

Colorado River Basin meeting minutes

1. January 25, 2021, CBRT Minutes.

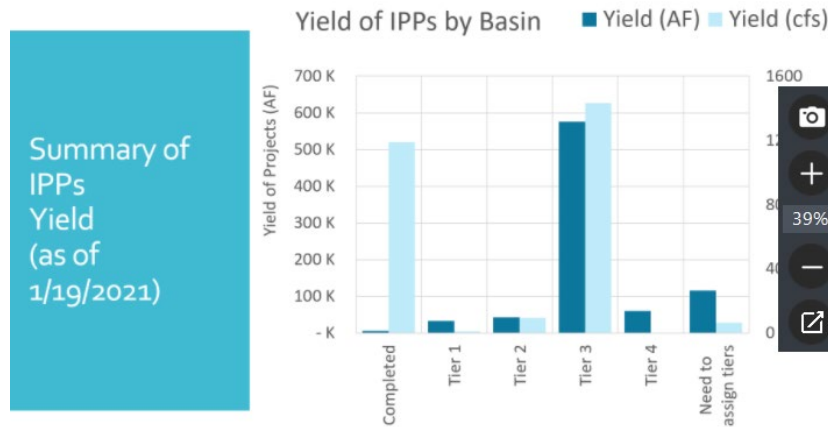
1. Reporter: These minutes were prepared by Ken Ransford, Esq., CPA, 970-927-1200, ken@kenransford.com.
2. **CBRT Members Present:** Paul Bruchez, Stan Cazier, Angie Fowler, Karl Hanlon, Kirsten Kurath, Merritt Linke, Holly Loff, April Long, Ed Moyer, Ken Ransford, Jason Turner, Richard Vangytenbeek, Peggy Bailey, David Graf, Kathy Kitzman, Maria Pastore, Rick McNeill, Randi Kim
3. **Guests:** Beth Albrecht, Shawn Bruckman Eagle County Conservation District, Abby Burk Audubon Society, Ginny Harrington, Bailey Leppek SGM, Matt Lindburg PE Brown & Caldwell, Ken Neubecker, Katie Randall, Sam Stein CWCB, Ted White
4. **Snow Report, Dave Kanzer, Colorado River district.** This is the **driest period ever recorded**. April to September 2020 inflow into Lake Powell is the driest period on record since record keeping began over 100 years ago, a trend that kept up in October, November, and December.
 - a. **Fall 2019 followed the very wet Snocopalypse winter in the spring of 2019.**
 - b. **The Upper Colorado Basin hydrograph** resembles 2018, a very dry year. The story stays the same as you go south to the Gunnison Basin, or to Lake Powell for the entire Colorado River Basin. A storm associated with an “atmospheric river” is scheduled to hit California on January 26; it hopefully will reach Colorado, and particularly southern Colorado.
 - c. **Blue Mesa Reservoir** is the largest reservoir in Colorado, and it is projected to **only fill 70% in 2021**.
 - d. **Lake Powell will be 40% of average and Lake Mead only 35% of capacity, the lowest levels ever seen.** We are in the bottom 10% percentile. Reservoir operations will change and releases may decrease this year. Lake Powell will release 8.23 MAF in water year 2021a ending September 30, 2021. Lake Powell release will likely drop to 7.49 MAF next year.
 - e. **Lake Powell may drop below 3,525’ elevation, only 35’ above the minimum power level of 3,490’ elevation.** The Upper Basin may go into drought contingency planning, and release water out of Flaming Gorge to supplement Lake Powell deliveries. We could be in the **first tier of shortage conditions**, which could **reduce releases from Lake Mead by 600,000 acre-feet** to the Lower Basin States. Arizona will suffer nearly all the shortfall from reduced deliveries.
 - f. **The forecast is for warm and dry weather, and reservoirs are projected to receive only 60-70% of normal inflow.**

