



Natural Resources Conservation Service
DAMAGE SURVEY REPORT (DSR)
Emergency Watershed Protection Program - Recovery

Section 1A

Date of report 3/27/2018
DSR number Hayden Pass Flood
Project number 1

NRCS Entry Only
Eligible: Yes [checked] No
Approved: Yes No
Funding priority number (from sect. 4) 2acf
Limited Resource Area: Yes No [checked]
1 Major disaster declaration
2 Emergency declaration
3 Fire management assistance declaration
[checked] 4 Local declaration

Section 1B - Sponsor Information

Sponsor Name: Fremont County
Address: 615 Macon Ave., Room 105
City/State/Zip: Canon City, CO, 81212
Telephone Number 719-276-7300 Fax: 719-276-7412

Section 1C - Site Location Information

County: Fremont State Colorado Congressional District 05
Latitude 38.364289 Longitude -105.747213 UTM Coordinates
Drainage name Hayden Site name Coaldale
Reach Hayden

Damage description July 13, 2017 flooding on Hayden Pass Fire Burn scar resulted in deposition of sediment and debris along stream channels, with flood water threatening life and property of the locals.

**Section 1D - Site Evaluation**

All answers in this section must be YES to be eligible for EWP assistance.

Site Eligibility	YES	NO	Remarks
Damage was a result of a natural disaster? <sup>1</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Recovery measures would be for runoff retardation or soil erosion prevention? <sup>1</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Threat to life and/or property? <sup>1</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Event caused a sudden impairment in the watershed? <sup>1</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Imminent threat was created by this event? <sup>2</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
For structural repairs, not repaired twice within 10 years? <sup>2</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<b>Site Defensibility</b>			
Economic, environmental, and social documentation adequate to warrant action? (See completed NRCS-CPA-52 and sections 3 and 4 of DSR. <sup>3</sup> )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Proposed action technically viable? (See section 6. <sup>3</sup> )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

<sup>1</sup> Statutory

<sup>2</sup> Regulation

<sup>3</sup> The completed DSR and Form NRCS-CPA-52, "Environmental Evaluation Worksheet," are required to support the decisions recorded on this summary page. If additional space is needed on this or any other page in this form, add appropriate pages.

Have all the appropriate steps been taken to ensure that all segments of the affected population have been informed of the EWP program and its possible effects? YES  NO

Comments:

2016 Wildfire on National Forest Land, triggered EWP team, nothing to do on fire, but posed moderate threat to adjacent private land. Monitoring continued from Fall of 2016 through Spring 2017. Summer of 2017 a series of flooding events off of burn scar triggered EWP team formulation and DSR completion.

**Section 1E - Proposed Action**

Describe the preferred alternative (same as NRCS CPA-52, boxes M and G)


Restore structure to the drainage areas to control water flow and reduce soil erosion to reduce further damage and impacts on water quality, as well as protect houses from potential destruction in the Hayden Pass Area.

Total installation cost identified in this DSR from section 6: \$ 1,815,400.00


NRCS 75% cost-share: \$ 1,361,500.00

Sponsor 25% cost-share: \$ 453,850.00

**Section 1F - NRCS State Office Review and Approval**

Reviewed by:  Date reviewed 5/9/2018  
State EWP Program Manager

Approved by:  Date approved 5-9-2018  
State Conservationist

Approved by:  Date approved 5-8-18  
Fremont County BOCC Chairman

DSR NO: Hayden Pass Flood**Section 2 - Environmental Evaluation and Special Environmental Concerns**

See attached NRCS-CPA-52, Environmental Evaluation Worksheet

**Section 3 - Economic Considerations**

This section must be completed for each alternative considered (attach additional sheets as necessary).

	Future Damages (\$)	Damage Factor (%)	Near Term Damage Reduction
<b>Properties protected (private)</b>			
Houses	\$ 3,910,000.00	75	\$ 2,932,500.00
<b>Properties protected (public)</b>			
County Roads	\$ 1,000,000.00	75%	\$ 750,000.00
<b>Business losses</b>			
<b>Other</b>			
Total near term damage reduction \$			\$ 3,682,500.00
Net benefit (total near term damage reduction minus Cost from section 6)			\$ 1,867,100.00

Completed by: TD BoldtDate: 3/28/2018

**Section 4 - Social Consideration**

This section must be completed for each alternative considered (attach additional sheets as necessary).

