

Legislation Text

File #: 2020-0367, Version: 1

To: The Board of Directors of the Sonoma County Water Agency Department or Agency Name(s): Sonoma County Water Agency Staff Name and Phone Number: Philip E. Wadsworth / 547-1945 Vote Requirement: 4/5th Supervisorial District(s): Countywide

Title:

Sonoma Water Flood Management Design Manual

Recommended Action:

Adopt a Resolution approving Update Flood Management Design Manual Revised March 2020 to provide guidance and criteria for the conveyance of storm water (4/5 Vote Requirement)

Executive Summary:

The Sonoma County Water Agency (Sonoma Water) Flood Management Design Manual is an update of the existing Sonoma County Water Agency Flood Control Design Criteria, which was last revised in August 1983. This manual is used to guide the design of Sonoma Water's own drainage and flood control facilities, aid the design of facilities proposed by other agencies/jurisdictions within the County of Sonoma, and provide guidance for the review of private development designs. Sonoma Water also has an agreement with the cities of Santa Rosa, Rohnert Park, Cotati, Petaluma, Cloverdale, and Sonoma, and the Town of Windsor to review new developments to verify they are designed in conformance with this document.

Discussion:

The Sonoma County Water Agency Flood Control Design Criteria has been updated and the name changed to Sonoma County Water Agency Flood Management Design Manual (Manual). On March 3, 2009, the Sonoma Water Board of Directors authorized the Chair to execute an agreement with Horizon Water and Environment, LLC, for Engineering and Environmental Services for Stream Maintenance and Flood Protection Services Program - Phase 2 - Flood Control Design Criteria Revision in the amount of \$1,199,053 to revise the Sonoma County Water Agency Flood Control Design Criteria (Criteria). The current Criteria dated August 1983 was adopted by Sonoma Water's Directors on September 13, 1983.

The Manual is a significant update to the existing Criteria. The Manual includes a discussion of Flood Management Goals addressing the following topics: Flood Risk, Public Safety, Water Quality, System Dynamics, Integrated Water Management, Water Supply, Multiple Benefits, Aesthetic Value and Public Use. The Manual includes a Flood Management Design Review Process chapter that details the review process for the Manual to be used as the basis for design review services that Sonoma Water provides for the cities and town within Sonoma County. The Manual has a more robust hydrology chapter that guides the user in determining the flow due to rain runoff (stormwater) that is gathered in the streets and conveyed through ditches and storm drains into local channels, streams, creeks and rivers. There is also a flow conveyance chapter that guides the user in designing inlet structures to storm drains and sizing the storm drains to convey

stormwater to local channels, creeks, streams and rivers. The Manual contains a large appendix that references the many variables and coefficients needed to perform the calculations necessary to adequately size drainage facilities.

During the Manual update process, Sonoma Water reached out to get input and feedback from local stakeholders. These included The cities of Santa Rosa, Petaluma, Rohnert Park, Cloverdale, Sebastopol, Healdsburg and Sonoma; Town of Windsor, County of Sonoma, North Coast Regional Water Quality Control Board and San Francisco Bay Regional Water Quality Control Board.

Sonoma Water also held a meeting on August 26, 2019 to present the draft Manual and get public comments. The local stakeholders and the engineering community were invited to this meeting. Sonoma Water also provided a 45-day comment period. The comments were received and where appropriate the Manual was revised.

In February 1996, Sonoma Water entered into agreements with the cities of Santa Rosa, Petaluma, Rohnert Park, Cloverdale, Cotati, Sonoma, Sebastopol, and Town of Windsor to review developments or projects within the entities' boundaries as requested for conformance with Sonoma Water's Flood Control Design Criteria. These services are fully reimbursed by the project's developer. The expenses have averaged \$150,000 annually.

The Manual plays an important role in Sonoma Water's Stream Maintenance Program because Sonoma Water's system of flood control channels receive stormwater from many of the developments to which the Manual provides guidance.

Prior Board Actions:

- 03/03/2009 1) authorize Chair to execute the Agreement for engineering and Environmental Services for Stream Maintenance and Flood Protection Services Program - Phase 2 - Flood Control Design Criteria Revision, between the Sonoma County water Agency and Horizon Water And Environment, LLC (\$1,200,000).
- 2)Authorize the Agency's General Manager/Chief Engineer to amend the Agreement provided amendments do not cumulatively increase the total cost to the Agency by more than \$100,000 (taking into account all prior amendments) and do not substantially change the scope of the work.
- 09/13/1983 Adopted Flood Control Design Criteria Revised August 1983.

Expenditures	FY 19-20 Adopted	FY20-21 Projected	FY 21-22 Projected
Budgeted Expenses			
Additional Appropriation Requested			
Total Expenditures			
Funding Sources			
General Fund/WA GF			
State/Federal			

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Fees/Other		
Use of Fund Balance		
Contingencies		
Total Sources		

Narrative Explanation of Fiscal Impacts:

There is no fiscal impact associated with approval of the Sonoma County Water Agency Flood Management Design Manual.

Staffing Impacts:					
Position Title (Payroll Classification)	Payroll Classification) Monthly Salary Range (A-I Step)		Deletions (Number)		

Narrative Explanation of Staffing Impacts (If Required):

N/A

Attachments:

Resolution

Draft Flood Management Design Manual <https://www.sonomawater.org/fmdm>

Related Items "On File" with the Clerk of the Board:

None