Application for project funding by the **Gulf of Maine Council on the Marine Environment/NOAA Habitat Restoration Partnership** - November 2004

Appendix A
Project Scope

Organizations: Maine Department of Inland Fisheries and Wildlife

Project Name and Location: A Geomorphic and Biological Survey of Grand Lake Stream, Maine for the Identification and Prioritization of Diadromous Fisheries Habitat Enhancements

Project Contact Name and Title: Merry Gallagher, Research Fishery Biologist

Address: MDIFW, Fisheries Research Section, 650 State St., Bangor ME 04401

Phone: (207) 941-4381 **Fax:** (207) 941-4443 **Email:** Merry.Gallagher@maine.gov

Project Type: Riverine Restoration and Diadromous Fish Restoration

Project Objective: The Survey and Restoration of Grand Lake Stream project has 3 primary objectives:

1) Determine where and how channel instabilities and physical habitat impairments on Grand Lake Stream are potentially limiting diadromous fish populations
2) Identify and design restoration solutions for 2 sites where improved channel stability will most significantly enhance diadromous fish populations
3) Collect base line biological and physical monitoring data of the 2 identified restoration sites for later comparison with post-restoration monitoring

The objectives above will be achieved in the project's first year with additional funding to be sought in the future for actual implementation of the 2 restoration designs to be developed as part of this initial project**.**

Project Description:

Historically, the diadromous fishery resources of Grand Lake Stream included robust populations of American eel (*Anguilla rostrata*), Alewife (*Alosa pseudoharengus*) and probably Atlantic salmon (*Salmo salar*) (Warner and Havey 1985). However, because of fish passage concerns lower in the St. Croix drainage, the only remaining diadromous species is American eel, a species that does continue to successfully pass through the lower constraints (Figure 1). Several decades of log drives and other human land uses in the river and surrounding watershed have left parts of the channel overwidened (Appendix C, Figure 1), some of the river banks unstable (Appendix C, Figure 2), and formerly deep pools filled in with sediment (Jeff McEvoy, personal communication, 2004). The effect of these physical changes to the stream's morphology has caused a significant decrease in the velocity and depth diversity along the stream, an important component of eel habitat (Wiley et al. 2004). A site visit to the stream in October 2004 by Merry Gallagher, a research biologist with the Maine Department of Inland Fisheries and Wildlife (MDIFW), and Dr. John Field, a fluvial geomorphologist with Field Geology Services, identified several sites where restoration could improve channel stability and physical habitat conditions for diadromous eels. The exact causes for channel instability and habitat degradation, however, are still uncertain and must be identified before implementing restoration projects on Grand Lake Stream. Restoration options that directly address the causes for instability will be long term, self sustaining, and potentially improve conditions beyond the project site. Projects that merely treat symptoms of instability (e.g.,

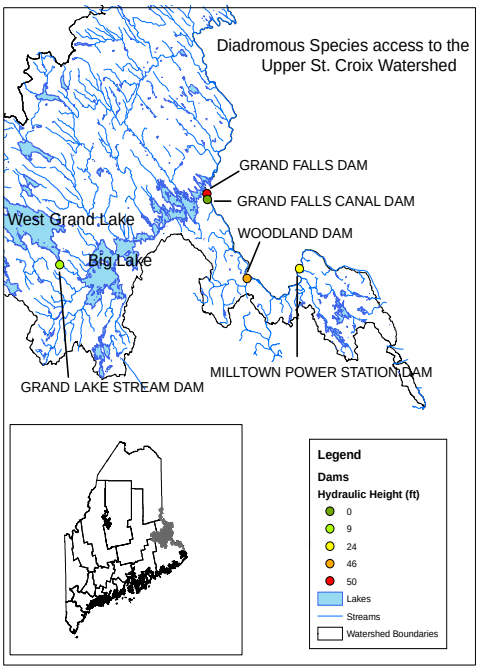

Figure 1. Location of Grand Lake Stream within the St. Croix watershed.

