

The Adopt - A- Beach Repeat Photography Project

Owl Eyes RM 135.1L 5-14-
96

Owl Eyes RM 135.1L 3-9-
96

Still GROWING



A collaboration of guides and staff conceived a Citizen Science (volunteer) program to photographically document Before /After effects of the BHBF and to track beach changes through the 1996 commercial season.

Initial funding support came from the Grand Canyon Conservation Fund.

110 Mile RM 109.9R 3-23-
1996



110 Mile RM 109.9R
7-7-1996



**At end of 2019 AAB has
16,400+ images in archive,
monitoring 44 different
beaches-**

**With nearly 4000 dated
records in database**



Travertine Falls RM 230.6L 7 - 11 - 2013



flickr

Sign Up

Explore

Prints

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Photos, people, or groups



29.3 Mile L - Shinumo Wash

Also Silver Grotto



1996 29.3L
3 photos



1997 29.3L
9 photos



1999 29.3L
4 photos



2002 29.3L
5 photos



2002-3 29.3L
Pre-Post
2 photos



2003 29.3L
3 photos



2004 29.3L
7 photos



2005 29.3L
1 photo



2006 29.3L
7 photos



2007 29.3L
9 photos



2008 29.3L
23 photos



2009 29.3L
16 photos



2010 29.3L
23 photos



2011 29.3L
35 photos



2012 29.3L
23 photos



2013 29.3L
28 photos



2014 29.3L
36 photos



2015 29.3L
9 photos



2016 29.3L
22 photos



2017 29.3L
23 photos



Your packet should include: camera, talking points (see reverse) and a reference image.

FILL IN THE DATE/TIME/LOCATION. IT IS IMPORTANT THAT THE DATE/TIME/LOCATION IS CORRECT.
* Adopters often have a reference sheet and you can include it.

USING THE REFERENCE IMAGE OF YOUR BEACH. MATCH YOUR PHOTOGRAPH AS CLOSE AS POSSIBLE USING ROCKS, VEGETATION, OR OTHER REFERENCE POINTS. PLEASE DO NOT INCLUDE BOATS OR PEOPLE IN THE PHOTOGRAPH. WE KNOW THAT CAMPSITES ARE LOCATED NEAR THE BEACH. YOU CAN INCLUDE ADDITIONAL INFORMATION ON YOUR REFERENCE PAGES.

river
mile/side: _____

date: _____

m

d

time: _____

Adopt a Beach Data Entry Form

(NOTE: PLEASE PHOTOGRAPH DATASHEET, THEN BEACH)

Any Comments about Beach Change? (describe in this space)

Guide's Name _____

Camp Name _____

Camp Mile _____

Date _____

River Flow (approximate) _____

Change in Beach Size from Previous Visit (circle one): INCREASE DECREASE SAME

Dominant Cause of Change (circle one):

Spike Daily/Monthly Flow Rain Wind People Don't Know

Supporting Observations for Dominant Cause (check any that are appropriate):

- ☐ New outbank
- ☐ Change of slope
- ☐ Bench in eddy
- ☐ Gully
- ☐ Trib/Debris flow
- ☐ Scour from wind or people
- ☐ Mounded sand

Secondary Cause of Change (circle one):

Spike Daily/Monthly Flow Rain Wind People Don't Know

Supporting Observations for Secondary Cause (check any that are appropriate):

- ☐ New outbank
- ☐ Change of slope
- ☐ Bench in eddy
- ☐ Gully
- ☐ Trib/Debris flow
- ☐ Scour from wind or people
- ☐ Mounded sand

Do you find evidence of tamarisk beetles in/near camp? YES NO

Campsite Quality Compared to Last Visit (circle one): SAME BETTER WORSE

Supporting Observations for Campsite Quality (check any that are appropriate):

- ☒ Boat parking
- ☐ Rockiness
- ☐ Vegetation encroachment
- ☐ Steepness
- ☐ Trail erosion
- ☐ Open sand area
- ☐ Human impacts - ants, pee spots, litter

Any Comments about Campsite Condition? (describe in this space)

Did you camp here this visit? Yes No How many people in your group?

If you camped here, does it feel crowded or comfortable given this water level and group size?

