Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

AGRICULTURAL EFFICIENCY IMPROVEMENTS ANALYSIS				PLAN WEP-1
STRATEGY	Determine which producers and which stream systems benefit from implementing agricultural improvements. Quantify the amount of water diverted, impact of agricultural use on in-stream flows, amount of water 'saved' from irrigation improvement projects, and where in the system benefits from the 'saved water' will accrue.			
OBJECTIVES ADDRESSED	AG-1, AG-2			
LOCATION OR AFFECTED AREA	Historically irrigated lands	**WATERSHED REGION**	San Juan, Rio Blanco, Navajo	
SPONSOR OR CHAMPION	San Juan Conservation District			
PRINCIPLE PARTNER(S)	NRCS, WEP, San Juan Water Conservancy District			
OPPORTUNITIES CONSTRAINTS CHALLENGES	Various methodologies for estimating impacts of irrigation water delivery/application efficiencies already exist. Uncertainty in Colorado Water law and impacts to individual water rights from conservation measures may cause participant hesitancy. Recent policy instruments and pilot projects in the state can allay some of these concerns. Potential for water and cost savings, improved yields, and improvements to instream flows may help attract funding from private or environmental partners.			
DEGREE RIPENESS	Medium	**TIMEFRAME**	1-3 years	
ACTION TARGET	Completed assessment of water conservation impacts on streamflows and groundwater return flows for 50% of the irrigated lands in the WEP planning area.			
ESTIMATED COSTS	**CAPITAL**	**OPERATION/MAINTENANCE**		
	$50-150K	NA		
SUGGESTED PERFORMANCE CRITERIA	NA			

CWCB METADATA				
	PROJECT TYPE	Ag	**WATER DESTINATION**	San Juan River
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	Yes (Ag, Storage and Supply, Env-Rec)	**ESTIMATED WATER YIELD/UNITS**	(This study seeks to quantify this)
	WATER SOURCE	Various	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

AGRICULTURAL INFRASTRUCTURE ASSESSMENT					PLAN WEP-2
STRATEGY	Identify needs for repairing or replacing aging infrastructure and improving water delivery/application for producers in the Navajo River watershed.				
OBJECTIVES ADDRESSED	AG-2				
LOCATION OR AFFECTED AREA	Active surface water diversion and delivery systems		**WATERSHED REGION**	Navajo River	
SPONSOR OR CHAMPION	San Juan Conservation District				
PRINCIPLE PARTNER(S)	NRCS, WEP				
OPPORTUNITIES CONSTRAINTS CHALLENGES	Infrastructure assessments are relatively straightforward processes, dependent on landowner permissions/interest and team members with technical knowledge to describe and estimate individual project costs/feasibility.				
DEGREE RIPENESS	Medium		**TIME FRAME**	1-3 years	
ACTION TARGET	Completed assessment of agricultural infrastructure condition and estimated costs for infrastructure repair or upgrades for all diversion systems located along the mainstem Navajo River and its major tributaries.				
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**		
	$40,000		$0		
SUGGESTED PERFORMANCE CRITERIA	NA				
CWCB METADATA	**PROJECT TYPE**	Ag	**WATER DESTINATION**	Navajo River	
	BASIN	Southwest	**WATER DISTRICT**	29, 77	
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A	
	WATER SOURCE	Various	**ESTIMATED CAPACITY/UNITS**	N/A	

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

DIVERSION STRUCTURE PILOT STUDY				PROJECT WEP-3
STRATEGY	Identify a private landowner in the Upper Rio Blanco watershed willing to participate in a pilot project focused on testing methods for improving diversion structure reliability and reducing the need for regular physical modification of the streambed. Lessons learned may be applicable in other high-bedload settings.			
OBJECTIVES ADDRESSED	AG-2			
LOCATION OR AFFECTED AREA	Water users in the Upper Rio Blanco drainage		**WATERSHED REGION**	Rio Blanco
SPONSOR OR CHAMPION	San Juan Conservation District			
PRINCIPLE PARTNER(S)	NRCS, WEP			
OPPORTUNITIES CONSTRAINTS CHALLENGES	Experimental diversion structure reconfigurations may require input from numerous parties to achieve related but sometimes conflicting goals for water diversion, ecosystem connectivity, and floodplain management. Successful designs are likely to have wide reaching benefits to landowners in terms of long-term cost savings as well as to ecosystems in terms of stream health (better maintenance, geomorphic and biologic functions). Long-term design efficacy will only be known after multiple, hydrologically variable years. Multiple design and construction iterations may be required.			
DEGREE RIPENESS	Low		**TIMEFRAME**	5-10 years
ACTION TARGET	Implementation of a single pilot project on the upper Rio Blanco or in similar setting with high-bedloads			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$100-500K		$5K/year for 5 years	
SUGGESTED PERFORMANCE CRITERIA	• Reduced diversion structure maintenance needs • Improved sediment passage • Improve aquatic organism passage			
CWCB METADATA	**PROJECT TYPE**	Ag, Env/Rec	**WATER DESTINATION**	Rio Blanco
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	Yes	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	Rio Blanco	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

