

**APPENDIX F: One-Page Summary Reports for Recommended Flood Mitigation Projects and Details (Scope of Work, Components, Benefits, No Negative Impacts Assessment)**

# Flood Mitigation Project (FMP)



Title **Spring Meadows Estates Detention Pond Design**

ID# **033000007** Sponsor **Sachse**

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

## Project Description

Pond redesign and reconstruction to lower normal pool elevation to be below inlets upstream. Increase storage capacity and design outlet works to increase level of service to 100-yr storm event.

Watershed HUC# (if known) **120301060406,120301060408,12030106040** 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 **18** # of structures **9** Critical facilities **0**

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

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

## 100-Year Flood Risk Reduction

Population removed from 100-yr **18** # of structures removed from 100-yr **9**

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 **No** Reduction in # of road closures over 10 years **0**

## Impacts

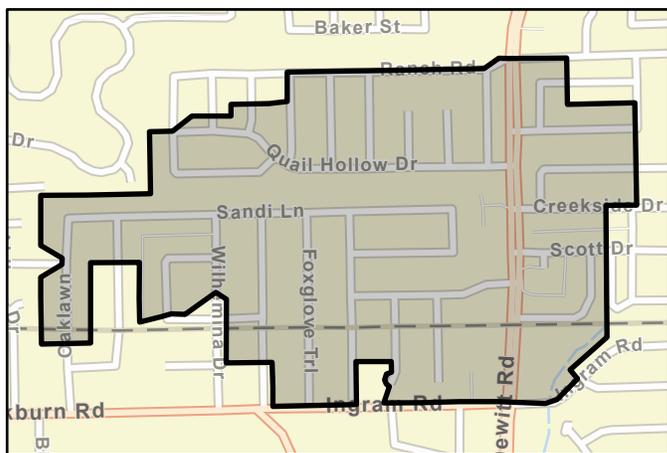
Negative impacts? **No** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$1,868,000** % Nature-Based **0** BCR **0**

Recurring costs **131000** Issues **None anticipated**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **West Irving Creek Phases 2, 3, and 4**

ID# **033000008** Sponsor **Irving**

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

## Project Description

FIF - 13792; W Irving Creek channel improvements project makes 2.5 miles of concrete channel deeper. Vertical walls allow project to have a similar footprint to minimize impacts. 15 road crossings and several miles of wastewater main need reconstruction

Watershed HUC# (if known) **120301020706** Emergency Need? **No**

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

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 **1,180** # of structures **259** Critical facilities **1**

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

Number of low water crossings **8** Historical road closures **61**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **1,151** # of structures removed from 100-yr **252**

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

Road removed from 100-yr (miles) **5** Low water crossings removed from 100-yr **7**

Other benefits **Public Recreation, Water Quality** Reduction in # of road closures over 10 years **44**

## Impacts

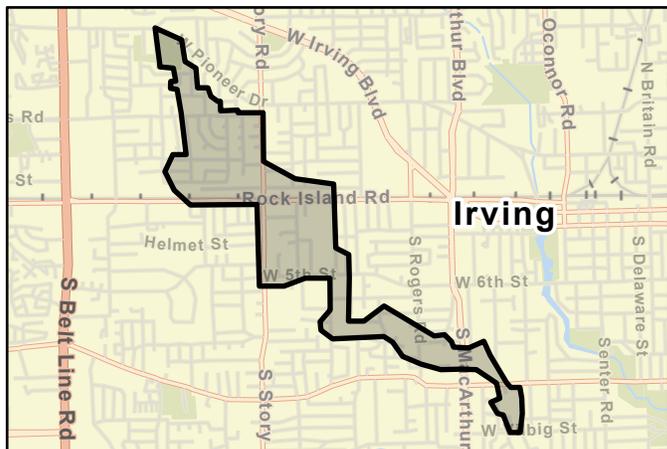
Negative impacts? **No** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$80,066,000** % Nature-Based **0** BCR **0**

Recurring costs **7355000** Issues **None anticipated**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Arlington VC(A)-1 Drainage and Erosion Improvements**

ID# **033000016** Sponsor **Arlington**

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

## Project Description

Arlington VC(A)-1 Drainage and Erosion Improvements; unfunded FIF #13646  
 This project includes improving the drainage in a residential area with an undersized bridge and severe erosion issues.

Watershed HUC# (if known) **120301020506,120301020405** Emergency Need? **No**  
 Drainage area (mi<sup>2</sup> est.) **1**  
 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 **474** # of structures **118** Critical facilities **0**  
 Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**  
 Number of low water crossings **3** Historical road closures **37**

## 100-Year Flood Risk Reduction

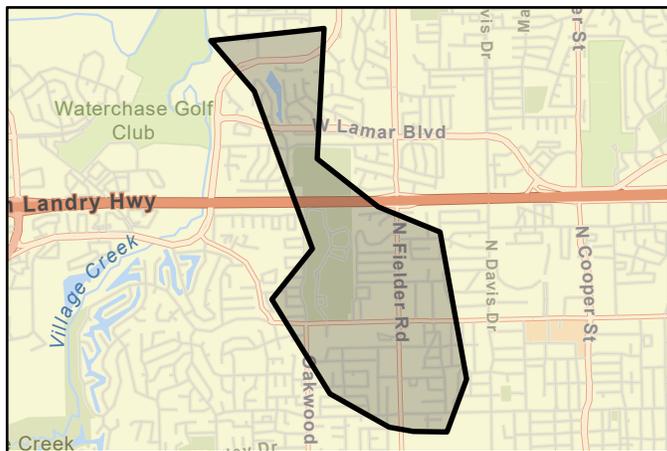
Population removed from 100-yr **24** # of structures removed from 100-yr **9**  
 Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**  
 Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**  
 Other benefits **No** Reduction in # of road closures over 10 years **3**

## Impacts

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

## Estimated Cost

Project Cost **\$2,601,000** % Nature-Based **0** BCR **0**  
 Recurring costs **181000** Issues **None anticipated**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Linwood-Lancaster/Foch**  
 ID# **033000030** Sponsor **Fort Worth**

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

## Project Description

To decrease the flooding depths near the Norwood/Bledsoe/Crockett intersections, a storm drain alternative was developed. The storm drain system would run along Foch Street and then through Trinity Park to the river.

Watershed HUC# (if known) **120301020105,120301020307** 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 **4,575** # of structures **44** Critical facilities **0**  
 Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **1**  
 Number of low water crossings **1** Historical road closures **59**

## 100-Year Flood Risk Reduction

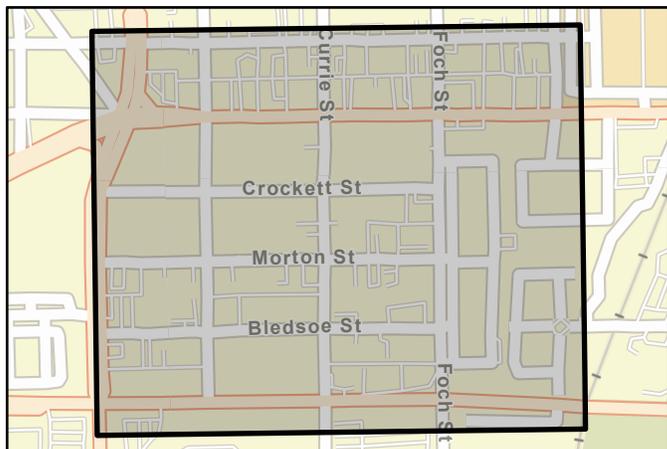
Population removed from 100-yr **3,272** # of structures removed from 100-yr **10**  
 Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**  
 Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**  
 Other benefits **No** Reduction 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 **\$26,528,000** % Nature-Based **0** BCR **0**  
 Recurring costs **783000** Issues **None anticipated**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Linwood-University Drive**

ID# **033000031** Sponsor **Fort Worth**

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

## Project Description

To mitigate the flooding depths in the Linwood Park area, a storm drain would outfall to the West Fork Trinity River.

