

## IBCC Colorado River Basin

### 1. March 28, 2016 CBRT Minutes

1. **January 25, 2016 CBRT Minutes – 2016 legislative update; process to use BuRec’s Colorado River Support System to estimate how a Compact Call would be administered; WSRA grant applications to improve agricultural diversion structures or permit fish passage; discussion of CBRT Roundtable’s BIP objective to sustain healthy agriculture and rivers.**
2. **Next Meeting: May 23, 2016, Glenwood Springs Comm Ctr, 12:00 – 4:00.**
3. Upcoming Meetings
  - a. **April 25, 2016, 12:00: Next Steps committee.** 2-hour conference call
4. Reporter: These minutes were prepared by Ken Ransford, Esq., CPA, 970-927-1200, [kenransford@comcast.net](mailto:kenransford@comcast.net).
5. **CBRT Members Present:** Kim Albertson, Steve Aquafresca, Art Bowles, Paul Bruchez, Stan Cazier, Kathy Chandler-Henry, Carlyle Currier, Angie Fowler SGM, Mark Fuller, Karl Hanlon, Mark Hermundstad, Bruce Hutchins, Diane Johnson, April Long City of Aspen, Louis Meyer, Ken Neubecker, Chuck Ogilby, Jim Pokrandt, Ken Ransford, Rachel Richards, Steve Ryken, Karn Stiegelmeier, Lurline Underbrink Curran, Mike Wageck, Lane Wyatt, Bob Zanella
6. **Guests:** Don Chaplin, Dennis Davidson Mount Sopris Conservation District, Morgan Hill Garfield County, Brent Gardner-Smith, Hannah Holm-CMU, Eric Kuhn, Greg Lanning City of Grand Junction, Victor Lee BuRec, Heather Lewin Roaring Fork Conservancy, Richard McIntyre and Tom Turnbull of the East Mesa Ditch, Christina Medved Roaring Fork Conservancy, Brent Newman CWCB, Mel Rettig, Laurie Rink Middle Colorado Watershed Council, Collin Robinson CPW, George Robinson and Don Louthan of the Multi Trina Ditch, Kim Smith GHD Services, Russ Schnitzer Colorado Trout Unlimited, Chris Treese, Richard Vangytenbeek Trout Unlimited.
7. **River Forecast. Flows at the Dotsero gage are average** for the upper Colorado River, registering **1,100 cfs. The forecast is for a wet April.** At the Cameo gage, flows are 1,600 cfs, about 200 cfs below normal. That is temporary, since they were in line with the 82-year median 4 days earlier on March 24. Snow water equivalent readings indicate the state is about average for March 28, slightly higher in the north half of the state and 79% to 86% in the southern half of the state. That is generally opposite of what El Nino would predict. **Across the entire upper Colorado River basin,** the Bureau of Reclamation reports that **snowpack levels are 80-120% of normal.** So far, this is an average winter.

8. **Vote for Angie Fowler and Steve Aquafresca to fill at large seats on the CBRT.** This measure passed unanimously, motioned by Karn Stieglemeier.
9. **Legislative Update Chris Treese.** Chris pointed out that in Colorado we register gun carriers, pedophiles, and lobbyists, all for similar reasons. Since **Democrats are the majority party in the house and senate**, house and senate majority leaders and **all chairmen and vice chairs are Democrat**.
  - a. The Colorado River District supports, takes no position, or opposes bills that could impact water. It generally just monitors water bills, but not every water bill. **When the Colorado River District opposes a bill, Chris Treese is instructed to work with the sponsor to try to amend it** so the Colorado River District can support it. There is a long way to go in the session, and with the primaries, and other bills that still must be debated and horse-traded, a lot can happen between now and May.
  - b. **Colorado's Water Plan has not loomed large in this session.** The House speaker anticipates more legislation in 2017.
  - c. The house will spend Tues-Fri this week on the long bill, the budget bill. The senate will spend 4 of 5 days next week debating the budget bill. The joint budget committee put the budget bill together, including 3 members of both the house and senate. They will also resolve any changes made to the bill.
  - d. On March 18, the **revenue forecast suggests the state is short \$90 million**, due to the drop in oil and gas royalties and severance tax. Fifty percent of severance tax revenue is dedicated to the CWCB including the Water Supply Reserve Account (WSRA), and 50% go to the Department of Local Affairs (DOLA), much of which is distributed to counties involved in extraction industries. The balance of DOLA funds is available for grants to local governments, but that does not include water districts.
  - e. The CWCB water projects bill is likely to be introduced March 28.
  - f. **The rain-barrel bill**, HB 16-1005, is awaiting passage. Sen. **Sonnenberg** (Rep. – Sterling), who chairs the Senate Agriculture Natural Resources and Energy Committee, took the bill off the table. He **opposes it because it amounts to storage without a water right**. At a committee hearing, Sonnenberg pointed out that each rain barrel can store 110 gallons after each rain event. He asked the State Engineer (SEO), “If there is a call on the river, who gets shut down?” As amended, the bills says the SEO can call for a cessation of collection but the SEO acknowledged this is impossible. **Each rain-barrel cessation would amount to a futile call**, meaning it would have no impact on stream flows if shut down. The bill requires the SEO to report back to the legislature about the impact that rain

