

Los Angeles



Department of Water & Power

#19

CF-17-0293

Questions and Answers

About the City of Los Angeles Emergency Declaration to Respond to the Snowpack Runoff



What is LADWP doing to manage the excess water?

LADWP crews are working right now to lower reservoir levels in the upper aqueduct system in order to make room for the runoff when the snow begins to melt. We are also maximizing the benefits of this water while we have it by replenishing the groundwater table in the Owens Valley watershed as much as possible through spreading and supplying as much water as we can to our environmental projects in the Owens Valley.

The total amount available to be delivered to Southern California is limited by the size of the Aqueduct. There is a maximum amount of the snowpack that can ultimately make it to Los Angeles. The excess will remain in Owens Valley and flow to Owens Lake.

LADWP is also reducing purchased water and increasing the use of LA Aqueduct water by making operational adjustments in the City water distribution system.

Given this abundance of runoff, is LA still in a drought?

The high snowpack level in the Eastern Sierra this year is good news, but we have no idea what next year has in store for our water system. Climatologists predict that climate change will result in more extreme weather patterns. That means we need to prepare for wetter wet years and also drier and hotter dry years. Because of this we continue to encourage all Angelenos to maintain their water efficient lifestyle. We need to plan for the long-term and not feel any false sense of security from one extremely wet year after five years of severe, record-setting drought.

How much could this potentially cost the City of Los Angeles?

LADWP has invested of over \$1.1 billion in dust mitigation infrastructure at Owens Lake and reduced dust levels in the Owens Valley by 96 percent. Some of this investment may be significantly damaged by flood waters that are expected to raise the level of Owens Lake up to seven feet. The water is expected to damage and/or destroy some of the dust control areas that have been planted with managed vegetation, others that have been tilled and contoured to mitigate dust, and damage or destroy other infrastructure. The extent of damage is not possible to fully assess or estimate at this time. However, LADWP has insurance and will seek federal and state disaster relief assistance. LADWP also has funding for additional dust control infrastructure that will be completed in the future. These sources are expected to cover some, if not all, of the costs to repair damage.

Why not just refill Owens Lake and keep it full?

The flood water that will naturally flow to Owens Lake in this extreme year will eventually evaporate over the next 12 to 18 months. In future years, LADWP expects to divert water to the LA Aqueduct according to established water rights and environmental agreements. Our priority is protecting the environment in Owens Valley, while also providing a reliable source of water for the City of Los Angeles.

Has an emergency declaration been issued before for a situation like this?

This is the first emergency declaration the City of Los Angeles has ever issued for excess snowpack runoff. In past record years (1969 and 1983) excess runoff would naturally flow to Owens Lake where it would evaporate over time. This year is different because the water that will naturally flow to Owens Lake can do significant damage to dust mitigation measures and infrastructure constructed by LADWP over the past 17 years that was not in place during previous record wet winters.

Besides infrastructure on Owens Lake, what is threatened by this influx of water?

Public safety, roads, homes and erosion of land are all at risk by this vast amount of water flowing through the Owens Valley this year along with sensitive environmental areas. We will work closely with Inyo County officials and other water agencies to assist in managing these flood waters while taking steps to minimize the damage that we expect to occur to dust control measures at Owens Lake, where possible.

Does this flooding pose the risk of dam failure similar to that experienced recently by the Oroville Reservoir?

We are taking every precaution to ensure dam safety during this period of high runoff. Spillways will be used at some dams along the Aqueduct system. However, we are working to avoid spilling Long Valley Dam due to environmental concerns, specifically protecting the habitat for the Owens Tui Chub that live just below Long Valley Dam.

Is LADWP managing flood waters for Inyo and Mono Counties?

The multiple atmospheric river systems that have inundated California created conditions that will result in possible flooding that can place the safety of the public, property, infrastructure and the environment in peril. All of LADWP's efforts to manage water this runoff season will aid in preventing harm and damage to the public, environment, and the communities of Mono and Inyo County. LADWP's management of these flood waters will assist the counties with their flood control efforts.

If Owens Lake floods to the levels we expect, how long would it take to recede? And then how long before that damaged portion becomes emissive?