Watershed HUC# (if known) **120301020105,120301020307** Emergency Need? **No**

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

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 **11,372** # of structures **313** Critical facilities **0**

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

Number of low water crossings **1** Historical road closures **81**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **6,882** # of structures removed from 100-yr **204**

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

Road removed from 100-yr (miles) **3** Low water crossings removed from 100-yr **0**

Other benefits **No** Reduction in # of road closures over 10 years **0**

## Impacts

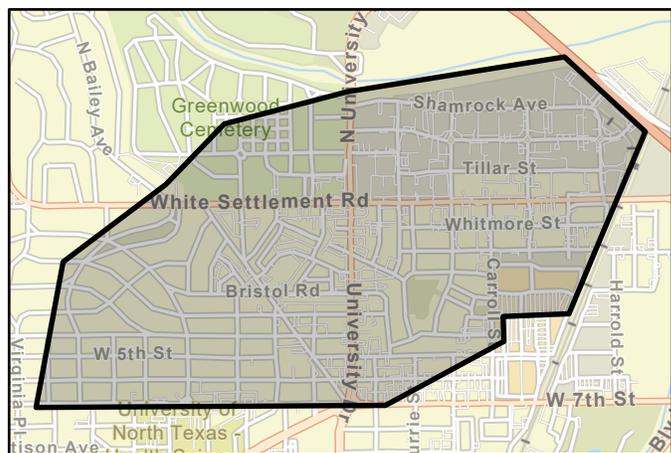
Negative impacts? **No** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$73,277,000** % Nature-Based **0** BCR **0**

Recurring costs **3358000** Issues **None anticipated**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Zoo Creek Storm Drain Flood Mitigation (Sandage)**

ID# **033000032** Sponsor **Fort Worth**

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

## Project Description

Construction of Conveyance - Sandage Relief Line Phases 1 & 2 from the 2018 Zoo Creek Storm Drain Flood Mitigation Study Report. Project includes upsizing storm drain lines and installation of a riprap basin.

Watershed HUC# (if known) **120301020502,120301020307** Emergency Need? **No**

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

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

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

## Existing 100-Year Flood Risk

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

Population at risk **4,008** # of structures **574** Critical facilities **92**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **38**

Number of low water crossings **0** Historical road closures **72**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **391** # of structures removed from 100-yr **153**

Critical facilities removed from 100-yr **37** Farm/Ranch land removed from 100-yr (acres) **0**

Road removed from 100-yr (miles) **17** Low water crossings removed from 100-yr **0**

Other benefits **Unknown** Reduction in # of road closures over 10 years **30**

## Impacts

Negative impacts? **Yes** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$35,353,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Sunnyvale Urban Flooding Reduction Improvements - Area 1**

ID# **033000033** Sponsor **Sunnyvale**

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

## Project Description

Proposed alternatives to reduce roadway overtopping's during the 100-year ultimate storm such as culvert and ditch improvements.

Watershed HUC# (if known) **120301060501,120301060503** 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 **56** # of structures **14** Critical facilities **1**  
 Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**  
 Number of low water crossings **0** Historical road closures **7**

## 100-Year Flood Risk Reduction

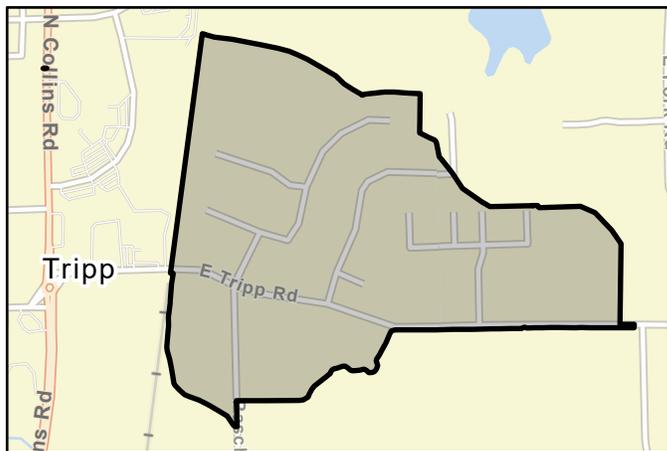
Population removed from 100-yr **56** # of structures removed from 100-yr **14**  
 Critical facilities removed from 100-yr **1** Farm/Ranch land removed from 100-yr (acres) **0**  
 Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**  
 Other benefits **No** Reduction 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 **\$4,560,000** % Nature-Based **0** BCR **0**  
 Recurring costs **310000** Issues **None anticipated**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Sunnyvale Urban Flooding Reduction Improvements - Area 2**

ID# **033000036** Sponsor **Sunnyvale**

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

## Project Description

Proposed alternatives to reduce roadway overtopping's during the 100-year ultimate storm such as culvert, ditch and storm drain improvements.

Watershed HUC# (if known) **120301060503** 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 **113** # of structures **35** Critical facilities **1**

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 **113** # of structures removed from 100-yr **32**

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 **No** Reduction in # of road closures over 10 years **8**

## Impacts

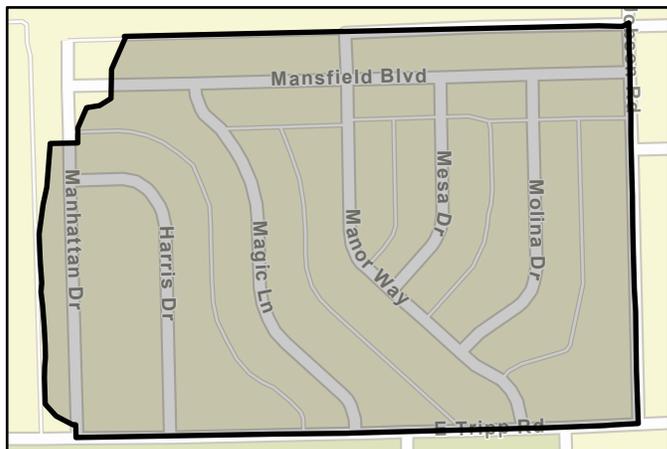
Negative impacts? **No** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$5,701,000** % Nature-Based **0** BCR **0**

Recurring costs **388000** Issues **None anticipated**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Project 1 - Point North Parkway System**

ID# **033000037** Sponsor **Richardson**

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

## Project Description

Prairie Creek; ~450' channel improvements to lower HGL; proposed RCBC storm sewer main crossing Point N PKWY; new wingwalls; and added 100 LF inlet capacity to reduce sedimentation at Synergy Park Boulevard culverts and reduce flood depths at Point N PKWY

Watershed HUC# (if known) **120301060407** Emergency Need? **No**

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

Associated FME's **-** County **Collin**

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

## Existing 100-Year Flood Risk

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

Population at risk **19** # of structures **4** Critical facilities **0**

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

Number of low water crossings **0** Historical road closures **2**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **17** # 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) **1** Low water crossings removed from 100-yr **0**

