

Purpose and Need

- The purpose of this project is to reduce flood damage to rural communities in the Spring Creek Watershed.
- The need for this project is due to a history of flood damage that has occurred in the watershed and to address the continued risk of flooding and flood-related damages to public and private infrastructure.



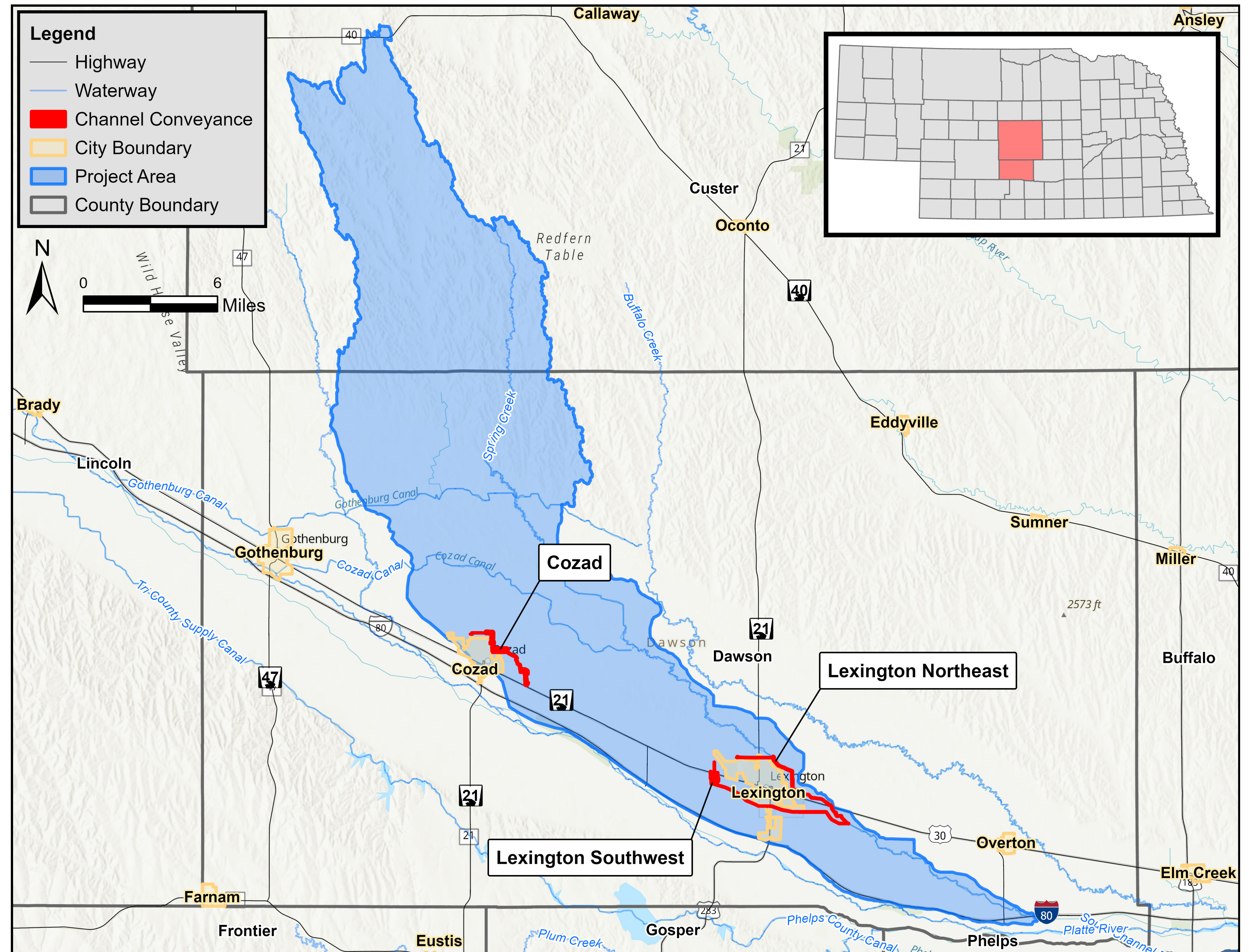
Flooding within Spring Creek Watershed

Flood Damage Reduction Measures

- The following measures were considered for this Watershed Plan study. The highlighted measure advanced to formulate potential alternatives for specific locations within the watershed.
 - No Action/Future Without Federal Investment
 - Existing On-Channel Storage
 - New On-Channel Storage
 - Off-Channel Storage
 - Levee Systems
 - Channel Conveyance
 - Floodplain Connectivity
 - Physical Non-Structural Measures

Alternatives Evaluated

- The following Channel Conveyance alternatives were developed to address specific locations of flooding problems:
 - Cozad Channel Conveyance
 - Lexington Northeast Channel Conveyance
 - Lexington Southwest Channel Conveyance

