

Downtown Guadalupe River Project

Mark Ellis

Project Manger

US Army Corps of Engineers -
Sacramento

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US Army Corps of Engineers
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Guadalupe River Project

- 170 square mile watershed
- Project Authorized by WRDA 1986
- Goal to provide 100 yr. flood protection
- Project implemented in six phases



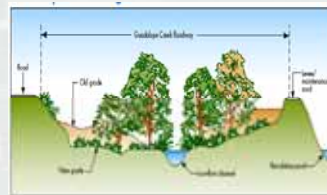
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Pre-Project Performance

Capacity Limitations

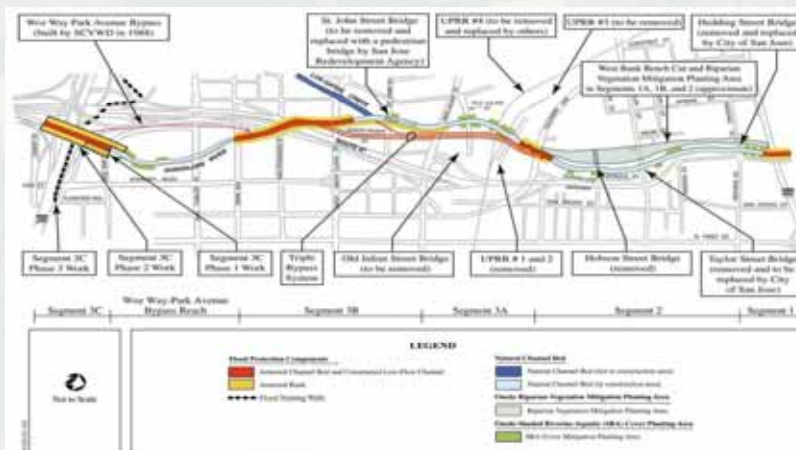
- Hydraulic
- Debris Loading

LOCATION	100 Yr DISCHARGE (cfs)	IN CHANNEL (cfs)	BYPASS (cfs)
Pre-Project			
St John Gage		9,140 (~ 20 Yr frequency)	
Post-Project			
Santa Clara St	14,600	14,600	0
New Julian	17,000	6,900	10,100



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Downtown Guadalupe River



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Global Solution Strategy

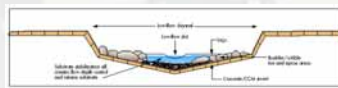
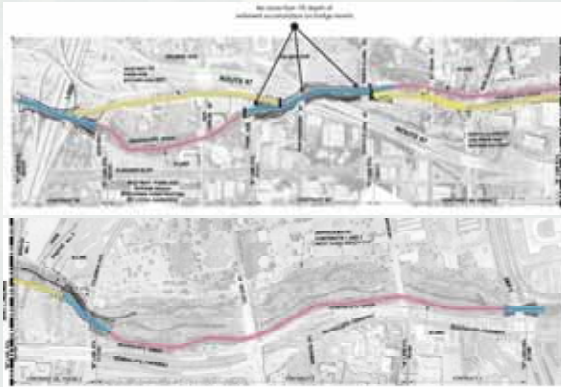
- Collaborative process initiated in December 1997 to include the Corps of Engineers, Santa Clara Valley Water District, City of San Jose, and the Resource Agencies
- Dispute Resolution Memorandum signed September 1998
- Guadalupe Watershed Inter-agency Working Group
- Partnering Conference
- Adaptive Management Team



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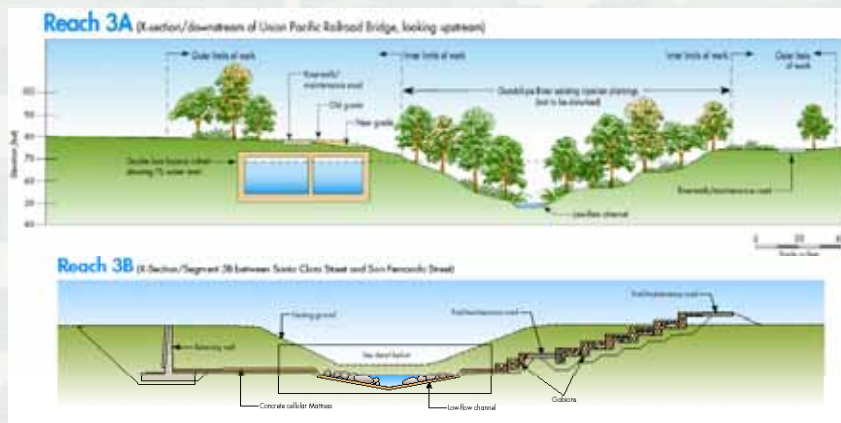
Project Features

- Bypass Culverts
- Low-flow channel for fish passage
- Terraced river banks with gabion and concrete walls
- Plazas
- River walk



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GUADALUPE RIVER PROJECT COLLABORATIVE



