Use and Economic Importance of
the Lower Farmington River and Salmon Brook

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Background/Research Methods

The four-study project described below was conducted for the Farmington River Watershed Association (FRWA) between May and October 2008. The focus of these studies was the lower segment of the Farmington River, Salmon Brook and the lands that immediately border it. The lower Farmington River section stretches from Canton to Windsor, flowing through Burlington, Farmington, Avon, Simsbury, East Granby, and Bloomfield, and the Salmon Brook section flows through Hartland, Granby and East Granby.
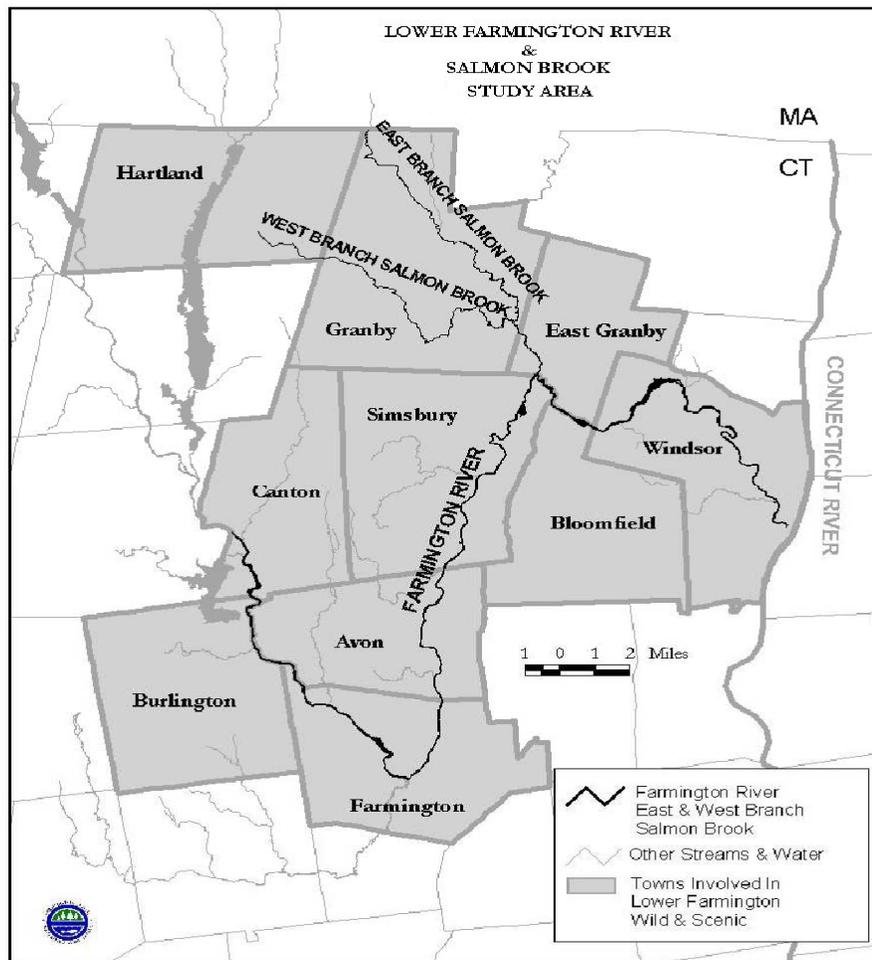
Recreation study

A brief in-person survey was first conducted at 15 key recreation access points, on the Lower Farmington River and Salmon Brook, with recreational users of the river/brook and adjoining lands. The purpose was to develop a mailing list of individuals who agreed to complete a future mail survey; a small amount of user information was collected at the time of the interview (see Appendix 1 for questionnaire). A total of 566 intercept interviews were completed over 60 days. These interviews were done in half day increments randomly dispersed by day of the week and time of day (morning from 8:00-12:00 AM and afternoons from 12:00-4:00 PM) from May through September, 2008. Each access point was surveyed four times, twice in the morning and twice in the afternoon.

The 15 access points are listed below. Access point numbers refer to those published in FRWA's River Guide.

1) Collinsville
a) Access Pt #16 at upstream end of trail
b) Collinsville Canoe/Kayak
c) Walking bridge area

2) Farmington River Trail
a) Access Pt #17
b) Access Pt #18 along Rt. 4/179

3) Upper Unionville
a) New parking area on north side of road
b) Access Pt #19 on south side

4) Lower Unionville
a) Access Pt #20 behind carwash
b) Park on up-stream side of ball field

5) Fisher Meadows Recreation Area
a) Main ball fields/trails area
b) Trails access area a few miles up Farms Road

6) Upper Avon – Rt. 10&44 – Access Pt #22

7) Upper Simsbury
a) Access Pt #23 by Pinchot Sycamore
b) Bike trail parking/access off Rt. 10 and Rt. 315 (please confirm)
c) Simsbury Crew Boathouse

8) Lower Simsbury
a) Rt. 10 & Rt. 315 parking area for trail
b) Access Pt #25 at Curtis Park

9) Tariffville Park – Access Pt #26

10) Tariffville Gorge, Beach, Bridge
a) Parking area on both sides of river
b) Access Pt #27 and Access Pt #28

11) Rainbow Reservoir boat launch – Access Pt #29 in Windsor

12) Windsor
a) Strawberry Hills Park (Access Pt #30)
b) Welch Park

13) Windsor
a) Pleasant St. boat ramp (Access Pt #31)
b) Park across the street

14) Salmon Brook
a) Enders State Forest
b) McLean's Game Refuge off Barndoor Hills Rd.
c) Granbrook Park off Rt 187 in East Granby

15) Salmon Brook
a) Salmon Brook Park (Rt 10 just south of Granby)
b) McLean's Game Refuge off Rt 10 south of Granby

Counts of visible recreation users at each access point were completed at the same times as the interviews. These counts were extrapolated to arrive at an estimate for total recreation use. Total recreation use estimates were used as the basis for economic impact calculations.

A mail survey of the 566 respondents to the intercept survey was conducted to assess recreational use and values attached to these uses (see Appendix 2 for questionnaire).

Intercept data was not analyzed because this data was collected during the mail survey. The mail survey questionnaire was designed to take no more than 15minutes to complete and was accompanied by a cover letter, postage paid return envelope, and a crisp one dollar bill as an incentive for completion. Mailings immediately followed the intercept survey interview that identified each participant. Twenty four surveys were returned to sender because of a bad address, yielding a total effective sample of 542. Of this, 225 completed surveys were returned yielding a response rate of 42%.

Resident study

A mail survey was conducted of 600 residents randomly selected from FRWA mailing lists of individuals living in close proximity to the Lower Farmington River and Salmon Brook. The survey assessed values attached to the presence of the river/brook, value based on proximity to river/brook, support for watershed protection measures, etc.(see Appendix 3 for questionnaire). The survey questionnaire was designed to take no more than 15 minutes to complete and was accompanied by a postage paid return envelope, and a crisp one dollar bill as an incentive for completion. Nonresponse was monitored and phone call follow up and second mailings to nonrespondents were made as needed. Of the original 600 surveys that were mailed, 184 were returned by the post office as undeliverable. Of the 416 remaining, 127 were returned yielding a response rate of 30.5%.

Business study

A survey was conducted either over the telephone or in-person with 30 owners or managers of businesses selected from a FRWA mailing list of businesses in close proximity to the Lower Farmington River and Salmon Brook. Businesses were selected based on their having some link to river users, river recreation, river aesthetics, etc. The survey assessed value attached to presence of river, value based on proximity to river, support for watershed protection measures, etc. (see Appendix 4 for questionnaire). Both qualitative and quantitative data were collected. The survey was designed to take 30 minutes to complete. See Appendix 5 for a list of businesses interviewed.

Real Estate study

The impact of proximity to the Lower Farmington River and Salmon Brook on real estate values in the 10 town study area was assessed. The data set consisted of 700 residential property sales in the 10 town study area. The sample came from property sales occurring between 2004 and 2006. Property sales were chosen randomly, but were weighted by the size of the town relative to the study area; i.e., larger communities had a larger representation in the sample. Distance to the Farmington River was measured using GIS software. The data estimating the value of the property as a function of distance to the river and other amenities (such as lot size, square footage of the property, etc) was used to develop a hedonic price model.

Recreation Study Findings

Part 1: Profile of interviewees on day of initial contact for the study

1) Water body that best defines the area visited on day of initial contact for this study.

	Frequency	Valid Percent
Lower Farmington River	185	83.3
Salmon Brook	27	12.2
Both	10	4.5
Total	222	100.0
Missing	3	
	225	

Not surprisingly, given the relative size of the Lower Farmington River versus Salmon Brook [which is also reflected in the number of collection sites on the river (13) versus the brook (2)], the ratio of respondents who identify with the river versus those that identify with the brook is about the same (about 7 to 1). Interestingly very few identify with the watershed as a whole (i.e., both the river and the brook).

2) The day of initial contact for this study was the first visit to the Lower Farmington River/Salmon Brook area for only 7.1% (16) of respondents; i.e., 92.4% (208) had visited the area previously.

The following table shows the year of first visit for those that had previously visited the area.

	Frequency	Valid Percent
1950-1959	7	4.0
1960-1969	9	5.2
1970-1979	11	6.3
1980-1989	13	7.5
1990-1999	43	24.7
2000-2004	41	23.6
2005- 2007	41	23.6
Within 2008	9	5.2
Total	174	100.0
Missing	51	
	225	

3) When asked about changes in the frequency of their visits to the river/brook since their first visit, 63.6% (119) agreed that it had increased, 29.9% (56) agreed that it had remained the same, and 6.4% (12) indicated they thought it had decreased (n=187).

As can be seen from the findings above, the day that respondents were first contacted for this study was the first visit to the area for very few (7.1%). Of the others, slightly less than one quarter started coming 1-3 years ago and about the same number started coming 4-8years ago.

Nearly half had been coming for at least 9 years, with nearly 10% coming since 1960. The area is a consistently popular place to visit reflected by the fact that nearly two thirds (63.6%) of respondents have increased the frequency of their visits since first coming. Very few (6.4%) have decreased their frequency of visiting.

4) Outdoor activities respondents engaged on the day of initial contact for this study from most to least common (n= 389). Respondents were instructed to check all that apply.

Walking/Jogging   25.7% (n = 100)
Wildlife observation   14.9% (n = 58)
Biking   11.1% (n = 43)
Dog walking   10.0% (n = 39)
Kayak/Canoe   8.3% (n = 32)
Fishing (lures/bait)   6.2% (n = 24)
Picnicking   5.7% (n = 22)
Hiking   5.4% (n = 21)
Baby/child walking   4.6% (n = 18)
Water skiing   1.3% (n = 5)
Boating   1.3% (n = 5)
Education   1.0% (n = 4)
Other   4.4% (n = 17)

5) Primary outdoor activity respondents engaged in on the day of initial contact for this study (n= 221). Respondents were instructed to select only one activity.

Walking/Jogging   30.8% (n = 68)
Biking   15.4% (n = 34)
Dog walking   12.7% (n = 28)
Kayak/Canoe   12.2% (n = 27)
Fishing (lures/bait)   6.8% (n = 15)
Baby/child walking   5.0% (n = 11)
Picnicking   2.7% (n = 6)
Hiking   2.7% (n = 6)
Wildlife observation   1.8% (n = 4)
Water skiing   1.8% (n = 4)
Boating   1.8% (n = 14)
Other   6.3% (n = 14)

Responses to the two previous questions indicate that Walking/Jogging is by far the most popular recreational activity in the area practiced on the day of initial contact for this study by about a quarter of the respondents (25.7%) and mentioned as their primary activity by almost a third (30.8%). Biking, dog walking and kayaking/canoeing are also common past times, practiced by about 10% of respondents (8.3% to 11.1%) and mentioned as their primary activity by between 12 and 15% of respondents. Interestingly, wildlife observation, rarely mentioned as a primary activity, was a very common ancillary activity practiced by about 15% of respondents.

6) Length of time spent near the river, brook or bordering lands on the day of initial contact for this study.

	Frequency	Percent
Less than 1 hr	24	10.6
1 to 2 hrs	143	63.8
2.5 to 4 hrs	45	20.0
More than 4 hrs	12	5.3
Total	224	100.0
Missing	1	
	225	

    Average = 1.90 hours

As can be seen from the above table, nearly two thirds of respondents spent 1-2 hours near the river, brook or bordering lands on the day of initial contact for this study. The average length of time was 1.90 hours.

7) Type of group accompanying respondents on the day of initial contact for this study.

	Frequency	Valid Percent
Alone	76	34.1
Family	66	29.6
Friends	45	20.1
Organized group	11	4.9
Family and friends	18	8.2
Student/camp group	2	.9
Self plus dog	5	2.2
Total	223	100.0
Missing	2	
	225	

As can be seen from the above table, about one third (34.1%) of respondents were by themselves on the day of initial contact for this study. Most of the rest were either with family (29.6%) or friends (20.1%).

8) Most frequently mentioned alternatives to visiting the Lower Farmington River/Salmon Brook area on the day of initial contact for this study (n=200).

Activity		Location	
Walking	27.5% (55)	Home/neighborhood	19.2% (34)
Kayak/Canoe	10.0% (20)	Northwest Park, Windsor	6.2% (11)
Biking	9.5% (19)	State/town roads	5.1% (9)
Stay home	9.0% (18)	Windsor	4.5% (8)
Dog walk	7.5% (15)	Simsbury	3.4% (6)
Hike	6.5% (13)	Avon	2.8% (5)
Run	5.0% (10)	Connecticut River	2.8% (5)
Fish	3.5% (7)	Don't know	2.8% (5)
Other	21.5% (40)	Other	53.2% (94)

When asked what they would have done as an alternative if they had not been able to visit the Lower Farmington River/Salmon Brook area on the day of initial contact for this study, most said they would have gone walking and most would have done this near their home or neighborhood.

Part 2: Economic impact of visit to the Lower Farmington River/Salmon Brook area on day of initial contact for this study

1) Mode of travel from home to the river/brook on day of initial contact for this study.

	Frequency	Valid Percent
Motor vehicle	187	83.9
Bicycle	17	7.6
Run, Jog, Walk	19	8.5
Total	223	100.0
Missing	2	
	225	

2) Frequency of using a commercial outfitter for recreation activities in the Lower Farmington River/Salmon Brook area on the day of initial contact for this study.

	Frequency	Percent
No	216	96.9
Yes	7	3.1
Total	223	100.0
Missing	2	
	225	

3) Source of funds spent on trip to the Lower Farmington River/Salmon Brook area on the day of initial contact for this study.

	Frequency	Valid Percent
Respondent paid all of own expenses and no one else's	114	52.1
Respondent paid all expenses of the group	20	9.1
Group shared some or all expenses	3	1.4
Someone else paid respondent's expenses	4	1.8
Respondent or their group had no expenses associated with this trip	78	35.6
Total	219	100.0
Missing	6	
	225	

4) Average size of group for those respondents that paid all expenses of the group: 2.86 people.

5) Average size of group for those groups that shared some or all expenses: 2.67 people.

6)) Average estimated expenditures (based on reported sample size for each item) <u>for respondents that paid all of their own expenses and no one else's</u>. Expenses include those associated with the trip taken on the day of initial contact for this study from preparations before leaving home until their return home. Expenditures are distinguished by those that took place within and outside the ten towns comprising the Lower Farmington River/Salmon Brook area.

		ESTIMATED AMOUNT SPENT	
		Within the ten towns' boundaries	Outside the ten towns' boundaries
a.	Motel, hotel, cabin or B&B	$0 (n=0)	$0 (n=0)
b.	Camping fees	$16 (n=1)	$0 (n=0)
c.	Restaurants & bars	$18 (n=17)	$80 (n=2)
d.	Groceries, take-out food & drinks	$11 (n=19)	$13 (n=2)
e.	Gas & oil	$11 (n=53)	$16 (n=9)
f.	Other vehicle expenses	$5 (n=2)	$5 (n=1)
g.	Local transportation	$3 (n=1)	$0 (n=0)
h.	Equipment rental and leasing	$25 (n=3)	$0 (n=0)
i.	Admissions & fees	$20 (n=2)	$0 (n=0)
j.	Clothing	$100 (n=1)	$25 (n=1)
k.	Sporting goods	$13 (n=2)	$35 (n=1)
l.	Souvenirs & other expenses	$0 (n=0)	$54 (n=1)

7) Average estimated expenditures <u>for respondents who paid all expenses of a group or whose group shared expenses</u> (amounts are average estimates of the amount spent for/by the entire group). Expenses included those associated with the trip taken on the day of initial contact for this study from preparations before leaving home until their return home. Expenditures are distinguished by those that took place within and outside the ten towns comprising the Lower Farmington River/Salmon Brook area.

