

Upper Turkey Creek - Merriam, Kansas

Flood Risk Management Project, Feasibility Report



Future Performance

- Annual Damages reduced \$3,444,700 (73%)
- Reduction of 93% of annual damages in project reach
- Annual chance of flooding is reduced to 1 in 200 in project reach
- No induced damages upstream or downstream
- Reduces loss of life risk due to flash flooding

Residual Risk

- Residual annual damages estimated at \$1.3 million
- Exceedance probability of 5.1% in 10 years
- Exceedance probability of 23% over 50-yr period
- Sponsor maintains robust flood preparedness & response plans

Recommended Plan Features

- 6,822' of floodwall 3 to 6.5' height
- 3,383' levee 3 to 6' height
- =10,205' total

Description of Symbol Colors

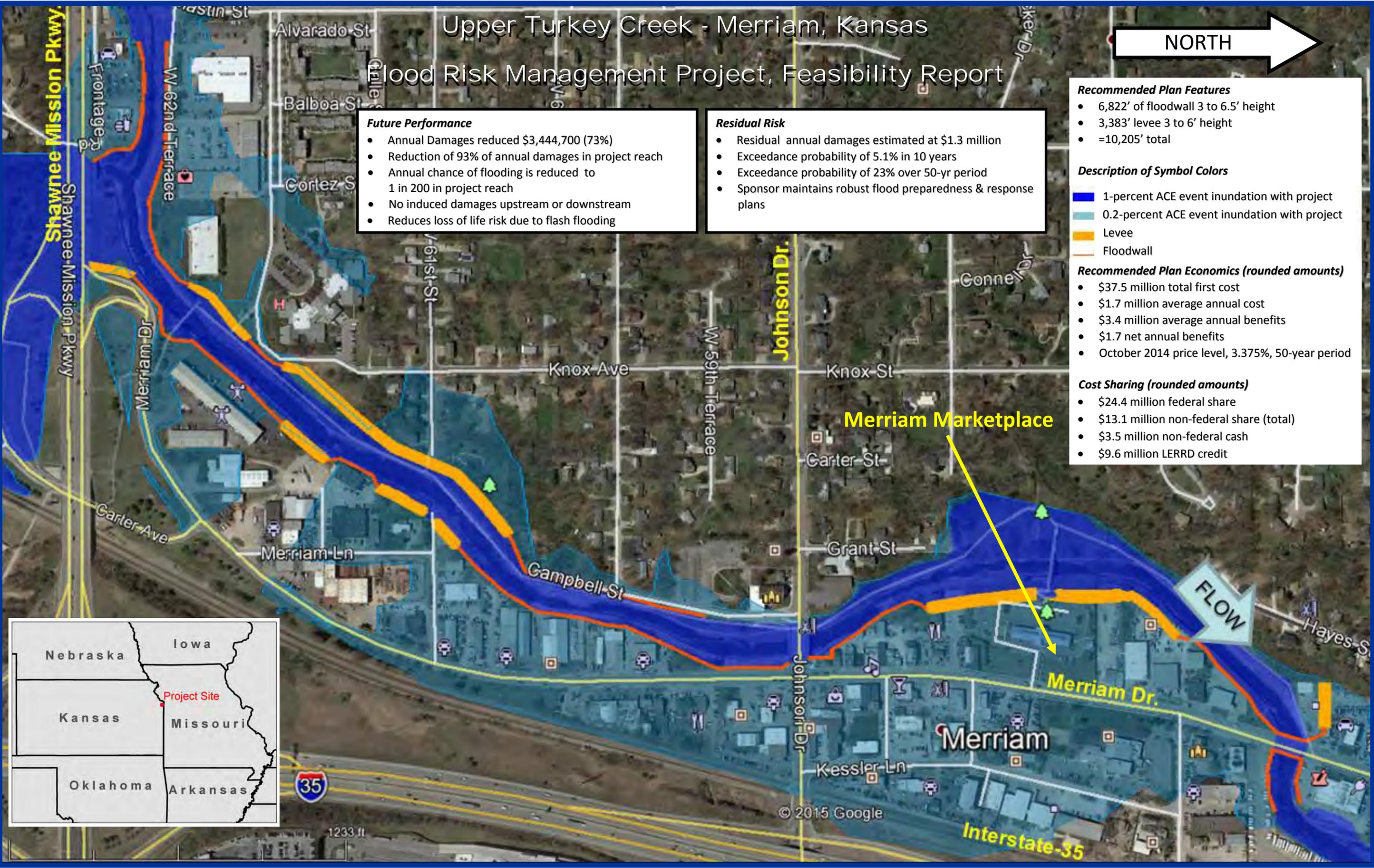
- 1-percent ACE event inundation with project
- 0.2-percent ACE event inundation with project
- Levee
- Floodwall

Recommended Plan Economics (rounded amounts)

- \$37.5 million total first cost
- \$1.7 million average annual cost
- \$3.4 million average annual benefits
- \$1.7 net annual benefits
- October 2014 price level, 3.375%, 50-year period

Cost Sharing (rounded amounts)

- \$24.4 million federal share
- \$13.1 million non-federal share (total)
- \$3.5 million non-federal cash
- \$9.6 million LERRD credit



1233 ft

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