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To: Barry Gold – Grand Canyon Monitoring & Research Center Fax #556-7092

From: Lynn Hamilton

Re: Adopt-a-Beach proposal

Date: 11/12/98

Pursuant to our conversation yesterday, you will find our proposal for the Adopt-a-Beach program attached here. Thank you so much for your willingness to bring up the possibility of funding for our program at the TWG meeting next week. It looks as if Andre Potochnik will be able to attend. As a co-author of the 1996 Adopt-a-Beach report, he can easily field any questions you may have concerning the program.

I spoke with Andre yesterday afternoon. We agreed that it would be far more beneficial to GCMRC if we could have some results (or hopefully the complete analysis) by the first of the year to assist AMWG in the task of tackling the question of a Beach/Habitat Building Flow in 1999. We'll try our best to shoot for this earlier time frame (rather than completion by the Guides Training Seminar in March).

At the time of this writing, I have been unable to reach Dave Haskell of the Grand Canyon National Park Science Center to discuss the possibility of their participation in funding a portion of this program. I intend to send him a proposal by mail in the next few days. If you need to contact him, you can do so at (520) 638-7759. The contact information for the Grand Canyon Conservation Fund is included in my proposal. If we can manage the three-way funding, it will lessen the burden on any one organization, while fostering this important program and carrying it on into the future. We sincerely hope we can count on the assistance and support of GCMRC.

Thanks so much for your time and consideration.

Lynn

TWGs
11-17-98
BGS presented only
(no distrib to TWG)

attachment 16



November 11, 1998

Mr. Barry Gold
Grand Canyon Monitoring and Research Center
2255 N. Gemini Dr., #341
Flagstaff, AZ 86001

Dear Barry,

Grand Canyon River Guides, Inc. is a grassroots 501(c)(3) organization fueled largely by volunteer assistance. Although many larger organizations address broad environmental issues in the Grand Canyon, only GCRG focuses solely on the current issues of the Colorado River corridor in Grand Canyon. Filling that niche is an important role we take very seriously. Several years ago prior to the 1996 Beach/Habitat Building Flow, our board members saw the need for long-term monitoring of camping beaches in Grand Canyon. The Adopt-a-Beach program evolved from this idea and has continued in the ensuing years. Grand Canyon River Guides would like to propose the possibility of three-way funding of program expenses covered jointly by GCMRC, the Grand Canyon Conservation Fund, and the Grand Canyon Science Center. Support such as yours would be instrumental in enabling us to achieve continued success in our worthwhile and innovative program.

OUR PROPOSAL:

Our Adopt-a-Beach program is a photo-matching, beach monitoring effort utilizing volunteer guides to document changes in sand deposition on beaches along the Colorado River. The photographs taken over the course of the river season are then compared to determine beach erosion, stabilization and potential causes. The pre-flood photographs from spring of 1996 will continue to provide a benchmark for our comparison study. The results are analyzed and compiled by professional geologists and made available to the Grand Canyon Monitoring and Research Center (GCMRC), the National Park Service, Bureau of Reclamation scientists, the commercial outfitters and the Adaptive Management and Technical Work Groups. Andre Potochnik, as River Science Coordinator for GCRG, holds a seat on those federal advisory committees as the sole representative of recreational river running interests. The Adopt-a-Beach program provides us with a strong basis to voice our concerns about potential negative impacts on Grand Canyon beaches that affect both recreation and riparian habitat. As indicated in the 1996 Adopt-a-Beach report, "The guides' interest in 'beaches' stems not only from intimate daily use, but from recognizing these sand deposits as indicators for overall health of the river ecosystem." GCMRC echoes this sentiment as well in a recent report of the physical resources monitoring review panel by saying "Effective management of the remaining sand supply represents one of the key goals of future river operations". GCMRC has clearly stated that the Adopt-a-Beach program is effective and should be continued – a view that we at GCRG share wholeheartedly.

*Dedicated to the quality of the
Grand Canyon Experience*

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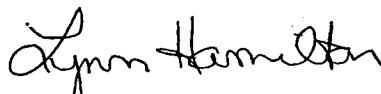
By utilizing volunteer guides who are on site far more often than scheduled research trips, the Adopt-a-Beach program is a remarkably efficient use of resources and provides the guides' first-hand knowledge of the beaches and their changing conditions. There is, in fact, no better way to document the many processes that erode, reshape and generally alter beaches over time. For the 1999 Adopt-a-Beach program, Grand Canyon River Guides plans to more heavily promote participation as this program exhibits tremendous potential for public outreach and environmental education of the river-running public that should not be overlooked. In all, the Adopt-a-Beach program has the important capacity to save tax dollars and minimize the intrusive aspect of monitoring, while providing crucial information about the state of the beaches in the riverine corridor.

