



## Quagga-Zebra Mussel Management Plan (QZMP EA)



### Why is a plan needed now?

As of January 2014, approximately 1,300 adult quagga mussels have been found and removed from Lake Powell. We expect to find additional adult mussels as the season progresses.

The Quagga-Zebra Mussel Management Plan (QZMP) is needed to help the NPS decide what tools are appropriate to support the ongoing management of invasive mussels in Glen Canyon now that quagga mussels are present in Lake Powell.

The QZMP will consider changes to the existing prevention and monitoring efforts, and would include analysis of potential control, containment, and other park management actions. The plan will also consider options for providing a sustainable funding source.

The NPS has used a variety of tools to support extensive mussel prevention efforts for several years. This has included education efforts, monitoring, and inspection, decontamination, and quarantine of incoming boats as necessary.

Mussel larvae (veligers) were first confirmed in Lake Powell in late 2012. Adult mussels were first reported in March 2013 when a local marine services business discovered 4 adult mussels on a boat that had been pulled for service.

To date, no mussels or veligers have been found uplake of Navajo Canyon. Although recent water sampling results have detected additional veligers in the lake and indicate mussel reproduction is occurring.

### How will the finding of quagga mussels in Lake Powell affect boaters in 2014?

Arizona and Utah state laws require you to clean, drain, and dry your boat when leaving Lake Powell using self-decontamination procedures. Additional steps are required if you will be launching on other waters without a significant drying period or if you are on Lake Powell for more than 5 days. Regulations vary depending on the state, so all boaters should review the regulations of any states they will enter with their watercraft after being at Lake Powell, including Utah and Arizona.

Boat inspections and decontamination of high risk boats are still required for incoming boats at Glen Canyon. Although quagga mussels have been found in Lake Powell, the low numbers suggest an early detection stage and control strategies may be successful in containing the population. Continuing mussel prevention activities, including boat inspections, will minimize the chances that mussels will colonize other areas of the lake. It may also prevent the introduction of other aquatic invasive species.

### What can I do to help?

Boaters can help by making sure your vessels and equipment are not contributing to the problem. How? **Clean, drain, and dry!**

The continued spread of mussels and other aquatic invasive species is preventable. Cooperate with prevention and containment efforts at Lake Powell and other places where people are trying to protect their waters. Also review the Frequently Asked Questions

(FAQ) materials that are updated regularly by the NPS. The FAQ is available at <http://parkplanning.nps.gov/qzmp>.

Your input is also requested to help develop the Quagga-Zebra Mussel Management Plan (QZMP). More information is provided on the next page. For the most current planning updates, or to provide comments on the QZMP visit <http://parkplanning.nps.gov/qzmp>.

## How will a decision be made?

The NPS is preparing an Environmental Assessment (EA) to evaluate different management tools to support the prevention, early detection, control, containment, and other management actions that are appropriate for addressing invasive mussels in Glen Canyon National Recreation Area.

This Quagga-Zebra Mussel Management Plan and EA (QZMP EA) will be developed through a public process that complies with the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA) and other applicable laws, regulations, and policies.

This process will develop and analyze a reasonable range of alternatives to meet park management goals related to invasive mussel management, resource protection, and visitor enjoyment. The QZMP EA will evaluate the environmental impacts of potential management actions and will seek opportunities to avoid or minimize the potential for adverse impacts.

The QZMP EA will also evaluate a range of options to fund a sustainable invasive mussel management program. This may include consideration of new or increased boater fees to help recover costs to operate the program.



## How can I get involved?

The NPS encourages public participation throughout the planning process. There are two opportunities to formally comment on the project; once during initial project scoping and again following public release of the EA.

The EA will consider the potential impacts to visitor use, cultural resources, natural resources, and park operations.

**All comments, questions, and suggestions related to the project are welcome. During the public scoping period the following types of comments are particularly helpful:**

- Specific information about what management actions the NPS should consider to support the prevention, early detection/monitoring, control, containment, and management of invasive mussels at Lake Powell.
- Information about how you use this area and how changes in invasive mussel management might affect your use.
- Other activities, interests, or resources that might affect or be affected by NPS actions to manage invasive mussels at Lake Powell.
- Other ideas or alternative ways of meeting the project objectives.

**All comments must be submitted in writing and will be accepted in the following ways:**

By mail: Superintendent  
Attn: Quagga-Zebra Mussel Management Plan  
P.O. Box 1507  
Page, AZ 86040

By website:  
<http://parkplanning.nps.gov/qzmp>

By fax: 928-608-6204

In person: Monday – Friday between  
7:30 a.m. and 4:00 p.m.  
Glen Canyon Headquarters  
691 Scenic View Drive  
Page, AZ 86040

**Please provide all comments by March 7, 2014.**