



October 27, 2022

Mr. Robert Viehl
Colorado Water Conservation Board
1313 Sherman Street
Denver, CO 80203

Dear Mr. Viehl,

High Country Conservation Advocates (HCCA) submits this instream flow recommendation for Splains Gulch, located in Gunnison County, Water Division 4.

HCCA's mission is to protect the health and natural beauty of the land, rivers, and wildlife in and around Gunnison County. Many of our members live and work here and enjoy recreational opportunities and a quality of life that is preserved by our valley's wildlife, habitat, and water resources. HCCA's 30 year-old water program has a long history of protecting waters in the Upper Gunnison Basin and in developing an environmental voice within key regional and state forums.

In the past HCCA has partnered with the Bureau of Land Management to support instream flow proposals on the Slate River and Oh-Be-Joyful Creek. In 2016 HCCA submitted proposals to protect updated instream flows for Coal Creek and Brush Creek. HCCA partnered with Western Resource Advocates in 2017 to submit an instream flow proposal on Dutchman Creek. More recently HCCA submitted instream flow proposals for Gold Creek, Italian Creek, Lottis Creek, Elk Creek, Wildcat Creek, Cameron Creek, and Cross Creek, all in Division 4.

The headwaters of Splains Gulch originate on United States Forest Service lands in Gunnison County. The Splains Gulch riparian area supports high-quality habitat dominated by willows. HCCA staff observed several small trout and macroinvertebrates when completing R2Cross assessments in 2022. Sampling of Splains Gulch by Colorado Parks and Wildlife (CPW) documented a healthy brook trout population.

HCCA has coordinated with local consultants to arrive at a preliminary instream flow recommendation. In considering this application, the Colorado Water Conservation Board (CWCB) has an opportunity to protect an important stream ecosystem by moving forward with an instream flow protection that would preserve the natural environment to a reasonable degree.

Enclosed you will find the preliminary instream flow proposal, R2Cross modeling runs, stream photos, and maps of the relevant reach. If you have any further questions regarding this recommendation, please feel free to contact Julie Nania at (509) 999-0012. HCCA thanks CPW and the CWCB for their support in developing this recommendation.

Sincerely,

A handwritten signature in cursive script that reads "Julie Nania".

Julie Nania
High Country Conservation Advocates
Water Director

Enclosure

ENCLOSURE - INSTREAM FLOW RECOMMENDATIONS FOR SPLAINS GULCH

Below is a description of the proposed instream flow. Additional details can be found in Attachments A-C.

Location

Splains Gulch is located within the Coal Creek watershed (HUC-12: 140200010204) in Gunnison County, Water Division 4. The headwaters of Splains Gulch originate below Lily's Lake (a.k.a. Splains Lake) in a small sub-alpine basin west of Mt. Axtell. Splains Gulch flows north to the confluence with the Coal Creek, approximately 6 miles west of the Town of Crested Butte, a tributary to the Slate River. The Splains Gulch Watershed is about 2.3 square miles and is on the Mt. Axtell United States Geologic Survey quad map (Attachment A).

The stream segment identified for the proposed instream flow appropriation is approximately 2.3 miles long from its headwaters to the confluence with Coal Creek.

Table 1. Land Status in the Splains Gulch Watershed.

Upper Terminus	Lower Terminus	Total Length (miles)	Land Ownership	
			Private (%)	Public (%) ¹
Headwaters	Confluence with Coal Creek	2.3	Riparian Corridor ² 0%	Riparian Corridor 100%
			Watershed Composition 0%	Watershed Composition 100%

1. The public land in the Splains Gulch Watershed is managed by the USFS.

2. The riparian corridor ownership percentages were estimated using stream length.

The Splains Gulch Watershed is 100 percent public land managed by the United States Forest Service (USFS). The riparian corridor of the proposed segment is 100 percent public land managed by the USFS.

Existing Instream Flow Rights

Splains Gulch does not have an existing instream flow water right. Lily's Lake lacks a natural lake level water right.

Water Availability

Physical Availability

There is not a gage in Splains Gulch; however, there are three gages in the Coal Creek Watershed that may provide useful data:

- Elk Creek at Coal Creek ([USGS gage 09110990](#)) is a seasonal gage located across the valley, and less than a mile, from Splains Gulch.

- Coal Creek above McCormick Ditch at Crested Butte is ([USGS gage 09111250](#)) operated seasonally; with a period of record of 2014 to present.
- USGS recently installed a new gage in Coal Creek where Splains Gulch Road crosses Coal Creek which is just upstream of the confluence of Coal Creek and Splains Gulch. The new gage on Coal Creek relies upon provisional technology. Following formal approval, USGS will publish the flow data from [Coal Creek at Splains Gulch Road](#)¹.

Legal Availability

There are no active diversions on Splains Gulch. A water rights search on Colorado's Decision Support System (CDSS) did not identify any existing water rights in the Splains Gulch watershed.²

¹ Based on conversations with USGS staff, we expect that USGS will publish the flow data from Coal Creek at Splains Gulch Road in late 2022 or early 2023. This gage is a part of the Next Generation Water Observing System (NGWOS).

² Water rights were assessed via Colorado's Decision Support System database. Accessed on 10/16/2022 at <https://maps.dnrgis.state.co.us/dwr/Index.html?viewer=mapviewer>.

Biological Summary

The headwaters of Splains Gulch form at the outlet of Lily's Lake in a small basin west of Mt. Axtell as a cold-water, high gradient stream. The area downstream of Lily's Lake supports a large wetland complex that supports a healthy riparian community and increases flows to Splains Gulch. The riparian area of the creek is primarily composed of willow communities. The confluence of Splains Gulch and Coal Creek also supports a high-quality wetland.

Generally, Splains Gulch has gravel and cobble-sized substrate and ample woody debris. Flows from Splains Gulch support a robust riparian area that provides shade and cover for the extant fish community.

While conducting R2Cross assessments, we saw numerous macroinvertebrates and small fish (unknown species). CPW surveyed Splains Gulch in 2007, 2008, 2009 and 2016. All passes demonstrated the presence of Brook Trout in the stream. See Attachment B for CPW Biological Data.



Photo 1. Macroinvertebrate housing from Splains Gulch (7/7/2022).

Preliminary R2Cross Analysis

HCCA relied on the expertise of Alpine Environmental Consultants LLC to interpret output from the R2Cross model and develop a preliminary instream flow recommendation that will protect Splains Gulch's natural environment to a reasonable degree.

An R2Cross field survey was completed at one location on July 7, 2022. The cross-section was in Splains Gulch approximately 0.2 miles upstream of the confluence with Coal Creek. R2Cross data entry, analysis, and interpretation were completed following fieldwork. These data were used to create the preliminary instream flow recommendations for Splains Gulch (Table 2). The R2Cross output and field forms are attached for review (Attachment C).

A summer flow rate of 1.4 cfs and a winter flow rate of 1.1 cfs are recommended based on the results of the 2022 cross-section (Table 2). The winter flow rate could be refined based on gage data from the Coal Creek Watershed.

Initially, the proposed dates for the winter ISF rate are October 1 to April 30. The proposed dates for the summer ISF rate are May 1 to September 30. The dates may be revised based upon additional review of physical and legal water availability.

Table 2. R2CROSS analysis summary and preliminary instream flow recommendations.

Cross Section (Date)	Measured Discharge (cfs)	Bankfull Top Width (ft)	Winter Flow Recommendation¹ (cfs)	Summer Flow Recommendation² (cfs)
Splains Gulch #1 (7-7-22)	1.71	7.1	1.07	1.36
Preliminary Proposed ISF Rates:			1.1 cfs	1.4 cfs

- 1) The proposed dates for the winter flow rate are October 1 to April 30. Flow data from the gages in the Coal Creek Watershed could be used to refine the preliminary recommendation for the flow rate and season.
- 2) The proposed dates for the summer flow recommendation are May 1 to September 30. Flow data from the gages in the Coal Creek Watershed could be used to refine the preliminary recommendation for the flow rate and season.

