

# Stream Team Report



Marlborough Stream Team, December 9, 2008

## South Street and Sheep Fall Brooks Marlborough, Massachusetts

### Study Conducted November 2008

Submitted

December 2008

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# Introduction

The Sheep Fall Brook and South Street Brook Studies were conducted by Marlborough residents under the supervision of Priscilla Ryder, Marlborough Conservation Officer, with materials and assistance from the Massachusetts Riverways/Adopt-A-Stream Program.

This report covers Sheep Fall Brook which empties into Fort Meadow Reservoir which is a recreation lake for Marlborough residents; and South Street Brook which empties into Sudbury Reservoir which is a back up source of drinking water for MWRA.

This report was written by stream team members whose names appear with their reports.

## Getting Started

Training Marlborough residents included an interactive slide show, maps, and stream survey data collection sheets for 15 residents. Training was conducted by Priscilla Ryder, Marlborough Conservation Officer on October 28, 2008. At this meeting, the stream survey was divided into seven sections and seven groups were assigned a section.

## Notifying Abutters

The conservation officer mailed letters to notifying residents and businesses abutting the stream and inviting them to participate in the stream team study.

## Publicity

The local newspapers and TV station reported on the Stream Team meetings and activities.

## Mapping/GPS/Photos

Detailed stream survey maps were provided to stream team members. The stream team members were instructed to take notes and photos to document their work.

## Survey Kits

Each team was provided with:

- Stream section maps
- A copy of letter to abutters
- Shoreline Survey Field Data Sheets
- Orange Vests from the DPW

## Field Work

Seven groups surveyed the stream in November 2008.

## Follow Up Meeting

The Stream Team reconvened on December 9, 2008 to report on the survey of each section and identified problems, assets, and priorities. Teams included their comments in this report.

## Summary of Actions Taken to Date

**Action:** The conservation officer notified the City Department of Public Works (DPW) and the Department of Conservation and Recreation (DCR) about the action items listed from each section. A copy of this “action list” is attached at the end of the report. These items will be addressed in the next few months and in the spring.

**Implementation:** One stream team picked up one bag of trash west of South Street.

## **Stream Team Participants and Stream Sections**

(Maps on pages 4 and 18 correspond to sections below.)

### **Flag Swamp and Sheep Fall Brook, located west of Fort Meadow**

Peggy Clark, Bob Clark, Ginger Ryan  
A03, A04, B02, B03, B04, B05, C01, C02, C03

Kathleen Lirette, Rachel Hooper, JoAnn Cote, Amanda Cote, Melissa DeSouza  
from Girl Scout Troop 7045  
A06, A07, B06, B07, C06, C07

Celeste Burns, Lauren Burns, Melissa Kapeckas  
C08, C09, C10, D08, D09, E09, F09

### **South Street Brook, located northeast of Sudbury Reservoir**

Frank Bennett, Bill Tate  
C06, D06, D07, D08, E08, E09, E10, E11

Gary Crossman and Susan Alatalo  
A11, B10, B11, C11, C12, D12, D13 (to Route 85)

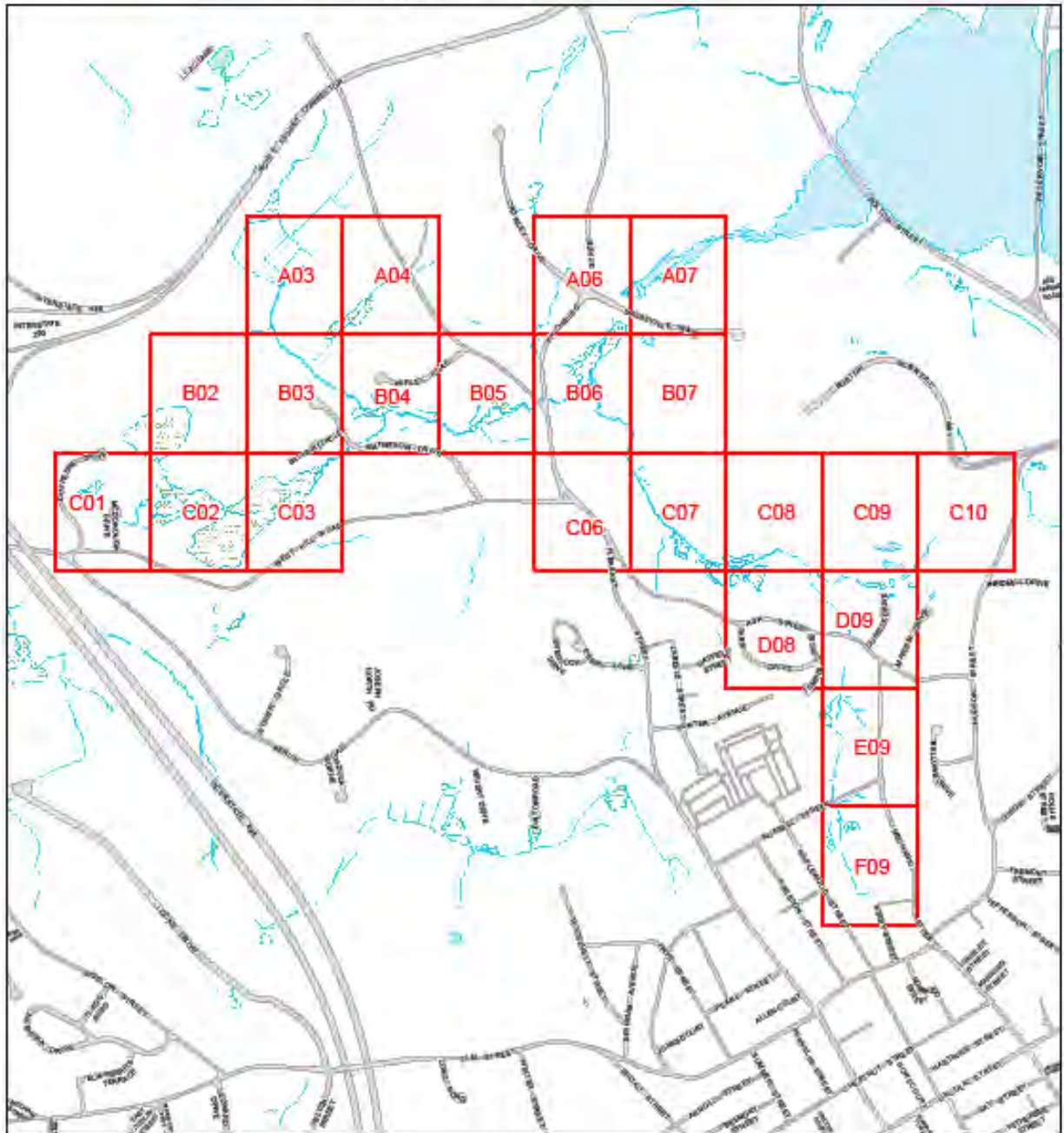
Jen and Rick Boudrie  
D11, D12 (up to stream branch)

Bob and Andrea Belford, Frank Bennett  
D13 (from Route 85), D14, E14, F14, F15



# *Flag Swamp*

## *Sheep Fall Brook*



<b>Map Segments</b>	Flag Swamp & Sheep Fall: A03, A04, B02, B03, B4, B05, C01, C02, C03
<b>Date</b>	November 2, 2008
<b>Observers</b>	Peg and Bob Clark, Ginger Ryan
<b>Weather</b>	Cloudless, Relatively warm (50 degrees) for November
<b>Recent weather</b>	The period around this time had seen very little precipitation.

### **Flag Swamp & Sheep Fall Brook C05-A03**

We entered the brook from the cul de sac at the end of Varley Road. (B05). We had tried to access it from Pleasant Street - but after traipsing through thick underbrush, we finally reached a spot where we could no longer approach the brook. We then retreated and went to Varley entering the brook area through an abutter's yard. We descended down a good distance to reach the brook. The water in most areas was about 6" to 12" deep with natural river banks in good condition through-out. Brook bottom was muddy and leafy (time of year and presence of many deciduous trees probably responsible for this). Water was hardly moving. After a short distance, we merged onto a good path (with access coming in also from Matheson Circle) and headed north. We passed two (2) sewer access points. Land to the west sloped upward; land east was wooded. Continued through B04-B03. Went across a well preserved cinder block crossing over a smaller brook running east-west. We continued north well into A03. Brook was not more than two (2) feet across at any point. Passed through a wooded area where there was a hunter's blind. We must have been fairly close to Route 290 since the sound of cars was quite distinct. Just prior to the end of A03, land to the west was ledge. There was a rock culvert here in good condition on our approaching side... but pretty well collapsed on the side where the brook was moving into a heavy, swampy area full of reeds. The collapsed culvert appeared to possibly hamper water flow.

