to form a Straits Pond committee that would include officials and residents of both towns and Hingham. But Hull Selectman Carl Katzoff downplayed the idea, saying Cohasset did not seem to be able to get three of its own boards together.

Katzoff also said he was insulted that the Hull selectmen had not been on the official invitation list for last night's meeting.

All three Hull selectmen attended anyway, along with about 35 residents of both towns.

Officials: Correct septic problems

Cohasset

Over the past two years, Hull has paid \$16,311 for pond maintenance, including \$5,348 for new tidal gates. During the same period, Cohasset paid \$3,620 toward the spraying.

The Cohasset commission invited the Hull Conservation Commission, health board and tidagate keepers to the meeting so the pond's water level could be discussed. Some Cohasset residents say the level is kept too high. Three Jerusalem Road residents complained that they were losing part of their back yards because of flooding.

Lemnios said that when he went to investigate the situation, he found that water problems on the proper-



TOWN OF COHASSET

CONSERVATION COMMISSION
41 Highland Avenue - Town Hall
Cohasset, MA 02025
Telephone: (617) 383-9900, Ext. 122

CONSERVATION COMMISSION SPECIAL MEETING RE: STRAITS POND

DATE: THURSDAY, SEPTEMBER 21, 1995
TIME: 7:30 P.M.
PLACE: 41 HIGHLAND AVENUE - TOWN HALL, COHASSET, MA 02025

A G E N D A

1. Immediate issue of pond water level.
2. Discussion of long term problems and solutions, including creation of new advisory committee.

September 1, 1995

Bill Chisolm
605 Jerusalem Rd.
Cohasset, MA

Dear Bill,

Thanks for your letter. I find myself in agreement with about everything you said in the letter. The newspaper article I guess did quote people correctly, but they did not print everything that was said.

As I recall, I expressed praise for both Mr. McNamara and Hull town officials for their initiative. My main point was that it is time for Cohasset to step in and put up its share of money for the recent gate improvements and to pay the one-half of the salary of Mr. McNamara or whoever has responsibility for the operation of the gates.

With regard to the pond being a "soup", my point is that the pond's water temperatures are high because there is little outflow and inflow. So the pond is a solar collector and the water temperatures get very high (up to mid-80's) and this probably leads to greater algae growth. I think that high water levels and the resultant newly created wetlands create new areas for midges and mosquitos to breed in.

Obviously, the improved management of the pond will benefit everyone ... and as you note great steps in that direction have been taken since the 1950's. The problem and the responsibilities for the remedies lie with both towns.

Thanks again for the letter

Best regards,

Teo Ford

copies: Anson Whealler
Bill McNamara
Ed Graham
Phil Lemnios

Straits Pond pollution has neighbors fuming

COHASSET — Residents of the Straits Pond section of Jerusalem Road say the pond is becoming increasingly polluted because it isn't being flushed with enough fresh ocean water.

Ted Ford, of 573 Jerusalem Road, called the pond a "simmering, stagnant soup," saying that it is so deep, it encroaches on some lawns.

"I have observed the pond since childhood and I believe it is not being well-managed right now," Ford told the conservation commission last night.

The town of Hull, which shares the pond with Cohasset, controls the arrangement of boards that lets sea water in and out.

Hull resident Bill McNamara is the volunteer in charge of the boards, but Ford said he is not very responsive to complaints from Cohasset residents about the water level. "He's the czar of the pond," said Anson Whealler of 619 Jerusalem Road.

Ford suggested that the job should be a paid position and the person be made accountable to both towns.

"I agree that management should be shared," said commission Chairman Thomas Callahan. "But Hull's answer is that we don't chip in

enough moneywise."

Ford said he believes that about 70 percent of the water in the pond could be replaced in two or three tide cycles if the boards are lowered enough.

Whealler, an engineer, said he and several Hull High School students have developed a sensing device that could be used with a computer to operate the newly mechanized gate at the West Corner end of the pond to control the water level.

"But will we be allowed to attach it and who will decide what the level should be and when to flush the pond?" he asked.

