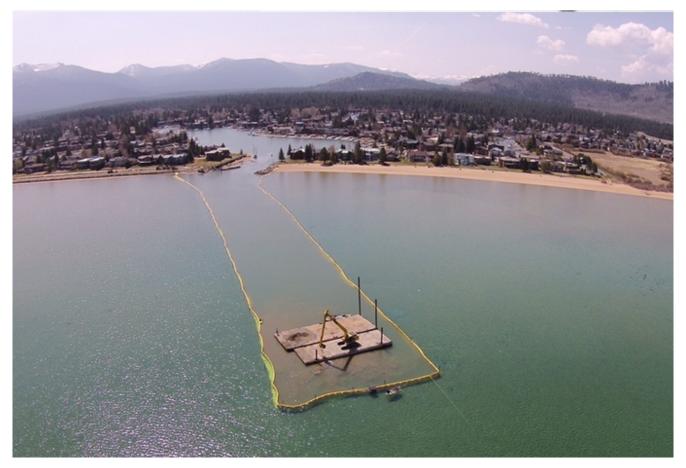
Opinion: State keeps an eye on Tahoe dredging



Dredging at the Tahoe Keys Property Owners Association channel was completed earlier this month. Photo/Melanie Green

By Alan Miller

With low water conditions at Lake Tahoe due to the ongoing drought, there have been a number of maintenance dredging projects taking place to keep boating and commercial access open at existing marina and boat ramp facilities. Some of these dredging projects have been completed, while others are going on right now, and some have yet to begin.

The Lahontan Regional Water Quality Control Board of California plays a role in ensuring water quality is protected for beneficial uses such as drinking water, recreation in or on the water, and the protection of plants and animals that live in or near the water. The Lahontan Water Board does this by issuing permit requirements to control pollutants from dredging activities.

For the established California marinas at Lake Tahoe, the Lahontan Water Board has issued a single Marina General Permit. This permit includes requirements to control wastes and pollutants from all marina operations, including wastes in stormwater runoff. Within the Marina General Permit the Water Board has granted an exemption to its waste discharge prohibitions that allows for dredging in previously dredged areas to provide for ongoing public recreation.

Approval of maintenance dredging projects is streamlined for those meeting the requirements of the Marina General Permit. The permit requires the project to complete an application specifically describing the activities and pollution control methods.



- Tahoe Keys Marina (above) has begun dredging.
- Tahoe Keys Property Association is done dredging.
- Ski Run completed dredging for inner harbor, no application

for dredging farther out into the lake.

- Homewood is dredging.
- Lakeside Marina's application is incomplete.
- Fleur de Lac's application is incomplete. The plan is to dredge in the fall.
- Star Harbor has its permit and plans to dredge in the fall. Source: Lahontan Water Board

These methods, sometimes called best management practices, or BMPs, include plastic curtains, also known as turbidity curtains, to contain water clouded by soils disturbed by dredging. The turbidity curtains are anchored by weights at the lake bottom, with floats at the top. The idea is to keep the suspended sediments contained within a small area and keep the rest of Lake Tahoe clear and blue.

If suction dredging is used, large volumes of water and sediment must be managed, often requiring large areas to separate the solid material from the water. Water must either be placed on land to percolate into the ground or filtered prior to discharging back to the lake. Also, project staff must describe the disposal or reuse of the dredged material. A plan to monitor water quality, during and following the project, is also required, as is pre- and post-project lake bottom surveys to ensure that only maintenance dredging occurs.

The Lahontan Water Board staff reviews all applications for the adequacy of the BMPs that are proposed, and issues authorizations under the Marina General Permit that may include special conditions. Such conditions may include limiting equipment access; controlling the spread of aquatic invasive species; land restoration following wetland or other disturbance; or monitoring and reporting on the dredging activity.

During the application review staff considers proposed containment and dewatering methods, locations for dredging and disposal of spoils, types of mechanical equipment to be used, access routes (from water or land), and needed monitoring. When the Water Board is satisfied that adequate controls are proposed to protect against potential or actual effects that may be harmful to water quality, aquatic life, wildlife, recreation, and water aesthetics, then the dredging is allowed to proceed.

Maintenance dredging is needed because the lakebed and shoreline materials are subject to periodic movement under the action of stream inputs, in-lake currents, storms and waves. Over time, the low spots tend to fill and so they must be dredged — especially in low-water conditions — to maintain access for boaters.

The Water Board is here to ensure the best possible dredging projects, and to reduce impacts to water quality and uses of water from allowed activities. Besides the obvious recreational benefits, dredging can also be beneficial by removing or controlling the infestations of non-native or invasive aquatic organisms, and by removing fine sediments that may be contaminated by metals, oily wastes, or pollutants in sediment from urban runoff.

In most cases, however, the primary concern is keeping the soils from the disturbed lakebed from getting outside the containment areas during dredging. It's a balancing act as the Water Board strives to meet the desires of the public to enjoy Lake Tahoe, while also protecting it.

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