We retraced our path back to where the brook had forked off in a north easterly tributary into A04. Here the brook had natural deep banks, about 5-6 feet deep, and slow moving water. There was wooded area to the south. Area to the north and ahead on the path was full of reeds and other signs of overall marshy areas. Another sewer access was noted here. The brook seemed to meander into this wet land.

At all points, the brook appeared in good shape and showed few signs of problems. Very little trash except in the area between Pleasant Street and Varley Road. Could hear birds but saw no other animals except for a young boy walking his dog. The hunter's blind suggests that other game animals are present.

## **Flag Swamp & Sheep Fall Brook C01-C05**

This segment was surveyed directly after the C05-A03 area was completed. We entered the area off McDonough Circle and went down an embankment to a large expanse of muddy area - no sign of a well defined brook here... just a muddy flat area. We proceeded north, somewhat parallel to West Hill Road. Shortly up, there was a manmade entrance from one of the abutting homes. As we followed, a more defined but still a very narrow brook became obvious. Land to the north was wooded and hilly to the south. About area C03, we approached a wide expanse of marshy land, full of cat o'nine tails. The water disappeared into this region. We turned back and re-entered the brook from near the junction of Matheson & Bacher Cir. (around B04). This spot is near the area we had walked earlier and noted there was an entrance coming in from Matheson. At the Matheson-Bacher junction, the brook heading south passed through a cement culvert (under the roadway) of about 4-5 feet wide and in good shape. The left bank has an old stone wall in disrepair, and woods behind that. About 100 yards down, the brook re-enters the marshy area we had seen from the other end (C03). There was very little water in any of this area. From the east side of Matheson, the brook passes through a very dense, impenetrable area of brush, vines etc. and proceeds to Pleasant Street (B05).

A resident from 100 Matheson came out and told us there was at least one snapping turtle, usually seen in the area just beyond the culvert previously mentioned heading towards the marshy region. He also said there was a junk car behind his house heading up toward West Hill Road.

On both sides of Matheson, residents had gardens near the brook, but we saw no signs of run-off from the gardens. Gardens were bounded by bricks and cinder blocks.

<b>PROBLEMS</b>	Clogged culvert (see photo A3). Abandoned car behind 100 Matheson Street property should be removed.
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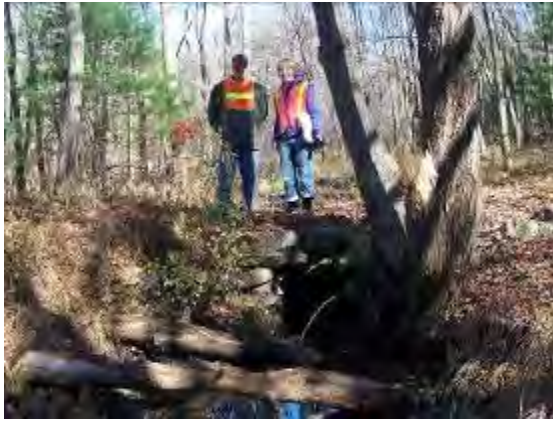
<b>ASSETS</b>	Wooded areas and wetlands – walking paths
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<b>PRIORITIES</b>	Fixing stone culvert that collapsed (A3) for better stream flow
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Sheep Fall Brook

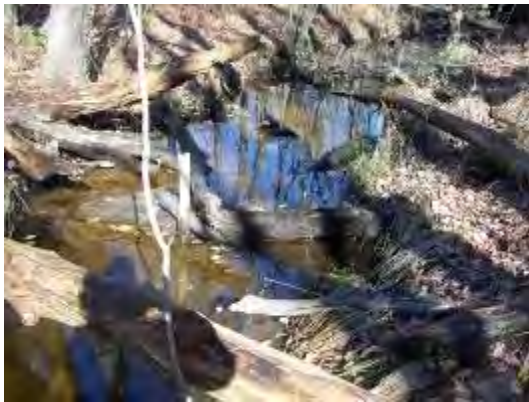




A3 Above stone culvert



A3 This side of stone culvert is clogged



A3 Log across



A3 Pool of foam, no odor



A3 Culvert



A4 Steep bank – Tree branches across



A4 Stream diminishes



B3 Concrete cinder blocks across





B4 Plank across



B4 Stagnant water



B5 Area, log across



B5 Varley Road area - swampy



C1 McDonough Rd area – muddy



C3 Mossy - swampy



Matheson Boucher area culvert



C3 Swampy area



<b>Map Segments</b>	Flag Swamp and Sheep Fall Brook: A06, A07, B06, B07, C06, C07
<b>Date</b>	November 16, 2008
<b>Observers</b>	Kathleen Lirette, Rachel Hooper, JoAnn Cote, Amanda Cote, and Melissa DeSouza -- from Girl Scout Troop 7045
<b>Weather</b>	50ish degrees F, cloudy
<b>Recent Weather</b>	Cool and rainy

We started our stream in section A07 behind Assabet Valley High School.

There was some small amount of white foam that broke up easily with a stick. We saw what looked like a beaver habitat stretched across the stream but it did not block the flow of water. There was a small stagnant smelling area at the bend. We observed lots of places for wildlife habitats, but observed no actual wildlife with the exception of some snails on a log in the stream and a small pile of seeds.

There was a moderate amount of vegetation overhang. The water was less than 1 foot deep; it was tea in color with a fast meandering flow. The area was abundant with undercut banks, large woody material and small organic material and sparse aquatic vegetation. The banks were well established with the exception of one area broken down by runoff from the parking lot. There were exposed roots on both sides of the banks. The left bank was wooded with trees and shrubs as far as we could see. The right bank was marsh with trees and shrubs for about 500 feet to a playfield. We saw no fish although it looked like it should be a good area for fish.

#### **Between A07 and A06**

Upstream behind Land's Towing lots of pollution in, on and around the stream. We observed a fire extinguisher, tire, plywood, cooler and large pieces of debris on the hill. We are still observing white foam. Still lots of possible wildlife habitats such as downed trees, undercut banks and some sandy build up in the stream. The stream looks nice and smooth.

#### **A06**

Behind Lands' Towing we observed large boulders, a waterfall, tea colored water, a sandy bottom to the stream with some organic material. The stream is more than a foot deep and fast flowing with a low to moderate to low gradient meandering and some small step pools. There is a stone wall and above the waterfall there's a heavy marsh area on the right bank. We had to walk around the marsh and could not see the stream in this area.

A pipe under Sassville Way was stone and in good shape. It was 6 feet wide, the water was the color of black coffee and there was no odor, growth or algae. There were some boulders but no signs of sediment. The water was 2 ½ to 3 deep with a moderate flow.

#### **A06 Behind the Moose Lodge**

We saw bittersweet plants on the hill by Sassville Way side. The pipe we observed at 12:30 pm. It was stone in good shape. The water was brown and murky with a stagnant odor with no signs of algae. We couldn't get close enough to take measurements due to some fencing and raised pipe (see picture). (We learned that this is a pipe installed to deter beavers from building a dam in the culvert).

We walked around up hill to get around the swamp area opposite the Moose, Right bank. There is a small stream that feeds into the main stream. In this stream feed we observed white foam, a

strong sulfurous odor, boulders, exposed roots, organic debris, steep grade, small waterfall and a lot of erosion, the feeder stream was 3 to 6 inches deep and babbling. There's a stone wall on the right bank. We took a water sample at a point with white foam. Roots were evident, the stream partially blocked by pine needles, leaves, debris and had a strong rotten egg like odor. The area at the top is a pool that was still and stagnant with a strong rotten egg like odor. No evidence of life. We picked up a marked trail back to the main stream and found a furry cabbage like plant on the trail (see picture). In back of the houses next to the Moose, there was a good flow. The stream was meandering with a gravel and sand bottom. The water was clear, no odor, with some debris. There are good banks with some undercut another sides with brush and wooded on both sides.

### **Past the VFW – Pleasant Street**

We saw birds, natural stone banks, large boulders, clear running water, moss on the rocks but not much. The water was rippling, meandering, with brush on both sides of the stream. The houses are about 500 feet from the left bank and a stone wall about 50 feet from the right bank. There were lots of trees and forest. The brush and thorns were too heavy to navigate and we needed to walk in the stream. We observed a stone wall, some trash, a gravel stream bed, there were boulders, exposed roots, clear water and meandering.