PROTECT FLOWS FOR ENVIRONMENT AND RECREATION				PROCESS WEP-4
STRATEGY	Future hydrological scenario modelling incorporating population growth and climate change indicates that San Juan River flows below Park Ditch are likely to fall below desirable environmental, fishing and boating thresholds with increasing frequency. An ongoing collaborative process among water users may help ensure that future water management and use activities do not significantly reduce the number of days in any month when streamflows fall within acceptable and optimal ranges for aquatic habitat quality and/or whitewater boating and float fishing, as defined by local users.			
OBJECTIVES ADDRESSED	AN-1, AN-2, WB-1, B-1			
LOCATION OR AFFECTED AREA	San Juan River above and through Pagosa Springs		**WATERSHED REGION**	San Juan River
SPONSOR OR CHAMPION	WEP			
PRINCIPLE PARTNER(S)	TU, Town of Pagosa Springs, CPW, Park Ditch members, PAWSD, San Juan Water Conservancy District, Friends of the San Juan River, Colorado Water Trust			
OPPORTUNITIES CONSTRAINTS CHALLENGES	Maintaining sufficient flows in this reach will likely hinge on successful cooperative dialog and high levels of trust between recreational users, ditch owners and/or reservoir planners. Discussions about water use can be contentious and identification of appropriate incentive mechanisms for adjusting patterns of water use and management for the benefit of recreation is often difficult. Opportunity may exist for recreational organizations to work with water users to implement water efficiency measures (e.g. piping open ditches) that can simultaneously reduce O&M costs for agricultural producers and enable contribution of "saved" water to the stream without impacting patterns of historical consumptive water use.			
DEGREE RIPENESS	Low		**TIMEFRAME**	Ongoing
ACTION TARGETS	• Engage a working group (potentially facilitated professionally) for low flow contingency planning on the reach. Discuss the flows identified in the Phase II WEP report in relation to late summer streamflows and the needs of environmental and recreational water uses. • Establish agreements that make use of legal mechanisms, incentive programs, or other means for enhancing stream flows when needed while, simultaneously, ensuring the viability of consumptive water users' operations			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$0		$2-5K/ year for ongoing facilitation	
SUGGESTED PERFORMANCE CRITERIA	Duration, frequency and magnitude of water supply gaps relative to environmental and recreation water use thresholds			
CWCB METADATA	**PROJECT TYPE**	Env/Rec	**WATER DESTINATION**	San Juan River
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	San Juan River	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

PAGOSA GATEWAY PROJECT				PROJECT WEP-5
STRATEGY	Potential future changes in climate, stream flow and aquatic habitat quality in the San Juan River above and through Pagosa Springs may negatively impact river recreation and the cold-water fishery. Stream channel and riparian interventions intended to increase shading and encourage formation/persistence of consolidated low flow channels within the streambed may help protect the quality of habitat for fish and macroinvertebrates and benefit the whitewater boating and angling experience through this reach.			
OBJECTIVES ADDRESSED	WB-1, AN-1, AN-2, B-1			
LOCATION OR AFFECTED AREA	San Juan River in vicinity of Pagosa Springs		**WATERSHED REGION**	San Juan River
SPONSOR OR CHAMPION	TU			
PRINCIPLE PARTNER(S)	WEP, CPW, Town of Pagosa Springs, Friends of the San Juan, local outfitters, landowners along the San Juan River above Pagosa Springs, The Nature Conservancy			
OPPORTUNITIES CONSTRAINTS CHALLENGES	The beneficial impact of this project may be further leveraged with strategic management of streamflows during low flow periods (see AN-1). Completion of a large-scale riparian revegetation and channel modification effort will require participation of all landowners along the project reach. The sediment transport characteristics of the San Juan River may require regular or sporadic maintenance of any introduced engineering structures or inset low-flow channels.			
DEGREE RIPENESS	High		**TIMEFRAME**	1-3 years
ACTION TARGETS	• Complete initial engineering and permitting for the entire project • Implement a at least one phase of construction			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$1,800,000		$10 – 50K / year	
SUGGESTED PERFORMANCE CRITERIA	• Changes to the duration of navigable season for local anglers and boaters • Persistence of newly planted riparian vegetation • Wetland functional assessment results • Fish and/or macroinvertebrate community structure • Long-term maintenance requirements			
CWCB METADATA	**PROJECT TYPE**	Env/Rec	**WATER DESTINATION**	San Juan River
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	San Juan River	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

SAN JUAN RIVER RECREATIONAL ACCESS MASTER PLAN				PLAN WEP-6
STRATEGY	Develop a strategic plan for development of public boating and fishing access points on the San Juan River above the Town of Pagosa Springs.			
NEEDS ADDRESSED	AN-3, BO-2			
LOCATION OR AFFECTED AREA	San Juan River between the confluence of the East Fork and West Fork and the Town of Pagosa Springs		**WATERSHED REGION**	San Juan River
SPONSOR OR CHAMPION	Friends of the San Juan River			
PRINCIPLE PARTNER(S)	Archuleta County, Town of Pagosa, TU, CPW, PAWSD, Pagosa area recreational businesses, WEP, American Whitewater			
OPPORTUNITIES CONSTRAINTS CHALLENGES	Select locations in downtown Pagosa Springs provide relatively high amounts of angling and boater access to the San Juan River. However, areas upstream and downstream of town face recreational user/landowner conflicts. Commercial boating access to these segments rely on uncertain private agreements that may not be secure in the long-term. Identifying and securing long-term legal public access can help to enhance user experiences while at the same time controlling user patterns in ways potentially beneficial to private land owners. Providing additional access points above the Town of Pagosa Springs may also be an important strategy for ensuring that a diversity of recreational opportunities persist in the face of changing climate conditions. Important locations for public access point consideration include the San Juan River near the River Center, at Running Iron Ranch, in the vicinity of the San Juan River Village, and near the confluence of the East and West Fork San Juan River.			
DEGREE RIPENESS	High		**TIMEFRAME**	1 –3 years
ACTION TARGET	Complete a strategic plan for public river access endorsed and/or adopted by the Town of Pagosa Springs and Archuleta County			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$25-50K		NA	
SUGGESTED PERFORMANCE CRITERIA	NA			
CWCB METADATA	**PROJECT TYPE**	Env/Rec	**WATER DESTINATION**	San Juan River
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	San Juan River	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

