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**PROPOSAL FOR HABITAT AND ACCESS
ON THE DOLORES RIVER
TOWN OF DOLORES**

Prepared For: The Town of Dolores

Prepared By: Corey Sue Hutchinson

INTRO

This proposal was prepared for the Town of Dolores as part of their potential Fishing is Fun Grant application. Over the years, there have been several projects conducted within this current planning area. Site work proposed here include the repair and enhancement of existing structures as well as many new access (steps) and structure locations. This plan is a good start but final planning will need to occur for acquisition of a U.S. Army Corps 404 permit and construction.

PROJECT AREA DESCRIPTION

Years ago the Dolores River was straightened and a levee built, in the effort of flood control. As a result, the channel is very confined and has little to no structure. Fish habitat in this general section of the Dolores is a continuous, fast riffle with no pools or cover at low or high flows (in the unimproved areas). Stream flow is un-regulated and flows can range from approximately 35 cfs to 5000 cfs. Much the river bank on the north side is very steep, and dangerous for most people to scramble down to fish or enjoy the river. In the lower section of this project, rip- rap was constructed that includes rusty cars and other metal junk.

Water quality in the Dolores River is quite good. Turbidity and sediment transport are naturally occurring during spring snow melt and rain events. During the survey for this proposal salmon were seen spawning and several other redds (nests of cleared gravel below boulders) were observed. Because natural reproduction is tenuous, this is encouraging.

The project area is divided into two sections. 1). From Hwy 145 bridge , downstream several hundred yards to 4th St. and 2). 9th St to several hundred yards above Dolores City Park. Figures 1 & 2.

