

Glen Canyon Dam Adaptive Management Work Group
Agenda Item Information
August 26-27, 2015

Agenda Item

Stakeholder's Perspective and High Flow Experiments (HFE) Effects on Beaches--the View from Camp

Action Requested

Information item only; we will answer questions but no action is requested.

Presenters

Sam Jansen, Grand Canyon River Guides; Paul "Zeke" Lauck, GCRG Adopt-A-Beach Coordinator

Previous Action Taken

N/A

Relevant Science

N/A

Summary of Presentation and Background Information

This talk will have two parts: (1) the Grand Canyon River Guides Stakeholder perspective; who we are, what we do, and what we care about and (2) the river runner's take on effects of the High Flow Experiments, based on what we've learned through our Adopt-A-Beach program (started in 1996) and experience in the canyon.

The Adopt-A-Beach program was implemented by Grand Canyon River Guides after the first High Flow Experiment in 1996. Its purpose is to keep tabs on changes to the camping beaches that river runners depend upon. It's a volunteer program where river guides stop and take photos of their chosen beaches each time they pass by during the summer. The repeat photographs are collected and analyzed, and a report is published each year. This program is one of the many ways guides work to be good stewards of the place they care so much about.

Stakeholder Perspective— Grand Canyon River Guides





Grand Canyon River Guides

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- 501(c)(3) educational and environmental organization

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- 501(c)(3) educational and environmental organization
- Created in 1988
- More than 1700 members

GCRG Mission

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- Protect the Grand Canyon

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- Set the highest standards for the river profession

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- Celebrate the unique spirit of the guide community

GCRG Mission

- Protect the Grand Canyon
- Set the highest standards for the river profession
- Celebrate the unique spirit of the guide community
- Provide the best possible river experience

How does that lead to a chair
at this table?

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at this table?

- Grand Canyon Protection Act of 1992

What does GCRG do?

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- Guide Training Seminar

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- Yearly training river trip

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- Fall Rendezvous

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- BQR—the Boatman's Quarterly Review

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- Guide Training Seminar
- Yearly training river trip
- Fall Rendezvous
- BQR—the Boatman's Quarterly Review
- Great Website: www.gcrg.org

Why?

Why?

- Why is recreation important?















































































Stewardship

Stewardship

- When we look back years from now, will we be able to say we did the best we could?

Stewardship

- When we look back years from now, will we be able to say we did the best we could?
- When future generations look at our choices, what will they have to say about them?



High Flow Experiments—

What do the Guides See?











We know beaches have been
shrinking...

So let's try High Flow Experiments!

So let's try High Flow Experiments!

- But how do we know if they work?

The “Ideal” Camping Beach...

The “Ideal” Camping Beach...

- Big

The “Ideal” Camping Beach...

- Big
- Flat

The “Ideal” Camping Beach...

- Big
- Flat
- Accessible

The “Ideal” Camping Beach...

- Big
- Flat
- Accessible
- Right location

The “Ideal” Camping Beach...

- Big
- Flat
- Accessible
- Right location
- Unoccupied

The “Ideal” Camping Beach...

- Big
- Flat
- Accessible
- Right location
- Unoccupied
- Beautiful

The “Ideal” Camping Beach...

- Big
- Flat
- Accessible
- Right location
- Unoccupied
- Beautiful
- One of many

How do we know if HFEs bring
beaches closer to “Ideal”?

How do we know if HFEs bring beaches closer to “Ideal”?

- Guides will tell you!

How do we know if HFES bring beaches closer to “Ideal”?

- Guides will tell you!
- Always accurate, always honest.

The Adopt-A-Beach Program



Tom Moody & Andre Potochnik

“.....the goal of this project is to provide purely qualitative, anecdotal evidence about the effects of the test flood and the subsequent impacts on sandbars during the 1996 commercial boating season”.