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 **\$965,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Project 4 - Big Horn Lane/Canyon Creek Drive system**

ID# **033000038** Sponsor **Richardson**

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

## Project Description

Prairie Creek; Replace existing storm sewer main between Big Horn Lane & Canyon Creek Drive with larger 36" & 48" storm sewer; added 70 LF inlet capacity to reduce the flooding along Big Horn Lane, Canyon Creek Drive & Canyon Creek Country Club property

Watershed HUC# (if known) **120301060407** Emergency Need? **No**

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

Associated FME's **-** County **Collin**

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

## Existing 100-Year Flood Risk

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

Population at risk **37** # of structures **10** Critical facilities **0**

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

Number of low water crossings **0** Historical road closures **3**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **8** # of structures removed from 100-yr **3**

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 **3**

## Impacts

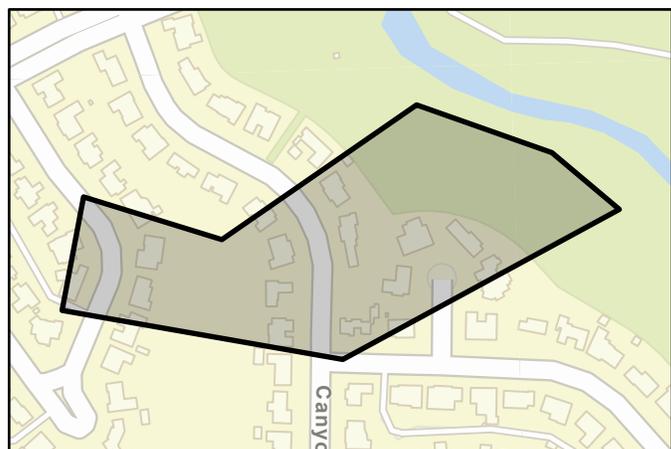
Negative impacts? **No** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$622,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Project 6 - Valley Forge Street System**

ID# **033000039** Sponsor **Richardson**

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

## Project Description

Prairie Creek; Parallel culvert crossing KCS Railroad; concrete flume from cul-de-sac to alley parallel to KCS Railroad; replaces existing storm sewer main with 36" & 60" storm sewer; new wingwalls & added 50 LF inlet capacity to keep floodwater in ROW

Watershed HUC# (if known) **120301060407** Emergency Need? **No**

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

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

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

## Existing 100-Year Flood Risk

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

Population at risk **29** # of structures **11** Critical facilities **0**

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

Number of low water crossings **0** Historical road closures **3**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **18** # of structures removed from 100-yr **5**

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 **3**

## Impacts

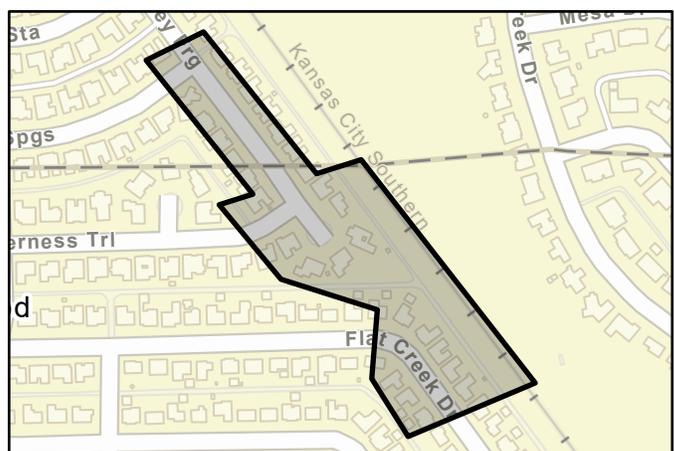
Negative impacts? **No** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$755,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Project 8 - Lower Canyon Creek Drive System**

ID# **033000040** Sponsor **Richardson**

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

## Project Description

Prairie Creek; Replaces the existing storm sewer with larger 24", 36" and 42" storm sewer along Lower Canyon Creek Drive; new 42" storm sewer; and additional 70 LF inlet capacity to keep floodwaters within the road ROW

Watershed HUC# (if known) **120301060407** 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? **Yes** Playa? **No** Other? **No**

Population at risk **40** # of structures **14** Critical facilities **0**

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

Number of low water crossings **0** Historical road closures **1**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **30** # of structures removed from 100-yr **9**

Critical facilities removed from 100-yr **0** 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

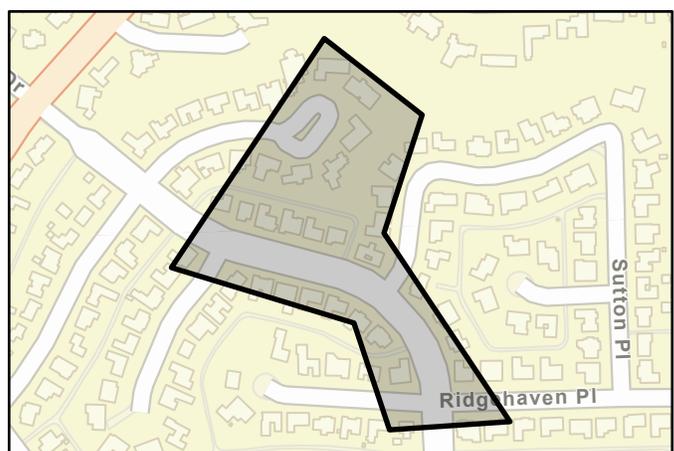
Negative impacts? **No** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$1,502,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Project 9 - Grandview Drive System**

ID# **033000041** Sponsor **Richardson**

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

## Project Description

Prairie Creek; Replaces the existing storm sewer with larger storm sewer along Grandview Drive; new wingwalls; and additional 100 LF inlet capacity to keep floodwaters within the road ROW

Watershed HUC# (if known) **120301060407** 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? **Yes** Playa? **No** Other? **No**

Population at risk **34** # of structures **10** Critical facilities **0**

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

Number of low water crossings **0** Historical road closures **2**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **12** # of structures removed from 100-yr **5**

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 **2**

## Impacts

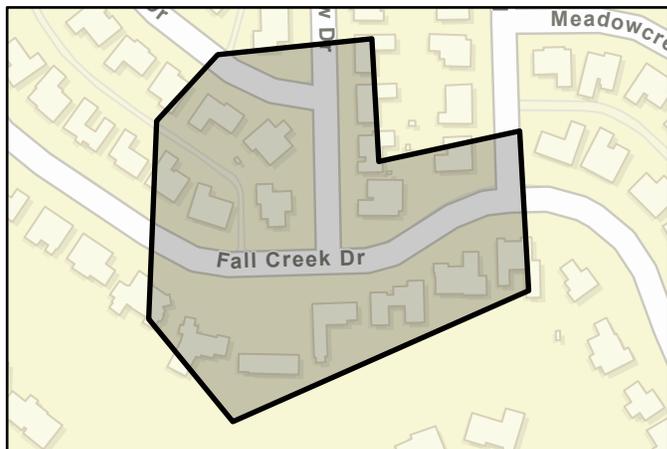
Negative impacts? **No** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$766,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Project 16 - Valley Glen drive System**