5. **Conserved Consumptive Use Report by Paul Bruchez** . Perry Cabot will report on the Upper Colorado River reduced irrigation program at the March Roundtable meeting. They consider the **project a total success**. Phase 2 will last through 2024, and involve more data collection. They see need for additional changes: (1) different treatment techniques to enhance crop recovery; (2) reduce acreage receiving less irrigation; (3) get more water on land in 2021 to restore the lands; (4) do more treatment in 2023 and 2024. Goals: Determine multi-use strategies for conserved consumptive use. By February 15, they'll ask for **\$150,000 CWCB grant for Phase 2; Phase 1 has cost \$650,000** to date. Phase 1 was a success.
 - a. **This is not a Demand Management project.** It is a study of crop water consumption at higher altitude.
 - b. **Will there be any repeat users?** No, because 2020 was so dry, it is a bad idea to reduce crop watering to the same fields in back-to-back years. They can take 3-5 acres out of a 300-acre meadow and that will be adequate for the study.
 - c. **Treatment** to restore fields includes different techniques of fertilizing, over-seeding, and aeration. They might plant "experimental" forage cover crops. This will be addressed in upcoming meetings with soil health experts. **All tests will be done on smaller acreage.**
 - d. **Ginny Harrington of Holy Cross Cattlemen asked whether** there is a riparian or wildlife habitat component to this study, and whether that being overlooked? Bruchez assured her that it is being considered, as Abby Burke of the Audubon Society is studying birds at the sites and Seth Mason of Lotic Hydrological is evaluating riparian corridors.
6. **CWCB report.** Sam Stein of the CWCB reported that the CWCB is interested on recommendations for demand management projects.
7. **Matt Lindburg, Brown & Caldwell.** Projects in Tier 3 can still be funded.
 - a. **Tier 1:** Ready to launch
 - b. **Tier 2:** Supported by roundtable and almost ready to move forward, but likely needs more data.
 - c. **Tier3:** Developing, but still need to flesh out details.
 - d. **Tier 4:** Considering the project, no clear proponent.
 - e. **Forest Health emphasized.** This was identified in CWCB focus groups in June 2020. Matt says the BIP could include a goal to support forest health improvements or to study efforts by basin stakeholders (which sets a vision for considering future grant applications); consider how forest health could be addressed when identifying areas that need stream management plans; perhaps being a resource for connecting small watershed groups with larger organizations

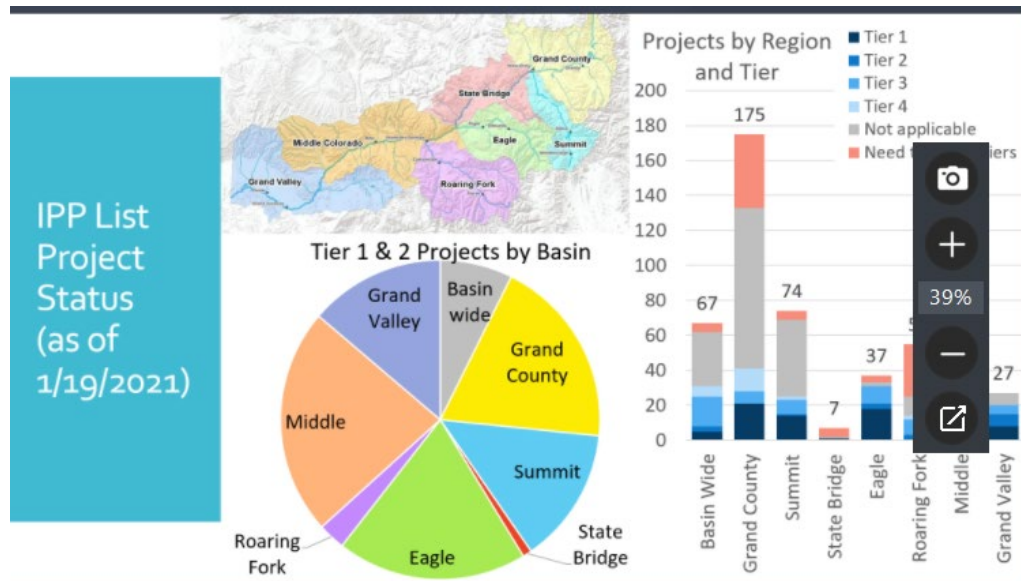
(like USFS or larger collaboratives focused on forest health); being a forum for sharing information on forest health activities in the basin (example - the Southwest BRT recently hosted a webinar on forest health science and activities).

8. **BIP Update Angie Fowler and Bailey Leppek.**

- a. Goal: identify 160 Tier 1 projects statewide, 20 from each basin. A secondary goal is to identify 200 additional projects.
- b. The Colorado basin roundtable estimates needs for the following **additional yields** (water to be taken out of rivers and transferred for human use).



- c. The projects are spread evenly throughout the Upper Colorado River Basin.