When Ford asked for a further study of the problem, Whealler and commission member Veneta Roebuck said it has been studied since 1902 and that the real solution is either a giant pump or a cut through the causeway to the ocean at Gun Rock Beach.

Commission Vice Chairman Ed Graham, who also lives near the pond, said he will write to Hull Administrator Phil Lemnios to advise him of the problem. The commission will seek a meeting with their Hull counterparts on the problem.

1988

Lemnios lobbies for straight talk on Straits Pond

By Rod Young

Town Manager Philip Lemnios briefed the selectmen last night in preparation for a public face-off between Hull and Cohasset officials at Cohasset Town Hall by that town's Conservation Commission tonight [Thursday].

At issue are the interrelated problems of midge control, infiltration of raw sewage and the potential for Cohasset connections to the Hull sewer system centered around Straits Pond.

Lemnios reported that 83¢ of every dollar so far spent to study and correct the pond's environment has been contributed by Hull, although a third of the pond's shoreline borders Cohasset.

Lemnios also reported that several residents on the Cohasset side have expressed frustration over

allegedly contradictory stands taken by their town, especially with regard to sewerage the pond neighborhood.

Selectman Carl Katzeff said Cohasset town officials forbade a private initiative by its residents themselves to connect to the Hull sewer system - reportedly because sewerage might facilitate unwanted development on the Cohasset side. Katzeff added that a developer in question was Hullonian, suggesting "snobbery" as a factor in Cohasset decision-making.

Katzeff promised to make clear Thursday evening that, Cohasset notwithstanding, Hull holds the cards. In order for Cohasset to come into compliance with the state's recently enforced Title V law, which requires expensive up-grading of below-stan-

dard, home septic systems, it must provide sewage to problem areas such as Straits Pond. The Hull sewer system offers by far the most cost-effective solution for pond abutters.

At the previous selectmen's meeting, sewer commission Chairman John Struzziery told the selectmen that, over and above Hull's current and future sewer needs, the town's wastewater treatment plant could accommodate both Cohasset and Hingham, but only those residences and businesses along Jerusalem and Rockland Roads.

According to plant Manager Norman Rogers, the two towns would not be allowed to increase their total daily flow above a contracted 62,000 gallons.

Having contacted the Cohasset Sewer Commission to begin negotiations, with the Hull selectmen's

blessing, Struzziery reported that to date there has been no serious response.

Of mutual benefit to both communities of the proposed sewer connection would be a cleaner Straits Pond - which objective, Lemnios hoped, would keep Thursday evening's joint discussions productive.

The selectmen voted unanimously to reappoint Struzziery, in attendance Wednesday, to his fourth consecutive five-year term on the sewer commission. Struzziery quipped that he takes seriously his committee's formal name, the Permanent Sewer Commission.

Selectmen want Cohasset to do more about pond problems

HULL — Selectmen will meet with Cohasset officials tonight and urge them to take better care of Straits Pond.

At the Hull selectmen's meeting last night, board members Mark Burns and John Reilly and Town Manager Philip Lemnios indicated that they would attend a meeting sponsored by the Cohasset Conservation Commission at 7:30 tonight.

The officials will discuss ways to deal with the pond's problems, which include flooding, weed and algae growth, and faulty septic systems. The pond is on the Cohasset-Hull border.

"It's about time we gave a wake-up call to the Cohasset selectmen that says: 'Put something to your voters to have them sewer the lake,'" Selectman Carl Katzoff said. Katzoff indicated that he may attend the meeting tonight.

Selectmen said one of their primary goals is to see that Cohasset addresses the faulty-septic-system problem by installing sewerage in the vicinity of the pond.

They also want to determine whether Cohasset is regularly testing pond water and, if it is, find out about the test results.

Katzoff suggested that selectmen hold their own public hearings regarding the pond problems.

Hull

This summer, Hull sprayed the pond with pesticides to control the midges — small flying insects — but Lemnios said that should be viewed as a strictly short-term solution. He also said Hull recently flushed the pond with ocean water, which reduced the amount of algae.

Such upkeep should not be the responsibility of Hull alone, selectmen said.

"For every dollar spent managing that pond, we have spent 83 cents of it," Lemnios said.

