

## **SUMMARY: Joint Fact Finding Meeting #5**

**Held September 21, 2016**

### **Meeting in Brief**

#### **Dredging**

The Committee discussed dredging policies and requirements from the various regulatory agencies (Lahontan, TRPA, U.S. Army Corps of Engineers (Corps), NDEP) and whether state and federal requirements would provide adequate environmental protection to replace or streamline TRPA permitting. The state and federal requirements are comprehensive and require an intensive review to ensure that water quality is protected. Given the extensive review and comprehensive dredging conditions required for each project, it appears that some redundancy exists between state, federal and TRPA requirements, and in addition, that the Shoreline Plan could evaluate provisions for permit streamlining. The Committee began to evaluate whether the current TRPA code provision that requires a beneficial finding for new dredging is necessary given current high standards, Best Management Practices identify specific mitigation measures, and monitoring. The goal is to adopt dredging permitting policy and codes that protect water quality. TRPA staff will continue to work with the shoreline permitting agencies to map the permitting processes and identify opportunities for streamlining to inform the Shoreline Plan.

#### **Fish Habitat Study and Map**

Dan Segan gave an overview of the findings of the Fish Habitat study completed for TRPA by Spatial Informatics Group (SIG). While the extent of the fish habitat has not drastically changed since the 2002 study, the substrate data is more refined and provides a more accurate and complete boundary. The Committee agreed that this study and map are the best available science regarding fish habitat and that this information should be used to inform the Shoreline Plan.

### **Action Item**

<b>Date</b>	<b>Responsible</b>	<b>Item</b>
10/5	Rebecca	Get Tahoe Keys dredging study and post on website
Ongoing	Brandy/Tiffany	Map dredging permit processing

Next Meeting: October 27 10-12:30

### **Discussion Summary**

#### **Updates and Follow Up on Action Items from Meeting 4**

Water Quality

Since the last JFF meeting, a number of committee members submitted feedback to Adam Lewandowski on the water quality analysis memo and approach. Ascent Environmental will incorporate this feedback in the environmental impact analysis to ensure that the full range of water quality impacts related to boating and boating structures are addressed.

#### Fish Habitat/Structures Subcommittee

In addition, the fisheries subcommittee met to begin addressing specific questions related to shoreline structures and their impacts on fish habitat. They plan on meeting again to provide recommendations as to best available science to inform the Shoreline Plan. The questions under consideration are:

- Is there an impact of putting structures in or adjacent to fish spawning habitat or fish feed-and-cover habitat?
- Can that be mitigated? If yes, how?
- Could you avoid the impact by the project design? Does pier cover affect spawning behavior?

### **Dredging**

The JFF Committee was asked to consider the following questions related to dredging:

1. Are there concerns that exist with new dredging that differ from maintenance dredging?
2. Regarding lifting the beneficial finding for new dredging, what value or benefits does the beneficial finding provide (given states protocols / requirements)?
3. Are there conditions, based on science, that the Steering Committee might consider for new dredging?

In order to inform this discussion, TRPA, Lahontan and Nevada Division of State Lands staff gave overviews of their respective agency requirements. A representative from the Army Corps of Engineers was also present to describe how the federal requirements and oversight come into play. The following is an overview:

#### TRPA

TRPA currently allows maintenance dredging (areas that have previously been dredged) subject to the measures described in the BMP Handbook section for shoreline structures. In Nevada, dredging is reviewed by TRPA, Nevada Department of Environmental Protection, Nevada Division of State Lands, and Army Corps of Engineers. In California, dredging is reviewed by TRPA, the Lahontan Regional Water Quality Control Board, Cal. State Lands Commission, and the Army Corps of Engineers. Through an memorandum of understanding, TRPA has delegated to Lahontan the review and approval of the 12 California marinas' dredging requests. TRPA requires a beneficial finding be made for new dredging (dredging in areas or to depths that have not previously been dredged). Specifically, new dredging must be found to be beneficial to shorezone conditions and water quality and clarity. Due to the difficulty of a project meeting this condition, no new dredging applications have been approved since 1991. Due to low lake levels, TRPA & Lahontan are currently reviewing an application for new dredging at the U.S. Coast Guard

Station in Tahoe City. The Marina Association is interested in exploring new dredging to adapt to low lake levels.

