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Pasadena Group

January 20, 2014

**To: County of Los Angeles
Department of Public Works
Water Resources Division
Attn: Reservoir Cleanouts Program
P.O. Box 1460
Alhambra, CA 91802-1460**

reservoircleanouts@dpw.lacounty.gov

From: Pasadena Sierra Club

Re: Draft Environmental Impact Report for Devil's Gate Reservoir Sediment Removal and Management Project

We have reviewed the Draft Environmental Impact Report for removal of sediment behind Devil's Gate Dam and welcome this opportunity to submit these comments.

Overview

Hahamongna Watershed Park is one of Pasadena's most prized environmental sites. Located in northwest Pasadena where the Arroyo Seco emerges from the San Gabriel Mountains, its alluvial canyon and riparian habitat provide a home for a wide variety of plants and animals. Pasadena is committed to preserving its ecological and recreational values. The sediment that Hahamongna accumulates from its hillside watershed has to be managed, but in a way that does the least damage to the environment – with small amounts removed on a regular basis rather than a massive cleanout.

This Draft Environmental Impact Report starts with the premise that the Devil's Gate Dam/Hahamongna basin must have the capacity for two Design Debris Events to ensure that the dam will not be overwhelmed, which could result in downstream flooding. It defines a DDE for Hahamongna as 2 million cubic yards, multiplies that by two, and proceeds to analyze the proposed project's impacts without serious consideration of less aggressive alternatives.

This basic premise of requiring capacity for two DDEs needs to be examined critically. Would public safety be adequately ensured by removing less than the projected 2.4 to 4 million cubic yards of sediment? What degree of risk would that entail? How much would a smaller, more

gradual approach reduce the environmental impacts? This DEIR is inadequate because it fails to provide the public and decision makers a broad range of reasonable alternatives to balance flood safety and environmental impacts. This failing is reflected in the six “Primary Project Objectives” listed in Sec. 2.4, which refer only to sediment removal, dam operation and flood control with no reference to environmental impacts or even mention of the word “environmental,” although this is a Draft **Environmental** Impact Report.

This DEIR should be supplemented with one or more alternatives for removing smaller amounts of sediment each year, perhaps 150,000 to 200,000 cubic yards a year, over a longer period than four or five years, with a rigorous analysis of the risks of flooding compared with the project proposed in this DEIR, as well as the comparative environmental impacts of those less aggressive approaches. Then decision makers, stakeholders and the community would have the information needed for an informed decision on how to proceed.

Assessing the Risk

The DEIR states that the Design Debris Event is *“the predicted amount of sediment that can flow into the reservoir after the undeveloped portion of the tributary watershed is completely burned and a 50-year design storm event occurs after four years of watershed recovery. The 50-year design storm and the DDE are defined by the Los Angeles County Department of Public Works Hydrology and Sedimentation Manuals respectively. The DDE for the Devil’s Gate Reservoir is approximately 2 million cy.”*

The first part of that definition has already happened. The 2009 Station Fire burned the entire undeveloped watershed in the San Gabriel Mountains. How likely is a repeat of this fire? Not likely any time soon, since it will take many years for the vegetation to grow into enough fuel to sustain such a devastating fire. Meanwhile, each year the watershed is recovering its ability to hold storm water so it doesn’t rush down hillsides and wash unusual amounts of sediment into the Hahamongna basin. In short, the destructive fire part of the DDE definition, and its effects on erosion of the watershed, seems to be diminishing each year, and unlikely to increase significantly for many years to come.