		ESTIMATED AMOUNT SPENT	
		Within the ten towns' boundaries	Outside the ten towns' boundaries
a.	Motel, hotel, cabin or B&B	$0 (n=0)	$0 (n=0)
b.	Camping fees	$0 (n=0)	$0 (n=0)
c.	Restaurants & bars	$50 (n=6)	$0 (n=0)
d.	Groceries, take-out food & drinks	$15 (n=7)	$44 (n=1)
e.	Gas & oil	$28 (n=13)	$10 (n=1)
f.	Other vehicle expenses	$15 (n=2)	$0 (n=0)
g.	Local transportation	$30 (n=1)	$0 (n=0)
h.	Equipment rental and leasing	$100 (n=1)	$0 (n=0)
i.	Admissions & fees	$0 (n=0)	$0 (n=0)
j.	Clothing	$500 (n=1)	$0 (n=0)
k.	Sporting goods	$0 (n=0)	$0 (n=0)
l.	Souvenirs & other expenses	$10 (n=1)	$0 (n=0)

8) Average cost per trip based on trips taken to the Lower Farmington River/Salmon Brook area in the past 12 months including expenses incurred from preparations before leaving home until return home = $16.30 (n=176). Average number of people this sum pays for = 1.67 (n=129). Average cost per trip per person = $9.76 (16.30/9.76).

Findings from responses to the questions above provide information about the impact recreation can have on the people, the environment, and the economy in and around the Lower Farmington River/Salmon Brook. The vast majority of respondents (83.9%) traveled by motor vehicle to the area on the day of initial contact for this study.   In terms of economic impacts, the vast majority of respondents (96.9%) did not use a commercial outfitter on the day of initial contact for this study. For those few who did use an outfitter (5 respondents), it was for canoe/kayak rental/transportation.

In terms of other economic impacts, about one third (35.6%) say they had no expenses associated with their trip to the area on the day of initial contact for this study. About half (52.1%) had expenses and say they paid for themselves and no one else. For these individuals the most frequent expense was for gas and oil (mentioned by 53 individuals) followed by food/drink (mentioned by 19) and restaurants/bars (mentioned by 17). All of these expenses were made within the ten town boundary area of the Lower Farmington River/Salmon Brook and expenses ranged on average from $11 for gas/oil and $11 for food/drink to $18 for restaurant/bar.

These figures are greater than the average estimated cost per trip based on trips taken in the past 12 months which was $9.76 per person.

Approximately 10% of the respondents say they paid for all the expenses of a group or were with a group who shared expenses. The average size of the groups were about 2 ¾. For these groups the most frequent expense was for gas and oil (mentioned by 13 individuals) followed by food/drink (mentioned by 7) and restaurants/bars (mentioned by 6). All of these expenses were made within the ten town boundary area of the Lower Farmington River/Salmon Brook and expenses ranged on average from $15 for food/drink, to $28 for gas/oil, to $50 for restaurant/bar.

Part 3: Conditions during visit to the Lower Farmington River/Salmon Brook on day of initial contact for this study

1) When asked about changes in the quality of the river/brook since their first visit, 41.8% (79) agreed that it had improved, 55% (104) agreed that it had remained the same, and 3.2% (6) indicated they thought it had gotten worse (n =189).

2) Overall satisfaction with visit to the Lower Farmington River/Salmon Brook on day of initial contact for this study on a 1 to 5 scale, worst possible trip to best possible trip.

	Frequency	Valid Percent
2.00	1	.5
3.00	118	53.2
4.00	82	36.9
5.00	21	9.5
Total	222	100.0
Missing	3	
	225	

Average response = 3.55 (n = 222)

A little over one half (53.2%) of respondents thought their trip to the Lower Farmington River/Salmon Brook on the day of initial contact was average/normal (scale midpoint value of 3) and a little less than half rated the trip above the scale mid point (4 or 5, meaning above average or "best"). The average response was 3.55. Only one person rated it below the scale mid point reflecting negative perceptions. The same trend in responses was obtained when asked how the quality of the river/brook had changed over time. A little over one half (55%) thought it had remained the same and a little less than half (41.8%) thought it had improved. Only 3.2% thought it had gotten worse.

3) Most people reported that the river/brook was not very crowded on day of initial contact for this study on a 1 to 5 scale, not crowded to extremely crowded. Average response = 1.68 (n = 221).

4) Degree that encounters with people affected enjoyment of the river/brook on day of initial contact for this study on a 1 to 5 scale, greatly reduced enjoyment to greatly increased enjoyment. Average response = 3.19 (n = 220).

As can be seen from the above two findings, crowding on the river/brook is not seen as a problem

5) Motivations for visiting the Lower Farmington River/Salmon Brook on day of initial contact for this study area assessed in terms of a) importance and b) fulfillment on a 1-5 scale, low to high.

	Importance		Fulfillment	
	N	Mean	N	Mean
To get exercise	213	4.30	200	4.40
To relax	208	4.26	195	4.27
To enjoy the view along the water	207	4.21	193	4.29
To be close to nature	201	4.19	189	4.21
To experience solitude	201	3.30	184	3.66
To do something with my family	201	2.99	178	3.59
To think about my personal values	194	2.88	171	3.43
To learn about the area	194	2.29	166	3.02
To meet new people	194	2.29	158	2.58
To use my equipment	193	2.12	168	2.95
To test my skills/endurance	199	2.06	171	2.96
To be with members of a group	190	2.05	161	3.02
To enjoy being in the water	192	1.88	164	2.57
To exercise my pet	189	1.89	155	2.57
To share my skills and knowledge	191	1.64	158	2.65
To be creative by doing something such as sketching, painting, taking pictures, etc.	187	1.53	160	2.26
To show off my skills/endurance	190	1.32	154	2.47
To take risks	193	1.26	163	2.47

As can be seen from the above table, the top four motivations for visiting the Lower Farmington River/Salmon Brook area on the day of initial contact for this study (all above 4.0 on a 1 to 5 scale), both in terms of importance and degree that this was fulfilled, are: a) to get exercise, b) to relax, c) to enjoy the view along the water, and d) to be close to nature. Three other motivations were considered moderately important and moderately attainable. They are: a) to experience solitude, b) to do something with my family, and c) to think about my personal values. The other issues that were asked about were considered relatively unimportant and less attainable.

Part 4: Overall conditions of the Lower Farmington River/Salmon Brook and bordering lands

1) Overall satisfaction with the condition of the river/brook on a 1 to 5 scale, not satisfied to very satisfied. Average response = 4.05 (n = 216).

2) Overall satisfaction with the lands bordering the river/brook on a 1 to 5 scale, not satisfied to very satisfied. Average response = 3.78 (n = 218).

3) Perceived problems facing in the Lower Farmington River/Salmon Brook area on a 1 to 5 scale, very unimportant to very important.

	N	Mean
Not enough restrooms along the river/brook	210	3.10
Litter on the banks along the river/brook	209	3.06
Litter in the river/brook	211	3.00
Polluted water	208	2.87
Erosion of banks along the river/brook	213	2.59
Evidence of human waste	209	2.57
Reckless behavior of people on or near the river/brook	211	2.56
Traffic noise from nearby roads	211	2.53
Lack of knowledge of river, brook or trail etiquette	211	2.38
Too few police/rangers/management staff on the river/brook	212	2.28
Muddy water	211	2.27
Trampled vegetation along the banks of the river/brook	211	2.23
Too crowded	212	2.19
Too developed	211	2.18
Not enough parking areas	211	2.18
Noisy/rowdy people	208	2.13
Not enough access points	212	2.12
Conflicts between different types of visitors	211	2.11
Logging of forest visible from river/brook	209	2.10
Feelings of being unsafe/insecure	207	2.09
Lack of direction signs	209	2.01
Lack of information needed to plan visits	211	1.97
Lack of public transportation between access points	210	1.92
Lack of services (food, drink, equipment rental, etc.)	208	1.88
Too many rules and regulations	208	1.76

As can be seen from the above findings, respondents are fairly satisfied with both the condition of a) the river/brook and b) the lands bordering them (average assessment 4.05 and 3.78 on 1 to 5 scale, respectively). Only three potential problems were assessed near the scale midpoint reflecting that these issues were seen as moderately important (range from 3.10 to 3.00 on 1 to 5 scale). These include (in descending order of importance): a) not enough restrooms along the river/brook, b) litter on the banks along the river/brook and c) litter in the river/brook.

Part 5: Feelings about the Lower Farmington River/Salmon Brook

The following five statements were assessed using a 1 to 5 scale, strongly disagree to strongly agree.

1) The river/brook contributes a lot to my feelings about this area.

	Frequency	Percent
1.00	3	1.4
2.00	6	2.7
3.00	29	13.2
4.00	65	29.7
5.00	116	53.0
Total	219	100.0
Missing	6	
	225	

Average response = 4.30

2) I enjoy doing the type of things I do here because of the river/brook.

	Frequency	Percent
1.00	3	1..4
2.00	2	0.9
3.00	22	10.0
4.00	70	32.0
5.00	122	55.7
Total	219	100.0
Missing	6	
	225	

Average response = 4.40

3) This river/brook contributes a lot to the beauty of the area.

	Frequency	Percent
1.00	2	0.9
2.00	0	0
3.00	11	5.0
4.00	47	21.5
5.00	159	72.6
Total	219	100.0
Missing	6	
	225	

Average response = 4.65

4) The river/brook defines the area.

	Frequency	Percent
1.00	2	0.9
2.00	9	4.1
3.00	38	17.5
4.00	56	25.8
5.00	112	51.6
Total	217	100.0
Missing	8	
	225	

Average response = 4.23

5) This river/brook contributes a lot to how people spend their free time in the area.

	Frequency	Percent
1.00	2	0.9
2.00	10	4.6
3.00	41	18.9
4.00	77	35.5
5.00	87	40.1
Total	217	100.0
Missing	8	
	225	

Average response = 4.09

It is apparent from responses to the above five questions that the Lower Farmington River/Salmon Brook contributes beauty and recreation, and positively affects how one feels about the place they have chosen to visit. The river/brook helps define one's sense-of-place and to a slightly lesser extent (though still quite positively) how they spend their free time.

Part 6: Conservation of the Lower Farmington River/Salmon Brook and bordering lands

In 1994, the 14-mile segment of the Upper Farmington River from the Colebrook Dam in Hartland to Satan's Kingdom in Canton was designated as "Wild and Scenic" under the National Wild and Scenic Rivers Act of 1968. The Wild and Scenic designation of this segment of the Farmington River protects it from federally funded or licensed water resource projects that would harm its natural resources or free-flowing character. In the case of the Upper Farmington River local, state and national organizations and government agencies are working to preserve the river.

Because much of the land that the Upper Farmington River flows through is privately owned, activities that affect the upper river are monitored and guided by the Farmington River Coordinating Committee (FRCC). The committee is made up of representatives of the bordering towns, state of Connecticut, Metropolitan District Commission, and Farmington River Watershed Association.

1) After reading the above statement, respondents were asked to indicate on a 1-5 scale, not appropriate to very appropriate, how appropriate they feel a local, regional and state partnership like the Farmington River Coordinating Committee (in the upper river) would be for managing the Lower Farmington River and Salmon Brook and the lands along these two water bodies.

Average response = 4.67 (n = 219)

The Farmington River Coordinating Committee relies primarily on local zoning regulations to minimize activities that could be harmful to the Upper Farmington River and the lands within 100 feet of it. These include activities such as constructing new buildings, installing septic systems, excavating sand and gravel, etc.

2) After reading the above statement, respondents were asked to indicate on a 1-5 scale, not effective to very effective, how effective they feel similar mechanisms (i.e., local zoning regulations) would be for minimizing activities that could be harmful to the Lower Farmington River and Salmon Brook and the lands within 100 feet of these two water bodies.

Average response = 4.73 (n = 219)

3) Perceived benefits that a Wild and Scenic designation for the Lower Farmington River/Salmon Brook might have for surrounding communities rated on a 1-5 scale, not important to very important.

	N	Mean
Preserve aesthetic beauty	221	4.65
Preserve undeveloped open space	222	4.59
Improve fish and wildlife habitat	220	4.44
Promote health and fitness	221	4.25
Attract funding for local environmental projects	220	4.24
Increase public education about the environment	215	4.21
Increase community pride	221	4.14
Improve access for persons with disabilities	220	3.97
Increase public recreation opportunities	220	3.96
Tourism and business development	219	3.19

4) Perceived importance of having the Lower Farmington River/Salmon Brook protected as a National Wild and Scenic River on a 1-5 scale, not important to very important.

Average response = 4.49 (n = 223)

Most respondents feel that a local, regional and state partnership (like the Farmington River Coordinating Committee) that relies primarily on local zoning regulations to minimize harmful activities would be very appropriate for the Lower Farmington River/Salmon Brook area. In addition, there is great support for protecting the area as a National Wild and Scenic River. The primary benefits for doing this include (in descending order of importance): preserving aesthetic beauty, preserving undeveloped open space, improving fish and wildlife habitat, promoting health and fitness, attract funding for local environmental projects, increasing public education about the environment, and increasing community pride (all above 4.0 on a 1 to 5 scale). It is noteworthy that tourism and business development is by far the least important topic.

Part 7: Respondent Characteristics

1) Age: Range 18 to 87, Average = 51.3 (n=219).

2) Sex: 50.2% Female, 49.8% Male (n=223).

3) Ethnicity

	Frequency	Percent
American Indian or Alaskan Native	2	0.9
Asian or Pacific Islander	1	0.5
Black, not of Hispanic origin	3	1.4
White, not of Hispanic origin	214	96.4
Other	2	0.9
Total	222	100.0
Missing	3	
	225	

4) Education

	Frequency	Percent
8th grade or less	0	0
Some high school	2	0.9
High school diploma or GED	23	10.3
Business school or trade school	5	2.2
Some college	41	18.4
College graduate	71	31.8
Some graduate school	12	5.4
Master's degree	44	19.7
Doctorate or professional degree	25	11.2
Total	223	100.0
Missing	2	
	225	

5) Income

	Frequency	Percent
Under $20,000	8	4.1
$20,000 to $39,999	21	10.7
$40,000 to $59,999	22	11.2
$60,000 to $79,999	21	10.7
$80,000 to $99,999	25	12.8
$100,000 to $119,999	28	14.3
$120,000 to $139,999	14	7.1
$140,000 to $159,999	22	11.2
$160,000 to $179,999	18	9.2
$180,000 to $199,999	2	1.0
$200,000 or more	15	7.7
Total	196	100.0
Missing	29	
	225	

The typical respondent is white (96.4%), around 50 years old, equally likely to be male as female, a college graduate, with a median income of about $100,000.

We cannot compare these income levels directly to the surrounding area because data is unavailable on the distribution of income within the local areas. However, the median household income is available for each of the towns in the study is available. The median incomes range from a high of $111,000 in Avon to a low of $65,000 in Bloomfield.

6) Number of people living in the home ranges from 1 to 6, average = 2.66.

7) Distance from the home to the Lower Farmington River/Salmon Brook area ranges from 0 to 150 miles, average = 16.9 miles.

8) Length of time it takes to get from home to the Lower Farmington River/Salmon Brook area ranges from 0 to 120 minutes, average = 10.56 minutes.

As can be seen from the findings above, the middle age characteristic of respondents (early 50's average) is appropriately reflected by relatively small-sized households (average 2.66 people). These households reside a moderate distance from the Lower Farmington River/Salmon Brook area (an average of 16.9 miles or an average of 10.56 minutes away).