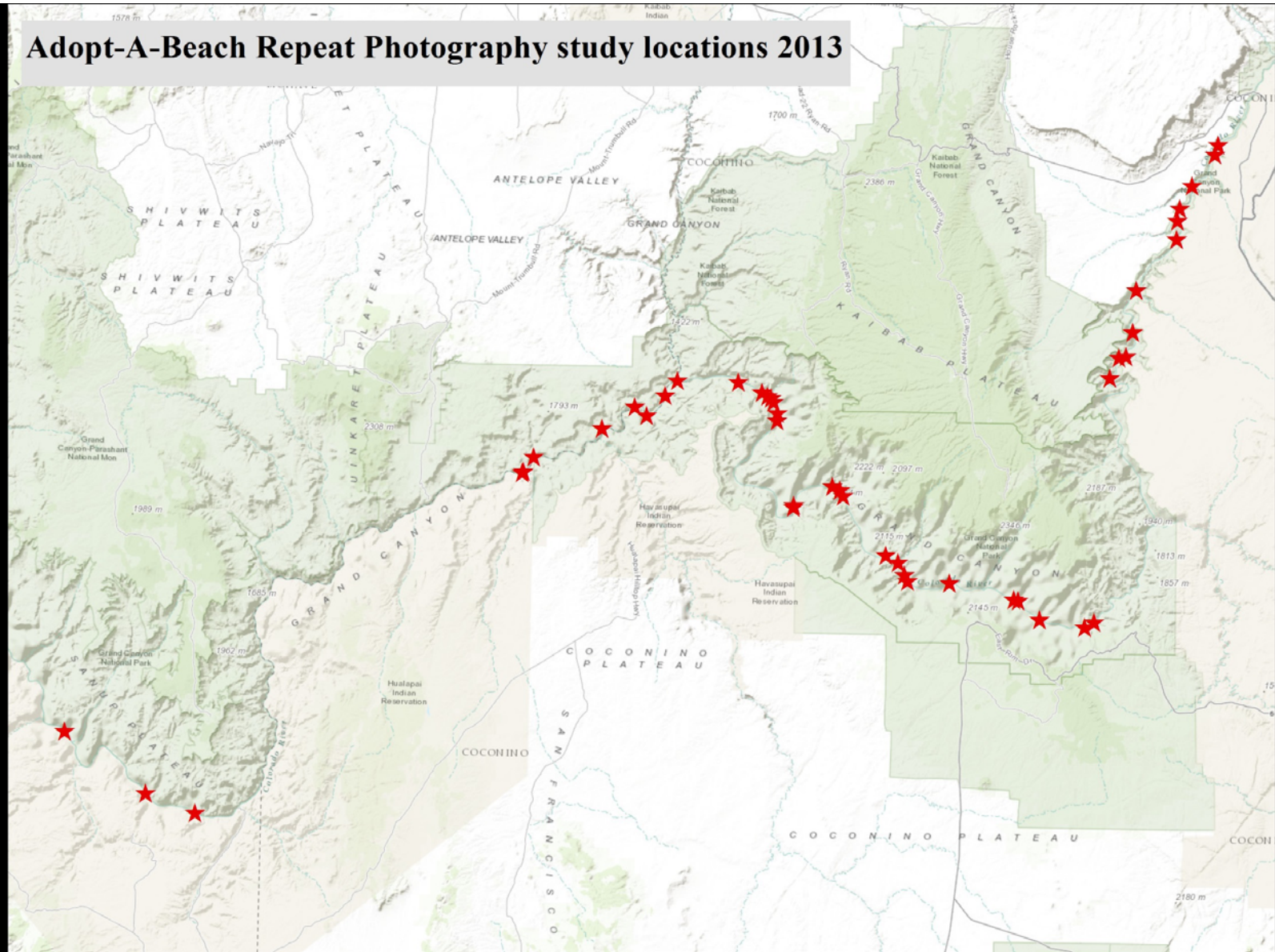


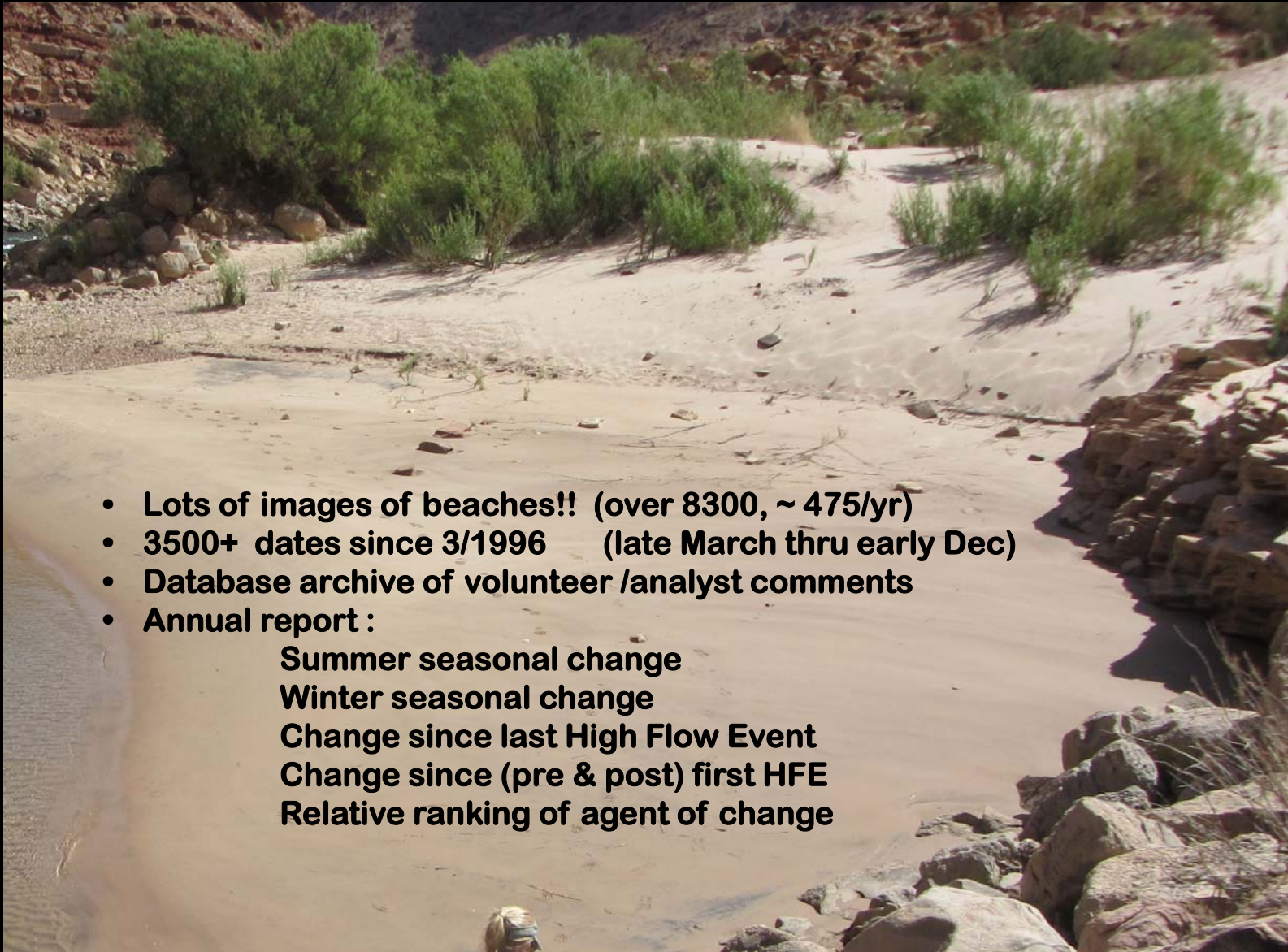


Schist
river
mile/side: 96.5 L
date: 4 8 2010
m d y
time: 10:45



Adopt-A-Beach Repeat Photography study locations 2013





- Lots of images of beaches!! (over 8300, ~ 475/yr)
- 3500+ dates since 3/1996 (late March thru early Dec)
- Database archive of volunteer /analyst comments
- Annual report :
 - Summer seasonal change
 - Winter seasonal change
 - Change since last High Flow Event
 - Change since (pre & post) first HFE
 - Relative ranking of agent of change

What kinds of changes do we see?

*Degraded Parking,
loading/unloading*





Cutbanks
Vegetation encroachment

A photograph of a riverbank. On the left, a high, layered rock cliff rises from a sandy shore. The shore is covered in light brown sand and is littered with a large amount of driftwood and debris. A river flows along the right side of the shore. The water is a murky, brownish color. Some green vegetation is visible on the cliff face and along the riverbank. The text "Human impacts" is overlaid on the left side of the image.

Human impacts



Wind scour / deposition

river
mile/side:

Silver
29.2 Grotto

date:

10	19	10
m	d	y

time:

9AM

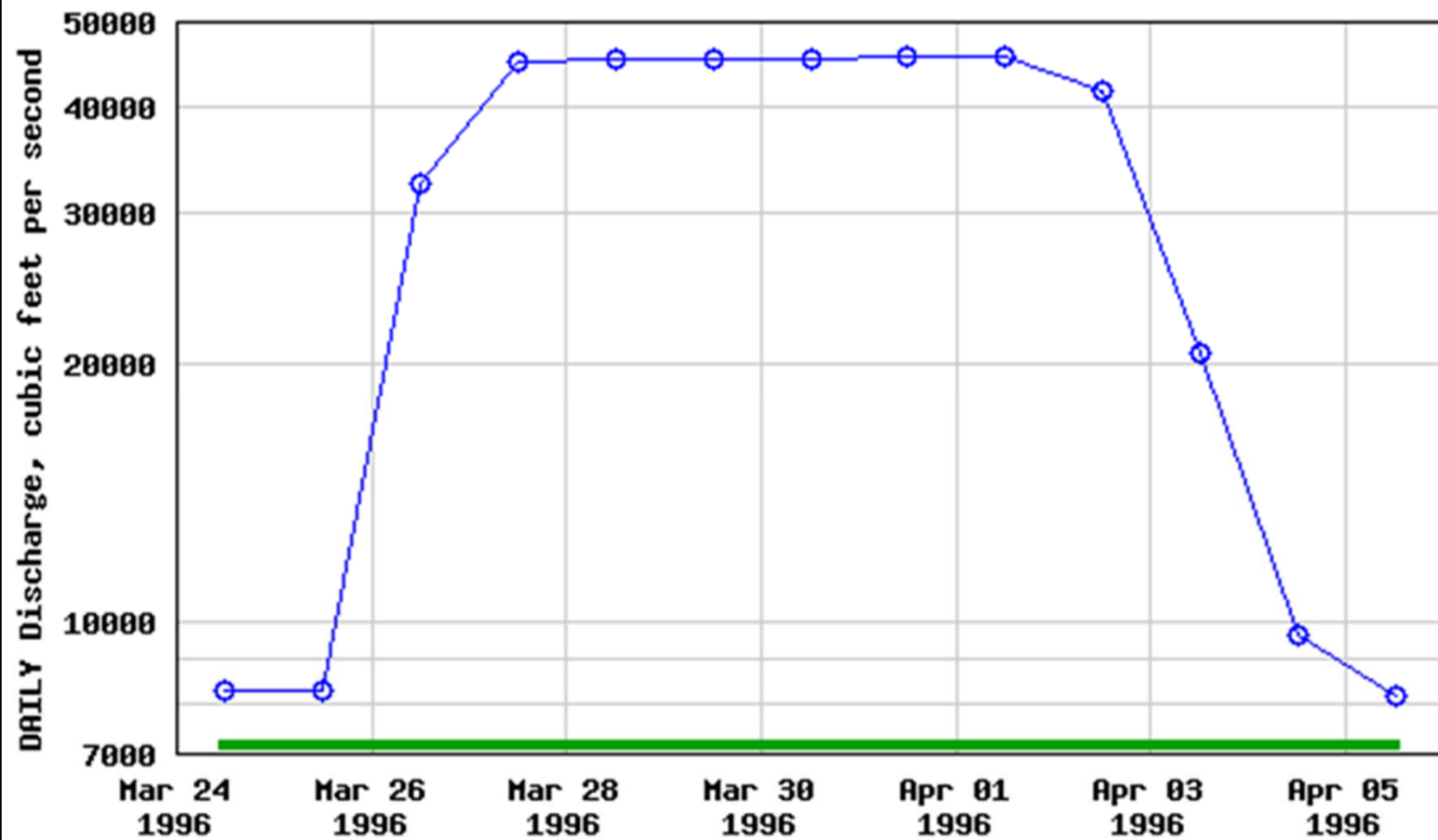
064 Rain
Event Gully/cut



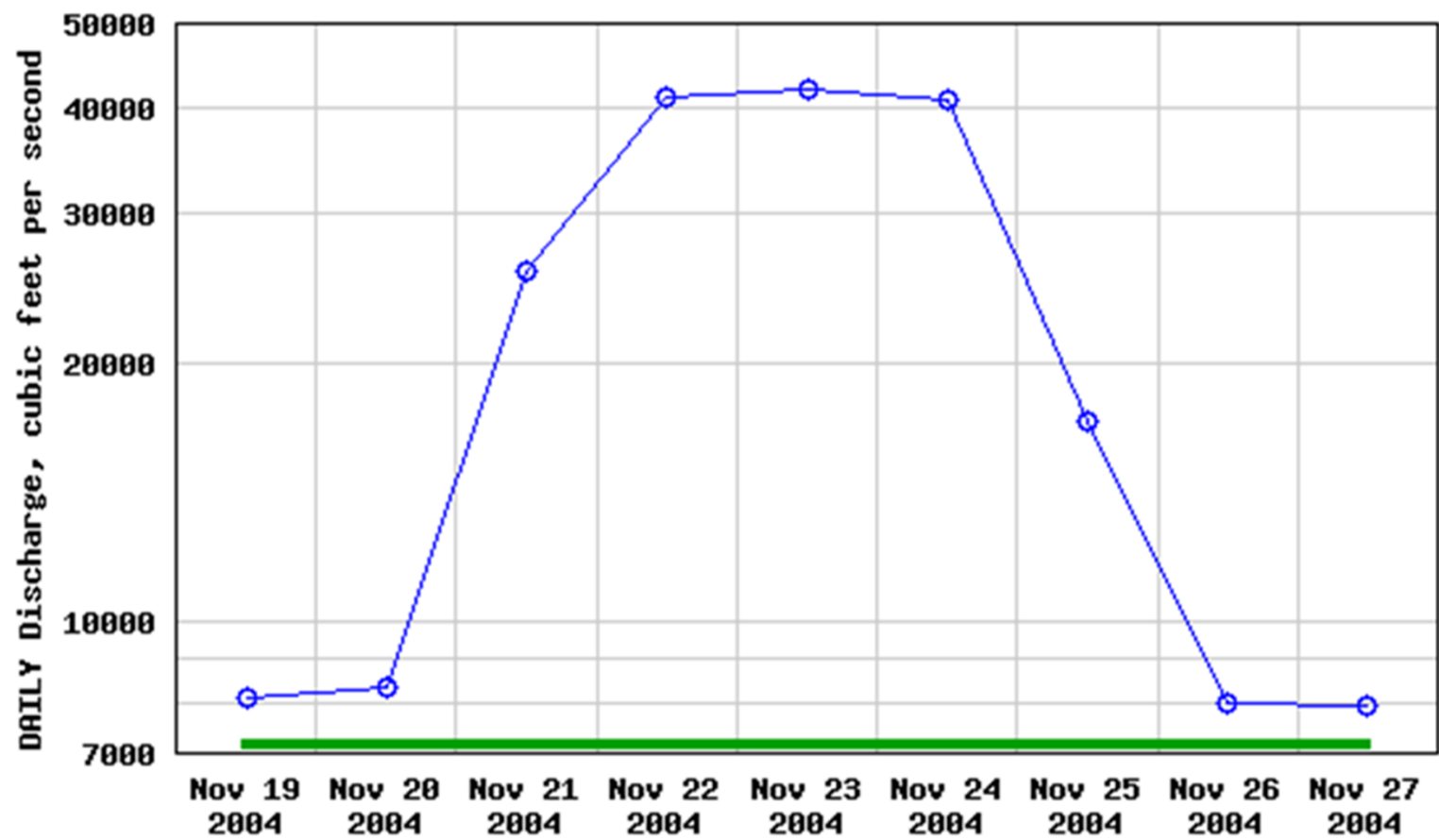
Improvements!

