

Safe, Clean Water and Natural Flood Protection



Original Project Text

Project E4

Upper Penitencia Creek Flood Protection Coyote Creek to Dorel Drive – San José

Preferred project: A federal-state-local partnership

This project continues a partnership with the U.S. Army Corps of Engineers (USACE) to plan, design and construct improvements along 4.2 miles of Upper Penitencia Creek from the confluence with Coyote Creek to Dorel Drive. The project is also funded in partnership with the state. Part of the project must be completed prior to a planned Silicon Valley Rapid Transit extension to the Bay Area Rapid Transit line, to protect the area around the proposed Berryessa station near King Road, which would otherwise be subject to flooding.

The natural creek channel will be preserved while adjacent existing open space and parkland will remain as recreational areas, only rarely taking the role as a temporary floodplain so that floodwaters do not enter surrounding neighborhoods and commercial areas. Proposed construction measures may include modified floodplains, levees, flood walls, bypass channels, and fish passage improvements. Existing District water supply facilities may also be modified to protect habitat and improve water supply reliability.

The \$41.9 million in local funding from Safe, Clean Water allows the District to move ahead with the planning, design and construction of the project.

Flooding History and Project Background

Upper Penitencia is a major tributary of Coyote Creek, flowing westerly from Alum Rock Park through the residential neighborhoods of Berryessa and Alum Rock in San José. More than 5,000 homes, schools and businesses are located in this floodplain, including many high-tech and commercial industries supporting the greater Silicon Valley.

With the capacity to carry less than a 10-year event, Upper Penitencia Creek has spilled its banks at least 7 times since the District began preparing flood reports in 1967. Damaging flood events occurred in 1978, 1980, 1982, 1983, 1986, 1995, and 1998, impacting many homes, businesses and surface streets.

Potential damages from a 1% (or 100-year) flood event are estimated at \$455 million (in 2004 dollars, according to a USACE economic analysis), with average annual damages estimated at \$30.5 million for the full reach from the Coyote Creek confluence to Dorel Drive.

The preferred project would build on a 1981 tri-party agreement between the District, the City of San José, and Santa Clara County to preserve open land and provide flood protection along the Upper Penitencia Creek corridor. As a result of the agreement, 78 acres have been permanently preserved as Penitencia Creek County Park and Penitencia Creek Trail. A 4-mile, intermittent trail follows Upper Penitencia Creek from 700-acre Alum Rock Regional Park to its confluence with Coyote Creek. In addition to much-needed flood protection, this project will help provide the opportunity for the City of San José and Santa Clara County to complete the long-planned trail and linear park.

Benefits

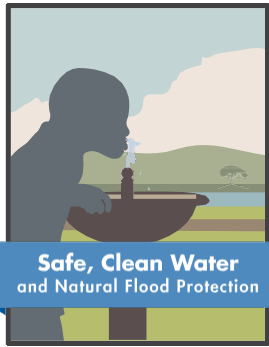
- Preferred project provides 1% flood protection to approximately 5,000 homes, schools and businesses. Locally funded-only project provides 1% flood protection to the proposed rapid transit station and areas downstream from King Road
- Reduces sedimentation and maintenance requirements
- Improves water quality in Coyote Creek
- Provides opportunities for recreation improvements consistent with the City of San José and Santa Clara County Park master plans

Key Performance Indicators (15-Year Program)

1. Preferred project with federal and local funding: Construct a flood protection project to provide 1% flood protection to 5,000 homes, businesses and public buildings.
2. With local funding only: Acquire all necessary rights-of-way and construct a 1% flood protection project from Coyote Creek confluence to King Road.

Geographic Area of Benefit

San José



Safe, Clean Water and Natural Flood Protection

Santa Clara Valley
Water District



Proposed Modifications

Project E4

Upper Penitencia Creek Flood Protection Coyote Creek to Dorel Drive – San José

Preferred project: A federal state local partnership

This project ~~continues a partnership with the U.S. Army Corps of Engineers (USACE) to plan, design and construct~~ completes a planning study report for flood protection improvements along 4.2 miles of Upper Penitencia Creek from the confluence with Coyote Creek to Dorel Drive. ~~The project is also funded in partnership with the state. Part of the project must be completed prior to a planned Silicon Valley Rapid Transit extension to the Bay Area Rapid Transit line, to protect the area around the proposed Berryessa station near King Road, which would otherwise be subject to flooding.~~

The planning study will identify improvements that preserve ~~The~~ the natural creek channel and will be preserved while adjacent recreational areas such as the existing open space and parkland, so that they will remain as recreational areas, only rarely taking the role can function on a rare basis to serve as a temporary floodplain to prevent so that floodwaters from do not entering surrounding neighborhoods and commercial areas. Proposed construction flood risk reduction measures may include modified floodplains, levees, detention/retention areas, flood walls, bypass channels, and fish passage improvements. Modifications to ~~E~~existing District water supply facilities may also be modified included to protect habitat and improve water supply reliability.

The ~~\$241.9~~ million in local funding from Safe, Clean Water allows the District to move ahead with the planning phase, design and construction of the project. The planning study report will provide the foundation to allow the District to pursue additional funding opportunities for the project design and construction phases.

Flooding History and Project Background

Upper Penitencia is a major tributary of Coyote Creek, flowing westerly from Alum Rock Park through the residential neighborhoods of Berryessa and Alum Rock in San José. More than 5,000 homes, schools and businesses are located in this floodplain, including many high-tech and commercial industries supporting the greater Silicon Valley.

