SAN JUAN REGIONAL PLANNING COMMISSION AGENDA Tuesday April 18, 2023 7:00 PM

Planning Commission meetings will be conducted in a hybrid virtual/in-person format. All persons, including Board Members, Staff, Applicants, and Citizens may meet in-person, or via Zoom. Information necessary to connect to the public meeting is listed below.

7:00 PM – Roll Call of Members, and Minutes.

7:05 PM – Resolution 2023-02 to Amend 10-103.4 Floodplain Hazard Areas of the Zoning and Land Use Regulations to Adopt the Flood Insurance Study for San Juan County

7:20 PM – Ordinance 2023-XX An Emergency Ordinance To Amend Chapter 16 Article 4 Section 16-4-20 To Adopt The Flood Insurance Study For Town Of Silverton Colorado And Incorporated Areas, Dated May 9, 2023, With Accompanying Flood Insurance Rate Maps

7:40 PM – Ordinance 2023-XX An Ordinance Amending Chapter 16 Of The Municipal Code Of The Town Of Silverton Colorado, By Amending Subsection 16-1-40, Concerning The Timeline For The Planning Commission To Return A Recommendation Regarding A Code Amendment Or Change To The Board Of Trustees; And Subsection 16-1-50 Concerning The Board Of Trustees Rendering A Decision Within 60 Days Of Application Submission; And Subsection 16-4-730, Concerning The Timeline For The Historic Review Committee To Render A Decision After A Complete Submittal; And Subsection 16-5-20, Concerning The Board Of Trustees Issuing A Decision Within 30 Days From The Date Of A Mobile Home Park Submittal; And Subsection 16-5-40 Concerning The Board Of Trustees Issuing A Decision Within 60 Days Of The Date Of A Camper Park Submittal; And Chapter 17 Of The Municipal Code Of The Town Of Silverton Colorado, By Amending Subsection 17-2-20, Concerning The Town Rendering A Decision On An Outline Development Plan Within 45 Days; And Subsection 17-2-30, Concerning The Planning Commission Rendering A Decision Within 30 Days Of Submittal; And Subsection 17-2-40, Concerning The Planning Commission Approving Or Disapproving A Final Plat Within 30 Days After Submission; And Subsection 17-2-50, Concerning The Town Rendering A Decision Within 45 Days From An Application Submittal.

8:20 PM = Introduction to the Certified Local Government Ordinance

Other

Adjourn.

Next Planning Commission Meeting: Tuesday May 16, 2023 at 7:00 PM

Assigned times listed above are approximate.

Discussion of an agenda item may occur before or after the assigned time.

Join Zoom Meeting

https://zoom.us/j/92136473203

Meeting ID: 921 3647 3203

One tap mobile

- +16699006833,,92136473203# US (San Jose)
- +12532158782,,92136473203# US (Tacoma)

Dial by your location

- +1 669 900 6833 US (San Jose)
- +1 253 215 8782 US (Tacoma)
- +1 346 248 7799 US (Houston)

The San Juan Regional Planning Commission met virtually via zoom and in the Commissioner room on March 21, 2023, at 7:07 PM with roll call showing the following attendance:

Bev Rich	X	Ken Safranski	X
Jim Weller	Absent	Melissa Childs	X
Tyler George	Absent	Austin Lashley	X
Jim Harper	X		

Also present via Zoom, were, Bev Rich, Melissa Childs, Jim Harper, Fritz Klinke and various participants on phones, also Mr. App and son. Becky Almon (attorney for proposed Land Acquisitions) and Brian Holland from Sunnyside Gold and Dennis Golbricht County Attorney..

Chairperson Jim Weller was out of Town, so Ken Safranski took over as Chairperson of the meeting, he and Austin Lashley, William Tookey, County Administrator and Chris Tookey, Secretary were present in the Commissioners Room along with Anthony Edwards.

MINUTES February 21, 2023

Ken Safranski made a motion to approve the minutes of February 21, 2023, with a second from Bev Rich. The motion passed with a show of hands.

IMPROVEMENT PERMIT APPLICATION FROM FRED APP--CHARLESTON PLACER MS 12365 FOR CONSTRUCTION OF A STORAGE SHED AND REPAIRS TO THE WELL HOUSE

The owner Fred App was present on Zoom to answer any questions.

William Tookey acting as Land Use Administrator, gave the commission the background information. Mr. App was previously issued an improvement permit to construct a cabin with a condition that it would not be used during the winter months due to its location in an avalanche zone. The cabin survived for years before being destroyed by an avalanche in 2019, a year of extreme avalanches. The cabin was totally destroyed; however, the basement/crawl space was left intact. Mr. App would like to make the necessary repairs and improvements to the basement and make repairs to the well house. His plan is to use his property for a maximum of 20 days as use as a RV camping unit.

After discussion, questions and answers from the applicant, the commission members decided that an exemption to the Land Use Code be granted recognizing that this application creates unique circumstances and allow the applicant to preserve the enjoyment of the property and is not detrimental to the public welfare or injurious to other property rights, Austin Lashley made a motion to recommend to the County Commissioners to approve this improvement application with the six conditions listed with the addition to #5 that NO generator usage except during an emergency period when electricity is not available to the site. Jim Harper seconded, and it was unanimous with a show of hands.

A letter was sent to the San Juan County Commissions.

SAN JUAN COUNTY PROPOSED LAND ACQUISITION AND PROPERTIES TO BE DONATED BY SUNNYSIDE GOLD CORPORATION

Sunnyside Gold Corporation has offered to donate all of it's properties located within San Juan County to San Juan County. The first step was to enter an engagement letter with Rebecca Almon of the Ireland, Stapleton, Pryor and Pascoe law firm to address the potential environmental liability issues and to guide us through the "Bona Fide Prospective Purchaser" process to limit the County's liability of the proposed land transfer which included an Phase 1 Environmental Site Assessment. Phase 1 has been completed. The complete report is 1555 pages which was on the table for this meeting and available online.

Rebecca Almon was present on Zoom to give the Planning Commission a thorough understanding of the procedure and what the County Commissioners will be voting on. Brian Holland, from Sunnyside Gold, Anthony Edwards, Dennis Golbricht, County Attorney were all available to answer questions. After the completion of the presentation by Rebecca Almon, Ken Safranski made the motion to recommend that the San Juan County Commissioners to approve the proposed land acquisition of the properties too be donated by Sunnyside Gold Corporation. Austin Lashley seconded. The motion passed unanimously with a show of hands.

The meeting was adjourned at 8:15 PM.		
Respectfully Submitted,		
Christine M. Tookey, Secretary		
	Approved	

San Juan Regional Planning Commission

SAN JUAN COUNTY TOWN OF SILVERTON Silverton, Colorado 81433 P.O. Box 223

March 21,2023

Board of County Commissioners San Juan County Silverton, CO 81433

Members of the Commission:

RE: Improvement Permit

Fred App Construction of a Storage Shed

and repairs to the well house on Charleston Placer MS 12365

At a regular meeting of the San Juan Regional Planning Commission on March 21, 2023, members of that Commission discussed an application for an Improvement Permit for the construction of a storage shed and also needed repairs to the well house on the Charleston Placer MS 12365. The owner, Mr. Fed App was present on Zoom to answer any questions.

The background information regarding the property was given by William Tookey, acting as Land Use Administer. After discussion, questions and answers from the applicant, the Planning Commission voted to recommend to the San Juan County Commissioners that 1. an exemption to the Land Use Code be granted recognizing that the application creates unique circumstances, allows the applicant to preserve the enjoyment of the property and is not detrimental to the public welfare or injurious to other property rights. 2. The Commissioners approve this application for the Improvement Permit with six conditions listed with the addition to number 5 that NO generator usage will be used except during an emergency period when electricity is not available to the site. The motion passed unanimously with a show of hands.

Thank you for considering this recommendation.

Sincerely,

The Planning Commission Members and Ken Safranski, Acting Chairperson

MEMORANDUM

April 18, 2023

TO: San Juan County Regional Planning Commission

FR: William A. Tookey

RE: Amendment to 10-103.4 Floodplain Hazard Areas of the Zoning and Land Use

Regulations

The Federal Emergency Management Agency (FEMA) has completed a new Flood Insurance Study for San Juan County. The completed study includes new Flood Insurance Rate Maps for the National Flood Insurance Program. The completed study with maps becomes effective as of May 9, 2023. The current FEMA study and maps are dated March 1978.

In order to be in compliance with FEMA San Juan County needs to amend Section 10-103.4 of the Zoning and Land Use Regulations to reflect the new Flood Insurance Study. Failure to be in compliance with FEMA could prevent property owners from purchasing flood insurance.

A copy of the proposed Resolution 2023-02 and the amended Section 10-103.4 are included along with a copy of the Flood Insurance Study and Maps.

RESOLUTION 2023-02

A RESOLUTION AMENDING THE ZONING AND LAND USE REGULATION CONCERNING FLOODPLAIN MAPS AND FLOODPLAIN REGULATIONS

- **WHEREAS**, Federal Emergency Management Agency (FEMA) has produced a new Flood Insurance Study (FIS) and Floodplain Insurance Rate Map (FIRM) for San Juan County: and
- WHEREAS, San Juan County has been mandated by FEMA and Colorado Water Conservation Board (CWCB), together with federal and state law, to adopt the new maps or risk being suspended from the National Flood Insurance Program (NFIP); and
- WHEREAS, loss of the NFIP participation will result in harm to citizens of San Juan County who need and obtain flood insurance to protect their property through the NFIP; and
- **WHEREAS**, to avoid loss of the NFIP participation, San Juan County will follow the mandate of FEM and CWCB and adopt the new floodplain maps: and
- **WHEREAS**, Section 13-111 of the San Juan County Zoning and Land Use Regulation allows for the amendment of that regulation by the Board of County Commissioners; and
- **WHEREAS**, amendments to the San Juan County Zoning and Land Use Regulation have been reviewed by the San Juan Regional Planning Commission during their regular meeting of, April 18. 2023; and
- WHEREAS, a public hearing has been conducted by the Board of County Commissioners on the proposed amendments, having been properly noticed in accordance with Section 13-111 of the San Juan County Zoning and Land Use Regulation; and
- WHEREAS, the Board of Commissioners held a public hearing on April 26, 2023 to receive public comment and determined that the adoption of these amendments promotes the health, safety and welfare of its citizens and the general public.
- **NOW THEREFORE, BE IT RESOLVED** by the Board of Commissioners of San Juan County, that Section 10-103 FLOODPLAIN AND HAZARD AREAS .4 of the San Juan County Zoning and Land Use Regulation shall be amended as attached and incorporated within this resolution, are hereby adopted; and
- **BE IT FURTHER RESOLVED** that upon adoption of this resolution, the amendments to the San Juan County Zoning and Land Use Regulation shall be filed in the office of the County Clerk & Recorder and indexed in the manner prescribed by law.
- **READ, PASSED AND ADOPTED** this 26th day of April, 2023 by the Board of Commissioners of San Juan County, Colorado.

	Attest:
Austin Lashley, Chair	Ladonna Jaramillo
	Clerk and Recorder
Pete Maisel	
Scott Fetchenhier	

CHAPTER TEN FLOODPLAIN IMPACT ANALYSIS

10-101 PURPOSE

The purpose of this chapter shall be to minimize significant hazards to public health and safety, and to property in an identified floodplain area; to promote the safe use of floodplain areas; to reduce the impact of floodplain hazards on life and property; to protect the public from the burden of excessive financial expenditure connected with the impacts of floodplain hazards; and to provide that uses made of floodplains do not constitute significant potential hazards to public health and safety, or to property, and do not serve to aggravate the hazard potential of the area.

10-102 APPLICABILITY

Any party obtaining an Application for Improvement Permit shall be required to obtain clearance relative to potential adverse impact from, or to, floodplain hazards before an Improvement Permit may be issued.

10-103 FLOODPLAIN HAZARD AREAS

Floodplain hazard areas, the characteristics common to them, and recommended mitigating factors or conditions, are contained in a series of documents as follows:

- 1 The potential floodplain hazard areas depicted on a map entitled "Potential Flood Ilazard Areas" drafted by San Juan County for submission to the Colorado Water Conservation Board on December 26, 1974, and approved for identification of flood hazard potential by the County Commissioners by Resolution 4-75 on April 9, 1975, a single map of San Juan County, a copy of which is filed in the office of the County Clerk & Recorder, Book 212, Page 32 and in the office of the Land Use Administrator. The County Commissioners declare that the following materials are approved for use by the officials of this jurisdiction in the application, interpretation and enforcement of this chapter.
- .2 The physiographic floodplain areas depicted on the series of maps entitled "Surficial Deposits and Geologic Hazards Map, San Juan County," compiled by William A. Gallant of Charles S. Robinson and Associates, Inc. of Golden, Colorado, for San Juan County in 1975-76, involving and including all, or part, of eight USGS 1:24,000 topographic quadrangle maps within San Juan County. These maps were approved for identification of the physiographic floodplain by the County Commissioners by Resolution 8-76 on March 3, 1976, and are filed in the office of the County Clerk & Recorder, Book 212, Pages 13-19, and in the office of the Land Use Administrator.
- A document entitled, "Geologic Hazard and Land Use Study, San Juan County, Colorado," prepared by Charles S. Robinson and Associates, Inc. of Golden, Colorado, for San Juan County in 1976, and approved as part of the

- identification of natural hazards by the County Commissioners by Resolution 8-76 on March 3, 1976, copies of which are filed with the Land Use Administrator.
- .4 Areas of special flood hazard are identified by the Flood Insurance Study on file in the office of the Land Use Administrator. This report is entitled "Flood Insurance Study, San Juan County, Colorado and Incorporated Areas Town of Silverton and Unincorporated Areas," dated May 9, 2023 March 1978, with accompanying Flood Insurance Rate Maps and Flood Boundary-Floodway Maps. These maps and study are incorporated herein by reference and made part of this chapter.

10-104 PROCEDURES

- Designation of the Floodplain Administrator. The Land Use Administrator is hereby appointed as Floodplain Administrator to administer, implement and enforce the provisions of this chapter and other appropriate sections of 44 CFR (National Flood Insurance Program Regulations) pertaining to floodplain management.
- Duties and Responsibilities of the Floodplain Administrator. Duties and responsibilities of the Floodplain Administrator shall include, but not be limited to, the following:
 - (a) Maintain and hold open for public inspection all records pertaining to the provisions of this chapter, including the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures and any floodproofing certificate required by Section 10-106.
 - (b) Review, approve or deny all applications for Floodplain Development Permits required by adoption of this ordinance.
 - (c) Review Floodplain Development Permit applications to determine whether a proposed building site, including the placement of manufactured homes, will be reasonably safe from flooding.
 - (d) Review permits for proposed development to assure that all necessary permits have been obtained from those Federal, State or local governmental agencies (including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334) from which prior approval is required.
 - (e) Inspect all development at appropriate times during the period of construction to ensure compliance with all provisions of this ordinance, including proper elevation of the structure.
 - (f) Where interpretation is needed as to the exact location of the boundaries of the Special Flood Hazard Area (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Floodplain Administrator shall make the necessary interpretation.

- (g) When Base Flood Elevation data has not been provided in accordance with Section 10- 103, the Floodplain Administrator shall obtain, review and reasonably utilize any Base Flood Elevation data and Floodway data available from a Federal, State, or other source, in order to administer the provisions of this chapter.
- (h) For waterways with Base Flood Elevations for which a regulatory Floodway has not been designated, no new construction, substantial improvements or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one-half foot at any point within the community.
- (i) Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program regulations, a community may approve certain development in Zones A1-30, AE, AH, on the community's FIRM which increases the water surface elevation of the base flood by more than one-half foot, provided that the community first applies for a conditional FIRM revision through FEMA (Conditional Letter of Map Revision), fulfills the requirements for such revisions as established under the provisions of Section 65.12 and receives FEMA approval.
- (j) Notify, in riverine situations, adjacent communities and the State Coordinating Agency, which is the Colorado Water Conservation Board, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to FEMA.
- (k) Ensure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
- .3 Applicants for an Improvement Permit are required to obtain clearance from the Land Use Administrator regarding floodplain hazards prior to the issuance of an Improvement Permit. The procedures to be used in the granting or denial of this clearance shall be as follows:
 - (a) Upon receipt of the information required by Section 3-102, the Land Use Administrator shall determine the floodplain hazard relative to the property in question by consultation of the maps and documents specified in Section 10−103. The Land Use Administrator may, at their discretion, also conduct an on-site inspection of the property.
 - (b) At the completion of the consultation, the Land Use Administrator may do one of the following:
 - (i) Find that the property in question is not adversely affected by any floodplain hazard, and that special impact analysis for flood plain hazards does not apply.
 - (ii) Find that floodplain hazards may affect the property or improvement in

question, but that plans of the applicant include sufficient mitigating techniques or elements to allow the use or improvement to proceed.

- (1) In such a case, clearance shall be subject to conditions specified, in writing, to the applicant by the Land Use Administrator.
- (2) In such a case, clearance can be given by the Land Use Administrator only after approval has been given by the Building Inspector, based upon the provisions of the Building Code as amended, to the plans submitted in accordance with Section 3 102 of this Code.
- (iii) Find that impact cannot be sufficiently determined without further study of the property, or the floodplain hazard involved, by the Planning Commission, with final decision to be made by the County Commissioners.
 - (1) In such a case, the Land Use Administrator shall require the applicant to utilize the Review and Appeal Process detailed in Chapter of this Code, as specifically authorized in Section 4-102.1 (b).
 - (2) In such a case, the Land Use Administrator shall require the applicant to meet additional submission requirements as listed in Section 10-105 below.
- (iv) Deny floodplain hazard impact clearance based upon the provisions of this chapter.

10- 105 ADDITIONAL SUBMISSION REQUIREMENTS

Applicants for an Improvement Permit shall be required to submit additional materials beyond those specified in Section 3 – 102 of this Code under certain circumstances.

- Additional materials shall be submitted to the Board of County Commissioners by applicants who:
 - (a) Are required by the Land Use Administrator to utilize the Review and Appeal Process under Section 10 104.2 (c).
 - (b) Seek a variance to any provision of this chapter provided it complies with the following general FEMA standards:
 - (i) An applicant has good and sufficient cause for requesting a variance;
 - (ii) An applicant will suffer exceptional hardship should a variance be denied;
 - (iii) A variance will not cause increased flood heights, additional threats to

- public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances;
- (iv) A variance is the minimum necessary, considering the flood hazard, to afford relief; and
- (v) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation below the Base Flood Elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- (c) Wish to appeal an administrative decision made under the provisions of this chapter.
- .2 The additional materials for any of the cases above shall consist of at least four (4) copies of:
 - (a) A vicinity map, showing the location of the property in question, portrayed on the appropriate USGS 1:24,000 topographic quadrangle map.
 - (b) A topographic map, or maps, at a scale no less detailed than 1"=500' and with contour intervals of 2' showing the location, nature and density of the proposed improvement or land use change, as well as all streams, rivers, channels and drainage features.
 - (c) Any available flood elevation studies, water surface elevations or base flood elevations.
 - (d) Drawings of the surface view showing elevations or contours of the ground, pertinent structures, fill or storage elevations, size, location and arrangement of proposed structures, location and elevation of existing and proposed roads, driveways, water supply systems and sanitary facilities.
 - (e) Data on the elevation, in relation to mean sea level, of the lowest floor, including basement, of any and all structures in question and, where the lowest floor is below grade on two or more sides, the elevation of the floor immediately above.
 - (f) A report showing specifications for building materials, filling, dredging, grading, storage of materials, channel changes, water systems and sanitary facilities.
 - (g) Description of any construction activity which would affect the hydraulic capacity of the floodway.
 - (h) Description of proposed floodproofing measures.

- .3 Unless otherwise specified, the following map standards shall be adhered to in this chapter.
 - (a) Maps will be in compliance with national map accuracy standards as promulgated by the U. S. Bureau of Budget.
 - (b) All maps shall show a true north arrow and shall show monumented corners of the property in question.
 - (c) One of the four copies of each map shall be in reproducible form, ie: mylar, sepia or clear film positive.
- .4 All engineering work prepared under this chapter shall be prepared by, or under the direction of, and signed by a registered Colorado professional engineer.
- The County Commissioners may waive any part, but not all, of the submission requirements imposed by this chapter upon the written petition of the applicant that full compliance with the submission requirements would be an unreasonable burden for the applicant and that the proposed improvement will have an insubstantial impact on the surrounding area.

10- 106 CRITERIA FOR CLEARANCE

An applicant for an Improvement Permit shall be given floodplain hazard clearance only if all of the following are met:

- .1 The requirements of Chapter 10 have been complied with.
- .2 Provision has been made for the long-term protection of the public from floodplain hazards.
- .3 The proposed improvement will not impose a financial burden upon residents of the areas or upon the County.
- .4 The proposed improvement will not intensify the hazard for flooding.
- The improvement is engineered and will be constructed in a manner that will minimize hazards to public health and safety or to property due to flood.
- No development on, or over, any portion of a floodway shall be permitted which alone or cumulatively with other such activities would cause or result in any of the following:
 - (a) The storage or processing of materials that in time of flooding are buoyant, flammable, explosive or otherwise potentially injurious to human, animal or plant life.

- (b) The disposal of garbage or solid waste in the floodplain area.
- (c) The permanent or temporary occupation of fixed or mobile structures for residential purposes.
- (d) Substantial solid debris being carried downstream.
- (e) Any obstruction which would adversely affect the efficiency of, or restrict the flow or capacity of, a floodplain so as to cause foreseeable damage to others.
- .7 Improvements within a potential floodplain area not within a floodway shall be designed so as to minimize adverse effects of the hazard through the following:
 - (a) Anchoring of structures to prevent flotation, collapse or lateral movement.
 - (b) Design to locate public utilities so as to minimize damage to utility lines and facilities.
 - (c) Insurance of adequate drainage to minimize flood hazard potential.
 - (d) Guarantee that water supply and sanitary sewage systems are not impaired or contaminated during, or subsequent to, flooding.
 - (e) Construction of the lowest floors of structures (including basements), electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities (including ductwork) at an elevation at least one foot above the probable, or known, intermediate regional flood level.
 - (f) Floodproofing of structures (including basements), electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities (including ductwork) located below the level of the probable, or known, intermediate regional flood, or subject to floodwater with significant velocity, to a level at least one foot above the probable, or known, intermediate regional flood level.
 - (g) Elimination of mobile and/or manufactured homes of any type.
- A Critical Facility is a structure or related infrastructure, but not the land on which it is situated, as specified in Rule 6 of the Rules and Regulations for Regulatory Floodplains in Colorado, that if flooded may result in significant hazards to public health and safety or interrupt essential services and operations for the community at any time before, during and after a flood.
 - (a) Classification of Critical Facilities

It is the responsibility of the County of San Juan to identify and confirm that

specific structures in their community meet the following criteria:

Critical Facilities are classified under the following categories: (a) Essential Services; (b) Hazardous Materials; (c) At-risk Populations; and (d) Vital to Restoring Normal Services.

(i) Essential services facilities include public safety, emergency response, emergency medical, designated emergency shelters, communications, public utility plant facilities and transportation lifelines.

These facilities consist of:

- (1) Public safety (police stations, fire and rescue stations, emergency vehicle and equipment storage, and, emergency operation centers);
- (2) Emergency medical (hospitals, ambulance service centers, urgent care centers having emergency treatment functions, and non-ambulatory surgical structures but excluding clinics, doctors' offices and non-urgent care medical structures that do not provide these functions);
- (3) Designated emergency shelters;
- (4) Communications (main hubs for telephone, broadcasting equipment for cable systems, satellite dish systems, cellular systems, television, radio and other emergency warning systems, but excluding towers, poles, lines, cables and conduits);
- (5) Public utility plant facilities for generation and distribution (hubs, treatment plants, substations and pumping stations for water, power and gas, but not including towers, poles, power lines, buried pipe-lines, transmission lines, distribution lines and service lines); and
- (6) Air Transportation lifelines (airports- municipal and larger), helicopter pads and structures serving emergency functions and associated infrastructure (aviation control towers, air traffic control centers and emergency equipment aircraft hangars).

Specific exemptions to this category include wastewater treatment plants (WWTP), non-potable water treatment and distribution systems and hydroelectric power generating plants and related appurtenances.

Public utility plant facilities may be exempted if it can be demonstrated to the satisfaction of the County of San Juan that the facility is an element of a redundant system for which service will not be interrupted during a flood. At a minimum, it shall be demonstrated that redundant facilities are available (either owned by the same utility or available through an intergovernmental agreement or other contract) and connected, the alternative facilities are either located outside of the 100-year floodplain or are compliant with the provisions of this Article, and an operations plan is in effect that states how redundant systems will provide service to the

- affected area in the event of a flood. Evidence of ongoing redundancy shall be provided to the County of San Juan on an as-needed basis upon request.
- (ii) Hazardous materials facilities include facilities that produce or store highly volatile, flammable, explosive, toxic and/or water-reactive materials.

These facilities may include:

- (1) Chemical and pharmaceutical plants (chemical plant, pharmaceutical manufacturing);
- (2) Laboratories containing highly volatile, flammable, explosive, toxic and/or water-reactive materials;
- (3) Refineries;
- (4) Hazardous waste storage and disposal sites; and
- (5) Above ground gasoline or propane storage or sales centers.

Facilities shall be determined to be Critical Facilities if they produce or store materials in excess of threshold limits. If the owner of a facility is required by the Occupational Safety and Health Administration (OSHA) to keep a Material Safety Data Sheet (MSDS) on file for any chemicals stored or used in the work place, and the chemical(s) is stored in quantities equal to or greater than the Threshold Planning Quantity (TPQ) for that chemical, then that facility shall be considered to be a Critical Facility. The TPQ for these chemicals is: either 500 pounds or the TPQ listed (whichever is lower) for the 356 chemicals listed under 40 C.F.R. § 302 (2010), also known as Extremely Hazardous Substances (EHS); or 10,000 pounds for any other chemical. This threshold is consistent with the requirements for reportable chemicals established by the Colorado Department of Health and Environment. OSHA requirements for MSDS can be found in 29 C.F.R. § 1910 (2010). The Environmental Protection Agency (EPA) regulation "Designation, Reportable Quantities, and Notification," 40 C.F.R. § 302 (2010) and OSHA regulation "Occupational Safety and Health Standards," 29 C.F.R. § 1910 (2010) are incorporated herein by reference and include the regulations in existence at the time of the promulgation this ordinance, but exclude later amendments to or editions of the regulations

Specific exemptions to this category include:

- (1) Finished consumer products within retail centers and households containing hazardous materials intended for household use and agricultural products intended for agricultural use.
- (2) Buildings and other structures containing hazardous materials for which it can be demonstrated to the satisfaction of the local authority having jurisdiction by hazard assessment and certification by a qualified professional (as determined by the local jurisdiction having

land use authority) that a release of the subject hazardous material does not pose a major threat to the public.

(3) Pharmaceutical sales, use, storage and distribution centers that do not manufacture pharmaceutical products.

These exemptions shall not apply to buildings or other structures that also function as Critical Facilities under another category outlined in this chapter.

(iii) At-risk population facilities include medical care, congregate care and schools.

These facilities consist of:

- (1) Elder care (nursing homes);
- (2) Congregate care serving 12 or more individuals (day care and assisted living); and
- (3) Public and private schools (pre-schools, K-12 schools), before-school and after-school care serving 12 or more children).
- (iv) Facilities vital to restoring normal services including government operations.

These facilities consist of:

- (1) Essential government operations (public records, courts, jails, building permitting and inspection services, community administration and management, maintenance and equipment centers); and
- (2) Essential structures for public colleges and universities (dormitories, offices and classrooms only).

These facilities may be exempted if it is demonstrated to the County of San Juan that the facility is an element of a redundant system for which service will not be interrupted during a flood. At a minimum, it shall be demonstrated that redundant facilities are available (either owned by the same entity or available through an intergovernmental agreement or other contract), the alternative facilities are either located outside of the 100-year floodplain or are compliant with this ordinance, and an operations plan is in effect that states how redundant facilities will provide service to the affected area in the event of a flood. Evidence of ongoing redundancy shall be provided to the County of San Juan on an as-needed basis upon request.

(b) Protection for Critical Facilities

All new and substantially improved Critical Facilities and new additions to Critical Facilities located within the Special Flood Hazard Area shall be

regulated to a higher standard than structures not determined to be Critical Facilities. For the purposes of this ordinance, protection shall include one of the following:

- (i) Location outside the Special Flood Hazard Area; or
- (ii) Elevation of the lowest floor or floodproofing of the structure, together with attendant utility and sanitary facilities, to at least two feet above the Base Flood Elevation.
- (c) Ingress and Egress for New Critical Facilities

New Critical Facilities shall, when practicable as determined by the County of San Juan, have continuous non-inundated access (ingress and egress for evacuation and emergency services) during al00-year flood event.

- .8 Standards for Subdivision Proposals
 - (a) All subdivision proposals including the placement of manufactured home parks and subdivisions shall be reasonably safe from flooding. If a subdivision or other development proposal is in a flood-prone area, the proposal shall minimize flood damage.
 - (b) All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet Floodplain Development Permit requirements of this ordinance.
 - (c) Base Flood Elevation data shall be generated for subdivision proposals and other proposed development including the placement of manufactured home parks and subdivisions which is greater than 50 lots or 5 acres, whichever is lesser, if not otherwise provided pursuant to this ordinance.
 - (d) All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.
 - (e) All subdivision proposals including the placement of manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.
- Properties Removed From the Floodplain by Fill

A Floodplain Development Permit shall not be issued for the construction of a new structure or addition to an existing structure on a property removed from the floodplain by the issuance of a FEMA Letter of Map Revision Based on Fill (LOMR-F), unless such new structure or addition complies with the following:

(a) Residential Construction

The lowest floor (including basement), electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork), must be elevated to one foot above the Base Flood Elevation that existed prior to the placement of fill.

(b) Nonresidential Construction

The lowest floor (including basement), electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork), must be elevated to one foot above the Base Flood Elevation that existed prior to the placement of fill, or together with attendant utility and sanitary facilities be designed so that the structure or addition is watertight to at least one foot above the base flood level that existed prior to the placement of fill with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy.

- Provision is made for disclosure, prior to sales, of all floodplain hazards and mitigation procedures undertaken, and for attaching a delineation and description of the floodplain hazard and mitigation measures to all deeds, titles, and recorded documents involving a transfer of ownership of the property, or any part of said property.
- .11 Open space uses are incorporated into the improvement plan to the greatest practicable extent, in addition to, rather than in place of, other mitigation procedures.

10-107 LIMITATIONS OF MAPS

- Maps and documents referred to in this chapter are not intended to serve as a forecast of all possible flood activity within San Juan County, and should not be relied upon as such by the public. Neither San Juan County, nor any of its agents, employees or appointed boards, can assume any responsibility for unforeseen effects of extraordinary snow melt, precipitation, changes in climate, alteration of floodways or other events upon the future behavior of floodwaters and they do not, by adoption of this regulation, purport to do so.
- .2 San Juan County shall not be liable for any damage or destruction caused by flooding, whether or not such damage could have been foreseen or otherwise prevented by San Juan County or its agents, employees, officers or boards. All persons constructing improvements in San Juan County must consult all information in the office of the Land Use Administrator prior to seeking approval for the construction of improvements. No person shall be entitled to seek, or rely upon, any opinion of any agent, employee, officer or board of San Juan County regarding the presence or absence of natural hazards which might affect property on which they propose to construct improvements.

PUBLIC HEARING

Notice is hereby given to the members of the general public that the San Juan Board of County Commissioners will hold a public hearing on Wednesday April 26, 2023 at 8:00 P.M. in the County Commissioner's Room to receive public comment concerning the amendment to 10-103.4 Floodplain Hazard Areas of the Zoning and Land Use Regulations.

The proposed changes are in response to the Federal Emergency Management Agency Flood Insurance Study and The National Flood Insurance Program Flood Insurance Rate Maps that will become effective as of May 9, 2023.

NOTICE is further given that all persons may appear in person or via Zoom Conferencing and present oral testimony at the public hearing. The login information is listed below. Written testimony may be submitted prior to the public hearing by mailing comments to San Juan County, PO Box 466, Silverton, CO 81433, or by email to sanjuancounty@frontier.net. Interested persons may visit or call the San Juan County Administrator at 970-387-5766 during regular business hours to discuss the proposed property transfer.

The San Juan Regional Planning Commission will also review the Federal Emergency Management Agency Flood Insurance Study and The National Flood Insurance Program Flood Insurance Rate Maps during their regular meeting of April 18, 2023, beginning at 7:00 P.M. in the County Commissioner's Room. The Planning Commission Meeting may be attended in person or via the Zoom Conferencing login listed below.

Austen Lashley, Chairman San Juan Board of County Commissioners

Join Zoom Meeting https://zoom.us/j/92136473203

Meeting ID: 921 3647 3203

One tap mobile

- +16699006833,,92136473203# US (San Jose)
- +12532158782,,92136473203# US (Tacoma)

Dial by your location

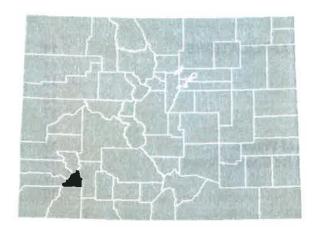
- +1 669 900 6833 US (San Jose)
- +1 253 215 8782 US (Tacoma)
- +1 346 248 7799 US (Houston)
- +1 646 876 9923 US (New York)
- +1 301 715 8592 US (Germantown)
- +1 312 626 6799 US (Chicago)

Meeting ID: 921 3647 3203

FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 1 OF 1



SAN JUAN COUNTY, COLORADO

AND INCORPORATED AREAS

COMMUNITY NAME	NUMBER
SAN JUAN COUNTY UNINCORPORATED AREAS	080267
SILVERTON, TOWN OF	080165



EFFECTIVE:

MAY 9, 2023

FLOOD INSURANCE STUDY NUMBER 08111CV000A

Version Number 2.6.4.6

TABLE OF CONTENTS

Volume 1

		<u>Page</u>
SEC.	TION 1.0 – INTRODUCTION	1
1.1	The National Flood Insurance Program	1
1.2	Purpose of this Flood Insurance Study Report	2
1.3	Jurisdictions Included in the Flood Insurance Study Project	2
1.4	Considerations for using this Flood Insurance Study Report	3
SEC	TION 2.0 FLOODPLAIN MANAGEMENT APPLICATIONS	11
2.1	Floodplain Boundaries	11
2.2	Floodways	15
2.3	Base Flood Elevations	16
2.4	Non-Encroachment Zones	17
2.5	Coastal Flood Hazard Areas	17
	2.5.1 Water Elevations and the Effects of Waves	17
	2.5.2 Floodplain Boundaries and BFEs for Coastal Areas	17
	2.5.3 Coastal High Hazard Areas	17
	2.5.4 Limit of Moderate Wave Action	17
	TION 3.0 – INSURANCE APPLICATIONS	17
3.1	National Flood Insurance Program Insurance Zones	17
	TION 4.0 – AREA STUDIED	18
4.1	Basin Description	18
4.2	Principal Flood Problems	18
4.3	Non-Levee Flood Protection Measures	19
4.4	Levees	19
	TION 5.0 - ENGINEERING METHODS	19
5.1	Hydrologic Analyses	20
5.2	Hydraulic Analyses	24
5.3	Coastal Analyses	26
	5.3.1 Total Stillwater Elevations	26
	5.3.2 Waves	26
	5.3.3 Coastal Erosion	26
E 4	5.3.4 Wave Hazard Analyses	26
5.4	Alluvial Fan Analyses	26
	TION 6.0 - MAPPING METHODS	27
6.1	Vertical and Horizontal Control	27
6.2	Base Map	28
6.3	Floodplain and Floodway Delineation	28
6.4	Coastal Flood Hazard Mapping	33
6.5	FIRM Revisions	33

6.5.1 Letters of Map Amendment	33
6.5.2 Letters of Map Revision Based on Fill	34
6.5.3 Letters of Map Revision	34
6.5.4 Physical Map Revisions	34
6.5.5 Contracted Restudies	35 35
6.5.6 Community Map History	35
SECTION 7.0 - CONTRACTED STUDIES AND COMMUNITY COORDINATION	
7.1 Contracted Studies	36
7.2 Community Meetings	36
SECTION 8.0 - ADDITIONAL INFORMATION	38
SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES	39
<u>Figures</u>	<u>Page</u>
E' 4 FIDML I	-
Figure 1: FIRM Index Figure 2: FIRM Notes to Users	5 6
Figure 3: Map Legend for FIRM	8
Figure 4: Floodway Schematic	16
Figure 5: Wave Runup Transect Schematic	17
Figure 6: Coastal Transect Schematic	17
Figure 7: Frequency Discharge-Drainage Area Curves	23
Figure 8: 1% Annual Chance Total Stillwater Elevations for Coastal Areas	26
Figure 9: Transect Location Map	26
T 11	
<u>Tables</u>	<u>Page</u>
Table 1: Listing of NFIP Jurisdictions	2
Table 1: Elsting of N in Sunsdictions Table 2: Flooding Sources Included in this FIS Report	13
Table 3: Flood Zone Designations by Community	18
Table 4: Basin Characteristics	18
Table 5: Principal Flood Problems	19
Table 6: Historic Flooding Elevations	19
Table 7: Non-Levee Flood Protection Measures	19
Table 8: Levees	19
Table 9: Summary of Discharges	21
Table 10: Summary of Non-Coastal Stillwater Elevations	24
Table 11: Stream Gage Information used to Determine Discharges	24
Table 12: Summary of Hydrologic and Hydraulic Analyses	25 26
Table 13: Roughness Coefficients Table 14: Summary of Coastal Analyses	26 26
Table 14. Sulfillary of Coastal Arialyses	20

Table 15: Tide Gage Analysis Specifics	26
Table 16: Coastal Transect Parameters	26
Table 17: Summary of Alluvial Fan Analyses	26
Table 18: Results of Alluvial Fan Analyses	27
Table 19: Countywide Vertical Datum Conversion	27
Table 20: Stream-Based Vertical Datum Conversion	27
Table 21: Base Map Sources	28
Table 22: Summary of Topographic Elevation Data used in Mapping	29
Table 23: Floodway Data	30
Table 24: Flood Hazard and Non-Encroachment Data for Selected Streams	33
Table 25: Summary of Coastal Transect Mapping Considerations	33
Table 26: Incorporated Letters of Map Change	34
Table 27: Community Map History	36
Table 28: Summary of Contracted Studies Included in this FIS Report	36
Table 29: Community Meetings	37
Table 30 Map Repositories	38
Table 31: Additional Information	38
Table 32: Bibliography and References	40

Volume 1

Exhibits

Flood Profiles	Panel
Animas River	01-07 P
Cement Creek	08-12 P
Mineral Creek	13-22 P

Published Separately

Flood Insurance Rate Map (FIRM)

FLOOD INSURANCE STUDY REPORT SAN JUAN COUNTY, COLORADO

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 San Juan County, Colorado.

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.

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
San Juan County, Unincorporated Areas	080267	13010001, 14020006, 14080101, 14080104	08111C0025C ¹ , 08111C0050C, 08111C0075C, 08111C0100C ¹ , 08111C0105C, 08111C0106C, 08111C0107C ¹ , 08111C0108C, 08111C0109C, 08111C0115C,	7.

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
San Juan County, Unincorporated Areas (cont.)	080267	13010001, 14020006, 14080101, 14080104	08111C0116C, 08111C0117C ¹ , 08111C0118C ¹ , 08111C0119C ¹ , 08111C0150C, 08111C0175C ¹ , 08111C0200C ¹ , 08111C0225C ¹ , 08111C0250C ¹ , 08111C0275C ¹ , 08111C0300C ¹	
Silverton, Town of	080165	14080104	08111C0108C, 08111C0109C, 08111C0116C	

¹ 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-percent-annual-chance flood elevation is also referred to as the Base Flood Elevation (BFE)); delineations of the 1-percent-annual-chance and 0.2-percent-annual-chance floodplains; and 1-percent-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, "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.

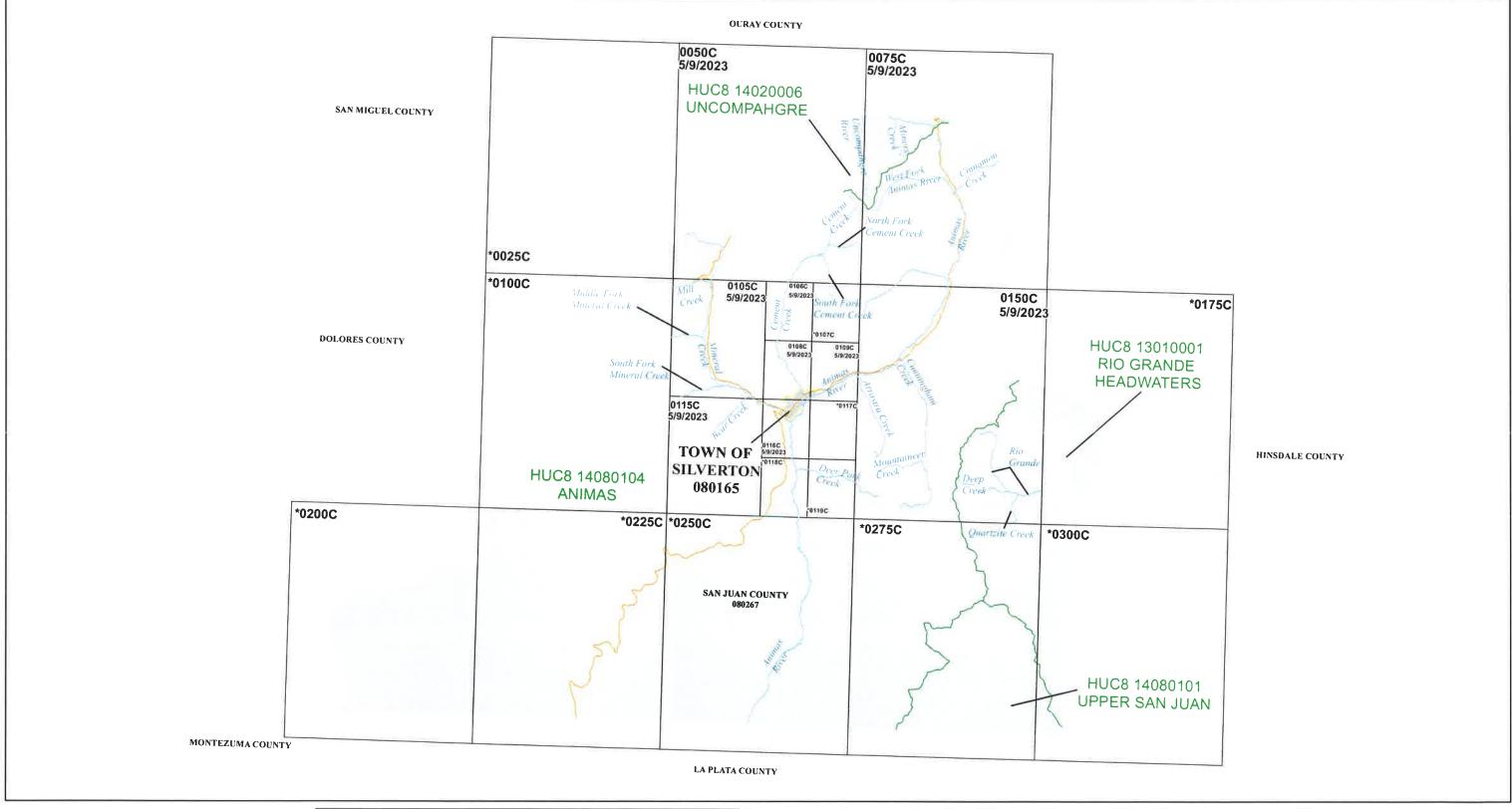
The initial Countywide FIS Report for San Juan County became effective on May 9, 2023. Refer to Table for information about subsequent revisions to the FIRMs.

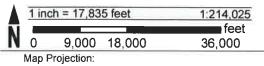
 Selected FIRM panels for the community may contain information (such as floodways and cross sections) that was previously shown separately on the corresponding Flood Boundary and Floodway Map (FBFM) panels. In addition, former flood hazard zone designations have been changed as follows:

Old Zone	New Zone
A1 through A30	AE
V1 through V30	VE
В	X (shaded)
С	X (unshaded)

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.

The FIRM Index in Figure 1 shows the overall FIRM panel layout within San Juan 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, flooding sources, watershed boundaries, and USGS HUC-8 codes.