FIGURE 1: TOWN OF DOLORES LOCATION

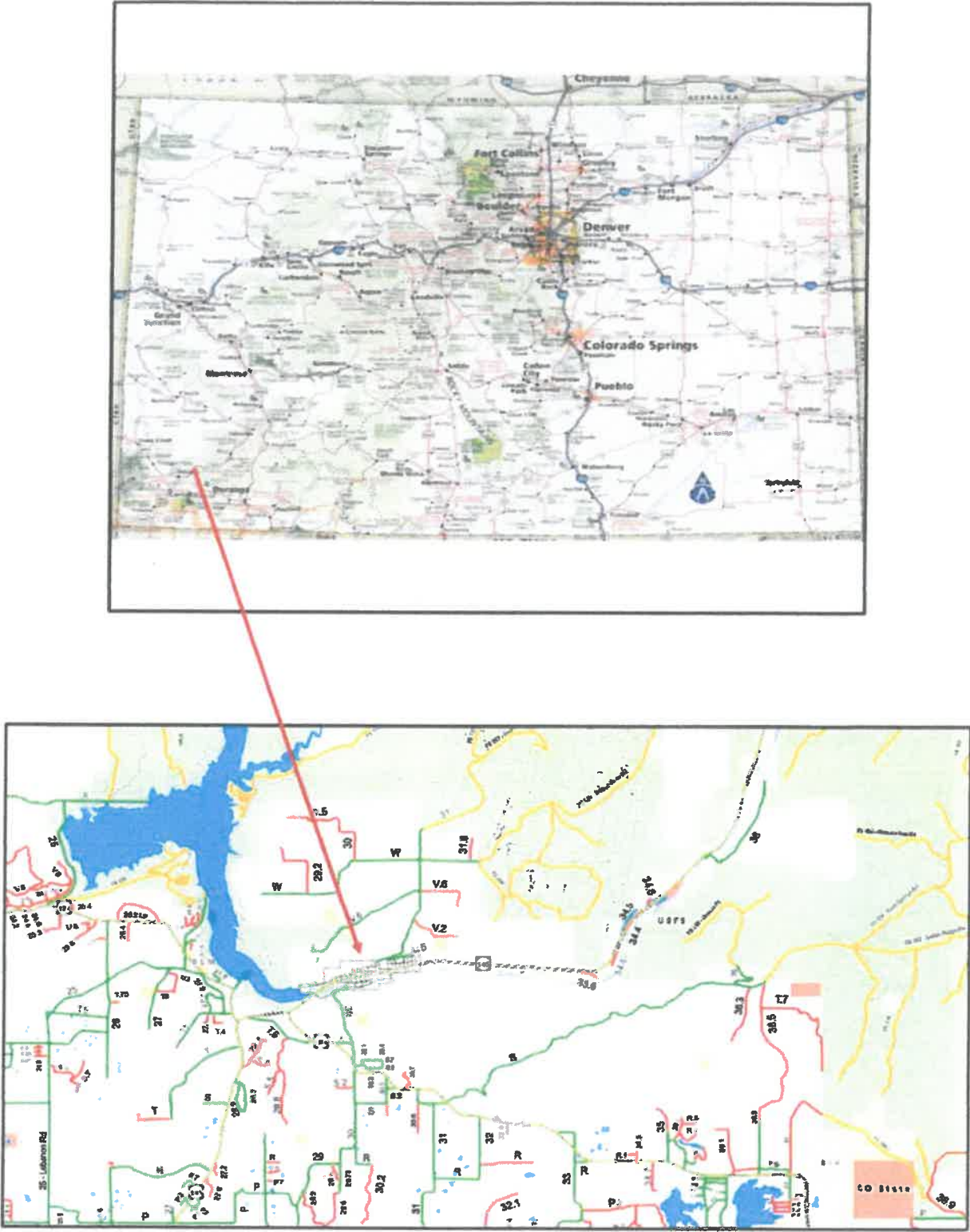
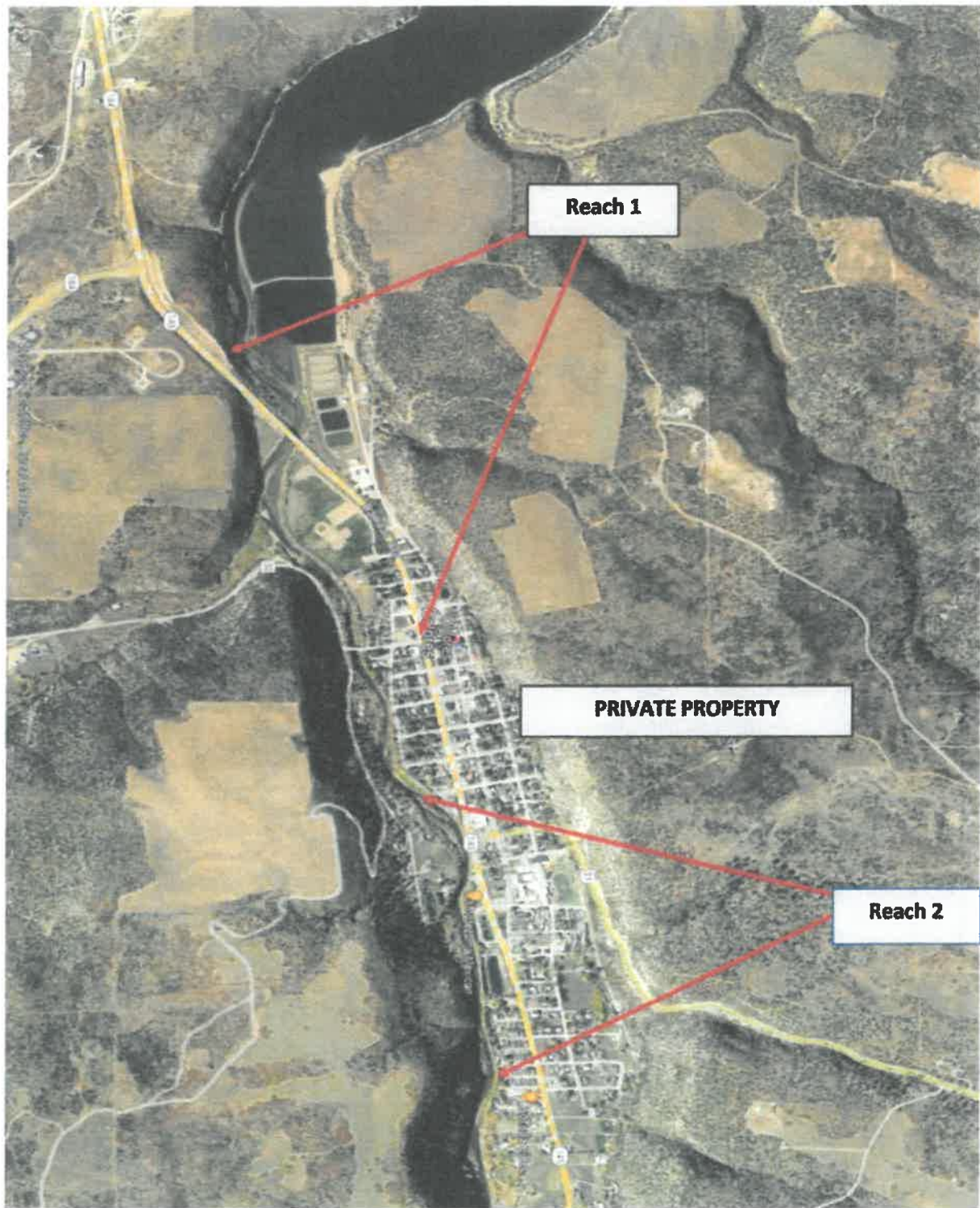


