

REPORT ON THE SURFACE AND GROUND WATER SURVEY

Prepared by the
Surface and Ground Water Study Committee
For the Town of Topsfield

March 12, 2009

EXECUTIVE SUMMARY

The Surface and Ground Water Study Committee (SAG) mailed a survey to 2153 residences and 212 businesses of Topsfield in March 2008. The SAG received responses from 452 residences and 18 businesses.

The primary purpose of the survey was to understand the extent to which changes have occurred to surface and ground water levels in Topsfield over the past few years. The Committee also wished to identify surface and ground water problems of which the SAG was currently unaware, the extent to which residences and businesses are currently being affected, and the potential for changes that will affect residences and businesses in the future.

Nearly ¼ of respondents reported that conditions have changed: wetter and/or incidences of new water-related problems. There were no widespread changes to surface and ground water levels, but some significant changes occurred in localized areas and on some individual properties. The primary causes of the localized changes included beaver activity, Title 5 septic “mounds”, and development. Other water-level and erosion problems include street water runoff and drainage issues, backup from inadequate culverts, natural river and stream flooding, and basement flooding. There were a few unexplained increases in apparent water levels.

The chief cause of localized long-term (weeks to months or longer) water level increases in recent years is beaver dams. Beaver activity in Pye Brook caused flooding of wetlands and a corresponding increase in water table levels on dry land along Haverhill Road, Wilmor Road, and Bare Hill Road. Some residents incurred costs dealing with the higher water table, and they and several more suffered damage due to the more severe flooding during significant rain events. Beaver dams near Hood’s Pond, Thompson Lane, School Brook near Route 1, and Mile Brook at the stone bridge on Perkins Row, among others, were dealt with via beaver trapping and dam removal or water-level control devices (beaver deceivers). A few Winsor Lane residents were concerned that beaver activity was affecting water levels and drainage on their or a neighbor’s property. Many residents, including several on East Street, expressed concern with the loss of trees and transformation to lakes of formerly boggy or dry properties, including trails, especially in Willowdale State Forest, Bradley Palmer State Park, and the Ipswich River Wildlife Sanctuary. Overall, 10% of survey respondents indicated that beaver activity was a threat to their property.

A number of survey respondents indicated that Title 5 septic mounds, usually on one or more neighboring properties, altered the natural drainage and/or rendered their, or a neighbor’s property, a local low spot. This created transient ponds and flooding on properties where no problems had occurred previously.

Transient water-level problems, namely short-term flooding, were exacerbated by the increased frequency of significant rain events over the last 12 years as compared with the previous 30 years.¹ It is possible that several of the 23% of respondents who reported that conditions had changed were partially reflecting the increased frequency of these large rain events. However, development that increases the acreage of non-porous surfaces; beaver dams that reduce wetland area available for short-term water storage; and Title 5 septic mounds that may contribute to storm water runoff in a manner analogous to non-porous surfaces may be contributing factors. The relative effects of these three contributors to flooding in Topsfield are unknown.

Several residents complained of increased erosion, basement water problems, or yard flooding created by individual residential, commercial, or multi-unit developments generally uphill from them. The largest number of complaints pertained to changes on the higher properties on Prospect Street affecting properties lower on the hill. Complaints came from both sides of the street and both sides of the hill. The Great Hill, New Meadows, Hickory Beech, Dover Hill, and Masconomet Healthcare developments were the targets of 1 to 2 complaints each.

The problems created by beaver dams, septic mounds, and development are largely correctable or preventable. Other causes of water problems that may be largely correctable or preventable are undersized culverts and inadequate or improper street drainage. A 'blocked or inadequate culvert' was reported by 15% of respondents as a contributor to their water problems. As there was no 'street, or storm, drainage' category to check off for a cause of water problems, respondents generally checked off the 'inadequate culvert' or 'other' category. About 60 respondents made comments on and/or requests to correct problems with culverts and street runoff and drainage.

Overall, nearly 60% of respondents experienced water problems in the last 12 years. The major cause, 75% of those with problems, was a high water table. Not surprisingly, 40% of respondents have sump pumps in their basement. The flooding of buildings, presumably primarily basements, was reported by 37% of respondents with 70% of those reporting flood damage. Problems from natural river and stream flooding were reported by 12% of respondents; some, perhaps most, of these are non-building property flooding. Nearly 10% of respondents reported that they have corrected past flooding problems via installation of back-up batteries for sump pumps or back-up power generators, simple to elaborate basement treatments, and improvements to drainage around their home. There is no simple cure to flooding of buildings from natural river or stream flooding, but this is believed to be a very small percentage of Topsfield's flooding problems.

¹ Based on rainfall records of C. Wilkinson, Lawrence historical precipitation data, and records of Ipswich River maximum gauge heights and stream-flows

In other items in the survey, 26% were concerned with mold in their basements, 19% thought that mosquitoes were worse, and 17% thought that increased surface and ground water levels constituted a public health concern. Some respondents provided unsolicited comments on poor drinking water quality and dissatisfaction with the summer watering ban.

Overall, the attitude of residents towards water problems and issues was very reasonable. There was general acceptance, albeit sometimes with consternation, of natural conditions – high water table, localized effects of occasional large storms, natural river and stream flooding. Most of the complaints pertained to man-made problems or issues created or exacerbated by changes made to state laws and regulations. Man-made issues include inadequate culverts, poor or changed street/storm drainage, drainage problems resulting from Title 5 septic installations and development. Restrictions imposed by new, mostly state, laws and regulations include trapping restrictions, more stringent Title 5 requirements, watering bans, drinking water treatment requirements, and cessation of cleaning rivers and streams of debris .

Based on the results of this survey, a list of recommendations to the Town of Topsfield is provided at the end of the Report.

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INTRODUCTION

The first two items in the Board of Selectmen's (BOS) charter to the Surface and Ground Water Study Committee (SAG) are:

- Investigate and document the extent to which surface water and ground water are
 - a problem for residents of Topsfield
 - a problem or threat to the Town's infrastructure, private property, or public health
- Compare current conditions during the wet spring/fall seasons to a baseline date (e.g., 1990); identify and document those locations in Topsfield where a significant change (i.e., greater than 1 foot) in the surface water level and/or ground water level (if possible to determine) has occurred since the baseline. Where possible and appropriate, suggest the potential reason(s) for the change and methods to return the water level to the baseline.

Investigations by SAG members identified a number of surface and ground water issues, e.g. beaver-caused problems, inadequate culverts along School and Cleaveland Brooks, flooding of basements during heavy rains, etc. But, a lack of regular water level measurements and other specific data made it difficult to determine changes in surface and ground water levels over the last two decades. The survey was seen as a tool to identify and determine the extent of any changes to surface and ground water levels, and to identify surface and ground water problems of which the SAG was currently unaware

This report discusses the survey preparation, the survey questions, the tabulated results, and eleven categories of resident comments. The final two sections summarize the conclusions and recommendations that are either stated or implied in the body of the report. Limitations implicit in the survey questions that could affect the conclusions are identified. The SAG has information external to the survey that expands our understanding of surface and ground water issues in Topsfield. This information will be published in separate documentation.

SURVEY DEVELOPMENT

The SAG received a preliminary draft of a surface and ground water questionnaire from the Board of Selectmen. The draft was reviewed and revised by the SAG over several iterations. It was then given to a focus group consisting of 13 people for their review and comment. Several suggestions were incorporated into a final version of the questionnaire.

The survey was prepared in a 4-page tri-fold format. Each page was 8.5" x 11". The first page was the survey letter, the second and third contained the survey questions and areas for comment, and the last page contained the send and return addresses each on the appropriate third of the page. The questionnaire was printed on two sides of an 11"x17" sheet, see Attachment 1, with the two survey question pages on one side and the first and last pages on the other side. The survey was printed and folded at the Essex County Correctional Facility in Middleton at no cost to the town except for paper.

The questionnaires were addressed to "Postal Customer" to minimize postage costs and were delivered, in theory, in March 2008 to 2153 residences and 212 businesses of Topsfield that comprise the US Postal Service's "Postal Customer" lists. SAG members received complaints from at least two residents of not receiving the questionnaire. There was no way of determining the exact number of residents who did not receive the questionnaire.

The survey recipients were requested to either attach a stamp and mail the completed questionnaire to the Town Hall, or to deposit it in one of three drop boxes located in the Selectmen's office, the Topsfield Town Library, or Steward School. A little more than half of the questionnaires were mailed in. Almost all of the others were deposited in the drop boxes at the Selectmen's Office and at the Library, fairly evenly split. There were only 5 deposited at Steward School.

The questionnaire return rates were 21% for residents and 8.5% for businesses. One might surmise that residents with water problems were more likely to return the questionnaire than those with no problems. However, the SAG is aware of residents and businesses with fairly serious water problems that did not return the questionnaire. One reason for not responding about problems might be fear of creating difficulty in selling the property if the problems are publicized. We don't know whether the nondisclosure motivation is stronger or weaker than the why-be-bothered-I-have-no-problem thinking in not returning the survey.

SURVEY TOPICS

The survey consisted of 14 items. The topics for the items were as follows:

1. Concern about water problems
2. Street name and whether the property was used primarily for business.
3. Causes of water problems and whether conditions had changed.
4. Causes of any surface flooding
5. Flooding of buildings and flood damage
6. Beavers
7. Ground water in basement
8. Sump Pumps
9. Ground water affecting septic systems
10. to 12. Mold, mosquito and public health concerns
13. Overall level of concern
14. Comments and Suggestions

Finally, the respondent could optionally supply their name and telephone number.

SURVEY RESULTS

The raw results of the survey returns from residents are tabulated in three Tables, one for each level of concern about water problems:

- Table 1 – Residents Level 1, low level of concern
- Table 2 – Residents Level 2, moderate level of concern
- Table 3 – Residents Level 3, high level of concern

Refer to the ‘Level of Concern’ subsection for the criteria used in placement of responses in Tables 1 to 3.

Table 4 summarizes the residential returns giving totals and percentages for each item and level of concern, and a total and percentage for all resident returns. Table 5 gives the raw results for the business returns. Tables 1-3 and 5 contain columns for street name, and street number if supplied by the respondent. The file number of the return allows for easy retrieval of the filled-out questionnaire and cross references the comments. The resident’s name and telephone number (if supplied) are available in the SAG’s master tabulation tables, but have been omitted in the version in this report to the Selectmen. The street names and numbers are omitted in the report available to the general public. The rest of the columns correspond one-to-one to the items in the survey with two exceptions: the column indicating whether the response was mailed, and the column indicating whether the respondent made a complaint about drinking water quality. A ‘1’ indicates a ‘yes’ was checked, a ‘0’ indicates a ‘don’t know’ was checked, and a blank indicates either a ‘no’ was checked or there was no box checked. No analysis was performed on the ‘don’t know’ answers.

The following subsections discuss the results pertaining to residential responses. The business responses are discussed briefly in the last subsection.

WATER PROBLEMS AND CAUSES

57% percent of residential respondents indicated they had experienced water problems on their property in the past 12 years. Many people listed multiple causes for their water problems. A high water table was indicated as a probable cause on 42% of all returns. Other probable causes were natural river and stream flooding (17% of all returns), blocked or inadequate culverts (14% of all returns), and four other categories of causes, each at close to 10% of all returns: beaver activity (12%), installation of Title 5 septic system(s) on property or nearby (10%), development (12%), and other (9%).

Several people checked off causes for water problems, but didn't check off the box that they had a water problem. Conversely, a few people indicated they had a water problem, but didn't check any cause.²

The survey did not list storm drainage as a probable cause of problems. However, 39 respondents (9% of total) made comments on and/or requests to correct problems with street water runoff and drainage. Most of these respondents checked the 'inadequate culvert' or 'development' or 'other' category.

CHANGES IN WATER CONDITIONS

Nearly ¼ (23%) of respondents reported that conditions had changed in the last 12 years. They were either wetter and/or reflect incidences of new water-related problems. Refer to the Conclusions section for a discussion of causes and caveats.

DRINKING WATER QUALITY

Eight respondents, 2% of the total, made unsolicited complaints about the quality of the drinking water. Refer to the Survey Comment subsection on the Town Water Supply for details.

SURFACE FLOODING

Surface flooding due to heavy rains was reported as a problem by 37% of respondents. 12% were affected by a river or brook overflowing its banks. These two questions were not specific enough to determine whether the respondents were referring to flooding of property away from buildings; surface flooding of homes, garages, or outbuildings; or flooding of basements. 18% of respondents indicated that conditions were wetter now than they were 12 years or more ago. Refer to the Conclusions section for causes of and caveats associated with this assessment.

9% of respondents reported that they had corrected a previous flooding problem. Refer to the Survey Comment subsections, particularly the one addressing basement flooding for approaches to correcting problems.

FLOODING OF BUILDINGS

A surprisingly large percentage of respondents reported flooding of buildings (including basements), and roughly 2/3 of those (26% of all respondents) had flood damage. The SAG cross correlated the flooding and sump pump questions and found that 30 (~25%) of those with flood damage had no sump pumps. There are numerous conditions that can cause an unexpected

² In a handful of instances, the SAG inserted a '*I*' (*in italics*) in the water problem column where it appeared obvious that the respondent had a problem and neglected to check the box.

or unique flooding situation, e.g. a 100+ year rain event; heavy rains on frozen or saturated or snow/ice laden ground; blocked gutters and/or downspouts and/or subsurface drains, etc.

BEAVER ACTIVITY

Eighteen percent of respondents reported that beavers were active on or near their property, and more than half of those (10% of all respondents) reported that beavers were a threat to their property. The questionnaire did not ask whether the beavers constituted a “public safety” threat to their property which is a prerequisite to getting an emergency permit from the Board of Health to trap the beavers when trapping out of season.

BASEMENT GROUND WATER AND SUMP PUMPS

Half of the respondents reported that water in their basement was a concern during heavy rains. Yet only 40 % of respondents had sump pumps and 33% (~80% of those with sump pumps) reported that their pumps ran during heavy rains.

28% of respondents typically used sump pumps during the spring thaw, and 9% used them year round. 13% considered their basement to be under threat throughout the year.

Note that 26 respondents with sump pumps expressed no ‘concern’ about basement ground water problems. 22 of these indicated that their sump pumps ran during heavy rains and/or during the spring thaw and/or throughout the year. The SAG considers that most of these respondents feel they are dealing satisfactorily with their water issues, and basement water is not a ‘problem’.

Around 10 respondents had sump pumps that apparently seldom, if ever, ran.

A relatively small number of respondents (3.5%) complained of the pump not working when needed. Most failures were caused by power outages, a situation that could be alleviated with a battery backup or generator installation. A number of respondents reported that they had installed one or both. A few respondents indicated that the sump pump had failed.

TITLE 5 SEPTIC SYSTEMS

21% of respondents have had their Septic System replaced under Title 5; several gave a reason why. The two primary reasons were sale of property and failure of the system. Many respondents indicated they didn’t know whether their System was replaced under Title 5. Only 5% believed the operation of their septic system had been affected by ground water, whereas a very large number of respondents were uncertain.

MOLD, MOSQUITO, AND PUBLIC HEALTH CONCERNS

Of all resident respondents, 26% were concerned with mold in their basements, 20% thought that mosquitoes were worse, and 17% thought that increased surface and ground water levels constituted a public health concern. Three respondents thought the mosquito situation was

better, indicated by an ‘L’ in Tables 1 and 3. Many responded ‘don’t know’ to these three questions, particularly relative to mosquitoes and increased water levels being a public health concern.

LEVEL OF CONCERN

Some respondents either understated or overstated their level of concern about water problems compared to the vast majority of respondents. The SAG placed each response in the concern level it considered appropriate for the problems described, regardless of the assessment of the respondent. This resulted in 288 level one responses – just over half, 130 level 2s, and 94 level 3s. The respondent-assessed levels averaged 1.3, 2.1, and 2.9 for the three levels. The average concern level for all returns was 1.9.

BUSINESS RESPONSES

Of the 18 business responses, 5 reported water problems. The one level 3 response, in downtown Topsfield, experienced 3 floods in the last twelve years due to an inadequate culvert. This was known to the SAG prior to the survey³. Two level 2s indicated beavers were a threat. Three had sump pumps and pumped during heavy rains and the spring thaw. Not responding to the survey were two businesses that have experienced serious flooding from an inadequate culvert and are periodically under a threat of flooding from beaver activity.

³ The flooding at the Topsfield Library (in 1996 and 2006) may be due to backup from the same culvert.

SURVEY COMMENTS

Many of the survey respondents supplied comments, complaints, and recommendations in item 14 of the questionnaire and occasionally in short margin notes. We separated the comments into 11 separate categories. There are a very few brief comments that were judged not pertinent to the survey conclusions. These were not included in any of the 11 categories, but can be readily identified in SAG 'Comment' files arranged by file number. A few comments appear in multiple categories as appropriate.

Most respondents who gave comments provided their street number and/or name. The few who didn't provide their name or address make it difficult for a town representative to respond to a complaint or request.

The editors inserted a few comments, mostly comments made in the margins of the survey and not in the comment section. These are in italics.

STORM DRAINAGE ISSUES, TABLE C1

The comments are divided into street water runoff and storm drain subcategories. Most of the street water runoff problems are on hilly streets. The storm drain issues are generally in low or flat areas, e.g., Ross Road, Summer Street, Forrest Road, and Arrowhead. There was one comment about a small stream issue on Towne Lane. Four of the comments had no street address or name making the problems described difficult to locate.

CULVERT ISSUES, TABLE C2

There were several comments about the inadequacy of culverts along School Brook. The Cleaveland Brook culvert at Prospect Street was also cited. The backup from two on School Brook and the cited one on Cleaveland Brook have flooded buildings in very heavy rain events.

There were several comments about inadequate culverts along Perkins Row, Ledgewood Circle, and at 6 other areas scattered about town two of which (Birch Lane and Candlewood Drive) did not identify their address. The Kinsman Road comment included a diagram which requires retrieval of File # 17 from the SAG survey files.

DEVELOPMENT COMMENTS AND ISSUES, TABLE C3

More than 1/3 of the comments under the development category are from Prospect Street or neighboring street (Gail Street and River Road) residents. Complaints are from both sides of the street and from both sides of the hill on the north (odd-numbered) side. The main issue is that uphill developments and changes are having a negative impact on them. One complaint is directed at an uphill resident who himself expressed complaints directed at residents further uphill.

Two neighbors on Camp Meeting cited a long-standing drainage issue that was caused by houses that blocked the natural drainage pattern when they were built.

There are a few complaints, 1 or 2 each, directed towards perceived problems from major completed, in process, and planned developments: Great Hill, Masconomet Health Care, St Rose Church, Dover Hill, Hickory Beech, and New Meadows. Of the 4 comments concerning Great Hill, two complained of increased basement flooding – one of those may just be reflecting the increased frequency of large rain events in the last 12 years; another cited observations of neighbors but had no problem himself; and another stated that a previous flooding problem had been corrected.

TITLE 5 COMMENTS AND ISSUES, TABLE C4

A number of residents made observations on the negative impacts of septic mounds on ponding, drainage patterns, ground water affecting basements, and, in one case, erosion. While the comments were from various areas of town there were two each from Forrest Road and Pemberton Road, and three from Summer/Central Streets.

There were 3 complaints concerning the town's handling of their Title 5 experience and one complaint about Title 5 in general. One respondent described a problem with his leaching field and speculated on possible causes.

ISSUES AND COMMENTS CONCERNING TOWN WATER SUPPLY, TABLE C5

Several respondents made unsolicited comments concerning the Town's water supply. A resident on the corner of Summer and Central Streets requested that the water main on Central Street be replaced ASAP. Eight respondents complained about the quality of the drinking water. Four respondents complained about the seasonal watering ban, one supported it, and one didn't see the necessity for watering lawns.

BEAVER RELATED PROBLEMS AND COMMENTS, TABLE C6

There were many comments about beaver activity, the problems beavers created for some residents, and the altered landscape they created. There were multiple comments from five areas of town: 1. Haverhill, Wilmor, and Bear Hill Roads adjacent to Pye Brook; 2. Thompson Lane, on a small stream that flows into Pye Brook; 3. Perkins Row near the Audubon Sanctuary; 4. Winsor Lane; and 5. East Street.

The Pye Brook area generated the most comments and the worst impacts. These included higher water levels, flooding of property including barn and paddock area in one case and loss of former vegetable garden in another, loss of many trees both on residents' property and in wetlands, contaminated water in culvert, concern with drinking water quality in well; and increased mosquito population and duration. One resident reported spending thousands of dollars dealing with the problem with little success. Thompson Lane residents reported loss of trees and a threat to a septic system before beavers were trapped via emergency permit from the Board of Health and the dam was breached under guidance from the Conservation Commission.

Three Perkins Row residents report that areas in their yards and in the Audubon Sanctuary they back up to, that were dry 12 years ago, are now wet with loss of trees. Beaver deceivers help but need to be continually monitored and cleaned when necessary.

Many Winsor Lane and East Street residents complained of higher water tables, possible threat to septic systems, increased mosquitoes, and possible well pollution.

Other problems were reported on Ipswich Road east of Route 1, on School Brook near Route 1, and on Salem Road at the base of the hill close to the Danvers line.

There were many comments, both from people in the areas affected and from other residents, observing that water levels were higher in many areas, complaining about the loss of trees and altered landscape, and expressing concern for residents with beaver-caused water problems. One resident did like the improved environment for water-birds in flooded areas, but suggested that the dead trees should be removed.

Two residents offered help; one to clean beaver deceivers, and one to give his insights into problems from a trapper's viewpoint.

RIVER AND STREAM COMMENTS, TABLE C7

There were 4 comments that related to flooding from rivers and streams. The overflowing of School Brook near Maple Street in the May '06 storm was back-up from the Ipswich River. Other properties in the Maple Street, Maple Lane, and Central Street area were impacted. The cutting of trees by the electric company was periodic maintenance to keep trees clear from power lines; it is not related to the rails to trails effort.

There were 4 requests to clean brooks and streams of debris as was done in the past.

There were 4 other miscellaneous observations and concerns on this topic.

COMMENTS ON MOSQUITOES, DEER FLIES, ETC, TABLE C8

Table C8 contains all the comments concerning mosquitoes, including those included in Table C6 relating to beaver activity. The last three mosquito entries were in-the-margin comments that there were fewer mosquitoes.

There was one comment that the ticks were worse than the mosquitoes, and one complaint about a deer fly infestation.

COMMENTS INDICATING A HIGHER WATER TABLE OF UNKNOWN ORIGIN, TABLE C9

A number of respondents claim to have wetter conditions for either unknown or unexplained reasons. We have divided them into those with observed higher surface water levels and those with inferred higher ground water levels.

COMMENTS ON BASEMENT FLOODING, TABLE C10

Many respondents commented on basement water problems. For brevity, Table 10 includes only those comments where basement flooding is the only topic discussed; none of these comments are repeats from other Comment Tables.

