Malibu Lagoon: MYTH vs. FACT

Misinformation surrounds the restoration of a treasured sanctuary

In highly urbanized Southern California, we've lost much of our wetland habitat and our remaining lagoons are often highly degraded. Malibu Lagoon is one of the few remaining tidal lagoons in the region and marks critical habitat for the federally endangered tidewater goby and southern steelhead trout, as well as a diversity of wetland shorebirds. But, Malibu Lagoon is in trouble. It is being clogged by sediments, has severely low dissolved oxygen levels, and is not in its natural state.

Heal the Bay cherishes the beautiful Malibu coast and understands that Malibu Lagoon is an essential part of a healthy environment. Many people have worked for decades to protect the lagoon and improve water quality throughout the Malibu Creek watershed. The area has also been heavily studied by experts at many of the state's leading universities.

It's clear that Malibu Lagoon is less vibrant and diverse, especially under the surface of the water, than other lagoons in Southern California, such as Bolsa Chica in Huntington Beach or the Carpinteria Salt Marsh. Fortunately, the California Coastal Commission late last year approved carefully developed plans to restore the Lagoon and improve circulation. The State Park restoration, guided by science and input from top wetlands ecologists throughout the state, is expected to begin this summer. Heal the Bay helped develop the plan from 2002-05 but will not be an active participant in the actual restoration.

Despite this transparent process, a small but vocal contingent of community members has raised concerns about the restoration project.

Here we address some of the common misconceptions about the lagoon restoration:

MYTH: *Malibu Lagoon is a thriving, healthy environment*

FACT: Since the early 1900s, increased human activity has degraded Malibu Lagoon. Caltrans and others used the lagoon for landfill in the 1950s and 1960s. By the late 1970s the site was completely filled and housed two baseball fields. The wetland area historically extended throughout the Civic Center and Malibu Colony region, but the lagoon's size has been greatly diminished by urban development along the coast. Decades of soil dumping have destroyed much of the lagoon's natural function.

MYTH: *Lagoon water should be still and have little circulation*

FACT: In a healthy lagoon system, tides and river flows would remove built-up sediments and flush them out to sea, especially on high tides or during rainstorms when the river runs high. This natural circulation creates an oxygenated system for aquatic life to breathe. Because of the human disturbance at Malibu Lagoon over the years, there is not enough water flow or flushing in the western part of the lagoon. With too little flushing, fine sediments accumulate. They hold extra nutrients that cause excessive algal growth, which depletes oxygen in the water, stressing and threatening aquatic life. Oxygen levels in Malibu Lagoon have measured close to zero because of these problems. Better water flow in the western portion of the lagoon will reduce this stress on plants and aquatic animals, helping them to thrive.

MYTH: *Previous restoration activities have worked, and the lagoon is functioning naturally*

FACT: The restoration conducted by State Parks in 1983 involved removing some of the soils previously dumped in the lagoon and creating the three lagoon channels. However, that restoration did not plan well for water movement. Now, 30 years later, fine sediments are filling those channels and choking the lagoon. The recently approved restoration plan will remove more of the dumped soils that never should have been placed there, and redirect the tidal channels so that water can flush through them in a more natural way, the lagoon will be cleansed regularly by tides and creek flows. If the restoration is not conducted, the western portion of the lagoon may fill completely with sediment.

MYTH: *There is abundant native animal and plant life in the Malibu Lagoon*

FACT: Although the bird life at the lagoon is diverse and abundant, the creatures that live in the water -- the fish, crabs, shrimp, clams and other invertebrates — are severely threatened by the unhealthy conditions in the western lagoon. Low oxygen levels will continue to drive bottom-dwelling creatures away, meaning less food for birds and other wildlife. The State Water Board and EPA have determined that the invertebrate ecology and water quality (nutrients, dissolved oxygen, fecal bacteria) are impaired and must be cleaned up.

MYTH: *This restoration can be effective without machinery*

FACT: Using machinery allows the work to be done all at once, during one season. This is important to allow the lagoon to recover. In nature, occasional events such as storms and floods help to "clean out" a system like the lagoon, and the plants and animals that live there quickly re-establish themselves in the new, refreshed environment. Introduced sediment from past human activities is still affecting the lagoon, and dissolved oxygen is often too low for fish survival. Acclaimed wetland ecologists helped design the Malibu Lagoon restoration project to ensure success. Other wetlands restoration projects in California, such as Bolsa Chica and Carpinteria Salt Marsh, have involved the use of heavy machinery to address sediment and circulation issues. These systems are now healthier than they were before the restoration projects.

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MYTH: *It's the other problems in the watershed that need to be addressed*

FACT: Several issues impact the Malibu Creek Watershed, from upstream development, to circulation problems in the Malibu Lagoon. Heal the Bay's Stream Team has conducted comprehensive monitoring throughout the watershed for over 10 years. With this data, we have successfully called for the dry weather discharge prohibition for Tapia Wastewater Treatment Plant during summer months (April 15-October 15) to help protect surfers and swimmers at Surfrider Beach, worked towards stronger wastewater and septic controls in the lower watershed and Civic Center area, and worked with communities throughout the watershed to reduce pollution associated with runoff. We've removed several stream barriers in the watershed to allow for fish passage and partnered with wildlife agencies to help to help reintroduce the tidewater goby to Malibu Lagoon. Heal the Bay will continue to work throughout the watershed to improve habitat and water quality.

MYTH: *The restoration plan was completed behind closed doors without public input. Stakeholders were allowed to attend, but not speak.*

FACT: The Malibu Lagoon restoration project is the culmination of nearly two decades of scientific research and public concern. In a stakeholder driven process, 85 members participated in the Malibu Lagoon Task Force, part of the greater Malibu Creek Watershed Advisory Council. The planning work, including extensive environmental review of numerous restoraton alternatives through public workshops and the EIR process, was done in the mid 2000s, but now permits and state funding are finally in place to move forward with the project.

MYTH: *Heal the Bay is profiting off of funds supporting the Malibu Lagoon restoration*

FACT: Heal the Bay received funding from the state in 2002 to convene the Malibu Lagoon restoration project stakeholder group and develop the restoration plan. Similar to contract work conducted for any project conducted by an entity, we were funded to develop the restoration plan in consultation with wetland ecologists and stakeholders, which was completed in 2005. We have not received any funding to work on the project since then. The lead groups on the actual restoration activities are the Santa Monica Bay Restoration Commission and State Parks.

MYTH: *The project will threaten sensitive and endangered species that live in the lagoon*

FACT: Top-notch ecologists helped design the lagoon restoration plan. Conducting the restoration during summer (June 1 to October 15) is the most protective time frame for the fish and animals. This timing was selected very carefully in consultation with National Oceanic and Atmospheric Administration (NOAA) fisheries and the United States Fish and Wildlife Service to best safeguard lagoon wildlife. Furthermore, significant protections are built into the restoration plan for wildlife. Biologists will survey work areas and will carefully move any fish and wildlife that they find. They will place them in other areas of the lagoon where they will be safe from any impacts. They will count and record any breeding or nesting birds, which will probably move to other areas of the lagoon on their own and will not be touched. No work will occur near any nesting or breeding sites, to protect birds and chicks.

MYTH: *This project eliminates beach and lagoon access for beach goers and naturalists*

FACT: While the current bridge system will be removed to reduce further sediment build up in the lagoon, the existing perimeter path will be enhanced for easier access and educational signage. The path will give better access to people of all ages, including a bird blind for wildlife viewing, interactive tide gauge, and amphitheater to help facilitate educating groups. This path also maintains access to the beach for surfers and beachgoers.

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