A key outcome of the Collaborative was the re-design of the project to include a double box bypass culvert to help convey flood flows while maintaining and replacing riparian and shaded riverine aquatic (SRA) vegetation for habitat



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Construction Challenges

- Limited in-stream activities
- Stringent traffic flow and parking requirements
- Local codes and regulations for temporary encroachments, traffic control and utility work
- Integration with recreational, landscaping and architectural details
- Railroad requirements
- Work adjacent to historical buildings
- Regulatory requirements for fish passage and in-stream activities



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Technical Challenges

- Urban Downtown Area
(Utilities, Traffic, Noise)
- Incised Channel
- Adjacent Structures
 - ▶ Settlement
 - ▶ Deflection/Cracking
- Road Crossing
- RR Crossing



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Environmental Challenges

- Loss of SRA Cover
- Loss of Riparian Vegetation
- Threatened species under ESA
 - ▶ Steelhead and Chinook Salmon
- Nesting Birds during Construction
- Contaminated Sediment in Box Culvert
- HTRW
- Dewatering



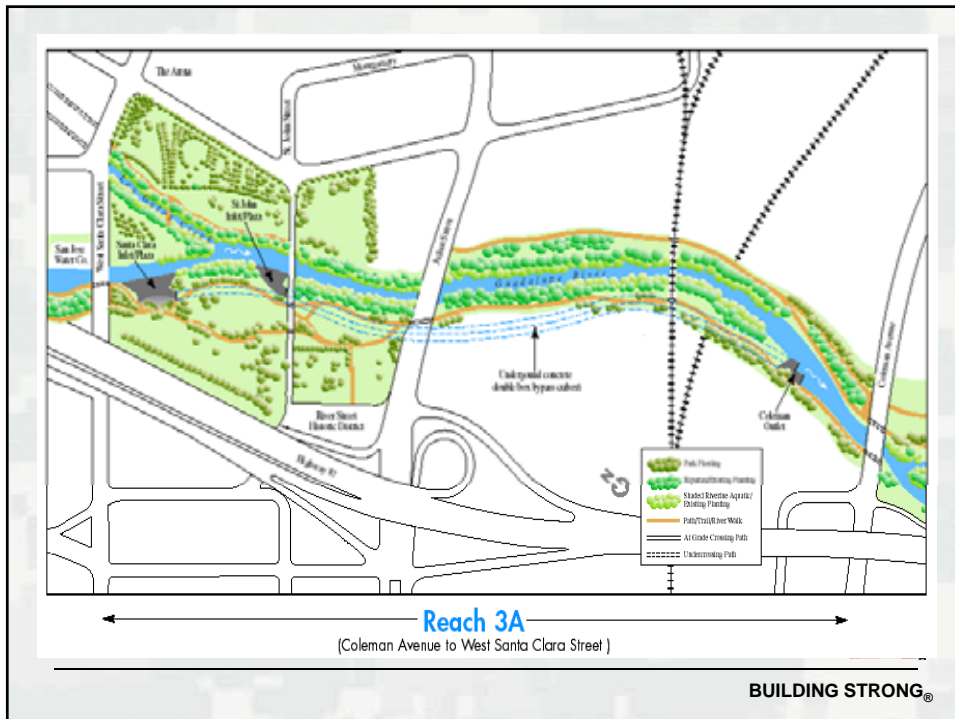
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Other Challenges

- Local Interest Groups
- Redevelopment Agency
- Bike Path Needs
- Resource Agency
- Water District
- Sequence of Funds
- Phased Approach
- Court Mandates
- Litigation



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Contract 3A: Coleman Avenue Looking Upstream (Pre-project)



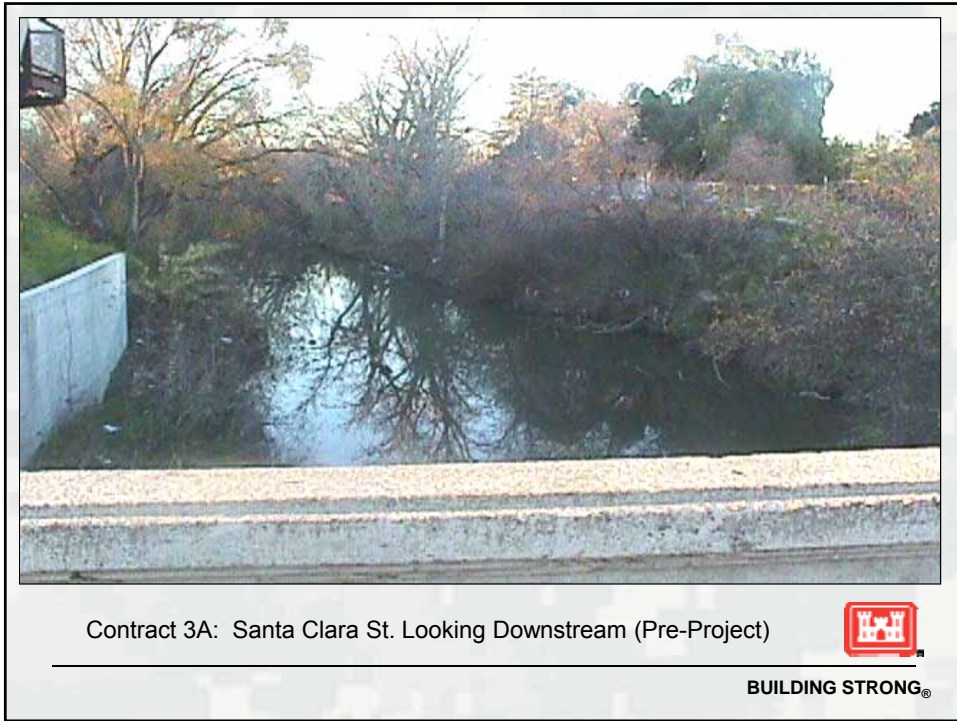
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Contract 3A: Coleman Avenue Looking U/S (Bypass Outlet)



