

APPENDIX L: COMMENTS ON DRAFT TECHNICAL REPORT
BY LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS



COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS

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IN REPLY PLEASE
REFER TO FILE: **WM-5**

December 10, 2001

Ms. Eileen Takata
North East Trees
570 West Avenue 26, Suite 200
Los Angeles, CA 90065

Dear Ms. Takata:

**ARROYO SECO WATERSHED RESTORATION FEASIBILITY STUDY
COMMENTS ON DRAFT TECHNICAL REPORTS**

Thank you for the opportunity to review the draft technical reports for the Arroyo Seco Watershed Restoration Feasibility Study. Public Works has enjoyed working with North East Trees and the Arroyo Seco Foundation in developing this feasibility study that has been very successful in establishing cooperation between various agencies, organizations, and the community. We look forward to continuing this relationship as the project moves forward into a Watershed Management and Restoration Plan and site-specific demonstration projects.

Public Works' comments on the technical reports are enclosed. We understand that due to funding limitations, most substantive comments will not be applied to the reports, instead will be attached as an addendum to the final report.

Ms. Eileen Takata
December 10, 2001
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If you have any questions regarding the enclosed materials, please contact Mr. Dan Sharp at (626) 458-4345.

Very truly yours,

JAMES A. NOYES
Director of Public Works



ROD H. KUBOMOTO
Assistant Deputy Director
Watershed Management Division

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techrepcover.wpd

Enc.

cc: Arroyo Seco Foundation

County of Los Angeles Department of Public Works

Comments on the Arroyo Seco Watershed Restoration Feasibility Study Phase II Technical Reports

Water Resources Report (Tim Brick)

Pasadena's Water Diversion System

Page 10, Second Paragraph: The water standards should be referred to as the Surface Water Treatment Rule (SWTR). The report should indicate if the water is chlorinated before infiltration and if the City's water treatment plant is still shut down due to SWTR violations.

Page 11: The third paragraph indicates that both streams are on the east side of the flood control channel. The report should provide more details related to the locations of the streams as they relate to the flood control channel.

Watershed Management Report (Tim Brick)

General

To develop this report from a more holistic view, the watershed plan report should also include discussions regarding flood control, public education on water conservation, safety, and resource protection

Recommendations of the City of Pasadena's Master Plans should be coordinated with this study to create a compatible vision for the Arroyo Seco Corridor.

A Watershed Management Program

Page 4: Flood hazard mitigation should be included as part of the watershed management program (also for table on Page 5).

Pasadena's Diversion and Spreading Program

Second Paragraph: The Philip Williams and Associates' Report finds percolation basins are an effective method to recharge the Raymond Basin. It should also be noted that if water was held behind Devil's Gate Dam, the percolation rates would quickly diminish due to sediment deposition in the reservoir.

Hydrology, Hydraulics, and Geomorphology (Montgomery Watson Harza)

General Comments on the Capital Flood Flow Rates

To be technically correct, the "Capital Storm" should be referred to as "Capital Flood" and "capitol" should be replaced by "capital."

This report and the Geomorphology Report by Martin Kammerer compare Public Works' Capital Flood flow rates with the frequency based runoff values from other agencies. Public Works has used a modification of the Rational Method for over 50 years to provide a uniform, cost-effective level of protection that takes the amount and reliability of available data into account. Over the years, it has been used to design over a billion dollars of flood control facilities and prevented an estimated \$3.5 billion in damages.

This model accounts for the infiltration characteristics of a watershed through the use of runoff coefficient curves. Countywide, the method employs 170 curves which were developed from infiltrometer tests on hundreds of test plots. Additionally, the runoff coefficient curves provide for anticipated future development. It is also important to note that the same methodology is used by several neighboring counties.

~~For these reasons, Public Works uses the Modified Rational Method to design flood control facilities. Please take this into consideration when comparisons are made in these technical reports.~~

~~Also, please emphasize that all channel naturalization options are only possible if the Capital Flood can be conveyed without compromising public safety.~~

Hydraulics (Page 2)

The statement in Bullet No. 3 should be clarified. It can easily be interpreted to mean that the floodplain will be inundated with 10 to 15 feet of flow if Devil's Gate Dam is removed. We believe it was intended to indicate the depth required to compensate for the lost storage in the reservoir.

Geomorphology (Page 3)

The current operating procedure for Devil's Gate Dam allows sediment transfer for flows up to 625 cfs. Only with larger flows is sediment prevented from progressing downstream.

Location of Tributary Storm Drain and Influence of Urban Runoff (Page 17)

The report should provide the data source and explain how the "directly connected paved area" for each subarea was determined.

Upper Watershed Hydrology

Page 17: The sediment control facilities referred to are check dams, not debris basins. They are designed to have sediment behind them to prevent erosion by lowering the stream gradient.

Page 18, The second to last sentence of the first paragraph: The report should indicate that these are "prescribed" burns.

Page 19: Please replace "WMS Model" with "Hydrologic Model" to be technically correct. WMS is a tool used to apply our hydrologic model.

Page 19: The purpose of Table 12 is unclear. Should it show the reduction in flow, as the title states, or the contribution from the watershed below Devil's Gate Dam, as the second column indicates?

Existing Channel Description (Page 21)

In Table 13, the Upstream and Downstream columns should be switched.

Existing Channel Capacity (Page 24)

Please revise the third sentence of the first paragraph to read "LACDPW has acknowledged that portions of the existing channel have insufficient capacity to carry the Capital Flood based on current criteria." It is recommended that the next phase of the Study provide a more thorough hydraulic analysis of the Arroyo Seco Channel.

Changes in Flow, Depth, and Velocity due to Stream Naturalization (Page 34)

Normal depth calculations were used to determine some rough figures. However, the Manning's "n" value of 0.120 is high for a natural channel. Please refer to USGS publications that provide commonly accepted "n" values. Also, the next phase of the Study should use a more accurate hydraulic model (i.e. HEC-RAS) to simulate different runoff scenarios.

Geomorphology Report (Martin Kammerer)

Please see "General Comments on Capital Flood Flow Rates" from Hydrology, Hydraulics, and Geomorphology Report (Montgomery Watson Harza).

We recommend that the next phase of the study provide engineering analysis to confirm the findings of this report and analyze different watershed/channel scenarios.

It should also be noted that removing Devil's Gate Dam would create a debris flow hazard that should be investigated in the next phase of the project.