Photographs



Photo 1. Splains Gulch near cross-section looking downstream (7-7-2022).



Photo 2. Splains Gulch near cross-section looking upstream (7-7-2022).



Photo 3. Splains Gulch cross-section view from the river-left bank (7-7-2022).



Photo 4. Splains Gulch cross-section view from the river-right bank (7-7-2022).

Relationship to Existing State Policy

HCCA is proposing this instream flow to the CWCB in furtherance of the State of Colorado's policy "that the wildlife and their environment are to be protected, preserved, enhanced, and managed for the use, benefit, and enjoyment of the people of this state and its visitors... and that, to carry out such program and policy, there shall be a continuous operation of planning, acquisition, and development of wildlife habitats and facilities for wildlife-related opportunities." C.R.S. 33-1-101(1).

Attachments

A – USGS Topographic Quadrangle Map

B – CPW Biological Data

C – R2Cross Analysis

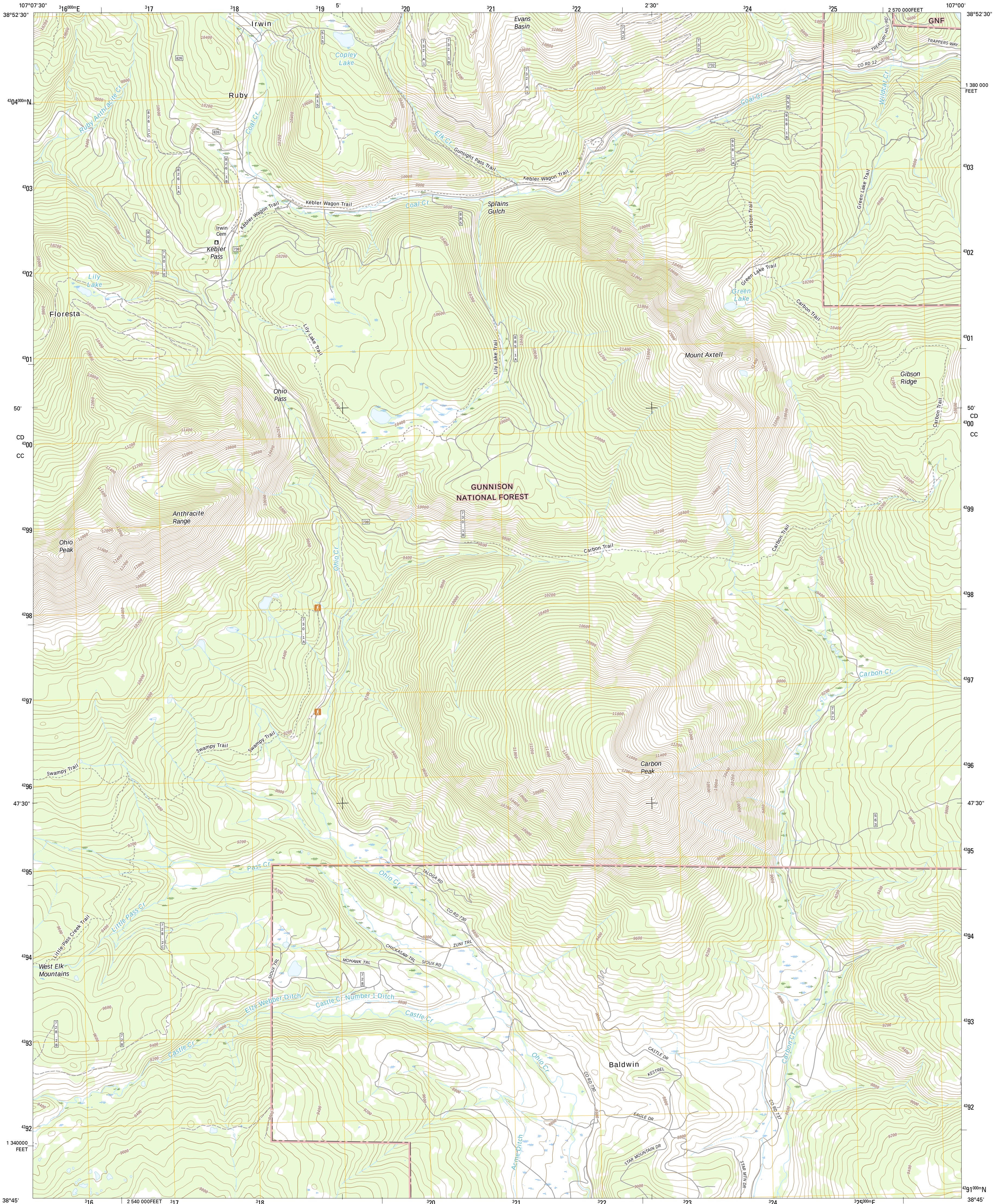
Attachment A- USGS Topographic Quadrangle Map



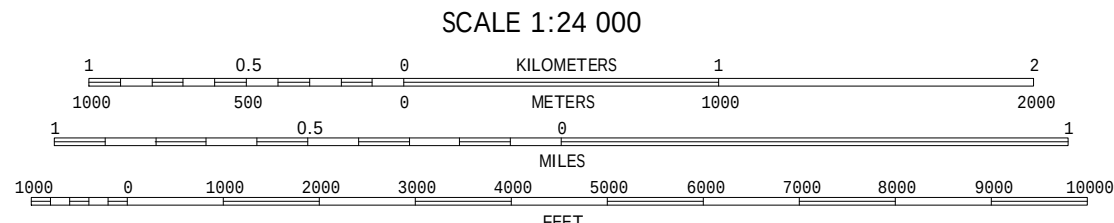
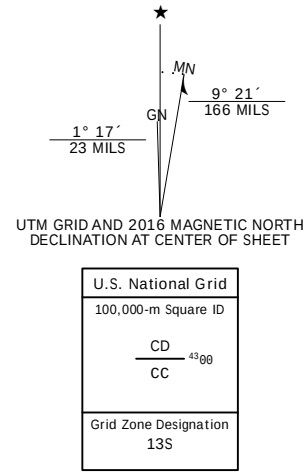
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY



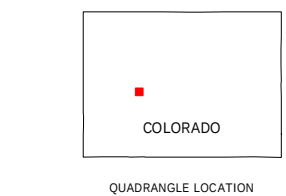
MOUNT AXTELL QUADRANGLE
COLORADO-GUNNISON CO.
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1000-meter grid: Universal Transverse Mercator, Zone 13S
10 000-foot ticks: Colorado Coordinate System of 1983 (central
zone)
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.
Imagery.....NAIP, September 2013
Roads.....U.S. Census Bureau, 2015 - 2016
Roads within US Forest Service Lands.....FSTopo Data
with limited Forest Service updates, 2012 - 2016
Names.....National Hydrography Dataset, 2016
Hydrography.....National Elevation Dataset, 2003
Contours.....Multiple sources; see metadata file 1972 - 2016
Public Land Survey System.....BLM, 2011
Wetlands.....FWS National Wetlands Inventory 1977 - 2014



CONTOUR INTERVAL 40 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988
This map was produced to conform with the
National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.19



1	2	3
4	5	6
7	8	9

1 Marcellina Mountain
2 Oh-be-joyful
3 Gothic
4 Anthracite Range
5 Crested Butte
6 West Elk Peak
7 Squirrel Creek
8 Flat Top

ROAD CLASSIFICATION	
Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD
Interstate Route	US Route
FS Primary Route	FS Passenger Route
	FS High Clearance Route

Check with local Forest Service unit
for current travel conditions and restrictions.