Part 8: Estimate of Total Recreation Use

The total number of visitors to the lower Farmington River and Salmon Brook area is an important indication of the value of the area to its users. To determine the total amount of use, counts of visible recreation users were made at each of the 15 access points used in the intercept survey portion of the recreation study described previously. These counts were done in half day increments randomly dispersed by day of the week and time of day (morning from 8:00-12:00 AM and afternoons from 12:00-4:00 PM) from May through September, 2008. Each of the 15 access point was used four times, twice in the morning and twice in the afternoon for a total of 60 observation periods. The number of users was recorded by type of activity and the weather conditions on the date of observation. [See Appendix 6 for details]

A regression analysis of user counts and weather conditions was performed. Weather conditions were not found to significantly affect user counts. Another regression analysis was performed of user counts and season [prime season (June, July and August) versus shoulder season (May and September)], again no significant difference were detected.

To estimate total recreation use, the total number of observed users was first divided by 60 to arrive at an average number of users per access point during a four hour period. Assuming that mornings and afternoons are likely to be prime user times for the river, the average number of users during a four hour period is then multiplied by 2 to estimate the daily number of users. There was no significant difference between morning and afternoon usage of the river. Early morning and evening hours (usage) have been ignored, hence overall user estimates are **conservative**. In addition, it is **conservatively** assumed that usage of the river falls by 50% in May and September. Although there was not a significant difference in usage across the months that data was collected, the observations did not occur during early May nor late September. Finally, it is **conservatively** assumed that there is no recreation use of the river between October and April. Hence, the daily use estimate is multiplied by 120 days (mid May through mid September) to estimate total recreation use per access point per season. This figure is then multiplied by 15 to arrive at total recreation use for the lower Farmington River and Salmon Brook area.

A very conservative estimate of total recreation for the lower Farmington River/Salmon Brook during the 2008 season is 124,380 visits per year. The breakdown of visitors by the type of activity is given in the table below. The estimate of users by activity is calculated based on data collected by the observer when the user counts were made. In addition, the recreation users that were surveyed by mail indicated which activities they engaged in when visiting the river. The percentage breakdown of activities in this self report is somewhat different than that reported by the observer in the user counts. The recreation survey asked respondents which activities they were engaged in on the day of the intercept survey and which was their primary activity.

Differences between the self report on the survey questionnaire and the observed use findings are probably due to the fact that some activities make it much more difficult to stop at an access point to be interviewed and therefore included in the survey.

Estimate of Total Use by Recreation Activity

Activity	Visits (rounded)	Percent of Total
Bicycling	30,548	24.56%
Walking/Jogging	28,495	22.91%
Boating	15,784	12.69%
Dog Walking	11343	9.12%
Fishing	8035	6.46%
Picnic	6418	5.16%
Swimming	6119	4.92%
Wildlife Observation	4614	3.71%
Walking w/ Child	3719	2.99%
Other*	9366	7.53%
Total	124,380	100%

* Other = Tubing, Roller Blades, Hiking, Photography, Exercise, Education, ATV, Boating, Water Skiing, Jet Skiing, Reading, Horseback Riding, Painting, Volunteer Maintenance

Part 9: Total Economic Impact of Farmington River and Salmon Brook Recreation

While the Farmington River and Salmon Brook provide benefits in terms of recreational opportunities for users, these visitors also spend money during their visits which is important to the local economy. There are two ways in which the role of the Farmington River and Salmon Brook affect the local economy. Expenditures by out of town users of the river bring outside dollars into the local economy. The analysis of these expenditures is called *Economic Impact Analysis.*   For example, out of town users may use the services of local motels and hotels, restaurants and services related directly to a particular recreation activity, such as bicycle or kayak rental. These outside users are bringing in dollars that might not be brought into the local area.   Local users are likely to spend less, since lodging expenses are not involved; however

local users do have an impact on the local economy. Local expenditures are treated differently, since local expenditures are not likely to represent new expenditures in the local economy, but just a rearrangement of current expenditures. For example, the lower Farmington River/Salmon Brook competes with other forms of recreation in the local area, such as movie theaters or outings at other local establishments. The economic activity generated by the river can be measured and this measurement is called the *economic significance of the river*. It must be cautioned that the economic significance of the river is not a measure of the economic value of the river to its users. The river has value to its users that is not traded in the marketplace. What is being measured here, is the value of economic activities associated with river. As an analogy, consider someone going to a movie and buying popcorn. The main event is the movie, the popcorn is an incidental. In the case of the lower Farmington River/Salmon Brook, the movie (the river) is essentially free and we are measuring the amount of popcorn sold.

Recreation users were asked about their expenditures on the day they were initially contacted for the survey. The survey showed that the average amount spent per person per visit was $9.76. In order to determine the total economic impact of recreation opportunities, visitors need to be divided into two groups - local users and outside users. The major economic impact comes from outside users, because these users are bringing outside dollars into the local economic system. These dollars are initially spent in the lower Farmington River/Salmon Brook area and provide increased income for local businesses. Some of this local income is re-spent in the local economy further increasing local incomes and output. For this reason, we multiply these new dollars into the economy by a multiplier which reflects the net effect of this re-spending to get the total economic impact.

The recreation survey reported information about recreation users and where they came from. To determine the economic impact of the river, those users coming from more than 25 miles away are considered outside users and will be used in determining the economic impact of the lower Farmington River/Salmon Brook. Approximately 10% of the river users came from more than 25 miles away. The remaining 90% came from the local area, and this group will be used for the economic significance analysis.

The outside users spent significantly more per person than did the local residents. The average spending per person per visit for these outside users was $24.78. Local residents spent significantly less per person per visit, spending an average of $6.86. The total economic impact is determined by the following equation:

Total Economic Impact = average spending per person * number of visitors * economic impact multiplier.

The multiplier is affected by a number of different factors. For example, a higher savings rate reduces the size of the multiplier, the savings rate is the fraction of spendable income that is saved rather than spent. Also, a more diverse economic region tends to have a higher multiplier because more expenditures can be satisfied with locally produced goods and services. Also, the more local inputs are used in the production process the larger the size of the multiplier. The more local inputs used, the larger the fraction of the dollars spent stay in the local community. For example, if someone buys locally produced vegetables at the supermarket the local economy

retains the value added by both the supermarket and the local grower. If the same supermarket sells the same produce coming from another state, such as California, the local economy retains the value added by the supermarket, but the wholesale dollars spent on the produce is sent out of the local area to California. A study of tourism and the arts in Connecticut in 2006[1] produced estimates of local multipliers between 1.60 and 2.17. These multipliers will be used in the following calculations. These multipliers are appropriate for this study because river use is related to tourism. In addition, consumers of the arts are likely to use a lot of the same economic services, such as restaurants, hotels and local shopping.

Assuming that 10% of river users are from outside the local economy, this means that there are approximately 12,438 visitors each year. Assuming that they spend $24.78 per person per visit, the economic impact would be conservatively between $493,000 and $669,000 per year. It can be argued, particularly in an economic climate with high gas prices, such as was experienced during the summer of 2008, that this economic impact is understated. Some of the local expenditures might be a substitution of money that might have been spent elsewhere. For example, if a household normally spends a week kayaking in Maine every summer, but because of higher gasoline prices chooses to spend the week kayaking on the Farmington River, then those expenditures that normally would have been spent elsewhere should be considered in the economic impact analysis. Unfortunately, we don't have the data to determine the extent to which local users substituted local recreation for recreation and vacations outside of the local area.

The economic significance is about 2.5 to 3 times larger than the economic impact . The spending of local users on activities related to the river has a total value of conservatively between $1,229,000 and $1,666,000 per year. In interpreting this number, it is important to keep in mind that this is measuring the value of expenditures on activities related to the river, but unlike the economic impact, if these expenditures were not made on river related activities, they would likely be spent somewhere else in the local economy. The multiplier would be the same for both the economic impact and economic significance analysis, because both local and outside expenditures increase the incomes of business owners, and increased incomes result in increased spending regardless of the source. Finally, while the economic significance is larger than economic impact, 90% of the visitors to the river are local, so the fact that the economic significance is only about 2.5 to 3 times larger is a reflection of the much smaller level of local expenditures.

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[1] McMillen, Stanley. The Economic Impact of the Arts, Film, History and Tourism Industries in Connecticut. Working Paper, University of Connecticut, Connecticut Center for Economic Analysis. December 2006.
http://ccea.uconn.edu/studies/EconImpact_Arts_Film_Tourism_2006.pdf

Resident Study Findings

Part 1: Feelings about the Lower Farmington River/Salmon Brook

The following five statements were assessed using a 1 to 5 scale, strongly disagree to strongly agree.

1) The river/brook contributes a lot to my feelings about this area.

	Frequency	Percent
1.00	8	6.6
2.00	4	3.3
3.00	25	20.5
4.00	24	19.7
5.00	61	50.0
Total	122	100.0
Missing	5	
	127	

   Average response = 4.03

2) I enjoy doing the type of things I do here because of the river/brook.

	Frequency	Percent
1.00	5	4.2
2.00	6	5.0
3.00	38	31.9
4.00	28	23.5
5.00	42	35.3
Total	119	100.0
Missing	8	
	127	

   Average response = 3.81

3) This river/brook contributes a lot to the beauty of the area.

	Frequency	Percent
1.00	7	5.8
2.00	2	1.7
3.00	5	4.2
4.00	31	25.8
5.00	75	62.5
Total	120	100.0
Missing	7	
	127	

   Average response = 4.38

4) The river/brook defines the area.

	Frequency	Percent
1.00	6	5.1
2.00	4	3.4
3.00	19	16.1
4.00	44	37.3
5.00	45	38.1
Total	118	100.0
Missing	9	
	127	

Average response = 4.00

5) This river/brook contributes a lot to how people spend their free time in the area.

	Frequency	Percent
1.00	7	5.9
2.00	11	9.3
3.00	25	21.2
4.00	42	35.6
5.00	33	28.0
Total	118	100.0
Missing	9	
	127	

Average response = 3.70

It is apparent from responses to these five questions that the Lower Farmington River/Salmon Brook contributes beauty and definition, and positively affects how one feels about the place they have chosen to live. The river/brook helps define one's sense-of-place and to a slightly lesser extent (though still positively – i.e., well above the scale mid point of 3.0), what they do and how they spend their free time.

Part 2: Recreational pursuits in and around the Lower Farmington River/Salmon Brook

1) Degree respondents engage in outdoor recreational activities during the year in the Lower Farmington River/Salmon Brook area on a 1 to 5 scale, not at all/rarely (once per year or less) to moderate amount (once per month) to very large amount (daily).

	Frequency	Percent
1.00	21	17.6
2.00	18	15.1
3.00	27	22.7
4.00	35	29.4
5.00	18	15.1
Total	119	100.0
Missing	8	
	127	

Average response = 3.09

Findings indicate that the Lower Farmington River/Salmon Brook area is a relatively popular place for a significant number of residents to recreate -- slightly less than half (44.5%) of the respondents engage in recreational activities in the area more than once per month. However, about one third of respondents indicated that they rarely use the area for recreation (less than once per month). The average response of 3.09 indicates moderate use overall (defined by recreational use once per month).

2) Outdoor activities respondents engage in from most to least common (n = 449). Respondents were instructed to check all that apply.

Walking/Jogging	16.0% (n = 72)
Kayaking	13.4% (n = 60)
Dog walking	11.4% (n = 51)
Rollerblading	10.7% (n = 48)
Biking	8.2% (n = 37)
Picnicking	7.6% (n = 34)
Fishing (lures/bait)	6.0% (n = 27)
Tubing	4.9% (n = 22)
Canoeing	4.7% (n = 21)
Hiking	4.5% (n = 20)
Baby/child walking	4.2% (n = 19)
Wildlife observation	2.2% (n = 10)
Fly fishing	1.1% (n = 5)
Other	5.1% (n = 23)

3) Most common outdoor activities respondents engage in (n = 85). Respondents were instructed to select only one activity.

Walking/Jogging	31.8% (n = 27)
Kayaking	16.5 % (n = 14)
Picnicking	12.9% (n = 11)
Dog walking	8.2% (n = 7)
Rollerblading	7.1% (n = 6)
Hiking	5.9% (n = 5)
Biking	4.7% (n = 4)
Canoeing	3.5% (n = 3)
Tubing	2.4% (n = 2)
Fishing (lures/bait)	2.4% (n = 2)
Wildlife observation	2.4% (n = 2)
Other	2.4% (n = 2)

Responses to the two previous questions indicate that Walking/Jogging is by far the most popular recreational activity in the area practiced by more people (16.0%) and listed as the most common pastime by about one third of respondents (31.8%). Kayaking is the second most frequently practiced activity (mentioned by 13.4% of respondents) and rated as the second most common activity (by 16.5%). Dog walking, rollerblading and biking are also popular pastimes (practiced by approximately 10% of respondents (11.4-8.2%), though they are listed as less common than picnicking, which is listed as the third most common activity (by 12.9% of respondents) though this activity attracts fewer people overall (7.6%).

4) Length of time spent near the river, brook or bordering lands for recreational purposes per visit.

	Frequency	Percent
Less than 1 hr	7	6.8
1 to 2 hrs	80	78.5
2.5 to 4 hrs	13	12.7
More than 4 hrs	2	2.0
Total	102	100.0
Missing	25	
	127	

Average = 1.75 hours

As can be seen from the above table, over three quarters of respondents spend 1-2 hours near the river, brook or bordering lands when they visit for recreational purposes. The average length of time is 1.75 hours.

5) Motivations for engaging in recreational activities in the Lower Farmington River/Salmon Brook area assessed in terms of a) importance and b) likelihood of attainment on a 1-5 scale, low to high.

	Importance		Likelihood of Attainment	
	N	Mean	N	Mean
To enjoy the view along the water	104	4.48	94	4.60
To be close to nature	101	4.38	90	4.64
To relax	98	4.26	87	4.59
To get exercise	100	4.16	91	4.54
To experience solitude	97	4.02	87	4.32
To do something with my family	97	3.73	85	4.08
To think about my personal values	101	3.48	88	4.07
To learn about the area	97	3.02	83	3.77
To enjoy being in the water	99	2.75	83	3.54
To be creative by doing something such as sketching, painting, taking pictures, etc.	100	2.58	85	3.74
To exercise my pet	96	2.43	82	3.62
To use my equipment	94	2.37	75	3.52
To be with members of a group	99	2.34	78	3.45
To test my skills/endurance	96	2.22	79	3.34
To meet new people	93	2.16	76	3.04
To share my skills and knowledge	94	2.10	71	3.07
To show off my skills/endurance	97	1.53	75	2.69
To take risks	95	1.47	76	2.57

As can be seen from the above table, the top five motivations for engaging in recreational activities in the Lower Farmington River/Salmon Brook area (all above 4.0 on a 1 to 5 scale), both in terms of importance and ability to attain are: a) to enjoy the view along the water, b) to be close to nature, c) to relax, d) to get exercise, and e) to experience solitude. Three other motivations listed in the above table are considered more than moderately important and more than moderately attainable. They are: a) to do something with my family b) to think about my

personal values, and c) to learn about the area. Eight other issues, though considered more than moderately attainable, are considered relatively unimportant (see table above).

6) Overall evaluation of Lower Farmington River/Salmon Brook area for recreation on a 1-5 scale, worst to best.

	Frequency	Percent
1.00	4	3.8
3.00	31	29.2
4.00	50	47.2
5.00	21	19.8
Total	106	100.0
Missing	21	
	127	

Average response = 3.79

As can be seen from the above table, approximately two thirds of respondents rate the Lower Farmington River/Salmon Brook area above the scale mid point of 3.0 when evaluating the area's recreational opportunities. This reflects their high opinion of the area. The scale mid point reflects an average or normal evaluation. Very few (3.8%) rate recreational opportunities below the scale mid point reflecting negative perceptions.

Part 3: Impact of recreational pursuits in and around the Lower Farmington River/Salmon Brook

1) Usual mode of travel between river/brook area and home

	Frequency	Percent
Run, Jog, Walk	58	55.2
Motor vehicle	36	34.3
Bicycle	8	7.6
Other	3	3.0
Total	105	100.0
Missing	22	
	127	

2) Frequency of using a commercial outfitter for recreation activities in the Lower Farmington River/Salmon Brook area

	Frequency	Percent
No	89	85.6
Yes	15	14.4
Total	104	100.0
Missing	23	
	127	

The most commonly used type of outfitter was for canoe/kayak rental/transportation (mentioned by 9 respondents) and tube rental (mentioned by 4 respondents).

