

# Flood Mitigation Project (FMP)



Title **Town Creek Railroad and S. Warren Street Improvements**

ID# **033000090** Sponsor **Burleson**

RFPG recommend? **Yes** Reason for Recommendation **Action aligns with goals and meets TWDB guidance**

## Project Description

This FMP includes improving the capacity of the crossing by adding a third 12' x 10' barrel to the RCB. This solution also includes raising S Warren St by 2.5' and increasing the capacity of the crossing.

Watershed HUC# (if known) **120301020401** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **0**

Associated FME's **-** County **Johnson**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **146** # of structures **60** Critical facilities **4**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **1**

Number of low water crossings **4** Historical road closures **12**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **0** # of structures removed from 100-yr **0**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **1**

Other benefits **Unknown** Reduction in # of road closures over 10 years **4**

## Impacts

Negative impacts? **No** Negative impacts description **N/A**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$2,441,000** % Nature-Based **0** BCR **0**

Recurring costs **-** Issues **Unknown**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Saturn Springs Estates Drainage Improvements**

ID# **033000091** Sponsor **Garland**

RFPG recommend? **Yes** Reason for Recommendation **Action aligns with goals and meets TWDB guidance**

## Project Description

Creek improvements such as gabions and walls to protect utilities, structures, and high-velocity areas from erosion and storm drain improvements such as upsized lines, additional laterals, regraded alleyways, and new curb and gutter along several roads.

Watershed HUC# (if known) **120301060501** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **0**

Associated FME's **-** County **Dallas**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **107** # of structures **32** Critical facilities **13**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **5**

Number of low water crossings **0** Historical road closures **12**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **18** # of structures removed from 100-yr **6**

Critical facilities removed from 100-yr **1** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **1** Low water crossings removed from 100-yr **0**

Other benefits **Unknown** Reduction in # of road closures over 10 years **1**

## Impacts

Negative impacts? **No** Negative impacts description **N/A**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$10,696,000** % Nature-Based **0** BCR **0**

Recurring costs **-** Issues **Unknown**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Terrell KC1 Watershed Drainage Improvements**

ID# **033000092** Sponsor **Terrell**

RFPG recommend? **Yes** Reason for Recommendation **Action aligns with goals and meets TWDB guidance**

## Project Description

Implement and upsize storm drain on Brin St, College St, Rochester St, & Gardner St. Add additional drainage crossing at SH 34. Place inlets at every intersection to capture additional runoff. Upsize railroad crossing and improve adjacent channel.

Watershed HUC# (if known) **120301070105** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **1**

Associated FME's **-** County **Kaufman**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **651** # of structures **67** Critical facilities **4**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **3**

Number of low water crossings **0** Historical road closures **46**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **610** # of structures removed from 100-yr **61**

Critical facilities removed from 100-yr **3** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **2** Low water crossings removed from 100-yr **0**

Other benefits **Unknown** Reduction in # of road closures over 10 years **28**

## Impacts

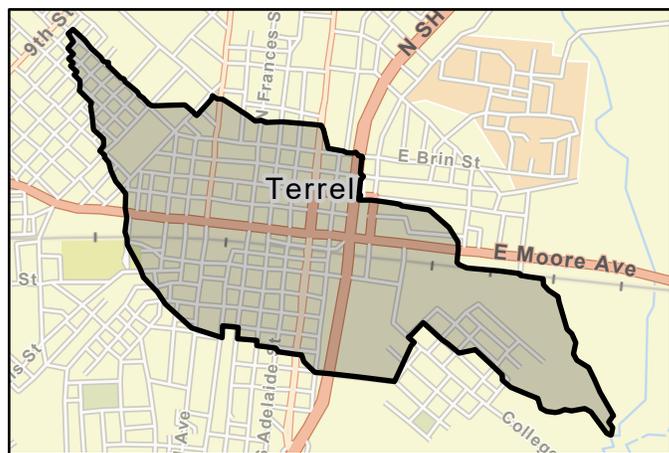
Negative impacts? **No** Negative impacts description **N/A**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$27,350,000** % Nature-Based **0** BCR **0**

Recurring costs **-** Issues **Unknown**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Lois Branch Main Channel Improvements**

ID# **033000094** Sponsor **Richardson**

RFPG recommend? **Yes** Reason for Recommendation **Action aligns with goals and meets TWDB guidance**

## Project Description

Alternative proposes channel geometry modifications for 3,900 LF, drop structures, culvert crossing resizing, and raising one roadway by 1.0 feet.