RUNNING IRON RANCH RIVER ACCESS				PROJECT WEP-7
STRATEGY	Running Iron Ranch is currently leased by PAWSD and San Juan Water Conservancy District through early 2023. Opportunities exist on site for providing river recreation access (boat ramp) and riparian habitat improvements.			
NEEDS ADDRESSED	BO-2, AN-3			
LOCATION OR AFFECTED AREA	San Juan River in Pagosa Springs		**WATERSHED REGION**	San Juan River
SPONSOR OR CHAMPION	Friends of the San Juan River			
PRINCIPLE PARTNER(S)	PAWSD, Archuleta County, Town of Pagosa Springs, American Whitewater, TU, WEP			
OPPORTUNITIES CONSTRAINTS CHALLENGES	The river stretch above town is high value for recreation use and as a potential river-based economic driver. This property is uniquely located several miles above the Town of Pagosa Springs. A public river access point on the property would enable local residents and visitors to more reliably utilize the segment of the San Juan River immediately above town. Historical gravel mining activities on the site degraded the condition of riparian vegetation. Regrading and revegetation efforts on the portion of the property adjacent to the river may produce some meaningful benefits for aquatic and terrestrial ecosystems.			
DEGREE RIPENESS	High		**TIMEFRAME**	2 – 5 years
ACTION TARGETS	• Complete a conceptual engineering design and cost/feasibility for ramp improvements, bank stabilization and riparian projects • Complete a management plan/framework/agreement to protect the property owner and ensure that river users remain good stewards of the access point • Fully implement engineering design and riparian restoration project			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$100-300K		$5-10K/yr	
SUGGESTED PERFORMANCE CRITERIA	• Commercial and private user day counts • Metrics of wetlands/riparian area functional condition			

CWCB METADATA				
	PROJECT TYPE	Env/rec	**WATER DESTINATION**	San Juan River
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	San Juan River	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

FOREST HEALTH-WATERSHED FUNCTION RESEARCH AND MONITORING STATION NETWORK				PROJECT WEP-8
STRATEGY	Enhance the understanding of the relationships between climate change, forest succession, forest management, and water stress in forests in mid-and high-elevation forests.			
NEEDS ADDRESSED	WF-1, DW-2			
LOCATION OR AFFECTED AREA	Mid-elevation forests in areas managed by USFS		**WATERSHED REGION**	San Juan, Rio Blanco, Navajo
SPONSOR OR CHAMPION	Mountain Studies Institute or San Juan Headwaters Forest Health Partnership (SJHFHP)			
PRINCIPLE PARTNER(S)	USFS, USDA/NRCS, Fort Lewis College, Colorado State Forest Service, WEP, Banded Peak Ranch, Chama Peak Land Alliance			
OPPORTUNITIES CONSTRAINTS CHALLENGES	Complex interactions between forests, climate change, forest management, and stream systems will potentially require years or decades of continuing study to yield practical management directives. Despite this uncertainty in outcomes, long term data collection is vital to achieving local, state, and national goals in understanding these systems. Deployment of data collection stations should be accompanied by a sustained effort to analyze and interpret the generated data. Potential opportunities could involve WEP and SJHFHP collaborating to install/manage a network of snowtography sites and/or meteorological stations across different forest types, elevations, aspects, etc. to better understand relationships between forest health, forest management activities, and watershed function. Another opportunity may exist to install one or more stations on forest treatment tracts on the Banded Peak Ranch.			
DEGREE RIPENESS	Moderate		**TIMEFRAME**	2 – 10 years
ACTION TARGET	Installation and maintenance of 3-5 meteorological, snowtography, and soil moisture data collection stations at different elevation bands and in differing forest types.			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$30-50K		$10-20K/year	
SUGGESTED PERFORMANCE CRITERIA	• Continued operation and maintenance of the monitoring network for a minimum of 5 years • Use of the data to produce one or more integrative assessments of soil moisture and forest condition/structure in relation to changing climate conditions			
CWCB METADATA	**PROJECT TYPE**	Storage and supply, Engagement and innovation	**WATER DESTINATION**	San Juan River
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	Various	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

BANDED PEAK RANCH FUELS REDUCTION				PROJECT WEP-9
STRATEGY	Support Banded Peak Ranch and Chama Peak Land Alliance's efforts on forest fuels reduction and wildfire risk reduction to protect water sources, aquatic and riparian habitat, and water quality.			
NEEDS ADDRESSED	WF-2, ancillary: AG-2			
LOCATION OR AFFECTED AREA	Banded Peak Ranch and the upper Navajo River watershed	**WATERSHED REGION**	Navajo River	
SPONSOR OR CHAMPION	Chama Peak Land Alliance			
PRINCIPLE PARTNER(S)	Banded Peak Ranch, COFS, USFS, NRCS, SJWCD, Archuleta County, CPW, WEP, SJHFHP			
OPPORTUNITIES CONSTRAINTS CHALLENGES	Forest treatments on private lands may be quicker to enact than on public lands due to streamlined review processes. Challenges may lay in finding public/private funding sources for forest health projects on private lands. The Banded Peak Ranch incorporates topography, surficial geology, and forest types that are representative of many other locations in the upper San Juan River basin. Insights gained from projects implemented on the ranch may be applicable to forests on public or private lands in other locations in the planning area. Opportunity may exist to include the impact of vegetated buffers around streams on water quality. Explore cross boundary work with USFS at Price Lakes.			
DEGREE RIPENESS	High	**TIMEFRAME**	1 – 5 years	
ACTION TARGETS	• Completed forest treatment plan indicating priority treatment areas and types • Incorporation of vegetated buffer effects into experimental treatment design and post project monitoring • 3 – 5 years of post-treatment monitoring in treated areas and on control plots			
ESTIMATED COSTS	**CAPITAL**	**OPERATION/MAINTENANCE**		
	?	?		
SUGGESTED PERFORMANCE CRITERIA	• Soil moisture • Herbaceous understory vigor/density • Forest floor fuel load • Remote sensing of NDWI/NDVI			