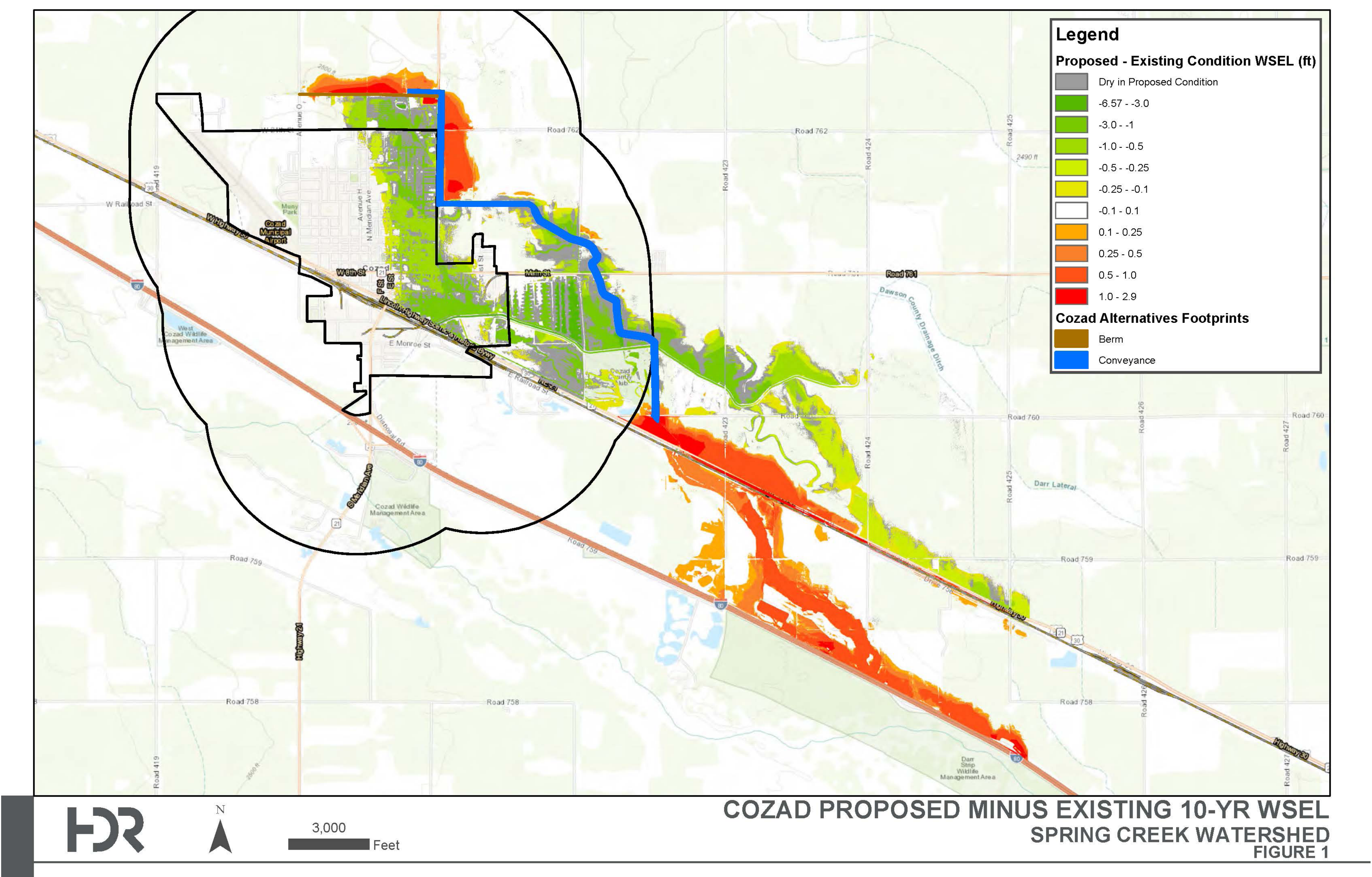


Flood Damage Reduction for Cozad (10-year Storm Event)

- 1,303 structures benefit from flood reduction
- Average annual damage reduction benefits: \$1,881,975 (includes structural and agricultural related flood damage reduction)

This figure displays the change in flood depths for a 10-year storm event after implementation of the Conveyance Alternative

- Grey Shading**
Areas with NO flooding with implementation of the Conveyance Alternative that are flooded under the existing conditions
- Green/Yellow Shading**
Areas that have a reduction in flood depths with implementation of the Conveyance Alternative that are flooded under the existing conditions
- Red/Orange shading**
Areas that have an increase in flood depths with implementation of the Conveyance Alternative that are flooded under the existing conditions