barrels will have on the prior appropriation system, but the SEO acknowledged that reporting this would have limited or no value.

- i. Ken Ransford estimates that **it would take 737 households to consume one acre foot of water captured in rain barrels** based on the calculations supplied by CSU engineering professor Larry Roesner at a 2015 Water Resources Interim Committee hearing.<sup>1</sup>
  - ii. The Colorado Water Congress does not support this bill; it has taken no position on it.
  - iii. GAVEL amendment – this bill prevents pocket vetoes like Sonnenberg’s refusal to hold hearings on the rain barrel bill. It permits a legislator to motion that a bill be voted on by the entire house (or senate). The house has had 3 votes on the rain barrel bill and it has passed each time, so **it could be enacted based on the GAVEL amendment**. The GAVEL amendment was put on the November 1988 ballot and easily passed by voters, amending the state constitution. GAVEL stands for "give a vote to every legislator."
- g. HB 16-1109, application of state water law to federal agencies. This is back for a 3<sup>rd</sup> year, sponsored by Weld County Rep. Becker and Sen. Sonnenberg. It was **prompted by the forest service’s water lease rule passed in 2011 which required ski areas operating under a special use permit to transfer their water rights to the federal government.**<sup>2</sup> This prompted a court challenge that ski areas won; in return, **the forest service now requires ski areas to obtain permission to transfer water to a new use**. For instance, if a ski area uses water for snowmaking, which the forest service considers a federal reserved water right, the ski area needs permission to change to a new use such as watering blue grass lawns in a residential subdivision at the base of a ski area. If the forest service refuses to grant a change in use to the water right, the forest service gets the water right back. **This bill** would pre-empt the Forest Service’s recent rule change by **holding that the State Engineer does not have to administer the federal government’s water right**. The Colorado River District supports this bill; it does not want local government’s 1041 powers impacted, and it also does not want bypass flow requirements interfered with. Savings language was added to the bill to provide it will have no effect on these 2 elements. This bill will likely move

---

<sup>1</sup> See, Olsen, C., P.E., Roesner, L., “Impacts of Rain Barrels on Surface Water Runoff,” <https://www.colorado.gov/pacific/sites/default/files/Colorado%20Water%20Institute%20-%20Rain%20Barrel%20Capture%20Analysis%20Presentation.pdf>.

<sup>2</sup> See, Blankenbuehler, P., “Forest Service leaves control of water rights to ski resorts,” Jan. 29, 2016, High Country News, <https://www.hcn.org/articles/new-forest-service-water-policy-leaves-control-of-water-rights-to-resorts>.

forward. Chris thinks this will pass the house, as amended, and will likely also pass the senate.

- h. HB 16-1228. **The Flex Bill** allows a water right holder to seek a change-in-use decree in water court to allow the **transfer of up to 50% of the historic consumptive use (HCU) for successive 1-year periods** without specifying the beneficial use. This would **allow it to be leased to cities, left in the river as an environmental flow, or leased to another farmer**. Currently, water court must approve any change in in time, location, amount, and purpose of HCU and any person can claim injury and oppose the change in use. The water right holder must prove that there is no injury, a difficult and expensive proof battle since it demands analysis of underground return flows. **Agricultural board members on the Colorado River District (who make up a majority) oppose this** because it will cost farmers to determine whether they are injured by the successive one-year changes in use. The timing and location or **return flows could be impacted**, and cause injury to farmers, thereby requiring multiple visits to court. The bill passed the full house on a 36-26 vote, and now goes to the Senate. The **Colorado Farm Bureau opposed** it last year and is not supporting it again this year.
  - i. Karn Stieglemeier asked how the bill could be amended to get the Colorado Farm Bureau's support; Bureau vice chair Carlyle Currier said neighboring farmers should have the right to go to court to object to the change in use each year; that is not currently permitted in the bill.
  - ii. At least one ditch company on the lower South Platte supports it, and so does the environmental community because it prevents buy and dry.
- i. HB 16-1256 – **South Platte Storage study**, introduced by J. Paul Brown (Rep – Cortez) and Sonnenberg (Rep. – Sterling). This bill would study additional dam storage options on the East slope to hold back precipitation falling in the South Platte, introduced because the South Platte River has delivered more than 4 maf to downstream states than required under river compacts. **The Colorado River District supports** this bill.
- j. SB 16-097 would **protect DOLA's 50% share** of severance tax revenue that from being raided by the legislature to balance the budget. **The legislature has historically taken \$10-100 million a year from severance tax revenue to pay for General Fund expenditures since the 1970s**. The Colorado River District is concerned that this is not protecting the CWCB's 50% share of the severance tax funds.
  - i. Even if this bill passed, in 2017 the legislature can transfer the funds, and it could undo the 2016 bill.