3) Average cost per day spent in a typical day on recreation activities in the Lower Farmington River/Salmon Brook area over the past 12 months (including restaurants, groceries, take-out food/drinks, gas, equipment rental, admission fees, clothing, sporting goods, etc.).

	Frequency	Percent
$5 or Less	48	54.5
$5.01 to $20	21	23.8
$20.01 to $50	14	16.0
$50.01 to $100	3	3.4
More than $100	2	2.2
Total	89	100.0
Missing	39	
	127	

Average amount = $15.01

Average number of people that the costs above pertain to = 1.82.

Findings from responses to the three questions above provide information about the impact recreation can have on the people, the environment, and the economy in and around the Lower Farmington River/Salmon Brook. As can be seen, over half the respondents (55.2%) travel between river/brook area and home on their own steam –and about one third (34.3%) use a motor vehicle to travel this distance. Most respondents (85.6%) do not use an outfitter to help them with their recreational pursuits. The few that do (14.4%) are apt to use a canoe/kayak rental/transportation outfitter (primarily) or tube rentals. In terms of other economic impacts, slightly more than half of the respondents (54.5%) report spending $5.00 or less in area shops on a typical day to support their recreational activities. Approximately one quarter of respondents (23.8%) spend between $5.00 and $25.00. Though another 16% do spend between $20.00 and $50.00, given that the average frequency of engaging in recreational activities in the area is moderate (i.e., once per month; re. part 2 question 1), the overall economic impact of recreation activities appears to also be fairly moderate.

Part 4: Conditions in the Lower Farmington River/Salmon Brook and bordering lands

1) Perceived changes in the quality of the area over time

	Frequency	Percent
Improved	59	48.4
Remained the same	45	36.9
Gotten worse	18	14.8
Total	122	100.0
Missing	5	
	127	

2) Number of people found on or near the river/brook on a 1 to 5 scale, not crowded to extremely crowded. Average response = 1.89 (n= 124).

3) Degree that encounters with people affect enjoyment of the river/brook on a 1 to 5 scale, greatly reduces enjoyment to greatly increases enjoyment. Average response = 3.05 (n=123).

4) Overall satisfaction with the condition of the river/brook on a 1 to 5 scale, not satisfied to very satisfied. Average response = 3.83 (n=124).

5) Overall satisfaction with the lands bordering the river/brook on a 1 to 5 scale, not satisfied to very satisfied. Average response = 3.53 (n=123).

6) Perceived problems facing in the Lower Farmington River/Salmon Brook area on a 1 to 5 scale, very unimportant to very important.

	N	Mean
Litter on the banks along the river/brook	115	3.45
Litter in the river/brook	115	3.40
Development too near the river/brook	113	3.27
Traffic noise from nearby roads	113	3.13
Polluted water	116	3.11
Erosion of banks along the river/brook	116	3.07
Reckless behavior of people on or near the river/brook	115	3.05
Evidence of human waste	115	2.93
Trampled vegetation along the banks of the river/brook	116	2.81
Lack of knowledge of river, brook or trail etiquette	116	2.77
Muddy water	115	2.67
Too few police/rangers/management staff on the river/brook	114	2.66
Logging of forest visible from river/brook	113	2.65
Noisy/rowdy people	114	2.62
Feelings of being unsafe/insecure	112	2.54
Too developed	114	2.54
Not enough restrooms along the river/brook	116	2.54
Conflicts between different types of visitors	114	2.50
Not enough access points	114	2.46
Not enough parking areas	114	2.41
Too crowded	114	2.39
Lack of direction signs	113	2.36
Lack of information needed to plan visits	115	2.32
Lack of public transportation between access points	116	2.17
Too many rules and regulations	114	2.09
Lack of services (food, drink, equipment rental, etc.)	116	1.98

As can be seen from the above findings, nearly half (48.4%) of respondents believe that the quality of the Lower Farmington River/Salmon Brook and bordering lands has improved in recent years; a little over one third (36.9%) believe it has stayed the same. Few think it has deteriorated. Crowding is not seen as an issue. Overall, respondents are fairly satisfied with both the condition of the river/brook and the lands bordering them (average assessment 3.83 and 3.53 on 1 to 5 scale, respectively). Only seven potential problems were assessed slightly above the scale midpoint reflecting that they were seen as slightly important (range from 3.45 to 3.05 on 1 to 5 scale). These include (in descending order of importance): a) litter on the banks along the river/brook, b) litter in the river/brook, c) development too near the river/brook, d) traffic noise

from nearby roads, e) polluted water, f) erosion of banks along the river/brook, and g) reckless behavior of people on or near the river/brook.

Part 5: Conservation of the Lower Farmington River/Salmon Brook and bordering lands

In 1994, the 14-mile segment of the <u>Upper</u> Farmington River from the Colebrook Dam in Hartland to Satan's Kingdom in Canton was designated as "Wild and Scenic" under the National Wild and Scenic Rivers Act of 1968. The Wild and Scenic designation of this segment of the Farmington River protects it from federally funded or licensed water resource projects that would harm its natural resources or free-flowing character. In the case of the Upper Farmington River local, state and national organizations and government agencies are working to preserve the river.

Because much of the land that the <u>Upper</u> Farmington River flows through is privately owned, activities that affect the upper river are monitored and guided by the Farmington River Coordinating Committee (FRCC). The committee is made up of representatives of the bordering towns, state of Connecticut, Metropolitan District Commission, and Farmington River Watershed Association.

1) After reading the above statement, respondents were asked to indicate on a 1-5 scale, not appropriate to very appropriate, how appropriate they feel a local, regional and state partnership like the Farmington River Coordinating Committee (in the upper river) would be for managing the Lower Farmington River and Salmon Brook and the lands along these two water bodies.

Average response = 4.61 (n= 123).

The Farmington River Coordinating Committee relies primarily on local zoning regulations to minimize activities that could be harmful to the Upper Farmington River and the lands within 100 feet of it. These include activities such as constructing new buildings, installing septic systems, excavating sand and gravel, etc.

2) After reading the above statement, respondents were asked to indicate on a 1-5 scale, not effective to very effective, how effective they feel similar mechanisms (i.e., local zoning regulations) would be for minimizing activities that could be harmful to the Lower Farmington River and Salmon Brook and the lands within 100 feet of these two water bodies.

Average response = 4.48 (n= 123).

3) Perceived benefits that a Wild and Scenic designation for the Lower Farmington River/Salmon Brook might have for surrounding communities rated on a 1-5 scale, not important to very important.

	N	Mean
Preserve aesthetic beauty	122	4.56
Preserve undeveloped open space	122	4.52
Improve fish and wildlife habitat	122	4.32
Increase community pride	122	4.16
Improve access for persons with disabilities	122	4.16
Increase public education about the environment	117	4.02
Attract funding for local environmental projects	122	3.88
Promote health and fitness	122	3.85
Increase public recreation opportunities	121	3.56
Tourism and business development	119	2.94

4) Perceived importance of having the Lower Farmington River/Salmon Brook protected as a National Wild and Scenic River on a 1-5 scale, not important to very important.
Average response = 4.52 (n= 123).

As can be seen from the findings reported above, most respondents feel that a local, regional and state partnership (like the Farmington River Coordinating Committee) that relies primarily on local zoning regulations to minimize harmful activities would be very appropriate for the Lower Farmington River/Salmon Brook area. In addition, there is great support for protecting the area as a National Wild and Scenic River. The primary benefits for doing this include (in descending order of importance): preserving aesthetic beauty, preserving undeveloped open space, improving fish and wildlife habitat, increasing community pride, improving access for persons with disabilities, and increasing public education about the environment (all above 4.0 on a 1 to 5 scale). It is also noteworthy that tourism and business development is by far the least important topic.

Part 6: Respondent Characteristics

1) Length of time living in the Lower Farmington River/Salmon Brook area ranges from 3 to 87 years, average = 28.53 years.

2) Age: Range 20 to 87, Average = 57.4 (n=105).

3) Sex: 58.0% Female, 38.7% Male (n=119).

4) Ethnicity

	Frequency	Percent
American Indian or Alaskan Native	3	2.7
Asian or Pacific Islander	1	.9
Black, not of Hispanic origin	1	.9
White, not of Hispanic origin	108	95.6
Total	113	100.0
Missing	14	
	127	

5) Education

	Frequency	Percent
8th grade or less	1	.9
Some high school	2	1.8
High school diploma or GED	12	10.5
Business school or trade school	5	4.4
Some college	19	16.7
College graduate	30	26.3
Some graduate school	10	8.8
Master's degree	20	17.5
Doctorate or professional degree	15	13.2
Total	114	100.0
Missing	13	
	127	

6) Income

	Frequency	Percent
Under $20,000	4	4.0
$20,000 to $39,999	15	15.2
$40,000 to $59,999	19	19.2
$60,000 to $79,999	13	13.1
$80,000 to $99,999	15	15.2
$100,000 to $119,999	14	14.1
$120,000 to $139,999	2	2.0
$140,000 to $159,999	7	7.1
$160,000 to $179,999	6	6.1
$180,000 to $199,999	1	1.0
$200,000 or more	3	3.0
Total	99	100.0
Missing	28	
	127	

As can be seen from the findings to the above six questions, respondents are predominantly white (95.6%), in their mid 50s, about 60/40 female/male, about two thirds have graduated college, about 40% (38.4%) have a household income of less than $60,000 and another 40% (42.4%) have a household income between $60,000 and $120,000. The average length of time they have lived in the area is 28.53 years; i.e., they moved to the area in early middle age.

7) Type of home

	Frequency	Percent
Apartment	4	3.3
Condominium	15	12.3
Single Family Home	103	84.4
Total	122	100.0
Missing	5	
	127	

	Frequency	Percent
Own	114	93.4
Rent	8	6.5
Total	122	100.0
Missing	5	
	127	

8) Number of people living in the home ranges from 1 to 7, average = 2.42.

9) Length of time living in present home ranges from 1 to 68 years, average = 22.61 years.

10) Waterbody that best defines the area where home is located.

	Frequency	Percent
Lower Farmington River	87	71.3
Salmon Brook	22	18.0
Both	7	5.7
Neither	6	4.9
Total	122	100.0
Missing	5	
	127	

11) Distance from the home to the Lower Farmington River/Salmon Brook area ranges from 0 to 20 miles, average = 2.04 miles.

12) Length of time it takes to get from home to the Lower Farmington River/Salmon Brook area ranges from 0 to 25 minutes, average = 6.14 minutes.

As can be seen from the findings above, the vast majority (84.4%) live in single family homes which they own. They have lived there an average of 22.61 years, long enough for children to have been raised and departed. This is reflected by the relatively small size of the household (average 2.42 people). As would be expected, most (71.3%) say the Lower Farmington River defines where their home is located; 18% named Salmon Brook. The sample that was surveyed was based on individuals living in close proximity to the river/brook. This is confirmed by findings that show respondents living an average of 2.04 miles or 6.14 minutes away.

Business Study Findings

There were thirty businesses who agreed to participate in the business survey (see Appendix 5 for a list of businesses). Twenty respondents are business owners and ten are business managers. Of these individuals, 20 live in the area of the lower Farmington River and Salmon Brook, while 10 do not. For those participants who live in the area, the average length of time in the area was 20.43 years. For those who live outside of the area, the average participant lives 21 miles away. The average age of participants is 46.33 years.

Part 1: Business Characteristics

1) On average, respondents reported that approximately 69% of their customers are local residents, 22% are Connecticut residents that live more than a 30 minute drive away, and 9% are from outside of Connecticut.

2) Businesses have been operating for an average of 24.6 years and the average tenure of respondents in the business is 10.1 years.

3) Businesses have an average of 4.5 full time employees and 6.8 part time employees.

4) As the table below shows, there is a good mix of businesses across different sales categories with about one third having sales revenue less than $150,000 per year, one third between $150,000 and $300,000, and one third over $300,000 per year.

Sales (per year)	Frequency	Percent
Less than $50,000	4	13.3
Between $50,000 and $150,000	7	23.3
Between $150,000 and $300,000	9	30.0
Between $300,000 and $500,000	3	10.0
Over $500,000	6	20.0
Refused	1	3.3

5) Status of sales/revenue over the past five years

	Frequency	Percent
Expanding	16	53.3
Staying the same	3	10.0
Decreasing	6	20.0
N/A	5	16.7

As the table above shows, a little more than half (53%, 16 individuals) have seen their sales revenue increase over the past five years. About one third have found their sales either flat or decreasing. A small number of businesses have not been around long enough to know. The most common reason given for increasing sales is "general economic trends". The most common reason for flat or decreasing sales is "increased competition". Several respondents stated that higher gasoline prices increased the demand for their services as local residents substituted local recreation opportunities for vacations in more distant places.

Part 2: Feelings about the Lower Farmington River and Salmon Brook

1) Water body that best defines the area where business is located

	Frequency	Percent
Lower Farmington River	27	90.0
Salmon Brook	2	6.7
Both	1	3.3

The overwhelming majority of participants responded that the lower Farmington River is the water body that best defines the area where their business is located. There is a paucity of businesses in the Salmon Brook area.

2) The following five statements were assessed using a 1 to 5 scale, strongly disagree to strongly agree.

a) The river/brook contributes a lot to my feelings about this area.

Scale value	Frequency	Percent
1	0	0
2	0	0
3	7	23.3
4	8	26.7
5	15	50.0

Average response = 4.27

b) I enjoy doing the type of things I do here because of the river/brook.

Scale value	Frequency	Percent
1	1	3.3
2	2	6.7
3	8	26.7
4	7	23.3
5	12	40.0

Average response = 3.90

c) This river/brook contributes a lot to the beauty of the area.

Scale value	Frequency	Percent
1	0	0
2	0	0
3	0	0
4	5	16.7
5	25	83.3

Average response = 4.83

d) The river/brook defines the area.

Scale value	Frequency	Percent
1	0	0
2	1	3.3
3	2	6.7
4	12	40.0
5	15	50.0

Average response 4.37

e) This river/brook contributes a lot to how people spend their free time in the area.

Scale value	Frequency	Percent
1	0	0
2	1	3.3
3	8	26.7
4	7	23.3
5	14	46.7

Average response = 4.13

It is apparent from responses to the above five questions that nearly everyone thinks that the Lower Farmington River/Salmon Brook contributes beauty and helps define the area. For many, it positively affects how one feels about the place they have chosen to operate a business. To a slightly lesser extent (though still quite positively for many) the river/brook affects how they spend their time.

3) When asked about changes in the quality of the river/brook since they first started doing business in the area, most participants (63%) feel the quality of the river/brook has increased. Thirty percent (30%) feel the quality of the river/brook has stayed the same. Only one participant feels the quality of the river has decreased.

4) Satisfaction with the *river/brook itself* in the Lower Farmington River/Salmon Brook area (on a 1 to 5 scale, 1 = not satisfied, 2 = slightly satisfied, 3 = moderately satisfied, 4 = very satisfied, 5 = extremely satisfied).

Scale value	Frequency	Percent
1	0	0
2	0	0
3	9	30.0
4	15	50.0
5	6	20.0

Average response = 3.90

As can be seen from the table above, most participants (about two thirds) are satisfied with the quality of the river/brook. When asked to elaborate, the most common response was that the river/brook was "very beautiful". Other positive comments included mention of the many recreation opportunities and the perception that the river/brook has become cleaner in recent years. Negative comments addressed the need for the river/brook to be cleaner and the need for more access points for canoeing and kayaking.

5) Satisfaction with the *lands bordering the Lower Farmington River/Salmon Brook* (on a 1 to 5 scale, 1 = not satisfied, 2 = slightly satisfied, 3 = moderately satisfied, 4 = very satisfied, 5 = extremely satisfied).

Scale value	Frequency	Percent
1	0	0
2	0	0
3	8	26.7
4	15	50.0
5	6	20.0
No Opinion	1	3.3

Average response = 3.93

As can be seen from the table above, the responses about bordering lands are very similar to those about the river/brook itself. Once again, when asked to elaborate, the most common response was about the beauty of the lands surrounding the river/brook. Several businesses mentioned that they would like to see more tourism development as well as more information about recreational opportunities made available to the public.

