EMERY COUNTY

USDA United States Department of Agriculture

WELCOME

COTTONWOOD CREEK WATERSHED FLOOD PREVENTION

ENVIRONMENTAL ASSESSMENT

PUBLIC SCOPING MEETING

September 17, 2019

5 - 7 p.m.

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BACKGROUND

- Emery County, as the project sponsor and in partnership with the United States Department of Agriculture Natural Resources Conservation Service (USDA-NRCS), has initiated an Environmental Assessment (EA) to evaluate environmental impacts associated with proposed measures to limit sediment and debris flow within the Cottonwood Creek watershed.

- The National Environmental Policy Act (NEPA) and the Council on Environmental Quality's regulations (40 CFR Parts 1500-1508) require an evaluation of potential environmental impacts associated with federal projects and actions with input from the public.

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PURPOSE & NEED

The purpose of the project is to increase protection for the Cottonwood Creek watershed, Joe's Valley Reservoir, and Orangeville City from sedimentation, flooding, and debris flows.

The project is needed to address the current sedimentation of Joe's Valley Reservoir, to protect the watershed from potential sedimentation and debris flow in the event of a forest fire, and to protect the community of Orangeville, also in the Cottonwood Creek Watershed, from increased flooding caused by the planned abandonment of canals in the area after piping.

Joe's Valley

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SEDIMENTATION

Sedimentation can reduce water storage volume, limit recreation, and affect reservoir infrastructure.

Intake Structure at Paonia Reservoir, Colorado in 1961

Paonia Intake Structure in 2014

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PROJECT DESCRIPTION

The potential improvements include the installation of sedimentation and flood prevention measures within the Cottonwood Creek watershed.

Possible measures include:

- Debris basins
- Excavated debris basins
- Drop structures
- Diversion berms or channels
- Flow impediments
- Check dams
- Debris racks
- Watershed Management
- Reservoir Modification
- Combination of the above

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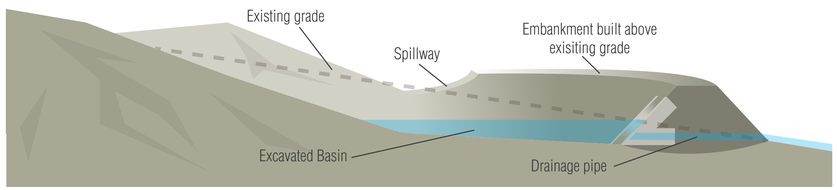
FLOOD PREVENTION MEASURES

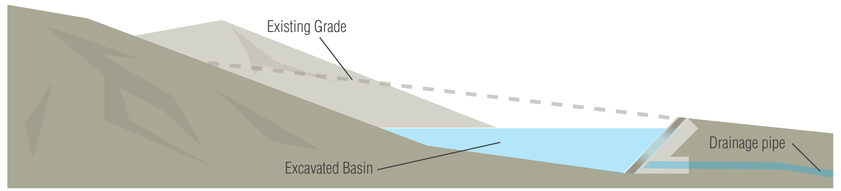
Debris Basin

Partially excavated basin and embankment built to collect debris and store stormwater.



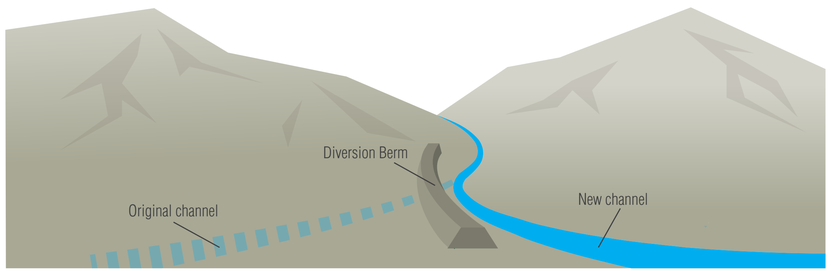
Excavated Debris Basin

Fully excavated basin built to collect debris and store stormwater. No built up embankment.



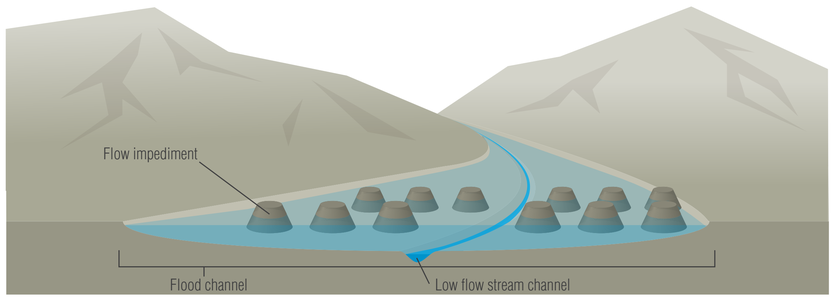
Diversion Berm

Structure built to redirect flow of existing channel to a new location or into a basin.



Flow Impediments

Structures built in flood channel to slow down and stop large debris.



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FLOOD PREVENTION MEASURES

Check Dams

A series of structures to stop large debris.

Debris Rack

Steel bar structure to screen large debris.

Drop Structure

Structure to allow sediment to settle.

Other Alternatives

- Watershed Management/Fuel Reduction
- Upstream erosion reduction
- Minimize deposition in reservoir
- Remove sediment from reservoir
- Enlarge dam to compensate for sediment

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ENVIRONMENTAL RESOURCES

Once a Proposed Action has been determined, potential impacts to environmental resources will be evaluated. Environmental resources of likely concern for this study include:

- Cultural Resources (Archaeology and Tribal Concerns)
- Wetlands/Streams
- Biological (wildlife/vegetation/invasive species)
- Water quality/Water storage capacity
- Visual
- Recreational
- Human health and safety
- Flooding

What other resources are you concerned with for this study?
Please provide input by filling out a comment form.

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Natural Resources Conservation Service

WHAT IS A DEBRIS BASIN?

A debris basin is a basin that is specially engineered and constructed for storing large amounts of sediment in ephemeral stream channels. Typically located at the mouths of canyons, debris basins capture the sediment, gravel, boulders, and vegetative debris that are washed out of the canyons during storms.

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NEPA PROCESS & SCHEDULE

We Are Here					
SCOPING	**PREPARATION OF ENVIRONMENTAL ASSESSMENT**	**NOTICE OF AVAILABILITY OF ENVIRONMENTAL ASSESSMENT**	**PUBLIC COMMENT PERIOD**	**FINALIZATION OF ENVIRONMENTAL ASSESSMENT**	**DECISION NOTICE**
September 2019	**Winter 2019**	**Summer 2020**	**Summer 2020**	**Winter 2020-2021**	**Winter 2020-2021**
Public Scoping Meeting	Alternative Development & Screening	Draft EA	Public Hearing on Draft EA		

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HOW TO COMMENT

Comments are due by October 4, 2019

Submit comments tonight

Email: jonathan@jandtengineering.com

Mail:
Johansen & Tuttle Engineering
Attn: Jonathan Johansen
PO Box 487
Castle Dale, UT 84513