FIGURE 2: PROJECT EVALUATION AREA



REACH 1- BELOW HWY BRIDGE TO 4th STREET

This section has some decent habitat in general and one structure. The following are ideas for improvements. As mentioned above, final designs will be determined by grant allocation and input from the Town and public. Examples of the structures are included in Figure X-X.

1. Dig out existing structure.
2. Build steps that merge into J-Hook structure.
3. Place a few sitting rocks under bridge.
4. Build steps that merge with vortex weir structure.
5. Re-arrange rip-rap into path to river from existing trail.
6. Build vortex weir.
7. Pull rock from bank into river for cover structures.
8. Boulder clusters.
9. Clear path.
10. Pull boulders from bank into river.
11. Fix steps and add boulder clusters.
12. J-hook at existing steps.

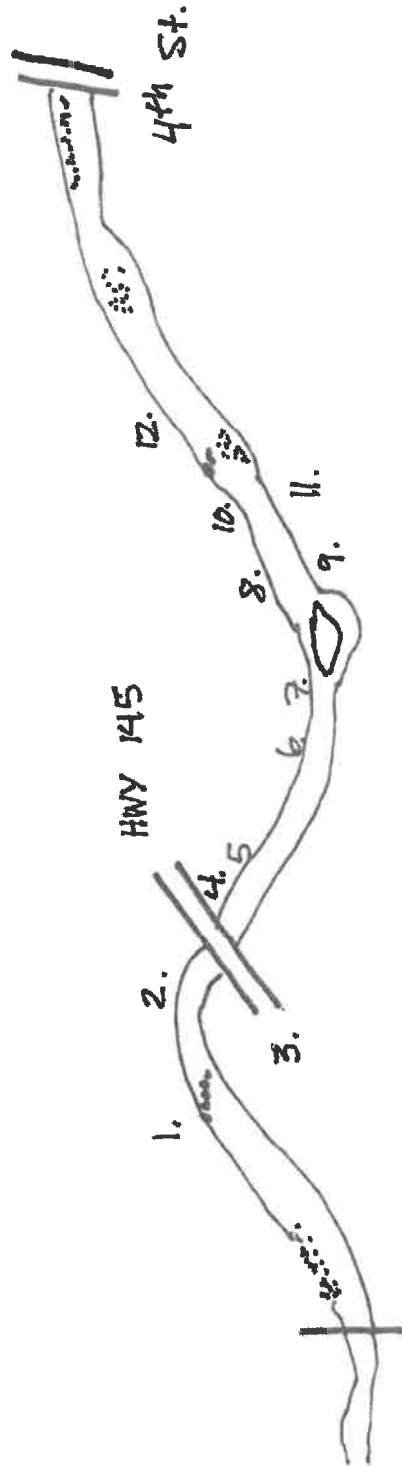
A total of boulders needed is 160 including 12 flat for steps.



Example of area to construct and maintain steps.

