

Perry Ranch Water Resource Update

<u>Presentation Prepared for:</u>

Division 5 Water

Colorado River Basin Roundtable

WSRF Grant Application

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Path of Water Flow from Perry Ranch to The Colorado River

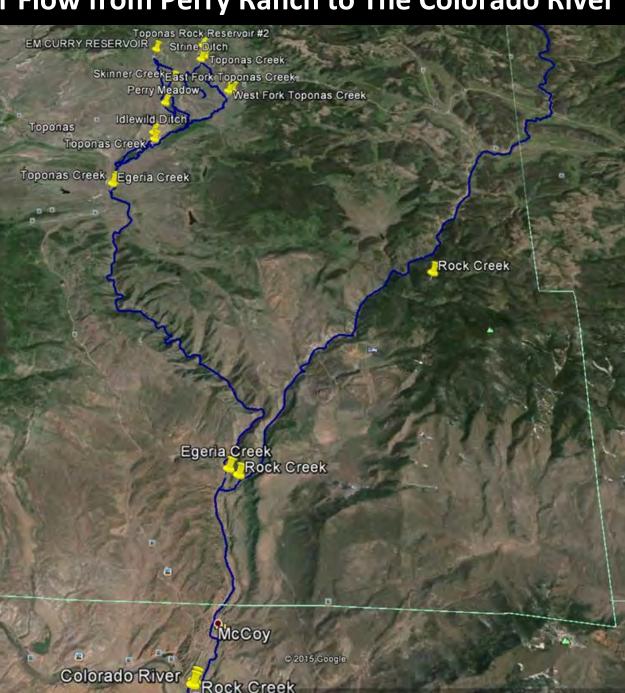
Where are We?

Location:

- Colorado River Basin
- •3 Miles NE of Toponas

<u>Tributaries Include:</u>

- Perry Ranch Ditches
- •E. Toponas Creek
- •W. Toponas Creek
- Egeria Creek
- Rock Creek



Perry Ranch: Toponas Rock Reservoir 2015 | Significant Hazard Status

- Safety Rating Upgraded to "Requires Immediate Attention" After Dam Safety Expressed Concerns in '09, '10, '12
- Spillway Erosion & Road Bank precarious for 30+ YEARS
- Repairs & Additional backfill needed to Reinforce & Stabilize Road Bank on East Side of Spillway



East Bank, Road to Clow Ranch Above



Proposed

Area

Splash Pool

Eastern Hillside requires additional backfill to raise landing pad floor & to stabilize the Clow Ranch Road

- Road Base Had to Be Strengthened. More Gravel/grading will be needed.
- Service Road on Right. 1/4 Mile of Gravel Placed
 - Original Service Road up to staging area below TPR2 Spillway Channel into Toponas Creek



Outlet Plate Cover & Control Stem Welding Fix/Marine Grade Coating by Mobile Fabricator: July, 2018



Control Stem Fix, Stacked Larger Rocks to protect from movement/cattle trampling



- Action Taken to address critical tasks: Outlet Plate & Control Stem Fix, Dirt Work and Spillway Splash Pool
- Compare to previous inspection concerns. Total Cost to Perry Ranch was over \$40,000
- 2019 was a record snow year



Spillway smoothed, trash removed

Existing Reservoir & Private Residence Access Road



Note: Western Hillside may require additional backfill to <u>stabilize road</u>

■ Profile of spillway: Stilling basin view from the West bank. 2 Rows vertical concrete ties placed below the spillway pipe and along the eastern hillside. Backfill used to raise floor height to 10ft.





- Staging Area. Repurposed 731 Railroad Concrete Ties
- Each Tie Weighs Approx 725 lbs.
- Placed equivalent of 253 tons concrete to form the splash pool
- Spillway Base Floor: Raised up 40-60ft for a safer drop height of 10ft







- Spillway Chute Transitions Requires Inspection Spring, 2019
 - Final Grading, Chute Channel Path, Add Cobble, Gradual Grade into W. Fork Toponas Creek

Some erosion anticipated Spring, 2019

Concrete Ties interlock to limit movement

Splash Pool Steps: Multiple Layers, Each Layer has: Fracking Tarp covered w/ Ties

Sml Gravel to fill cracks btwn ties

Stacked alternating positions vertical/horizontal

Downstream View: Proposed 60ft Spillway Channel Construction (received grant 07/2019).