With the capacity to carry less than a 10-year event, Upper Penitencia Creek has spilled its banks at least 7 times since the District began preparing flood reports in 1967. Damaging flood events occurred

in 1978, 1980, 1982, 1983, 1986, 1995, and 1998, impacting many homes, businesses and surface streets.

Potential damages from a 1% (or 100-year) flood event are estimated at \$455 million (in 2004 dollars, according to a USACE economic analysis), with average annual damages estimated at \$30.5 million for the full reach from the Coyote Creek confluence to Dorel Drive.

The ~~preferred~~ project would build on a 1981 tri-party agreement between the District, the City of San José, and Santa Clara County to preserve open land and provide flood protection along the Upper Penitencia Creek corridor. As a result of the agreement, 78 acres have been permanently preserved as Penitencia Creek County Park and Penitencia Creek Trail. A 4-mile, intermittent trail follows Upper Penitencia Creek from 700-acre Alum Rock Regional Park to its confluence with Coyote Creek. In addition to much-needed flood protection, this project will help provide the opportunity for the City of San José and Santa Clara County to complete the long-planned trail and linear park.

Benefits

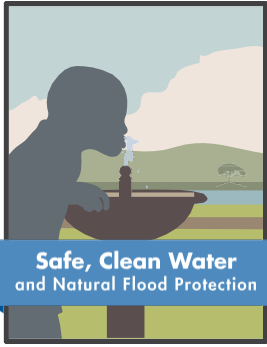
- ~~Preferred p~~Project provides a planning study report for:
 - o Up to 1% flood protection to approximately 95,000 homes, schools and businesses.
~~Locally funded only project provides 1% flood protection to the proposed rapid transit station and areas downstream from King Road~~
 - o Reduction of es sedimentation and maintenance requirements
 - o Improvements to s water quality in Coyote Creek
 - o ~~Provides o~~ Opportunities for recreation improvements consistent with the City of San José and Santa Clara County Park master plans

Key Performance Indicators (15-Year Program)

1. ~~Preferred project with federal and local funding: Construct~~ Complete a planning study report for a flood protection project to provide up to 1% flood protection to 95,000 homes, businesses and public buildings.
2. ~~With local funding only: Acquire all necessary rights of way and construct a 1% flood protection project from Coyote Creek confluence to King Road.~~

Geographic Area of Benefit

San José and Milpitas



Safe, Clean Water and Natural Flood Protection



Modified Project Text

Project E4

Upper Penitencia Creek Flood Protection Coyote Creek to Dorel Drive – San José

This project completes a planning study report for flood protection improvements along 4.2 miles of Upper Penitencia Creek from the confluence with Coyote Creek to Dorel Drive. The planning study will identify improvements that preserve the natural creek channel and adjacent recreational areas such as the existing open space and parkland, so that they can function on a rare basis to serve as a temporary floodplain to prevent floodwaters from entering surrounding neighborhoods and commercial areas. Proposed flood risk reduction measures may include modified floodplains, levees, detention/retention areas, bypass channels, and fish passage improvements. Modifications to existing District water supply facilities may also be included to protect habitat and improve water supply reliability.

The \$2 million in local funding from Safe, Clean Water allows the District to move ahead with the planning phase of the project. The planning study report will provide the foundation to allow the District to pursue additional funding opportunities for the project design and construction phases.

Flooding History and Project Background

Upper Penitencia is a major tributary of Coyote Creek, flowing westerly from Alum Rock Park through the residential neighborhoods of Berryessa and Alum Rock in San José. More than 5,000 homes, schools and businesses are located in this floodplain, including many high-tech and commercial industries supporting the greater Silicon Valley.

With the capacity to carry less than a 10-year event, Upper Penitencia Creek has spilled its banks at least 7 times since the District began preparing flood reports in 1967. Damaging flood events occurred in 1978, 1980, 1982, 1983, 1986, 1995, and 1998, impacting many homes, businesses and surface streets.

Potential damages from a 1% (or 100-year) flood event are estimated at \$455 million (in 2004 dollars, according to a USACE economic analysis), with average annual damages estimated at \$30.5 million for the full reach from the Coyote Creek confluence to Dorel Drive.

The project would build on a 1981 tri-party agreement between the District, the City of San José, and Santa Clara County to preserve open land and provide flood protection along the Upper Penitencia

Creek corridor. As a result of the agreement, 78 acres have been permanently preserved as Penitencia Creek County Park and Penitencia Creek Trail. A 4-mile, intermittent trail follows Upper Penitencia Creek from 700-acre Alum Rock Regional Park to its confluence with Coyote Creek. In addition to much-needed flood protection, this project will help provide the opportunity for the City of San José and Santa Clara County to complete the long-planned trail and linear park.

Benefits

- Project provides a planning study report for:
 - o Up to 1% flood protection to approximately 9,000 homes, schools and businesses.
 - o Reduction of sedimentation and maintenance requirements
 - o Improvements to water quality in Coyote Creek
 - o Opportunities for recreation improvements consistent with the City of San José and Santa Clara County Park master plans

Key Performance Indicators (15-Year Program)

1. Complete a planning study report for a flood protection project to provide up to 1% flood protection to 9,000 homes, businesses and public buildings.

Geographic Area of Benefit

San José and Milpitas