Considering the campsite quality factors above, and the restriction against camping in the Old High Water Zone, what would a good group size be for this camp at the current water level? _____



1 of 4

Below Bedrock RM 131.7 R



View 1 First photo

Photographer location for view 1 series

Please try to center viewer on dot



2 of 4

View 1 Overlapping series looking upstream from large rock at lower beach. Photos 2 & 3

Below Bedrock RM 131.7 R

Please try to center your viewer on the dot



After 13 years of scientific investigation, the Glen Canyon Environmental Studies (GCES) Record of Decision included the mandate to conduct the first Beach/ Habitat Building Flow (BHBF) – now known as a High Flow Experiment

Tuckup RM 165.1R 5-16-96



Tuckup RM 165.1R 2-29-96





Analysis

Relative to
Recreational Use:
Change/No Change?
If Change:
Improve/Degrade?
Reason(s) for change

Quantitative,
qualitative..

HFE's can pile lots of
sand, but is it useable
for recreation?

LTEMP sediment
resource goals-AAB
helps to show when
HFE's are needed, and
if they are being
effective for recreation.



Lower Nautiloid RM 35.1L



Hot Na Na RM 16.6L 7 - 19 - 2018

Hot Na Na RM 16.6L 7 - 19 - 2018 Hot Na Na 4 - 1 - 2019





Matkat Hotel RM 148.9 L
7-26-2014



Matkat Hotel RM 148.9 L
4 – 11 -2018

Shinumo Wash RM 29.4L 4 –
3 -2015







Tatahatso RM 37.9L 4-3-
2015



Camp name	Rvr mile	2016	TD	2017	Reason
		No change	Degraded	Improved	
Soap Creek	11.3 R			X	More sand along front. Post HFE event?
12.4 Mile	12.4 L			X	More sand though steep
Hot Na Na	16.6 L			X	Very significant beach increase
19.4 Mile	19.4 L			X	Very significant beach increase
Upper North Canyon	20.7 R			X	Very significant beach increase
23 Mile	22.7 L			X	More sand in camp but not at parking
Shinumo Wash	29.5 L			X	Very significant beach increase
Nautaloid	35 L			X	Slight improvement noticed
Tatahatso	37.9 L	X			No change found
Martha's	38.6 L		X		General sand loss
Buck Farm	41.2 R		X		Erosion uncovers rocks in upper camp
Total per Reach	11	1	2	8	
Nevills	76 L			X	Some interior rocks covered
Hance	77.1 L	X			No change found
Grapevine	81.7 L			X	Very significant beach increase
Clear Creek	84.6 R			X	Improved parking
Zoroaster	85 L			X	Very significant beach increase
Trinity Creek	92.1 R			X	Very significant beach increase
Schist	96.6 R	X			Slight, if any, improvement
Boucher	97.3 L	X			Camp increase but covered by driftwood
Crystal	98.7 R	X			No change found
Lower Tuna	100.2 L	X			Sand increase offset by steep access
Ross Wheeler	108.3 L			X	Gully in camp filled, but rocky parking
Bass	109 R		X		New cutbank across front
110 mile	110 R			X	Gully in camp filled, much wood deposited
Upper Garnet	114.9 R			X	Significant beach increase
Lower Garnet	115.1 R			X	Significant beach increase
Total per Reach	15	5	1	9	
Below Bedrock	131.7 R			X	Some rocks covered in camp
Stone Creek	132.5 R			X	Very significant beach increase
Talking Heads	133.7 L			X	Modest but noticeable improvement
Racetrack	134.2 R			X	Modest improvement with veg increase
Lower Tapeats	134.5 R	X			No change found
Owl Eyes	135.2 L			X	Very significant beach increase
Backeddy	137.8 L	X			No change found
Kanab	144 R			X	Very significant beach increase
Olo	146.1 L	X			Sand increase offset by outbank increase
Matkat Hotel	148.9 L			X	Significant beach increase
Upset Hotel	150.9 L	X			No change found
Last Chance	156.3 R			X	Lower shelf camp increase in size
Tuckup	165.2 R	X			Bigger beach but cutbank in camp area
Upper National	167 L			X	More camp beach but bad parking
Lower National	167.2 L	X			Sand rearranged, but no improvement
Total per Reach	15	6	0	9	
Travertine Falls	230.6 L			X	Very significant beach increase
Gneiss	236.1 R			X	Slight but noticeable increase in beach
250 Mile	250.0 R			X	Very significant beach increase
Total per Reach	3	0	0	3	
Total Reporting	44	12	3	29	

