

MEMORANDUM

EL Montgomery
Salinas Valley GSP

WG Project No. 1447-0002-0100



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Subject: Eastside Basin, Project 6 - Floodplain Restoration and Recharge Project

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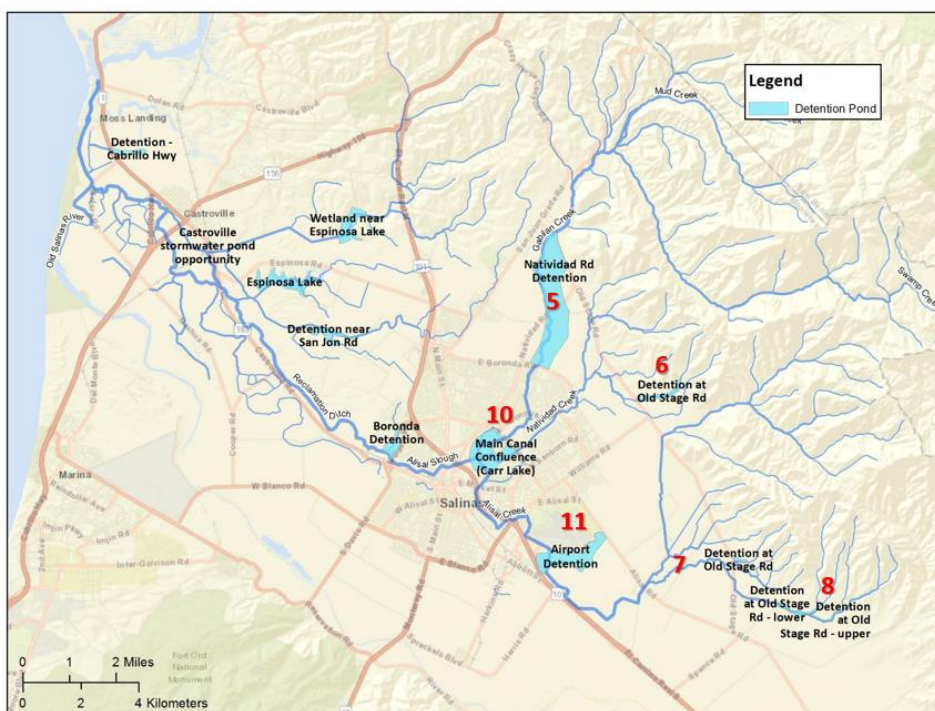
WATER RESOURCES

Introduction

This memorandum provides a summary of the assumptions used to develop the engineer's opinion of probable cost for the conceptual Eastside Basin Project No. 6 (Eastside Floodplain Restoration and Recharge Project).

Based on a presentation entitled, *Salinas Valley Stormwater Plan Implementation*, from February 2021, six priority projects were identified within the Eastside Subbasin with the potential to store stormwater runoff and promote groundwater recharge through the construction of detention basins; the five basins are indicated on Figure 1 as sites 5, 6, 7, 8, 10, and 11.

Figure 1. Detention Basin Projects



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The six locations and their estimated annual retention volumes¹ are provided in Table 1.

Table 1. Estimated Basin Retention Volumes

	Basin Size (Acres)	Wet Season (AF)	Dry Season (AF)	Annual (AF)
No. 5, Natividad Road (Gabilan Ck)	40	1,073	107	1,180
No. 6 Old Stage Natividad	1.1	89	7	96
No. 7 Old Stage Alisal	7.1	114	21	135
No. 8 Old Stage Upper/Lower	18.1	47	7	54
No. 10 Carr Lake	33.4	2,879	233	3,112
No. 11 Airport	32.7	955	186	1,141
Total	132	5,157	561	5,718

Conceptual Project

The project assumes construction of the six detention basins at the locations indicated in Figure 1. This preliminary cost estimate did not include diversion structures or pipelines needed to deliver water to the basins, since they are assumed to be constructed as in-stream basins. Access agreements will have to be developed for the detention basin sites to facilitate operations and maintenance activities; this estimate includes a cost for attaining such agreements (e.g., easements, license, leases), which will be refined as the project becomes more defined. Periodic maintenance assumes restoring infiltration capacity of the basins on an approximate ten-year frequency through surface soil scarification.

Opinion of Probable Cost

Attachment 1 provides a summary of the opinion of probable costs for this conceptualized Eastside Floodplain Restoration and Recharge project. Capital costs were estimated at \$15,949,000. On an annualized basis, assuming a 6% discount rate, and 25-year term, this amounts to \$1,248,000. Including an annual operations and maintenance cost of \$86,000 generates a total annualized cost of \$1,334,000. Assuming a yield of 5,700 AFY, the unit cost for water retained is estimated at \$230/AF.

Attachments

1. Engineer's Opinion of Probable Cost

¹ Based upon the aforementioned presentation materials.