- ii. There is **no discussion of raiding it this year. The \$90 million shortfall will likely be met by budget cutbacks or accounting gimmicks.** Treese gave an example of an accounting gimmick the legislature could use is to switch from a bi-monthly to a bi-weekly payroll; this could push 3 days of a payroll into the next year, but “save” \$90 million in state spending. The 2017 legislature would then reverse back to bi-monthly accounting and undo the 2016 accounting gimmick.
- k. SB16-145: The original 1937 Colorado River District enabling bill allows the Colorado River District to change sub-district boundaries, provided that it obtains at least 50% of the signatures of land owners in the district. **This bill would permit a direct vote of the people within the sub-district** to do this. Differential mill levy assessments can be created for separate sub-districts, but it would have to be approved by the sub-district. Diane Johnson said her board voted to support this bill. The citizen vote is not the only hurdle to get past under TABOR. “It moves the bar from impossible to very difficult,” according to Eric Kuhn.
  - i. The Colorado River District board has not been discussing the creation of any sub-districts according to Chris Treese.
- l. HB16-1392: Water banking bill: Colorado law permits water banking statewide but so far only the Arkansas basin has used it to address the demand by municipalities on agricultural water (the super ditch). The bill permits water banking to occur statewide, and would **allow farmers to bank water in 3 of 10 any years.** After 2 years, the CWCB can **transfer operation of the water bank to a local water conservation or conservancy district** (conservation districts are authorized by the legislature, and conservancy districts are authorized by a vote of the people owning land in the district). The bill directs the State Engineer to adopt **rules that streamline how to calculate the amount of water that is banked without requiring a water court hearing,** but provides that water right holders can challenge the SEO rules in water court. It prevents banks from interfering with Colorado’s interstate compact obligations for from transferring water out of the Arkansas or Rio Grande basins.
  - i. **The Colorado River District is concerned that it should only be made applicable to Water Divisions 1, 2, and 3** (South Platte, Arkansas, and Rio Grande). One concern the Colorado River District has is how to protect agricultural West slope water rights that are junior and decreed after the 1922 Colorado River Compact.
- m. Local government master plans. Water conservation goals can be included in a master plan. But, Treese pointed out this is permissible in the law anyway.

- n. HB16-1382, sponsored by K.C. Becker (Dem – Boulder & Grand counties) would permit a water right to **divert water for recreation, aesthetic, and piscatorial (fishing, not fisheries) uses**. This **legislation was withdrawn** and will be discussed by the Water Resources Interim Committee in the summer of 2016. It addressed *St. Jude's Co. v. Roaring Fork Club, LLC*, 351 P.3<sup>rd</sup> 442 (Colo. 2015), where the Colorado Supreme Court said the legislature has not permitted a water right for these uses, even though **water rights are granted for this all the time**. The Supreme Court majority opinion said it was unwilling to go where the legislature has not gone. Treese pointed out that Green Mountain and Ruedi Reservoir fish releases amount to a municipal, recreational water right; the Colorado River District is concerned that this could be at risk under the *St. Jude's* decision, and it supported the bill.
    - i. **Fish hatcheries have fishery rights, not fishing rights.**
10. Update on the 4 West slope roundtable Colorado River future development study update by Eric Kuhn. This group is investigating **how a Compact Call would impact the West slope**. There are 7 technical representatives from the Front Range on the Colorado and Gunnison basin roundtables, but they are not very active these days. The first meeting was held in January detailing how CRSS works. No additional meeting times have been set, but 4-5 more are likely, mostly to be done by webinar. **Louis Meyer and Ken Neubecker are on the technical advisory committee** that is holding these meetings, and Jim Pokrandt requested that two more roundtable members should join the committee. Ken Ransford agreed to join.
- a. This is a small study using the CRSS computer model developed by BuRec, the only model that looks at the entire river. Colorado's CDSS computer model of how water rights are administrated ends at the state line. BuRec's CRSS model differs since it does not model individual water rights, as Colorado's CDSS system does. Kuhn said that if we are concerned about maintaining hypothetical storage levels in Lake Powell, Lake Mead, and the end of the river, BuRec's CRSS model must be used, which it has spent over \$10 million developing. The point of the study is to **examine tradeoffs between protecting Lake Powell levels and developing additional supplies upstream** (i.e., taking more water out of the river upstream) are being considered.
  - b. CRSS has its limitations—all diversions above GWS are treated as a single diversion; they can't be broken out separately. The CWCB's earlier water availability study looked at the Blue River, Colorado River, Fryingpan, and Roaring Fork rivers separately, but the BuRec model does not permit this. The **BuRec model will indicate how often we will have to go to demand management (i.e., reducing demand by cutting back uses, which in nearly every situation will mean cutting back hayfield irrigation)** in order to avoid draining reservoirs.