	YES	NO	Remarks
Has there been a loss of life as a result of the watershed impairment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is there the potential for loss of life due to damages from the watershed impairment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Has access to a hospital or medical facility been impaired by watershed impairment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Has the community as a whole been adversely impacted by the watershed impairment (life and property ceases to operate in a normal capacity)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is there a lack or has there been a reduction of public safety due to watershed impairment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Completed by: J.Tashiro

Date: 3/27/2018

**DSR NO: Hayden Pass Flood****Section 5 - Group Representation Information****This section is completed only for the preferred alternative selected.**

Group Representation	Number
American Indian/Alaska Native Female Hispanic	
American Indian/Alaska Native Female Non-Hispanic	9
American Indian/Alaska Native Male Hispanic	
American Indian/Alaska Native Male Non-Hispanic	9
Asian Female Hispanic	
Asian Female Non-Hispanic	5
Asian Male Hispanic	
Asian Male Non-Hispanic	4
Black or African American Female Hispanic	
Black or African American Female Non-Hispanic	5
Black or African American Male Hispanic	
Black or African American Male Non-Hispanic	5
Hawaiian Native/Pacific Islander Female Hispanic	
Hawaiian Native/Pacific Islander Female Non-Hispanic	
Hawaiian Native/Pacific Islander Male Hispanic	
Hawaiian Native/Pacific Islander Male Non-Hispanic	
White Female Hispanic	53
White Female Non-Hispanic	795
White Male Hispanic	53
White Male Non-Hispanic	794
Total Group	1732

Census tract(s) ESRI 2015 USA Diversity Index:080439792.00Completed by: TBoldt Date: 20180406

Census data was not gender specific

**DSR NO: Hayden Pass Flood**

**Section 6 - Engineering Cost Estimate**

This section must be completed for each alternative considered (attach additional sheets as necessary).

Proposed recovery measure (including mitigation)	Quantity	Units	Unit cost (\$)	Amount (\$)
Channel Bed Stabilization (584)	200	LF	\$ 100.00	\$ 20,000.00
Critical Area Planting (342)	15	AC	\$ 4,000.00	60,000.00
Dam, Diversion (348)	70	CY	\$ 220.00	15,400.00
Grade Stabilization Structure (410)	8	EA	\$ 2,150.00	17,200.00
Pipeline Crossing (430)	120	LF	\$ 30.00	3,600.00
Obstruction Removal (500)	150	CY	\$ 60.00	9,000.00
Streambank and Shoreline Protection (580)	7400	LF	\$ 228.00	1,687,200.00
Structure for Water Control (587)	2	EA	\$ 1,500.00	3,000.00
<b>Total installation cost (enter in sections 1E and 3) \$</b>				<b>1,815,400.00</b>

**Unit Abbreviations**

AC	acre
CY	cubic yard
EA	each
HR	hour
LF	linear feet
LS	lump sum
SF	square feet
SY	square yard
TN	ton
Other	
(specify)	_____

Completed by: TDBoldt Date: 03-28-2018

**DSR NO: Hayden Pass Flood**

**Section 7 - NRCS EWP Funding Priority**

Complete the following section to compute the funding priority for the recovery measures in this application (see instructions on page 9).

Priority Ranking Criteria	Yes	No		Ranking Number Plus Modifier
1. Is this an exigency situation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
2. Is this a site where there is serious, but not immediate threat to human life?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		2
3. Is this a site where buildings, utilities, or other important infrastructure components are threatened?	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
4. Is this site a funding priority established by the NRCS Chief?	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<b>The following are modifiers for the above criteria</b>			<b>Modifier</b>	
a. Will the proposed action or alternatives protect or conserve federally-listed threatened and endangered species or critical habitat?			a	
b. Will the proposed action or alternatives protect or conserve cultural sites listed on the National Register of Historic Places?				
c. Will the proposed action or alternatives protect or conserve prime or important farmland?				
d. Will the proposed action or alternatives protect or conserve existing wetlands?				
e. Will the proposed action or alternatives maintain or improve current water quality conditions?			e	
f. Will the proposed action or alternatives protect or conserve unique habitat, including but not limited to, areas inhabited by State-listed species, fish and wildlife management area, or State identified sensitive habitats?			f	

Enter priority computation in section 1A, "NRCS Entry Only" box, in "Funding priority number."

Remarks:

See CPA-52



DSR NO: Hayden Pass Flood**Section 8 - Findings**

Enter NEPA compliance finding from section Q of the NRCS-CPA-52.

This is a federal action that has been sufficiently analyzed in an existing agency, state, regional, or national NEPA document and there are no predicted significant adverse environmental effects or extraordinary circumstances. EWP PEIS. Chapters 2.3.1.; 2.3.3.1.2.; 2.3.5.1.; 2.3.5.3 & 5.2.3.; 5.2.2.2 & 5.2.2.5.2

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The DSR was reviewed with the sponsors. Yes  No

NRCS representative of the DSR team: J.Tashiro

Title: Upper Arkansas Watershed RMS Date: 3/28/2018

**Section 9 - Attachments:**

- A. Location map
- B. Site plan or sketches
- C. NRCS-CPA-52, Environmental Evaluation Worksheet
- D. Other (explain)