- 9. **Mely Whiting, Colorado Trout Unlimited.** Mely says it is important to **include all Colorado River Compact Agreement water demands** and mitigation agreements in the BIP update. These include the projects listed below; this is an abbreviated list compared

to what was included in the 2015 BIP. Stan Cazier emphasized it is important to include all projects identified in the 2015 BIP plan and in the Colorado River Compact Agreement, the agreement between over 30 Front Range and West slope water parties to permit the Moffatt Firming and Windy Gap Firming projects to proceed.

| Grand County IPPs Tier 1 and 2 (no Tier 2 at this time) | Yield | | Cost | Tier |
|--|-------|-------|-------------------|--------|
| Big Lake Ditch Study Implementation | | | | Tier 1 |
| Matheson Reservoir Restoration | 1,074 | AF | Not estimated yet | Tier 1 |
| Little King Ranch Reservoir restoration | 900 | AF | Not estimated yet | Tier 1 |
| Grand County W&S Reservoirs Nos. 1 & 2 | 74 | AF | \$ 4,000,000 | Tier 1 |
| ILVK Upper Colorado River Irrigation and Restoration Project (Phase 1) | 14 | miles | | Tier 1 |
| Stream Management Plan Update | NA | | | Tier 1 |
| Colorado River Cooperative Agreement Implementation | NA | | | Tier 1 |
| CRCA West Slope Water Supply Enhancement | NA | | | Tier 1 |
| CRCA Water Quality Improvement Projects | NA | | | Tier 1 |
| CRCA Water Supply Infrastructure Projects | NA | | | Tier 1 |
| CRCA Habitat Improvement Projects | NA | | | Tier 1 |
| CRCA Public Access | NA | | | Tier 1 |
| Grand County Mitigation and Enhancement Coordination Plan (MECP) | NA | | | Tier 1 |
| Moffat Mitigation Requirements | NA | | | Tier 1 |
| Windy Gap Firming Project 1041 & IGA | NA | | | Tier 1 |
| Windy Gap Firming Project IGA Key Provisions | NA | | | Tier 1 |
| Colorado River Connectivity Channel | NA | | | Tier 1 |
| Learning by Doing (LBD) program | NA | | | Tier 1 |
| Cabin Creek Fish Passage Project | 3.6 | miles | \$ 200,000 | Tier 1 |
| Kaibab Park Stream Improvement Project | NA | | \$ 300,000 | Tier 1 |
| East Troublesome Fire Restoration and Watershed Protection Projects | NA | | | Tier 1 |

10. Summit County projects, Richard Vangytenbeek. Summit County has 74 projects.

| Summit IPPs Tier 1 and 2 | Yield | | Cost | Tier |
|---|-------|----|----------------|--------|
| CRCA Article IV.B. East Slope Storage of Blue River Water | | | | Tier 1 |
| Continental-Hoosier System Project | 4,000 | AF | \$ 140,000,000 | Tier 2 |
| Clinton Reservoir 1st Enlargement and Refill (06CW252) | 500 | AF | | 1 |
| Town of Breckenridge outside irrigation minimization plan (well mitigation) | | | \$ | 1 |
| Blue Valley Ranch fishery restoration efforts on the lower Blue River (a private proponent for the Blue River) | - | AF | \$ 2,457, | 1 |
| Green Mountain Reservoir controlled flow fluctuations | - | AF | \$ | 1 |
| Aquatic habitat study and restoration project on Blue River above Dillon | - | AF | \$ 16,000, | 1 |
| Swan River Restoration | - | AF | \$ 10,000, | 1 |
| Non-potable water reuse on Summit County golf courses | | | | 1 |
| Goose Pasture Tarn/Blue River watershed protection (Town of Breckenridge; wildfire protection and tree cutting) | | | \$ 40,000 (20 | 1 |
| Drilling deeper wells (Buffalo Mountain Metropolitan District) | TBD | | \$ 350, | 1 |
| Direct intake from Dillon Reservoir (East Dillon Water District) | | | | 1 |
| Forest Health/Watershed Improvements | NA | | \$ 500,000,000 | Tier 1 |
| Town of Dillon Salt Lick Gulch Pipeline/Siphon | | | \$ 750,000 | Tier 1 |
| Dillon Marina Shoreline Stabilization and Wharf Structure Improvements | | | \$ 4,000,000 | Tier 1 |

11. State Bridge has identified 7 IPP projects. The only Tier 1 project is obtaining Wild and Scenic Designation for Deep Creek.