### **C06-C07 Across from West Hill Road**

There was a small amount of white foam. The brush and thorns are still too thick and we need to continue walking in the stream. There are deep undercut banks. It appears that it would be a good animal habitat area. The water was 3" to 6" deep all under 1' deep with clear water and a sandy bottom.

### **C07 Behind Ash Street Townhouses**

Woody marshy area with a lot of downed trees, rocky boulders, lots of brambles. Still have to walk in the stream. Looks like excellent habitat throughout.

We observed some yellow foam, and a large tree down in the stream but not blocking the flow. There is overhanging vegetation. There is a concrete pipe. The girls walked through it and said it smelled like baking soda when they were in there. It was in good condition. We passed through at 2pm and there was a moderate flow about 6" deep in the pipe. Downstream outside the pipe the water was more than a foot deep with a sandy and boulder stream bed. Upstream of the pipe possibly an animal habitat to the side of the pipe, muddy right bank with woods on the left bank along with vines and sand. We observed crows flying above us. Toward the far end of the townhouses upstream we saw a metal pipe 13" in diameter draining into the stream. The bottom of the pipe is corroded and rust staining below on the bank.

### **Ash Street opposite the light gray house.**

Sand stream bed, eroded right bank. Organic debris blocking one side of stream. Tire on side of stream. Pool and marsh seeping into the stream on the left bank. There are deep banks, with a slower flow and murky bottom.

**C08 Ash Street** Stream has straightened out and we have easier passage. Swampy left bank. Our path is blocked by a chain link fence. One of our team has fallen in the water. We have to cut through the swamp. We see a fence with a guard rail and hope it will take us out by following to the end. There was no out but it has brought us past the other fence that blocked us at the

stream. The area is wooded with large boulders (state park look about it). The water is clear with a good flow. The stream bed is sand, gravel and boulder. Small waterfall where we crossed and exited onto 130 Ash Street across from a big yellow split-entry house with a wishing well out front at about 2:50 pm.

All in all, except behind the Moose, the stream appeared clear and healthy. Although there appeared to be ideal habitat all along our portion of the stream we disappointedly saw no wildlife present and very little signs of any. We saw a few beaver downed trees. A few seed piles and that's about it.

#### **PROBLEMS**

- 1) Pool and feeder stream strongly smelled of sulfur in A06 (see photo)
- 2) Remove trash behind Moose a television, air conditioner, large propane tank, tires, and beer can and tires near Pleasant street area
- 3) Remove trash upstream behind Land's Towing (Fitchburg St.) lots of pollution in, on and around the stream - a fire extinguisher, tire, plywood, cooler and large pieces of debris on the hill. Swampy and LOTS of pollution.

#### **ASSETS**

Wooded areas and wetlands, this section was very clean

#### **PRIORITIES**

Check pool and feeder stream that smell like sulfur in A06



White foam by wood debris



A07 Behind Assabet Valley, undercut banks



A07 Crossing the stream



A06 Little water fall





Pretty stream in the woods



A06 Stone pipe in good condition



Beaver decoy behind Moose



A06 Propane tank, microwave, rusted tank behind Moose



A06 rusted tank behind Moose



A06 Behind Moose and across stream... this pool and feeder stream smelled strongly of sulfur.





A06 Heavy erosion



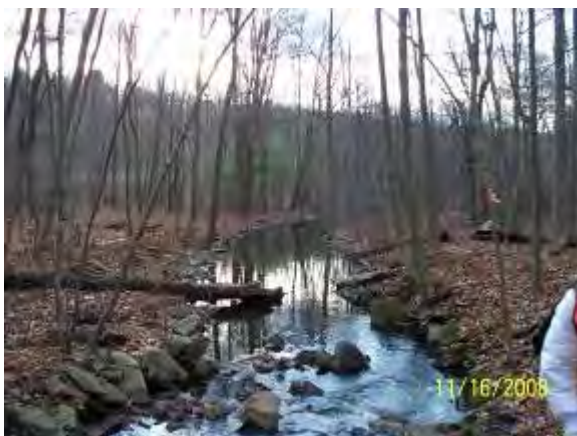
Close up, with white foam



C07 Concrete pipe, good condition,  
smelled like baking soda



Furry cabbage like plant (Mullein)



C08 Pretty stream



C08 Pretty stream with boulders

<b>Map Segments</b>	Sheep Fall Brook: C09-C10, D08-D09; E09 and F09
<b>Date</b>	Sunday, November 16, 2008
<b>Observers</b>	Celeste Burns, Lauren Burns, Melissa Kapeckas
<b>Weather</b>	Weather was windy and clear, in the low 40's
<b>Recent weather</b>	Rainy

The sections covered by this survey can be broken into 3 sections: 1) C09, C10, D8 and the northern half of D09 which is all before the stream crosses under Ash Street. This section included wetlands and natural and man-made retention ponds. 2) Above the Falls, the southern half of D09 and E09 are residential, and 3) F09 was forested land. A further breakdown of the surveyed areas is below.

**Sections C8, C09, D08 and northern half of D09** This survey was done in late fall and we were not able to observe much wildlife in the area. As such, we are including an excerpt from abutter Ed Mahan in regards to the brook in the springtime. The remainder of the report includes only our observations.

I live at 89 Ash St. in Marlborough. This is at the point where the brook takes a substantial drop and then turns toward the VFW post. The stream is a bit cleaner than it used to be, but that may be because of increased flow the last few years. We have seen green frogs from little frogs to grown up during a summer, perhaps 6 or 8 in a pool below the falls. I have found the remains of a large crayfish by the bank, the head, antennae and one claw, but it would have been 5-6 inches long if whole. We have deer, turkey, ducks (spring), rabbits, woodchuck, cardinals (spring), raccoon, skunk. All of these I have seen regularly.

This section begins with several retention ponds. There is evidence of one man-made dried up retention pond. The second retention pond was natural, clear with organic debris. The northern side bank was steep with a 16" cement drainage pipe in good condition with no odor or algae. The banks were intact. No recreational use is possible. The pond is away from houses. A Cardinal and Vulture were spotted during the survey.

The second natural retention pond was difficult to observe because both the near and far banks were raised with trees and scrub. There was abundant overhanging vegetation and cloudy water.

The third and final pool was where we could clearly see the start of the stream. The stream had a slight meandering flow in this low gradient area. It was swampy and bordered by wetlands. The water was shallow, less than 1 foot deep and clear with good water quality. The stream was made up of organic debris and sand (silt?). Skunk cabbage was evident. The stream remained narrow with both banks low and intact. There were no obvious signs of runoff. There are no potential access points for recreation at any point of this stream. There was no evidence of aquatic life. Fallen tree limbs and trunks were abundant throughout this area of the stream.

The stream meanders to the falls through sections 42-78D and 42-78Cn on the aerial photos. It remains clear at all times but at first has a reddish bottom with multiple rocks and narrows due to debris then becomes all sandy with a low flow.



Just below the falls, which is at the intersection of 42-78C and Ash Street on the aerial photo, the stream bottom was rocky, ranging from cobbles to boulders. The water was clear with a fast flow and steep gradient. There was moderate overhanging vegetation and the right bank was very deep with evidence of wildlife in the form of multiple holes in the bank. At the road level there is an obvious problem with runoff as the road slopes towards the stream with no hindrances or grassy areas to absorb any of the road runoff.

**Sections (southern half of) D09 and E09** The section was difficult to observe in part due to the lack of access at some points. This section also had some minor issues including drainage pipes from homes located at 84 Ash Street and 29 Russell Street draining directly into the stream. (Note: these were confirmed to be drainage pipes). There was also trash, including a shopping cart and tire. On the East side of Russell Street the bank is rocky and man-made. The near bank is residential and flat while the far bank is steeper and overgrown with brambles.

**Grid Sections E09 including only the southwest corner and F09** The stream was shallow and quietly flowing in this section. The right bank was steep and the left bank was more gradual and the vegetation was very thick with trees and shrubs. The land is undeveloped and it is unknown if it is conservation land. The water was clear and there was little sediment. The culverts under Russell Street were in good condition and the stream was protected from runoff by a 5' stone wall above the culvert. There was some foam that immediately regained its shape when tapped with a stick. This area also had trash including cinder blocks along the near bank. There are no recreational opportunities available and we saw no evidence of aquatic life.