- c. This will not address how a compact curtailment will be implemented, but rather on how it will be avoided. **BuRec assumes the river is operated under the Interim Guidelines** today, not how it could be operated under different guidelines. The Interim Guidelines are up for re-negotiation in 2026, but Kuhn said it will be difficult to change because that could upset a lot of side agreements including Minute 319.
  - d. Rachel Richards: **What if the study group concludes is there is 150,000 af available? What streams would be impacted by this? Eric said this will have to be addressed in the future with different tools than we have today.** Eric does not anticipate a single aggregate number; rather, a range of numbers will be presented. The study will try to determine how often we will be have to cut back demand (hayfield irrigation) in order to keep the system whole.
  - e. Chuck asked about **conditional water rights**, and mentioned his concern that this will prompt the Front Range to agitate for new diversions based on additional available water. Eric said they **will not be addressed in this study because the BuRec CRSS model is not based on water rights**. This study is primarily designed to educate us on how the river is integrated today by BuRec – i.e., when are releases made from Ruedi, the Gunnison River reservoirs that make up the Aspinall Unit, or Flaming Gorge. There are too many possible outcomes. How demand management will be addressed (i.e., what uses are cut back) will be very challenging.
11. **Integrated Water Management Planning grant update** by Hannah Holm and Ken Neubecker. This grant, approved by the CWCB WSRA program, is designed to develop a model for stream management plans. A website has been created at [libguides.coloradomesa.edu/](http://libguides.coloradomesa.edu/). The next step is to catalog available resources and literature, to see what studies are available to incorporate into ~~stream~~ integrated water management plans. The word “stream” was replaced by “integrated water” to emphasize that the **management plans are designed to address all uses on the stream, irrigation as well environmental flows.**
- a. This project does not currently have a mission statement. The goal is not to deliver a particular stream management plan, but a guidebook for how to develop stream management plans. **Steve Aquafresca recommends that a mission statement be determined sooner than later to address stakeholder (i.e., farmer) fears regarding where this is headed.** Aquafresca emphasized, “It would be good to quickly identify what the goal of this project is.”
  - b. Jim Pokrandt mentioned that **there are not many advocates for healthy stream flows in the water provider community.** *Integrated plans* refer to the fact that a lot of agricultural irrigation practices can be tweaked to improve stream flows.
  - c. Lane Wyatt volunteered to join this group.