12. Eagle County, Holly Loff. Eagle County has 37 projects identified; 64% are being implemented or planned. All but 3 or 4 have been assigned.

| Eagle IPPs Tier 1 and 2 | Yield | | Cost | Tier |
|---|---------|---------|----------------|--------|
| Eagle River Memorandum of Understanding Joint Use Water Project (ERMOU) | 33,000 | AF/year | \$30,000/AF | Tier 2 |
| Gore Creek Strategic Action Plan implementation | NA | | \$ 8,500,000 | Tier 1 |
| Water Quality Action Planning | NA | | \$ 100,000 | Tier 1 |
| Eagle River Community Water Plan completion/implementation | NA | | \$ 453,000 | Tier 1 |
| Weed Warriors program | NA | | \$ 10,000 | Tier 1 |
| Hwy 24/Minturn stormwater mitigation | NA | | \$ 12,000 | 1 |
| Conduct Eagle & Colorado River Asset Inventory Phase II | NA | | \$ 75,000 | 2 |
| Implement Projects Identified in Eagle & Colorado River Asset Inventory Phase I | Unknown | | Unknown | 1 |
| Brush Creek stream/riparian restoration needs assessment | - | AF | \$ 200,000 | 1 |
| Sweetwater Lake conservation | - | AF | \$ 9,500,000 | 1 |
| Town of Eagle Water Efficiency Plan implementation | NA | | \$ 125,000 | 1 |
| Town of Eagle Source Water Protection Plan identified BMP implementation | NA | | \$ 10,000,000 | 1 |
| Vail Pass Auxiliary Lane project | - | AF | \$ 700,000,000 | 2 |
| ERWSD/UERWA Service Area Source Water Protection Plan | NA | | \$ 23,750 | 1 |
| Minturn Tank construction | | | \$ 1,670,000 | 1 |
| Maloit Park Tank construction | | | \$ 900,000 | 1 |
| Leak detection system installation | | | \$ 50,000 | 1 |
| Water Meter Replacement Program | | | \$ 250,000 | 1 |
| New well field & pipeline | | | \$ 5,220,000 | 1 |
| Lower Basin Water Treatment Plant | | | \$ 14,400,000 | Tier 1 |
| Cemetery Water Tank replacement/expansion | | | \$ 2,400,000 | Tier 1 |
| Eagle River Water Festival | - | AF | \$20,000/year | Tier 1 |
| Water Policy program | - | AF | \$10,000/year | Tier 2 |
| Piping of Nottingham-Pouder Ditch | 4 | cfs | \$ 600,000 | Tier 1 |
| Qualified Water Efficiency Landscaper (QWEL) Certification | NA | | \$ 30,000 | Tier 1 |
| ERWC community outreach programs | NA | | \$ 20,000 | Tier 1 |

13. Roaring Fork IPP list has 55 projects identified, contact April Long with questions.

| Roaring Fork IPPs Tier 1 (none at this time) and 2 | Yield | | Cost | Tier |
|---|-------|----|------------|--------|
| Martin Reservoir (Fourmile Creek): Martin Reservoir Alt 4 and/or Alt 3 expansion study | 227 | AF | \$ 692,000 | Tier 2 |
| Crystal River Augmentation Plan Feasibility Study | NA | | \$ 100,000 | 2 |
| Crystal River Augmentation Plan Implementation /Construction | 100 | AF | TBD | 2 |

14. Middle Colorado IPP List. 98 projects have been identified as IPPs. See Laurie Rink for questions. Paula Stepp has been hired to serve as Executive Director of the Middle Colorado Watershed Council.