As a whole our section of the stream was healthy. All of the pipes were in good condition

<b>PROBLEMS</b>	1) Ash Street runoff goes directly into stream 2) Pipes near 84 Ash Street and 29 Russell Street empty into stream (Note: These are drainage pipes conveying the stream) 3) Trash includes shopping cart and tire and cement blocks
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<b>ASSETS</b>	Wooded areas and wetlands
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<b>PRIORITIES</b>	Educating abutters about stream and watershed care Preventing road run off from emptying directly into stream
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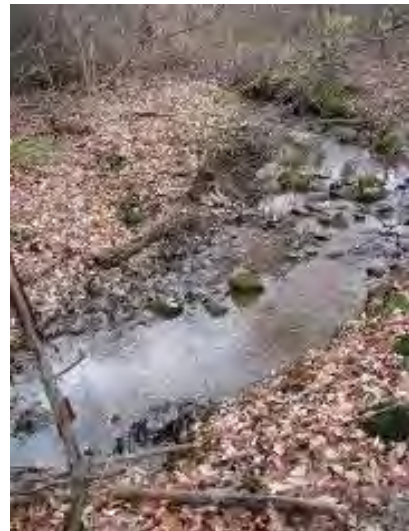
D9 Retention Pond



D9 Set of 3 culvert pipes by Retention Pond



Wetlands, Stream meandering through D9



Stream near D9 behind Ash Street



D8 near the falls/bridge at 89 Ash Street



By 89 Ash Street near the falls





The falls



Culvert near Russell Street in either F9 or E9



E9 culvert between Ash Street & Russell Street



White drainage pipe was from the yard behind 29 Russell Street in the Stream



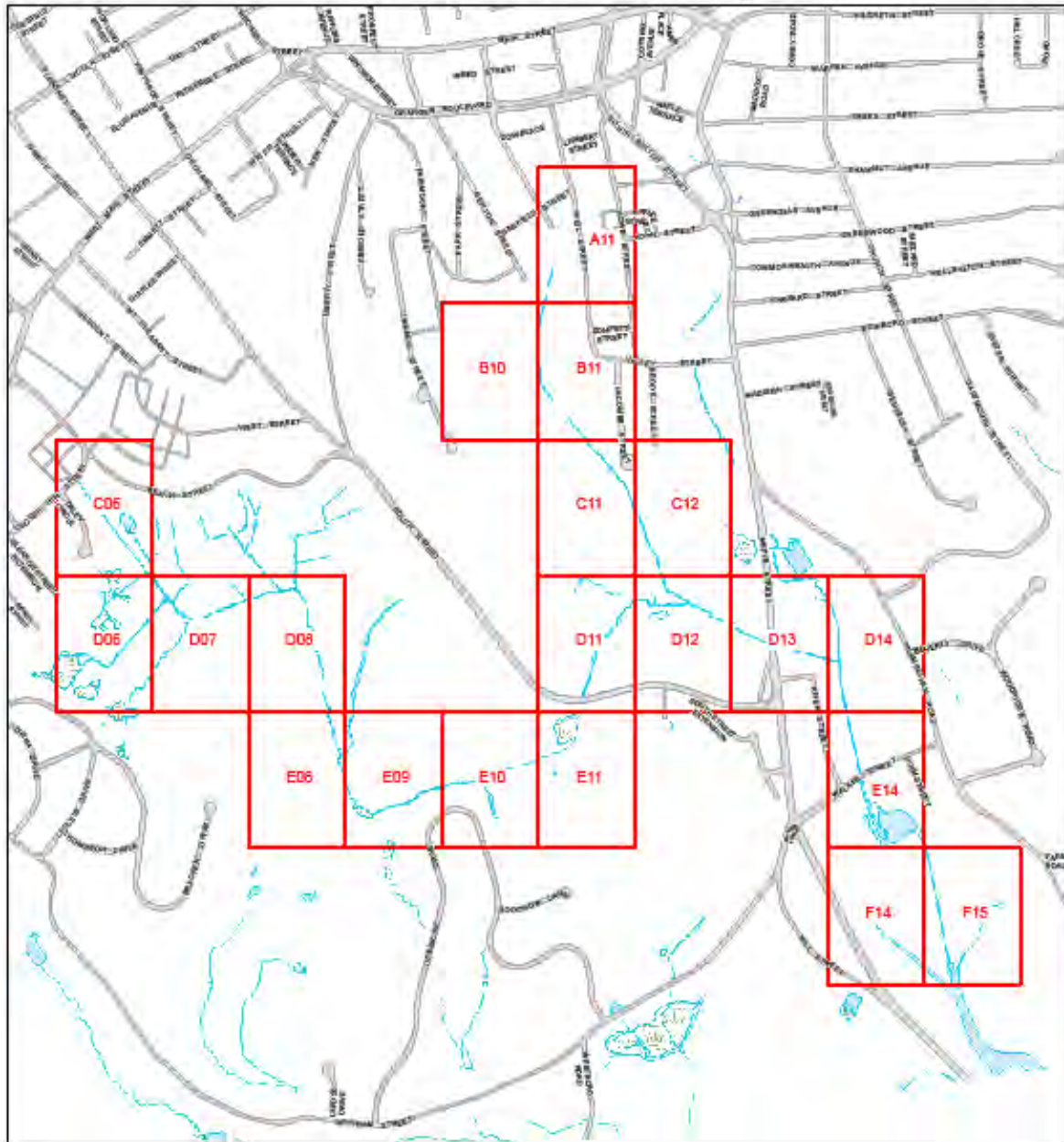
Drainage pipe from 84 Ash Street into the stream







# *South Street Brook Stream Study*





**C06 The start at Clover Hill**



**c. 10 feet from the start**



**c. 250 feet from the start**

<b>Map Segments</b>	South Street Brook: C06, D06, D07, D08, E08, E09, E10, E11
<b>Date</b>	November 2, 2008
<b>Observers</b>	Frank Bennett and Liam (Bill) Tate
<b>Weather</b>	Cloudless, Relatively warm (50 degrees) for November
<b>Recent weather</b>	The period around this time had seen very little precipitation.

**This stream study encompassed a distance of approximately 6,650 feet (1.26 miles or 2.03 kilometers) beginning almost at the intersection of Beach St. and Clover Hill St. and ending at South St. about 300 feet from the intersection at Rte 85. Time elapsed was approximately 4 hours and 25 minutes.**



*This photo is 100 feet from the start behind two homes on Daley Circle.*

The bankings were approx. 2 - 3 ft in depth. This stretch was located directly behind two residences located on Daley Circle which is connected to Clover Hill St. A resident told us the brook would be 2 - 3 ft. higher in the Spring. We discovered pipe openings leading from each property to the brook. We surmised they were coming from downspouts on the homes.

*“Adopt the pace of nature, her secret is Patience.” Ralph Waldo Emerson*

**The study began** at two culverts located at Clover Hill St. about 150 feet from the intersection at Beach St. The culverts measured 11 inches in diameter and one had a brown tinge to the water (see photo, top left), which became clear almost immediately exiting. The water coming from the other culvert, same diameter and about 5 feet to the right of the one above, had a clear appearance from the pipe’s exit.

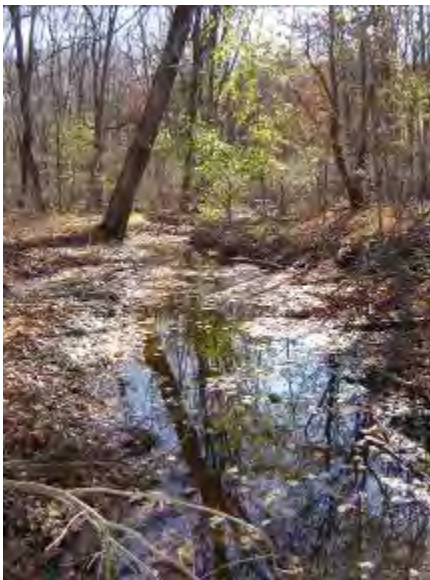
A few yards from the culvert the brook took the appearance shown in the top center photo. Shortly after that it widened (c. 6 - 10 ft) showing the bank stability to be eroding. (See photo, left)







c.400 ft. along the brook, we noticed a pond about 75 ft. off to our left (left photo). There were 6 mallard ducks on the pond. We made our way to it and followed the path it took (right photo) back to the brook.. The homes shown in the photos are on Beach St



c.850 ft from the start, the narrow brook began to pan out. It was at the point where the pond stream emptied into the brook. The general appearance of the brook, its bottom, and the surroundings had changed drastically (left photo).