In other business last night, selectmen:

- Announced that J. Cashman Inc. will be dredging the harbor from October until February. The dredging will be coordinated by the state and will cost \$437,000. The town will pay \$120,000 of that.

- Agreed to the establish "Enjoy Hull," a volunteer committee that will help local organizations and businesses run special events in town.

- Reappointed Joseph Duffy to the board of appeals, John Struzziery to the permanent sewer commission and Joan McAuliffe to the conservation commission.

605 Jerusalem Road
Cohasset, MA 02025

August 31, 1995

Ted Ford
573 Jerusalem Road
Cohasset, MA 02025

Ted,

Hi! You sure will get some of the neighbor's "fuming" when they see your published remarks about the "simmering, stagnant soup" we live beside.

I, too, have been "on the pond" since 59'. In my caring watch of the pond, I can certainly see improvements that have been administrated and acted upon by the Town of Hull.

Thank God we have concerned neighbor's from the Hull side. Example: When our Town (Cohasset) held a meeting regarding the spraying to control the midge problem only I as a concerned Cohasset resident was there but through the efforts of a concerned Hull Town Manager and the combined efforts of the "gang" of good people of Hull who showed up at "our" meeting, we were allowed to reasonably control the midge problem.

I know both of you and Anson Wheeler are concerned citizens but we must agree that Bill McNamara is also a truly concerned citizen. He has put in many, many hours of actually "doing the job" and, in my eyes, is accomplishing a lot!

Sure, sometimes the high water causes some minor problems. I too, have experienced some minor problems but the flushing of the pond and the reduction of midges is best for the overall good.

Let's hope we, as neighbor's, on both sides of the pond, can work with each other.

Regards,



Bill Chisholm
383-0351

cc: Anson Wheeler
Bill McNamara ✓
Ed Graham, Vice Chairman Cohasset Conservation Commission
Phil Lemnios - Hull Town Manager

Bill McNamara, a resident who has lived on and observed the pond for 70 years, agreed to volunteer to oversee the implementation of some recommendations he had. He has spent a significant amount of his free time ensuring that the gates at West Corner were opened and closed at the proper time. This recommendation seems to have helped solve the problem in the short-term while being relatively inexpensive and environmentally safe.

His efforts have helped to successfully avoid the second wave of midges. The flushing of the pond has also cleared the algae which was reputed to be a breeding ground for the midges. We know there are additional measures which need to be taken for the long-term, but at this point the residents have seen more positive results in the past four weeks than we have in years of studies.

We do not intend to imply that the student volunteers in this study did not give 100% and learn a great deal from their experience. We hope they continue their civic involvement as we are all enriched by it.

We do have trouble with the adult management of this program. We feel the students were cheated of some valuable lessons which this project could have offered them. Past town officials and program managers did not seem to understand the importance of defining deliverables, task definition and completion, setting

and meeting deliverable dates, and accounting for expenditures. Skills developed as a result of good project management. Skills necessary to be successful in life.

The Straits Pond taxpayers are eager to have a written report with long-term solutions, an implementation plan and an accounting of the \$35,000 appropriated to the Hull Environment and Service Corps Pond Team. We would like the program management to submit these documents to the board of selectmen and the town manager immediately.

Residents of Straits Pond

Study: Draining pond worsened bug problem

By Brendan Farrington
The Patriot Ledger

HULL. — The town's long campaign against the pesky midge may have had a major bug in it.

For 15 years, the town drained Straits Pond during the winter in an attempt to kill off midges that swarm around Green Hill in the summer. But a report to be discussed this weekend says the plan helped the bugs breed.

"What we really did find was that by draining the pond, it helped to increase them," said Linda Beres, who prepared the report along with eight high school students and Suffolk University Professor Walter Johnson.

After a study done in 1980, the Straits Pond water level was lowered in the winter and raised in the spring, using a gate at the mouth of the Weir River.

The new report says draining the pond reduced the number of fish and eels that feed on midge larvae. In the spring, before fish and eels could be reintroduced to the pond from the Weir River, the larvae developed into the people-pestering midges.