What about the likelihood of a 50-year design storm event? And what exactly is that for the Arroyo Seco watershed? The DPW Sedimentation Manual defines a DDE as *“the quantity of sediment produced by a saturated watershed significantly recovered from a burn (after four years) as a result of a 50-year, 24-hour rainfall amount.”*

Is the past any guide? When was the last 50-year design storm event in the San Gabriel Mountains, and what was its 24-hour rainfall? These facts ought to be in a DEIR that hinges on such a storm. (During my 46 years living in Pasadena, the rainiest year I can recall was 2004-2005. I have a backyard rain gauge, and have recorded every rain event since 1993. My notes show nearly 6 inches of rain on Jan. 10, 1995, and 50 inches of rain between mid-October 2004 and February 2005, with more than 5 inches on one day, Oct. 19, 2004. The 24-hour period of Dec. 21-22, 2010 produced 6 inches of rain in Pasadena – there probably was more than that in the mountains -- which, coming so soon after the 2009 Station Fire, must have brought down a lot of the sediment that flowed into the basin. The period Dec. 18-22, 2010, had 13 inches of rain, but that was spread over five days, not 24 hours. Many of us have watched water pouring

through or over Devil's Gate Dam during a major storm. Was there any flooding below the dam during or after any of these storms?)

What about the potential effects of climate change? While these will be very gradual, they may have some bearing on a 50-year time scale. The science seems to indicate that Southern California will receive less rainfall in the decades ahead because of climate change. How reliable is the science, and what can it tell us about the strength of future storms?

Previous Sediment Removals

The County Flood Control District's Sediment Management Strategic Plan 2012-2032 indicates that the most recent large sediment removal was 190,000 cubic yards in 1995. As of March 2011 – after the basin had received more than 1.1 million c/y of sediment in the two winters following the Station Fire – this plan listed the reservoir's capacity at elevation 1054 ft. as 3.2 million c/y. (The spillway floor elevation is 1040 ft.) But, a graph indicates that the storage capacity drops sharply if 1 or 2 DDEs are required,

Given the varied figures for the basin's storage capacity cited in the Strategic Plan, and in other County documents, the Devil's Gate Dam DEIR must provide a clear set of figures for available storage capacity each year over the last decade or two, how those measurements were made, the amounts of sediment removed in that period, and remaining storage capacity, figured with and without DDEs. These figures would help in judging the urgency of removing any given amount of sediment over the next few years. Has maintenance been neglected? Is the County now "playing catch-up" with a huge project to make up for neglecting more routine sediment removal over the last 15 or 20 years, as one Pasadena City Council member has asserted? Does the inflow of 1.1 million cubic yards of sediment after the Station Fire really require the removal of 2.4 to 4 million cubic yards now?

As part of evaluating the effects of the fire and resulting sediment inflow, the DEIR also should describe the modifications to the trash racks and other fixtures on the dam face since the Station Fire and their role in preventing debris from clogging the dam's outlet works.

Related Project Not Analyzed

The DEIR mentions in passing the proposed pump and 30-inch pipeline to move water from just above Devil's Gate Dam about 5 miles eastward to the Eaton Wash Spreading Grounds. The volume of water moved could range from 2,000 to 4,500 acre feet a year. Because this project is closely related to the Devil's Gate Dam project, with possible cumulative impacts, these questions must be answered:

1. Would pumping water to Eaton Wash affect the Hahamongna basin's storage capacity during a storm?
2. Would it decrease the volume of water available for sluicing sediment through Devil's Gate Dam to the ocean?
3. Was the size and scope of the sediment removal project adjusted to fit it to the Eaton Wash diversion?

COORDINATION WITH OTHER AGENCIES

The projects in this DEIR are not coordinated with the operations or visions of other agencies.

The City of Pasadena maintains Hahamongna Watershed Park in the basin and surrounding higher ground, and City officials appear to be alarmed at the scope of this sediment removal project and its impacts on the park. The County must coordinate with the City to strike the best possible balance between their different missions and objectives.

The U.S. Army Corps of Engineers is working on an Arroyo Seco Watershed Feasibility Study, which will provide long-term management practices to improve watershed health, water quality, and increase water conservation while maintaining flood control. The Army Corps' Arroyo Seco Watershed Feasibility Study scoping document of 2011 sketches potential ecosystem restoration measures for Hahamongna and other sections of the Arroyo, leaving to a later report the specific projects to implement them. The L.A. County Flood Control District is working with the Army Corps on this important study. In May 2013, the County's director of public works, Gail Farber, wrote a letter to Army Corps officials saying that "It is critical that we finalize this effort and move forward with the feasibility portion of the Study, which will allow us to identify potential projects that will benefit the environment and improve the quality of life for the community."