MOUNT AXTELL, CO
2016



Attachment B- CPW Biological Data

Requestee: Julie Nania

Affiliation: High Country Conservation Advocates

Approved By: John Alves

Conditions: All data associated with Elk and Red Creeks (north of Blue Mesa Reservoir), Splains Gulch, and Deer Creek near Crested Butte (no data)

Details:

Date Extracted: Thursday, July 14, 2022

Data Request Disclaimer

Colorado Parks and Wildlife (“CPW”) collects aquatic data from both internal sources and a variety of external governmental and non-governmental agencies. CPW provides this data, upon request, solely as a public service. As a significant proportion of this data comes from an outside agency, over which CPW lacks the ability to verify the protocols and data collection procedures, CPW makes no warranty, representation, or guarantee as to the content, accuracy or completeness of any of the data provided. CPW makes this data available on an “as is” basis and explicitly disclaims any representations and warranties, including, without limitation, the implied warranties of merchantability and fitness for a particular purpose. The CPW shall assume no liability for: 1. any errors, omissions, or inaccuracies in the data provided, regardless how it was caused; or, 2. any decision made or action taken or not taken by anyone using or relying upon data provided.

Use of Data

CPW may require a user of this data to terminate any and all display, distribution or other use of any or all of the data for any reason including, without limitation, violation of these Terms of Use.

<u>CalYear</u>	<u>SurveyID</u>	<u>Region</u>	<u>Drainage</u>	<u>WQCD Segment</u>	<u>NHD CommID</u>	<u>WaterType</u>	<u>WaterId</u>	<u>WaterName</u>	<u>StationID</u>
2007	11053	Southwest	Gunnison River	COGUUG09	1332242	Stream	49,254	Splains Gulch	281
2008	11054	Southwest	Gunnison River	COGUUG09	1332242	Stream	49,254	Splains Gulch	281
2007	8583	Southwest	Gunnison River	COGUUG09	1332242	Stream	49,254	Splains Gulch	282
2008	8584	Southwest	Gunnison River	COGUUG09	1332242	Stream	49,254	Splains Gulch	282
2009	23023	Southwest	Gunnison River	COGUUG09	1332242	Stream	49,254	Splains Gulch	281
2009	23060	Southwest	Gunnison River	COGUUG09	1332242	Stream	49,254	Splains Gulch	282
2016	52197	Southwest	Gunnison River	COGUUG09	1332242	Stream	49,254	Splains Gulch	281
2016	52189	Southwest	Gunnison River	COGUUG09	1332242	Stream	49,254	Splains Gulch	282
1977	11052	Southwest	Gunnison River	COGUUG09	1332242	Stream	49,254	Splains Gulch	281

<u>Station</u>	<u>SiteName</u>	<u>Location</u>	<u>StationOnPrivate</u>
GU1402	1 MI ABV CNFL WITH COAL CRK BLW FS RD 885	1800 M BLW Splains Gulch Lake	N
GU1402	1 MI ABV CNFL WITH COAL CRK BLW FS RD 885	1800 M BLW Splains Gulch Lake	N
GU2254	ABOVE CONFLUENCE WITH COAL CREEK	100 M ABV Coal Creek	N
GU2254	ABOVE CONFLUENCE WITH COAL CREEK	100 M ABV Coal Creek	N
GU1402	1 MI ABV CNFL WITH COAL CRK BLW FS RD 885	1800 M BLW Splains Gulch Lake	N
GU2254	ABOVE CONFLUENCE WITH COAL CREEK	100 M ABV Coal Creek	N
GU1402	1 MI ABV CNFL WITH COAL CRK BLW FS RD 885	1800 M BLW Splains Gulch Lake	N
GU2254	ABOVE CONFLUENCE WITH COAL CREEK	100 M ABV Coal Creek	N
GU1402	1 MI ABV CNFL WITH COAL CRK BLW FS RD 885	1800 M BLW Splains Gulch Lake	N

<u>Elevation</u>	<u>Lat</u>	<u>Lon</u>	<u>UTMX</u>	<u>UTMY</u>	<u>HUC12</u>	<u>County</u>	<u>AreaBio</u>	<u>SampleDate</u>
10199	38.83893645	-107.0619965	321058	4300923	140200010204	Gunnison	Dan Bauch	9/19/07
10199	38.83893645	-107.0619965	321058	4300923	140200010204	Gunnison	Dan Bauch	9/11/08
9607	38.85446627	-107.0650024	320856	4302652	140200010204	Gunnison	Dan Bauch	9/19/07
9607	38.85446627	-107.0650024	320856	4302652	140200010204	Gunnison	Dan Bauch	9/11/08
10199	38.83893645	-107.0619965	321058	4300923	140200010204	Gunnison	Dan Bauch	9/17/09
9607	38.85446627	-107.0650024	320856	4302652	140200010204	Gunnison	Dan Bauch	9/17/09
10199	38.83893645	-107.0619965	321058	4300923	140200010204	Gunnison	Dan Bauch	9/15/16
9607	38.85446627	-107.0650024	320856	4302652	140200010204	Gunnison	Dan Bauch	9/15/16
10199	38.83893645	-107.0619965	321058	4300923	140200010204	Gunnison	Dan Bauch	6/21/77

Survey Purpose

NULL

NULL

NULL

NULL

NULL

NULL

Species Presence, Community Composition and Relative Abundance

Species Presence, Community Composition and Relative Abundance

Standard Survey or Population Estimate

Protocol

TWO-PASS REMOVAL

TWO-PASS REMOVAL

TWO-PASS REMOVAL

TWO-PASS REMOVAL

THREE-PASS REMOVAL

TWO-PASS REMOVAL

TWO-PASS REMOVAL

TWO-PASS REMOVAL

PRESENCE/ABSENCE

Gear

NOT LISTED

EF

NOT LISTED

NOT LISTED

NOT LISTED

EF

BPEF

BPEF

BPEF

NumNets

NULL

NULL

NULL

NULL

NULL

NULL

NULL

NULL

NULL

<u>NumPasses</u>	<u>NumAnglers</u>	<u>StationLength</u>	<u>StationAsMiles</u>	<u>StationAsKilometers</u>	<u>AvgWidth</u>	<u>StationAsAcres</u>	<u>StationAsHectares</u>
2	NULL	300	0.056818	0.09144	0	NULL	NULL
2	NULL	300	0.056818	0.09144	8.2	0.056473826	0.022854148
2	NULL	NULL	NULL	NULL	NULL	NULL	NULL
2	NULL	300	0.056818	0.09144	7.6	0.052341595	0.021181893
3	NULL	300	0.056818	0.09144	8.2	0.056473826	0.022854148
2	NULL	300	0.056818	0.09144	7.6	0.052341595	0.021181893
2	NULL	300	0.056818	0.09144	8.2	0.056473826	0.022854148
2	NULL	300	0.056818	0.09144	7.6	0.052341595	0.021181893
NULL	NULL	150	0.028409	0.04572	6	0.020661156	0.008361274

<u>TotalCatch</u>	<u>TotalWeight</u>	<u>ElecEffort</u>	<u>GillEffort</u>	<u>TrapEffort</u>	<u>SeinEffort</u>	<u>TotalEffort</u>	<u>EffortMetric</u>	<u>SpeciesID</u>	<u>SpeciesCode</u>
65	593	0	0	0	0	0	2 PASS	24	BRK
38	96	2	NULL	NULL	NULL		2 PASS	24	BRK
93	1484	0	0	0	0	0	2 PASS	24	BRK
49	431.5	NULL	NULL	NULL	NULL		2 PASS	24	BRK
16	333	NULL	NULL	NULL	NULL		3 PASS	24	BRK
39	644	2	NULL	NULL	NULL		2 PASS	24	BRK
13	271	NULL	NULL	NULL	NULL		2 PASS	24	BRK
104	994	NULL	NULL	NULL	NULL		2 PASS	24	BRK
0	NULL	1	NULL	NULL	NULL		1 PASS	NULL	XXX