Several people indicated in their comment (and in question 4 of the survey) that they had corrected a previous flooding problem. Those comments are collected together in Table C10. Methods used included:

- Installing one or more sump pumps
- Installing back-up power - battery and/or generator
- Installing French (perimeter) drains
- Keeping gutters and downspouts clean
- Installing outside drainage apron around home and or drainage pipes
- Preventing leaks around pipes through basement walls
- Using dehumidifiers to prevent mold

One resident (see Table C9) suggested government help in dealing with a purely localized basement water problem.

MISCELLANEOUS ISSUES, COMMENTS, AND SUGGESTIONS, TABLE C11

Table C11 includes a number of comments and suggestions that don't fit into any other category. Two respondents provided extensive comments. These are included in separate Microsoft Word documents.

CONCLUSIONS

There were no widespread changes to surface and ground water levels, but some significant changes occurred in localized areas and on some individual properties. The primary causes of the localized changes included beaver activity, Title 5 septic “mounds”, and development. Other water-level and erosion problems include storm drainage issues, backup from inadequate culverts, natural river and stream flooding, and basement flooding. There were a few unexplained increases in apparent water levels.

The chief cause of localized long-term (weeks to months or longer) water level increases in recent years is beaver dams. Some residents incurred significant costs dealing with the higher water table, and they and several more suffered damage due to the more severe flooding during significant rain events. Many residents expressed concern with the loss of trees and transformation to lakes of formerly boggy or dry properties. Overall, 10% of survey respondents indicated that beaver activity was a threat to their property.

Transient water-level problems, namely short-term flooding, were exacerbated by the increased frequency of significant rain events over the last 12 years as compared with the previous 30 years. Notable storms occurred in 1996, 2001, 2004, and 2006. It is likely that many who reported that conditions had changed were partially reflecting the increased frequency of these large rain events. However, there are at least three factors that can contribute adversely to transient flooding problems: development, beaver activity, and Title 5 septic mounds.

Development, particularly the expansion of non-porous surfaces, is commonly cited as a major contributor to increased levels of storm runoff. In developed areas, beaver dams increase water table levels and reduce the wetland area available for short-term water storage during significant rain events. These factors increase storm water runoff levels. This adds to the total volume of water and increases short-term flows and flooding levels. Septic mounds raise land level and may contribute to storm water runoff in a manner analogous to non-porous surfaces. The relative effects of these three contributors to flooding in Topsfield are unknown.

Overall, the survey enhanced the SAG’s understanding of surface and ground water problems in Topsfield. The known issues associated with beaver activity, inadequate culverts, and developments were confirmed. Several problems caused by septic mounds and storm water runoff and street drainage were uncovered. The information gathered in the survey effort will be factored into the SAG’s final report.

RECOMMENDATIONS

Town departments and boards can address many of the problems associated with beavers, Title 5 septic mounds, development, inadequate culverts, and storm drainage. Table 6 summarizes the SAG's recommendations. The recommendations are directed towards streamlining the resolution of beaver problems, reducing the likelihood of flooding and flood damage, and correcting problems caused by improper storm runoff or inadequate storm drainage.

TABLE 6 SUMMARY OF RECOMMENDATIONS

CATEGORY	TOWN ENTITY⁴	RECOMMENDATIONS
Beavers	Board of Selectmen, Highway Department, Conservation Commission	Determine/approve no-beaver areas, e.g., School/Cleveland Brooks, Pye Brook, etc. Review and update, if needed, responsibilities - town vs. private - for trapping in no-beaver areas. Arrange for timely trapping and dam breach/removal in no-beaver areas under town control.
Title 5 Septic Mounds	Board of Health	Investigate complaints in survey documentation. Make recommendations to correct existing problems. Develop guidelines to avoid such problems in future septic system installations.
Development	Zoning Board of Appeals Conservation Commission	Address appropriate concerns expressed in survey responses. Continue to provide a forum for neighbors and concerned citizens to express viewpoints regarding small and large development proposals.
Undersized Culverts	Highway Department Road Commissioners	Establish a long term plan to replace undersized culverts. Keep culverts free of debris to minimize flooding potential.
Street Runoff and Drainage	Highway Department Road Commissioners	Review complaints in survey documentation. Establish a prioritized list of the problems to correct or mitigate. Develop a town-wide drainage model.
Town Water Supply	Water Department	
Basement Flooding	SAG	Generate a list of methods homeowners can take to minimize the likelihood of basement flooding and/or damage
Higher Water Table	SAG	Investigate individual complaints to determine likely cause.
River & Stream Flooding		None
Mosquitoes, etc.		None
Other	All	Read for general information.

⁴ Board of Selectmen or Finance Committee/Town Meeting may need to approve funding requirements.

TABLES

SUMMARY TABLES

SUMMARY TABLE 1
RESIDENTS WITH LOW LEVEL OF
CONCERN

TABLE 1 TABULATION OF SURVEY RESPONSES: TOPSFIELD RESIDENTS - LEVEL 1

File Number	Street	Number	Mailed	Water Problems	Conditions Changed	Drinking Water Quality	Surface Flooding: Rains	Buildings Flooded	Beavers Active	Basement: heavy rains	Have Sump Pump	Septic: ground water	Mold in Basement concern	Mosquitos changed	Water: public health concern	Concern Level	Comment Summary
				Natural Water Table Beaver Activity Inadequate Culvert Septic System Development Other			River/Brook Changed : dry to wet Problem Corrected	Flood Damage	Beaver Threat	Basement: always	Runs: haevy rains Runs: spring thaw Runs: throughout year Often fails when needed	Septic: New (Title 5)					
1	Bare Hill								1					0	1	1	Concern for neighbors; thinks Great Hill development increased problems
2	Candlewood						1							1		1	
3	Boardman Lane				0				1			1				1	
5	Great Hill											1				1	Pumped every spring at previous home on Washington St
6	High Ridge	8		0	0		0 0 0	0 0 0				0		0		1	
9	Averill															1	
11	Alderbrook	41										0				1	
14	Willowdale	36											1			1	
15	Ipswich Road											1				1	
17	High Street	69						1								2	Prev owner installed drainage apron (>15 yrs ago); cured basement flooding
18	Towne Lane	28		1 1 1	0	1		1 1		1						1	Concerned about quality of town water; brackish ~5-6 times a year
22	Averill	18												0		1	
28	Ipswich Road	78			1				1					0		3	Complained about dead trees on North Street from Beaver activity
31	High Street	100		1	1		1									X	Development of Dover Hill Rd changed water flow, areas mostly wetter
32	Candlewood	15		0					1							1	Offered to help maintain beaver deceivers near him
35	Averill	41										1				1	
38	Perkins Row								1			0	0	0		2	Contentds water levels in surrounding area (IRWS) have risen in recent years
40	Rowley Road	19										1	0	1		1	Concern with road salt on well and small tankers dumping nearby
41	Perkins Row	90														1	
42	Pine Street	12	1													1	
46	Ipswich Road	144	1				1									1	
47	Canterbury Hill Road		1		0						0	1	0	0		2	
53	Candlewood	14	1										1			2	
54	Valley Road	2														1	
57	Ipswich Road	260			0		1		0 0	1			1	0	0	1	
59	Surrey Lane	4							0 0					1	0	2	
60	Ridgeview Road	16	1											0		1	
61	Canterbury Hill Road		1											1		3	Concerned about mosquito breeding in un-drained water
66	Colrain Road	7														1	
67	Howlett															1	
68	Forrest Road	9		1	1		1 1			0 0	1					1	Street drain clogged twice over many years; otherwise no problem
70	Averill		1				1						1	0		2	<i>Italics means just a little concern</i>
71	Great Hill	47	1									0				1	
73	Woodside	36	1									0	0			1	
74	High Street	178				1							1	1	1	2	Complains about clorine smell in water; asks if filtration device can remove
75	High Street	244	1							1 1						2	
77	Pine Street	4														1	
78	Averill	37						1		1					0	2	
80	North Street	89	1													1	
81	Timber Lane	13	1									1				1	
83	Hill Street	1	1		1						1					1	Has wet field due to neighbor's culvert
87	Blueberry Lane	10										0				1	House built in '78; asks link between ground water and lower Ipswich R level
88	Brookside											0				1	
89	River Road			1	0		1	1	0 0		1 1 1					1	Flooding from May '06 storm

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TABLE 1 TABULATION OF SURVEY RESPONSES: TOPSFIELD RESIDENTS - LEVEL 1

File Number	Street	Number	Mailed	Water Problems	Conditions Changed	Drinking Water Quality	Surface Flooding: Rains	Buildings Flooded	Beavers Active	Basement: heavy rains	Have Sump Pump	Septic: ground water	Mold in Basement concern	Mosquitos changed	Water: public health concern	Concern Level	Comment Summary
				Natural Water Table Beaver Activity Inadequate Culvert Septic System Development Other			River/Brook Changed : dry to wet Problem Corrected	Flood Damage	Beaver Threat	Basement: always	Runs: haevy rains Runs: spring thaw Runs: throughout year Often fails when needed	Septic: New (Title 5)					
91	Robert Road	2			1		1		1 0	1		0 1	1 1 0			2	Old Septic system failed
92	Howlett	96								1			1			2	
94	Washington/Little Brk	69	1									0 0				1	
96	Great Hill	63	1		1							0 0	0			1	
97	Coventry Lane	9	1				1					0	0			1	2 Vernal Pools connected by man-made ditch; many drowned trees in 4 yrs
99	Alderbrook		1													1	
101	Perkins Row	17		1			1		1 1		1 1					1	lt. Sometimes. Flooding only seepage in basement; freq: 3-4 times in 12 yrs
102	Pheasant Lane	3	1													1	
103	Wenham Road	41	1								1 1 1	1				2	
106	Perkins Row		1	1 1 1	1 1		1 1	1 1	0 0	1		0 1				1	Septic: Required for refinancing
110	Bare Hill	34														1	
113	Canterbury Hill Road											1				1	Septic: New home
114	Canterbury Hill Road	30	1									0	1 1			1	
116	Bare Hill	79	1													1	
117	Boston (Rt 1)	409	1	1	1		1			1	1		1			2	Seepage around chimney base during heavy rains/ high water table
118	Washington		1							1			1			1	
120	Coppermine		1	1 1 1 1	0	1 1 1		1 1				0	0 0			3	Property Flooding from Nichols Brook
121	High Ridge	11	1													1	
122	Rowley Road		1				1					0	1 1			1	
123	Blueberry Lane		1	1						1			1			1	No problem if gutters & downspouts kept clean
125	Howlett Street	67	1		1					1 1	1 1 1					1	Get seepage around pipe due to faulty construction, contractor will fix
126	Deer Run	5	1										1			2	Mosquito population has exploded
127	Stagecoach	35	1										1			1	
128	Towne Lane	32	1									1	-1			1	Septic: failure of distrib sys; large drainage pipe at 34 Towne/ erosion
129	Haverhill Rd		1	1 1					1				1			1	On Hoods Pd; Beavers have taken down 30+ trees & saplings
131	Willowdale	16	1													1	
132	High Street	75	1	1	1					1						1	Only very heavy rain a problem; general complaint- over stringent regs
133	North Street		1													1	
137	Parsonage Lane		1	0	0		1 1			1		1 1 1 1				2	Septic: D-Box replaced by previous owner in '03; Rec: Town sewerage
138	Parsonage Lane	64	1	1 1						1						1	1-2" in basement 3 times in last 6 years during very heavy rains
139	Perkins Row	224														1	
140	Glen Road			1 1				1		1						2	
141	North Street															1	
142	Woodside			1 1			1									2	
143	Mansion Drive			1 1 1	1		1 1		1 1	1 1			1 1 0			2	Gives no specifics on own property, only general obs around town
145	Hill Street	129	1										1			3	Marked only 4 boxes. Complained about H2O ban. Rec: esc scale for usage
147	Mansion Drive	28	1													1	Concerned about increase of non-porous surfaces around town
150	Haverhill	196	1		1		1	1								2	Runoff from Route 97 deposits material in driveway over past 3 years
151	Rowley Bridge	76	1													1	
152	Washington	64	1													X	
153	Brookside		1										1			1	
154	Woodside		1	1 1	0		1 1			1		1	0			2	Septic failed in 2000
161	Bare Hill	29	1									1				1	
162	Great Hill															1	

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TABLE 1 TABULATION OF SURVEY RESPONSES: TOPSFIELD RESIDENTS - LEVEL 1

File Number	Street	Number	Mailed	Water Problems	Conditions Changed	Drinking Water Quality	Surface Flooding: Rains	Buildings Flooded	Beavers Active	Basement: heavy rains	Have Sump Pump	Septic: ground water	Mold in Basement concern	Mosquitos changed	Water: public health concern	Concern Level	Comment Summary
				Natural Water Table Beaver Activity Inadequate Culvert Septic System Development Other			River/Brook Changed : dry to wet Problem Corrected	Flood Damage	Beaver Threat	Basement: always	Runs: haevy rains Runs: spring thaw Runs: throughout year Often fails when needed	Septic: New (Title 5)					
163	Ridgeview Road													1	0	2	
164	Pemberton Road	17		1	1					1	1	1	1	0	0	1	
165	Great Hill	20														1	
168	Haverhill		1	1	1	1	1	1	1	1				0		1	
169	Rowley Road	25	1									1		1		1	Septic: Built an addition
172	Perkins Circle	3	1											1	1	1	
173	Orchard Lane	18														1	Does anyone have suggestion to deal with our infestation of deer flies?
174	Arrowhead	15										1				2	Septic: Existing septic failed testing. General concern about beaver activity
177	East		1	1	1	1			1								Concerned about beavers causing problems to other property owners
178	Boxford Road	26	1											0		1	
180	East Street	2	1	1	1				1					1		3	Generally concerned beavers may pollute wells, affect septic systems
181	Kinsman Circle	53	1				0									1	Rec: Spray woods to kill mosquitos and tics (sic)
183	Winsor Lane	33	1									0		0		2	Concerned for neighbors
184	Rowley Bridge	281	1														Resident for 10 months, no problems so far
185	Perkins Row	136	1									1				1	House built in '01
188	Aaron Drive	4	1	1	1	1	1	1	1	1				0		1	Water higher in small stream; been told it may be beavers
189																	
190	Timber Lane			1	1				1	1						1	
195	Wilmor	3	1														
199	Perkins Row	145	1														
200	Kinsman Lane										1	1		1	0	1	Septic: house purchase in 2000; concern is with mosquitoes
202	Rowley Road	4	1														
207	Perkins Row		1														
208	Coppermine	18	1											1		2	
211	North Street	1	1														
214	River Road	136	1														
215	Ledgewood Circle	13	1		0		1			1	1						
216	Brookside	54	1	1	1				1	1				1	1	1	3 Tap water often brown
218	Washington	69	1	1	1					1				1		2	
223	Perkins Row	116												L		1	Considerably diminished mosquitoes in last 40 years
225	Brookside									0				0	0	1	Resident since '02; mosquitoes always bad
226	Perkins Row	135		1	1			1	1		1					1	Uses dehumidifier in basement
227	Haverhill	100										1				1	Septic: New construction - no respect for health agent
228	Ridgeview Road																
230	Candlewood	8					1				1			1		1	
233	Rowley Bridge	226	1	1			1									1	Street runoff into driveway, floods areas; phragmytes choking pond
235	Perkins Circle		1	1	1							1		0		2	High water table possibly affecting septic system
237	Wenham Road	37	1							1	1	1		1		1	Leaching failed in 1995
239	Great Hill		1									0	0		0	1	Unpleasant chemical taste to water
241	North Street		1				1	0	0	0				0	1	1	2 yr resident; water in back during heavy rain?; Treat mosquitoes non-toxic
243	Rowley Road		1											1	0	0	
246	Perkins Row		1						1	1	1	1				1	Septic :New Construction
247	Perkins Row	220	1						1							1	Water in IRWS rising yearly; may go across road onto their prop
248	Kinsman Circle	50	1	1	1					1	1	1		1		2	

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TABLE 1 TABULATION OF SURVEY RESPONSES: TOPSFIELD RESIDENTS - LEVEL 1

File Number	Street	Number	Mailed	Water Problems	Conditions Changed	Drinking Water Quality	Surface Flooding: Rains	Buildings Flooded	Beavers Active	Basement: heavy rains	Have Sump Pump	Septic: ground water	Mold in Basement concern	Mosquitos changed	Water: public health concern	Concern Level	Comment Summary	
				Natural Water Table Beaver Activity Inadequate Culvert Septic System Development Other			River/Brook Changed : dry to wet Problem Corrected	Flood Damage	Beaver Threat	Basement: always	Runs: haevy rains Runs: spring thaw Runs: throughout year Often fails when needed	Septic: New (Title 5)						
249	Willowdale	28	1									1	0	0	1	1	Septic: by seller	
252	Candlewood		1	1	1				1	1						2		
258	Colrain Road		1	1												2		
260	Honor Place	15					1		0	0		0	0	0	0	2		
264	Walker Road							1				1	0	0	1	1	Septic: failed	
267	Parsonage Lane	47		1	1	0							0		1	1	One problem from melting snow and rain	
268	Washington	211					1	1	1	1	1				1	1	Letter complaining about people complaining about water problems	
269	Wilmor	28		1			1		1	1						3	Beaver Lodge in Backyard; trees down	
272	Willowdale	43									1	1	1		1	1		
276	Brookside	19		0		1						0	0	0	0	1	Sediment from flushings blocked water valves in sinks/ dirty water	
277	Winsor Lane	4	1											0		1		
278	Brookside															1	Water levels in wetlands risen markedly in last few years	
280	Arrowhead	21		1		1	1									3	Problem is street flooding, including by mailbox; ice rink in winter	
282	Hill Street				0													
285	Grove	15													1	2	Rec: Clear Cleaveland Brook	
286														L		1	Fewer mosquitoes	
287	South Main	95	1								1	1				1	Septic: Old system inadequate	
288	Honor Place	14	1	0			0	0	1			0	0			1	Res 1 Yr	
289	Parsonage Lane		1	1							1	1	1			1	Water in basement - May'06	
291			1													1	Res: 8 yrs	
293	Towne Lane	17	1	1	1	1	0	0	0	1			1	1	2	2	Concern:little stream changing direction; Rec: Town add gravel/ rocks	
294	High Street			1	1	1	0		1			0	1	0	2	2		
295	Brookside	31														1		
297	Howlett													1		2		
298	Towne Lane										1	1	1			1		
300	Boxford Road	14														1	Has dehumidifier	
304	Canterbury Hill Road	16	1	1	1		1		1	1		1				1	Septic: House built '95. Complaint of Ca in drinking water; many questions	
306	High	65	1									1				2	Ground water very high/ saturated around area of leech field- affects leeching	
307	Stagecoach	29	1									1	1	0	3	3	Septic: Addition. Long epistle railing against developers, polluters, etc.	
308	Parsonage Lane	51	1	1	1	0	1	1	1			1	1	0	3	3	Res 5 yrs. Septic: new at purchase	
309	Willowdale		1	1				1			1	1				1		
310	Perkins Row		1									0			1	2		
312	River Road						0			1					1	2	Septic: On transfer	
314	Perkins Row	294														1		
316	Rowley Bridge	116	1	1	1	0	1									1	Only problem: Slight driveway damage May '06	
320	East Street	31												1	1	1	1	Rec: Manage beavers along East Street
321	Coppermine	11	1													1		
322	Gail Circle		1				1				1	1			1	1	Septic: on purchase	
323	Park	22		1	1	0	1		1	1						A	Change may be to tamping of ground/filling vernal pool of new church	
324	Walker Road	2											1	1	1	2	Trapper; noticed rising/expanding water; offered to meet with us	
325	Perkins Circle	19									1		1	0	0	1	Said Hi; Pine trees dying- lowered water table?	
327	Forrest Road	19					1							1		1	Installed drain to flow from back to front	
330	Orchard Lane													0		1		
334	Surrey Lane	30	1									1	0	0	2	2	Septic: on sale/purchase	

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TABLE 1 TABULATION OF SURVEY RESPONSES: TOPSFIELD RESIDENTS - LEVEL 1

File Number	Street	Number	Mailed	Water Problems	Conditions Changed	Drinking Water Quality	Surface Flooding: Rains	Buildings Flooded	Beavers Active	Basement: heavy rains	Have Sump Pump	Septic: ground water	Mold in Basement concern	Mosquitos changed	Water: public health concern	Concern Level	Comment Summary
				Natural Water Table Beaver Activity Inadequate Culvert Septic System Development Other			River/Brook Changed : dry to wet Problem Corrected	Flood Damage	Beaver Threat	Basement: always	Runs: haevy rains Runs: spring thaw Runs: throughout year Often fails when needed	Septic: New (Title 5)					
335	Mill Brook Lane	5	1													1	
336	Asbury Street	65	1	1				1		1		1	1			2	Septic: Tenant House. Water in basement in very heavy rains
337	Linebrook		1									0	0			1	
338	Canterbury Hill Road	15	1													1	
339	Fox Run	24	1								1	1				1	
341	Camp Meeting	34	1											1		2	Concern is increase in mosquito population
343	Rowley Road	13	1									1	1			1	Septic: failed in '06
345	Willowdale	12	1	1 1			1							1		1	
349	Perkins Row	57	1								1	1	1			1	Small damage to wood floor from power outage; now have battery backup
350	East Street	124	1	1 1	1		1 1		1					1	1	3	Concerns: Road/Willowdale flooding, mosquitos. Rec: control beavers
351	Washington	167														2	Res since '65
352	Main	100		1 1 1			1 1			1		0				2	Res -35 Yrs
354	Haverhill						1 1					0				1	
357	Washington			0									1	0	0	2	
360	Washington	111	1		0							1				1	Septic: On purchase, 7/06
362	Ipswich Road											1	1			2	Septic: Higher water table
365	High Street	165														1	
367	High Street	220		1 1 1			1 1		1			1			1	2	Septic: new plan complete, not implemented yet
370	Main Street		1	0	0			0 0 0		0 0	0	0 0	0			1	
371	Coppermine	8	1											1		2	
373	Candlewood		1													1	
378	Towne Lane	19														1	
379	Ledgewood Circle	8		1 1 1		1		1						1		1	Catch Basin clogged - May '06; mosquitoes worse when spraying stopped
382	Perkins Row		1									1					Septic: Age
389	Walker Road	18	1	0	0				1 0			0		0 0		2	Res: 10 months
396	South Main											0 0	1	0 0		2	
399	Timber Lane	21	1													1	
400	Willowdale		1													1	
401	Washington		1	1						1	1 1 1			0		2	
402	Willowdale	51								1	1 1 1					2	
403	Averill	33														1	
405				1			1					0				1	
407	Haverhill		1													2	
408	Wildes Road	35	1						1							1	Well water excellent. Concerned about Golf Course devel & appl of fertilizer
410	Howlett			1	1			1								1	Basement flooding May '06 only
411	Timber Lane	37														1	
412	Normandy Row	18	1	1	1			1 1		1				1		1	Basement flooding; unusual because on a hill
416	High Street			1 1						1	1					1	
422	Averill											0		1		2	Getting a little concerned because there is a survey
423												0	1	1 1		2	
429	East Street	27	1	1 1				1	1	1	1					1	Pump runs only during very heavy rains, ~ every 10 years
430	Ipswich Road	183	1											1		1	
431	Fuller Farms Road	15	1									1				2	Septic: New house
432	Washington	106	1	0	0		1	0 0			1	0	0	0 0		1	