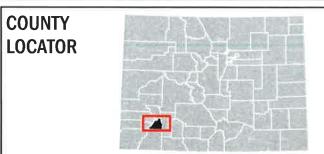


Map Projection: Universal Transverse Mercator Zone 13N; North American Datum 1983

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

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION

* PANEL NOT PRINTED - NO SPECIAL FLOOD HAZARD AREAS



NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP INDEX

SAN JUAN COUNTY, COLORADO And Incorporated Areas

PANELS PRINTED:

0050, 0075, 0105, 0106, 0108, 0109, 0115, 0116, 0150



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 Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at 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 Map Information 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 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.

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.

<u>FLOODWAY INFORMATION</u>: 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.

<u>FLOOD CONTROL STRUCTURE INFORMATION</u>: 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.

Figure 2: FIRM Notes to Users

<u>PROJECTION INFORMATION</u>: The projection used in the preparation of the map was Universal Transverse Mercator (UTM) Zone 13. 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.

<u>ELEVATION DATUM</u>: 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.

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 of this FIS Report.

BASE MAP INFORMATION: Base map information shown on this FIRM was derived from U.S. Census Bureau TIGER files, the U.S. Geological Survey, and the San Juan County Department, dated 2019, and the U.S. Department of Agriculture dated 2016.

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 San Juan County, CO, 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.

SPECIAL NOTES FOR SPECIFIC FIRM PANELS

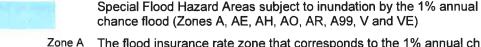
This Notes to Users section was created specifically for San Juan County, CO, effective May 9, 2023.

<u>FLOOD RISK REPORT</u>: 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 San Juan County.

Figure 3: Map Legend for FIRM

SPECIAL FLOOD HAZARD AREAS: 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.



Zone A 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.

Zone AE 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.

Zone AH 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.

Zone AO 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.

Zone AR 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.

Zone A99 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.

Zone V 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.

Zone VE 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.

Regulatory Floodway determined in Zone AE.

Figure 3: Map Legend for FIRM

OTHER AREAS OF FLOOD HAZARD 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. 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. 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. 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. OTHER AREAS Zone D (Areas of Undetermined Flood Hazard): The flood insurance rate zone that corresponds to unstudied areas where flood hazards are undetermined, but possible. **NO SCREEN** Unshaded Zone X: Areas of minimal flood hazard. FLOOD HAZARD AND OTHER BOUNDARY LINES Flood Zone Boundary (white line on ortho-photography-based mapping; gray line on vector-based mapping) (ortho) (vector) Limit of Study Jurisdiction Boundary Limit of Moderate Wave Action (LiMWA): Indicates the inland limit of the area affected by waves greater than 1.5 feet **GENERAL STRUCTURES** Aqueduct Channel Channel, Culvert, Aqueduct, or Storm Sewer Culvert Storm Sewer Dam Dam, Jetty, Weir Jetty Weir Levee, Dike, or Floodwall Bridge **Dridge**