<u>Family</u>	<u>CommonName</u>	<u>GenusSpecies</u>	<u>SpeciesMethod</u>	<u>SpeciesCatch</u>	<u>RelAbun</u>	<u>Threshold</u>
SALMONIDAE	BROOK TROUT	Salvelinus fontinalis	Seber Lecren	65	1	130
SALMONIDAE	BROOK TROUT	Salvelinus fontinalis	Seber Lecren	38	1	130
SALMONIDAE	BROOK TROUT	Salvelinus fontinalis	Seber Lecren	93	1	130
SALMONIDAE	BROOK TROUT	Salvelinus fontinalis	Seber Lecren	49	1	130
SALMONIDAE	BROOK TROUT	Salvelinus fontinalis	3-Pass Estimator	16	1	130
SALMONIDAE	BROOK TROUT	Salvelinus fontinalis	Seber Lecren	39	1	130
SALMONIDAE	BROOK TROUT	Salvelinus fontinalis	Seber Lecren	13	1	130
SALMONIDAE	BROOK TROUT	Salvelinus fontinalis	Seber Lecren	104	1	130
NULL	No Fish Caught	NULL	Counts	0	NULL	NULL

[illegible]

<u>SpeciesWeight</u>	<u>Weighed</u>	<u>WeightCalcd</u>	<u>FirstWeight</u>	<u>SecondWeight</u>	<u>ThirdWeight</u>	<u>MarkedWeight</u>	<u>RecapturedWeight</u>
703	9	0	617	86	NULL	NULL	NULL
553	2	0	481	72	NULL	NULL	NULL
2535	24	0	1614	250	NULL	NULL	NULL
887.5	10	0	722.5	165	NULL	NULL	NULL
333	8	0	240.5	206.5	21.5	NULL	NULL
952	15	0	883	69	NULL	NULL	NULL
366	6	0	277	89	NULL	NULL	NULL
1590	21	0	1340	250	NULL	NULL	NULL
NULL	0	0	NULL	NULL	NULL	NULL	NULL

[illegible]

<u>PopulationEstimate</u>	<u>POP Variance</u>	<u>LOWER POP CI</u>	<u>UPPER POP CI</u>	<u>EstimatedSpeciesWeight</u>	<u>NumberPerAcre</u>
67.2222	4.795000762	62.9303	71.5141	5191	NULL
39.3846	3.065438885	35.953	42.8162	2017	697.3956
96.0154	6.372939211	91.0674	100.9634	6997	NULL
58.3333	60.49382716	43.0889	73.5777	2136	1114.4731
16.92062985	1.48329098	16.10025902	24.45369613	930	299.619
39.8621	1.593567479	37.3879	42.3363	1750	761.5759
16.2	26.9568	6.0237	26.3763	665	286.8586
108.1286	9.474963099	102.0954	114.1618	5340	2065.8255
0	NULL	NULL	NULL	NULL	NULL

<u>PoundsPerAcre</u>	<u>NumberPerMile</u>	<u>PoundsPerMile</u>	<u>NumberPerHectare</u>	<u>kilogramsPerHectare</u>	<u>NumberPerkilometer</u>
NULL	1183.1145	201.4185	NULL	NULL	735.1509
78.7396	693.1712	78.2626	1723.3021	88.2553	430.7152
NULL	NULL	NULL	NULL	NULL	NULL
89.9681	1026.6694	82.88	2753.9229	100.8408	637.9407
36.3053	297.804	36.0854	740.3746	40.6928	185.0463
73.7098	701.5752	67.9026	1881.8951	82.6177	435.9372
25.9602	285.1209	25.803	708.8429	29.0976	177.1654
224.9203	1903.0694	207.1999	5104.7656	252.1021	1182.5087
NULL	NULL	NULL	NULL	NULL	NULL

[illegible]

DataSource

Southwest Region Fisheries Management
Southwest Region Fisheries Management
Southwest Region Fisheries Management
Southwest Region Fisheries Management
Southwest Region Fisheries Management
Southwest Region Fisheries Management
Southwest Region Fisheries Management
Southwest Region Fisheries Management
Stream and lake databank

SciColl

NULL
NULL
NULL
NULL
NULL
NULL
NULL
NULL
NULL

Surveyors

BRAUCH, MELICK, KRISTENSEN

BRAUCH, CALLAWAY, CAPPS
Brauch
Brauch, Paonia HS
Brauch, Kesler, Bennet, Sanderson
Brauch, Kesler, Samuelsen, sanderson
WEILER

Comments

UTM's in NAD83

3100 shocking seconds

UTM's in NAD83; One third of flow going down side channel to east (Dry in 2006)

No notes recorded

No notes recorded

Much of channel split east. Electrofished both channels.

No fish found pass 3. Site sampled is about 300 M below Station GU1402

Backpack1 seconds P1: 2276 P2: 1180 Backpack 2 P1+P2: 2087. Channel is split in lower half, both channels shocked.

NO FISH SAMPLED.

<u>SurveyFlag</u>	<u>SpeciesFlag</u>	<u>SPCNStatus</u>	<u>CreatedBy</u>	<u>CreatedWhen</u>	<u>ModifiedBy</u>	<u>ModifiedWhen</u>	<u>timestamp</u>
NULL	NULL	NULL	brauchd	58:29.0	RivermanC	26:57.6	0x000000006C9AABE7
NULL	NULL	NULL	brauchd	53:18.0	RivermanC	17:00.9	0x000000006C9AABE8
NULL	NULL	NULL	brauchd	57:31.0	RivermanC	46:15.2	0x000000006C9AAD45
NULL	NULL	NULL	brauchd	53:17.0	RivermanC	17:00.9	0x000000006C9AAD46
NULL	NULL	NULL	brauchd	33:20.0	RivermanC	11:49.5	0x000000006C9B4221
NULL	NULL	NULL	brauchd	33:19.0	RivermanC	11:49.5	0x000000006C9B42AE
NULL	NULL	NULL	KESLERJ	38:46.6	BRAUCHD	00:00.0	0x000000006C9CABB6
NULL	NULL	NULL	KESLERJ	08:50.5	BRAUCHD	00:00.0	0x000000006C9CB88A
NULL	NULL	NULL	stauffera	00:00.0	RivermanC	30:54.3	0x000000006C9DAB85