Ties will be placed in step down pattern Alternate vertical/horizontal position

Spillway Run Down Channel Entrance
Drop 8-12 Ft into Sml Splash Pool
From Here a Step Down Channel to
West Fork Toponas Creek to be built







Bank erosion and concrete tie displacement



Hillside Seep Installed French Drain & Pipe

- Summary 2019: Received grant to repair 2019 Spring Runoff Damage to Stilling Basin
- Raised Spillway Basin Floor up 30ft for a safer drop height from stilling basin
- Constructed rundown channel, installed French Drain on East Bank below road base
- 4 Horizontal Courses 44in high/2 courses step down. 3ft side walls
- Continue to fill cracks between concrete ties with gravel
- Place additional Rip Rap down at start of W. Fork Toponas Creek next spring

Perry Ranch 2020

October 17, 2019 - Inspection Day



Looking downstream along the rundown channel from the stilling basin.

Rundown consists of channel formed of concrete railroad ties over multiple layers of pond liner and a nonwoven geotextile. Construction of the rundown fit to existing grading and includes a series or drops varying from about 1 foot to 7 foot at various locations.

The rundown distance is about 100 feet and has about a 20 foot vertical drop.



Oct 17, 2019: Final State Engineer Inspection

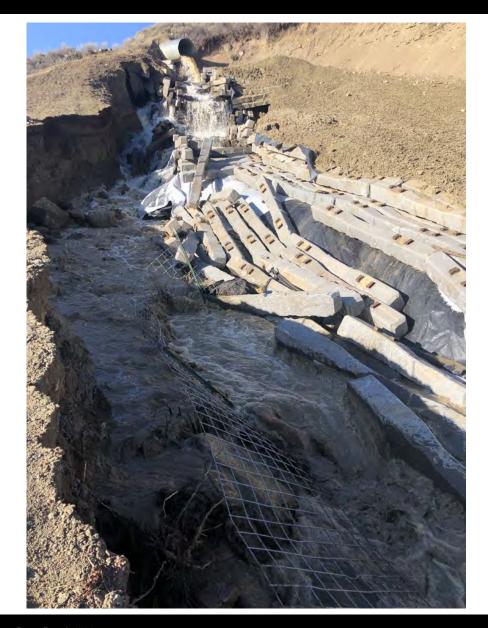


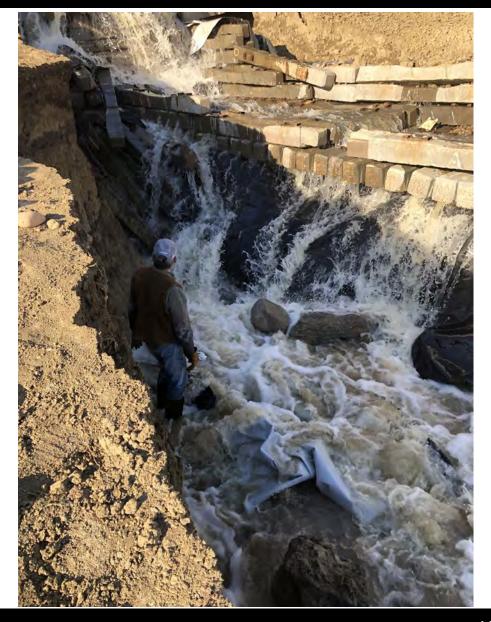




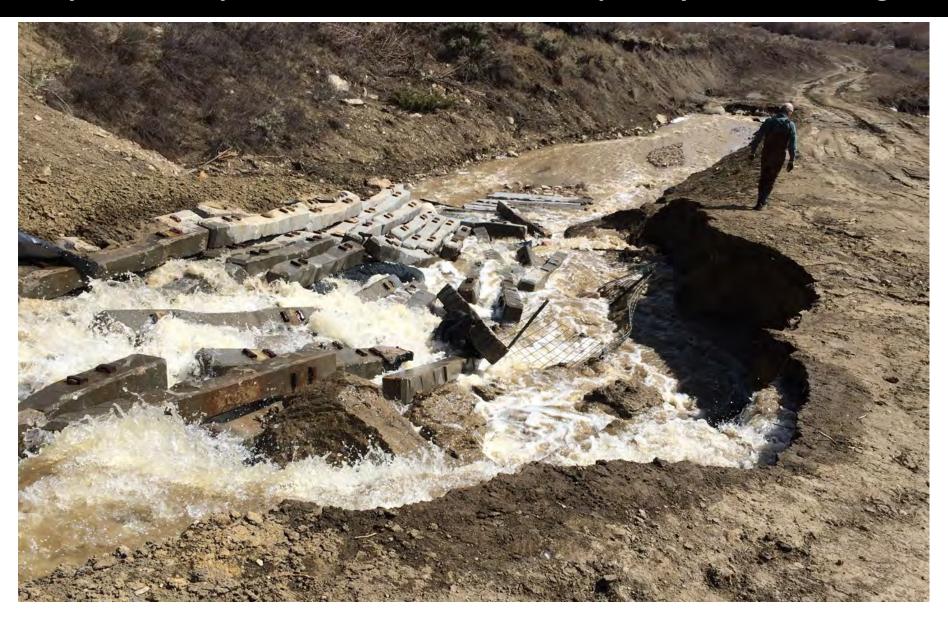
Fall 2019

May 5, 2020



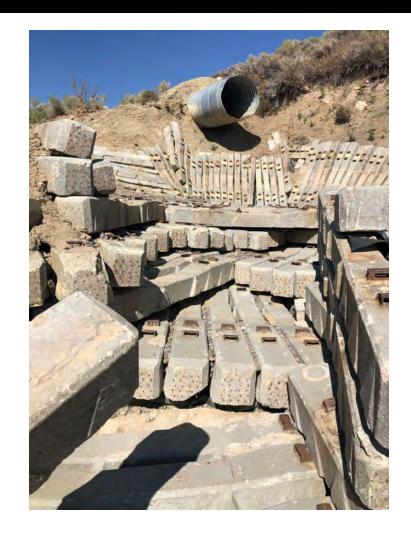


Perry Ranch 2020





Perry Ranch: Toponas Rock Reservoir Spillway October, 2020





West of Basin – Line shows Start of Pipeline Headwall

Base of Spillway – Stilling Basin

Perry Ranch: Toponas Rock Reservoir Spillway October, 2020



West Gulley – exit point into creek bed



Outlet Area – Exit headwall site

Gulley walls are 15-20ft high on each side Riprap will be placed downstream

Additional Background

- Presentation originally presented to The Colorado River Basin Roundtable March, 2019