Camp name	Rvr mile	2017	thru	season	Reason
		No change	Degraded	Improved	
Soap Creek	11.3 R				No late season photos
12.4 Mile	12.4 L	X			Slight veg increase on camp periphery
Hot Na Na	16.6 L	X			No change
19.4 Mile	19.4 L	X			Some slight wind degradation possible
Upper North Canyon	20.7 R		X		Wind deflation, rain gullies, cutbank
23 Mile	22.7 L	X			No appreciable change
Shinumo Wash	29.5 L		X		Fluc flow recession, cutbank
Nautaloid	35 L		X		Rain erosion gully in camp
Tatahatso	37.9 L	X			Slight sand loss from foot traffic
Martha's	38.6 L	X			Parking/access fluctuate through season
Buck Farm	41.2 R	X			Slight veg increase
Total per Reach	11	7	3	0	
Nevills	76 L	X			Slight veg increase
Hance	77.1 L				No late season photos
Grapevine	81.7 L		X		Beach/sand same, huge veg ncrease
Clear Creek	84.6 R				No late season photos
Zoroaster	85 L		X		Fluc flow recession, cutbank
Trinity Creek	92.1 R		X		Fluc flow recession
Schist	96.6 R	X			No change
Boucher	97.3 L				No late season photos
Crystal	98.7 R		X		Fluc flow recession, cutbank
Lower Tuna	100.2 L				No late season photos
Ross Wheeler	108.3 L		X		Rain erosion gully in camp
Bass	109 R				No late season photos
110 mile	110 R	X			Slight veg increase
Upper Garnet	114.9 R				No late season photos
Lower Garnet	115.1 R				No late season photos
Total per Reach	15	3	5	0	
Below Bedrock	131.7 R				No late season photos
Stone Creek	132.5 R		X		Cutbank, rain erosion, human traffic, veg
Talking Heads	133.7 L				No late season photos
Racetrack	134.2 R				No late season photos
Lower Tapeats	134.5 R		X		Fluc flow sand loss, wood deposited
Owl Eyes	135.2 L		X		Fluc flow recession, cutbank
Backeddy	137.8 L				No late season photos
Kanab	144 R				No late season photos
Olo	146.1 L		X		Sand loss at lower end of beach
Matkat Hotel	148.9 L		X		Rain erosion gully, foot traffic slumping
Upset Hotel	150.9 L		X		Fluc flow outbank, foot traffic slumping
Last Chance	156.3 R		X		Fluc flow recession, cutbank
Tuckup	165.2 R	X			No change
Upper National	167 L				No late season photos
Lower National	167.2 L	X			No appreciable change
Total per Reach	15	2	7	0	
Travertine Falls	230.6 L				No late season photos
Gneiss	236.1 R		X		Fluc flow recession, some wind deflation
250 Mile	250.0 R		X		Tributary flash event covers beach
Total per Reach	3	0	2	0	
Total Reporting	29	12	17	0	



In February 2020, GCMRC met with Lynn and Zeke to discuss expansion of the Adopt-A-Beach online presence within the GCMRC website.

19.4 Mile RM 19.4L 6 – 6 -
2017

- **Dedicated Adopt-A-Beach page**
- **Gallery of all beach photos**
- **Access to all Reports and Results tables**
- **Ability to query the database of observations and comments**
- **Possible increase in funding**
- **Flash flood report request**



**Grapevine RM 81.7L 7 - 17
-2017**

**Public data used to initiate
discussions with passengers
Used by Grand Canyon
Monitoring and Research
Center to evaluate beach
change.**

**Used in presentations with NPS
and Adaptive Management
Groups to visually express
erosion through fluctuating
dam releases.**

**Results of High Flow Experiments (HFEs) Evaluation of Vegetation Impacts
on Camping Area Possible rational to slow down ramp rates after HFE.**



Fall HFE vs. Spring HFE

Questions?