Watershed HUC# (if known) **120301050104** Emergency Need? **No**  
 Drainage area (mi<sup>2</sup> est.) **0**  
 Associated FME's **-** County **Dallas**  
 Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**  
 Population at risk **5** # of structures **2** Critical facilities **9**  
 Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **4**  
 Number of low water crossings **3** Historical road closures **7**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **5** # of structures removed from 100-yr **2**  
 Critical facilities removed from 100-yr **8** Farm/Ranch land removed from 100-yr (acres) **0**  
 Road removed from 100-yr (miles) **4** Low water crossings removed from 100-yr **3**  
 Other benefits **Unknown** Reduction in # of road closures over 10 years **7**

## Impacts

Negative impacts? **No** Negative impacts description **N/A**  
 Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$2,737,000** % Nature-Based **0** BCR **0**  
 Recurring costs **-** Issues **Unknown**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **DMP Phase 1: Kirven Avenue (Project 1)**

ID# **033000095** Sponsor **Waxahachie**

RFPG recommend? **Yes** Reason for Recommendation **Action aligns with goals and meets TWDB guidance**

## Project Description

Supplement existing storm drain system with additional parallel system near the intersection of Almond St and Sycamore St that extends downstream along Harbin Ave to the existing Marvin Ave outfall. Upsize Marvin Ave to 8' x 7' RCB outfall.

Watershed HUC# (if known) **120301090302** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **0**

Associated FME's **-** County **Ellis**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **77** # of structures **22** Critical facilities **0**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **1**

Number of low water crossings **0** Historical road closures **8**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **37** # of structures removed from 100-yr **14**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**

Other benefits **Unknown** Reduction in # of road closures over 10 years **0**

## Impacts

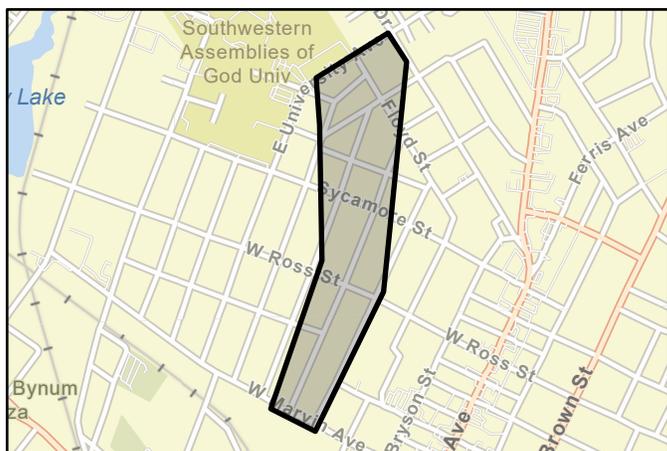
Negative impacts? **No** Negative impacts description **N/A**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$11,048,000** % Nature-Based **0** BCR **0**

Recurring costs **-** Issues **Unknown**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Estates Drive Bridge Replacement**

ID# **033000096** Sponsor **Copper Canyon**

RFPG recommend? **Yes** Reason for Recommendation **Action aligns with goals and meets TWDB guidance**

## Project Description

Replace Estates Drive Bridge over Poindexter Creek

Watershed HUC# (if known) **120301030805** Emergency Need? **No**  
 Drainage area (mi<sup>2</sup> est.) **1**  
 Associated FME's **-** County **Denton**  
 Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**  
 Population at risk **13** # of structures **12** Critical facilities **26**  
 Farm/Ranch land impacted (acres) **28** Roadway(s) impacted (length) **3**  
 Number of low water crossings **0** Historical road closures **8**