CWCB METADATA				
	PROJECT TYPE	Env/rec, Ag, Storage and supply	**WATER DESTINATION**	Navajo River
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	Various	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

ENHANCEMENT OF THE SAN JUAN - CHAMA PROJECT DIVERSION STRUCTURES				PLAN WEP-10
STRATEGY	Each of the three primary San Juan-Chama Project diversions on the Rio Blanco, Little Navajo River, and Navajo River experience similar issues related to significantly altered sediment transport, limited aquatic organism passage and fish entrainment into the diversion canals. A redesign or retrofit of the existing diversion structures is necessary to alleviate these issues.			
NEEDS ADDRESSED	WB-2, WB-3, WB-7			
LOCATION OR AFFECTED AREA	Primary diversion points on the Rio Blanco, Little Navajo River, and Navajo River.		**WATERSHED REGION**	Rio Blanco, Navajo
SPONSOR OR CHAMPION	CPW			
PRINCIPLE PARTNER(S)	USBR, WEP, Chama Peak Land Alliance, San Juan Chama Watershed Partnership			
OPPORTUNITIES CONSTRAINTS CHALLENGES	The primary diversion structures of the San-Juan Chama Project are nearing their end of life. Opportunity exists for collaboration between local entities, state agencies and USBR on design concepts that may be incorporated into re-engineered diversion structures. These design concepts may help facilitate passage of native warm water fish and/or provide a means for supplying downstream river segments with a sediment supply commensurate to the modified hydrological regime. The need for continued seamless seasonal operation of SJ-Chama project projects may make reconstruction challenging due to compressed timeframes. USBR priorities for water delivery may create agency inertia that do not favor design concepts conducive to aquatic organism passage or sediment transport objectives.			
DEGREE RIPENESS	High		**TIMEFRAME**	1 – 3 years
ACTION TARGET	• Establish a process where USBR provides local stakeholders with regular updates on design considerations and engineering plans for the San Juan – Chama diversions • Selection of final engineering designs by USBR that meets the needs and expectations of the local community as they relate to aquatic organism passage and sediment transport around/through the San Juan – Chama project diversions.			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$0		$0	
SUGGESTED PERFORMANCE CRITERIA	• Passage rates for pit-tagged warm-water fish • Fish counts/observations in project conveyances • Bed sediment embeddedness and particle size distributions on stream reaches below diversion points			
CWCB METADATA	**PROJECT TYPE**	Storage/supply, Env/rec	**WATER DESTINATION**	Navajo River
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	Various	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

RIPARIAN AREA CONSERVATION EASEMENTS				PROJECT WEP-11
STRATEGY	Conserve high-quality and/or longitudinally contiguous riparian areas along the San Juan River from the confluence of the East Fork and West Fork to Pagosa Springs.			
NEEDS ADDRESSED	WB-5, WB-1, AN-2			
LOCATION OR AFFECTED AREA	San Juan River above the Town of Pagosa Springs		**WATERSHED REGION**	San Juan River
SPONSOR OR CHAMPION	RiversEdge West			
PRINCIPLE PARTNER(S)	Private landowners, CPW, TU, Archuleta County, WEP, Colorado Open Lands			
OPPORTUNITIES CONSTRAINTS CHALLENGES	Riparian zones upstream and downstream of town have experienced alteration, degradation, or removal over time from livestock grazing practices, land clearing, gravel mining, and more recently, suburban and urban development. Alteration may be so extensive and have occurred so long ago that, in many locations, riverside landowners may no longer realize which ecological functions and characteristics are missing. Fortunately, some sections of the river corridor still exhibit robust and healthy riparian zones. These areas may be at risk for development in the coming years and, if they are to be protected, action needs to be taken soon.			
DEGREE RIPENESS	Moderate		**TIMEFRAME**	2 – 10 years
ACTION TARGET	Secured conservation easements safeguarding at least 15 acres of high-quality riparian area against future development in the floodplain, removal of vegetation, or fill/removal of backwaters, sloughs, and other riverine features.			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$100,000 - $1,000,000		$10-50K for monitoring	
SUGGESTED PERFORMANCE CRITERIA	• Number of acres in river corridor protected under conservation easements			
CWCB METADATA	**PROJECT TYPE**	Env/rec	**WATER DESTINATION**	San Juan River
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	Various	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

PAGOSA HOT SPRINGS WETLANDS PROTECTIONS				PLAN WEP-12
STRATEGY	Conserve and manage the unique qualities of the hot springs wetlands in downtown Pagosa Springs.			
NEEDS ADDRESSED	WB-6			
LOCATION OR AFFECTED AREA	Pagosa Wetlands, downtown Pagosa		**WATERSHED REGION**	San Juan River
SPONSOR OR CHAMPION	Town of Pagosa Springs			
PRINCIPLE PARTNER(S)	Pagosa Wetlands Partners, Audobon, CPW			
OPPORTUNITIES CONSTRAINTS CHALLENGES	The hot springs occur on private lands and hot springs owners may face challenges balancing water needs to operate the business with water needed to sustain the functional wetland ecosystem. Ongoing functional public/private partnerships will be vital to achieving goals.			
DEGREE RIPENESS	Moderate		**TIMEFRAME**	1 – 3 years
ACTION TARGET	MOA or other formal agreement between the Town and the owner of the hot springs to ensure continued delivery of hot springs water to the wetlands that reflects the timing and quantity of historical deliveries.			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$5K for legal costs		$500 – 1000 / year	
SUGGESTED PERFORMANCE CRITERIA	• Monthly measured inflows of hot springs water			
CWCB METADATA	**PROJECT TYPE**	Env/rec	**WATER DESTINATION**	San Juan River
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	Various	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