Camp	1996 Improved	1996 Degraded	1996 Same	2005 Improved	2005 Degraded	2005 Same	2008 Improved	2008 Degraded	2008 Same	2012 Improved	2012 Degraded	2012 Same	2013 Improved	2013 Degraded	2013 Same
Soap 12.4	X			X		X	X	X			X		X	X	
Hot Na Na 19.4	X			X		X	X				X			X	
North 23	X			X		X		X		X			X		
Shinumo	X			X			X			X			X		
Nautiloids	X			X			X			X			X		
Tatahatso	X							X							X
Marthas	X			X			X							X	
Buck Farm	X				X			X			X		X		
Nevills	X					X	X						X		
Hance			X												
Grapevine						X	X			X			X		
Clear Creek	X						X			X			X		
Zoroaster	X						X						X		
Trinity	X						X			X			X		
Schist	X					X			X	X			X		
Boucher	X						X								X
Crystal			X			X		X		X					X
Lower Tuna	X			X									X		
Ross Wheeler		X				X			X						X
Bass	X				X			X		X					
110		X					X				X				
Upr Garnet	X			X			X			X			X		
Lwr Garnet	X			X			X			X			X		
Below Bedrock	X					X	X					X			X
Stone	X					X	X			X			X		
Talking Heads	X			X			X			X			X		
Racetrack	X					X			X	X					X
Tapeats	X					X	X						X		
Owl Eyes	X			X			X			X			X		
Backeddy	X			X			X			X					
Kanab	X					X	X			X			X		
Olo	X						X						X		
Matkat	X			X			X			X			X		
Upset							X			X			X		
Last Chance	X					X			X				X		
Tuckup	X			X			X			X			X		
Upr National		X				X		X		X			X		
Lwr National	X					X		X		X				X	
Travertine						X			X						
Gneiss 250						X	X			X			X		X