*"I am two with Nature."  
Woody Allen*

The next several thousand feet of brook was characterized by a predominantly sandy bottom with occasional stone, muddy bankings, and varying water depths. We walked in the brook here whenever possible, which was quite often.

At this point too, we began to notice a sort of brown algae in the water (photo below). It was generally clustered, but sometimes it appeared more spread out. There wasn't an over abundance that we noticed, however we did notice it again along the next 1 or 2 thousand feet of brook. We also saw a few small oil slicks along the way. When we

stirred them gently with a stick, they would reform almost immediately.

Shortly before the 1/2 mile point of our walk, the brook appeared to end (top center of photo on right), however this was due to thick over growth covering it. The brook also narrowed considerably and turned right at a sharp 45 degree angle. Here the water also became deeper



(c.2-2.5 ft. deep). About 45 yards into the woods (on the right) we noticed a hunter's tree stand about 15 ft up a tall pine tree. Unfortunately we didn't take a photo. It had an excellent view of the brook as it turned.







The photo (left) shows about where the brook turned. Its banks were heavily overgrown, and the banks had a thick, black muddy appearance. We found numerous deer tracks here on both banks. There appeared to be a narrow path or trail through an area of near 6 ft. high brush off on the left bank. We were confident that this was a deer crossing. We also noticed that a number of small trees had been sawed down on the right bank, at the point of the crossing. When we turned our gaze back, there was a perfect view of where we were standing, from the hunter's tree stand we had just passed.

c.350 ft. further down the brook we came to a double culvert (see photo on right). Each pipe measured 2 ft diameter. One of the pipes was obviously angled downward more than the other, as we discovered when we looked at the other side. (see next photo )



in

This photo shows one of the pipes sitting much deeper, and more submerged than the other. The overgrowth here had thinned out considerably, and although the water was too deep to walk in, it soon lessened and we could walk in the brook once again.



The area after the culverts opened up once again, and the brook meandered onward for about another 650 ft., until we came to the next culvert. This photo was taken just before the next culvert and is looking back towards whence we came. It was also here, to the right that we saw a deer off in the woods about 50 yards away. Upon hearing us it quickly scampered out of sight.

*"How strange that Nature does not knock,  
and yet does not intrude." Emily Dickinson*

After wading through this next section of brook, we had to get on the banking as a pool had formed just before the next culverts we came to (photo below). The pool was at least 2 ft. in depth, but exact measurement was not possible. The diameter of the culverts was 2 ft.



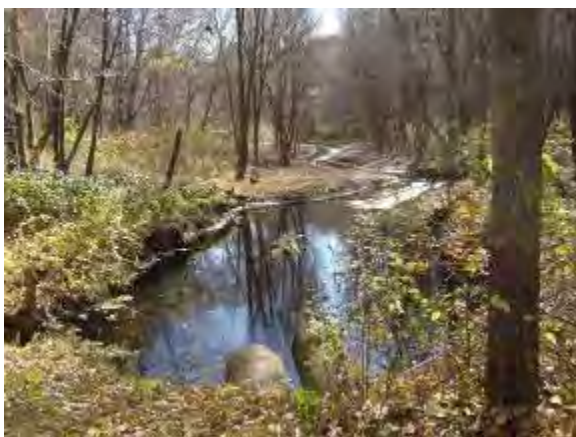
This photo (below) shows the two culverts in the photo above exiting the land bridge. Again a pool had formed which was too deep to wade through. Just to the right of the pool we discovered a tributary flowing slowly into the brook.



***“Look into Nature, and then you will understand everything better.” Albert Einstein***



We followed the tributary for about 200 ft. and came to another land bridge with a culvert planted through it. The photo (left) shows the water flow exiting it. A brownish foam was created as the water, which appeared clear, fell 6 inches from the pipe, which was 2 ft. in diameter.



We walked back to the pool on South St. Brook. This photo was taken atop the land bridge (also shown above, but facing downstream). We continued our walk on the left bank, just past the greenery to the left of the pool. It was at this point also that we were able to actually walk in the brook again. We stayed in the brook for about the next 400 ft, then walked on the banking again as the water became too deep and the brook turned to the left. We then walked another 250 feet and came across an interesting and intriguing sight !





According to our GPS maps we were now behind some homes on Desimone Drive. A small part of a backyard lawn can be seen in the upper left corner of the photo (left). At the brook's edge was a "Memorial" (rock). Printed neatly on it were the words "In Memory of Dan - Rawchuck". To the left of it is actually a stone bench. The water here was too deep to walk through.

Just 20 or 30 ft. past this location, steep embankments appeared and we discovered two, double culverts not indicated on our GPS maps.



The first one we came to was curious! It appeared from this view (left) that it had been there for awhile. The stone looked quite weathered. The pipes were 4 feet in diameter and brook water flowed through them, although branches and leaves had piled up in front of each pipe. The brook had also narrowed to about 2 - 3 ft wide now. The roof of a house on Desimone Drive can be seen in the upper right corner of the photo.

*"When one tugs at a single thing in Nature, he finds it attached to the rest of the world." John Muir*

The photo (below right) shows the brook water exiting from the pipes beneath the land bridge pictured (left). Many of the stones that helped make up the structure of the land bridge appeared to be "newer", or not as weathered as the other side. (Compare with photo on left.) The brook on this side was clear and pretty much "leaf free". It was also shallow

(6 - 10 inches) and allowed us to walk through it, although it did have a large number of good size stones on the bottom, which made the walking a bit more hazardous.



This photo (left) was taken directly in front of the two pipes shown above and facing downstream. The brook began to flow a little more swiftly here and led to the next unmarked culvert we discovered, which can be seen (if you look carefully) directly in the center of the photo. The distance between the two land bridges was about 100 ft. Walking in the brook here can be described as it was in the paragraph above.





This photo (left) shows the brook entering the culvert beneath the 2nd unmarked land bridge we discovered. The water depth of the brook was about 1 ft. and the pipe diameter was 5 ft, which enabled me to actually walk through it without much difficulty, although slightly hunched over.

The culvert from the water's exit point (right). The water, still pretty clear, dropped about 8 - 10 inches. The brook then meandered slightly downward and along a rock strewn course.



View of the rock strewn course (below) taken from in front of the culvert pictured above. The water continued to be about 1 ft. deep, but walking through it was again a little difficult because of the good size rocks along the bottom.



Looking back (upstream) toward the culvert (two photos above ) and approximately 50 - 60 feet away, part of the culvert can be seen in the upper right quadrant of the photo - if you look carefully. The earth bankings were approx. 4 - 8 ft. tall. Desimone Drive and a few homes were located not far from the banking on the left.

At this point I felt the brook was trying to tell me something, but I couldn't understand what it was saying for, alas, it was only babbling !



*"Nature does nothing uselessly." Aristotle*



The brook (left) continued on a downhill slope for about another 125 ft. and then it seemed to disappear into a thick layer of trees and bushes. While approaching this we noticed a small, dry tributary to the right and photographed the entering and exit points of the culvert (shown below). The diameter of the pipe was 12 inches. The land was damp, but not too wet.

It became virtually impossible to walk near the brook now, because of the thick entanglement of thorn bushes, trees, and bushes. We angled away from the brook and discovered a culvert which was part of a catchment basin, next to a sand / gravel company (CMS, Inc.). This was about 50 ft. away. The diameter of the pipe (left) was 12 inches, and the area immediately around it was dry. However about 20 ft. away were several small puddles of sandy brown water. (below left).



***“Nothing is more beautiful than the loveliness of the woods before sunrise.”***  
**George Washington**



We tried to get closer to the South St. Brook, but for the last 500 ft. or so it was so difficult (photo right) that we viewed it from a distance.







Trying to view the brook while walking along one perimeter side of the CMS, Inc. sand / gravel company, we discovered another culvert on the property line. The diameter measured 8 inches on one end, while the other end (photo left) flared out to a width of 37 inches. Although quite dry, it emptied on to the top of an embankment which sloped down toward the brook.



South Street Brook viewed from a distance of about 50 ft. away (photo right). This section of the brook is about 300 ft. from where it flows beneath South St. and just a few feet from where the photo above was taken.



