

# FLOOD INSURANCE STUDY

## FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 1 OF 5



### HAYS COUNTY, TEXAS AND INCORPORATED AREAS

COMMUNITY NAME	NUMBER
AUSTIN, CITY OF	480624
BEAR CREEK, VILLAGE OF	481679
BUDA, CITY OF	481640
CREEDMOOR, CITY OF	481697
DRIPPING SPRINGS, CITY OF	481667
HAYS COUNTY, UNINCORPORATED AREAS	480321
HAYS, CITY OF	481669
KYLE, CITY OF	481108
MOUNTAIN CITY, CITY OF	481671
NIEDERWALD, CITY OF	481670
SAN MARCOS, CITY OF	485505
UHLAND, CITY OF	481668
WIMBERLEY, CITY OF	481694
WOODCREEK, CITY OF	481641

**REVISED  
PRELIMINARY  
12/14/2022**

**REVISED:  
TBD**

FLOOD INSURANCE STUDY NUMBER  
**48209CV001B**

Version Number 2.3.3.3



# FEMA

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### **Published Separately**

Flood Insurance Rate Map (FIRM)

# FLOOD INSURANCE STUDY REPORT

## HAYS COUNTY, TEXAS

### SECTION 1.0 – INTRODUCTION

#### 1.1 The National Flood Insurance Program

The National Flood Insurance Program (NFIP) is a voluntary Federal program that enables property owners in participating communities to purchase insurance protection against losses from flooding. This insurance is designed to provide an alternative to disaster assistance to meet the escalating costs of repairing damage to buildings and their contents caused by floods.

For decades, the national response to flood disasters was generally limited to constructing flood-control works such as dams, levees, sea-walls, and the like, and providing disaster relief to flood victims. This approach did not reduce losses nor did it discourage unwise development. In some instances, it may have actually encouraged additional development. To compound the problem, the public generally could not buy flood coverage from insurance companies, and building techniques to reduce flood damage were often overlooked.

In the face of mounting flood losses and escalating costs of disaster relief to the general taxpayers, the U.S. Congress created the NFIP. The intent was to reduce future flood damage through community floodplain management ordinances, and provide protection for property owners against potential losses through an insurance mechanism that requires a premium to be paid for the protection.

The U.S. Congress established the NFIP on August 1, 1968, with the passage of the National Flood Insurance Act of 1968. The NFIP was broadened and modified with the passage of the Flood Disaster Protection Act of 1973 and other legislative measures. It was further modified by the National Flood Insurance Reform Act of 1994 and the Flood Insurance Reform Act of 2004. The NFIP is administered by the Federal Emergency Management Agency (FEMA), which is a component of the Department of Homeland Security (DHS).

Participation in the NFIP is based on an agreement between local communities and the Federal Government. If a community adopts and enforces floodplain management regulations to reduce future flood risks to new construction and substantially improved structures in Special Flood Hazard Areas (SFHAs), the Federal Government will make flood insurance available within the community as a financial protection against flood losses. The community's floodplain management regulations must meet or exceed criteria established in accordance with Title 44 Code of Federal Regulations (CFR) Part 60, *Criteria for Land Management and Use*.

SFHAs are delineated on the community's Flood Insurance Rate Maps (FIRMs). Under the NFIP, buildings that were built before the flood hazard was identified on the community's FIRMs are generally referred to as "Pre-FIRM" buildings. When the NFIP was created, the U.S. Congress recognized that insurance for Pre-FIRM buildings would be prohibitively expensive if the premiums were not subsidized by the Federal

Government. Congress also recognized that most of these floodprone buildings were built by individuals who did not have sufficient knowledge of the flood hazard to make informed decisions. The NFIP requires that full actuarial rates reflecting the complete flood risk be charged on all buildings constructed or substantially improved on or after the effective date of the initial FIRM for the community or after December 31, 1974, whichever is later. These buildings are generally referred to as “Post-FIRM” buildings.

**1.2 Purpose of this Flood Insurance Study Report**

This Flood Insurance Study (FIS) Report revises and updates information on the existence and severity of flood hazards for the study area. The studies described in this report developed flood hazard data that will be used to establish actuarial flood insurance rates and to assist communities in efforts to implement sound floodplain management.

In some states or communities, floodplain management criteria or regulations may exist that are more restrictive than the minimum Federal requirements. Contact your State NFIP Coordinator to ensure that any higher State standards are included in the community’s regulations.

**1.3 Jurisdictions Included in the Flood Insurance Study Project**

This FIS Report covers the entire geographic area of Hays County, Texas.

The jurisdictions that are included in this project area, along with the Community Identification Number (CID) for each community and the United States Geological Survey (USGS) 8-digit Hydrologic Unit Code (HUC-8) sub-basins affecting each, are shown in Table 1. The FIRM panel numbers that affect each community are listed. If the flood hazard data for the community is not included in this FIS Report, the location of that data is identified.

The location of flood hazard data for participating communities in multiple jurisdictions is also indicated in the table.

Jurisdictions that have no identified SFHAs as of the effective date of this study are indicated in the table. Changed conditions in these communities (such as urbanization or annexation) or the availability of new scientific or technical data about flood hazards could make it necessary to determine SFHAs in these jurisdictions in the future.

**Table 1: Listing of NFIP Jurisdictions**

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Austin, City of <sup>1</sup>	480624	12090205, 12100203	48209C0141G 48209C0145G 48209C0285F	



**Table 1: Listing of NFIP Jurisdictions, (continued)**

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Bear Creek, Village of	481679	12090205	48209C0130G 48209C0133G 48209C0137G 48209C0141G	
Buda, City of	481640	12090205, 12100203	48209C0260G 48209C0280G 48209C0285F 48209C0290G 48209C0291F	
Creedmoor, City of <sup>1</sup>	481697	12100203	48209C0295F 48209C0315F	
Dripping Springs, City of	481667	12090205	48209C0085G 48209C0105G 48209C0108G 48209C0109G 48209C0115G 48209C0128G	
Hays, City of	481669	12090205	48209C0260G 48209C0280G	
Hays County, Unincorporated Areas	480321	12090205, 12090206, 12100203	48209C0025F 48209C0050G 48209C0070G 48209C0082G 48209C0085G 48209C0095G 48209C0100G 48209C0101G 48209C0105G 48209C0106G 48209C0107G 48209C0108G 48209C0109G 48209C0115G 48209C0120G 48209C0126G 48209C0128G 48209C0130G 48209C0137G 48209C0140G 48209C0141G 48209C0145G 48209C0165G 48209C0200G	

**Table 1: Listing of NFIP Jurisdictions, (continued)**

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Hays County, Unincorporated Areas	480321	12090205, 12090206, 12100203	48209C0215G 48209C0217G 48209C0219G 48209C0220G 48209C0225G 48209C0230G 48209C0235G 48209C0236G 48209C0237F 48209C0238G 48209C0239G 48209C0241G 48209C0243F 48209C0245G 48209C0255G 48209C0260G 48209C0265G 48209C0270G 48209C0280G 48209C0285F 48209C0290G 48209C0291F 48209C0293F 48209C0295F 48209C0315F 48209C0330G 48209C0335G 48209C0345G 48209C0355G 48209C0360G 48209C0365G 48209C0369G 48209C0370G 48209C0380G 48209C0385G 48209C0386G 48209C0387G 48209C0388G 48209C0389G 48209C0391G 48209C0392G 48209C0393G 48209C0394G 48209C0405F 48209C0410F 48209C0415F 48209C0420F <sup>2</sup>	

**Table 1: Listing of NFIP Jurisdictions, (continued)**

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Hays County, Unincorporated Areas	480321	12090205, 12090206, 12100203	48209C0430F 48209C0457G 48209C0459F <sup>2</sup> 48209C0460F <sup>2</sup> 48209C0467F 48209C0470F 48209C0475F <sup>2</sup> 48209C0476G 48209C0477G 48209C0478G 48209C0479G 48209C0481G 48209C0482G 48209C0483G 48209C0484F <sup>2</sup> 48209C0486F 48209C0487F 48209C0488F 48209C0495F <sup>2</sup> 48209C0501G	
Kyle, City of	481108	12090205, 12100203	48209C0270G 48209C0290G 48209C0385G 48209C0405F	
Mountain City, City of	481671	12090205, 12100203	48209C0270G	
Niederwald, City of <sup>1</sup>	481670	12100203	48209C0291F 48209C0293F 48209C0295F 48209C0315F 48209C0410F 48209C0430F	
San Marcos, City of <sup>1</sup>	485505	12100203	48209C0369G 48209C0385G 48209C0387G 48209C0388G 48209C0389G 48209C0391G 48209C0392G 48209C0393G 48209C0394G 48209C0415F 48209C0457G	

**Table 1: Listing of NFIP Jurisdictions, (continued)**

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
San Marcos, City of <sup>1</sup>	485505	12100203	48209C0459F <sup>2</sup> 48209C0467F 48209C0476G 48209C0477G 48209C0478G 48209C0479G 48209C0481G 48209C0482G 48209C0483G 48209C0484F <sup>2</sup> 48209C0486F 48209C0487F 48209C0488F 48209C0495F <sup>2</sup> 48209C0501G	
Uhland, City of <sup>1</sup>	481668	12100203	48209C0405F 48209C0410F	
Wimberley, City of	481694	12100203	48209C0219G 48209C0236G 48209C0237F 48209C0238G 48209C0239G 48209C0243F 48209C0335G 48209C0355G 48209C0360G	
Woodcreek, City of	481641	12100203	48209C0236G 48209C0238G	

<sup>1</sup>Community is mapped in multiple counties. This FIS only covers the portion within Hays County

<sup>2</sup>Panel Not Printed

#### **1.4 Considerations for using this Flood Insurance Study Report**

The NFIP encourages State and local governments to implement sound floodplain management programs. To assist in this endeavor, each FIS Report provides floodplain data, which may include a combination of the following: 10-, 4-, 2-, 1-, and 0.2-percent annual chance flood elevations (the 1% annual chance flood elevation is also referred to as the Base Flood Elevation (BFE); delineations of the 1% annual chance and 0.2% annual chance floodplains; and 1% annual chance floodway. This information is presented on the FIRM and/or in many components of the FIS Report, including Flood Profiles, Floodway Data tables, Summary of Non-Coastal Stillwater Elevations tables, and Coastal Transect Parameters tables (not all components may be provided for a specific FIS).

This section presents important considerations for using the information contained in this FIS Report and the FIRM, including changes in format and content. Figures 1, 2, and 3 present information that applies to using the FIRM with the FIS Report.

- Part or all of this FIS Report may be revised and republished at any time. In addition, part of this FIS Report may be revised by a Letter of Map Revision (LOMR), which does not involve republication or redistribution of the FIS Report. Refer to Section 6.5 of this FIS Report for information about the process to revise the FIS Report and/or FIRM.

It is, therefore, the responsibility of the user to consult with community officials by contacting the community repository to obtain the most current FIS Report components. Communities participating in the NFIP have established repositories of flood hazard data for floodplain management and flood insurance purposes. Community map repository addresses are provided in Table 30, "Map Repositories," within this FIS Report.

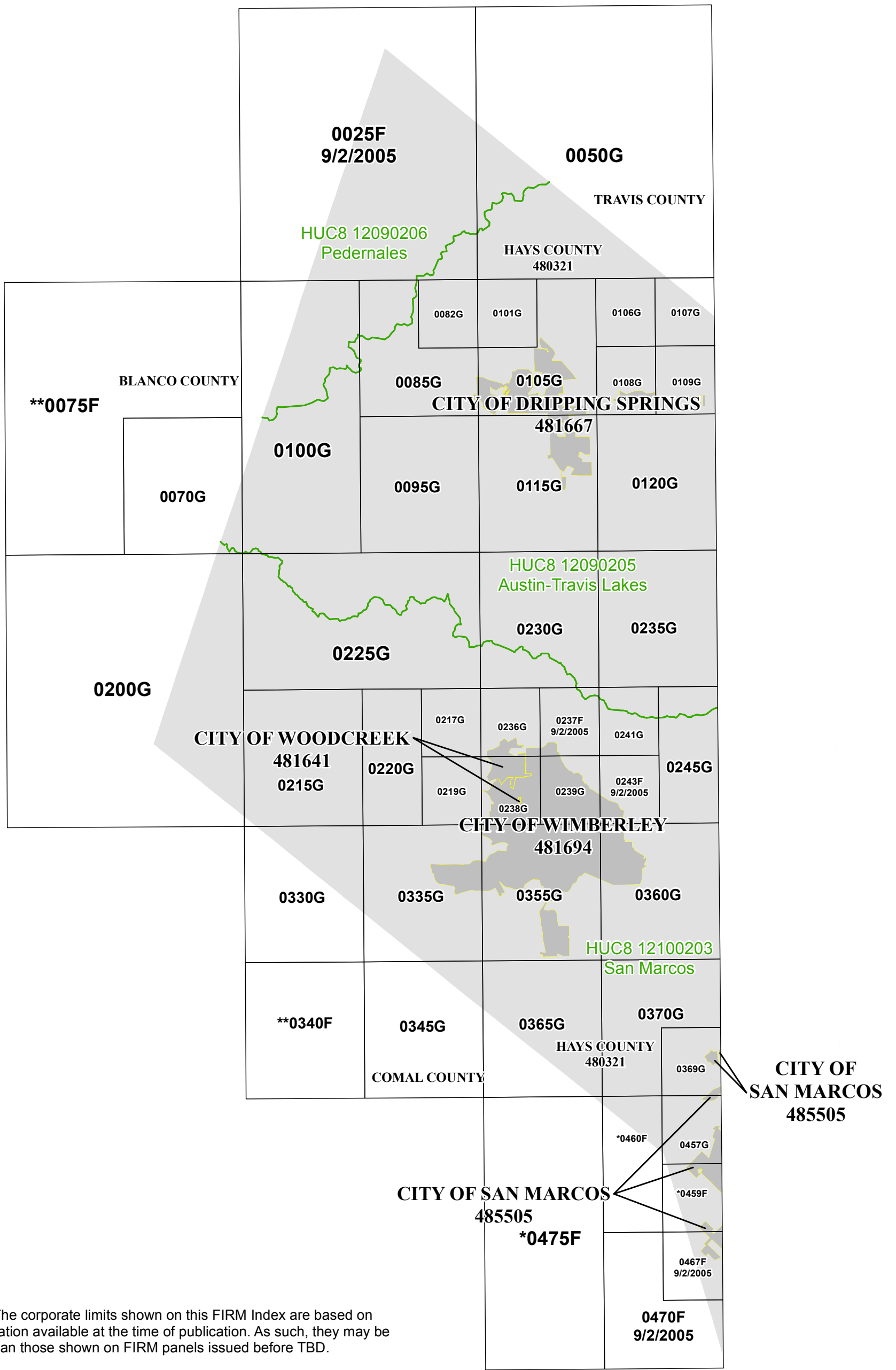
- New FIS Reports are frequently developed for multiple communities, such as entire counties. A countywide FIS Report incorporates previous FIS Reports for individual communities and the unincorporated area of the county (if not jurisdictional) into a single document and supersedes those documents for the purposes of the NFIP.

The initial Countywide FIS Report for Hays County became effective on February 18, 1998. Refer to Table 27 for information about subsequent revisions to the FIRMs.

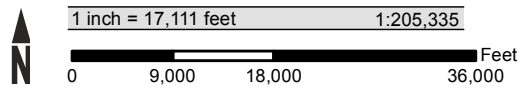
FEMA has developed a *Guide to Flood Maps* (FEMA 258) and online tutorials to assist users in accessing the information contained on the FIRM. These include how to read panels and step-by-step instructions to obtain specific information. To obtain this guide and other assistance in using the FIRM, visit the FEMA Web site at [www.fema.gov/online-tutorials](http://www.fema.gov/online-tutorials).

The FIRM Index in Figure 1 shows the overall FIRM panel layout within Hays County, and also displays the panel number and effective date for each FIRM panel in the county. Other information shown on the FIRM Index includes community boundaries and USGS HUC-8 codes.

Figure 1: FIRM Panel Index



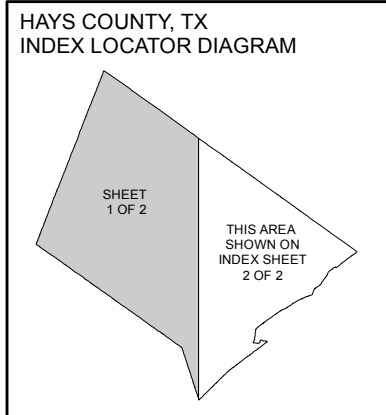
**ATTENTION:** The corporate limits shown on this FIRM Index are based on the best information available at the time of publication. As such, they may be more current than those shown on FIRM panels issued before TBD.