Above Highway Bridge

FIGURE 4: REACH 1 SITES

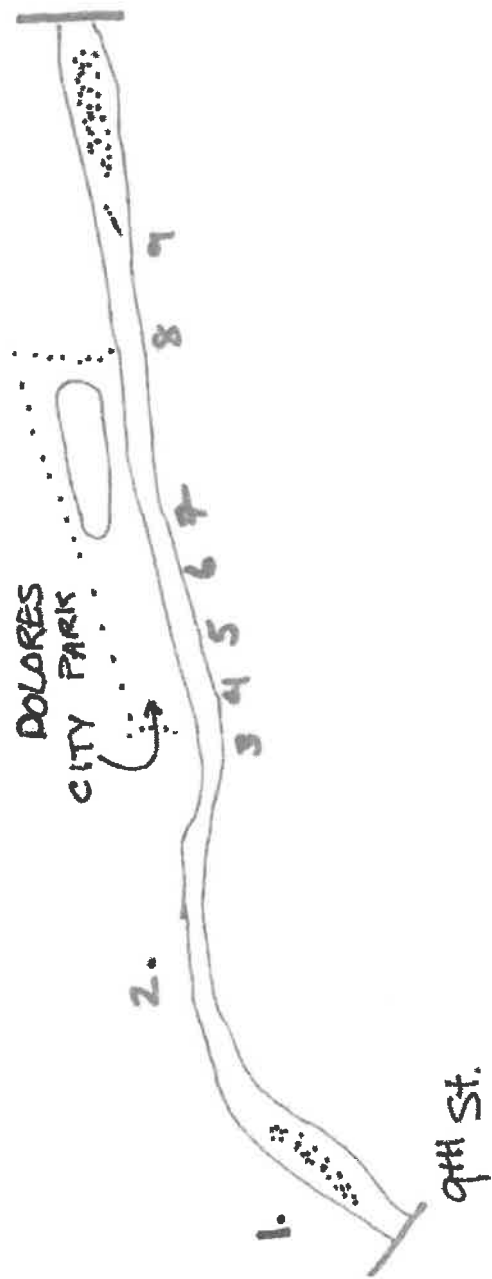


REACH 2: FROM 9TH STREET TO TRAILER PARK

This section has had improvements constructed in the past. These suggestions include maintenance of several step locations as well as new construction and structure maintenance.

1. Vortex weir on west side of island.
2. Vortex weir in narrow section.
3. Organize existing boulders into j-hook.
4. At platform add on to make j-hook.
5. Add boulders to create J-hook.
6. Steps.
7. Dig out below structure, use existing rock for steps.
8. Outflow area- j hook and build steps.
9. Steps.

A total of 54 boulders is needed including 16 flat for steps.



COST ESTIMATE

The following estimate is based on the above proposal. A more detailed and accurate estimate will be prepared once the scope of work is decided on.

Detailed planning and 404 permit application	(Aqua-Hab)	\$6,000
Boulders		
(blasted and delivered) from pit in Cortez	215 minimum 1 yard in size	\$24,000
Equipment for all river work (Excavator, loader, transport)		
2 weeks excavator, 4 days loader		\$29,000
Materials		\$1,000
Aqua-Hab, Implementation		\$11,000
TOTAL		\$ 71,000

FIGURE 6: REACH 2 SITES



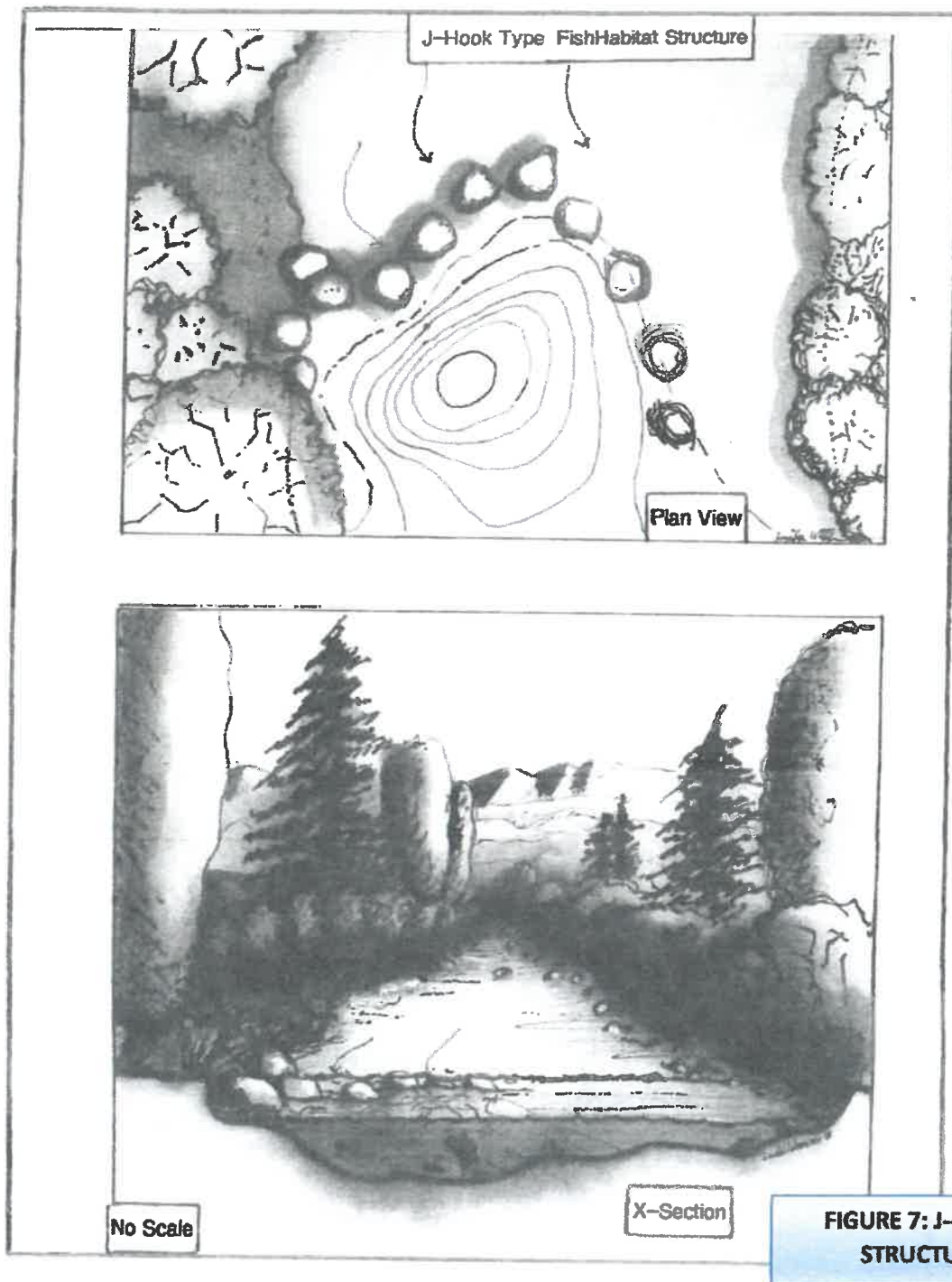
Reach 2: Some good Habitat but in need of more pools and cover.