## 100-Year Flood Risk Reduction

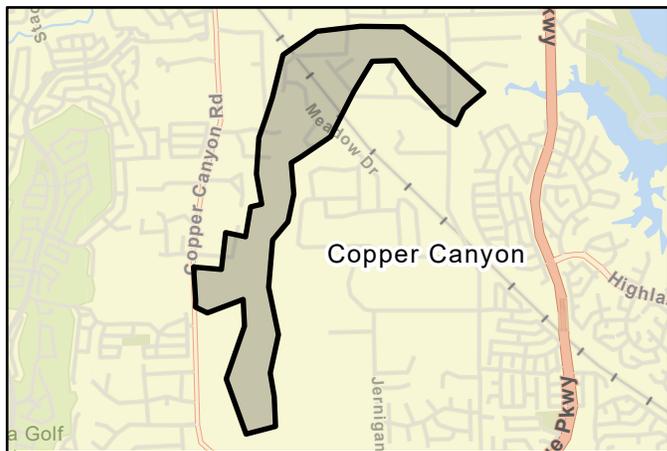
Population removed from 100-yr **5** # of structures removed from 100-yr **4**  
 Critical facilities removed from 100-yr **5** Farm/Ranch land removed from 100-yr (acres) **8**  
 Road removed from 100-yr (miles) **3** Low water crossings removed from 100-yr **0**  
 Other benefits **Unknown** Reduction in # of road closures over 10 years **4**

## Impacts

Negative impacts? **No** Negative impacts description **N/A**  
 Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$1,410,000** % Nature-Based **0** BCR **0**  
 Recurring costs **-** Issues **Unknown**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **PEC-4 Phases 3&4**

ID# **033000097** Sponsor **Denton**

RFPG recommend? **Yes** Reason for Recommendation **Action aligns with goals and meets TWDB guidance**

## Project Description

Install 3,200 linear ft of 10'x8', 12'x8', and 16'x8' underground box culvert from the intersection with Phase 2 at Prairie following the PEC 4 Tributary and then traveling down Mulberry to Bernard. Box culvert will contain the 100-yr floodplain.

Watershed HUC# (if known) **120301030902,120301030803,12030103080** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **1**

Associated FME's **-** County **Denton**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **321** # of structures **89** Critical facilities **2**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **1**

Number of low water crossings **1** Historical road closures **11**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **244** # of structures removed from 100-yr **81**

Critical facilities removed from 100-yr **2** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **1** Low water crossings removed from 100-yr **1**

Other benefits **Unknown** Reduction in # of road closures over 10 years **2**

## Impacts

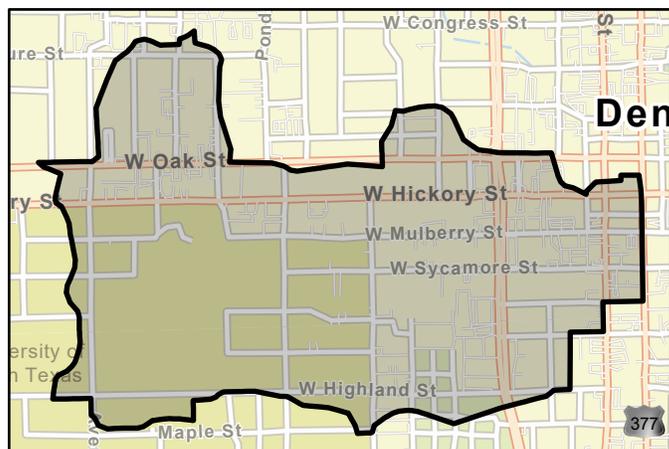
Negative impacts? **No** Negative impacts description **N/A**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$15,973,000** % Nature-Based **0** BCR **0**

Recurring costs **-** Issues **Unknown**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Kingstree Rd Drainage Improvements**

ID# **033000098** Sponsor **Kaufman County**

RFPG recommend? **Yes** Reason for Recommendation **Action aligns with goals and meets TWDB guidance**

## Project Description

Proposed bridge installation over creek crossing on Kingstree Road to reduce roadway overtopping during storm events. Includes creek channel grading improvements.