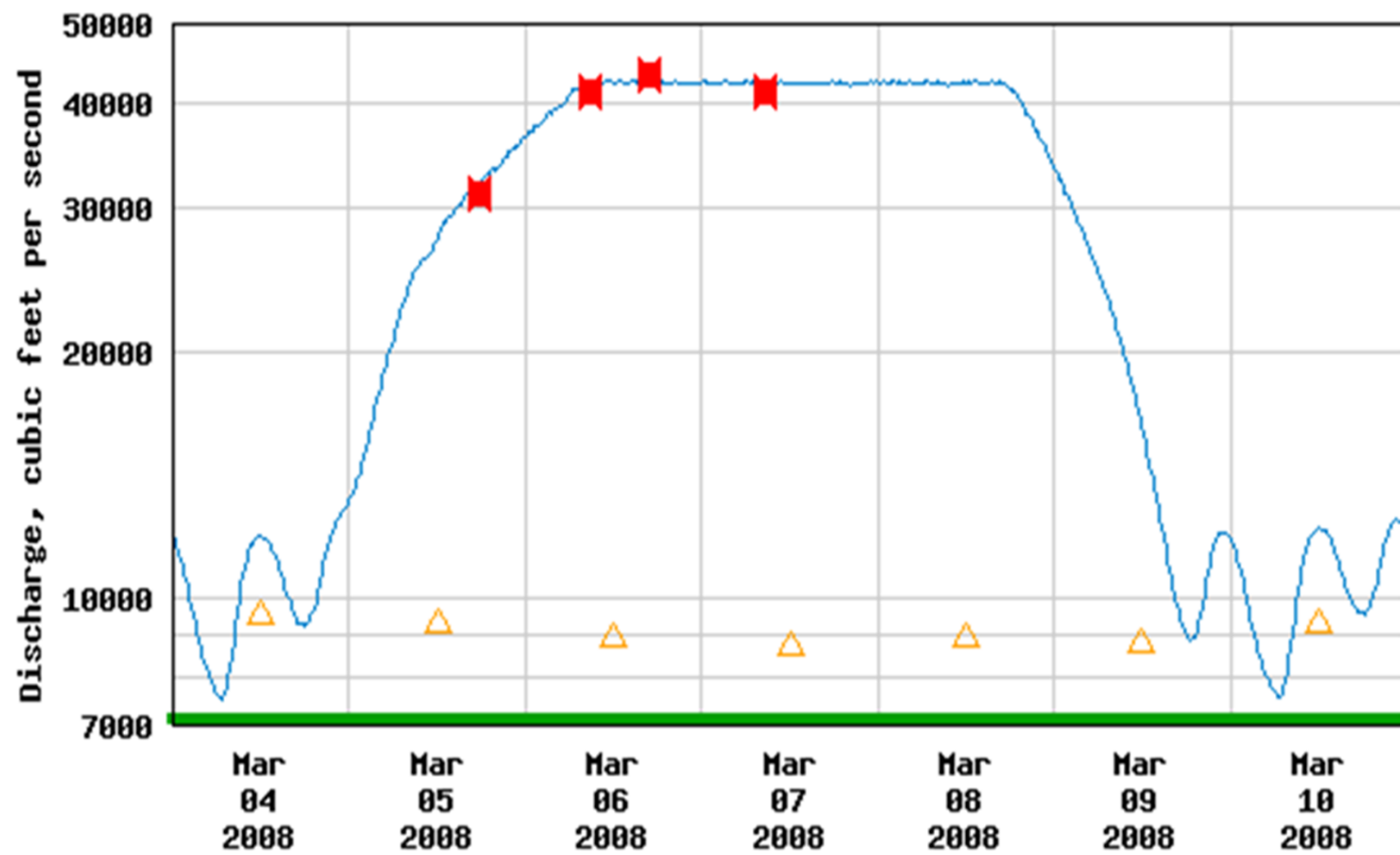
USGS 09380000 COLORADO RIVER AT LEES FERRY, AZ



