



California Water and Infrastructure Report

For January 9, 2020

by Patrick Ruckert

Published weekly since July, 2014

An archive of all these weekly reports can be found at both links below:

<http://www.californiadroughtupdate.org>

<https://www.facebook.com/CaliforniaDroughtUpdate>

patruckert@hotmail.com

“But, it is not just the Los Angeles Aqueduct that Mulholland bequeathed to us in this city. He initiated the campaign to build the Hoover Dam and played a key role in ensuring that the Federal Government built it. To do so, as the superintendent of the Los Angeles Department of Water and Power (DWP), he was an initiator of the founding of the Metropolitan Water District of Southern California, which today distributes water to all the cities of the region from Ventura to San Diego. For more than 40 years Mulholland, as the superintendent of the (DWP), built the entire system that today quenches the thirst of more than three million people in this city. The DWP and the MWD were the models used by President Franklin Roosevelt in the 1930s, for the organization of the Tennessee Valley Project and, a few years later, for the Bonneville Power Administration on the Columbia River. There was no one in California for the first decades of the 20th Century who was more respected and admired than Mulholland. He built Los Angeles to be what it is today, and made possible for Southern California to be able to support more than 20 million people.”

From the Feature in this week's report

A Note To Readers

While the Congress does nothing and the President is virtually paralyzed by the ongoing attempted coup to remove him, nothing necessary to create a better future for all Americans is even on the agenda.

So, this week's report is a smorgasbord of reports.

Again we return to a “better time” in our **Feature** this week, when great projects were not only

undertaken, but celebrated by a population that understood the idea of creating a future. Read my 2013 report on William Mulholland and the building of the Los Angeles Aqueduct more than 100 years ago.

More In This Week's Report:

The **Feature** this week is from history. The building of infrastructure has always been about the future, and no one in the history of California understood that, and acted on that idea, better than William Mulholland one hundred years ago. My report from October, 2013, on Mulholland and the building of the Los Angeles Aqueduct demonstrates that principle.

Our first report is on the “Water portfolio” just released by the state of California, which lays out the state’s long-term plans, with some commentary on it by the California Farm Bureau Federation.

Next a small step forward on the funding of a key water storage project was made with the announcement that the federal government is adding \$6 million to the Sites Reservoir project.

The *Los Angeles Times* has a report that claims that “Widespread Power Shutdowns in CA Helped Reduce Chances of Human-Related Fire Ignitions.”

President Trump announced this week a dramatic cut to the requirements for “environmental impact studies” for infrastructure projects under the National Environmental Policy Act (NEPA). Long-term climate change will no longer be part of such studies.

Worried about milk for your child, then read the report below, “Major Dairy Bankruptcies Show the Nasty Wall Street Side of U.S. Economic Destruction.” And, at the same time, small family run dairies are experiencing record bankruptcies.

The final item in this week's report is our **Feature**, as mentioned above.

A Solution to California's Never Ending Water Wars? Probably Not

The following is the comment on the latest state proposed big plan to manage the state's water. While the California Farm Bureau gives a maybe endorsement to the plan, still no one in the state is really looking ahead 50 to 100 years and the necessity of creating new sources of water for when the population of the state is double its present population of 40 million.

I repeat, once again, that only by reviving the planned projects of the John Kennedy presidency will we have something serious. Those projects are the North American Water and Power Projects and the building of multiple nuclear powered desalination plants along the coast and in San Francisco Bay.

Water portfolio lays out state’s long-term plans

Issue Date: January 8, 2020

By Christine Souza

<http://www.agalert.com/story/?id=13605>

Farm organizations welcomed a new water planning document from state agencies while they analyzed the document's proposed strategies.

Titled the California Water Resilience Portfolio and released last week, Gov. Gavin Newsom's

administration described the document as an effort to guide water management in a way that works for people, the environment and the economy.

The draft portfolio document addresses safe drinking water, flood risks, depleted groundwater aquifers, water supply uncertainty for agriculture, and native fish populations.

The California Farm Bureau Federation and other agricultural groups have been actively engaged in the process to develop an updated water plan for the state, advocating for improvements such as water storage, recharge and conveyance.

CFBF Senior Counsel Chris Scheuring said, "While we do not embrace every element of the plan, we appreciate its substance and its urgency," adding that Farm Bureau hopes the portfolio will lead to administration actions that benefit the state's water future.