View Downfrom 4th Street Bridge



Redd (Spawning Area) Above 9th Street Bridge



BOULDER STEPS / RIVER ACCESS POINTS

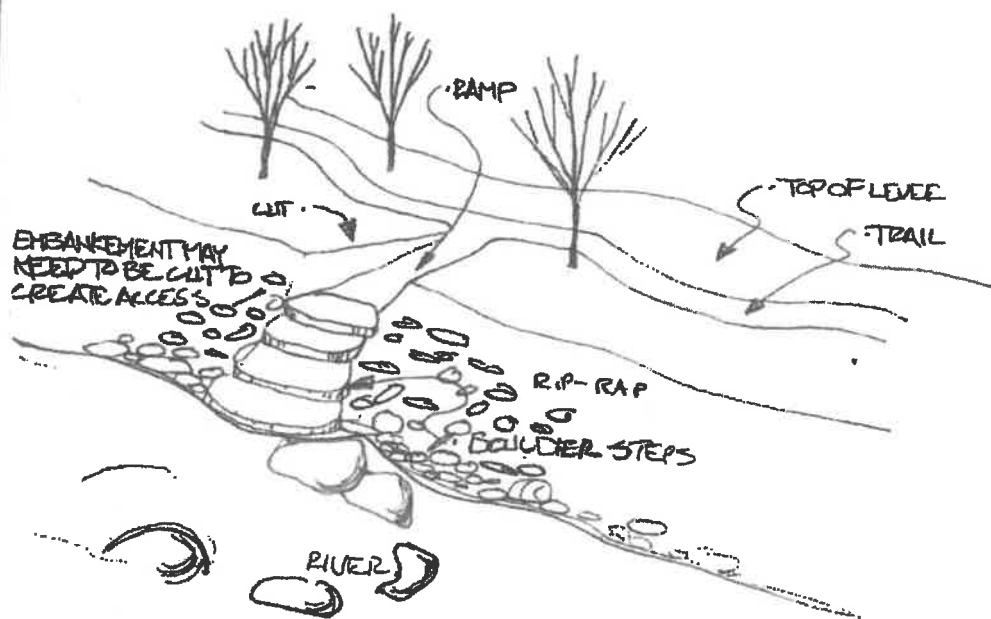


FIGURE 8

FIGURE 9 :EXAMPLE OF VORTEX WEIRS

La Plata River



Dolores River in Town



Examples of needed step repair

Reach 2







FISHING IS FUN APPLICATION FORM

1. Application Form
2. Signature Page

The following application form is available on the Fishing Is Fun website at
<https://cpw.state.co.us/aboutus/Pages/FishingIsFunProgram.aspx>

An electronic version can be obtained by contacting the Fishing Is Fun Program
Coordinator at jim.guthrie@state.co.us



FISHING IS FUN APPLICATION FORM

PLEASE USE THIS FORM AND FILL IN ALL SECTIONS!