"The result is that the farther from the Weir River gate one goes, the more likely that a midge will survive the trip from the mud to the pond's surface," the report says.

The results of the recent study will be discussed at 10 a.m. Saturday at the senior center on Samoset Avenue.

Beres said yesterday that the draining of the pond took a toll on the fish population in two ways. Some fish froze to death because of the low water level, and some were un-

Hull

able to survive because the pond would fill with fresh water during the winter.

"The pond was becoming a freshwater environment in the wintertime and a saltwater environment in the summertime," Beres said. "What you ended up having was a pond with the main population being the midges."

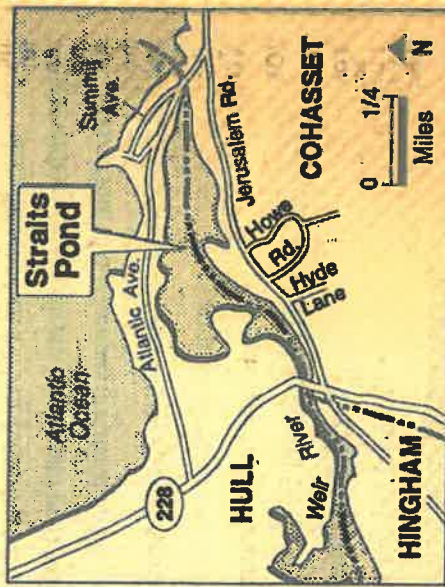
The report recommends that Straits Pond be maintained as a brackish water pond throughout the year. The town's proposed fiscal 1996 budget includes money to install an automatic gate at the Weir River to keep the pond at a higher winter level.

The midge problem peaked last year. The new report says the midge population had doubled in each of the previous two years.

This winter, the pond's water level is being kept higher, Beres said. But the new report says the water level is only part of the problem.

Pollution from Hull and Cohasset is causing algae blooms, which provide midge larvae with food and reduce the amount of oxygen in the pond, making it harder for fish to survive.

The report identifies failed septic systems on Richards Road, Pond Street, Elm Street and Montana Road and sewer pipes from Jerusalem Road in Cohasset as main sources of the pollution. It recommends connecting those areas to the town's sewer system.