Watershed HUC# (if known) **120301070109,120301070106,12030107011** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **5**

Associated FME's **-** County **Kaufman**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **302** # of structures **212** Critical facilities **0**

Farm/Ranch land impacted (acres) **915** Roadway(s) impacted (length) **1**

Number of low water crossings **0** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **0** # of structures removed from 100-yr **0**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**

Other benefits **Unknown** Reduction in # of road closures over 10 years **0**

## Impacts

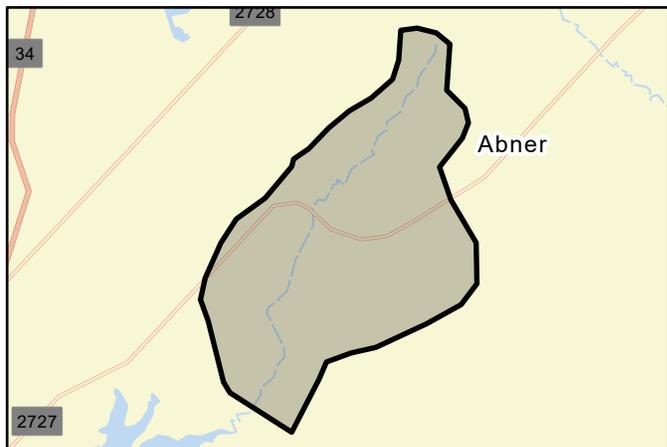
Negative impacts? **No** Negative impacts description **N/A**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$3,319,000** % Nature-Based **0** BCR **0**

Recurring costs **-** Issues **Unknown**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Arlington Upper Village VC(A)-5 Channel and Culvert Improvements**

ID# **033000100** Sponsor **Arlington**

RFPG recommend? **Yes** Reason for Recommendation **Action aligns with goals and meets TWDB guidance**

## Project Description

Proposed improvements include upsizing RCBC, replacing existing concrete-lined trapezoidal channel with 20' wide, 7' deep rectangular channel, and transitions downstream of Bowman Springs Road crossing and upstream of Crossgate Court crossing.

Watershed HUC# (if known) **120301020404** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **0**

Associated FME's **-** County **Tarrant**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **43** # of structures **21** Critical facilities **0**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **4**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **28** # of structures removed from 100-yr **13**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**

Other benefits **Unknown** Reduction in # of road closures over 10 years **0**

## Impacts

Negative impacts? **No** Negative impacts description **N/A**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$4,504,000** % Nature-Based **0** BCR **0**

Recurring costs **-** Issues **Unknown**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title

ID#  Sponsor

RFPG recommend?  Reason for Recommendation

## Project Description

Proposed improvements to the upstream closed storm drain network and the downstream open channel. There are two phases for the storm drain network: trunk line and lateral improvements.

Watershed HUC# (if known)  Emergency Need?

Drainage area (mi<sup>2</sup> est.)

Associated FME's  County

Associated FMS's  Associated FMP's

## Existing 100-Year Flood Risk

Flood risk type: Riverine?  Coastal?  Local?  Playa?  Other?

Population at risk  # of structures  Critical facilities

Farm/Ranch land impacted (acres)  Roadway(s) impacted (length)

Number of low water crossings  Historical road closures

## 100-Year Flood Risk Reduction

Population removed from 100-yr  # of structures removed from 100-yr

Critical facilities removed from 100-yr  Farm/Ranch land removed from 100-yr (acres)

Road removed from 100-yr (miles)  Low water crossings removed from 100-yr

Other benefits  Reduction in # of road closures over 10 years

## Impacts

Negative impacts?  Negative impacts description

Water supply contributions?  Water supply contribution description

## Estimated Cost

Project Cost  % Nature-Based  BCR

Recurring costs  Issues



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title

ID#  Sponsor

RFPG recommend?  Reason for Recommendation

## Project Description

Proposed 40' natural channel connecting Prairie Meadow and Helms Trail. Also includes significant improvements to culverts and new drainage ditches to protect residential lots from offsite flooding.

Watershed HUC# (if known)  Emergency Need?

Drainage area (mi<sup>2</sup> est.)

Associated FME's  County

Associated FMS's  Associated FMP's

## Existing 100-Year Flood Risk

Flood risk type: Riverine?  Coastal?  Local?  Playa?  Other?