ID# **033000042** Sponsor **Richardson**

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

## Project Description

Prairie Creek; Parallel storm sewer along the existing storm sewer alignment and extends the existing system further downstream; new storm sewer; and additional 230 LF inlet capacity to reduce the flooding along Valley Glen Drive and Pleasant Valley Lane

Watershed HUC# (if known) **120301060407** Emergency Need? **No**

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

Associated FME's **-** County **Collin**

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

## Existing 100-Year Flood Risk

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

Population at risk **29** # of structures **9** Critical facilities **0**

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

Number of low water crossings **0** Historical road closures **2**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **14** # of structures removed from 100-yr **2**

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 **2**

## Impacts

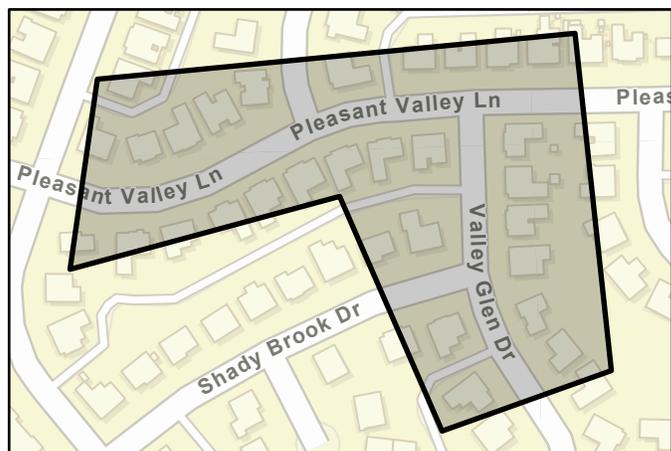
Negative impacts? **No** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$1,513,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Project 19 – Pebblebrook Circle System**

ID# **033000043** Sponsor **Richardson**

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

## Project Description

Prairie Creek; Replaces the existing storm sewer with larger 36" storm sewer near Pebblebrook Circle; new 30" storm sewer; and additional 30 LF inlet capacity to keep floodwaters within the road ROW

Watershed HUC# (if known) **120301060407** 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? **Yes** Playa? **No** Other? **No**  
 Population at risk **3** # of structures **3** Critical facilities **0**  
 Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **0**  
 Number of low water crossings **0** Historical road closures **2**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **3** # of structures removed from 100-yr **1**  
 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 **2**

## Impacts

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

## Estimated Cost

Project Cost **\$511,000** % Nature-Based **0** BCR **0**  
 Recurring costs **-** Issues **Unknown**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Project 2 – Campbell Road System**

ID# **033000044** Sponsor **Richardson**

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

## Project Description

Cottonwood Creek; Replaces the existing storm sewer main with a larger 30" storm sewer; includes the addition of a 36" and 42" parallel storm sewer; and additional 50 LF inlet capacity near Campbell Road to keep floodwaters within the road ROW

Watershed HUC# (if known) **120301060407,120301050104** 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? **No** Coastal? **No** Local? **Yes** Playa? **No** Other? **No**

Population at risk **85** # of structures **10** Critical facilities **0**

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

Number of low water crossings **0** Historical road closures **1**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **60** # of structures removed from 100-yr **6**

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 **1**

## Impacts

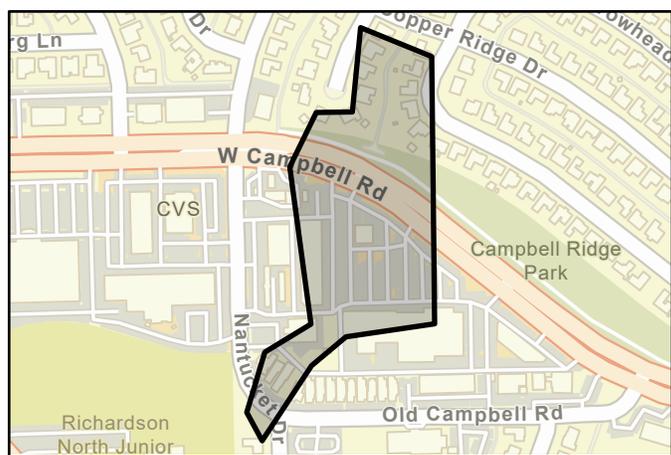
Negative impacts? **No** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$1,349,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Project 6 – Wisteria Way Circle at Timberlake Circle**

ID# **033000045** Sponsor **Richardson**

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

## Project Description

Cottonwood Creek; Replace portion of storm sewer system with larger 30" RCP storm sewer & propose RCBC underground system connecting to stub out adjacent to Pinehurst Drive and Wisteria Way; & added 120 LF inlet capacity keeps floodwaters within road ROW

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? **Yes** Playa? **No** Other? **No**

Population at risk **66** # of structures **30** Critical facilities **0**

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

Number of low water crossings **0** Historical road closures **1**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **16** # of structures removed from 100-yr **10**

Critical facilities removed from 100-yr **0** 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

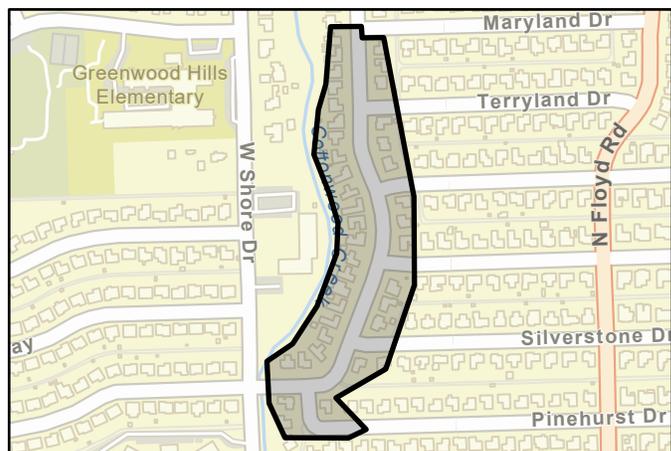
Negative impacts? **No** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$2,015,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Hickory Creek Flood Protection - Alternative 1**

ID# **033000062** Sponsor **Balch Springs**

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

## Project Description

Hickory Creek Drainage Improvements project 2022 update based on input from the City of Balch Springs. Alternative 1 involves storm water detention pond facilities & the removal of Stein Road at river station 54955 on Hickory Creek was included

Watershed HUC# (if known) **120301050204** Emergency Need? **No**

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

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 **462** # of structures **124** Critical facilities **103**

Farm/Ranch land impacted (acres) **33** Roadway(s) impacted (length) **4**

Number of low water crossings **7** Historical road closures **53**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **90** # of structures removed from 100-yr **31**

Critical facilities removed from 100-yr **8** Farm/Ranch land removed from 100-yr (acres) **7**

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 **46**

## Impacts

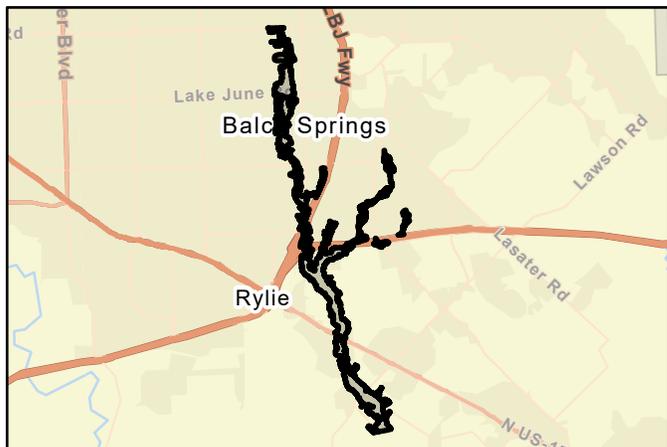
Negative impacts? **No** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$27,272,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Hickory Creek Flood Protection - Alternative 2**