TableLastUpdated

36:02.2

36:02.2

36:02.2

36:02.2

36:02.2

36:02.2

36:02.2

36:02.2

36:02.2

Attachment C- R2Cross Analysis

R2Cross RESULTS

Stream Name: Splains Gulch

Stream Locations: Splains Gulch upstream of the confluence with Coal Creek

Fieldwork Date: 07/07/2022

Cross-section: 1

Observers: J. Nania, A. Bembenek

Coordinate System: UTM Zone 13

X (easting): 320903

Y (northing): 4302734

Date Processed: 08/26/2022

Slope: 0.0082

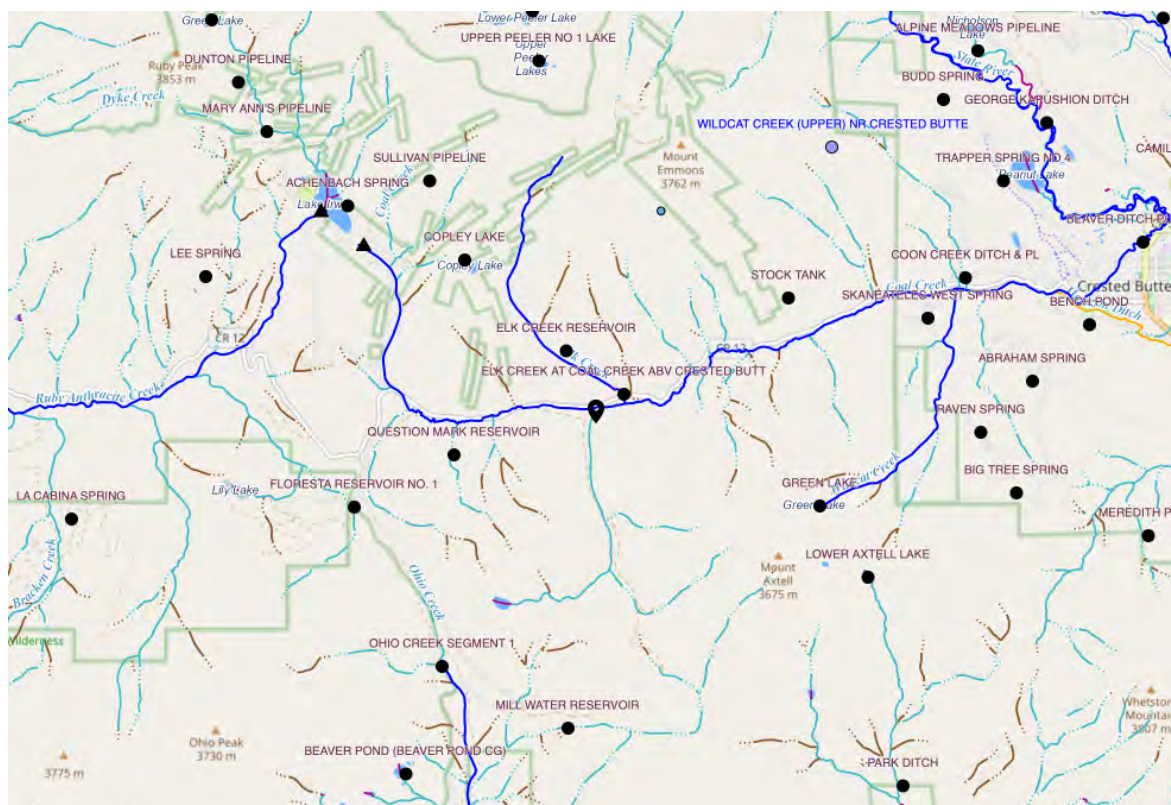
Discharge: R2Cross data file: 1.71 (cfs)

Computation method: Ferguson VPE

R2Cross data filename: Splains Gulch R2Cross Data File 22-08-26.xlsx

R2Cross version: 2.0.0

LOCATION



ANALYSIS RESULTS

Habitat Criteria Results

Bankfull top width (ft) = 7.1

	Habitat Criteria	Discharge (cfs) Meeting Criteria
Mean Depth (ft)	0.2	1.36
Percent Wetted Perimeter (%)	50.0	0.06
Mean Velocity (ft/s)	1.0	1.07

STAGING TABLE

Feature	Distance to Water (ft)	Top Width (ft)	Mean Depth (ft)	Maximum Depth (ft)	Area (sq ft)	Wetted Perimeter (ft)	Percent Wetted Perimeter	Hydraulic Radius (ft)	Manning's n	Mean Velocity (ft/s)	Discharge (cfs)
Bankfull	2.5	7.1	0.33	0.55	2.36	7.46	100.0	0.32	0.03	1.91	4.51
	2.51	7.02	0.32	0.54	2.27	7.36	98.78	0.31	0.03	1.85	4.2
	2.53	6.93	0.31	0.52	2.17	7.27	97.56	0.3	0.03	1.8	3.9
	2.54	6.85	0.3	0.51	2.07	7.18	96.33	0.29	0.03	1.74	3.61
	2.56	6.77	0.29	0.49	1.98	7.09	95.11	0.28	0.03	1.68	3.33
	2.57	6.69	0.28	0.48	1.89	7.0	93.89	0.27	0.03	1.62	3.07
	2.58	6.61	0.27	0.47	1.8	6.91	92.67	0.26	0.04	1.56	2.81
	2.6	6.52	0.26	0.45	1.71	6.82	91.44	0.25	0.04	1.5	2.56
	2.61	6.44	0.25	0.44	1.62	6.73	90.22	0.24	0.04	1.44	2.33
	2.62	6.36	0.24	0.43	1.53	6.63	89.0	0.23	0.04	1.38	2.1
	2.64	6.28	0.23	0.41	1.44	6.54	87.78	0.22	0.04	1.31	1.89
	2.65	6.2	0.22	0.4	1.37	6.46	86.67	0.21	0.04	1.25	1.71
Waterline	2.65	6.19	0.22	0.4	1.36	6.45	86.55	0.21	0.04	1.24	1.69
	2.67	6.11	0.21	0.39	1.27	6.36	85.29	0.2	0.04	1.18	1.5
	2.68	6.02	0.2	0.37	1.19	6.26	84.03	0.19	0.04	1.11	1.32
	2.69	5.93	0.19	0.36	1.11	6.17	82.76	0.18	0.04	1.04	1.15
	2.71	5.84	0.18	0.34	1.03	6.08	81.5	0.17	0.04	0.97	0.99
	2.72	5.76	0.16	0.33	0.95	5.98	80.24	0.16	0.04	0.89	0.85
	2.73	5.67	0.15	0.32	0.87	5.89	78.98	0.15	0.05	0.82	0.71
	2.75	5.58	0.14	0.3	0.79	5.79	77.72	0.14	0.05	0.74	0.59
	2.76	5.5	0.13	0.29	0.71	5.7	76.46	0.13	0.05	0.67	0.48
	2.77	5.41	0.12	0.28	0.64	5.61	75.19	0.11	0.05	0.59	0.38
	2.79	5.32	0.11	0.26	0.57	5.51	73.93	0.1	0.06	0.52	0.29
	2.8	4.91	0.1	0.25	0.49	5.09	68.28	0.1	0.06	0.48	0.24
	2.82	4.67	0.09	0.23	0.43	4.85	65.0	0.09	0.06	0.42	0.18

2.83	4.44	0.08	0.22	0.37	4.6	61.71	0.08	0.07	0.36	0.13
2.84	4.21	0.07	0.21	0.31	4.36	58.43	0.07	0.07	0.31	0.09
2.86	3.85	0.07	0.19	0.25	3.98	53.41	0.06	0.08	0.26	0.07
2.87	3.38	0.06	0.18	0.2	3.5	46.93	0.06	0.09	0.23	0.05
2.88	2.91	0.05	0.17	0.16	3.02	40.45	0.05	0.09	0.2	0.03
2.9	2.44	0.05	0.15	0.12	2.53	33.97	0.05	0.1	0.18	0.02
2.91	1.98	0.05	0.14	0.09	2.05	27.49	0.04	0.11	0.16	0.01
2.93	1.51	0.04	0.12	0.07	1.57	21.01	0.04	0.11	0.15	0.01
2.94	1.04	0.05	0.11	0.05	1.08	14.53	0.04	0.11	0.16	0.01
2.95	0.68	0.05	0.1	0.04	0.71	9.55	0.05	0.09	0.2	0.01
2.97	0.61	0.05	0.08	0.03	0.64	8.55	0.04	0.11	0.16	0.0
2.98	0.54	0.04	0.07	0.02	0.56	7.56	0.04	0.12	0.12	0.0
3.0	0.47	0.03	0.05	0.01	0.49	6.56	0.03	0.15	0.08	0.0
3.01	0.37	0.02	0.04	0.01	0.38	5.12	0.02	0.2	0.05	0.0
3.02	0.25	0.01	0.03	0.0	0.25	3.41	0.01	0.28	0.03	0.0

This Manning's roughness coefficient was calculated based on velocity estimates from the Ferguson VPE method

MODEL SUMMARY

Measured Flow (Qm) =	1.71	(cfs)
Calculated Flow (Qc) =	1.71	(cfs)
(Qm-Qc)/Qm * 100 =	-0.01%	
Measured Waterline (WLm) =	2.65	(ft)
Calculated Waterline (WLc) =	2.65	(ft)
(WLm-WLc)/WLm * 100 =	0.00%	
Max Measured Depth (Dm) =	0.4	(ft)
Max Calculated Depth (Dc) =	0.4	(ft)
(Dm-Dc)/Dm * 100 =	-0.00%	
Mean Velocity =	1.25	(ft/s)
Manning's n =	0.038	
0.4 * Qm =	0.68	(cfs)
2.5 * Qm =	4.27	(cfs)