PROJECT SPONSOR			
Name: TOWN OF DOLORES			
Type of Business: Municipality			
Mailing Address: 420 Central Avenue PO Box 630 Dolores, CO 81323			
Project Contact(s) & Title: Ken Charles, Town Manager 970 882 7720 Ext 4 Marianne Mate, Dolores Parks Committee			
Phone/Email: manager@townofdolores.com mariannemate@gmail.com			
FISHERY			
Type: Habitat Development/Fishing Site Improvements			
Acres of Water/Miles of Stream Benefited: Approximately 6,716 LF			
Type of Access: Access is from various riverbank locations			
PROJECT COSTS			
Amount of Fishing Is Fun funding requested: \$ 53,250			
Amount of project sponsor match:		Cash/In-kind = \$17,750	In-kind =
\$71,000			TOTAL =

PROJECT DESCRIPTION

Name: Town of Dolores/Fishing is Fun Phase IV

Purpose and Need: The Town of Dolores proposes to make the following improvements on approximately one mile of the Dolores River:

- 1. Improve fish habitat,**
- 2. Make repairs and improvements to existing fisherpersons access points and develop new access points.**

This request proposes to improve and repair the fish habitat and access points that were built in Phase III, FiF contract #1017-09 as well as new access points (steps) and fish habitat structures. The project includes habitat and access point improvements on both sides of the Dolores River from just downstream of the State Highway 145 bridge upstream to the Town of Dolores 4th Street bridge and from 9th Street upstream to the Town of Dolores Riverside Park and behind the town's Water Treatment Plant. The project design has twenty-one various sites planned for improvements.

The town of Dolores is in Montezuma County, Colorado. The Dolores River bisects the town and is the most significant natural feature that defines the community. "Where can I go fish" is an often-asked question by visitors. Locals and tribal members enjoy fishing the Dolores. Soon after leaving the town, the Dolores River enters McPhee Reservoir. Public access is rare on the Dolores River above McPhee Reservoir. Angler use of this reach of the river is valued and appears to be high.

Objective(s): To provide more fishing access points and improve fish habitat on a large and popular section of the Dolores River within the Town of Dolores, Montezuma County, Colorado. The project would benefit local and visiting fisherpersons. Much of the riverbank on the north side is very steep and dangerous for most people to access the Dolores River. These improvements will make the fishing access to the Dolores River safer and easier which will attract more locals, youths, Ute and Navajo tribal members and visitors to the river to fish. The habitat improvements have already proven to improve fisheries and these repairs and enhancements of existing structures will only improve the habitat.

Access to the river in Reach 1 is along the town's river trail. It is a well-used trail that runs along the Dolores River. Joe Rowell Park is a 23-acre park that adjoins the Dolores River trail and has significant parking for fisherpersons. Visitors and residents can access the river trail via the park and from the 4th Street bridge.

Access to the Dolores River in Reach 2 is primarily from the Town of Dolores Riverside Park about 14th Street and Railroad Avenue and continues east upstream adjacent to the town's Water Treatment Plant and/or downstream in the river.

Approach (Work Plan): if awarded the grant funds the town will:

1. Obtain the necessary permits including a 404 permit and any other federal or state permits-Aqua-Hab Inc;
2. Perform final design-Aqua-Hab Inc;
3. Acquire and transport boulders;
4. Perform the work.

Once the necessary permits are acquired and final design is completed, the town will bid out the work. Aqua Hab Inc will oversee the work.

Does this project include in-channel habitat work? Yes ☒ No ☐

If yes, do the proposed improvements follow Natural Channel Design techniques?

Yes ☒ No ☐

Expected Results & Benefits: This project will improve fishing access and increases/improves fish habitat structures. Additionally:

- 1) The location of the Dolores River in the town is an attraction that the town has made conscious efforts to improve the experience for the public. Joe Rowell Park on the west end and Riverside Park on the east end, the river trail, and finally, but not the least, are the improvements made for fishing access and fishing habitat improvements. With your past and continued help we can continue to improve this experience.
- 2) Fishing is an important part of the economic attractions. While we do not have formal survey information of the impacts, the town's economy is positively improved as a result of the fishing and access on the Dolores River.