BANDED PEAK RANCH HABITAT PROTECTION AND ENHANCEMENT				PLAN WEP-13
STRATEGY	Conserve aquatic habitat quality for San Juan Cutthroat Trout in tributaries to the Navajo River.			
NEEDS ADDRESSED	WB-7			
LOCATION OR AFFECTED AREA	Navajo River headwaters and tributary streams		**WATERSHED REGION**	Navajo River
SPONSOR OR CHAMPION	Banded Peak Ranch Partners			
PRINCIPLE PARTNER(S)	TU, USFS, CPW, CSU			
OPPORTUNITIES CONSTRAINTS CHALLENGES	Proposed work on Banded Peak Ranch targets multiple terrestrial and aquatic habitat types, offering opportunities to pursue a variety of funding sources for forest and stream restoration. Remaining native cutthroat trout populations in the southwest Rockies face numerous challenges and ongoing threats from competition with introduced salmonids, warming stream temperatures, catastrophic watershed-wide wildfires, requiring direct protective measures to ensure population enhancement and survival.			
DEGREE RIPENESS	High		**TIMEFRAME**	1 – 5 years
ACTION TARGET	• Map habitat quality and suitability for San Juan Cutthroat Trout in the upper Navajo River watershed • Conduct invasive species removals from high-quality habitat, construct fish barriers, and introduce native trout on 3 headwaters streams			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$?		$?	
SUGGESTED PERFORMANCE CRITERIA	• Total stream miles inhabited by San Juan Cutthroat • Cutthroat trout biomass on target streams • Counts of spawning age adults on target streams			
CWCB METADATA	**PROJECT TYPE**	Env/rec	**WATER DESTINATION**	Navajo River
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	Various	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

SAN JUAN-CHAMA PROJECT WATER BYPASS NOTIFICATION				PROCESS WEP-14
STRATEGY	Secure agreement with Bureau of Reclamation to provide notification of large bypass flows from the San Juan – Chama Project.			
NEEDS ADDRESSED	AG-1			
LOCATION OR AFFECTED AREA	Portions of the Rio Blanco, Little Navajo River and Navajo River below San Juan - Chama Project diversions		**WATERSHED REGION**	Rio Blanco, Navajo River
SPONSOR OR CHAMPION	CPW			
PRINCIPLE PARTNER(S)	Bureau of Reclamation, WEP			
OPPORTUNITIES CONSTRAINTS CHALLENGES	Water users in the lower Navajo River and Blanco River watersheds complain of non-notified bypasses of water from the San Juan Chama Project facilitates. These water and sediment releases can be problematic for downstream agricultural diversion systems. It is unclear whether all bypasses are problematic or only bypasses of certain magnitudes and at certain times of year. More information is needed from local water users. It is also unclear if the issues posed by the bypasses affect a majority of downstream users or a select few. In case of the latter, development of an automated phone notification system may be relatively easy to implement.			
DEGREE RIPENESS	Moderate		**TIMEFRAME**	1-3 years
ACTION TARGET	• Agreement with U.S. Bureau of Reclamation to provide notice of bypass flows to a list of water users on the lower Rio Blanco.			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$0		$0	
SUGGESTED PERFORMANCE CRITERIA	NA			
CWCB METADATA	**PROJECT TYPE**	Engagement and innovation	**WATER DESTINATION**	Rio Blanco
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	Various	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

RIO BLANCO CHANNEL STRUCTURES MAINTENANCE AND REPAIR				PROJECT WEP-15
STRATEGY	Maintain engineered channel features in the Rio Blanco near Highway 84 that were damaged by high flows in 2019.			
NEEDS ADDRESSED	WFH-2			
LOCATION OR AFFECTED AREA	Rio Blanco		**WATERSHED REGION**	Headwaters
SPONSOR OR CHAMPION	Rio Blanco Homeowners			
PRINCIPLE PARTNER(S)	TU, CPW			
OPPORTUNITIES CONSTRAINTS CHALLENGES	Local landowners requested assistance in repairing and maintaining channel structures on the Rio Blanco. Channel modifications in this area respond, in part to altered sediment and hydrological regime characteristics due to the San Juan – Chama Project diversions. In these flow/sediment regime contexts where flows and sediment supplies are regularly and significantly depleted but irregular peak flow events reflect a more natural condition, the longevity of human interventions in channel habitats may be short lived, requiring regular upkeep. Plans for rehabilitating damaged structures might include a consideration of the impacts from upstream wildfire and increased sediment delivery.			
DEGREE RIPENESS	High		**TIMEFRAME**	1 – 3 years
ACTION TARGET	• Complete engineering design for structure rehabilitation			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$?		$?	
SUGGESTED PERFORMANCE CRITERIA	NA			

CWCB METADATA				
	PROJECT TYPE	Env/Rec, Ag	**WATER DESTINATION**	San Juan River
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	Various	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

