

Community Focus Statement D: Improve Lucerne Valley's water and sewer infrastructure with a focus on the community's sustainability.

Action Statement D.3: *Coordinate with County Flood Control to improve flood mitigation measures throughout the community and advocate for a stormwater retention basin to effectively capture stormwater runoff or recharge basins.*

D3

Benchmark: Smaller basins are allowed to better control regular storms rather than requiring 100-year storm basins.

Champion: Volunteer group or person or can be identified by the community

Estimated Cost: \$35,000,000–\$40,000,000

Stormwater occurs when rain or snowmelt flows into local streams or management facilities such as detention basins. Effective stormwater management helps to minimize flooding and erosion of a community's infrastructure. The San Bernardino County Flood Control District, part of the Public Works Department, is responsible for an extensive system of facilities, including dams, conservation basins, channels, and storm drains. The purpose of these facilities is to intercept and convey flood flows through and away from the major developed areas of the county, thus providing flood control. The Flood Control district's major functions include flood protection on major streams, water conservation, and storm drain construction.

The County Public Works Department is responsible for responding to flood-damaged infrastructure facilities. It responds to such events on a case-by-case basis depending on the extent of impacts from a storm event. Public Works also has a program in place to maintain the flood control facilities in an attempt to minimize potential storm impacts. Storm flows from a portion of the North Slope watershed are collected in a control channel which flows through the center of town but ends at Rabbit Springs Road which occasionally floods making it impassable. It was intended to flow across the road into Lucerne Valley Dry Lake, but seldom does. Flood control facilities and detention/retention basins allow for percolation of natural drainage into aquifers within areas of coarse alluvium that is best for percolation to groundwater. (LVEDA comments October 25, 2017)

Retention basins are wet ponds that provide a stormwater runoff storage area, and are essentially artificial lakes. Detention basins are dry ponds that serve as a temporary storage area for stormwater runoff in the event of a storm. Detention basins are often used as a way to avoid localized flooding. Stormwater retention and detention basins are often constructed as part of a new development in order to offset the direct impact of increases in impervious surfaces. They are also sometimes considered a method of stormwater management on a community-wide basis in order to address the cumulative impacts of improvements and projects in an area.

The County Public Works Department would be responsible for developing a stormwater basin in a community that is independent of a specific development or project. County Public Works often conducts internal assessments to determine if facilities require replacement or if new facilities would be beneficial to the flood control system. A cost-benefit analysis is often part of such an analysis given the potential cost of construction. A detention basin in Lucerne Valley is likely to cost between \$35,000,000 and \$40,000,000.

Action	Action Leader	Timeline	Resources
1. Establish community support for community flood mitigation measures and a potential stormwater basin.	Champion with Local community leaders	Months 1–	San Bernardino County Department of Public Works, Flood Control District http://cms.sbcounty.gov/dpw/FloodControl.aspx California Stormwater Quality Association Stormwater Best Management Practice Handbook Portal: Construction https://www.casqa.org/sites/default/files/downloads/fact_sheet_se-02_rev2.pdf
2. Meet with San Bernardino County Public Works, Flood Control District to discuss flood mitigation measures and a potential stormwater basin. The discussion should include potential funding requirements.	Champion with Local community leaders	Months 4–6	
3. Since the funding for a potential stormwater basin will likely exceed the available County budget funding, establish a Special District to generate additional tax-based funds for the proposed project.	Community Flood Control (CFC) Special District with assistance from County Special Districts Department	Months 7–18	
4. Implement additional flood mitigation measures identified as part of community discussions.	CFC Special District	Months 19–30	
5. Conduct preliminary analysis of a potential stormwater basin, including a cost estimate and cost/benefit analysis.	CFC Special District	Months 31–90	
6. Develop design plans for a potential stormwater basin.	CFC Special District	Months 91–108	
7. Construct the stormwater basin.	CFC Special District	Months 109–132	