Project Budget:

Work Item	Work Activity	Unit of Measurement	Quantity	Cost Unit	Total Cost	Local Share	Federal Share
Permits and Planning			1		\$6,000	\$1,500	\$4,500
Boulders	Blasted and Delivered	Min 1 Cu Yard	215		\$24,000	\$6,000	\$18,000
Excavator and Loader	Excavator-2 weeks Loader-4 days				\$29,000	\$7,250	\$21,750
Materials		1			\$1,000	\$250	\$750
Aqua-Hab Inc-project management		1			\$11,000	\$2,750	\$8,250
TOTALS					\$71,000	\$17,750	\$53,250

BREAKDOWN OF LOCAL SHARE

(Attach work sheet using format provided) See Attachment-Aqua-Hab Inc report.

PROPOSED WORK SCHEDULE

When funds are approved in June 2022 the town will move forward with:

1. Permitting and final design-July-September 2022.
2. Set up the acquisition of the boulders for the project-Summer/Fall 2022.

3. Build the project in 2023.

ANGLER/MOTOR BOAT USE

Present Angler Use:

Although the town has not conducted any formal angler surveys on the Dolores River that would enumerate angler numbers and use, the town's proposal is adjacent to a large town park (Joe Rowell park) and federal Bureau of Reclamation and US Forest Service lands. Public access is rare on the Dolores River above McPhee Reservoir. Angler use of this reach of the river is valued and appears to be high.

Estimated Angler Use after Project Completion:

This project will enhance the fishing along this section of the Dolores River.

Present Motor Boat Use:

NA

Estimated Motor Boat Use after Project Completion:

NA

Present Handicapped Angler Use: Two existing structures, one is only in use if McPhee Reservoir is full.

Estimated Handicapped Angler after Project Completion: Same

ENGINEERING

Name:

Aqua-Hab Inc

Qualifications: Aqua-Han INC had 30 years of experience in riparian ecosystem evaluation and improvements to aquatic systems including fish habitat improvements and construction of fisherperson access. Corey Sue Hutchinson has worked with government, tribal and private sector clients, specializing in fish habitat evaluation and improvements, river channel and bank stabilization and wetlands delineation and creation. Corey Sue has worked on the Animas La Plata, Mancos, Dolores, Florida, Pine, Rio Grande, San Juan and Piedra rivers.

MAINTENANCE (Responsible Party)

Name: Ken Charles-Town Manager manager@townofdolores.com 970 759 0016

Randy McGuire-Public works director randy@townofdolores.com 970 739 0789

PROJECT SITE

Location of Project:

Dolores River, Town of Dolores, Montezuma County, Colorado

Property Owner: Town of Dolores

Legal Instrument: Town of Dolores-Town Board approval

MAIN CDOW CONTACT(S)
Name, title, phone number (e.g., District Wildlife Manager, Aquatic Biologist): 1) Matt Sturdevant, District Wildlife Manager 970-903-1073 2) Jim White, Aquatic Biologist 970 749 1435 3) John Alves, SW Senior Aquatic Biologist 970 964 8367

Attachments:

Site map

Location Map(s)

Breakdown of Local Costs: Aqua-Hab Inc Preliminary Plan



SIGNATURE PAGE

Project Name:

Town of Dolores/Fishing is Fun Phase IV

Project Sponsor (name, title):

Date

District Wildlife Manager and/or Area Fishery Biologist:

Date

Regional Manager / Senior Fishery Biologist:

Date

Region Comments:

Regional FIF Coordinator:

Rank:

THE COLORADO DIVISION OF WILDLIFE RECEIVES FEDERAL FUNDS FROM THE U.S. FISH AND WILDLIFE SERVICE PURSUANT TO THE WILDLIFE RESTORATION ACT AND THE SPORT FISH RESTORATION ACT. UNDER TITLE VI OF THE CIVIL RIGHTS ACT OF 1964, THE U.S. DEPARTMENT OF THE INTERIOR PROHIBITS DISCRIMINATION ON THE BASIS OF RACE, COLOR, OR NATIONAL ORIGIN. ANY PERSON WHO BELIEVES HE OR SHE HAS BEEN DISCRIMINATED AGAINST IN ANY PROGRAM, ACTIVITY, OR FACILITY OPERATED BY A RECIPIENT OF FEDERAL ASSISTANCE SHOULD WRITE TO:

**Chief, Office for Human Resources
U.S. Department of the Interior
Fish and Wildlife Service
Washington, D.C. 20240**

Army Corp Comments

From: Zdimal-Quarles, Kerrienne L CIV USARMY CESPA (USA) <Kerrienne.L.Zdimal-Quarles@usace.army.mil>

Date: Wed, Mar 15, 2023 at 4:46 PM

Subject: RE: [URL Verdict: Neutral][Non-DoD Source] Re: contact information

To: Kenneth Charles <manager@townofdolores.com>

Good Afternoon Ken,

Thank you for reaching out and providing the information via email below.