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SUMMARY TABLE 2
RESIDENTS WITH MODERATE LEVEL OF
CONCERN

TABLE 2 TABULATION OF SURVEY RESPONSES: TOPSFIELD RESIDENTS LEVEL 2

File Number	Street	Number	Mailed	Water Problems	Conditions Changed	Drinking Water Quality	Surface Water: Rains	Changed : dry to wet	Problem Corrected	Buildings Flooded	Flood Damage	Beavers Active	Beaver Threat	Basement: heavy rains	Basement: always	Have Sump Pump	Runs: haevy rains	Runs: spring thaw	Runs: throughout year	Often fails when needed	Septic: ground water	Septic: New (Title 5)	Mold in Basement concern	Mosquitos changed	Water: public health concern	Concern Level	Comment Summary
4	Towne Lane	34		0	0		1	0	0	0	1	1	0	0	1	0					0	1	1	0	0	2	Recently moved from Pemberton; Concerned about water easement on prop
8	High Street	161		1	1	1	0	0	0	0	1	0	0	1		1	1				0		0	0	2	Pump only with record rains; 3 times in 17 years	
10	Fox Run	20		1	0	1			1	0	0			1		1	1				1				2	Title 5 inspection passed, but overruled by Downing (high water table)	
12	Washington	15		1	1				1					1		1	1				0		0	0	2	French Drain helped	
13	Willowdale			1	1			1				0	1										0		2		
19	Ipswich Road			1	1	1				0				1											2		
20	Winsor Lane			1	1			0	0			1	1	1									0		2		
21	High Street	51		1	1	0	0	0								1	1	1			0	1	0		2	Part of lawn now boggy; basement damp all year; mold on house	
27	Meetinghouse Lane	6		1	1	1	1			0	1	0	0	0	0						0	1	0	0	2	Yard puddling; stream runs through driveway; 20 month resident	
29	Boston (Rt 1)	391		1	1	1					1	1	0	0	1								1	0	2	Minor damage - May '06	
30	Winsor Lane			1	1				1			1	1												2	Drains improperly installed; problem corrected	
34	Wenham Rd	51		1	1	1		1		1				1	1	1	1					0	0	0	2	increased surface water and runoff since Title 5 installations nearby	
36	Colrain Rd	10		1	1						1			1							1				2		
37	Summer Street	22		1		1			1	1				1		1	1	1					1		2	Drainage fixed; Replace old water main on Central Street ASAP	
44	Glen Road	18	1	1	1	0	0			1	1			1									0		2	Basement flooded 3 times, modified bulkhead	
45	South Main	64	1	1	1									1		1	1	1					1	0	2		
50	River Road			1	1		1	1		1		0		1							1				2	Believes Title 5 is abused	
51	Washington Street			1	1			1		0	0	0	0	1		1	1	1	1	0			0	0	0	2	
55	Central Street			1	1	0			0	1				1		1	1	1			1		1		2	Complaints about Septic/Parking Lot conditions at Shopping Center	
56	Woodside Drive	10		1	1	1				1	1			1											2	Pumped only in May '06	
58	Perkins Row	228		1	1	1		1	1	1	1	1		1		1	1						1	0	2	Suggests changes caused by Great Hill development and beavers	
62	Ipswich Road		1	1	1	1		1	1			1	1										1	0	2	Rec: Go on trapper.com and invite trappers to trap during open season	
63	N/A		1	1	1		1			0				1							1	1	0	0	2		
64	Comstock Lane	3	1	1	1				1	1	1	1	1	1		1	1	1			1	1			2	\$15K Damage in basement in '07: Lives on top of hill!!!	
69	Ipswich Road	106		1		1	1			1		1	1										1	0	2	Beavers clogged culvert and damaged/cut tree; Rec: remove beavers	
72	Perkins Row	81	1	1	1			1		1				1											2		
76	Bare Hill	3		1	1	1		1	1	1	1										0		1	0	2	Beavers in Pye Brook increased water levels	
79	Haverhill			1	1					1				1							0	1	0	0	2		
85	Hill Street		1	1	1					1	1			1	1						1				2	Incr in surface flooding since street repavement; flooding thru B/M toilet	
86	Gail Street	29		1	1		1							1	1	1	1	0			0		1	0	0	2	
90	Howlett Street	15		1	1	1		0	0							1					0	0	1	0	1	2	Septic failed Title 5 insp due to high water table; functioning properly
93	Pemberton Road	16		1	1					1				1		1	1	1							2	It: when water table high; Rec: Install culvert by RR berm re Title 5	
95	Central Street		1	1			1		1	1	1			1		1	1	1							2	It: Heavy Rain	
100	High Street	97	1	0					0	0				1		1	1				0				2	Resident <1yr; 2 sump pumps; washer won't drain when water table high	
105	South Main	52	1	1	1					1				1		1	1	1							2		
108	Central Street	42	1	1	1	1				1				1		1	1	1			0	1		0	2	Rec: Keep clear/replace Summer St School Brook culvert	
115	Forrest		1	1	1									1		1	1	1							2		
124	Central Street		1	1	1					1	1			1	1	1	1				1	1		0	2		
134	Parsonage		1	1	1					1	1			1							1				2	Septic replaced by previous owner	
135	Alderbrook	32	1	1	1			1	0					1	1	1	1				0	0	0	0	2	Battery backup for pump	
136	Meadowview	18	1	1	1					1				1		1	1	1							2		
144	Perkins Row		1	1	1			1	1			1	1	1		1	1	1	1						2		
149	Ledgewood Circle	11	1	1	1					1				1		1	1	1	0		1				2	Old septic failed	
155	Salem Road	136	1	1		1				1		1	1	1		1	1					1	1		2	Hill and road drainage cause erosion; culvert blocked by beavers	
156	Fox Run		1	1	1	0	0		1					1							1		0	1	3	Septic replaced for house addition; basement flooded	

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TABLE 2 TABULATION OF SURVEY RESPONSES: TOPSFIELD RESIDENTS LEVEL 2

File Number	Street	Number	Mailed	Water Problems	Conditions Changed	Drinking Water Quality	Surface Water: Rains	Buildings Flooded	Beavers Active	Basement: heavy rains	Have Sump Pump	Septic: ground water	Mold in Basement concern	Mosquitos changed	Water: public health concern	Concern Level	Comment Summary
				Natural Water Table Beaver Activity Inadequate Culvert Septic System Development Other			River/Brook Changed : dry to wet Problem Corrected	Flood Damage	Beaver Threat	Basement: always	Runs: haevy rains Runs: spring thaw Runs: throughout year Often fails when needed	Septic: New (Title 5)					
158	Ipswich Road	139		1 1 1	1		1	1 1	1	1	1 1 1	1				2	Septic Failed; Mile Brook flooding further up; ConsCom imposed restrictions
159	South Main	66		1 1 1	1		1 1		0 0					0 0		3	Cleaveland Brook plugged; Rec: Clear debris as Bill Gamble used to
160	Fox Run			1 1			1	1 1	1							2	Basement flooded twice in 12 years
167	Pemberton Road	32	1	1 1 1 1 1 1	1		1	1 1	1 1	1 1 1 1	1 1	0 0	1			2	Septic: Ground saturated/backup to B/M; Change:ponding from Title 5 mounds
170	Normandy Row		1	1	1	0	1	1 1	1 1	1 1 1		0	1	0 1		3	
186	Colrain Rd	27	1	1 1	0		1	1 1	1	1 1	1 1	1				2	Septic: Sale of home. General concern re overdevelopment and beavers
191	Washington Street			1 1 1 1 1	1		1	1	1 1	1 1 1		1				2	Problems: 1996, 2002. Pump every spring since 2002. Blames septic mounds
192	Washington	119		1 1	1		1	1 1	1							2	
197	Haverhill			1 1 1 1 1			1 1 1		1 1			1				2	Septic: sale. Former vegetable garden under water 80% of year/ PB park road
201	Haverhill		1	1 1 1 1	1		1		1 1			1				2	Septic: by sellers in 1998
204	Hill Street	115	1	1				1 1 1								2	
209	Perkins Row	186	1	1 1				1 1 1	0 0	1	1 1 1	1				2	Septic:Failure. Lower Split-level flooded-May'06 (only inst in 14yrs); installed pump
217	Howlett Street	35	1	1 1	0			1 1 1	0 0	1	1 1 1 1	1	1	0 0		2	Septic: Sale. \$5K to install sump pump and perimeter drain; runs 2 dehumifiers
221	Ipswich Road		1	1 1	0		1	1 1		1	1 1	1				2	Septic: when purchased in '04
222	Asbury Street		1	1 1 1			1	1	1	1	1 1		1			2	Too much lawn watering; beavers flooding BPNF: Rec: reinstate beaver trapping
224	Perkins Row	142		1	1	1		1		1	1 1 1	1	0	0		2	3 Pumps; Septic: purchase '98, at 140 in '06, new at 136 in 02; drainage imp in '99
231	East Street	37	1	1 1 1				1 1	1 1	1 1	1 1 1 1	0	1			2	Pump runs 10/12 months; beaver activity a concern
232	Surrey Lane	33	1	1 1				1 1		1	1					2	Basement flooded in '96 and '06; now have sump pump- not needed yet
234	Meadowview	8	1	1 1			1	1 1		1						3	
236	Washington		1	1 1 1						1 1	1 1 1	1	1	0 0		2	
238	Ipswich Road		1	1 1 1			1 1	1	0 0	1				0 0		2	
251	Timber Lane	50	1	1 1 1	1			1	1 1	1		0	1	1		3	Rec: Control beaver population. No specifics on his particular threat, if any
253	Route 97		1	1	1		1	1 1		1		1 1	1			2	Septic: Property transfer
256	Sleepy Hollow Rd		1	1 1			1	1	1							2	
257	Hill Street	92	1	1	1	1	1			1		1				2	Septic: Property transfer '98. Drainage issue caused by Highway Dept berms
261	Kinsman Lane	17		1	1	1	1 1				1 1 1	0				2	Rec: clear culvert as did in 1973 and earlier to increase flow- diagram
262	Caitlin Lane	10		1	1	1	1	1 1		1	1 1 1	0	0	0		2	Installed 2 pumps & generator. Letter- Hickory Hill developmnet concern
265	Ipswich Road			1 1 1	1			1 1		1	1 1		0				Other: street and drain overflow
270	Glen Road			1	1		1	1 1		1	1 1		0	0		3	Basement flooded 2x: heavy rains; Septic: Seller; Dehumidifier
275	Howlett Street			1 1			1	1 1	0 0	1	1 1 1		1	0 0		2	
279	Grove	42		1 1 1	1	1	1 1 1									0	Repaving directed large runoff down driveway to back yard; wet year round
281	Salem Road	120		1 1 1			1 1	1		1 1						1	3
283	Winsor Lane	3		1	1	0	1	1						0		2	Problem is runoff from road, damage is soil & grass erosion
290	Mansion Drive		1	1	1	1	1	1		1	1 1 1	1 1	1			2	Septic: Replaced because of water in side yard; concern: mold on roof & trees
292	High Street	283	1	1 1 1	1			1 1		1	1 1 1	1	1	0		2	Problem: Pump couldn't keep up in May'06
301	Perkins Row	193	1	1	1	1	1 1									X	Problem: No storm drain in street Rec: Install storm drain
302	River Road	147	1	1 1	0			1 1		1						2	Only problem was May '06
303	Prospect	8	1				1 1		1			1				2	Septic: by seller in 12/05. Back part of lot saturated for days after heavy rains.
305	Forrest Road		1	1 1 1 0 0 0	0		1	0 1 1		1 1	1 1 1 1	0	1	0		2	
311	High Ridge Road	14		1 1 1 1	1		1 1	1 1	0 0	1 1	1 1	0 0	1	0		2	Concerned with way developer built swail (sic) to divert water from house
313	Central Street	64		1 1			1 1	1		1	1 1 1		1	1		2	On-site portable automatic pump
315	Candlewood		1	1 1 1			1	1	0 0	1		1	1	0 0		3	Contributor to problem: culvert on nearby undeveloped land
318	Rowley Bridge	195	1	1 1	1		1 1	1 1								1	Unbuildable lot, floods in spring every year
329	Colrain Rd	26		1	1		1 1	1		1				0		2	Portable pumps; Neighbor's Title 5 causes puddling in area previously dry
331	Haverhill	11	1	1 1						1	1 1					3	Res since 8/06. B/M flooded May '06, & '07. Installed Pump system at\$5K.

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TABLE 2 TABULATION OF SURVEY RESPONSES: TOPSFIELD RESIDENTS LEVEL 2

File Number	Street	Number	Mailed	Water Problems	Conditions Changed	Drinking Water Quality	Surface Water: Rains	Buildings Flooded	Beavers Active	Basement: heavy rains	Have Sump Pump	Septic: ground water	Mold in Basement concern	Mosquitos changed	Water: public health concern	Concern Level	Comment Summary
				Natural Water Table Beaver Activity Inadequate Culvert Septic System Development Other			River/Brook Changed : dry to wet Problem Corrected	Flood Damage	Beaver Threat	Basement: always	Runs: haevy rains Runs: spring thaw Runs: throughout year Often fails when needed	Septic: New (Title 5)					
332	Rowley Bridge	211	1	1 1			1	1 1		1			1			2	Res since '93. Handful of instances where water table up to basement
340	High		1	1 1	1					1	1 1 1	0	0 0			2	Last 5 yrs, surface and ground water levels have increased
342	Main	129	1	1 1	-1					1	1 1			1		2	Flooding of back of lot improved since Great Hill developed
346	Main	99	1			0	1 0 1 0	0	0	1 1	1 1 1 1	0 1	1 0			2	Septic: '05 by Seller
347	Alderbrook			1 1			1		0 0	1 1	1 1 1	0	1				Sump pump sometimes runs throughout year
353	Wenham	12	1	1 1	1		1 1 1	1 1		1 1	1 1 1 1	0				3	Septic - '92,B/M: 9" in '06, 12" in '07 Installed sump pump.
355	Rowley Bridge	124	1	1 1	1		1		0 0	1	1 1					2	Culvert challenged by added water from earthwork activity 2 houses over
356	Normandy Row		1	1 1	1		1		0 0	1 0			1			2.5	Nearby culvert needs dredging; street drains inadequate
358	Parsonage	22		1 1	0		1	1 1	0	1		0	0			2	Res - 6.5 Yrs. Basement flooded twice in very heavy rains
359	Surrey Lane	28		1	1	1	1 1 1	1				0		1		3	Neighbor landscaping causes shed area to flood. Concerned with H2O ban
364	Washington	129		1 1 1	1		1		0	1		0				2	Back Yard wetter longer. Slope changed; land sinking?
368	High Street		1	1	0			0 1	0	1	1 1 1 1	0 0	0			3	Other: Slope/ old basement
372	Woodside Drive	22	1	1 1				1 1		1	1 1 1	0				2	B/M - installed drain. Has conerns, suggestions, and questions
377	Bare Hill	60	1	1 1				1 1					0			1	
380	High Street			1 1			1	1		1 1			1 1 1			2	Septic: '99 on purchase
384	Washington		1	1 1	0			1 1		1	1 1 1	1	1 1			2	Septic: '99 on purchase
385	Rowley Bridge	212	1	1 1	0		1	1 1		1 1	1 1 1		1 0			2	Res: '2yrs. 2 pumps/generator; more H2O past few yrs; ? spring H2O/summer ban
386	Campmeeting		1	1 1			1	1 1		1	1					2	
387	Ipswich Road							1		1	1 1		0 0 0			2	Cars splash water from flooded street onto lawn and into garage
391	Meadowview			1 1			1			1	1 1 1	0	0 0			2	Properties not graded evenly for surface water flow
393	Birch Lane	2		1 1			1	1		1	1 1 1		1 1			2	Septic: Owner's decision to update
394	Washington			1 1	0 0 0 1 0			0		1	1 1 1	1	0 0			2	Flooded: 4" in Basement
397	Mansion Drive		1	1 1	1 1			0 1 1		1		0 1 1				2	Septic: on sale '00. Leeching field full at reg maint noew. Tree removal cause?
398	Bare Hill	38	1	1	1			1 1 1				0	1			3	Beavers across street; neighbor's sump pump discharges onto property
413	Sleepy Hollow Rd		1	1	1		1	1 1		1	1 1		1			2	On Hillside; built French drain. Concerned with lawn chem, wetlands protect re well
414	Ipswich Road	36	1	1 1	0	0	1	0 1 1		1	1 1 1	0	0			2	Res since '99
417	Salem Road	132	1	1 1	1		1	1	1	1	1 1 1		0			2	Drainage causing erosion/lost trees. Rec: divert water to culvert across st
481	Colrain Rd		1	1 1						1	1 1 1					2	Minimal water on basement floor as long as pump working
420	Rowley Bridge	90		1 1	1			1 1	0	1 1	1		1 0			2	
425	Perkins Row	21		1	1		1	1		1		0				2	St drains thru driveway; collects behind several homes. Cellar: Occa minor dam
426	Porter Meadow		1	1 1	0		1	1 1		1	1 1 1 1		1 0			2	Basement - Minor damage
427	Homestead Way	9		1 1			1	1 1	0	1	1	0				2	
428	Woodside Drive	21	1	1 1	1		1 1	1	1 0	1	1 1 1	0 1	1 0			2	Water in basement every year since Great Hill Dev; twice before that since '54
435	Central Street	51		1 1			1	1 1		1	1 1	1	1 0 1			2.5	Septic: Purchase; Flood Damage -Pump Failure; Title 5 Mounds; beaver stroganoff
439	Washington	110	1	1	1	1	1	1		1						2	Street drains into driveway and garage. Rec: Build berm
440	Maple Street		1	1 1 1	1			1 1		1	1 1 1 1	0				2	Blames basement flooding on trees cut down for 'rail trail'
442	Canterbury Hill	26	1	1 1				1 1		1	1 1					2	
444	Rowley Bridge		1	1 1			1	1 1		1	1 1	1	1 0 1			3	
446	Andrews		1	1 1	1		1	1		1	1 1 1	1	1 0			2	Septic: On Sale
447	Colrain Rd		1	1 1				1		1	1 1 1		1 1 1			2	
	TOTALS		74	122 27 91 12 19 17 12 18	33	0	72 18 18 19	80 52	21 13	109 19	78 70 55 12 1	7 38	36 18 12 269				