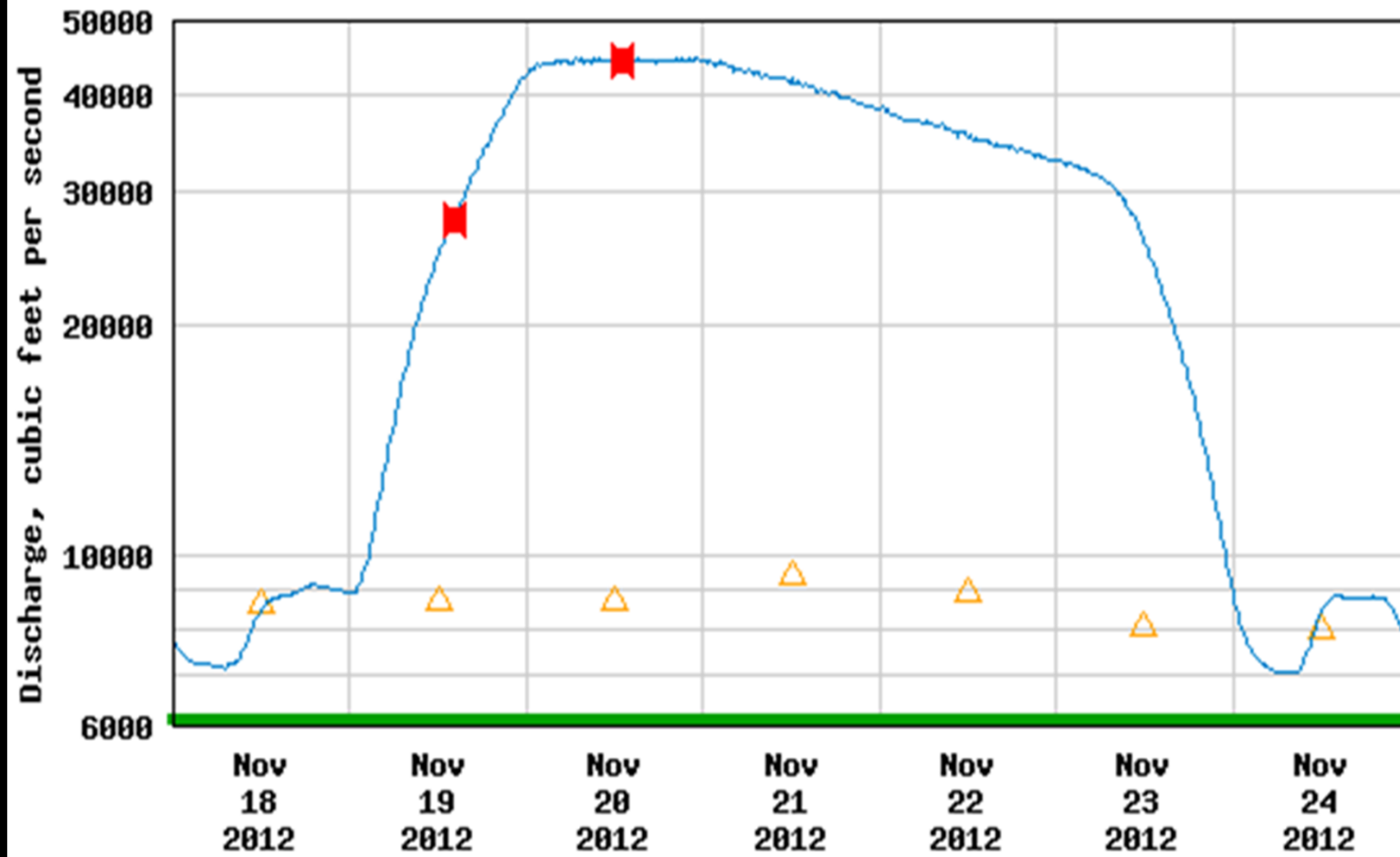
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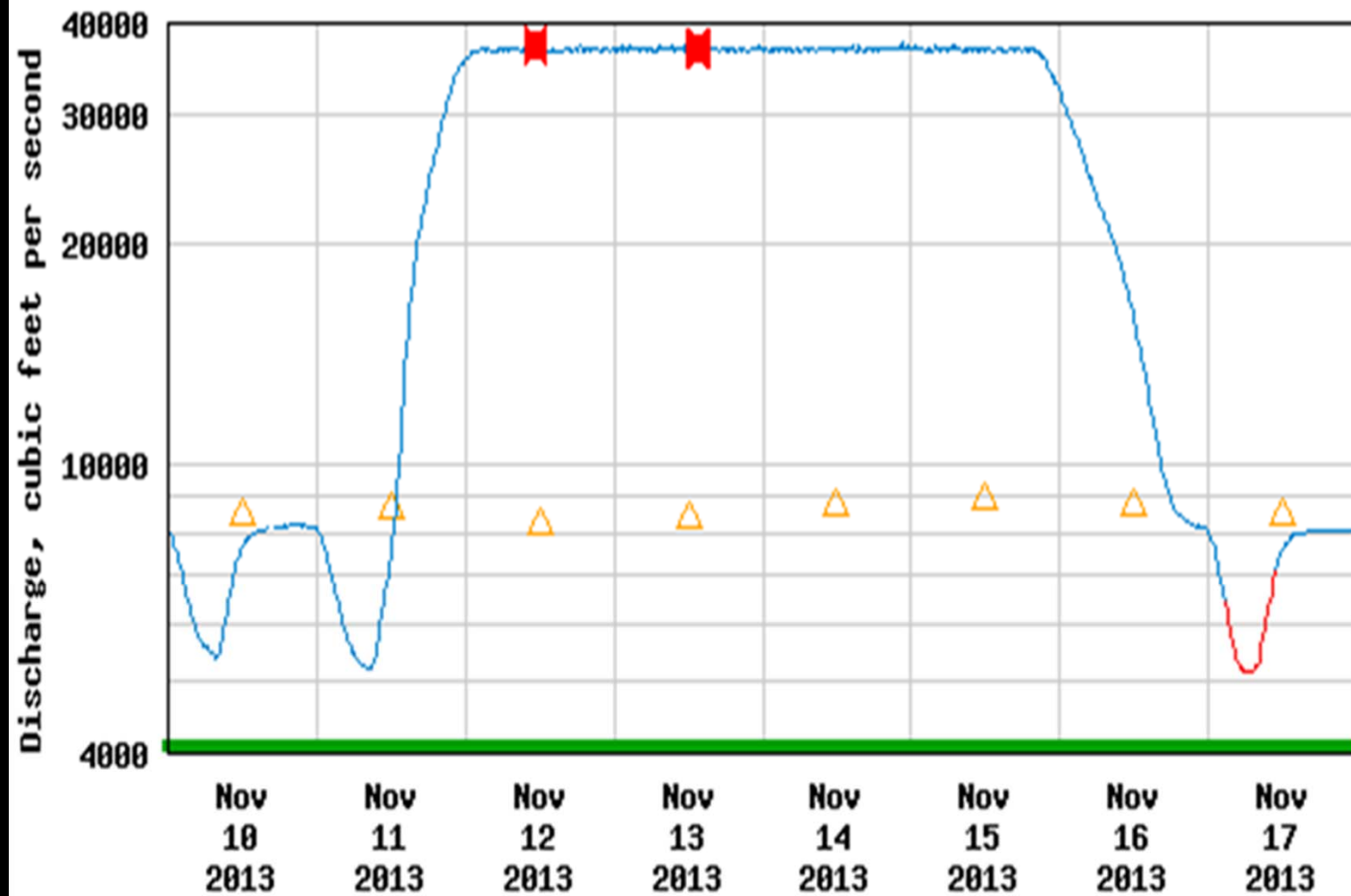
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Buck Farm Fall 2012