Figure 3: Map Legend for FIRM

REFERENCE MARKERS	
22.0	River mile Markers
CROSS SECTION & TRANSECT INFORMATION	
B 20.2	Lettered Cross Section with Regulatory Water Surface Elevation (BFE)
5280 21.1	Numbered Cross Section with Regulatory Water Surface Elevation (BFE)
17.5	Unlettered Cross Section with Regulatory Water Surface Elevation (BFE)
8	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.
~~~~ 513 ~~~~	Base Flood Elevation Line
ZONE AE (EL 16)	Static Base Flood Elevation value (shown under zone label)
ZONE AO (DEPTH 2)	Zone designation with Depth
ZONE AO (DEPTH 2) (VEL 15 FPS)	Zone designation with Depth and Velocity
BASE MAP FEATURES Missouri Creek	River, Stream or Other Hydrographic Feature
234	Interstate Highway
234	U.S. Highway
(234)	State Highway
234	County Highway
MAPLE LANE	Street, Road, Avenue Name, or Private Drive if shown on Flood Profile
RAILROAD	Railroad
	Horizontal Reference Grid Line

Figure 3: Map Legend for FIRM

____ 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

⁴²**76**^{000m}**E** Horizontal Reference Grid Coordinates (UTM)

365000 FT Horizontal Reference Grid Coordinates (State Plane)

80° 16' 52.5" Corner Coordinates (Latitude, Longitude)

SECTION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS

2.1 Floodplain Boundaries

To provide a national standard without regional discrimination, the 1-percent-annual-chance (100-year) flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2-percent-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 San Juan 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-percent-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), study methodologies employed (Section 5.0), and flood risk, certain flooding sources may be mapped to show both the 1-percent and 0.2-percent-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-percent-annual-chance floodplain boundary on the FIRM, without published water surface elevations. In cases where the 1-percent and 0.2-percent-annual-chance floodplain boundaries are close together, only the 1-percent-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 San Juan 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-percent-annual-chance floodplain corresponds to the SFHAs. The 0.2-percent-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

Length (mi) (streams Limit Upstream Limit Basin(s) (coastlines) or ponding) Length (mi) (streams Area (mi²) (streams Area (mi	Approximately 1.0 mile downstream of county confluence of Mineral Road 20	Approximately 1.2 Fork Animas River and North Fork Animas River River	Confluence with upstream of Greene Animas River Street	Approximately 0.7 County Road 10 14080104 6.7 N Zone A 11/29/19 Greene Street	Confluence with upstream of confluence with Animas River with Animas River	Approximately 2.9 Approximately 1.8 miles miles upstream of unstream of U.S. Highway 550 Approximately 1.8 miles (6.1 N Zone A 11/29/19 Highway 550	
							14080104 1.4
	1	RIVE					Approximately 0.2 mile upstream of County Road 2
		Approximately 1.2 miles upstream of County Road 20	Confluence with Animas River	Approximately 0.7 mile upstream of Greene Street			Confluence with Animas River
Community	San Juan, Unincorporated Areas; Silverton, Town of	San Juan, Unincorporated Areas	San Juan, Unincorporated Areas, Silverton, Town of	San Juan, Unincorporated Areas	San Juan, Unincorporated Areas, Silverton, Town of	San Juan, Unincorporated Areas	San Juan, Unincorporated Areas
Flooding Source	Animas River	Animas River	Cement Creek	Cement Creek	Mineral Creek	Mineral Creek	North Fork Animas River

Table 2: Flooding Sources Included in this FIS Report

Date of Analysis	Zone A 11/29/19
Area (mi²) (estuaries Floodway shown on Date of (Y/N) FIRM Analysis	Zone A
Floodway (Y/N)	Z
Length (mi) (streams Area (mi²) UC-8 Sub- or (estuaries Basin(s) coastlines) or ponding)	
Length (mi) (streams or or coastlines)	2.5
HUC-8 Sub- Basin(s)	14080104
Upstream Limit	Approximately 2.6 miles upstream of Picane Gulch Road
Downstream Limit	Confluence with Animas River
Community	West Fork San Juan, Animas River Unincorporated Areas
Flooding Source	West Fork Animas River

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-percent-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-percent-annual-chance flood. The floodway fringe is the area between the floodway and the 1-percent-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-percent-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.

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. Regulations for Colorado require communities in San Juan County to limit increases caused by encroachment to 0.5 foot and several communities have adopted additional restrictions. 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.

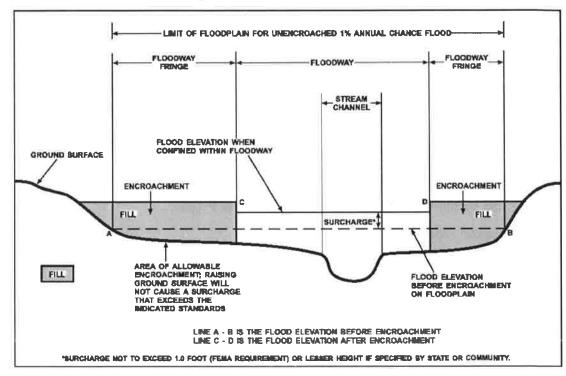


Figure 4: Floodway Schematic

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-percent-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 BFE is the elevation of the 1-percent-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.

BFEs are primarily intended for flood insurance rating purposes. 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. 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. For example, the user may use the FIRM to determine the stream station of a location of interest and then use the profile to determine the 1-percent annual chance elevation at that location. Because only selected cross sections may be shown on the FIRM for riverine areas, the profile should be used to obtain the flood elevation between mapped cross sections. Additionally, for riverine areas, whole-foot elevations shown on the FIRM may not exactly reflect the elevations derived from the hydraulic analyses; therefore, elevations obtained from the profile may more accurately reflect the results of the hydraulic analysis.

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-percent-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-percent-annual-chance floodplain boundary corresponds to the boundary of areas of additional flood hazards.

Table 3 lists the flood insurance zones in San Juan County.

Table 3: Flood Zone Designations by Community

Community	Flood Zone(s)
San Juan County, Unincorporated Areas	A, AE, X
Silverton, Town of	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)
Animas	14080104	Animas River	Largest watershed with San Juan County	328
Rio Grande Headwaters	13010001	Rio Grande	Small portion of watershed affecting eastern portion of San Juan County	35
Uncompahgre	14020006	Uncompahgre River	Small portion of watershed affecting northern portion of San Juan County	7
Upper San Juan	14080101	San Juan River	Small portion of watershed affecting southern portion of San Juan County	19

4.2 Principal Flood Problems San Juan River

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

Table 5: Principal Flood Problems

Flooding Source	Description of Flood Problems
Animas River	The 1884 flood was the first known flood on the Animas River. In the Town of Silverton, bridges and homes were being swept away. The second highest flood on record occurred in 1927, destroying the railroad along Animas River. The 1970 flood caused railroad damage of approximately \$500,000.
Cement Creek	In 1911, on Cement Creek, high waters broke over banks just above the highway bridge and flooded the main street. The highway bridges spanning Cement Creek are two troublesome spots where stream channel construction backs up water, causing flooding in the streets.
Mineral Creek	The highway bridges spanning Mineral Creek are two troublesome spots where stream channel construction backs up water, causing flooding in the streets.

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

Table 6: Historic Flooding Elevations [Not Applicable to this Flood Risk Project]

4.3 Non-Levee Flood Protection Measures

Table 7 contains information about non-levee flood protection measures within San Juan 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 [Not Applicable to this Flood Risk Project]

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-percent-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-percent-annual-chance flood elevation and a 1-percent-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-percent-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.

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 Figure for selected flooding sources.

Table 9: Summary of Discharges

		Oronio d	L.		Peak Discharge (cfs)	large (cfs)		
	granth o fin	Area (Square	10% Annual	4% Annual	2% Annual	1% Annual	1% Annual Chance	0.2% Annual
Flooding Source	Location	Miles)	Chance	Chance	Chance	Chance	Plus	Chance
Animas River	USGS Gage 09359020, Animas Below Silverton	146.2	2,808	2,955	3,053	3,142	3,351	3,329
Animas River	Downstream of Cement Creek Confluence	82	1,848	2,014	2,127	2,232	2,473	2,453
Animas River	USGS Gage 09358000, Animas at Silverton	70.6	1,470	1,644	1,763	1,873	2,127	2,108
Animas River	CDWR Gage, Animas at Howardsville	57.6	1,419	1,604	1,733	1,855	2,193	2,119
Cement Creek	USGS Gage 09358550, Cement Creek at Silverton	20.1	466	532	578	624	733	725
Cement Creek	1.5 miles upstream of Gage 09358550	17.7	429	489	532	574	674	899
Cement Creek	2.5 miles downstream of Confluence of South Fork Cement Creek	12.8	339	387	421	454	534	529
Cement Creek	Downstream of South Fork Cement Creek	9.9	213	242	264	285	334	331
Mineral Creek	USGS Gage 9359010, Mineral Creek at Silverton	52.6	1,338	1,550	1,706	1,860	2,230	2,218
Mineral Creek	Downstream of South Fork Mineral Creek	42.5	1,157	1,340	1,474	1,608	1,927	1,917

Table 9: Summary of Discharges

		Drainage			Peak Discharge (cfs)	narge (cfs)		
Flooding Source	Location	Area (Square Miles)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Chance Plus	0.2% Annual Chance
Mineral Creek	Downstream of Middle Fork Mineral Creek	18	628	727	800	872	1,046	1,040
Mineral Creek	Downstream of Mill Creek	8.5	368	426	469	511	613	609
North Fork Animas	At Confluence with Animas River	2.74	147	215	267	321	543	481
North Fork Animas	At Horseshoe Creek	0.5	52	77	86	118	199	179
West Fork Animas	Downstream of Placer Gulch Confluence	4.39	195	285	353	424	717	632
West Fork Animas	At Confluence with Animas River	3.78	178	260	323	388	929	580
(40 :0:\ +0= 0+0 *								

*Data not Available

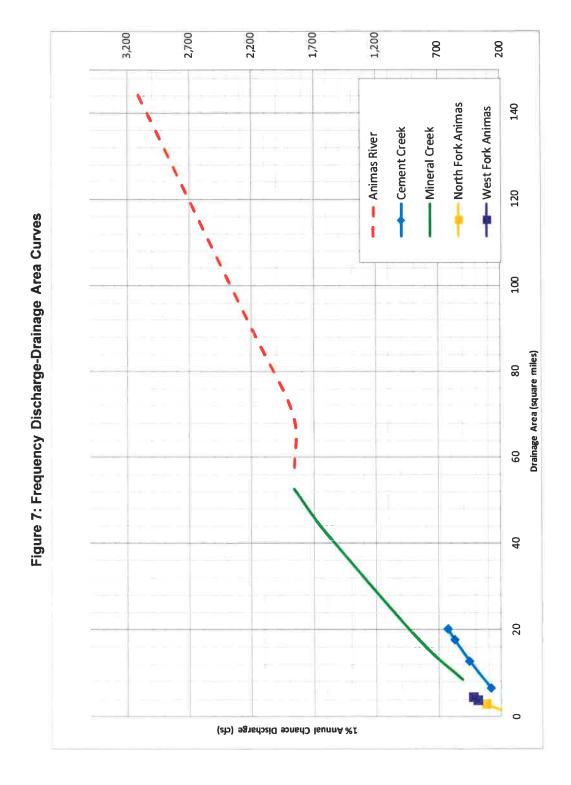


Table 10: Summary of Non-Coastal Stillwater Elevations [Not Applicable to this Flood Risk Project]

Table 11: Stream Gage Information used to Determine Discharges

		Agency		Drainage	Period	of Record
Flooding Source	Gage Identifier	that Maintains Gage	Site Name	Area (Square Miles)	From	То
Animas River	09359020	USGS	Animas River below Silverton, CO	146	6/12/1992	6/10/2017
Animas River	09358000	USGS	Animas River at Silverton	70.6	6/12/1992	6/5/2017
Animas River	ANIHOWCO	CDWR	Animas River at Howardsville, CO	55.9	6/8/1991	6/18/2017
Animas River	09359010	USGS	Mineral Creek at Silverton, CO	52.3	7/25/1992	6/18/2017
Cement Creek	09358550	USGS	Cement Creek at Silverton, CO	20.1	6/12/1992	6/10/2017

5.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the sources studied were carried out to provide estimates of the elevations of floods of the selected recurrence intervals. Base flood elevations on the FIRM represent the elevations shown on the Flood Profiles and in the Floodway Data tables in the FIS Report. Rounded whole-foot elevations may be shown on the FIRM in coastal areas, areas of ponding, and other areas with static base flood elevations. These whole-foot elevations may not exactly reflect the elevations derived from the hydraulic analyses. Flood elevations shown on the FIRM 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. The hydraulic analyses for this FIS were based on unobstructed flow. The flood elevations shown on the profiles are thus considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail.

For streams for which hydraulic analyses were based on cross sections, locations of selected cross sections are shown on the Flood Profiles (Exhibit 1). For stream segments for which a floodway was computed (Section 6.3), selected cross sections are also listed in Table 23, "Floodway Data."

A summary of the methods used in hydraulic analyses performed for this project is provided in Table 12. Roughness coefficients are provided in Table 13. Roughness coefficients are values representing the frictional resistance water experiences when passing overland or through a channel. They are used in the calculations to determine water surface elevations. Greater detail (including assumptions, analysis, and results) is available in the archived project documentation.

Table 12: Summary of Hydrologic and Hydraulic Analyses

Special Considerations								
Flood Zone on FIRM	Zone AE with Floodway	Zone A	Zone AE with Floodway	Zone A	Zone AE with Floodway	Zone A	Zone A	Zone A
Date Analyses Completed	11/29/19	11/29/19	11/29/19	11/29/19	11/29/19	11/29/19	11/29/19	11/29/19
Hydraulic Model or Method Used	HEC-RAS 5.0.6	HEC-RAS 5.0.6	HEC-RAS 5.0.6	HEC-RAS 5.0.6	HEC-RAS 5.0.6	HEC-RAS 5.0.6	HEC-RAS 5.0.5	HEC-RAS 5.0.5
Hydrologic Model or Method Used	Gage Analysis	Gage Analysis	Gage Analysis	Gage Analysis	Gage Analysis	Gage Analysis	Regression Analysis	Regression Analysis
Study Limits Upstream Limit	Approximately 1.2 miles upstream of County Road 20	Confluence of West Fork Animas River and North Fork Animas River	Approximately 0.7 mile upstream of Greene Street	County Road 10	Approximately 2.9 miles upstream of confluence with Animas River	Approximately 1.8 miles upstream of U.S. Highway 550	Approximately 0.2 mile upstream of County Road 2	Approximately 2.6 miles upstream of Picane Gulch Road
Study Limits Downstream Limit	Approximately 1.0 mile downstream of confluence of Mineral Creek	Approximately 1.2 miles upstream of County Road 20	Confluence with Animas River	Approximately 0.7 mile upstream of Greene Street	Confluence with Animas River	Approximately 2.9 miles upstream of confluence with Animas River	Confluence with Animas River	Confluence with Animas River
Flooding Source	Animas River	Animas River	Cement Creek	Cement Creek	Mineral Creek	Mineral Creek	North Fork Animas River	West Fork Animas River

Table 13: Roughness Coefficients

Flooding Source	Channel "n"	Overbank "n"
Animas River	0.04-0.048	0.016-0.12
Cement Creek	0.045-0.055	0.013-0.095
Mineral Creek	0.035-0.048	0.016-0.13

5.3 Coastal Analyses

This section is not applicable to this Flood Risk Project.

Table 14: Summary of Coastal Analyses
[Not Applicable to this Flood Risk Project]

5.3.1 Total Stillwater Elevations

This section is not applicable to this Flood Risk Project.

Figure 8: 1% Annual Chance Total Stillwater Elevations for Coastal Areas
[Not applicable to this Flood Risk Project]

Table 15: Tide Gage Analysis Specifics
[Not applicable to this Flood Risk Project]

5.3.2 Waves

This section is not applicable to this Flood Risk Project.

5.3.3 Coastal Erosion

This section is not applicable to this Flood Risk Project.

5.3.4 Wave Hazard Analyses

This section is not applicable to this Flood Risk Project.

Table 16: Coastal Transect Parameters
[Not Applicable to this Flood Risk Project]

Figure 9: Transect Location Map
[Not Applicable to this Flood Risk Project]

5.4 Alluvial Fan Analyses

This section is not applicable to this Flood Risk Project.

Table 17: Summary of Alluvial Fan Analyses
[Not Applicable to this Flood Risk Project]

Table 18: Results of Alluvial Fan Analyses [Not applicable to this Flood Risk Project]

SECTION 6.0 – MAPPING METHODS

6.1 Vertical and Horizontal Control

All FIS Reports and FIRMs are referenced to a specific vertical datum. The vertical datum provides a starting point against which flood, ground, and structure elevations can be referenced and compared. Until recently, the standard vertical datum used for newly created or revised FIS Reports and FIRMs was the National Geodetic Vertical Datum of 1929 (NGVD29). With the completion of the North American Vertical Datum of 1988 (NAVD88), many FIS Reports and FIRMs are now prepared using NAVD88 as the referenced vertical datum.

Flood elevations shown in this FIS Report and on the FIRMs are referenced to NAVD88. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between NGVD29 and NAVD88 or other datum conversion, visit the National Geodetic Survey website at www.ngs.noaa.gov.

Temporary vertical monuments are often established during the preparation of a flood hazard analysis for the purpose of establishing local vertical control. Although these monuments are not shown on the FIRM, they may be found in the archived project documentation associated with the FIS Report and the FIRMs for this community. Interested individuals may contact FEMA to access these data.

To obtain current elevation, description, and/or location information for benchmarks in the area, please visit the NGS website at www.ngs.noaa.gov.

The datum conversion locations and values that were calculated for San Juan County are provided in Table 19.

Table 19: Countywide Vertical Datum Conversion [Not Applicable to this Flood Risk Project]

A countywide conversion factor could not be generated for San Juan County because the maximum variance from average exceeds 0.25 feet. Calculations for the vertical offsets on a stream by stream basis are depicted in Table 20.

Table 20: Stream-Based Vertical Datum Conversion
[Not Applicable to this Flood Risk Project]

6.2 Base Map

The FIRMs and FIS Report for this project have been produced in a digital format. The flood hazard information was converted to a Geographic Information System (GIS) format that meets FEMA's FIRM Database specifications and geographic information standards. This information is provided in a digital format so that it can be incorporated into a local GIS and be accessed more easily by the community. The FIRM Database includes most of the tabular information contained in the FIS Report in such a way that the data can be associated with pertinent spatial features. For example, the information contained in the Floodway Data table and Flood Profiles can be linked to the cross sections that are shown on the FIRMs. Additional information about the FIRM Database and its contents can be found in FEMA's *Guidelines and Standards for Flood Risk Analysis and Mapping*, www.fema.gov/media-library/resources-documents/collections/361.

Base map information shown on the FIRM was derived from the sources described in Table 21.

Data Type	Data Provider	Data Date	Data Scale	Data Description
Political Boundaries	San Juan County GIS Department	2019	1: 24,000	Municipal and couny boundaries
Public Land Survey System (PLSS)	United States Department of Agriculture (USDA)	2016	1: 24,000	PLSS data
Surface Water Featues	(USGS) National Hydrology Dataset	2019	1: 24,000	Streams, rivers, and lakes for the county
Transportation Features	Tiger Line Files, Road and Rail Centerlines	2019	1: 24,000	Roads and railroads for the county

Table 21: Base Map Sources

6.3 Floodplain and Floodway Delineation

The FIRM shows tints, screens, and symbols to indicate floodplains and floodways as well as the locations of selected cross sections used in the hydraulic analyses and floodway computations.

For riverine flooding sources, the mapped floodplain boundaries shown on the FIRM have been delineated using the flood elevations determined at each cross section; between cross sections, the boundaries were interpolated using the topographic elevation data described in Table 22.

In cases where the 1-percent and 0.2-percent-annual-chance floodplain boundaries are close together, only the 1-percent-annual-chance floodplain boundary has been shown. 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 floodway widths presented in this FIS Report and on the FIRM were computed for certain stream segments on the basis of equal conveyance reduction from each side of

the floodplain. Floodway widths were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. Table 2 indicates the flooding sources for which floodways have been determined. The results of the floodway computations for those flooding sources have been tabulated for selected cross sections and are shown in Table 23, "Floodway Data."

Certain flooding sources may have been studied that do not have published BFEs on the FIRMs, or for which there is a need to report the 1-percent-annual-chance flood elevations at selected cross sections because a published Flood Profile does not exist in this FIS Report. These streams may have also been studied using methods to determine non-encroachment zones rather than floodways. For these flooding sources, the 1-percent-annual-chance floodplain boundaries have been delineated using the flood elevations determined at each cross section; between cross sections, the boundaries were interpolated using the topographic elevation data described in Table. All topographic data used for modeling or mapping has been converted as necessary to NAVD88. The 1-percent-annual-chance elevations for selected cross sections along these flooding sources, along with their non-encroachment widths, if calculated, are shown in Table 24, "Flood Hazard and Non-Encroachment Data for Selected Streams."

Table 22: Summary of Topographic Elevation Data used in Mapping

		Source for	Topographic E	levation Data	
Community	Flooding Source	Description	Vertical Accuracy	Horizontal Accuracy	Citation
San Juan County, Unincorporated Areas	All within County	Light Detection and Ranging data (LiDAR)	2 cm	1.5 cm	CWCB NASA 2018

BFEs shown at cross sections on the FIRM represent the 1-percent-annual-chance water surface elevations shown on the Flood Profiles and in the Floodway Data tables in the FIS Report.

	ASE	0.0	0.0	0.5	0.2	0.3	0.0	0.0	0.3	0.0	0.2	0.1	0.1	2	
SURFACE	INCREASE	0	0	0	0	0	0	0	0	0	0	0	0	0.2	
1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)	WITH	9,209.0	9,225.5	9,243.3	9,257.3	9,279.1	9,294.6	9,307.2	9,328.3	9,343.4	9,361.7	9,380.0	9,396.1	9,409.6	
UAL CHANCE I	WITHOUT FLOODWAY	9,209.0	9,225.5	9,242.8	9,257.1	9,278.8	9,294.6	9,307.2	9,328.0	9,343.4	9,361.5	9,379.9	9,396.0	9,409.4	
1% ANN	REGULATORY	9,209.0	9,225.5	9,242.8	9,257.1	9,278.8	9,294.6	9,307.2	9,328.0	9,343.4	9,361.5	9,379.9	9,396.0	9,409.4	
	MEAN VELOCITY (FEET/SEC)	8.4	8.4	4.5	8.8	5.5	7.7	5.2	4.5	6.5	7.8	8.9	o.o	6.8	
FLOODWAY	SECTION AREA (SQ. FEET)	651	654	692	254	405	243	360	412	346	242	210	189	276	
	WIDTH (FEET)	235	368	228	56	296	58	335	295	251	89	22	56	29	
NOIL	DISTANCE 1	395,019	397,338	399,664	401,145	402,843	404,160	405,244	406,882	407,977	409,265	410,456	411,570	412,340	
LOCATION	CROSS	∢	ω	ပ	۵	Ш	L	O	I	-	7	¥	7	Σ	

¹ Feet above approximately 150 feet downstream of the Colorado-New Mexico border

FLOODWAY DATA

FLOODING SOURCE: ANIMAS RIVER

AND INCORPORATED AREAS

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN JUAN COUNTY, CO

URFACE	INCREASE	0.0	0.0	0.0	0.1	0.0	0.1	
1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)	WITH	9,283.12	9,306.5	9,327.8	9,349.3	9,386.2	9,424.6	
UAL CHANCE F ELEVATION (WITHOUT	9,283.12	9,306.5	9,327.8	9,349.2	9,386.2	9,424.5	
1% ANNI	REGULATORY	9,285.1	9,306.5	9,327.8	9,349.2	9,386.2	9,424.5	
	MEAN VELOCITY (FEET/SEC)	5.9	9.1	8.5	9.7	8.4	8.7	
FLOODWAY	SECTION AREA (SQ. FEET)	106	69	73	65	74	72	
	WIDTH (FEET)	98	25	28	21	32	26	
LOCATION	DISTANCE 1	0	1,005	2,058	2,934	3,976	4,861	
	CROSS SECTION	A	8	O	Q	Ш	L	

Feet above confluence with Animas River

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN JUAN COUNTY, CO

TABLE 23

AND INCORPORATED AREAS

FLOODWAY DATA

FLOODING SOURCE: CEMENT CREEK

²Computed without consideration of backwater effects from Animas River

		1								
URFACE	INCREASE	0.4	0.1	4.0	4.0	0.3	0.0	0.1	0.4	
1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)	WITH FLOODWAY	9,242.9	9,265.7	9,277.1	9,297.4	9,325.5	9,371.2	9,396.9	9,419.6	
UAL CHANCE F ELEVATION (WITHOUT	9,242.5	9,265.6	9,276.7	9,297.0	9,325.2	9,371.2	9,396.8	9,419.2	
1% ANN	REGULATORY	9,242.5	9,265.6	9,276.7	9,297.0	9,325.2	9,371.2	9,396.8	9,419.2	
	MEAN VELOCITY (FEET/SEC)	5.9	8.9	9.4	8.6	10.8	7.9	8.7	6.0	
FLOODWAY	SECTION AREA (SQ. FEET)	314	209	199	217	172	235	213	270	
ш	WIDTH (FEET)	161	80	89	29	46	65	47	75	
LOCATION	DISTANCE 1	622	2,294	3,070	4,256	5,841	7,925	9,738	11,391	
	CROSS SECTION	∢	Ω	O	۵	ш	L	ŋ	I	

¹ Feet above confluence with Animas River

FLOODWAY DATA

AND INCORPORATED AREAS

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN JUAN COUNTY, CO

TABLE 23

FLOODING SOURCE: MINERAL CREEK

Non-encroachment areas may be delineated where it is not possible to delineate floodways because specific channel profiles with bridge and culvert geometry were not developed. Any non-encroachment determinations for this Flood Risk Project have been tabulated for selected cross sections and are shown in Table 24. The non-encroachment width indicates the measured distance left and right (looking downstream) from the mapped center of the stream to the non-encroachment boundary based on a surcharge of 1.0 foot or less.

Table 24: Flood Hazard and Non-Encroachment Data for Selected Streams [Not Applicable to this Flood Risk Project]

6.4 Coastal Flood Hazard Mapping

This section is not applicable to this Flood Risk Project. . .

Table 25: Summary of Coastal Transect Mapping Considerations [Not Applicable to this Flood Risk Project]

6.5 FIRM Revisions

This FIS Report and the FIRM are based on the most up-to-date information available to FEMA at the time of its publication; however, flood hazard conditions change over time. Communities or private parties may request flood map revisions at any time. Certain types of requests require submission of supporting data. FEMA may also initiate a revision. Revisions may take several forms, including Letters of Map Amendment (LOMAs), Letters of Map Revision Based on Fill (LOMR-Fs), Letters of Map Revision (LOMRs) (referred to collectively as Letters of Map Change (LOMCs)), Physical Map Revisions (PMRs), and FEMA-contracted restudies. These types of revisions are further described below. Some of these types of revisions do not result in the republishing of the FIS Report. To assure that any user is aware of all revisions, it is advisable to contact the community repository of flood-hazard data (shown in Table, "Map Repositories").

6.5.1 Letters of Map Amendment

A LOMA is an official revision by letter to an effective NFIP map. A LOMA results from an administrative process that involves the review of scientific or technical data submitted by the owner or lessee of property who believes the property has incorrectly been included in a designated SFHA. A LOMA amends the currently effective FEMA map and establishes that a specific property is not located in a SFHA.

To obtain an application for a LOMA, visit www.fema.gov/letter-map-amendment-loma and download the form "MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill". Visit the "Flood Map-Related Fees" section to determine the cost, if any, of applying for a LOMA.

FEMA offers a tutorial on how to apply for a LOMA. The LOMA Tutorial Series can be accessed at www.fema.gov/online-tutorials.

For more information about how to apply for a LOMA, call the FEMA Map Information eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627).

6.5.2 Letters of Map Revision Based on Fill

A LOMR-F is an official revision by letter to an effective NFIP map. A LOMR-F states FEMA's determination concerning whether a structure or parcel has been elevated on fill above the base flood elevation and is, therefore, excluded from the SFHA.

Information about obtaining an application for a LOMR-F can be obtained in the same manner as that for a LOMA, by visiting www.fema.gov/letter-map-amendment-loma for the "MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill" or by calling the FEMA Map Information eXchange, toll free, at 1-877-FEMA MAP (1-877-336-2627). Fees for applying for a LOMR-F, if any, are listed in the "Flood Map-Related Fees" section.

A tutorial for LOMR-F is available at www.fema.gov/online-tutorials.

6.5.3 Letters of Map Revision

A LOMR is an official revision to the currently effective FEMA map. It is used to change flood zones, floodplain and floodway delineations, flood elevations and planimetric features. All requests for LOMRs should be made to FEMA through the chief executive officer of the community, since it is the community that must adopt any changes and revisions to the map. If the request for a LOMR is not submitted through the chief executive officer of the community, evidence must be submitted that the community has been notified of the request.

To obtain an application for a LOMR, visit www.fema.gov/media-library/assets/documents/1343 and download the form "MT-2 Application Forms and Instructions for Conditional Letters of Map Revision and Letters of Map Revision". Visit the "Flood Map-Related Fees" section to determine the cost of applying for a LOMR. For more information about how to apply for a LOMR, call the FEMA Map Information eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627) to speak to a Map Specialist.

Previously issued mappable LOMCs (including LOMRs) that have been incorporated into the San Juan County FIRM are listed in Table 26. Please note that this table only includes LOMCs that have been issued on the FIRM panels updated by this map revision. For all other areas within this county, users should be aware that revisions to the FIS Report made by prior LOMRs may not be reflected herein and users will need to continue to use the previously issued LOMRs to obtain the most current data.

Table 26: Incorporated Letters of Map Change [Not Applicable to this Flood Risk Project]

6.5.4 Physical Map Revisions

A Physical Map Revisions (PMR) is an official republication of a community's NFIP map to effect changes to base flood elevations, floodplain boundary delineations, regulatory floodways and planimetric features. These changes typically occur as a result of structural works or improvements, annexations resulting in additional flood hazard areas or correction to base flood elevations or SFHAs.

The community's chief executive officer must submit scientific and technical data to FEMA to support the request for a PMR. The data will be analyzed and the map will be

revised if warranted. The community is provided with copies of the revised information and is afforded a review period. When the base flood elevations are changed, a 90-day appeal period is provided. A 6-month adoption period for formal approval of the revised map(s) is also provided.

For more information about the PMR process, please visit www.fema.gov and visit the "Flood Map Revision Processes" section.

6.5.5 Contracted Restudies

The NFIP provides for a periodic review and restudy of flood hazards within a given community. FEMA accomplishes this through a national watershed-based mapping needs assessment strategy, known as the Coordinated Needs Management Strategy (CNMS). The CNMS is used by FEMA to assign priorities and allocate funding for new flood hazard analyses used to update the FIS Report and FIRM. The goal of CNMS is to define the validity of the engineering study data within a mapped inventory. The CNMS is used to track the assessment process, document engineering gaps and their resolution, and aid in prioritization for using flood risk as a key factor for areas identified for flood map updates. Visit www.fema.gov to learn more about the CNMS or contact the FEMA Regional Office listed in Section 8 of this FIS Report.

6.5.6 Community Map History

The current FIRM presents flooding information for the entire geographic area of San Juan County. Previously, separate FIRMs, Flood Hazard Boundary Maps (FHBMs) and/or Flood Boundary and Floodway Maps (FBFMs) may have been prepared for the incorporated communities and the unincorporated areas in the county that had identified SFHAs. Current and historical data relating to the maps prepared for the project area are presented in Table, "Community Map History." A description of each of the column headings and the source of the date is also listed below.

- Community Name includes communities falling within the geographic area shown
 on the FIRM, including those that fall on the boundary line, nonparticipating
 communities, and communities with maps that have been rescinded.
 Communities with No Special Flood Hazards are indicated by a footnote. If all
 maps (FHBM, FBFM, and FIRM) were rescinded for a community, it is not listed
 in this table unless SFHAs have been identified in this community.
- Initial Identification Date (First NFIP Map Published) is the date of the first NFIP map that identified flood hazards in the community. If the FHBM has been converted to a FIRM, the initial FHBM date is shown. If the community has never been mapped, the upcoming effective date or "pending" (for Preliminary FIS Reports) is shown. If the community is listed in Table 7 but not identified on the map, the community is treated as if it were unmapped.
- Initial FHBM Effective Date is the effective date of the first FHBM. This date may be the same date as the Initial NFIP Map Date.
- FHBM Revision Date(s) is the date(s) that the FHBM was revised, if applicable.
- Initial FIRM Effective Date is the date of the first effective FIRM for the community.

FIRM Revision Date(s) is the date(s) the FIRM was revised, if applicable. This is the revised date that is shown on the FIRM panel, if applicable. As countywide studies are completed or revised, each community listed should have its FIRM dates updated accordingly to reflect the date of the countywide study. Once the FIRMs exist in countywide format, as PMRs of FIRM panels within the county are completed, the FIRM Revision Dates in the table for each community affected by the PMR are updated with the date of the PMR, even if the PMR did not revise all the panels within that community.

The initial effective date for the San Juan County FIRMs in countywide format was May 9, 2023.

Table 27: Community Map History

Community Name	Initial Identification Date	Initial FHBM Effective Date	FHBM Revision Date(s)	Initial FIRM Effective Date	FIRM Revision Date(s)
San Juan County, Unincorporated Areas	9/1/1978	N/A	N/A	9/1/1978	5/9/2023
Silverton, Town of	6/14/1974	6/14/1974	5/28/1976	9/1/1978	5/9/2023

SECTION 7.0 - CONTRACTED STUDIES AND COMMUNITY COORDINATION

7.1 Contracted Studies

Table 28 provides a summary of the contracted studies, by flooding source, that are included in this FIS Report.

Table 28: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Animas River and Tributaries	5/9/2023	AECOM	CT 2018- 2357	4/3/2020	San Juan County, Unincorporated Areas

7.2 Community Meetings

The dates of the community meetings held for this Flood Risk Project and previous Flood Risk Projects are shown in Table 29. These meetings may have previously been referred to by a variety of names (Community Coordination Officer (CCO), Scoping, Discovery, etc.), but all meetings represent opportunities for FEMA, community officials, study contractors, and other invited guests to discuss the planning for and results of the project.