1 = Yes
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SUMMARY TABLE 3
RESIDENTS WITH HIGH LEVEL OF
CONCERN

TABLE 3 TABULATION OF SURVEY RESPONSES: TOPSFIELD RESIDENTS LEVEL 3

File Number	Street	Number	Mailed	Water Problems	Natural	Water Table	Beaver Activity	Inadequate Culvert	Septic System	Development	Other	Conditions Changed	Drinking Water Quality	Surface Flooding: Rains	River/Brook	Changed : dry to wet	Problem Corrected	Buildings Flooded	Flood Damage	Beavers Active	Beaver Threat	Basement: heavy rains	Basement: always	Have Sump Pump	Runs: haevy rains	Runs: spring thaw	Runs: throughout year	Often fails when needed	Septic: ground water	Septic: New (Title 5)	Mold in Basement concern	Mosquitos changed	Water: public health concern	Concern Level	Comment Summary
7	Perkins Row			1	1	0	1	0				0		1	1	1				1	1			1	1	1	1	1	0		1	1	3	Pump only fails when power out	
16	Winsor Lane			1	1	1	1					1		1	1	1		1	1	1	1	1						0			1	3	>\$10K Damage (May'06); blames high water level at IRWS		
23	Gail Street			1	1	1	1		1					1				1	1	1	1	1			1	1	1					3	Drainage from Prospect historical problem; concern re Gangi development		
24	Perkins Row			1	1	1			1			1		1	1			1	1	0	1			1						0	0	0	3	Sump Pump not automatic	
25	East Street	42		1	1	1	1			0	1			1	1	1		1	1	1	1	1		1	1	0		0	0	1	1	3	Pool pump; concern with Young & Peabody dams. "Other" is "Swimming Pools"		
26	Summer Street	36		1	1				1	1				1	1			1	1			1	1	1	1	1				1	1	3	Summer Street runoff; new septic/dry well next door		
33	Camp Meeting	56		1	1	1	1		1	1		1		1	1			1	1	1	1	1	1	1	1	1	0		1	1	1	3	2 Sump Pumps; many, many comments		
39	Caitlin Lane	11		1	1							0		1	0	0		1	0			1							1	0	0	3	Concerned about Hickory St development and adjacent Title 5 Septic		
43	Thompson Lane	5	1	1	1							0					1	1	1	0				1	1	1	1	0		1	0	0	3	Added two sump pumps, now have 4	
48	Summer (at Park)	9?	1	1	1		1					0						1						1	1		0	1	1	0	3	Storm drain inadequate; concern with rail bed dvlpmnt worsening drainage			
49	Deer Run			1	1	1								1								1	1	1	1			0		1	0	0	3	Property sinking? Street runoff floods front yard and driveway	
52	Kinsman Lane	46		1	1				1	1		1		1	1			1	1			1	1	1	1	1				1	1	3	Power Outages. Recs: low interest loans; repop tree loss; pump into storm drains		
65	Forrest Road	12	1	1	1	1	1	1	1	1	1	1		1	1			1	1				1	1	1	0		1	1	0	3				
82	Main Street	110		1	1	1		1				0		1	1									1				1	1	0	0	3	Rec: Clean out downstream stream bed and drainage pipes		
84	Lockwood Lane		1	1	1	1		1						1				1				1		1				1	1		0	3			
98	Ipswich Road	134	1	1	1	1		1			1			1	1	1		1	1	1	1	1	1	1	1	1	1	1		1	1	0	3	1 pump occas to 3 pumps cont; May'06 moved out: 11K damage & 11K Generator	
104	Washington		1	1	1									1	1			1	1			1	1	1	1					1		3			
107	Washington	77	1	1	0	0	1					0		1	1			1	1			1	1	1	1	1	0	0	0	0	0	3			
109	Wilmor Road	45	1	1	1	1		1		1		1		1	1			1	1	1	1	1	1	1	1	1	1			1	1	3	Pump in Barn; beaver activity raised water table; many \$K spent; barn floods		
111	Prospect	18		1					1			1		1	1													1		1	3	Problem is surface water drainage; 2 letters attached; Rec: install piping			
112	Pemberton Road	48		1	1	1	1							1	1	1		1	1	1	1	1	1	1	1	1	0	1		3	Beaver dam removed in '06; Rec: enlarge School Brook culvert under Rt 1				
119	Fuller Farms Road	8	1	1	1							1		1	1			1	1			1	1	1	1			0	1	3	There 12 years; 1st 4 - no problems; last 8 - installed 2 sump pumps, run in spring				
130	Washington	190	1	1	1					1				1	1			1	1			1	1	1	1						3				
146	Candlewood	49	1	1	1	1	1					1		1	1			0	0			1						0	0	X	Complaints about Skeffington Land; > 10 yr issue with Cons Com				
148	Ledgewood Circle	12	1	1	1		1					1		1	1			1	1			1	1	1	1	1				1	3	Frequency of flooding due to culvert backup increasing; sinkholes developing			
157	Glen Road		1	1	1		1	1			0			1	1	1	1	1	0	0		1	1	1	1	1	1	1	1	1	0	1	3	Septic by seller; basement flooded when pump failed; now battery back-up	
166	Prospect	52		1	1				1			1		1	1			1	1			1	1	1	1	1	1	1			0	3	Removal of trees next door increased water		
171	Thompson Lane	17	1	1	1	1	1					1		1	1							1	1					1	1	1	3	Beaver flooding caused dozens of uprooted trees			
175	Ross Road	3		1	1		1	1	1			0		1	1			1	1			1	1	1	1				1	0	3	Rec: Replace storm drainage on Ross & Brook Roads			
176	Perkins Row	14		1	1	1						1		1	1	1		1	1			1							1	3	Beaver activity on adjacent property causing backup				
179	Canterbury Hill	20	1	1					1					1	1			1				1					1	1	0	3	Street resurfacing caused water to flow down driveway				
182	Ipswich Road	10	1	1	1			1				1		1	1			1	1			1	1	1	1	1		1	1	1	3	3 basement floods in 15 years; word is Great Hill development increased problems			
187	Perkins Row		1	1	1	0						0		1	1			0	0			1	1	1	1	1		1	0	1	3	Flooding when pump failed; now has new pump with battery/generator backup			
193	Birch Lane			1	1		1	1		1		0		1	1			1	1			1	1	1	1				1	1	3	Culvert behind home plugged by neighbors (brush), kids (intentional)			
194	Washington	234		1	1		1	0	0			1		1	1	1		1	1			1							0	3	Flooding in 1996 and 2006				
196	Forrest Road	10		1				1				1		1	1			1	1			1	1	1	1		0		3	Problem: septic mounds. Crawl space, not basement. Outbuilding flooded					
198	Haverhill		1	1	1	1	1					1		1	1			1	1									1	1	3	Angry at mosquitoes, environmentalists, watering ban when back yard flooded				
203	River Road	132	1	1	1							0		1	0	0		1	1			1	1	1	1					3					
205	Ross Road			1	1				1	1		1		1	1			1	1			1	1	1	1	1			1	0	1	3	20+ yr Res; Fingers development, clogged storm drains. No mosquito spraying		
206	Washington	153		1	1									1	1			0	0			1		1				1	0	0	3	Portable Sump Pump. Built in '94. No basement water until ~'02; now every year			
210	Forrest Road	5	1	1	1		1					0	1	1	1			1	1			1	1	1	1	1	0		1	1	3	Rec: Clean storm drains yearly; install drain on prop. Bad water quality.			
212	Prospect		1	1	1		1	1				0		1	1			1	1			1	1	1			1	1	2.5	"Ticks"; Septic:seller; Impact from dvlpmnt: Taylor, Wilkinson, Brown-prop					
213	Perkins Row	122	1	1	1		1					0		1	1			1	1			1						0	1	3	2 floods in 5.5 yrs; backs up from wetlands. Rec: keep culverts clear				
219	Audubon Drive	6	1	1	1		1					1		1	1	1		1	0			1	1	1	1			0	0	3	3 floods in13 years:pump failed once: couldn't keep up other 2. Culvert issue				
220	Heritage Lane	4	1	1	1									1				0	0			1	1	1	1		0	0	1	3					

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File Number	Street	Number	Mailed	Water Problems	Natural	Water Table	Beaver Activity	Inadequate Culvert	Septic System	Development	Other	Conditions Changed	Drinking Water Quality	Surface Flooding: Rains	River/Brook	Changed : dry to wet	Problem Corrected	Buildings Flooded	Flood Damage	Beavers Active	Beaver Threat	Basement: heavy rains	Basement: always	Have Sump Pump	Runs: haevy rains	Runs: spring thaw	Runs: throughout year	Often fails when needed	Septic: ground water	Septic: New (Title 5)	Mold in Basement concern	Mosquitos changed	Water: public health concern	Concern Level	Comment Summary	
229	Summer Street	18		1	1			1				1						1	1			1	1	1	1	1				L				2 pumps; new home & septic made hers low land; power loss=furnace, h/w loss		
240	Colrain Road	13	1	1	1							0		1	0	0		1	1			1		1	1	1		1	1	0	0			3	Septic: purchase from Keith in '03. Flooding in '04 and '06	
242	Perkins Row	110	1	1	1	1		1	1	0				1	1							1	1	1	1	1	1			1				3	Frequent power outages. Rec: expand culvert near IRWS entrance-road floods	
244	Main Street	118	1	1	1				1			1						1	1	0	0	1	1	1	1	1	1	0	1	1	1	0		3	Back wetlands now wet all year; installed 2nd pump during recent construction	
245	Maple Street	47	1	1	1	1		1	1			1		1	1	1		1	1	1	1	1	1	1	1	1	1	0		1	0	1		3	Res since '73. Comments on '06 flood, rails to trails, Masco Healthcare, etc	
250	Perkins Row	235		1		1	1					1			1	1		1	1									0		1	0	1		3	Rec: trap beavers; deceivers can help; continually monitor/clear culverts	
254	Wilmor Road	42	1	1	1	1						1			1			1	1	1	1	1	1	1	0		1	1	1	1			3	Septic: failed. Beavers turned beautiful area into disaster area		
255	High (corner Rt 1)	78	1	1						1	1	1		1	1	1		1				1					0		1	1	1			3	Letter attached; Rt 1 drainage: property flood/erosion; basement to 5' 3x	
259	South Main			1	1							1		1		1	1	1	1	0	0	1		1	1	1	1	0	1	1	0	0			3	Septic: on sale
263	Wilmor Road			1	1	1						1		1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1			3	Septic: on sale Water gets worse every year; woods across street gone	
266	Hill	3		1	1	1	1	1	1			1		1	1	1	1	1	1	0	0	1		1	1	1			1	1	0			3	Rec: Clear/improve drainage from Rt 1, Salem Rd and Hill St	
271	Perkins Row	223		1	1	1	1	0	0			1		1	1	1	1	1	1	1	1	1	1	1	1	0			0	0	0			3	40+ Yr Res; Back yard was once walkable land, now wet and dead	
273	Ipswich Road	244		1				1	1	1		1		1	1	1		1	1			1						0		0	1			3	Problem is neighbor's dramatic septic; angry at ConCom. Lawsuit likely?	
274	Parsonage	25	1	1	1	1	1	1	1			1		1	1	1	1	1	1	1	1	1	1	1	1									3	12 yr Res; pumps more freq, Oct-Mar: cites Bare Hill devel; Rec:clean Ipswich R	
284	South Main	78		1	1	1	1	1	1			1		1	1	0	0		1	1	1	1	1	1	1	1	1	1	1	1	0			3	Septic: Alternative system;Has basement system to keep it dry	
296	Garden Street	20		1	1	1		1	1	1	1	1		1	0	1		1	1		0	1		1	1	1	1	1	1	1	0	1		3	Prob: drain added under road- erosion leading to leech field. See cmnts	
299	Winsor Lane	40		1	1	1	1	1	1	1	1	1		1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		3	Rec: Trap beavers; lower dam height in IRWS. Water too high- town wells	
317	Rowley Bridge	63	1	1			1	1	1			1		1	1	1		1	1			1	1	1	1					1	0			3	Prob: construction on Cross St increased flow; flooded living space, May '06?	
319	Perkins Row	7	1	1	1	1	1					1		1	1	1	0	0	1	1	0	0	1						1	1	1			3	Local low spot; 12" culvert under Rt 97 inadequate	
326	Winsor Lane	42		1	1	1						1		1	1	1	1	1	1			1						0		1	1	1		3	Res since '90; problems started ~10 yrs ago; up to 12-18" in b/m, beavers	
328	Meetinghouse Lane	11		1	1	1	0	1	0			1		1	1	1		1	1			1								1	1			3	Culvert at Perkins Row inadequate; leads to flooded yards	
333	Fox Run	32	1	1	1	1						1			1				0	0	1													3	Concern: surface water in back, once lawn, now wet all year.	
344	Wilmor Road	24	1	1	1	1		1	1			1		1	1	1	1	1	1	1	1	1					0		1	1	1			3	Rec: Remove beavers, improve Pye Brook flow; lower RE taxes	
348	River Road	95	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1			1	1	1	1	1	1	0		1	0	0		3	4 High Cap. Pumps. Concerns: hillside develop; street drainage, etc Letter	
361	Maple Lane	5		1	1	1	1	1	1			1		1	1	1	1	1	1			1		1	1	1	1	1	1	1	1	0	1		3	Prob:Wet yard & B/M from neighbors sump, broken drain, Masco HC,etc.
363	Normandy Row	5		1	1	1	1					1		1	1	1	1	1	0	0	1		1		1	1	1	1	1	1	1	1			3	Septic: leeching field wet/spongy. Rec. Town resume cleaning culvert
366	Prospect	48		1					1			1		1	1			1				1		1	1			0		1	1	1			3	Prob: Attempted develop next door. Rec: Don't approve develop in wetlands
369	High Street	139	1	1	1			1	1			1		1				1	1	0	0	1		1					1	0	1			3	35 Yr Res. Brooks & culverts not cleaned in last 23 years	
374	Rowley Road	47	1	1	1	1	1	1	1			1		1	1	1		1				1		1	1	1		1	1					3	Septic: old. Culvert not working, road raised on paving, Pheasant Lane runoff	
375	Washington	7	1	1	1			1	1	1	1	1		1	1			1				1		1	1	1		1						3	Septic: on sale. Creek no longer cleaned; dumping of trees a few lots away	
376	Woodbrier		1	1				1	1					1	1	1	1	1				1		1	1	1	1	0		1	1	1		3		
381	Summer Street		1	1	1	1	1	1	1								1	1	1			1		1	1									3		
382	Winsor Lane		1	1	1							1						1	1	0	0	1	1	1	1	1				1	1	1		3		
388	Surrey Lane		1	1	1							0		1				1	1	0	0	1		1	1	1	0			1	0	0		3		
390	Ross Road	7	1	1	1	1	1	1	1			1			1	1		1	1			1		1	1	1	1	1		1	1	1			3	Change:wetlands filled & stream diverted. Pump runs cont. and burns out
392	Winsor Lane			1	1	1	1					1		1	1	1		1	1			1		1	1	1				1	1	1		3		
395	Birch Lane	6	1	1	1							0		1	1			1	1			1	1	1	1	1	1	1	1	1	1			3	Septic: seller. Sump pump/french drains; still occa water; power loss., Mosq. bad	
404	Perkins Row			1	1			1	1	1		1		1	1			1	1	1	0	1		1	1	1	0	0	1		0	0		3	Title 5 Septic & Swimming pools causing ponding; culverts inadq, etc	
406	Thompson Lane	18	1	1		1						1						1	1															3	Beaver dam threatened septic. Rec: change law rel. to beavers	
409	South Main	31		1	1	1	1	0		0	0	0		1	0	0		1	0	1	0	1					0	0		0	0			3	Res since 1/07. Prob. May '06. Prior problems unknown. Seen beavers.	
415	Prospect	11		1	1	1		1	1			1		1	1	1		1				1		1	1	1				1	0	1		3	Culvert backup '96, '06, etc. Septic on Gail St; Concern with Gangi devel	
419	Prospect	28	1	1						1		1		1								1		1						1				3	Uphill tree cutting increased water flow; installed extensive sys in basement	
421	Camp Meeting	58	1	1	1	1			1	1	1	1		1				1				1							1	0	1		3	Flooded 4x since '87. Increased water in yard from develop/ street run-off		
424	Ross Road	6	1	1	1							1						1	1			1		1	1	1								3	Lots of ground water. 3.5' in B/M '06. Rec: Town keep drains clear	
433	Washington	225	1	1	1	1	0	1				1		1	1	1		1	1	0	0	1					1		1	1			3	Septic: update. Brook overflows and floods 3 sides of house; backyard freq wet		

1 = Yes
 0 = No
 Blank = No or not checked

TABLE 3 TABULATION OF SURVEY RESPONSES: TOPSFIELD RESIDENTS LEVEL 3

File Number	Street	Number	Mailed	Water Problems								Conditions Changed	Drinking Water Quality	Surface Flooding: Rains			Buildings Flooded		Beavers Active		Basement: heavy rains		Have Sump Pump					Septic: ground water		Mold in Basement concern	Mosquitos changed	Water: public health concern	Concern Level	Comment Summary	
				Natural	Water Table	Beaver Activity	Inadequate Culvert	Septic System	Development	Other		River/Brook	Changed : dry to wet	Problem Corrected	Flood Damage	Beaver Threat	Basement: always	Runs: haevy rains	Runs: spring thaw	Runs: throughout year	Often fails when needed	Septic: New (Title 5)													
436	Wilmor Road			1	1	1	1				1					1	1							0	1	3									
438	Birch Lane	9	1	1				1	1		1		1	1			1	1	1	1	1	1	1	1	1	0	3	Septic: 2006 by seller; pump runs 'continuously", suspects raised septic is problem							
448	Arrowhead Road		1	1				1			1		1				1	1	1			1		0	1	3	Water table incr from "pond", tree removal, grade change on Colrain, etc								
451	Dover Hill Road	9	1	1		1		0	0	1	1				1		1						0		0	1	3	More water collecting in yard during rainstorms; affecting basement							
	TOTALS		53	92	35	74	30	38	23	35	12	60	1	69	26	51	9	72	60	31	24	81	33	69	61	56	27	14	10	21	52	33	47	276	

1 = Yes
 0 = No
 Blank = No or not checked

SUMMARY TABLE 4
COMPOSITE RESIDENT RESULTS

TABLE 4 SUMMARY OF RESIDENTIAL SURVEY RESPONSES

Residential Returns	Number of Returns		Water Problems								Conditions Changed		Drinking Water				Buildings Flooded		Beavers Active		Basement: heavy rains		Have Sump Pump					Septic: ground water		Mold in Basement concern		Mosquitos changed		Water: public health concern		Average Concern Level
	Number Mailed		Natural	Water Table	Beaver Activity	Inadequate Culvert	Septic System	Development	Other			Heavy Rains	River/Brook	Changed : dry to wet	Problem Corrected	Flood Damage		Beaver Threat		Basement: always	Runs: haevy rains	Runs: spring thaw	Runs: throughout year	Often fails when needed	Septic: New (Title 5)											
TOTALS																																				
Level 1	228	126	42	17	25	11	8	3	5	11	10	7	26	12	10	14	16	4	28	9	36	5	34	18	16	0	1	4	37	30	38	19	1.32			
Level 2	130	74	122	27	91	12	19	17	12	18	33	0	72	18	18	19	80	52	21	13	109	19	78	70	55	12	1	7	38	36	18	12	2.07			
Level 3	94	53	92	35	74	30	38	23	35	12	60	1	69	26	51	9	72	60	31	24	81	33	69	61	56	27	14	10	21	52	33	47	2.93			
ALL	452	253	256	79	190	53	65	43	52	41	103	8	167	56	79	42	168	116	80	46	226	57	181	149	127	39	16	21	96	118	89	78	1.87			
Percentages																																				
Level 1		55.3	18.4	7.5	11.0	4.8	3.5	1.3	2.2	4.8	4.4	3.1	11.4	5.3	4.4	6.1	7.0	1.8	12.3	3.9	15.8	2.2	14.9	7.9	7.0	0.0	0.4	1.8	16.2	13.2	16.7	8.3				
Level 2		56.9	93.8	20.8	70.0	9.2	14.6	13.1	9.2	13.8	25.4	0.0	55.4	13.8	13.8	14.6	61.5	40.0	16.2	10.0	83.8	14.6	60.0	53.8	42.3	9.2	0.8	5.4	29.2	27.7	13.8	9.2				
Level 3		56.4	97.9	37.2	78.7	31.9	40.4	24.5	37.2	12.8	63.8	1.1	73.4	27.7	54.3	9.6	76.6	63.8	33.0	25.5	86.2	35.1	73.4	64.9	59.6	28.7	14.9	10.6	22.3	55.3	35.1	50.0				
ALL		56	56.6	17.5	42.0	11.7	14.4	9.5	11.5	9.1	22.8	1.8	36.9	12.4	17.5	9.3	37.2	25.7	17.7	10.2	50.0	12.6	40.0	33.0	28.1	8.6	3.5	4.6	21.2	26.1	19.7	17.3				

Flood Damage but no Sump Pump

4
17
9

SUMMARY TABLE 5
BUSINESS RESULTS

TABLE 5 TABULATION OF SURVEY RESPONSES: TOPSFIELD BUSINESSES

File Number	Street	Number	Concerned	Water Problems	Conditions Changed	Drinking Water Quality	Surface Flooding: Rains	River/Brook	Changed : dry to wet	Problem Corrected	Buildings Flooded	Flood Damage	Beavers Active	Beaver Threat	Basement: heavy rains	Basement: always	Have Sump Pump	Runs: haevy rains	Runs: spring thaw	Runs: throughout year	Often fails when needed	Septic: ground water	Septic: New (Tile 5)	Mold in Basement concern	Mosquitos changed	Water: public health concern	Concern Level	Comment Summary
B1	Rear Main St	20	1	1			1				1						1	1	1							1	Attributes some problems to clogged/broken Cumberland Farms roof drains	
B2	Central Street	5	1	0		0			0	0	0	0					0	0	0			0	0			1		
B3	Maple Street	16	1																						0	1		
B4	Boston (Rt 1)	418	1																							0	1	
B5	Boston (Rt 1)		1	1	1	1			0				1	1													2	
B6	Ipswich Road	125	1	1	1	1	1	1		0			1	1			1	1	1					1	0	2		
B7	Boston (Rt 1)		1																								1	
B8	Boston (Rt 1)	426e																									1	No Basement
B9	Main Street	58	1	1	1				0						1		1	1	1	0						2	Sump Pumps	
B10	Boston (Rt 1)		1						0													0					2	Several dead trees on own and adjacent property removed
B11	Central Street	10	1	0													0					0	0	0	0	1		
B12	Boston (Rt 1)		1																								1	
B13	Boston (Rt 1)	363	1																								1	
B14	Boston (Rt 1)		1							0			0	0	0	0						0	0				1	
B15	Maple Street	16	1			0																			0		1	
B16	Topsfld Business Pk																										1	
B17	Boston (Rt 1)	218/8		1			1															0	0				1	Trouble getting to office with flooding roads
B18	Main Street	55		1				1	1		1	1										1		0	1	3	Flooded 1996, 2001, 2006. Great Hill development likely increased flow.	
	TOTALS		13	5	2	3	1	1	0	2	0	2	1	2	2	1	0	3	3	3	0	0	1	0	1	0	1	23

1 = Yes
 0 = No
 Blank = No or not checked

COMMENT TABLES

TABLE C1
STORM DRAINAGE ISSUES

TABLE C1 SURVEY COMMENTS: STORM DRAINAGE ISSUES

File Number	Street	Number	Comment #1	Comment #2
STREET WATER RUNOFF				
26	Summer Street	36	A new septic and dry well were put in close to our property line and we seem to have an increase in water problems in our basement. Things have gotten so bad that we installed french drains in the basement this year.	We tend to also get a lot of run-off from storms as they come down the hill on Summer Street. It runs right off the street and into our driveway. The lack of a curb or berm definitely hurts as well as the property at 38 Summer Street which has been left unrenovated for the last 3 years. This ungraded lot also catches a lot of water and it runs down to our lot.
179	Canterbury Hill	20	When street was resurfaced it was made higher than my driveway that runs at a down slope toward the house. Street water flows down driveway like a river during heavy rains and does not flow further down to the catch basin.	
374	Rowley Road	47	Pheasant Lane increased runoff. Trees dying on edge of wetlands! Culvert once operational now fails to operate under Rowley Road. It was functioning in late 1970's early 80's. Also, increase height of road surface limits (dams up) heavy rain event causing flooding on east side of Rowley Road.	[1]Examine whether making culvert operational. [2] Issues may increase with new driveway construction at 49 Rowley Road.
279	Grove	42	When Washington Street was repaved my driveway became the runoff for a large area. Now my backyard floods in moderate to heavy rain and does not drain into drainage brook. It remains wet year round.	I have 2 brooks or drainage areas on my property that do flood in heavy rain but do no harm, my cellar is dry. The driveway problem is my concern.
283	Winsor Lane	3	A small tar berm and small culvert had been installed in the past along the street and sidewalk to stop water that runs down the hill from Ipswich Road and floods at the end of our property. It also washes away most of the soil and grass along the area and leaves a lot at the foot of our driveway.	
417	Salem Road	132	I have a field that floods from runoff from the street that runs by our house. I have lost trees due to this runoff. The water continues through our property causing soil erosion throughout our property as well as our neighbors.	Solution: There is a culvert on the other side of the street that naturally drains into a pond down the street. If the water that runs down our hill and onto our property was diverted across the street to this culvert it would eliminate some of the erosion and flooding. Please come over and look at [it]. The problem starts at the base of 110 Salem Rd. Thanks.
155	Salem Road	136	We get ground water from the hill above us. It will wash out my driveway down back of the house. Also we get ground water in the street end of our drive that washes all the rocks and gravel from above us. No culverts along the main road. Beaver have blocked culvert across the road in the pond.	
425	Perkins Row	21	Perkins Row drains through my driveway and contributes to ground water collection behind several houses during most rains.	During a hurricane or the flood on Mothers Day 2 years ago, I had slight problem with water penetrating any break in basement floor. This was stopped immediately by digging a 2 foot deep hole in an unpaved floor in an attached shed and pumping water out of the hole. This probably was not a water table problem.
255	High (corner Rt 1)	78	I have lived at the intersection of Routes 1 and 97 for the past 15 years. In front of my yard, on Route 1, was a catch basin that constantly clogged with sand and debris. I would call Mass Highway and speak to Brett about once a month to have him clean out the basin. When the basin clogged all rain water traveled onto my lawn and deteriorated the soil and vegetation. Depending on the amount of rain the front lawn would flood and seep into the soil and eventually my basement. I have had up to 5 feet of water in my basement on at least three occasions. Due to the construction on the corner which started in the spring of 2007 the catch basin has now been moved more toward the center of the street. This means that all of the water is now traveling directly onto my lawn; especially because there is no curb to divert the water away. I now have an eroded lawn with no grass, failing trees, as well as constant water seepage into the basement.	I spoke to someone at Mass Highway a few months ago. They came to look at the area and noted the problem. I was told that a curb would be added in April. The problem is that given the slope of the property, the curb will never be tall enough to divert the water away from my land. I have spoken with people who tell me that a French drain needs to be installed next to the road. I know the Town has one just up the road near the Atwood property and can not understand why they can't just continue the drain down the road past my property.