Map Projection:  
Universal Transverse Mercator Zone 14 North;  
North American Datum 1983

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION  
\*PANEL NOT PRINTED - NO SPECIAL FLOOD HAZARD AREAS  
\*\*PANEL NOT PRINTED - AREA OUTSIDE COUNTY BOUNDARY



**NATIONAL FLOOD INSURANCE PROGRAM**  
FLOOD INSURANCE RATE MAP PANEL INDEX

HAYS COUNTY, TEXAS and Incorporated Areas

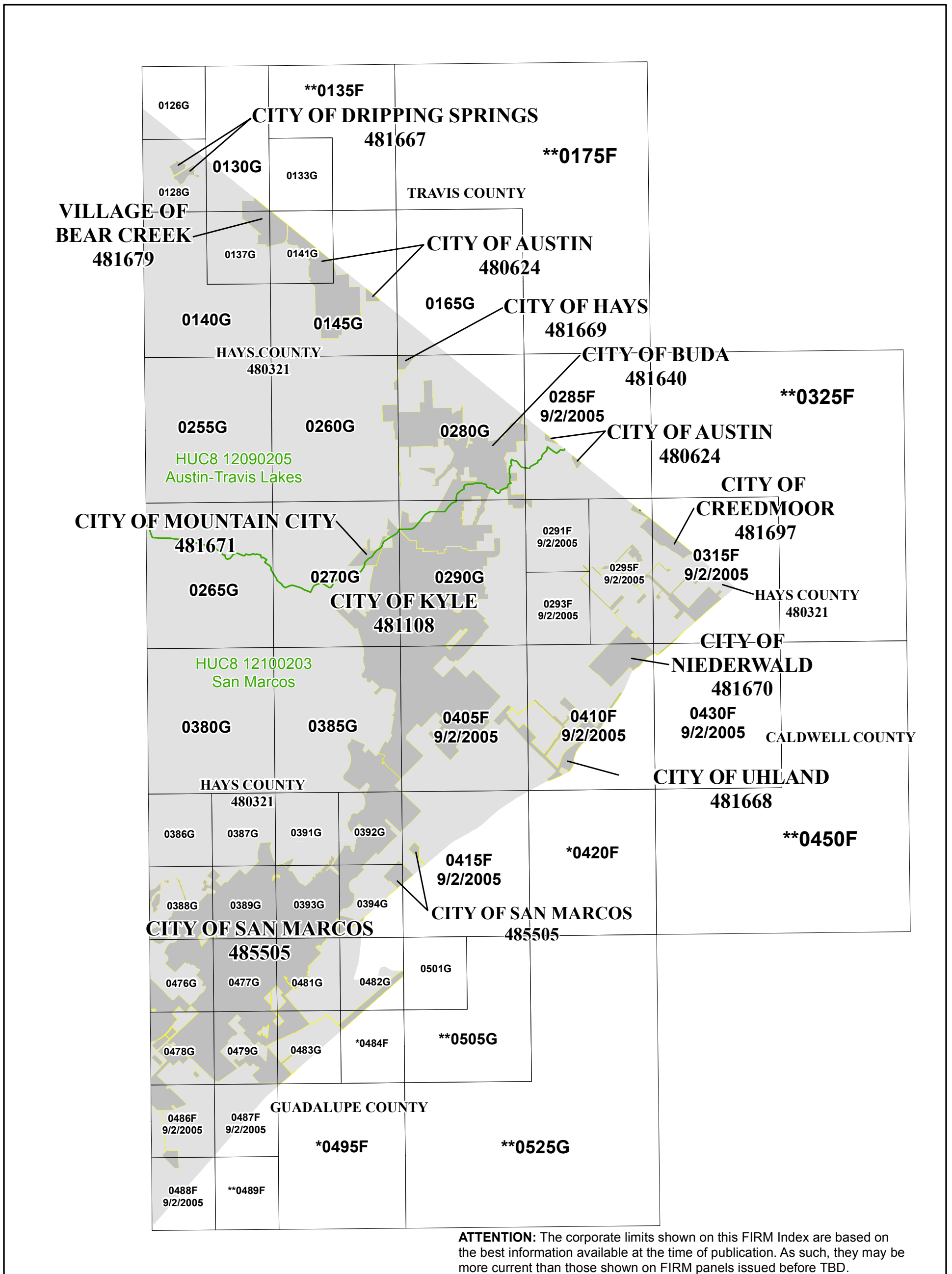
PANELS PRINTED:  
0025, 0050, 0070, 0082, 0085, 0095, 0100, 0101, 0105, 0106, 0107, 0108, 0109, 0115, 0120, 0200, 0215, 0217, 0219, 0220, 0225, 0230, 0235, 0236, 0237, 0238, 0239, 0241, 0243, 0245, 0330, 0335, 0345, 0355, 0360, 0365, 0369, 0370, 0457, 0467, 0470

**REVISED PRELIMINARY**  
**12/14/2022**

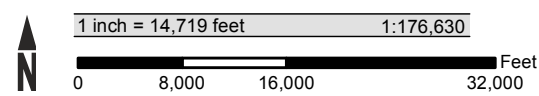
**FEMA**  
U.S. DEPARTMENT OF HOMELAND SECURITY

MAP NUMBER 48209CIND1B  
MAP REVISED

Figure 1: FIRM Panel Index (Continued)



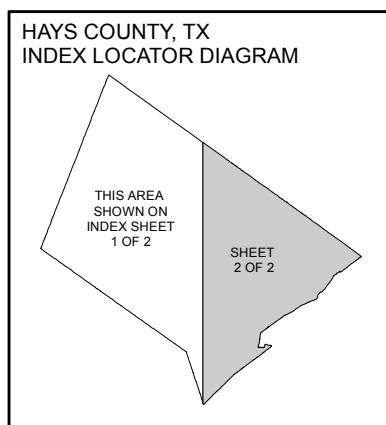
**ATTENTION:** The corporate limits shown on this FIRM Index are based on the best information available at the time of publication. As such, they may be more current than those shown on FIRM panels issued before TBD.



Map Projection:  
Universal Transverse Mercator Zone 14 North;  
North American Datum 1983

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION  
\*PANEL NOT PRINTED - NO SPECIAL FLOOD HAZARD AREAS  
\*\*PANEL NOT PRINTED - AREA OUTSIDE COUNTY BOUNDARY



**NATIONAL FLOOD INSURANCE PROGRAM**  
FLOOD INSURANCE RATE MAP PANEL INDEX

HAYS COUNTY, TEXAS and Incorporated Areas

PANELS PRINTED:  
0126, 0128, 0130, 0133, 0137, 0140, 0141, 0145, 0165, 0255, 0260, 0265, 0270, 0280, 0285, 0290, 0291, 0293, 0295, 0315, 0380, 0385, 0386, 0387, 0388, 0389, 0391, 0392, 0393, 0394, 0405, 0410, 0415, 0430, 0476, 0477, 0478, 0479, 0481, 0482, 0483, 0486, 0487, 0488, 0501

**REVISED PRELIMINARY**  
**12/14/2022**



FEMA

MAP NUMBER  
48209CIND2B  
MAP REVISED

Each FIRM panel may contain specific notes to the user that provide additional information regarding the flood hazard data shown on that map. However, the FIRM panel does not contain enough space to show all the notes that may be relevant in helping to better understand the information on the panel. Figure 2 contains the full list of these notes.

**Figure 2: FIRM Notes to Users**

## **NOTES TO USERS**

For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products, or the National Flood Insurance Program in general, please call the FEMA Mapping and Insurance eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at [msc.fema.gov](http://msc.fema.gov). Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Flood Map Service Center website or by calling the FEMA Mapping and Insurance eXchange.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates, refer to Table 27 in this FIS Report.

To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

PRELIMINARY FIS REPORT: FEMA maintains information about map features, such as street locations and names, in or near designated flood hazard areas. Requests to revise information in or near designated flood hazard areas may be provided to FEMA during the community review period, at the final Consultation Coordination Officer's meeting, or during the statutory 90-day appeal period. Approved requests for changes will be shown on the final printed FIRM.

The map is for use in administering the NFIP. It may not identify all areas subject to flooding, particularly from local drainage sources of small size. Consult the community map repository to find updated or additional flood hazard information.

BASE FLOOD ELEVATIONS: For more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, consult the Flood Profiles and Floodway Data and/or Summary of Non-Coastal Stillwater Elevations tables within this FIS Report. Use the flood elevation data within the FIS Report in conjunction with the FIRM for construction and/or floodplain management.

FLOODWAY INFORMATION: Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the FIS Report for this jurisdiction.



**Figure 2: FIRM Notes to Users, (continued)**

FLOOD CONTROL STRUCTURE INFORMATION: Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 4.3 "Non-Levee Flood Protection Measures" of this FIS Report for information on flood control structures for this jurisdiction.

PROJECTION INFORMATION: The projection used in the preparation of the map was Universal Transverse Mercator (UTM) Zone 14. The horizontal datum was the North American Datum of 1983 NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

ELEVATION DATUM: Flood elevations on the FIRM are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at [www.ngs.noaa.gov](http://www.ngs.noaa.gov).

Local vertical monuments may have been used to create the map. To obtain current monument information, please contact the appropriate local community listed in Table 30 of this FIS Report.

BASE MAP INFORMATION: Base map information shown on the FIRM was provided by TxDOT, the City of San Marcos, USGS and the Texas Natural Resources Information System. This imagery was flown in 2015 and was produced with a 0.5-meter ground sample distance.

Corporate limits shown on the map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after the map was published, map users should contact appropriate community officials to verify current corporate limit locations.

## **NOTES FOR FIRM INDEX**

REVISIONS TO INDEX: As new studies are performed and FIRM panels are updated within Hays County, Texas, corresponding revisions to the FIRM Index will be incorporated within the FIS Report to reflect the effective dates of those panels. Please refer to Table 27 of this FIS Report to determine the most recent FIRM revision date for each community. The most recent FIRM panel effective date will correspond to the most recent index date.

ATTENTION: The corporate limits shown on this FIRM Index are based on the best information available at the time of publication. As such, they may be more current than those shown on FIRM panels issued before [TBD].

## **SPECIAL NOTES FOR SPECIFIC FIRM PANELS**


This Notes to Users section was created specifically for Hays County, Texas, effective [TBD].

**Figure 2: FIRM Notes to Users, (continued)**

FLOOD RISK REPORT: A Flood Risk Report (FRR) may be available for many of the flooding sources and communities referenced in this FIS Report. The FRR is provided to increase public awareness of flood risk by helping communities identify the areas within their jurisdictions that have the greatest risks. Although non-regulatory, the information provided within the FRR can assist communities in assessing and evaluating mitigation opportunities to reduce these risks. It can also be used by communities developing or updating flood risk mitigation plans. These plans allow communities to identify and evaluate opportunities to reduce potential loss of life and property. However, the FRR is not intended to be the final authoritative source of all flood risk data for a project area; rather, it should be used with other data sources to paint a comprehensive picture of flood risk.

Each FIRM panel contains an abbreviated legend for the features shown on the maps. However, the FIRM panel does not contain enough space to show the legend for all map features. Figure 3 shows the full legend of all map features. Note that not all of these features may appear on the FIRM panels in Hays County.


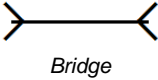

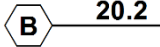
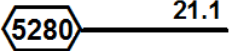
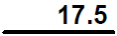
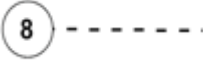







**Figure 3: Map Legend for FIRM**

<p><b>SPECIAL FLOOD HAZARD AREAS:</b> <i>The 1% annual chance flood, also known as the base flood or 100-year flood, has a 1% chance of happening or being exceeded each year. Special Flood Hazard Areas are subject to flooding by the 1% annual chance flood. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood. The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights. See note for specific types. If the floodway is too narrow to be shown, a note is shown.</i></p>	
	<p>Special Flood Hazard Areas subject to inundation by the 1% annual chance flood (Zones A, AE, AH, AO, AR, A99, V and VE)</p>
<p>Zone A</p>	<p>The flood insurance rate zone that corresponds to the 1% annual chance floodplains. No base (1% annual chance) flood elevations (BFEs) or depths are shown within this zone.</p>
<p>Zone AE</p>	<p>The flood insurance rate zone that corresponds to the 1% annual chance floodplains. Base flood elevations derived from the hydraulic analyses are shown within this zone.</p>
<p>Zone AH</p>	<p>The flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. Whole-foot BFEs derived from the hydraulic analyses are shown at selected intervals within this zone.</p>
<p>Zone AO</p>	<p>The flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. Average whole-foot depths derived from the hydraulic analyses are shown within this zone.</p>
<p>Zone AR</p>	<p>The flood insurance rate zone that corresponds to areas that were formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.</p>
<p>Zone A99</p>	<p>The flood insurance rate zone that corresponds to areas of the 1% annual chance floodplain that will be protected by a Federal flood protection system where construction has reached specified statutory milestones. No base flood elevations or flood depths are shown within this zone.</p>
<p>Zone V</p>	<p>The flood insurance rate zone that corresponds to the 1% annual chance coastal floodplains that have additional hazards associated with storm waves. Base flood elevations are not shown within this zone.</p>
<p>Zone VE</p>	<p>Zone VE is the flood insurance rate zone that corresponds to the 1% annual chance coastal floodplains that have additional hazards associated with storm waves. Base flood elevations derived from the coastal analyses are shown within this zone as static whole-foot elevations that apply throughout the zone.</p>



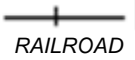



**Figure 3: Map Legend for FIRM, (continued)**

	<p>Regulatory Floodway determined in Zone AE.</p>
<p><b>OTHER AREAS OF FLOOD HAZARD</b></p>	
	<p>Shaded Zone X: Areas of 0.2% annual chance flood hazards and areas of 1% annual chance flood hazards with average depths of less than 1 foot or with drainage areas less than 1 square mile.</p>
	<p>Future Conditions 1% Annual Chance Flood Hazard – Zone X: The flood insurance rate zone that corresponds to the 1% annual chance floodplains that are determined based on future-conditions hydrology. No base flood elevations or flood depths are shown within this zone.</p>
	<p>Area with Reduced Flood Risk due to Levee: Areas where an accredited levee, dike, or other flood control structure has reduced the flood risk from the 1% annual chance flood.</p>
	<p>Area with Flood Risk due to Levee: Areas where a non-accredited levee, dike, or other flood control structure is shown as providing protection to less than the 1% annual chance flood.</p>
<p><b>OTHER AREAS</b></p>	
	<p>Zone D (Areas of Undetermined Flood Hazard): The flood insurance rate zone that corresponds to unstudied areas where flood hazards are undetermined, but possible.</p>
	<p>Unshaded Zone X: Areas of minimal flood hazard.</p>
<p><b>FLOOD HAZARD AND OTHER BOUNDARY LINES</b></p>	
	<p>Flood Zone Boundary (white line on ortho-photography-based mapping; gray line on vector-based mapping)</p>
	<p>Limit of Study</p>
	<p>Jurisdiction Boundary</p>
	<p>Limit of Moderate Wave Action (LiMWA): Indicates the inland limit of the area affected by waves greater than 1.5 feet</p>
<p><b>GENERAL STRUCTURES</b></p>	
<p>-----  <i>Aqueduct</i>  <i>Channel</i>  <i>Culvert</i>  <i>Storm Sewer</i></p>	<p>Channel, Culvert, Aqueduct, or Storm Sewer</p>
<p>_____  <i>Dam</i>  <i>Jetty</i>  <i>Weir</i></p>	<p>Dam, Jetty, Weir</p>

**Figure 3: Map Legend for FIRM, (continued)**

	Levee, Dike, or Floodwall
	Bridge
<b>REFERENCE MARKERS</b>	
	River mile Markers
<b>CROSS SECTION &amp; TRANSECT INFORMATION</b>	
	Lettered Cross Section with Regulatory Water Surface Elevation (BFE)
	Numbered Cross Section with Regulatory Water Surface Elevation (BFE)
	Unlettered Cross Section with Regulatory Water Surface Elevation (BFE)
	Coastal Transect
	Profile Baseline: Indicates the modeled flow path of a stream and is shown on FIRM panels for all valid studies with profiles or otherwise established base flood elevation.
	Coastal Transect Baseline: Used in the coastal flood hazard model to represent the 0.0-foot elevation contour and the starting point for the transect and the measuring point for the coastal mapping.
	Base Flood Elevation Line
<b>ZONE AE (EL 16)</b>	Static Base Flood Elevation value (shown under zone label)
<b>ZONE AO (DEPTH 2)</b>	Zone designation with Depth
<b>ZONE AO (DEPTH 2) (VEL 15 FPS)</b>	Zone designation with Depth and Velocity
<b>BASE MAP FEATURES</b>	
	River, Stream or Other Hydrographic Feature
	Interstate Highway
	U.S. Highway
	State Highway

**Figure 3: Map Legend for FIRM, (continued)**

	County Highway
	Street, Road, Avenue Name, or Private Drive if shown on Flood Profile
	Railroad
	Horizontal Reference Grid Line
	Horizontal Reference Grid Ticks
	Secondary Grid Crosshairs
Land Grant	Name of Land Grant
7	Section Number
R. 43 W. T. 22 N.	Range, Township Number
<b>4276<sup>000m</sup>E</b>	Horizontal Reference Grid Coordinates (UTM)
<b>365000 FT</b>	Horizontal Reference Grid Coordinates (State Plane)
<b>80° 16' 52.5"</b>	Corner Coordinates (Latitude, Longitude)

## SECTION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS

### 2.1 Floodplain Boundaries

To provide a national standard without regional discrimination, the 1% annual chance (100-year) flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2% annual chance (500-year) flood is employed to indicate additional areas of flood hazard in the community.