### Instructions for Completing the NRCS-PDM-20, DSR

-	Explanation of Requested Item	Who Completes
<b>Section 1</b>	Enter Site Sponsor, Location, Evaluation, Selected Alternative, and Reviewed and Approval Signatures.	NRCS completes with voluntary assistance from Sponsor except for NRCS-only portion of section 1A.
1A	Enter the Date, DSR Number, and Project Number. For NRCS only enter Eligible Yes/No, Approved Yes/No, Funding Priority Number, and Limited Resource Area Yes/No.	
1B	Enter Sponsor Name, Address, Telephone, Fax	
1C	Enter site location County, State, Congressional District, Latitude, Longitude, Section, Township, Range, UTM Coordinates, Drainage name, Reach within drainage, and Damage description.	
1D	Enter Yes/No and any Remarks for the Site Evaluation information. Any No response means the site is not eligible for EWP assistance and no further information is necessary to complete the DSR. (See NE WPPM 390-502.03 and 390-502-04) Enter Yes/No regarding whether the affected public has been informed of the EWP program.	
1E	Enter the proposed treatment and the cost of installation.	
1F	NRCS Review and Approval.	
<b>Section 2</b>	Attach NRCS-CPA 52 that addresses environmental evaluation and special environmental concerns	NRCS only.
<b>Section 3</b>	<p>Identify Property protected both private and public, business losses and other economic impacts considered for each alternative. Enter the dollar value of the potential future damages if no action is taken in the Future Damage (5) column. This would be the estimate of the value lost if the EWP recovery measure is not installed. Use the repair cost or damage dollar method to determine the estimate of future damages. The repair cost method uses the costs to return the impaired property, good, or services based on their original prevent condition or value. The damage dollar method uses an estimate of the future damage to value (e.g., if the structure is condemned, then enter the value of the structure). Enter the estimated amount based upon existing information or information furnished by the sponsor, contractors, or others with specific knowledge for recovery from natural disasters for each alternative considered. Often market values for properties or services can be obtained from personnel at the local county/parish tax assessment office.</p> <p>The DSR team needs to determine the Damage Factor (%) which is a coefficient that indicates the degree of damage reduction to a property that is attributed to the effect of the proposed EWP recovery measures. Use an appropriate estimate of how much of the damage the EWP recovery measure will avoid for the alternative being considered. If the recovery measures from a single site will prevent 100 percent of the damage use 100 percent. The Near Term Damage Reduction is the Future Damage (\$) times the Damage Factor (%). Sum the Near Term Damage Reduction values to calculate the Total Near Term Damage Reduction. Enter the Net Benefit which is computed by subtracting the Cost from Section 6 from the total near term damage reduction. The</p>	NRCS completes with voluntary assistance from Sponsor.

-	<b>Explanation of Requested Item</b>	<b>Who Completes</b>
	economic section must be completed for each alternative considered. Attach additional sheets as necessary.	
<b>Section 4</b>	<p>Enter information to describe the potential social impacts and considerations for each alternative. Answer Yes or No and any remarks necessary to adequately address each question. The information may be obtained through interviews with community leaders, government officials or sponsors.</p> <p>Factors such as road closures, loss of water, electricity, access to emergency services are used when answering whether the community as a whole has been impaired.</p> <p>This information is part of the environmental evaluation (NRCS-CPA-52) but may be pertinent in section 7 regarding funding priorities. The Social Considerations section must be completed for each alternative considered. Attach additional sheets as necessary.</p>	NRCS completes with voluntary assistance from Sponsor.
<b>Section 5</b>	Enter the Group Representation for the preferred alternative. Use the most recent census tract information based upon where the EWP recovery measures are located.	NRCS completes using most recent U.S. Census data.
<b>Section 6</b>	<p>Enter Proposed Recovery Measure(s) including Quantity, Units, Unit Cost, and Total Amount Cost.</p> <p>Enter sum of all Proposed Recovery Measure Costs to calculate Total Costs. Enter Total Installation Costs in Section 1E. The Engineering Cost Estimate must be completed for each alternative considered. Attach additional sheets as necessary.</p>	NRCS completes with voluntary assistance from Sponsor.
<b>Section 7</b>	This section is used to determine the Funding Priority for the preferred alternative and sequence for initiating recovery measures. Enter Yes/No for questions 1 through 4 and enter the number (exigency 1, serious threat to human life 2, etc.) in the right column, Ranking Number Plus Modifier. Complete the Modifier portion by placing the alphabetic indicator a through f in the Modifier column. Complete the Ranking Number Plus Modifier column by entering the alphabetic indicator(s) that exists within the site. The number of the site designates the priority (e.g., a site with a designation of 2 is a higher priority than a site with a designation of 3). The modifiers increase the priority for the same numeric site (e.g., a site with a designation of 1a, would be a higher priority than a site with a designation of 1, a site with a designation of 2bc would be a higher priority than a site designated as 2b). Enter the Funding Priority in Section 1A.	NRCS completes with voluntary assistance from Sponsor.
<b>Section 8</b>	Insert the number of the Finding that was checked in section Q of the NRCS-CPA-52. If action is required to meet NEPA requirements, state whether an EA or EIS will be prepared or adopted.”	NRCS only.
<b>Section 9</b>	Include attachments for location map, site sketch or plan, a completed NRCS-CPA-52, Environmental Evaluation Worksheet, and other information as needed.	NRCS completes with voluntary assistance from Sponsor.