- d. In order to catalog available resources, Ken Ransford mentioned **the USGS has compiled several bibliographies of river studies**, and recommends the website include the following links:
  - i. The likely best starting point for the Upper Colorado basin including Colorado tributaries of the Colorado River is a 1995 bibliography listing 1,397 articles on the Colorado River on 282 pages, with separate indexes that break down studies by river, subject area, and author; see, Bauch, N., Apodaca, L., “Bibliography, Indices, and Data Sources of Water-Related Studies, Upper Colorado River Basin, Colorado And Utah, 1872-1 995,” USGS Open-File Report 95-450, <http://pubs.usgs.gov/of/1995/ofr95450/pdf/OFR95-450.pdf>.
  - ii. A 1993 bibliography on South Platte Basin environmental studies prepared by the USGS describes 1,282 studies on 207 pages. This does not include research papers written since 1993. See, Dennehy, K., and Ortiz-Zavas, J., “Bibliography of Water-Related Studies, South Platte River Basin-Colorado, Nebraska, and Wyoming,” USGS, Report 93-106, <http://pubs.usgs.gov/of/1993/0106/report.pdf>.
  - iii. “Bibliography of reports by U.S. Geological Survey authors about the water resources of Wyoming,” USGS, <http://wy-mt.water.usgs.gov/publications/statebiblio/sw.htm>.
  - iv. This provides a map of the United States, and separate bibliographies by state are accessed by clicking on the state; see, “Selected Water-Use Bibliography for the United States - State and Regional Reports,” USGS, <http://water.usgs.gov/watuse/biblio/>.
  - v. “Selected Bibliography on Evaporation and Transpiration,” 1961, USGS Water Supply Paper 1539-R, <http://pubs.usgs.gov/wsp/1539r/report.pdf>.
- 12. **CWCB Board Meeting Update**, Jim Pokrandt. The Colorado River District has \$353,327 in the basin WSRA account. The recent \$15,000 grant to educate how water reuse projects work, and \$50,000 to develop more fish-friendly diversion structures in the upper Colorado River in Grand County were both approved and matched as required by the CWCB. Paul Bruchez thanked Brent Newman for promoting the upper Grand County grant; it has resulted in \$415,000 being raised from the CWCB WSRA and \$50,000 from the CBRT WSRA accounts. The grant is funding phase 2 that will try to arrest bank cutting.
  - a. Brent Newman mentioned that **the CBRT WSRA fund will likely only receive \$70,000 in April 2016**. The lower amount reflects reduced oil and gas severance tax revenue.



- b. Stan Cazier said we should shepherd the remaining funds carefully.
13. Jim Pokrandt mentioned that the question being bandied about at a recent CWCB board meeting is **whether \$100 million can be raised for future water development projects**. WSRA funding has been declining due to declining oil and gas production.
14. **\$60,000 CBRT WSRA grant request to improve East Mesa Ditch** in Carbondale. Dennis Davidson of the Mt. Sopris Conservation District administrated by the federal National Resources Conservation Service (NRCS) made the presentation. **The project cost is \$113,000** and the East Mesa ditch company is requesting \$60,000 from the CBRT WSRA account. In 2015, they rehabilitated the tunnel for a cost of \$760,000, in order to get a 450' tunnel and 750' pipe fixed. The NRCS made a \$300,000 EQIP grant toward this.
- a. Davidson reported the East Mesa Ditch irrigates 750 acres at the northwest foot of Mt. Sopris. The original 1908 water court decree (case number CA 990) granted an 1894 priority date for 31.8 cfs to irrigate 1,590 acres, and this was supplemented with a second water right with a May 1942 priority date for 10 cfs (CA 4033). The State Engineer tracks annual diversions in its Colorado Decision Support Systems computer database; the CDSS Structure Summary Report for East Mesa Ditch indicated that in 2000 and 2010, 383 acres were irrigated, 145 by sprinkler and the rest by flood irrigation.
- b. **On average, 9,626 acre feet was diverted** from 1952 through 2014 through the ditch according to the CDSS Structure Summary Report, **25 acre feet for each of the 383 irrigated acres**. The ditch irrigates grass pasture.
- c. Davidson described recent conservation efforts. **NRCS installed CoAgMet weather stations** that monitors rainfall, hours of sunlight, air temperature, soil moisture content, and estimates the ET rate for various crops. One was placed on Bill Fale's ranch along the Crystal River and a second on Silt Mesa.
- d. A handbook has been created that has a photo of every ditch structure on the ditch for all land owners. This will help the ditch company make decisions to use water more efficiently. This effort has identified leaking pipes, Parshall flumes, and headgates that need to be replaced.
- e. The **ditch runs for 9 miles**, and serious irrigation occurs 3-4 miles south of Carbondale. The ditch is **in poor to unsatisfactory condition, and Davidson said that ditch improvements are unaffordable**. Richard McIntyre, one of the ditch owners, said the East Mesa Ditch Company is working with the NRCS to develop 5- and 10-year plans to pipe much of the 9-mile system. He said the ditch company hopes to be a contributor to maintaining adequate flows in the Crystal River.