FIELD DATA

Feature	Station (ft)	Rod Height (ft)	Water depth (ft)	Velocity (ft/s)
	1	1.05		
	2	1.2		
	3	1.25		
	3.9	1.55		
	4	1.6		
	4.3	1.8		
Bankfull	4.7	2.5		
Waterline	4.8	2.65	0	0
	5	2.85	0.2	0.72
	5.3	2.95	0.3	0.74
	5.6	2.85	0.2	1.2
	5.9	2.9	0.25	1.64
	6.2	2.85	0.2	1.79
	6.5	2.9	0.25	1.62
	6.8	2.85	0.2	1.66
	7.1	3	0.35	1.59
	7.4	3.05	0.4	1.42
	7.7	2.95	0.3	1.55
	8	2.9	0.25	1.56
	8.3	2.95	0.3	1.32
	8.6	2.9	0.25	1.45
	8.9	2.95	0.3	1.18
	9.2	2.8	0.15	1.04
	9.5	2.85	0.2	0.64
	9.9	2.8	0.15	0.53
	10.2	2.8	0.15	0.4
Waterline	11	2.65	0	0
Bankfull	11.8	2.5		
	12	2.45		
	12.5	2.3		

13	2.1
14	1.9
15	1.45
16	1.2
17	1.35
18	1.4

COMPUTED FROM MEASURED FIELD DATA

Wetted Perimeter (ft)	Water Depth (ft)	Area (ft^2)	Discharge (cfs)	Percent Discharge
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0.28	0.2	0.05	0.04	2.11
0.32	0.3	0.09	0.07	3.9
0.32	0.2	0.06	0.07	4.22
0.3	0.25	0.08	0.12	7.21
0.3	0.2	0.06	0.11	6.29
0.3	0.25	0.07	0.12	7.12
0.3	0.2	0.06	0.1	5.84
0.34	0.35	0.1	0.17	9.79
0.3	0.4	0.12	0.17	9.99
0.32	0.3	0.09	0.14	8.18
0.3	0.25	0.08	0.12	6.86
0.3	0.3	0.09	0.12	6.96
0.3	0.25	0.07	0.11	6.37
0.3	0.3	0.09	0.11	6.22
0.34	0.15	0.04	0.05	2.74
0.3	0.2	0.07	0.04	2.63
0.4	0.15	0.05	0.03	1.63
0.3	0.15	0.08	0.03	1.93
0.81	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

DISCLAIMER

"The Colorado Water Conservation Board makes no representations about the use of the software contained in the R2Cross platform for any purpose besides that for which it was designed. To the maximum extent permitted by applicable law, all information, modeling results, and software are provided "as is" without warranty or condition of any kind, including all implied warranties or conditions of merchantability, or fitness for a particular purpose. The user assumes all responsibility for the accuracy and suitability of this program for a specific application. In no event shall the Colorado Water Conservation Board or any state agency, official or employee be liable for any direct, indirect, punitive, incidental, special, consequential damages or any damages whatsoever including, without limitation, damages for loss of use, data, profits, or savings arising from the implementation, reliance on, or use of or inability to use the R2Cross platform.



LOCATION INFORMATION

STREAM NAME:		SPLAINS GULCH #1				CROSS-SECTION NO.:		1	
CROSS-SECTION LOCATION:		Splains Gulch upstream of confluence w/ Coal Creek							
DATE:		7 July '22							
OBSERVERS:		J. Nania, A. Bembenek							
LEGAL DESCRIPTION		% SECTION:		SECTION:		TOWNSHIP:		RANGE:	
						N/S		E/W	
COUNTY:		WATERSHED:		WATER DIVISION				DOW WATER CODE:	
Gunnison		Coal Creek / slate / East		4					
MAP(S):		USGS: GPS Point: Splains 1 13S 0320903, 4302734 Elevation: 9,103 ft.							
		USFS:							

SUPPLEMENTAL DATA

SAG TAPE SECTION SAME AS DISCHARGE SECTION:		YES / NO	METER TYPE: <u>Hach FH950</u>	
METER NUMBER: <u>NA</u>		DATE RATED: <u>NA</u>	CALIB/SPIN <u>NA</u> sec	TAPE WEIGHT <u>NA</u> lbs/foot
CHANNEL BED MATERIAL SIZE RANGE: <u>Sand to small boulder</u>			PHOTOGRAPHS TAKEN <u>YES</u> /NO	NUMBER OF PHOTOGRAPHS: <u>Many</u>

CHANNEL PROFILE DATA

STATION		DISTANCE FROM TAPE (ft)	ROD READING (ft)
⊗	Tape @ Stake LB	0.0 1.0'	
⊗	Tape @ Stake RB	0.0 18.0'	
①	WS @ Tape LB/RB	0.0	2.65 / 2.65'
②	WS Upstream	13.0'	4.88
③	WS Downstream	4.0'	5.02'
SLOPE	0.14' / 17' = 0.00823529		

SKETCH

LEGEND

Stake ⊗

Station ①

Photo ① →

Direction of Flow
←
→

AQUATIC SAMPLING SUMMARY

[illegible]

COMMENTS

COMMENTS

* Saw many macroinvertebrates during the pebble count & while setting up cross-section.
Julie took several extra photos. Approximately 50' downstream of SP-00, a CCWC Water Quality Monitoring station (inactive).

DISCHARGE/CROSS SECTION NOTES

STREAM NAME: Splains Gulch					CROSS-SECTION NO. 1		DATE 7/7/22		SHEET 2 OF 3			
BEGINNING OF MEASUREMENT		EDGE OF WATER LOOKING DOWNSTREAM: (0.0 AT STAKE)			LEFT / RIGHT		Gage Reading: — ft		TIME 12:00 pm			
Features	Stake (S) Grassline (G) Waterline (W) Rock (R)	Distance From Initial Point (ft)	Width (ft)	Total Vertical Depth From Tape/Inst (ft)	Water Depth (ft)	Depth of Observation (ft)	Revolutions	Time (sec)	Velocity (ft/sec)		Area (ft ²)	Discharge (cfs)
									At Point	Mean in Vertical		
		1		1.05								
		2		1.20								
		3		1.25								
		3.9		1.55								
		4.0		1.60								
		4.3		1.80								
(BF)		4.7		2.50								
(W)		4.8		2.65	0							
		5		2.85	0.20					0.72		
		5.3		2.95	0.30					0.74		
		5.6		2.85	0.20					1.20		
		5.9		2.90	0.25					1.64		
(ROCK)		6.2		2.85	0.20					1.79		
		6.5		2.90	0.25					1.62		
		6.8		2.85	0.20					1.66		
		7.1		3.00	0.35					1.59		
		7.4		3.05	0.40					1.42		
		7.7		2.95	0.30					1.55		
		8.0		2.90	0.25					1.56		
		8.3		2.45	0.30					1.32		
		8.6		2.90	0.25					1.45		
		8.9		2.95	0.30					1.18		
		9.2		2.80	0.15					1.04		
		9.5		2.85	0.20					0.64		
		9.9		2.80	0.15					0.53		
		10.2		2.80	0.15					0.40		
(W)		11.0		2.65	0							
(BF)		11.8		2.50								
		12.0		2.45								
		12.5		2.30								
		13.8		2.10								
		14.0		1.90								
		15.0		1.45								
log		16.0		1.20								
		17.0		1.35								
		18		1.4								
TOTALS												
End of Measurement		Time 12:45		Gage Reading — ft		CALCULATIONS PERFORMED BY:				CALCULATIONS CHECKED BY:		

1.71 cfs actual discharge

Splains
Cross Sec 1

Sheet 3 of 3

****Please be sure to measure at least 100 pebbles (10 in 10 transects or 5 in 20 transects- depending on stream size, for accurate distributional representation.****
EMBEDDEDNESS:

If intermediate particle axis is less than 32 mm chose the nearest cobble for embeddedness.
If no cobble >32 mm is present without taking a step, record 100% embedded.