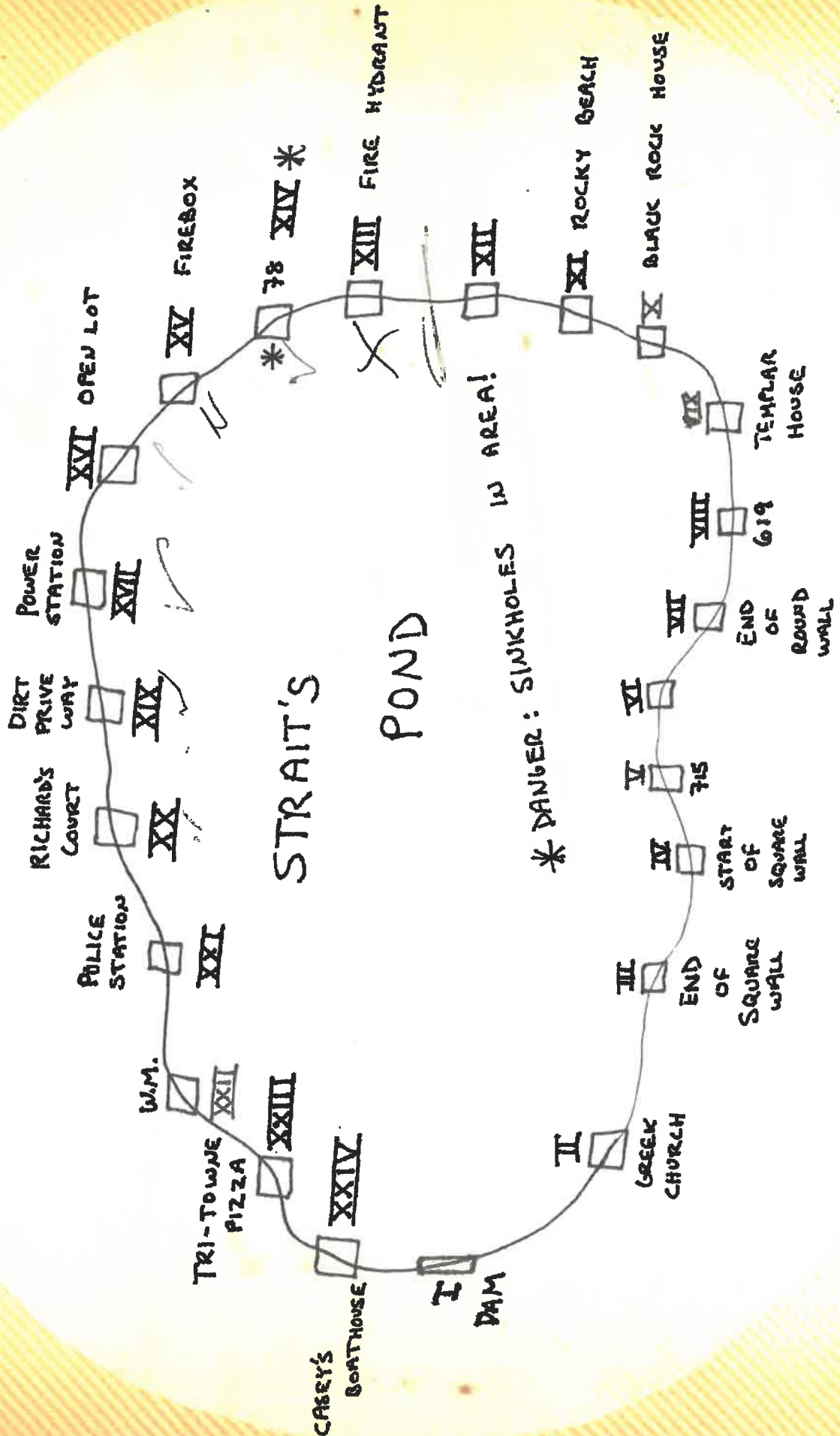


The Patriot Ledger

"The pollution entering the pond via septic systems and street drains has a major effect on the midge population by increasing the quantity and quality of available food sources, reducing their predators and allowing the midges to grow faster and survive to maturity," the report says.

The study measured the number of midge larvae, fish and fecal coliform in 12 areas of the pond during the last three years. Where the fecal coliform level was higher, the midge population was above normal.

HULL



COHASSET

Meeting set on Straits Pond problems

By Molly Hochkeppel
The Patriot Ledger

COHASSET — Cohasset and Hull will try again to reach an agreement on solving problems that plague Straits Pond.

The Cohasset Conservation Commission said last night that it would invite to a meeting at 7:30 p.m. Sept. 21 the Hull Conservation Commission, Hull Town Manager Philip Lemnios, the health agents from both towns, and Bill McNamara, a Hull Highway Department employee. McNamara decides when the tide gates should be lowered to flush the pond with salt water.

The pond, which forms part of the border between the towns, is notorious for spawning clouds of midges each summer. Other problems include flooding on some properties, algae blooms, contamination from failing septic systems, and a growing layer of toxic muck at the bottom of the pond. The Weir River empties into the pond, possibly adding to the pollution.

Committees, studies and "solutions" have proliferated over the years to no particular avail. One fall the pond was lowered in an effort to get rid of the midges. This resulted in one of the worst infesta-

tions ever the following summer.

The chemical Abate appears to have some effect on the midges, but it was added too late this summer. And neither the Cohasset Conservation Commission nor the state is enthusiastic about a chemical solution to the problems of the pond, which the state has designated an area of critical environmental concern.

"After 10 years, the buggies start to enjoy the stuff anyway," Ann Murray of Hull said last night.

Another area of contention is the height of the water, which McNamara controls by opening the tide gates for a few hours during certain tides and manipulating the flow of the Weir River into the pond.

Walter Schroeder, of Jerusalem Road, said he was losing a lot of his back yard to flooding because the pond is being kept higher than usual this year.