| Middle Colorado IPPs Tier 1 and 2 | Yield | | Cost | Tier |
|---|-------|-----|---------------|--------|
| On-Farm Treatment for Conservation Practices Study | N/A | | | Tier 2 |
| Enhance conservation easement incentives to prevent agricultural water from being sold for diversion or other uses. | N/A | | | Tier 1 |
| Shoshone Operations - Sediment Flushing Protocols | N/A | | \$ - | Tier 1 |
| Grass Valley Canal Improvements | 6 | cfs | \$ 3,209,000 | Tier 1 |
| Collaborative post-fire watershed management | N/A | N/A | \$ 10,480,000 | 1 |
| Reconfigure barriers for fish passage on tributaries | N/A | | \$ 2,925,000 | 2 |
| Install fish screens to minimize entrainment | N/A | | \$ 1,040,000 | 2 |
| Roan Creek Barrier | N/A | | \$ 200,000 | 1 |
| Educational Signage About Nonnative Transport | N/A | | \$ 31,250 | 2 |
| Participation in flow management forums | N/A | | \$ 15,000 | 1 |
| Support renewal of upper Colorado river endangered fish recovery program | N/A | | \$ 3,000 | 1 |
| Best practices for gravel pit reclamation | N/A | | \$ 25,000 | 1 |
| Landowner outreach for fishery management best practices | N/A | | \$ 30,000 | 1 |
| Citizen science program to track invasive species | N/A | | \$ 17,000 | 1 |
| Implement water quality monitoring strategy | N/A | | \$ 470,000 | 1 |
| Riparian restoration and invasive species control | N/A | | \$ 500,000 | 2 |
| Interpretive education at river stop | N/A | | \$ 100,000 | 1 |
| Securing Shoshone power plant flows | TBD | | | 1 |
| Targeted outreach for salinity control | N/A | | \$ 5,000 | Tier 2 |
| Best management practices for floodplain uses | N/A | | \$ 40,000 | Tier 1 |
| Educational programming to protect local water resources | N/A | | \$ 50,000 | Tier 2 |
| Develop and distribute recreational river guide | N/A | | \$ 24,000 | Tier 1 |
| Improvements at Silt boat ramp at Island Park | N/A | | \$ 275,000 | Tier 2 |
| River access facilities improvements | N/A | | \$ 165,000 | Tier 1 |
| Increase river camping opportunities | N/A | | \$ 5,000 | Tier 1 |

15. Grand Valley IPP List, Kirsten Kurath, has identified 27 projects, of which 15 are Tier 1 and Tier 2 projects. Many of the major projects involve Roller Dam improvements in Debeque Canyon upstream of Grand Junction.

| Grand Valley IPPs Tier 1 and 2 | Yield | Cost | Tier |
|---|-----------|---------------|--------|
| Kendall Reservoir Restoration Project | 87 AF | \$ 150,000 | Tier 1 |
| Monument Reservoir No. 1 Enlargement | 5,284 AF | \$ 37,000,000 | Tier 2 |
| Efficiency Improvements to Orchard Mesa Irrigation District (OMID) System | 17,000 AF | | Tier 1 |
| Grand Valley Diversion Dam (Roller Dam) Improvements. Yield and capacity reported for umbrella project (CO-2015-0086). Costs and funding reported for each phase (A-H). | 4,000 AF | See A-H | |
| Grand Valley Roller Dam & Canyon Electric Upgrades (Part 2) | - | \$ 448,000 | |
| Grand Valley Roller Dam & Canyon Headworks Inc. Transition | - | \$ 4,500,000 | |
| Grand Valley Roller Dam & Canyon Roller Tracks Concrete Rehabilitation | - | \$ 1,500,000 | |
| Grand Valley Roller Dam & Canyon Station 22 Emergency Spillway | - | \$ 1,000,000 | |
| Comprehensive Grand Valley canal lining: Government Highline Canal | 36 cfs | \$ 25,000,000 | |
| Comprehensive Grand Valley canal lining: Grand Valley Canal | 26 cfs | \$ 13,377,000 | |
| Comprehensive Grand Valley canal lining: Orchard Mesa Canal | 23 cfs | \$ 45,000,000 | |
| Decision Support System for Upper Colorado River Basins | NA | | Tier 1 |
| Grand Valley Power Plant Replacement | 10,000 AF | \$ 9,258,000 | Tier 1 |
| Colorado River Corridor Plan, Grand Valley | NA NA | \$ 115,000 | Tier 1 |
| Orchard Mesa Check Improvements | 10 cfs | \$ 600,000 | Tier 2 |