- WSRF Grand Awarded July, 2019
- Spillway work completed October, 2019
- Runoff Issues May, 2020 2nd season for stilling basin, 1st season for rundown channel
- Presentation Updated May, 2020 and October, 2020 to reflect current status
- September, 2020: Educational Partnership secured with CSU Water Resource Program
 - Working to fulfill the Grant Application Requirements showing public benefit

Perry Ranch 2020

The Toponas Project: Key Points

- Toponas Rock Reservoir: located on State School Section, storage capacity of 197 acre ft
 - Multi-Purpose Benefits to State of CO, 4 landowners, Forest Fire Protection Units, Wildlife
- Toponas Rock Reservoir decades of deferred maintenance & ongoing dam safety concerns
- Perry Pipeline Project utilizes existing waterways to transport stored water
 - Received NRCS Funding twice & returned due to lack of easement
 - Easement obtained January, 2019
 - 800-900ft of pipeline will be installed between current ditch and public creek. NRCS approved design
- Positive working track record: NRCS (2007-2020) & Div 5 Water (2015-2020)
 - 2007-2008 NRCS pipeline: Highland Ditch Miller Enlargement Pipeline
 - 2019-2020 NRCS pipeline: Perry Pipeline Project
 - 2018-2020 Div 5: Toponas Rock Reservoir spillway/splash pool/run down channel construction
- Western Heritage: Perry Ranch is a Centennial Ranch/5th Generation owned property

Perry Ranch: Review of Water Rights for Toponas Rock No. 2

Toponas Rock Reservoir No. 2: Sits on State School Section

Stored Water Rights:

44 Acre Feet, Priority #421 (Case No. CA -1277)

109 Acre Feet (Case No. 89-CW-1277)

Total First Fill: 153 Acre Feet

Refill: 109 Acre Feet (Refill by absolute decree – in addition to first fill)

Grand Total: 262 Acre Feet Annual Use

Perry Ranch - Annual Lease Options of 150 Acre Feet:

- 75 Acre Feet to Neighboring Ranch I
- 75 Acre Feet to Neighboring Ranch II

Historically, the original storage right & refill right fill to capacity almost every year