This culvert (photo left) flows beneath South St. and approximately 300 feet from the intersection of Rte 85. The brook was about 1 - 2 ft. wide at this point and was reached by sliding down a steep embankment. The diameter of the pipe was 28 inches.



**EPILOGUE :** It was an interesting and intriguing day - all around. While on our walk we also completely filled one trash bag with assorted containers, wrappers, and miscellaneous items. The photo (right) was taken behind Desimone Drive where there was a pile of debris, including over 50 coffee cups (our estimate). In the same area we also found a rusted out auto and two discarded refrigerators. We hope this report has given some justice to our efforts on this day.

## PROBLEMS

- 1) Look at algae-like material (see photo) and oily substance
- 2) Add two double culvert pipes to maps (see photos)
- 3) Check culvert and sand by CMS?
- 4) Clean up trash by Desimone Drive and Route 85

## ASSETS

Beautiful wooded areas, streams and wetlands

## PRIORITIES

Look at algae-like material (see photo)  
Educate abutters about stream and watershed care



<b>Map Segments</b>	North Branch of South Street Brook: A11, B10, B11, C11, C12, D12, D13
<b>Dates</b>	November 28, November 29, December 6, 2008
<b>Observers</b>	Susan Alatalo, Gary Crossman
<b>Weather</b>	See below

#### Sunday, December 6, 2008

It is partially sunny and the air temperature is around 40 degrees.

At noontime the water is milky from the headwaters flowing from the west 5' round diameter pipe in **A-11**. For several days the color of the water has been like this. About 10 days ago the water flowing from this drainage pipe was black; it comes from storm drains throughout central Marlborough.

There are numerous stalks of vegetation hanging from atop of pipe opening and in front of it. On the surface of the water is an oil film patch approximately 12 inches at its widest, along with several smaller patches of oil.

The other nearby pipe is rectangular and is situated more easterly. It is 5' wide and 2' tall.

#### Friday, November 28, 2008

44 degrees, partly sunny, 2-3:30 pm. Recently the weather has been cold and rainy.

Stream width varied from 3' to 10' from bank to bank. Water depth varied from 2" to 16." Rate of water flow was moderate. The water appears clear with no suds. Two springs entered the Brook, coming from the west side and traveling though clay banks.

In **C-11** there are many small crab apples trees within 10 feet of the brook, for about ¼ acre.

There are trails of leaves turned over where deer had walked. Visible are deep imprints of deer hooves in mud. Chickadees and squirrels were seen. A large bird flew over.

Rocks varied from 2-3 inches wide to large boulders, with many large rocks behind the Municipal Garage property in **D-12**. There is a waterfall over ledge and a plastic recycling bin caught there.

There was no muddy bottom; it is all sand or gravel. Banks were sandy or consisted of a clay/mud-like composition.

In **C-11** is a large section of an 8"-10" diameter pipe lying across the brook, and it appears to have been there a long time. Both ends are embedded. It creates a waterfall.

There is a short channelized section with a stone wall about 10 to 15 ' long on the western bank. There are large chunks of torn asphalt pavement in water.

#### Saturday, November 29, 2008

It was about 48 degrees and partly sunny at midday. The Brook's water was mostly clear except at the eastern side of the railroad bed in **D-13** where there is one short section of water which was a little rust-colored. The water's depth ranged from 3"-18." Sinuosity is slightly meandering. There were quite a few undercut banks with overhanging vegetation. Many banks were steep. Many sections of the brook were thickly edged by bamboo-like stalks, fallen branches, leaves, boulders, vines, and dead trees. There were a few patches of prickly thorns, bittersweet vines, a variety of red berries, and even some green grasses and low-lying, green leafy plants on the ground.

Discovered were deer droppings amidst the apple drops in an old orchard, as well as many deer trails, signs of hooves digging into stream banks and deer tracks at 6-8 muddy spots along the Brook. There were numerous raccoon tracks in mud at water's edge at 6-8 sites along stream. Observed were 15 or so male robins fluttering, feasting on berries high up in trees, and turning over dead leaves on the ground.

We saw litter such as a kitchen strainer, liquor bottle, Honda automotive part, plastic water bottle, hair scrunchie, and plastic bags.

Land uses that are visible from the stream include: wooded areas, automotive lots and junkyards. Some land uses were formerly agricultural due to the presence of old farm equipment and abandoned apple orchards. The old railroad bed is visible. There are a number of businesses bordering the **D12** and **D13** segments of the stream.

In **D-14** at the junction of Walker Street Brook and South Street Brook is a cement wall section which has separated from an adjacent wall section and is leaning towards the water.

## **PROBLEMS**

1) After storms, run-off from numerous street drains throughout the greater downtown area rapidly pours out of the large drainage pipe in **A-11**. Sometimes flooding extends as much as 30-40 feet into private yards on Neil Street. After floods recede, the City's debris left behind contaminates the soil and vegetation, leaving homeowners with considerable clean-up. (see photos) The unpredictable effluence prohibits vegetable gardening.

2) In addition to the litter deposited into storm drains, the presence of odors, discolored water, and oil indicates that more education about the effects of dumping in storm drains needs to be done. Visible contaminants flow out of the storm drain tunnel sporadically, not just during rainstorms.

3) In **D-12** development is on the Brook's edge, lack of buffer (see tent in photo)

4) In **D-13** a long black rubber hose going into Brook from 354 Maple Street (see photos)

5) In **D-13** composting near Brook (see photo)

6) In **D-14** a cement channel wall segment is leaning, leaving gaps (see photo)

## **PRIORITIES**

1) Address rapid flooding of private property adjacent to the drain pipe openings, recommend extension of piping in **A-11** downstream to DPW garage property. Because the swift, powerful current is capable of dragging in nearby objects, it is a safety issue.

2) Locate source(s) of milky, black and other contaminated waters flowing out of storm drain tunnel at times other than after rainfall. Enlighten central Marlborough about effects of unclean storm drains upon the Sudbury Reservoir. More frequent street cleaning and use of net(s) at drain opening would decrease amount of debris flowing downstream.

3) Caution automotive shop in **D-13** about its work tent's close proximity to water.

4) The long hose in Brook in **D-13** should be investigated, in case it is used for draining.

5) Educate composters in **D-13** about contaminating waterways.

6) The separated segment of cement wall in **D-14** needs to be re-erected before it falls over more and blocks water flow.

## **ASSETS**

Woods and wetlands, signs of wildlife. Area in **D-13** behind medical/professional building at 340 Maple Street is shady, serene, well-kept site with picnic table.



Debris hanging on vegetation gets caught there after North Branch of South Street Brook rises, showing recent high flood stage. Flooding, due to storm water runoff, deposits refuse in **A-11** behind 91-95 Neil Street area.

After water recedes, debris remains on vegetation lining North Branch of South Street Brook in **A-11** behind 91-95 Neil Street area.



At the headwaters of the North Branch of South Street Brook in **A-11** dense vegetative stalks overhang 5' round diameter pipe at center of photograph. A smaller drain pipe is at far right. Oil slick is in foreground at right.

View looking upstream in **D-12** showing numerous boulders, rocks and stones lining much of the South Street Brook in this area.





There were many raccoon and deer tracks in sand at the water's edge in **C-12**.

In **C-12** much vegetation grows thickly along South Street Brook, Northern Branch, Marlborough.



In **D-13** at All Star Auto Sales, 329 Maple Street, were sounds of a mechanic working.

A large, sealed, black plastic trash bag sat in the South Street Brook by All Star Auto Sales, 329 Maple Street, where there are two wooden crossing bridges. On both sides of this channelized section, located in **D-13**, is fresh red mulch.



This pipe is connected to a long black rubber hose leading from a yard at 354 Maple Street. It is in the channelized segment of the North Branch of South Street Brook in **D-13** adjacent to the medical/professional building at 340 Maple Street.

Beside this channelized wall of the South Street Brook is a black rubber hose from a backyard behind the gray house at 354 Maple Street in **D-13**. The hose goes under and through a wooden planked fence, down a steep bank and into the Brook. In the yard is a swimming pool and a piece of construction equipment.



Visible from the medical/professional building's parking lot at 340 Maple Street are two compost structures outside the chainlink fenced-in yard behind the pale green house and unattached garage located at 20 River Street in **D-13**. One bin is 6-8 feet from the waterline of the channelized brook, while the other bin is 8-10 feet away.

The leaning cement wall is located near the junction of Walker Street Brook and South Street Brook behind the four-story medical/professional building at 340 Maple Street in **D-14**.