stabilizing an eroding bank) without determining the cause of the problem (e.g., excess sediment from upstream sources that form mid-channel bars and cause erosion by diverting flow into the bank) will unlikely sustain habitat improvements for extended periods of time because the source of channel instability will persist (Rosgen 1996). Consequently, a fluvial geomorphic assessment designed to identify the causes of channel instability along Grand Lake Stream is warranted before proceeding with restoration. The assessment results will allow several restoration options to be considered with those with the greatest likelihood of long term success in improving diadromous eel habitat over the greatest distance to be more fully developed so restoration can proceed soon after completion of the assessment. The fluvial geomorphology assessment proposed here will accomplish three major objectives: 1) identify sediment sources and other causes for channel instability; 2) locate areas where diadromous eel habitat is significantly degraded; and 3) produce design drawings for restoration projects at two high priority sites that address the causes for channel instability while improving habitat for diadromous fish species.

Biological survey

Many local residents have noted significant and recently increasing sedimentation concerns throughout the Grand Lake Stream system. High sedimentation rates are often quite detrimental to biological communities by reducing overall habitat availability through high degrees of substrate embeddedness (Appendix C, Figure 3). The residents of this area have long held high regard for this riverine system for socio-economic reasons, including its historically significant diadromous fishery resources. However, there is growing consensus that the once robust fishery and ecological resources are diminishing, including noticeable declines in American eel (*Anguilla rostrata*) abundance, fish species diversity, and macroinvertebrate production.

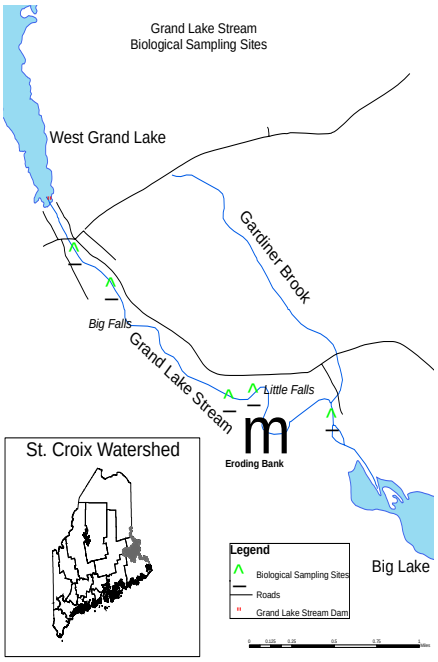

Figure 2. Biological Survey Sites

In October 2004, MDIFW initiated a biological survey of Grand Lake Stream to assess existing fishery and macroinvertebrate resources (Figure 2). Five sampling sites that represent 'disturbed' and 'relatively undisturbed' conditions were identified for seasonal macroinvertebrate collection and standard electrofishing surveys (MDIFW – Level 2 Stream Fishery Survey Standard Protocol) to determine species composition and relative abundance.

In addition, MDIFW will conduct an intensive eel population survey using a mark/recapture study design in 2005. Eels will be captured in baited pots (a type of trap specific for capturing eels), individually marked (by freeze branding or the application of numeric VIalpha tags, Northwest Marine Technology, Inc.) and measured prior to release near the capture site. Monthly trapping events will be replicated at the five survey sites from May to October 2005 and all captured eels will be assessed for previous marks, marked if unmarked, measured and released. Eel data will be analyzed with Program MARK (Colorado State University software package) to estimate population size, degree of immigration and emigration, and percent survival. In addition, repeat measurements on recaptured individuals will allow for annual somatic growth estimation for the Grand Lake Stream eel population.

Geomorphic survey

The fluvial geomorphology assessment will begin with detailed mapping of channel features along the entire 3.3 mile length of Grand Lake Stream. Some of the features to be mapped include: channel bank stability (e.g., eroding, stable, and riprapped banks), bank composition (e.g., floodplain sediment, glacial deposits, and bedrock), substrate particle size (e.g., cobbles, gravel, or sand on channel bed), bank height (possible indicator of channel incision), depositional features (e.g., mid-channel bars, point bars), riparian buffer width (width of trees growing along beside the river bank), and human activities in the channel (e.g., dams, bridges, deflectors). The channel features will be precisely mapped onto vellum sheets overlaying aerial photographs while walking or canoeing the stream's length. The mapped features will then be hand digitized into an ArcView GIS project and

supplemented with publicly available GIS data such as soil types. The mapping will help to identify the most unstable sites (e.g., the longest length of eroding bank), sediment sources causing channel instability and the infilling of pools (e.g., high eroding banks of glacial deposits), and areas of impaired habitat (e.g., shallow channels with fine substrate, mid-channel bars and limited riparian buffer for shading).