SAN JUAN GRAVEL PIT RESTORATION PILOT PROJECT				PROJECT WEP-16
STRATEGY	Enhance riparian characteristics of abandoned gravel pits along the San Juan River.			
NEEDS ADDRESSED	WB-1, WB-5, AN-2			
LOCATION OR AFFECTED AREA	San Juan River near Pagosa Springs		**WATERSHED REGION**	San Juan River
SPONSOR OR CHAMPION	RiversEdge West			
PRINCIPLE PARTNER(S)	CPW, TU, Archuleta County, NRCS, WEP			
OPPORTUNITIES CONSTRAINTS CHALLENGES	Floodplain and near-stream gravel pit restoration is a common issue on river/streams throughout the state, development of successful restoration practices may benefit local ecosystems as well as the larger community. Material removed from the channel at the San Juan-Chama project diversions may represent a viable source to fill an abandoned gravel pit located in San Juan River floodplain above Pagosa Springs. Partially fill the pit such that water depths are decreased, the width of the vegetated fringe around the open water area is increase and the area can be remediated to resemble a well-vegetated backwater slough or cutoff meander bend. Project design and development may face initial cost hurdles for engineering designs and significant transport costs for fill material. Removal of sediment from SJ-Chama project properties may require coalition-building to work within a multi-jurisdictional landowner and regulatory environment.			
DEGREE RIPENESS	Low		**TIMEFRAME**	5-10 years
ACTION TARGETS	• Pilot project filling abandoned gravel pit with alluvial material from off-site and restoring riparian characteristics of the floodplain.			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$300 – 500K		$10K for 5 years	
SUGGESTED PERFORMANCE CRITERIA	• Functional wetlands assessment metrics			

CWCB METADATA				
	PROJECT TYPE	Env/Rec	**WATER DESTINATION**	San Juan River
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	Various	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

LOWER MILL CREEK RESTORATION AND MONITORING				PROJECT WEP-17
STRATEGY	Enhance functional characteristics of lower Mill Creek			
NEEDS ADDRESSED	WB-7			
LOCATION OR AFFECTED AREA	Lower Mill Creek near Pagosa Springs		**WATERSHED REGION**	San Juan River
SPONSOR OR CHAMPION	?			
PRINCIPLE PARTNER(S)	CPW, Archuleta County, NRCS, WEP, local landowners			
OPPORTUNITIES CONSTRAINTS CHALLENGES	Legacy land uses and livestock practices have degraded riparian zones and channel habitat in Mill Creek. The stream flows through predominately private lands near Pagosa. Restoration work to improve degraded segments will require successful public/private partnerships. Opportunity exists to work with local landowners to install grazing exclosures around riparian areas and woody debris structures and/or beaver dam analogs in the stream channel above Highway 84. Opportunities for beaver dam analogs on reaches below Highway 84 may also be explored. Monitoring outcomes to understand impacts on groundwater elevations and the productivity of grasses, herbs and forbs on flow-lying areas adjacent to the channel will provide important information about the value of this type of project for both stream ecosystems and local ranchers.			
DEGREE RIPENESS	Moderate		**TIMEFRAME**	3 – 5 years
ACTION TARGET	• Implement a process-based restoration project on a minimum of ½ mile of lower Mill Creek			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$100-200K		$5-10K/year for 5 years	
SUGGESTED PERFORMANCE CRITERIA	• Linear feet or acres of restored streambank and restoration zones. • Aquatic life (macroinvertebrate and fisheries) index scores • Functional wetland assessment			

CWCB METADATA				
	PROJECT TYPE	Env/Rec	**WATER DESTINATION**	San Juan River
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	Various	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

FOURMILE CREEK RESTORATION				PROJECT WEP-18
STRATEGY	Enhance functional characteristics of Fourmile Creek			
NEEDS ADDRESSED	WB-7			
LOCATION OR AFFECTED AREA	Lower Fourmile Creek near Pagosa Springs		**WATERSHED REGION**	San Juan River
SPONSOR OR CHAMPION	?			
PRINCIPLE PARTNER(S)	CPW, Archuleta County, NRCS, WEP, local landowners			
OPPORTUNITIES CONSTRAINTS CHALLENGES	Opportunity exists to work with local landowners to install woody debris structures and/or beaver dam analogs in the lower sections of the creek. Monitoring outcomes to understand impacts on groundwater elevations and the productivity of grasses, herbs and forbs on flow-lying areas adjacent to the channel will provide important information about the value of this type of project for both stream ecosystems and local ranchers.			
DEGREE RIPENESS	Moderate		**TIMEFRAME**	3 – 5 years
ACTION TARGET	• Implement a process-based restoration project on a 300-1000 ft reach of Fourmile Creek			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$100-200K		$5-10K/year for 5 years	
SUGGESTED PERFORMANCE CRITERIA	• Linear feet or acres of restored streambank and restoration zones. • Aquatic life (macroinvertebrate and fisheries) index scores • Functional wetland assessment			
CWCB METADATA	**PROJECT TYPE**	Env/Rec	**WATER DESTINATION**	San Juan River
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	Various	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

MCCABE CREEK CHANNEL AND RIPARIAN REHABILITATION				PROJECT WEP-19
STRATEGY	Enhance functional characteristics of McCabe Creek			
NEEDS ADDRESSED	WB-7			
LOCATION OR AFFECTED AREA	McCabe Creek near Pagosa Springs		**WATERSHED REGION**	San Juan River
SPONSOR OR CHAMPION	?			
PRINCIPLE PARTNER(S)	CPW, Archuleta County, NRCS, WEP, Town of Pagosa Springs, local landowners			
OPPORTUNITIES CONSTRAINTS CHALLENGES	Legacy land uses and livestock practices have degraded riparian zones and channel habitat in McCabe Creek. The stream flows through predominately private lands near Pagosa. Restoration work to improve degraded segments will require successful public/private partnerships. Opportunity exists to work with local landowners to install grazing exclosures around riparian areas and woody debris structures and/or beaver dam analogs in the stream channel. Monitoring outcomes to understand impacts on groundwater elevations and the productivity of grasses, herbs and forbs on flow-lying areas adjacent to the channel will provide important information about the value of this type of project for both stream ecosystems and local ranchers.			
DEGREE RIPENESS	Moderate		**TIMEFRAME**	3 – 5 years
ACTION TARGET	• Implement a process-based restoration project on a minimum of ½ mile of McCabe Creek			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$100-200K		$5-10K/year for 5 years	
SUGGESTED PERFORMANCE CRITERIA	• Linear feet or acres of restored streambank and restoration zones. • Aquatic life (macroinvertebrate and fisheries) index scores • Functional wetland assessment			

