



Big Hole Watershed Committee

Monthly Meeting Minutes

November 20, 2019 – 6:00pm

Divide Grange – Divide, Montana

In Attendance

Pedro Marques, BHWC; Tana Nulph, BHWC; Ben LaPorte, BHWC; Craig Fellin, Big Hole Lodge; Betty Bowler; Tom Bowler; Matt Norberg, DNRC; Zach Owen, Beaverhead Watershed Committee; Jarrett Payne, FWP; Jim Hagenbarth, BHWC/Rancher; Randy Smith, BHWC/Rancher; Steve Luebeck, BHWC/Sportsman; John Reinhardt, BHWC/Rancher; Jim Olsen, FWP; Scott Reynolds, TU/GGTU; Peter Frick, BHWC; Jason Brooks, BLM-Butte; Brian Wheeler, BHRF; Jim Magee, USFWS; Chris Edgington, MT TU; Dean Peterson, BHWC/Rancher; Kim Johnston, People and Carnivores; Jim Dennehy, BHWC/BSB Water Utility; Paul Cleary, BHWC/Resident; and the University of Montana Western's Natural Resources Conflict Resolution course (Mark Mastrofini, Mitchel Odden, Margaret Anderson, Ann Aiseth, John Dillon, Shilah Doble, Sydney Steinbeisser, Holt Gibson, Olivia FitzGerald, Catelyn Stone, Rebecca Corbally, Darien Matthews, Abbee Croninger, Carter Gerrinjen, Emerson Blotz, Tate Langel, Ryan Dorvall, Drake Kopp, Tyler Izatt, Isaak Koslosky, Nathan Hutson, and Professor Arica Crootof).

Introductions *Attendees introduced themselves.*

Meeting Minutes *October 2019 meeting minutes were reviewed, no additions or corrections.*

Reports

Streamflow/Snowpack Report – Matt Norberg, Montana Department of Natural Resources and Conservation

- Included in CCAA presentation, below.

Director's Report – Pedro Marques, Executive Director

- BHWC has been working on securing grants – have brought in ~\$1.3 million in the last 3 years.
- Over the last year as E.D., Pedro has been continually influenced by the importance of identifying needs on the landscape, bringing together partners, securing funding, and making things happen, and that is what BHWC has been doing. Expect our Fall newsletter and annual appeal coming up soon and please contribute!
- Regional Conservation Partnership Program (RCP) proposal – BHWC and several other groups are working to put in a proposal regarding conifer encroachment and natural water storage through the High Divide Collaborative.
- Putting together 2 short films focusing on BHWC projects and natural water storage goals.

Steering Committee Report – Randy Smith, Chairman; Jim Hagenbarth, Vice-Chairman; and Steve Luebeck, Treasurer

- CSKT Water Compact came up at today's Steering Committee meeting. The Confederated Salish-Kootenai Tribe (CSKT) has water rights under the Stephens Treaty – the Compact is currently at the Washington D.C. level and needs to be passed, fast. If the compact passes, it will affect ~300 water rights, most of which are west of the Continental Divide. If it doesn't pass, the Tribe has time-immemorial water rights on over 10,000 water rights throughout Montana. These rights precede all other water rights in the state of Montana.
 - *Comment: Senator Daines and Congressman Gianforte need to co-sponsor the Water Compact. It is questionable at this time whether the compact will pass. Again, if it doesn't pass, irrigator's water rights will be severely restricted, affecting irrigation practices in the Big Hole*

and throughout Montana, dramatically, to the tune of 2.5 million irrigated acres/10,127 irrigators/>45,000 water rights.