$D(e)$ = embedded depth; $D(t)$ = total depth

**COLORADO**Department of
Natural Resources

Date	7/7/2022
Observer	J. Nania, A. Bembenek
Cross-section#	1
Coordinate	UTM Zone 13
X (easting)	320903
Y (northing)	4302734

R2CROSS CROSS-SECTION NOTES

Stream Name	Stream Location			Slope
Splains Gulch	Splains Gulch upstream of the confluence with Coal Creek			0.00823529
Feature	Distance From Initial Point (ft)	Rod Height (ft)	Water Depth (ft)	Velocity (ft/s)
	1	1.05		
	2	1.2		
	3	1.25		
	3.9	1.55		
	4	1.6		
	4.3	1.8		
Bankfull	4.7	2.5		
Waterline	4.8	2.65	0	0
	5	2.85	0.2	0.72
	5.3	2.95	0.3	0.74
	5.6	2.85	0.2	1.2
	5.9	2.9	0.25	1.64
	6.2	2.85	0.2	1.79
	6.5	2.9	0.25	1.62
	6.8	2.85	0.2	1.66
	7.1	3	0.35	1.59
	7.4	3.05	0.4	1.42
	7.7	2.95	0.3	1.55
	8	2.9	0.25	1.56
	8.3	2.95	0.3	1.32
	8.6	2.9	0.25	1.45
	8.9	2.95	0.3	1.18
	9.2	2.8	0.15	1.04
	9.5	2.85	0.2	0.64
	9.9	2.8	0.15	0.53
	10.2	2.8	0.15	0.4
Waterline	11	2.65	0	0
Bankfull	11.8	2.5		
	12	2.45		
	12.5	2.3		
	13	2.1		
	14	1.9		
	15	1.45		
	16	1.2		
	17	1.35		
	18	1.4		

R2Cross RESULTS

Stream Name: Splains Gulch

Stream Locations: Splains Gulch upstream of the confluence with Coal Creek

Fieldwork Date: 07/07/2022

Cross-section: 1

Observers: J. Nania, A. Bembenek

Coordinate System: UTM Zone 13

X (easting): 320903

Y (northing): 4302734

Date Processed: 05/19/2023

Slope: 0.0082

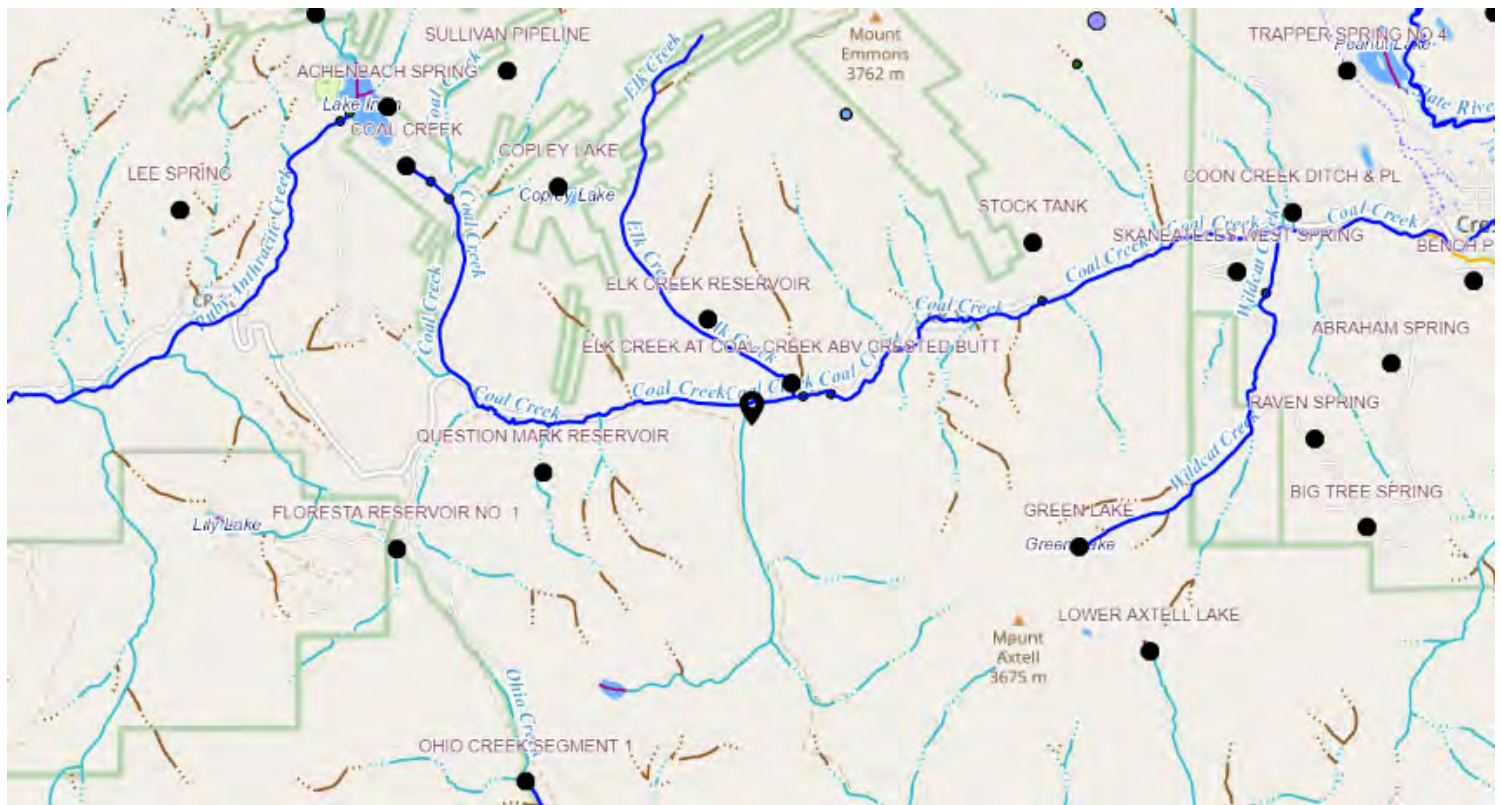
Discharge: R2Cross data file: 1.71 (cfs)

Computation method: Ferguson VPE

R2Cross data filename: Splains Gulch R2Cross Data File 22-08-26.xlsx

R2Cross version: 2.0.2

LOCATION



ANALYSIS RESULTS

Habitat Criteria Results

Bankfull top width (ft) = 7.1

	Habitat Criteria	Discharge (cfs) Meeting Criteria
Mean Depth (ft)	0.2	1.36
Percent Wetted Perimeter (%)	50.0	0.06
Mean Velocity (ft/s)	1.0	1.07