TABLE C1 SURVEY COMMENTS: STORM DRAINAGE ISSUES

File Number	Street	Number	Comment #1	Comment #2
150	Haverhill	196	During heavy rains, run-off comes off on Rt 97 into my driveway and into my front yard. It also washes the curb dressing into my driveway and has caused a build up of material on my driveway. This has happened over the past 3 years.	I could really use the help in getting this resolved.
421	Camp Meeting	58	We have experienced flooding in our basement 3 - 4x since 1987. All of the episodes have occurred after a prolonged period of rain. However, we have noticed more water collection in the yard since the neighbor behind us regraded his land, and since a new house was erected across the street from us. There seems to be considerable runoff from Campmeeting and East Streets.	Could the town look at the road conditions to assess balanced drainage?
33	Camp Meeting	56	At back of property horse is isolated. Barn area is totally cut-off; no deliveries possible. We experience a high water table in our area and excessive street water run off. Many houses in our area have water problems because of these 2 factors. Houses were build on our street that block the normal flow of water to the Ipswich River. Also swamp areas (in the 1950's) were filled and houses built on them! Our quality of life is seriously compromised because of the problem during periods of wet weather. We even have a Honda yard pump to keep ahead of the water which collects in our yard due to road run off (at times as much as 1' to 3' of water)! This can cover 3/4ths of our property.	Campmeeting Road needs a drainage system for street run off. This would help. We are not sure what to do about the high water table. Mothers Day storm: We have photographs and written information that was sent to the Conservation Commission -- the Highway Department and Selectmen -- Mr. Gandt came to observe the problem -- he has even seen it during heavy rain -- this water problem causes unbelievable stress. Farmers used to keep the rivers free of fallen trees and debris therefor the river flows freely -- on East Street driveways have been raised and paved dumping water into neighboring yards. HELP!
348	River Road	95	(3b) We understand from the previous owner that the condition has become much worse and that it became noticeably worse after large areas of land were cleared and leveled above us. (8) We have installed 4 new high capacity sump pumps in the basement. We have had to replace these since they only last a maximum of 2 years because of continuous use. There are not enough culverts in the road on Prospect Street heading towards River Road. Subsequent water torrents down the road towards our house a 95 River Road. Sandbags placed by the DPW at the culvert in front of our house help to keep water torrents from assaulting the house -- however, these break down -- sending sand across our lawn and into wetland area -- bags are not properly maintained by the town and also have negative impact on the appearance of the landmark road.	We cannot express how concerned we are with any further development or alteration of the steep hillside behind our home. The impact of both clearing of trees and change of grade has had a disastrous effect upon the water table only to be further exacerbated by the road. It is our feeling that the historically natural flow of runoff from the hill has been stopped by the road which has soil so packed that runoff can no longer follow a natural route to the River. Our home having survived over 300 hundred years, no doubt due to the clever intuition of the early builders, is now under assault from forces of which we have absolutely NO control. All too often the property rights of the 'developer' outweigh the rights of residents affected down stream. We are encouraged that the Town has issued this survey but are completely skeptical that the outcome will be a positive one. Topsfield is a special place. We are honored to have the resources to maintain a piece of town history and truly hope that we can continue this stewardship to the next generation.
439	Washington	110	Water run-off from street down driveway to house and garage. Drain in yard cannot handle heavy rain and road run-off.	Solution: Build higher speed bump at driveway from street. Small one now present.

STORM DRAIN ISSUES

175	Ross Road	3		I think the street drains need new piping, especially the ones on Brook Road and Ross Road. Tree roots I am sure have xxxx the pipes many years ago. I have been on my property for approximately 53 years and nothing has ever been done.
205	Ross Road		Have lived at current address for 20+ years and have noticed a marked change in water table related problems. We have to rely on the sump pump far more frequently than we ever had to in the past and even with the sump the cellar is often wet due to general seepage through the foundation. Also flooding in our yard and surrounding street areas (where school bus stops) has also increased dramatically.	? development, paving, removal of trees in the surrounding areas seem to have negative impact on water table.

TABLE C1 SURVEY COMMENTS: STORM DRAINAGE ISSUES

File Number	Street	Number	Comment #1	Comment #2
390	Ross Road	7	I go through a sump pump on a yearly basis. I have lost my oil burner and water heater on two occasions and have spent over \$1000 getting repairs. I have lost 2 washing machines and one dryer. The fire department has refused to come until 15" or over. When we lose electricity, that can be in less than one hour. My sump pump and xxxx small pumps are running constantly. The force of ground water has cracked my basement floor. I did not have these problems until wetlands were filled in. A stream has been diverted to my property and runs under my basement. My electric bill sums are \$35 higher in the spring. I also have to go to a laundromat. I had a dog as well as myself that had a yearly bout of bronchitis because of mold. I have lost \$3000+ of items stored in my basement.	
424	Ross Road	6	Last few years -- water in my basement during any rain -- I've had new gutters put in, now I'm just concerned about heavy rain and wind. If the power goes out, then there would be problems due to the lack of power to run the pump. There has been water in the sump hole for about 2 months now. I have been pumping steadily since then. Scott Warren lives next door and he's spoken to Dave Bond many times about keeping the drains clear -- please speak to him -- thank you. Mothers Day storm -- 3 1/2 feet in basement.	
48	Summer (at Park)	9?	My property at the intersection of Summer and Park Streets is the low point in the area. The storm drain at the intersection is not adequate during heavy or prolonged rain.	If the Rail Trail between Summer Street and Route 1 is constructed by elevating the railbed, this will exacerbate the flooding problem on my property as the railbed in that area is currently a drainage run-off area for water the storm drain cannot handle.
229	Summer Street	18	<i>Ed: 2 Sump Pumps</i>	I feel land across from me (new house) should not have been approved for additional septic system. This was low land with water in damp weather years ago. Water in basement almost constantly except real dry weather, since I became the low land on the street.
301	Perkins Row	193	Because there is no storm drain in the street, the water drains across my property. I've re-seeded my lawn and replaced eroded soil many times. There needs to be a storm drain installed.	
210	Forrest Road	5	Storm drains on our street have often been blocked and I believe pipes have broken open causing sink holes. These problems have been reported to Selectmen's office -- very slow to respond. On my property I have requested a storm drain because my driveway floods because the street is sloped towards my property and I was refused. I have on occasion used a pump to remove the water from my driveway. I would like to have the storm drain pipes checked to see if they are clear (every year). I would also like to have a drain on my property.	
68	Forrest Road	9	The drain pipe carrying H2O away from dwellings has become blocked at least twice recently for different reasons -- i.e., root invasion and/or collapsed drain tile -- thus causing water draining into catch basin in front of our home and having no place to go other than down our drain and into our cellar. This is not a problem if the street drain is kept open and in repair.	(7) Always a concern because street drain is not reliable. (8) Sump pump only runs if the catch basin rises to a level where the water from two houses beyond us is pumped into the catch basin and then runs down our drain. Highway department is fully aware of this problem.

TABLE C1 SURVEY COMMENTS: STORM DRAINAGE ISSUES

File Number	Street	Number	Comment #1	Comment #2
266	Hill	3	So many ash trees are dying along Hill Street that helps with water drainage. I sit low on Bradstreet Lane and Hill Street -- so much water comes off Salem Road and Rt 1 -- we need some kind of drains up on Rt 1 to help us at the bottom of the hill. The water used to flow slower but now the ditches are deeper and the water volume flows much faster on Salem Road. People (landowners) need to clean out culverts on their property and ditches. Also could use some drains to drain water off Hill Street.	
361	Maple Lane	5	All our immediate neighbors sump pumps drain into a broken orangeburg pipe in our backyard creating wet conditions. Puddles of water in front yard and increasing amount of water in backyard and into the street. The nursing home that was built several years ago has also increased the amount of water.	We need our neighbors' sump pumps to be able to drain into a working drain pipe so our yard and basement do not get flooded. We have one drain in our street that fills during a heavy rain. We have not been able to use our yard all spring. We would love to see help in this matter.
257	Hill Street	92	Flooding on Hill Street accelerated by small berms installed by Town of Topsfield (edge of road). Causes flooding across driveway and property and sand deposition.	
233	Rowley Bridge	226	Phragmyte is choking out my pond.	<i>Ed: Street runoff into driveway, floods areas</i>
317	Rowley Bridge	63	I believe construction across the street (Cross St.) has created additional flooding problems for us. For the first time ever we sustained water into the living space from the basement with costly damage sustained.	Better drainage at street level.
280	Arrowhead	21	When it rains or the snow melts I have a large area of water in front of my mailbox and also on the street in front of the house, large pools of water. When they freeze they are a big hazard for anyone coming to my house as it is like an ice rink. The pools of water are at least 1/8" to 1/4" deep or more at times.	
174	Arrowhead	15	Beaver activity!!!	Arrowhead Road surface water -- completion of drainage pipe to culvert.
448	Arrowhead		The water table has changed significantly since 1) Little Brook was allowed to be blocked, and a "pond" created behind 43 Washington Street, 2) lot at 14 Arrowhead was significantly cleared of trees, 3) grade was changed so that water from Colrain Road now "drains" into storm drain on Arrowhead. "Pond" now covered with green material when not frozen. Seems if would be an excellent place for mosquitoes to breed.	My basement gets wet approximately 24 hours after the water from three residences (R side of Arrowhead) up hill is pumped into the gutter of the street and flows downhill - particularly during spring thaw and my pump works until approximately 48 hours after flow ceases. I feel this is a health hazard, as I don't know how sanitary the water is, or where it is coming from those three properties. This situation has been called to Mr. Bond's attention many times.
128	Towne Lane	32	Thankfully, we are on a hillside and all run-off flows down into "water country", as our children fondly refer to it. This is a large area at the end of Emerson Field and Deer Run Road. Within the past 3-4 years a large drainage pipe was installed at 34 Towne Lane which consolidates run-off from Howlett in a tremendous flow. This has caused a great deal of erosion. There is also a lot of standing water at School (?) Brook at the end of Deer Run, but this has not resulted in more mosquitoes. The intersection of River and Salem Roads is particularly flooded and the Fairgrounds, but perhaps that is the nature of the river.	
296	Garden Street	20	A drain was put in under the road that releases onto our property. It has significantly deteriorated the land in its path leading to our leaching field. We constantly bring this to the Water Department's attention without a solution being considered. Drain should be blocked as to not run onto our property or some sort of rock or drainage be constructed to slow down the rushing water, especially in the spring.	Several trees on Garden Street are dead and are a safety risk of falling -- they should be removed.

TABLE C1 SURVEY COMMENTS: STORM DRAINAGE ISSUES

File Number	Street	Number	Comment #1	Comment #2
OTHER ISSUES				
293	Towne Lane	17	I have a little stream near my property and I am concerned about it changing direction or over flowing.	I feel if the town added some gravel or rocks it would help.
NO ADDRESS GIVEN				
49	Deer Run		I think parts of the property are sinking. Portions of the driveway are being undermined thus requiring replacement in the near future. Front areas of the property have sunk below street level so drain water from the street floods the front yard and driveway.	
85	Hill Street		Have seen increase in amount of surface flooding since replacement of the street.	Took out basement toilet and capped it after 3 years of ground water coming up into house thru toilet -- dry last 2 years.
387	Ipswich Road		Heavy rain floods lower part of street. Cars splash lawn sending water on lawn and into garage.	
265	Ipswich Road		<i>Editor: Flooded by street and drain overflow</i>	

TABLE C2
CULVERT ISSUES

TABLE C2 SURVEY COMMENTS: CULVERT ISSUES

File Number	Street	Number	Comment #1	Comment #2
SCHOOL BROOK				
B18	Main Street	55	On three occasions 1996, 2001 and 2006 we have been flooded. This last 2006 occurrence we suffered very heavy flooding and it set us back \$10,000 - \$100,000 which we are still recovering from.	The development of Great Hill seems to have diverted excess water to this area. The storm drains can't handle the great volume of water during extended very wet seasons. Did storm drains from Great Hill get redirected to this area? Thank you, Jim Kehoe, Village Woodworking Shop, Inc.
112	Pemberton Road	48	(3a) Culvert under Rt 1 (School Brook) inadequate. Flooded cul-de-sac, driveway and garage 4 times since 1996. (3a) Beaver dam in '05 caused portion of property to flood and cul-de-sac to flood during heavy October rains. Sump pumps in basement were running daily even in dry periods before heavy rains. Believe leeching field was flooded. Mold in basement is threat only if water table is continuously high from beaver dam.	Enlarge culvert under Rt 1. Keep beavers out of School Brook permanently. <i>Ed: Note that flooding is much more severe and frequent for two businesses on Route 1.</i>
108	Central Street	42	Our property backs up on "School Brook". The segment on both sides of Summer Street is culverted. Inlet above our property often partially obstructed. Culvert looks like a Depression-era (WPA?) mosquito control project -- no one maintains it. Stream should be "daylighted" upstream of Summer Street for better flows and better habitat.	
82	Main Street	110		(3) (4) (13) During run-off events the stream in the western portion of my property experiences out-of-bank flow. This is in combination with high groundwater levels in the same area. I suspect contributing factors to these conditions are upstream development, failed drainage piping from Rt 97 to the east, and an undersized downstream culvert (located on private property). Additionally, the stream bed is very cluttered and could use some clearing activity.
363	Normandy Row	5	(3b) Town ceased to maintain drainage canal at base of cemetery as well as culvert under Normandy Row increasing water table and cellar flooding.	Town in the past removed accumulated debris from canal and in front of culvert. Last year a resident used a rake and removed debris. A marked stake was driven in the water prior to starting and in 1 hour the level dropped 7".
356	Normandy Row		(3a) Nearby culvert has not been dredged for some time. (3b) Drainage inadequate for street drains as they backup.	
CLEVELAND BROOK				
415	Prospect	11	The neighbor on Gail Street had a new septic system put in about 2 years ago -- when doing construction, Conservation Commission asked them to slope property so water was funneled to my property at 11 Prospect Street.	<i>Ed: Culvert under Prospect inadequate; flooded garage in '96, '06, etc.</i>
PERKINS ROW				
219	Audubon Drive	6	We have had basement flooding 3 times in the thirteen years I have lived here. We have a sump pump and French drain (B-Dry) system. The first time was due to the loss of electricity and the pump failed. The other two times the sump pump just couldn't keep up.	We have a culvert across our property that dumps into a brook that runs into the Ipswich River. Water from Perkins Row, Audubon Drive and Proctor Drive all flow into this culvert along with road sand. The brook fills with sand and then overflows into our yard. This is a <u>real problem!</u>
242	Perkins Row	110	(3) Culvert under Perkins Row near Ipswich River Wildlife Sanctuary entrance is inadequate during heavy rains, or spring thaw. (8) Storms with heavy rain and wind typically cause me to lose electricity for my sump pump just when I need it most.	Please increase culvert pipe capacity under Perkins Row between house numbers 110 and 116. During heavy rains water has built up on my side of Perkins Row to the point the road has been closed several times due to water going over the road to get to the other side, which is never backed up.
213	Perkins Row	122	I have lived here 5.5 years and have had major water in my basement on 2 occasions -- both severe Spring storms. These storms seem to be more frequent and the water does not flow out of the wetlands area adequately enough. During heavy rain it builds up and floods my backyard and ultimately the basement.	The culverts get clogged and need to be cleared regularly so the water will flow. It doesn't make sense to have to worry every time we get a heavy period of rain.
328	Meetinghouse Lane	11	Flooding of culvert happens much more often than in the past. Culvert under road near corner of Perkins Row and Meetinghouse Lane is too small to handle the amount of water. This leads to flooded yards.	
319	Perkins Row	7	My property -- 7 Perkins Row -- is low ground for about 5 properties up the street. When rain is heavy my yard floods -- A 12" culvert from my yard under the street to a basin that goes under Rt 97 is not large enough to handle the flow.	

TABLE C2 SURVEY COMMENTS: CULVERT ISSUES

File Number	Street	Number	Comment #1	Comment #2
OTHERS				
148	Ledgewood Circle	12	Have lived in our home for 20 years, and for the entire time, the culvert/pipe outflow has been inadequate to the task of handling water run-off to the river. The frequency of lawn flooding has increased over the years, and we have a growing problem with developing sink holes on our property. The installation of a B-Dry system has spared us the hardship of innumerable cellar floods.	
379	Ledgewood Circle	8	Clogged streams can create standing water. Clogged streams leading to wetlands can cause flooding. Water used to taste great. Last[?] years over chlorinated. And the chlorination is not consistent. One could get the feeling "Does anyone know what's going on?" <i>Ed: Mosquitoes worse since stopped spraying.</i>	Water coming from Campmeeting spills into culvert on Ledgewood Circle. Heavy rains and non-cleaned catch basins and things get serious. The added water can negatively impact Ledgewood Circle. This has become more so over the last 10 years. Heavy rains can also fill catch basins on Ipswich Road adjacent to Ledgewood Circle. Spill over comes down to Ledgewood Circle.
261	Kinsman Lane	17		[culvert sketches showing current level of sediment in culvert and level of sediment in 1973 after cleaning] Comment: about 450' from street this culvert turns south, goes under Washington Street at #77, and heads toward Ipswich River. Recommendation: Clean culvert like this one and others that feed into Ipswich River as the Town did about 1973. Result: Prevent water overflow onto property and increase water flow in Ipswich River. [sketch showing] 1973 water level after Town of Topsfield cut and cleared 10' easement and cleaned sediment, salt/sand mix, debris, etc. from culvert.
355	Rowley Bridge	124	Our own culvert is being challenged by additional water pouring down from a property, two houses over, that has substantial earthwork activity.	
83	Hill Street	1	We border wetlands -- but a neighbor's culvert diverts all water to our field which is very wet as a result. That is our only problem.	
40	Rowley Road	19	Under road culvert entrances are not maintained well causing clogging that contributes to flooding during heavy rains. I have seen (very rare) small tanker trucks parked at Rowley Road next to streams that empty into Hoods Pond on Topsfield/Ipswich border. Strong possibility of polluters.	
No Address Given				
193	Birch Lane		Additional houses have eliminated natural drainage. Culvert (drainage) behind our home is often plugged due to neighbors disposing of leaves, brush etc. into culvert. Neighbor children also intentionally plug culvert.	There is lots of low water and streams behind Birch Lane. We are concerned about potential for beavers, which would further exacerbate water problems.
315	Candlewood			Condition of culvert on nearby undeveloped property being a contributor to water problems.

TABLE C3
DEVELOPMENT COMMENTS & ISSUES

TABLE C3 DEVELOPMENT COMMENTS AND ISSUES

File Number	Street	Number	Comment #1	Comment #2
PROSPECT STREET - EVEN NUMBERED SIDE				
111	Prospect	18	See, Ltr-Brown-11-3-2003	Five years later (see attached letter dated November 3, 2003) the surface water running down both sides of Prospect Hill have worsened, in my opinion. I applaud your committee's formation, however, your mission is a very steep up-hill battle and I do not anticipate solutions to this paramount issue. I am available to help you and to discuss with you any and all concerns that I have. One solution, although cost prohibitive to the Town, is to install underground piping on both sides of Prospect Hill that replaces the "unlinked" piping for the seasonal brook, which by the way is no longer seasonal. The new piping would dump the surface water, as it does today, into the South Main pond. This solution would minimize the surface water running down both sides of the hill, uncontrolled.
166	Prospect	52		During power failures our basement fills up with water. Removal of trees next door has resulted in much more water.
212	Prospect		ConsCom/Town's inability to regulate homeowners who clear out land for horse paddocks, or approve driveways cutting through wetlands on Prospect Hill have greatly disrupted natural water flow and water table. Our "wet-in-spring" only swamp is now wet all year due to new construction on Prospect Hill; Taylors clear cutting their land and Wilkinson's clear cutting their land for paddock areas has really caused issues up and down the street. Now Roy Brown wants to put a driveway across wetland and install potentially 2 septic systems in a wetland buffer zone.	Any new "development" (horse paddocks, new houses, driveways, etc.) should be held until a "water impact" analysis can be done. <i>Ed: Claims ticks bigger problem than mosquitoes.</i>
366	Prospect	48	Five years ago a developer (Landvest[?]) ripped out the trees in a wetland buffer zone next door (50 Prospect Street) with the intention of building a house on the property. The house was never built and we have had water collect on our property, due to removed trees, ever since.	Don't approve building permits in wetlands!
419	Prospect	28	Prospect St is a water-rich hill. However, since the extreme cutting of trees on nearby property, water flowing down the hill has increased both around the house and into the cellar. It has been necessary to completely "dismantle" the cellar and install a water reduction system.	
303	Prospect	8	During periods of heavy or steady rain, the back area of our lot (near tree line) becomes very wet and saturated and does not dry out for days. There seem to be small streams or runoff that contributes to this.	
PROSPECT STREET - ODD NUMBERED SIDE / GAIL STREET				
415	Prospect	11	The neighbor on Gail Street had a new septic system put in about 2 years ago -- when doing construction, Conservation Commission asked them to slope property so water was funneled to my property at 11 Prospect Street. <i>Ed: Resident had verbally indicated that drainage from paved parking area at residence 2 uphill from him negatively impacted him.</i>	<i>Ed: Culvert under Prospect inadequate; flooded garage in '96, '06, etc.</i>
23	Gail Street		Water from Prospect Street flows over Gangi driveway and down the street. If Gangi develops that property, the condition will worsen. Problems began when driveway was moved many years ago and Road Commissioners -- going back to Mr. Gamble -- have refused to deal with it.	