In **D12** is a rectangular-shaped stone tunnel under the old railroad bed. It is approximately four feet wide. This view is looking southeast.

**Map Segments** South Street Brook, D11 and D12 to stream junction  
**Date** November 22, 2008  
**Observers** Jen and Rick Boudrie  
**Weather** Partly cloudy, cold, dry, 30 degrees Fahrenheit  
**Recent weather** same

### **Stream Description**

Stream bottom: cobbles, gravel, sand  
Water: clear, 3-12 inches deep. Judging from the stream banks the water level was low  
Flow: fast  
Gradient: moderate  
Sinuosity: meandering, somewhat braided  
Reach: step pools, runs  
NOTE: Some swampy sections covered by ice

### **Habitat**

Trees, brush, brambles, overhanging vegetation, algae seen on a rock

### **Human Alterations**

Former farm lands turned into industrial, business area. Black landscape barrier near South Street culvert embankment. The area has several rock walls. Some foam from rapidly running water. Some trash.

### **Riparian Area and Land Use**

Near South Street steep banks rise to parking and road areas for surrounding businesses about 50-100 feet from the stream. Downstream the area opens up to a broad, swampy, forested area.

Visible land uses near South Street are businesses (trucking, fence company), small and large buildings, roads, and a parking lot.

### **Recreation**

None

### **Wildlife**

Downy woodpecker  
Small animal tracks

### **Wildlife Habitat**

Trees, fallen limbs/trees, scattered rocks, vines, stone walls.

### **Narrative**

From South Street the stream flows northeast. The stream runs fast here and over rocks to pools. The banks are steep and rise up to the parking lots and business areas. After a couple hundred feet and a few pools, the stream widens and the terrain flattens where this stream branch meets the north branch. (D12). This area has brush, swamp, rocks, brambles, and trees on both sides. Some trash has fallen down the banks.



Brambles, brush, trees and rocks made slow walking at first. Then the stream runs through a rather swampy area. In warmer weather it would have been marshy, wet and difficult for walking, but because of recent cold temperatures the ground was frozen and easy to walk on!



Culvert south of South Street



Culvert north of South Street



Animal tracks – Fisher?



Debris – metal pipes and other trash



## **ASSETS**

The woodlands are beautiful.

## **PRIORITIES**

Remove the trash.  
Educate the public.  
Display signs to protect the watershed.

**Map Segments** South Street Brook D13, D14, E14, F14, F15  
**Date** November 19, 2008  
**Observers** Bob Belford, Andrea Belford, Frank Bennett  
**Weather** Sunny, mild, 30-40 degrees

### **Stream Description**

Stream bottom: 70% concrete channels, other areas w/silt and sand  
Water: Clear for the most part – tea color in some parts  
Flow: Swift to slight to almost stopping in some parts  
Gradient: Low  
Sinuosity: Channelized  
Reach: Riffles/runs to riffles/pools

### **Habitat**

Abundant large and small woody organic material, with some overhanging vegetation.

### **Human Alterations**

Not much, but there was excess sedimentation in some areas, as well as culverts and dams.

### **Riparian Area and Land Use**

As mentioned, stream was mostly channelized w/bank stability collapsed in some areas as well as overhanging vegetation. Mostly surrounded by shrubs/brambles and wetlands/marsh. Land use visible from stream: commercial, residential, parking lots, roads, wooded areas, conservation land (Sudbury Reservoir)

### **Recreation**

Walking, bicycling, X-country skiing at Sudbury Reservoir Watershed (according to new sign put up)

### **Wildlife**

Red squirrel, robins, Canada geese, mallard ducks, deer tracks/droppings, beaver dams/teeth marks

### **Wildlife Habitat**

Well vegetated, wetland areas with thick vegetation, stream banks vegetated, too. Some matting where deer may be sleeping.

### **Narrative**

Just above D13 (would be C13 on chart) started out behind Monty's on Rt. 85/Framingham Rd. corner. There was a big pond area (murky and trashy). Nothing flowed from this. Then a small crowded stream w/natural shoreline, into a babbling brook (sandy bottom) which led to the channel at D14 (behind Medical building next to Dunkin Donuts). Here is where the narrow cement channel began (4-5' wide). It was a clean, steady flow of water with a clear bottom. There were a couple trees that fell over top, and a big blockage downstream that needs clearing. The wall shifted in a few areas notated on map. Clean flow of water at fork in stream – clear bottom. E14 is where the current slowed down to almost a stop right before Walker St. bridge. Water was 2' deep w/9" of sediment – culvert. Across the street is Sudbury Watershed



Reservoir. It started with a built-up natural sediment island – deer tracks, droppings, oil in standing water (stays apart when poked which means its natural decomposition), methane rotting leaves (bubbles), and brown cloudy water spots (see pictures below). In the reservoir, we saw Canada geese and mallard ducks. From there, there was a bridge with a spillway. The spillway was pretty clean but had some brown muck at edges. F15 started with another cement channel (with wall like a “V” instead of straight vertical like in D14). At the very beginning, right after the spillway, there was a discharge pipe (12” diameter) blocked up with brown residue going down right side. We stuck a stick way up and it started flowing again. After that, there were 10” dry pipes every 50’ or so. The bottom was fairly rugged and clean in the channel with a steady, easy flow. Some trees and branches had fallen over the top in a few areas. The stream was adjacent to open space with groups of trees, but there was an open manhole adjacent to the bank that need to be covered (dangerous for humans/wildlife). At the end of the channel was a lot of beaver-chomped wood with a large beaver dam (F14) where the stream ended in the swampy marshy area by the Ford dealership.

#### **PROBLEMS (see photos)**

1. Clean up big pond behind Monty’s (C13/D13) – trash and brown colored water.
2. Big natural blockage across channel in D14 (trees and organic debris)
3. Shifted channel walls in D14
4. E14 at Walker St. Bridge – built-up sediment slowing flow, causing backup (before and after bridge)
5. F15 – check pipe right after spillway – discharge, blockage
6. F15 – fallen branches over channel
7. F14 – big beaver dam (good or bad?)
8. F15 – open manhole

#### **ASSETS**

1. Sudbury Reservoir Watershed – walking, biking, X-country skiing (E14)
2. Good habitat (E14)
3. Potential recreation use – pond behind Monty’s (C13/D13)

#### **PRIORITIES (see photos)**

1. Great double action priority – clean up pond behind Monty’s to provide community recreation for winter (ice skating rink). It would also provide wetland for good habitat in summer.
2. Clear up fallen debris/blockages in all areas noted (D14, E14, F15) to help healthy flow of stream
3. Cover open manhole (F15) – dangerous to humans and wildlife