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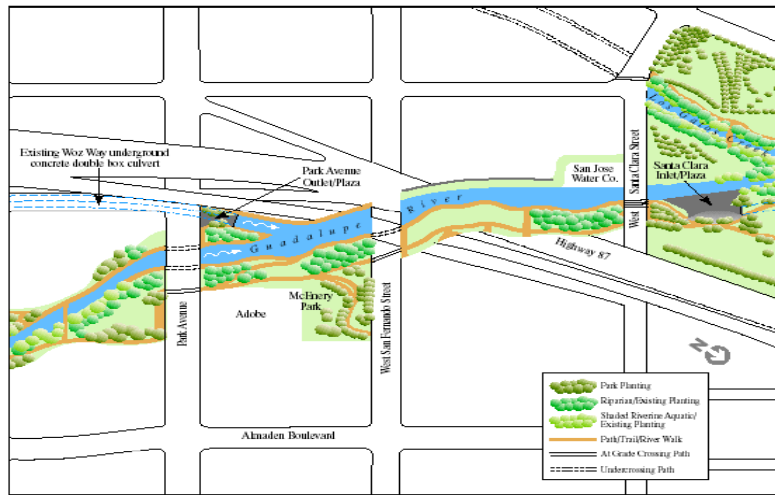




Contract 3A: Confluence Park East Santa Clara Street to St. John Street



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Reach 3B
(West Santa Clara Street to Park Avenue)



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Contract 3B: Santa Clara Street Looking Upstream (Pre-project)



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Contract 3B: Santa Clara Street Looking Upstream



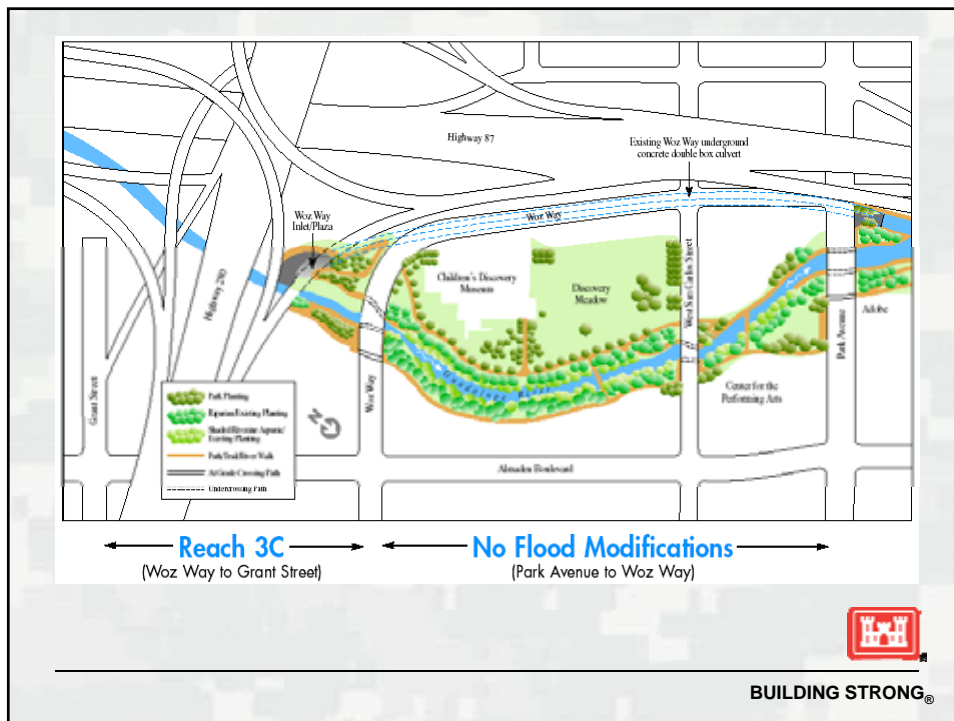
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Contract 3B: San Fernando St. looking U/S (Bypass Outlet)



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Contract 3C: Woz Way looking upstream



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Contract 3C: Woz Way Bypass Inlet (Winter 2002)



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Questions & Answers



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