A sediment removal project as aggressive as proposed in the County's DEIR could well reshape the Hahamongna basin and defeat any beneficial projects envisioned by the Army Corps study.

Significant Impacts

Air Quality and Pollution

The DEIR minimizes the potential harm from air quality impacts of this aggressive sediment removal project. Even with best management practices, particulate matter from excavation activities is bound to escape the site and reach adjacent schools and recreational users. The DEIR notes that there are 10 schools within half a mile. This is a large and particularly vulnerable population to expose to any more pollution than absolutely necessary, and a project of this scale would do just that. Exhaust from the stream of diesel-powered trucks – nearly one a minute – will add to the unhealthy air. The DEIR states that the County will try to use trucks meeting the latest emission standards, but can't ensure that all trucks will meet the standards. Scaling the project down would allow the County to use fewer trucks and ensure that they all meet the newest emission standards.

Biological Resources

The DEIR offers scant comfort to those dismayed at the prospect of destroying so much riparian habitat in this semi-natural area in a major City park. The proposed mitigation of 1:1 is too low. Trees and other vegetation in this kind of area should be replaced at a 3:1 ratio or more. And the "management areas" that would be permanently cleared of vegetation, mowed and grubbed every year, would ensure a barren wasteland of 50 or more acres in this prime Pasadena City park. This would be not only an aesthetic loss, as illustrated in the views shown in the DEIR, but a permanent loss of habitat for wildlife and a turn-off for many recreational users.

Land Use and Planning

The City of Pasadena owns the land, and has granted a permanent easement to the County to build and operate the dam for flood control purposes. Both City and County want to minimize the risk of downstream flooding. But while the County's primary mission is to operate the dam so as to avoid flooding – and to promote water conservation – the City's mission also includes preserving open space, conserving habitat and wildlife, promoting recreation. These obvious objectives are spelled out in the City's General Plan which in a recent update calls for "Zoning Changes: Protect the existing natural open space within the Hahamongna Watershed Park Master Plan area." The 2003 Hahamongna Master Plan calls for developing "a sediment removal plan that minimizes the impact to the basin and to the surrounding neighborhoods" and for "a grading plan that allows habitat restoration and recreational activities to coexist with flood management and water conservation." It also calls for development of "a multi-agency task force to review maintenance, sediment removal, dam operation, permit, and liability issues on a continual basis after this plan is adopted."

These references underline the need for the County and the City to work together to develop a plan that will minimize the risk of flooding, preserve the Hahamongna Watershed Park environment, and have the smallest possible environmental impacts.

Recreation/Public Services

Recreational activities at Hahamongna and adjacent trails include disc golf, Tom Sawyer Camp, Rose Bowl Riders, MACH 1, hiking, biking, horseback riding, bird-watching, and nature walks. In addition, approximately 10,200 visitors came to Hahamongna Watershed Park during 2010 to utilize the sports and recreational facilities available by permit through the City. These included sporting events and tournaments, City events, picnics, and equine-related clinics and shows.

The sediment removal project would curtail some of these activities by closing trails, and affect others with noise and air pollution. Many recreational users will be dissuaded from using the park by the large-scale, industrial-type of activity. The DEIR notes that these users can go elsewhere for their recreation, and lists the many parks and other sites in the Pasadena community. But Hahamongna is unique in this area, and other sites cannot offer the same experience. The impact on recreation in Pasadena will be significant, in contrast with the DEIR's conclusions. As with other impacts noted earlier, the effects on recreation would be greatly reduced by a less aggressive sediment-removal plan that removed sediment more gradually over a longer period.

Thank you for considering our comments.



Don Bremner, Conservation Chair
Pasadena Group, Angeles Chapter-Sierra Club