ID# **033000063** Sponsor **Balch Springs**

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

## Project Description

Hickory Creek Drainage Improvements project 2022 update has input from the City of Balch Springs. Alternative 2 involves channel modifications on Hickory Creek & detention, & the removal of Stein Road at river station 54955 on Hickory Creek was included

Watershed HUC# (if known) **120301050204** Emergency Need? **No**  
 Drainage area (mi<sup>2</sup> est.) **1**  
 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 **462** # of structures **124** Critical facilities **103**  
 Farm/Ranch land impacted (acres) **33** Roadway(s) impacted (length) **4**  
 Number of low water crossings **7** Historical road closures **53**

## 100-Year Flood Risk Reduction

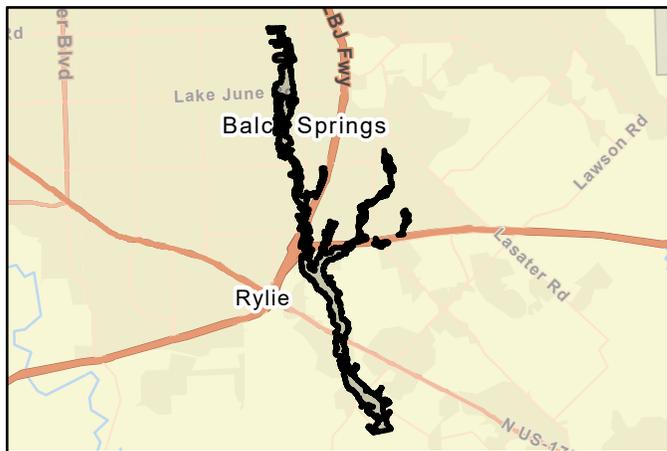
Population removed from 100-yr **90** # of structures removed from 100-yr **30**  
 Critical facilities removed from 100-yr **8** Farm/Ranch land removed from 100-yr (acres) **7**  
 Road removed from 100-yr (miles) **1** Low water crossings removed from 100-yr **0**  
 Other benefits **Unknown** Reduction in # of road closures over 10 years **46**

## Impacts

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

## Estimated Cost

Project Cost **\$30,531,000** % 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?  Yes Reason for Recommendation

## Project Description

Hickory Creek Drainage Improvements project 2022 update based on input from the City of Balch Springs. Alternative 3 involves levee protection with channel modifications & the removal of Stein Road at river station 54955 on Hickory Creek was included

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?  Yes Coastal?  No Local?  No Playa?  No Other?  No

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

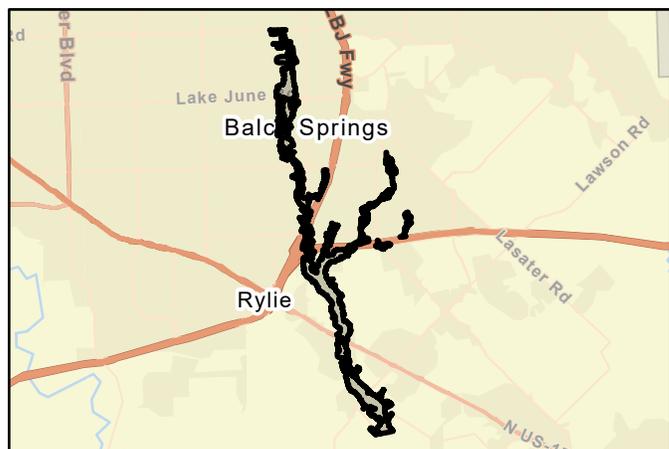
Negative impacts?  Negative impacts description

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 **Town Creek [Tarrant Ave, Warren St, Johnson Ave, Newton Dr] Safety Improvement**

ID# **033000065** Sponsor **Burleson**

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

## Project Description

Implement safety improvements including high-water warning flashers, staff gauges, flood hazard signs, and additional light fixtures at four crossings along Town Creek in Burleson: Tarrant Ave, Warren St, Johnson Ave, and Newton Dr.

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 **148** # of structures **52** Critical facilities **4**

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

Number of low water crossings **4** Historical road closures **11**

## 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 **\$367,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Ansley Dr. Storm Sewer System Improvement**

ID# **033000067** Sponsor **Westworth Village**

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

## Project Description

Replace 1400 LF concrete drainage channel with storm sewer, 6 storm sewer inlets to replace curb cuts drain into existing channel, upgrading existing junction box for storm sewer, & pavement above proposed storm sewer between Burton Hill Road & Oaks Lane

Watershed HUC# (if known) **120301020105** 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 **589** # of structures **2** Critical facilities **1**

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

Number of low water crossings **0** Historical road closures **3**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **589** # of structures removed from 100-yr **2**

Critical facilities removed from 100-yr **1** 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

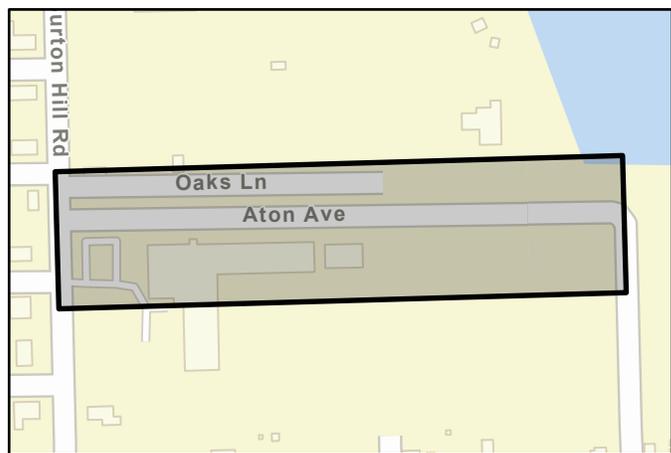
Negative impacts? **No** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$4,225,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Main A pump station and conveyance improvements**

ID# **033000068** Sponsor **Liberty County Water Control Improvement District**

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

## Project Description

The proposed improvements include the rehabilitation and upsizing of Pump Station A, upsizing the North Travis Street Culverts to 5-8'x8' box culverts, and channel improvements along the Main A channel.