#### Lahontan Regional Water Quality Control Board

Mary Fiore-Wagner gave a detailed overview of the permit requirements of the Lahontan Regional Water Quality Control Board's Basin Plan for dredging activities in Lake Tahoe. She described the different technologies used for various types of dredging and potential contaminants that need to be contained. Regardless of whether dredging projects are considered maintenance or new dredging, a CEQA analysis (with public review) or checklist is required as well as extensive mitigation and monitoring to ensure surface water quality objectives are met. Monitoring of materials used for beach replenishment is also required. Timing of dredging at Lake Tahoe is during the fall/winter (October -May) and must also avoid fish spawning season. She said that they would follow the same review process for new dredging as they currently do for maintenance dredging.

#### Nevada Division of Environmental Protection (NDEP)

NDEP requires a Working in Waterways Permit for any construction activity within the lake including routine maintenance such as channel clearing and minor repairs to intake structures. Activities that require a 404 permit from the Corps will also require a Section 401 Water Quality Certification or a waiver from the State of Nevada. A certification requires BMPs be implemented during construction to prevent violation of state water quality standards.

#### U.S. Army Corps of Engineers (Corps)

Kristine Hansen from the Corps joined the meeting and weighed in as to how federal permitting aligns with state requirements for dredging. The Corps provides primary oversight of dredging through the 404 Clean Water Act permit process. Kristine clarified that the Corps has to follow the National Environmental Policy Act requirements (with public review) for new dredging and that the Corps has to make the same findings that Lahontan does, including a finding that all impacts can be mitigated, before approving a dredging project. **She recommended that TRPA also adopt the same findings as a way to streamline the review process.**

**In all cases, both states, TRPA, and federal permitting or review is required for dredging. The Committee agreed that there is redundancy in the current system and there is potential for streamlining the permitting process through the Shoreline planning process and subsequent code updates.**

#### Considerations for New Dredging

While new dredging is not specifically prohibited under TRPA code, the necessary beneficial finding is difficult for a project to meet and has effectively halted new dredging applications at Lake Tahoe. Some JFF members raised concerns with new dredging having the potential to disturb substrates that have not previously been disturbed, creating an environment that could be conducive to establishment of Aquatic Invasive Species (AIS). Members also pointed out that it is important not to disturb soils and lake bottom conditions that provide fish habitat. Substrate sampling is typically required to analyze these potential

impacts and this is particularly important in areas of the lake that have not been dredged previously.

When evaluating the implications for new dredging (which goes through the extensive permitting and approval process outlined above, i.e. both states, TRPA, and federal), it is important to look at how allowing dredging to provide lake access may avert other impacts, such as prop scour and unregulated sediment disturbance from boats operating in low lake levels. Dredging under these circumstances may result in a benefit to shoreline conditions and thus satisfy the current TRPA beneficial finding requirement. There has also been a study conducted at the Tahoe Keys evaluating the biological impacts of dredging, which would be useful. Another potential impact is the proximity of dredging projects to water intake facilities, such as near Glenbrook.

While project level impacts can be evaluated and mitigated, cumulative impacts to water quality lake wide from opening up areas to new dredging is more difficult to analyze because these areas have never been dredged and therefore the impacts are not known. There have, however, been improvements in BMP's (dredging techniques) that can better control or address these cumulative impacts. All agreed that while certain standard conditions and best management practices for new dredging should be required, much of the mitigation is site/project specific. Some suggested placing limits on the locations where new dredging could occur to streamline the cumulative impacts analysis in the environmental review.