Population at risk  # of structures  Critical facilities

Farm/Ranch land impacted (acres)  Roadway(s) impacted (length)

Number of low water crossings  Historical road closures

## 100-Year Flood Risk Reduction

Population removed from 100-yr  # of structures removed from 100-yr

Critical facilities removed from 100-yr  Farm/Ranch land removed from 100-yr (acres)

Road removed from 100-yr (miles)  Low water crossings removed from 100-yr

Other benefits  Reduction in # of road closures over 10 years

## Impacts

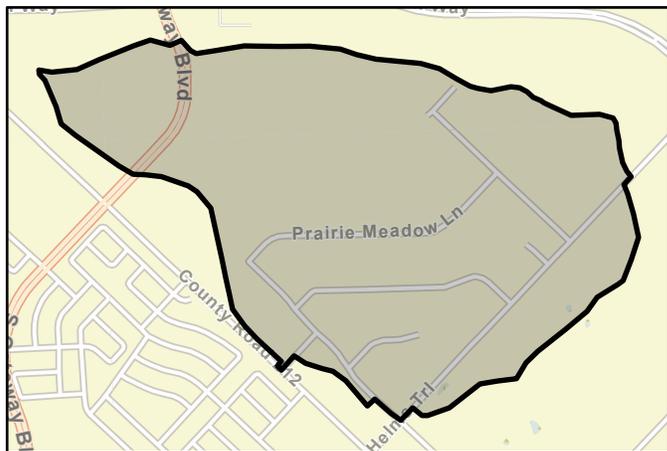
Negative impacts?  Negative impacts description

Water supply contributions?  Water supply contribution description

## Estimated Cost

Project Cost  % Nature-Based  BCR

Recurring costs  Issues



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **CR-243 Drainage Improvements**

ID# **033000108** Sponsor **Kaufman County**

RFPG recommend? **Yes** Reason for Recommendation **Action aligns with goals and meets TWDB guidance**

## Project Description

Proposed culvert upgrades and roadside drainage ditch improvements to reduce roadway overtopping along County Road 243.

Watershed HUC# (if known) **120301070102,120301070103,12030107010** Emergency Need? **No**  
 Drainage area (mi<sup>2</sup> est.) **4**  
 Associated FME's **-** County **Kaufman**  
 Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**  
 Population at risk **167** # of structures **70** Critical facilities **1**  
 Farm/Ranch land impacted (acres) **807** Roadway(s) impacted (length) **2**  
 Number of low water crossings **0** Historical road closures **-**

## 100-Year Flood Risk Reduction

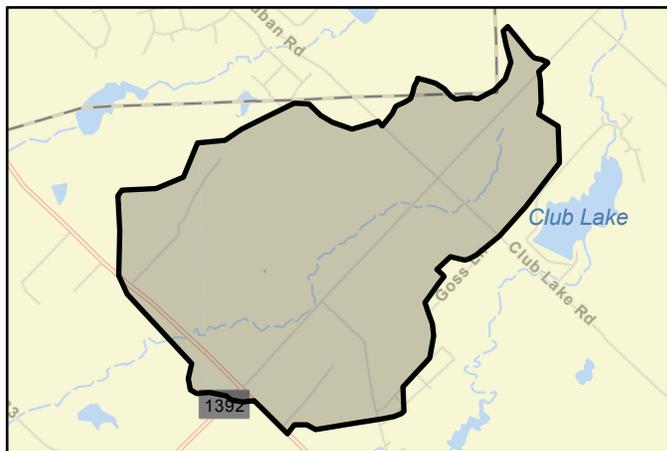
Population removed from 100-yr **0** # of structures removed from 100-yr **0**  
 Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **1**  
 Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**  
 Other benefits **Unknown** Reduction in # of road closures over 10 years **0**

## Impacts

Negative impacts? **No** Negative impacts description **N/A**  
 Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$4,767,000** % Nature-Based **0** BCR **1**  
 Recurring costs **-** Issues **Unknown**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title

ID#  Sponsor

RFPG recommend?  Reason for Recommendation

## Project Description

Proposed culvert upgrades and grading improvements to reduce roadway overtopping along Valley View Road and Ranch Road near Ravenhill Road intersection.

Watershed HUC# (if known)  Emergency Need?

Drainage area (mi<sup>2</sup> est.)