"We know that in California water, everything is difficult, and if this administration can break new ground where past administrations have failed, we're certainly going to welcome it," Scheuring said.

According to the draft, he said, the state would like to fast-track the construction of the offstream storage facility Sites Reservoir and emphasize the need for groundwater recharge, both of which Scheuring described as "good things."

Noting that the state will likely need to cope with more extreme droughts and floods, rising temperatures, declining fish populations, aging infrastructure and other challenges, the almost 150-page draft outlines more than 100 recommendations intended to maintain and diversify water supplies; protect and enhance natural ecosystems; build connections and be prepared.

The draft plan encourages state actions and investment to improve physical infrastructure to store, move and share water more flexibly and integrate water management through shared use of science, data and technology. To prepare for more extreme droughts and floods, the plan promotes state investments and guidance to enable preparation, protective actions and adaptive management.

The draft encourages voluntary river flow agreements as an alternative to state-mandated "unimpaired flow" plans being drafted by the State Water Resources Control Board, which Scheuring described as critical. At the same time, he said the draft document also calls for instream flow recommendations elsewhere in California.

"We support voluntary agreements that are truly voluntary and that take a balanced approach to consider the many other factors related to healthy fisheries, including habitat, predator control, food supply and more," Scheuring said. "Our members oppose use of water quality planning processes as a systemic environmental overlay that controls water rights and disrupts human uses of water that have been legally established for more than 100 years."

Will It Really Be Built?

The proposed Sites Reservoir has taken a small step forward.

Sites Reservoir proposal receives \$6M in federal funds

Part of year-end spending package

By [Woodland Daily Democrat](#) |

PUBLISHED: January 8, 2020

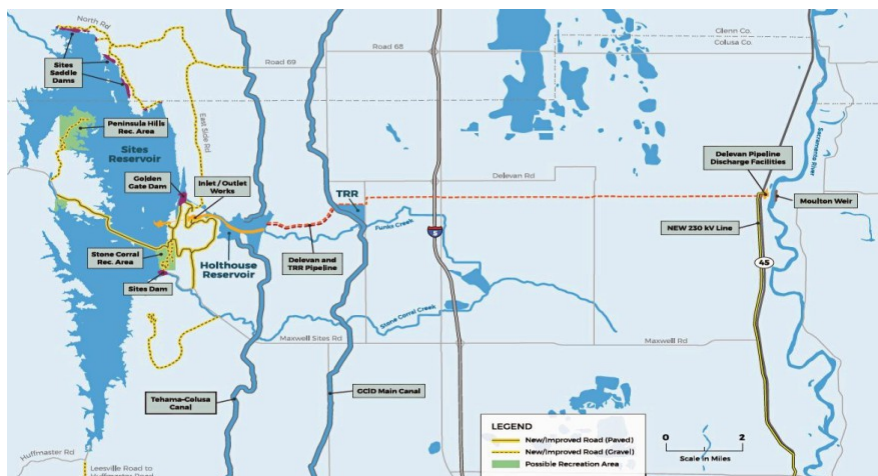
<https://www.dailydemocrat.com/2020/01/08/sites-reservoir-proposal-receives-6m-in-federal-funds/>

Sacramento — Sites Reservoir will receive \$6 million from the federal government as part of a bipartisan spending bill that was signed by President Trump at the close of 2019.

The funding, authorized by the WIIN Act, was appropriated to the Bureau of Reclamation to advance Sites Reservoir. With the passage of this legislation, Congress has now appropriated roughly \$10 million in WIIN Act funding to the Bureau of Reclamation for Sites Reservoir.

Area Congressman John Garamendi in response to the legislation that provides more money also commended Gov. Gavin Newsom's inclusion of the Sites Reservoir Project in his 2020 Water Resilience Portfolio.

“Building Sites Reservoir, an off-stream reservoir, would bring California closer to achieving a drought-resilient water system,” Garamendi stated. “Our state needs to make forward-looking investments to meet its future water supply needs, and Sites will benefit farmers, our communities, and the environment.”



The proposed Sites Reservoir would be near Maxwell. COURTESY

Located 10 miles west of the town of Maxwell in rural Glenn and Colusa counties, Sites Reservoir would be an off-stream storage facility that captures and stores stormwater flows in the Sacramento River — after all other water rights and regulatory requirements are met — for release in dry and critical years for environmental use and for California communities, farms and businesses when it is so desperately needed.