Each flooding source included in the project scope has been studied and mapped using professional engineering and mapping methodologies that were agreed upon by FEMA and Hays County as appropriate to the risk level. Flood risk is evaluated based on factors such as known flood hazards and projected impact on the built environment. Engineering analyses were performed for each studied flooding source to calculate its 1% annual chance flood elevations; elevations corresponding to other floods (e.g. 10-, 4-, 2-, 0.2-percent annual chance, etc.) may have also been computed for certain flooding sources. Engineering models and methods are described in detail in Section 5.0 of this FIS Report. The modeled elevations at cross sections were used to delineate the floodplain boundaries on the FIRM; between cross sections, the boundaries were interpolated using elevation data from various sources. More information on specific mapping methods is provided in Section 6.0 of this FIS Report.

Depending on the accuracy of available topographic data (Table 22), study methodologies employed (Section 5.0), and flood risk, certain flooding sources may be mapped to show both the 1% and 0.2% annual chance floodplain boundaries, regulatory water surface elevations (BFEs), and/or a regulatory floodway. Similarly, other flooding sources may be mapped to show only the 1% annual chance floodplain boundary on the FIRM, without published water surface elevations. In cases where the 1% and 0.2% annual chance floodplain boundaries are close together, only the 1% annual chance floodplain boundary is shown on the FIRM. Figure 3, “Map Legend for FIRM”, describes the flood zones that are used on the FIRMs to account for the varying levels of flood risk that exist along flooding sources within the project area. Table 2 and Table 3 indicate the flood zone designations for each flooding source and each community within Hays County, respectively.

Table 2 “Flooding Sources Included in this FIS Report,” lists each flooding source, including its study limits, affected communities, mapped zone on the FIRM, and the completion date of its engineering analysis from which the flood elevations on the FIRM and in the FIS Report were derived. Descriptions and dates for the latest hydrologic and hydraulic analyses of the flooding sources are shown in Table 12. Floodplain boundaries for these flooding sources are shown on the FIRM (published separately) using the symbology described in Figure 3. On the map, the 1% annual chance floodplain corresponds to the SFHAs. The 0.2% annual chance floodplain shows areas that, although out of the regulatory floodplain, are still subject to flood hazards.

Small areas within the floodplain boundaries may lie above the flood elevations but cannot be shown due to limitations of the map scale and/or lack of detailed topographic data. The procedures to remove these areas from the SFHA are described in Section 6.5 of this FIS Report.

**Table 2: Flooding Sources Included in this FIS Report**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Barton Creek	Hays County, Unincorporated Areas	At Hays County political boundary	Approximately 300 feet downstream of Twin Oaks Trail	12090205	10.0		Y	AE	August 2014
Barton Creek	Hays County, Unincorporated Areas	At Bell Springs Rd and Upstream Limit of Detailed Study	Approximately 500 feet downstream of Twin Oaks Trl Lane	12090205	3.9		N	A	February 2015
Barton Creek Tributary	Hays County, Unincorporated Areas	At confluence with Barton Creek	Approximately 1,325 feet upstream of confluence with Barton Creek	12090205	0.3		N	A	February 2013
Barton Creek Tributary 1	Hays County, Unincorporated Areas	Approximately 130 feet downstream of confluence with Barton Creek Tributary 39-3	Approximately 1,650 feet upstream of confluence with Barton Creek Tributary 39-3	12090205	0.3		N	A	February 2013
Barton Creek Tributary 1	Hays County, Unincorporated Areas	At confluence with Barton Creek	At confluence with Barton Creek Tributary 39-3	12090205	1.8		N	AE	August 2014
Barton Creek Tributary 2	Hays County, Unincorporated Areas	At confluence with Barton Creek	Approximately 4,220 feet upstream of Hart Lane	12090205	1.9		Y	AE	August 2014
Barton Creek Tributary 2-1	Hays County, Unincorporated Areas	At confluence with Barton Creek Tributary 2	Approximately 770 feet upstream of Bells Springs Road	12090205	0.9		Y	AE	August 2014
Barton Creek Tributary 3	Hays County, Unincorporated Areas	At confluence with Barton Creek	Approximately 5,450 feet upstream of Bells Springs Road	12090205	1.8		Y	AE	August 2014
Barton Creek Tributary 39-1	Hays County, Unincorporated Areas	At confluence with Barton Creek Tributary 1	Approximately 1,350 feet upstream of Barton Creek Tributary	12090205	0.3		N	A	February 2013



**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Barton Creek Tributary 39-2	Hays County, Unincorporated Areas	At confluence with Barton Creek	Approximately 2,150 feet upstream of W Fitzhugh Road	12090205	0.7		N	A	February 2013
Barton Creek Tributary 39-3	Hays County, Unincorporated Areas	At confluence with Barton Creek Tributary 1	Approximately 1,750 feet upstream of Barton Creek Tributary 1 confluence	12090205	0.3		N	A	February 2013
Barton Creek Tributary 40	Hays County, Unincorporated Areas	At confluence with Barton Creek	Approximately 2,000 feet upstream of Barton Creek confluence	12090205	0.4		N	A	February 2013
Bear Creek	Austin, City of; Hays County, Unincorporated Areas	Hays County boundary	Approximately 1,970 feet upstream of Wildwood Hills Lane	12090205	7.3		Y	AE	August 2014
Bear Creek	Hays County, Unincorporated Areas	At upstream limit of Bear Creek detailed study	Approximately 2,250 feet upstream of Aspen Drive	12090205	1.9		N	A	August 2014
Bear Creek Tributary 1	Hays County, Unincorporated Areas	At Hays County political boundary	Approximately 3,650 feet upstream of Hays County political boundary	12090205	0.7		N	A	February 2013
Bear Creek Tributary 1A	Bear Creek, Village of; Hays County, Unincorporated Areas	At confluence with Bear Creek Tributary 1	Approximately 2,060 feet upstream of Signal Hill View	12090205	2.3		Y	AE	August 2014
Bear Creek Tributary 1B	Hays County, Unincorporated Areas	At Hays County political boundary	Approximately 1,000 feet upstream of Old Baldy Trail	12090205	0.4		N	A	February 2013

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Bear Creek Tributary 1B-1	Hays County, Unincorporated Areas	At confluence with Bear Creek Tributary 1B	Approximately 1,100 feet upstream of confluence with Bear Creek Tributary 1B	12090205	0.2		N	A	February 2013
Bear Creek Tributary 3	Hays County, Unincorporated Areas	At confluence with Bear Creek	Approximately 3,675 feet upstream of FM 1826	12090205	1.0		N	A	February 2013
Bear Creek Tributary 4	Hays County, Unincorporated Areas	At confluence with Bear Creek	Approximately 5,500 feet upstream of Crosscreek Drive	12090205	1.8		N	A	February 2013
Bear Creek Tributary 5	Hays County, Unincorporated Areas	At confluence with Bear Creek	Approximately 1,400 feet upstream of Signal Hill Road	12090205	1.8		N	A	February 2013
Bear Creek Tributary 5-1	Hays County, Unincorporated Areas	At confluence with Bear Creek Tributary 5	Approximately 1,400 feet upstream of Signal Hill Road	12090205	0.7		N	A	February 2013
Bear Creek Tributary 6	Hays County, Unincorporated Areas	At confluence with Bear Creek	Approximately 2,400 feet upstream of confluence with Bear Creek	12090205	0.5		N	A	February 2013
Bear Creek Tributary 7	Hays County, Unincorporated Areas	At confluence with Bear Creek	Approximately 5,000 feet upstream of Belterra Drive	12090205	1.5		N	A	February 2013
Bear Creek Tributary 7-1	Hays County, Unincorporated Areas	At confluence with Bear Creek Tributary 7	Approximately 1,700 feet upstream of the confluence with Bear Creek Tributary 7	12090205	0.3		N	A	February 2013
Bear Creek Tributary A	Hays County, Unincorporated Areas	At confluence with Bear Creek	Approximately 5,620 feet upstream of the confluence with Bear Creek	12090205	1.1		N	A	February 2013

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Blanco-San Marcos Overflow	Hays County, Unincorporated Areas; San Marcos, City of	From divergence with Blanco River downstream of Martindale Road	Convergence with San Marcos River approximately 2,500 feet upstream of Blanco/San Marcos confluence	12100203	0.8		N	AO	February 2013
Blanco Gardens Overflow	San Marcos, City of	From divergence with Blanco River downstream of State Highway 80	Convergence with San Marcos River approximately 600 feet upstream of Cape Road	12100203	1.1		N	AO	8/31/2016
Blanco River	Hays County, Unincorporated Areas; San Marcos, City of; Wimberley, City of	Approximately 1.2 miles upstream of Post Road	At the Hays County Line	12100203	51.4		Y	AE	8/31/2016
Blanco River Overflow Upstream of I-35	Hays County, Unincorporated Areas; San Marcos, City of	From divergence with Blanco River approximately 700 feet upstream of Interstate 35	Confluence with Blanco River approximately 1,600 feet upstream of Uhland Road	12100203	1.2		Y	AE	8/31/2016
Brushy Creek	Niederwald, City of; Hays County, Unincorporated Areas; Uhland, City of;	Approximately 5,770 feet downstream of the Hays County boundary	Approximately 1,150 feet upstream of Satterwhite Road	12100203	9.0		Y	AE	June 1995
Bypass Creek	Hays County, Unincorporated Areas; San Marcos, City of	Confluence with San Marcos River	Approximately 2 miles upstream of Harris Hill Road	12100203	6.6		Y	AE	8/31/2016

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Cambrian Branch	Hays County, Unincorporated Areas	At confluence with Barton Creek	Approximately 3,400 feet upstream of confluence with Cambrian Branch Tributary 1	12090205	2.9		Y	AE	August 2014
Cambrian Branch Tributary 1	Hays County, Unincorporated Areas	At confluence with Cambrian Branch	Approximately 1,980 feet upstream of confluence with Cambrian Branch	12090205	0.4		Y	AE	August 2014
Cottonwood Branch (Tributary to Roy Branch)	Hays County, Unincorporated Areas	At confluence with Roy Branch	Approximately 1,010 feet upstream of Hidden Hills Drive	12090205	1.5		Y	AE	August 2014
Cottonwood Branch (Tributary to Onion Creek)	Hays County, Unincorporated Areas	At confluence with Onion Creek	Approximately 1,220 feet upstream of Loop 165	12090205	0.4		N	A	August 2014
Cottonwood Creek	Hays County, Unincorporated Areas; San Marcos, City of	Approximately 0.1 miles downstream of Old Bastrop Road	Approximately 380 feet downstream of E McCarty Lane	12100203	1.1		Y	AE	5/31/2016
Cottonwood Creek	Hays County, Unincorporated Areas; San Marcos, City of	Approximately 380 feet downstream of E McCarty Lane	Approximately 180 feet upstream of Centerpoint Road	12100203	2.6		Y	AE	June 1995
Cypress Creek	Hays County, Unincorporated Areas; Woodcreek, City of; Wimberley, City of; Woodcreek, City of	Confluence with Blanco River	Approximately 3.7 miles upstream of Pump Station Road	12100203	15.2		Y	AE	4/30/2016

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Dripping Springs	Hays County, Unincorporated Areas	At confluence with Onion Creek	Approximately 4,160 feet upstream of Mercer Street	12090205	1.7		N	AE	August 2014
Dripping Springs Tributary	Dripping Springs, City of; Hays County, Unincorporated Areas	At confluence with Drippings Springs	Approximately 130 feet downstream of Youth Sports Association Road	12090205	0.7		N	AE	August 2014
Eskew Branch	Hays County, Unincorporated Areas	At confluence with Onion Creek	Approximately 700 feet downstream of FM 165	12090205	1.3		N	A	February 2013
Fitzhugh Creek	Hays County, Unincorporated Areas	At confluence with Barton Creek	Approximately 3,800 feet downstream of Bell Springs Road	12090205	3.8		N	A	August 2014
Fitzhugh Creek Tributary 1	Hays County, Unincorporated Areas	At confluence with Fitzhugh Creek	Approximately 3,450 feet upstream of W Fitzhugh Road	12090205	1.2		N	A	February 2015
Fitzhugh Creek Tributary 2	Hays County, Unincorporated Areas	At confluence with Fitzhugh Creek	Approximately 3,450 feet upstream of Fitzhugh Creek	12090205	0.7		N	A	February 2015
Fitzhugh Creek Tributary 3	Hays County, Unincorporated Areas	At confluence with Fitzhugh Creek	Approximately 2,500 feet upstream of Fitzhugh Creek	12090205	0.5		N	A	February 2015
Flat Creek	Hays County, Unincorporated Areas	At confluence with Onion Creek	Approximately 11,500 feet upstream of Covered Bridge Drive	12090205	5.1		N	A	August 2014
Freestone Branch	Hays County, Unincorporated Areas	At confluence with South Onion Creek	Approximately 9,100 feet upstream of confluence with South Onion Creek	12090205	1.7		N	A	August 2014

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Garlic Creek	Buda, City of; Hays County, Unincorporated Areas	At Hays County political boundary	Approximately 2,855 feet upstream of Maybrook Drive	12090205	5.5		N	AE	August 2014
Garlic Creek Tributary	Buda, City of; Hays County, Unincorporated Areas	At confluence with Garlic Creek	Approximately 155 feet upstream of Remuda Trail	12090205	0.9		N	AE	August 2014
Gatlin Creek	Hays County, Unincorporated Areas	At confluence with Onion Creek	Approximately 1,880 feet downstream of FM 12	12090205	2.9		N	A	August 2014
Grooms Branch	Hays County, Unincorporated Areas	At confluence with South Onion Creek	Approximately 3,000 feet upstream of Pursley Road	12090205	1.8		N	A	August 2014
Grooms Branch Tributary 1	Hays County, Unincorporated Areas	At the confluence with Grooms Branch	Approximately 700 feet upstream of the confluence with Grooms Branch	12090205	0.1		N	A	February 2013
Hog Creek	Hays County, Unincorporated Areas; Wimberley, City of; Woodcreek, City of	At confluence with Cypress Creek	At FM 12	12100203	2.0		Y	AE	4/30/2016
Hog Creek Overflow	Woodcreek, City of	At the convergence with Hog Creek	At the divergence with Hog Creek	12100203	0.1		N	A	4/30/2016
Jackson Branch	Hays County, Unincorporated Areas	At confluence with Onion Creek	Approximately 4,200 feet upstream of Cross Creek	12090205	3.8		N	A	August 2014

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Jackson Branch Tributary	Hays County, Unincorporated Areas	At confluence with Jackson Branch	Approximately 6,400 feet upstream of the confluence with Jackson Branch	12090205	1.2		N	A	February 2013
Little Barton Creek	Dripping Springs, City of; Hays County, Unincorporated Areas	At confluence with Barton Creek	Approximately 2,620 feet upstream of Springlake Drive	12090205	4.6		Y	AE	August 2014
Little Bear Creek	Hays County, Unincorporated Areas	Hays County boundary	Approximately 2,700 feet upstream of Arbor Trail	12090205	7.6		Y	AE	June 1995
Little Bear Creek	Hays County, Unincorporated Areas	Approximately 2,700 feet upstream of Arbor Trail	Approximately 12,000 feet upstream of FM 967	12090205	5.8		N	A	August 2014
Little Bear Creek Tributary 1	Hays County, Unincorporated Areas	Approximately 500 feet downstream of Chaparral Road	Approximately 13,500 feet upstream of Chaparral Road	12090205	2.7		N	A	August 2014
Little Bear Creek Tributary 1-1	Hays County, Unincorporated Areas	At the confluence of Little Bear Creek Tributary 1	Approximately 5,350 feet upstream of the confluence of Little Bear Creek Tributary 1	12090205	1.0		N	A	February 2013
Little Bear Creek Tributary 1-2	Hays County, Unincorporated Areas	At the confluence of Little Bear Creek Tributary 1	Approximately 1,700 feet upstream of the confluence of Little Bear Creek Tributary 1	12090205	0.3		N	A	February 2013
Little Bear Creek Tributary 1A	Hays County, Unincorporated Areas; Hays, City of	At the confluence of Little Bear Creek	Approximately 3,800 feet upstream of FM 1626	12090205	1.0		N	A	February 2013