To provide historical context for human land use activities and their impact on the stream channel, historical topographic maps and aerial photographs will be compiled to document changes in channel position, growth of mid-channel bars, and watershed land use. The Grand Lake Stream Historical Society, Maine State Archives, and Fogler Library at the University of Maine will be visited to locate any ground photographs or other archival information that will further document human activities and channel changes along Grand Lake Stream.

At the conclusion of the mapping of channel features and historical study, three sites will be chosen for more detailed assessment. Two of the sites will be heavily impacted sites that are a high priority for restoration. One example of a potentially impacted site that will be studied, as observed during the field visit to Grand Lake Stream in October 2004, is an area just upstream of Little Falls where mid-channel bars are diverting water into and causing erosion of a high bank of loose sandy glacial deposits (Figure 2 and Appendix C, Figure 2). Another reach just upstream of Big Falls was likely straightened by humans and is now wide, shallow, devoid of pools, and missing large boulders that were likely originally in the center of the channel (Appendix C, Figure 1). Both sites, representing different types of impacts, have poor velocity and depth diversity required by diadromous eel populations and are potentially transferring channel instabilities elsewhere (i.e., increased delivery of fine sediment to downstream reaches). These two sites will be compared with a third relatively undisturbed reach. The third site will serve as a reference site that will help establish the condition of the other two sites prior to human disturbance. One potential reference site is located downstream of the Little Falls area but a final decision on the location of all three sites to be studied in detail will be made after the mapping of channel features.

A longitudinal profile, at least 4 cross sections, position of the top of the bank, and substrate particle size will be measured at each of the three sites chosen for detailed study. The longitudinal profile, cross sections, and bank position will be surveyed with a Sokkia Set 5 Electronic Total Station that will provide sufficient detail for drafting design drawings for potential restoration projects. All of the cross section end points will be monumented with well marked 2-foot lengths of steel rebar in order to permit resurveying in future years for monitoring purposes. The longitudinal profiles, measured from upstream to downstream along the deepest part of the channel, will reveal the spacing and depths of pools, channel slope, and channel sinuosity. Distinct differences in pool depths and spacing between the impacted reaches and reference sites may be an indication of channel instability and human impacts to channel morphology. Pool measurements will also be compared with expected values (e.g., pools are spaced every 6 bankfull channel widths) derived from undisturbed streams around the world (Rosgen, 1996). Channel cross sections will provide information on bankfull channel widths and depths, valley confinements, and bank slopes (Figure 3). The bankfull dimensions are generally measured at the top of the channel banks when flow would just begin to spill out onto the floodplain. Comparisons between cross sections within the same reach will reveal how channel dimensions are altered by valley confinement and depositional features such as mid-channel bars. Comparisons of channel dimensions between the impacted sites and the reference site will reveal how channel instabilities have altered the channel. The cross sections will also be used to calculate the minimum depth necessary to initiate transport of the substrate particles to be measured at each cross section using the pebble count method described in Rosgen (1996). In stable gravel bed streams, sediment transport usually begins at or near the bankfull depth. The addition of abundant fine sediment due to upstream instabilities will allow sediment transport to be initiated at much lower depths while channel armoring due to channel incision will result in a coarse channel substrate that will not be transported even during flows greater than bankfull depth. Therefore, surveyed channel cross sections and substrate particle size measurements provide a method to determine if and what channel instabilities are occurring along the stream.