“I’m happy to have helped secure additional federal commitments for Sites Reservoir. This \$6 million represent a continuous push from the Federal Government to actually build this project,” said Congressman LaMalfa. “Sites is the best opportunity we have to increase water storage in California. Dry years or wet- for habitat, farms and Northern California communities this project brings water security and benefits. I’ll keep fighting to get this project built.”

Supported both regionally and statewide, the project has made progress since it was first proposed about five years ago. A group of more than 175 organizations, agencies, businesses and bipartisan elected officials support the Sites Reservoir Project. In 2018, the project was awarded \$816 million in funding from California’s Proposition 1 water bond and secured a \$449 million investment from the United States Department of Agriculture.

Did the Power Shutdowns Reduce the Incidence of Fires in California?

According to this study from the *Los Angeles Times* it did. Here is a summary of the article by KTLA.

Widespread Power Shutdowns in CA Helped Reduce Chances of Human-Related Fire Ignitions

Posted 11:46 AM, January 5, 2020, by [Los Angeles Times](#), Updated at 01:15PM, January 5, 2020

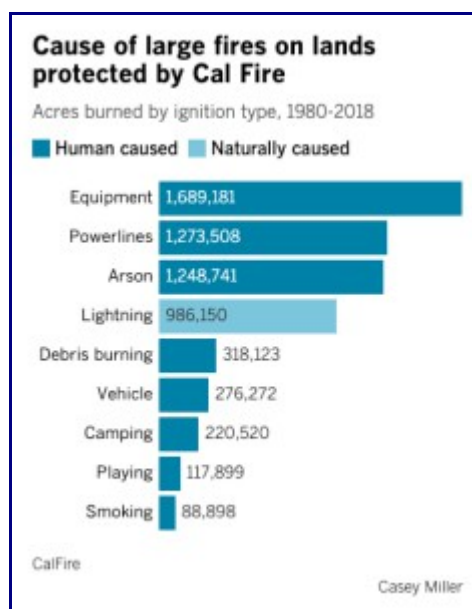
<https://ktla.com/2020/01/05/widespread-power-shutdowns-in-ca-helped-reduce-chances-of-human-related-fire-ignitions/>



Flames heat up high power lines at the Saddleridge Fire on Oct. 11, 2019, near Newhall. (Credit: David McNew/Getty Images)

It could have been another bad wildfire year in California. A bountiful summer crop of quick-to-burn dead grass carpeted the hillsides. Autumn was warm and dry. A record-breaking stretch of fire weather hit the Bay Area in October.

But it wasn't. California wildfires charred about 270,000 acres in 2019, the smallest number since 2011. The three fatalities and roughly 735 burned structures were a fraction of the catastrophic losses of the previous two fire seasons.



This Los Angeles Times graphic shows the different sources of fire ignition and how many acres burned in lands protected by Cal Fire.

The lower than expected toll followed an unusually wet spring and big snowpack, which slowed the start of the fire season. The installation of backcountry fire cameras gave firefighting crews early notice of ignitions. When flames approached, evacuation orders were swift and sweeping.

But most critically, widespread preventive power shutdowns by the state's largest electric utility diminished the chances of human-related ignitions at critical times — during high, hot winds that can fan a single spark into the kind of unstoppable inferno that destroyed the town of Paradise, Calif., and left 86 people dead in the [2018 Camp fire](#).

Read the full story on [LATimes.com](#).

Climate Change Will No Longer Be Part of Environmental Impact Studies for Infrastructure Projects

Trump Cuts Many Destructive Aspects of Environmental Impact Requirements for Infrastructure Projects.

Jan. 10, 2020 (EIRNS)—Despite hooting and hollering from the Greenies in Congress and the Quangos, President Trump yesterday announced dramatic cuts to the requirements for “environmental impact studies” for infrastructure projects under the National Environmental Policy Act (NEPA), which has been on the books since 1970. The reform will require that the impact studies be completed within two years for large projects and within one year on smaller projects.

Most important, projects will no longer be required to consider “cumulative effects of new infrastructure,” which was the trick by which they had to measure potential impact on climate change based on the fake EPA declaration of carbon as a pollutant.

Trump told a meeting of labor leaders and others at the White House Thursday: “These endless delays waste money, keep projects from breaking ground and deny jobs to our nation’s incredible workers. From day one, my administration has made fixing this regulatory nightmare a top priority.”