Ed Graham, who is handling Straits Pond issues for the Cohasset Conservation

Commission, said he will discuss Schroeder's problem with Lemnios, the Hull town manager, and Ed Parent, head of the Hull Highway Department.

Cohasset commission member Veneta Roebuck said: "This is serious. The man shouldn't have to wait for the next meeting."

Diane Goode, a former Hull Conservation Commission member, said that when the water level gets too low "the temperature goes up, oxygen boils off, and you get a fish kill. Then the midges don't get eaten."

Ted Ford, of Jerusalem Road, suggested a pump and pipe operation to bring in cold ocean water to knock off the algae and midges. But Bob McCunney, also of Jerusalem Road, called for a scientific study rather than such ad hoc solutions.

McCunney volunteered to serve on a proposed joint technical committee that would review the studies already done, gather data, and possibly apply for government grants to seek solutions.

The Cohasset commission may ask a special town meeting Nov. 6 to ban fishing at the pond. Fishing cuts down on the eels, which are stocked to eat midges. Hull already has such a ban.

Cohasset

9/6/95

September 13, 1995

The Cohasset Conservation Commission
re: Straits Pond

I am leaving shortly on overseas assignment, however I thought it may be useful before departing to put in writing to you my thought regarding a possible solution to the Pond's condition.

The Problem:

The pond's volume is approximately 10 million cubic feet of water: (72 acres x 44,000 feet/acre x 4.5 ft depth). The pond is higher than average sea level and apparently the pond is much easier to empty than to fill. If the gates were left open (or if there were a channel to the sea), the pond would simply drain out and only partially refill. Large flats would be exposed.

The amount of water that can move in and out of the gates is limited -- 100,000 cubic feet per tide seems optimistic and this would only be 1% of the pond's 10 million cubic foot volume. Moreover, it would be mostly the same water moving back and forth on the tide. Under the best circumstances of gate management, the pond is still largely stagnant.

Possible Solution

Using simple PVC pipe (which might run 100 yards or so beyond the low tide mark) and basic pumps, to pipe ocean water from Black Rock or Gunrock (or both) into the pond, perhaps 1 million cubic feet of fresh ocean water per day. The excess water would run out via Wier River. In 10 days, the whole of the pond's water would theoretically be exchanged. The colder water and higher salinity would defeat the midges and the algae. (This is indicated by the 1992 midge study.) A beauty of the solution is that it is environmentally friendly and calls for no chemicals.

This could be tried for an experiment of one season: May 1 to September 30. I do not see where the approach could cause any harm. I hope that the Hull and Cohasset Commissions will consider this as a possible remedy and perhaps recommend that funds be provided to undertake a trial.

All the best,


Ted Ford

copies:
Cohasset Selectmen
Cohasset Conservation Commission
Hull Selectmen
Hull Conservation Commission

Phil Lemnios
Kevin Obrien
Ann Murrey
Bill McNamara ✓

Mighty Midges Strike Again

By Rod Young

Responding to what might be a centuries' old problem on the shores of Straits Pond, the selectmen Wednesday night declared a "top priority" emergency of midge infestation. Resident David Kelley promised to pack the hall at the next selectmen's meeting with 75 of his bugged neighbors if measures were not immediately taken.

Although a special insecticide was sprayed over the pond last month by helicopter (under a Plymouth County contract), the tiny insects are now reportedly swarming over the area. Coleman reported that one house in the Straits Pond area appeared to her "painted black," so thickly midge-covered were its walls.

Executive Administrator Christopher McCabe, who has dealt with the problem with varying degrees of success in previous years, suspects that the pests have evolved into an insecticide-resistant strain. His first step is likely to be an on site consultation with a professional entomologist, as suggested by Selectman Myers.

In the meantime, Kelley will likely call off a planned backyard wedding reception.

Kelley was obliged earlier in the selectmen's meeting to reschedule a hearing before the board for his requested appointment to the town's personnel board. He graciously agreed that another candidate for the available one-year term, Ronna Hollingshead, should have the opportunity to present her qualifications; she could not attend because of a prior Brownies' scouting commitment.