STAGING TABLE

Feature	Distance to Water (ft)	Top Width (ft)	Mean Depth (ft)	Maximum Depth (ft)	Area (sq ft)	Wetted Perimeter (ft)	Percent Wetted Perimeter	Hydraulic Radius (ft)	Manning's n	Mean Velocity (ft/s)	Discharge (cfs)
Bankfull	2.5	7.1	0.33	0.55	2.36	7.46	100.0	0.32	0.03	1.91	4.51
	2.51	7.02	0.32	0.54	2.27	7.36	98.78	0.31	0.03	1.85	4.2
	2.53	6.93	0.31	0.52	2.17	7.27	97.56	0.3	0.03	1.8	3.9
	2.54	6.85	0.3	0.51	2.07	7.18	96.33	0.29	0.03	1.74	3.61
	2.56	6.77	0.29	0.49	1.98	7.09	95.11	0.28	0.03	1.68	3.33
	2.57	6.69	0.28	0.48	1.89	7.0	93.89	0.27	0.03	1.62	3.07
	2.58	6.61	0.27	0.47	1.8	6.91	92.67	0.26	0.04	1.56	2.81
	2.6	6.52	0.26	0.45	1.71	6.82	91.44	0.25	0.04	1.5	2.56
	2.61	6.44	0.25	0.44	1.62	6.73	90.22	0.24	0.04	1.44	2.33
	2.62	6.36	0.24	0.43	1.53	6.63	89.0	0.23	0.04	1.38	2.1
	2.64	6.28	0.23	0.41	1.44	6.54	87.78	0.22	0.04	1.31	1.89
	2.65	6.2	0.22	0.4	1.37	6.46	86.67	0.21	0.04	1.25	1.71
Waterline	2.65	6.19	0.22	0.4	1.36	6.45	86.55	0.21	0.04	1.24	1.69
	2.67	6.11	0.21	0.39	1.27	6.36	85.29	0.2	0.04	1.18	1.5
	2.68	6.02	0.2	0.37	1.19	6.26	84.03	0.19	0.04	1.11	1.32
	2.69	5.93	0.19	0.36	1.11	6.17	82.76	0.18	0.04	1.04	1.15
	2.71	5.84	0.18	0.34	1.03	6.08	81.5	0.17	0.04	0.97	0.99
	2.72	5.76	0.16	0.33	0.95	5.98	80.24	0.16	0.04	0.89	0.85
	2.73	5.67	0.15	0.32	0.87	5.89	78.98	0.15	0.05	0.82	0.71
	2.75	5.58	0.14	0.3	0.79	5.79	77.72	0.14	0.05	0.74	0.59
	2.76	5.5	0.13	0.29	0.71	5.7	76.46	0.13	0.05	0.67	0.48
	2.77	5.41	0.12	0.28	0.64	5.61	75.19	0.11	0.05	0.59	0.38
	2.79	5.32	0.11	0.26	0.57	5.51	73.93	0.1	0.06	0.52	0.29
	2.8	4.91	0.1	0.25	0.49	5.09	68.28	0.1	0.06	0.48	0.24
	2.82	4.67	0.09	0.23	0.43	4.85	65.0	0.09	0.06	0.42	0.18

2.83	4.44	0.08	0.22	0.37	4.6	61.71	0.08	0.07	0.36	0.13
2.84	4.21	0.07	0.21	0.31	4.36	58.43	0.07	0.07	0.31	0.09
2.86	3.85	0.07	0.19	0.25	3.98	53.41	0.06	0.08	0.26	0.07
2.87	3.38	0.06	0.18	0.2	3.5	46.93	0.06	0.09	0.23	0.05
2.88	2.91	0.05	0.17	0.16	3.02	40.45	0.05	0.09	0.2	0.03
2.9	2.44	0.05	0.15	0.12	2.53	33.97	0.05	0.1	0.18	0.02
2.91	1.98	0.05	0.14	0.09	2.05	27.49	0.04	0.11	0.16	0.01
2.93	1.51	0.04	0.12	0.07	1.57	21.01	0.04	0.11	0.15	0.01
2.94	1.04	0.05	0.11	0.05	1.08	14.53	0.04	0.11	0.16	0.01
2.95	0.68	0.05	0.1	0.04	0.71	9.55	0.05	0.09	0.2	0.01
2.97	0.61	0.05	0.08	0.03	0.64	8.55	0.04	0.11	0.16	0.0
2.98	0.54	0.04	0.07	0.02	0.56	7.56	0.04	0.12	0.12	0.0
3.0	0.47	0.03	0.05	0.01	0.49	6.56	0.03	0.15	0.08	0.0
3.01	0.37	0.02	0.04	0.01	0.38	5.12	0.02	0.2	0.05	0.0
3.02	0.25	0.01	0.03	0.0	0.25	3.41	0.01	0.28	0.03	0.0

This Manning's roughness coefficient was calculated based on velocity estimates from the Ferguson VPE method

MODEL SUMMARY

Measured Flow (Qm) =	1.71	(cfs)
Calculated Flow (Qc) =	1.71	(cfs)
(Qm-Qc)/Qm * 100 =	-0.01%	
Measured Waterline (WLm) =	2.65	(ft)
Calculated Waterline (WLc) =	2.65	(ft)
(WLm-WLc)/WLm * 100 =	0.00%	
Max Measured Depth (Dm) =	0.4	(ft)
Max Calculated Depth (Dc) =	0.4	(ft)
(Dm-Dc)/Dm * 100 =	-0.00%	
Mean Velocity =	1.25	(ft/s)
Manning's n =	0.038	
0.4 * Qm =	0.68	(cfs)
2.5 * Qm =	4.27	(cfs)

FIELD DATA

Feature	Station	Rod Height (ft)	Water depth (ft)	Velocity (ft/s)
	1	1.05		
	2	1.2		
	3	1.25		
	3.9	1.55		
	4	1.6		
	4.3	1.8		
Bankfull	4.7	2.5		
Waterline	4.8	2.65	0	0
	5	2.85	0.2	0.72
	5.3	2.95	0.3	0.74
	5.6	2.85	0.2	1.2
	5.9	2.9	0.25	1.64
	6.2	2.85	0.2	1.79
	6.5	2.9	0.25	1.62
	6.8	2.85	0.2	1.66
	7.1	3	0.35	1.59
	7.4	3.05	0.4	1.42
	7.7	2.95	0.3	1.55
	8	2.9	0.25	1.56
	8.3	2.95	0.3	1.32
	8.6	2.9	0.25	1.45
	8.9	2.95	0.3	1.18
	9.2	2.8	0.15	1.04
	9.5	2.85	0.2	0.64
	9.9	2.8	0.15	0.53
	10.2	2.8	0.15	0.4
Waterline	11	2.65	0	0
Bankfull	11.8	2.5		
	12	2.45		
	12.5	2.3		

13	2.1
14	1.9
15	1.45
16	1.2
17	1.35
18	1.4

COMPUTED FROM MEASURED FIELD DATA

Wetted Perimeter (ft)	Water Depth (ft)	Area (ft^2)	Discharge (cfs)	Percent Discharge
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0.28	0.2	0.05	0.04	2.11
0.32	0.3	0.09	0.07	3.9
0.32	0.2	0.06	0.07	4.22
0.3	0.25	0.08	0.12	7.21
0.3	0.2	0.06	0.11	6.29
0.3	0.25	0.07	0.12	7.12
0.3	0.2	0.06	0.1	5.84
0.34	0.35	0.1	0.17	9.79
0.3	0.4	0.12	0.17	9.99
0.32	0.3	0.09	0.14	8.18
0.3	0.25	0.08	0.12	6.86
0.3	0.3	0.09	0.12	6.96
0.3	0.25	0.07	0.11	6.37
0.3	0.3	0.09	0.11	6.22
0.34	0.15	0.04	0.05	2.74
0.3	0.2	0.07	0.04	2.63
0.4	0.15	0.05	0.03	1.63
0.3	0.15	0.08	0.03	1.93
0.81	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

DISCLAIMER

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General Site Field Visit Data Report (Filters: Case Number = 24/4/A-005;)

Type		Div	Name	CWCB Case Number	Segment ID	Visit Date	Location Description	Watershed Name	
Stream		4	Solains Gulch	24/4/A-005	24/4/A-005	10/24/2023	At a point upstream from confluence with Coal Creek (UTMX: 320872.2867, UTMY: 4302726.3864)	East-Taylor	
	Remarks	Date	Remark						
		24/10/23 00:00	Gernal site visit found flow and open water. Snow in riparian areas.						
	GPS Log	No GPS Log records for this visit.							
	Photo Log	No Photo Log records for this visit.							