- For more information RE: the CSKT Water Compact here:
<http://dnrc.mt.gov/divisions/reserved-water-rights-compact-commission/confederated-salish-and-kootenai-tribes-compact>
- ***Steering Committee suggests that BHWC & supporters send letters to Senator Daines, Senator Tester, and Congressman Gianforte, encouraging them to support the CSKT Compact. Committee reached consensus.***
- *Discussion:*
 - *If these rights go in (if the compact doesn't pass), irrigators will have to appeal to both the Tribe and the Department of Justice, which will be difficult and may not go their way.*
 - *January 20th is the deadline for Congress to make some progress in order for the Judge to extend the current stay on the water rights so this is very urgent.*
 - *What is the reasoning for those who oppose the Compact?*
 - *Passing the Compact means settlement; no Compact means litigation.*
 - *BHWC will provide sample language and Legislator contact information for individuals to send letters in addition to the letter from BHWC. **Attached.***

Wildlife Report – Jim Hagenbarth, Vice-Chairman; Dean Peterson, BHWC/Rancher; and Tana Nulph, Associate Director

- Tana, Jim Hagenbarth, and Erik Kalsta attended Livestock Depredation workshop at Alder on November 15th.
- Green River Drift in Wyoming – move about 6,000 cattle to a huge USFS allotment. Got shipping containers to store equipment and trash in along the way so as not attract bears. The Wyoming Game and Fish Department decided that for every 1 animal confirmed to be killed by predators, there are probably about 5 or 6 that weren't confirmed, so they have a multiplier in effect that allows livestock producers to be reimbursed 3.5x for each confirmed loss. The funding comes from Wyoming Game and Fish. They are experiencing very heavy losses in Wyoming right now – near 14.5%.
- *Comment: The American people decided that they want these carnivores on the landscape, and they/we need to come up with ways to keep them on the landscape without bankrupting the public lands rancher. Because if they don't take care of the land, who will?*
- Tana is working with Kim Johnston with P&C to put together a livestock depredation toolkit for ranchers to borrow.
- BHWC will be getting another load of bear-resistant trash cans for landowners. Please contact us if you are interested in obtaining one; we will be giving them out free-of-charge to Big Hole residents who need them.

Restoration/Land Use Planning Report – Ben LaPorte, Program Manager

- Ben showed drone footage of the French Creek restoration project.
 - *Discussion:*
 - *What is the total cost of this project so far?*
 - *Close to \$300,000 in grant funding through 6 sources – including State, Federal, and NGO.*
 - *How many acres does it cover?*
 - *It's tough to quantify acres, but there are ~4,000 linear feet of new stream and ~7-8 acres of new wetlands. Some of this is to mitigate wetland removal downstream for FWP's fish barrier project.*
 - *What is the total cost with the fish barrier?*
 - *Well the fish barrier cost \$416,000. This project is probably around \$400,000 on our end. When you add up all of the restoration work on Mount Haggin in the last 5 years – excluding the Highway project – it's close to ~\$3,000,000 dollars, give-or-take.*

- *This area also provides habitat to (native) Western Pearlshell mussels, a unique Species of Concern in the State of Montana.*
- *What does the timeline look like for a project like this?*
 - *There was a pretty quick timeline on this project. Usually either a landowner or agency resource person will come to us with a problem and then we look for money to fix it. We started looking at this project in 2017 and secured funding the following spring. In 2018 and early 2019, we worked on permitting the project. The actual construction was the shortest part – it started in September and should be done in December.*
 - *Once you can demonstrate that you can successfully complete a large project like this, it becomes easier to find funding because funders are more confident in your abilities. Everything also goes smoother once you've done it before and have made those connections with agency personnel and other partners. Writing well is really important too – you need to be able to write convincingly, clearly, concisely, and match the resource concern and funders' goals to your solutions. Pretty pictures and drone imagery help, but at the end of the day you need to be convincing in your grant proposal.*
- *Final BHRIP project in the works – a bank stabilization project on the Weststeyn property. Ben has been furiously cutting willows for the project. Rowe Excavation is doing the construction.*
 - *This is a really great project – it was suggested to us by both the landowner and local sportsmen and paid for through the BHRIP. This project benefits several different entities.*
- *Experimenting with drones to get footage of our restoration projects.*

New Business

- *We were joined by the Natural Resource Conflict Resolution course from the University of Montana-Western and their professor, Arica Crootof. Welcome students!*

Discussion:

- *At the beginning of the meeting, you mentioned something about taking out trees. Can you explain why you would want to do that?*
 - *Sure, what researchers, scientists, and range specialists are seeing, is that for a combination of reasons, conifers like juniper, Douglas fir, and pines are creeping down the hillsides and taking over grasslands and riparian areas (to fire suppression, changing climate, pine beetles, etc.). Each tree uses an enormous amount of water, ~300 gallons/day/tree. The water is also drawn by the tap root from down deep and evapotranspired, whereas grassland ecosystems have shorter roots and take more surface water. (Basically, fewer trees = more water available for the river, ranching, wildlife, etc.) Sean Claffey with TNC is a great resource for more information about conifer reduction.*

Meeting Topic: Upper Big Hole Graying CCAA Update

Presented by: Jim Magee, USFWS; Jarrett Payne, FWP; and Matt Norberg, DNRC

Background: In 2009, Montana Fish, Wildlife and Parks (FWP) joined forces with the United States Fish and Wildlife Service (USFWS), Montana Department of Natural Resources and Conservation, and the Natural Resources Conservation Service to create the Upper Big Hole Arctic Grayling Candidate Conservation Agreement with Assurances (CCAA) program. The CCAA introduced a strategic plan for recovering the Big Hole River Arctic grayling as well as providing legal protections for landowners who enroll and participate in the CCAA. Private landowner cooperation was essential to the development and success of the CCAA, as 90% of grayling occupy streams on

private land in the Big Hole watershed. Jim, Jarrett, and Matt have joined us today to update us on how the CCAA is faring after 10 years in existence.

Upper Big Hole Arctic Grayling CCAA History – Jim Magee, USFWS

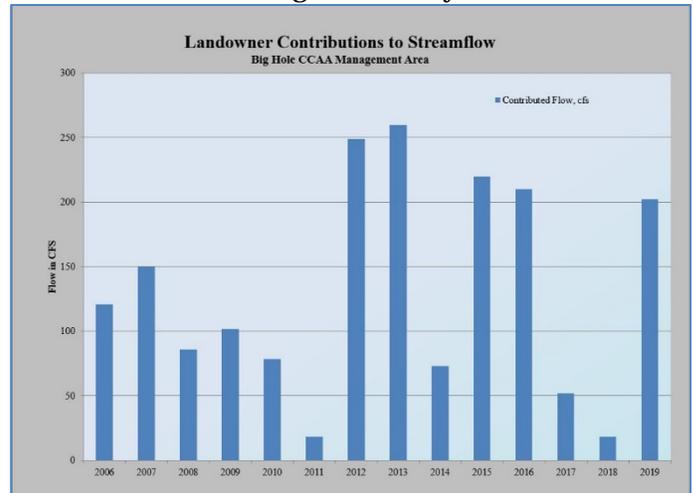
- Timeline:
 - 1988 – River bed was dry at Wisdom Bridge for 24 days. An average of 1.11 cfs for monthly flow. No riparian vegetation, no river gage. Things were not great in the Big Hole. In 1988, the Wisdom stream gage was installed and people started to become aware of the drought conditions and grayling status.
 - 1991 – Fluvial Arctic Grayling ESA Petition
 - Arctic Grayling Recovery Program started, FWP hired Grayling biologist
 - 1994 – Grayling deemed “Warranted but Precluded” by the USFWS
 - Extreme drought
 - Governor Task Force led to creation of the Big Hole Watershed Committee
 - The issue was very contentious in the beginning – lots of finger-pointing.
 - Fall 1994 – Emergency Stockwater Project
 - Watered 2,400 cattle 25 days
 - \$7,254 for 10 tanks/truck
 - Fixed 1 well
 - Wisdom: 1.9 cfs to 18 cfs (watering cattle using wells allowed ditches to be turned off and more water to remain in the river.)
 - Resulted in Stockwater Program started. This was a win-win for ranchers, fish and wildlife, and conservation interests. The CCAA started with communication and connections.
 - 1997 – BHWC introduced the Big Hole River Drought Management Plan
 - 1999 – Implemented drought restrictions on the Big Hole River 9 years in a row (1999-2007)
 - DNRC became involved (Mike Roberts)
 - 2004 –
 - Continued drought, river never opened
 - Spawning flows: 6cfs
 - Petition to emergency list grayling under the ESA
 - NRCS Expedited EQIP
 - Need for watershed-scale, programmatic conservation
 - 1993-2006 –
 - Biology and life history research for grayling
 - Hooking mortality
 - Thermal tolerance
 - Movement: Pit and VI tags
 - Drought response to radio telemetry
 - Species interactions (LL, brook trout, rainbow trout)
 - Grayling surveys
 - Hydrology analysis
 - Big Hole Arctic Grayling Strategic Conservation Plan:
 - Conservation Design:
 - Watershed scale
 - All habitat threats
 - Private lands
 - CCAA: Habitat restoration at a watershed scale by working together through collaborative conservation. In return, private landowners wanted protection from possible litigation related to ESA listing. Ranchers were worried about their ability to irrigate and graze; enrolling in the CCAA gave them peace of mind knowing that they would not lose those abilities.
 - Proactive