We expect water to evaporate from the Owens Lakebed between 12 and 18 months after the high level of flows cease. It is important that LADWP manages the increased flow as to not disturb the ecosystem restoration and dust mitigation measures to the greatest extent possible. LADWP will work to repair any damage to the dust mitigation infrastructure and ensure that future investments allow for surge capacity in extreme wet years.

2017 City of Los Angeles Snowpack Runoff Emergency Declaration

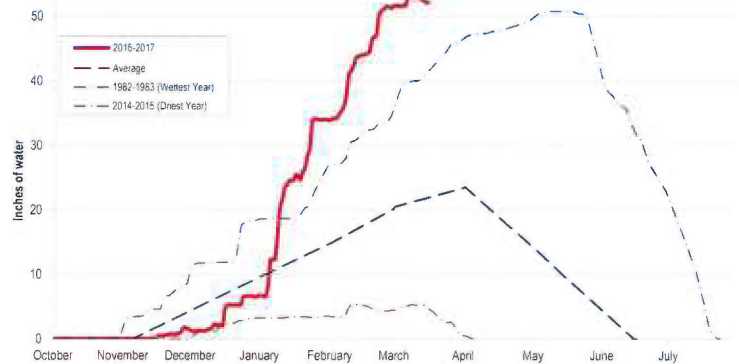
Fact Sheet

With snowpack levels in the Eastern Sierra registering at 241 percent of normal, the Los Angeles Department of Water and Power (LADWP) is expecting one of the largest snowpack runoffs from the Eastern Sierra watershed in the over 100-year history of the Los Angeles Aqueduct. Up to 1 million acre feet (AF) of water – or about twice the amount of water Angelenos consume in one year – is expected to flow through the aqueduct system this spring and summer. This massive amount of water exceeds the storage capacity of the entire LA Aqueduct System and has prompted the Mayor of the City of Los Angeles to issue an Emergency Declaration to allow LADWP to take immediate steps to protect infrastructure and aid in managing flood waters. The declaration is expected to assist the City in response to the threat posed by this excessive runoff to the health and safety of the public as well as to protect infrastructure and the environment.

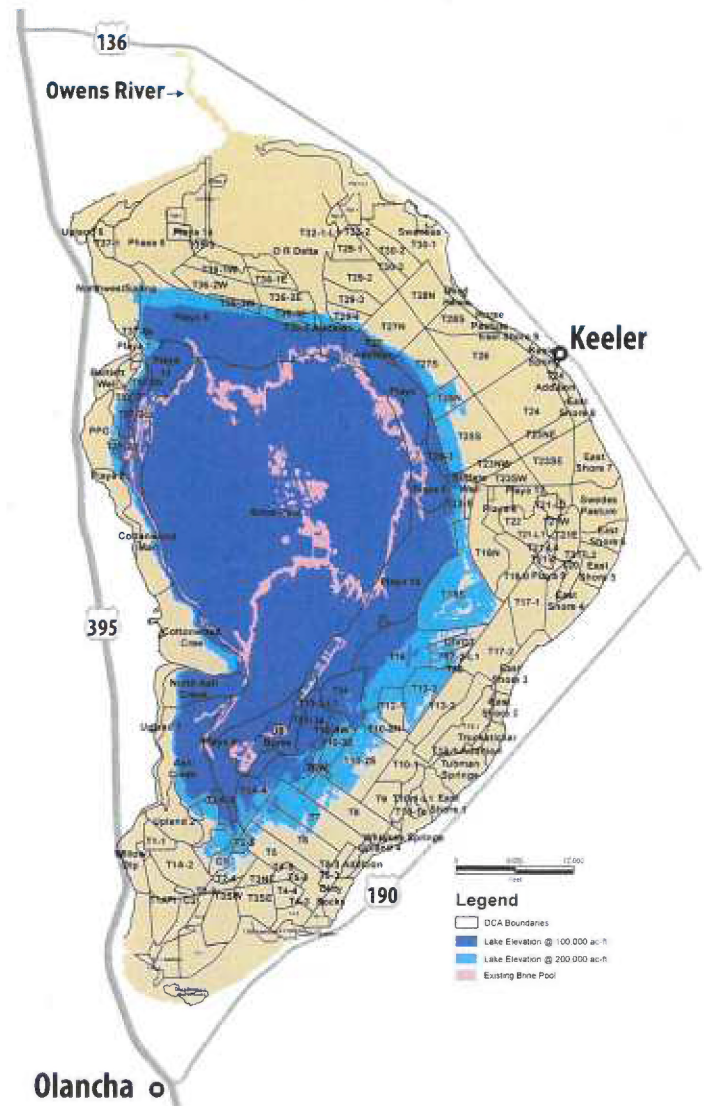
To maximize the beneficial use of this water to the fullest extent, LADWP is spreading water throughout the aqueduct system to replenish local groundwater aquifers, maximizing flows in the LA Aqueduct by emptying reservoirs to create more storage space for runoff waters, and supplying Los Angeles with aqueduct water in place of purchased water and pumped water wherever possible to manage excess flows. After all of these steps are taken, LADWP expects there to be up to 200,000 AF of flood water that will naturally flow to Owens Lake, located near Lone Pine, CA.