Watershed HUC# (if known) **120302030301** Emergency Need? **No**  
 Drainage area (mi<sup>2</sup> est.) **1**  
 Associated FME's **-** County **Liberty**  
 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 **2,008** # of structures **217** Critical facilities **2**  
 Farm/Ranch land impacted (acres) **40** Roadway(s) impacted (length) **5**  
 Number of low water crossings **0** Historical road closures **34**

## 100-Year Flood Risk Reduction

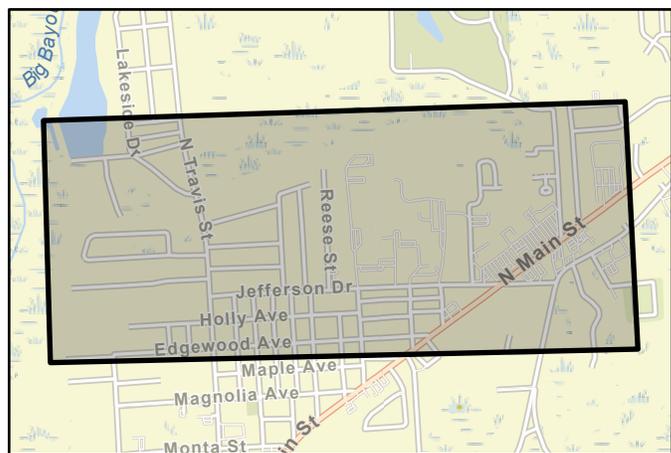
Population removed from 100-yr **1,850** # of structures removed from 100-yr **167**  
 Critical facilities removed from 100-yr **1** Farm/Ranch land removed from 100-yr (acres) **9**  
 Road removed from 100-yr (miles) **4** Low water crossings removed from 100-yr **0**  
 Other benefits **Unknown** Reduction in # of road closures over 10 years **20**

## Impacts

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

## Estimated Cost

Project Cost **\$7,639,000** % Nature-Based **0** BCR **4**  
 Recurring costs **-** Issues **Unknown**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Highland Ave. Drainage Improvements**

ID# **033000069** Sponsor **Waxahachie**

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

## Project Description

Upsize Highland SD system from Sycamore St through W Marvin Ave to 10'x4' RCB & add 36" RCP at UPRR culvert. Acquire parcels along creek south of BNSF RR to detain 64,000 CY. Install drop inlet at Harding St. & W. Main St., & add 24" RCP along Highland

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

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

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 **830** # of structures **127** Critical facilities **0**

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

Number of low water crossings **0** Historical road closures **25**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **33** # of structures removed from 100-yr **20**

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 **\$9,365,000** % Nature-Based **0** BCR **2**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title Fairgrounds Detention Option 3  
 ID# 033000070 Sponsor Denton

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

## Project Description

Detention upstream of Denton Center Shopping Mall along North Pecan Creek

Watershed HUC# (if known) 120301030902,120301030803,120301030800 Emergency Need? No  
 Drainage area (mi<sup>2</sup> est.) 5  
 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 6,458 # of structures 469 Critical facilities 40  
 Farm/Ranch land impacted (acres) 22 Roadway(s) impacted (length) 8  
 Number of low water crossings 35 Historical road closures 30

## 100-Year Flood Risk Reduction

Population removed from 100-yr 1,228 # of structures removed from 100-yr 114  
 Critical facilities removed from 100-yr 5 Farm/Ranch land removed from 100-yr (acres) 2  
 Road removed from 100-yr (miles) 3 Low water crossings removed from 100-yr 22  
 Other benefits Unknown Reduction in # of road closures over 10 years 5

## Impacts

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

## Estimated Cost

Project Cost \$24,234,000 % 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

Upgrade dam to be able to pass the 25% PMF and meet TCEQ dam safety requirements. Add an emergency spillway through the right abutment of the dam along with raising the top of dam elevation.

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 **Elkins Lake Dam Rehabilitation**

ID# **033000072** Sponsor **Dalworthington Gardens**

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

## Project Description

Modify dam to pass required 75% PMF and meet TCEQ criteria. Addition of two 60-in diameter culverts to the existing spillway and widening of vegetated approach channel. Raise the crest of the dam to 569.5 ft.

Watershed HUC# (if known) **120301020405** 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 **0** # of structures **0** Critical facilities **0**

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

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

## 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

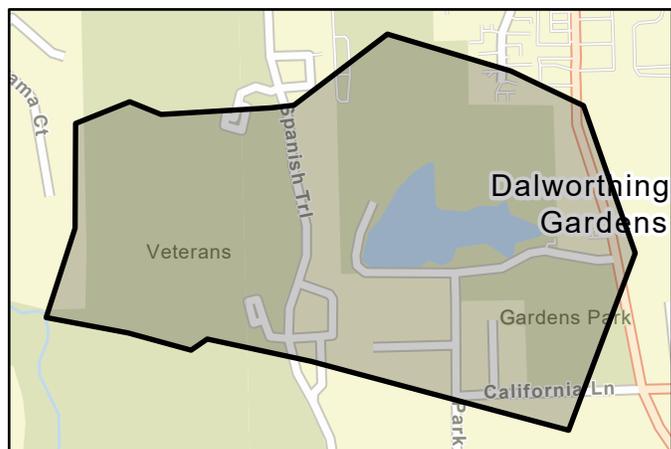
Negative impacts? **No** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$1,705,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Bonneville/Greenbrook Drainage Improvement**

ID# **033000073** Sponsor **Arlington**

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

## Project Description

Proposed improvements include realignment of storm drain, upsizing of existing trunk lines, and addition of curb inlets through Greenbrook Dr and Huntwick. Includes construction of Downstream Channel Improvement Option 1 to offset negative impacts

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

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

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 **44** # of structures **14** 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 **37** # of structures removed from 100-yr **12**

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 **3**

## Impacts

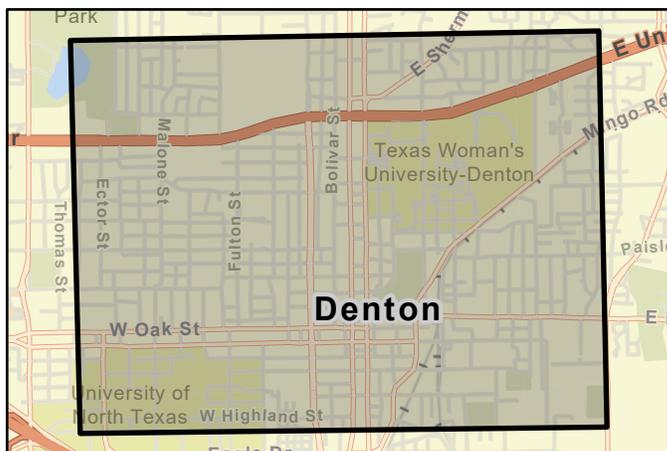
Negative impacts? **Yes** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$4,939,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Lebow Flood Mitigation Project**

ID# **033000074** Sponsor **Fort Worth**

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

## Project Description

Improve storm water conveyance while minimizing impact on existing residential structures, maintain a 'no-rise' condition in the existing 100-yr WSE. The project includes: Section 404 permit, phased implementation, and utility relocations.

Watershed HUC# (if known) **120301020501** Emergency Need? **No**  
 Drainage area (mi<sup>2</sup> est.) **1**  
 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 **1,246** # of structures **321** Critical facilities **9**  
 Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **4**  
 Number of low water crossings **29** Historical road closures **55**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **1,078** # of structures removed from 100-yr **277**  
 Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **1**  
 Road removed from 100-yr (miles) **3** Low water crossings removed from 100-yr **3**  
 Other benefits **Unknown** Reduction in # of road closures over 10 years **12**

## Impacts

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

## Estimated Cost

Project Cost **\$84,725,000** % Nature-Based **1** BCR **2**  
 Recurring costs **-** Issues **Unknown**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Village Creek [Dobson St (CR 714)] Safety Improvements**

ID# **033000075** Sponsor **Burleson**

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

## Project Description

Implement safety improvements including automatic closure gates with flashers on the north and south side of the floodplain, flood hazard signs and staff gauges at CR 714 along Village Creek in Burleson.