Part 3: Effect of Lower Farmington River and Salmon Brook on businesses

1) Proximity of the river/brook to business

	Frequency	Percent
On the river	7	23.3
Within 50 yards of the River	7	23.3
More than 50 yards away from the river	16	53.3

As can be seen from the table above, slightly more than half of the businesses were located more than 50 yards from the river. This may be due to local land use regulations that restrict building in floodplains.

2) Degree that proximity to the Farmington River/Salmon Brook affects business (on a 1 to 5 scale, 1 = very little effect, 2 = little effect, 3 = moderate effect, 4 = large effect, 5 = very large effect)

Scale value	Frequency	Percent
1	11	36.7
2	2	6.7
3	7	23.3
4	1	3.3
5	9	30.0

Average response = 2.83

As can be seen from the table above, overall, respondents feel that the river/brook has a moderate effect on their businesses. However, one third of respondents feel that the river has a large effect on their businesses. These individuals feel the river is important to their business because a) their business is related to the recreational opportunities associated with the river and/or b) the river attracts tourists which increases the demand for local businesses.

Part 4: Public Policies and the Farmington River/Salmon Brook.

1) Perceptions of federal, state or local regulations relating to the use of the river/brook or land adjacent to the river/brook that directly affect businesses in a <u>positive</u> way

Respondents had relatively few comments about the positive effects of regulations. The most common comment was that the Farmington River Greenway was a positive development for businesses in the area. In addition, flood control policies are viewed favorably, as are trout management policies of the Connecticut Department of Environmental Protection.

2) Perceptions of federal, state or local regulations relating to the use of the river/brook or land adjacent to the river/brook that directly affect businesses in a <u>negative</u> way

Two businesses complained that water levels are kept too low which is bad for canoeing and kayaking. These respondents suggested that water levels might be kept higher if the hydroelectric project proposed for Collinsville is approved.

In 1994, the 14-mile segment of the <u>Upper</u> Farmington River from the Colebrook Dam in Hartland to Satan's Kingdom in Canton was designated as "Wild and Scenic" under the National Wild and Scenic Rivers Act of 1968. The Wild and Scenic designation of this segment of the Farmington River protects it from federally funded or licensed water resource projects that would harm its natural resources or free-flowing character. In the case of the Upper Farmington River local, state and national organizations and government agencies are working to preserve the river.

Because much of the land that the <u>Upper</u> Farmington River flows through is privately owned, activities that affect the upper river are monitored and guided by the Farmington River Coordinating Committee (FRCC). The committee is made up of representatives of the bordering towns, state of Connecticut, Metropolitan District Commission, and Farmington River Watershed Association.

3) After hearing the above statement, respondents were asked to indicate on a 1-5 scale, not appropriate to very appropriate, how appropriate they feel a local, regional and state partnership like the Farmington River Coordinating Committee (in the upper river) would be for managing the Lower Farmington River and Salmon Brook and the lands along these two water bodies.

Average response = 3.79.

The Farmington River Coordinating Committee relies primarily on local zoning regulations to minimize activities that could be harmful to the Upper Farmington River and the lands within 100 feet of it. These include activities such as constructing new buildings, installing septic systems, excavating sand and gravel, etc.

4) After hearing the above statement, respondents were asked to indicate on a 1-5 scale, not effective to very effective, how effective they feel similar mechanisms (i.e., local zoning regulations) would be for minimizing activities that could be harmful to the Lower Farmington River and Salmon Brook and the lands within 100 feet of these two water bodies.

Average response = 3.80

5) Perceived benefits that a Wild and Scenic designation for the Lower Farmington River/Salmon Brook might have for surrounding communities rated on a 1-5 scale, not important to very important.

	Mean
Preserve aesthetic beauty	4.73
Increase public education about the environment	4.70
Improve fish and wildlife habitat	4.63
Attract funding for local environmental projects	4.47
Preserve undeveloped open space	4.40
Increase community pride	4.33
Tourism and business development	4.30
Promote health and fitness	4.23
Improve access for persons with disabilities	4.17
Increase public recreation opportunities	4.10

6) Perceived importance of having the Lower Farmington River/Salmon Brook protected as a National Wild and Scenic River on a 1-5 scale, not important to very important.
Average response = 4.43

As can be seen from the findings reported above, respondents feel that a local, regional and state partnership (like the Farmington River Coordinating Committee) that relies primarily on local zoning regulations to minimize harmful activities would be fairly appropriate and effective for the Lower Farmington River/Salmon Brook area (3.79/3.80 on 1 to 5 scale). In addition, there is great support for protecting the area as a National Wild and Scenic River (4.43 on 1 to 5 scale). The primary benefits for doing this include preserving aesthetic beauty, increasing public education about the environment, and improving fish and wildlife habitat. Other benefits are listed in the table above (all are above 4.0 on a 1 to 5 scale).

Real Estate Study Findings

This study investigates the effect of proximity to the Farmington River/Salmon Brook on the sales prices of single family homes. A hedonic price model is estimated. A hedonic price model estimates the value of a house as a function of its various characteristics. It is a particularly useful tool for analyzing the value of real estate because of the heterogeneous nature of the subject. The data for the hedonic price equation come from single family home transactions that occurred in the towns of: Avon, Canton, East Granby, Farmington, Granby, Simsbury and Windsor. There were 700 observations used in the analysis. Each town was represented in the sample in proportion to its population. Therefore, Canton and East Granby had fewer observations, while Windsor and Farmington had more observations.

The variable being predicted is the selling price of the home. The data was randomly chosen from sales in these towns between 2004 and 2006. These years were chosen to avoid that downturn in the real estate market that started in 2007. There were six property characteristics that were used in the hedonic price model. They were: the lot size (in acres), size of home (in square feet), number of bedrooms, number of bathrooms, the year the house was built, and the distance to the Farmington River or Salmon Brook. The first five variables are expected to have a positive impact on housing prices. For example, we would expect buyers would be willing to pay more for a house with a larger lot. The expected valence of the coefficient on distance to the river is expected to be negative if home buyers view the river as an amenity; i.e., if buyers view the river as an amenity, it is expected that they would be willing to pay more to be closer to the river.

The results are shown in the following table.

	Coefficients	Standard Error	t Stat	P-value
Intercept	--856448.658	287515.796	-2.979	.003
lot size	14082.437	4255.378	3.309	.001
square feet	180.657	7.838	23.050	.000
bedrooms	-19580.109	6761.769	-2.896	.004
bathrooms	22872.715	7379.468	3.100	.002
year built	430.714	147.157	2.927	.004
proximity	-14047.431	4571.319	-3.073	.002

The results are all statistically significant at the 0.01 level. The regression equation has an adjusted R^2 of 0.766, which is quite high for a housing price equation. One result is the opposite of what was expected. The number of bedrooms has a negative coefficient, which suggests that all else being equal, people will be willing to pay less for an extra bedroom. This result is most likely due to the correlation between the size of the house (in square feet) and the number of bedrooms. Larger houses tend to have more bedrooms and what might be happening here is that for a very large house, there actually could be too many bedrooms relative to what buyers of these large houses desire. The other variables have values that are consistent what economic theory would predict. As lot size, square footage, and number of baths increase, home buyers are willing to pay more. In addition, newer homes tend to sell for higher prices. Finally, the

proximity coefficient suggests that home buyers are willing to pay approximately $14,000 to be a mile closer to the Farmington River/Salmon Brook. This suggests that the lower Farmington River and Salmon brook are an amenity that local residents are willing to pay for.

To investigate the seemingly odd result for the coefficient on the bedrooms variable, a regression was run where the bedrooms variable was included in the analysis, while the square footage variable was dropped. In this regression equation, the number of bedrooms had a positive impact on the expected sales price. However, the explanatory power of the model, as measured by the adjusted R^2 fell significantly to 0.587. This suggests that even though the coefficient is the opposite of what economic theory would predict, the variable does add explanatory power to the model.

Summary

Summary: Recreation Study

Respondents are predominantly white (96.4%), in their early 50s, about 50/50 female/male, about two thirds have graduated college, and they have a median income of about $100,000. The middle age characteristic of respondents is appropriately reflected by relatively small-sized households (average 2.66 people). They reside a moderate distance from the Lower Farmington River/Salmon Brook area (an average of 16.9 miles or an average of 10.56 minutes away).

Not surprisingly, given the relative size of the Lower Farmington River versus Salmon Brook [which is also reflected in the number of collection sites on the river (13) versus the brook (2)], the ratio of respondents who identify with the river versus those that identify with the brook is about the same (about 7 to 1). Interestingly, very few identify with the watershed as whole (i.e., both the river and the brook).

The day that respondents were first contacted for this study was the first visit to the area for very few (7.1%). Of the others, slightly less than one quarter started coming 1-3 years ago and about the same number started coming 4-8years ago. Nearly half had been coming for at least 9 years, with nearly 10% coming since 1960. The area is a consistently popular place to visit reflected by the fact that nearly two thirds (63.6%) of respondents have increased the frequency of their visits since first coming. Very few (6.4%) have decreased their frequency of visiting.

Walking/Jogging is by far the most popular recreational activity in the area practiced on the day of initial contact for this study by about a quarter of the respondents (25.7%) and mentioned as their primary activity by almost a third (30.8%). Biking, dog walking and kayaking/canoeing are also common pastimes, practiced by about 10% of respondents (8.3% to 11.1%) and mentioned as their primary activity by between 12 and 15% of respondents. Interestingly, wildlife observation, rarely mentioned as a primary activity, was a very common ancillary activity practiced by about 15% of respondents.

Nearly two thirds of respondents spent 1-2 hours near the river, brook or bordering lands on the day of initial contact for this study. The average length of time was 1.90 hours.

About one third (34.1%) of respondents were by themselves on the day of initial contact for this study. Most of the rest were either with family (29.6%) or friends (20.1%).
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When asked what they would have done as an alternative if they had not been able to visit the Lower Farmington River/Salmon Brook area on the day of initial contact for this study, most said they would have gone walking and most would have done this near their home or neighborhood.

The vast majority of respondents (83.9%) traveled by motor vehicle to the area on the day of initial contact for this study -- which is good for fuel sales but maybe not for the environment. In terms of economic impacts, the vast majority of respondents (96.9%) did not use a commercial

outfitter on the day of initial contact for this study. For those few who did use an outfitter (5 respondents), it was for canoe/kayak rental/transportation.

In terms of other economic impacts, about one third (35.6%) say they had no expenses associated with their trip to the area on the day of initial contact for this study. About half (52.1%) had expenses and say they paid for themselves and no one else. For these individuals the most frequent expense was for gas and oil (mentioned by 53 individuals) followed by food/drink (mentioned by 19) and restaurants/bars (mentioned by 17). All of these expenses were made within the ten town boundary area of the Lower Farmington River/Salmon Brook and expenses ranged on average from $11 for gas/oil and $11 for food/drink to $18 for restaurant/bar.

These figures are greater than the average estimated cost per trip based on trips taken in the past 12 months which was $9.76 per person.

Approximately 10% of the respondents say they paid for all the expenses of a group or were with a group who shared expenses. The average size of the groups were about 2 ¾. For these groups the most frequent expense was for gas and oil (mentioned by 13 individuals) followed by food/drink (mentioned by 7) and restaurants/bars (mentioned by 6). All of these expenses were made within the ten town boundary area of the Lower Farmington River/Salmon Brook and expenses ranged on average from $15 for food/drink, to $28 for gas/oil, to $50 for restaurant/bar.

A little over one half (53.2%) of respondents thought their trip to the Lower Farmington River/Salmon Brook on the day of initial contact was average/normal (scale midpoint value of 3) and a little less than half rated the trip above the scale mid point (4 or 5, meaning above average or "best"). The average response was 3.55. Only one person rated it below the scale mid point reflecting negative perceptions. The same trend in responses was obtained when asked how the quality of the river/brook had changed over time. A little over one half (55%) thought it had remained the same and a little less than half (41.8%) thought it had improved. Only 3.2% thought it had gotten worse.

The top four motivations for visiting the Lower Farmington River/Salmon Brook area on the day of initial contact for this study (all above 4.0 on a 1 to 5 scale), both in terms of importance and degree that this was fulfilled, are: a) to get exercise, b) to relax, c) to enjoy the view along the water, and d) to be close to nature. Three other motivations were considered moderately important and moderately attainable. They are: a) to experience solitude, b) to do something with my family, and c) to think about my personal values. The other issues that were asked about were considered relatively unimportant and less attainable.

Respondents are fairly satisfied with both the condition of a) the river/brook and b) the lands bordering them (average assessment 4.05 and 3.78 on 1 to 5 scale, respectively). Only three potential problems were assessed near the scale midpoint reflecting that these issues were seen as moderately important (range from 3.10 to 3.00 on 1 to 5 scale). These include (in descending order of importance): a) not enough restrooms along the river/brook, b) litter on the banks along the river/brook and c) litter in the river/brook.

It is apparent that the Lower Farmington River/Salmon Brook contributes beauty and recreation, and positively affects how one feels about the place they have chosen to visit. The river/brook

helps define one's sense-of-place and to a slightly lesser extent (though still quite positively) how they spend their free time.

Most respondents feel that a local, regional and state partnership (like the Farmington River Coordinating Committee) that relies primarily on local zoning regulations to minimize harmful activities would be very appropriate for the Lower Farmington River/Salmon Brook area. In addition, there is great support for protecting the area as a National Wild and Scenic River. The primary benefits for doing this include (in descending order of importance): preserving aesthetic beauty, preserving undeveloped open space, improving fish and wildlife habitat, promoting health and fitness, attract funding for local environmental projects, increasing public education about the environment, and increasing community pride (all above 4.0 on a 1 to five scale). It is also noteworthy that tourism and business development is by far the least important topic.

The total number of users was calculated using data from the sample of observed users. The observations were made during four hour periods during the morning and the afternoon. There was no significant difference between morning and afternoon usage of the river. Evening usage/evening hours have been ignored, hence overall user estimates are **conservative**. In addition, it is **conservatively** assumed that usage of the river falls by 50% in May and September. Although there was not a significant difference in usage across the months that data was collected, the observations did not occur during early May nor late September. Finally, it is **conservatively** assumed that there is no recreation use of the river between October and April.]

The estimate of total visits to the lower Farmington River/Salmon Brook during the 2008 season is 124,380 visits per year. The breakdown of visitors by type of activity is listed below.

Estimate of Total Use by Recreation Activity

Activity	Visits	Percent of Total
Bicycling	30,548	24.56%
Walking/Jogging	28,495	22.91%
Boating	15,784	12.69%
Dog Walking	11343	9.12%
Fishing	8035	6.46%
Picnic	6418	5.16%
Swimming	6119	4.92%
Other*	17637	14.18%
Total	124,380	100%

To determine the economic impact of the river, those users coming from more than 25 miles away are considered outside users. Approximately 10% of the river users came from more than 25 miles away. The remaining 90% came from the local area, and this group will be used for the economic significance analysis.

The outside users spent significantly more per person than did the local residents. The average spending per person per visit for these outside users was $24.78. Local residents spent

significantly less per person per visit, spending an average of $6.86. The total economic impact is determined by the following equation:

Total Economic Impact = average spending per person * number of visitors * economic impact multiplier.

The multiplier is affected by a number of different factors including savings rates, economic diversity, and amount of locally produced goods and services. A study of tourism and the arts in Connecticut in 2006 produced estimates of local multipliers between 1.60 and 2.17.

Assuming that 10% of river users are from outside the local economy, there are approximately 15,758 visitors each year. Assuming that they spend $24.78 per person per visit, the economic impact would be between $493,000 and $669,000 per year. The economic significance is a bit larger. The spending of local users on activities related to the river has a total value of between $1,229,000 and $1,666,000 per year.

Summary: Resident Study

Respondents are predominantly white (95.6%), in their mid 50s, about 60/40 female/male, about two thirds have graduated college, about 40% (38.4%) have a household income of less than $60,000, and about another 40% (42.4%) have a household income between $60,000 and $120,000. The average length of time they have lived in the area is 28.53 years; i.e., they moved to the area in early middle age.