Table 29: Community Meetings

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
San Juan County,	6000001	8/6/2020	Resilience	FEMA, the community, and the study contractor
Unincorporated Areas	5/3/2023	3/18/2021	Final CCO	FEMA, the community, and the study contractor
Silverton Town of	5/9/2023	8/6/2019	Flood Risk Review	FEMA, the community, and the study contractor
		3/18/2021	Final CCO	FEMA, the community, and the study contractor

SECTION 8.0 – ADDITIONAL INFORMATION

Information concerning the pertinent data used in the preparation of this FIS Report can be obtained by submitting an order with any required payment to the FEMA Engineering Library. For more information on this process, see www.fema.gov.

Table 30 is a list of the locations where FIRMs for San Juan County can be viewed. Please note that the maps at these locations are for reference only and are not for distribution. Also, please note that only the maps for the community listed in the table are available at that particular repository. A user may need to visit another repository to view maps from an adjacent community.

Table 30: Map Repositories

Community	Address	City	State	Zip Code
San Juan County, Unincorporated Areas	San Juan County Courthouse 1557 Greene Street	Silverton	СО	81433
Silverton, Town of	Town Hall 1360 Greene Street	Silverton	со	81433

The National Flood Hazard Layer (NFHL) dataset is a compilation of effective FIRM Databases and LOMCs. Together they create a GIS data layer for a State or Territory. The NFHL is updated as studies become effective and extracts are made available to the public monthly. NFHL data can be viewed or ordered from the website shown in Table 31.

Table 31 contains useful contact information regarding the FIS Report, the FIRM, and other relevant flood hazard and GIS data. In addition, information about the State NFIP Coordinator and GIS Coordinator is shown in this table. At the request of FEMA, each Governor has designated an agency of State or territorial government to coordinate that State's or territory's NFIP activities. These agencies often assist communities in developing and adopting necessary floodplain management measures. State GIS Coordinators are knowledgeable about the availability and location of State and local GIS data in their state.

Table 31: Additional Information

FEMA and the NFIP	
FEMA and FEMA Engineering Library website	www.fema.gov/national-flood-insurance-program-flood-hazard-mapping/engineering-library
NFIP website	www.fema.gov/national-flood-insurance-program
NFHL Dataset	msc.fema.gov
FEMA Region VIII	Denver Federal Center, Building 710 P.O. Box 25267 Denver, CO 80255-0267 (303) 235-4812

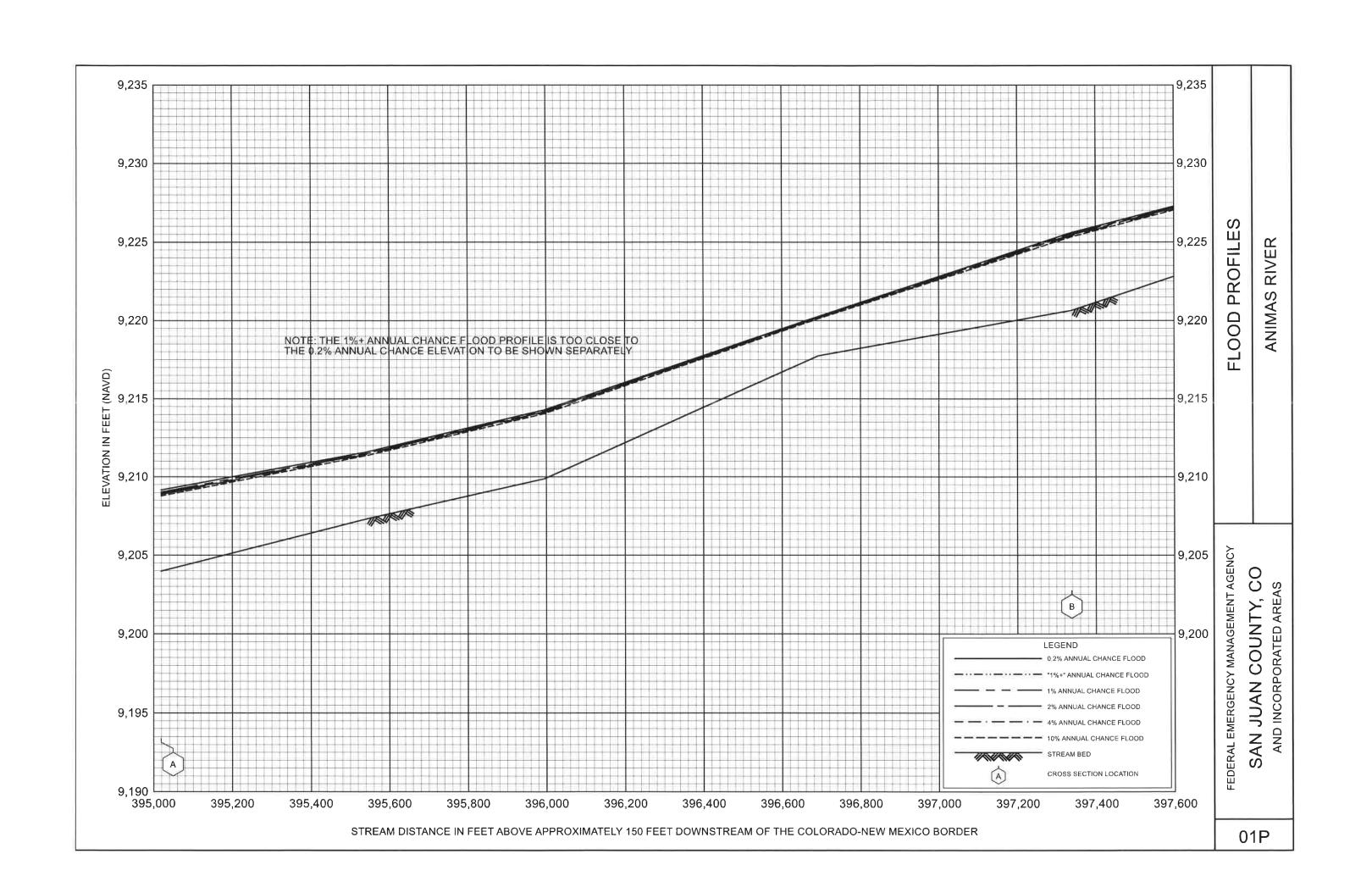
Other Federal Agencies	
USGS website	www.usgs.gov
Hydraulic Engineering Center website	www.hec.usace.army.mil
State Agencies and Organization	ons
State NFIP Coordinator	Doug Mahan, CFM CWCB Community Assistance Program Coordinator 1313 Sherman Street, Rm. 718 Denver, CO 80203 (303) 866-3441 x3221 doug.mahan@state.co.us
State GIS Coordinator	Jon Gottsegen Statewide GIS Coordinator 601 E. 18 th Ave Denver, CO 80203 Phone: (303) 764-7712 jon.gottsegen@state.co.us

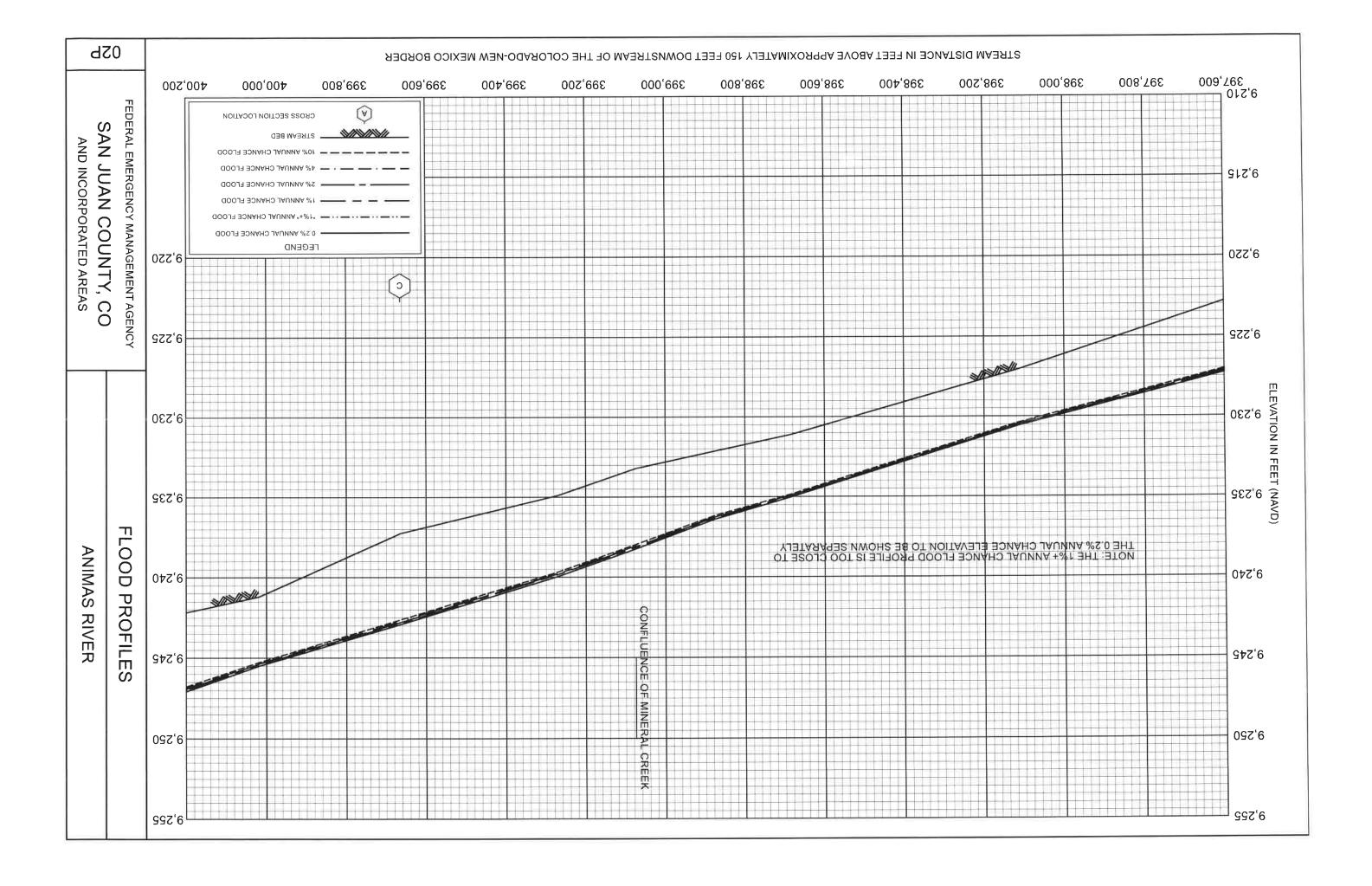
SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES

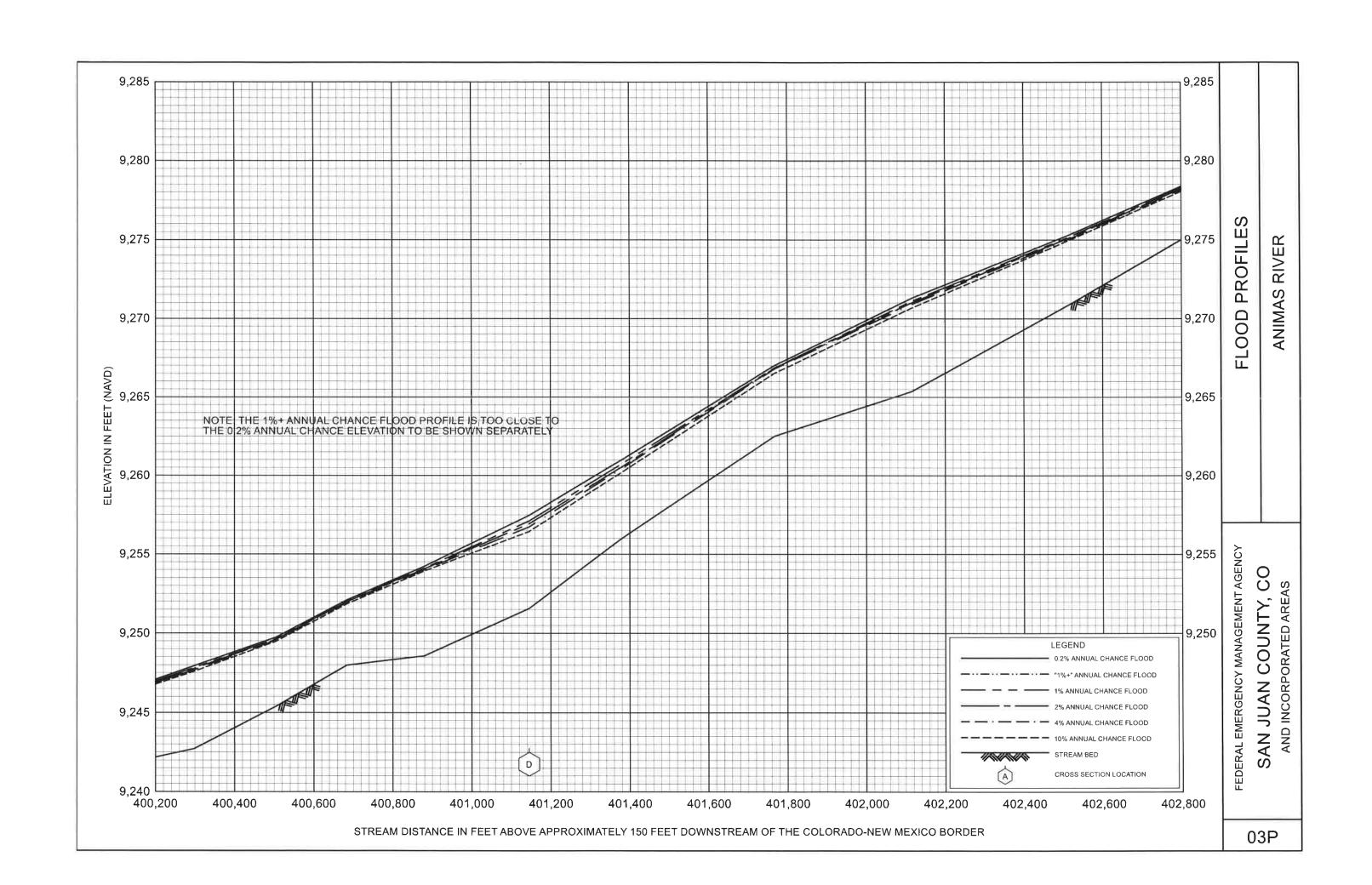
Table 32 includes sources used in the preparation of and cited in this FIS Report as well as additional studies that have been conducted in the study area.

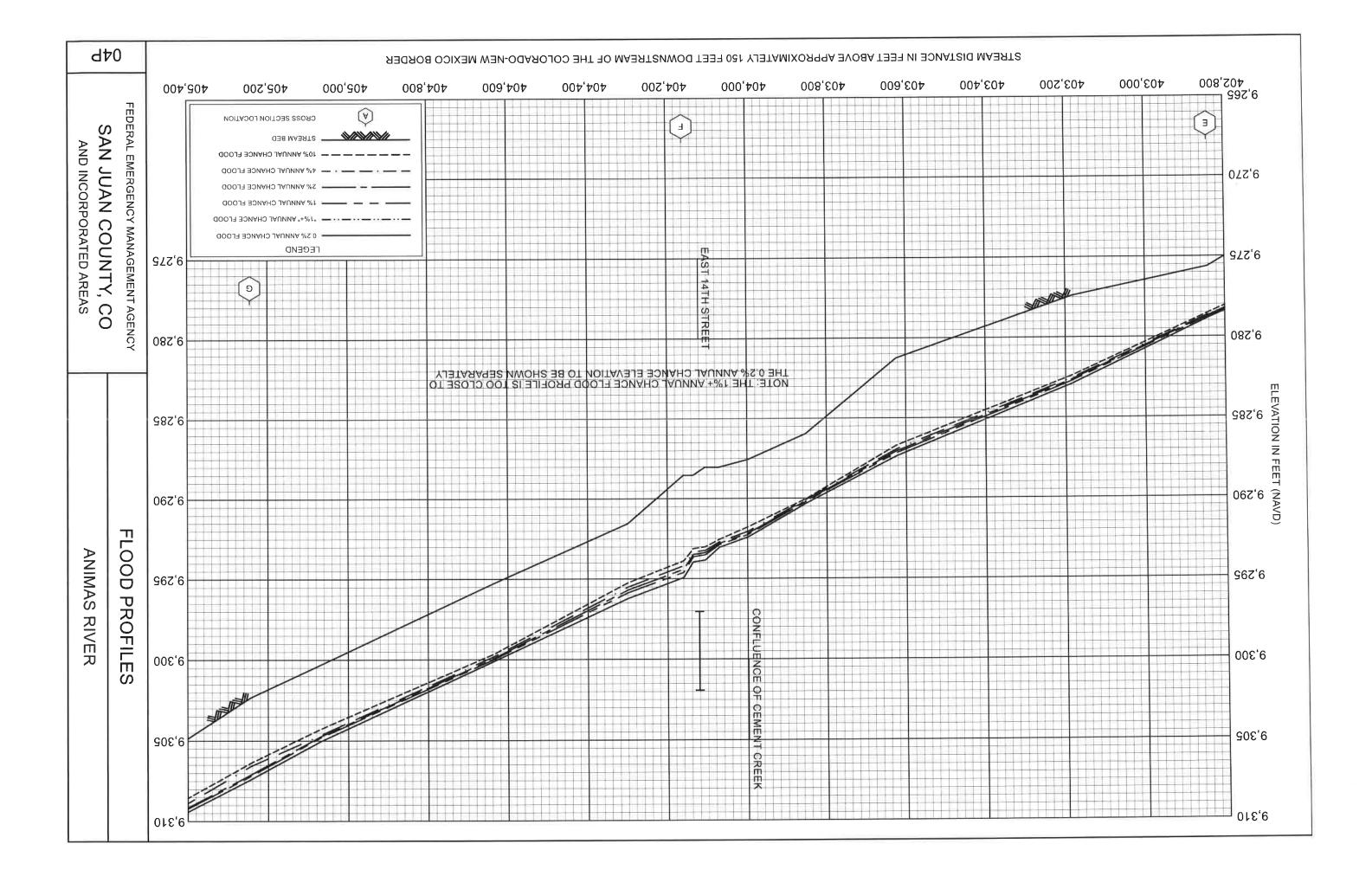
Table 32: Bibliography and References

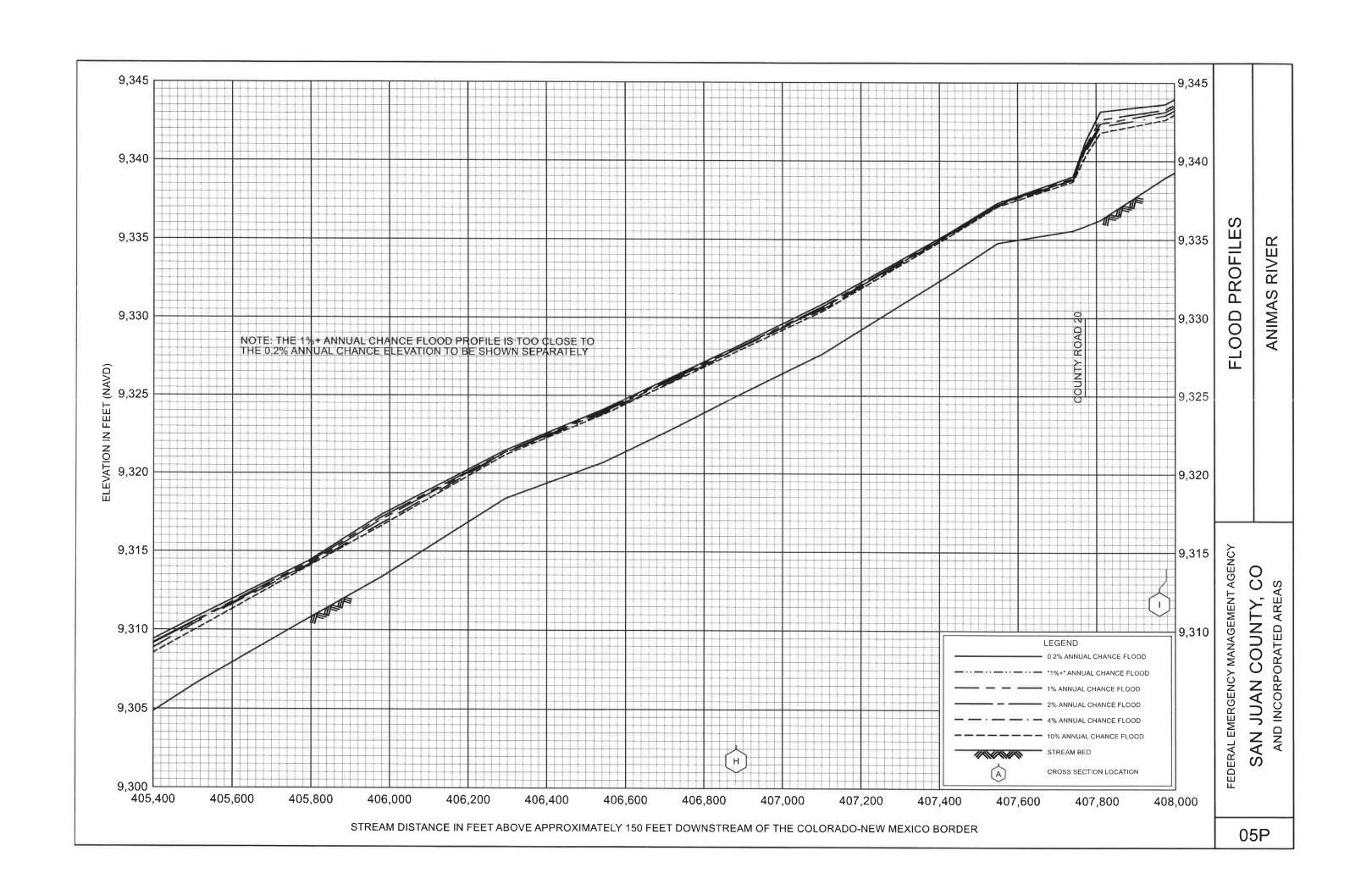
Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
USDA 2019	U.S. Department of Agriculture	Public Land Survey System	USDA	Washington, D.C.	1/1/2016	
CWCB 2019	Colorado Water Conservation Board	Hydrology, Hydraulics, and Floodplain Mapping submittal for San Juan Co	CWCB	Denver, CO	October 2019	http://www.coloradoha zardmapping.com/risk Map/animas/Documen ts
USCB 2016	U.S. Census Bureau	TIGER/Line Shapefile, 2016 USCB	USCB	Washington, D.C.	6/1/2019	
CWCB 2018	NASA Re-Process, Colorado Priority Sites LiDAR	Light Detection and Ranging data(LiDAR)	nsgs	Washington, D.C.	2018	
USGS 2017	U.S. Geologic Survey	National Hydrography Dataset (NHD)	USGS	Reston, VA	10/17/2019	

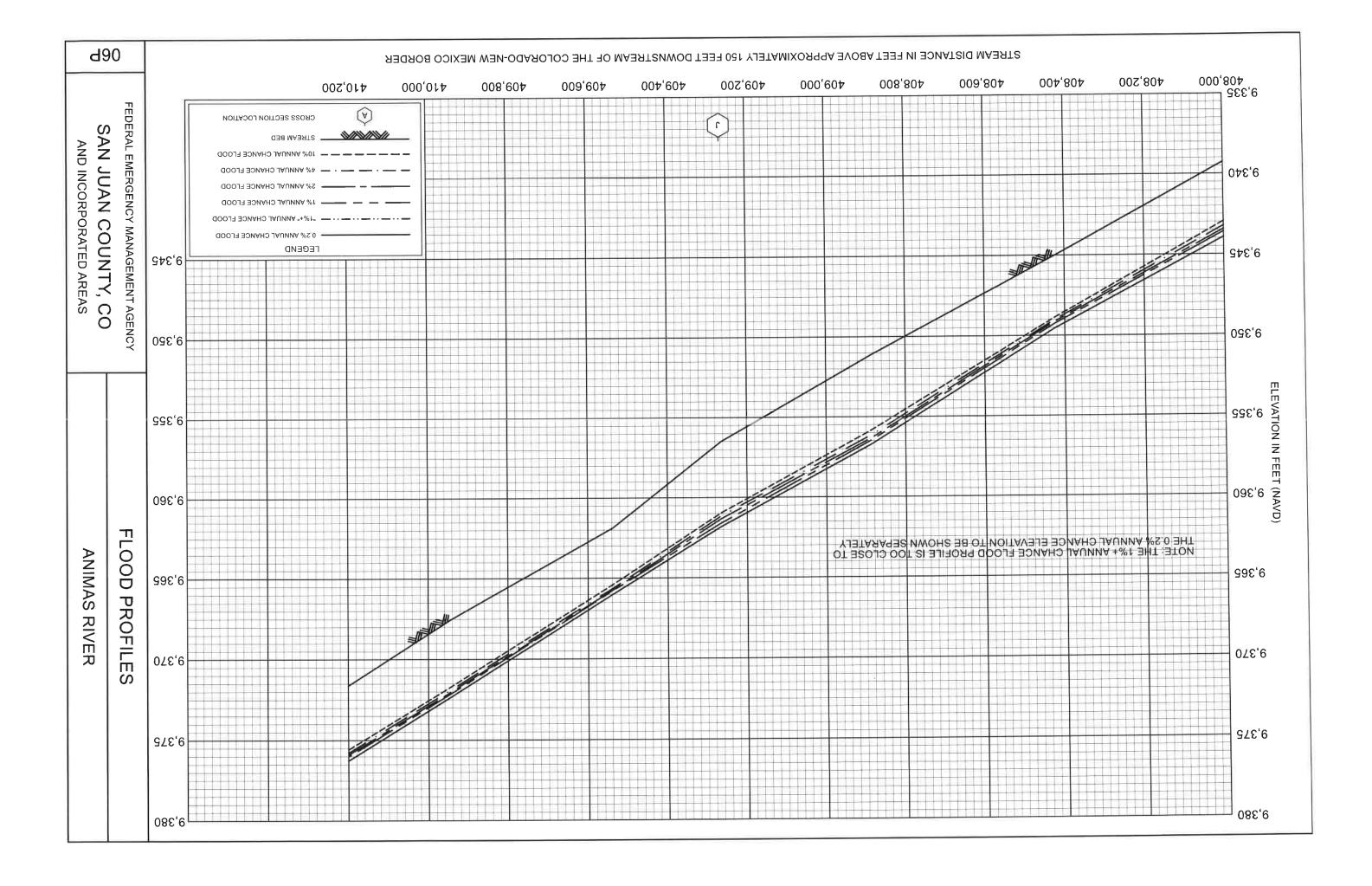


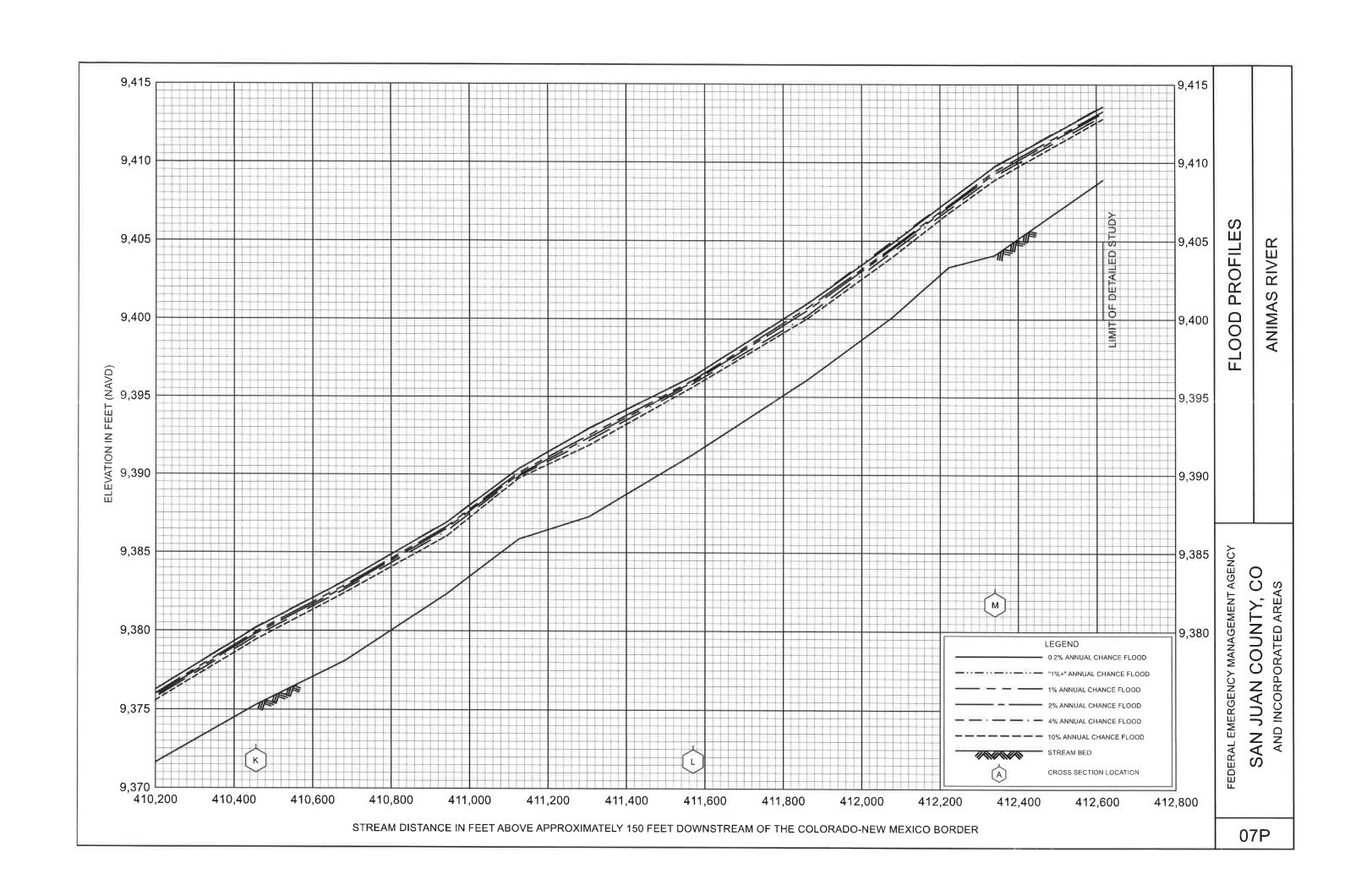


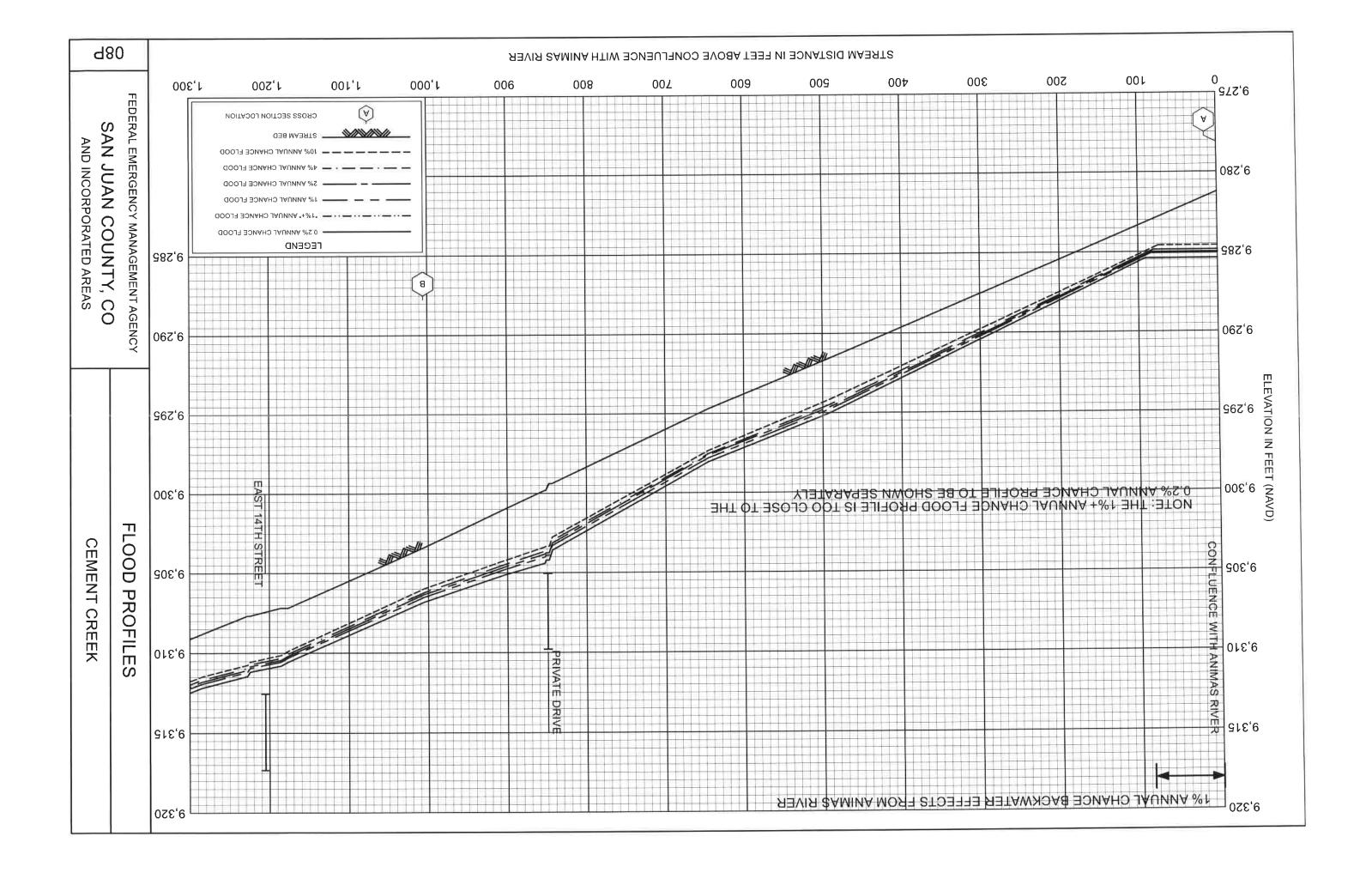


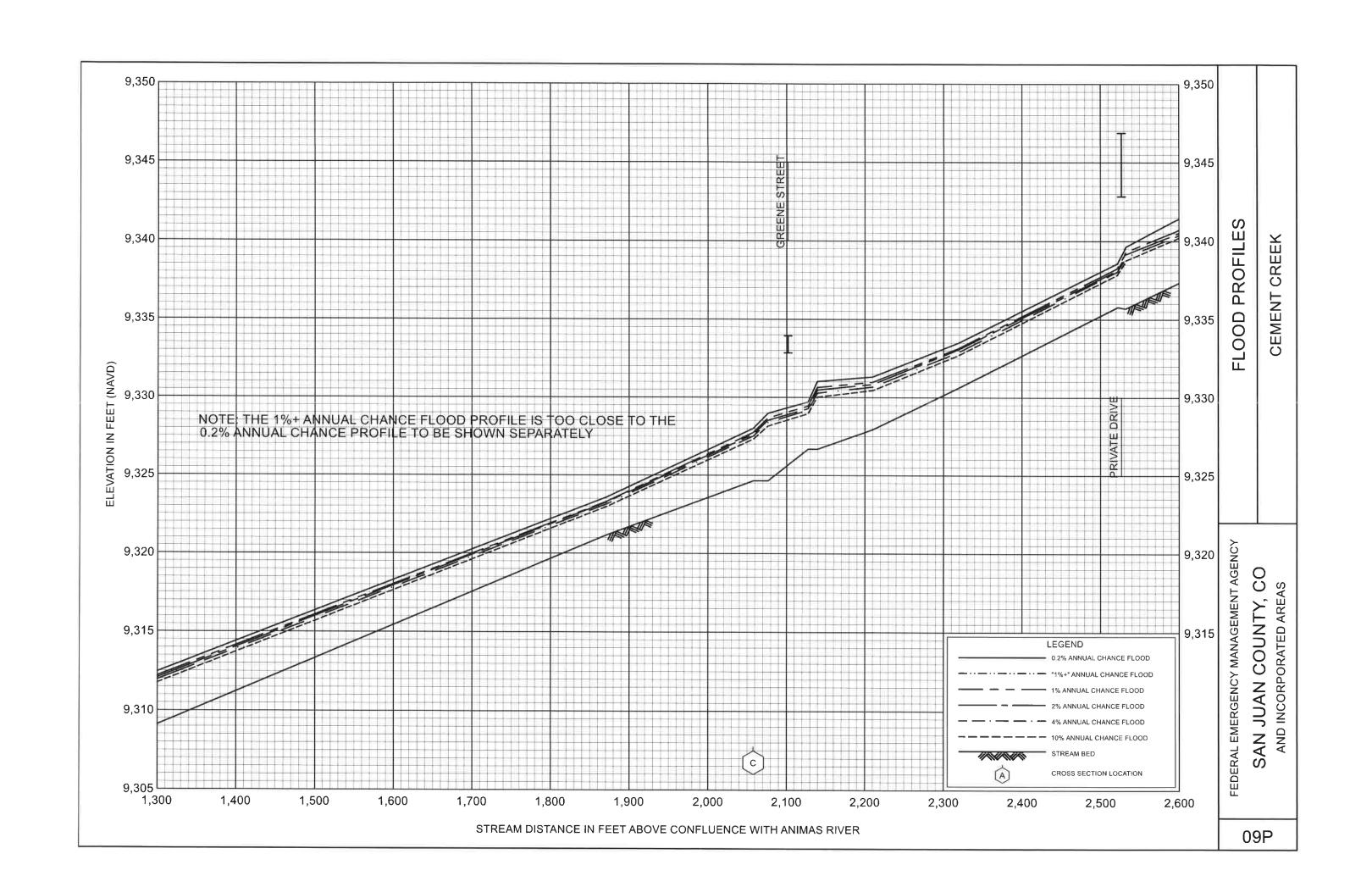


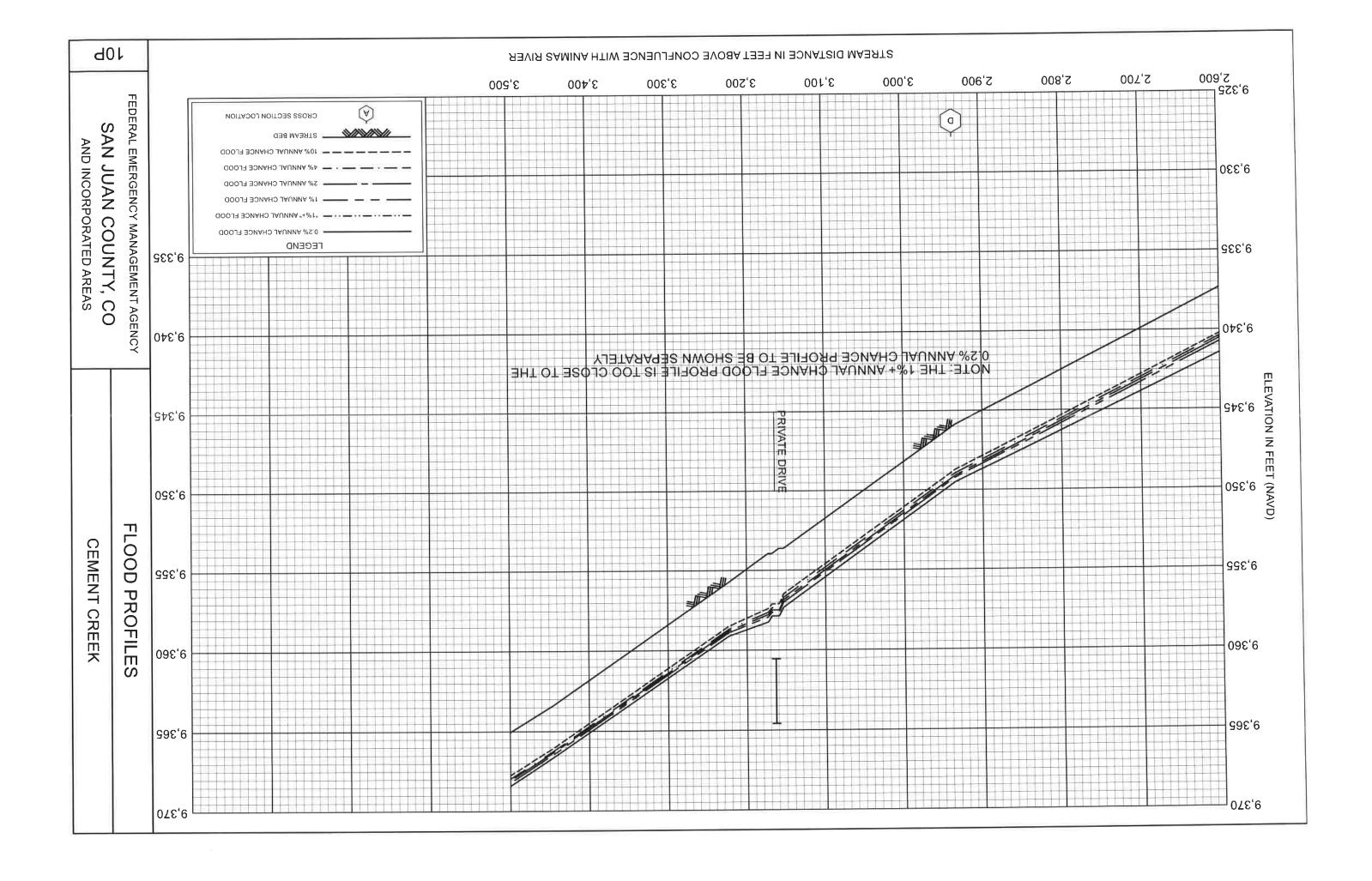


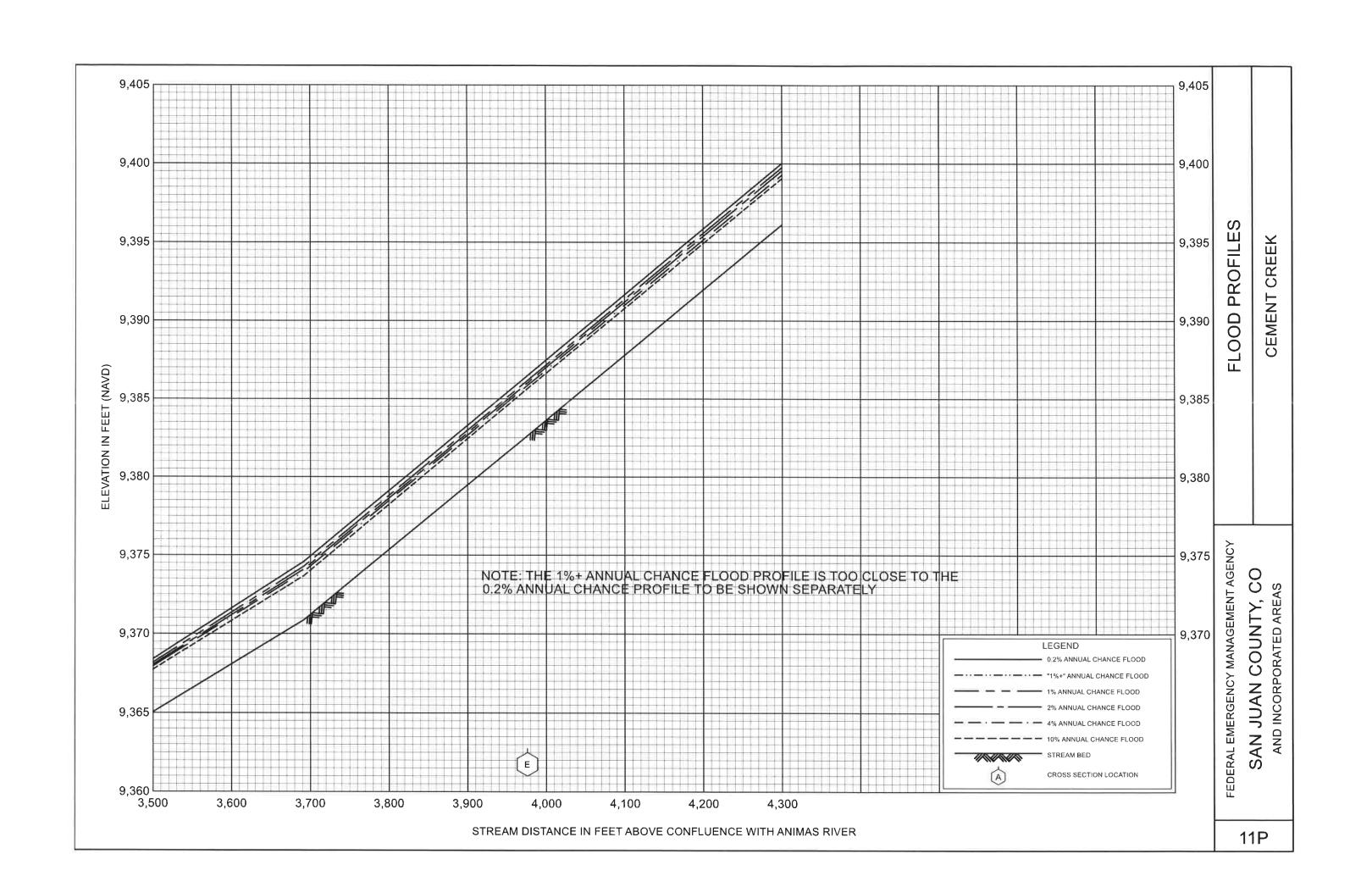


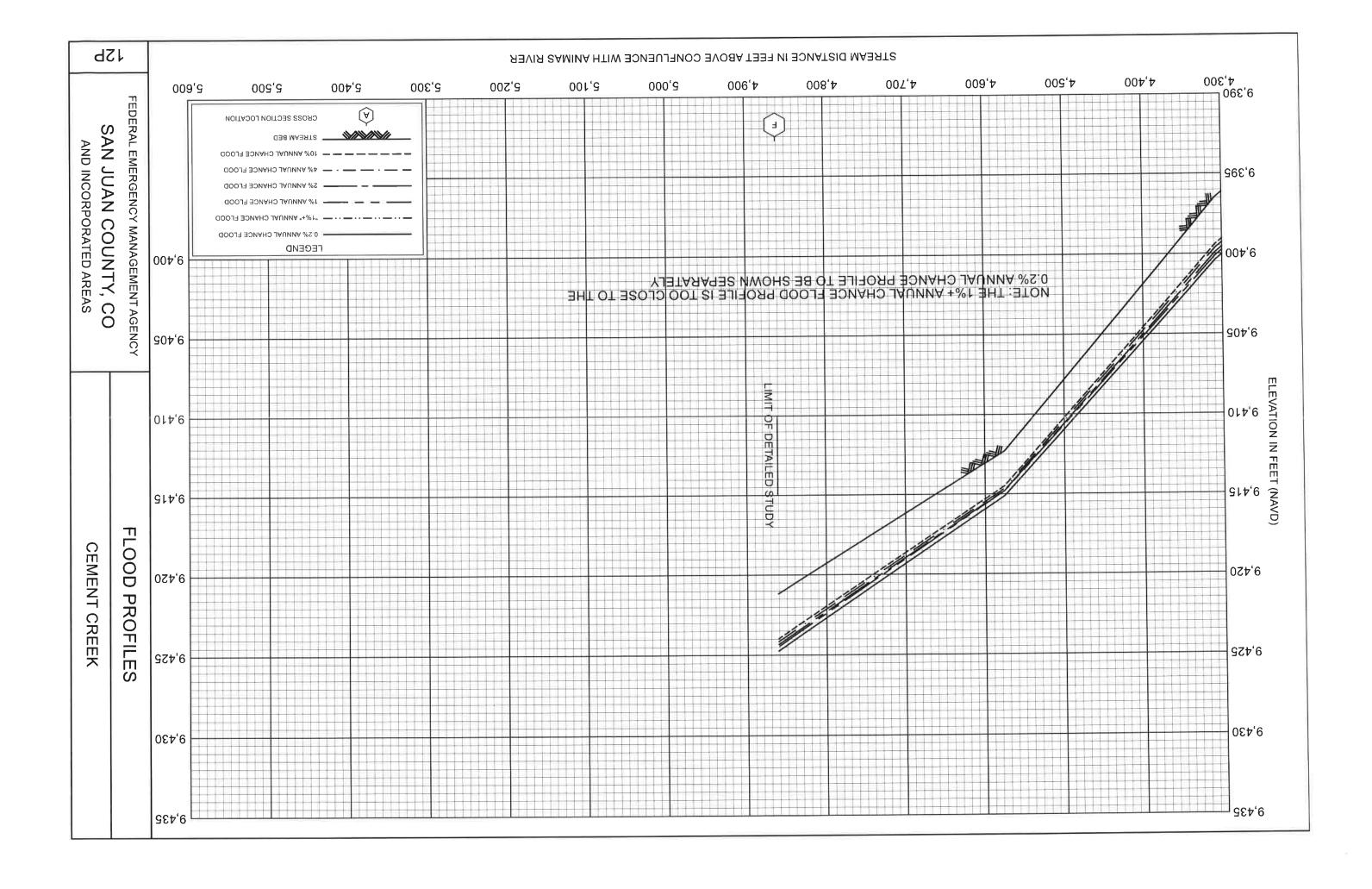


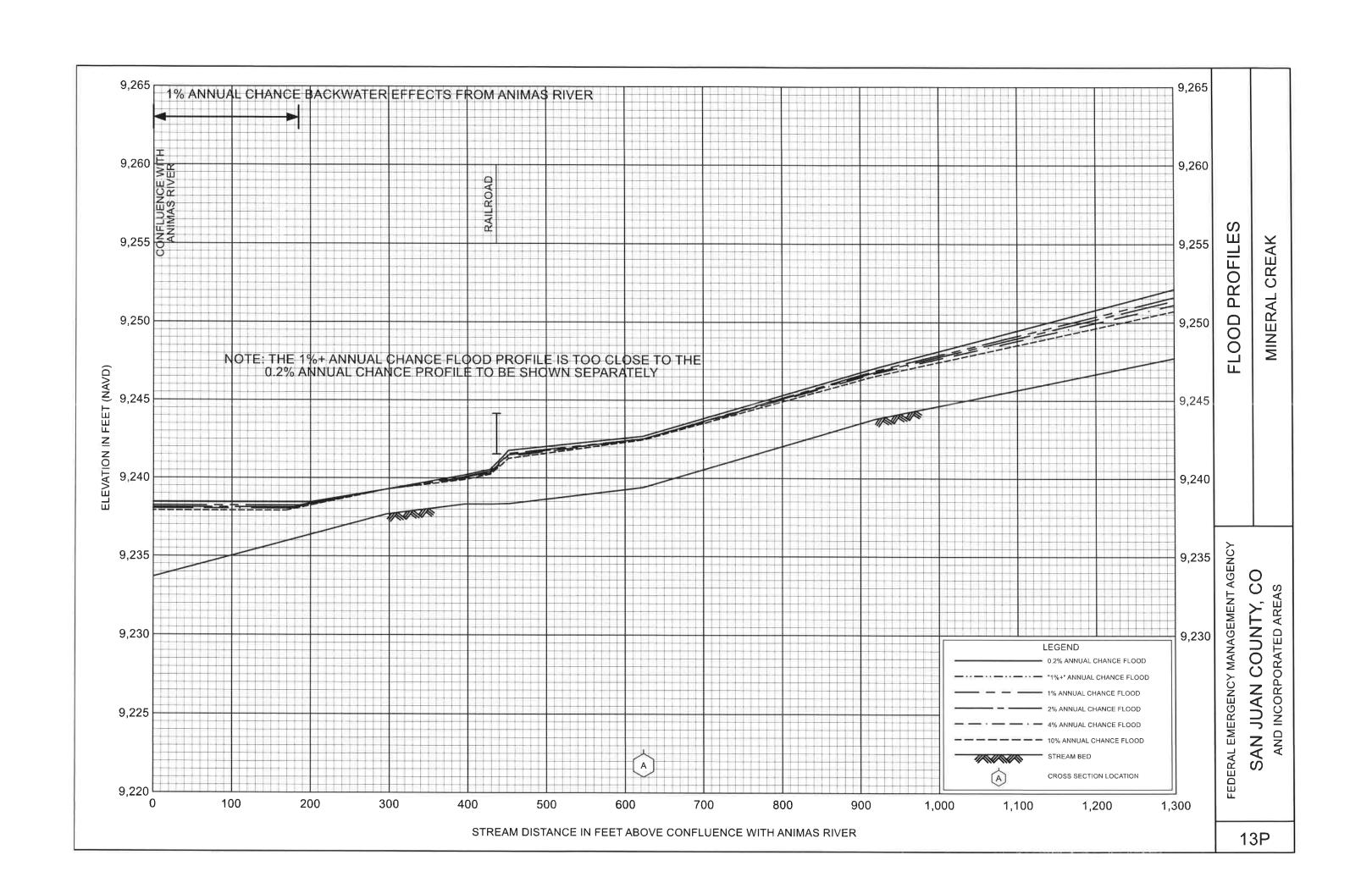


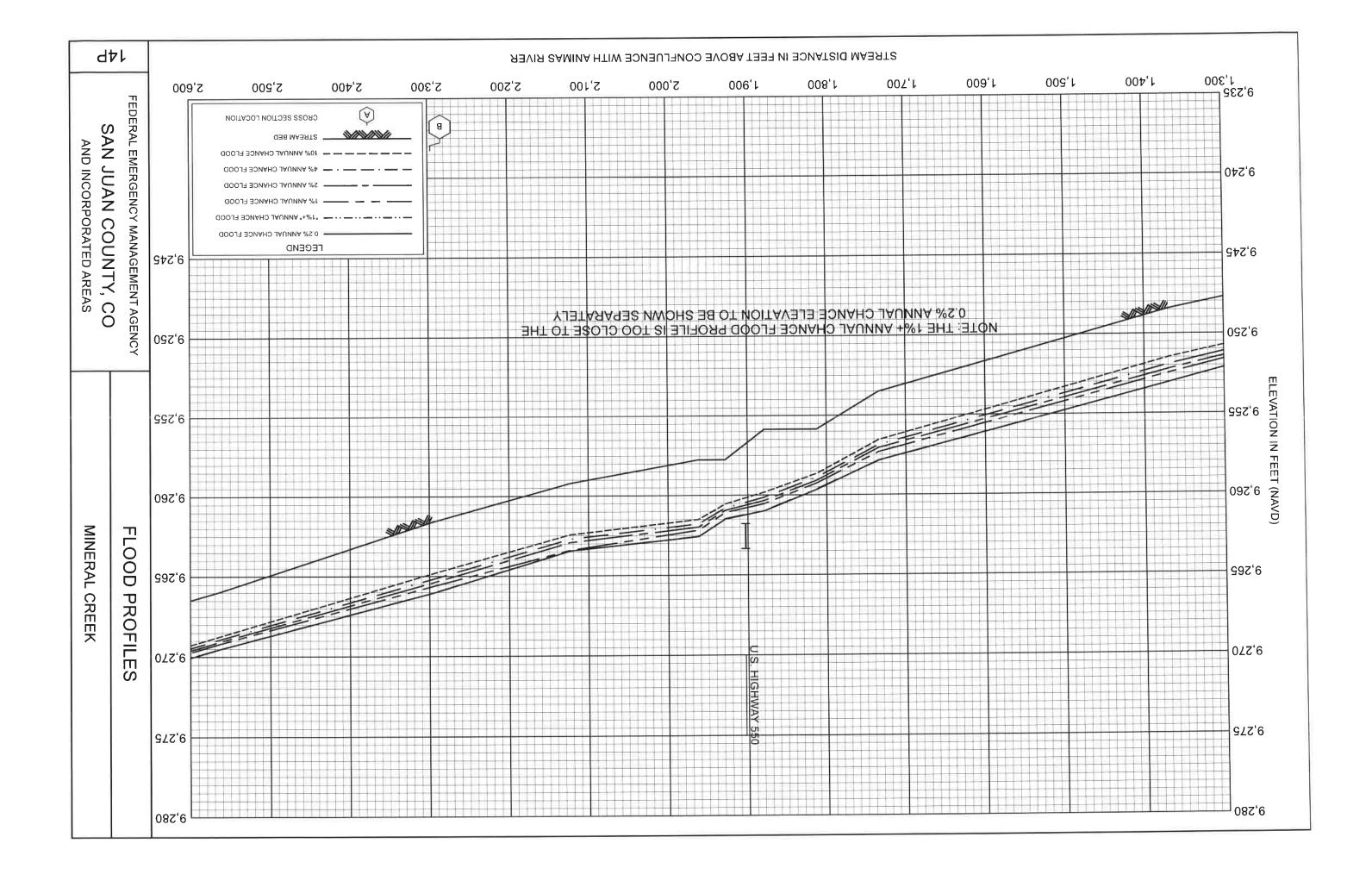


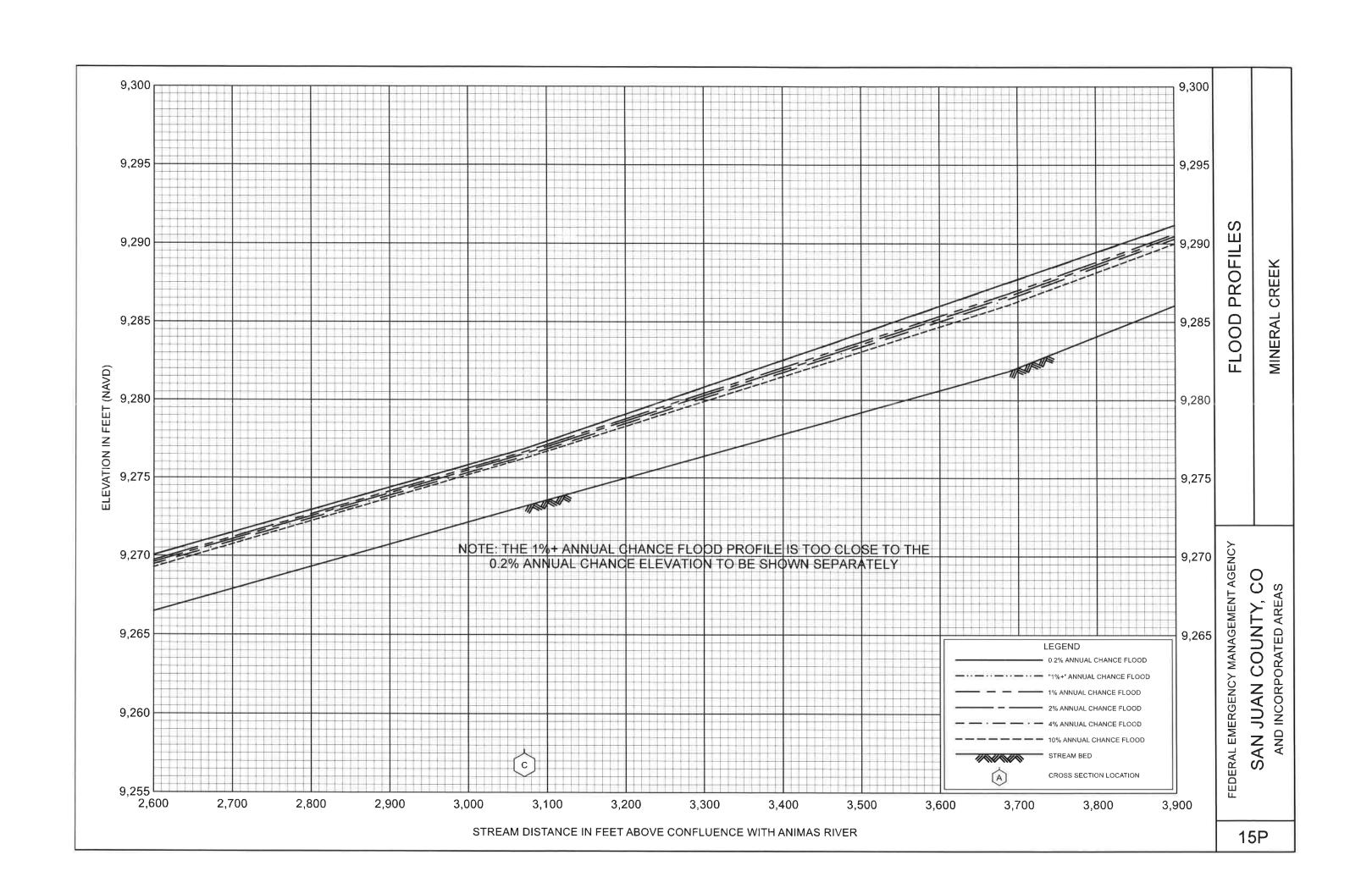


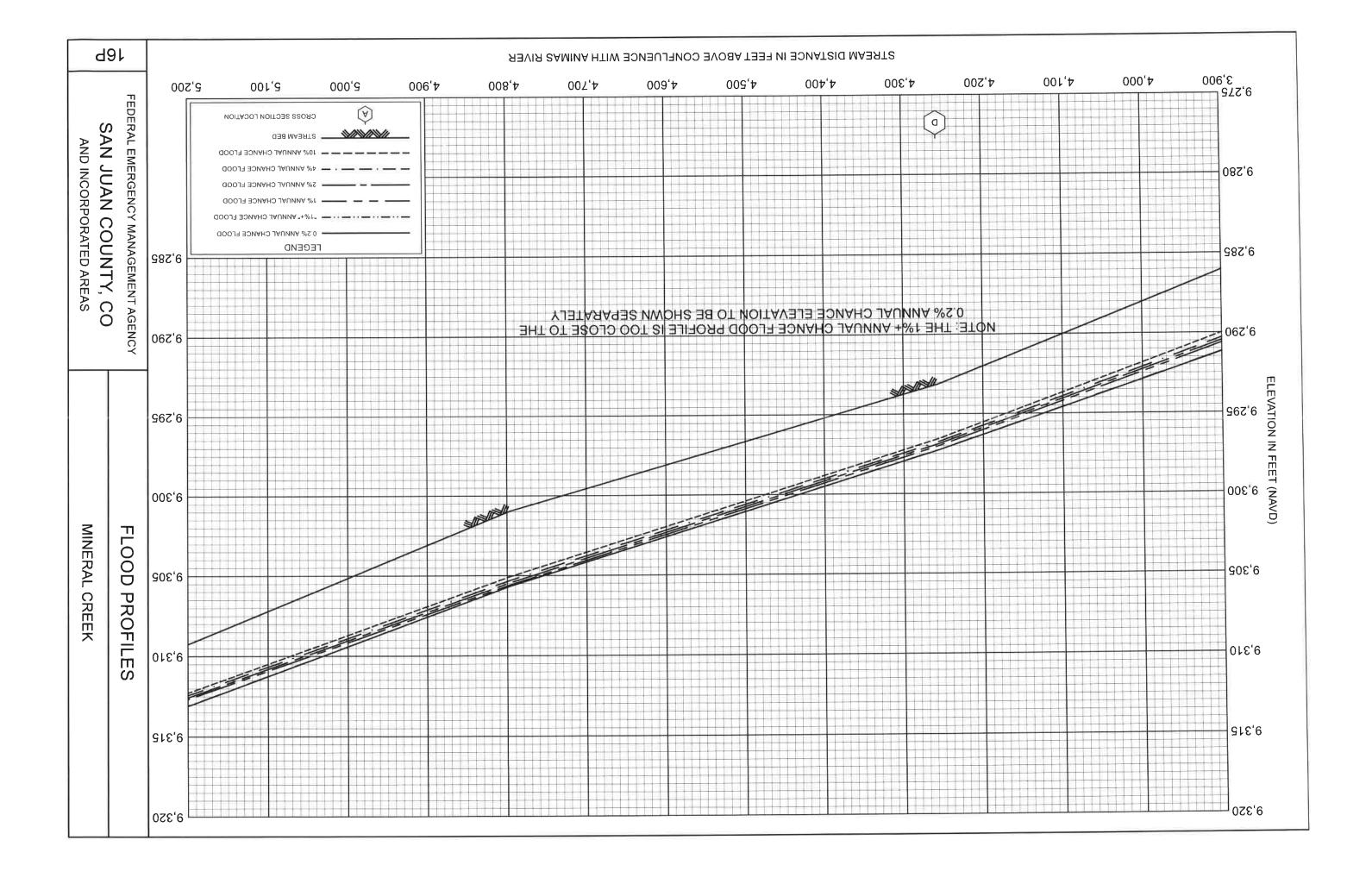


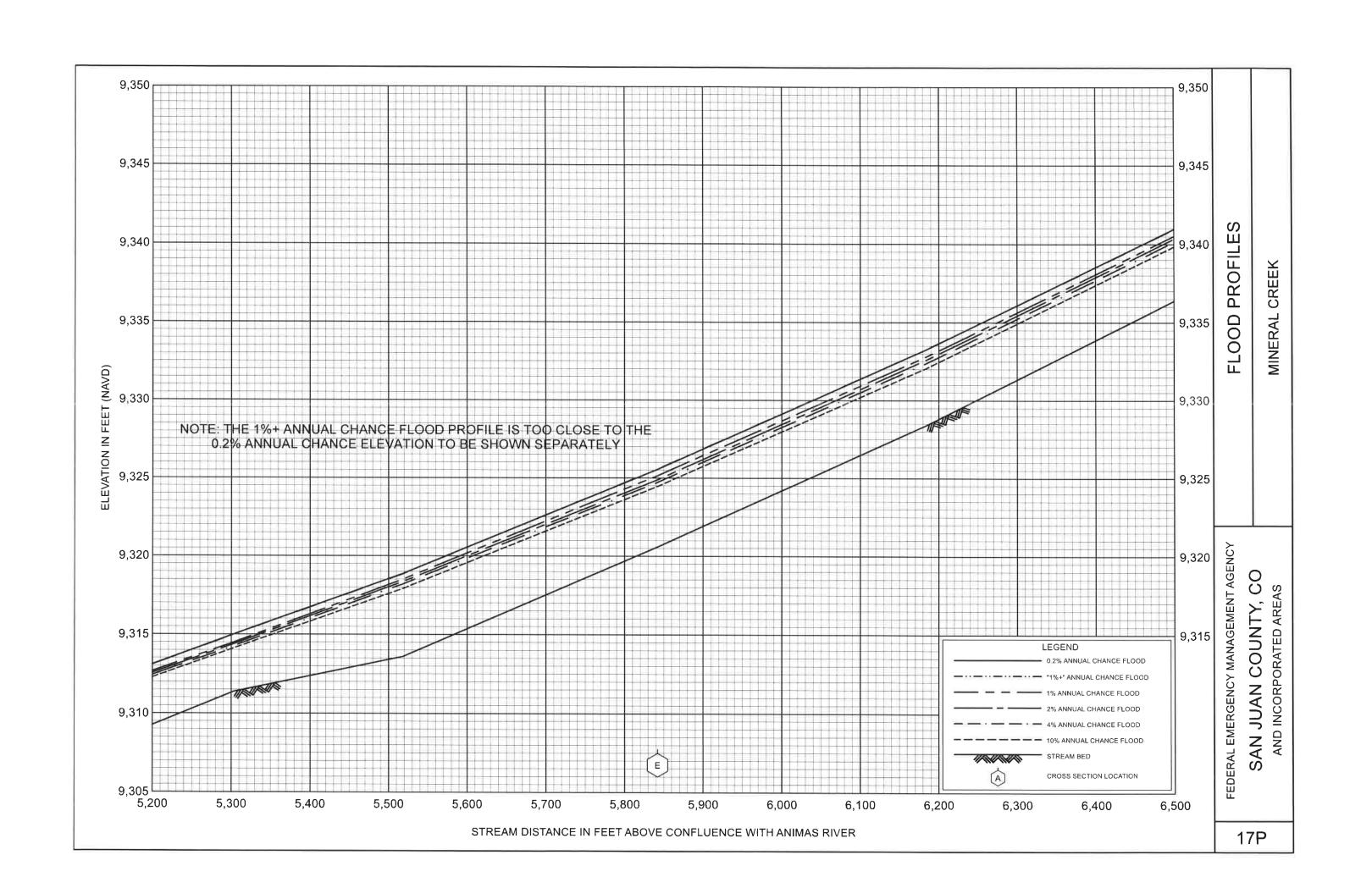


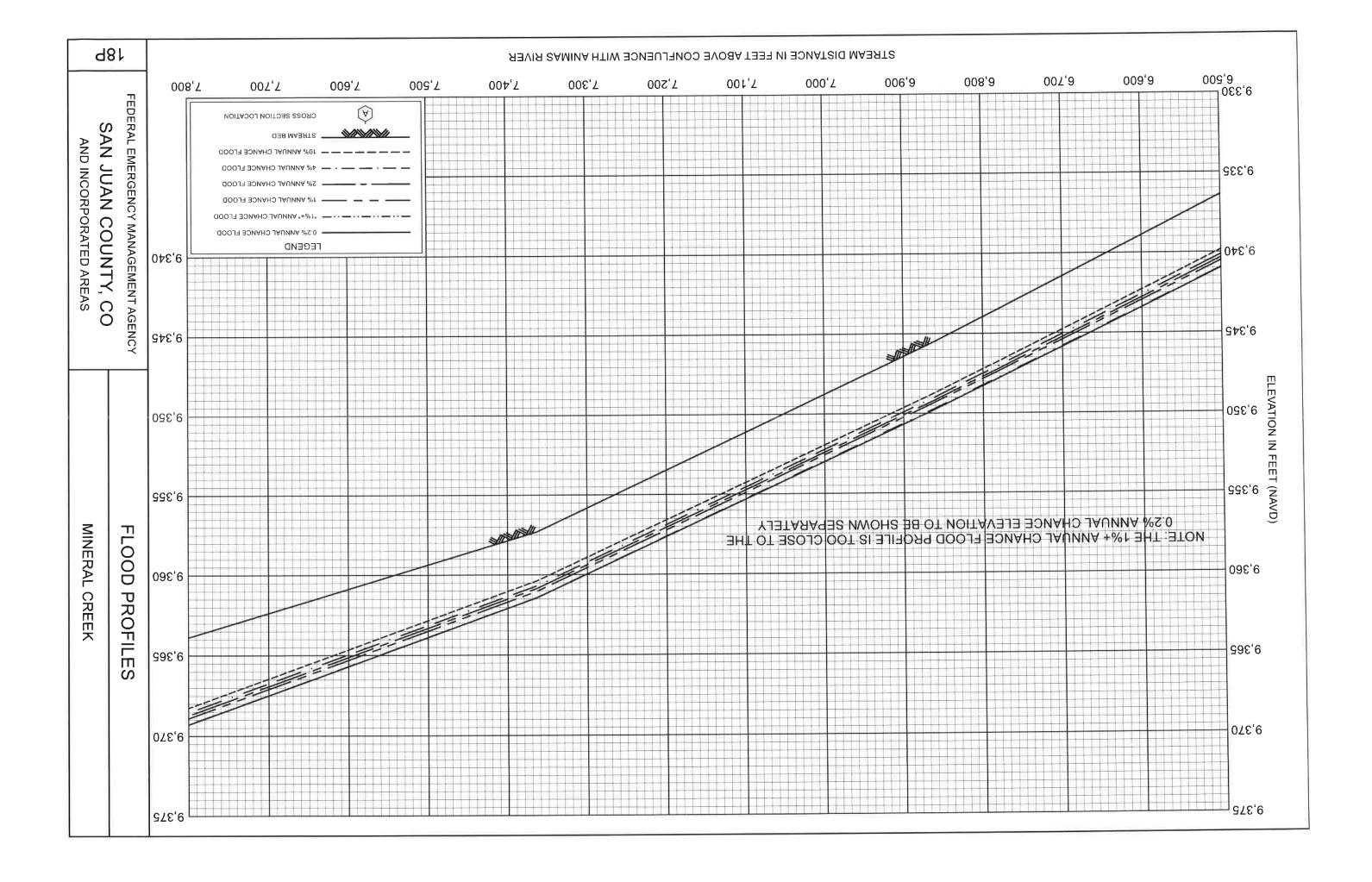


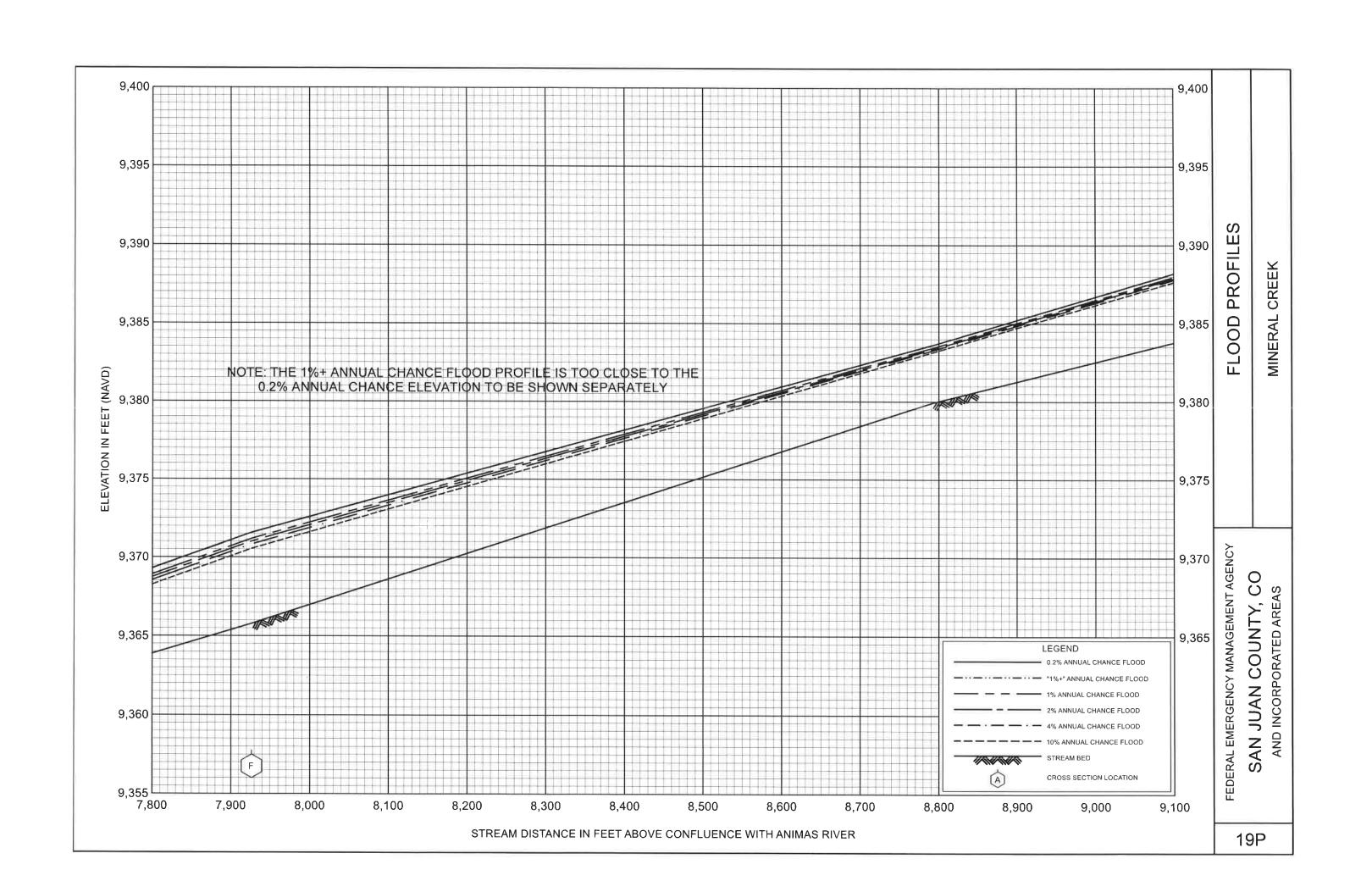


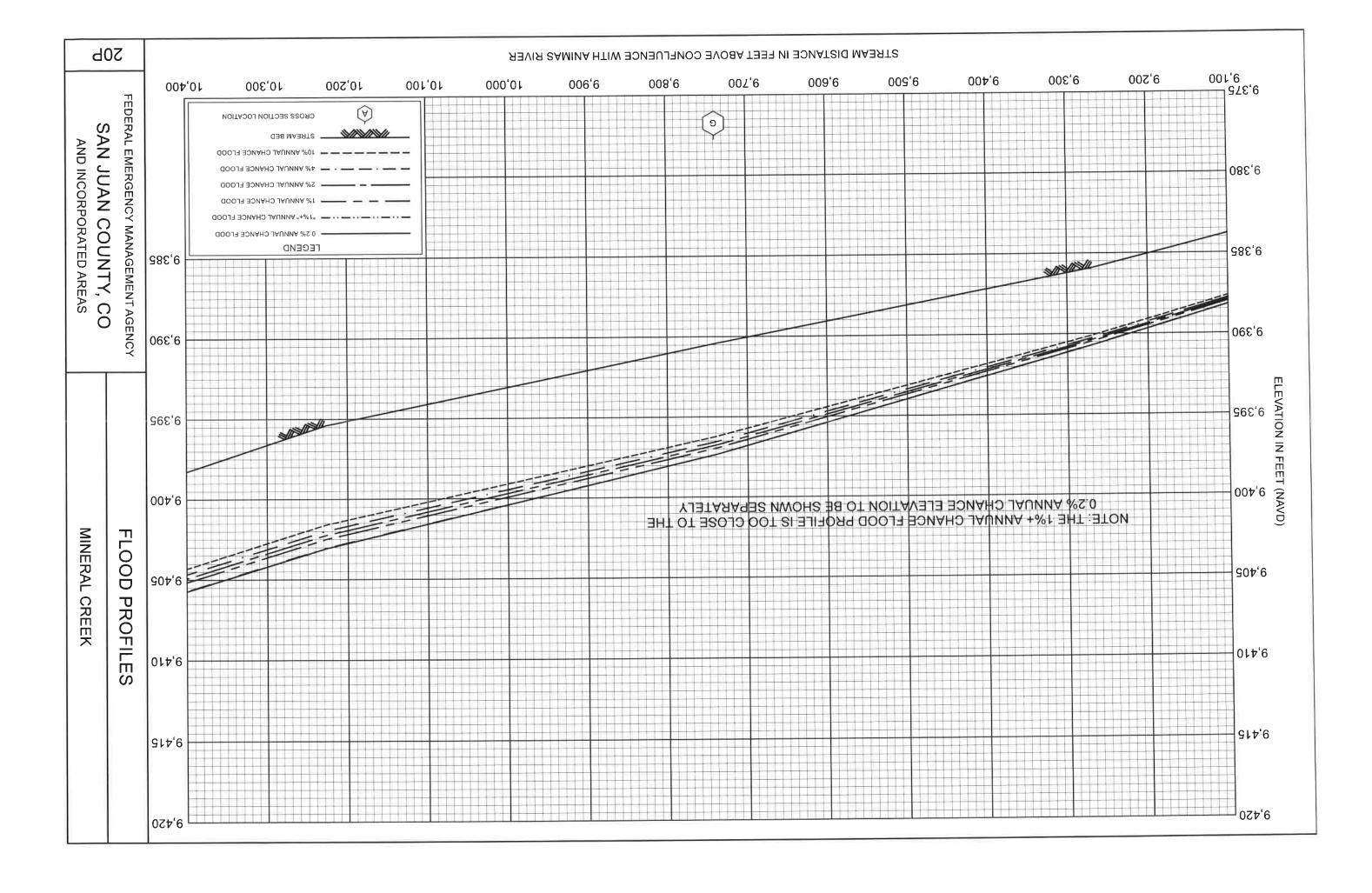


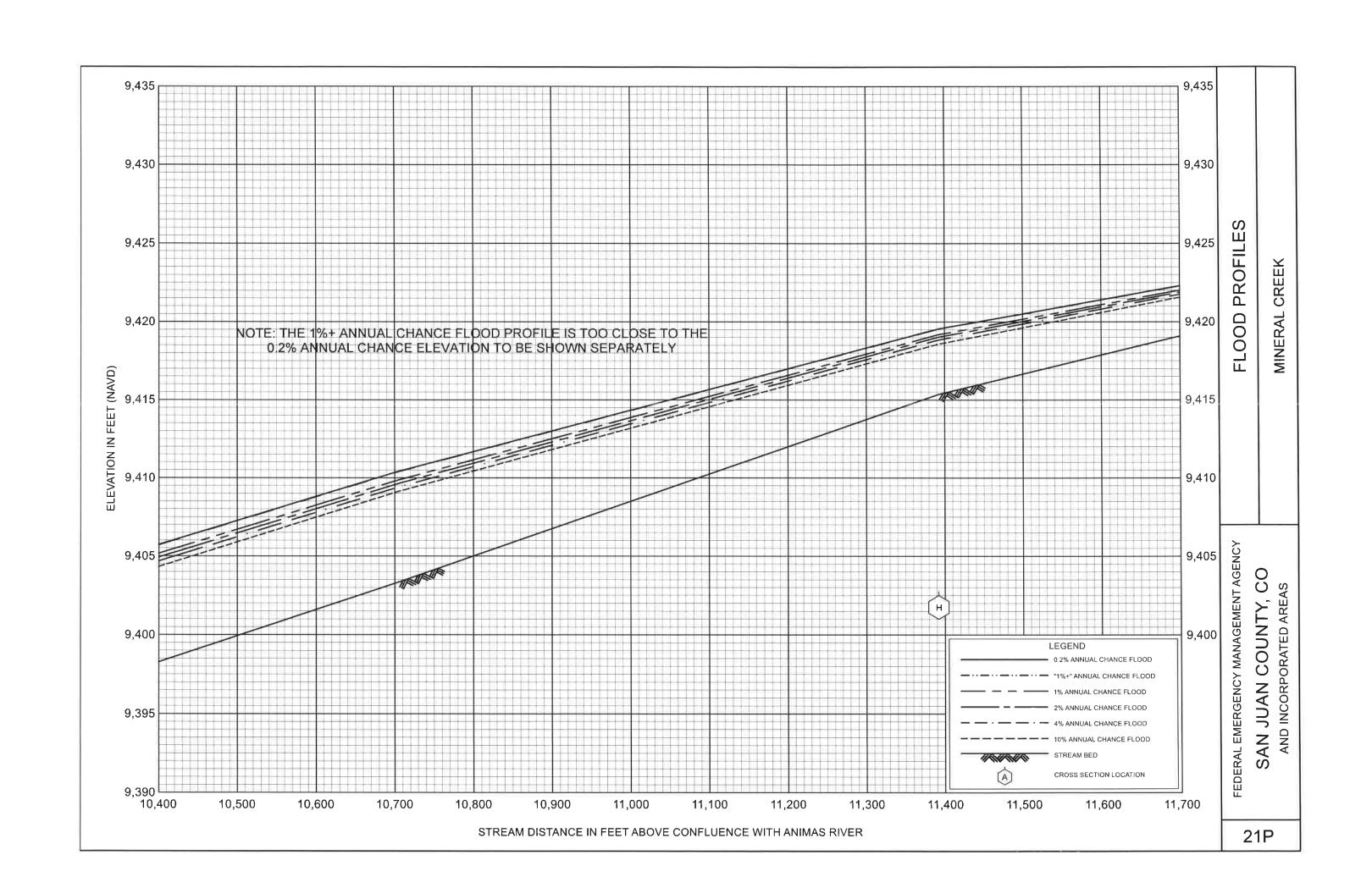


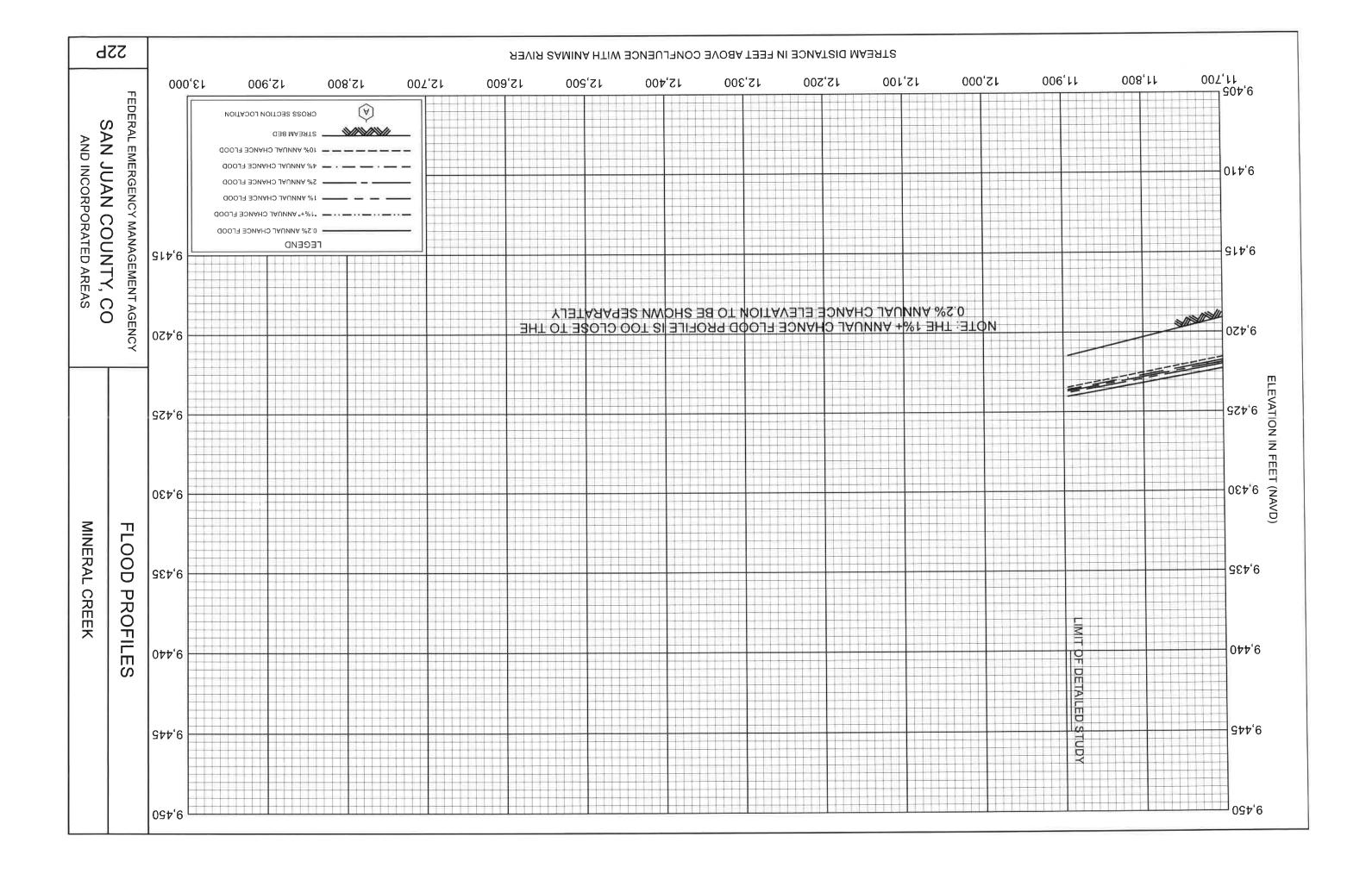


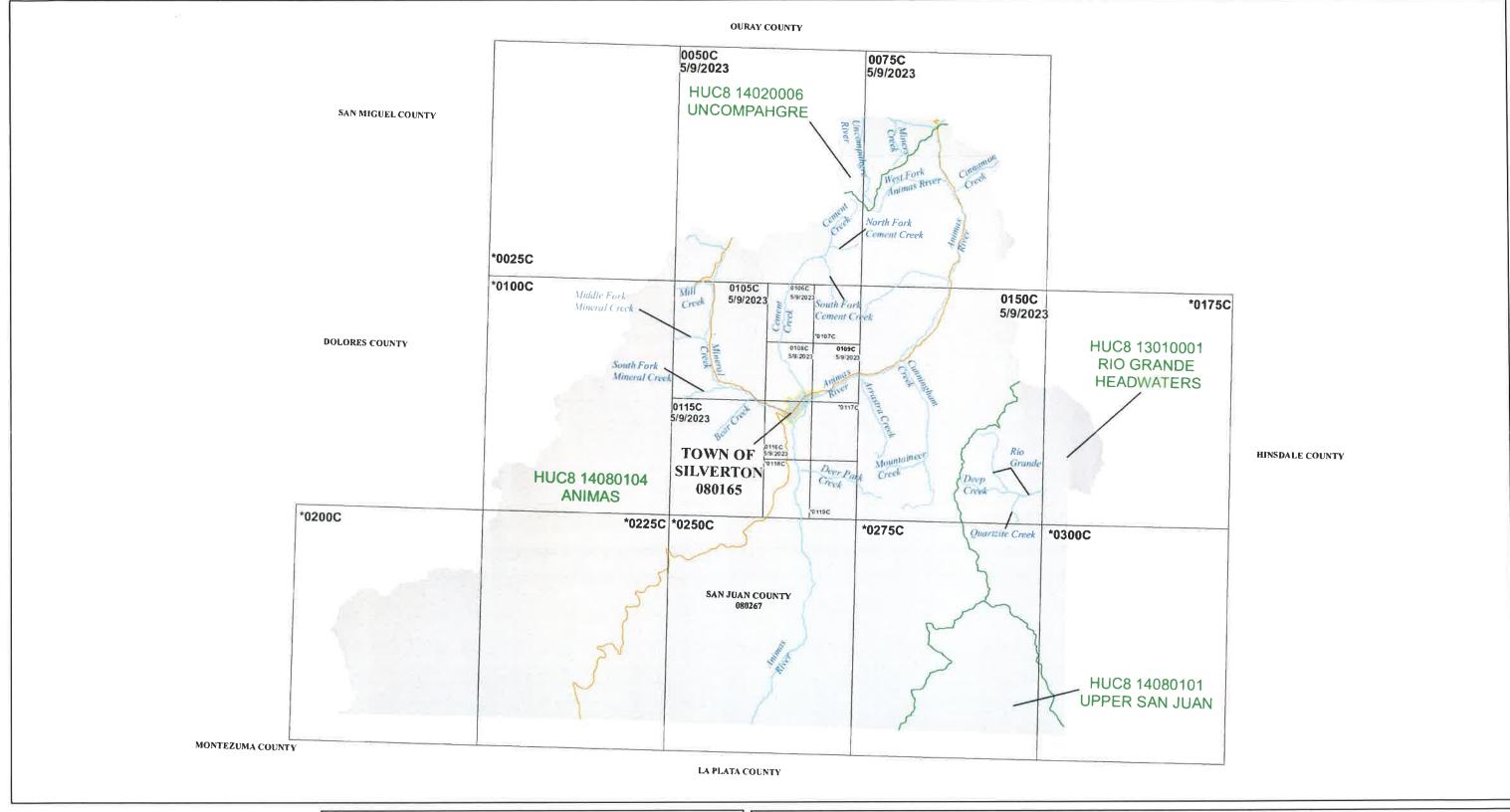


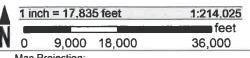












Map Projection: Universal Transverse Mercator Zone 13N; North American Datum 1983

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT

HTTPS://MSC.FEMA.GOV

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION
*PANEL NOT PRINTED - NO SPECIAL FLOOD HAZARD AREAS



NATIONAL FLOOD INSURANCE PROGRAM

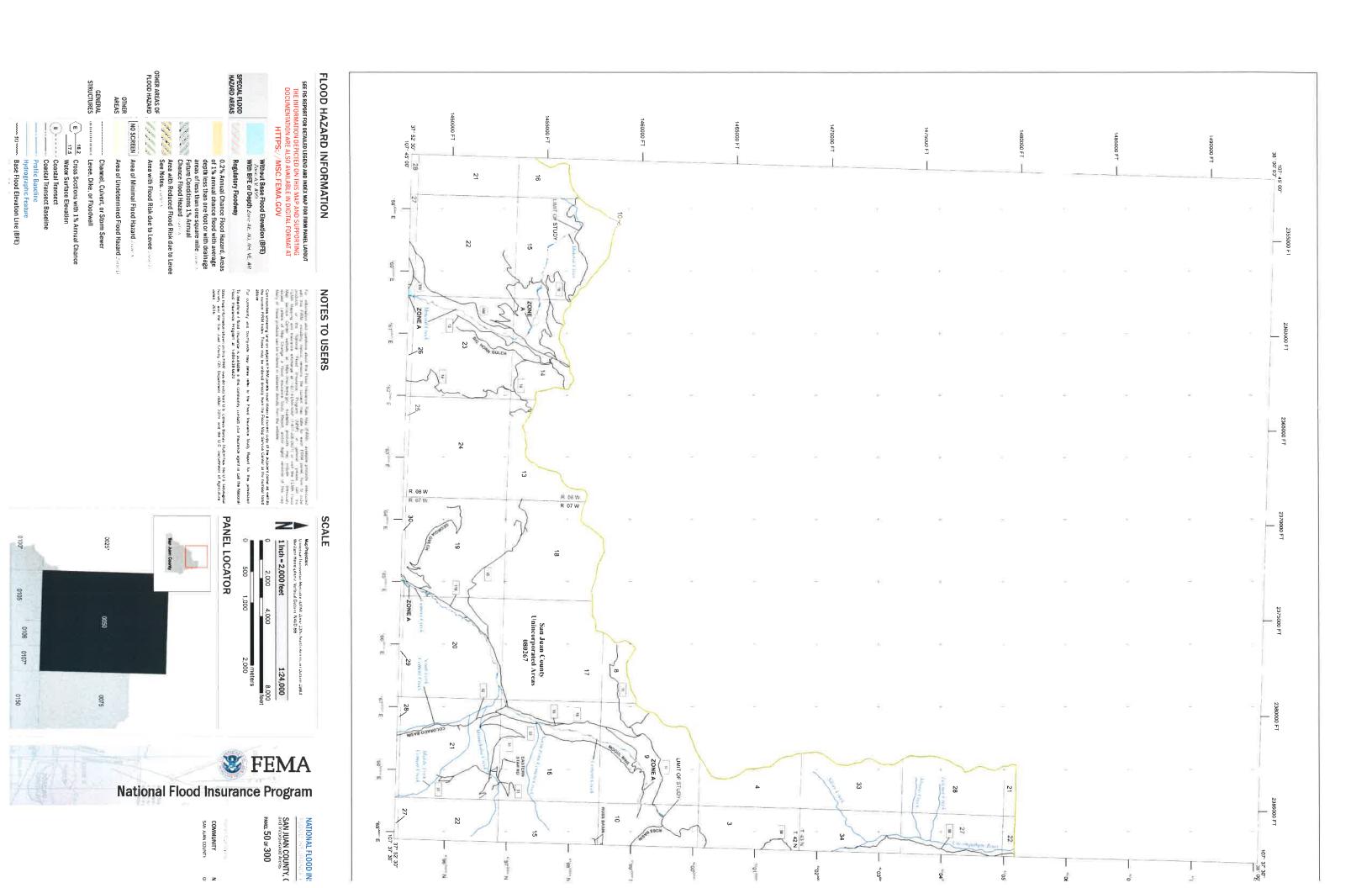
FLOOD INSURANCE RATE MAP INDEX

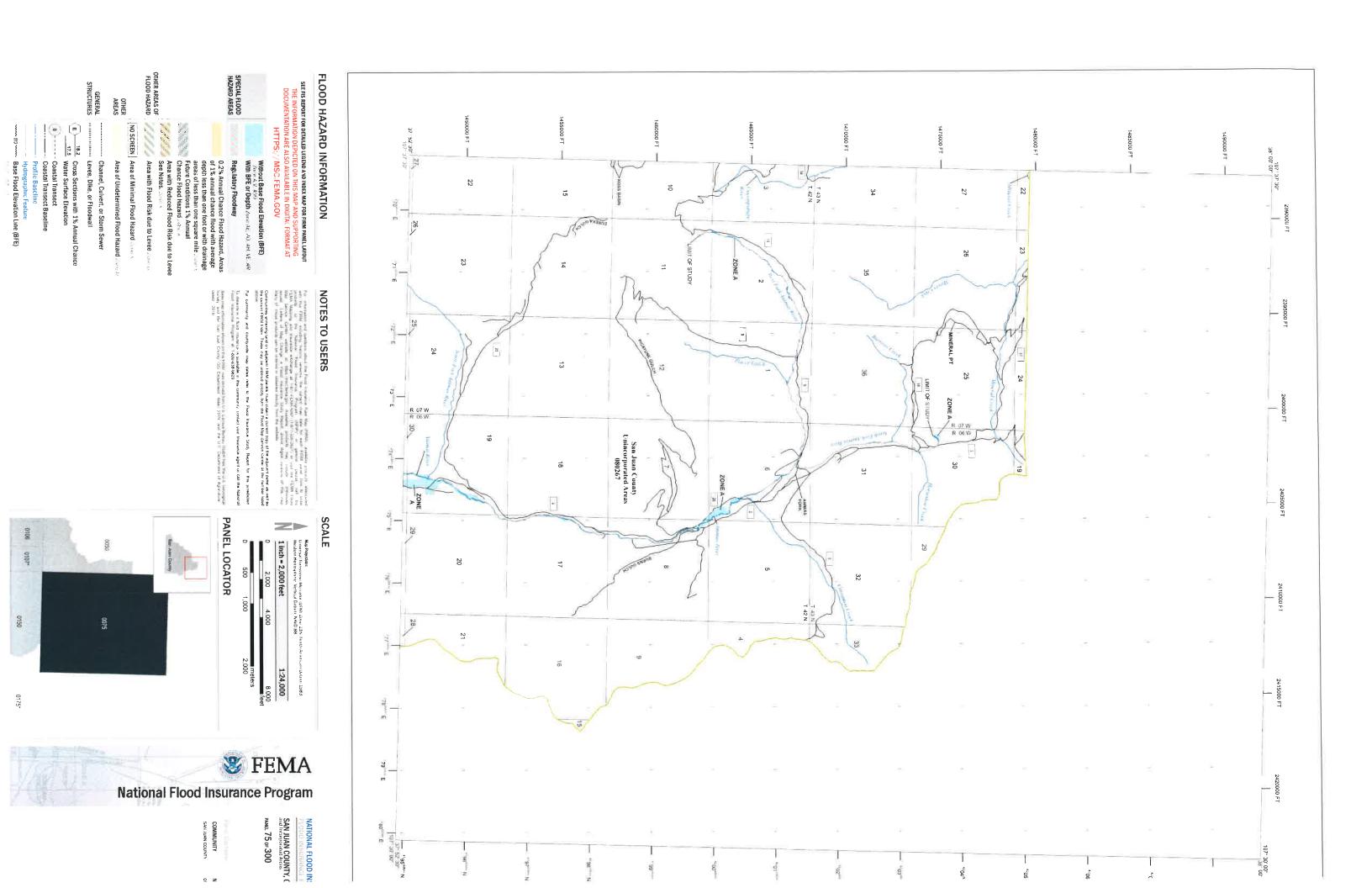
SAN JUAN COUNTY, COLORADO And Incorporated Areas

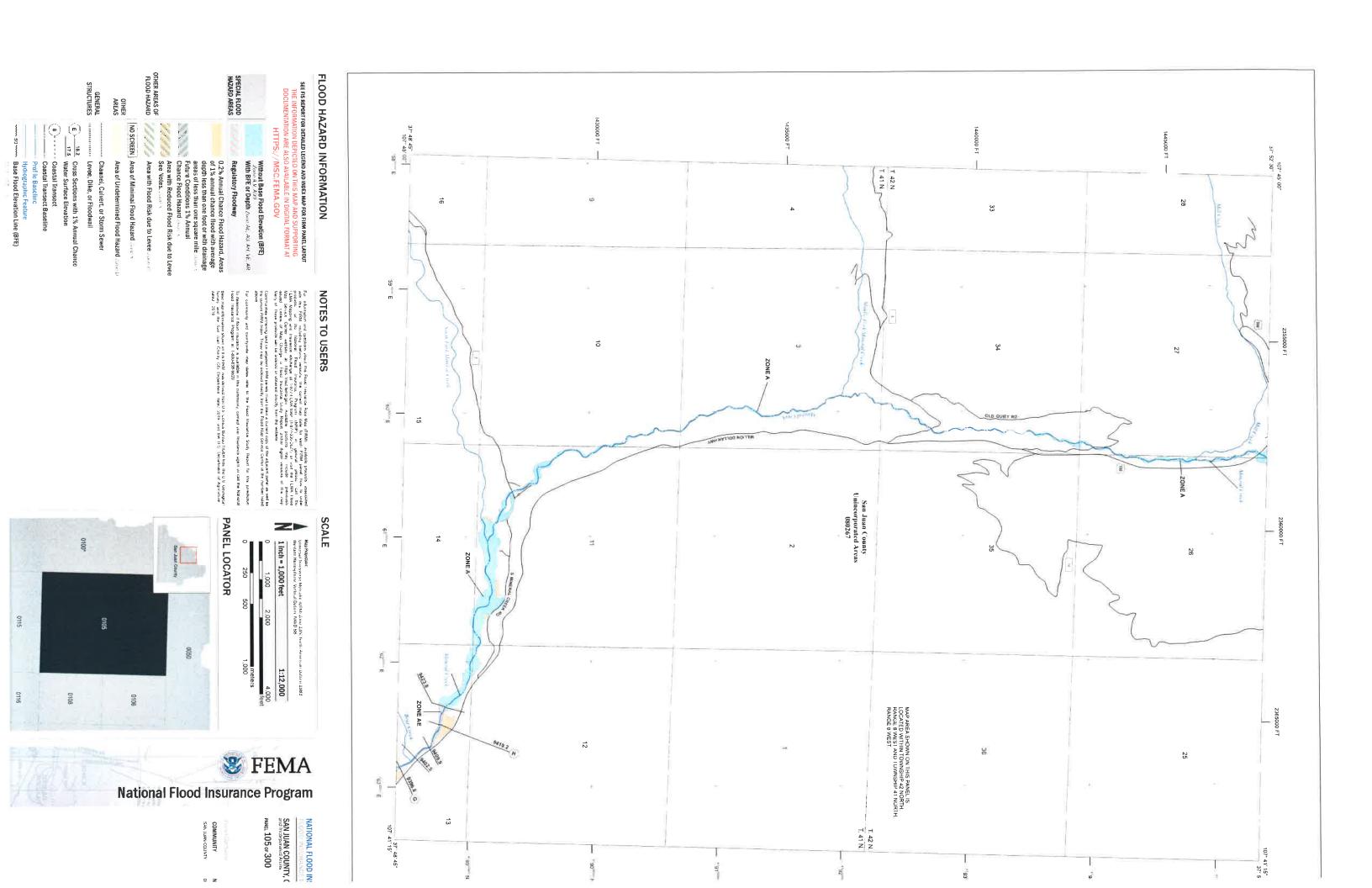
PANELS PRINTED:

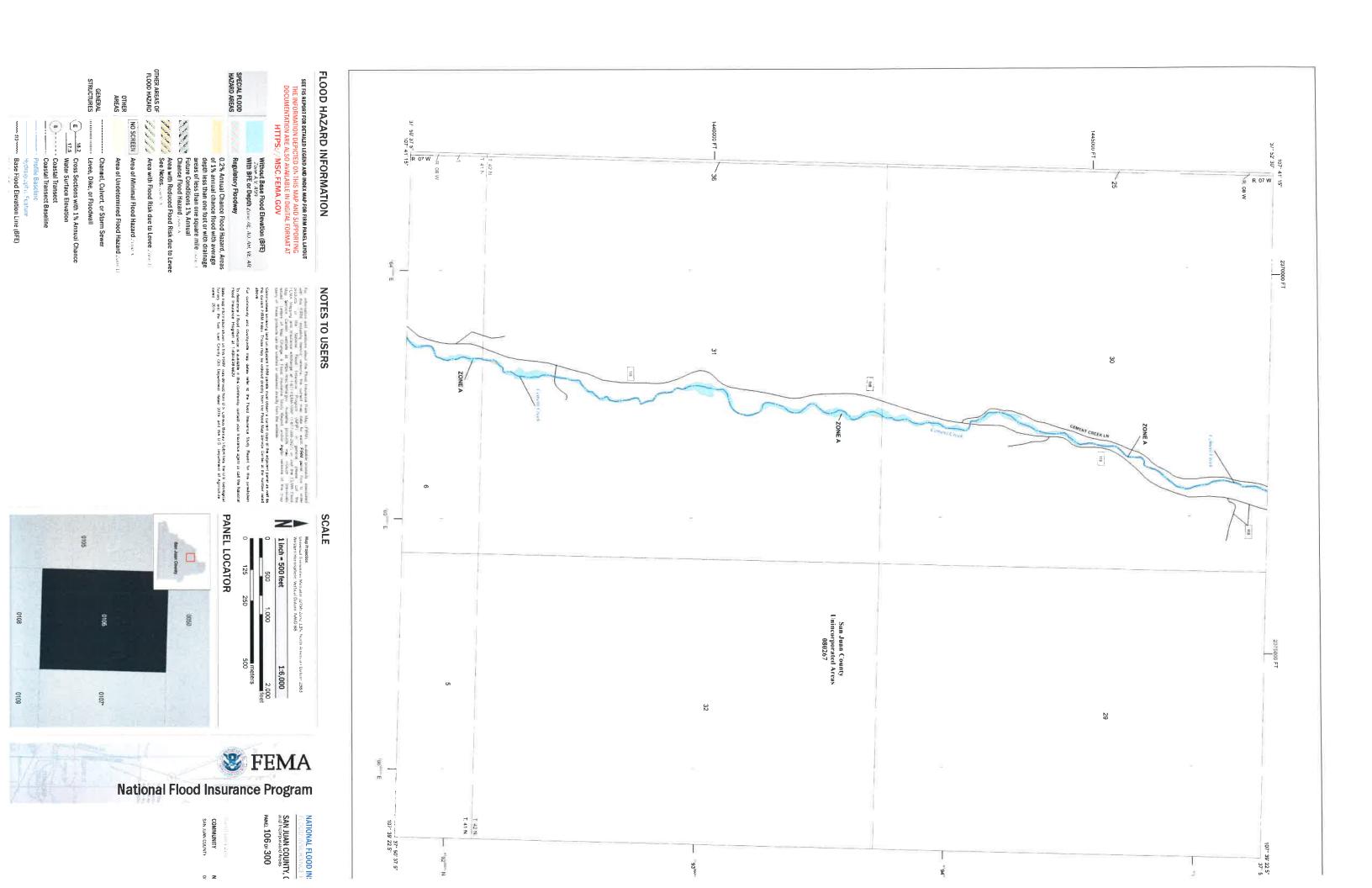
0050, 0075, 0105, 0106, 0108, 0109, 0115, 0116, 0150

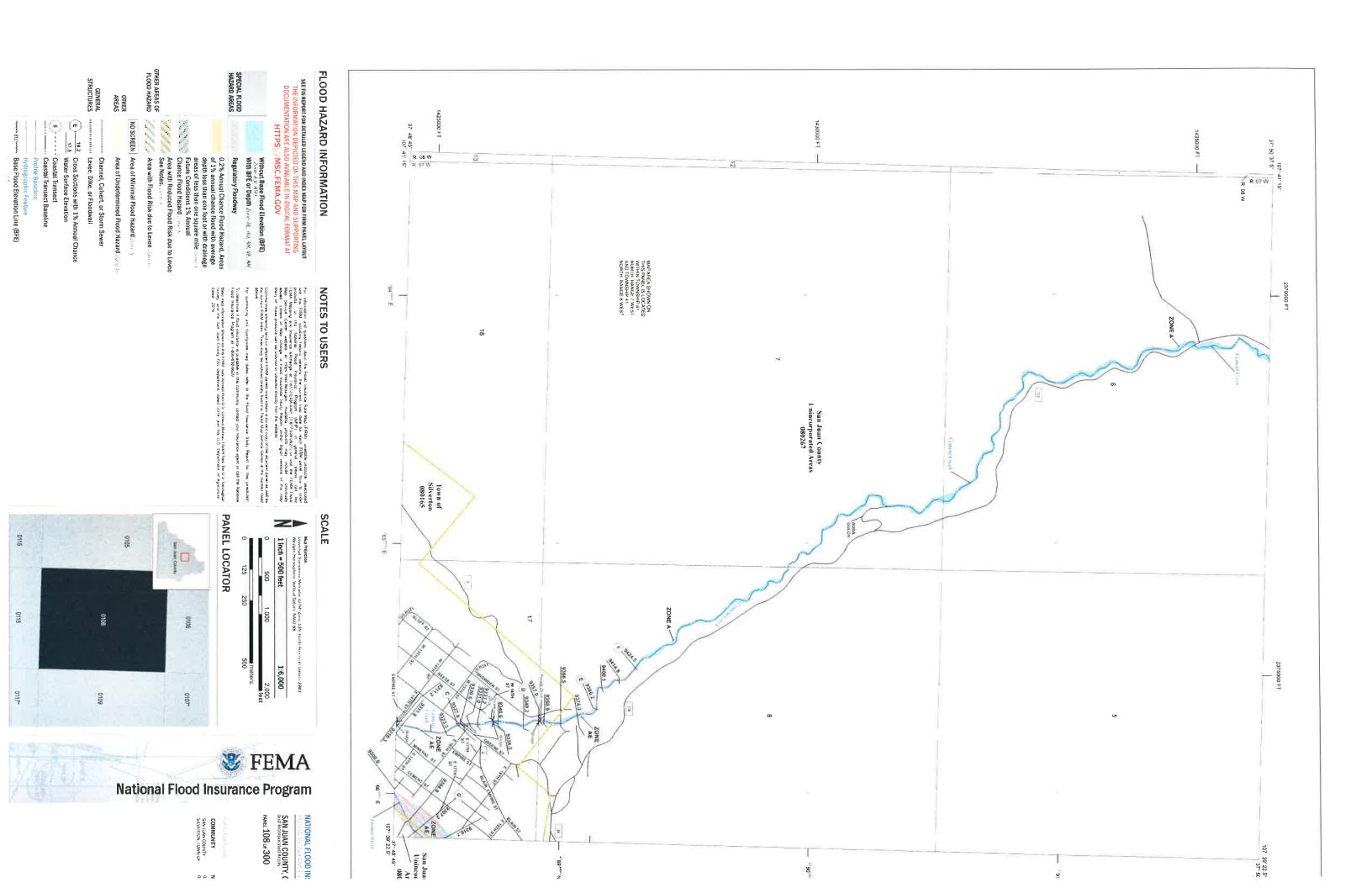


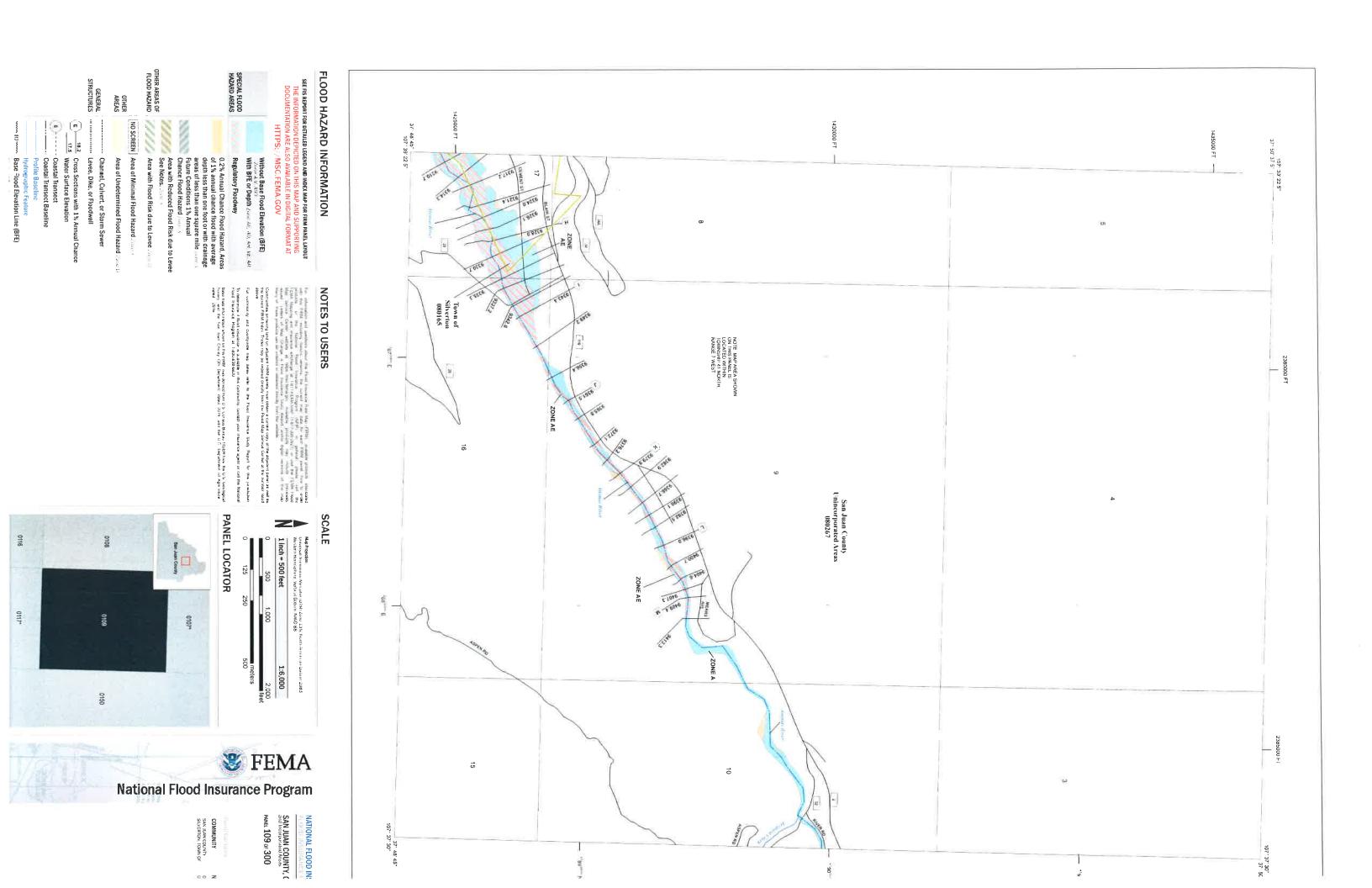


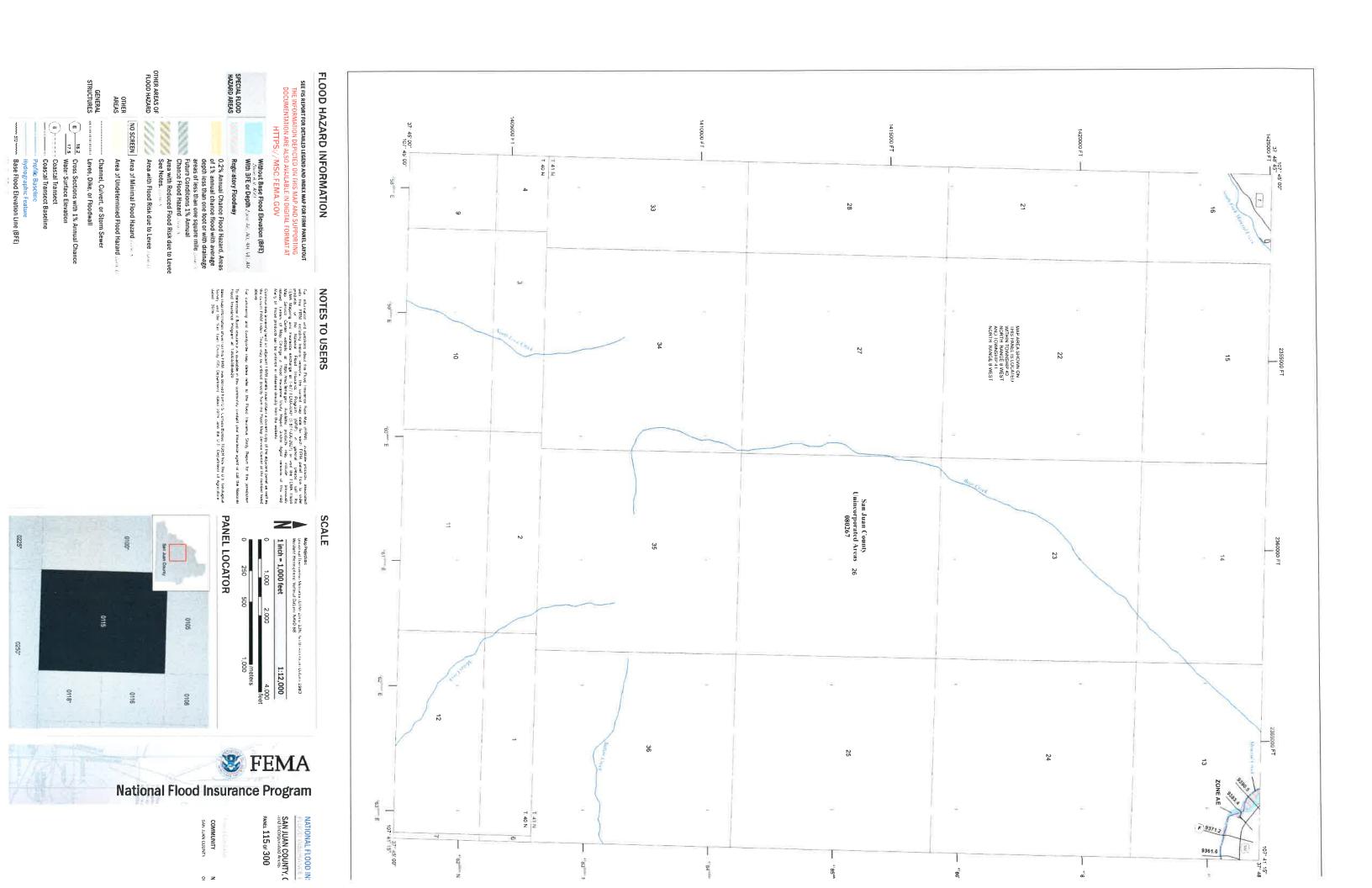


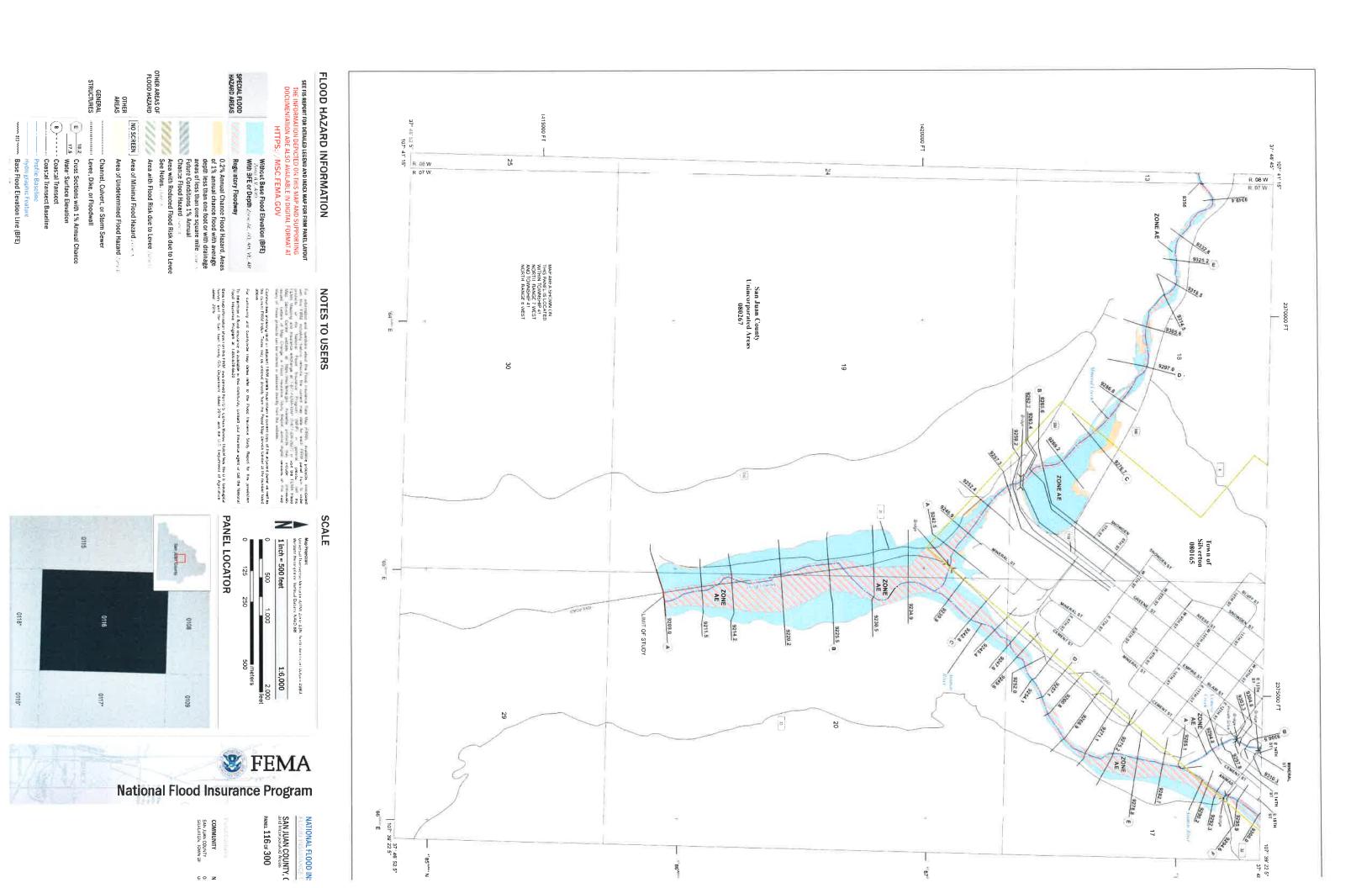


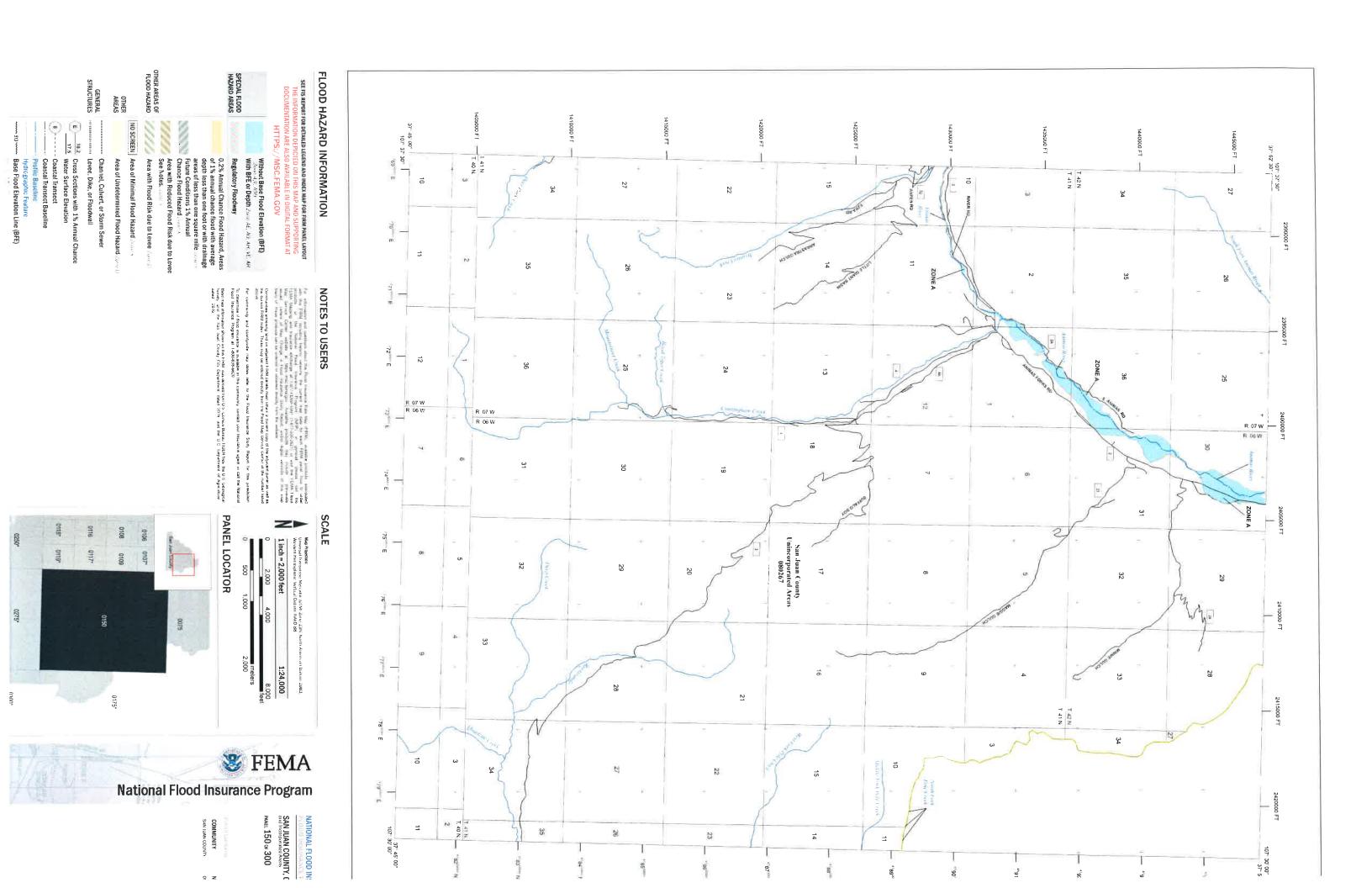












STAFF REPORT FOR THE PLANNING COMMISSION

PROPOSED TEXT AMENDMENTS TO SILVERTON MUNICIPAL CODE

REPORT DATE: April 12, 2023 **MEETING DATE:** April 18, 2023

FROM: Katie Kent, Contracted Town Planner

RE: Ordinance 2023-XX An Ordinance amending Chapter 16 and 17 regarding application

processing timeline.

Purpose of Text Amendments:

It has come to the Town Staff's attention through the Development Readiness Assessment performed early in 2023, that the existing timelines stated within Chapters 16 and 17 regarding processing of applications do not lend themselves to adequate time for staff review and public noticing of applications.

As a solution to this concern, the proposed Ordinance 2023-XX contains language to amend the Silverton Municipal Code (SMC) language to replace the existing timelines with "a reasonable timeline". This language is to serve as an interim solution until a full code rewrite is performed that will encompass a new application submittal and review process which will clearly outline timelines for review.

In an effort to ensure that applications are still moved forward promptly, without unnecessary delays, an internal policy has been written for staff to follow. This internal process, whereas not codified, provides timelines for Staff to follow while allowing delays if an applicant does not include complete materials, or does not answer staff's inquiries for further clarifying information in a timely manner. Essentially, an application that is submitted complete will move through the process quickly. An application that is missing required information for staff to complete a thorough review will not be moved forward to Planning Commission and/or the Board of Trustees until all required information has been submitted and reviewed.

Furthermore, the following definition is proposed to be inserted into Sections 16.1.20 and 17.1.30:

REASONABLE TIMEFRAME MEANS A TIMEFRAME IN WHICH THE REVIEW OF AN APPLICATION WILL TAKE PLACE, DETERMINED BY STAFF, RELATED TO THE COMPLEXITY OF THE APPLICATION, STAFF'S CURRENT WORKLOAD, AND THE INTERNAL APPLICATION PROCESSING POLICY.

Planning Commission Action: Pursuant to SMC Sec. 16-1-40, all applications for an amendment shall be referred to the Planning Commission, which shall review and return a recommendation either for or against the proposed amendment or change to the Board of Trustees within 30 days of the receipt of the application. The Planning Commission shall recommend approval as presented, recommend approval with modifications, or recommend denial of the proposed language as presented in Ordinance 2023-XX.

Staff Recommendation: Staff recommends that the Planning Commission recommends approval of Ordinance 2023-XX as presented.

Suggested Motion: "I move that the Planning Commission recommends the Board of Trustees approve An Ordinance Amending Chapter 16 Of The Municipal Code Of The Town Of Silverton Colorado, By Amending Subsection 16-1-20, Concerning The Definition Of A Reasonable Timeframe; And Amending Subsection 16-1-40, Concerning The Timeline For The Planning Commission To Return A Recommendation Regarding A Code Amendment Or Change To The Board Of Trustees; And Subsection 16-1-50 Concerning The Board Of Trustees Rendering A Decision Within 60 Days Of Application Submission; And Subsection 16-4-730, Concerning The Timeline For The Historic Review Committee To Render A Decision After A Complete Submittal; And Subsection 16-5-20, Concerning The Board Of Trustees Issuing A Decision Within 30 Days From The Date Of A Mobile Home Park Submittal; And Subsection 16-5-40 Concerning The Board Of Trustees Issuing A Decision Within 60 Days Of The Date Of A Camper Park Submittal; And Chapter 17 Of The Municipal Code Of The Town Of Silverton Colorado, By Amending Subsection 17-1-30, Concerning The Definition Of A Reasonable Timeframe; And Amending Subsection 17-2-20, Concerning The Town Rendering A Decision On An Outline Development Plan Within 45 Days; And Subsection 17-2-30, Concerning The Planning Commission Rendering A Decision Within 30 Days Of Submittal; And Subsection 17-2-40, Concerning The Planning Commission Approving Or Disapproving A Final Plat Within 30 Days After Submission; And Subsection 17-2-50, Concerning The Town Rendering A Decision Within 45 Days From An Application Submittal.

Attachments: Ordinance 2023-XX

Internal Procedure for application intake

Prepared By: Katie Kent

Contracted Town Planner Community Planning Strategies

TOWN OF SILVERTON COLORADO ORDINANCE 2023-XX

AN ORDINANCE AMENDING CHAPTER 16 OF THE MUNICIPAL CODE OF THE TOWN OF SILVERTON COLORADO, BY AMENDING SUBSECTION 16-1-20, CONCERNING THE DEFINITION OF A REASONABLE TIMEFRAME; AND AMENDING SUBSECTION 16-1-40, CONCERNING THE TIMELINE FOR THE PLANNING COMMISSION TO RETURN A RECOMMENDATION REGARDING A CODE AMENDMENT OR CHANGE TO THE BOARD OF TRUSTEES; AND SUBSECTION 16-1-50 CONCERNING THE BOARD OF TRUSTEES RENDERING A DECISION WITHIN 60 DAYS OF APPLICATION SUBMISSION; AND SUBSECTION 16-4-730, CONCERNING THE TIMELINE FOR THE HISTORIC COMMITTEE TO RENDER A DECISION AFTER A COMPLETE SUBMITTAL; AND SUBSECTION 16-5-20, CONCERNING THE BOARD OF TRUSTEES ISSUING A DECISION WITHIN 30 DAYS FROM THE DATE OF A MOBILE HOME PARK AND SUBSECTION 16-5-40 CONCERNING THE BOARD OF TRUSTEES ISSUING A DECISION WITHIN 60 DAYS OF THE DATE OF A CAMPER PARK SUBMITTAL; AND CHAPTER 17 OF THE MUNICIPAL CODE OF THE TOWN OF SILVERTON COLORADO, BY AMENDING SUBSECTION 17-1-30, CONCERNING THE DEFINITION OF A REASONABLE TIMEFRAME; AND AMENDING SUBSECTION 17-2-20, CONCERNING THE TOWN RENDERING A DECISION ON AN OUTLINE DEVELOPMENT PLAN WITHIN 45 DAYS; AND SUBSECTION 17-2-30, CONCERNING THE PLANNING COMMISSION RENDERING A DECISION WITHIN 30 DAYS OF SUBMITTAL: AND SUBSECTION 17-2-40, CONCERNING THE PLANNING COMMISSION APPROVING OR DISAPPROVING A FINAL PLAT WITHIN 30 DAYS AFTER SUBMISSION; AND SUBSECTION 17-2-50, CONCERNING THE TOWN RENDERING A DECISION WITHIN 45 DAYS FROM AN APPLICATION SUBMITTAL.

WHEREAS, the Town of Silverton, Colorado is a statutory town incorporated under the laws of the state of Colorado; and

WHEREAS, the Town of Silverton has adopted regulations related to the processing of zoning applications per Municipal Code, Chapter 16; and

WHEREAS, the Town of Silverton has adopted regulations related to the processing of subdivision applications per Municipal Code, Chapter 17; and

WHEREAS, the stated deadlines for the Town to review applications have proven to not be attainable give recent applications are too complex to review in thirty (30) days or less; and

WHEREAS, the Town of Silverton's 2022 Development Readiness Assessment recommended the removal of the deadlines for staff to review an application in Chapters 16 and 17 of the municipal code; and

WHEREAS, the Town of Silverton acting by and through its Town Board of Trustees has the power to regulate land use matters pursuant to Colorado Revised Statutes (C.R.S.) Section 31, Article 23 et seq.; and

WHEREAS, the San Juan Regional Planning Commission has reviewed the proposed amendments to Chapters 16 and 17 on April 18, 2023, and has made a recommendation to approve the amendments to the Town Board of Trustees.

WHEREAS, the Board of Trustees held Public Hearings on April 24, and May 8, 2023, to receive public comment, evidence and testimony relative to the proposed amendments to the Municipal Code.

WHEREAS, the San Juan Regional Planning Commission and the Board of Trustees have determined that the establishment of these regulations intended to remove the deadlines for certain application reviews, within Chapters 16 and 17 of the Municipal Code of the Town of Silverton, is in the best interests of the citizens' health, safety and welfare.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN OF SILVERTON COLORADO BOARD OF TRUSTEES THAT:

I. Amendment to Chapter 16, Article 1 Section 16.1.20 of the Municipal Code. Chapter 16, Article 1, Section 16.1.20 of the Municipal Code is amended by adding the capitalized and underlined text, as follows:

Section 16.1.20. Definitions.

For the purpose of this Chapter, certain words or phrases used herein shall be defined or interpreted as follows:

Accessory means customarily associated with but incidental to another use or structure on the same lot.

Accessory dwelling unit or ADU means a dwelling unit accessory and subordinate to a primary structure on a single legally described parcel. The ADU shall require a permit from the Town of Silverton.

Alley, as platted and shown on the official Town map, means a public way other than a street, permanently reserved as a secondary means of access to abutting property.

Applicant includes any person seeking to obtain Town land use approval, a variance or any other required permit consistent with this Chapter.

Awning means any device attached to and supported solely by a building and designed to provide shade and shelter over a walkway or thoroughfare.

Basement means that portion of a building with walls and floor located wholly or partially underground.

Bed and breakfast: A single-family residential dwelling used as a lodging establishment for transient guests staying 30 days or less, and which has a common guest area, contains no more than five guest rooms and is operated by the on-site owner or resident manager.

Building means any temporary or permanent structure having a roof or other covering, and designed or used for the shelter or enclosure of any person, animal or property of any kind, excluding tents or vehicles.

Camper means any recreation, mobile vehicle designed for temporary occupancy and having self-contained utilities.

Camper park means any property used to provide public parking facilities for one or more campers or camper units of any type.

Car wash means a lot on which motor vehicles are washed or waxed, either by the patron or by others, using machinery especially designed for that purpose.

Carport means a shelter for one or more vehicles which is not fully enclosed by walls.

Center for the performing, visual or literary arts means a facility, including any offices directly related to that facility, the primary purpose of which is to disseminate, encourage, present or facilitate culture and arts through a variety of media.

Child care center means a state-licensed facility used for the day care of five or more children under 16 years of age.

Clinic means a place where medical or dental care is furnished to persons on an outpatient basis by licensed medical practitioners.

Club means any membership organization, including a lodge, catering exclusively to members and their guests, whose facilities are limited to meeting, eating and recreational uses, and whose activities are not conducted principally for monetary gain.

Community center means a facility, including any offices directly related to the primary activity of the facility, where members of the local or regional community can gather for social, cultural or recreational purposes.

Condominium means a building, or buildings, consisting of separate fee simple estates to individual units of a multiunit property, together with an undivided fee simple interest in common elements.

Convention and conference facility means a private or publicly operated venue for the gathering of professionals, associations or other groups in a single location. Such a facility may or may not be attached to another use, such as a hotel or restaurant, and may include any offices directly related to the primary activity of the facility.

Dwelling unit means a permanent building, or portion thereof, which is used as the private residence or sleeping place of one or more persons or families, excluding hotels, hospitals, nursing homes or such temporary structures as tents or campers.

Family means any individual, or two or more persons related by blood or marriage or between whom there is a legally recognized relationship, or a group of unrelated persons, occupying the same dwelling unit.

Family care home means a state-licensed or state-approved facility providing 24-hour child care in a place of residence of a family or person.

Floor area means the total gross living or business area on all floors, including finished basement, as measured to the outside surfaces of existing walls, excluding crawl spaces, garages, carports, ventilation shafts, courts, breezeways, open porches, balconies and terraces.

Front lot line means a boundary line separating a lot or parcel of land from any street.

Garage means an enclosed building designed for the private storage of motor vehicles, excluding buildings from which motor vehicle fuels are sold or repair or other services are performed for compensation.

Group home for the aged means an owner-occupied or nonprofit group home for the exclusive residential use of not more than eight persons, 60 years of age or older.

Group home for the developmentally disabled means a state-licensed facility for the residential dwelling of not more than eight developmentally disabled persons.

Height means the vertical distance from the highest point on a structure or building, excluding any chimney, antenna, cupola or steeple, to the average ground level of the grade where the walls or other structural elements intersect the ground.

High impact repair shop means an enclosed building, or portion thereof, where products, equipment, appliances or other machinery are repaired.

Home occupation means any business conducted principally within a dwelling unit, enclosed garage or accessory building, and carried on by the inhabitants, which use is clearly incidental and secondary to the use of the dwelling and property for residential purposes, and which does not change or adversely affect the character of the property or neighborhood.

Hotel/motel/lodge/inns: A commercial building that is approved or allowed through variance for a designated zoning district. A commercial building, taxed and assessed as such that provides overnight lodging in rooms for transient guests and includes on-site reservations and check-in, on-site management/guest services, combined utilities, daily maid service, accessory facilities and services. Guest accommodations shall include on-site and/or on-street parking availability. A hotel, motel, lodge, inn to be considered as such shall contain a minimum of three suites consisting of two bedrooms with one room equipped with or connected to that suite with a bath and toilet facilities; or six sleeping rooms, each with bath and toilet or a combination there of the aforementioned for a compliant minimum of six sleeping room. Hospitals or nursing homes are not covered or included in this definition.

Kennel means any building, structure or open space devoted wholly or partly to the raising, boarding or harboring of six or more animals that are over four months old.

Laundromat means a facility where patrons wash, dry or dry-clean clothing or other fabrics in machines operated by the patron.

Lot means a parcel of real property as shown with a separate and distinct number or letter on a plat recorded in the County Courthouse; also, or when not platted in a recorded subdivision, a parcel of real property abutting upon at least one public street.

Lot line means a line marking the boundary of a lot or parcel.

Low impact repair shop means an enclosed building, or portion thereof, wherein products, equipment, appliances or other machinery are repaired, and from which no heat, glare, vibration or noise extends beyond the lot line.

Manufactured home means a single-family dwelling which meets the following criteria:

- (1) Is partially or entirely manufactured in a factory.
- (2) Is not less than 24 feet in width and 36 feet in length, exclusive of any towing apparatus, bumpers or additions.
- (3) Is installed on an engineered permanent foundation.
- (4) Has brick, wood or cosmetically equivalent exterior or siding and a pitched roof.
- (5) Is certified pursuant to the National Manufactured Housing Construction and Safety Standards Act 1974, 42 U.S.C. 5401, et seq., as amended.
- (6) Meets or exceeds minimum Town building code standards, including but not limited to the adopted building code provisions, snow loads and wind shear factors.

Marquee means any roofed structure attached to a building and having columns, posts or other supports, which projects over the public right-of-way.

Mobile home means a structure or mobile vehicle manufactured partially or entirely in a factory, which is designed and used as a permanent single-family dwelling, and which has no self-contained utilities. The structure shall be considered a mobile home whether or not its wheels or other rolling devices have been removed, it has been jacked up, skirted or any addition to the basic trailer has been built upon the ground.

Mobile home park means any property under the same ownership which had been planned, improved or used for the placement of five or more mobile homes for residential occupancy.

Multifamily dwelling means a building or structure designed or used for residential occupancy by two or more families, with or without common or separate kitchen or dining facilities, including apartment houses, rooming houses, boarding houses, dormitories, row houses, townhouses and similar housing types.

Nonconforming building or structure means a building or structure, or portion thereof, legally existing on May 14, 1984, but conflicting with the provisions of this Chapter applicable to the district in which it is located. This shall not include any building or structure existing under a variance to any previous code of the Town.

Nonconforming use means the use of a building, structure or premises, or portion thereof, legally existing on May 14, 1984, but which conflicts with the provisions of this Chapter. This shall not include any use existing under a current variance to any previous code of the Town, which shall not be considered a nonconforming use.

Nursing home means a structure or building designed or used for residential occupancy and providing limited medical or nursing care on the premises for occupants, but not including a hospital or mental health center.

Person means and includes any natural person, partnership, association, company, corporation, limited liability company or any agent or officer thereof.

Personal service means any business enterprise with the primary purpose of providing personal services. Personal service activities encompass a wide range of professions, including law, medicine, engineering, design, finance, accounting and even performing arts. As the name implies, a personal service activity focuses on directly providing a personalized service, such as legal advice or medical treatment, to an individual or group for compensation.

Rear lot line means a boundary line opposite the front lot line, which usually separates the lot from the adjoining alley.

REASONABLE TIMEFRAME MEANS A TIMEFRAME IN WHICH THE REVIEW OF AN APPLICATION WILL TAKE PLACE, DETERMINED BY STAFF, RELATED TO THE COMPLEXITY OF THE APPLICATION, STAFF'S CURRENT WORKLOAD, AND THE INTERNAL APPLICATION PROCESSING POLICY.

Religious institution means a building wherein persons regularly assemble for religious worship, which is used only for that purpose and those accessory activities customarily associated therewith.

Restaurant/bar means a building, or portion thereof, in which food or beverages are prepared and offered for sale, and where consumption is permitted on the premises, whether or not entertainment is offered, including grills, cafes, taverns, nightclubs, drive-ins and any fast-food establishment permitting consumption on the premises.

Scientific facility or education facility means a public or private facility, including any offices directly related to the primary purpose of the facility, of which that purpose is to provide education, conduct research or otherwise serve to increase or disseminate academic knowledge.

Service station means a facility where motor vehicle fuels are sold at retail and at which repair or other services may be performed for compensation.

Service yard means any yard area utilized for storage of materials or supplies accessory to, or used in conjunction with, the principal use of the lot or building, or used for trash or garbage containers or for the location of mechanical equipment or machinery accessory to the principal building or use.

Setback means the required distance between the farthest protrusion of a building or structure and any lot line of the lot or parcel on which it is located.

Side lot line means a line, or lines, which represent the boundary between adjoining lots or parcels of property.

Sign means any object, device or part thereof, which is used to advertise, identify, display, direct or attract attention to an object, person, institution, organization, business product, service, event or location by any means, including words, letters, figures, designs, symbols, merchandise, fixtures, colors, motion, illumination or projected images.

Sign area means the area of the smallest rectangle, triangle or circle which encompasses the facing of a sign, including copy, insignia, background and borders and excluding the sign structure. Where no background is defined on a wall sign, the sign area shall be the smallest rectangle, triangle or circle which encompasses all of the lettering or other elements of the sign. Signs which are interconnected with and hang from other signs shall be considered as one sign and shall be measured as the smallest rectangle, triangle or circle which encompasses all of the sign elements as it will be displayed. The area measurement of projecting or hanging signs shall

account for only one side of the subject sign, provided that the sign copy is identical on all sides of the sign.

Sign, freestanding means a sign structurally separate from the building, being supported on itself or on standards, legs, columns, braces or uprights.

Sign, projecting means a sign, other than a wall sign, attached to and projecting from a building.

Sign structure means any supports, uprights, braces or columns to which a sign is affixed, excluding any portion of the sign structure which is incorporated into the sign or the sign's message.

Sign, wall means any sign painted on, incorporated in or affixed to a building wall, or any sign consisting of cut-out letters, symbols or other devices affixed to the building wall with no background defined on said wall.

Signboard means a sign that is designed to have a changing message or advertisement (i.e., retail "specials" boards, restaurant menu boards and similar advertisements). Signboards are not permanently attached to the building or ground.

Single-family dwelling means a structure, except a mobile home, designed or used for residential occupancy.

Street, as platted and shown on the official Town map, means a named or numbered public way which provides the principal means of access to abutting property.

Structure means any constructed or erected material or combination of materials in or upon the ground, including but not limited to buildings, mobile homes, radio towers, sheds, decks, storage bins, and walls and fences over six feet high, but excluding sidewalks and paving on streets, driveways, parking areas and patios.

Supplemental overnight lodging. For those events and special dates previously approved by the Board of Trustees or emergency situations as declared by the Mayor or Mayor Pro Tem, overnight lodging may be provided in private residences to the general public. This service may be allowed only when it is anticipated that the existing commercial lodging availability will be insufficient to satisfy the demand for overnight accommodations.

Tract means a land area proposed for development or use pursuant to this Code and lying in undivided ownership. A tract may consist of a lot, an irregular parcel or adjoining lots or parcels of land.

Vacation rental: A residential dwelling unit, including either a single-family or multi-family unit, assessed and taxed as a residential dwelling unit, rented for the purpose of transient lodging or transient living accommodations for a maximum period not to exceed 30 consecutive days to the same renter, with tenancies defined per zone, per month. Hotels, motels, lodges, inns, bed and breakfasts, RV spaces and campsites are not vacation rentals. Bedrooms within a single-family dwelling or multi-family unit are prohibited from being used as vacation rentals.

Venue for public entertainment means a public or private facility, including any offices directly related to the primary activity of the facility, constructed primarily to encourage the gathering of individuals to view or participate in activities intended for public entertainment.

Warehouse means a building used for the public or business storage of goods, materials or vehicles.

II. Amendment to Chapter 16, Article 1 Section 16.1.40 of the Municipal Code. Chapter 16, Article 1, Section 16.1.40 of the Municipal Code is amended by omitting strikethrough text and adding the capitalized and underlined text, as follows:

Section 16.1.40. Amendment or changes.

- (a) Pursuant to Sections 31-23-304 and 31-23-305, C.R.S., the regulations, restrictions and boundaries established by this Chapter and the official use district map may be amended, supplemented, changed, modified or repealed by the Board of Trustees, following review and recommendation by the Planning Commission. Such amendments or changes may be initiated by the Board of Trustees, the Planning Commission or application of any person residing, owning or leasing property in the Town.
- (b) Application procedure.
 - (1) The application for such action by a person shall be filed in writing with the Planning Director.
 - (2) The application for amendment or change in the use district map shall contain the following information:
 - a. Description of land area, including lot and block numbers to be rezoned, and requested new classification, along with a drawing to scale showing boundaries of the area requested to be rezoned.
 - b. A statement of justification for the rezoning requested.
 - c. Time schedule for any contemplated new construction or uses.
 - (3) All applications shall be referred by the Planning Director to the Planning Commission, which shall review and return a recommendation either for or against the proposed amendment or change to the Board of Trustees within 30-days A REASONABLE TIMEFRAME of the receipt of the application.
- (c) Before action is taken to amend or change this Chapter, a public hearing shall be held by the Board of Trustees. At least ten days' advance notice of the date, time and place of such hearing shall be published in a newspaper of general circulation in the Town.
- (d) The adoption of any amendment, supplement, change or modification to this Chapter shall require favorable vote of a majority of the Board of Trustees; however, a favorable vote of two-thirds of all members of the Board of Trustees shall be required when a protest is filed with the Planning Director at least 24 hours prior to the vote of the Board of Trustees on the change and is signed by the owners of 20 percent or more of the area of land which is subject to the proposed change, or 20 percent or more of the land extending a radius of 100 feet from the land which is subject to the proposed change, disregarding intervening public streets and alleys. A favorable vote of two-thirds of all the members of the Board of Trustees shall also be required when an amendment or change has not been recommended by the Planning Commission or in the event of the repeal of all or part of this Chapter.

(Prior code, § 7-2-3; Ord. No. 2016-07, § 1, 6-13-2016)

III. <u>Amendment to Chapter 16, Article 1 Section 16.1.50 of the Municipal Code</u>. Chapter 16, Article 1, Section 16.1.50 of the Municipal Code is amended by omitting

strikethrough text adding the capitalized and underlined text, as follows:

Section 16.1.50. Use Subject to Review.

- (a) Applications for uses subject to review or uses in the B-A Business Auto District shall be filed, in writing, with the Town Clerk, along with the required fee as set forth on the Town's Fee Schedule. Such applications shall contain the following information, as applicable:
 - (1) Location and identification of all existing and proposed public and private easements.
 - (2) Boundaries of sites to be reserved or dedicated for trails, parks, playgrounds, schools or other public uses and the location of any common area not reserved or dedicated to public use.
 - (3) The area, in square feet, and percentage of the total area of the proposed development, devoted to each type of use.
 - (4) The existing buildings, telephone and power lines and sewer, water, gas and drainage pipes located on the proposed development and adjacent to its boundaries.
 - (5) A description of the land area of the request, including lot and block number, along with a drawing to scale showing boundaries and an indication of existing zoning for all areas on the drawing.