CWCB METADATA				
	PROJECT TYPE	Env/Rec	**WATER DESTINATION**	San Juan River
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	Various	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

AGRICULTURAL INFRASTRUCTURE UPGRADES				PROJECT WEP-20
STRATEGY	Repair and/or replace aging infrastructure in order to improve water delivery/application for producers.			
OBJECTIVES ADDRESSED	AG-2			
LOCATION OR AFFECTED AREA	Active surface water diversion and delivery systems	**WATERSHED REGION**	San Juan, Blanco	
SPONSOR OR CHAMPION	San Juan Conservation District			
PRINCIPLE PARTNER(S)	NRCS, landowners, WEP			
OPPORTUNITIES CONSTRAINTS CHALLENGES	Infrastructure upgrades should be informed by assessments completed by SJCD/WEP in both watersheds in 2020/2021. SJCD estimated costs for ditch and on-farm improvements within the San Juan ($5,470,210-ditches, $3,332,239-on farm) and Blanco watersheds ($791,387-on farm) for a total of over $9 million in potential upgrades/improvements of diversion and irrigation infrastructure. Upgrades that allow for multi-beneficial improvements should be considered (reduction of O&M, fish passage, sediment transport). Actual project implementation is highly dependent on landowner interest and availability of cost-share or grant funding.			
DEGREE RIPENESS	Medium	**TIME FRAME**	5 – 20 years	
ACTION TARGET	• Implement 20% of the projects identified in agricultural infrastructure needs assessments completed in each watershed			
ESTIMATED COSTS	**CAPITAL**	**OPERATION/MAINTENANCE**		
	$9,593,836	$0		
SUGGESTED PERFORMANCE CRITERIA	• Post project surveys with water users to assess the effectiveness of the infrastructure improvements at reducing maintenance costs/burdens			

CWCB METADATA				
	PROJECT TYPE	Ag	**WATER DESTINATION**	San Juan River
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	Various	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

SAN JUAN RIVER WATER TEMPERATURE MONITORING				PROJECT WEP-21
STRATEGY	Increase understanding of spatial and temporal patterns in San Juan River water temperatures			
OBJECTIVES ADDRESSED	WB-1, WB-7			
LOCATION OR AFFECTED AREA	San Juan River through Pagosa Springs		**WATERSHED REGION**	San Juan
SPONSOR OR CHAMPION	Pagosa Springs High School?			
PRINCIPLE PARTNER(S)	WEP			
OPPORTUNITIES CONSTRAINTS CHALLENGES	Limited data collection on the San Juan River in Pagosa Springs indicates that water temperatures at some locations may exceed lethal limits for trout. Opportunity exists to collect a robust set of water temperature data, bracketing the outflows from the hot springs and inflows from McCabe Creek in order to determine their relative effects on local water temperatures and on conditions downstream. A minimum water temperature monitoring network will include real-time monitoring stations on the San Juan River at the Hwy 160 crossing near the River Center, at the USGS gauge near Town Park, above the confluence with McCabe Creek, at the Apache Street Bridge, and at Yamaguchi Park. All stations should be installed sufficiently downstream from inflow water sources to ensure a well-mixed condition.			
DEGREE RIPENESS	High		**TIME FRAME**	1 – 3 years
ACTION TARGET	• Fully deployed real-time water temperature monitoring network collecting data at a minimum of six locations between the River Center and Yamaguchi Park over a period of 2-5 years.			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$2,000		$500/year for 5 years	
SUGGESTED PERFORMANCE CRITERIA	NA			

CWCB METADATA				
	PROJECT TYPE	Env/Rec	**WATER DESTINATION**	San Juan River
	BASIN	Southwest	**WATER DISTRICT**	29, 77
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	N/A
	WATER SOURCE	Various	**ESTIMATED CAPACITY/UNITS**	N/A

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

UPPER FOURMILE CREEK WILDFIRE RISK REDUCTION				PROJECT WEP-22
STRATEGY	Reduce risks associated with wildfire to municipal water supply infrastructure			
NEEDS ADDRESSED	WF-2, DW-2			
LOCATION OR AFFECTED AREA	Fourmile watershed (bound by Fourmile, Plumtaw, Jackson Mountain)		**WATERSHED REGION**	San Juan
SPONSOR OR CHAMPION	San Juan Headwaters Forest Health Partnership			
PRINCIPLE PARTNER(S)	CSFS, USFS, NRCS, SJWCD, PAWSD, Archuleta County			
OPPORTUNITIES CONSTRAINTS CHALLENGES	The SJHFHP has identified the Fourmile drainage as both a high risk and high value area and a target for forest management activities that protect water infrastructure and the WUI. The drainage connects to the Pagosa Lakes, which store municipal drinking water and offer recreational opportunities. The Dutton ditch/pipeline, the primary water delivery source for Hatcher reservoir, and the Snowball pipeline occupy this landscape. This large landscape and the ecosystem services it provides could be significantly impacted by a relatively small fire. Mixed conifer and ponderosa pine forests offer potential forest products of value and opportunities to build local capacity for forest management activities. Cross jurisdictional forest management work has already occurred and continues to be planned in this drainage. Opportunities to leverage funds and implementation scenarios to increase the pace and scale of work exist and are amplified by the fact that the Fourmile landscape lies within the Southwest Colorado CFLRP boundary. This area is also visible and well-known, so it provides unique education opportunities for target decision makers, stakeholders, and the public. Challenges may lay in finding public/private funding sources for projects on private lands, properly planning and leveraging various mechanisms for work, and telling the story of how cross boundary work is being planned, successfully implemented, and monitored.			
DEGREE RIPENESS	High		**TIMEFRAME**	Current, ongoing
ACTION TARGETS	• Coordinate partnerships and funding to leverage cross-boundary opportunities			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	<$....>		<$....>	
SUGGESTED PERFORMANCE CRITERIA	• Number of different forest treatments implemented • Total acreage included in treatment/control study designs			