TABLE C3 DEVELOPMENT COMMENTS AND ISSUES

File Number	Street	Number	Comment #1	Comment #2
348	River Road	95	<p>(3b) We understand from the previous owner that the condition has become much worse and that it became noticeably worse after large areas of land were cleared and leveled above us. (8) We have installed 4 new high capacity sump pumps in the basement. We have had to replace these since they only last a maximum of 2 years because of continuous use. There are not enough culverts in the road on Prospect Street heading towards River Road. Subsequent water torrents down the road towards our house at 95 River Road. Sandbags placed by the DPW at the culvert in front of our house help to keep water torrents from assaulting the house -- however, these break down -- sending sand across our lawn and into wetland area -- bags are not properly maintained by the town and also have negative impact on the appearance of the landmark road.</p>	<p>We cannot express how concerned we are with any further development or alteration of the steep hillside behind our home. The impact of both clearing of trees and change of grade has had a disastrous effect upon the water table only to be further exacerbated by the road. It is our feeling that the historically natural flow of runoff from the hill has been stopped by the road which has soil so packed that runoff can no longer follow a natural route to the River. Our home having survived over 300 hundred years, no doubt due to the clever intuition of the early builders, is now under assault from forces of which we have absolutely NO control. All too often the property rights of the 'developer' outweigh the rights of residents affected down stream. We are encouraged that the Town has issued this survey but are completely skeptical that the outcome will be a positive one. Topsfield is a special place. We are honored to have the resources to maintain a piece of town history and truly hope that we can continue this stewardship to the next generation.</p>
CAMP MEETING				
33	Camp Meeting	56	<p>At back of property horse is isolated. Barn area is totally cut-off; no deliveries possible. We experience a high water table in our area and excessive street water run off. Many houses in our area have water problems because of these 2 factors. Houses were build on our street that block the normal flow of water to the Ipswich River. Also swamp areas (in the 1950's) were filled and houses built on them! Our quality of life is seriously compromised because of the problem during periods of wet weather. We even have a Honda yard pump to keep ahead of the water which collects in our yard due to road run off (at times as much as 1' to 3' of water)! This can cover 3/4ths of our property.</p>	<p>Campmeeting Road needs a drainage system for street run off. This would help. We are not sure what to do about the high water table. Mothers Day storm. We have photographs and written information that was sent to the Conservation Commission -- the Highway Department and Selectmen -- Mr. Gandt came to observe the problem -- he has even seen it during heavy rain -- this water problem causes unbelievable stress. Farmers used to keep the rivers free of fallen trees and debris therefor the river flows freely -- on East Street driveways have been raised and paved dumping water into neighboring yards. HELP!</p>
421	Camp Meeting	58	<p>We have experienced flooding in our basement 3 - 4x since 1987. All of the episodes have occurred after a prolonged period of rain. However, we have noticed more water collection in the yard since the neighbor behind us regraded his land, and since a new house was erected across the street from us. There seems to be considerable runoff from Campmeeting and East Streets.</p>	<p>Could the town look at the road conditions to assess balanced drainage?</p>
HICKORY BEECH DEVELOPMENT				
39	Caitlin Lane	11	<p>We are very concerned about the Hickory Street development. Their septic system is very close to the back of our property. Once it is in operation, we fear more flooding due to changes in water run-off and higher water table.</p>	

TABLE C3 DEVELOPMENT COMMENTS AND ISSUES

File Number	Street	Number	Comment #1	Comment #2
262	Caitlin Lane	10	There is wetland behind my property, now part of the Hickory Beech development, which floods ever time it rains heavily. Water from the adjacent hill accumulates there and then partly flows away via a small intermittent stream. At times this water spreads onto my land and works its way towards my house (photographs are on file at the Town Hall). During the discussion stage of the previously mentioned development I attended as many ConsCom and Planning Board meetings as I could to voice my concerns. These were that by cutting down trees, building roads and houses the flooding on my property could potentially be a lot worse. I was assured by the engineers that this would not happen and so far it hasn't but only one house is currently built and that is not sold yet. What transpires when the 25 homes are built is anyone's guess. (Actually, this Spring the water line does appear closer to the house but that may be because of the abnormal snowy and wet winter).	After a couple of days of heavy rain I get water in my basement and have had to install two sump pumps and buy an emergency generator to help alleviate future flooding. With the wetland so close to my house and global climate change a reality I can foresee greater problems ahead. I would suggest that Topsfield try to minimize all further development especially on a scale of Hickory Beech. Allowing 25 lots on that parcel of land was a blunder beyond comprehension. The Ipswich River is one of the most endangered in this country which alone should automatically be good reason to restrict growth. It is a well known fact that roofs, road surfaces and the elimination of trees and vegetation increase erosion and water runoff. It is much more prudent to anticipate potential problems than deal with them later. I have friends on Camp Meeting Road that suffer terrible flooding every year and more effort should be made to assuage those sorts of disasters.
NEW MEADOWS DEVELOPMENT				
408	Wildes Road	35	Water quality is very good. Drinking water from our well is excellent. Note: The dead trees and high water off of Rt 1 (actually just north of Topsfield in Ipswich) was caused by beaver dams located near East St. and Hobbs [Howlett] Brook.	I'm concerned that the New Meadows Golf Course is attempting to build 24 townhouses on the golf course. I feel this is too many units and could negatively affect the quality of the surface and groundwater we drink from our wells. It also flows directly into the Ipswich River. A smaller amount of single family homes should be built instead. The golf course also probably applies fertilizer, etc. to the grass and greens which also negatively affects the ground water / surface water.
COMMENTS ON GREAT HILL DEVELOPMENT				
182	Ipswich Road	10	I have lived in this house -- 10 Ipswich +15 years and have had 3 basement floods. First 2 severe with damage -- recent flood -- I xxxx xxxx -- manageable with sump and lifting everything off basement. I have been told by more? xxxx xxxx neighbors that things have been much worse since Great Hill development. I am happy to see concern on the part of the town.	
428	Woodside Drive	21	We have had more flooding in our basement in the past 10 - 12 years than ever before. Previous owners stated flooding in basement 2x in history of house (built 1954). We have had flooding every year since Great Hill has been developed.	
1	Bare Hill		Several of my neighbors do have problems when it rains -- enhances the mosquito population. In the 16.5 years that I have lived here in town, I have noticed more people in my neighborhood with hose running from their basement to the street - especially since the construction of Great Hill property. People who never had water do now, fortunately not us.	
342	Main	129	At times land behind my house has been a flood problem but since Great Hill was developed this problem seems to be corrected -- thankfully!!	

TABLE C3 DEVELOPMENT COMMENTS AND ISSUES

File Number	Street	Number	Comment #1	Comment #2
OTHER COMMENTS				
31	High Street	100	(3) (4) Development of Dover Hill Road changed the water flow. A stream that used to be dry in summer is wet all the time. An area that was swampy is now dry. Another area became wet most of the time causing many trees to fall over.	
245	Maple Street	47	Since buying our house in 1973 water problems have increased. The construction of Masconomet Healthcare Center (which replaced 7 acres of apple trees) was definitely a problem during the "Mothers Day flood". Water flowed like a river down Maple from Central Street and School Brook overflowed on the other side of us. We had to replace our furnace due to water damage. We have generator to run the sump pump during power failures, however we are grateful to the fire department for pumping us out when the pumps (2) cannot keep up with the water coming in. The cutting of trees for the rails to trail by the electric company has also had an effect, and we are concerned about the future impact of the trail.	
323	Park	22	Part of the situation might be from the construction of the new church. They tamped the ground for at least a week or more (shook the house.) Also there was a vernal pool in the back of the old church that is now hot top.	
311	High Ridge Road	14	My primary concern is the way the developer constructed the swale that is supposed to carry water away from my house/basement during heavy rains and directly afterwards.	
359	Surrey Lane	28	My neighbor did landscaping and the area around my garden shed floods and does not dry out enough to cut the grass around it until June-July. Shed is on cinder blocks and water often rises to floor level.	I am more concerned with general water availability in Topsfield and annual restrictions on water usage. The Town needs a long term water solution -- more important to me than ground water problems.
147	Mansion Drive	28	By the above answers I don't have any problems, however, visual observation around town indicate many other are, and I believe the problems are increasing and could get even more serious. Building and pavements are a serious concern.	Other paving surface should be considered (req'd).

TABLE C4
TITLE 5 ISSUES

TABLE C4 TITLE 5 COMMENTS AND ISSUES

File Number	Street	Number	Comment #1	Comment #2
TITLE 5 SEPTIC MOUND ISSUES				
196	Forrest Road	10	<i>Ed: Crawl space and outbuilding flood. Nearby Title 5 Mound is problem.</i>	
65	Forrest Road	12	<i>Ed: Problems maybe related to #196</i>	
273	Ipswich Road	244	Conservation Commission authorized neighbors dramatic septic installation over my objection -- and relieved him of obligation to maintain adjoining drainage pond and culvert. Now to intentionally block culvert causing my property damage and flooding -- and Conservation Commission ignores my repeated complaint. Law suit will follow seeking damages from all responsible.	Conservation Commission ineffective and dangerous.
26	Summer Street	36	A new septic and dry well were put in close to our property line and we seem to have an increase in water problems in our basement. Things have gotten so bad that we installed french drains in the basement this year.	We tend to also get a lot of run-off from storms as they come down the hill on Summer Street. It runs right off the street and into our driveway. The lack of a curb or berm definitely hurts as well as the property at 38 Summer Street which has been left unrenovated for the last 3 years. This ungraded lot also catches a lot of water and it runs down to our lot.
229	Summer Street	18	<i>"very few mosquitoes" Lost furnace furnace and hot water when elec. Off because of storm a few years age. Lights have been good since.</i>	I feel land across from me (new house) should not have been approved for additional septic system. This was low land with water in damp weather years ago. Water in basement almost constantly except real dry weather, since I became the low land on the street.
435	Central Street	51	Water table rises in spring -- can be very bad if spring thaw is accompanied by heavy rain. Pump works -- replaced one 2 years ago after failure led to flooded basement. I do feel that Title 5 septic installed all around our property have changed ground water / surface water flow patterns.	
438	Birch Lane	9	In 2006, a new septic (raised) system was installed on our property. Although there has been a sump pump in the basement for quite some time, we've had flooding in the basement almost every heavy rain since such time. We don't know if this has always been a problem or is a new problem. We have issues when the power goes out as our sump pump fails and we often flood xxxx rain storms. Power loss at any time is a concern. Our sump pump operates continuously. We have also noticed higher levels in the wetlands surrounding our property in the past year.	Although we suspect a change in the property's grading since the installation of the 2006 septic system has contributed to the flooding (there is flooding of the driveway and property in different places now), we are not completely certain that the basement had "never flooded as the previous owners indicated and this may be an ongoing problem.
34	Wenham Rd	51	(3b) Surface water and runoffs have increased on portions of my land nearest Title 5 septic systems recently installed on adjoining properties -- some topsoil erosion has resulted. (8) It is likely that the high level of clay in soil inhibits drainage. Water seeps into sump holes in varing degrees throughout the year.	
93	Pemberton Road	16	Like many others on Pemberton Road, groundwater flooding in the basement is only a problem in the spring when the water table is high. Heavy rains during this time pose an additional risk of flooding...	More oversite (by the town engineer?) should be given to proper elevation and drainage around title 5 mounds. In many cases on Pemberton Road, surface flooding has become a problem in the Spring since heavy rainfall cannot drain -- the mounds focus the run-off into the yards rather than back towards the railroad tracks. I think most of the Pemberton problems could be solved by installing a culvert or drainage ditch through the railroad birm.
167	Pemberton Road	32		An elderly* neighbor's house of ours has had septic mounds constructed on both sides of her house. I have observed since the first mound has been constructed her yard and home have been flooded numerous times. I have seen her home completed surrounded (100%!) by water. It looks as if her home was built in the middle of a pond. Our backyard has also been flooded since a neighbor's mound has been installed. (Not to the extent of our house sitting in the middle of a pond.) Solution - 1) If my neighbor's problem has not been addressed by the Board of Health, it should be, and 2) If drainage plans of septic installs are not part of future designs, they ought to be. * I write elderly, because I personally feel that because of her age she has not petitioned the town to have this terrible problem corrected. Of course she could have and town turned her down, I don't know. What I do know is that her home suffers greatly since these mounds have been built.

TABLE C4 TITLE 5 COMMENTS AND ISSUES

File Number	Street	Number	Comment #1	Comment #2
224	Perkins Row	142	(9) Title 5 septic system a condition of purchase in 1998. Title 5 septic system installed at 140 Perkins Row 2006. New home build at 136 Perkins Row ~2002/2003. (4) Extensive drainage repair done around 142 [Perkins Row] in 1999.	<i>Ed: 3 Sump Pumps</i>
329	Colrain Rd	26	Title 5 redo of a neighboring yard (land raised) causes heavy xxxx puddling in a previously dry border section of our yard during heavy rains.	<i>Ed: Uses portable pumps for basement - very heavy rains</i>
SEPTIC MOUND COMMENTS				
404	Perkins Row		(3a) Some Title 5 septic systems and swimming pool additions have changed natural course of surface water drainage causing greater pooling closer to foundations of several homes in the area. New home construction on previously vacant lot has made previously adequate culvert totally inadequate. Some culverts and catch basin drains are not located in places where water collects on the road. (3b) Wetlands have greatly expanded in undeveloped areas -- many large /old trees dying -- high water levels constant -- beavers are suspects.	
191	Washington Street		We never had water prior to 1998 (<i>Ed: actually Oct '96</i>) then there was a large fall flood. We had no water again until 2002. Now we have water every spring without fail. All my neighbors pump too. I believe all the septic systems recently installed has changed the groundwater table. With the "backyard mounds" the water has no where to go. The Ipswich River is taxed.	
OTHER TITLE 5 SEPTIC ISSUES AND COMMENTS				
10	Fox Run	20	Joe Downing. Hancock Survey originally passed and certified Title 5 inspection on our septic system. Joe Downing overturned their certification costing us approximately \$15000. We would have fought his decision but it was far too expensive.	
50	River Road			The program of Title 5 is abused. It is a dream come true for contractors. Home owners who do not live near streams, etc. are being forced to raise the height of their land.
90	Howlett Street	15	Property failed Title 5 inspection because water table was too high relative to leaching pit. Inspector reported that system was otherwise functioning normally!	
227	Haverhill	100	<i>Ed: Had unfavorable comment re Rosemary</i>	
284	South Main	78	<i>Ed: Has alternative septic system due to wetlands & high water table</i>	
397	Mansion Drive		In very heavy rains, high water table causes flooding in basement. Since last flooding, a nearby property has removed a very large amount of trees which has increased concerns for flooding. Previous owners did not disclose flooding problems but neighbors remember them having problems.	Our septic system is 8 years old. Recently, when we had it pumped (regular maintenance) it was full -- nearly backing up into the house. Nothing (in the use of it) could suggest why this was so. It made us wonder if there are issues in the leaching field that are related to high water tables.

TABLE C5
WATER SUPPLY ISSUES

TABLE C5 ISSUES AND COMMENTS CONCERNING TOWN WATER SUPPLY

File Number	Street	Number	Comment #1	Comment #2
WATER QUALITY				
37	Summer Street	22		Replace old water main on Central Street ASAP.
210	Forrest Road	5		Just a side note: The water quality (drinking water) is terrible! The chlorine and other chemicals that are being added to our water supply makes the water undrinkable. The chlorine has dried out my skin and my hair has become brittle and breaks off. Topsfield used to have excellent water quality ... now I have to buy drinking water! Resident for 57 years.
18	Towne Lane	28		The condition of the town's water supply and the delivery (old?) concern us as we get "brackish water" -- five or six times a year.
74	High Street	178	In question 1 I tried to say we live on a hill. The original owners of our property sold off 10 lots -- all at the bottom of our hill. Those homes, especially the ones on Perkins Row have water problems. There is standing water enough for ice skating in the winter or ducks and frogs in the spring (in their back yards).	As one who uses Topsfield's water supply, I am unhappy with the strong chlorine -- smell and taste. Isn't there some kind of water purification system (perhaps using sand, rocks and filtration devices) which could offer us water with no smell or taste? Thanks
216	Brookside	54	Often the water is brown coming from the taps.	
239	Great Hill			The water has an unpleasant taste of chemicals -- not the clean, clear, fresh taste of water.
276	Brookside	19	The flushing of Town water system and resulting sediment in pipes has blocked up my water valves in the house sinks and created very dirty water, necessitating calls to furnace technicians and plumbers. Not a good situation for home owners to do all this flushing of Town water -- causes homeowners additional expenses.	
304	Canterbury Hill Road	16	Is surface water drawn into Topsfield's well fields? If so, how much? Impact on the river flow? Is surface water treatment available (filtration, disinfection) in that case? Then what about thxxxxs?	We regularly see Ca [calcium] deposits on plumbing and bath fixtures -- very stubborn deposits -- which is understood for piping and line protection. What are conditions of distribution system that require such precipitous pH adjustments?
379	Ledgewood Circle	8	Clogged streams can create standing water. Clogged streams leading to wetlands can cause flooding. Water used to taste great. Last[?] years over chlorinated. And the chlorination is not consistent. One could get the feeling "Does anyone know what's going on?" <i>Ed: Mosquitoes worse since stopped spraying.</i>	Water coming from Campmeeting spills into culvert on Ledgewood Circle. Heavy rains and non-cleaned catch basins and things get serious. The added water can negatively input Ledgewood Circle. This has become more so over the last 10 years. Heavy rains can also fill catch basins on Ipswich Road adjacent to Ledgewood Circle. Spill over comes down to Ledgewood Circle.
WATER BAN				
145	Hill Street	129	Obviously there is no water shortage and therefore there should be no water ban. There should be a dramatically escalating scale for usage. Why should someone be penalized if they conserve at the expense of those using significantly more water?	
385	Rowley Bridge	212	(8) We have 2 pumps and a generator to handle the water so our basement won't flood. (3) We have only lived in our house for 2 years, but our neighbors said it has happened more frequently in the last few years.	What is hard for us to understand is the spring flooding and then summer water bans. The extremes seem so perplexing.

TABLE C5 ISSUES AND COMMENTS CONCERNING TOWN WATER SUPPLY

File Number	Street	Number	Comment #1	Comment #2
359	Surrey Lane	28	My neighbor did landscaping and the area around my garden shed floods and does not dry out enough to cut the grass around it until June-July. Shed is on cinder blocks and water often rises to floor level.	I am more concerned with general water availability in Topsfield and annual restrictions on water usage. The Town needs a long term water solution -- more important to me than ground water problems.
198	Haverhill		It is clear because of the state of constant flooding in the Pye Brook area that the flood plain is being pushed much higher on my property after unusually heavy rain periods. Because the water cannot drain in the summer dry periods the mosquito population is now unbearable all summer long. Where as before the beaver dams were allowed, the mosquito population would subside in late spring.	Although it may be a difficult concept for environmental extremist groups like Ipswich water shed to accept. Common sense suggests flow problems on the Ipswich river in the summertime have more to do with water dammed up in the tributaries than over drawing from the river itself. During last summers drought static water levels in my water well & wetlands behind my house never dropped below flood stage levels. The absurdity of local government bureaucrats telling me I have to water my vegetable garden with a hand held hose and my backyard is flooded. It would be nice for local government policy to address the taxpayers needs & concerns and take a stand against the extremist crowd.
437	Haverhill	80	We do believe those on wells should also have to abide by water bans. Perhaps if folks better understood where "their well water" comes from, they would be more amenable to conserve at all times, not just during dry spells.	An educational seminar about how water supplies and systems work and how private home use affects water levels. For families, made [make?] fun, food and beverage. Just a thought.
222	Asbury Street		Too much water is used for lawns. There are paths/roads in Bradley Palmer Park that get ruined by flooding due to beavers. Water (rain/floods) will always be an issue. We do need to manage it. Reinstate beaver trapping where necessary.	

TABLE C6
BEAVER RELATED ISSUES

TABLE C6 BEAVER RELATED PROBLEMS AND COMMENTS

File Number	Street	Number	Comment #1	Comment #2
WILMOR ROAD / PYE BROOK PROBLEMS, CONCERNS, AND COMMENTS				
109	Wilmor Road	45	Beaver activity (Pye Brook) has caused water table to rise causing flooding on our lower property. We have spent thousands of dollars to alleviate the situation with very little success. When sump pump fails, our barn floods.	
254	Wilmor Road	42	Beaver dams have caused water on my property and killed trees, contaminated water in culvert, bridged into a spring fed pond and turned what was a beautiful area into a disaster.	
269	Wilmor Road	28	Beavers. Lodge in my backyard -- dammed up Pye Brook which has flooded many acres -- also chopped down all the trees in the surrounding area.	
344	Wilmor Road	24	Capping of the landfill and beaver activity has led to permanent standing water in surrounding areas of my property. I am concerned about my drinking water quality.	Remove beavers from area. Investigate why Pye Brook doesn't flow properly. Lower real estate taxes (land) as water has covered areas and can't be used.
263	Wilmor Road		Surface water continues to worsen each year. The woods across the street were just that 15 years ago; now it's a pond and most of the trees are dead.	
436	Wilmor Road		<i>Ed: Indicated beavers were active and a 'threat'</i>	
76	Bare Hill	3	Beaver activity on Pye Brook has made water levels higher in recent years after they stopped trapping of these animals.	
398	Bare Hill	38	Across street beaver activity has raised water levels in neighbor's yard.	Neighbor's sump pump discharges to our property.
198	Haverhill		It is clear because of the state of constant flooding in the Pye Brook area that the flood plain is being pushed much higher on my property after unusually heavy rain periods. Because the water cannot drain in the summer dry periods the mosquito population is now unbearable all summer long. Whereas before the beaver dams were allowed, the mosquito population would subside in late spring.	Although it may be a difficult concept for environmental extremist groups like Ipswich water shed to accept. Common sense suggests flow problems on the Ipswich river in the summertime have more to do with water dammed up in the tributaries than over drawing from the river itself. During last summers drought static water levels in my water well & wetlands behind my house never dropped below flood stage levels. The absurdity of local government bureaucrats telling me I have to water my vegetable garden with a hand held hose and my backyard is flooded. It would be nice for local government policy to address the taxpayers needs & concerns and take a stand against the extremist crowd.
197	Haverhill		When we moved to this property, we had a vegetable garden in the very back of my yard. That piece of land is now 80% of the year totally under water from Pye Brook expanding after they built the road to Pye Brook Park.	
129	Haverhill			Heavy beaver activity have taken down 30+ trees and saplings.
201	Haverhill		Pye Brook does not flow as it used to. It has become relatively stagnant at a higher level (beavers).	
64	Comstock Lane	3	The forest abutting Bare Hill Road and Pye Brook Park (the old dump) is all dead due to the high water levels. During spring thaws water table rises into basement. Last year we spent \$15000 to repair damage to the basement and to turbocharge sump pumps. PS- I live on the top of a hill!	
THOMPSON LANE PROBLEMS				
171	Thompson Lane	17	Beaver activity has flooded our yard resulting in dozens of uprooted and overturned trees.	
406	Thompson Lane	18	A beaver dam erected about 1 1/2 years ago caused the water levels behind my house to rise about 12"-14". This allowed water to come 20' closer in some areas, to the house. It was close enough for the health department to declare it a hazard, allowing me to get trappers to remove the beavers and breach the dam.	Although the beaver issue needs to be addressed at the State level, they must not be allowed to build dams where they can destroy private property.