- i. Laurie Rink **asked if statewide funds are available; Davidson said yes, but not for 2016.**
  - f. Angie Fowler asked if the ditch company involved in the **Crystal River stream management plan**, an ongoing effort designed to leave more water in **the Crystal River, which dropped to 1 cfs in the September 2012 drought.** McIntyre reported the ditch company has been attending the Crystal River stakeholder meetings, but they have not been very productive. **The ditch company has asked when stakeholders want the water, how much do they want, what is it worth to them, and who is going to pay the ditch company for the water. He said it has been impossible to get answers to any of these questions.** Therefore, the ditch company is planning to make an offer to the stakeholders.
  - g. On average, the **12 largest ditches on the Crystal River** have diverted 73,304 acre feet each year in order to irrigate 2,714 acres, an average of 27 acre feet per acre. It amounts to **a constant diversion rate of 202 cfs over 6 months** (data compiled from CDSS Structure Summary Reports). These 12 ditches account for 89% of Crystal River appropriations. The Crystal is over-appropriated since decreed flows exceed the amount diverted on average.
  - h. **The 9-mile ditch could result in 30-40% water savings by piping it.** This could mean as much as **10 cfs that could be put back in the Crystal River.**
  - i. Don Chapin asked if piping the ditch would interfere with wells. McIntyre replied they have not looked at this question. Louis Meyer previously recounted to Ken Ransford that his engineering company SGM has studied this issue and determined that lining irrigation ditches in the Roaring Fork or Crystal Rivers will not interfere with most wells since the aquifer is well saturated in these valleys.
15. **\$40,000 WSRA grant request to repair the damaged North Thompson Ditch**, by George Robinson, New Multa Trina Ditch Company, near Silt. **Heavy spring 2015 rains**, late snow, and warm temperatures caused the hillside to slough and make the ditch inoperable on June 11, 2015. The \$40,000 grant request would pay **25% of the cost to install HDPE (high density polyethylene plastic) pipe** to repair the damaged section, the best long-term solution to this issue according to ditch company representative George Robinson.
- a. **The ditch delivers water 15 miles below the damaged section, and captures every small tributary that comes into it.** (This is similar to the Grand Ditch that captures every tributary on the east slope of the Never Summer Mountains and delivers 20,000 acre feet each year on average from the upper Colorado River drainage to the Poudre River.) Piping the entire ditch is not a good long term solution because this would no longer capture every tributary that is intersected by the 15-mile ditch.

- b. There is one commercial organic farm at Eagle Springs near Rifle among the 2,400 acres that are irrigated, and it ceased getting water after the blowout.
  - c. About 3,500 cubic yards of fill is needed to repair the ditch. The ditch crosses US forest service land, and Robinson lamented that **the forest service is changing what is required to repair the ditch daily**. He pointed out that the irrigation ditch was built before the land was designated as US forest service land.
  - d. The **irrigation water** is used until it runs out around August 1, **providing another cutting of hay**. Robinson reported that can make or break a cattle rancher. They spent \$18,000 on a new headgate system in 2013 about half a mile below the headgate which now cannot be used due to the blowout. There are 70 shareholders on the ditch, and it is hard to manage that many people. The ditch was initially constructed with horses and Fresno scrapers.
  - e. **They hope the USDA will eventually pay to improve the ditch.**
16. **\$63,500 grant request for Ware and Hinds Fish Passage Bypass Project**, by presented by long-time CBRT participant Richard Vangytenbeek of Colorado Trout Unlimited. Don Chapin represents the Ware and Hinds and Rosemond Ditches, and he said **both ditch companies are very enthusiastic** about the project and Colorado Trout Unlimited's participation; Chapin said both companies heartily recommend approval.
- a. They also are requesting **\$78,500 from Colorado Parks & Wildlife**, which will pay for all studies and construction. Colorado Trout Unlimited has already paid \$5,000 and \$20,000 in donated professional time to develop the project plans. **The total project cost is about \$200,000, of which Colorado Trout Unlimited will contribute about \$60,000 in-kind services.**
    - i. Angie Fowler said that in-kind contributions made within 9 months of the project can be included as matching funds in the grant application.
  - b. This project will **remove fish barriers and benefit over 3 miles of Elk Creek which flows from the Flat Tops into the Colorado River at New Castle**. The affected landowners, Burning Mountain Land and Cattle and the Williams Family Partnership, are supportive and will permit access to construct and maintain the bypass structure in the future by removing sediment when necessary.
  - c. Vangytenbeek presented a video showing that **16-20" trout cannot physically leap past the diversion structure** because of a concrete spillway that was built to shore up the low-head dam. A bypass around the diversion would restore a fishery upstream that is completely under-utilized at this time.
  - d. Elk Creek has multiple channels, woody debris, and good sinuosity, all features necessary for high quality fisheries. Fish will move up to the creek to spawn and,

when they get large and outgrow the creek, they will move back into the Colorado River. The stream is steep below the planned bypass and the Colorado mainstem, which does not allow for good spawning. The spawning beds above the low-head dam are superior. Vangytenbeek said **this is like a free hatchery and fishery to benefit a highly accessible section of the Colorado River.**