16. Angie summarized CBRT Tier projects.

Basinwide

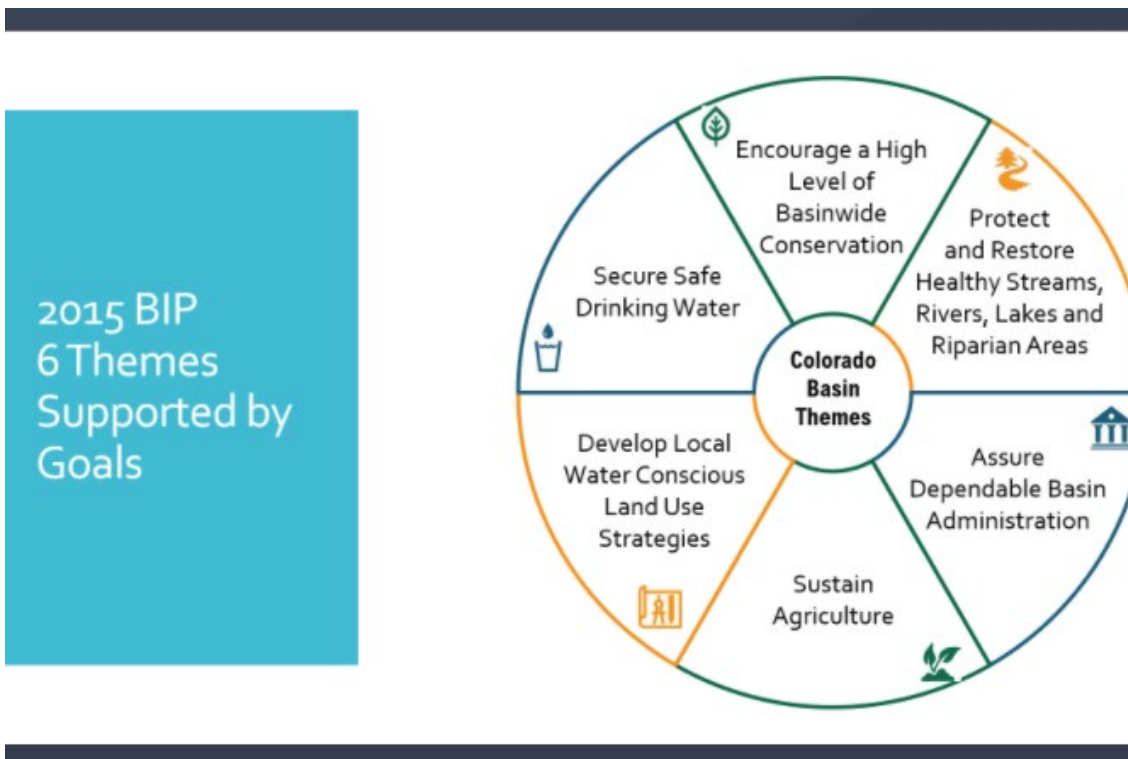
| Status | Number of Projects Basinwide |
|--------------|------------------------------|
| Implementing | 9 |
| Planned | 2 |
| Concept | 23 |
| Completed | 1 |
| Not Pursuing | 30 |
| Not Assigned | 2 |
| Total | 67 |

| Tier | Number of Projects Basinwide |
|----------------|------------------------------|
| Tier 1 | 5 |
| Tier 2 | 3 |
| Tier 3 | 17 |
| Tier 4 | 6 |
| Not applicable | 31 |
| Need to assign | 5 |
| Total | 67 |

17. Summary of projects. The Upper Colorado Alternative Management Plan listed below is a second Wild and Scenic project, distinct from the State Bridge Wild and Scenic River project in Deep Creek.

| Basinwide IPPs Tier 1 and 2 | Yield | Cost | Tier |
|--|-------|-----------|--------|
| Colorado River Compact Water Bank | ? AF | | Tier 2 |
| Lower Basin Compact Call Administration Study | NA | | |
| Shoshone Hydro Electric Plant (West Slope West Slope Acquisition & Control of Shoshone Assets) | NA | | |
| Shoshone Historical Operations Protocol (ShOP) | NA | | |
| Upper Colorado Wild & Scenic Alternative Management Plan implementation | NA | \$ 170,0 | |
| Model Proposed Transmountain Diversion Projects | NA | \$ 10,0 | |
| Cross-basin Forest Health Analysis | NA | \$ 10,000 | Tier 1 |

18. Themes and Goals for the 2021 BIP Update.



19. Feedback on goal to protect and restore healthy rivers. Baily Leppek presented redlines with recommended changes to the 6 goals set forth in the 2015 BIP.