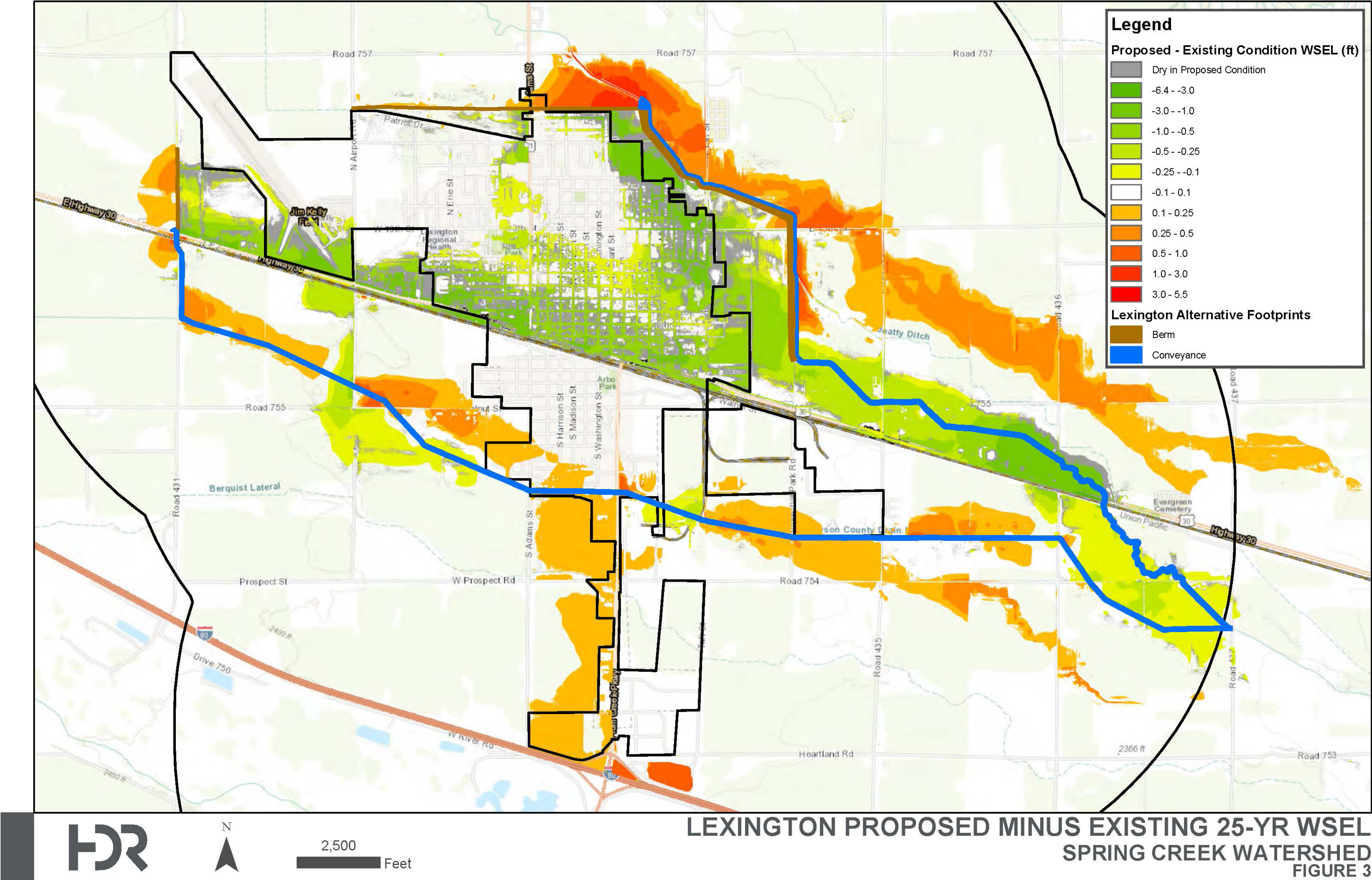


Flood Damage Reduction for Lexington (25-year Storm Event)

- 712 structures benefit from flood reduction in Lexington NE, 115 structures benefit in Lexington SE
- Average annual damage reduction benefits: \$1,048,856 Lexington NE, -\$455,180 Lexington SE

This figure displays the change in flood depths for a 25-year storm event after implementation of the Conveyance Alternative

- Grey Shading**
Areas with NO flooding with implementation of the Conveyance Alternative that are flooded under the existing conditions
- Green/Yellow Shading**
Areas that have a reduction in flood depths with implementation of the Conveyance Alternative that are flooded under the existing conditions
- Red/Orange shading**
Areas that have an increase in flood depths with implementation of the Conveyance Alternative that are flooded under the existing conditions



Preferred Alternative and Next Steps

Measure	Land Treatment	Total Damage Reduction Benefit, Average Annual*	Total Average Annual Cost	NEE Metrics Benefit Cost Ratio	NEE Metrics Net Benefits
Cozad	Channel Conveyance	\$1,881,975	\$1,061,369	1.77	\$820,606
Lexington NE	Channel Conveyance	\$1,048,856	\$1,024,961	1.02	\$23,895
Lexington SE	Channel Conveyance	-\$455,180	\$1,266,300	-0.36	-\$1,721,480
Total		\$2,475,651	\$3,352,630	0.74	-\$876,979

- The preferred alternative for this plan is Cozad Channel Conveyance and Lexington Northeast Channel Conveyance. It was selected due to a positive benefit cost analysis
- Lexington Southwest was removed due to lack of benefits compared to the cost

Total Project Cost: \$56,568,330
NRCS Share: \$20,122,166
CPNRD Share: \$36,446,164

Next Steps

- The public will be able to provide comment on the Draft Watershed Plan until December 15, 2025
- The Central Platte NRD will coordinate with the NRCS to seek design funding through the Watershed and Flood Prevention Operations program