 - (6) The time schedule for any contemplated new construction or uses.
- (b) All applications shall be referred by the Town Clerk to the Board of Trustees. A public hearing shall be held, with at least ten days' advanced notice of the date, time and place of such hearing, to be published in a newspaper of general circulation in the Town.
- (c) The Board of Trustees shall render its decision within 60 days <u>A REASONABLE</u> <u>TIMEFRAME</u> of the date of submission of the application, unless an extension of said time is agreed upon, in writing, by the applicant and the Board of Trustees.

(Ord. No. 2012-02, 12-10-2012; Ord. No. 2016-07, § 1, 6-13-2016)

IV. <u>Amendment to Chapter 16, Article 4 Section 16.4.730 of the Municipal Code</u>. Chapter 16, Article 4, Section 16.4.730 of the Municipal Code is amended by omitting strikethrough text adding the capitalized and underlined text, as follows:

Section 16.4.730. Procedure for development.

Six copies of a site and building plan, including a detailed elevation (minor exterior modifications may require less detailed elevations) showing the proposed structure and adjacent structures, shall be submitted to the Planning Department for review by the Historic Review Committee. The Historic Review Committee must convene and render a decision within 30-calendar days A REASONABLE TIMEFRAME of a complete submittal. After reviewing the submittal, the Historic Review Committee shall approve as submitted, approve with conditions, table for additional review with the applicant's consent or deny the application. Failure to render one of these decisions within 30 calendar days shall result in the request being automatically approved. The approval of the Historic Review Committee is required for the issuance of a new construction or exterior renovation building permit within the Historic Overlay District.

Decisions may be appealed to the Board of Trustees by the applicant or the Planning. Department by filing a written appeal with the Town Clerk within 15 calendar days of the Historic Review Committee's decision.

(Prior code, § 7-2-21; Ord. No. 2008-02, § 1, 9-8-2008; Ord. No. 2016-07, § 1, 6-13-2016)

V. <u>Amendment to Chapter 16, Article 5 Section 16.5.20 of the Municipal Code</u>. Chapter 16, Article 5, Section 16.5.20 of the Municipal Code is amended by omitting strikethrough text adding the capitalized and underlined text, as follows:

Section 16.5.40. Mobile home parks.

- (a) Mobile home parks may be established in the R-2 and the E-D Districts only, either in connection with a camper park or independently. If in connection with a camper park, the area for campers shall be separate and distinct from the area for permanent mobile homes.
- (b) Special requirements.
 - (1) The minimum land area required for a mobile home park shall be eight lots or 20,000 square feet.
 - (2) The minimum land area required for each individual mobile home space within the park shall be one and one-half lots or 3,750 square feet, with a minimum frontage of 37.5 feet along a common means of access within or adjacent to the park.
 - (3) The minimum square footage of any mobile home within the park shall be 400 square feet, exclusive of any additions to the basic trailer body or any towing apparatus or bumpers.
 - (4) The minimum setbacks for each individual mobile home shall be seven feet from the front lot line or space boundary, seven feet from the side lot line or space boundary and five feet from the rear lot line or space boundary. No mobile home shall be located closer than 20 feet from the nearest mobile home in any direction, including additions or added structures.
 - (5) All mobile homes require the issuance of a mobile home permit prior to placement on the property, with inspection and approval of the Building Official.
- (c) All mobile home parks shall have the following provisions:
 - (1) Water, sewer and electrical connections installed pursuant to the Development Standards and Specifications, this Code and all applicable Town ordinances (see Chapter 13 of this Code).
 - (2) All telephone and power lines within the park shall be buried.
 - (3) Screening, such as fences or natural growth, shall be a minimum of six feet in height along property boundaries separating the park from adjacent residential property.
 - (4) All mobile homes must be fully skirted within 30 days of placement.
 - (5) No additional buildings or structures shall be built within the park except for one carport and one storage structure per mobile home space, such storage structure to be a minimum of ten feet by ten feet and a maximum of 12 feet in height per each mobile

- home space, and a single office, caretaking and service facility for such services as laundry facilities.
- (6) No camper units of any kind shall be allowed within the mobile home park, except for one which is owned and being kept in storage by a resident of the park.
- (d) Any mobile home which is substantially damaged or destroyed must be removed from the park within 30 days.
- (e) Application for construction of a mobile home park.
 - (1) Applications for construction of a mobile home park shall be submitted in writing to the Planning Director at the time of application for the initial occupation license and shall include a plat of the park showing the layout of individual spaces, all public utilities and all other aspects of conformance with this Article as may be required.
 - (2) The plat and design shall be subject to approval by the Board of Trustees following review by the Planning Commission, prior to granting of the business license.
 - (3) The Board of Trustees shall issue such approval, or state in writing the reasons for disapproval, within 30 days A REASONABLE TIMEFRAME of the date of submission of the application, unless an extension of said time is agreed upon, in writing, by the developer and the Board of Trustees.

(Prior code, § 7-2-16; Ord. No. 2016-07, § 1, 6-13-2016)

VI. <u>Amendment to Chapter 16, Article 5 Section 16.5.40 of the Municipal Code</u>. Chapter 16, Article 5, Section 16.5.40 of the Municipal Code is amended by omitting strikethrough text adding the capitalized and underlined text, as follows:

Section 16.5.40. Camper parks.

- (a) Camper parks may be established in the E-D District only, either in connection with a mobile home park or independently. If established in connection with a mobile home park, the area for campers shall be separate and distinct from the area for mobile homes.
- (b) Special requirements.
 - (1) The minimum land area for a camper park shall be one block or 60,000 square feet.
 - (2) The minimum size of each individual camper parking space or camp site within the park shall be 1,250 square feet.
 - (3) The minimum space allowable between parked campers shall be 15 feet in any direction.
- (c) All camper parks shall have the following provisions:
 - (1) Water, sewer and electrical connections for at least 60 percent of the total number of camper spaces and camp sites within the park, all of which must be buried within the boundaries of the park.
 - (2) Fire extinguishing equipment in good working order and of such type, size and number, and so located as to comply with the adopted fire code.

- (3) Metal garbage cans, a minimum of 32 gallons in size, with tight-fitting metal covers, in quantities adequate to permit disposal of all garbage and trash, and located not farther than 300 feet from any camper space or camp site.
- (4) Sufficient lighting for proper illumination and safety.
- (5) Restroom facilities for the occupants of the park, with toilets and baths or showers. Toilet facilities for males shall consist of not less than one flush toilet and one urinal for every 20 camper spaces or fraction thereof, and for females, not less than one flush toilet for every ten camper spaces or fraction thereof. Each sex shall also be provided with not less than one bathtub or shower with individual dressing accommodations for every ten camper spaces or fraction thereof. Lavatory or bathing facilities for each sex shall be in separate buildings or, if in the same building, shall be separated by a soundproof wall.
- (6) Screening, such as fences or natural growth, a minimum of six feet in height, shall be provided along property boundaries separating the park from adjacent residential property.
- (7) Additional structures, such as service and maintenance buildings, may be constructed within the camper park in conformance with the adopted building code.
- (8) Camper parks shall at no time contain any camper of any type exceeding 35 feet in length.
- (d) Any camper unit which is substantially damaged or destroyed must be removed from the park within 15 days.
- (e) Application for construction of a camper park.
 - (1) Applications for the construction of a camper park shall be submitted, in writing, to the Town Clerk at the time of application for the initial occupation license, and shall include a plat of the park showing the layout of camper spaces, sanitary facilities and all other aspects of conformance with this Articles may be required.
 - (2) The plat and design shall be subject to approval by the Board of Trustees following review by the Planning Commission, prior to the granting of a business license.
 - (3) The Board of Trustees shall issue such approval, or state in writing the reasons for disapproval, within 60 days A REASONABLE TIMEFRAME of the date of submission of the application, unless an extension of said time is agreed upon, in writing, by the developer and the Board of Trustees.

(Prior code, § 7-2-18; Ord. No. 2016-07, § 1, 6-13-2016)

VII. Amendment to Chapter 17, Article 1 Section 17.1.30 of the Municipal Code. Chapter 17, Article 1, Section 17.1.30 of the Municipal Code is amended adding the capitalized and underlined text, as follows:

Section 17.1.30. Definitions.

The following words and terms, wherever they occur in this Chapter, shall be construed as herein defined:

Block means a parcel of land bounded on all sides by a street or streets.

Comprehensive plan means a plan for guiding and controlling the physical development of land use and circulation facilities in the Town and any amendment or extension of such a plan.

Consumer means any person contacted as a potential purchaser, lessee or renter, as well as one who actually purchases, leases or rents property in a subdivision.

Dedication means a grant by the owner to the public in general of a right to use land involving a transfer of property rights and an acceptance of the dedicated property by the appropriate public agency.

Easement means a dedication of land for a specified use, such as providing access for maintenance of utilities.

Highway means any main road or public passage, existing or proposed.

Lot means a parcel of land intended for transfer of ownership or building development, having its full frontage on a public street.

Person means an individual, partnership, corporation, association, unincorporated organization, trust or any other legal or commercial entity, including a joint venture or affiliated ownership. The word *person* also means a municipality or state agency.

Plat means a map, drawing or chart upon which the subdivider presents proposals for the physical development of a subdivision, and which he or she submits for approval and intends to record in final form.

REASONABLE TIMEFRAME MEANS A TIMEFRAME IN WHICH THE REVIEW OF AN APPLICATION WILL TAKE PLACE, DETERMINED BY STAFF, RELATED TO THE COMPLEXITY OF THE APPLICATION, STAFF'S CURRENT WORKLOAD, AND THE INTERNAL APPLICATION PROCESSING POLICY.

Reservation means a legal obligation to keep property free from development for a stated period of time, not involving any transfer of property rights.

Right-of-way means the width between property lines of a street.

Street means a way for vehicular traffic, further classified and defined as follows:

- (1) Arterial streets are those which permit the relatively rapid and unimpeded movement of large volumes of traffic from one part of the community to another.
- (2) Collector streets are those which collect traffic from local streets and carry it to arterial streets or to local traffic generators, such as neighborhood shopping centers and schools. Collector streets include the principal entrance streets to a residential development, those linking such adjacent developments and those streets providing circulation within such developments.
- (3) Local streets are those used primarily for direct access to properties abutting the right-of-way. Local streets carry traffic having an origin or destination within the development and do not carry through traffic.
- (4) Alley means a minor way which is used primarily for vehicular service access to the rear or side of properties otherwise abutting on a street.

Subdivider or developer means any person, individual, firm, partnership, association, corporation, estate, trust or any other group or combination acting as a unit, dividing or proposing to divide land as to constitute a subdivision as herein defined, including any agent of the subdivider.

Subdivision means:

- (1) The division of a parcel of land into two or more parcels, sites or lots for the purpose, whether immediate or future, of transfer of ownership or building development; or
- (2) The improvement of one or more parcels of land for residential, commercial or industrial structures or groups of structures involving the division or allocation of land for the opening, widening or extension of any street or streets, except private streets serving industrial structures; and/or the division or allocation of land as open spaces for common use by owners, occupants or lease holders, or as easements for the extension and maintenance of public sewerage, water, storm drainage or other public utilities or facilities.
- VIII. <u>Amendment to Chapter 17, Article 2 Section 17.2.20 of the Municipal Code</u>. Chapter 17, Article 2, Section 17.2.20 of the Municipal Code is amended by omitting strikethrough text and adding the capitalized and underlined text, as follows:

Section 17.2.20. Preapplication procedure.

- (a) Prior to the filing of an application for approval of a preliminary plat, the subdivider shall submit to the Board of Trustees an outline development plan as specified in Section 17-3-20 of this Chapter. This procedure shall not require a formal application, fee or filing of a plat with the Board of Trustees.
- (b) Subsequent to the review by the Board of Trustees, the outline development plan shall be referred to the Planning Commission.
- (c) The Planning Commission shall review the outline development plan to determine its general acceptability and compliance with the objectives and standards of these regulations, and shall hold a conference with the subdivider to discuss desirable modifications of the plan.
- (d) The following procedure shall be followed in the consideration of applications for resubdividing lands situated within existing, platted subdivisions where less than five acres of land is involved in the resubdivision and the subdivider is not increasing the number of lots within the area being resubdivided:
 - (1) The subdivider shall submit 11 copies of an outline development plan, as defined in Section 17-3-20 of this Chapter, to the Town. The subdivider shall pay a nonrefundable review fee to the Town as set forth in the Town's Fee Schedule. The Town shall review the outline development plan for compliance with the requirements of Section 17-3-20 and, upon finding that all required information and review fees have been properly submitted by the subdivider, the Town shall forward the outline development plan to the Planning Commission for its review, consideration and recommendation concerning approval, conditional approval or disapproval of the application.

- (2) The Planning Commission shall review the outline development plan to determine its general acceptability and compliance with the objectives and standards of this Chapter. The Planning Commission shall hold a public hearing on the proposed subdivision to receive public comment concerning the application, and shall make written recommendations to the Board of Trustees. The Planning Commission shall give at least 15 days' notice of the public hearing by publication in a newspaper having general circulation in the Town.
- (3) After receipt of the Planning Commission's recommendations, the Board of Trustees shall finalize its review of the proposed subdivision and render its decision concerning approval, conditional approval or disapproval of the subdivision application. Such approval shall be binding for a period of one year from the date of preliminary approval. The subdivider may petition the Board of Trustees for an extension of the preliminary approval period for one additional year, and the Board of Trustees may grant an extension; however, no more than one extension shall be allowed.
- (4) Unless it is determined during the review of the outline development plan that a preliminary plat is necessary, the requirement for review of a preliminary plat shall be waived. In the event that a preliminary plat review is required, the applicant will need to provide 11 copies of the preliminary plat, as defined in Section 17-3-30 of this Chapter, to the Town for review and approval prior to proceeding with the final plat review process; however, the Town will waive the requirement for payment of preliminary plat review fees.
- (5) A final plat must be submitted to the Town for review and approval prior to the termination of the preliminary approval period. Final plat review procedures shall be as specified in Section 17-2-40 of this Chapter, except that no public hearing shall be required.
- (6) The Town shall approve, conditionally approve or deny preliminary approval of the outline development plan within 45 days A REASONABLE TIMEFRAME from the date the Planning Commission officially receives the outline development plan for review purposes.

(Prior code, § 7-4-3; Ord. No. 1996-05, § 1, 6-10-1996; Ord. No. 2016-07, § 1, 6-13-2016)

IX. Amendment to Chapter 17, Article 2 Section 17.2.30 of the Municipal Code. Chapter 17, Article 2, Section 17.2.30 of the Municipal Code is amended by omitting strikethrough text and adding the capitalized and underlined text, as follows:

Section 17.2.30. Conditional approval of preliminary plat...

(a) Upon formal application, the subdivider shall submit to the Planning Commission 11 copies of a preliminary plat, together with supplementary material as specified in Section 17-3-30 of this Chapter. The preliminary plat shall be submitted, together with a written application for conditional approval, at least 20 days prior to the Planning Commission meeting at which it is to be considered. Payment of fees specified in Subparagraph 17-1-20(c)(1)a. of this Chapter shall be made at that time.

- (b) Upon receipt of the preliminary plat, the Planning Director shall transmit copies to public agencies having jurisdiction of interest and to utility companies, which shall examine the plan and report their recommendations thereon to the Planning Commission.
- (c) The Planning Commission shall review the preliminary plat for compliance with this Chapter and negotiate with the subdivider on the type and extent of improvements to be installed and on any modification deemed advisable.
- (d) Within 30 days following submittal FOLLOWING A DECISION, the Planning Commission shall inform the subdivider of its approval or disapproval, stating the conditions of approval, if any, or if disapproved, stating the reasons therefor. Any conditions must be met before submittal of the final plat.

(Prior code, § 7-4-3; Ord. No. 2016-07, § 1, 6-13-2016)

X. <u>Amendment to Chapter 17, Article 2 Section 17.2.40 of the Municipal Code</u>. Chapter 17, Article 2, Section 17.2.40 of the Municipal Code is amended by omitting strikethrough text and adding the capitalized and underlined text, as follows:

Section 17.2.40. Approval of final plat.

- (a) A final plat, containing the information specified in Section 17-3-40 of this Chapter, shall be submitted by the Board of Trustees to the Planning Commission within 12 months after approval of the preliminary plat; otherwise, such approval shall become null and void unless an extension of time is applied for and granted by the Board of Trustees. Payment of fees specified in Subparagraphs 17-1-20(c)(2)b. and c. of this Chapter shall be made at this time.
- (b) The final plat as submitted shall conform substantially with the preliminary plat as approved and may constitute only that portion of the approved preliminary plat which the subdivider proposed to record and develop at the time. Submission of the final plat shall take place at least 20 days prior to the Planning Commission meeting at which it is to be considered, and nNotice of such hearing shall be published at least ten days prior to such hearing at the subdivider's expense.
- (c) Following review, the Planning Commission shall act to approve or disapprove the final plat and send its recommendations to the Board of Trustees for its approval or disapproval of the final plat. If the plat is disapproved, the reasons therefor shall be stated in writing and a copy furnished to the subdivider. Only upon approval and recording of the final plat with the County Clerk and Recorder shall the Town issue building permits for structures within the subdivision.
- (d) The Planning Commission shall approve or disapprove RECOMMEND APPROVAL OR DENIAL OF the final plat, within 30 days after submission of said final plat for approval. Failure of the Planning Commission to formally act within said time shall constitute approval of the final plat as submitted. The Board of Trustees shall approve or disapprove the final plat within 20 days after its submission with recommendations from the Planning Commission or after such default. Failure of the Board of Trustees to formally act within said time shall constitute approval of the final plat as submitted to the Planning Commission.

(e) The subdivider or developer, within ten days following approval of the final plat by the Board of Trustees, shall file said final plat in the office of the County Clerk and Recorder; otherwise, the approving action of the Board of Trustees shall be deemed withdrawn. There shall be no sales, agreements to sell, leases or rentals of a subdivision until the final plat has been duly recorded.

(Prior code, § 7-4-3; Ord. No. 2016-07, § 1, 6-13-2016)

XI. <u>Amendment to Chapter 17, Article 2 Section 17.2.50 of the Municipal Code.</u> Chapter 17, Article 2, Section 17.2.50 of the Municipal Code is amended by omitting strikethrough text and adding the capitalized and underlined text, as follows:

Section 17.2.50. Resubdivision procedure.

The following procedure shall be followed in the consideration of applications for resubdividing lands situated within existing, platted subdivisions where less than five acres of land is involved in the resubdivision and the subdivider is not increasing the number of lots within the area being resubdivided.

- (1) The subdivider shall submit 11 copies of an outline development plan, as set forth in Section 17-3-20 of this Chapter, to the Town. The Town shall review the outline development plan for compliance with the requirements of Section 17-3-20, and, upon a finding that all required information and review fees have been properly submitted by the subdivider, the Town shall forward the outline development plan to the Planning Commission for its review, consideration and recommendation concerning approval, conditional approval or disapproval of the application.
- (2) The Planning Commission shall review the outline development plan to determine its general acceptability and compliance with the objective and standards of this Chapter. The Planning Commission shall hold a public hearing on the proposed subdivision to receive public comment concerning the application; and shall make written recommendations to the Board of Trustees. The Planning Commission shall give at least ten days' notice of public hearing by publication in a newspaper having general circulation in the Town.
- (3) After receipt of the Planning Commission's recommendations, the Board of Trustees shall finalize its review of the proposed subdivision and render its decision concerning approval, conditional approval or disapproval of the subdivision application. Such approval shall be binding for a period of one year from the date of preliminary approval. The subdivider may petition the Board of Trustees for an extension of the preliminary approval period for one additional year, and the Board of Trustees may grant an extension; however, no more than one extension shall be allowed.
- (4) Unless it is determined during the review of the outline development plan that a preliminary plat is necessary, the requirement for review of a preliminary plat shall be waived. In the event that preliminary plat review is required, the subdivider must provide 11 copies of the preliminary plat, as set forth in Section 17-3-30 of this Chapter, to the Town for review and approval prior to proceeding with the final plat

- review process; however, the Town will waive the requirement for payment of preliminary plat review fees.
- (5) A final plat must be submitted to the Town for review and approval prior to the termination of the preliminary approval period. Final plat review procedures shall be as specified in Section 17-2-40 of this Chapter, except that no public hearing shall be required.
- (6) The Town shall approve, conditionally approve or deny preliminary approval of the outline development plan within 45 days from the date the Planning Commissionofficially receives the outline development plan for review purposes.

(Prior code, § 7-4-3; Ord. No. 2016-07, § 1, 6-13-2016)

- XII. <u>Incorporation of Recitals</u>. The recitals set forth above are incorporated and ordained hereby as if set forth hereafter in full.
- XIII. Ordinance Approval. The Amendments to Chapter 16 and Chapter 17 as outlined herein are hereby approved, removing time constraints associated with application review and approval.
- XIV. <u>Public Inspection</u>. The full text of this Ordinance, with any amendments, is available for public inspection at the office of the Town Clerk.
- XV. <u>Severability</u>. If any portion of this Ordinance is found to be void or ineffective, it shall be deemed severed from this Ordinance and the remaining provisions shall remain valid and in full force and effect.
- XVI. <u>Posting, Publication and Effective Date</u>. Following the passage of this Ordinance on second reading, the Town Clerk shall publish this Ordinance in full in a newspaper published within the limits of the Town. This Ordinance shall take effect 30 days after such publication.

INTRODUCED, READ, AND ORDERED FOR FIRST READING BY THE BOARD OF TRUSTEES OF THE TOWN OF SILVERTON, COLORADO, UPON A MOTION DULY MADE, SECONDED AND PASSED AT ITS REGULAR MEETING HELD AT THE TOWN OF SILVERTON, ON THE 24 DAY OF APRIL 2023.

TOWN OF SILVERTON

	By:	
	Shane Fuhrman, Mayor	
ATTEST:	•	
Matthew Green, Town Clerk		

FINALLY PASSED, ADOPTED AND APPROVED ON SECOND AND FINAL READING AND ORDERED POSTED AND PUBLISHED IN THE MANNER PROVIDED IN

SECTION VII HEREOF BY THE BOARD OF TRUSTEES OF THE TOWN OF SILVERTON, COLORADO, UPON A MOTION DULY MADE, SECONDED AND PASSED AT ITS REGULAR MEETING HELD AT THE TOWN HALL ON THE 8 DAY OF MAY, 2023, BY A VOTE OF THIS ORDINANCE AS IS ON FILE IN THE TOWN CLERK'S OFFICE FOR PUBLIC INSPECTION.

	TOWN OF SILVERTON	
	By:	
ATTEST:		
Matthew Green, Town Clerk		

Silverton Development Review Process Outline Internal Review Timeline CPS DRAFT – 3/27/2023

Silverton Land Use Application Review Overview

Internal Procedure for application intake

Computation of Time

- (A) In computing a period of days, the first day is excluded and the last day is included unless the last day of any period is a Saturday, Sunday or legal holiday, in which case the last day shall be the next working day.
- (B) Unless otherwise specified in the Silverton Municipal Code, the term "days" shall refer to business days.

Application Intake

1) Informal/Pre-App

 Meeting held with Community Development Coordinator and they will invite Engineer, Attorney, and/or CPS depending on the application.

2) Application Submittal:

- Applicant submits application materials to Community Development Coordinator at Town Hall.
 - i. Community Development Coordinator dates the documents, scans them, and puts them into the Google Drive Folder.
 - ii. Community Development Coordinator sends email to CPS that the file has been put into the folder.
- Applicant submits files electronically to Community Development Coordinator.

3) <u>Completeness Review:</u> (Perform within ten (10) days from submittal)

- CPS will review submitted materials and determine whether or not is complete.
 - i. Incomplete:
 - 1. Email sent to applicant/owner identifying the missing items.
 - 2. Applicant resubmits and a new "Completeness Review" timeline starts.

ii. Complete:

1. CPS sends email to applicant/owner accepting the application as complete.

Application Review Process

- **4)** Referral Agency Review (Start within five (5) days from completeness)
 - CPS to forward completed application materials to Town's Public Works and Attorney if applicable.
 - CPS to forward any applications/materials to other applicable agencies whose review is necessary for the application review (Fire District, CDOT, etc.)
 - Review period to last (teen (14) days.
- 5) Coordinated Comment Letter: (complete within five (5) days of referral period end)
 - Internal comments sent to CPS in individual form/format.
 - CPS draft cover letter and attach comments received from reviewing entities.
 - CPS send draft letter with review comments to Community Development Coordinator to review and comment on.
 - Internal discussion on comments, if needed. (within the five (5) days)
 - i. Determine if application is ready to go to PC hearing.
 - 1. If yes, schedule hearing based on notification requirements.
 - 2. If no, second review needed.
- 6) <u>Comment letter:</u> (sent to applicant/owner team w/in seven days of end of referral period)
 - Identifies whether or not application can go to hearing.
 - If yes, identify hearing date, notification dates, referral notice, and staff report dates.

Silverton Development Review Process Outline Internal Review Timeline CPS DRAFT – 3/27/2023

- ii. If no, deficiencies identified in comment letter and provide a deadline for resubmittal.
- 7) Post-Comment meeting with applicant (Determined if needed by town staff)
- **8)** Application resubmitted by applicant (Timeline up to applicant)
 - Same process as outlined in #3 above.
- 9) Second review: (Start within five (5) days from completeness)
 - Same process as outlined in #4 and #5 above.

Public Hearing Process

- **10)** <u>PC Hearing scheduled:</u> (Appropriate hearing set by town).
 - Public Notice Posting (Shall be published at least fifteen (15) days from public hearing date)
 - Staff Report to Community Development Coordinator for review and comments (*Due ten* (10) days prior to meeting date).
 - Staff Report published in packet (Four (4) days prior to meeting).
 - Staff Report emailed to applicant (Four (4) days prior to meeting).

11) Board of Trustees Hearing Scheduled:

- Public Notice Posting (Shall be published at least fifteen days from public hearing date)
- Staff Report to Community Development Coordinator for review and comments (Due 10 days prior to meeting date).
- Staff Report published in packet (Four (4) days prior to meeting).
- Staff Report emailed to applicant (Four (4) days prior to meeting).

12) Review Board Decision

13) Post Approval:

- Action Letter (Sent to applicant within five (5) days of meeting).
- Review of approved documents reflecting conditions of approval.
- Recordation in San Juan County Clerk and Recorder within ninety (90) days of approval date.

Step 1 Step 2 Step 3 Step 4 Step 5 Step 6 Step 7

PreApplication Submittal

Completeness Referral Period Application Resubmittal

Review Period Resubmittal

Post Approval

Applicant or staff will request a meeting to better understand objectives, goals and process of the project.

- Applicant formally submits application and submittal items.
- Staff will prepare the submittal packet for completene ss review.
- Staff will review all submitted materials and determine whether or not the packet is complete.
- Staff and referral agencies will review all submitted materials and determine or not there are outstanding concerns.
- Staff will coordinate review by referral agencies and will then create a comment letter addressing all reviewer comments to be addressed by applicant.
- Once all comments are addressed, staff will create a staff report for the decision making bodies.

- Planning Commission hearing scheduled (if applicable).
- Board of Trustees hearing scheduled
- (if applicable).
- Action Letter sent to applicant within 5 days of meeting.
- Coordinate post-approval requirements and actions, including reviewing final materials addressing conditions of approval.
- Recording in San Juan County Clerk and Recorder's office within 90 days of decision.

AGENDA MEMO



SUBJECT: Certified Local Government Ordinance

STAFF CONTACT: Lucy Mulvihill

MEETING DATE: April 18, 2023

Overview:

What is a Certified Local Government?

Certified Local Governments (CLG) are counties or municipalities that have been endorsed by the State Historic Preservation Office (History Colorado) and the National Park Service to participate in the national preservation program while maintaining standards consistent with the National Historic Preservation Act and the Secretary of the Interior's Standards for Archaeology and Historic Preservation.

How do municipalities become Certified Local Government? What are the requirements?

Municipalities must adopt a Certified local Government ordinance. The ordinance presented has been reviewed and approved for CLG compliance by Lindsey Flewelling, Preservation Planner from History Colorado. Following the adoption of a CLG ordinance, the Town will apply to History Colorado. Requirements include,

- Each CLG must enact and enforce a local ordinance that provides a legal framework for a preservation program that will achieve the purpose of designating and protecting significant historic buildings, sites, structures and districts,
- Each CLG must create a commission of at least five members that have a demonstrated interest, competence, or knowledge of preservation, and the commission must meet at least four times a year,
- At least one commission member must attend a SHPO-approved educational/training event each year.
- CLGs must maintain a system for survey and inventory of historic properties.
- CLGs must provide opportunities for public participation in local preservation efforts.
