Supplemental Budget Request

Status: Pending

Public Works — **Flood Control Zone District**

Supp'l ID # 3282 | ***Fund*** 169 | ***Cost Center*** 712004 | ***Originator:*** Paula Harris

Expenditure Type: One-Time | **Year** 1 | **2021** | **Add'l FTE** ☐ | **Add'l Space** ☐ | **Priority** 1

Name of Request: Jones Creek Deflection Berm

X 7/20/21

Department Head Signature (Required on Hard Copy Submission) **Date**

Costs:

Object	*Object Description*	*Amount Requested*
4334.0310	DOE Grants	($913,600)
6630	Professional Services	$75,000
6670	Construction Contracts	$155,000
7320	Land	$912,000
Request Total		***$228,400***

1a. Description of request:

The town of Acme is located on the Jones Creek alluvial fan and is prone to damaging debris flows. The FCZD conducted a risk assessment for the Jones Creek fan and identified mitigation measures to reduce the risk to life and infrastructure. The preferred alternative includes acquisition of high risk properties and construction of a deflection berm to dissipate the debris flow energy and a setback berm to route the flow around the town of Acme.

This supplemental budget request includes funding for land acquisition and associated costs for the remaining properties needed to construct the project and demolition costs for the structures on the acquired property.

1b. Primary customers:

Residents of the town of Acme

2. Problem to be solved:

Residents and public and private infrastructure in the town of Acme are subject to potentially damaging debris flows. Several landslides in the upper watershed are actively moving, increasing the risk to the town and its residents. Numerous residences and the Acme Elementary School are located on the Jones Creek alluvial fan and both Galbraith and Turkington Roads are subject to debris flows. The impacts of debris flows are much greater than overland flooding as three foot diameter boulders can be entrained in flow depths as great as twelve feet deep in the highest risk areas of the fan.

The property acquisition that will occur using the requested budget was initally expected to occur next year. The property owner is willing to sell but wants the transaction to occur before the end of this year.

3a. Options / Advantages:

The FCZD conducted a risk assessment and evaluation of alternatives to mitigate the debris flow risk. The following structural alternatives were evaluated:

-Debris basin on the upper fan
-Debris basin with debris barrier
-Deflection and setback berms

The deflection and setback berm option was selected as the preferred alternative for several reasons. The other two alternatives include a debris basin sized for a specific storage volume; events generating larger

volumes could result in damage to or failure of the structure. The berm option is less prone to failure for events exceeding the design event. In addition, the debris basin alternatives would involve significant instream construction and potentially create a barrier to fish passage, making them difficult or impossible to permit.

3b. Cost savings:

N/A - project is intended to reduce the risk to life and property

4a. Outcomes:

The property acquisition will be complete by the end of this year.

Construction of the berm is scheduled for 2023-24.

4b. Measures:

Closing of the property and construction of the berm project

5a. Other Departments/Agencies:

As part of the project an emergency access route will be provided lower on the fan to provide an alternate access for local residents when Turkington Road is closed due to debris flows/flooding. The alternate access will reduce the urgency to reopen Turkington Road after an event, reducing the risk to the M&O staff who respond.

5b. Name the person in charge of implementation and what they are responsible for:

Bridge crew typically removes sediment from the roadway and bridge and reopens the roadway

6. Funding Source:

Jones Creek land acquistion is included in the current Floodplains by Design grant awarded to the Flood Control Zone District. The grant provides for 80% reimbursement with the remaining 20% being funded by the FCZD.