REPRODUCED FROM THE ORIGINAL
DOCUMENT IN THE ARCHIVES OF THE
TOWN OF HULL, MASSACHUSETTS
DATE: 10/15/2010

**PUBLIC HEARING
NOTICE**

The HULL conservation Commission will hold a Public Hearing on the Request for Determination of Applicability filed by the Town of Hull for work described as raking of floating algae on the surface of the pond to allow it to move with tidal currents. Location of proposed project is Straits Pond. Said meeting will be held on Tuesday, July 10, 2007 at 7:45 pm at the Hull Municipal Building, 253 Atlantic ave., 2nd floor. Said hearing will be held pursuant to the Wetlands Protection Act MGL Chapter 131, Section 40. A copy of the permit application is on file with the Hull Conservation Office at the Hull Municipal Building, 253 Atlantic Ave., 2nd floor.

July 2, 2007

If it's May, it's midges If it's August, it's the stench of Straits Pond

*Area residents suffer same
annoying plagues each summer*

By Wesley Holmes

There's something rotten at Straits Pond and town officials are getting an earful from area residents about the resulting stench.

Town Manager Philip Lemnios said that while the town is well aware of the problem and has been making consistent efforts to eradicate it, the excessively high temperatures and low tides last week made it impossible to control the odor.

According to Lemnios, the unpleasant smell comes from algae that grows on the surface of the pond and which decomposes in the sweltering sun. To alleviate the stench, the town has been flushing the pond at least three times every week. However, a tide of no less than 10 feet is necessary to flush the pond and early last week the tide levels never rose above 9.8 feet so town officials were not able to address the problem.

According to Lemnios, the town did flush the pond at 10:05 on Wednesday evening when the tide level reached 10.02 feet. Additionally, Lemnios said that the town hired an air-boat operator to enter the pond and break up the condensing algae on the surface.

Lemnios apologized to residents who have to deal with the pungent odor, but he said the town is doing the best it can. "It's part of aquatic life," he said. "It's a terrible thing, but we are doing everything we can to combat the problem."

According to Lemnios, while researching potential solutions to the problem, town officials came across one interesting procedure that residents tried on a pond in Wisconsin. The town manager said that residents there sought



LOOKS CAN BE DECEIVING - The plants along Straits Pond look pretty in the noonday sun, but the stench from rotting plant material was horrifying last week... [File photo]

to alleviate the algae problem by floating bales of barley at a rate of four bales per acre across the pond surface. Reportedly, the bales slowly dissolve into the waters and the resulting chemical process seemed to be somewhat successful in alleviating the stench.

One Straits Pond abutter reached for comment this week seemed willing to try anything. Donna Freedman of Atlantic Ave. said, "You wait for summer all year long, but between the midges (insects that swarm in late spring)

High-tech proposal made in midge battle

By Jackie Cowin
The Patriot Ledger

Hull

HULL — They've tried homemade traps, chemical sprays and flooding.

Now the residents around Straits Pond may acquire a high-tech weapon in their continuing battle against the midges.

Anson Wheeler, an electrical engineer, proposes using an electronic sensor to control water levels in the pond and prevent it from becoming a breeding-ground for the small, black flies.

"To be able to regulate the water level better would lead to improvement, if not elimination, of the pond problem," Wheeler told the selectmen last night.

The bugs swarm from May to August. Wind, rain and cool temperatures bring some relief, but the midges always come back — keeping residents virtual captives in their homes.

After a particularly bad outbreak in June, town officials declared an emergency, treated the pond with a larvicide and opened a gate to flood it with salt water from the Weir River.

Wheeler proposes using electronic sensors, like those used to focus cameras automatically, to monitor the water level in the pond. The device would automatically raise and lower a metal gate that dams the pond.

To demonstrate how the sensors would work, Wheeler placed one, which was contained inside a foot-long circuit board, on a table.

The digital reader in the box indicated the distance between the sensor and the ceiling to be 7.8 feet. Wheeler then placed his hand between the ceiling and the board, and

Wind, rain and cool temperatures bring some relief, but the midges always come back — keeping residents virtual captives in their homes.

the indicator read the distance as 6.2 feet.

"The sensor would be installed in a pipe and aimed at the water," he explained.