- CLGs must review and provide comment on National Register nominations submitted for properties within their jurisdiction.

Why should Silverton be a Certified Local Government? What are the Benefits?

The Town of Silverton has been exploring the CLG program for many years. As a Historic National Landmark, and a town that values Historic Preservation and Historic Tourism, we are already closely aligned with the program's requirements, however do not yet reap the benefits. The benefits include,

- CLGs communities have access to grant funds available only to CLGs. These grants do not require a cash match and can be used for survey, planning, nomination, or educational activities,
- CLG communities receive technical support from State Historic Preservation Office (SHPO) and National Park Service staff in order to advance local preservation objectives,
- CLG communities have the ability to join national organizations, such as the National Alliance of Preservation Commissions, that provide informational resources and access to a 50-state preservation network, The SHPO offers CLG-exclusive training and networking opportunities throughout the state,
- The opportunity to participate in the review of tax credit projects,
- Local designation qualifies property owners for the 20 percent State Historic Preservation Tax Credit and provides access to the State Historical Fund preservation grant program,
- A strong local preservation program can increase property values, assist in promoting heritage tourism, and promote community heritage and identity.

What's next?

If the Town would like to become a CLG we must first adopt the CLG ordinance and then apply through the CLG Application process.

Other implications

Separation of the Planning Commission and the Historic Review Committee.

MEMO Attachments:

DRAFT CLG ordinance for final discussion

Staff Recommendation:

Provide feedback to staff regarding the CLG ordinance. Comment will be used to draft the final ordinance.

Town of Silverton DRAFT Certified Local Government Ordinance

Section I. General

- Purpose. The purpose of this ordinance is to enhance our community's local resources and to promote the public health, safety, and welfare through:
 - The protection and preservation of the Town's architecture, culture, and heritage as embodied in Historic Properties and Historic Districts, by appropriate regulations and incentives:
 - b. The enhancement of Property values and the stabilization of historic neighborhoods;
 - c. The establishment of the Town's Historic Register listing Historic Properties and Historic Districts;
 - d. The cultivation of civic pride in the art, architecture, and accomplishments of the past;
 - e. The encouragement of continued private ownership and utilization of such Historic Properties or Historic Districts now so owned and used;
 - f. The promotion of thoughtful community planning and design;
 - g. The maintenance and improvement of economic and financial benefits through the protection of attractions that bring tourists and visitors to the Town; and
 - h. The provision of educational opportunities to increase public appreciation of the Town's unique heritage.
- Intent. The intention of this ordinance is to create a reasonable balance between private property rights and the public interest in preserving the Town's unique historic character through the nomination of Buildings, Structures, Sites, Objects, and districts for preservation.
- 3 Definitions For purposes of this ordinance, the following terms are to be defined as follows:
 - Alteration or Alter Any act or process that changes one (1) or more of the exterior architectural or landscape features of a Building, Structure, Site. Object, or district.
 - b. Architectural Overlay District Meaning as set forth in Section 16-4-2 of the Codes. A map of the Architectural Overlay District shall be kept in Town Hall and the Town Website.
 - c. Board of Trustees The elected group of individuals, including Mayor, Mayor Pro Team and other Trustees that has overall responsibility for the management of the municipality.
 - d. Applicant Person or persons submitting nomination or Alteration paperwork.
 - e. Building A shelter or enclosure constructed for persons, animals, or chattels
 - f. Building Code The Building Code as set forth in Chapter 18 of the Codes
 - g. Building Official The officer or other designated authority charged with the administration and enforcement of the Building Code, or that person's authorized representative
 - h. Certificate of Appropriateness Certificate issued by the Committee authorizing any proposed repair, restoration, Alteration, Construction, Relocation, or Demolition of a Historic Property or element within a Historic District pursuant to this ordinance.
 - i. Certificate of Economic Hardship A certificate issued by the Committee authorizing the repair, restoration, Alteration, Construction, Relocation, or Demolition of a designated Building, Structure, Object. Site, or element within a designated Historic District in accordance with the provisions of this ordinance, even though a Certificate of Appropriateness has previously been denied
 - i. Code The Town of Silverton Municipal Code.
 - k Colorado State Register of Historic Properties The official listing of state designated cultural resources
 - Committee The Historic Review Committee established pursuant to Section 2 of this ordinance.
 - m Compatible or Compatibility Consistent or harmonious with location, design, setting, materials, workmanship, feeling, or association of an individual Building, Structure, Object, or Site or of surrounding Properties.

DRAFT Certified Local Government Ordinance

- n. Construction or Construct Act of erecting an addition to an existing Building, Structure, or Object or the erection of a new principal or accessory Building, Structure, or Object on a lot or Property
- Contributing Property A Building, Structure, Site, or Object that reflects the historic or architectural character within a Historic District.
- p. Demolition or Demolish Any act or process that destroys in part or in whole a Building, Structure, Object, or Site.
- q. Design Guidelines A standard of appropriate activity that will preserve the historic and architectural character of a Historic Property, Property, or Historic District.
- r_s Historic District Meaning as set forth in Section 16-4-7 of the Codes and Section 3 of this ordinance. A map of the Historic District shall be kept in Town Hall and the Town Website.
- s. **Historic Property** A Building, Structure, Site, or Object which is designated by the Board of Trustees pursuant to this ordinance.
- Historic Register The register established pursuant to Section 3 of this ordinance
- Historic Significance The meaning or value ascribed to a Building, Structure, Object, Site, or district based on criteria for evaluation as defined by Section 3 below
- Infill Construction on vacant or under-used parcels within existing areas that are largely developed.
- Integrity The ability of a property to convey its Historic Significance through its physical features.
- x. Inventory Catalog of Buildings, Structures, Objects, and Sites within the Town, listed, eligible for listing, or non-eligible for listing in the Town's Historic Register.
- y Maintenance All activities necessary to prolong the useful life and aesthetic appearance of a property
- z National Register of Historic Places The list of significant Buildings, Structures, Sites, Objects, or districts in American history, architecture, archaeology, engineering, or culture maintained by the U.S. Secretary of the Interior.
- aa. Non-Contributing Property A Building. Structure, Object, or Site that does not reflect the historic or architectural character within a Historic District because of age or lack of Integrity.
- bb Object A material item of functional, aesthetic, cultural, historical, or scientific value that may be, by nature or design, movable yet related to a specific setting or environment.
- cc. Period of Significance Span of time during which significant events and activities occurred dd. Owner The person, corporation, government, or other legal entity who owns or who has any
 - legal or equitable interest in Property and who is so listed as Owner on the records of the San Juan County Assessor's Office.
- ee. Property A Building, Structure, Site, or Object.
- ff. Relocation or Relocate Moving a Building, Structure, or Object to a different location, either temporarily or permanently.
- gg. Secretary The secretary of the Committee.
- hh. Secretary of the Interior's Standards for the Treatment of Historic

DRAFT Certified Local Government Ordinance

Properties – The preservation, rehabilitation, restoration, and reconstruction standards adopted by the U.S. Department of the Interior.

- ii Section 106 Review Process required of federal agencies under 54 U.S.C. 306108 to consult local governments and other parties in consideration of the effects of projects carried out, permitted, licensed, or funded by that agency on properties listed in the National Register of Historic Places.
- jj. Site Location of a significant event; a prehistoric or historic occupation or activity; or a Building, Structure, or Object, whether standing or vanished, where the location itself maintains historic or archaeological value regardless of the value of any existing Building, Structure. or Object.
- kk. Structure A Construction for purposes other than shelter for humans, animals, or chattel (such as a road, bridge, canal, or fence).
- Il Year-Round Resident of the Town A Resident of the Town of Silverton who resides in the Town or San Juan County at least 9 months per calendar year, and that such residence must be the primary residence and usual place of return of the person, as documented by the following documents: driver's license or Colorado State Identification Card and voter registration. "Person" shall not include any corporation, partnership, firm, association, joint venture, or other similar legal entity.

Section 2. Historic Review Committee

- 1. Separation This hereby separates the Historic Review Committee from the San Juan Regional Planning Commission, in accordance with Certified Local Government Standards, and hereinafter referred to as the "Committee."
- 2. Composition
 - a. The Committee shall be composed of 5 voting members, all of whom have demonstrated interest in, competence with or knowledge of preservation. Members shall be appointed by the Board of Trustees
 - Including
 - Voting Owner of Property and Year-Round Resident in the Historic Overlay District (3 year term)
 - Voting Year-Round Resident of the Town (3 year term)
 - Voting Member of the Board of Trustees (2 year term)
 - Voting Member of the Board of Trustees (2 year term) or Voting Year-Round Resident of the Town (3 year term)
 - Voting Member of the Historical Society (1 year term)
 - Non-voting High School Member (when available) (1 year term)
 - Non-voting Town Staff Member
 - All members shall be residents of the Town, unless approved by the Board of Trustees.
 - d. At least 40% of the voting members shall be professionals or shall have extensive expertise in a preservation-related discipline, including but not limited to History, Architecture, Landscape Architecture, American Studies. American Civilization, Cultural Geography, Cultural Anthropology, Planning, or Archaeology.
- 3. Term of Office
 - a. Members shall serve one to three-year staggered terms from the date of their appointment; provided, however, that the initial appointment to the Committee shall consist of two appointments of a term of one year, one appointments of a

DRAFT Certified Local Government Ordinance

term of two years, and two appointments of a term of three years

- b. Members may continue to serve until their successors have been appointed
- 4. Officers. The Committee shall, by majority vote, elect one of its members to serve as chairperson to preside over the Committee's meetings, one member to serve as the vice-chairperson and one member to serve as Secretary. The members so designated shall serve in these capacities for terms of one year.
- 5 Quorum and Voting. A quorum for the Committee shall consist of a majority or 51% of the members. A quorum is necessary for the Committee to conduct business, including holding a public hearing. A roll call vote shall be taken upon the request of any member. A tie vote shall be deemed a denial of the motion or recommended action.
- 6 Compensation. All members of the Committee shall serve without compensation except for such amounts determined appropriate, in advance, by the Board of Trustees to offset expenses incurred in the performance of their duties.
- 7. Powers and Duties. The Committee shall advise The Board of Trustees and Staff on the following.
 - Conduct surveys and create Inventories of Properties and areas for the purpose of defining those of Historic Significance
 - Review and determine qualifications of Buildings, Structures. Objects, Sites, and districts nominated for designation and recommend that the Board of Trustees designate by ordinance such Buildings, Structures, Objects, Sites, or districts qualifying for such designation.
 - c. Recommend to the Board of Trustees the establishment of Construction and Design Guidelines, consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties, for review of proposals to Alter, Relocate, or Demolish Historic Properties.
 - d. Make recommendations on any application for Alteration. Relocation, or Demolition of a Historic Property or Historic District or planning and design project that may affect the character or Integrity of the Historic Property or Historic District.
 - e Participate in review of National Register of Historic Places nominations
 - Maintain online data base of resources related to physical and financial aspects of preservation, rehabilitation, restoration, and reconstruction, including nomination to the Town's Historic Register, the Colorado State Register of Historic Properties, and the National Register of Historic Places
 - Develop and assist in public education programs on history, archaeology, and historic preservation.
 - h. Advise the Board of Trustees on matters related to preserving the historic character and substance of the Town and recommend easements, covenants, licenses, and other methods which will implement the completion of the purposes of this ordinance.
 - L. Participate in Federal Section 106 Review as requested by Board of Trustees or Staff.
 - j₁ Draft and recommend for adoption by the Board of Trustees such by-laws, operating policies and other rules of procedure as the Committee may deem appropriate.
- 8. Meetings
 - a. The Committee shall establish a regular meeting schedule with no less than four scheduled meetings per fiscal year.
 - b. The Committee shall meet monthly unless no agenda items are prepared.
 - c. Minutes shall be kept of all Committee proceedings
 - d. All meetings of the Committee shall be open to the public.

Commented [LM1]: Not adding term limits because of the requirements for 40% professional members. Member must re-run and may be removed by Board of Trustees

Commented [LM2]: This has been the role of Historical Society

Commented [LM3]: Recommend before PC meeting

Commented [LM4R3]: If their design revisions may change aspects that the planning commission finds important. Applicants will be able to make necessary changes before Pianning Commission meeting

DRAFT Certified Local Government Ordinance

- Vacancies. Appointments to fill vacancies on the Committee shall be made by the Board of Trustees in the same manner as regular appointments.
- Removal, Members of the Committee may be removed by the Board of Trustees in their sole discretion

Section 3. Establishment of Town Register and Designation Criteria

- 1. The Board of Trusts hereby establishes The Town of Silverton's Register of Historic Places (the "Town's Historic Register").
 - a. Properties or districts may be listed in the Town's Historic Register only if such Property or district has been so designated pursuant to this ordinance.
 - b. All Properties listed in the Colorado State Register of Historic Properties and the National Register of Historic Places are eligible for the Town's Historic Register but are not designated until approval, pursuant to this ordinance, is obtained.
- 2. Eligibility Criteria
 - a. Properties or districts shall be at least fifty years old and meet one or more of the following criteria in order to be considered for designation:
 - i. Association with events that have made a significant contribution to history;
 - ii. Connection with persons significant in history;
 - iii. Distinctive characteristics of a type, period, method of Construction, or artisan;
 - iv. Geographic importance; and/or
 - v. Possibility to yield important information related to prehistory or history.
 - b. A Property or district may be exempted from the age standard if the Board of Trustees finds it to be exceptionally important in other criteria.
- 3. Integrity Criteria

All Properties and districts shall be evaluated for their physical Integrity using the following criteria:

- a. Location
- b. Design
- c. Setting
- d Materials
- e. Workmanship
- f. Feeling
- g. Association
- 4. Historic Districts
 - a. A "Historic District" is a geographically definable area including a concentration, linkage, or continuity of Properties within a specified Period of Significance and may include within its geographic boundaries one or more Contributing Properties, which has been designated by the Board of Trustees pursuant to this ordinance.
 - A Historic District is related by a pattern of either physical elements or social activities. Historic Significance is determined by applying eligibility and Integrity criteria to the pattern(s) and unifying element(s).
 - Historic District boundaries will be defined by visual changes, historical
 documentation of different associations or patterns of development, or
 evidence of changes in Property type, density, or Integrity
 - d. The map of the Historic District can be found in the office of the Planning Department and online.
 - e. Properties that do not contribute to the Historic Significance of the Historic District shall be included within its boundaries.

Town of Silverton DRAFT Certified Local Government Ordinance

Section 4. Designation Procedure

- 1. Nomination and Application
 - a Applications shall be submitted to the Planning Department for consideration on a form provided by the Town
 - b. A nomination for listing in the Town's Historic Register may be made:
 - i. By the Owner or Owners of the Property or Properties to be designated;
 - ii. By a member or members of the Committee;
 - iii. By a member or members of The Board of Trustees;
 - iv. By a member or members of the Planning Commission and/or
 - By non-Owners of the Property or Properties to be designated, in which case the Applicant must be a resident or Owner of Property in the Town, or have a place of business in the Town.
 - c. Where nominated by someone other than the Property Owner, the Town or at least one member of the or Staff shall contact the Owner or Owners of such Property or Properties nominated for designation in writing, outlining the reasons and effects of listing in the Town's Historic Register within 30 days of receipt of nomination.
 - d. Applications determined incomplete shall be returned to the Applicant with a request for additional information.
 - e. Applications for a district nomination shall not be complete if more than 25% of the Property Owners within the proposed district oppose the nomination in writing or though ballot prepared and administered by the Town
 - f. The currently adopted fee.
- 2. Designation Hearing
 - a. After an application is determined complete: a public hearing shall be held by the Committee.
 - Staff shall provide notice of the date, time, and location of the public hearing to the Applicant, the Owner or Owners of record, the Owners of directly adjacent, across public ROW at least 10 days prior to the hearing.
 - ii A legal notice indicating the nature of the hearing, the Property involved, and the time, date, and place of the scheduled public hearing, shall be published in the Town's publication of record at least 10 days prior to the hearing
 - b) A hearing may be continued. If the hearing is continued, the time, date, and place of the continuation shall be established and announced before the current session is adjourned.
 - c. Reasonable opportunity shall be provided for all interested parties to express their opinions regarding the proposed designation. However, nothing contained in this ordinance shall be construed to prevent the Committee from establishing reasonable rules to govern the proceedings of the hearings, or from establishing reasonable limits on the length of individual presentations.
 - d. Transcripts of the hearings are not required; however, the Committee's records shall include the name and address of each speaker; the organization or person the speaker represents, if any; whether or not the speaker is an Owner or holder of some interest in the Property or district nominated for designation or represents such Owner or holder; and a summary of the relevant portions of each statement. Written reports and presentations shall be incorporated into the record of the hearing.

Commented [CB5]: Why is "committee" underlined throughout?

Town of Silverton DRAFT Certified Local Government Ordinance

3. Committee Review

- a. The Committee shall review the application for conformance with the established criteria for designation and with the purposes of this ordinance.
- b. Recommend The Committee
 - i. Approval;
 - ii. Approval with conditions; or
 - iii. Denial of the application.

The Committee shall set forth in writing its findings of fact which constitute the basis of its recommendation

- c. If the Committee approves an application or approves an application with conditions, the Committee shall forward the application with a copy of its report and findings of approval to the Board of Trustees.
- d. If the Committee denies the application, the Committee must notify, in writing, the Board of Trustees and the Applicant within 30 days of such denial. Such denial shall state the reasons for the denial and the procedures for appeal to the Board of Trustees.
- e. The Committee may issue an order continuing the nomination process if the Committee finds that additional information is necessary to make a decision. If the hearing is continued, the time, date, and place of the continuation shall be established and announced to those present when the current session is to be adjourned. In no case can a hearing be continued more than 30 days without the express consent of the Applicant.

4. Board of Trustees Proceedings

- Following the Committee's approval of an application, the Board of Trustees shall hold a public hearing to consider adopting by ordinance those properties qualifying for designation. Such notice and hearing shall be conducted in conformance with the procedures set forth in Section 4, Subsections 2(a)-(d), except the Town Clerk shall perform the responsibilities assigned therein to the Secretary.
- b. The Board of Trustees shall review the application for conformance with this ordinance
- c. The Board of Trustees shall, by ordinance, approve, approve with conditions, or deny the proposed application and shall issue written findings based on the Committee's recommendations.
- d. The Town shall provide a copy of the results of the Board of Trustees' final action to the Applicant/Applicants, all Owners of record, the Planning Development Director, the Building Official, and any other person who has requested in writing to receive the same.
- Recording of Designation Following the effective date of an ordinance designating a Historic Property or Historic District for preservation, the Town shall record the ordinance with the clerk and recorder of San Juan County
- Records. The Town shall maintain a current record of all Historic Properties and Historic Districts and pending designations.
- 7. Limitation on Resubmission and Reconsideration of Proposed Designation. Whenever the Committee or the Board of Trustees denies a proposed designation, no person shall submit an application that is the same or substantially the same for at least one year from the effective date of the final action on the denied application unless the Committee or Board of Trustees has denied based on a request for additional information.
- 8. Appeal of Committee's Denial of Application

DRAFT Certified Local Government Ordinance

- a. Applicant(s) and/or Owner(s) shall have the right to appeal such decision to the Board of Trustees by filing a written notice within 15 days after the date of receipt of the Committee's denial, Such written notice shall specify the factual and legal basis for the appeal.
- Following an appeal is received by the Town, within a time frame agreed upon by the Applicant(s) and/or Owner(s) and the Town, a public hearing shall be held by the Board of Trustees.
- c. Notice of the Board of Trustees consideration of the appeal and hearing shall be provided in accordance with Section 4, Subsections 2(a)-(d), except the Town Clerk shall perform the responsibilities of the Secretary.
- d. The Board of Trustees may consider only the notice of appeal, the Committees' reasons for denial of the application, and the comments related thereto made during the Committee hearing.
- e. If the Board of Trustees finds the Committees' denial of the application was based on incorrect information, or there is shown to be newly discovered information not available at the time the application was submitted to the Committee, and if the correct or newly discovered information could, in the opinion of the Board of Trustees, change the Committees' denial of said application, then the entire matter shall be remanded by the Board of Trustees to the Committee for its consideration.
- f. The decision of the Board of Trustees shall be final.

9. Amendment of Designation

- a Designation of a Historic Property or Historic District may be amended to add features or Properties to such Historic Property or Historic District under the procedures prescribed hereinabove.
- b. Upon the Committees' decision to amend a designation, the Committee shall promptly notify the Owners of the Historic Property and the Town shall cause to be prepared a resolution including the legal description of the affected Historic Property or Historic District stating notice of the amendment and schedule the resolution for Board of Trustee review. Upon adoption by the Board of Trustee, the resolution shall be recorded.

10. Revocation of Designation

- a. If a Historic Property or Historic District has been Altered to a degree that it no longer retains its historic Integrity, the Owner may apply to the Committee for a revocation of the designation, or the Committee shall recommend revocation of the designation to the Board of Trustees in the absence of the Owner's application to do so. The revocation application shall be reviewed under the same procedures described hereinabove.
- b. Upon the Committee's decision to revoke a designation, the Committee shall promptly notify the Owners of the Historic Property or Historic District and the Town shall cause to be prepared a resolution including the legal description of the affected Historic Property or Historic District stating notice of the revocation and schedule the resolution for Boar of Trustee review. Upon adoption by the Board of Trustees, the resolution shall be recorded

Section 5. Alterations or New Construction of properties and Historic Districts

1. Requirements

 Before carrying out any new Construction, Alteration, Relocation, or Demolition involving the exterior of any Historic Property or Property within a Historic

DRAFT Certified Local Government Ordinance

District (including Non-Contributing Properties) such Owner(s) must first submit the proposed work to the Committee under this Section,

- b. The Town shall review any building permit application received to determine whether the Property is a listed Historic Property or located in a Historic District and if so, if the Applicant has completed review by the Committee as required by this Section, If a Certificate of Appropriateness has been issued on the permit application and the proposed work conforms thereto, the Town shall process it without further action. If no Certificate of Appropriateness has been issued or if the Town determines that the permit application does not conform to such, the Town shall not approve the permit application and shall not issue a permit until a Certificate of Appropriateness has been issued and the permit application conforms thereto.
- c. No person shall receive a building permit to Construct, Alter, remove, or Demolish any Building, Structure, Object, or other feature on a Site or element of a district nominated for designation after an application has been filed to initiate the designation of such Property or district. No such building permit shall be approved while proceedings are pending on such designation.

2. Application

- a. A request for Alteration or New Construction shall be initiated by the Owners: or Person(s) designated by Owners: Such application shall be submitted to the Town for consideration on a form provided by the Town, and the currently adopted fee. The application shall include anything the Town deems necessary, including, without limitation and as applicable, a
 - Project Narrative. Description of the type of work proposed, including its effect or impact upon the Historic Property or Historic District, the time schedule for any contemplated new construction or uses.
 - ii. Legal Description. A description of the land area of the request, including lot and block number.
 - iii. Specifications showing the proposed exterior appearance, with finishes, materials, samples of materials, and architectural design and detail
 - iv. Location Map. Drawing to scale no less than I in =200ft Including
 - Location and identification of all existing and proposed public and private easements.
 - Boundaries of sites to be reserved or dedicated for trails, parks, playgrounds, schools or other public uses and the location of any common area not reserved or dedicated to public use.
 - showing boundaries and an indication of existing zoning and overlay districts for all areas on the drawing.
 - The existing buildings, telephone and power lines and sewer, water, gas and drainage pipes located on the proposed development and adjacent to its boundaries.
 - v. The area, in square feet, and percentage of the total area of the proposed development, devoted to each type of use.
- b. If the Town determines the application is complete, the Town shall promptly refer the application to the Committee. If the Town determines the application is incomplete, the Applicant shall be advised of the reasons in writing.
- [Public Hearing] Once an application is deemed complete by the Town, or, a public hearing held by the Committee, shall be scheduled. Such notice and hearing shall be

Commented [LM7]: Next Steps: Determine is we want require Use Subject to Review or Create an Updated form

Commented [LM8]: According to the fee schedule (currently \$500)

Commented [LM9]: This list reflects what is currently required on USR. Could add, take away or only require certain materials for certain types of projects. EX-façade improvements my not require a location map.

Commented [LM10R9]: Planning Commission- what do you want to see in this category??

DRAFT Certified Local Government Ordinance

conducted in conformance with the procedures set forth in Section 4, Subsections 2(a) – (d).

4. Review Criteria

- a Compliance with any Design Guidelines adopted by the Town and the Secretary of the Interior's Standards for the Treatment of Historic Properties.
- b. For Non-Contributing Properties within a Historic District
 - Compatibility with the Property's current design materials features, size, scale and proportion, and massing, or
 - Compatibility with the Historic District's design materials features, size, scale and proportion, and massing
- c. Infill Construction within Historic Districts shall be differentiated from the Historic Properties but be Compatible with the historic materials, features, size scale and proportion, and massing to protect the Integrity of the Historic District and its environment.

5. Committee Review

- a. The Committee shall Recommend:
 - i. Approval;
 - ii. Approval with conditions; or
 - iii. Deny the application.

The Committee shall set forth in writing its findings of fact which constitute the basis of its recommendation

- If the Committee recommends approval or approval with conditions, the Committee shall forward the application and signed Certificate of Appropriateness to the Board of Trustees for final approval.
- c: If the Committee and Board of Trustees approves or approves the application with conditions, the Committee shall issue and send a Certificate of Appropriateness to the Applicant, the Planning Director, the Building Official, and any other person who has requested in writing to receive the same. If approved with conditions, such conditions shall be stated in writing in the Certificate of Appropriateness.
- d. If the Committee denies the application, the Committee shall deny a Certificate of Appropriateness and notify, in writing, the Applicant, the Planning Director, the Building Official, and any other person who has requested in writing to receive the same. Such denial shall state the reasons for the denial and the procedures for appeal to the Board of Trustees.
- e. The Committee may issue an order continuing the Alteration application process if the Committee finds that additional information is necessary to make a decision. If the hearing is continued, the time, date, and place of the continuation shall be established and announced to those present when the current session is to be adjourned. In no case can a hearing be continued more than 30 days without the express consent of the Applicant.
- f. The Applicant may resubmit an amended application or reapply for a building permit that takes into consideration the recommendations of the Committee or appeal the denial to the Board of Trustees.
- g. If an application for a Certificate of Appropriateness is denied, no person may submit a subsequent application for the same Alteration or Construction within one year from the date of the final action upon the earlier application.
- 6. Appeal of Denial of Certificate of Appropriateness

Commented [LM11]: Builders handbook is suggestionsbut we could use to develop standards

Commented [LM12]: https://www.nps.gov/tps/standard s/treatment-guidelines-2017.pdf

Commented [LM13]: Currently the Historic Review
Committee has decision making authority over all