CWCB METADATA				
	PROJECT TYPE	Env/rec, Ag, Storage/supply	**WATER DESTINATION**	
	BASIN	Southwest	**WATER DISTRICT**	
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	
	WATER SOURCE	Various	**ESTIMATED CAPACITY/UNITS**	

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

DUTTON DITCH ENCLOSURE				PROJECT WEP-23
STRATEGY	Increase drought resiliency for municipal water supply infrastructure.			
OBJECTIVES ADDRESSED	DW-2, WF-2, ancillary AG-2			
LOCATION OR AFFECTED AREA	Dutton Ditch		**WATERSHED REGION**	San Juan
SPONSOR OR CHAMPION	PAWSD			
PRINCIPLE PARTNER(S)	San Juan Water Conservancy District, Fourmile Ditch water rights owners, Dutton Ranch			
OPPORTUNITIES CONSTRAINTS CHALLENGES	Infrastructure assessment specific to this pipeline will need to be completed and/or located. Enclosing this pipeline fully could help protect water supply and make infrastructure more resilient in the event of a fire and/or drought. A fully enclosed pipeline will have different maintenance requirements than the current infrastructure. Feasibility and cost still need to be explored. Opportunity may exist for bypassing additional environmental water in Fourmile Creek if conveyance efficiencies in the ditch system are increased. Bypassed water would need to be administered past downstream senior water rights.			
DEGREE RIPENESS	Moderate		**TIME FRAME**	2 – 5 years
ACTION TARGETS	• Pipe the full length of the Dutton ditch to protect municipal water flows from the impacts of potential wildfire and enable pumping water from Stevens Reservoir to Hatcher Reservoir during drought periods. • Bypass additional environmental water past the Dutton Ditch diversion point			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$1.5 million		$?	
SUGGESTED PERFORMANCE CRITERIA	• Total miles of piped ditch			

CWCB METADATA				
	PROJECT TYPE	Ag, Storage/supply	**WATER DESTINATION**	San Juan River
	BASIN	Southwest	**WATER DISTRICT**	
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	
	WATER SOURCE		**ESTIMATED CAPACITY/UNITS**	

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

SNOWBALL WATER TREATMENT PLANT REPLACEMENT					PROJECT WEP-24
STRATEGY	Upgrade municipal water supply infrastructure.				
OBJECTIVES ADDRESSED	DW-2				
LOCATION OR AFFECTED AREA	West Fork San Juan River		**WATERSHED REGION**	San Juan	
SPONSOR OR CHAMPION	PAWSD				
PRINCIPLE PARTNER(S)	WEP				
OPPORTUNITIES CONSTRAINTS CHALLENGES	Treatment plant receives water from a 5 cfs water right on the West Fork of the San Juan River. New plant will use microfiltration and a pre-treatment process that should be more robust to impacts on water supply quality associated with historical wildfires and increase capacity for growing population of water users.				
DEGREE RIPENESS	High		**TIME FRAME**	2 – 5 years	
ACTION TARGETS	• Secure grant funding • Complete construction of the treatment plant				
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**		
	$25 million		NA		
SUGGESTED PERFORMANCE CRITERIA	• Treated gallons per year				
CWCB METADATA	**PROJECT TYPE**	Storage/supply	**WATER DESTINATION**	San Juan River	
	BASIN	Southwest	**WATER DISTRICT**		
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**		
	WATER SOURCE		**ESTIMATED CAPACITY/UNITS**		

Scan the QR Code at right with your smartphone camera to provide feedback to rank this action.

PARK DITCH PIPING				PROJECT WEP-25
STRATEGY	Increase conveyance efficiencies and reduce operations & maintenance (O&M) costs associated with the Park Ditch			
OBJECTIVES ADDRESSED	AG-1, AG-2			
LOCATION OR AFFECTED AREA	San Juan River near Pagosa Springs		**WATERSHED REGION**	San Juan
SPONSOR OR CHAMPION	Park Ditch			
PRINCIPLE PARTNER(S)	San Juan Conservation District, WEP			
OPPORTUNITIES CONSTRAINTS CHALLENGES	Replacing open portions of the Park Ditch with pipe will reduce maintenance costs, ease operations, and reduce risks to infrastructure located below the ditch.			
DEGREE RIPENESS	High		**TIME FRAME**	2 – 5 years
ACTION TARGETS	• Secure grant funding • Complete construction of 2,500 ft of 5' pipeline and concrete headwalls installed above the High Country Lodge • Complete construction of a pipeline and diversion box for the Tierra Del Oro subdivision			
ESTIMATED COSTS	**CAPITAL**		**OPERATION/MAINTENANCE**	
	$900,000		NA	
SUGGESTED PERFORMANCE CRITERIA	• Feet or miles of pipeline			
CWCB METADATA	**PROJECT TYPE**	Ag, Storage/supply	**WATER DESTINATION**	San Juan River
	BASIN	Southwest	**WATER DISTRICT**	
	MULTIPLE NEEDS	No	**ESTIMATED WATER YIELD/UNITS**	
	WATER SOURCE		**ESTIMATED CAPACITY/UNITS**	