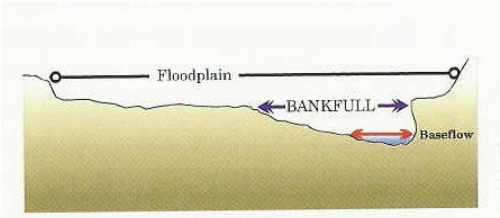

Figure 3. Stream cross sectional features

After the detailed surveying at each site has revealed the channel condition and possible reasons for channel instability, if they exist, at least five restoration options will be considered for each impacted site. The detailed surveying of bank profiles will be used to create a map of the site showing the position of the channel

banks. The map will provide the basis for creating conceptual design drawings of the restoration options. These conceptual designs will help frame discussions between the Maine Department of Inland Fisheries and Wildlife, residents of Grand Lake Stream, and other interested parties before a final restoration option is chosen. For example, in channel reaches that were straightened by humans and lack velocity and depth diversity, possible restoration options that might be considered include: 1) do nothing; 2) reroute channel into former meander bends; 3) install V-shaped rock weirs across the channel to narrow the channel and scour pools; 4) add gravel along the side to narrow the channel and create more sinuosity; and 5) place boulders in the center of the channel to help scour small pools. Detailed design drawings and cost estimates will then be made of the restoration option that has the greatest potential to address the cause of channel instability and, therefore, sustain improvements to diadromous fish habitat. The design drawings will then provide the basis for securing the necessary permits for project implementation and required funding. Trout Unlimited, although unable to support survey and assessment work, has expressed an interest in funding project implementation once the assessment has identified the most impacted sites and effective restoration strategies (Greg Ponte, Trout Unlimited, personal communication, 2004).

Proposed Payment Schedule:
A three payment schedule will be adequate. A suggested schedule is: an upfront payment of 15% at proposal acceptance, followed by a 75% payment as restoration plans are finalized (August 2005), with final payment at project completion (November 2005).

Tasks and Project Timeline:
1. Initiate biological survey and monitoring (October 2004)
2. Mapping channel features (June 2005)
3. Intensive eel population survey (May – October 2005)
4. Historical map, photo, and archive analysis (June 2005)
5. Detailed surveying of impacted and reference sites (June-July 2005)
6. Conceptual designs of restoration options (August 2005)
7. Public meeting to discuss restoration options (August 2005)
8. Final design of selected restoration strategies (September 2005)

Work Products and Deliverables:
1. ArcView GIS project of mapped channel features and historical changes in channel position (June 2005)
2. Drafted drawings of surveying results and tabular summary of findings (July 2005)
3. Conceptual restoration designs for 2 impacted sites (August 2005)
4. Final restoration designs for 2 impacted sites (September 2005)
5. Final report summarizing results of channel features mapping, historical analysis, and detailed surveying of impacted and reference reaches (September 2005)
6. Interim report summarizing pre-habitat restoration biological survey (November 2005)
7. Final report summarizing eel population dynamics for Grand Lake Stream (November 2005)

Biographical sketch:

Dr. John Field received a Ph.D. from the University of Arizona with concentrations in fluvial geomorphology and hydrology. During eight years as a university professor, Dr. Field received two excellence in teaching awards and was active in training teachers and government agency personnel on techniques for assessing the stability and habitat conditions of streams. Dr. Field's research on flooding and habitat issues has been published in numerous scientific publications and presented at professional meetings throughout the United States. He has conducted several geomorphology based watershed assessments in Vermont, New Hampshire, and Maine to identify the best long-term restoration strategies for a given site. Dr. Field will oversee and participate in all aspects of the fluvial geomorphology assessment and restoration design.

Merry Gallagher is a Research Biologist with MDIFW's Division of Fisheries and Hatcheries where she oversees MDIFW's statewide assessment program for riverine systems. Merry has incorporated geomorphic principles into MDIFW's standard stream assessment strategies for cataloguing Maine's riverine fishery resources and prioritizing fishery habitat restoration projects. In addition, Merry is a Ph.D. candidate at the University of Maine's Department of Biological Sciences. She has been intensively studying the population ecology and habitat associations of resident American eels in Maine's lacustrine systems for six years. Merry also has extensive

experience in stream fisheries ecology, native fish biology, and stream physical processes. Merry will oversee and actively participate in all aspects of the biological survey associated with this study.

Cited Works

Rosgen, D. 1996. *Applied River Morphology, 2nd ed.* Wildland Hydrology Press, Pagosa Springs, CO.

