

WATER DEVELOPMENT COMMISSION

Utah Lake questions

HYDROLOGY

1. What would be needed to achieve complete restoration of water quality and water clarity to healthy and clean conditions?

Division of Water Quality at DEQ is best suited to answer this question.

2. What would be needed to maximize water storage and water supply potential?
Water is currently held in Deer Creek and Jordanelle reservoirs so it is available for drinking water. Once the water reaches Utah Lake it can be used for recreation and irrigation, but not drinking. Water storage and supply are questions best suited for the DNR divisions of Water Rights and Water Resources or, for Utah Lake and the two up-stream reservoirs, the Central Utah Water Conservancy District.

3. What would be needed to eliminate shoreline and lake bottom damage caused by wave action?

Erosion and deposition are natural processes on any lake, including Utah Lake, and should not be misconstrued as "damage." The Division of Forestry, Fire and State Lands, as the manager of the sovereign land lakebed and shoreline, rarely, if ever, fields a complaint about damage caused by wave action. Winter can be a different story as winter wave action causes ice flows, which can be dangerous and damaging. Ice flows are also a natural occurrence, though.

WILDLIFE (responses provided by DNR's Endangered Species Program)

1. What would be needed to achieve complete removal of invasive fish species?

To completely remove invasive fish species would require a chemical treatment of the entire lake and all upstream waters that also contain invasive species. A complete lake treatment was previously evaluated and it was determined unfeasible. However, invasive fish species can be managed at a low level such that their impacts are minimal. This requires long-term commitments. Other alternatives have also been considered, including diking off a portion of the lake, removing all invasive fish species, and maintaining the area for June sucker.

2. What would be needed to successfully restore the Bonneville Cutthroat Trout population?

The lake would have to be much deeper and cooler than it is today. Provo River could support natural reproduction but lake temperatures are currently too warm to support trout year-round.

3. What would be needed to successfully recover the June Sucker population?
The State is currently in the process of evaluating June sucker for downlisting from Endangered to Threatened. To get it completely removed from federal protection and returned to State management, it will take long-term actions, such as the planned Provo River Delta project, to support sufficient natural recruitment of June sucker young. The barrier to achieving this is providing sufficient areas for the young to grow without being eaten by predators.
4. What would be needed to restore critical habitat for waterfowl and other wildlife species?
Restoring submergent vegetation and near-shore wetland habitats is key. Carp removal and converting phragmites areas to native plant species will go a long way in achieving this.

PLANTS

1. What would be needed to completely eliminate the invasive plant species plaguing Utah Lake?
Increased funding and capacity. The work to remove invasive species at Utah Lake is led by Utah County and the Utah Lake Commission, of which DNR, FFSL and DEQ (represented by the Division of Water Quality) are members. The Commission, along with various state and local agencies, has been very successful with invasive plant management at Utah Lake, particularly phragmites. In fact, nearly every acre of Utah Lake shoreline has been treated for phragmites, which requires 3-4 years of deliberate and successive treatments. Many invasive species, including phragmites, have been fully removed all along Utah Lake. In reality, invasive species cannot be "eliminated;" instead, invasives can be put into a manageable maintenance mode, but you can never walk away completely from ongoing management (especially if the adjacent private land owner does not manage for invasives).

FFSL's Phrag Story Map with some pics from Utah Lake is here:

<http://utahdnr.maps.arcgis.com/apps/MapSeries/index.html?appid=84af699f45784ad3a79f8d110ba33b29>

2. What would be needed to restore native plant species on the lake's shoreline?
Additional funding and capacity. Part of successfully and fully treating invasive species, including along Utah Lake's shoreline, is replacing the invasives with native and more desirable plant species. This work is being done at Utah Lake in conjunction with removal. It is the only way to be successful and can be expedited with additional funding.

3. What would be needed to restore the littoral zone plant communities?

Additional funding and capacity. (Littoral zone is defined as an area near the coastline of a body of water, so likely this question is referring to the wetlands around Utah Lake?)

Because of the fluctuation of the level of the lake this shoreline area is expansive and critically important. There have been suggestions in the past to drain the "swampy" areas to prevent mosquitoes and such. This does not take into account the important ecological role wetlands play in filtering and cleansing runoff, providing critical habitat for fish and wildlife, etc. These areas are being restored with native plants as invasive species are removed.

Education of adjacent landowners and those that recreate on the Lake is key to increasing the awareness and understanding of the role and values of healthy wetlands.

RECREATION

1. What would be needed to restore and maximize recreational opportunities on Utah Lake?

The recreation opportunities on Utah Lake are abundant (e.g., fishing, boating, kayaking and paddle boarding, swimming, beach use, waterfowl hunting, and many other uses).

During weekends in the summer most of the marinas are operating at capacity.

Unfortunately, current algal blooms are keeping people from using the available resources and services (marinas, beaches, open water). Low lake levels, such as occurred just last year in 2016, also kept people from using marinas. If the lake level remains low, then dredging the marinas around the lake can help restore recreational opportunities. However, without addressing the algal blooms, the intent to spend millions of dollars dredging marinas and providing recreational facilities at beaches (e.g., Sandy Beach) and other publicly accessible areas is questionable.