

ACONA Meeting Notes, March 29, 2016

Following introductions, these topics were covered:

Status of Groundwater Remediation

NASA's JPL

Merrilee Fellows, NASA Manager for Community Involvement

Steven Slaten, NASA Groundwater Cleanup Project Manager

David Conner, Senior Geologist

Chemicals that were deposited underground during WWII when JPL was developing rocket technology have been the subject of the ongoing cleanup since 1992. JPL has been testing the soil and groundwater since then and conducting cleanup operations, treating the soil and water to remove the chemical contamination. Soil cleanup was completed in 2007. Perchlorate treatment at Lincoln Avenue Water company began in 2004. In 2007, regulators agreed that the treatment plants were doing their job. In 2011, a second treatment plant at Monk Hill began operations. Have to achieve drinking water standards for perchlorate contamination in the deep groundwater; that is ongoing. In 2012 the first five-year review was completed -- systems were operating effectively. Recently completed a deep well (~900') for Lincoln Avenue Water. Cleanup is done in partnership with the water companies. NASA pays to get the chemicals out.

Q&A:

Q: You've identified all the soil and water, but you haven't actually cleaned up the soil and water. A: Soil cleanup is completed: some soil removed. Deep groundwater cleanup is ongoing -- will take another 10-15 years.

Q: Is the drought affecting the cleanup. A: Not appreciably.

Q: Are any wells still closed? A: Monk Hill treatment plant is in the area where the perchlorate plume is. It is effectively removing the perchlorate. Some wells are still closed because of other contamination.

Q: What is a soil vapor well? A: It's like a big vacuum cleaner. It sucks out the air in the soil and removes the volatile chemicals.

Devil's Gate To Eaton Canyon Water Conservation Project

Keith Lilley, Department of Public Works County of Los Angeles

Flood Control District was formed in 1915 to reduce flood risk via flood control and to conserve water for local supply. Two-thirds of water is imported from out of the area. It is becoming scarcer. In 2000 started aggressive program to conserve water through groundwater recharging. Partner with local water agencies to complete projects. Clear out debris to make more room for water storage.

Devil's Gate project: There are no spreading grounds below Devil's Gate Dam. There are spreading grounds below Eaton Wash Dam. Eaton Dam has undergone a seismic upgrade so that the dam will work after a maximum expected earthquake on the Sierra Madre fault. In addition to diverting water to Eaton Wash Dam from Arroyo Seco, there

is a study to see about pumping the water back up to the Arroyo Seco spreading ground. The pipeline will go along New York Drive and over to Eaton Wash. This project will capture water that would otherwise go to the ocean. Outreach and CEQA process will begin this fall, and there will be public input at that time.

Q&A:

Q: I live on New York Drive -- how will this affect my access, and will there be flood control channels? A: Trying to combine as many projects as possible so streets are not torn up twice. There'll be a construction impact of course, but the goal is to minimize impact.

Q: How will Altadena water companies benefit from this project? A: Will be answered during the panel. Water that's being diverted would otherwise go to the ocean.

Q: Arroyo Seco spreading grounds have been dry for years. Why are we spending money on diverting nonexistent water? A: We won't always be in a drought condition.

Arroyo Seco Canyon Project, Pasadena Non-Potable Project, Flint Michigan Issue, Devil's Gate to Eaton Canyon Pipeline (Panel)

Presenter: Bradley R. Boman, Engineering Manager City of Pasadena Water & Power

Panel:

Lisa Yamashita-Lopez, General Manager, Rubio Canon Land and Water Association

Nina Jazmadarian, General Manager, Foothill Municipal Water District

Robert Hayward, General Manager, Lincoln Avenue Water Company

Melvin L. Matthews, General Manager, Kinneloa Irrigation District

Arroyo Seco Canyon Project addresses three areas: Headworks, intake, and spreading basins.

Area 1: Headworks -- taking out part of the construction and naturalizing the area. Directing the stream over to the side so the road doesn't flood during heavy rain. Making it a recreation-type area.

Area 2: For the last five years there hasn't been much stream flow, so the spreading grounds have been dry. There's so much sediment that comes downstream that heavy equipment has been needed to clear it. So a weir gate that can be raised or lowered as needed is being installed to manage the problem.

Area 3: JPL parking lot: a lot of the asphalt has been removed. Plan is to expand the spreading basins in the parking lot area, add a recreational parking lot and possibly restroom facilities.

Recycled water project: Water from Scholl Canyon is going to be brought over to Pasadena. Non-potable water. To be used for watering. \$50MM project, hoping to be in construction in 2017-2018. Will serve a number of Altadena locations, including Mountain View Cemetery and the Altadena Golf Course.

Flint, Michigan: In 2014 Flint changed water supply to Flint River from City of Detroit water. The river water was more corrosive. Detroit water had corrosion inhibitors, but Flint water did not. Flint had lots of water service lines made of lead, which increased

water levels of lead due to corrosives. In October 2015, Flint reconnected to Detroit's water, but it's going to take time for the anti-corrosives to coat the pipes.

Altadena's water is not very corrosive. Hard water naturally coats the interior of pipes. Tests show no lead in the water. Homes built before 1920 may have lead pipes going from the meter to the house. Also, solder containing lead was used on copper water pipes until 1986. The water that sits in the pipes all night long potentially contains the most contaminants, so flush it out before you drink in the morning.

Open Q&A:

Q: Some Pasadena wells have closed down because of VOCs. The standard was lowered for one of the wells, which was then reopened. A: All the water that's served by the water companies meets the water quality standards. Water quality standards tend to go more restrictive, rather than less. Perchlorate used to test at 50 ppb (parts per billion), then went to 18 ppb, now testing to 2ppb. California's standard is 6 ppb.

Q: Have you done a traffic study on New York Drive? There's a LOT of traffic. A: Yes, a traffic study will be done. Two-year project, but in stages, so no part of New York Drive will be affected for the entire two years.

Q: I hear the water supply is contaminated with proscribed drugs and cocaine. What's being done about that? A: Most of the water supply contains only a small amount of these substances. Low parts per billion.

Q: Who are partners for Eaton Wash project? A: State, but also City of Pasadena. Q: Why is Mountain View Cemetary getting recycled water? A: Recycled water would replace use of potable ground water.

Comment: Consumer confidence reports for Pasadena Water & Power: show 11 ppb of perchlorates, so water has to be blended with metropolitan water to bring it down.

Q: How will Altadena water companies benefit from the cross-town pipeline? A: Lincoln Avenue Water Company partners with Pasadena. Objective is not to let any water pass through the dam to the ocean.

Comment: Spreading basins don't work -- they silt in and water evaporates off. When there's enough rain to send water over to Eaton Canyon, those spreading grounds are already full of water. Pumping the water back into the Hahamonga natural habitat is a better plan. Q: Why isn't there a CEQA for both projects? A: There will be.

Q: What percentage of water will be pumped back into the Arroyo Seco? [Not answered.]

Q: How many of the water companies have reinjection wells into the aquifer, and were they considered before the pipeline project? A: Pasadena has five wells, La Canada and Kinneloa have one each, Lincoln Avenue has one that's licensed.

Comment: I worked for the flood control district for 40 years. It's known as a leader in this type of projects. They have a lot of credibility. Flood control has records of the amount of water that runs through the dams, showing how much water is available to be spread. Amount of spread and absorption can be calculated. The Arroyo Seco spreading grounds are not big enough to absorb all the water. It needs to be pumped over to another spreading ground. Pipe can be laid at 200 feet a day.