Warner, K. and K. A. Havey. 1985. *Life History, Ecology and Management of Maine Landlocked Salmon.* MDIFW, Augusta, ME

Wiley, D. J., R.P. Morgan, R. H. Hilderbrand, R. L. Raesly and D. L. Shumway. 2004. Relations between physical habitat and American eel abundance in five river basins in Maryland. *Trans. Amer. Fish. Soc*. 133:515-526.

Appendix B

Budget

Applicant: Maine Department of Inland Fisheries and Wildlife

Project Name: A Geomorphic and Biological Survey of Grand Lake Stream, Maine for the Identification and Prioritization of Diadromous Fisheries Habitat Enhancements

Cost Categories	**GOMC $**	**Matching $**	**Type of Match***	**Other Federal $**	**Total $**
Personnel - volunteer assistance - prelim analysis J. Field - IFW staff time and bio surveys		$2400 $2000 $23,200	K C K		$27,600
Fringe					
Travel for J. Field	$144				$144
Equipment for J. Field	$300				$300
Supplies					
Contractual - J. Field	$14,400				$14,400
Other (specify) - Lodging - Indirect costs	$1,262	$1374	K		$2636
Totals	$16,106	$28,974			$45,080

* Indicate type of match here; “C” for cash, “K” for in-kind, “O” for other. Include source of match in the budget detail with documentation supporting whether the match is promised, in-hand, or requested.

Grand Lake Stream Geomorphic and Biological Assessment Project - Budget Justification

Items in blue are procured matching commitments

Work Item	Personnel	Hours	Rate/hour	Total	Budget Justification
Completed work					
Prelim Analysis/Site Investigations	MG/IFW	28	$40.00	$1,120.00	Initial site visits/ bio collections by IFW staff; August - October 2004 - IN-HAND donation
	JF			$2,000.00	Contracted initial visit by J. Field - CASH IN-HAND donated by Grand Lake Stream residents
Impending work					
Mapping	JF	20	$80.00	$1,600.00	1 day field/1.5 days GIS input
History	JF	8	$80.00	$640.00	Compile and analyze photos/maps
	JF	4	$80.00	$320.00	Historical society visit
Surveying	JF	36	$80.00	$2,880.00	1.5 days in field/site X 3 sites
	Assistance	60	$40.00	$2,400.00	PROMISED volunteers provided by Weatherby's Resort
	JF	24	$80.00	$1,920.00	Drafting survey data
Design	JF	24	$80.00	$1,920.00	Conceptual design options for 2 sites
	JF	32	$80.00	$2,560.00	Final design of chosen options
Administration	JF	16	$80.00	$1,280.00	Organizational meetings and meetings to choose restoration options
	JF	8	$80.00	$640.00	Final report preparation
Drive Time	JF	8	$80.00	$640.00	1 roundtrip from Farmington, ME to Grand Lake Stream,ME
Bio Survey	MG	96	$80.00	$7,680.00	2 IFW employees plus equipment for 3 standard fishery survey and macroinvertebrate collections - IN-HAND donation
Eel Survey	MG	240	$60.00	$14,400.00	1 IFW employee and equipment plus 1 volunteer; 1 week trap session per month (6 months total) - IN-HAND donation
Totals (Wages)				$42,000.00	
		Miles	**Rate/mile**	**Total**	
Travel	JF	400	$0.36	$144.00	1 400-mile round trip from Farmington, ME to Grand Lake Stream, ME
Per Diem		**Days**	**Rate/day**		
	JF	6	$129.00	$774.00	6 days in field provided by Weatherby's Resort as match (lodging and meals PROMISED for J. Field)
	MG	6	$100.00	$600.00	3 days lodging for IFW staff PROMISED by Weatherby's Resort for Bio Survey
Total Station Rental				$270.00	4.5 days @ $60/day
GIS Usage Fee				$30.00	1.5 days @ $20/day
Total Work Costs				$43,818.00	
Total Contributions				$28,974.00	
Needed Funds				$14,844.00	
Indirect Costs				$1,262.00	8.5% administrative costs on granted monies - assessed by MDIFW
GOMCME Request				**$16,106.00**	
Total Project Costs				**$45,080.00**	

Notes: JF = Dr. John Field; MG = Merry Gallagher; IFW = MDIFW staff; Assistance = 2 volunteers

Appendix C

Maps and photos of project location

It is to your advantage to make it as clear and as possible for the reviewers to determine the location and extent of the project. Visual aids such as aerial photos and orthophotoquads will help substantially in this process ;1:24,000 scale USGS topographic sheets can be used as a substitute if necessary. Photos taken from the ground which clearly reveal the current condition of the site should also be included.