The group also discussed that applications for dredging are very expensive, the review process is lengthy and therefore most individual property owners will not pursue new dredging. At JFF, it was noted that new dredging may be a preferable low lake level adaptation alternative to building extremely long piers.

One person observed that dredging might be linked to water-dependent activities, mitigation, and when no sensitive alternative to dredging exists. Some wonder if existing policy likely increases the demand for pier extensions because parties are very limited in their ability to dredge. A final consideration is that safety improvements would have been possible if parties were able to conduct new dredging.

#### Dredging Summary

Streamlined permitting is recommended because of the redundancy in the evaluation / approval system across both states, TRPA, and the Army Corps.

In sum, the key outcomes from the discussion on dredging are captured here:

1. *Are there concerns that exist with new dredging that differ from maintenance dredging?*

The primary difference is that new dredging uncovers historic deposits and maintenance dredging uncovers "new" deposits. Permit conditions may not differ, but the analysis differs. (The Army Corps concurred and added that they analyze new dredging materials to decide on applicant can deposit materials.)

2. *Regarding lifting the beneficial finding for new dredging, what value or benefits does the beneficial finding provide (given states protocols / requirements)?*

- Water treatment operators are very concerned about water quality to meet health codes. Any policy changes must evaluate this impact.
  - Dredging in new areas could open those areas to aquatic invasive species.
3. *Are there conditions, based on science that the Steering Committee might consider for new dredging?*
- Substrate sampling can help evaluate potential for aquatic invasive species and effect on fish habitat.
  - When evaluating, it is important to look at how allowing dredging to provide lake access may avert other impacts, such as prop scour and unregulated sediment disturbance from boats operating in low lake levels.
  - Other conditions could consider: amount of total dredging, location, and methods.

### **Fish Habitat Study and Map**

Dan Segan gave an overview of the findings of the fish habitat study completed for TRPA by Spatial Informatics Group (SIG). TRPA defines fish habitat by the type of physical substrate which includes spawning, feed and cover (considered “prime fish habitat”) and marginal habitat. While the extent of the fish habitat has not drastically changed since the 2002 study was completed, the substrate data is more refined, provides a more accurate and complete boundary and is being recommended to use to inform the Shoreline Plan.

Key findings of the study include the following:

- The study shows that because there has been little change in the extent of fish habitat, it is considered “in attainment”, meeting the TRPA Threshold Standard at approximately 6,000 acres of prime fish habitat.
- While there was no change in the overall habitat mapped since 2002, there has been a decrease in fish populations. Scientists are not sure why this occurring, maybe from increasing lake temperatures. TRPA may want to look at updating their fisheries threshold indicators.
- Field mapping (snorkel surveys) used to inform the analysis used the same protocol and surveyed at the same depth as the surveys conducted in the 1990’s. There has been no analysis as to how changes in physical conditions of the lake (changing lake levels) may be a factor in the extent and type of fish habitat is present today. This should be a consideration for future analysis of fish habitat.

The Committee agreed that this study and map are the best available science regarding fish habitat and will be used to inform the Shoreline Plan.

### **Shoreline Interactive Map**

TRPA staff has updated the interactive Shoreline Plan Map, removing some of the layers so that views can upload more quickly. An instruction guide is now included with the map on the Shoreline website.

## Participants

Lahontan RWQCB: Mary Fiore-Wagner

CTC: Penny Stewart

California State Lands: Jason Ramos

League to Save Lake Tahoe: Jesse Patterson

Tahoe Lakefront Owners' Association: Jan Brisco

Nevada State Lands: Liz Kingsland

TRPA: Kenneth Kasman, Brandy McMahon, Dan Segan, John Marshall

Sierra Club: Harold Singer

Tahoe Keys POA & Beach and Harbors Ass.: John Larson

North Tahoe Marina: Jim Walsh

USACOE: Kristine Hansen

Via phone:

UNR: Sudeep Chandra,

UC Davis: Geoff Shladow,

NDOW: Kristy Knight

Tahoe Water Suppliers Association: Madonna Dunbar

Consultants

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