Environmental Protection Agency Administrator Andrew Wheeler called NEPA rules “a Frankenstein of a regulatory regime and a welfare project for trial attorneys.”

“In the last 40 years, we’ve gone backwards, and your actions are changing that,” Interior Secretary David Bernhardt said at the event.

The press tried to bait Trump, asking if climate change was a hoax. Trump responded: “Not at all. Nothing’s a hoax about that. It’s a very serious subject. The environment is very important to me. I’m a big believer in that word, the environment — I want clean air, I want clean water. I also want jobs, though. I don’t want to close up our industry because somebody said, you know, you have to go with wind or you have to go with something else that doesn’t have the capacity to do what we have to do.”

White House aims to roll back bedrock environmental law to speed development

By [Rebecca Beitsch](#) - 01/09/20 11:00 AM EST [1,156](#)

TheHill.com

<https://thehill.com/policy/energy-environment/477512-white-house-aims-to-roll-back-bedrock-environmental-law-to-speed>

The White House on Thursday issued sweeping changes to one of the nation's bedrock environmental laws, allowing greater industry involvement in environmental reviews of projects and diminishing the role climate change plays in those assessments.

The changes target the 50-year-old National Environmental Policy Act (NEPA), which requires agencies to evaluate how pipelines, highways and some oil and gas development affects the environment and nearby communities.

The law has been a repeated target of [President Trump](#), who has vowed to speed the construction of fossil fuel infrastructure and eliminate barriers to construction projects.

Flanked by industry leaders at Thursday morning press conference, Trump described the measure as a complete overhaul.

"From Day One, my administration has made fixing this regulatory nightmare a top priority. And we want to build new roads, bridges, tunnels, highways bigger, better, faster, and we want to build them at less cost," he said.

The changes, which will be posted to the Federal Register on Friday, would limit the law's scope, excluding some projects from undergoing NEPA review, like those that receive little federal funding. It also opens the door for more industry involvement in reviewing the environmental impacts of their projects.

While NEPA serves a noble purpose, it has "paralyzed commonsense decision making for a generation," Interior Secretary David Bernhardt said on a call to present the proposal, listing a wide range of projects that have been delayed by environmental analyses.

"This is a really, really big proposal. It affects virtually every big decision made by the federal government that affects the environment, and I think it will be the most significant deregulatory proposal you ultimately implement," Bernhardt told Trump.

The proposal from the White House Council on Environmental Quality (CEQ) would no longer require consideration of the "cumulative" effects of new projects. Courts have largely interpreted that as studying how a project might contribute to climate change, say by contributing heat-trapping greenhouse gases, or how it might be influenced by effects of climate change like extreme weather.

Under the changes proposed by the Trump administration, officials would need to consider effects of a project that are "reasonably foreseeable" and show "a reasonably close causal relationship."

Environmentalists say those changes would allow the government to look the other way when projects contribute considerable amounts of greenhouse gases into the atmosphere.

In a call with reporters on Thursday, CEQ Chairwoman Mary Neumayr said the new changes would push agencies to complete environmental impact statements in two years, a process that now averages about 4 1/2.

The process would be streamlined in part by requiring project leaders to coordinate with one agency, rather than undergo multiple NEPA reviews with each agency with jurisdiction over the project.

The changes were welcomed by a host of construction and fossil fuel organizations, ranging from builders to railroad and oil companies that have long pushed for changes in the law that could speed their work.

"The plan to reform the National Environmental Policy Act is the most recent example of the Trump administration's ongoing efforts to reduce harmful regulations that hurt small businesses and impede economic growth. Updating NEPA will streamline the federal permitting process and allow badly

needed transportation and infrastructure projects to move forward,” Greg Ugalde, chairman of the National Association of Home Builders, said in a statement.

It Is Not Just Environmentalists Who Are Killing Agriculture

Dairy Bankruptcies Show Nasty Wall Street Side of U.S. Economic Destruction, Farm Crisis

https://larouchepub.com/pr/2020/200109_diary.html

Jan. 9, 2020 (EIRNS)—This week the famous name dairy company Borden’s declared Chapter 11 Federal bankruptcy. Headquartered in Texas, the 160-year-old milk-processing firm is known the world over for its mascot, Elsie the Cow. It ranks about 30th in U.S. dairy companies. In November, the largest fluid milk processor in the U.S., Dean Foods (and third largest dairy firm) also declared Ch. 11. Dean’s originated in the Midwest, then became based in Texas, through mergers and shifting dairy herd concentration.