Feedback / Input

Goals for
Protect and
Restore Healthy
Streams, Rivers,
Lakes and
Riparian Areas



FEEDBACK ON GOALS

- This is where fire recovery could be mentioned
- Is recreation well enough represented here?
- Ranching and Ag should/can/does play a part in restoring healthy str
Need to recognize interrelationship between Rec/Environment and
- How do the first two goals communicate ("Protect and rehabilitate..
"Define ...")? Isn't the latter a necessary step to the former?
- Reduction in funding match requirements for non-profits.
- A) ~~Protect and rehabilitate healthy rivers, streams, lakes and riparian~~
→ **Understand, protect, maintain and restore watershed functions to support healthy and self-sustaining aquatic and riparian ecosystems the species that depend on them.**
- B) Define water quality needs, **understand** and at-risk water bodies, **resolve impairments that affect important uses.**
- C) Preserve high **Support and provide** for quality recreational river and stream reaches **recreational opportunities** with **adequate access and** appropriate flows.
- Need to address private and public pressures regarding access
- D) Good as is.

20. Redlined changes to the goals are set forth below. **Ken Ransford recommended adding an “adaptive management” goal** so we can respond to low water levels or increased water temperatures. Angie said there might be another place in the document to include this.

2021 GOALS

- 

A. **Understand, protect, maintain and restore watershed functions to support healthy and self-sustaining aquatic and riparian ecosystems and the species that depend on them.**
- 

B. Define water quality needs, **understand** and at-risk water bodies, **and resolve impairments that affect important uses.**
- 

C. Preserve high **Support and provide** for quality recreational river and stream reaches **recreational opportunities** with **adequate access and** appropriate flows.
- 

D. Develop a basinwide funding system to meet basin E&R needs
- 

E. Fire recovery goal (needs to be developed)

2021 Goals
for
Protect and
Restore Healthy
Streams, Rivers,
Lakes and
Riparian
Areas







39%





21. Access proved to be controversial among members. Ginny Harrington says rivers can be healthy without adequate access. Ginny fears the Roundtable is recommending condemnation of private lands to get to public lands. Bailey said the 2015 goals did mention recreation with appropriate flows. Bailey said that all the goals listed above require non-consumptive flows.
- Ken Ransford said he did not read the above statement as a goal of the Colorado River Basin Roundtable to condemn private land for river access. Harrington said a goal should be getting recreation users together with agricultural users to try to reach agreement on river access. She recommends removing the clause referencing “adequate access.”
 - Holly Loff does not think that “adequate access” should be included. The reference to “adequate access” was removed from Goal C above.
 - Richard Vangytenbeek asked, “How do you implement a goal?” It is important to develop strategies to implement the goals.
22. Stan Cazier said that landowners whose ranches have burned are trying to re-plant trees, and are being told that this is not an appropriate water use. He says we should add this to the list of strategies.
23. **Agricultural goals.** Recommended changes include the redlined changes below. Ken Ransford said that **what is missing is a general statement that we want to preserve ranches** so they are still here for future generations. One strategy Ken recommended would be to pass a special district tax to raise funds from West slope residential property owners to purchase conservation easements on ranches to preserve them in perpetuity. We have to preserve ranches in order to preserve ranching.

2021 GOALS

| | | |
|---|-----------|--|
|  <p>2021 Goals for Sustain Agriculture</p> | Reduce | A. Reduce and prevent agricultural water shortages |
| | Minimize | B. Minimize potential for transfer of agricultural water right municipal uses |
| | Develop | C. Develop incentives to support agricultural production |
| | Increase | D. Increase education among the agricultural community at Colorado River Basin water issues to build a collaborative relationship between entities and build on agriculture's knowledge of the issues |
| | Increase | E. Increase education among the broader community about importance of agriculture and efficiency and conservation by the agricultural community |
| | Implement | F. Implement sustainable agriculture practices that conserve water, minimize soil erosion, and protect water quality |

24. Merritt Linke said we should be careful about **preserving ranch lands for scenic beauty and wildlife habitat since this could be controversial with Front Range water providers** compared to stating we wish to preserve ranching as a sustainable business. Preserving ranch lands is a side effect of supporting productive ranches.
 - a. Shawn Bruckman of the Eagle County Conservation District believes it's important to protect working lands. She has seen a lot of projections showing that working lands will disappear from the West slope.
25. Stan Cazier commented on, "Review existing laws regarding water rights speculation *and land use purchases*." Water rights are in the public domain, but land use purchases are different; Stan recommends deleting the italicized language.
26. Shawn Bruckman recommended adding a **goal to improve irrigation** on agricultural lands; Ken Ransford recommended adding that these **improvements should improve aquatic enhancements at the same time, such as preventing fish entrainment, or enhancing additional river flows**. Richard Vangytenbeek says every funder requires fish passage, or the project will not get funded.