Buck Farm Spring 2013





Olo Summer 2013



Olo Spring 2014



Lower Garnet
Late Summer 2012

Lower Garnet
Spring 2013





North Canyon
Fall 2012



North Canyon
Spring 2013



**Shinumo Wash
Late Summer 2012**



**Shinumo Wash
Late November 2013**



Lower Tapeats
Fall 2007



Lower Tapeats
Spring 2008

Zoroaster

9/12/13



4/6/2014



Zoroaster Camp



- Tuckup Camp

5/7/2014



9/8/2014



Camp	1996 Improved	1996 Degraded	1996 Same	2005 Improved	2005 Degraded	2005 Same	2008 Improved	2008 Degraded	2008 Same	2012 Improved	2012 Degraded	2012 Same	2013 Improved	2013 Degraded	2013 Same
Soap 12.4	X			X		X	X	X			X		X	X	
Hot Na Na 19.4	X			X		X	X				X			X	
North 23	X			X		X		X		X			X		
Shinumo	X			X			X			X			X		
Nautiloids	X			X			X			X			X		
Tatahatso	X							X							X
Marthas	X			X			X							X	
Buck Farm	X				X			X			X		X		
Nevills	X					X	X						X		
Hance			X												
Grapevine						X	X			X			X		
Clear Creek	X						X			X			X		
Zoroaster	X						X						X		
Trinity	X						X			X			X		
Schist	X					X			X	X			X		
Boucher	X						X								X
Crystal			X			X		X		X					X
Lower Tuna	X			X									X		
Ross Wheeler		X				X			X						X
Bass	X				X			X		X					
110		X					X				X				
Upr Garnet	X			X			X			X			X		
Lwr Garnet	X			X			X			X			X		
Below Bedrock	X					X	X					X			X
Stone	X					X	X			X			X		
Talking Heads	X			X			X			X			X		
Racetrack	X					X			X	X					X
Tapeats	X					X	X						X		
Owl Eyes	X			X			X			X			X		
Backeddy	X			X			X			X					
Kanab	X					X	X			X			X		
Olo	X						X						X		
Matkat	X			X			X			X			X		
Upset							X			X			X		
Last Chance	X					X			X				X		
Tuckup	X												X		
Upr National		X				X	X	X		X			X		
Lwr National	X					X		X		X				X	
Travertine						X			X						
Gneiss 250						X	X			X			X		X

Enough with data--
Sam has anecdotes!

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- The boating/camping experience

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- Long-term trends

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- HFEs seem to be helping

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- HFEs seem to be helping
- Let's keep a robust HFE program going.

Enough with data--
Sam has anecdotes!

- The boating/camping experience
- Long-term trends
- HFEs seem to be helping
- Let's keep a robust HFE program going.
- Are we doing the best we can for the Grand Canyon?

Thank You!



A photograph of a wooden oar floating horizontally on a body of water. The water is dark and reflects the sky, with some ripples visible. The oar is light-colored wood with a smooth finish. The text "Come Boating With Me!" is overlaid in the center of the image in a black, sans-serif font.

Come Boating With Me!