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Little Bear Creek Tributary 2	Hays County, Unincorporated Areas	At the confluence of Little Bear Creek	Approximately 10,100 feet upstream of the confluence of Little Bear Creek	12090205	1.9		N	A	August 2014
Little Bear Creek Tributary 2-1	Hays County, Unincorporated Areas	At the confluence of Little Bear Creek Tributary 2	Approximately 5,900 feet upstream of the confluence of Little Bear Creek Tributary 2	12090205	1.1		N	A	February 2013
Little Bear Creek Tributary 2A	Hays County, Unincorporated Areas	At the confluence of Little Bear Creek	Approximately 8,900 feet upstream of the confluence of Little Bear Creek	12090205	1.6		N	A	February 2013
Little Bear Creek Tributary 2B	Hays County, Unincorporated Areas	At the confluence of Little Bear Creek	Approximately 4,380 feet upstream of the confluence of Little Bear Creek	12090205	0.8		N	A	February 2013
Little Bear Creek Tributary 3	Hays County, Unincorporated Areas	At the confluence of Little Bear Creek	Approximately 2,900 feet upstream of the confluence of Little Bear Creek	12090205	0.6		N	A	February 2013
Little Bear Creek Tributary 4	Hays County, Unincorporated Areas	At the confluence of Little Bear Creek	Approximately 2,500 feet upstream of the confluence of Little Bear Creek	12090205	0.6		N	A	February 2013
Little Bear Creek Tributary 5	Hays County, Unincorporated Areas	At the confluence of Little Bear Creek	Approximately 1,550 feet upstream of the confluence of Little Bear Creek	12090205	0.3		N	A	February 2013
Little Bear Creek Tributary 6	Hays County, Unincorporated Areas	At the confluence of Little Bear Creek	Approximately 3,100 feet upstream of the confluence of Little Bear Creek	12090205	0.6		N	A	February 2013
Little Bear Creek Tributary 7	Hays County, Unincorporated Areas	At the confluence of Little Bear Creek	Approximately 3,400 feet upstream of the confluence of Little Bear Creek	12090205	0.6		N	A	February 2013



**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Loneman Creek	Hays County, Unincorporated Areas	Confluence with the Blanco River	Approximately 11,030 feet upstream of Deer Lake Estates Road	12100203	7.9		Y	AE	June 1995
Long Branch	Hays County, Unincorporated Areas	Approximately 360 feet downstream of Hays County political boundary	Approximately 650 feet downstream of Pemberton Way	12090205	2.0		Y	AE	August 2014
Long Branch 2 Tributary 1	Hays County, Unincorporated Areas	At the confluence of Long Branch	Approximately 1,550 feet upstream of the confluence of Long Branch	12090205	0.3		N	A	August 2014
Long Branch 2 Tributary 2	Dripping Springs, City of; Hays County, Unincorporated Areas	At the confluence of Long Branch	Approximately 2,400 feet upstream of the confluence of Long Branch	12090205	0.5		N	A	August 2014
Long Branch 2 Tributary 2-1	Dripping Springs, City of; Hays County, Unincorporated Areas	At the confluence of Long Branch 2 Tributary 2	Approximately 600 feet upstream of the confluence of Long Branch 2 Tributary 2	12090205	0.1		N	A	August 2014
Millseat Branch	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 3,000 feet upstream of US 290	12090205	2.7		N	A	August 2014
Mustang Branch	Hays County, Unincorporated Areas	At the confluence of Onion Creek	At FM 150	12090205	8.6		N	A	August 2014
Mustang Branch Tributary 1	Hays County, Unincorporated Areas; Kyle, City of	At the confluence of Mustang Branch	At Jack C Hays Trail	12090205	0.8		N	A	February 2013

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Mustang Branch Tributary 2	Hays County, Unincorporated Areas	At the confluence of Mustang Branch	Approximately 3,675 feet upstream of Indian Creek Road	12090205	1.5		N	A	February 2013
Mustang Branch Tributary 2-1	Hays County, Unincorporated Areas; Mountain City, City of	At the confluence of Mustang Branch Tributary 2	At Maple Drive	12090205	0.5		N	A	February 2013
Mustang Branch Tributary 3	Hays County, Unincorporated Areas	At the confluence of Mustang Branch	Approximately 2,525 feet upstream of the confluence of Mustang Branch	12090205	0.5		N	A	August 2014
Mustang Branch Tributary 4	Hays County, Unincorporated Areas	At the confluence of Mustang Branch	Approximately 2,350 feet upstream of the confluence of Mustang Branch	12090205	0.4		N	A	February 2013
Mustang Branch Tributary 5	Hays County, Unincorporated Areas	At the confluence of Mustang Branch	Approximately 2,075 feet upstream of the confluence of Mustang Branch	12090205	0.4		N	A	February 2013
Mustang Branch Tributary 6	Hays County, Unincorporated Areas	At the confluence of Mustang Branch	Approximately 4,525 feet upstream of the confluence of Mustang Branch	12090205	0.9		N	A	February 2013
Mustang Branch Tributary 7	Hays County, Unincorporated Areas	At the confluence of Mustang Branch	Approximately 1,725 feet upstream of the confluence of Mustang Branch	12090205	0.3		N	A	February 2013
North Gatlin Creek	Hays County, Unincorporated Areas	At the confluence of Gatlin Creek	At Mt Olive School Road	12090205	4.3		N	A	August 2014
NRCS Dam 1 Spillway	Hays County, Unincorporated Areas	Confluence with Sink Creek	Approximately 0.64 miles upstream of Sink Creek confluence	12100203	0.6		N	A	8/31/2016

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
NRCS Dam 2 Spillway	Hays County, Unincorporated Areas	Confluence with Pope Creek	Approximately 0.31 miles upstream of Pope Creek confluence	12100203	0.3		N	A	8/31/2016
NRCS Dam 3 Spillway	San Marcos, City of	Confluence with Sink Creek	Approximately 0.32 miles upstream of Sink Creek confluence	12100203	0.3		N	A	8/31/2016
NRCS Dam 4 Spillway	Hays County, Unincorporated Areas	Confluence with Purgatory Creek	Approximately 0.23 miles upstream of Purgatory Creek confluence	12100203	0.2		N	A	8/31/2016
NRCS Dam 5 Spillway	San Marcos, City of	Confluence with Purgatory Creek at Wonder World Drive	Approximately 0.61 miles upstream of Purgatory Creek confluence	12100203	0.6		N	A	8/31/2016
Onion Creek	Buda, City of; Hays County, Unincorporated Areas	At confluence with Colorado River	Approximately 700 feet upstream of confluence with Onion Creek Tributary 22	12090205	39.1		Y	AE	August 2014
Onion Creek	Hays County, Unincorporated Areas	Approximately 700 feet upstream of confluence with Onion Creek Tributary 22	At Hays County political boundary	12090205	10.2		N	A	February 2013
Onion Creek Tributary 1	Hays County, Unincorporated Areas	At the confluence of Onion Creek	At N Loop 4	12090205	0.4		N	A	August 2014
Onion Creek Tributary 2	Buda, City of; Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 2,350 feet upstream of N Loop 4	12090205	1.8		N	A	August 2014

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Onion Creek Tributary 3	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 9,500 feet upstream of the confluence of Onion Creek	12090205	1.8		N	A	February 2013
Onion Creek Tributary 4	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 4,750 feet upstream of the confluence of Onion Creek	12090205	0.9		N	A	February 2013
Onion Creek Tributary 5	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 4 miles upstream of the confluence of Onion Creek	12090205	4.0		N	A	August 2014
Onion Creek Tributary 5-1	Hays County, Unincorporated Areas	At the confluence of Onion Creek Tributary 5	Approximately 3.1 miles upstream of the confluence of Orion Creek Tributary 5	12090205	3.1		N	A	August 2014
Onion Creek Tributary 5-1-1	Hays County, Unincorporated Areas	At the confluence of Onion Creek Tributary 5-1	Approximately 3,100 feet upstream of the confluence of Orion Creek Tributary 5-1	12090205	0.6		N	A	February 2013
Onion Creek Tributary 6	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 4,800 feet upstream of the confluence of Onion Creek	12090205	0.9		N	A	February 2013
Onion Creek Tributary 7	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 6,350 feet upstream of the confluence of Onion Creek	12090205	1.2		N	A	February 2013
Onion Creek Tributary 8	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 4,875 feet upstream of the confluence of Onion Creek	12090205	0.9		N	A	February 2013
Onion Creek Tributary 8-1	Hays County, Unincorporated Areas	At the confluence of Onion Creek Tributary 8	Approximately 2,000 feet upstream of the confluence of Orion Creek Tributary 8	12090205	0.4		N	A	February 2013

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Onion Creek Tributary 8-1-1	Hays County, Unincorporated Areas	At the confluence of Onion Creek Tributary 8-1	Approximately 1,650 feet upstream of the confluence of Orion Creek Tributary 8-1	12090205	0.3		N	A	February 2013
Onion Creek Tributary 9	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 2,400 feet upstream of the confluence of Onion Creek	12090205	0.5		N	A	February 2013
Onion Creek Tributary 10	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 6,275 feet upstream of the confluence of Onion Creek	12090205	1.2		N	A	February 2013
Onion Creek Tributary 11	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 2,550 feet upstream of the confluence of Onion Creek	12090205	0.5		N	A	August 2014
Onion Creek Tributary 12	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 3,150 feet upstream of the confluence of Onion Creek	12090205	0.6		N	A	February 2013
Onion Creek Tributary 13	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 3,250 feet upstream of the confluence of Onion Creek	12090205	0.6		N	A	February 2013
Onion Creek Tributary 14	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 4,450 feet upstream of the confluence of Onion Creek	12090205	0.8		N	A	February 2013
Onion Creek Tributary 14-1	Hays County, Unincorporated Areas	At the confluence of Onion Creek Tributary 14	Approximately 1,350 feet upstream of the confluence of Onion Creek Tributary 14	12090205	0.3		N	A	February 2013
Onion Creek Tributary 15	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 2,800 feet upstream of the confluence of Onion Creek	12090205	0.5		N	A	February 2013

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Onion Creek Tributary 16	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 1,500 feet upstream of FM 1826	12090205	3.5		N	A	August 2014
Onion Creek Tributary 16-1	Hays County, Unincorporated Areas	At the confluence of Onion Creek Tributary 16	At FM 1826	12090205	0.6		N	A	February 2013
Onion Creek Tributary 17	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 4,000 feet upstream of the confluence of Onion Creek	12090205	0.8		N	A	February 2013
Onion Creek Tributary 18	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 2,850 feet upstream of the confluence of Onion Creek	12090205	0.5		N	A	August 2014
Onion Creek Tributary 19	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 5,375 feet upstream of the confluence of Onion Creek	12090205	1.0		N	A	August 2014
Onion Creek Tributary 20	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 1,000 feet upstream of Trebbled Waters Trail	12090205	0.4		N	A	August 2014
Onion Creek Tributary 21	Dripping Springs, City of; Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 6,000 feet upstream of Onion Creek	12090205	1.1		N	A	August 2014
Onion Creek Tributary 22	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 1,700 feet upstream of the confluence of Onion Creek	12090205	0.3		N	A	February 2013
Onion Creek Tributary 23	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 5,275 feet upstream of the confluence of Onion Creek	12090205	1.0		N	A	February 2013

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Onion Creek Tributary 24	Hays County, Unincorporated Areas	At the confluence of Onion Creek	Approximately 6,575 feet upstream of the confluence of Onion Creek	12090205	1.2		N	A	February 2013
Pier Branch	Hays County, Unincorporated Areas	At the confluence of Onion Creek	At Huck Finn Trail	12090205	3.8		N	A	August 2014
Plum Creek	Hays County, Unincorporated Areas; Kyle, City of; Uhland, City of	City of Uhland corporate boundary	Approximately 4,550 feet upstream of the Union Pacific Railroad	12100203	11.3		Y	AE	June 1995
Plum Creek	Hays County, Unincorporated Areas; Kyle, City of	Approximately 1,500 feet upstream of SCS Site No. 1 Dam	Approximately 110 feet upstream of Jack C. Hays Trail/FM-2770	12100203	0.4		N	AE	8/16/2018
Pope Creek	Hays County, Unincorporated Areas	At the confluence with Sink Creek	Approximately 0.3 miles upstream of NRCS Dam No.2	12100203	1.0		Y	AE	8/31/2016
Purgatory Creek	Hays County, Unincorporated Areas; San Marcos, City of	At the confluence with the San Marcos River	Approximately 3.8 miles upstream of NRCS Dam No.2	12100203	12.5		Y	AE	8/31/2016
Purgatory Creek Diversion 1	San Marcos, City of	At the convergence of Purgatory Creek	At the Divergence of Purgatory Creek	12100203	1.2		Y	AE	8/31/2016
Purgatory Creek UNT	Hays County, Unincorporated Areas; San Marcos, City of	At the confluence with Stream PC-3	Approximately 13,400 feet upstream of the confluence with Stream PC-3	12100203	2.5		N	A	8/31/2016
Purgatory Middle Diversion	San Marcos, City of	At the confluence with Purgatory Creek	Divergence with Purgatory Creek at Hunter Road	12100203	0.5		N	A	8/31/2016

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Richmond Branch	Hays County, Unincorporated Areas; Kyle, City of	Approximately 400 feet upstream of Dacy Ln	At Windy Hill Road	12100203	0.7		N	AE	1/25/2007
Rocky Branch	Hays County, Unincorporated Areas	At the confluence with Onion Creek	Approximately 4,575 feet upstream of La Ventana Parkway	12090205	4.0		N	A	August 2014
Roy Branch	Hays County, Unincorporated Areas	At the confluence with Barton Creek	Approximately 2,410 feet upstream of N Canyonwood Drive	12090205	2.7		Y	AE	August 2014
San Marcos River	Hays County, Unincorporated Areas;	Hays County boundary	Approximately 0.56 miles downstream of Blanco/San Marcos confluence	12100203	2.1		Y	AE	8/31/2016
San Marcos River	Hays County, Unincorporated Areas; San Marcos, City of	Approximately 0.56 miles downstream of Blanco/San Marcos confluence	Approximately 0.3 miles upstream of Lime Kiln Road	12100203	6.5		Y	AE	8/31/2016
San Marcos Tributary	Hays County, Unincorporated Areas	At the confluence with San Marcos River	Approximately 2.7 miles upstream of San Marcos River confluence	12100203	2.7		N	A	8/31/2016
Sessom Creek	San Marcos, City of	At the confluence with San Marcos River	Approximately 0.1 miles upstream of West Sessom Drive	12100203	0.4		N	A	8/31/2016
Sink Creek	Hays County, Unincorporated Areas; San Marcos, City of	At the confluence with the San Marcos River	Approximately 0.3 miles upstream of Ranch Road 12	12100203	11.7		Y	AE	8/31/2016



**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Smith Creek	Hays County, Unincorporated Areas; Wimberley, City of	At the confluence with Loneman Creek	Approximately 4,680 feet upstream of Deer Lake Road/FM 3237	12100203	2.5		Y	AE	June 1995
South Gatlin Creek	Hays County, Unincorporated Areas	At the confluence with Gatlin Creek	Approximately 10,600 feet upstream of FM 12	12090205	3.7		N	A	August 2014
South Gatlin Creek Tributary 1	Hays County, Unincorporated Areas	At the confluence with South Gatlin Creek	Approximately 2,900 feet upstream of the confluence with South Gatlin Creek	12090205	0.6		N	A	February 2013
South Gatlin Creek Tributary 2	Hays County, Unincorporated Areas	At the confluence with South Gatlin Creek	Approximately 4,675 feet upstream of the confluence with South Gatlin Creek	12090205	0.9		N	A	February 2013
South Gatlin Creek Tributary 3	Hays County, Unincorporated Areas	At the confluence with South Gatlin Creek	Approximately 4,850 feet upstream of the confluence with South Gatlin Creek	12090205	0.9		N	A	February 2013
South Onion Creek	Hays County, Unincorporated Areas	At the confluence with Onion Creek	Approximately 18,000 feet upstream of the confluence with Freestone Branch	12090205	14.8		N	A	August 2014
South Onion Creek Tributary 1	Hays County, Unincorporated Areas	At the confluence with South Onion Creek	Approximately 2,350 feet upstream of the confluence with South Onion Creek	12090205	0.4		N	A	August 2014
South Onion Creek Tributary 2	Hays County, Unincorporated Areas	At the confluence with South Onion Creek	Approximately 4,825 feet upstream of the confluence with South Onion Creek	12090205	0.9		N	A	February 2013
South Onion Creek Tributary 3	Hays County, Unincorporated Areas	At the confluence with South Onion Creek	Approximately 1,700 feet upstream of the confluence with South Onion Creek	12090205	0.3		N	A	August 2014

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Spring Branch	Kyle, City of; Hays County, Unincorporated Areas	Approximately 1,500 feet upstream of the confluence with Plum Creek	Approximately 1,125 feet upstream of Spring Branch Drive	12100203	0.9		Y	AE	June 1995
Spring Hollow	Hays County, Unincorporated Areas	At the confluence with Bear Creek	Approximately 4,400 feet upstream of Cool Spring Way	12090205	4.8		N	A	February 2013
Spring Hollow Tributary 1	Hays County, Unincorporated Areas	At the confluence with Spring Hollow	Approximately 1,700 feet upstream of the confluence of Spring Hollow	12090205	0.3		N	A	February 2013
Spring Hollow Tributary 2	Hays County, Unincorporated Areas	At the confluence with Spring Hollow	Approximately 3,425 feet upstream of the confluence of Spring Hollow	12090205	0.6		N	A	February 2013
Spring Hollow Tributary 3	Hays County, Unincorporated Areas	At the confluence with Spring Hollow	Approximately 4,600 feet upstream of the confluence of Spring Hollow	12090205	0.9		N	A	February 2013
Stream Bear-1	Bear Creek, Village of; Hays County, Unincorporated Areas	At confluence with Bear Creek	Approximately 1,200 feet upstream of N Madrone Trail	12090205	1.5		Y	AE	September 1990
Stream Bear-2	Hays County, Unincorporated Areas	At confluence with Bear Creek	Approximately 1,500 feet upstream of Reunion Boulevard	12090205	0.9		Y	AE	September 1990
Stream BPC-1	Hays County, Unincorporated Areas; San Marcos, City of	At the confluence with Bypass Creek	At West Uhland Road	12100203	0.4		Y	AE	8/31/2016