- e. The project will cut a notch into the older part of the dam and **build a bypass structure around the low-head dam.** The bypass structure will accommodate both fast-swimming rainbow and brown trout, and slower-swimming fish including darts, suckers, and sculpin.
  - f. There are a lot of other nearby tributaries in this section of the river that could benefit; **this project could serve as a model.**
  - g. There is no public access to the lands that will benefit, but the public can access the Colorado River, and they will benefit by increased rainbow and brown trout in the Colorado River.
17. **CBRT WSRA \$100,000 grant request to re-water Shield o Mesa just north of the Snowmass Ski Area.** The ditch company said it has received \$40,000 in kind funding from NRCS. They want to re-establish water in 2 ditches dating back to 1907 and 1913 to restore water to Shield o Mesa which now has 60 homeowners. Water has not flowed to the mesa since 1980 for various reasons. This will permit them to expand agricultural operations, and re-saturate the aquifer so wells will stop going dry for certain homeowners.
- a. They want to put 18" pipe from the headgate and **take 7 cfs out of Hunter Creek to expand hay production on 35 more acres.**
  - b. **NRCS is working on this project, and estimate the cost is \$325,000 for both ditches.**
  - c. The water that would be diverted to Shield o Mesa flows now into the Snowmass River, but the presenter said the project will not impact instream flows. They want to divert 7-8 cfs from the Upper Elk Creek Ditch, and 5 cfs out of the lower Elk Creek Ditch. The Harvey family, an adjacent landowner supports this project.
  - d. Rachel Richards **asked if this is supported by the Snowmass Capitol Creek Caucus,** but the presenter could not answer this.
18. Paul Bruchez, Kim Albertson, and Carlyle Currier provided an update on the CBRT BIP agricultural priorities.
- a. **Colorado Basin BIP has 4 goals:**

- i. **Reduce irrigation water shortages.**
  - ii. **Minimize permanent transfers from farm to cities.**
  - iii. **Increase agricultural irrigation water efficiency.**
  - iv. **Lease excess water to cities or environmental groups to enhance river flows.**
- b. Russ Schnitzer, 970-309-0285, [rschnitzer@parulallic.com](mailto:rschnitzer@parulallic.com), described a series of meetings The Nature Conservancy, Colorado Trout Unlimited, and Western Resource Advocates have had with the agricultural community. They concluded there is significant potential for projects that can benefit both the agricultural community and rivers. Colorado Trout Unlimited believes that, **without agriculture, there isn't much left to save in Colorado rivers.** They view river habitat restoration projects such as the ILVK project on the Colorado River above Kremmling as long term agricultural investments.
- i. There are mutual interests between the environment and agriculture.
  - ii. There is a commitment to project approach.
  - iii. One size does not fit all. There are many ditch-specific and basin specific differences.
- c. **Water markets can pay producers to fallow fields and bank the consumption savings in Lake Powell.** Everyone is looking to agricultural water to solve municipal water shortages. Schnitzer cautioned that when we establish **agricultural transfer methods, over time they can become institutionalized, and difficult to reverse.**
- d. **Carlyle Currier** reported that he has been involved in several ongoing meetings of about 6 farmers and 6 members of the environmental community for the past couple years, and he **is surprised at how much potential there is for cooperation between the agricultural and environmental communities.** It has been hard to get the rest of the agricultural community on board of this, and if they can, Carlyle believes they can make real progress. Carlyle discussed 2 projects:
- i. Rehabilitation of Bull Creek Reservoir No. 5, owned by small farmers. They earlier rehabilitated Res. No. 3 and re about \$1 million in debt. If we can help with this cost, it will keep water in the river and pre-1922 rights
  - ii. The Southside Canal in the Collbran Water Conservancy District irrigates land in the Plateau Creek valley with water from Vega Reservoir. This

project powers 2 Molina power plants, and the water is eventually used by Ute Water Conservancy District. It was built 50 years ago, and components need to be replaced. The Salt Creek siphon, a 7' pipe that is over 1,000' long, needs to be replaced. This is the type of project we need in order to keep agriculture alive in the Plateau Creek. **Farmers can't afford to pay these costs.**