TABLE C6 BEAVER RELATED PROBLEMS AND COMMENTS

File Number	Street	Number	Comment #1	Comment #2
PERKINS ROW / AUDUBON				
250	Perkins Row	235	The increased beaver population has increased flooding in many areas that were dry 12 years ago. Many culverts should be periodically cleaned out (preferably once a month) before the floods occur.	I think trapping beavers is essential, and that beaver deceivers can help, but they should be continually monitored and cleaned out when necessary.
271	Perkins Row	223	(3) Have lived here 40+ years -- the backyard has gone from walkable land to wet-and-dead! At its "flooded worst" beavers were cutting down trees (yes -- we saw them!). This property backs up to the Sanctuary -- they have been concerned and helpful about my situation. They constructed the beaver deceiver on "Vogt's path" (235 Perkins) which has helped me -- well, not worry so much!	
247	Perkins Row	220	We live across the street from Audubon property and do notice that it floods more frequently and surface water is higher each year on that land. If that trend continues, water will flood across the road and affect our property.	
WINSOR LANE COMMENTS				
16	Winsor Lane		About 1/4 of our property that used to dry up in the summer and fall now has standing water year round. We began to see this happen about 1994. The water table has become higher threatening septic systems. We have had significant damage to our home from groundwater flooding -- the last flood ("Mothers Day flood") caused > \$10000 damage.	As this committee knows, the Winsor Lane residents believe their problem would be solved if Audubon would properly manage the dams (both beaver and man-made) on their property.
299	Winsor Lane	40		1. Trap the beavers. 2. Lower the dam height in the Audubon. 3. Water level too high around Town wells.
326	Winsor Lane	42	We bought our home in 1990; one selling point was a finished basement and no sump pump. Now, besides getting 12" - 18" in the May rains, we had several smaller problems in the last 10 years. We no longer trust that our basement will remain dry.	Based on meetings with the ConsCom, Selectmen, and Audubon officials, it became apparent that Winsor Lane problems began with the Audubon's "management" of the small dam on their property. At the same time, hunting restrictions have led to bumper crops of beavers, blocking the many streams around us. Now, homes which were dry for 30-40 years have water worries.
382	Winsor Lane		<i>Ed: Has had flood damage; didn't know if beavers were a threat</i>	
392	Winsor Lane		<i>Ed: Concerned that beavers were a threat to flooding their property</i>	
EAST STREET COMMENTS				
231	East Street	37	Sump pump runs 10 out of 12 months due mainly high water table.	Local beaver activity is a concern.
177	East Street		I think "the beaver" are overrunning the streams and the river. This problem is going to increase since one pair of beavers can and do produce 608 beavers in 10 years. Hence anyone near a brook or river is going to have problems in the near future.	
320	East Street	31	The[re] is a great deal of beaver activity along East Street. I think this should be addressed. It appears that much of the flooding that occurs, particularly towards Rt 1 end of East Street, could be prevented if the beavers were better managed. They now appear to be migrating towards Campmeeting Road and I fear this end of the street will be affected soon.	
25	East Street	42	The little brook that runs past 108 East Street (Thompson's) has been dammed by beavers. The water now reaches Rt 1. The water floods part of the golf course. Complications develop when Fred Young added height to the dam he erected behind his property. He claims that the culvert across Wildes Road is too small so Wildes Road frequently floods. (Young's house has been empty for a number of years.) Any failure along this brook would affect water going under bridge on East Street (our property). We think the Town should be able to control all this water. No resident should be able to flood a neighbor's property at will. The dam on Peabody's property on Campmeeting Road also affects the flow of our brook and backs it up (Howlett Brook). Pump works as long as electricity is on -- no electricity, no pump, big mess.	

TABLE C6 BEAVER RELATED PROBLEMS AND COMMENTS

File Number	Street	Number	Comment #1	Comment #2
180	East Street	2		The uncontrolled beaver population is a big concern on East Street from Willowdale Forest. Since the stopping of traps the "tide" has risen many feet. Thus the mosquitoes have increased two fold. Are beavers going to pollute our wells?
350	East Street	124	My main concern is Willowdale State Forest across the street from my property. What was once beautiful skating bogs and walking paths has now turned into a lake. All the trees in the filed near Rt 1 are dead or 'dying'. This is turning into a breeding pool for mosquitoes. This land has changed drastically in the last twelve years. I have concern for myself and my neighbors because of the increase in mosquitoes -- health issues.	Break up beaver dams and control the beaver population as they reproduce prolifically. They are ruining our recreation areas. Just past East Street on Rt 1 heading towards Ipswich look at the first house on the left. The water level is almost to the front of their house. It's horrifying.
OTHER BEAVER PROBLEMS				
69	Ipswich Road	106	Beaver have become plentiful within the past 12 years. They have plugged the culvert blocking the passage of water beneath our driveway to our home -- also have damaged 3 of our ornamental trees on, and around our property some 38 saplings and small trees just last fall.	Remove beavers from our area. They are over populated and create an expensive problem and disrupt the natural flow of water exiting this area.
112	Pemberton Road	48	(3a) Culvert under Rt 1 (School Brook) inadequate. Flooded cul-de-sac, driveway and garage 4 times since 1996. (3a) Beaver dam in '05 caused portion of property to flood and cul-de-sac to flood during heavy October rains. Sump pumps in basement were running daily even in dry periods before heavy rains. Believe leeching field was flooded. Mold in basement is threat only if water table is continuously high from beaver dam.	Enlarge culvert under Rt 1. Keep beavers out of School Brook permanently. <i>Ed: Note that flooding is much more severe and frequent for two businesses on Route 1.</i>
155	Salem Road	136	We get ground water from the hill above us. It will wash out my driveway down back of the house. Also we get ground water in the street end of our drive that washes all the rocks and gravel from above us. No culverts along the main road. Beaver have blocked culvert across the road in the pond.	
OTHER COMMENTS				
28	Ipswich Road	78	My house is on the wetlands across from the town wells on North Street. Due to beaver activity, trees have been flooded and died, and other trees have been taken down by the beavers. The flooded area has created a nice environment for waterbirds which would be nice to preserve. However, it would be nice if the dead trees could be taken down.	
176	Perkins Row	14	Beaver activity around town and adjacent to my property causing water to backup.	
188	Aaron Drive	4	We have a small stream behind our house. Since the flooding of May 2006 the water is closer to our home. We have lived here since 1993 and the water had not been visible from our windows as it is now. We have been told that beavers could also be a source of the problem.	
409	South Main	31	We've only lived here since January 2007 and do not know this history of water conditions. We were told by the prior owner that there was no history of water in the basement (prior to the Mothers Day flood in 2006). In the year we've owned the house, we've had water in the lowest section of the basement several times. We've seen beavers in our pond and in the "pipe" that flows under a portion of our backyard.	
58	Perkins Row	228	I wonder if land clearing and development at Great Hill Drive has increased surface run-off east towards Perkins Row. I think beaver populations in and outside the Audubon has raised the surrounding water table.	
38	Perkins Row		Clearly there have been changes with elevated water levels and flooding issues at the Audubon Sanctuary on Perkins Row. I don't know if this indicates a problem, but water levels have definitely risen in recent years.	
62	Ipswich Road			Go to trapper.com and invite trappers to hunt the beavers during trapping season on water department land.

TABLE C6 BEAVER RELATED PROBLEMS AND COMMENTS

File Number	Street	Number	Comment #1	Comment #2
222	Asbury Street		Too much water is used for lawns. There are paths/roads in Bradley Palmer Park that get ruined by flooding due to beavers. Water (rain/floods) will always be an issue. We do need to manage it. Reinstate beaver trapping where necessary.	
251	Timber Lane	50	Beavers seem to be causing major problems in Topsfield. They need to be trapped and dams breached. They seem to reproduce quickly. I believe this will be an ongoing problem for many property owners and the Town government if we do not control the beaver population.	Area between Timber Lane, Aaron Drive and Rt 97 -- beavers. Area between landfill and Wilmore -- beavers. Rt 1 near the golf course -- beavers about to flood road IRWS -- beavers have ruined sanctuary. Hopefully we can have action this spring before damage gets too much worse.
132	High Street	75	There is a problem in many areas of town mainly caused by beaver activity and our inability to properly clean natural and manmade waterways because overly stringent regulations and a lack of common sense in their application.	
288	Honor Place	14	Concerned about dead trees on Rt1 as extends up thru Newbury. What is causing it?? Can they be removed? Flooding at Topsfield Fairgrounds and Essex Co-op is concerning this year but given only here one year not sure what has historically been the normal winter or rainy season with flood levels in the low lying areas.	
186	Colrain Rd	27	Over-development has a great impact on surface's ability to absorb rainwater without run-off. Beaver damage is a great concern -- particularly in proximity to town's well fields on North Street and Perkins Row and proximity to Pye Brook (landfill penetration).	
294	High Street		There is no question that beaver activity and heavier than usual rains and snow have raised water levels.	
143	Mansion Drive		Extensive flooding in certain wooded areas that I see off Rt 1, Rt 97, etc. -- causes? beaver in part? We can't replace dead forests due to over development -- becomes permanent loss to the eco system.	Who explains these ongoing environmental changes to public? How do we know how to address problems? Who is responsible? Do we actually have too many beaver now? (we have too many deer.)
OFFERS TO HELP				
32	Candlewood	15		There are obviously a lot of beavers near my home. On my walks I see that the deceiver systems are sometimes clogged. I would be willing to volunteer to maintain one or more.
324	Walker Road	2	As I conducted trapping operations in town this year I noted many areas of rising and expanding water situations that need to experience ongoing management.	I would be willing to discuss with group.

TABLE C7
RIVER AND STREAM ISSUES

TABLE C7 RIVER AND STREAM COMMENTS

File Number	Street	Number	Comment #1	Comment #2
RIVER AND STREAM FLOODING				
245	Maple Street	47	Since buying our house in 1973 water problems have increased. The construction of Masconomet Healthcare Center (which replaced 7 acres of apple trees) was definitely a problem during the "mothers day flood". Water flowed like a river down Maple from Central Street and School Brook overflowed on the other side of us. We had to replace our furnace due to water damage. We have generator to run the sump pump during power failures, however we are grateful to the fire department for pumping us out when the pumps (2) cannot keep up with the water coming in. The cutting of trees for the rails to trail by the electric company has also had an effect, and we are concerned about the future impact of the trail.	
440	Maple Street		Flooding in our basement was never a major concern until trees were cut down near the Ipswich River to make way for a rail trail.	
433	Washington	225	During heavy rains the brook (which is already extremely swollen) overflows onto my yard and into my house. I do not have a sump pump because there is no place to pump the water to!!	[sketch showing location of house, brook, pond, Washington St, and Masco] Cannot pump out Washington Street -- house has water on 3 sides during flooding. *Many dead/dying trees on my property. *Backyard is frequently wet.
158	Ipswich Road	139	Property abuts Mile Brook and over the past 10-15 years the water has flooded further onto our property such that the conservation commission had to restrict part of our property from any usage, maintenance or improvement.	
REQUEST TO CLEAN BROOKS AND STREAMS				
159	South Main	66	Cleaveland Brook at South Main Street is plugged going towards Rt 1. The water backs up causing higher ground water levels and using the land futile. The brook should be cleared (not cleaned) out. The water moves very slowly. When Mr. Gambal was highway superintendent he would walk someone down the brook to just clean out the sticks, etc. that would slow the water flow. Kerry Makin (IRWA) see's no problem! I think the water should flow to the river instead of evaporating into the air because of slow flow.	
285	Grove	15	Cleaveland Brook needs to be cleaned to flow freely	
375	Washington	7	The creek behind our house used to be cleaned on a regular basis (every year) by the town to keep water flow and drain clear. Since this has stopped, increased flooding has occurred on our property and that of our neighbors. Also, dumping of trees into small pond / swamp a few lots away has increased water / flooding issues for neighbors and myself.	
369	High Street	139	Brooks and culverts are not cleaned to allow surface water to drain in a timely manner and in some occasions cause major flooding. In the 35 years I've lived at this residence we have got water in our basement twice in the past 5 years. Brooks were cleaned twice in my first 12 years here and 0 times in the past 23 years. Someone might want to look into cleaning brooks and streams.	
OTHER COMMENTS				
120	Coppermine		My area of concern is Nichols Brook which divides Topsfield and Middleton. My property is adjacent to it but the administration and jurisdiction of it maybe split or divided -- and this concerns us should there be any problems associated with/from the "Brook".	Adjacent golf club (Ferencroft) ground improvement projects and maintenance work maybe affecting Nichols Brook's flow -- volume, speed of flow, etc. Possible discharge of debris and clippings may contribute to natural flow and drainage into Ipswich River system? I'm not an expert but these things maybe contributing in one way or the other.
27	Meetinghouse Lane	6	Puddling in parts of back yard. Stream running from rear of property through driveway. Only lived here 20 months.	
87	Blueberry Lane	10	Ipswich River water levels are significantly lower during the last ~ 5 years than in earlier times. What is the linkage between ground water levels and the river levels?	
25	East Street	42	The little brook that runs past 108 East Street (Thompson's) has been dammed by beavers. The water now reaches Rt 1. The water floods part of the golf course. Complications develop when Fred Young added height to the dam he erected behind his property. He claims that the culvert across Wildes Road is too small so Wildes Road frequently floods. (Young's house has been empty for a number of years.) Any failure along this brook would affect water going under bridge on East Street (our property). We think the Town should be able to control all this water. No resident should be able to flood a neighbor's property at will. The dam on Peabody's property on Campmeeting Road also affects the flow of our brook and backs it up (Howlett Brook). Pump works as long as electricity is on -- no electricity, no pump, big mess.	

TABLE C8
MOSQUITO ISSUES

TABLE C8 COMMENTS ON MOSQUITOES, DEER FLIES, ETC.

File Number	Street	Number	Comment #1	Comment #2
MOSQUITO COMMENTS				
61	Canterbury Hill Road		I am concerned of mosquito breeding grounds, un-drained waters.	
198	Haverhill		It is clear because of the state of constant flooding in the Pye Brook area that the flood plain is being pushed much higher on my property after unusually heavy rain periods. Because the water cannot drain in the summer dry periods the mosquito population is now unbearable all summer long. Where as before the beaver dams were allowed, the mosquito population would subside in late spring.	Although it may be a difficult concept for environmental extremist groups like Ipswich water shed to accept. Common sense suggests flow problems on the Ipswich river in the summertime have more to do with water dammed up in the tributaries than over drawing from the river itself. During last summers drought static water levels in my water well & wetlands behind my house never dropped below flood stage levels. The absurdity of local government bureaucrats telling me I have to water my vegetable garden with a hand held hose and my backyard is flooded. It would be nice for local government policy to address the taxpayers needs & concerns and take a stand against the extremist crowd.
241	North Street		I've only been here about 2 years -- there is some concern at times when the backyard starts to gain water and heads to the basement. So far so good. Also have noticed more mosquitoes and our allergies to mold and mildew seem more constant than they used to be.	Could you safely spray or treat area for mosquitoes without using hazardous chemicals. It would be great!
126	Deer Run	5	Since moving to Topsfield over 12 years ago we have noticed an increase in flooding in more areas than before. The mosquito population seems to have exploded in our area and going out near dusk and on is impossible. The only time we have been threatened by water was during the May storm 2 years ago.	
200	Kinsman Lane		Mainly the attraction of mosquitoes.	
341	Camp Meeting	34	Concern is due to increase in mosquito population.	
350	East Street	124	My main concern is Willowdale State Forest across the street from my property. What was once beautiful skating bogs and walking paths has now turned into a lake. All the trees in the filed near Rt 1 are dead or 'dying'. This is turning into a breeding pool for mosquitoes. This land has changed drastically in the last twelve years. I have concern for myself and my neighbors because of the increase in mosquitoes -- health issues.	Break up beaver dams and control the beaver population as they reproduce prolifically. They are ruining our recreation areas. Just past East Street on Rt 1 heading towards Ipswich look at the first house on the left. The water level is almost to the front of their house. It's horrifying.
180	East Street	2		The uncontrolled beaver population is a big concern on East Street from Willowdale Forest. Since the stopping of traps the "tide" has risen many feet. Thus the mosquitoes have increased two fold. Are beavers going to pollute our wells?
122	Rowley Road			Mosquitoes
181	Kinsman Circle	53		Let's spray the woods to kill mosquitoes and ticks.
395	Birch Lane	6	We have an elaborate sump pump with french drains around the perimeter, but during heavy rains we still often get water in the basement. Also, if we lose power, the sump doesn't run and we get water. Our mosquito population is unbelievable due to standing water in our backyard wetlands.	

TABLE C8 COMMENTS ON MOSQUITOES, DEER FLIES, ETC.

File Number	Street	Number	Comment #1	Comment #2
379	Ledgewood Circle	8	Clogged streams can create standing water. Clogged streams leading to wetlands can cause flooding. Water used to taste great. Last[?] years over chlorinated. And the chlorination is not consistent. One could get the feeling "Does anyone know what's going on?" <i>Ed: Mosquitoes worse since stopped spraying.</i>	Water coming from Campmeeting spills into culvert on Ledgewood Circle. Heavy rains and non-cleaned catch basins and things get serious. The added water can negatively input Ledgewood Circle. This has become more so over the last 10 years. Heavy rains can also fill catch basins on Ipswich Road adjacent to Ledgewood Circle. Spill over comes down to Ledgewood Circle.
223	Perkins Row	116	"considerably diminished [mosquitoes] in the last 40 years"	
286			"less [mosquitoes]"	
229	Summer Street	18	"very few mosquitoes" <i>Lost furnace furnace and hot water when elec. Off because of storm a few years ago. Lights have been good since.</i>	I feel land across from me (new house) should not have been approved for additional septic system. This was low land with water in damp weather years ago. Water in basement almost constantly except real dry weather, since I became the low land on the street.
TICKS AND DEER FLIES				
212	Prospect		ConsCom/Town's inability to regulate homeowners who clear out land for horse paddocks, or approve driveways cutting through wetlands on prospect Hill have greatly disrupted natural water flow and water table. Our "wet-in-spring" only swamp is now wet all year due to new construction on Prospect Hill; Taylors clear cutting their land and Wilkinson's clear cutting their land for paddock areas has really caused issues up and down the street. Now Roy Brown wants to put a driveway across wetland and install potentially 2 septic systems in a wetland buffer zone.	Any new "development" (horse paddocks, new houses, driveways, etc.) should be held until a "water impact" analysis can be done. <i>Ed: Claims ticks bigger problem than mosquitoes.</i>
173	Orchard Lane	18		This past summer, we had an infestation of deer flies. We are the only house on the end of a cul-de-sac, and the problem was only around our house and the cul-de-sac. It was to the point we had to run from our car into our house, but still got surrounded by approximately 20-30 biting flies. We were unable to go to the front of our house for approximately 7 weeks, and had to drive down the street to walk our dog. We don't know if this has anything to do with changes water levels or not. We spoke to the Department of Health, but unfortunately there is no spray to get rid of them. If you have any suggestions, we would love to know -- thank you.

TABLE C9
WATER TABLE ISSUES

TABLE C9 COMMENTS INDICATING A HIGHER WATER TABLE OF UNKNOWN ORIGIN

File Number	Street	Number	Comment #1	Comment #2
OBSERVED HIGHER SURFACE WATER				
21	High Street	51	Part of the lawn that was wet in spring is now really boggy almost all summer. Basement is wet on floor almost all year to some degree and in spring water in basement can go up to 10" plus without sump operating. Mold on side of house is new in past 18 months.	
451	Dover Hill Road	9	More water collecting in our front yard during rainstorms resulting in water in our basement	
333	Fox Run	32	During heavy flood conditions, we sometimes (rarely) may get an inch or so of water in our basement. Of much greater concern is surface water in back of the house. At one time, we had a lawn there. Over the last several years, this has changed to a boggy situation which doesn't dry even during August.	
364	Washington	129	Backyard and areas along stream stay wet longer and slope of ground has changed (portions seem to be sinking).	
278	Brookside		Water levels in the wetlands on Brookside Road have risen markedly in the last few years. There is almost a pond opposite #18 Brookside. And next to #14, the ground is very wet and it looks like it will be a pond some day. Ducks and an egret have been hanging out on the pondlet across from # 18. I hope there are fish to eat the mosquitoes.	
203	River Road	132		To keep up with the ground water due to the water table I have 3 wells containing 5 sump pumps. They run from January to August. My backyard is typically under water throughout the spring.
244	Main Street	118	Areas of wetlands in our backyard were always dry in summer and fall previously (I grew up here) and now they are wet all year round. We installed a second sump pump in the basement during recent construction.	
INFERRED HIGHER SUBSURFACE WATER				
52	Kinsman Lane	46	Progressively over the last 5 years during heavy rains or thaw, water flows under my foundation into my sump pump. This never occurred before during the first 15 years I lived here. My concern is the electrical supply to the sump pump. Topsfield frequently loses power during heavy rains.	Low interest loans to home owners to correct or address these issues. Supply residents with tree seedlings to plant to re-populate tree loss. Allow residents to drain into the town storm drains.
98	Ipswich Road	134	In the last 12 years went from 1 pump occasionally to 3 running full time. Had move out during Mothers Day flood -- did a \$11000 basement treatment -- 3 pumps still running -- had to put in \$11000 generator, natural gas -- to keep pumps running in case of power failure.	
206	Washington	153	My house was built in 1994 and we never had to use a sump pump until about 5 years ago. Now we have used one every year since 2002 (approx.)	
235	Perkins Circle		(3a) Possibly high level of water table on septic system.	
119	Fuller Farms Road	8	We have lived in our house for 12 years. In the earlier years our backyard would experience natural flooding in the early Spring. During this period there was never any water in our basement. We experienced flooding in our basement approximately 8 years ago and had to install two sump pumps. The pumps are active March - April.	