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Stream BPC-2	Hays County, Unincorporated Areas	At the confluence with Bypass Creek	Approximately 0.4 miles upstream of State Highway 21	12100203	0.9		Y	AE	8/31/2016
Stream Brushy-1	Hays County, Unincorporated Areas; Niederwald, City of	Confluence with Brushy Creek	Approximately 670 feet upstream of County Road 131/Windy Hill Road	12100203	4.7		Y	AE	June 1995
Stream Brushy-1A	Hays County, Unincorporated Areas	Confluence with Stream Brushy-1	Approximately 2,660 feet upstream of County Road 125	12100203	1.0		Y	AE	June 1995
Stream CC-1	San Marcos, City of	At the confluence with Cottonwood Creek	Approximately 0.5 miles upstream of Interstate Highway 35	12100203	2.2		Y	AE	8/31/2016
Stream CC-1 South	San Marcos, City of	At the confluence with Stream CC-1	Approximately 1,900 feet upstream of the confluence with Stream CC-1	12100203	0.4		Y	AE	8/31/2016
Stream CC-2	Hays County, Unincorporated Areas; San Marcos, City of	Union Pacific Railroad	Approximately 0.3 miles upstream of Hunter Road	12100203	0.6		Y	AE	June 1995
Stream CC-2D	Hays County, Unincorporated Areas; San Marcos, City of	Confluence with Cottonwood Creek	Approximately 145 feet upstream of I-35 South Bound/Frontage Road	12100203	0.3		Y	AE	June 1995
Stream CC-IH35	Hays County, Unincorporated Areas; San Marcos, City of	Confluence with Stream CC-1	Approximately 5,250 feet upstream of McCarty Lane/County Road 233	12100203	1.5		Y	AE	8/15/2008

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Stream Cypress-1	Hays County, Unincorporated Areas	Confluence with Cypress Creek	Approximately 3,850 feet upstream of Valley Spring Road	12100203	1.4		Y	AE	June 1995
Stream LB-1	Austin, City of; Hays County, Unincorporated Areas	At the downstream limit of Little Bear Creek	Approximately 1,100 feet upstream of Chaparral Lane	12090205	1.4		Y	AE	June 1995
Stream PC-1	Hays County, Unincorporated Areas; San Marcos, City of	At the confluence with Purgatory Creek	Approximately 1.1 miles upstream of Mccarty Lane	12100203	2.6		Y	AE	3/30/2015
Stream PC-3	San Marcos, City of	At the confluence with Purgatory Creek	Approximately 0.2 miles upstream of Castle Creek Road	12100203	1.7		N	A	8/31/2016
Stream Plum-1	Hays County, Unincorporated Areas; Kyle, City of	At the confluence with Plum Creek	Approximately 40 feet upstream of South Sledge Street	12100203	3.0		Y	AE	June 1995
Stream WSC-1	Hays County, Unincorporated Areas	At the confluence with Willow Springs Creek	Approximately 0.3 miles upstream of W McCarty Lane	12100203	0.6		Y	AE	8/31/2016
Stream WSC-1 Split	Hays County, Unincorporated Areas	At the Confluence with Stream WSC-1	Approximately 250 feet upstream of W McCarty Lane	12100203	0.2		N	A	8/31/2016
Stream WSC-RR	San Marcos, City of	At the convergence with Willow Springs Creek	At the divergence with Willow Springs Creek	12100203	0.6		Y	AE	8/31/2016
Tributary CC-1A	Hays County, Unincorporated Areas; Woodcreek, City of	At the confluence with Cypress Creek	Approximately 1 mile upstream of Mount Sharp Road	12100203	1.3		N	A	8/31/2016

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Tributary CC-2A	Wimberley, City of	At the confluence with Cypress Creek	Just downstream of Winters Mill Parkway	12100203	1.5		N	A	8/31/2016
Unnamed Tributary To Blanco River	Wimberley, City of	Approximately 780 feet downstream of Deer Lake Road	Approximately 220 upstream of Deer Lake Road	12100203	0.2		N	AE	01/27/2011
Unnamed Tributary 1 to Cedar Fork	Hays County, Unincorporated Areas	Approximately 4,100 feet upstream of confluence with Cedar Fork	Approximately 5,300 feet upstream of the downstream limit	12100203	1.0		N	A	June 1995
Unnamed Tributary 1 to Unnamed Tributary 1 to Cedar Fork	Hays County, Unincorporated Areas	At the confluence with Unnamed Tributary 1 to Cedar Fork	Approximately 2,000 feet upstream of the downstream limit	12100203	0.4		N	A	8/15/2008
Unnamed Tributary 2 to Unnamed Tributary to Cedar Fork	Hays County, Unincorporated Areas	Confluence with Unnamed Tributary 1 to Unnamed Tributary 1 to Cedar Fork	Approximately 1,764 feet upstream of confluence with Unnamed Tributary 1 to Unnamed Tributary 1 to Cedar Fork	12100203	0.33		N	A	8/15/2008
Unnamed Tributary of Cypress Creek	Hays County, Unincorporated Areas	Confluence with Cypress Creek	Approximately 698 feet upstream of Shadow Valley	12100203	1.9		N	A	3/30/2015
Unnamed Tributary to Plum Creek	Hays County, Unincorporated Areas	Confluence with Plum Creek	Approximately 270 feet upstream of Arbor Knot Drive	12100203	0.75		N	AE	June 1995
Walnut Spring	Dripping Springs, City of	At Needham Road	Approximately 150 feet upstream of Founders Park Road	12090205	0.8		N	AE	August 2014

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Walnut Spring	Dripping Springs, City of; Hays County, Unincorporated Areas	At the confluence with Onion Creek	Approximately 2,000 feet upstream of Needham Road	12090205	1.4		N	A	August 2014
West Mustang Branch	Hays County, Unincorporated Areas	At the confluence with Onion Creek	Approximately 22,650 feet upstream of the confluence with Onion Creek	12090205	4.3		N	A	August 2014
West Mustang Branch Tributary 1	Hays County, Unincorporated Areas	At the confluence with West Mustang Branch	Approximately 1,350 feet upstream of the confluence with West Mustang Branch	12090205	0.3		N	A	August 2014
West Mustang Branch Tributary 2	Hays County, Unincorporated Areas	At the confluence with West Mustang Branch	Approximately 1,200 feet upstream of the confluence with West Mustang Branch	12090205	0.2		N	A	August 2014
West Mustang Branch Tributary 3	Hays County, Unincorporated Areas	At the confluence with West Mustang Branch	Approximately 2,500 feet upstream of the confluence with West Mustang Branch	12090205	0.5		N	A	August 2014
White Branch	Hays County, Unincorporated Areas	At the confluence with Onion Creek	Approximately 14,400 feet upstream of the confluence with Onion Creek	12090205	2.7		N	A	August 2014
White Branch Tributary 1	Hays County, Unincorporated Areas	At the confluence with White Branch	Approximately 3,125 feet upstream of the confluence with White Branch	12090205	0.6		N	A	February 2013
Willow Springs Creek	Hays County, Unincorporated Areas; San Marcos River, City of	At the confluence with San Marcos River	Approximately 2,700 feet upstream of W McCarty Lane	12100203	5.2		Y	AE	8/31/2016
Willow Springs Creek Diversion	San Marcos River, City of	At the convergence of Willow Springs Creek	At the divergence of Willow Springs Creek	12100203	0.8		N	A	8/31/2016

**Table 2: Flooding Sources Included in this FIS Report, (continued)**

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi <sup>2</sup> ) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Willow Springs Creek Lower Tributary	San Marcos River, City of	At the confluence with Willow Springs Creek	Approximately 1,700 feet upstream of the confluence with Willow Springs Creek	12100203	0.3		N	A	8/31/2016
Wilson Creek	Hays County, Unincorporated Areas	Confluence with the Blanco River	Approximately 6,945 feet upstream of the confluence with Stream WC-1	12100203	4.2		Y	AE	June 1995
Yorks Creek	Hays County, Unincorporated Areas	At the confluence with Onion Creek	Approximately 6,400 feet upstream of Stepping Stone Crossing	12090205	8.0		N	A	August 2014
Yorks Creek Tributary 1	Hays County, Unincorporated Areas	At the confluence with Yorks Creek	Approximately 1,750 feet upstream of the confluence of Yorks Creek	12090205	0.3		N	A	August 2014
Yorks Creek Tributary 2	Hays County, Unincorporated Areas	At the confluence with Yorks Creek	Approximately 5,000 feet upstream of Rolling Oaks Drive	12090205	2.9		N	A	February 2013
Yorks Creek Tributary 3	Hays County, Unincorporated Areas	At the confluence with Yorks Creek	Approximately 6,925 feet upstream of the confluence with Yorks Creek	12090205	1.3		N	A	February 2013

## 2.2 Floodways

Encroachment on floodplains, such as structures and fill, reduces flood-carrying capacity, increases flood heights and velocities, and increases flood hazards in areas beyond the encroachment itself. One aspect of floodplain management involves balancing the economic gain from floodplain development against the resulting increase in flood hazard.

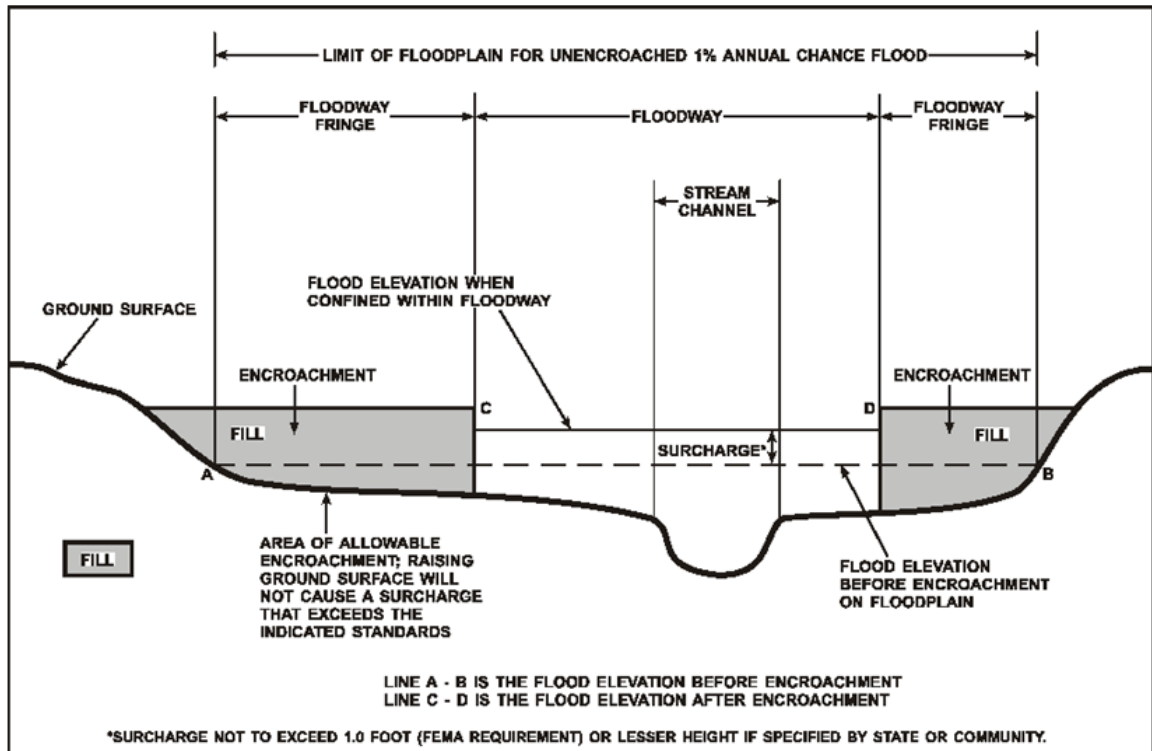
For purposes of the NFIP, a floodway is used as a tool to assist local communities in balancing floodplain development against increasing flood hazard. With this approach, the area of the 1% annual chance floodplain on a river is divided into a floodway and a floodway fringe based on hydraulic modeling. The floodway is the channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment in order to carry the 1% annual chance flood. The floodway fringe is the area between the floodway and the 1% annual chance floodplain boundaries where encroachment is permitted. The floodway must be wide enough so that the floodway fringe could be completely obstructed without increasing the water surface elevation of the 1% annual chance flood more than 1 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to floodplain development are shown in Figure 4: Floodway Schematic .

To participate in the NFIP, Federal regulations require communities to limit increases caused by encroachment to 1.0 foot, provided that hazardous velocities are not produced. The floodways in this project are presented to local agencies as minimum standards that can be adopted directly or that can be used as a basis for additional floodway projects.

The City of San Marcos has designated the floodplain as floodway and adopted a “no rise” floodway policy within city limits. For floodway modeling of Zone AE cross-sections completely within the San Marcos city limits, the encroachments were set at the edges of the 1% annual chance floodplain. At locations where one side of the stream was within Hays County and the other side was within the city, traditional floodway modeling was utilized to define the floodway extent on the Hays County side and then modified such that the encroachments on the City of San Marcos side were adjusted to the edge of the 1% annual chance floodplain. The floodways were modeled and delineated to match the “no rise” requirements of the City of San Marcos as well as the traditional floodway requirements of Hays County within their jurisdictions. As a result of this designation, floodways within the City of San Marcos are marked as Administrative Floodways on the FIRM. For more information, contact the City of San Marcos's Floodplain Administrator within the city engineering office located at 630 E Hopkins, San Marcos, TX 78666, Phone: 512-393-8130.



Figure 4: Floodway Schematic



Floodway widths presented in this FIS Report and on the FIRM were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. For certain stream segments, floodways were adjusted so that the amount of floodwaters conveyed on each side of the floodplain would be reduced equally. The results of the floodway computations have been tabulated for selected cross sections and are shown in Table 23, "Floodway Data."

All floodways that were developed for this Flood Risk Project are shown on the FIRM using the symbology described in Figure 3. In cases where the floodway and 1% annual chance floodplain boundaries are either close together or collinear, only the floodway boundary has been shown on the FIRM. For information about the delineation of floodways on the FIRM, refer to Section 6.3.

### 2.3 Base Flood Elevations

The hydraulic characteristics of flooding sources were analyzed to provide estimates of the elevations of floods of the selected recurrence intervals. The Base Flood Elevation (BFE) is the elevation of the 1% annual chance flood. These BFEs are most commonly rounded to the whole foot, as shown on the FIRM, but in certain circumstances or locations they may be rounded to 0.1 foot. Cross section lines shown on the FIRM may also be labeled with the BFE rounded to 0.1 foot. Whole-foot BFEs derived from engineering analyses that apply to coastal areas, areas of ponding, or other static areas

with little elevation change may also be shown at selected intervals on the FIRM.

Cross sections with BFEs shown on the FIRM correspond to the cross sections shown in the Floodway Data table and Flood Profiles in this FIS Report. BFEs are primarily intended for flood insurance rating purposes. For construction and/or floodplain management purposes, users are cautioned to use the flood elevation data presented in this FIS Report in conjunction with the data shown on the FIRM.

#### **2.4 Non-Encroachment Zones**

This section is not applicable to this Flood Risk Project.

#### **2.5 Coastal Flood Hazard Areas**

This section is not applicable to this Flood Risk Project.

##### **2.5.1 Water Elevations and the Effects of Waves**

This section is not applicable to this Flood Risk Project.

#### **Figure 5: Wave Runup Transect Schematic**

**[Not Applicable to this Flood Risk Project]**

##### **2.5.2 Floodplain Boundaries and BFEs for Coastal Areas**

This section is not applicable to this Flood Risk Project.

##### **2.5.3 Coastal High Hazard Areas**

This section is not applicable to this Flood Risk Project.

#### **Figure 6: Coastal Transect Schematic**

**[Not Applicable to this Flood Risk Project]**

##### **2.5.4 Limit of Moderate Wave Action**

This section is not applicable to this Flood Risk Project.

### **SECTION 3.0 – INSURANCE APPLICATIONS**

#### **3.1 National Flood Insurance Program Insurance Zones**

For flood insurance applications, the FIRM designates flood insurance rate zones as described in Figure 3, “Map Legend for FIRM.” Flood insurance zone designations are assigned to flooding sources based on the results of the hydraulic or coastal analyses. Insurance agents use the zones shown on the FIRM and depths and base flood elevations in this FIS Report in conjunction with information on structures and their

contents to assign premium rates for flood insurance policies.

The 1% annual chance floodplain boundary corresponds to the boundary of the areas of special flood hazards (e.g. Zones A, AE, V, VE, etc.), and the 0.2% annual chance floodplain boundary corresponds to the boundary of areas of additional flood hazards.

Table 3 lists the flood insurance zones in Hays County.