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 **18** # of structures **8** Critical facilities **1**

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

Number of low water crossings **1** Historical road closures **2**

## 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 **\$273,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **White Settlement Rd. Storm Sewer System Improvements**

ID# **033000077** Sponsor **Westworth Village**

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

## Project Description

Upgrade of 1940 LF of existing storm sewer, 5 existing junction boxes, and 2 headwalls from east of Burton Hill Road to west of Tanny Street. Construction of 5 new inlets and 5 curb inlet extensions.

Watershed HUC# (if known) **120301020105** 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 **18** # of structures **13** Critical facilities **2**

Farm/Ranch land impacted (acres) **2** Roadway(s) impacted (length) **1**

Number of low water crossings **0** Historical road closures **5**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **18** # of structures removed from 100-yr **13**

Critical facilities removed from 100-yr **2** 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 **2**

## Impacts

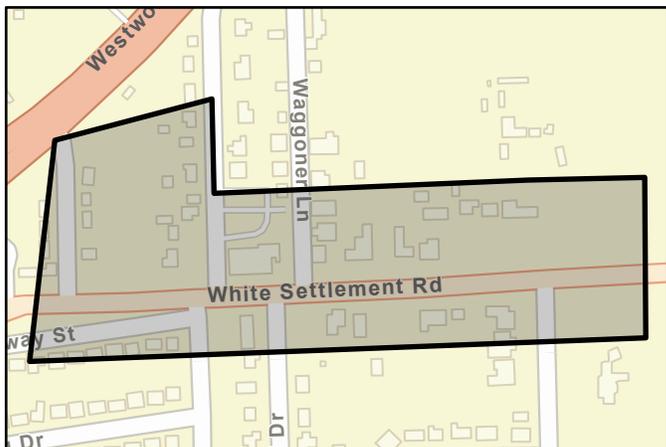
Negative impacts? **No** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$1,904,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Main B pump station, detention, and conveyance improvements**

ID# **033000078** Sponsor **Liberty County Water Control Improvement District**

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

## Project Description

The proposed improvements include the rehabilitation and upsizing of Pump Station B, upsize the culverts at North Travis Street, Milam Street and Woods Drive, and construction of a detention basin upstream of Main Street.

Watershed HUC# (if known) **120302030301** Emergency Need? **No**  
 Drainage area (mi<sup>2</sup> est.) **1**  
 Associated FME's **-** County **Liberty**  
 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 **3,280** # of structures **324** Critical facilities **7**  
 Farm/Ranch land impacted (acres) **17** Roadway(s) impacted (length) **6**  
 Number of low water crossings **1** Historical road closures **30**

## 100-Year Flood Risk Reduction

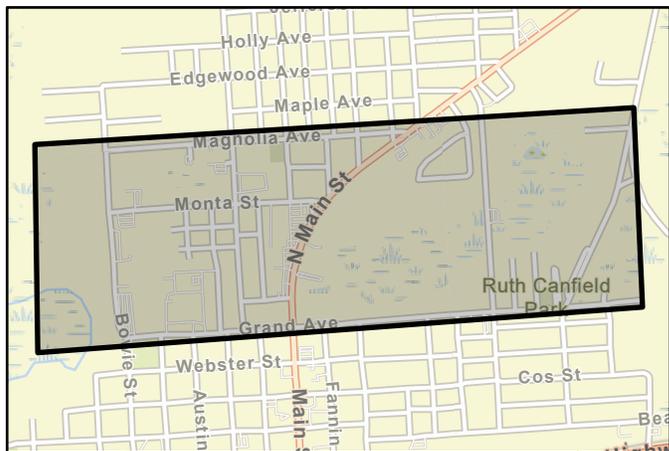
Population removed from 100-yr **12** # of structures removed from 100-yr **3**  
 Critical facilities removed from 100-yr **0** Farm/Ranch land removed from 100-yr (acres) **0**  
 Road removed from 100-yr (miles) **0** Low water crossings removed from 100-yr **0**  
 Other benefits **Unknown** Reduction 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 **\$14,433,000** % Nature-Based **0** BCR **2**  
 Recurring costs **-** Issues **Unknown**



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Cordell Detention Pond (Rayzor Elementary School Pond)**

ID# **033000079** Sponsor **Denton**

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

## Project Description

Detention pond located on the intersection of W Univesity Drive and Malone Street along Pecan near Rayzor Elementary School. Pond capacity will be approximately 90 acre-feet with a surface area of approximately 12 acres.

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

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

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 **3,225** # of structures **297** Critical facilities **84**

Farm/Ranch land impacted (acres) **3** Roadway(s) impacted (length) **4**

Number of low water crossings **6** Historical road closures **52**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **373** # of structures removed from 100-yr **42**

Critical facilities removed from 100-yr **2** 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

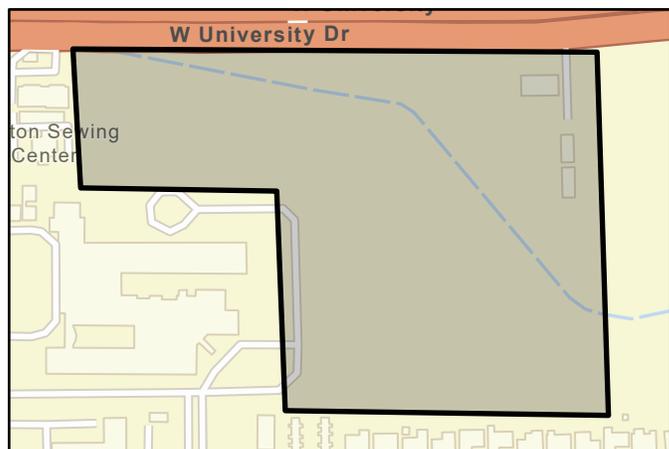
Negative impacts? **No** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$15,497,000** % 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

This alternative proposes voluntary acquisitions of structures at risk of flooding and extending the existing Warren Park. This extension would include a park with walking paths, exercise pads, and a dog park.

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 **Project 18 - Waterview Dr. Re-Route**

ID# **033000082** Sponsor **Richardson**

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

## Project Description

The project consists of replacing RCP with larger diameter RCP, constructing new RCBC, constructing additional curb inlets, and new junction boxes with manholes.

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 **122** # of structures **35** Critical facilities **0**

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

Number of low water crossings **1** Historical road closures **3**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **118** # of structures removed from 100-yr **33**

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 **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 **\$11,500,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Pumphrey Dr. Storm Sewer System Improvements**

ID# **033000083** Sponsor **Westworth Village**

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

## Project Description

Upgrade of 280 LF of existing sewer, 2 existing inlets, and 1 headwall

Watershed HUC# (if known) **120301020105** 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 **3** # of structures **2** Critical facilities **1**  
 Farm/Ranch land impacted (acres) **2** Roadway(s) impacted (length) **0**  
 Number of low water crossings **0** Historical road closures **1**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **2** # of structures removed from 100-yr **2**  
 Critical facilities removed from 100-yr **1** Farm/Ranch land removed from 100-yr (acres) **2**  
 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 **1**

## Impacts

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

## Estimated Cost

Project Cost **\$221,000** % 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

The proposed improvements include channel widening to a 5' bottom width and a trapezoidal shape with 4:1 side slopes. The primary crossing of Redmond Creek will be upsized to 4-8'x7' RCB and a crossing to the west will be upsized to a 2-3'x2' RCB.