TABLE C10
BASEMENT FLOODING ISSUES

TABLE C10 COMMENTS FROM THOSE WHOSE ONLY COMMENTS WERE ON BASEMENT FLOODING

File Number	Street	Number	Comment #1	Comment #2
BASEMENT WATER PROBLEMS				
5	Great Hill		Increased beaver activity has resulted in more surface water in some parts of our town. A high water table (ground water) is and has been a problem in many parts of Topsfield from the very time Topsfield was first established. In 1951 we built one of the first new houses in the "Plainer" section of Washington Street. Due to a lack of experience we did not set the house high enough and suffered severe flooding of our basement every spring. A sump pump was a necessity.	<i>Ed: Comments are on previous home on Washington Street</i>
7	Perkins Row		(8) [Pump] only [fails] if the power goes out.	
8	High Street	161	Moved in in 1991 -- first flood approximately 1996-1997. Ipswich river seems to flood more the last 10 years.	Water in basement 3 times since 1996-1997. Worse rain in 100 years, etc. Worse flooding in 100 years, etc. First time in fall. Second and third time in spring.
19	Ipswich Road		During heavy rains, water enters my basement in some places where the slab and the foundation wall meet. It does not flood but rather it runs across the sloped floor and runs out under the garage door. The basement is unfinished. I have no flooring. It is an annoyance, but not serious.	
29	Boston (Rt 1)	391	(5) Water damage happened only after the Mother's Day rains and flooding (?) two years ago.	
43	Thompson Lane	5	There is beaver activity at the end of my street, but I am not sure that affects us. We installed a basement system about 5 years ago. We added another 2 pumps last year after the original pumps could not handle the spring flooding. I still get nervous when there are days of heavy rain predicted. We hope that the 4 pumps will keep the basement dry.	
44	Glen Road	18	We have had a severe flooding of basement three times; modified bulkhead seems to have helped now only minor flooding. Who knows what tomorrow brings?	
89	River Road		(3) Natural river or stream flooding -- Mothers Day storm of 2006 -- (8) Pump runs during heavy rains if ground water rises significantly.	
117	Boston (Rt 1)	409	When the water level rises higher than the basement floor (at any heavy rain event), the water leaks into the basement thru the base of the chimney.	
138	Parsonage Lane	64	In the past 6 years we have had water in the basement 3 times -- only during heavy rains, in the Spring typically. We only get 1-2 inches so minimal water in basement.	
154	Woodside		High water table only during excessive storms like Mothers Day flood 06.	
160	Fox Run		Basement has flooded twice in the time period referenced. May 06 (with everyone else) and once with not as drastic a rainfall.	What can be done about a water table? Isn't that nature at work?
194	Washington	234	We have had unprecedented flooding in 1996 and especially in 2006.	
240	Colrain Road	13	Flooding occurred during 2004 and 2006 (Mothers Day flood).	
292	High Street	283	Our problems are more specific to our home/drainage than environmental conditions. During the big flood a couple of years ago we had 6" of water, more if we didn't pump constantly. A sump pump works in our addition, but there isn't one for the older part of my house.	My bigger water level concerns are low water levels in the Ipswich River and wanting to preserve wetlands to reduce flooding.
313	Central Street	64	Heavy rains consistently cause basement flooding (no monetary flood damage loss to date.)	
332	Rowley Bridge	211	In the 15 years we have lived in Topsfield, we have had a handful of instances, following a heavy rain, where groundwater has risen into the basement. I have not noticed any significant trends or increased incidence, however.	
336	Asbury Street	65	(3a) Extra heavy rains cause water in basement, once every 2 - 3 years.	
357	Washington		At 46 Main Street basement flooded.	
358	Parsonage	22	(3a) We have lived here 6.5 years and have had our basement flood twice -- both times we had had heavy rains.	
393	Birch Lane	2	Entire street (Birch lane) is filled or partially filled land. Reaction to ground/surface water is very sporadic -- some rains flood basement, some don't.	Natural runoff system works pretty well, with creek behind houses draining to swamp. My impression is that artificial measures do more harm than good.

TABLE C10 COMMENTS FROM THOSE WHOSE ONLY COMMENTS WERE ON BASEMENT FLOODING

File Number	Street	Number	Comment #1	Comment #2
395	Birch Lane	6	We have an elaborate sump pump with french drains around the perimeter, but during heavy rains we still often get water in the basement. Also, if we lose power, the sump doesn't run and we get water. Our mosquito population is unbelievable due to standing water in our backyard wetlands.	
353	Wenham	12	Our basement began flooding 3 years ago. Previously we would get water seepage thru the walls which would leave the basement floor wet for a period of time. In 2006 we got 9 inches of water in the basement. In 2007, the basement flooded (approximately 12 inches). We installed a sump pump in April 2007. Sump runs every 25 minutes or so. We are back to water seepage thru the walls being the chief problem now. Our house is a little lower than the surrounding ground in the back. Runoff during spring thaw and heavy rains contribute to wet basement, but it had been remarkably worse in 2006 and 2007. Would assume 2008 would have been just as bad if we hadn't installed sump pump.	
274	Parsonage	25	Over the past 12 years, my sumps run more frequently, especially October to March. Since Bare Hill (<i>Ed: Great Hill?</i>) has been developed it has gotten worse. Also I really feel it is time to clean out the river. As a frequent Kayaker on the river I know that the flow rate towards Ipswich has become reduced do to downed trees and other debris. I pump a lot of water on the street and plan on installing larger drains this year -- hard to believe we have a water shortage when I am pumping 1000's of gallons?	<i>Ed: Property is on hill at corner of Normandy. Septic system was replaced in fall '08; this may have been the problem.</i>
410	Howlett		Had flooding in basement during Mothers Day storm in 06. We received 12" of rain that day.	
24	Perkins Row		<i>Ed: Sump Pump is not automatic</i>	
156	Fox Run		<i>Ed: Basement flooded due to high ground water. Has no sump pump.</i>	
BASEMENT WATER PROBLEMS CURED OR CONTROLLED				
17	High Street	69		Previous owner made a drainage apron around the house due to the fact that basement flooded. I'm dry only because of that. Neighbor homes have been flooded. I watch the water coming off the hill across the street most of the year that affects Rt 97. I don't remember it when I moved here 15 years ago.
101	Perkins Row	17	High water table in Spring causes large puddles in Spring usually associates with heavy rain and snow melt which raises Ipswich River levels to flood stage. (3) Basement flooding seepage has probably occurred only 3 or 4 times in the past 12 years and sump pump takes care of the problem.	
123	Blueberry Lane		If gutters are not cleaned and downspouts are not taking water away from home, I will have an issue. If these are in good working order -- no real issues.	
125	Howlett Street	67	Due to faulty construction, water does seep into basement around the pipe. Contractor will fix it this Summer.	
135	Alderbrook	32	(8) System checked frequently to ensure it will control water - battery backup in case power is lost.	
157	Glen Road		Sump pump failed once causing water backup into finished basement resulting in heavy property damage -- walls, floor washer, dryer, heating system + personal property stored in basement. Sump pump has been replaced with battery backup.	
187	Perkins Row		I have had to install an expensive multi-pump sump pump system with both battery backup and generator backup (for extended power outage scenarios) in order to preclude a wet basement from high ground water conditions which have seemingly (but can't say for sure) gotten worse over recent years.	
209	Perkins Row	186	Had water flood the lower level of my split level house during 4 days of heavy rain Mother's Day 2006. Only time we had water in 14 years of ownership. After flooding we installed a sump pump.	

TABLE C10 COMMENTS FROM THOSE WHOSE ONLY COMMENTS WERE ON BASEMENT FLOODING

File Number	Street	Number	Comment #1	Comment #2
217	Howlett Street	35	I'm less concerned after spending \$5000 in a pump system and perimeter drains. Mold is a problem. We run 2 dehumidifiers in the basement which is expensive.	
232	Surrey Lane	33	Basement flooded 2 times over 16 years ~ 1997 and 2006 after very wet rainy spring conditions. Ground water leaked through floor cracks and bulkhead. We now have a sump pump -- never used -- always dry.	
236	Washington		Sump pump runs during heavy rains and spring thaw. Once pumped, water flows away from property and is not a concern. Inadequate drainage below grade may be cause of water problem in basement.	
327	Forrest Road	19	Had a flooding problem up until last year. We put a pipe from the back of the property -- down the side of the house to the street. A drain in the back seems to be working so far. Water kept coming up to the back of the house after heavy rain.	
331	Haverhill	11	We bought our home in August 2006. Basement flooded May 2006. 2007 basement flooded. Spent \$5000 to have system installation to prevent flooding. So far so good. Pump has run this past March after heavy rains. System kept basement dry. Was told by fire department problem is caused from high water table and development.	
349	Perkins Row	57	My sump pump was my fault. During April "2007" we had excessive rain, the pump was working as usual. During the night the power went off about 2:30am and the sump did not work, and we had a small amount of water in the lower living room.. It was not a flood, but it did damage the wood floor. This was our fault, we did not put the backup battery system on that pump, which we knew was necessary.	
64	Comstock Lane	3	The forest abutting Bare Hill Road and Pye Brook Park (the old dump) is all dead due to the high water levels. During spring thaws water table rises into basement. Last year we spent \$15000 to repair damage to the basement and to turbocharge sump pumps. PS- I live on the top of a hill!	
12	Washington	15	<i>Ed: Installed French Drain around 1/2 of cellar.</i>	
284	South Main	78	<i>Ed: Has system to keep basement dry</i>	

TABLE C11
MISCELLANEOUS ISSUES

File #268 Comments

I have lived in Topsfield for 30 years. Now retired, I walk 5 or 6 miles everyday with my lab usually around various areas of town. I have also built an extensive addition as well as new houses in Boxford and Rowley. All towns especially Topsfield made me comply exactly with town buildings codes. As for your ground water and septic survey in Topsfield my watching such problems on my walks, as well as my being required to comply with modern stringent building codes draws me to one conclusion. The people who are now complaining live on property where their homes were not constructed properly or where the structures were placed on existing wet land in the first place. Ask any old timer along Washington Street between Lockwood Lane and River Road and they will tell you they have always needed sump pumps because developers in the 1950s filled in wetlands to build most of these homes. I see the same predicament for most of the new buyers of the older homes along Rowley Bridge Road and River Road who have wet basements.

In my 30 years of jogging and walking around Topsfield I see no difference in any ground water or mosquito problems. Deer tick problems, YES, but this questionnaire does not address this problem. Other than a few areas where Beaver live there is no correlation between the wet areas and the change in the ground water table. If anything the ground water table is lowering especially in the summer as evidenced by the recent trickles of the Ipswich River.

In summary, the few people in town complaining about wet and moldy basements or inadequate septic systems:

1. Have old houses and systems that were never properly constructed or should NEVER have been constructed in such locations
2. Should never have purchased these inadequate properties where the former owners obviously had the same problems and lied to the realtor and in turn to the buyer.
3. Have now complained to the town fathers praying that all taxpayers, the state or federal government give them a bigger and better sewer system to solve their predicaments

I must say our town building inspectors now have been super and will not let further problems like this occur to unsuspecting home buyers. Let the buyer beware.

For other unique problems or concerns: stop the open burning in the spring, especially of poison ivy and wet moldy leaves, we have a fantastic recycle center in Topsfield for yard waste.

Can you please finish painting the crosswalks on Washington and River Road and place warning signs at them, it is difficult for the students and old walkers like me to cross safely.

.
Thanks for letting me voice my concern.

File #307 Comments

On hill across from my driveway people building without asking permission from town illegally with huge hoses were draining their waters from ground construction into my front yard. When I called her on it and 3 people manning machinery she said she had town permission. When I called town they said no such thing and she was stopped. Referring to her race she said "so, you don't want us to live here?" I replied I don't mind you living here but you are not dumping your excess water into my front yard.

Large swamp mosquitoes now in summer getting back to this arrogant person. Before that without a permit put original high driveway on other side from present one and flooded former neighbors the xxxx septic system. Did the town know their septic system is built on *fill(?)*, land that can't hold water. Who inspected same? We had all kinds of inspections when we put in our new system, and rightly so. Our old system never had a problem. We are here 50 years; birds, frogs, rabbits etc. used this small pool all those years and now I'll never know what toxic junk they put in it from up on the hill. Thanks for looking out for us all.

Many years ago in back of our land Pye Brook was a rushing wonderful place. Developers on the street other side of water of water dumped so much trees, xxxx etc. it no longer was the xxxx. Nothing was done. It was a great place for geese to stop over. I know I ran on a bit, but care needs to be done with there developers and what they hide.

Some people think laws are made for others and arrogantly do as they please no matter how it affects us. A big concern is the hundreds of poisons now in the ground water. All things crawling or flying feed birds. When we moved here more than 20 birds, now maybe 7 or 8. Who will address this? We all depend on our wells and depend on people looking not for everyone. Birds used to take care of mosquitoes along with the dragonflies. No more. We have a red fox running through here and turkeys and deer. It's a great thing you are doing re the survey.

Roy A. Brown, Jr.
18 Prospect Street
Topsfield, MA USA 01983
Home Phone: 978-887-5093

November 3, 2003

Conservation Commission Members
Town of Topsfield
Town Hall
8 W. Common Street
Topsfield, MA 0 1983

Dear Ladies and Gentlemen,

I write this letter to you with sincere intentions of looking at the big picture of our Prospect Hill. In light of more property developments on Prospect Hill I am cordially requesting your:

1. Opinion on the water surface runoff that flows down both sides of Prospect Hill, to South Main Street and River Road,
2. Assistance in requiring better water management with these new property developments and all additions to existing homes that will minimize more surface runoff (e.g. gravel driveways, replanting appropriate trees, large and deep drywells for roof water runoff, infiltration trenches, etc.) and
3. Help in working with the Board of Health to ensure new septic and leaching fields will not increase, one, more surface runoff and two, the high water tables on my property and other residents on Prospect Hill, South Main Street and River Road.

I have lived at 18 Prospect Street since 1975. I have recently experienced two new issues with water surface runoff and higher water tables on my property.

1. Increased surface runoff. During the last two springs, one dry and one wet, I now have three new uncontrolled seasonal brooks running down from the back of my property into the existing, large controlled seasonal brook. I now have a considerably larger area of wet, soggy land that eventually dries up in August.
2. Higher water tables.
 - a. In the last two winters and springs, I have had water in my pea stone cellar for the first time. Esther Rock, whom I bought the property from stated, she and her husband, Clayton, never experienced water in the cellar.
 - b. I have two 50 feet surface wells on my property. Over the last few years during the late summer months, they are full of water, unlike the other years I have lived on this property.

In an effort to better understand the dynamics involved with these increased water concerns I have done some research for you and all the residents of Prospect Hill and those residents on South Main Street and River Road. I would like to share this information with you.

I began my research by visiting the Boston & Maine Railroad Historical Society and their archives at the Center for Lowell History. Why would I start there, you ask? The B&M Railroad has four very deep wells on an abutter of mine, Mr. Jamie Peirce, 15 South Main Street. Where these four wells are, I believe, was once my property (see first bullet that follows). The B&M used this water as their primary source for the Danvers & Georgetown and the Newburyport lines. I also found this interesting information during my visit:

- On August 6, 1861, the B&M took out water rights on my property. The grantor was Sally Sanderson, the owner of my property at that time. (Recorded Essex County, Book 626, page 256, on date 8/14/1861)
- On July 26, 1864, the B&M took out water rights on 27 Prospect Street. The grantor was Andrew Gould. Currently Parsons and David Clark live at this address. (Recorded Essex County, Book 804, page 34, on date 8/19/1870)

So I then asked myself, how did the B&M know that these properties were a great source of water for their locomotives as Prospect Hill was a grassy hill (see attached picture, dated 1902)?

In reviewing the "Soil Survey of Essex County, MA, Northern Part" book, I found my answer to this question. I have included all Prospect Hill pertinent information from this book in the appendix. Here are the key or critical points from my review of this book:

- Prospect Hill is a drumlin. A drumlin is a "low, smooth, elongated oval hill, mound or ridge of compact glacial till. The longer axis is parallel to the path of the glacier and commonly has a blunt nose pointing in the direction from which the ice approached". Also a drumlin can have large underground water veins, which Prospect Hill does have.
- My property is located at the bottom of this drumlin where the glacier and ice approached. My house and barn are on a soil type, PaC, Paxton fine sandy loam. However, much of my property's soil type is, WrB, Woodbridge fine sandy loam. WrB soil has a "high water table of 1.5 to 3 feet from the surface; it is perched and exists from November to March". This WrB soil type extends onto 27 Prospect Street. Also a soil type RdB, Ridgebury fine sandy loam, with a high water table exists on 27 Prospect Street. Thus, this why the B&M chose to take out water rights in the 1860's on these two properties.

In summary:

- There continues to be increasing surface runoff on Prospect Hill and
- All Prospect Hill soil types for septic tank absorption fields are listed as "severe, percs slowly". (refer to Appendix Section 9, Table 9, Sanitary Facilities, pages 26-30)

I am, therefore, very concerned as this situation is negatively impacting my property and it could become a worse situation for my property as more housing developments/additions are granted, without your help.

I look forward to discussing my request with you on Wednesday, November 5, 2003.

Sincerely yours,

Roy Brown, Jr.

Conservation Committee Members:

Walter Harmer, Chairman

Wade Goldman

Gregory Mellinger

Stanley Ragalevsky

Ralph Stump

Thomas Warren

John Olcott

Lana Spellman, Administrator

Appendix of Prospect Hill Soil Types & A 1902 Picture

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Source of Sections 3-13: Soil Survey of Essex County, Massachusetts, Northern Part. United States Department of Agriculture, Soil Conservation Service, in cooperation with the Massachusetts Agricultural Experiment Station. Issued February 1981.

Appendix, Part 3
Listing of Prospect Hill Soil Types from South Main Street to River Road

Soil Types

Even # Home Side shown on Soil Map, page 5:

Sa, Saco Variant silt loam
PaD, Paxton fine sandy loam, 15 to 25 percent slopes
PaB, Paxton fine sandy loam, 3 to 8 percent slopes
PaC, Paxton fine sandy loam, 8 to 15 percent slopes
WrB, Woodbridge fine sandy loam, 3 to 8 percent slopes
MoC, Montauk fine sandy loam, 8 to 15 percent slopes
PbC, Paxton very stony fine sandy loam, 8 to 15 percent slopes
PbB, Paxton very stony fine sandy loam, 3 to 8 percent slopes
MoB, Montauk fine sandy loam, 3 to 8 percent slopes

Odd # Home Side shown on Soil Map, page 5:

Sa, Saco Variant silt loam
PaC, Paxton fine sandy loam, 8 to 15 percent slopes
PaD, Paxton fine sandy loam, 15 to 25 percent slopes
WrB, Woodbridge fine sandy loam, 3 to 8 percent slopes
RdB, Ridgebury fine sandy loam, 3 to 8 percent slopes
MsD, Montauk very stony fine sandy loam, 15 to 25 percent slopes
MoC, Montauk fine sandy loam., 8 to 15 percent slopes
MoB, Montauk fine sandy loam, 3 to 8 percent slopes
MsD, Montauk very stony fine sandy loam, 15 to 25 percent slopes

Downhill side to River Road on Soil Map, page 6:

MoB, Montauk fine sandy loam, 3 to 8 percent slopes
PbB, Paxton very stony fine sandy loam, 3 to 8 percent slopes
PbC, Paxton very stony fine sandy loam, 8 to 15 percent slopes
MsD, Montauk very stony fine sandy loam, 15 to 25 percent slopes
WrB, Woodbridge fine sandy loam, 3 to 8 percent slopes

Note: The soil type descriptions above are for the surface layers and subsoils. These descriptions do not define the substratum. This deep soil layer is explained, however, in the Appendix section 6, Soil Type Descriptions.

SURVEY

To: Residents and Businesses of Topsfield

From: Surface & Ground Water Study Committee, Town of Topsfield

Subject: Survey - Effects of surface and ground water on residential and business properties

The Topsfield Board of Selectmen appointed a 'Surface & Ground Water Study Committee' to determine how surface and ground water levels may be affecting the citizens and business owners of Topsfield. The Committee made up of fellow residents who are volunteers, prepared the enclosed questionnaire in order to respond to the Selectmen and to recommend actions. Please complete and return the questionnaire. For your convenience, drop boxes have been placed in:

Town Hall - Selectemen's Office
Town Library - near the Circulation Desk
Steward School - Office

If you wish, you may mail the form by refolding it so that the preprinted return address, rather than "Postal Customer", is visible and adding a stamp.

Background Information:

There is a concern that the levels of surface and ground water in Topsfield have changed and are continuing to change. Based on anecdotal evidence these changes may be having a negative impact on a number of residences and businesses. The evidence includes letters to the Selectmen, complaints to the Board of Health and Conservation Commission, and general observations.

Many residents (and visitors) have made comments about the dead trees along the northern section of Route 1 and along Route 97. These are indications that conditions have changed. These visible changes and not so visible changes may be causing conditions that are directly affecting residences and businesses.

The purpose of the enclosed questionnaire is to help us identify problems of which we are currently unaware, better understand the extent to which changes have occurred over the past few years, the extent to which residences and businesses are currently being affected and the potential for changes that will affect residences and businesses in the future.

Action Requested:

Please take a moment now to complete and return the questionnaire. Renters please answer for the space you rent. Our goal is to receive filled out questionnaires within two weeks of your receiving them. Even if you have no concerns, we want to know - we want to identify affected as well as unaffected areas of Topsfield.

Thanks for your time,

Surface & Ground Water Study Committee

Rich Crosson
Walter Harmer
Greg Krom
William Whiting
Charles Wilkinson



Town of Topsfield
 Surface & Groundwater Study Committee
 Questionnaire

	YES	NO	Don't know
1) Are you concerned about water levels on your property or in your basement?	<input type="checkbox"/>	<input type="checkbox"/>	
2a) On what street is your property or business? _____			
2b) Is your property used primarily for business?	<input type="checkbox"/>	<input type="checkbox"/>	
3a) Have you had water problems on your property in the last 12 years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>If No to Question 1 and 3a, proceed to Question 8</i>			
<i>If Yes, Indicate probable cause(s): Check all that apply. Explain on Page 2</i>			
Natural river or stream flooding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
High water table	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beaver activity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blocked or inadequate culvert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Installation of Title 5 Septic System(s) on your property or nearby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Development/changes on your property or nearby	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3b) Have water conditions changed in the last 12 years? (Explain on Page 2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) Surface Water (Flooding) - What types of flooding are a concern:			
During heavy rains, water floods portions of my property around my home/business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A river or brook occasionally overflows its banks and floods portions of my property	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Portions of my property that were dry in the past are now wet or flooded for a period of time (more than a week)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A flooding problem I have had in the last 12 years has been corrected, at least temporarily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5) Flooding of buildings in the last 12 years			
Has your home, business, garage or outbuilding been flooded?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have you had flood damage?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6) Beavers			
Are beavers now active in ponds or waterways near your home or were they active within the last 12 years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does beaver activity constitute a threat of flooding or increased flooding on your property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7) Ground Water: Basement			
During heavy rains, water in my basement is a concern.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Water is always a concern in my basement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8) Sump pumps			
Is there a sump pump in your basement?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>If NO, go to question 9.</i>			
Does the pump run during heavy rains?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the pump run during the spring thaw?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the pump run throughout the year?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does the pump often fail when needed? (Explain on Page 2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- | | | YES | NO | Don't know |
|-----|---|--------------------------|--------------------------|--------------------------|
| 9) | Ground Water: Septic Systems | | | |
| | Has ground water affected the operation of your septic system | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Was your septic system constructed or replaced under Title 5? If Yes, Please explain why: _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10) | Mold | | | |
| | Is mold due to dampness in your basement a concern? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11) | Mosquitoes | | | |
| | Has the mosquito population in your area changed recently? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12) | Public Health | | | |
| | Do surface or ground water concerns in your area create health concerns? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13) | Overall, from 1 to 3, how would you rate your concern about the affect of surface or ground water on your property? (1 = Not concerned, 2 = A little concerned, 3 = Very concerned) | <input type="checkbox"/> | | |

14) Comments about surface and ground water in Topsfield (use second sheet if necessary):
Elaborate on Questions (3, 8, etc.):

Other (Unique problems or concerns, recommendations for solutions, questions...)

Optional:
Name: _____
Street Address: _____
Phone: _____