AROD/Historic Review Applications. We above three options

Commented [LM14R13]: 1. Historic Review Committee will continue to have Authority over all Historic Review Applications

Commented [LM15R13]: 2 Amend code so that the Committee is advisory like the planning commission

Commented [LM16R13]: 3. Amend the code so that the Committee has a range of authority over applications. Example a New Building may be required to be reviewed by behild the Committee and the Board. A façade change may be reviewed and approved/denied by the committee only and decisions may be appealed to the Board of Trustees.

Commented [LM17]: In this case the COA would require both Committee and Board signatures

DRAFT Certified Local Government Ordinance

- a. If a Certificate of Appropriateness is denied by the Committee, the Applicant may appeal the denial to the Board of Trustees by filing a written notice with the Town Clerk within 15 days after receipt of the Committee's denial.
- b. Following an appeal received by the Town Clerk, within a time frame agreed upon by the Applicant and the Town, a public hearing shall be held by the Board of Trustees.
- c Notice of the Board of Trustees' consideration of the appeal and hearing shall be provided in accordance with Section 4, Subsections 2(a)-(d), except the Town Clerk shall perform the responsibilities of the Secretary.
- d. The Board of Trustees shall consider the notice of appeal, the Committee's reasons for denial of the application, the comments related thereto made during the Committee hearing, and any evidence (including new evidence) it deems relevant to the application.
- e. The Board of Trustees shall apply the criteria in Section 5, Subsection 4 in making its decision.
- f. The decision of the Board of Trustees shall be final.

Section 6. Relocation of Listed Properties

1. General

- a. In addition to the criteria and procedures in Section 5, the Committee will use the criteria of this Section in considering applications for Relocating a Historic Property or Contributing Property in a Historic District within or outside of a designated Site or Historic District or Relocating a Property onto a designated Site or Historic District.
- b. Applicants for Relocation shall provide:
 - i. A professionally prepared estimate of costs of continued Maintenance of the Property in its current condition, of rehabilitation on site, and of Relocation and rehabilitation;
 - ii. An engineer's or architect's report as to structural soundness;
 - iii. A professionally prepared estimate of the Property's market value in its current location and current condition, of the market value of the Property rehabbed on its current site, and of the site after Relocation of the Property; and
 - iv. Professionally prepared site plan and construction documents for the current site

2. Review Criteria

- a. For consideration of the original Property and site, the Committee will review for the following criteria:
 - i. The Property cannot be preserved, restored, rehabbed or reused on its current site to provide for any reasonable, beneficial use of the Property regardless of any proposed development plan for the Property's site or adjacent Properties:
 - ii. And
 - Whether a structural report submitted by a licensed structural engineer adequately demonstrates the soundness of the Building, Structure, or Object proposed for Relocation;
 - 2. If the Property can be Relocated without significant damage to its physical Integrity; and
 - 3 Whether plans are specifically defined for the site to be vacated, and have been determined to meet all other Municipal codes and

Town of Silverton DRAFT Certified Local Government Ordinance ordinances,

- For consideration of the new location, the Committee will review for compliance with all of the following criteria:
 - Whether the Building, Structure, or Object is Compatible with its proposed site and adjacent Properties; and if the receiving site is Compatible in nature with the Building, Structure, or Object proposed to be moved;
 - ii. The Building, Structure, or Object's architectural Integrity and its consistency with the character of the neighborhood of the receiving site:
 - iii. Whether the Relocation of the Building, Structure, or Object will diminish the Integrity or character of the neighborhood of the receiving site; and
 - iv. If a Relocation plan has been submitted and approved by the Town, including posting a bond, to ensure the safe Relocation, preservation, and repair (if required) of the Property and site preparation and infrastructure connections as described in the Code.

Section 7. Demolition of Listed Properties

1. General

- a. In addition to the criteria and procedures in Section 5, the Committee will use the criteria of this Section in considering applications for Demolition of Historic Properties and Contributing Properties in a Historic District.
- b. Applicants for Demolition shall provide:
 - A professionally prepared estimate of costs of continued Maintenance of the Property in its current condition, of rehabilitation, and of Demolition;
 - ii... An engineer's or architect's report as to structural soundness; and
 - Professionally prepared estimates of the Property's market value in its current condition, as rehabbed and after Demolition,
- c. If a Demolition approval is granted on any basis other than that of an imminent hazard or economic hardship (See Section 8), a Certificate of Appropriateness will not be issued until a replacement/reuse plan for the Property has been approved by the Town.
- Review Criteria for Total Demolition. Applicants requesting a Certificate of Appropriateness for total Demolition must provide data to clearly demonstrate all of the following criteria:
 - The Property proposed for Demolition is not structurally sound, despite evidence of the Owner's efforts to properly maintain said Building, Structure, or Object;
 - The Property cannot be preserved, restored, rehabbed, or reused on site to provide for any reasonable, beneficial use of the Property regardless of any proposed development plan for the Property's site or adjacent Properties;
 - c. The Property cannot be practically moved to another site in the Town; and
 - d. The Applicant demonstrates that the proposal mitigates, to the greatest extent practical, all the following:
 - Any impacts that occur to the visual character of the neighborhood where Demolition is proposed to occur;
 - ii. Any impact on the Historic Significance of the Buildings, Structures, or

DRAFT Certified Local Government Ordinance

Objects located on the Property and adjacent Properties;

- iii. Any impact to the Integrity of Buildings, Structures, or Objects located on the Property and adjacent Properties; and
- iv. Any impact to archaeological deposits or ruins or the potential to access such resources and whether information can be recovered as part of the Demolition process.
- Review Criteria for Partial Demolition. Applicants requesting a Certificate of Appropriateness for partial Demolition must provide data to clearly demonstrate all of the following criteria:
 - a. The partial Demolition is required for the preservation, restoration, or rehabilitation of the Property; and
 - b. The Applicant demonstrates that the proposal mitigates to the greatest extent practical, all the following:
 - Any impact on the Historic Significance of the Buildings, Structures, or Objects located on the Property and adjacent Properties; and
 - ii. Any impact on the Integrity of the Buildings, Structures, or Objects located on the Property and adjacent Properties.

Section 8. Alteration Exemptions

- 1. General
 - a If an application for a Certificate of Appropriateness is denied, the Applicant may request an exemption from such certificate requirement pursuant to this Section.
 - b. A request for exemption shall be initiated by the Owner(s). Such application shall be submitted to the Town for consideration on a form provided by the Town. The Applicant shall have the burden of proof to establish hardship
 - c. The Committee may request additional information from the Applicant as necessary to make informed decisions according to the applicable criteria for decision-making.
 - d. If the Town determines the application is complete, the Town shall promptly refer the application to the Committee. If the Town determines the application is incomplete, the Applicant shall be advised of the reasons in writing within 30 days of submittal.
 - e. Certificate of Appropriateness exemptions are granted only to the specific Owner and are not transferable
- 2. Criteria for Exemption
 - a. Economic Hardship. The following factors, evidence, and testimony are to be considered:
 - The structural soundness of any Buildings or Structures on the Property and their potential for rehabilitation.
 - ii. The economic feasibility of rehabilitation or reuse of the existing Property in the case of a proposed Demolition.
 - iii. For investment or income producing Properties, the ability to obtain a reasonable rate of return on the Property in its present condition, or in a rehabbed condition pursuant to the requirements of this ordinance.
 - iv. For non-income producing Properties consisting of owner-occupied single-family dwellings and/or non-income producing institutional Properties not solely operating for profit, the ability to maintain or to convert the Property to a reasonable residential or institutional use in its present condition or in a rehabbed condition pursuant to the requirements of this ordinance or the ability to transfer the Property for a reasonable

Commented (LM18): Next Step: Create a new form

DRAFT Certified Local Government Ordinance

rate of return.

- v. The consideration for economic hardship shall not include any of the following:
 - 1. Willful or negligent acts by the Owner;
 - 2. Purchase of the Property for substantially more than its market value:
 - 3. Failure to perform normal Maintenance and repairs;
 - Failure to diligently solicit and retain tenants;
 - 5. Failure to prescribe a rental amount which is reasonable; or
- Failure to provide normal tenant improvements.
- b. Undue Hardship. An Applicant requesting an exemption based on undue hardship must show that the application of the criteria creates a situation that is substantially inadequate to meet the Applicant's needs because of specific health and/or safety issues.

3. Decision

- a. If the Committee doems the criteria of this Section are met, the Committee shall issue an order of exemption and send a Certificate of Economic Hardship to the Town within 30 days.
- b. If the Committee deems the criteria of this Section are not met, the Committee shall deny the exemption request and notify, in writing, the Town and the Applicant within 30 days of such denial. Such denial shall state the reasons for the denial and the procedures for appeal to the Board of Trustees.
- c. The Committee may issue an order continuing the exemption process for a period of not to exceed 90 days from the date of the application if the Committee would like additional information necessary to make a decision.
- d. The Applicant may resubmit an amended application, reapply for an exemption that takes into consideration the recommendations of the Committee, or appeal the denial to the Board of Trustees.
- e. If an application for an exemption is denied, no person may submit a subsequent application within one year for the same from the date of the final action upon the earlier application.

4. Appeal for Denial of Exemption

- a. If an exemption is denied by the Committee, the Applicant may appeal the denial to the Board of Trustees by filing a written notice with the Town within 15 days of the date of the receipt of the Committee's denial.
- Notice of the Board of Trustees' consideration of the appeal and hearing shall be provided in accordance with Section 4, Subsections 2(a)-(d), except the Town Clerk shall perform the responsibilities of the Secretary.
- c. The Board of Trustees shall hold a public hearing to consider the appeal, and consider any evidence (including new evidence) it deems relevant to the application.
- d. The Board of Trustees shall apply the criteria in this Section in making its decision.
- e. The decision of the Board of Trustees shall be final.

Section 9. Maintenance

The Board of Trustees intends to preserve from deliberate or inadvertent neglect the
exterior portions of Historic Properties or Historic Districts and all interior portions
thereof whose Maintenance is necessary to prevent deterioration of any exterior
portion. No Owner, lessee, or occupant of any Historic Property or Contributing
Property within a Historic District shall fail to prevent significant deterioration of the
exterior of the Building, Structure, Object, or special feature beyond the condition of

DRAFT Certified Local Government Ordinance

- such Historic Property or Contributing Property within a Historic District on the effective date of the designating ordinance.
- No Owner, lessee, or occupant of any Historic Property or Contributing Property within a Historic District shall fail to comply with all applicable provisions of this ordinance and other ordinances of the Town regulating Maintenance
- 3. Before the Town's attorney files a complaint in municipal court for failure to maintain the Historic Property or Contributing Property within a Historic District, the Town shall notify the Owner, lessee or occupant of the need to repair, maintain, or restore such Property; shall assist the Owner, lessee, or occupant in determining how to preserve such Property; and shall give the Owner, lessee, or occupant a reasonable time to perform such work.

Section 10. Unsafe or Dangerous Conditions Exempted

Nothing in this ordinance shall be construed to prevent any measures of Construction, Alteration, removal, or Demolition necessary to correct the unsafe or dangerous condition of any Property, other feature, or parts thereof where such condition is declared unsafe or dangerous by the Town and where the proposed measures have been declared necessary by the Town to correct the condition, as long as only such work that is absolutely necessary to correct the condition is performed. Any temporary measures may be taken without first obtaining a Certificate of Appropriateness under this ordinance, but a certificate is required for permanent Construction, Alteration, removal, or Demolition.

Section 11. Enforcement and Penalties

- 1. No person shall violate or permit to be violated any of the requirements of this ordinance or the terms of a certificate issued pursuant to this ordinance.
- Violations of this ordinance are punishable as provided in the Code and may be subject to the following additional penalties:
 - a. If any Historic Property or Property within a Historic District is externally reconstructed, externally Altered, added to, Relocated, or Demolished in violation of this ordinance the Committee may order any such Property to be returned to its condition prior to such unlawful Construction, reconstruction, exterior Alteration, addition. Relocation, or Demolition. This may specifically include ordering the reconstruction of a Property that was Demolished to replicate as closely as possible the original Property.
 - D. If any Building, Structure, or Object is erected or Constructed on a Historic Property or Property within a Historic District, the Committee may order any such Building, Structure, or Object to be removed or deconstructed.
 - c. Alterations to a Historic Property or Historic District without an approved Certificate of Appropriateness will result in a one-year moratorium on all building permits for the subject Property.
 - d. Relocating or Demolishing a Historic Property or Property within a Historic District without an approved Certificate of Appropriateness will result in a five-year moratorium on all relocation, Demolition, or building permits for such Property and/or its original location.

Section 12. Incentives

 Any Owner of a Historic Property or Contributing Property within a Historic District under this ordinance may be eligible for economic incentives for the restoration or rehabilitation of that Property as provided by the State of Colorado and such additional

DRAFT Certified Local Government Ordinance

- incentives as may be developed by the Committee or the Board of Trustees.

 2. The Committee shall identify and advise the Board of Trustees regarding the implementation of economic incentives for Historic Properties. The Committee shall notify the Owners of Historic Properties of economic incentive opportunities available.
- 3. The Committee shall make the determination for each request regarding economic incentives.



AGENDA MEMO

SUBJECT: Updating FEMA Flood Plain Maps

STAFF CONTACT: Lucy Mulvihill

MEETING DATE: April 18, 2023

Overview:

This year FEMA updated the San Juan County and Incorporated Areas Flood Insurance Study (FIS), which 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. This included updated Flood Insurance Rate Maps (FIRM) for Silverton. These must be adopted May 9th to be in compliance with the National Flood Insurance Program. Communities that do not adopt the updated FEMA FIRM and FIS will be sanctioned. Because of this we are proposing an emergency ordinance to be presented to the board of Trustees, Adopted, and effective April 24, 2023. Because this is an emergency ordinance the Planning Commission does not need to make an official motion, however this will affect Chapter 16 and future land use decisions, so staff is presenting to the Planning Commission for discussion and questions.

MEMO Attachments:

Emergency Ordinance An Emergency Ordinance To Amend Chapter 16 Article 4 Section 16- 4-20 To Adopt The Flood Insurance Study For Town Of Silverton Colorado And Incorporated Areas, Dated May 9, 2023, With Accompanying Flood Insurance Rate Maps.

May 9, 2023 FEMA FIRM and FIS

Staff Recommendation:

Because this is an emergency ordinance the Planning Commission does not need to make an official motion, however this will affect Chapter 16 and future land use decisions, so staff is presenting to the Planning Commission For discussion and questions.

TOWN OF SILVERTON COLORADO ORDINANCE 2023-XX

AN EMERGENCY ORDINANCE TO AMEND CHAPTER 16 ARTICLE 4 SECTION 16-4-20 TO ADOPT THE FLOOD INSURANCE STUDY FOR TOWN OF SILVERTON COLORADO AND INCORPORATED AREAS, DATED MAY 9, 2023, WITH ACCOMPANYING FLOOD INSURANCE RATE MAPS

WHEREAS, the Town of Silverton is a statutory town organized under and pursuant to the laws of the State of Colorado and has authority pursuant to state law, including Title 31, Article 23, and Title 29, Article 20, Colorado Revised Statutes, to adopt floodplain regulations; and

WHEREAS, as part of the Town's participation in the National Flood Insurance Program, the Town is required pursuant to state and federal regulation to incorporate certain floodplain provisions in its municipal ordinances; and

WHEREAS, the Federal Emergency Management Agency (FEMA) has issued a final determination adopting an updated Flood Insurance Study (FIS) and Flood Insurance Rate Maps (FIRM) for Silverton, Colorado with an effective date of May 09, 2023; and

WHEREAS, notice of a public hearing was published in the Silverton Standard, on March 30, 202; and

WHEREAS, the Board of Trustees at a regular meeting on April 10, 2023 conducted a public hearing and gave consideration to relevant information and testimony; and

WHEREAS, the Board of Trustees determined that the adoption of this Flood Hazard District Code Amendment promotes the health, safety and welfare of the community; and

WHEREAS, the amendments to Section 16-4-1 enacted by this ordinance meet state and federal requirement, and will improve safety for persons and property in the Town.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF TRUSTEES OF THE TOWN OF Silverton, COLORADO:

I. Amendment to Chapter 16, Article 4 Section 16.4.20 of the Municipal Code. Chapter 16, Article 4 Section 16.4.20 of the Municipal Code is amended by omitting strikethrough text and adding the capitalized and underlined text, as follows:

Section 16-4-20. Applicability.

This Division shall apply to all areas of special flood hazard and areas removed from the floodplain by the issuance of a FEMA Letter of Map Revision Based on Fill (LOMR-F) within the jurisdiction of the Town.

(1) Areas of special flood hazard are identified by the Flood Insurance Study on file in the office of the Town. This report is entitled "Flood Insurance Study, Town of Silverton and Unincorporated Areas," dated March 1978, with accompanying Flood Insurance Rate-Maps and Flood Boundary Floodway Maps. These maps and study are incorporated herein by reference and made a part of this Division.

THE SPECIAL FLOOD HAZARD AREAS IDENTIFIED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY IN A SCIENTIFIC AND ENGINEERING REPORT ENTITLED, "THE FLOOD INSURANCE STUDY FOR TOWN OF SILVERTON COLORADO AND INCORPORATED AREAS," DATED MAY 9, 2023 WITH ACCOMPANYING FLOOD INSURANCE RATE MAPS (FIRM) AND ANY REVISIONS THERETO ARE HEREBY ADOPTED BY REFERENCE AND DECLARED TO BE A PART OF THIS ORDINANCE. THESE SPECIAL FLOOD HAZARD AREAS IDENTIFIED BY THE FIS AND ATTENDANT MAPPING ARE THE MINIMUM AREA OF APPLICABILITY OF THIS ORDINANCE AND MAY BE SUPPLEMENTED BY STUDIES DESIGNATED AND APPROVED BY THE TOWN OF SILVERTON. THE FLOODPLAIN ADMINISTRATOR SHALL KEEP A COPY OF THE FLOOD INSURANCE STUDY (FIS), DFIRMS, AND FIRMS ON FILE AND AVAILABLE FOR PUBLIC INSPECTION.

- (2) Areas of special flood hazard within the Flood Hazard District are divided into two separate and distinct areas:
 - a. The floodway; and
 - b. The flood fringe.
- (3) Compliance. No structure shall hereafter be constructed, located, extended, converted, substantially improved or altered, and no development shall be permitted, within the areas of special flood hazard without full compliance with the terms of this Division and other applicable regulations.
- (4) Abrogation and greater restrictions. This Division is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this Division and another ordinance, easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.
- (5) Disclaimer. The degree of flood protection required by this Division is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood height may be increased by man-made or natural causes. This Division does not imply that lands outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damage. This Division shall not create liability on the part of the Town, any officer or employee thereof, or the Federal Emergency Management Agency, for any flood damages that result from reliance on this Division, or any administrative decision lawfully made thereunder.
- II. <u>Incorporation of Recitals</u>. The recitals set forth above are incorporated and ordained hereby as if set forth hereafter in full.
- III. Ordinance Approval. The Amendments to Chapter 16 Article 4 Section 16-4-20 as outlined herein are hereby approved, update Floodplain Regulations and adopting an updated Flood Insurance Study (FIS) and Flood Insurance Rate Maps (FIRM) for Silverton, Colorado with an effective date of May 09, 2023
- IV. <u>Public Inspection</u>. The full text of this Ordinance, with any amendments, is available for public inspection at the office of the Town Clerk.
- V. <u>Severability</u>. If any portion of this Ordinance is found to be void or ineffective, it shall be deemed severed from this Ordinance and the remaining provisions shall remain valid and in full force and effect.

VI. <u>Posting, Publication and Effective Date</u>. This Ordinance shall become effective immediately upon passage by the Board of Trustees and Shall be published in full in the newspaper on April 27, 2023.

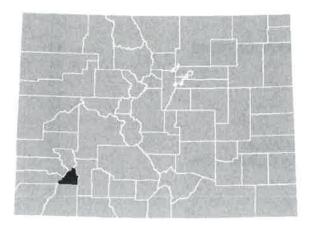
THIS ORDINANCE was approved and adopted on the 24th day of April 2023 by the Board of Trustees of the Town of Silverton, Colorado.

	TOWN OF SILVERTON
	By:
	Shane Fuhrman, Mayor
ATTEST:	
Matthew Green Town Clerk	

FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 1 OF 1



SAN JUAN COUNTY, COLORADO

AND INCORPORATED AREAS

COMMUNITY NAME	NUMBER
SAN JUAN COUNTY UNINCORPORATED AREAS	080267
SILVERTON, TOWN OF	080165



EFFECTIVE:

MAY 9, 2023

FLOOD INSURANCE STUDY NUMBER 08111CV000A

Version Number 2.6.4.6

TABLE OF CONTENTS

Volume 1

		<u>Page</u>
SEC	CTION 1.0 – INTRODUCTION	1
1.1	The National Flood Insurance Program	1
1.2	Purpose of this Flood Insurance Study Report	2
1.3	Jurisdictions Included in the Flood Insurance Study Project	2
1.4	Considerations for using this Flood Insurance Study Report	3
SEC	TION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS	11
2.1	Floodplain Boundaries	11
2.2	Floodways	15
2.3	Base Flood Elevations	16
2.4	Non-Encroachment Zones	17
2.5	Coastal Flood Hazard Areas	17
	2.5.1 Water Elevations and the Effects of Waves	17
	2.5.2 Floodplain Boundaries and BFEs for Coastal Areas	17
	2.5.3 Coastal High Hazard Areas	17
	2.5.4 Limit of Moderate Wave Action	17
SEC	TION 3.0 – INSURANCE APPLICATIONS	17
3.1	National Flood Insurance Program Insurance Zones	17
SEC	TION 4.0 – AREA STUDIED	18
4.1	Basin Description	18
4.2	Principal Flood Problems	18
4.3	Non-Levee Flood Protection Measures	19
4.4	Levees	19
SEC	TION 5.0 - ENGINEERING METHODS	19
5.1	Hydrologic Analyses	20
5.2	Hydraulic Analyses	24
5.3	Coastal Analyses	26
	5.3.1 Total Stillwater Elevations	26
	5.3.2 Waves	26
	5.3.3 Coastal Erosion	26
- 4	5.3.4 Wave Hazard Analyses	26
5.4	Alluvial Fan Analyses	26
	TION 6.0 – MAPPING METHODS	27
6.1	Vertical and Horizontal Control	27
6.2	Base Map	28
6.3	Floodplain and Floodway Delineation	28
6.4	Coastal Flood Hazard Mapping	33
6.5	FIRM Revisions	33

 6.5.1 Letters of Map Amendment 6.5.2 Letters of Map Revision Based on Fill 6.5.3 Letters of Map Revision 6.5.4 Physical Map Revisions 6.5.5 Contracted Restudies 6.5.6 Community Map History 	33 34 34 34 35 35
SECTION 7.0 – CONTRACTED STUDIES AND COMMUNITY COORDINATION 7.1 Contracted Studies 7.2 Community Meetings	36 36 36
SECTION 8.0 - ADDITIONAL INFORMATION	38
SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES	39
<u>Figures</u>	
	Page
Figure 1: FIRM Index Figure 2: FIRM Notes to Users Figure 3: Map Legend for FIRM Figure 4: Floodway Schematic Figure 5: Wave Runup Transect Schematic Figure 6: Coastal Transect Schematic Figure 7: Frequency Discharge-Drainage Area Curves Figure 8: 1% Annual Chance Total Stillwater Elevations for Coastal Areas Figure 9: Transect Location Map	5 6 8 16 17 17 23 26 26
<u>Tables</u>	<u>Page</u>
Table 1: Listing of NFIP Jurisdictions Table 2: Flooding Sources Included in this FIS Report Table 3: Flood Zone Designations by Community Table 4: Basin Characteristics Table 5: Principal Flood Problems Table 6: Historic Flooding Elevations Table 7: Non-Levee Flood Protection Measures Table 8: Levees Table 9: Summary of Discharges Table 10: Summary of Non-Coastal Stillwater Elevations Table 11: Stream Gage Information used to Determine Discharges Table 12: Summary of Hydrologic and Hydraulic Analyses Table 13: Roughness Coefficients Table 14: Summary of Coastal Analyses	2 13 18 19 19 19 21 24 24 25 26

	Tide Gage Analysis Specifics	26
Table 16:	Coastal Transect Parameters	26
Table 17:	Summary of Alluvial Fan Analyses	26
Table 18:	Results of Alluvial Fan Analyses	27
Table 19:	Countywide Vertical Datum Conversion	27
Table 20:	Stream-Based Vertical Datum Conversion	27
Table 21:	Base Map Sources	28
Table 22:	Summary of Topographic Elevation Data used in Mapping	29
Table 23:	Floodway Data	30
Table 24:	Flood Hazard and Non-Encroachment Data for Selected Streams	33
Table 25:	Summary of Coastal Transect Mapping Considerations	33
Table 26:	Incorporated Letters of Map Change	34
Table 27:	Community Map History	36
Table 28:	Summary of Contracted Studies Included in this FIS Report	36
Table 29:	Community Meetings	37
Table 30:	Map Repositories	38
	Additional Information	38
Table 32:	Bibliography and References	40

Volume 1

Exhibits

<u>Panel</u>
01-07 P
08-12 P
13-22 P

Published Separately

Flood Insurance Rate Map (FIRM)

FLOOD INSURANCE STUDY REPORT SAN JUAN COUNTY, COLORADO

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 San Juan County, Colorado.

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.

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
			08111C0025C ¹ ,	
			08111C0050C,	
			08111C0075C,	
		13010001,	08111C0100C ¹ ,	
San Juan County,	080267	14020006,	08111C0105C,	
Unincorporated Areas	000207	14080101,	08111C0106C,	
		14080104	08111C0107C ¹ ,	
			08111C0108C,	
			08111C0109C,	
			08111C0115C,	

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
San Juan County, Unincorporated Areas (cont.)	080267	13010001, 14020006, 14080101, 14080104	08111C0116C, 08111C0117C ¹ , 08111C0118C ¹ , 08111C0119C ¹ , 08111C0150C, 08111C020C ¹ , 08111C0225C ¹ , 08111C0250C ¹ , 08111C0275C ¹ , 08111C0300C ¹	
Silverton, Town of	080165	14080104	08111C0108C, 08111C0109C, 08111C0116C	

¹ 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-percent-annual-chance flood elevation is also referred to as the Base Flood Elevation (BFE)); delineations of the 1-percent-annual-chance and 0.2-percent-annual-chance floodplains; and 1-percent-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, "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 San Juan County became effective on May 9, 2023. Refer to Table for information about subsequent revisions to the FIRMs.

 Selected FIRM panels for the community may contain information (such as floodways and cross sections) that was previously shown separately on the corresponding Flood Boundary and Floodway Map (FBFM) panels. In addition, former flood hazard zone designations have been changed as follows:

Old Zone	New Zone
A1 through A30	AE
V1 through V30	VE
В	X (shaded)
С	X (unshaded)

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.

The FIRM Index in Figure 1 shows the overall FIRM panel layout within San Juan 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, flooding sources, watershed boundaries, and USGS HUC-8 codes.

MAP NUMBER OBTITCHEDA EFFECTAL DATE MAY 9, 2023 NATIONAL FLOOD INSURANCE PROGRAM SAN JUAN COUNTY, COLORADO And Incorporated Areas PANELS PRINTED: 0050, 0075, 0105, 0106, 0108, 0109, 0115, 0116, 0150 • COUNTY LOCATOR 1.214.025 feet 36,000

1 inch = 17,835 feet

0 9,000 18,000 36,0 Map Projection: Universal Transverse Mercator Zone 13N: North American Datum 1983

HTTPS://MSC.FEMA.GOV

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION * PANEL NOT PRINTED - NO SPECIAL FLOOD HAZARD AREAS

2

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 Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at 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 Map Information 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 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.

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.

<u>BASE FLOOD ELEVATIONS</u>: 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.

<u>FLOODWAY INFORMATION</u>: 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.

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.

Figure 2: FIRM Notes to Users

<u>PROJECTION INFORMATION</u>: The projection used in the preparation of the map was Universal Transverse Mercator (UTM) Zone 13. 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.

<u>ELEVATION DATUM</u>: 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.

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 of this FIS Report.

BASE MAP INFORMATION: Base map information shown on this FIRM was derived from U.S. Census Bureau TIGER files, the U.S. Geological Survey, and the San Juan County Department, dated 2019, and the U.S. Department of Agriculture dated 2016.

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

<u>REVISIONS TO INDEX</u>: As new studies are performed and FIRM panels are updated within San Juan County, CO, 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.

SPECIAL NOTES FOR SPECIFIC FIRM PANELS

This Notes to Users section was created specifically for San Juan County, CO, effective May 9, 2023.

<u>FLOOD RISK REPORT</u>: 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 San Juan County.

Figure 3: Map Legend for FIRM

SPECIAL FLOOD HAZARD AREAS: 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. Special Flood Hazard Areas subject to inundation by the 1% annual chance flood (Zones A, AE, AH, AO, AR, A99, V and VE) The flood insurance rate zone that corresponds to the 1% annual chance Zone A floodplains. No base (1% annual chance) flood elevations (BFEs) or depths are shown within this zone. Zone AE 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. 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. 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. Zone AR 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. Zone A99 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. Zone V 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. Zone VE 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.

Regulatory Floodway determined in Zone AE.

Figure 3: Map Legend for FIRM

OTHER AREAS OF FLOOD HAZARD 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. 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. 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. 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. OTHER AREAS Zone D (Areas of Undetermined Flood Hazard): The flood insurance rate zone that corresponds to unstudied areas where flood hazards are undetermined, but possible. **NO SCREEN** Unshaded Zone X: Areas of minimal flood hazard. FLOOD HAZARD AND OTHER BOUNDARY LINES Flood Zone Boundary (white line on ortho-photography-based mapping; gray line on vector-based mapping) (ortho) (vector) Limit of Study Jurisdiction Boundary Limit of Moderate Wave Action (LiMWA): Indicates the inland limit of the area affected by waves greater than 1.5 feet **GENERAL STRUCTURES** Aqueduct Channel Channel, Culvert, Aqueduct, or Storm Sewer Culvert Storm Sewer Dam Dam, Jetty, Weir Jettv Weir Levee, Dike, or Floodwall Bridge

Bridge

Figure 3: Map Legend for FIRM

REFERENCE MARKERS	
22.0	River mile Markers
CROSS SECTION & TRA	NSECT INFORMATION
B 20.2	Lettered Cross Section with Regulatory Water Surface Elevation (BFE)
5280 21.1	Numbered Cross Section with Regulatory Water Surface Elevation (BFE)
17.5	Unlettered Cross Section with Regulatory Water Surface Elevation (BFE)
8	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.
~~~ 513 ~~~~	Base Flood Elevation Line
ZONE AE (EL 16)	Static Base Flood Elevation value (shown under zone label)
ZONE AO (DEPTH 2)	Zone designation with Depth
ZONE AO (DEPTH 2) (VEL 15 FPS)	Zone designation with Depth and Velocity
BASE MAP FEATURES	
Missoum Creek	River, Stream or Other Hydrographic Feature
234	Interstate Highway
234	U.S. Highway
234)	State Highway
234	County Highway
MAPLE LANE	Street, Road, Avenue Name, or Private Drive if shown on Flood Profile
RAILROAD	Railroad
	Horizontal Reference Grid Line