The vast majority (84.4%) live in single family homes which they own. They have lived there an average of 22.61 years, long enough for children to have been raised and departed. This is reflected by the relatively small size of the household (average 2.42 people).

As would be expected, most (71.3%) say the Lower Farmington River defines where their home is located; 18% named Salmon Brook. The sample that was surveyed was based on individuals living in close proximity to the river/brook. This is confirmed by findings that show respondents living an average of 2.04 miles or 6.14 minutes away.

The Lower Farmington River/Salmon Brook contributes beauty and definition, and positively affects how one feels about the place they have chosen to live. The river/brook helps define one's sense-of-place and to a slightly lesser extent (though still positively – i.e., well above the scale mid point of 3.0), what they do and how they spend their free time.

Findings indicate that the Lower Farmington River/Salmon Brook area is a relatively popular place for a significant number of residents to recreate -- slightly less than half (44.5%) of the respondents engage in recreational activities in the area more than once per month. However, about one third of respondents indicated that they rarely use the area for recreation (less than once per month). The average response of 3.09 indicates moderate use overall (defined by recreational use once per month).

Walking/Jogging is by far the most popular recreational activity in the area practiced by more people (16.0%) and listed as the most common pastime by about one third of respondents (31.8%). Kayaking is the second most frequently practiced activity (mentioned by 13.4% of respondents) and rated as the second most common activity (by 16.5%). Dog walking, rollerblading and biking are also popular pastimes (practiced by approximately 10% of respondents (11.4-8.2%), though they are listed as less common than picnicking, which is listed as the third most common activity (by 12.9% of respondents), though this activity attracts fewer people overall (7.6%).

Over three quarters of respondents spend 1-2 hours near the river, brook or bordering lands when they visit for recreational purposes. The average length of time is 1.75 hours.

The top five motivations for engaging in recreational activities in the Lower Farmington River/Salmon Brook area (all above 4.0 on a 1 to 5 scale), both in terms of importance and ability to attain are: a) to enjoy the view along the water, b) to be close to nature, c) to relax, d) to get exercise, and e) to experience solitude. Three other motivations are considered more than

moderately important and more than moderately attainable. They are: a) to do something with my family b) to think about my personal values, and c) to learn about the area.

Approximately two thirds of respondents rate the Lower Farmington River/Salmon Brook area above the scale mid point of 3.0 when evaluating the area's recreational opportunities. This reflects their high opinion of the area. The scale mid point reflects an average or normal evaluation. Very few (3.8%) rate recreational opportunities below the scale mid point reflecting negative perceptions.

Over half the respondents (55.2%) travel between the river/brook area and their home on their own steam -- which is good for them as well as the environment. About one third (34.3%) use a motor vehicle to travel this distance. In terms of economic impacts, few respondents (85.6%) use an outfitter to help them with their recreational pursuits. The few that do (14.4%) are apt to use a canoe/kayak rental/transportation outfitter (primarily) or tube rentals. In terms of other economic impacts, slightly more than half of the respondents (54.5%) report spending $5.00 or less in area shops on a typical day to support their recreational activities. Approximately one quarter of respondents (23.8%) spend between $5.00 and $25.00. Though another 16% spend between $20.00 and $50.00, given that the average frequency of engaging in recreational activities in the area is moderate (i.e., once per month; re. part 2 question 1), the overall economic impact of recreation activities appears to also be fairly moderate.

Nearly half (48.4%) of respondents believe that the quality of the Lower Farmington River/Salmon Brook and bordering lands has improved in recent years; a little over one third (36.9%) believe it has stayed the same. Few think it has deteriorated. Crowding is not seen as an issue. Overall, respondents are fairly satisfied with both the condition of the river/brook and the lands bordering them (average assessment 3.83 and 3.53 on 1 to 5 scale, respectively). Only seven potential problems were assessed slightly above the scale midpoint reflecting that they were seen as slightly important (range from 3.45 to 3.05 on 1 to 5 scale). These include (in descending order of importance): a) litter on the banks along the river/brook, b) litter in the river/brook, c) development too near the river/brook, d) traffic noise from nearby roads, e) polluted water, f) erosion of banks along the river/brook, and g) reckless behavior of people on or near the river/brook.

Most respondents feels that a local, regional and state partnership (like the Farmington River Coordinating Committee) that relies primarily on local zoning regulations to minimize harmful activities would be very appropriate for the Lower Farmington River/Salmon Brook area. In addition, there is great support for protecting the area as a National Wild and Scenic River. The primary benefits for doing this include (in descending order of importance): preserving aesthetic beauty, preserving undeveloped open space, improving fish and wildlife habitat, increasing community pride, improving access for persons with disabilities, and increasing public education about the environment (all above 4.0 on a 1 to five scale). It is also noteworthy that tourism and business development is by far the least important topic.

Summary: Business Study

Thirty businesses participated in the survey. Twenty respondents were business owners and ten were business managers. Twenty of these individuals live in the area of the lower Farmington River and Salmon Brook, ten do not. Those who live in the area, have lived there an average of 20.43 years. Those who live outside the area, live an average of 21 miles away. The average age of participants is 46.33 years.

On average, 69% of customers are thought to be local residents, 22% are Connecticut residents that live more than a 30 minute drive away, and 9% are from outside of Connecticut. The businesses surveyed have been operating for an average of 24.6 years and the average tenure of the respondent in the business is 10.1 years. Businesses have an average of 4.5 full time employees and 6.8 part time employees. About one third of the businesses have sales revenue less than $150,000 per year, one third between $150,000 and $300,000, and one third over $300,000 . A little more than half (53%, 16 individuals) have seen their sales increase over the past five years. About one third have found their sales either flat or decreasing. A small number of businesses have not been around long enough to know. The most common reason given for increasing sales is "general economic trends". The most common reason for flat or decreasing sales is "increased competition". Several respondents stated that higher gasoline prices increased the demand for their services as local residents substituted local recreation opportunities for vacations in more distant places.

The overwhelming majority of participants believe that the lower Farmington River (not Salmon Brook) is the water body that best defines the area where their business is located. Nearly all respondents think that the Lower Farmington River/Salmon Brook contributes beauty and helps define the area. For many, it positively affects how one feels about the place they have chosen to operate a business. To a slightly lesser extent (though still quite positively for many) the river/brook affects how they spend their time.

Most participants (63%) feel the quality of the river/brook has increased since they first started doing business in the area. An additional 30% feel the quality of the river/brook has stayed the same. Most participants (about two thirds) are satisfied with the quality of the river/brook and the lands surrounding the river/brook. When asked to elaborate, the most common response was that the river was "very beautiful". Other positive comments included mention of the many recreation opportunities and the perception that the river/brook has become cleaner in recent years. Negative comments addressed the need for the river/brook to be cleaner and the need for more access points for canoeing and kayaking. Several businesses mentioned that they would like to see more tourism development as well as more information about recreational opportunities made available to the public.

Slightly more than half of the businesses are located more than 50 yards from the river. This may be due to local land use regulations that restrict building in floodplains. Overall, respondents feel that the river/brook has a moderate effect on their businesses. However, one third of respondents feel that the river has a large effect on their businesses. These individuals feel the river is important to their business because a) their business is related to the recreational

opportunities associated with the river and/or b) the river attracts tourists which increases the demand for local businesses.

Respondents had relatively few comments about the positive effects of federal, state or local regulations relating to the use of the river/brook or land adjacent to the river/brook. The most common comment was that the Farmington River Greenway was a positive development for businesses in the area. In addition, flood control policies are viewed favorably, as are trout management policies of the Connecticut Department of Environmental Protection. Two businesses complained that water levels are kept too low which is bad for canoeing and kayaking. These respondents suggested that water levels might be kept higher if the hydroelectric project proposed for Collinsville is approved.

Respondents feel that a local, regional and state partnership (like the Farmington River Coordinating Committee) that relies primarily on local zoning regulations to minimize harmful activities would be fairly appropriate and effective for the Lower Farmington River/Salmon Brook area (3.79/3.80 on 1 to 5 scale). In addition, there is great support for protecting the area as a National Wild and Scenic River (4.43 on 1 to 5 scale). The primary benefits for doing this include (in descending order of importance): preserving aesthetic beauty, increasing public education about the environment, and improving fish and wildlife habitat.

Summary: Real Estate Study

This study investigated the effect of proximity to the Farmington River/Salmon Brook on the sales prices of single family homes. A hedonic price model was used based on single family home transactions that occurred in the towns of: Avon, Canton, East Granby, Farmington, Granby, Simsbury and Windsor. There were 700 observations used in the analysis. Each town was represented in the sample in proportion to its population. Data were randomly chosen from sales in these towns between 2004 and 2006. Six property characteristics were used in the model: lot size (in acres), size of home (in square feet), number of bedrooms, number of bathrooms, the year the house was built, and proximity to the Farmington River or Salmon Brook. The expected valence of the coefficient on distance to the river is expected to be negative if home buyers view the river as an amenity; i.e., if buyers view the river as an amenity, it is expected that they would be willing to pay more to be closer to the river.

The regression equation had an adjusted R^2 of 0.766, which is quite high for a housing price equation. Findings show that as lot size, square footage, and number of baths increase, home buyers are willing to pay more. In addition, newer homes tend to sell for higher prices. The coefficient of the proximity variable suggests that home buyers are willing to pay approximately $14,000 to be a mile closer to the Farmington River/Salmon Brook. This suggests that the lower Farmington River and Salmon Brook are an amenity local residents are willing to pay for.

Appendix 1: Recreation Intercept Survey Questionnaire

If you are over age 18, the Farmington River Watershed Association and Central Connecticut State University's Center for Public Policy and Social Research need your help with a survey about recreation in and around the Lower Farmington River and Salmon Brook. The results of this study will help ensure that the future recreational needs of people like you are best met. Your participation is voluntary and your responses to the questionnaire will be strictly anonymous – your name will be disconnected from their responses.

Date: _____

Time: _____

Location of Interview: _____

Sex: _____

Age:_____

Number in Party: _____

Activities engaged: (Check *all* that apply)

___ Canoeing   ___ Tubing   ___ Fly fishing
___ Kayaking   ___ Biking   ___ Baby/child walking
___ Rollerblading   ___ Fishing with lures or bait ___ Dog walking
___ Wildlife observation ___ Hiking
___ Walking/Jogging   ___ Other (Please specify_____)

Circle item listed in question 3 that was primary activity.

Number of miles from home to location of interview: _____ one-way miles

Length of time it took to travel from home to location of interview: _____Time

Your recreational needs can be best served if we better understand your visit and experience to the river and nearby area today. Therefore, we would very much like to send you a follow-up survey to complete at your convenience. Would you be willing to give us your name and address so we can mail you a follow-up survey? Your contact information will be used for no other purpose and will be destroyed when the survey is completed.

NAME: _____

ADDRESS: _____

_____

If we need to contact you directly:

EMAIL: _____

PHONE: _____

Appendix 2: Recreation Survey Questionnaire

Part I. In this section we would like to learn more about your trip to the Lower Farmington River/Salmon Brook area on the day we initially contacted you for this study. Please answer the questions in this section in terms of that visit only.

1. Which water body, the Lower Farmington River or Salmon Brook, do you think best defines the area that you visited the day we contacted you? (check one)
____ Lower Farmington River   ____Salmon Brook   ___Both   ____Neither

2. How did you travel from your home to where you got on the river/brook the day we contacted you? (check *one*)
___ Motor vehicle
___ Bicycle
___ Run, jog, or walk
___ Other (Please specify _____)

3. Was that your first visit to the Lower Farmington River/Salmon Brook area?   ___ No   ___ Yes
(If "Yes," go to question #3)

   a.   If "No," about when was your first visit to this section of the river/brook? _____ Month_____ Year

   b.   Since you *first* visited this section of the river/brook, the <u>quality</u> of your visits here have (Check *one*)
        ___ Improved   ___ Remained the same   ___ Gotten worse

   c.   Since you *first* visited this section of the river/brook, the <u>quantity</u> of your visits here have (Check *one*)
        ___ Increased   ___ Remained the same   ___ Decreased

4. What activities did you engage in during your visit the day we contacted you? (Check *all* that apply)
___ Canoeing	___ Tubing	___ Fly fishing
___ Kayaking	___ Biking	___ Baby/child walking
___ Rollerblading	___ Fishing with lures or bait	___ Dog walking
___ Wildlife observation	___ Hiking	___ Picnicking
___ Walking/Jogging	___ Other (Please specify _____)	

5. Please circle the item listed in question 3 that was your primary activity.

6. Approximately how long did you stay near the river/brook the day we contacted you? _____ Hours

7. Did you use a commercial outfitter during your visit the day we contacted you? ___ No ___ Yes
   If "Yes," what kind of outfitter? (check all that apply)
   ___ Fishing ___ Canoe/Kayak rental or transport service ___ Tube rental ___ Bike rental

8. Which of the following best describes the group you were traveling with during your visit the day we contacted you? (Please check *one*)
___ Alone	___ Organized group (club or other organization)
___ Family	___ Family and Friends
___ Friends	___ Other (Please specify _____)

9. For your trip the day we contacted you, which of the following best describes how you handled your expenses from the time you left home until you returned home? (Check *one*)
   ___ I paid all of my own expenses and no one else's
   ___ I paid all expenses of the group
   If so, how many people in the group? _____ # of people

   ___ My group shared some or all expenses (members made purchases for one another).
   If so, how many people in the group shared expenses? _____ # of people

   ___ Someone else paid all my expenses (If so, go to Question #11)
   ___ Myself or my group had no expenses associated with this trip at all (If so, go to Question #11)

10. In the spaces below, please list the estimated expenditures made as a result of your entire trip to the Lower Farmington River/Salmon Brook. If you paid all of your own expenses and no one else's, report only the amounts *you* actually spent in each category. If your group shared some or all expenses (members made some purchases for one another), please report your estimates of the amounts spent *by the entire group* in each category. Please include all the expenses associated with that particular trip from your preparations before leaving home until your return home. Please indicate where the expenditures took place by recording the amounts in the appropriate columns. Refer to the map on the first page to help determine what is included within the ten towns comprising the Lower Farmington River/Salmon Brook area.

	ESTIMATED AMOUNT SPENT	
	Within the ten towns' boundaries	Outside the ten towns' boundaries
a. Motel, hotel, cabin or B&B	_____	_____
b. Camping fees	_____	_____
c. Restaurants & bars	_____	_____
d. Groceries, take-out food & drinks	_____	_____
e. Gas & oil	_____	_____
f. Other vehicle expenses	_____	_____
g. Local transportation	_____	_____
h. Equipment rental and leasing	_____	_____
i. Admissions & fees	_____	_____
j. Clothing	_____	_____
k. Sporting goods	_____	_____
l. Souvenirs & other expenses	_____	_____

11. Think back to the recreation trips you have taken to the Lower Farmington River/Salmon Brook area in the past 12 months where the river/brook and its bordering land were your primary destination. Considering the types of expenses included in the previous question (from your preparations before leaving home until your return home), please estimate the *average* cost per trip of these trips? $_____Average cost per trip.
How many people are you generally paying for with this amount of money? _____ # of people.

12. Suppose that before you visited the day we contacted you for this study, you found out the Lower Farmington River/Salmon Brook area was not available for some reason. Instead of going there, what would you have probably done instead?
     What would you have done instead?_____
     Where would you have done this? _____

Part II. In this section we would like to know about your experience on the day we initially contacted you near the river/brook for this study. Please answer the questions in this section in terms of that visit only.

13. Please *circle the number* that best describes how you would rate your visit to the Lower Farmington River/Salmon Brook the day we contacted you?

Worst Possible Trip   Average/Normal   Best Possible Trip
    1   2   3   4   5   6   7

14. Please *circle the number* that best describes the conditions you found on the river/brook during your visit the day we contacted you.

Not crowded   Moderately crowded   Extremely crowded
1   2   3   4   5   6   7

15. How did your encounters with people affect your enjoyment at the river/brook the day we contacted you? (Circle *one* number)

People greatly reduced my enjoyment			People had no effect on my enjoyment		People greatly increased my enjoyment	
1	2	3	4	5	6	7

16. There are many potential reasons why someone might visit the Lower Farmington River/Salmon Brook area. We would like to know what motivated you to visit on the day we contacted you. Please indicate (1) how important each of the experiences listed below was to you as a reason to visit and (2) the extent to which you fulfilled each of these experiences during your visit. Please circle *one* number under IMPORTANCE and *one* number under FULLFILLED for each experience.