Support for the 1997 Adopt-a-Beach program from the Grand Canyon Conservation Fund was for necessary supplies, equipment, film development and cameras (\$2,150 total). This grant was the only major funding assistance we received. A few of our individual members supported this program as well with contributions totaling \$350 in 1997 and \$400 year-to-date in 1998. Please see the attached financial report detailing the funding request made by our organization in 1997, our actual expenses for the program and anticipated expenses for the 1998 program. Of the \$2,150 received in March of 1998 from the Grand Canyon Conservation Fund, \$1,770 was actually spent. The remaining balance (\$380) will be put towards 1998 expenses in those areas. Contact information for the Grand Canyon Conservation Fund is: Bill Gloeckler and Allen House, Grand Canyon Conservation Fund, PO Box 22189, Flagstaff, AZ. 86002. You can also reach them by phone as follows: Bill Gloeckler (520) 527-0269, or Allen House (520) 526-8200.

GCRG plans to conduct an analysis of the 1997 and 1998 river seasons, jointly comparing photographs from each season, and again using the pre-flood photos from 1996 as a benchmark. We intend to complete the analysis by the first of the year so that the results can be made available at the Adaptive Management Work Group meeting in January. The Adopt-a-Beach program information on the evolving (and current) state of the beaches in Grand Canyon will hopefully provide the information needed to formulate a recommendation on how to proceed with the possibility of a Beach/Habitat Building Flow in 1999. It is crucial that we continue the Adopt-a-Beach program as it is intimately linked to both recreational use of the river and to the unique dam-controlled environment in Grand Canyon. The program will most certainly become an integral component of long-term monitoring of the physical resources and in the adaptive management process. Our proposal therefore, is to request funding in the amount of \$4,000 (approximately one-third of what we estimate the two-year analysis and associated expenses to cost).

Our sincere hope is that the Grand Canyon Monitoring and Research Center will assist in this funding effort and support of our program. Your assistance is vital. If you have any questions, please feel free to contact me.

Sincerely,



Lynn Hamilton
Secretary/Treasurer

ADOPT-A-BEACH PROGRAM FINANCIAL REPORT

	Anticipated costs 1997 AAB Program	Actual Expenses 1997 AAB Program	Anticipated costs 1998 AAB Program
Cameras & Film Development*	\$1,550	\$1,666	\$500
Professional Analysis	\$5,000	\$297	\$7,000
Printing & Publication	\$1,400		\$1,500
Public Outreach & Presentations	\$1,000		\$1,000
Postage*	\$100		\$100
Supplies & Equipment*	\$500	\$104	\$500
Administrative Costs (10%)	\$955	\$761	\$1,060
Totals	\$10,505	\$2,828	\$11,660

* Funding received in March 1998 from the Grand Canyon Conservation Fund -- \$2,150 to cover these categories only

Note: The professional analysis budget for 1998 reflects a two-year analysis of the 1997/98 seasons.

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**Effects of the Beach-Habitat Building Flow and
Subsequent Interim Flows from Glen Canyon Dam
on Grand Canyon Camping Beaches, 1996: a Repeat
Photography Study by Grand Canyon River Guides
(Adopt-a-Beach Program)**

by

Kate Thompson¹, Kelly Burke², and Andre Potochnik³

February, 1997

Administrative report submitted to the Grand Canyon Monitoring and Research Center
by the Grand Canyon River Guides Adopt-a-Beach program.

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³ 18 E. Juniper Ave., Flagstaff, AZ 86001

Abstract

The announcement of the 45,000 cfs test flood release through Grand Canyon sparked the interest of river guides in hands-on documentation of the changes in Colorado River sand bars ("beaches"). During a program of repeat photography called Adopt-a-Beach, commercial river guides took photos of 44 selected beaches and answered research questions about them, prior to and immediately following the test flood and throughout the commercial boating season (April to October, 1996).

The results of the study show 82% (36 of 44 sites) of the beaches photographed gained sand visibly, 11% (5 sites) stayed about the same, and 7% (3 sites) lost sand, because of the test flood. After observing the initial effects of the 45,000 cfs release, the guides documented four processes that eroded the beaches. The most significant of these were the interim fluctuating flows, followed by visitation, wind, and finally side canyon flash floods. From before the test flood until the end of the 1996 season, 80% of the beaches studied showed an overall net gain in sand, 11% showed a net loss, and 9% remained or returned to the same.

These results are supported by the conclusions of the sand bar survey project of Kaplinski and others (in press). They showed an average volume increase in sand of 176% for 93% of sand bars surveyed, due to the test flood. The results of Kearsley and Quartaroli (1997) differ somewhat, but their work focused on assessing change in campable area, rather than volume of sand. As in both studies, guides noted that most newly deposited sand from the test flow commonly produced steep and tall escarpments along beach fronts. However, guides generally considered the replenished condition of the beach well worth the scramble up the beach face and more consistent with natural conditions along undammed rivers.

The series of photographs of campsites showed that beaches with steep fronts slowly eroded to a gentle slope over the summer, as people tracked the sand downslope while loading and unloading boats. This suggests that human visitation is assisting in stabilizing the beach fronts. However, any reduced rate in erosion due to a gentler beach slope must be compared to the loss of sand into the eddy as pushed downslope by people.

The Adopt-a-Beach program can continue to address questions about beaches such as: 1) What will be the effects of high-flow releases in years of high lake levels? 2) How will the new maximum flows of 25,000 cfs affect beach shape and size? 3) Will the beach fronts remain at gentle slopes or begin to retreat as cutbanks reform? and 4) How will the new beaches fare in the long run?.