1. Include aerial photos, orthophotoquads, or USGS topographic sheets (or maps) of the project area with the project location clearly identified;

Included in Appendix A, Figures 1 and 2.

2. Please identify individual photo locations on a map and the angle from which they were taken (e.g., photo #1 taken looking NE).

Appendix C, Figure 1. Overwidened straightened reach upstream of Big Falls

Appendix C, Figure 2. High eroding bank of glacial deposits caused by flow diversion around mid-channel bar visible in left foreground

Appendix C, Figure 3. Extreme substrate embeddness in some Grand Lake Stream sites

Letters of Support for this project

FROM : FAX NO. : Nov. 10 2004 01:02PM

Gary & Nancy Betz
Grand Lake Stream Camps
PO Box 17
Grand Lake Stream, ME 0
(207) 796-5562 Ph. &

November 10, 2004

Dear Mr. Kachmar,

We have owned and operated Grand Lake Stream Camps for 31 years. Prior to that we vacationed here for 7 years. Our camps are located on the stream with access to Big Lake by boat. Over the past 15 to 20 years we have watched, with concern, how the stream has silted in. We remember swimming in places where it was over our heads and is now waist deep. Each year as the channel from our camp to Big Lake fills in, we worry that one day we may not be able to get our boats from our camp to the lake. That has the potential of threatening our economic livelihood.

We are also concerned for the salmon and their annual runs upstream. The pools that were once a destination for them during their trek no longer exist because of siltation. Grand Lake Stream is world renowned for its landlocked salmon fishery. We would think that protecting and enhancing it would be a top priority for the Maine Department of Inland Fisheries and Wildlife.

We support the proposed geomorphic study of Grand Lake Stream.

Sincerely,

Nancy Betz & Gary Betz

Nancy Betz Gary Betz

NEIL H (PETE) BORDEN

Mr. Jon Kachmar
State of Maine Planning Office
38 State House Station
Augusta, ME 04333

Dear Mr. Kachmar:

I am a third generation summer resident of Grand Lake Stream, and my home is on the Stream about 500 yards from the mouth of the river to Big Lake. I have witnessed the changes in the Stream for over 70 years, a process that has been speeding up in the last ten or so years. The Stream is becoming shallow and narrow in places. It is threatening to make it impossible for boats to reach the docks of a commercial lodge a few hundred yards from me. It also could be threatening fish spawning areas, and the way its going, effectively close the mouth of the Stream at Big Lake.

I am the Chairman of the Economic Planning Committee of the Downeast Lakes Land Trust, an enterprise raising $30 million to conserve 340,000 acres of land in the Grand Lake Stream area. The area needs all the help it can get as the lodges are not in good shape. If Stream and Lake fishing is degraded by the changes taking place, our local tourist industry will be in big trouble.

I strongly support the proposed geomorphic study. It is extremely important to the futur of the community.

Sincerely,

Neil H Borden

E-MAIL: repeteb1@worldnet.att.net
MAINE P.O.Box 118, Grand Lake Stream 04637 Phone: 207-796-2816 Fax: 8006
FLORIDA 3401 Sundial Ct, Fort Myers 33908 Phone: 239-433-4221 Fax: 3225

The FISHERMAN'S RESORT

P.O. Box 69, Grand Lake Stream, ME 04637
207-796-5558 (Summer) • 207-926-5598 (Winter) • www.weatherbys.com

November 9, 2004

Mr. Jon Kachmar
State Planning Office
38 State House Station
Augusta, ME 04333-0038

Dear Mr. Kachmar,

I am writing to you in support of the proposed Grand Lake Stream Geomorphic and Biological Assessment. Local funds were raised this year for a preliminary survey by John Field and the project shares broad support in the community.