		IMPORTANCE							FULLFILLED						
		Not at all Important					Extremely Important		Not at all Attained					Highly Attained	
a.	To take risks	1	2	3	4	5	6	7	1	2	3	4	5	6	7
b.	To test my skills/endurance	1	2	3	4	5	6	7	1	2	3	4	5	6	7
c.	To use my equipment	1	2	3	4	5	6	7	1	2	3	4	5	6	7
d.	To show off my skills/endurance	1	2	3	4	5	6	7	1	2	3	4	5	6	7
e.	To share my skills and knowledge	1	2	3	4	5	6	7	1	2	3	4	5	6	7
f.	To do something with my family	1	2	3	4	5	6	7	1	2	3	4	5	6	7
g.	To spend time with my group	1	2	3	4	5	6	7	1	2	3	4	5	6	7
h.	To meet new people	1	2	3	4	5	6	7	1	2	3	4	5	6	7
i.	To learn about the area	1	2	3	4	5	6	7	1	2	3	4	5	6	7
j.	To enjoy the view along the water	1	2	3	4	5	6	7	1	2	3	4	5	6	7
k.	To think about my personal values	1	2	3	4	5	6	7	1	2	3	4	5	6	7
l.	To be close to nature	1	2	3	4	5	6	7	1	2	3	4	5	6	7
m.	To get exercise	1	2	3	4	5	6	7	1	2	3	4	5	6	7
n.	To relax	1	2	3	4	5	6	7	1	2	3	4	5	6	7
o.	To experience solitude	1	2	3	4	5	6	7	1	2	3	4	5	6	7
p.	To exercise my pet	1	2	3	4	5	6	7	1	2	3	4	5	6	7
q.	To enjoy being IN the water	1	2	3	4	5	6	7	1	2	3	4	5	6	7
r.	To be creative by doing something such as sketching, painting, taking pictures, etc.	1	2	3	4	5	6	7	1	2	3	4	5	6	7

Part III. In this section we would like to know your opinions about Lower Farmington River/Salmon Brook resources and management

17. Overall, how satisfied are you with the *river/brook itself* in the Lower Farmington River/Salmon River area? (Circle *one* number)

Not satisfied		Moderately satisfied		Very satisfied
1	2	3	4	5

18. Overall, how satisfied are you with the *lands bordering the Lower Farmington Rive/Salmon Brook*? (Circle *one* number)

Not satisfied		Moderately satisfied		Very satisfied
1	2	3	4	5

19. To what extent do you feel the following are problems in the Lower Farmington River/Salmon Brook area?
(Circle *one* number for each item)

		Unimportant		Moderately important				Very important
a.	Too crowded	1	2	3	4	5	6	7
b.	Conflicts between different types of visitors	1	2	3	4	5	6	7
c.	Reckless behavior of people on or near the river/brook	1	2	3	4	5	6	7
d.	Too few police/rangers/management staff on the river/brook	1	2	3	4	5	6	7
e.	Noisy/rowdy people	1	2	3	4	5	6	7
f.	Evidence of human waste	1	2	3	4	5	6	7
g.	Development too near the river/brook	1	2	3	4	5	6	7
h.	Traffic noise from nearby roads	1	2	3	4	5	6	7
i.	Lack of public transportation between access points	1	2	3	4	5	6	7
j.	Not enough restrooms along the river/brook	1	2	3	4	5	6	7
k.	Too many rules and regulations	1	2	3	4	5	6	7
l.	Litter in the river/brook	1	2	3	4	5	6	7
m.	Muddy water	1	2	3	4	5	6	7
n.	Erosion of banks along river/brook	1	2	3	4	5	6	7
o.	Trampled vegetation along the banks of the river/brook	1	2	3	4	5	6	7
p.	Logging of forest visible from river/brook	1	2	3	4	5	6	7
q.	Polluted water	1	2	3	4	5	6	7
r.	Litter along the banks of the river/brook	1	2	3	4	5	6	7
s.	Feelings of being unsafe/insecure	1	2	3	4	5	6	7
t.	Lack of direction signs	1	2	3	4	5	6	7
u.	Not enough access points	1	2	3	4	5	6	7
v.	Not enough parking areas	1	2	3	4	5	6	7
w.	Lack of information needed to plan visits	1	2	3	4	5	6	7
x.	Lack of services (food, drink, equipment rental, etc.)	1	2	3	4	5	6	7
y.	Too developed	1	2	3	4	5	6	7
z.	Lack of knowledge of river, brook or trail etiquette	1	2	3	4	5	6	7

20. Please circle *one* number for each of the following statements that best describes your feelings about the Lower Farmington River/Salmon Brook.

	Strongly disagree		Neutral		Strongly agree
a. The river/brook contributes a lot to my feelings about this area	1	2	3	4	5
b. I enjoy doing the type of things I do here because of the river/brook	1	2	3	4	5
c. This river/brook contributes a lot to the beauty of the area	1	2	3	4	5
d. The river/brook defines the area	1	2	3	4	5
e. This river/brook contributes a lot to how people spend their free time in the area	1	2	3	4	5

In 1994, the 14-mile segment of the <u>Upper</u> Farmington River from the Colebrook Dam in Hartland to Satan's Kingdom in Canton was designated as "Wild and Scenic" under the National Wild and Scenic Rivers Act of 1968. The Wild and Scenic designation of this segment of the Farmington River protects it from federally funded or licensed water resource projects that would harm its natural resources or free-flowing character. In the case of the Upper Farmington River local, state and national organizations and government agencies are working to preserve the river.

Because much of the land that the <u>Upper</u> Farmington River flows through is privately owned, activities that affect the upper river are monitored and guided by the Farmington River Coordinating Committee (FRCC). The committee is made up of representatives of the bordering towns, state of Connecticut, Metropolitan District Commission, and Farmington River Watershed Association.

21. How *appropriate* do you feel a local, regional and state partnership like the Farmington River Coordinating Committee (in the upper river) would be for managing the <u>**Lower**</u> **Farmington River and Salmon Brook** and the lands along these two water bodies?

Not appropriate   Moderately appropriate   Very appropriate

    1   2   3   4   5

No opinion _____

The Farmington River Coordinating Committee relies primarily on local zoning regulations to minimize activities that could be harmful to the Upper Farmington River and the lands within 100 feet of it. These include activities such as constructing new buildings, installing septic systems, excavating sand and gravel, etc.

22. How *effective* do you feel similar mechanisms (i.e., local zoning regulations) would be for minimizing activities that could be harmful to the <u>**Lower**</u> **Farmington River and Salmon Brook** and the lands within 100 feet of these two water bodies?

Not effective   Moderately effective   Very effective

    1   2   3   4   5

No opinion _____

23. Here is a list of public benefits that a Wild and Scenic designation for the <u>**Lower**</u> **Farmington River/Salmon Brook** might have for surrounding communities. Please circle the number that indicates how important you feel these benefits would be.

		Not important	Moderately important			Very important
a.	Preserve undeveloped open space	1	2	3	4	5
b.	Preserve aesthetic beauty	1	2	3	4	5
c.	Increase community pride	1	2	3	4	5
d.	Tourism and business development	1	2	3	4	5
e.	Promote health and fitness	1	2	3	4	5
f.	Improve access for persons with disabilities	1	2	3	4	5
g.	Increase public recreation opportunities	1	2	3	4	5
h.	Increase public education about the environment	1	2	3	4	5
i.	Improve fish and wildlife habitat	1	2	3	4	5
j.	Attract funding for local environmental projects	1	2	3	4	5

24. How important is it to you that the <u>**Lower**</u> **Farmington River/Salmon Brook** also be protected as a National Wild and Scenic River? (Please circle *one* number)

Not important   Moderately important   Extremely important

    1   2   3   4   5

No opinion _____

Part IV. In this section we are interested in visitor information that will help us to better understand the characteristics of the users of the Lower Farmington River/Salmon Brook. All answers are confidential and will be reported only as overall summaries.

25. What is your gender? (Check *one*)
___ Female   ___ Male

26. To what race or ethnic group do you belong? (Check *one*)
___ American Indian or Alaskan Native
___ Asian or Pacific Islander
___ Black, not of Hispanic origin
___ Hispanic
___ White, not of Hispanic origin
___ Other (Please specify _____)

27. What is the highest educational level you have completed? (Check *one*)
___ 8th grade or less
___ Some high school
___ High school diploma or GED
___ Business school or trade school
___ Some college
___ College graduate
___ Some graduate school
___ Master's degree
___ Doctoral or professional degree

28. Which of the following best describes your total household income in 2007?
___ Under $20,000   ___ $20,000 to $39,999   ___ $40,000 to $59,999
___ $60,000 to $79,999   ___ $80,000 to $99,999   ___ $100,000 to $119,999
___ $120,000 to $139,999   ___ $140,000 to $159,999   ___ $160,000 to $179,999
___ $180,000 to $199,999   ___ $200,000 or more

29. How many people live in your home? ____
How many are male?____
How many are female?____
(please fill in the blanks)

30. What is your age? _____
What is the age of the others in your household ____, _____, _____, _____, _____, _____, _____, _____ .
(please fill in all blanks necessary)

31. How long does it usually take you to get from your home to the Lower Farmington River/Salmon Brook area?
____ minutes (please fill in the blank)
32. How many miles is it from your from your home to the Lower Farmington River/Salmon Brook area?
____ miles (please fill in the blank)

Appendix 3 - Resident Survey Questionnaire

I. To begin, we would like to understand how the Lower Farmington River, Salmon Brook and the lands immediately bordering it affect your feelings about where you live, your "sense of place"…

1. Please circle *one* number for each of the following statements that best describes your feelings about the Lower Farmington River/Salmon Brook.

	Strongly disagree		Neutral		Strongly agree
a. The river/brook contributes a lot to my feelings about this area	1	2	3	4	5
b. I enjoy doing the type of things I do here because of the river/brook	1	2	3	4	5
c. This river/brook contributes a lot to the beauty of the area	1	2	3	4	5
d. The river/brook defines the area	1	2	3	4	5
e. This river/brook contributes a lot to how people spend their free time in the area	1	2	3	4	5

II. Next, we would like to understand something about your recreational pursuits in and around the Lower Farmington River/Salmon Brook.

2. Using the following scale, please rate the degree that you engage in outdoor recreational activities during the year in the Lower Farmington River/Salmon Brook area. Please see the list of activities in question 3 to get an idea of what is meant by "outdoor recreational activities". (circle one number)

Not at all/rarely (once per year or less)		Moderate amount (one per month)		Very large amount (daily)
1	2	3	4	5

If you answered Question 2 with a 2 or greater please proceed. If you answered with a 1, please skip to Section III, Question 11.

3. What outdoor activities do you do in the Lower Farmington River/Salmon Brook area ? (check all that apply)

___ Canoeing	___ Tubing	___ Fly fishing
___ Kayaking	___ Biking	___ Baby/child walking
___ Rollerblading	___ Fishing with lures or bait	___ Dog walking
___ Wildlife observation	___ Hiking	___ Picnicking
___ Walking/Jogging	___ Other (Please specify _____)	

4. Of the activities listed in question 3 above, please circle the one activity that you do most.

5. How do you usually travel to/from the river/brook area and your home? (check one response)
   ___ Motor vehicle
   ___ Bicycle
   ___ Run, jog, or walk
   ___ Other (Please specify _____)

6. On average, when you go to the river, brook or the lands bordering them for recreational purposes, approximately how long do you usually stay near the river/brook? _____ Hours

7. Please *circle the number* that best describes how you would rate your time in the Lower Farmington River/Salmon Brook area for recreation?

Worst Possible Trip		Average/Normal		Best Possible Trip
1	2	3	4	5

8. Do you ever use a commercial outfitter when you go to the river/brook? ___ No ___ Yes
    If "Yes," what kind of outfitter? (check all that apply)
    ___ Fishing ___ Canoe/Kayak rental or transport service ___ Tube rental ___ Bike rental

9. Think back to the recreation activities you have engaged in within the Lower Farmington River/Salmon Brook area in the past 12 months. Considering all the different types of expenses you might incur per day while engaging in these activities (from your preparations before leaving home until your return home), what was the *average* cost per day for these activities? $_____Average cost per day (including restaurants, groceries, take-out food/drinks, gas, equipment rental, admission fees, clothing, sporting goods, etc.)

How many people are you generally paying for with this amount of money? _____

10. There are many potential reasons why someone might spend time at the Lower Farmington River/Salmon Brook. We would like to know what your motivations might be. Please indicate (1) how important each experience would be to you and (2) the extent to which you think you could realistically attain these experiences in the area. Please circle *one* number under IMPORTANCE and *one* number under ATTAINMENT for each experience.

	IMPORTANCE					ATTAINMENT				
	Not at all Important				Extremely Important	Not at all Attained				Highly Attained
a. To take risks	1	2	3	4	5	1	2	3	4	5
b. To test my skills/endurance	1	2	3	4	5	1	2	3	4	5
c. To use my equipment	1	2	3	4	5	1	2	3	4	5
d. To show off my skills/endurance	1	2	3	4	5	1	2	3	4	5
e. To share my skills and knowledge	1	2	3	4	5	1	2	3	4	5
f. To do something with my family	1	2	3	4	5	1	2	3	4	5
g. To be with members of a group	1	2	3	4	5	1	2	3	4	5
h. To meet new people	1	2	3	4	5	1	2	3	4	5
i. To learn about the area	1	2	3	4	5	1	2	3	4	5
j. To enjoy the view along the water	1	2	3	4	5	1	2	3	4	5
k. To think about my personal values	1	2	3	4	5	1	2	3	4	5
l. To be close to nature	1	2	3	4	5	1	2	3	4	5
m. To get exercise	1	2	3	4	5	1	2	3	4	5
n. To relax	1	2	3	4	5	1	2	3	4	5
o. To experience solitude	1	2	3	4	5	1	2	3	4	5
p. To exercise my pet	1	2	3	4	5	1	2	3	4	5
q. To enjoy being IN the water	1	2	3	4	5	1	2	3	4	5
r. To be creative by doing something such as sketching, painting, taking pictures, etc.	1	2	3	4	5	1	2	3	4	5

III. Next we would like to assess your opinions about the conditions of the Lower Farmington River/Salmon Brook and the lands immediately bordering it .

11. Since you first moved *to* this area, the overall quality of the area has (Check *one*)
___ Improved   ___ Remained the same   ___ Gotten worse

12. On the following scale, please *circle the number* that best describes the conditions you usually find on or near the river/brook.