**Table 3: Flood Zone Designations by Community**

Community	Flood Zone(s)
Austin, City of	A, AE, X
Bear Creek, Village of	AE, X
Buda, City of	A, AE, X
Creedmoor, City of	A, X
Dripping Springs, City of	A, AE, X
Hays, City of	A, X
Hays County, Unincorporated Areas	A, AE, AO, X
Kyle, City of	A, AE, X
Mountain Ciy, City of	A, X
Niederwald, City of	A, AE, X
San Marcos, City of	A, AE, AO, X
Uhland, City of	A, AE, X
Wimberley, City of	A, AE, X
Woodcreek, City of	A, AE, X

## SECTION 4.0 – AREA STUDIED

### 4.1 Basin Description

Table 4 contains a description of the characteristics of the HUC-8 sub-basins within which each community falls. The table includes the main flooding sources within each basin, a brief description of the basin, and its drainage area.

**Table 4: Basin Characteristics**

HUC-8 Sub-Basin Name	HUC-8 Sub-Basin Number	Primary Flooding Source	Description of Affected Area	Drainage Area (square miles)
Austin-Travis Lakes	12090205	Colorado River	Located in Blanco, Burnet, Hays, Llano, Travis, and Williamson counties. It begins at Alvin Wirtz Dam, which forms Lake Marble Falls in Burnet County, and flows southeast through the City of Austin in Travis County.	1,241
Pedernales	12090206	Pedernales River	Encompasses 815,000 acres mainly in Blanco and Gillespie counties. It is also located in Burnet, Hays, Kendall, Kerr, Kimble, and Travis counties. The Pedernales River starts in the southeastern corner of Kimble County, and flows east emptying into Lake Travis in Travis County.	1,280
San Marcos	12100203	Blanco River and San Marcos River	Begins at upstream limit of the Blanco River, extends southeast, affecting half of Hays County, as well as portions of Blanco, Caldwell, Comal, Gonzales, Guadalupe, Kendall and Travis counties.	1,359

**4.2 Principal Flood Problems**

Table 5 contains a description of the principal flood problems that have been noted for Hays County by flooding source.

**Table 5: Principal Flood Problems**

Flooding Source	Description of Flood Problems
Hays County, All areas	Generally, the major floods experienced throughout the county are produced by heavy rainfall from frontal-type storms. Major flooding can be produced by the intense rainfall usually associated with localized thunderstorms, which may occur at any time during the year, but are more prevalent in the spring and summer months. Major floods have occurred in 1921, 1929, 1970, 1972, 1974, 1981, and 1991. The 1869 and 1921 floods were extremely large, substantially in excess of 1-percent-annual-chance events based on studies conducted by the USGS. The occurrence of these floods is indicative of the capability of the region to produce floods significantly in excess of the 1-percent-annual-chance event.

**Table 5: Principal Flood Problems, (continued)**

Flooding Source	Description of Flood Problems
City of San Marcos, all areas	The City of San Marcos has a long history of catastrophic floods. Rapid runoff and high peak discharges result from steep topography and relatively steep stream gradients.

Table 6 contains information about historic flood elevations in the communities within Hays County.

**Table 6: Historic Flooding Elevations**

Flooding Source	Location	Historic Peak (Feet NAVD88)	Event Date	Approximate Recurrence Interval (years)	Source of Data
Blanco River	Valley View Drive	1002.35	05/2015	100	Lower Colorado River Authority
Blanco River	Fisher Store Road	965.96	05/2015	100	Guadalupe Basin River Authority
Blanco River	Lazy Lane	867.08	05/2015	100	Guadalupe Basin River Authority
Blanco River	River Road Wimberley	865.24	05/2015	100	Guadalupe Basin River Authority
Blanco River	Wayside Drive and Savage Lane	856.89	05/2015	100	Guadalupe Basin River Authority
Blanco River	Upstream of FM12 Bridge	842.58	05/2015	100	Guadalupe Basin River Authority
Blanco River	269 River Road	583.42	05/2015	100	Halff
Blanco River	LCRA Substation near River Road	584.6	05/2015	100	Halff
Blanco River	SH 80 Bridge San Marcos	586.35	05/2015	100	Guadalupe Basin River Authority
Blanco River	Railroad Bridge at River Road	589.36	05/2015	100	Halff
Blanco River	Tennis Courts at Fire Station	606.26	05/2015	100	Halff

**Table 6: Historic Flooding Elevations, (continued)**

Flooding Source	Location	Historic Peak (Feet NAVD88)	Event Date	Approximate Recurrence Interval (years)	Source of Data
Blanco River	Grove Apartments	602.77	05/2015	100	Half
Blanco River	LCRA Substation near Carlson Circle	611.7	05/2015	100	Half
Blanco River	Kappa Sigma house at Uhland Road	598.47	05/2015	100	Guadalupe Basin River Authority
Blanco River	Blanco Vista/Old Stagecoach Road	629.08	05/2015	100	Half
Blanco River	Broadie Lane	581.15	05/2015	100	Guadalupe Basin River Authority
Blanco River	Harris Hill Road	606.16	05/2015	100	Guadalupe Basin River Authority
Blanco River	Crabapple Road	1,396.98	05/2015	100	Lower Colorado River Authority
Blanco River	Chimney Valley Road	1,195.51	05/2015	100	Lower Colorado River Authority
Blanco River	Cox Road	1,230.13	05/2015	100	Lower Colorado River Authority
Blanco River	Tejas Trail	1,276.14	05/2015	100	Lower Colorado River Authority
Blanco River	FM165	1,292.49	05/2015	100	Lower Colorado River Authority
Blanco River	Blanco State Park Restroom	1,311.18	05/2015	100	Lower Colorado River Authority
Little Blanco River	CR 101	1,276.33	05/2015	100	Lower Colorado River Authority
Little Blanco River	FM 473	1,176.35	05/2015	100	Lower Colorado River Authority

**Table 6: Historic Flooding Elevations, (continued)**

Flooding Source	Location	Historic Peak (Feet NAVD88)	Event Date	Approximate Recurrence Interval (years)	Source of Data
Little Blanco River	US 281	1,265.56	05/2015	100	Lower Colorado River Authority
San Marcos River	Cape Road	572.09	05/2015	100	Guadalupe Basin River Authority
San Marcos River	Ramon Lucio park	573.16	05/2015	100	Guadalupe Basin River Authority

### 4.3 Non-Levee Flood Protection Measures

Table 7 contains information about non-levee flood protection measures within Hays County such as dams, jetties, and or dikes. Levees are addressed in Section 4.4 of this FIS Report.

**Table 7: Non-Levee Flood Protection Measures**

Flooding Source	Structure Name	Type of Measure	Location	Description of Measure
Barton Creek	N/A	Dam	Various locations along Barton Creek	N/A
Barton Creek Tributary 1	N/A	Dam	Medlin Loop	Concrete Dam
Barton Creek Tributary 1	N/A	Dam	Various locations along Barton Creek Tributary 1	N/A
Barton Creek Tributary 2-1	N/A	Dam	Various locations along Barton Creek Tributary 2-1	N/A
Barton Creek Tributary 3	N/A	Dam	Various locations along Barton Creek Tributary 3	
Bear Creek	N/A	Dam	Various locations along Bear Creek	
Bear Creek Tributary 1A	N/A	Dam	Various locations along Bear Creek Tributary 1A	
Blanco River	5 Mile Dam	Dam	At station 47,432 along Blanco River	
Brushy Creek	N/A	Dam	Downstream end of reservoir near Satterwhite Road	Floodwater-retarding structure
Cottonwood Branch (Tributary to Roy Branch)	N/A	Dam	Various locations along Cottonwood Branch (Tributary to Roy Branch)	Floodwater-retarding structure
Cypress Creek	N/A	Dam	At station 72,453 along Cypress Creek	
Garlic Creek Tributary	N/A	Dam	Approximately 250 feet upstream of Cullen Blvd	



**Table 7: Non-Levee Flood Protection Measures, (continued)**

Flooding Source	Structure Name	Type of Measure	Location	Description of Measure
Little Barton Creek	N/A	Dam	Various locations along Little Barton Creek	
Loneman Creek	N/A	Dam	Various locations along Loneman Creek	
Long Branch	N/A	Dam	Various locations along Long Branch	
Onion Creek	N/A	Dam/Weir	Various locations along Onion Creek	
Plum Creek	N/A	Dam	SCS Dam No. 1	Floodwater-retarding structure
Purgatory Creek	NRCS Dam 5	Dam	Purgatory Creek Natural Area	
Purgatory Creek	NRCS Dam No. 4	Dam	At station 45,201 along Purgatory Creek	
Roy Branch	N/A	Dam	Various locations along Roy Branch	
San Marcos River	Public Dam	Dam	At station 403,417 along San Marcos River	
Sink Creek	SCS Dam No. 1	Dam	Approximately 6,000 feet upstream of the confluence of Pope Creek	
Sink Creek	SCS Dam No. 3	Dam	Approximately 2.5 miles upstream of the confluence with San Marcos Tributary	
Smith Creek	N/A	Dam	Various locations along Smith Creek	
Stream Brushy-1A	N/A	Dam	Approximately 1,275 feet upstream of Goforth Rd	

**Table 7: Non-Levee Flood Protection Measures, (continued)**

Flooding Source	Structure Name	Type of Measure	Location	Description of Measure
Stream Plum-1	SCS Dam No.2	Dam	Approximately 2,050 feet upstream of the confluence with Plum Creek	
Unnamed Lake	Dam No. 13	Dam	Downstream of Cottonwood Creek	

**4.4 Levees**

This section is not applicable to this Flood Risk Project.

**Table 8: Levees**

**[Not Applicable to this Flood Risk Project]**

## SECTION 5.0 – ENGINEERING METHODS

For the flooding sources in the community, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this study. Flood events of a magnitude that are expected to be equaled or exceeded at least once on the average during any 10-, 25-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for floodplain management and for flood insurance rates. These events, commonly termed the 10-, 25-, 50-, 100-, and 500-year floods, have a 10-, 4-, 2-, 1-, and 0.2% annual chance, respectively, of being equaled or exceeded during any year.

Although the recurrence interval represents the long-term, average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered. For example, the risk of having a flood that equals or exceeds the 100-year flood (1-percent chance of annual exceedance) during the term of a 30-year mortgage is approximately 26 percent (about 3 in 10); for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported herein reflect flooding potentials based on conditions existing in the community at the time of completion of this study. Maps and flood elevations will be amended periodically to reflect future changes.

In addition to these flood events, the “1-percent-plus”, or “1%+”, annual chance flood elevation has been modeled and included on the flood profile for certain flooding sources in this FIS Report. While not used for regulatory or insurance purposes, this flood event has been calculated to help illustrate the variability range that exists between the regulatory 1% annual chance flood elevation and a 1% annual chance elevation that has taken into account an additional amount of uncertainty in the flood discharges (thus, the 1% “plus”). For flooding sources whose discharges were estimated using regression equations, the 1%+ flood elevations are derived by taking the 1% annual chance flood discharges and increasing the modeled discharges by a percentage equal to the average predictive error for the regression equation. For flooding sources with gage- or rainfall-runoff-based discharge estimates, the upper 84-percent confidence limit of the discharges is used to compute the 1%+ flood elevations.

The engineering analyses described here incorporate the results of previously issued Letters of Map Change (LOMCs) listed in Table 26, “Incorporated Letters of Map Change”, which include Letters of Map Revision (LOMRs). For more information about LOMRs, refer to Section 6.5, “FIRM Revisions.”

### 5.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish the peak elevation-frequency relationships for floods of the selected recurrence intervals for each flooding source studied. Hydrologic analyses are typically performed at the watershed level. Depending on factors such as watershed size and shape, land use and urbanization, and natural or man-made storage, various models or methodologies may be applied. A summary of the hydrologic methods applied to develop the discharges used in the hydraulic analyses for

each stream is provided in Table 12. Greater detail (including assumptions, analysis, and results) is available in the archived project documentation.

A summary of the discharges is provided in Table 9. Frequency Discharge-Drainage Area Curves used to develop the hydrologic models may also be shown in for selected flooding sources. A summary of Stillwater elevations developed for non-coastal flooding sources is provided in Table 10. Stream gage information is provided in Table 11.

**Table 9: Summary of Discharges**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Barton Creek	Approximately 0.63 miles downstream from confluence with Cambrian Creek	42.11	27,360	35,650	42,240	49,480	50,310	69,870
Barton Creek	Approximately 0.41 miles from confluence with Cambrian Creek	41.89	27,390	35,660	42,270	49,480	50,310	69,870
Barton Creek	Approximately 1,000 feet downstream from confluence with Cambrian Creek	39.78	26,890	34,800	41,010	48,070	48,880	67,950
Barton Creek	Approximately 0.28 miles downstream from confluence with Roy Branch	38.80	26,850	34,670	40,750	47,860	48,690	67,530
Barton Creek	Approximately 750 feet upstream from confluence with Roy Branch	35.71	25,760	33,170	38,790	45,890	46,670	63,930
Barton Creek	Approximately 1.12 miles upstream from confluence with Roy Branch	33.24	24,800	31,810	37,290	43,990	44,870	60,950

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Barton Creek	Approximately 0.28 miles downstream from confluence with Little Barton Creek (in Dipping Springs)	31.69	24,420	31,150	36,560	43,050	43,980	59,450
Barton Creek	Approximately 0.40 miles upstream from confluence with Little Barton Creek (in Dipping Springs)	25.53	21,400	27,450	32,090	37,440	38,400	51,190
Barton Creek	Approximately 1.11 miles downstream from confluence with Fitzhugh Creek	23.96	20,640	26,480	30,890	35,920	36,940	49,050
Barton Creek	Approximately 0.28 miles downstream from confluence with Fitzhugh Creek	22.59	20,760	26,630	31,010	35,920	37,020	49,160
Barton Creek	Approximately 800 feet upstream from confluence with Fitzhugh Creek	16.28	14,550	18,830	22,020	25,500	26,460	34,710
Barton Creek	Approximately 0.72 miles upstream from confluence with Fitzhugh Creek	15.07	13,960	17,980	20,980	24,340	25,340	32,960

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Barton Creek	Approximately 0.32 miles downstream from confluence with Barton Creek Tributary 1	13.91	13,350	17,130	19,950	23,090	24,100	31,030
Barton Creek	Just downstream from confluence with Barton Creek Tributary 1	11.60	10,610	13,680	16,010	18,520	19,400	24,910
Barton Creek	Approximately 0.24 miles downstream from confluence with Barton Creek Tributary 2	10.91	9,970	12,820	15,070	17,400	18,320	23,390
Barton Creek	Approximately 550 feet downstream from confluence with Barton Creek Tributary 2	9.47	8,400	11,080	12,900	14,820	15,650	20,220
Barton Creek	Approximately 0.25 miles downstream from confluence with Barton Creek Tributary 3	9.23	8,280	10,900	12,670	14,560	15,420	20,010
Barton Creek	Approximately 400 feet downstream from confluence with Barton Creek Tributary 3	7.92	7,100	9,100	10,490	12,250	12,640	17,670

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Barton Creek	Approximately 550 feet upstream from confluence with Barton Creek Tributary 3	7.67	6,920	8,840	10,240	11,980	12,280	17,290
Barton Creek Tributary 1	2,981 (Approximately 0.56 miles upstream from confluence of Barton Creek Tributary 1 with Barton Creek)	2.308	3,140	3,920	4,530	5,210	5,540	7,030
Barton Creek Tributary 1	11,091 (Approximately 2.1 miles upstream from confluence of Barton Creek Tributary 1 with Barton Creek)	1.072	1,570	1,940	2,230	2,560	2,740	3,430
Barton Creek Tributary 2	1,841 (Approximately 0.35 miles upstream from confluence of Barton Creek Tributary 2 with Barton Creek)	1.441	2,340	2,870	3,290	3,770	3,940	5,040
Barton Creek Tributary 2	4,100 (Approximately 0.77 miles upstream from confluence of Barton Creek Tributary 2 with Barton Creek)	1.283	2,220	2,720	3,110	3,560	3,750	4,750



**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Barton Creek Tributary 2	6,290 (Approximately 1.2 miles upstream from confluence of Barton Creek Tributary 2 with Barton Creek)	0.686	1,050	1,300	1,490	1,700	1,800	2,280
Barton Creek Tributary 2	9,599 (Approximately 1.8 miles upstream from confluence of Barton Creek Tributary 2 with Barton Creek)	0.412	630	780	890	1,020	1,080	1,370
Barton Creek Tributary 2.1	1,906 (Approximately 0.36 miles upstream from confluence of Barton Creek Tributary 2.1 with Barton Creek Tributary 2)	0.597	1,220	1,480	1,700	1,950	2,030	2,600
Barton Creek Tributary 2.1	4,795 (Approximately 0.91 miles upstream from confluence of Barton Creek Tributary 2.1 with Barton Creek Tributary 2; Approximately 772 feet north of Bell Springs road)	0.377	880	1,060	1,200	1,360	1,440	1,790