Figure 3: Map Legend for FIRM

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

⁴²**76**^{000m}E Horizontal Reference Grid Coordinates (UTM)

**365000 FT** Horizontal Reference Grid Coordinates (State Plane)

80° 16' 52.5" Corner Coordinates (Latitude, Longitude)

### SECTION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS

### 2.1 Floodplain Boundaries

To provide a national standard without regional discrimination, the 1-percent-annual-chance (100-year) flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2-percent-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 San Juan 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-percent-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), study methodologies employed (Section 5.0), and flood risk, certain flooding sources may be mapped to show both the 1-percent and 0.2-percent-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-percent-annual-chance floodplain boundary on the FIRM, without published water surface elevations. In cases where the 1-percent and 0.2-percent-annual-chance floodplain boundaries are close together, only the 1-percent-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 San Juan 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-percent-annual-chance floodplain corresponds to the SFHAs. The 0.2-percent-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

					Length (mi)	Ġ.			
Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub- Basin(s)	(streams or coastlines)	Area (ml²) (estuaries or ponding)	Floodway (Y/N)	Shown on FIRM	Date of Analysis
Animas River	San Juan, Unincorporated Areas; Silverton, Town of	Approximately 1.0 mile downstream of confluence of Mineral Creek	Approximately 1.2 miles upstream of County Road 20	14080104	2.8		<b>&gt;</b>	Zone AE	11/29/19
Animas River	San Juan, Unincorporated Areas	Approximately 1.2 miles upstream of County Road 20	Confluence of West Fork Animas River and North Fork Animas River	14080104	8.3		Z	Zone A	11/29/19
Cement Creek	San Juan, Unincorporated Areas, Silverton, Town of	Confluence with Animas River	Approximately 0.7 mile upstream of Greene Street	14080104	0.8		>	Zone AE	11/29/19
Cement Creek	San Juan, Unincorporated Areas	Approximately 0.7 mile upstream of Greene Street	County Road 10	14080104	6.7		Z	Zone A	11/29/19
Mineral Creek	San Juan, Unincorporated Areas, Silverton, Town of	Confluence with Animas River	Approximately 2.9 miles upstream of confluence with Animas River	14080104	2.0		>	Zone AE	11/29/19
Mineral Creek	San Juan, Unincorporated Areas	Approximately 2.9 miles upstream of confluence with Animas River	Approximately 1.8 miles upstream of U.S. Highway 550	14080104	6.1		Z	Zone A	11/29/19
North Fork Animas River	San Juan, Unincorporated Areas	Confluence with Animas River	Approximately 0.2 mile upstream of County Road 2	14080104	1.4		Z	Zone A	11/29/19

Table 2: Flooding Sources Included in this FIS Report

Date of Analysis	Zone A 11/29/19
Floodway shown on Date of (Y/N) FIRM Analysis	Zone A
Floodway (Y/N)	z
Length (mi) (streams Area (mi²) or (estuaries coastlines) or ponding)	
Length (mi) (streams or or coastlines)	2.5
HUC-8 Sub- Basin(s)	14080104
Upstream Limit	Approximately 2.6 miles upstream of Picane Gulch Road
Downstream Limit	Confluence with Animas River
Community	San Juan, Unincorporated Areas
Flooding Source	West Fork Animas River

### 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-percent-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-percent-annual-chance flood. The floodway fringe is the area between the floodway and the 1-percent-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-percent-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.

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. Regulations for Colorado require communities in San Juan County to limit increases caused by encroachment to 0.5 foot and several communities have adopted additional restrictions. 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.

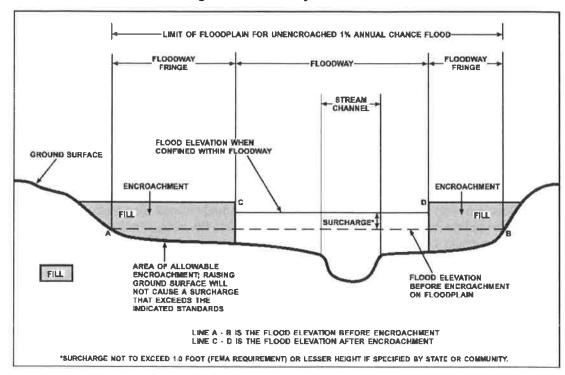


Figure 4: Floodway Schematic

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-percent-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 BFE is the elevation of the 1-percent-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.

BFEs are primarily intended for flood insurance rating purposes. 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. 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. For example, the user may use the FIRM to determine the stream station of a location of interest and then use the profile to determine the 1-percent annual chance elevation at that location. Because only selected cross sections may be shown on the FIRM for riverine areas, the profile should be used to obtain the flood elevation between mapped cross sections. Additionally, for riverine areas, whole-foot elevations shown on the FIRM may not exactly reflect the elevations derived from the hydraulic analyses; therefore, elevations obtained from the profile may more accurately reflect the results of the hydraulic analysis.

### 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-percent-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-percent-annual-chance floodplain boundary corresponds to the boundary of areas of additional flood hazards.

Table 3 lists the flood insurance zones in San Juan County.

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

Community	Flood Zone(s)
San Juan County, Unincorporated Areas	A, AE, X
Silverton, Town of	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)
Animas	14080104	Animas River	Largest watershed with San Juan County	328
Rio Grande Headwaters	13010001	Rio Grande	Small portion of watershed affecting eastern portion of San Juan County	35
Uncompahgre	14020006	Uncompahgre River	Small portion of watershed affecting northern portion of San Juan County	7
Upper San Juan	14080101	San Juan River	Small portion of watershed affecting southern portion of San Juan County	19

### 4.2 Principal Flood Problems San Juan River

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

**Table 5: Principal Flood Problems** 

Flooding Source	Description of Flood Problems
Animas River	The 1884 flood was the first known flood on the Animas River. In the Town of Silverton, bridges and homes were being swept away. The second highest flood on record occurred in 1927, destroying the railroad along Animas River. The 1970 flood caused railroad damage of approximately \$500,000.
Cement Creek	In 1911, on Cement Creek, high waters broke over banks just above the highway bridge and flooded the main street. The highway bridges spanning Cement Creek are two troublesome spots where stream channel construction backs up water, causing flooding in the streets.
Mineral Creek	The highway bridges spanning Mineral Creek are two troublesome spots where stream channel construction backs up water, causing flooding in the streets.

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

# Table 6: Historic Flooding Elevations [Not Applicable to this Flood Risk Project]

### 4.3 Non-Levee Flood Protection Measures

Table 7 contains information about non-levee flood protection measures within San Juan 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**

[Not Applicable to this Flood Risk Project]

### 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-percent-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-percent-annual-chance flood elevation and a 1-percent-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-percent-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.

### 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 Figure for selected flooding sources.

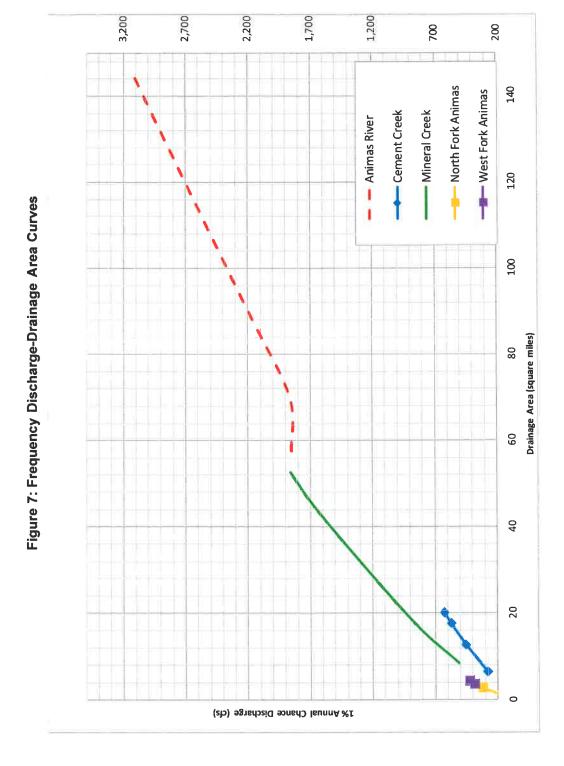
Table 9: Summary of Discharges

		Drainage			Peak Discharge (cfs)	large (cfs)		
Flooding Source	Location	Area (Square Miles)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Chance Plus	0.2% Annual Chance
Animas River	USGS Gage 09359020, Animas Below Silverton	146.2	2,808	2,955	3,053	3,142	3,351	3,329
Animas River	Downstream of Cement Creek Confluence	92	1,848	2,014	2,127	2,232	2,473	2,453
Animas River	USGS Gage 09358000, Animas at Silverton	70.6	1,470	1,644	1,763	1,873	2,127	2,108
Animas River	CDWR Gage, Animas at Howardsville	57.6	1,419	1,604	1,733	1,855	2,193	2,119
Cement Creek	USGS Gage 09358550, Cement Creek at Silverton	20.1	466	532	578	624	733	725
Cement Creek	1.5 miles upstream of Gage 09358550	17.7	429	489	532	574	674	899
Cement Creek	2.5 miles downstream of Confluence of South Fork Cement Creek	12.8	339	387	421	454	534	529
Cement Creek	Downstream of South Fork Cement Creek	6.6	213	242	264	285	334	331
Mineral Creek	USGS Gage 9359010, Mineral Creek at Silverton	52.6	1,338	1,550	1,706	1,860	2,230	2,218
Mineral Creek	Downstream of South Fork Mineral Creek	42.5	1,157	1,340	1,474	1,608	1,927	1,917

Table 9: Summary of Discharges

		Drainage			Peak Discharge (cfs)	narge (cfs)		
Flooding Source	Location	Area (Square Miles)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1% Annual Chance Plus	0.2% Annual Chance
Mineral Creek	Downstream of Middle Fork Mineral Creek	18	628	727	800	872	1,046	1,040
Mineral Creek	Downstream of Mill Creek	8.5	368	426	469	511	613	609
North Fork Animas	At Confluence with Animas River	2.74	147	215	267	321	543	481
North Fork Animas	At Horseshoe Creek	0.5	52	77	86	118	199	179
West Fork Animas	Downstream of Placer Gulch Confluence	4.39	195	285	353	424	717	632
West Fork Animas	At Confluence with Animas River	3.78	178	260	323	388	656	280

*Data not Available



## Table 10: Summary of Non-Coastal Stillwater Elevations [Not Applicable to this Flood Risk Project]

Table 11: Stream Gage Information used to Determine Discharges

		Agency		Drainage	Period	of Record
Flooding Source	Gage Identifier	that Maintains Gage	Site Name	Area (Square Miles)	From	То
Animas River	09359020	USGS	Animas River below Silverton, CO	146	6/12/1992	6/10/2017
Animas River	09358000	USGS	Animas River at Silverton	70.6	6/12/1992	6/5/2017
Animas River	ANIHOWCO	CDWR	Animas River at Howardsville, CO	55.9	6/8/1991	6/18/2017
Animas River	09359010	USGS	Mineral Creek at Silverton, CO	52.3	7/25/1992	6/18/2017
Cement Creek	09358550	USGS	Cement Creek at Silverton, CO	20.1	6/12/1992	6/10/2017

### 5.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the sources studied were carried out to provide estimates of the elevations of floods of the selected recurrence intervals. Base flood elevations on the FIRM represent the elevations shown on the Flood Profiles and in the Floodway Data tables in the FIS Report. Rounded whole-foot elevations may be shown on the FIRM in coastal areas, areas of ponding, and other areas with static base flood elevations. These whole-foot elevations may not exactly reflect the elevations derived from the hydraulic analyses. Flood elevations shown on the FIRM 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. The hydraulic analyses for this FIS were based on unobstructed flow. The flood elevations shown on the profiles are thus considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail.

For streams for which hydraulic analyses were based on cross sections, locations of selected cross sections are shown on the Flood Profiles (Exhibit 1). For stream segments for which a floodway was computed (Section 6.3), selected cross sections are also listed in Table 23, "Floodway Data."

A summary of the methods used in hydraulic analyses performed for this project is provided in Table 12. Roughness coefficients are provided in Table 13. Roughness coefficients are values representing the frictional resistance water experiences when passing overland or through a channel. They are used in the calculations to determine water surface elevations. Greater detail (including assumptions, analysis, and results) is available in the archived project documentation.

Table 12: Summary of Hydrologic and Hydraulic Analyses

Special Considerations								
Flood Zone on FIRM	Zone AE with Floodway	Zone A	Zone AE with Floodway	Zone A	Zone AE with Floodway	Zone A	Zone A	Zone A
Date Analyses Completed	11/29/19	11/29/19	11/29/19	11/29/19	11/29/19	11/29/19	11/29/19	11/29/19
Hydraulic Model or Method Used	HEC-RAS 5.0.6	HEC-RAS 5.0.6	HEC-RAS 5.0.6	HEC-RAS 5.0.6	HEC-RAS 5.0.6	HEC-RAS 5.0.6	HEC-RAS 5.0.5	HEC-RAS 5.0.5
Hydrologic Model or Method Used	Gage Analysis	Gage Analysis	Gage Analysis	Gage Analysis	Gage Analysis	Gage Analysis	Regression Analysis	Regression Analysis
Study Limits Upstream Limit	Approximately 1.2 miles upstream of County Road 20	Confluence of West Fork Animas River and North Fork Animas River	Approximately 0.7 mile upstream of Greene Street	County Road 10	Approximately 2.9 miles upstream of confluence with Animas River	Approximately 1.8 miles upstream of U.S. Highway 550	Approximately 0.2 mile upstream of County Road 2	Approximately 2.6 miles upstream of Picane Gulch Road
Study Limits Downstream Limit	Approximately 1.0 mile downstream of confluence of Mineral Creek	Approximately 1.2 miles upstream of County Road 20	Confluence with Animas River	Approximately 0.7 mile upstream of Greene Street	Confluence with Animas River	Approximately 2.9 miles upstream of confluence with Animas River	Confluence with Animas River	Confluence with Animas River
Flooding Source	Animas River	Animas River	Cement Creek	Cement Creek	Mineral Creek	Mineral Creek	North Fork Animas River	West Fork Animas River

**Table 13: Roughness Coefficients** 

Flooding Source	Channel "n"	Overbank "n"		
Animas River	0.04-0.048	0.016-0.12		
Cement Creek	0.045-0.055	0.013-0.095		
Mineral Creek	0.035-0.048	0.016-0.13		

### 5.3 Coastal Analyses

This section is not applicable to this Flood Risk Project.

Table 14: Summary of Coastal Analyses
[Not Applicable to this Flood Risk Project]

### 5.3.1 Total Stillwater Elevations

This section is not applicable to this Flood Risk Project.

Figure 8: 1% Annual Chance Total Stillwater Elevations for Coastal Areas
[Not applicable to this Flood Risk Project]

Table 15: Tide Gage Analysis Specifics
[Not applicable to this Flood Risk Project]

### 5.3.2 Waves

This section is not applicable to this Flood Risk Project.

### 5.3.3 Coastal Erosion

This section is not applicable to this Flood Risk Project.

### 5.3.4 Wave Hazard Analyses

This section is not applicable to this Flood Risk Project.

Table 16: Coastal Transect Parameters
[Not Applicable to this Flood Risk Project]

Figure 9: Transect Location Map
[Not Applicable to this Flood Risk Project]

### 5.4 Alluvial Fan Analyses

This section is not applicable to this Flood Risk Project.

Table 17: Summary of Alluvial Fan Analyses
[Not Applicable to this Flood Risk Project]

# Table 18: Results of Alluvial Fan Analyses [Not applicable to this Flood Risk Project]

### **SECTION 6.0 – MAPPING METHODS**

### 6.1 Vertical and Horizontal Control

All FIS Reports and FIRMs are referenced to a specific vertical datum. The vertical datum provides a starting point against which flood, ground, and structure elevations can be referenced and compared. Until recently, the standard vertical datum used for newly created or revised FIS Reports and FIRMs was the National Geodetic Vertical Datum of 1929 (NGVD29). With the completion of the North American Vertical Datum of 1988 (NAVD88), many FIS Reports and FIRMs are now prepared using NAVD88 as the referenced vertical datum.

Flood elevations shown in this FIS Report and on the FIRMs are referenced to NAVD88. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between NGVD29 and NAVD88 or other datum conversion, visit the National Geodetic Survey website at www.ngs.noaa.gov.

Temporary vertical monuments are often established during the preparation of a flood hazard analysis for the purpose of establishing local vertical control. Although these monuments are not shown on the FIRM, they may be found in the archived project documentation associated with the FIS Report and the FIRMs for this community. Interested individuals may contact FEMA to access these data.

To obtain current elevation, description, and/or location information for benchmarks in the area, please visit the NGS website at <a href="https://www.ngs.noaa.gov">www.ngs.noaa.gov</a>.

The datum conversion locations and values that were calculated for San Juan County are provided in Table 19.

# Table 19: Countywide Vertical Datum Conversion [Not Applicable to this Flood Risk Project]

A countywide conversion factor could not be generated for San Juan County because the maximum variance from average exceeds 0.25 feet. Calculations for the vertical offsets on a stream by stream basis are depicted in Table 20.

Table 20: Stream-Based Vertical Datum Conversion
[Not Applicable to this Flood Risk Project]

### 6.2 Base Map

The FIRMs and FIS Report for this project have been produced in a digital format. The flood hazard information was converted to a Geographic Information System (GIS) format that meets FEMA's FIRM Database specifications and geographic information standards. This information is provided in a digital format so that it can be incorporated into a local GIS and be accessed more easily by the community. The FIRM Database includes most of the tabular information contained in the FIS Report in such a way that the data can be associated with pertinent spatial features. For example, the information contained in the Floodway Data table and Flood Profiles can be linked to the cross sections that are shown on the FIRMs. Additional information about the FIRM Database and its contents can be found in FEMA's *Guidelines and Standards for Flood Risk Analysis and Mapping*, www.fema.gov/media-library/resources-documents/collections/361.

Base map information shown on the FIRM was derived from the sources described in Table 21.

Data Type	Data Provider	Data Date	Data Scale	Data Description
Political Boundaries	San Juan County GIS Department	2019	1: 24,000	Municipal and couny boundaries
Public Land Survey System (PLSS)	United States Department of Agriculture (USDA)	2016	1: 24,000	PLSS data
Surface Water Featues	(USGS) National Hydrology Dataset	2019	1: 24,000	Streams, rivers, and lakes for the county
Transportation Features	Tiger Line Files, Road and Rail Centerlines	2019	1: 24,000	Roads and railroads for the county

Table 21: Base Map Sources

### 6.3 Floodplain and Floodway Delineation

The FIRM shows tints, screens, and symbols to indicate floodplains and floodways as well as the locations of selected cross sections used in the hydraulic analyses and floodway computations.

For riverine flooding sources, the mapped floodplain boundaries shown on the FIRM have been delineated using the flood elevations determined at each cross section; between cross sections, the boundaries were interpolated using the topographic elevation data described in Table 22.

In cases where the 1-percent and 0.2-percent-annual-chance floodplain boundaries are close together, only the 1-percent-annual-chance floodplain boundary has been shown. 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 floodway widths presented in this FIS Report and on the FIRM were computed for certain stream segments on the basis of equal conveyance reduction from each side of

the floodplain. Floodway widths were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. Table 2 indicates the flooding sources for which floodways have been determined. The results of the floodway computations for those flooding sources have been tabulated for selected cross sections and are shown in Table 23, "Floodway Data."

Certain flooding sources may have been studied that do not have published BFEs on the FIRMs, or for which there is a need to report the 1-percent-annual-chance flood elevations at selected cross sections because a published Flood Profile does not exist in this FIS Report. These streams may have also been studied using methods to determine non-encroachment zones rather than floodways. For these flooding sources, the 1-percent-annual-chance floodplain boundaries have been delineated using the flood elevations determined at each cross section; between cross sections, the boundaries were interpolated using the topographic elevation data described in Table. All topographic data used for modeling or mapping has been converted as necessary to NAVD88. The 1-percent-annual-chance elevations for selected cross sections along these flooding sources, along with their non-encroachment widths, if calculated, are shown in Table 24, "Flood Hazard and Non-Encroachment Data for Selected Streams."

Table 22: Summary of Topographic Elevation Data used in Mapping

		Source for	Topographic	Elevation Data	
Community	Flooding Source	Description	Vertical Accuracy	Horizontal Accuracy	Citation
San Juan County, Unincorporated Areas	All within County	Light Detection and Ranging data (LiDAR)	2 cm	1.5 cm	CWCB NASA 2018

BFEs shown at cross sections on the FIRM represent the 1-percent-annual-chance water surface elevations shown on the Flood Profiles and in the Floodway Data tables in the FIS Report.

SURFACE	INCREASE	0.0	0.0	0.5	0.2	0.3	0.0	0.0	0.3	0.0	0.2	0.1	0.1	0.2	
1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)	WITH FLOODWAY	9,209.0	9,225.5	9,243.3	9,257.3	9,279.1	9,294.6	9,307.2	9,328.3	9,343.4	9,361.7	9,380.0	9,396.1	9,409.6	
UAL CHANCE F	WITHOUT FLOODWAY	9,209.0	9,225.5	9,242.8	9,257.1	9,278.8	9,294.6	9,307.2	9,328.0	9,343.4	9,361.5	9,379.9	9,396.0	9,409.4	
1% ANN	REGULATORY	9,209.0	9,225.5	9,242.8	9,257.1	9,278.8	9,294.6	9,307.2	9,328.0	9,343.4	9,361.5	9,379.9	9,396.0	9,409.4	
	MEAN VELOCITY (FEET/SEC)	4.8	4.8	4.5	8.8	5.5	7.7	5.2	4.5	6.5	7.8	8.9	6.6	8.9	
FLOODWAY	SECTION AREA (SQ. FEET)	651	654	692	254	405	243	360	412	346	242	210	189	276	
	WIDTH (FEET)	235	368	228	56	296	28	335	295	251	89	54	56	29	
LOCATION	DISTANCE 1	395,019	397,338	399,664	401,145	402,843	404,160	405,244	406,882	407,977	409,265	410,456	411,570	412,340	
7007	CROSS SECTION	∢	В	O	٥	Ш	ш	O	I		7	¥	_	Σ	

¹ Feet above approximately 150 feet downstream of the Colorado-New Mexico border

**FLOODWAY DATA** 

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN JUAN COUNTY, CO

TABLE 23

AND INCORPORATED AREAS

FLOODING SOURCE: ANIMAS RIVER

30

r		r —						
URFACE	INCREASE	0.0	0.0	0.0	0.1	0.0	0.1	
1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)	WITH FLOODWAY	9,283.12	9,306.5	9,327.8	9,349.3	9,386.2	9,424.6	
JAL CHANCE F ELEVATION (	WITHOUT	9,283.12	9,306.5	9,327.8	9,349.2	9,386.2	9,424.5	
1% ANNI	REGULATORY	9,285.1	9,306.5	9,327.8	9,349.2	9,386.2	9,424.5	
	MEAN VELOCITY (FEET/SEC)	5.9	9.1	8.5	9.7	8.4	8.7	
FLOODWAY	SECTION AREA (SQ. FEET)	106	69	73	65	74	72	
	WIDTH (FEET)	86	25	28	21	32	26	
LOCATION	DISTANCE 1	0	1,005	2,058	2,934	3,976	4,861	
LOCA	CROSS SECTION	∢	Ф	O	۵	Ш	ш	

^{&#}x27;Feet above confluence with Animas River

# FLOODWAY DATA

# FLOODING SOURCE: CEMENT CREEK

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN JUAN COUNTY, CO

AND INCORPORATED AREAS

²Computed without consideration of backwater effects from Animas River

		_				_		_	_	
URFACE	INCREASE	0.4	0.1	4.0	0.4	0.3	0.0	0.1	0.4	
1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)	WITH	9,242.9	9,265.7	9,277.1	9,297.4	9,325.5	9,371.2	9,396.9	9,419.6	
UAL CHANCE F ELEVATION (	WITHOUT FLOODWAY	9,242.5	9,265.6	9,276.7	9,297.0	9,325.2	9,371.2	9,396.8	9,419.2	
1% ANNI	REGULATORY	9,242.5	9,265.6	9,276.7	9,297.0	9,325.2	9,371.2	9,396.8	9,419.2	
	MEAN VELOCITY (FEET/SEC)	5.9	8.9	9.4	8.6	10.8	7.9	8.7	6.0	
FLOODWAY	SECTION AREA (SQ. FEET)	314	209	199	217	172	235	213	270	
	WIDTH (FEET)	161	80	68	29	46	65	47	75	
TION	DISTANCE	622	2,294	3,070	4,256	5,841	7,925	9,738	11,391	
LOCATION	CROSS	∢	В	O	۵	ш	L	တ	I	

# ¹ Feet above confluence with Animas River

# **FLOODWAY DATA**

FEDERAL EMERGENCY MANAGEMENT AGENCY

SAN JUAN COUNTY, CO

TABLE 23

AND INCORPORATED AREAS

# FLOODING SOURCE: MINERAL CREEK

Non-encroachment areas may be delineated where it is not possible to delineate floodways because specific channel profiles with bridge and culvert geometry were not developed. Any non-encroachment determinations for this Flood Risk Project have been tabulated for selected cross sections and are shown in Table 24. The non-encroachment width indicates the measured distance left and right (looking downstream) from the mapped center of the stream to the non-encroachment boundary based on a surcharge of 1.0 foot or less.

# Table 24: Flood Hazard and Non-Encroachment Data for Selected Streams [Not Applicable to this Flood Risk Project]

#### 6.4 Coastal Flood Hazard Mapping

This section is not applicable to this Flood Risk Project. . .

# Table 25: Summary of Coastal Transect Mapping Considerations [Not Applicable to this Flood Risk Project]

#### 6.5 FIRM Revisions

This FIS Report and the FIRM are based on the most up-to-date information available to FEMA at the time of its publication; however, flood hazard conditions change over time. Communities or private parties may request flood map revisions at any time. Certain types of requests require submission of supporting data. FEMA may also initiate a revision. Revisions may take several forms, including Letters of Map Amendment (LOMAs), Letters of Map Revision Based on Fill (LOMR-Fs), Letters of Map Revision (LOMRs) (referred to collectively as Letters of Map Change (LOMCs)), Physical Map Revisions (PMRs), and FEMA-contracted restudies. These types of revisions are further described below. Some of these types of revisions do not result in the republishing of the FIS Report. To assure that any user is aware of all revisions, it is advisable to contact the community repository of flood-hazard data (shown in Table, "Map Repositories").

#### 6.5.1 Letters of Map Amendment

A LOMA is an official revision by letter to an effective NFIP map. A LOMA results from an administrative process that involves the review of scientific or technical data submitted by the owner or lessee of property who believes the property has incorrectly been included in a designated SFHA. A LOMA amends the currently effective FEMA map and establishes that a specific property is not located in a SFHA.

To obtain an application for a LOMA, visit <a href="www.fema.gov/letter-map-amendment-loma">www.fema.gov/letter-map-amendment-loma</a> and download the form "MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill". Visit the "Flood Map-Related Fees" section to determine the cost, if any, of applying for a LOMA.

FEMA offers a tutorial on how to apply for a LOMA. The LOMA Tutorial Series can be accessed at www.fema.gov/online-tutorials.

For more information about how to apply for a LOMA, call the FEMA Map Information eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627).

### 6.5.2 Letters of Map Revision Based on Fill

A LOMR-F is an official revision by letter to an effective NFIP map. A LOMR-F states FEMA's determination concerning whether a structure or parcel has been elevated on fill above the base flood elevation and is, therefore, excluded from the SFHA.

Information about obtaining an application for a LOMR-F can be obtained in the same manner as that for a LOMA, by visiting <a href="www.fema.gov/letter-map-amendment-loma">www.fema.gov/letter-map-amendment-loma</a> for the "MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill" or by calling the FEMA Map Information eXchange, toll free, at 1-877-FEMA MAP (1-877-336-2627). Fees for applying for a LOMR-F, if any, are listed in the "Flood Map-Related Fees" section.

A tutorial for LOMR-F is available at www.fema.gov/online-tutorials.

#### 6.5.3 Letters of Map Revision

A LOMR is an official revision to the currently effective FEMA map. It is used to change flood zones, floodplain and floodway delineations, flood elevations and planimetric features. All requests for LOMRs should be made to FEMA through the chief executive officer of the community, since it is the community that must adopt any changes and revisions to the map. If the request for a LOMR is not submitted through the chief executive officer of the community, evidence must be submitted that the community has been notified of the request.

To obtain an application for a LOMR, visit <a href="www.fema.gov/media-library/assets/documents/1343">www.fema.gov/media-library/assets/documents/1343</a> and download the form "MT-2 Application Forms and Instructions for Conditional Letters of Map Revision and Letters of Map Revision". Visit the "Flood Map-Related Fees" section to determine the cost of applying for a LOMR. For more information about how to apply for a LOMR, call the FEMA Map Information eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627) to speak to a Map Specialist.

Previously issued mappable LOMCs (including LOMRs) that have been incorporated into the San Juan County FIRM are listed in Table 26. Please note that this table only includes LOMCs that have been issued on the FIRM panels updated by this map revision. For all other areas within this county, users should be aware that revisions to the FIS Report made by prior LOMRs may not be reflected herein and users will need to continue to use the previously issued LOMRs to obtain the most current data.

# Table 26: Incorporated Letters of Map Change [Not Applicable to this Flood Risk Project]

#### 6.5.4 Physical Map Revisions

A Physical Map Revisions (PMR) is an official republication of a community's NFIP map to effect changes to base flood elevations, floodplain boundary delineations, regulatory floodways and planimetric features. These changes typically occur as a result of structural works or improvements, annexations resulting in additional flood hazard areas or correction to base flood elevations or SFHAs.

The community's chief executive officer must submit scientific and technical data to FEMA to support the request for a PMR. The data will be analyzed and the map will be

revised if warranted. The community is provided with copies of the revised information and is afforded a review period. When the base flood elevations are changed, a 90-day appeal period is provided. A 6-month adoption period for formal approval of the revised map(s) is also provided.

For more information about the PMR process, please visit <u>www.fema.gov</u> and visit the "Flood Map Revision Processes" section.

#### 6.5.5 Contracted Restudies

The NFIP provides for a periodic review and restudy of flood hazards within a given community. FEMA accomplishes this through a national watershed-based mapping needs assessment strategy, known as the Coordinated Needs Management Strategy (CNMS). The CNMS is used by FEMA to assign priorities and allocate funding for new flood hazard analyses used to update the FIS Report and FIRM. The goal of CNMS is to define the validity of the engineering study data within a mapped inventory. The CNMS is used to track the assessment process, document engineering gaps and their resolution, and aid in prioritization for using flood risk as a key factor for areas identified for flood map updates. Visit <a href="www.fema.gov">www.fema.gov</a> to learn more about the CNMS or contact the FEMA Regional Office listed in Section 8 of this FIS Report.

#### 6.5.6 Community Map History

The current FIRM presents flooding information for the entire geographic area of San Juan County. Previously, separate FIRMs, Flood Hazard Boundary Maps (FHBMs) and/or Flood Boundary and Floodway Maps (FBFMs) may have been prepared for the incorporated communities and the unincorporated areas in the county that had identified SFHAs. Current and historical data relating to the maps prepared for the project area are presented in Table, "Community Map History." A description of each of the column headings and the source of the date is also listed below.

- Community Name includes communities falling within the geographic area shown
  on the FIRM, including those that fall on the boundary line, nonparticipating
  communities, and communities with maps that have been rescinded.
  Communities with No Special Flood Hazards are indicated by a footnote. If all
  maps (FHBM, FBFM, and FIRM) were rescinded for a community, it is not listed
  in this table unless SFHAs have been identified in this community.
- Initial Identification Date (First NFIP Map Published) is the date of the first NFIP map that identified flood hazards in the community. If the FHBM has been converted to a FIRM, the initial FHBM date is shown. If the community has never been mapped, the upcoming effective date or "pending" (for Preliminary FIS Reports) is shown. If the community is listed in Table 7 but not identified on the map, the community is treated as if it were unmapped.
- Initial FHBM Effective Date is the effective date of the first FHBM. This date may be the same date as the Initial NFIP Map Date.
- FHBM Revision Date(s) is the date(s) that the FHBM was revised, if applicable.
- Initial FIRM Effective Date is the date of the first effective FIRM for the community.

• FIRM Revision Date(s) is the date(s) the FIRM was revised, if applicable. This is the revised date that is shown on the FIRM panel, if applicable. As countywide studies are completed or revised, each community listed should have its FIRM dates updated accordingly to reflect the date of the countywide study. Once the FIRMs exist in countywide format, as PMRs of FIRM panels within the county are completed, the FIRM Revision Dates in the table for each community affected by the PMR are updated with the date of the PMR, even if the PMR did not revise all the panels within that community.

The initial effective date for the San Juan County FIRMs in countywide format was May 9, 2023.

Table 27: Community Map History

Community Name	Initial Identification Date	Initial FHBM Effective Date	FHBM Revision Date(s)	Initial FIRM Effective Date	FIRM Revision Date(s)
San Juan County, Unincorporated Areas	9/1/1978	N/A	N/A	9/1/1978	5/9/2023
Silverton, Town of	6/14/1974	6/14/1974	5/28/1976	9/1/1978	5/9/2023

#### SECTION 7.0 - CONTRACTED STUDIES AND COMMUNITY COORDINATION

### 7.1 Contracted Studies

Table 28 provides a summary of the contracted studies, by flooding source, that are included in this FIS Report.

Table 28: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Animas River and Tributaries	5/9/2023	AECOM	CT 2018- 2357	4/3/2020	San Juan County, Unincorporated Areas

### 7.2 Community Meetings

The dates of the community meetings held for this Flood Risk Project and previous Flood Risk Projects are shown in Table 29. These meetings may have previously been referred to by a variety of names (Community Coordination Officer (CCO), Scoping, Discovery, etc.), but all meetings represent opportunities for FEMA, community officials, study contractors, and other invited guests to discuss the planning for and results of the project.

Table 29: Community Meetings

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
San Juan County,	6000000	8/6/2020	Resilience	FEMA, the community, and the study contractor
Unincorporated Areas	5/8/2023	3/18/2021	Final CCO	FEMA, the community, and the study contractor
Silverton Town of	5/9/203	8/6/2019	Flood Risk Review	FEMA, the community, and the study contractor
		3/18/2021	Final CCO	FEMA, the community, and the study contractor

#### **SECTION 8.0 – ADDITIONAL INFORMATION**

Information concerning the pertinent data used in the preparation of this FIS Report can be obtained by submitting an order with any required payment to the FEMA Engineering Library. For more information on this process, see <a href="https://www.fema.gov">www.fema.gov</a>.

Table 30 is a list of the locations where FIRMs for San Juan County can be viewed. Please note that the maps at these locations are for reference only and are not for distribution. Also, please note that only the maps for the community listed in the table are available at that particular repository. A user may need to visit another repository to view maps from an adjacent community.

**Table 30: Map Repositories** 

Community	Address	City	State	Zip Code
San Juan County, Unincorporated Areas	San Juan County Courthouse 1557 Greene Street	Silverton	СО	81433
Silverton, Town of	Town Hall 1360 Greene Street	Silverton	со	81433

The National Flood Hazard Layer (NFHL) dataset is a compilation of effective FIRM Databases and LOMCs. Together they create a GIS data layer for a State or Territory. The NFHL is updated as studies become effective and extracts are made available to the public monthly. NFHL data can be viewed or ordered from the website shown in Table 31.

Table 31 contains useful contact information regarding the FIS Report, the FIRM, and other relevant flood hazard and GIS data. In addition, information about the State NFIP Coordinator and GIS Coordinator is shown in this table. At the request of FEMA, each Governor has designated an agency of State or territorial government to coordinate that State's or territory's NFIP activities. These agencies often assist communities in developing and adopting necessary floodplain management measures. State GIS Coordinators are knowledgeable about the availability and location of State and local GIS data in their state.

Table 31: Additional Information

FEMA and the NFIP	
FEMA and FEMA Engineering Library website	www.fema.gov/national-flood-insurance-program-flood- hazard-mapping/engineering-library
NFIP website	www.fema.gov/national-flood-insurance-program
NFHL Dataset	msc.fema.gov
FEMA Region VIII	Denver Federal Center, Building 710 P.O. Box 25267 Denver, CO 80255-0267 (303) 235-4812

Other Federal Agencies	
USGS website	www.usgs.gov
Hydraulic Engineering Center website	www.hec.usace.army.mil
State Agencies and Organization	ons
State NFIP Coordinator	Doug Mahan, CFM CWCB Community Assistance Program Coordinator 1313 Sherman Street, Rm. 718 Denver, CO 80203 (303) 866-3441 x3221 doug.mahan@state.co.us
State GIS Coordinator	Jon Gottsegen Statewide GIS Coordinator 601 E. 18 th Ave Denver, CO 80203 Phone: (303) 764-7712 jon.gottsegen@state.co.us

## **SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES**

Table 32 includes sources used in the preparation of and cited in this FIS Report as well as additional studies that have been conducted in the study area.

Table 32: Bibliography and References

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
USDA 2019	U.S. Department of Agriculture	Public Land Survey System	USDA	Washington, D.C.	1/1/2016	
CWCB 2019	Colorado Water Conservation Board	Hydrology, Hydraulics, and Floodplain Mapping submital for San Juan Co	CWCB	Denver, CO	October 2019	http://www.coloradoha zardmapping.com/risk Map/animas/Documen ts
USCB 2016	U.S. Census Bureau	TIGER/Line Shapefile, 2016 USCB	USCB	Washington, D.C.	6/1/2019	
CWCB 2018	NASA Re-Process, Colorado Priority Sites LiDAR	Light Detection and Ranging data(LiDAR)	NSGS	Washington, D.C.	2018	
USGS 2017	U.S. Geologic Survey	National Hydrography Dataset (NHD)	USGS	Reston, VA	10/17/2019	