As a lodge owner, guide and angler, this assessment could lead to fisheries habitat restoration and enhancement which would in turn lead to increased angling opportunitie dispersed angling pressure and a higher quality experience for our guests.

Thank you for your consideration of this proposal.

Sincerely,

Jeff McEvoy

9 November 2004
Waterways Camps
Box 34
Grand Lake Stream, Me. 04637

Jon Kachmar
State Planning Office
38 State House Station
Augusta, Me. 04333

RE: Grand Lake Stream sediment and degradation problem

Dear Mr. Kachmar:

Grand Lake Stream is important to a healthy fish habitat, which impacts the community, guides, lodges and fishing. My wife and I have owned a camp at the end of the stream for 15 years and in that time we have seen silting and sediment that is filling the stream bed, to the point of interfering with the normal boat channel to Big Lake

We are concerned that this undesirable condition will negatively affect the fish habitat and ultimately the community.

We strongly support the NOAA proposed geomorphic study and hope that with their help and that of the state we might improve the quality of the stream.

Sincerely,

John Betz
Fran Betz

John & Fran Betz

48 Loantaka Lane North
Morristown, NJ 07960
973 377 8580

November 7, 2004

Mr. Jon Kachmar
State of Maine Planning Office
38 State House Station
Augusta, Maine 04333

Dear Mr. Kachmar,

I am a fourth generation summer resident of Grand Lake Stream. Eventually I will be a home owner on the stream. After I have spent my life staying in this beautiful part of Maine, I plan to pass on my residence to my children. I am worried about the changes I have witnessed in the stream over the past ten years. Silt and gravel are building up in the stream. Where I once swam, I now wade. Boat passage is risky in many parts of the stream. Fish habitat is threatened and there have been notable changes in the fish presence in the stream. Clearly the health of the stream is at peril. Grand Lake Stream needs to be healthy for all of its residents. We rely on the stream for fishing, boating, and swimming – all activities that attract tourists and much needed revenue for this area.

I support the proposed geomorphic study of Grand Lake Stream and believe you should, as well. This community has worked hard to preserve its environment and is presently working hard to promote itself as a tourist destination. The health of Grand Lake Stream is vital to this community and worth preserving.

Sincerely,

Sarah B Holman

Sarah B. Holman

STATE OF MAINE
DEPARTMENT OF
MARINE RESOURCES
21 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0021

JOHN ELIAS BALDACCI
GOVERNOR

GEORGE D. LAPOINTE
COMMISSIONER

March 21, 2005

Jon Kachmar
Maine State Planning Office
#38 State House Station
Augusta, ME 04333-0038

Dear Jon,

This letter is in support of the project proposal "Geomorphic and Biological Survey of Grand Lake Stream, Maine for the Identification and Prioritization of Diadromous Fisheries Habitat Enhancements." Historically, the diadromous fishery resources of Grand Lake Stream included populations of American eel, alewife, and probably Atlantic salmon. Presently, sea-run alewives are not able to migrate to this area because the fishways have been closed at Woodland and Grand Falls by the Maine legislature; American eels, however, are still able to migrate to Grand Lake Stream and to utilize the habitat.

One goal of the proposed study is to determine where and how channel instabilities and physical habitat impairments on Grand Lake Stream are potentially limiting diadromous fish populations. DMR supports the proposal to collect baseline biological and physical monitorin data to determine if the impaired habitat impacts the eel resource, as well as the goal to develop restoration designs.

Sincerely,

THOMAS S. SQUIERS, JR. DIRECTOR
Stock Enhancement Division

TSS/jcw

Email correspondence with J. McEvoy promising in-kind lodging and volunteer assistance donation

With regard to matching contribution, I am willing to put up John Field as necessary at my rate of $129 per day (includes meals) and I will donate at least 20 hours of my time (estimate) and 40 hours of my staff's time (estimate). We can do more or less as needed.

As I do not Know what John would need for time, it is hard for me to get others to commit time right now. If you can get a better sense from John what he will expect, it will help me.

Keep me posted.

Jeff McEvoy
Weatherby's The Fisherman's Resort
POB 69
Grand Lake Stream, ME 04637
www.weatherbys.com
207-926-5598 winter
207-796-5558 summer