Wheeler also suggested hooking up the sensor to the gate, so that it would automatically trigger adjustment of the gate when water levels were too low or too high.

But not everyone was convinced of the merits of the device, which Wheeler designed and built with the help of Hull High School's Environment and Service Corps. The student group has been studying solutions to the midge problem for nearly two years.

William McNamara, who was a consultant on the pond's water levels this summer, said that automating the gates would be too expensive and too vulnerable to power failures and extreme freezing temperatures.

Wheeler said that the cost of automation would be relatively small, compared with the cost of the equipment it would control. But he didn't provide a price.

Automation also would prevent problems that would occur if an operator was delayed in reaching the pond to adjust the gate.

"This is not a contest. The bottom line is what is good for the pond," Wheeler said.

POND COST.XLS

Prepared 9/8/95

April 1995 Through October 1995 Operational Costs.

	<u>Openings</u>	<u>Cost</u>
Flushing	67	\$5,195.18
Spraying		\$3,620.00
Electricity		\$200.00
Sub-Total:		\$9,015.18
Less Cohasset Pmt for Spraying		(\$1,810.00)
TOTAL 1995 HULL OPERATIONAL COSTS:		\$7,205.18

April 1994 Through October 1994 Operational Costs

Flushing Proram:		
	<u>Openings</u>	<u>Cost</u>
Flushing	26	\$1,948.00
Spraying		\$3,620.00
Sub-Total:		\$5,568.00
Less Cohasset Pmt for Spraying		(\$1,810.00)
TOTAL 1994 HULL OPERATIONAL COSTS:		\$3,758.00

CAPITAL COSTS

Gate and Installation:	\$5,348.00
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SUMMARY

	<u>COST</u>	<u>SHARE</u>
1994 Operational Costs	\$5,568.00	
1995 Operational Costs	\$9,015.18	
Capital Costs	\$5,348.00	
Sub-Total:	\$19,931.18	
Less Cohasset Pmt	(\$3,620.00)	18%
TOTAL HULL COSTS:	\$16,311.18	82%

Pond-area residents need long-term relief...

To the Editor:

Responding to the letter from the Hull Environment and Service Corps Pond Team appearing in The Hull Times July 28:

Over the years the residents of Straits Pond have had to live as captives in their own homes because of the midge problem. In the summer we have had to live, breath, eat and sleep midges. Midges have infested our cars. In the winter, the residents have had to live with artificial mud flats as a result of recommendations made by a prior study.

After living with a midge outbreak since April, the residents attended a selectmen's meeting on July 12. What the residents were expecting was a concise summation of a plan to implement the recommendations of the study. What they received was a brief biology lesson.

Linda Beres, the corps' program manager, offered potential short-term solutions such as to build homemade midge traps, put up bat houses to attract bats which eat the midges, leave spider webs on our homes to entangle midges to create a veil of dead insects, keep the lights inside and outside of our home turned off at night and to keep all doors and windows closed. Other suggestions were to spray garlic throughout the area as a repellent. None of these suggestions seemed to address the elimination of the midge

problem, simply a means to put up with them.

We were told that the next outbreak this year would be four to five times worse but that the study was not yet conclusive as to what would definitively work to rectify the problem. The residents frustration level quickly escalated. At that point, the residents, through sheer frustration, decided to take matters into their own hands. Town Manager Phil Lemnios met several times with a committee of local residents who were desperate to find an immediate solution to the problem.

• A quick review of the actions the Hull Town Boards took to identify and correct possible septic or sewerage spilling from homes on the Hull side of the pond over the past eighteen months (1994-1995).

• A few words from the Cohasset Board of Health manager of tests conducted and the results over the past few years.

• Contamination levels- were they examined and documented? Where are Cohasset problems originating? Which end of Jerusalem Rd.? Who periodically (Hull or Cohasset) tests the water for temperature or pollution? Should it be done?

A wrap-up statement to emphasize the intention of the Town of Cohasset to actively, within current budgets and manpower, continue looking at ways to clean up the town's share of the pollution problem and also at the same time continue working with Hull to keep open the line of information flowing in the months and years to come.