Associated FME's  County

Associated FMS's  Associated FMP's

## Existing 100-Year Flood Risk

Flood risk type: Riverine?  Coastal?  Local?  Playa?  Other?

Population at risk  # of structures  Critical facilities

Farm/Ranch land impacted (acres)  Roadway(s) impacted (length)

Number of low water crossings  Historical road closures

## 100-Year Flood Risk Reduction

Population removed from 100-yr  # of structures removed from 100-yr

Critical facilities removed from 100-yr  Farm/Ranch land removed from 100-yr (acres)

Road removed from 100-yr (miles)  Low water crossings removed from 100-yr

Other benefits  Reduction in # of road closures over 10 years

## Impacts

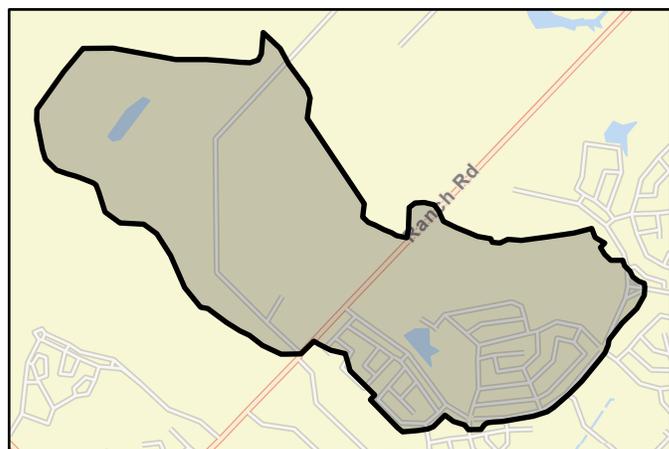
Negative impacts?  Negative impacts description

Water supply contributions?  Water supply contribution description

## Estimated Cost

Project Cost  % Nature-Based  BCR

Recurring costs  Issues



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **CR-4116 Drainage Improvements**

ID# **033000110** Sponsor **Kaufman County**

RFPG recommend? **Yes** Reason for Recommendation **Action aligns with goals and meets TWDB guidance**

## Project Description

Proposed upgrades to roadway drainage ditches and culverts along CR4116 to reduce structural inundation on both sides of the road. Includes additional collection channels to direct flow around existing structures.

Watershed HUC# (if known) **120301050401** Emergency Need? **No**

Drainage area (mi<sup>2</sup> est.) **1**

Associated FME's **-** County **Kaufman**

Associated FMS's **-** Associated FMP's **-**

## Existing 100-Year Flood Risk

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Population at risk **146** # of structures **62** Critical facilities **0**

Farm/Ranch land impacted (acres) **169** Roadway(s) impacted (length) **0**

Number of low water crossings **0** Historical road closures **-**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **0** # of structures removed from 100-yr **0**

Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**

Other benefits **Unknown** Reduction in # of road closures over 10 years **0**

## Impacts

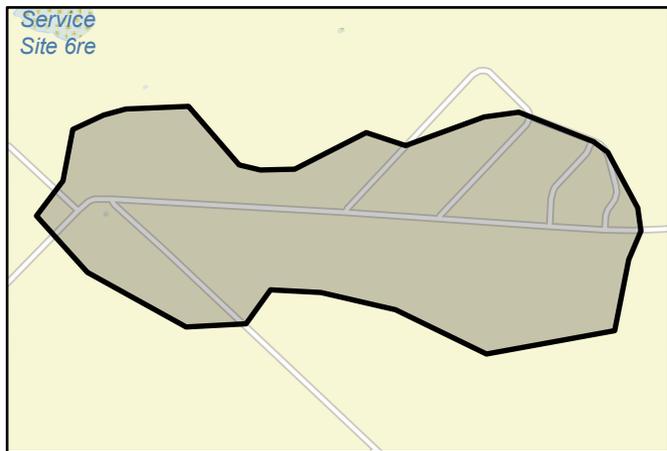
Negative impacts? **No** Negative impacts description **N/A**

Water supply contributions? **No** Water supply contribution description **-**

## Estimated Cost

Project Cost **\$8,019,000** % Nature-Based **0** BCR **0**

Recurring costs **-** Issues **Unknown**



FMP area



Regional view of FMP area