There are several twists and turns in these big-deal dairy bankruptcies, which reflect the unhinged Wall Street factor causing destruction throughout the farm-food chain.

On the level of physical economy, the dairy processor bankruptcies go along with the fact that not only have family-scale dairy herd operations been squeezed to the point of extinction across the country, replaced by bigger and bigger operations and mega-herds. But also the dairy processors—for fluid milk, cheese, ice cream—have become huge, cutting out local and regional operations. Even then, the bigger firms can’t necessarily survive.

As of 2017, of the four major dairy companies in the U.S., all except for Dean’s were foreign-owned multinational conglomerates: First was Nestlé (Swiss), next Saputo Dairy Foods (Canada), and fourth is Danone (France). The story doesn’t stop there.

In 2017 Walmart ceased obtaining any fluid milk from Dean’s, its chief supplier for years, which doomed the dairy firm. Walmart started up its own mega-processing facility in Indiana and is now one of the top U.S. processors. Hundreds of dairy farmers selling to Dean’s were left with no market. Walmart took over some of Dean’s former farmers and nixed others.

The point is that this kind of disruption and destruction of capacity and regional economies doesn’t have to be. Policies can be worked out to shift and protect farm-food productivity, as has been done in the past. Instead family-scale dairy farms are being forced into ruin.

The Borden’s story is especially nasty, involving a feud this week between Wall Street big money outfits, pissing over how to protect their money. In the recent period, Borden’s got a loan in the range of \$175 million from KKR & Co., and a loan from PNC Bank of some \$94 million. At the same time, the private equity fund Acon Investments had heavily bought into Borden’s. After Borden’s filed for Ch. 11 bankruptcy protection on Jan. 6, the next day, KKR filed a counter-action in the courts, arguing that Borden’s bankruptcy was unnecessary, and only prompted by Acon trying to protect its holdings.

As for the consumer—good luck. One blow against having regionally produced fresh milk, such as for fluid use and local cheeses, is the cynical line that there is a “milk glut,” and family farmers should not expect to get a decent price, but they should quit, or produce less. A contributing factor to this viewpoint is the 20-year campaign for “Beyond Milk” products, such as oat, nut, and other “milk.” Personal dietary preference is one thing, but the Wall Street interventions to induce preference is the

norm.

The solution, as always, lies with the government's sovereign responsibility for the food supply and economy, which involves production management, parity pricing, etc. The new USMCA dairy provisions are not designed to relieve the U.S. farm crisis.

Nuclear Power

Chemists report a new use for the waste product of nuclear power generation

by [University of Sussex](#)

January 10, 2020

<https://phys.org/news/2020-01-chemists-product-nuclear-power.html>



Credit: CC0 Public Domain

Chemists have found a new use for the waste product of nuclear power—transforming an unused and stockpile into a versatile compound which could be used to create valuable commodity chemicals as well as new energy sources.

Depleted uranium (DU) is a radioactive by-product from the process used to create nuclear energy. With many fearing the [health risks](#) from DU, it is either stored in expensive facilities or used to manufacture controversial armour-piercing missiles.

But, in a paper published in the Journal of the American Chemical Society, Professor Geoff Cloke, Professor Richard Layfield and Dr. Nikolaos Tsoureas, all at the University of Sussex, have revealed that DU could, in fact, be more useful than we might think.

By using a catalyst which contains depleted uranium, the researchers have managed to convert [ethylene](#) (an alkene used to make plastic) into ethane (an alkane used to produce a number of other compounds including ethanol).

Their work is a breakthrough that could help reduce the heavy burden of large-scale storage of DU, and lead to the transformation of more complicated alkenes.

Prof Layfield said: "The ability to convert alkenes into alkanes is an important [chemical](#) reaction that means we may be able to take simple molecules and upgrade them into valuable commodity chemicals, like hydrogenated oils and petrochemicals which can be used as an energy source.

"The fact that we can use depleted uranium to do this provides proof that we don't need to be afraid of it as it might actually be very useful for us."

Working in collaboration with researchers at Université de Toulouse and Humboldt-Universität zu Berlin, the Sussex team discovered that an organometallic molecule based on depleted uranium could catalyse the addition of a molecule of hydrogen to the carbon-carbon double bond in ethylene—the simplest member of alkene family—to create ethane.