The HWY 145 Bridge to 4th Street project appears to be along a reach associated with prior work conducted by USFS (SPK-2009-1182 for which an NWP 27 and RGP 12 were issued to USFS). It appears USFS may be the landowner for this reach — does the Town have an easement or agreement or authorization in place with USFS for the proposed work? The description identifies that one existing structure would be removed — is this structure associated with the previous work conducted by USFS? From the description provided, it appears that proposed work would be new work within this reach.

The 9th Street to Dolores City Park section appears to be along a reach associated with prior bank stabilization work near the library SPK-2010-636. From the description provided, it appears that proposed work would be new work within this reach, but would any of the proposed work be associated with this prior bank stabilization work?

Based on the information provided – the proposed work does not appear to be covered by previous/existing authorization and the projects may meet the terms/conditions for Nationwide Permit 27 (NWP 27). For NWP 27, the permittee must submit a pre-construction notification to the Corps prior to commencing any activity (see general condition 32), except for the following activities: (1) Activities conducted on non-Federal public lands and private lands, in accordance with the terms and conditions of a binding stream enhancement or restoration agreement or wetland enhancement, restoration, or establishment agreement between the landowner and the FWS, NRCS, FSA, NMFS, NOS, USFS or their designated state cooperating agencies; (2) Activities conducted in accordance with the terms and conditions of a binding coral restoration or relocation agreement between the project proponent and the NMFS or any of its designated state cooperating agencies; (3) Voluntary stream or wetland restoration or enhancement action, or wetland establishment action, documented by the NRCS or USDA Technical Service Provider pursuant to NRCS Field Office Technical Guide standards; or (4) The

reclamation of surface coal mine lands, in accordance with an SMCRA permit issued by the OSMRE or the applicable state agency. If the project does not meet one of these exceptions, pre-construction notification is required. If the project does meet one of these exceptions, the permittee must submit a copy of the appropriate documentation to the Corps to fulfill the reporting requirement (which we can discuss if applicable).

If pre-construction notification is required, the pre-construction notification form is available here --- <https://www.spa.usace.army.mil/Missions/Regulatory-Program-and-Permits/NWP/>. Note regional conditions associated with NWP 27 --
- https://www.spa.usace.army.mil/Portals/16/docs/civilworks/regulatory/Regional%20Conditions/2021%20Regional%20Conditions/Appendix%204%20Colorado%20Regional%20Conditions%202021%20Final%202022%2002%2017.pdf?ver=mRqAwqb7_kDxH5FJZcquHA%3d%3d and Guidelines For Nationwide Permit (NWP) 27 Aquatic Habitat Restoration, Establishment, & Enhancement Activities document located here: [https://www.spa.usace.army.mil/Portals/16/docs/civilworks/regulatory/publicnotices/Nationwide%2027%20SPA%20Guidelines November2021.pdf?ver=gpeFPSkwi_s0uy6ByfJbUA%3d%3d](https://www.spa.usace.army.mil/Portals/16/docs/civilworks/regulatory/publicnotices/Nationwide%2027%20SPA%20Guidelines%20November2021.pdf?ver=gpeFPSkwi_s0uy6ByfJbUA%3d%3d).

Last item - all permit applications, preconstruction notifications, requests for jurisdictional determinations, compliance certifications, and monitoring reports for projects in Colorado within the Albuquerque District area of responsibility should be submitted electronically to our general email box at SPA-RD-CO@usace.army.mil for initial in-processing and project manager assignment. You will receive a response identifying the assigned project manager and project number within five (5) working days from the receipt of your request.

(<https://www.spa.usace.army.mil/Missions/Regulatory-Program-and-Permits/Public-Notices/Article/3107767/special-public-notice-submittal-process-for-activities-within-colorado/>).

Please let me know if you have any questions regarding this information.

Best regards,
kz

Kerrianne Zdimal
Regulatory Specialist
US Army Corps of Engineers
Albuquerque District - Southern Colorado Branch