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

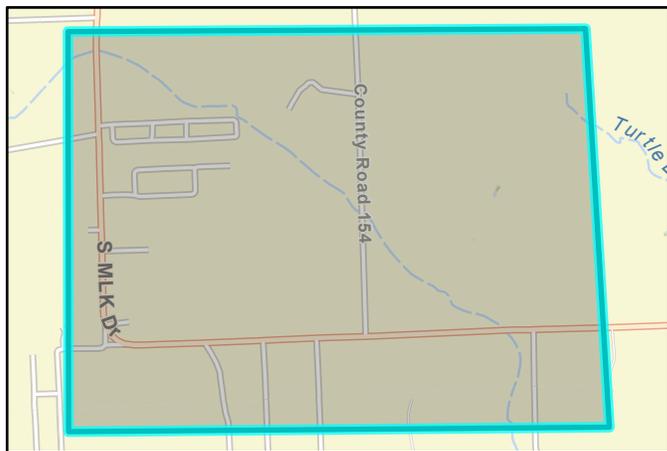
Population removed from 100-yr  # of structures removed from 100-yr   
 Critical facilities removed from 100-yr  Farm/Ranch land removed from 100-yr (acres)   
 Road removed from 100-yr (miles)  Low water crossings removed from 100-yr   
 Other benefits  Reduction in # of road closures over 10 years

## 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 **Harvest Hills Channel and Drainage Improvements**

ID# **033000085** Sponsor **Arlington**

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

## Project Description

Option 2 (Briar Meadow Diversion) DS channel improvements gives a 100-year LOS to protect structures, uses larger pipes, channel widening for conveyance, 6 buyouts, positive overflow & separate outfalls of existing dual 48" RCPs. Total cost \$12,656,000.

Watershed HUC# (if known) **120301020606** 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 **164** # of structures **44** Critical facilities **4**

Farm/Ranch land impacted (acres) **0** Roadway(s) impacted (length) **2**

Number of low water crossings **0** Historical road closures **17**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **164** # of structures removed from 100-yr **44**

Critical facilities removed from 100-yr **3** 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 **4**

## Impacts

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

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

## Estimated Cost

Project Cost **\$15,063,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Project 8A - Cheyenne Dr**

ID# **033000086** Sponsor **Richardson**

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

## Project Description

Project 8a replaces existing storm sewer mains with larger storm sewers and increases the number of curb to gutter inlets to reduce flooding.

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 **20** # of structures **7** Critical facilities **1**

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

Number of low water crossings **1** Historical road closures **3**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **20** # of structures removed from 100-yr **7**

Critical facilities removed from 100-yr **1** 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 **3**

## Impacts

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

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

## Estimated Cost

Project Cost **\$792,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title Johnson Creek - Arkansas Lane and Pioneer Parkway Buyout at Johnson Creek

ID# 033000087 Sponsor Arlington

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

## Project Description

Property acquisition of approximately twenty four (24) structures along Arkansas Lane and Pioneer Parkway. No channel improvements planned.

Watershed HUC# (if known) 120301020702 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 157 # of structures 24 Critical facilities 7  
 Farm/Ranch land impacted (acres) 0 Roadway(s) impacted (length) 13  
 Number of low water crossings 1 Historical road closures 5

## 100-Year Flood Risk Reduction

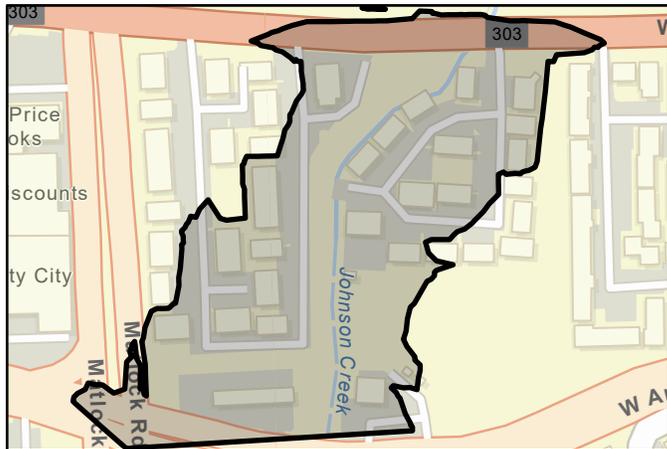
Population removed from 100-yr 157 # of structures removed from 100-yr 24  
 Critical facilities removed from 100-yr 0 Farm/Ranch land removed from 100-yr (acres) 0  
 Road removed from 100-yr (miles) 0 Low water crossings removed from 100-yr 0  
 Other benefits Unknown Reduction in # of road closures 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 \$7,675,000 % Nature-Based 0 BCR 0  
 Recurring costs - Issues Unknown



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Project 13 - Mimosa & Melrose Dr**

ID# **033000088** Sponsor **Richardson**

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

## Project Description

Project 13 proposes upsizing existing storm sewer mains and laterals, adding parallel storm sewers, and adding additional curb to gutter inlets to eliminate the 140 cfs of uncollected flow going to the east, alleviating ponding at the intersection.

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? **No** Coastal? **No** Local? **No** Playa? **No** Other? **No**

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

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

Number of low water crossings **0** Historical road closures **5**

## 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) **1** Low water crossings removed from 100-yr **0**

Other benefits **Unknown** Reduction in # of road closures over 10 years **3**

## Impacts

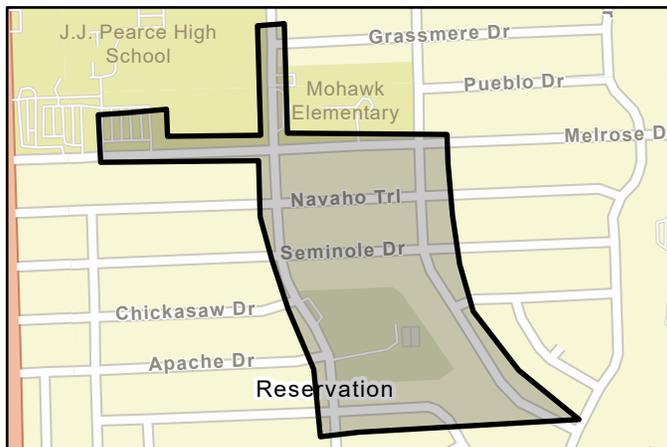
Negative impacts? **No** Negative impacts description **N/A**

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

## Estimated Cost

Project Cost **\$2,646,000** % Nature-Based **0** BCR **0**

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



FMP area



Regional view of FMP area

# Flood Mitigation Project (FMP)



Title **Arlington Johnson Creek - Collins Street and Division Street Buyout**

ID# **033000089** Sponsor **Arlington**

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

## Project Description

Property acquisition of approximately one hundred twenty four (124) structures along Collins Street and Division Street. No channel improvements planned.

Watershed HUC# (if known) **120301020702** Emergency Need? **No**  
 Drainage area (mi<sup>2</sup> est.) **1**  
 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 **640** # of structures **119** Critical facilities **39**  
 Farm/Ranch land impacted (acres) **1** Roadway(s) impacted (length) **10**  
 Number of low water crossings **4** Historical road closures **21**

## 100-Year Flood Risk Reduction

Population removed from 100-yr **640** # of structures removed from 100-yr **119**  
 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 **\$30,258,000** % Nature-Based **0** BCR **0**  
 Recurring costs **-** Issues **Unknown**



FMP area



Regional view of FMP area