COLORADO

State Land Board

Department of Natural Resources

OFFICE USE ONLY	
District:	-
AG Lease:	
Other Leases:	***************************************

TEMPORARY ACCESS	PERMIT APPLICATIO	N	
APPLICANT INFORMATION:			
Provide name and contact	Applicant Name (or representa	ative):	
information for main applicant.	Charles F. Perry		
	Company or Organization (if a	pplicable):	
	Perry Ranch LLCs: All family	nembers, emplo <mark>yees &</mark> vendors	s of Perry Ranch
	Address:		
	36100 Hwy 134/PO Box 213		
•	City:		State: Zip Code:
	Toponas		CO80479
	Phone Number:	E-mail Address:	
	970-638-4581	rooperry@gmail.com /	cfperryco@gmail.com
List all individuals who will be accompanying you during your temporary access. If additional space is required, attach a separate list. For school groups, only include name of class or group.	Additional individuals accomp Farrell Excavating & Team Other Sub-Contractors as nee CSU Senior Design Professor (
Select if temporary access is	Select if applicable and provid	le School, University, or Agenc	y Name:
related to any of the following user groups.	Colorado K-12 Public Scho	pol (1)	Paner and Market State State State
,	Colorado Public Universit	CSU CSU	
	State Government Agency	NRCS	
	Federal Government Ager	ncy	
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PROPERTY INFORMATION:

Application is hereby made across the following state lands. If you do not know this information, please contact your local District Office. Attach additional sheet, if necessary.

Number of Acres	Legal Description	Section	Township	Range	County
Approx 650	2N, S84, W36th PM				Routt

REQUESTED USE:

Provide a detailed description of your requested use, including proposed points of access, activity on the site, and method of travel (vehicular, horseback, hiking). If necessary, attach additional information or maps to support your request.

Description of requested use:

Spillway repair to maintenance, earth work, concrete powring, underground pipe installation, large rip-rap gravel delivery and placement. All vendors have had a guided die violi prior to non-accompanied access. All vendors are under contract with Perry Ranch. All guests will have pre-authorization to use the road/perform work on the reservoir spillway and NRCS designed pipeline. We will use the existing staging at ea for the pipeline. Perry Ranch is a 2020 senior design project with CSU. We will participate virtually. The students and professor may come to the ranch and reservoir one day. We will schedule a visit and would like to make like it Smith to participate with NRCS.

To

Requested dates for use (cannot exceed one year):

Begin Date:	114			
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End Date:

09/14/2021

By signing and submitting this application, the Permittee agrees to the following provisions as a condition of their use of the property:

- 1. Liability for claims or injuries to persons or property arising from the negligence of the State of Colorado, its departments, institutions, agencies, boards, officials, and employees is controlled and limited by the provisions of the Governmental Immunity Act, C.R.S. § 24-10-101 et seq., and the risk management statues, C.R.S. § 24-30-1501 et seq., as amended. No term or condition of this permit shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protections, or other provisions, of the Colorado Governmental Immunity Act, CRS§24- 10-101 et seq., or the Federal Tort Claims Act, 28 U.S.C. §§1346(b) and 2671 et seq., as applicable now or hereafter amended. This permit grants no rights to renew or extend and does not grant renewal rights under CRS §36-1-118.
- 2. Permittee assumes all liability arising from the use, occupation or control of the Property by Permittee under this permit. This assumption includes, but is not limited to, liability for all personal injuries (including death) and environmental and property damage and destruction. Permittee agrees to defend, indemnify and hold harmless the State Land Board ("Board") from and against any and all liabilities, losses, damages, liens, expenses, claims, demands, debts, obligations, fines, penalties, suits or actions, judgments, and costs of any kind whatsoever arising from the use, occupation or control of the Property, caused by any act, omission or neglect of Permittee, or Permittee's employees, agents, guests, invitees, contractors or assigns. Permittee further agrees to indemnify the Board for any costs, including costs of suit and fees for consultants, experts, and attorneys, incurred by the Board in terminating or canceling, enforcing obligations or defending itself against any matter arising under this permit caused or permitted by Permittee or Permittee's employees, agents, guests, invitees, contractors or assigns. This provision shall survive termination, cancellation or relinquishment of this permit and any cause of action by the Board to enforce it shall not be deemed to accrue until the Board's actual discovery of said liability, claim, loss, damage, or exposure. This indemnity is in addition to any other indemnity provided for in this permit. Permittee will not be responsible for any liability caused by persons granted other uses of the Property by the Board.
- 3. Permittee, at its sole cost and expense, shall during the entire term of this permit procure, pay for and keep in full force and effect an occurrence based general liability insurance policy from an insurance carrier licensed to do business in Colorado, in an amount not less than one million dollars (\$1,000,000.00) per occurrence and two million dollars (\$2,000,000.00) aggregate. Permittee, at its sole cost and expense, shall during the entire term of this permit procure, pay for and keep in full force and effect a property insurance policy from an insurance carrier licensed to do business in Colorado covering all insurable improvements owned by the State Land Board located on the Property in an amount not less than necessary to cover the replacement cost. All policies shall name the Board as an additional insured, shall provide that the coverage is primary and noncontributory over any other insurance coverage available to the Board, its agents and employees and shall include a clause waiving all rights of recovery, under subrogation or otherwise against the Board, its agents and employees. Failure to buy and maintain the required insurance is a default of this permit. Before starting work under this permit, Permittee shall, at the Board's request, furnish a certificate of liability insurance, referencing the lease number and reflecting the above requirements. The Board may alter any requirements of this section to meet the requirements of the Colorado Governmental Immunity Act or any requirements determined by the Colorado Office of Risk Management.
- 4. Permittee shall leave the property in the same condition as it was prior to their use. Upon completion of use or access, Permittee agrees to restore said land, if damaged, as determined at the sole discretion of the Board, as near as practicable to its original condition, unless otherwise agreed to in writing by the Board.
- 5. If required by the Board, the Permittee shall execute a bond at the time this permit is executed. The bond shall consist of cash, bank letter of credit, or other sureties. If the bond is other than cash, the bond must be in a form that will guarantee payment in cash to the Board upon receipt by any bank or insurance company of written demand by the Board, without further condition. The Bond shall guarantee restoration of said land to a native vegetative condition or to such other conditions as may be approved by the Board as well as continued maintenance of the area disturbed and/or for other property damage on said lands. The Board shall keep said bond until the Board is satisfied that the restoration or damage has been corrected as determined at the sole discretion of the Board.
- 6. Permittee shall strictly comply with all applicable federal state, and local laws, rules, and regulations in effect or hereafter established, including, without limitation, laws applicable to discrimination and unfair employment practices.
- 7. Colorado law, and rules and regulations issued pursuant thereto, shall be applied.
- 8. A consideration fee may be assessed for temporary access. The fee determined by the Board is non-negotiable and must be paid within one week of approval and/or prior to any access of the property. If payment is not received within this time frame, the document is terminated.

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The Applicant declares that all information provided on this form and submitted attachments are to the best of their knowledge true and complete. Furthermore, the applicant agrees to abide by the provisions listed on this form, and acknowledges that additional conditions, including consideration fees and bonding requirements, may be imposed.

Charter F. Perry	
Name	Title
Prorles Jorres	Sus 13, 8020 1
Signature	Late

Document is not valid without authorized signature of the Board of Land Commissioners. Once signed by an authorized representative of the Board, this application shall become the Temporary Access Agreement. All terms are binding on the applicant.

OFFICE USE ONLY:	
DATE(S) AUTHORIZED FOR TEMPO	DRARY ACCESS:TO
CONSIDERATION FEE?	O YES (ENTER AMOUNT: \$) O NO
BOND REQUIRED?	O YES (ENTER AMOUNT: \$) O NO
LIABILITY INSURANCE?	O YES (ENTER AMOUNT: \$) O NO
ADDITIONAL CONDITIONS:	
STATE LAND BOARD SIGN	NATURE APPROVAL DATE



Perry Ranch
P.O. Box 213
Toponas, Colorado

P 970.638,4581

August 8, 2021

Mr. Ben Wade Colorado Water Conservation Board Water Supply Planning Section 1313 Sherman Street, Rm 721 Denver, CO 80203

Ben, and members of the Roundtable,

Please accept this letter as a request for release of awarded grant funds for The Toponas Reservoir Spillway Project. We sold the water rights this spring and the new owners are not interested in taking over the grant funding & contract with the state. As discussed with Ben, we will resubmit the final status information previously submitted back in 2019 at the end of our work that season.

Warmest Regards from Perry Ranch,

Chuck Perry

Owner

970.638.4581

cfperryco@gmail.com

Marissa Perry

General Manager

720.810.7352

rooperry@gmail.com