- e. **Carlyle mentioned** that the Colorado Ag Water Alliance (CAWA) has scheduled upcoming meetings in the South Platte basin and in Delta in May, to bring irrigators to a meeting and explain what the Colorado River and Gunnison roundtable BIPs mean to them. **We need to improve Colorado water law so that irrigation efficient measures can take place without harming water rights.** Reagan Waskom who runs the CSU Water Center, and several water attorneys looked at this issue. They decided that water rights and diversions are administered inconsistently in different basins. Carlyle said that if you ask 10 attorneys about use it or lose it, and you'll get at least 5 and maybe 15 different answers. **We don't need a law change, we need consistency in how the laws are enforced. Most attorneys will tell you that farmers don't need to divert every last drop every year.**
- f. Kim Albertson –**fallowing and water-sharing programs must benefit the agricultural community. At the end of the day, farmers have to be sustainable.** Many of these are multi-generational ranches. The roller dam is over 100 years ago, and the Grand Valley Water Users Association recently upgraded them. The headgates are old, and the concrete run-outs need repair.
- g. The water banking work group took a field trip to the Palo Verde Irrigation District on the lower Colorado River near Blythe California. **The Metropolitan Water District** of Los Angeles pays them to fallow land in return for diverting more; they **purchased 22,000 acres recently for \$285 million**, an average cost of **\$13,000 per acre. (Divided by Southern California's 20 million residents, that amounts to \$14.25 per resident – ed.)**
- h. Municipalities have stored 500,000 af in Lake Mead. They negotiated a fee of \$3,900 per acre to farmers who signed up, plus additional fees are paid each year for water taken and **for acres fallowed.** Kim has been pessimistic that water banking could work because he said we cannot store it upstream. However, he noted **we can store it downstream in Lake Powell or Lake Mead.** Alfalfa is the dominant crop; it still ends up in our feed system, since it goes for milk or beef production. We need to keep in mind how to keep producing food.
- i. **Steve Aquafresca**, a fruit grower from Mesa County, spoke about agricultural land conservation. We should view **"pay to fallow"** as an emergency response only. **It should not be viewed as new supply, or the water will be gone from agriculture.**

- i. The BIPs address farm and ranch land conservation. For the last 30 years, the land trust movement has grown. Steve mentioned that **Colorado provides the best financial incentives for conservation easements in the country, providing a tax credit of up to \$1.5 million per easement.** The BIP advocates conservation easements, a voluntary private contract between a landowner and a land trust. **The Mesa County Land Trust was formed by active ranchers, and agriculture is still a high priority in its mission statement.**
- ii. **Mesa County Land Trust** will not negotiate a conservation easement that does not **tie irrigation water to the land.** Steve spent **4 years on the staff** of this land trust, and he saw many different uses and motives for conservation easements. The most significant deed restriction prohibits or limits subdivision of the land. **Land fragmentation is the most immediate threat to agriculture in Colorado.**
- j. Paul Bruchez said that the **ILVK project** to improve river flows and irrigation diversion structures on the upper Colorado River received \$465,000 funding from WSRA grants. It was matched by landowners , for **\$930,000 total funding.** The river improvements will **begin this summer.**
- k. Big Lake Ditch Study. Bishop Brogden Associates, Inc. prepared a hydrology report for Denver Water and Grand County to describe a **historic transbasin agricultural diversion from the Williams Fork to the Reeder Creek drainage** further west. **Williams Fork Reservoir provides replacement water to the Colorado River for water diverted from the Blue River via Dillon Reservoir** to the East slope. Denver Water purchased these water rights over 60 years ago, with the intent to abandon them so they could flow into the Williams Creek Reservoir.
  - i. The average diversion is 22,997 acre feet, but the consumptive use is about 1,511 acre feet. The return flows average 21,486 af, of which 5,967 af historically went to Reeder Creek Basin. **Once Denver Water ceased this diversion, the return flows no longer go into** Reeder Creek and the Colorado River below Parshall where the Williams Fork flows into **the Colorado River.**
  - ii. Williams Fork has filled every year but 3 or 4 since being constructed in the 1930s. Grand County's largest sage grouse lek is in the vicinity of the Big Creek Ditch. **The purpose of the study was determine return flow benefits to the Colorado River if the irrigation diversion was restored.**
- l. Jim Pokrandt's takeaways.
  - i. Land trusts are important.

- ii. CBRT can help fund projects as a partner.
- iii. Water law does not need to be revised.
- iv. Water banking and fallowing must keep ag alive.