C13 Approach to Channel



C13 Stream Flow



C13 Stream Flow



C13 Brown Colored Stream



C13 Trash Around Pond



C13 Trash in Stream





C13 Trash around pond



C13 Pond



C13 Pond



F15 Marsh Looking West toward Maple Street



C13 Trash in Stream



C13 Framingham Rd. Culvert





F14 Beaver Dam Looking Upstream



F14 Beaver Dam Looking Downstream



F14 Beaver Dam



F14 Beaver Trees



F14 Beaver Log



D15 Channel End Downstream

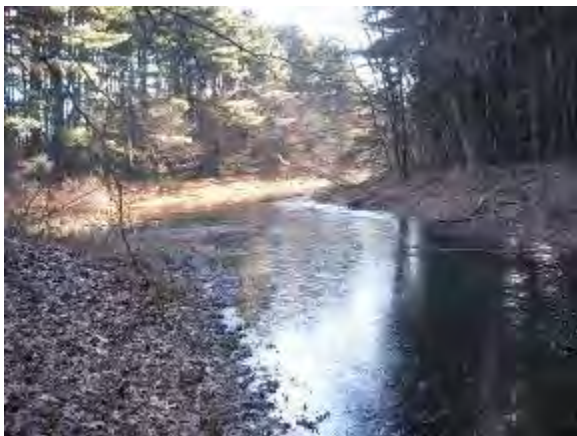




D15 Channel End Upstream



D15 Channel Approach to Pond



F15 Stream Merge



D15 Channel flow



F15 Open Manhole



F15 Channel Flow





D15 Channel Flow



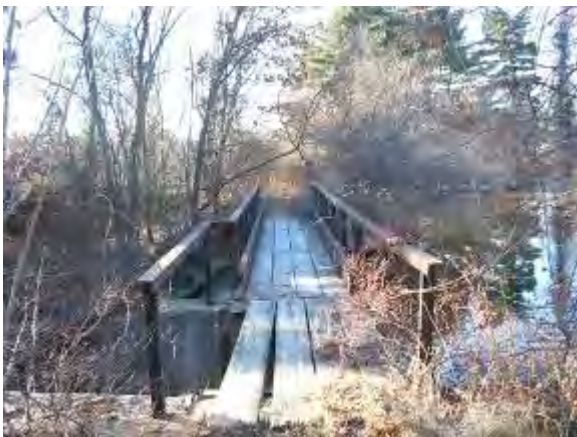
E14 Spillway



E14 Downstream View from Spillway



E14 Upstream View from Spillway



E14 Bridge over Spillway



F15 Channel Flow





E14 Pond Looking Upstream



E14 Brown-Colored Pool



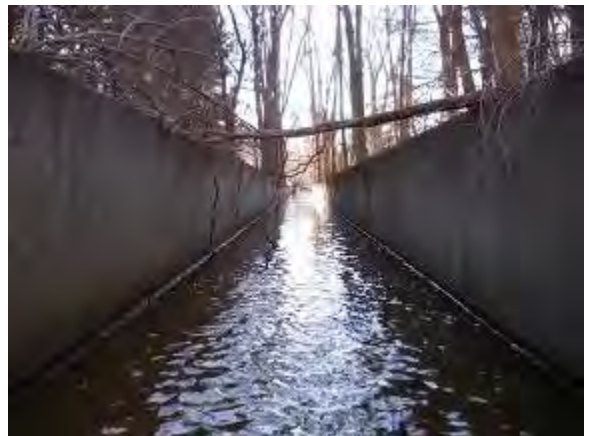
E14 Pond Looking Downstream



E14 Brown Colored Pool



E14 Walker Street Culvert Downstream



E14 Channel Flow2



E14 Channel Flow 1



E14 Walker Street Culvert



E14 Channel Walker Street Culvert Upstream



D14 Channel Merge Downstream



D14 Channel Merge Upstream



D14 Channel Flow 1





D14 Channel Drain



D14 Channel Wall Shift Upstream



D14 Channel Blockage Downstream



D14 Channel Blockage Drainage



D14 Channel Wall Shift Downstream



D14 Channel Flow 1



D14 Channel Start



D14 Channel Blockage Upstream

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## Communication with Resident

This is the full text of an email received on 11/1/08 from a resident who lives by Sheep Fall Brook.

I live at 89 Ash St. in Marlborough. This is at the point where the brook takes a substantial drop and the turns toward the VFW post. The stream is a bit cleaner than it used to be, but that may be because of increased flow the last few years. We have seen green frogs from little frogs to grown up during a summer, perhaps 6 or 8 in a pool below the falls. I have found the remains of a large crayfish by the bank, the head, antennae and one claw, but it would have been 5-6 inches long if whole. We have deer, turkey, ducks (spring), rabbits, woodchuck, cardinals (spring), raccoon, skunk. All of these I have seen regularly. My concerns would be road run off. This should be improved since they finally fixed the storm drain that is just above the stream. There still is a lot during rain because it is more or less channeled to flow into the stream by the way the berm and the cuts go. We remove debris, trash, logs etc from the stream during the year. The banks seem to be ok at this point as they are cut pretty deep at points and are rocky the rest of the way. I caution you that it is very, very steep from the street next to the waterfall down to the bottom of the falls. You may want to come around the house. - Ed Mahan



## **Stream Team Fall 2008 - Action Report**

### **1- Flagg Swamp and Sheep Fall Brook draining into Ft. Meadow Reservoir**

### **2- South Street Brook draining to Sudbury Reservoir**

The following action items are listed in the Stream Team Fall 2008 report as reported by the stream team. Each item is listed and the stream section noted with the closest address noted for easy reference. The item has been assigned and a status column noted. In spring of 2009 these items will be investigated and corrected as needed. A report will be given at the next stream team meeting in spring of 2009.

### **1- Flagg Swamp and Sheep Fall Brook located west of Ft. Meadow Reservoir**

<b>Stream Section</b>	<b>Problem Identified</b>	<b>Assigned to:</b>	<b>Status</b>
A3	Clogged culvert. Need to fix stone culvert that collapsed for better stream flow	<b>Con. Com. to check and determine whose land and what needs to be done.</b>	
	Abandoned car behind 100 Matheson Street property should be removed (heading up toward West Hill Road.)	<b>Priscilla to check to determine whose property it is on and will contact the owner</b>	
A6	Pool and feeder stream strongly smelled of sulfur in A06 (see photo)	<b>Priscilla to check in spring to determine if it's natural or manmade.</b>	
A6	Remove trash behind Moose. Swampy and LOTS of pollution. We observed a 55 gallon blue plastic drum across the stream but water was still passing through. We also saw a television, air conditioner, large propane tank, tires, and beer cans.	<b>Priscilla to work with Moose to clean up this area</b>	
A7- A6	Upstream behind Land's Towing lots of pollution in, on and around the stream. We observed a fire extinguisher, tire, plywood, cooler and large pieces of debris on the hill.	<b>Con. Com. to contact Lands Towing / and land owner to require cleanup.</b>	

C7 (Behind town houses on Ash St./Pleasant St.)	Toward the far end of the townhouses upstream we saw a metal pipe 13" in diameter draining into the stream. The bottom of the pipe is corroded and rust staining below on the bank.	<b>DPW will be notified as to condition of pipe and will determine if anything needs to be done.</b>	<b>1/29/09 DPW notified</b>
C7 & D7	Pipes near 84 Ash Street and 29 Russell Street empty into stream	<b>Con. Com. has already confirmed these are city drain pipes.</b>	<b>Done</b>
D9 – E9 Russel St. culvert	Trash includes shopping cart and tire and cement blocks	<b>Con. Com. will inspect and add to cleanup list.</b>	
C7	Educating abutters about stream and watershed care. Ash Street runoff goes directly into stream. Prevent untreated road run off from emptying directly into stream	<b>Con. Com and DPW will work together on this.</b>	



## 2. South Street Brook and Tributaries to Sudbury Reservoir

Stream Section	Problem Identified	Assigned to:	Status
C5 After pond south of Clover Hill St.	Look at algae-like material (see photo) and oily substance	<b>Con. Com. will take a look and determine if it is a good or bad algae.</b>	
E9 & E10	Add two double culvert pipes to maps (see photos)	<b>DPW will be notified.</b>	
E10 & E11	Check culvert and sand by CMS?	<b>Con. Com. will check deposits and culverts</b>	
E10 & E11	Clean up trash by Desimone Drive and South St.	<b>Con. Com. will add to cleanup locations for Clean Sweep in April 2009</b>	
A11	Debris on branches and vegetation after storm events at end of pipe which discharged behind Neil St. Excessive flows.	<b>Con. Com. will discuss with DPW to address issue</b>	
A11	Water discoloration changes often. Education of upstream dumpers needed. Investigate discharge.	<b>Con. Com. and DPW will monitor to determine source of discoloration.</b>	
D12	Development is on the Brook's edge, lack of buffer (see tent in photo) at auto dealership.	<b>Con. Com. will contact owner to move tent and create a buffer.</b>	
D13	a long black rubber hose going into Brook from 354 Maple Street (see photos)	<b>Con. Com. will investigate in spring 2009</b>	
D13	Composting near Brook (see photo)	<b>Con. Com. will send letter to owner to educate and suggest alternative location.</b>	
D14	A cement channel wall segment is leaning, leaving gaps (see photo)	<b>DPW and DCR will be notified of this condition.</b>	
C13-D13	Clean up pond behind Monty's.	<b>DCR will be notified. Area will be put on cleanup list for Clean Sweep (If permission granted by DCR).</b>	
D14	Remove blockage in channel (trees and organic debris).	<b>DCR will be notified.</b>	
E14	Walker St. Bridge – remove	<b>DCR and DPW will be</b>	

	sediment accumulation both sides upstream and downstream	<b>notified of this condition and asked to remove it when possible.</b>	
F15	Check pipe right after spillway discharge, blockage	<b>DCR will be notified.</b>	
F15	Fallen branches over channel	<b>DCR will be notified.</b>	
F14	Beaver Dam – inspect	<b>DCR will be notified and will address issue if it is a problem.</b>	
F15	Open manhole to be closed for safety	<b>DCR will be notified and asked to block this off for public safety purposes.</b>	

**-- End --**