Prof. Cloke said: "Nobody has thought to use DU in this way before. While converting ethylene into ethane is nothing new, the use of uranium is a key milestone.

"The key to the reactivity were two fused pentagonal rings of carbon, known as pentalene, which help the uranium to inject electrons into ethylene and activate it towards addition of hydrogen."

Feature: The Building of the Los Angeles Aqueduct More Than 100 Years Ago

The **feature** this week is from history. The building of infrastructure has always been about the future, and no one in the history of California understood that, and acted on that idea, better than William Mulholland one hundred years ago. My report from October, 2013, on Mulholland and the building of the Los Angeles Aqueduct demonstrates that principle.

Below you will find part of the introduction to this report. Here is the link to the full report:

http://www.californiadroughtupdate.org/20200109-The-Los-Angeles-Aqueduct.pdf?_t=1578770350

A Prometheus Among Us: William Mulholland Brings the Water to Los Angeles

**The California Water Crisis, the California Water Management System,
and the Solution—NAWAPA XXI, Part II**

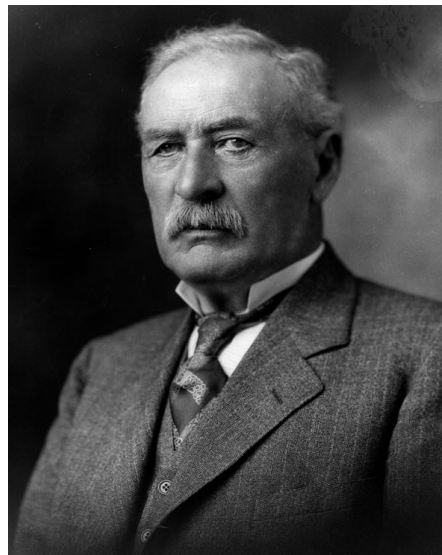
October 12, 2013

*“These are the wages for befriending man,
To whom, flouting divine authority,
You have so rashly and wrongfully surrendered
The property of the gods”
Prometheus Bound, by Aeschylus*



The Los Angeles Aqueduct--November 5, 1913

November 5, 2013 is the 100th anniversary of the opening day ceremony when the first water from the Owens Valley arrived in Los Angeles via the just completed Los Angeles Aqueduct. For 100 years the people of Los Angeles have been indebted to the builder of that aqueduct, William Mulholland.



William Mulholland

But, it is not just the Los Angeles Aqueduct that Mulholland bequeathed to us in this city. He initiated the campaign to build the Hoover Dam and played a key role in ensuring that the Federal Government built it. To do so, as the superintendent of the Los Angeles Department of Water and Power (DWP), he was an initiator of the founding of the Metropolitan Water District of Southern California, which today distributes water to all the cities of the region from Ventura to San Diego. For more than 40 years Mulholland, as the superintendent of the (DWP), built the entire system that today quenches the thirst of more than three million people in this city. The DWP and the MWD were the models used by President Franklin Roosevelt in the 1930s, for the organization of the Tennessee Valley Project and, a

few years later, for the Bonneville Power Administration on the Columbia River. There was no one in California for the first decades of the 20th Century who was more respected and admired than Mulholland. He built Los Angeles to be what it is today, and made possible for Southern California to be able to support more than 20 million people.

The Los Angeles Aqueduct

Now, let's look briefly at the Los Angeles Aqueduct, so we will have in our minds, as we proceed, what it is we are discussing here.

The aqueduct's construction began in late 1907, and the first waters from it flowed into Los Angeles on November 5, 1913, six years later. The 233 miles- long aqueduct had no pumps for lifting water over hills or mountains; it was a 100% gravity powered water delivery system-- the longest in the world.



The Los Angeles Aqueduct

Mulholland designed and built the aqueduct, but he was the first to admit that he did not do it alone. He especially gave credit to the 3,900 men who did the tunneling, digging, and the laying of pipes and concrete, as the ones who did the work. Mulholland knew that great projects were not built by the “rugged individualist.” Great projects, whether it is the building of a water project or the building of a nation, are accomplished by a harmony that is developed among people who have a mission that they share in common. They cooperate to achieve that mission. That is why he paid tribute to the workers who did the physical work to built the aqueduct, giving them the credit for the accomplishing the harder task.