Not crowded		Moderately crowded		Extremely crowded
1	2	3	4	5

13. In general, how do your encounters with people affect your enjoyment at or near the river/brook (Circle *one* number)

People greatly reduce my enjoyment		People have no effect on my enjoyment		People greatly increase my enjoyment
1	2	3	4	5

14. Overall, how satisfied are you with the *river/brook itself* in the Lower Farmington River/Salmon Brook area? (Circle *one* number)

Not satisfied		Moderately satisfied		Very satisfied
1	2	3	4	5

15. Overall, how satisfied are you with the *lands bordering the Lower Farmington River/Salmon Brook*? (Circle *one* number)

Not satisfied		Moderately satisfied		Very satisfied
1	2	3	4	5

16. To what extent do you feel the following are problems in the Lower Farmington River/Salmon Brook area? (Circle *one* number for each item)

		Unimportant	Moderately important			Very important
a.	Too crowded	1	2	3	4	5
b.	Conflicts between different types of visitors	1	2	3	4	5
c.	Reckless behavior of people on or near the river/brook	1	2	3	4	5
d.	Too few police/rangers/management staff on the river/brook	1	2	3	4	5
e.	Noisy/rowdy people	1	2	3	4	5
f.	Evidence of human waste	1	2	3	4	5
g.	Development too near the river/brook	1	2	3	4	5
h.	Traffic noise from nearby roads	1	2	3	4	5
i.	Lack of public transportation between access points	1	2	3	4	5
j.	Not enough restrooms along the river/brook	1	2	3	4	5
k.	Too many rules and regulations	1	2	3	4	5
l.	Litter in the river/brook	1	2	3	4	5
m.	Muddy water	1	2	3	4	5
n.	Erosion of banks along the river/brook	1	2	3	4	5
o.	Trampled vegetation along the banks of the river/brook	1	2	3	4	5

		Unimportant	Moderately important			Very important
p.	Logging of forest visible from river/brook	1	2	3	4	5
q.	Polluted water	1	2	3	4	5
r.	Litter on the banks along the river/brook	1	2	3	4	5
s.	Feelings of being unsafe/insecure	1	2	3	4	5
t.	Lack of direction signs	1	2	3	4	5
u.	Not enough access points	1	2	3	4	5
v.	Not enough parking areas	1	2	3	4	5
w.	Lack of information needed to plan visits	1	2	3	4	5
x.	Lack of services (food, drink, equipment rental, etc.)	1	2	3	4	5
y.	Too developed	1	2	3	4	5
z.	Lack of knowledge of river, brook or trail etiquette	1	2	3	4	5

In 1994, the 14-mile segment of the <u>Upper</u> Farmington River from the Colebrook Dam in Hartland to Satan's Kingdom in Canton was designated as "Wild and Scenic" under the National Wild and Scenic Rivers Act of 1968. The Wild and Scenic designation of this segment of the Farmington River protects it from federally funded or licensed water resource projects that would harm its natural resources or free-flowing character. In the case of the Upper Farmington River local, state and national organizations and government agencies are working to preserve the river.

Because much of the land that the <u>Upper</u> Farmington River flows through is privately owned, activities that affect the upper river are monitored and guided by the Farmington River Coordinating Committee (FRCC). The committee is made up of representatives of the bordering towns, state of Connecticut, Metropolitan District Commission, and Farmington River Watershed Association.

17. How *appropriate* do you feel a local, regional and state partnership like the Farmington River Coordinating Committee (in the upper river) would be for managing the **<u>Lower</u> Farmington River and Salmon Brook** and the lands along these two water bodies?

Not appropriate		Moderately appropriate		Very appropriate
1	2	3	4	5

No opinion ____

The Farmington River Coordinating Committee relies primarily on local zoning regulations to minimize activities that could be harmful to the Upper Farmington River and the lands within 100 feet of it. These include activities such as constructing new buildings, installing septic systems, excavating sand and gravel, etc.

18. How *effective* do you feel similar mechanisms (i.e., local zoning regulations) would be for minimizing activities that could be harmful to the **<u>Lower</u> Farmington River and Salmon Brook** and the lands within 100 feet of these two water bodies?

Not effective		Moderately effective		Very effective
1	2	3	4	5

No opinion ____

19. Here is a list of public benefits that a Wild and Scenic designation for the **Lower Farmington River/Salmon Brook** might have for surrounding communities. Please circle the number that indicates how important you feel these benefits would be.

		Not important	Moderately important			Very important
a.	Preserve undeveloped open space	1	2	3	4	5
b.	Preserve aesthetic beauty	1	2	3	4	5
c.	Increase community pride	1	2	3	4	5
d.	Tourism and business development	1	2	3	4	5
e.	Promote health and fitness	1	2	3	4	5
f.	Improve access for persons with disabilities	1	2	3	4	5
g.	Increase public recreation opportunities	1	2	3	4	5
h.	Increase public education about the environment	1	2	3	4	5
i.	Improve fish and wildlife habitat	1	2	3	4	5
j.	Attract funding for local environmental projects	1	2	3	4	5

20. How important is it to you that the **Lower Farmington River/Salmon Brook** also be protected as a National Wild and Scenic River? (Please circle *one* number)

Not important		Moderately important		Extremely important
1	2	3	4	5

No opinion _____

V. In this final section we are interested in information that will help us to better understand the characteristics of the users of the Lower Farmington River. All answers are confidential and will be reported only as overall summaries.

21. Which water body, the Lower Farmington River or Salmon Brook, do you think best defines the area where your home is located? (check one)
____ Lower Farmington River   ____Salmon Brook   ___Both   ____Neither

22. How long have you lived in the Lower Farmington River area? ____ years (please fill in the blank)

23. How long have you lived in your present home? ____ years (please fill in the blank)

24. Concerning your home, do you own____ , rent____ . (please check one response)

25. Concerning your home, is it an apartment ____, condominium____, or single family home____
(please check one response)

26. How long does it usually take you to get from your home to the Lower Farmington River/Salmon Brook area?
____ minutes (please fill in the blank)

27. How many miles is it from your from your home to the Lower Farmington River/Salmon Brook area?
____ miles (please fill in the blank)

28. What is your gender? (Check *one*)
___ Female   ___ Male

29. To what race or ethnic group do you belong? (Check *one*)
___ American Indian or Alaskan Native
___ Asian or Pacific Islander
___ Black, not of Hispanic origin
___ Hispanic
___ White, not of Hispanic origin
___ Other (Please specify _____)

30. What is the highest educational level you have completed? (Check *one*)
___ 8th grade or less
___ Some high school
___ High school diploma or GED
___ Business school or trade school
___ Some college
___ College graduate
___ Some graduate school
___ Master's degree
___Doctoral or professional degree

31. Which of the following best describes your total household income in 2007?
___ Under $20,000   ___ $20,000 to $39,999   ___ $40,000 to $59,999
___ $60,000 to $79,999   ___ $80,000 to $99,999   ___ $100,000 to $119,999
___ $120,000 to $139,999   ___ $140,000 to $159,999   ___ $160,000 to $179,999
___ $180,000 to $199,999   ___ $200,000 or more

32. How many people live in your home? ____
How many are male?____
How many are female?____
(please fill in the blanks)

33. What is your age? _____
What is the age of the others in your household ____, _____, _____, _____, _____, _____, _____, _____ .
(please fill in all blanks necessary)

Appendix 4: Business Survey Questionnaire

1. Date: _____

2. Time begin:_____

3. Time end: _____

4. Name of Business: _____

5. Type of Business: _____

6. Address of Business: _____

_____

7. Name of person interviewed: _____

8. Phone number of person interviewed:_____

First I would like to collect some basic information about you.

9. Position (w/in the business): _____

10. Sex: _____

11. Age:_____ (check category that applies)
18-21___, 21-25___, 26-30___, 31-35___, 36-40___, 41-45___, 46-50___, 51-55___, 56-60___, 61-65___,
66-70___, 71-75___, 76-80___, 81-85___, 85-90___, over 90___.

12. Do you live in the Lower Farmington River/Salmon Brook area? Yes____, No____
(*refer to map of area*)

13. If you do live in the area, how long have you lived here? _____years

14. If you do not live in the area, how far away do you live? _____miles.

Next I would like to collect some general information about your business.

15. From what product or service does your business derive the major part of its income? (later
code responses into categories - e.g., restaurants, canoe/kayak/boat rentals, outfitters, convenience store)

_____

16. What percentage of your customers do you estimate…

(*note: read all three categories before noting responses - inform respondents that answers to the three categories must sum to 100%*)

        a. …are local residents (live within a 30 minute drive):   _____ %

        b. … from Connecticut, but live more than a 30 minute drive away: _____ %

        c. ….from outside Connecticut: _____ %

17. How long has this establishment been in business? _____

18. How long have you been working at this establishment? _____

19. How many full and part time employees do you currently have:

        Full time: _____.   Part time: _____.

20. How would you characterize the size of your business based on sales revenue?
(check one category)

        Very small (less that $50,000/year) _____
        Small (between $50,000/year and $150,000/year) _____
        Medium (between $150,000/year and $300,000/year) _____
        Large (between $300,000/year and $500,000/year) _____
        Very large (over $500,000) _____

21. Thinking back over the past five years, has your sales/revenue been expanding, staying the same, or decreasing: _____.

22. To what do you attribute this change (if any): later code responses into categories (e.g., general economic trends, interest in river-based activities, etc.)

_____

_____

_____

_____.

Now we would like to understand how the Lower Farmington River, Salmon Brook and the lands immediately bordering it affect how you value the area you operate your business in.

23. Which water body, the Lower Farmington River or Salmon Brook, do you think best defines the area where your business is located? (check one)

____ Lower Farmington River   ____Salmon Brook   ___Both   ____Neither

24. On a 1 to 5 scale, 1 = strongly disagree, 2 = disagree, 3 = neutral, 4= agree, 5 = strongly agree, please indicate your feelings regarding each of the following statements about the Lower Farmington River/Salmon Brook.

	Strongly disagree		Neutral		Strongly agree
a. The river/brook contributes a lot to my feelings about this area	1	2	3	4	5
b. I enjoy doing the type of things I do here because of the river/brook	1	2	3	4	5
c. This river/brook contributes a lot to the beauty of the area	1	2	3	4	5
d. The river/brook defines the area	1	2	3	4	5
e. This river/brook contributes a lot to how people spend their free time in the area	1	2	3	4	5

25. Since you first starting doing business in this area, the overall quality of the area has (Check *one*)
___ Improved   ___ Remained the same   ___ Gotten worse

26. Overall, on a 1 to 5 scale, 1 = not satisfied, 2 = slightly satisfied, 3 = moderately satisfied, 4 = very satisfied, 5 = extremely satisfied, how satisfied are you with the *river/brook itself* in the Lower Farmington River/Salmon Brook area? (Circle *one* number)

Not satisfied   Moderately satisfied   Very satisfied
1   2   3   4   5

27. Please elaborate on your response to Questions 26.

_____

_____

_____

_____

28. Overall, on a 1 to 5 scale, 1 = not satisfied, 2 = slightly satisfied, 3 = moderately satisfied, 4 = very satisfied, 5 = extremely satisfied, how satisfied are you with the *lands bordering the Lower Farmington River/Salmon Brook*? (Circle *one* number)

Not satisfied   Moderately satisfied   Very satisfied
1   2   3   4   5

29. Please explain your responses to Questions 28.

_____

_____

_____

_____

Now I would like to ask you about the effects that you think the Lower Farmington River and/or Salmon Brook has on your business

30. What is the proximity of the river/brook to your business? (check one)
___business located on river/brook
___business located within 50 yards of river/brook
___business located more then 50 yards from river/brook

31. On a 1 to 5 scale, 1 = very little effect, 2 = little effect, 3 = moderate effect, 4 = large effect, 5 = very large effect, to what degree do you think proximity to the Farmington River or Salmon Brook affects your business? _____ (fill-in)

32. Why do you think this is? (later code responses into categories (e.g., proximity to the river, river required for business, people prefer business location to other similar businesses)

_____

_____

_____

_____

Finally, we would like to ask you about your feeling concerning public polices that might help determine recreation, business development, and land use in the area in the future.

33. Are there any federal, state or local regulations relating to the use of the river/brook or land adjacent to the river/brook that directly affect your business in a <u>positive</u> way? Please explain:

_____

_____

_____

_____

34. Are there any federal, state or local regulations relating to the use of the river/brook or land adjacent to the river/brook that directly affect your business in a <u>negative</u> way? Please explain:

_____

_____

_____

_____

In 1994, the 14-mile segment of the <u>Upper</u> Farmington River from Hartland (Colebrook Dam) to Canton (Satan's Kingdom) was designated as "Wild and Scenic" under the National Wild and Scenic Rivers Act of 1968. The Wild and Scenic designation of this segment of the Farmington River protects it from federally funded or licensed water resource projects that would harm its natural resources or free-flowing character. In the case of the Upper Farmington River local, state and national organizations and government agencies are working as partners to protect the river.

Because much of the land that the <u>Upper</u> Farmington River flows through is privately owned, activities that affect the upper river are monitored and guided by an advisory committee. This committee, the Farmington River Coordinating Committee (FRCC), is made up of representatives of the bordering towns, state of Connecticut, Metropolitan District Commission, National Park Service and Farmington River Watershed Association.

35. On a 1 to 5 scale, 1 = not appropriate, 2 = slightly appropriate, 3 = moderately appropriate, 4 = very appropriate, 5 = extremely appropriate, how *appropriate* do you feel a local, regional and state partnership like the Farmington River Coordinating Committee (in the upper river) would be for managing the **Lower Farmington River and Salmon Brook** and the lands along these two water bodies?

Not appropriate   Moderately appropriate   Very appropriate

1   2   3   4   5

No opinion ____

The Farmington River Coordinating Committee relies primarily on local regulations to minimize activities that could be harmful to the Upper Farmington River and the lands within 100 feet of it. These include activities such as constructing new buildings, installing septic systems, excavating sand and gravel, etc.

36. On a 1 to 5 scale, 1 = not effective, 2 = slightly effective, 3 = moderately effective, 4 = very effective, 5 = extremely effective, how *effective* do you feel similar mechanisms (i.e., local zoning regulations) would be for minimizing activities that could be harmful to the **Lower Farmington River and Salmon Brook** and the lands within 100 feet of these two water bodies?

Not effective   Moderately effective   Very effective

1   2   3   4   5

No opinion ____

37. Here is a list of public benefits that a Wild and Scenic designation for the **Lower Farmington River/Salmon Brook** might have for surrounding communities. On a 1 to 5 scale, 1 = not important, 2 = slightly important, 3 = moderately important, 4 = very important, 5 = extremely important, please indicate how important you feel these benefits would be.

a. Preserve undeveloped open space	1	2	3	4	5
b. Preserve aesthetic beauty	1	2	3	4	5
c. Increase community pride	1	2	3	4	5
d. Tourism and business development	1	2	3	4	5
e. Promote health and fitness	1	2	3	4	5
f. Improve access for persons with disabilities	1	2	3	4	5
g. Increase public recreation opportunities	1	2	3	4	5
h. Increase public education about the environment	1	2	3	4	5
i. Improve fish and wildlife habitat	1	2	3	4	5
j. Attract funding for local environmental projects	1	2	3	4	5

38. On a 1 to 5 scale, 1 = very unimportant, 2 = unimportant, 3 = neutral, 4 = important, 5 = very important, how important is it to you that the Lower Farmington River/Salmon Brook also be protected as a National Wild and Scenic River? (Please circle *one* number)

Not   Moderately   Very

Important   Important   Important

1   2   3   4   5

No opinion ____

39. In what ways do you believe such a designation would affect your business?

_____

_____

_____

That ends the survey. I wish to thank you very much for your cooperation. As I stated in the beginning, the results of this study will help determine recreation, business development, and land use policies in this area in the future. Therefore your input has been helpful and valuable. It is important that we hear from the various stakeholders. Thank you again.

Appendix 5: Business Survey Participants

Business	Town	Business Category
Max a Mia	Avon	Restaurant
Hillside Motel	Canton	Lodging
Benidorm Bikes	Canton	Recreation Related
Country Sports	Canton	Recreation Related
Center Spirit Shoppe	Collinsville	Retail
101 Gallery	Collinsville	Retail
Collinsville Canoe	Collinsville	Recreation Related
Lasalle Market and Deli	Collinsville	Restaurant
Huck Finn Adventures	Collinsville	Recreation Related
Riverside Nursery	Collinsville	Agricultural/Gardening
Crown and Hammer	Collinsville	Restaurant
Carol and Company	Collinsville	Retail
Mathein Silver Works	Collinsville	Wildlife Photography
JW Florist	Farmington	Retail
Farmington Frame Co	Farmington	Retail
Milrace Bookshop	Farmington	Retail
Grist Mill	Farmington	Restaurant
Truman Gillet House	Granby	Lodging
Main Stream Canoe*	New Hartford	Recreation Related
Tulmeadow Farms	Simsbury	Agricultural/Gardening
Touch of Class Consignment	Simsbury	Retail
Battestons Cleaners	Simsbury	Services
Elisabeth's Restaurant	Simsbury	Restaurant
Awakenings Natural Healing	Simsbury	Retail
Huggs & Kisses Candy Store	Simsbury	Restaurant
Bicycle Cellar	Simsbury	Recreation Related
Warner Nursery	Simsbury	Agricultural/Gardening
Fine Details	Simsbury	Services
Simsbury Bottle Shop	Simsbury	Retail
Italian Corner Restaurant	Windsor	Restaurant

* This firm does business on the lower Farmington River.