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Barton Creek Tributary 3	1,710 (Approximately 0.32 miles upstream from confluence of Barton Creek Tributary 3 with Barton Creek)	1.313	2,440	2,990	3,430	3,920	4,100	5,230
Barton Creek Tributary 3	5,285 (Approximately 1 mile upstream from confluence of Barton Creek Tributary 3 with Barton Creek)	0.931	1,950	2,370	2,700	3,080	3,270	4,090
Barton Creek Tributary 3	9,266 (Approximately 1.75 miles upstream from confluence of Barton Creek Tributary 3 with Barton Creek)	0.248	670	810	920	1,040	1,120	1,350
Bear Creek	77,289	*	2,740	4,480	5,770	7,030	*	8,740
Bear Creek	75,403	*	3,910	6,500	830	10,240	*	12,770
Bear Creek	67,912	*	4,470	7,250	9,560	11,770	*	14,810
Bear Creek	65,066	*	7,360	12,050	15,620	19,310	*	24,110
Bear Creek	61,728	*	7,610	12,400	16,020	19,900	*	24,970
Bear Creek	59,293	*	8,160	13,260	17,110	21,360	*	26,920
Bear Creek	54,011	*	8,300	13,580	17,520	21,910	*	27,740
Bear Creek	50,498	*	10,210	16,810	21,660	27,240	*	34,790

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Bear Creek	46,130	*	10,340	17,100	22,040	27,650	*	35,360
Bear Creek Tributary 1A	3,152 (Approximately 0.6 miles upstream from the confluence of Stream Bear-1 with Bear Creek)	*	1,090	1,650	2,070	2,500	*	3,580
Bear Creek Tributary 1A	12,191 (Approximately 2.31 miles upstream from the confluence of Stream Bear-1 with Bear Creek)	*	350	530	660	800	*	1,150
Blanco River	At confluence with San Marcos River <sup>1</sup>	436.2	49,550	*	96,710	101,900	*	108,920
Blanco River	At Interstate 35 <sup>1</sup>	432.7	50,780	*	116,570	158,330	*	238,580
Blanco River	At Kyle Gage	412.3	50,700	*	116,300	153,900	*	244,900
Blanco River	Just upstream from Halifax Creek	392.7	50,900	*	116,400	152,900	*	241,500
Blanco River	Just downstream of confluence with Loneman Creek	382.9	51,300	*	116,700	153,100	*	241,000
Blanco River	At Ranch Road 12	355.1	51,600	*	116,600	152,600	*	238,500
Blanco River	Just upstream from Wilson Creek	310.7	50,800	*	114,000	147,900	*	228,700

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Blanco River	Just upstream from Carpers Creek	274.7	51,100	*	112,900	145,200	*	221,500
Blanco River	At Fischer Store Road	268.8	51,600	*	113,900	146,100	*	222,200
Blanco River	Just upstream from Wanslow Creek	239.0	51,700	*	111,700	141,100	*	213,400
Blanco River	Just downstream of Little Blanco River	237.8	51,900	*	111,800	141,300	*	213,300
Blanco River	Just Upstream of Little Blanco River	169.1	40,600	*	85,100	106,900	*	159,500
Blanco River Overflow Upstream of I-35	6,696 (Approximately 1.12 miles upstream from the confluence with Blanco River)	*	*	*	*	630	*	*
Brushy Creek	Approximately 3,450 feet downstream from State Highway 21	21.79	4,140	*	7,720	9,640	*	15,070
Brushy Creek	Approximately 970 feet upstream from confluence with Stream Brushy-1	12.12	1,750	*	2,860	3,490	*	6,610
Brushy Creek	At SCS Dam No. 12, approximately 1,050 feet upstream from FM 2001	8.62	90	*	105	115	*	130

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Brushy Creek	At outflow of SCS Dam No. 12	8.61	55	*	500	2,140	*	6,610
Brushy Creek	Just downstream from emergency spillway channel for SCS Dam No. 10	1.80	125	*	245	580	*	1,910
Brushy Creek	At approximately 1,900 feet downstream of County Road 118	0.63	1,201	*	1,625	1,917	*	2,571
Brushy Creek	Outflow from weir, approximately 600 feet downstream of Sunbright Boulevard	0.16	350	*	480	570	*	768
Bunton Branch	Approximately 3,160 feet upstream of Interstate 35	2.5	3,267	*	5,679	6,961	*	10,459
Bypass Creek	At confluence with the San Marcos River	7.1	4,000	*	5,890	18,190	*	61,380
Bypass Creek	At State Highway 80	6.9	3,960	*	5,770	18,260	*	61,400
Bypass Creek	At Railroad Crossing	5	3,670	*	4,600	17,810	*	61,450
Bypass Creek	At Arnold Avenue	4.1	3,450	*	3,880	4,780	*	21,330
Bypass Creek	At State highway 21	3.8	3,870	*	6,250	7,580	*	44,580
Bypass Creek	At Harris Hill Road 1 <sup>st</sup> Crossing	2.4	2,290	*	3,710	6,090	*	44,440

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Bypass Creek	At Harris Hill Road 2 <sup>nd</sup> Crossing	1.1	1,090	*	1,780	2,180	*	2,760
Cambrian Branch	3,282 (Approximately 0.62 miles upstream from the confluence with Barton Creek)	*	3,590	4,380	5,000	5,700	*	7,570
Cambrian Branch	9,767 (Approximately 1.85 miles upstream from the confluence with Barton Creek)	*	1,960	2,320	2,640	2,990	*	3,910
Cambrian Branch	11,573 (Approximately 2.19 miles upstream from the confluence with Barton Creek)	*	1,350	1,630	1,850	2,100	*	2,750
Cambrian Branch	15,121 (Approximately 2.86 miles upstream from the confluence with Barton Creek)	*	810	980	1,110	1,260	*	1,650
Cambrian Branch Tributary 1	1,980 (Approximately 0.37 miles upstream from the confluence of Cambrian Branch with Barton Creek)	*	630	750	850	960	*	1,250

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Cottonwood Branch (Tributary to Roy Branch)	1,597 (Approximately 0.30 miles upstream from the confluence of Cottonwood Branch with Roy Branch)	*	*	*	*	3,600	*	*
Cottonwood Branch (Tributary to Roy Branch)	7,800 (Approximately 1.47 miles upstream from the confluence of Cottonwood Branch with Roy Branch)	*	*	*	*	2,900	*	*
Cottonwood Creek	Approximately 1,420 feet downstream of State Highway 123	7.41	5,750	*	8,470	10,250	*	14,640
Cottonwood Creek	Approximately 560 feet upstream of State Highway 123	6.63	4,980	*	7,360	9,150	*	12,390
Cottonwood Creek	Approximately 1,840 feet upstream of State Highway 123	6.43	4,910	*	7,430	8,750	*	12,140
Cottonwood Creek	Approximately 550 feet upstream of Clovis Barker Road	4.19	3,100	*	3,870	4,750	*	6,220
Cottonwood Creek	Approximately 1,100 feet upstream of East McCarty Lane	3.08	3,020	*	4,450	5,230	*	7,310

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Cottonwood Creek	Approximately 3,250 feet upstream of East McCarty Lane	2.58	2,620	*	3,640	4,190	*	5,390
Cottonwood Creek	Approximately 4,100 feet upstream of East McCarty Lane	2.50	2,250	*	3,200	3,670	*	4,710
Cottonwood Creek	Approximately 120 feet upstream of bridge entrance to outlet mall	2.15	1,890	*	2,370	2,590	*	3,100
Cottonwood Creek	Just downstream of IH 35	1.24	970	*	1,390	1,560	*	1,920
Cottonwood Creek	Approximately 620 feet upstream of IH 35	1.12	690	*	720	720	*	750
Cypress Creek	Just upstream of the confluence with the Blanco River	38	23,750	*	36,230	42,960	*	61,940
Cypress Creek	At Ranch Road-12 1 <sup>st</sup> Crossing	37.7	23,740	*	36,210	42,940	*	61,940
Cypress Creek	Approximately 3,000 feet downstream of Ranch Road 12 2 <sup>nd</sup> Crossing	34.6	23,290	*	35,180	42,020	*	60,240
Cypress Creek	Just downstream of Hog Creek confluence	33.1	23,100	*	34,670	41,650	*	59,370
Cypress Creek	At Jacobs Well Road	30.4	22,260	*	33,330	40,650	*	57,030



**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Cypress Creek	Just downstream of confluence with Stream Cypress-1	21.7	18,250	*	26,910	31,830	*	44,140
Cypress Creek	At Ledge Rock Road	7.7	7,050	*	10,410	12,340	*	16,990
Cypress Creek	At Pump Station Road	3.6	3,350	*	5,010	5,950	*	8,380
Dripping Springs	1,645 (Approximately 0.31 miles upstream of the confluence with Onion Creek)	*	1,200	1,990	2,570	3,140	*	4,550
Dripping Springs	4,692 (Approximately 0.89 miles upstream of the confluence with Onion Creek)	*	660	1,080	1,380	1,680	*	2,430
Dripping Springs	9,134 (Approximately 1.73 miles upstream of the confluence with Onion Creek)	*	60	90	120	140	*	200
Dripping Springs Tributary	1,181 (Approximately 0.22 miles upstream of the confluence with Dripping Springs)	*	490	800	1,030	1,250	*	1,800
Dripping Springs Tributary	3,549 (Approximately 0.66 miles upstream of the confluence with Dripping Springs)	*	370	610	780	950	*	1,370

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Garlic Creek	8,492 (Approximately 1.61 miles upstream from the confluence of Garlic Creek)	*	2,650	4,400	5,770	7,360	*	11,470
Garlic Creek	12,601 (Approximately 2.4 miles upstream from the confluence of Garlic Creek)	*	2,390	3,910	5,090	6,440	*	9,900
Garlic Creek	14,774 (Approximately 2.8 miles upstream from the confluence of Garlic Creek)	*	2,180	3,510	4,540	5,670	*	8,600
Garlic Creek	21,827 (Approximately 4.13 miles upstream from the confluence of Garlic Creek)	*	2,030	3,230	4,150	5,150	*	7,710
Garlic Creek	28,792 (Approximately 5.45 miles upstream from the confluence of Garlic Creek)	*	1,700	2,610	3,290	3,970	*	5,700
Garlic Creek	32,716.44 (Approximately 6.2 miles upstream from the confluence of Garlic Creek)	*	1,150	1,760	2,220	2,680	*	3,850

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Garlic Creek	31,848 (Approximately 6.03 miles upstream from the confluence of Garlic Creek)	*	1,150	1,760	2,220	2,680	*	3,850
Garlic Creek Tributary	4,416 (Approximately 0.84 miles upstream from the confluence of Garlic Creek Tributary 1 with Garlic Creek)	*	470	780	1,010	1,240	*	1,810
Hamilton Creek Tributary 1	Approximately one mile upstream of the county boundary	1.03	*	*	*	3,786	*	*
Hog Creek	Confluence with Cypress Creek	1.9	2,780	*	3,430	4,980	*	7,330
Hog Creek	Brookhollow Drive	1.6	2,530	*	3,930	4,750	*	6,810
Hog Creek	Brookmeadow Drive	1.4	2,440	*	3,790	4,570	*	6,500
Hog Creek	Mountain Crest Drive	1.3	2,350	*	3,700	4,410	*	6,250
Hog Creek	Ranch Road 12	0.9	1,940	*	2,930	3,440	*	4,790
Little Barton Creek	3,244 (Approximately 0.61 miles upstream from the confluence of Little Barton Creek with Barton Creek)	*	8,800	11,010	12,690	14,510	*	19,420

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Little Barton Creek	6,339 (Approximately 1.2 miles upstream from the confluence of Little Barton Creek with Barton Creek)	*	8,100	10,090	11,630	13,340	*	17,840
Little Barton Creek	8,081 (Approximately 1.53 miles upstream from the confluence of Little Barton Creek with Barton Creek)	*	6,550	8,160	9,400	10,790	*	14,330
Little Barton Creek	10,570 (Approximately 2 miles upstream from the confluence of Little Barton Creek with Barton Creek)	*	5,020	6,220	7,160	8,220	*	10,820
Little Barton Creek	12,894 (Approximately 2.44 miles upstream from the confluence of Little Barton Creek with Barton Creek)	*	3,660	4,510	5,180	5,940	*	7,380
Little Barton Creek	18,108 (Approximately 3.43 miles upstream from the confluence of Little Barton Creek with Barton Creek)	*	2,830	3,450	3,950	4,500	*	5,980

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Little Barton Creek	22,841 (Approximately 4.32 miles upstream from the confluence of Little Barton Creek with Barton Creek)	*	1,020	1,230	1,390	1,580	*	2,080
Little Barton Creek	24,469 (Approximately 4.63 miles upstream from the confluence of Little Barton Creek with Barton Creek)	*	610	740	840	950	*	1,250
Little Bear Creek	15,041 (Approximately 600 feet from intersection of Little Bear Creek with Carpenter Lane)	*	7,390	13,760	19,040	23,840	*	35,500
Little Bear Creek	26,404 (Approximately 200 feet from intersection of Little Bear Creek with Chaparral Rd)	*	7,180	13,270	18,190	22,810	*	34,230
Little Bear Creek	32,780 (Approximately 6.21 miles upstream from confluence of Little Bear Creek)	*	6,240	11,440	15,550	19,560	*	29,510

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Little Bear Creek	44,190 (Approximately 0.40 miles downstream from confluence of Little Bear Creek with Little Bear Creek Tributary 2B)	*	5,610	10,230	13,660	17,430	*	26,550
Little Bear Creek	45,822 (Approximately at the confluence of Little Bear Creek with Little Bear Creek Tributary 2B)	*	5,440	9,790	13,020	16,530	*	24,940
Loneman Creek	Just upstream from confluence with the Blanco River	12.98	4,050	*	9,390	12,090	*	21,560
Loneman Creek	Just upstream from confluence with Smith Creek	6.25	2,490	*	5,710	7,330	*	12,960
Long Branch	23,188 (Approximately 4.39 miles upstream from confluence of Long Branch)	*	3,480	4,290	4,920	5,630	*	7,580
Long Branch	29,414 (Approximately 5.57 miles upstream from confluence of Long Branch)	*	1,490	1,800	2,060	2,340	*	3,110

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Long Branch	31,574.12 (Approximately 5.97 miles upstream from confluence of Long Branch)	*	1,040	1,260	1,440	1,640	*	2,180
Onion Creek	Approximately 2.12 miles upstream from confluence with Bear Creek	173.17	22,590	42,300	61,470	80,490	82,310	124,480
Onion Creek	Approximately 2.78 miles upstream from confluence with Bear Creek	171.12	22,480	42,130	61,260	80,260	82,080	124,220
Onion Creek	Approximately 0.36 miles downstream from Union Pacific Railroad	170.59	22,460	42,110	61,260	80,250	82,080	124,250
Onion Creek	Approximately 1.7 miles downstream from confluence with Mustang Branch (167,934)	167.17	22,300	41,910	61,100	80,140	82,040	124,090
Onion Creek	Approximately 1.22 miles downstream from confluence with Mustang Branch (170,478)	166.04	22,230	41,810	60,990	80,010	81,920	123,930

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Onion Creek	At confluence with Mustang Branch	163.51	22,110	41,660	60,860	79,850	81,790	123,850
Onion Creek	Approximately 0.77 miles upstream from confluence with Mustang Branch	154.97	21,380	40,570	59,630	78,320	80,290	121,380
Onion Creek	Approximately 0.66 miles downstream from Ruby Ranch Road	153.66	21,310	40,480	59,570	78,250	80,220	121,260
Onion Creek	Approximately 0.5 miles downstream from Ruby Ranch Road	152.13	21,220	40,370	59,450	78,250	80,090	121,030
Onion Creek	Just downstream from Ruby Ranch Road	150.72	21,150	40,300	59,390	78,040	80,040	120,890
Onion Creek	Approximately 0.48 miles upstream from Ruby Ranch Road	144.78	20,820	39,910	58,940	77,480	79,490	119,920
Onion Creek	Approximately 2.11 miles downstream from confluence with Yorks Creek	142.33	20,700	29,800	58,860	77,370	79,410	119,640
Onion Creek	At confluence with Yorks Creek	138.35	20,530	39,640	58,720	77,140	79,200	119,190



**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Onion Creek	Approximately 0.64 miles upstream from confluence with Yorks Creek	128.84	19,970	38,790	57,530	75,710	77,860	116,770
Onion Creek	Approximately 2.76 miles downstream from confluence with Flat Creek	126.62	19,890	38,700	57,460	75,590	77,760	116,540
Onion Creek	Approximately 0.45 miles downstream from confluence with Flat Creek	123.67	19,800	38,600	57,380	75,420	77,600	116,220
Onion Creek	Just upstream from confluence with Flat Creek	122.66	19,770	38,570	57,380	75,390	77,570	116,130
Onion Creek	Approximately 0.75 miles upstream from confluence with Flat Creek	115.55	19,410	38,050	56,690	74,580	76,760	114,870
Onion Creek	At confluence with Rattlesnake Lake	114.59	19,380	38,010	56,670	74,530	76,710	114,780
Onion Creek	At confluence with Rocky Branch	110.32	19,150	37,640	56,120	73,860	76,070	113,610

