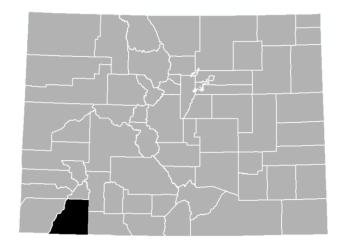
FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 3 OF 3



LA PLATA COUNTY, COLORADO

AND INCORPORATED AREAS

COMMUNITY NAME	NUMBER
BAYFIELD, TOWN OF	080098
DURANGO, CITY OF	080099
IGNACIO, TOWN OF	080268
LA PLATA COUNTY UNINCORPORATED AREAS	080097



REVISED:

April 25, 2024

FLOOD INSURANCE STUDY NUMBER 08067CV003B

Version Number 2.6.4.6

TABLE OF CONTENTS

Volume 1

SEC	TION 1.0 – INTRODUCTION	rage 1
1.1	The National Flood Insurance Program	1
1.2	Purpose of this Flood Insurance Study Report	
1.3	Jurisdictions Included in the Flood Insurance Study Project	2 2
1.4	Considerations for using this Flood Insurance Study Report	7
1.4	Considerations for using this Flood insurance Study Report	,
	TION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS	15
2.1	Floodplain Boundaries	15
2.2	Floodways	24
2.3	Base Flood Elevations	25
2.4		26
2.5	Coastal Flood Hazard Areas	26
	2.5.1 Water Elevations and the Effects of Waves	26
	2.5.2 Floodplain Boundaries and BFEs for Coastal Areas	26
	2.5.3 Coastal High Hazard Areas	26
	2.5.4 Limit of Moderate Wave Action	26
SEC	TION 3.0 – INSURANCE APPLICATIONS	26
3.1	National Flood Insurance Program Insurance Zones	26
SEC	TION 4.0 – AREA STUDIED	27
4.1	Basin Description	27
4.2	Principal Flood Problems	27
4.3	Non-Levee Flood Protection Measures	28
4.4	Levees	28
SEC	TION 5.0 – ENGINEERING METHODS	29
5.1	Hydrologic Analyses	29
5.2	Hydraulic Analyses	39
5.3	Coastal Analyses	48
	5.3.1 Total Stillwater Elevations	48
	5.3.2 Waves	49
	5.3.3 Coastal Erosion	49
	5.3.4 Wave Hazard Analyses	49
5.4	Alluvial Fan Analyses	49
SEC	TION 6.0 – MAPPING METHODS	49
6.1	Vertical and Horizontal Control	49
6.2	Base Map	51
6.3	Floodplain and Floodway Delineation	51
6.4	Coastal Flood Hazard Mapping	78
6.5	FIRM Revisions	78
	6.5.1 Letters of Map Amendment	78
	6.5.2 Letters of Map Revision Based on Fill	79
	6.5.3 Letters of Map Revision	79

	6.5.5	Physical Map Revisions Contracted Restudies Community Map History	79 80 80
SECTI 7.1 7.2	Contra	- CONTRACTED STUDIES AND COMMUNITY COORDINATION acted Studies nunity Meetings	81 81 82
SECTI	ION 8.0	- ADDITIONAL INFORMATION	84
SECTI	ION 9.0	- BIBLIOGRAPHY AND REFERENCES	85
		<u>Figures</u>	
			<u>Page</u>
Figure Figure Figure Figure Figure Figure	2: FIRI 3: Map 4: Floo 5: Way 6: Coa 7: Fred 8: 1%	M Index M Notes to Users Legend for FIRM dway Schematic Re Runup Transect Schematic stal Transect Schematic quency Discharge-Drainage Area Curves Annual Chance Total Stillwater Elevations for Coastal Areas ansect Location Map	9 10 12 25 26 26 38 49
		Tables	
			Dogo
			<u>Page</u>
Table : Table : Table : Table : Table :	2: Flood 3: Flood 4: Basin 5: Princ 6: Histo 7: Non-	ng of NFIP Jurisdictions ding Sources Included in this FIS Report d Zone Designations by Community n Characteristics cipal Flood Problems oric Flooding Elevations Levee Flood Protection Measures	2 17 27 27 28 28 28
Table Table Table Table Table	10: Sur 11: Stre 12: Sur 13: Rou	mary of Discharges nmary of Non-Coastal Stillwater Elevations eam Gage Information used to Determine Discharges nmary of Hydrologic and Hydraulic Analyses ughness Coefficients	29 31 39 39 41 48
Table Table Table	15: Tide 16: Coa 17: Sur	nmary of Coastal Analyses e Gage Analysis Specifics astal Transect Parameters nmary of Alluvial Fan Analyses sults of Alluvial Fan Analyses	48 49 49 49
		untywide Vertical Datum Conversion	50

Table 20: Stream-Based Vertical Datum Conversion	50
Table 21: Base Map Sources	51
Table 22: Summary of Topographic Elevation Data used in Mapping	52
Table 23: Floodway Data	53
Table 24: Flood Hazard and Non-Encroachment Data for Selected Streams	78
Table 25: Summary of Coastal Transect Mapping Considerations	78
Table 26: Incorporated Letters of Map Change	79
Table 27: Community Map History	81
Table 28: Summary of Contracted Studies Included in this FIS Report	82
Table 29: Community Meetings	83
Table 30: Map Repositories	84
Table 31: Additional Information	84
Table 32: Bibliography and References	86

Volume 1

Exhibits

Flood Profiles	<u>Panel</u>
500-Year Split Flow	01P

Volume 2

Exhibits

Flood Profiles	<u>Panel</u>
Animas River	02-28P
Coon Creek	29-34P
D Creek	35P
Dry Gulch	36-39P
Dry Gulch Split	40P
Grimes Creek	41-42P
Grimes East	43P
Grimes to Vallecito	44P
Grimes West	45P
Hermosa Creek	46-52P
Horse Gulch	53-55P
Horse Gulch Split	56-57P
Junction Creek	58-66P
Lightner Creek	67-81P

Volume 3

Exhibits

Flood Profiles	<u>Panel</u>
Los Pinos River	82-104P
Los Pinos River Split	105P
Lower Berri Creek	106P
Middle Creek	107-109P
Middle East	110P
South Bear Creek	111P
Upper Berri Creek	112P
Vallecito Creek	113-119P

Published Separately

Flood Insurance Rate Map (FIRM)

