**PROJECT DESCRIPTION:** The Project Applicant, the City of Calimesa, proposes to construct the proposed Calimesa Creek Stage III project that is a continuation of the Calimesa Channel "Stage I" and "Stage II" projects that were completed by the Riverside County Flood Control and Water Conservation District (RCFC&WCD) in 2002. Once completed, the Calimesa Creek Project III project would provide 100-year flood protection to existing and future development along County Line Road and Calimesa Creek from 5th Street on the east to Interstate 10 on the west.

The project would provide the following objective:

 Reduce peak 100-year flow rate to downstream facilities and eliminate flooding in the downtown area including the Calimesa Fire Station, City Hall, and Downtown Business District

In order to achieve the above objectives, the project proposes the following improvements:

- A proposed detention basin with tie-ins to the existing channel,
- Improvements to the existing channel near the proposed detention basin,
- Construct a new storm drain in County Line Road with low-flow tie-ins to the creek,
- Slope stability improvements in two areas adjacent to the creek.

Calimesa Channel "Stage I" and "Stage II" consists of a concrete lined trapezoidal channel beginning at County Line Road, approximately 500 feet west of California Street. The existing trapezoidal channel, with a base width of 4 feet and a depth of 5 feet, meanders westerly through existing residential neighborhoods and outlets on the west side of 5th Street. At 5th Street, Calimesa Creek extends west as an unimproved earthen channel to an existing inlet at Interstate 10. A 6' x 6' reinforced concrete box (RCB) extends under I-10 and connects with the Calimesa-Avenue L storm drain system east of the freeway and continues west and southwest as an earthen channel where it empties into San Timoteo Creek.

The project includes approximately 1.0 creek miles of Calimesa Creek from 3rd Street on the east to the Interstate 10 freeway on the west. The project includes construction of a 4.5-acre detention basin on the north side of Calimesa Creek approximately 150 feet west of 3rd Street, 18", 24", 54", 72" and 78" underground storm drains, box culverts, roadway crossings and grade the creek bank slopes of Calimesa Creek to protect the adjacent properties from a 100-year storm event.

The Calimesa Creek system operates under the Santa Ana Regional Water Quality Control Board's (SRWQCB) National Pollutant Discharge Elimination System (NPDES) permit. The permit requires that any hydromodification to a watercourse within its jurisdiction be considered as part of a project's analysis. Hydromodification is the change in rainfall-runoff relationships resulting from impervious areas on a site/project. In some stream systems, excessive hydromodification can cause erosion of stream banks and beds, transport of fine sediments, and disruption of aquatic habitat. The project must incorporate hydromodification management to

reduce degradation of the physical structure of the creek downstream of the proposed improvements.

The project included the construction of a detention basin adjacent to and on the north side of Calimesa Creek west of 3rd Street and a low-flow channel and active floodplain dimensions that are characteristic for this reach of Calimesa Creek.

The basin portion of the project includes a 53-acre foot detention basin on a 4.5-acre parcel of vacant land that is adjacent to and north of the creek and approximately 150 feet west of 3<sup>rd</sup> Street. The detention basin would capture upstream high storm water flows in Calimesa Creek. Project export is estimated at 35,000 cubic yards of materials associated with the excavation of the detention basin. All export material would be hauled to the San Timoteo Landfill that is located approximately 11 miles southwest of the project in the City of Redlands.

Approximately 100 feet west of 5th Street, the project would join the existing trapezoidal storm channel and transition from a trapezoidal channel to a proposed 7' x 7' reinforced concrete box (RCB). The 7' x 7' RCB would continue northwest towards County Line Road where a low-flow diversion structure would be constructed and divert a portion of the runoff west to the existing Calimesa Creek earthen channel. The remaining flow, including 100-year flows, would continue northerly to County Line Road where a new underground 72" reinforced concrete pipe (RCP) would be constructed in County Line Road. The underground 72" RCP would convey flows westerly in County Line Road to Calimesa Boulevard where the underground 72" RCP would pick up additional flows from an existing underground 54" storm drain in Calimesa Boulevard. At this confluence, an existing underground 78" RCP would continue westerly carrying flows underground in County Line Road and curve southwesterly to connect to the existing 78" RCP beneath an existing parking lot west of Calimesa Boulevard and south of County Line Road. The existing drainage patterns of Calimesa Creek would generally be maintained, with the exception of the underground storm drain that would be constructed in County Line Road. Maintaining the existing on-site drainage pattern along with the proposed detention basin would mitigate existing flooding impacts associated with Calimesa Creek downstream of the proposed detention basin.

Once completed, the project would provide 100-year flood protection for the Calimesa Channel watershed upstream from the proposed basin to Interstate 10.

Both the improved and unimproved sections of the Calimesa Creek are considered Waters of the United States. As such, any construction, modifications to, and/or elimination of any part of the creek requires purchase of either temporary or permanent off-site mitigation land through the US Army Corps of Engineers fee in-lieu program.

The project would comply with South Coast Air Quality Management District Rule 403 which requires the application of standard best management practices during construction and operation activities and includes the application of water or chemical stabilizers to disturbed soils, manage haul road dust by the use of water, cover haul vehicles, restrict vehicle speeds on on-site unpaved

roads to 15 mph, sweep loose dirt from paved site access roadways, stop construction activity when wind speeds exceed 25 mph and establish a permanent ground cover on finished areas.

The project is scheduled to be constructed in two phases. The first phase includes the construction of the storm drains and junction structures that would start in October 2023 and completed in March 2024. The second phase includes the construction of the detention basin and is scheduled to start construction in December 2023 and completed in August 2024.