

Leon Creek Flood Risk Management, San Antonio, Texas

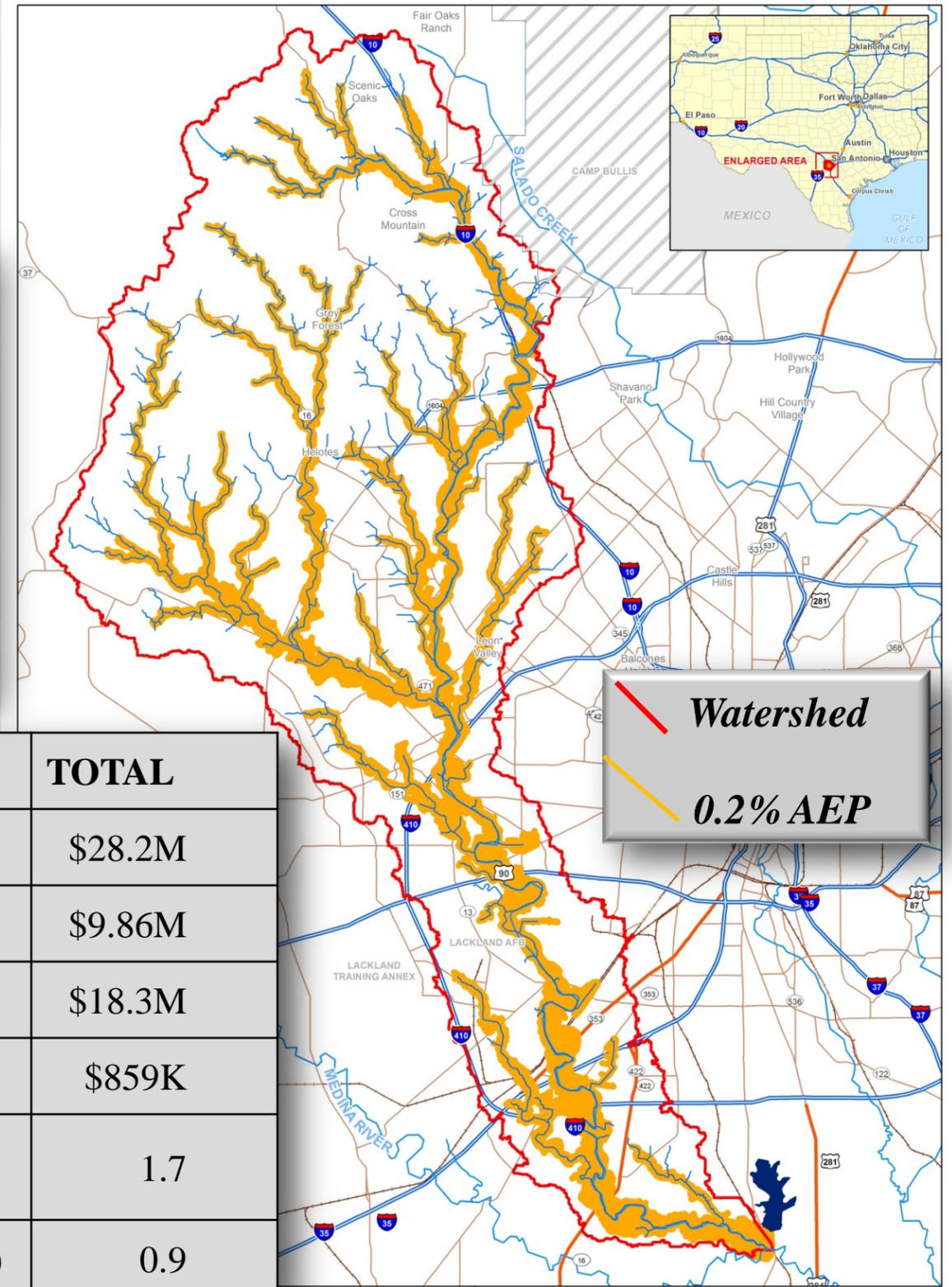
Recommended Plan



**US Army Corps
of Engineers®**
Fort Worth District



**SAN ANTONIO
RIVER AUTHORITY**
Leaders in Watershed Solutions

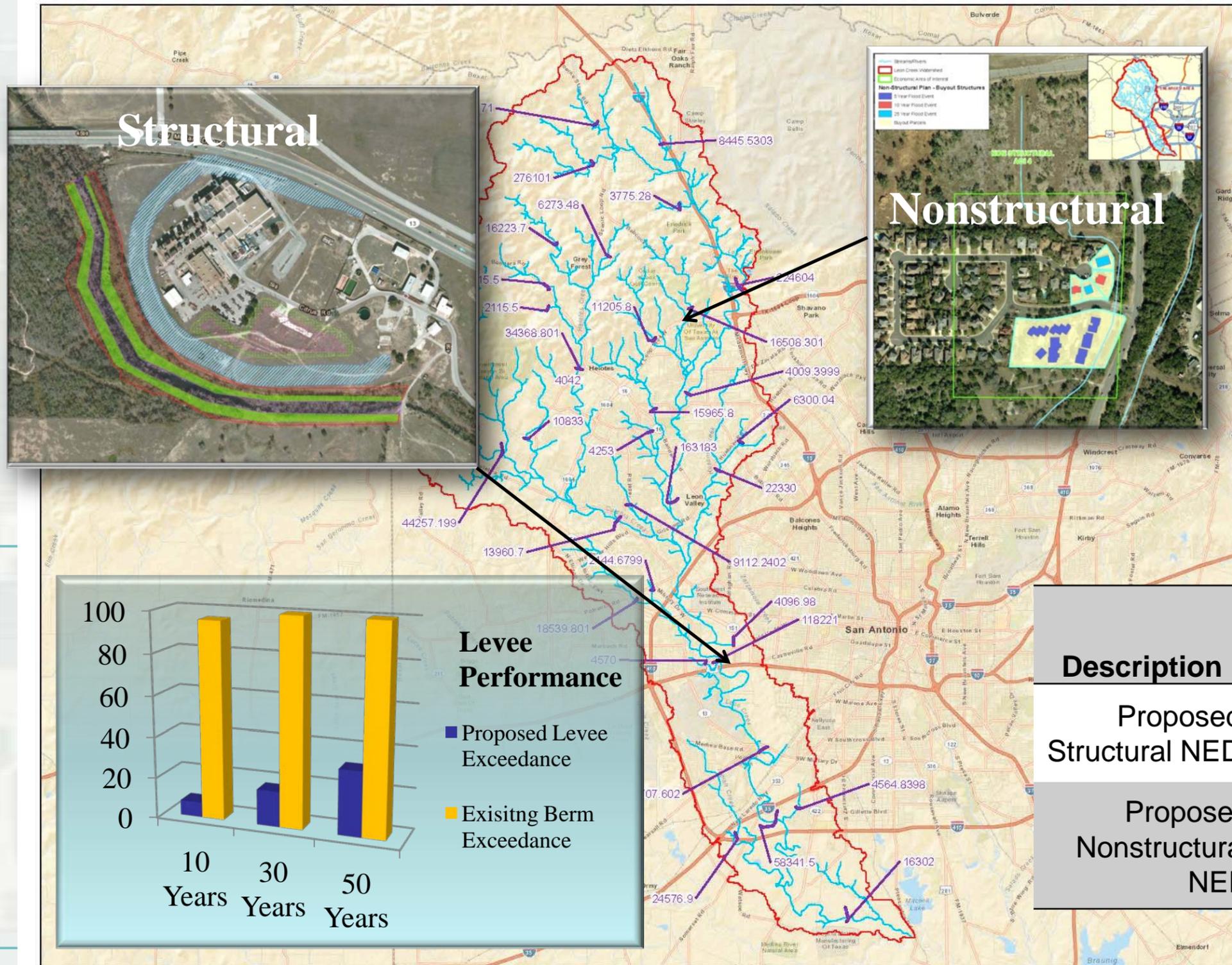


The Recommended Plan	TOTAL
Total Project First Costs	\$28.2M
Non-Federal	\$9.86M
Federal	\$18.3M
Net Annual Benefits	\$859K
Benefit to Cost Ratio (3.5% Interest)	1.7
Benefit to Cost Ratio (7% Interest)	0.9

Watershed
0.2% AEP

Recommended Plan Includes Structural and Nonstructural Solutions

Risk Reduction



Benefits – The Recommended Plan minimizes damages at the 1 percent AEP level for Port San Antonio, and reduces flood damages at the 4 percent AEP level through the removal of 36 residential dwellings.

Costs – Estimated first cost of \$ \$28,175,000; flood risk reduction benefits estimated at \$2,143,000 annually; net benefits of \$859,000.

Flooding in Recent History –

1986-87 - \$476,000 in damages

- ▶ Led to the construction of the current berm (less than 25-year protection)

2002 – \$300,000 in damages at Port San Antonio

2013 – \$1,600,000 in damages

- ▶ \$1M in damages at Jet Engine Test Cell Facility at the Port
- ▶ Test cell facility shut down for 2 weeks losing \$100,000 in revenue
- ▶ \$600,000 at other Port Facilities

Description	Annual Benefits	Annual Costs	Net Benefits
Proposed Structural NED	\$1,749,500	\$682,387	\$1,067,113
Proposed Nonstructural NED	\$358,580	\$138,525	\$220,055