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Onion Creek	Approximately 0.57 miles downstream from Farm to Market Road 1826	105.81	18,830	37,110	55,370	72,960	75,220	112,100
Onion Creek	At confluence with Pier Branch	103.20	18,710	36,910	55,120	72,640	74,950	111,520
Onion Creek	Approximately 0.86 miles upstream from confluence with Pier Branch	97.47	18,240	36,170	54,110	71,470	73,890	109,610
Onion Creek	Just upstream from confluence with Jackson Branch	95.51	18,190	36,120	54,100	71,500	74,000	109,550
Onion Creek	Approximately 0.45 miles upstream from confluence with Jackson Branch	89.60	17,580	35,130	52,360	69,500	72,090	106,450
Onion Creek	Approximately 800 feet upstream from confluence with Gatlin Creek	88.52	17,550	35,140	52,330	69,510	72,070	106,420
Onion Creek	Approximately 0.87 miles upstream from confluence with Gatlin Creek	72.78	16,160	31,660	45,160	57,710	59,800	87,260

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Onion Creek	Approximately 1000 feet upstream from confluence with South Onion Creek	70.77	16,200	31,640	45,050	57,430	59,520	86,530
Onion Creek	Approximately 1.02 miles upstream from confluence with South Onion Creek	46.85	10,060	20,290	29,410	37,870	39,500	57,070
Onion Creek	Approximately 1.90 miles upstream from confluence with South Onion Creek	43.93	10,040	20,300	29,330	37,700	39,330	56,770
Onion Creek	Approximately 2.11 miles upstream from confluence with South Onion Creek	42.18	9,940	20,120	29,040	36,960	38,450	55,020
Onion Creek	Approximately 2.46 miles upstream from confluence with South Onion Creek	41.84	9,960	20,160	29,060	36,960	38,460	55,000
Onion Creek	Approximately 2.77 miles upstream from confluence with South Onion Creek	39.85	9,840	19,970	28,770	36,570	38,110	54,370

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Onion Creek	Approximately 3.35 miles upstream from confluence with South Onion Creek	39.33	9,890	20,050	28,810	36,580	38,130	54,340
Onion Creek	Approximately 3.68 miles upstream from confluence with South Onion Creek	38.13	9,810	19,920	28,620	36,330	37,880	53,990
Onion Creek	Approximately 2.28 miles downstream from McCafferty Road	36.74	9,810	19,900	28,540	36,210	37,780	53,740
Onion Creek	Approximately 1.6 miles downstream from McCafferty Road	33.53	9,540	19,320	27,650	35,000	36,700	51,980
Onion Creek	Approximately 600 feet upstream from McCafferty Road	30.85	9,450	18,930	27,000	34,130	35,960	50,660
Onion Creek	Approximately 0.94 miles upstream from McCafferty Road	26.59	9,280	18,310	26,130	32,950	34,840	48,960
Onion Creek	*	22.76	8,890	17,150	24,580	30,760	32,570	45,810
Onion Creek	*	20.48	8,370	16,320	23,170	28,910	30,630	42,960
Onion Creek	*	20.23	8,390	16,320	23,160	28,900	30,610	42,950
Onion Creek	*	15.66	6,680	13,500	18,800	23,440	24,830	34,660

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Onion Creek	*	10.73	5,540	10,840	14,580	18,060	19,320	26,470
Onion Creek	*	8.88	5,520	10,130	13,440	16,620	17,870	24,280
Onion Creek	*	5.84	3,770	6,710	8,890	10,980	11,830	16,030
Onion Creek	*	3.16	2,300	4,010	5,300	6,540	7,200	9,560
Plum Creek	Approximately 1,880 feet downstream from State Route 21	37.00	5,050	*	9,580	14,150	*	34,850
Plum Creek	Approximately 2,400 feet upstream from County Route 156	15.96	3,480	*	6,480	9,590	*	17,370
Plum Creek	Approximately 580 feet upstream from confluence with Stream Plum-1 tributary	5.82	1,860	*	3,580	4,460	*	7,080
Plum Creek	Just upstream from emergency spillway channel	1.89	120	*	190	240	*	1,670
Plum Creek	Approximately 1,050 feet downstream of Sanders Road	1.26	*	*	*	4,250	*	*
Plum Creek	Approximately 490 feet upstream of confluence of Plum Creek Tributary 2	0.86	*	*	*	3,140	*	*

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Plum Creek	At Jack C. Hays Trail/FM-2770	0.53	*	*	*	1,840	*	*
Plum Creek Tributary 1	At SCS Site No. 1 Reservoir	0.49	*	*	*	1,860	*	*
Plum Creek Tributary 1	Approximately 490 feet downstream of Fairway Drive	0.35	*	*	*	1,350	*	*
Plum Creek Tributary 1	At Jack C. Hays Trail/FM-2770	0.26	*	*	*	1,070	*	*
Plum Creek Tributary 2	At confluence with Plum Creek	0.33	*	*	*	1,350	*	*
Plum Creek Tributary 2	At Jack C. Hays Trail/FM-2770	0.30	*	*	*	1,250	*	*
Pope Creek	At confluence with Sink Creek	4.8	970	*	1,400	1,600	*	4,400
Pope Creek	Outflows from NRCS Dam No. 2	4.3	110	*	120	880	*	4,300
Pope Creek	Inflows to NRCS Dam No. 2	4.3	6,900	*	10,200	11,900	*	16,200
Porter Creek	At Cement Plant Road	0.62	*	*	*	2,037	*	*
Purgatory Creek	At confluence with the San Marcos River	36.9	2,800	*	4,500	7,500	*	11,300

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Purgatory Creek	At South Guadalupe Street	36.8	2,800	*	4,800	7,500	*	17,300
Purgatory Creek	At South Mitchell Street	35.9	1,800	*	4,000	7,500	*	21,500
Purgatory Creek	At Hunter Road <sup>2</sup>	35.0	660	*	1,590	4,590	*	13,400
Purgatory Creek	Outflows from SCS Site No. 5	34.3	8,360	*	3,600	10,000	*	28,200
Purgatory Creek	Inflows to SCS Site No. 5	34.3	17,700	*	26,900	32,100	*	44,100
Purgatory Creek	Just upstream from confluence with Stream PC-1	28.8	9,100	*	13,500	16,000	*	33,500
Purgatory Creek	Outflows from SCS Site No. 4	20.0	440	*	3,600	9,500	*	30,200
Purgatory Creek	Inflows to SCS Site No. 4	20.0	17,100	*	25,700	30,400	*	42,000
Purgatory Creek Diversion 1	At confluence with Purgatory Creek <sup>2</sup>	*	1,040	*	2,040	5,410	*	14,900
Purgatory Creek Diversion 1	At Hunter Road <sup>2</sup>	*	1,040	*	2,040	5,410	*	14,900
Purgatory Creek Diversion 1	Just downstream of divergence with Purgatory Creek	*	1,040	*	2,040	4,690	*	9,940

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Richmond Branch	Approximately 2,600 feet upstream of the confluence with Porter Creek	1.69	2,435	*	3,385	3,867	*	5,796
Roy Branch	2,075 (Approximately 0.39 miles upstream from confluence of Roy Branch with Barton Creek)	*	*	*	*	7,480	*	*
Roy Branch	5,090 (Approximately 0.96 miles upstream from confluence of Roy Branch with Barton Creek)	*	*	*	*	7,010	*	*
Roy Branch	8,965 (Approximately 1.7 miles upstream from confluence of Roy Branch with Barton Creek)	*	*	*	*	3,630	*	*
Roy Branch	14,253 (Approximately 2.70 miles upstream from confluence of Roy Branch with Barton Creek)	*	*	*	*	2,550	*	*
San Marcos River	Just downstream of Blanco River <sup>1</sup>	531.3	51,270	*	116,420	144,160	*	186,930



**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
San Marcos River	Just upstream from the Blanco River <sup>1</sup>	94.9	10,800	*	19,750	42,320	*	80,010
San Marcos River	At Cape Road <sup>1</sup>	92.1	11,460	*	17,390	27,050	*	61,000
San Marcos River	At Interstate 35 <sup>1</sup>	87.4	8,360	*	13,030	16,920	*	35,230
San Marcos River	At Cheatham Street <sup>1</sup>	87.2	8,400	*	13,020	17,590	*	39,230
San Marcos River	Just downstream of Purgatory Creek <sup>1</sup>	86.9	8,370	*	12,950	17,810	*	42,030
San Marcos River	At East Hopkins Street <sup>1</sup>	49.4	5,610	*	8,380	10,920	*	33,820
San Marcos River	At Spring Lake Dam <sup>1</sup>	48.5	5,520	*	8,220	11,120	*	32,860
San Marcos River	At Lime Kiln Road <sup>1</sup>	48	5,650	*	8,810	11,300	*	33,720
Sink Creek	At Lime Kiln Road	44.6	5,300	*	7,900	10,800	*	32,900
Sink Creek	Outflows from SCS Site No. 3	43.3	930	*	3,300	10,900	*	33,000
Sink Creek	Inflows to SCS Site No. 3	43.3	9,100	*	13,400	15,900	*	35,400
Sink Creek	Outflows from SCS Site No. 1	33.6	330	*	2,900	8,100	*	31,700
Sink Creek	Inflows to Site No. 1	33.6	26,000	*	40,300	48,300	*	66,900
Sink Creek	At Fulton Ranch Road	14.7	12,400	*	19,700	23,600	*	32,800
Sink Creek	At Ranch Road 12	8	8,600	*	13,000	15,400	*	21,200

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Smith Creek	Just upstream from confluence with Loneman Creek	3.63	1,730	*	3,990	5,110	*	9,060
Spring Branch	At Union Pacific Railroad	1.43	*	*	*	2,276	*	*
Spring Branch	At FM 450	0.23	*	*	*	473	*	*
Stream Bear-1	At confluence with Bear Creek	4.85	2,260	*	6,880	9,900	*	21,590
Stream Bear-1	Just upstream of confluence with Stream Bear-1A	3.71	1,890	*	5,610	8,040	*	17,250
Stream Bear-2	Just upstream from confluence with Bear Creek	0.34	385	*	1,060	1,490	*	3,040
Stream Brushy-1	At confluence with Brushy Creek	5.47	2,270	*	4,010	4,930	*	7,430
Stream Brushy-1	Approximately 750 feet upstream from confluence with Stream Brushy-1A	1.66	1,025	*	1,760	2,150	*	3,170
Stream Brushy-1	Approximately 0.43 mile upstream from County Route 125	1.00	730	*	1,280	1,560	*	2,330
Stream Brushy-1A	At confluence with Stream Brushy-1	0.78	620	*	1,085	1,320	*	1,970

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Stream BPC-1	903 (Approximately 0.11 miles upstream of the confluence with Bypass Creek)	*	370	460	540	710	*	2,090
Stream BPC-1	2,066 (Approximately 0.33 miles upstream of the confluence with Bypass Creek)	*	190	230	390	940	*	2,380
Stream BPC-2	1,785 (Approximately 0.34 miles upstream of the confluence with Bypass Creek)	*	880	1,120	2,240	13,800	*	38,210
Stream BPC-2	4,329 (Approximately 0.82 miles upstream of the confluence with Bypass Creek)	*	440	560	2,420	13,870	*	38,360
Stream CC-1	Approximately 3,300 feet upstream of confluence with Cottonwood Creek	2.24	2,600	*	3,820	4,450	*	6,190
Stream CC-1	Approximately 260 feet upstream of Clovis Barker Road	1.27	1,660	*	2,100	2,290	*	2,790
Stream CC-1	Just downstream of IH 35	0.89	980	*	1,120	1,160	*	1,220

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Stream CC-1	Approximately 180 feet downstream of Barnes Drive	0.89	1,920	*	2,770	3,340	*	4,840
Stream CC-1	Approximately 200 feet upstream of Barnes Drive	0.73	1,510	*	2,230	2,610	*	3,690
Stream CC-1	Confluence with Cottonwood Creek Tributary 1S	0.62	1,160	*	1,730	2,040	*	2,870
Stream CC-1 South Tributary	Just downstream from Railroad	0.43	930	*	1,330	1,550	*	2,150
Stream CC-2	Just downstream of IH 35 and upstream of confluence with Cottonwood Creek	0.91	1,110	*	1,300	1,390	*	1,570
Stream CC-2	Approximately 1,100 feet downstream of the Railroad	0.76	910	*	1,200	1,360	*	1,820
Stream CC-2	Just downstream of the Railroad	0.55	640	*	770	960	*	1,880
Stream CC-2	Approximately 350 feet downstream of Hunter Road	0.55	1,260	*	1,800	2,090	*	2,910

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Stream CC-2	Approximately 140 feet upstream of Hunter Road	0.37	860	*	1,230	1,420	*	1,980
Stream CC-2	Approximately 1,600 feet upstream of Hunter Road	0.21	490	*	700	810	*	1,130
Stream CC-2D	Approximately 660 feet upstream of confluence with Cottonwood Creek	0.08	530	*	660	740	*	910
Stream CC-2D	Approximately 190 feet downstream of IH 35	*	310	*	360	390	*	460
Stream CC-2D	Approximately 1,000 feet upstream of IH 35	0.15	430	*	620	730	*	1,020
Stream CC-2D	Approximately 1,750 feet upstream of IH 35	0.03	90	*	120	150	*	200
Stream CC-2D	Approximately 2,360 feet upstream of IH 35	0.01	40	*	60	70	*	90
Stream CC-IH35	Overflow from Cottonwood Creek Tributary 2D	*	80	*	190	190	*	370
Stream CC-IH35	Just downstream of East McCarty Lane	*	70	*	110	110	*	130

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Stream Cypress-1	Just upstream from confluence with Cypress Creek	2.11	1,205	*	2,560	3,230	*	5,430
Stream LB-1	At confluence with Little Bear Creek	3.78	1,780	*	3,720	4,690	*	7,840
Stream PC-1	At confluence with Purgatory Creek	2.3	3,500	*	5,200	6,200	*	8,600
Stream PC-1	At West McCarty Lane	1.7	3,100	*	4,600	5,400	*	7,500
Stream Plum-1	At confluence with Plum Creek	2.96	135	*	445	1,300	*	3,450
Stream Plum-1	Just downstream of U.S. Interstate 35	1.16	810	*	1,400	1,710	*	2,550
Stream Plum-1	Approximately 1,000 feet downstream of South Sledge Road	0.62	530	*	915	1,110	*	1,640
Stream WSC-1	At confluence with Willow Springs Creek	0.4	980	*	1,500	1,770	*	2,530
Stream WSC-1	At West McCarty Lane	0.3	640	*	940	1,090	*	1,570
Stream WSC-RR	At confluence with Willow Springs Creek <sup>4</sup>	*	1,760	*	2,510	2,870	*	7,430
Stream WSC-RR Stream WSC-RR Stream WSC-RR Stream WSC-RR	Approximately 100 feet upstream of Railroad crossing <sup>4</sup>	*	2,000	*	3,000	3,540	*	5,090

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Stream WSC-RR	At divergence with Willow Springs Creek <sup>4</sup>	*	1,800	*	2,470	2,780	*	6,240
Unnamed Tributary to Blanco River	Approximately 350 feet downstream of Deer Lake Road	0.41	*	*	*	1,135	*	*
Unnamed Tributary to Plum Creek	At confluence with Plum Creek	0.53	*	*	*	209	*	*
Unnamed Tributary to Plum Creek	At Arbor Knot Drive	0.13	*	*	*	457	*	*
Unnamed Tributary to Blanco River	Approximately 350 feet downstream of Deer Lake Road	0.41	*	*	*	1,135	*	*
Walnut Spring	11,552 (Approximately 2.19 miles upstream of the confluence with Onion Creek)	*	170	270	350	420	*	610
Willow Springs Creek	At confluence with the San Marcos River	4.5	4,200	*	6,200	7,200	*	14,000
Willow Springs Creek	At South Guadalupe Street	3.8	3,600	*	5,000	5,700	*	12,900
Willow Springs Creek	At Ellis Street	3.5	3,400	*	4,800	5,400	*	9,400
Willow Springs Creek	Just upstream from confluence with WSC-RR	3.5	1,900	*	2,600	3,000	*	3,800

**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Willow Springs Creek	Just upstream of the Railroad Crossing	2.9	3,400	*	5,100	6,000	*	8,900
Willow Springs Creek	At Wonder World Drive	2.8	3,500	*	5,400	6,500	*	9,800
Willow Springs Creek	At Hunter Road	2.3	3,100	*	4,800	5,700	*	8,500
Willow Springs Creek	At Rolling Oaks	1.1	2,000	*	3,100	3,600	*	5,000
Willow Springs Creek	Just downstream of confluence with Stream WSC-1	1.0	1,900	*	2,900	3,400	*	4,700
Willow Springs Creek	At West McCarty Lane	0.5	950	*	1,400	1,600	*	2,300
Wilson Creek	At confluence with the Blanco River	5.35	2,240	*	4,780	6,060	*	10,250



**Table 9: Summary of Discharges, (continued)**

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Wilson Creek	Just upstream from Heaton Hollow	3.33	1,630	*	3,500	4,420	*	7,490

<sup>1</sup>Proposed Flows at these locations are taken from the Blanco-San Marcos confluence unsteady hydraulic model

<sup>2</sup>Proposed Flows at these locations are taken from the final flow splits in the Purgatory hydraulic model

<sup>3</sup>Proposed Flows at these locations are taken from the final flow splits in the Lower San Marcos hydraulic model

<sup>4</sup>Proposed Flows at these locations are taken from the final flow splits in the Willow Springs hydraulic model

\*Not calculated for this Flood Risk Project