Just as the Pacific Ocean is the natural terminus for flood waters from the western side of the Sierra Nevada Mountain Range, Owens Lake is the natural end point for rain and snowmelt flowing down the Owens River through the Owens Valley. Water that exceeds what can be spread to recharge local aquifers and which does not make it into the LA Aqueduct system will end up on the Owens Lakebed. Once there, it will add to the existing 30 sq. miles of saline brine pools and is expected to cause significant flood damage to dust control infrastructure managed and constructed by LADWP over the past 17 years. These measures spread over nearly 50 sq. miles of dried lake playa have effectively reduced dust pollution in the area by 96 percent.

Weighted Average of Owens Valley Snow Courses



Owens Lake Dust Mitigation Program



Los Angeles Aqueduct System

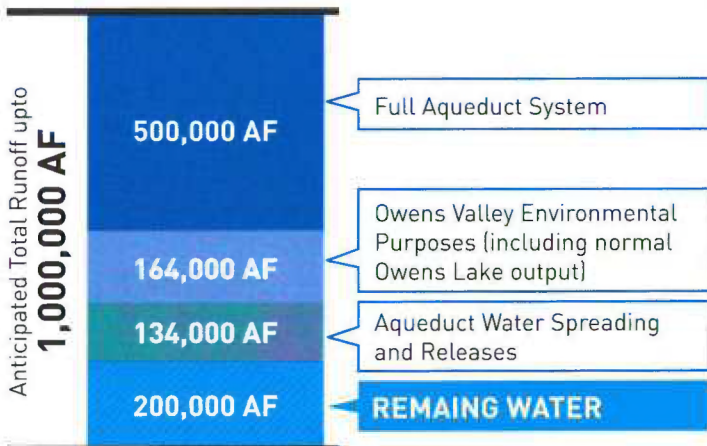
Since 2000, the Los Angeles Department of Water and Power has invested over \$1.1 billion in dust mitigation infrastructure on Owens Lake. The excess runoff threatens to destroy significant elements or portions of LADWP's dust control areas and interrupt dust mitigation operations, possibly altering the ecosystem in a way that would generate excess air pollution that could threaten the health of the public after the runoff evaporates over the next 12 to 18 months.

Therefore, the City of Los Angeles must take immediate steps, including constructing infrastructure on and near Owens Lake to manage the flow of water onto the lake playa in a manner that avoids additional air quality problems. LADWP must also take subsequent steps to repair, replace and remediate damaged dust mitigation infrastructure at Owens Lake to ensure air quality is maintained throughout the Owens Valley Planning Area. These immediate and prospective measures will be done to fulfill the City's dust mitigation commitments on Owens's Lake despite this emergency situation.

In addition to emergency measures required at Owens Lake, LADWP must also take action to armor and repair certain LA Aqueduct facilities from floodwater impacts, clean out water conveyance and delivery facilities of debris, increase water storage at certain locations, increase water flows in certain controlled waterways, construct flood control projects throughout the Aqueduct system to mitigate potential harm and maximize the amount of water delivered to Los Angeles while ensuring all water available is put to the highest and most beneficial use.

This Emergency Declaration issued by the Mayor triggers City rules allowing LADWP to contract for the goods and services necessary to respond to the threat and rebuild any infrastructure that may be damaged. It is effective for seven days and may be extended further by the LA City Council. It also allows the City to request all necessary assistance from the state in order to respond to the flooding and proactively take necessary precautions to prepare for possible damages.

By The Numbers:*



*Note: All numbers are estimates