- Nonfederal lands
- Voluntary
- Landowners conservation plan to address threats
- Regulatory assurances
- Incidental take if listed
- 32 landowners, 160,000 acres enrolled.
- 2014 – USFWS found grayling to be not-warranted for listing under the ESA and credited successful conservation efforts (in part by BHWC).
- 2019 – To date, the CCAA has completed 453 projects in the upper Big Hole.
- 2020 – UPCOMING: USFWS to produce updated finding: either proposed for listing or not-warranted for listing under the ESA.

2019 Upper Big Hole Hydrology and CCAA Report – Matt Norberg, DNRC

- Matt replaces Mike Roberts, DNRC, and Jacqueline Knutson, FWP as the Big Hole/CCAA hydrologist. He has some big shoes to fill (and we are happy to have him on-board)!
- 2019 Water Year:
 - Wisdom Precipitation:
 - Big Hole Basin snowpack: approx. 96% of average (1981-2010 median)
 - February broke records across MT for snowfall and cold temps
 - March was the opposite – minimal snowfall
 - Seasonal April conditions led to low to mid elevation runoff
 - Snowpack went isothermal by end of April (even at high elevations)
 - Jefferson basin precipitation YTD – approx. 104% of average
 - Wisdom Precipitation
 - 11.69 inches average
 - 2019: 10.8 inches, ~90% of average
 - April to June: ~77% of average
 - May to June: ~57% (we usually get a lot of rain during this time period, but that didn't happen this year)
 - July to September: ~160% of average (2.49 inches of rain)
 - June/July/August: 87% of average (this is the critical time period when moisture is really needed)
 - Wisdom Temperatures:
 - February and March: -5 and -9.5 degree Fahrenheit departure from normal
 - April to June: 98%
 - July to August: 98%
 - September: 101%
 - Streamflows:
 - Peak flows:
 - Melrose: 5,940 cfs, May 18 (2-3 weeks early)
 - Wisdom: 1,450 cfs, April 21 (5-6 weeks early)
 - Bankfull: 1,100 cfs, 3 days above bankfull conditions (channel is full and water is just about to spill onto the floodplain – this is really important for natural channel maintenance to occur.)
 - In comparison, in 2018, we had 144% snowpack and 48 days above bankfull.
 - Low flows:
 - Melrose: 251 cfs, September 5
 - Wisdom: 14.4 cfs, September 5
 - Drought closures:
 - Section I Fishing Closure: August 31 to September 25
 - BHR at Wisdom was below 20 cfs for 6 days during this closure
 - *Discussion:*

- *Peak flow at Melrose is almost always in June. In the last 3 years, it's been in May. Any theories as to why this is happening earlier?*
 - *It's a climatic shift, in my opinion. We're even seeing some of these events happen in March. This may also have to do with rain-on-snow events.*
 - *Last year, we had more snowpack at lower elevations and low temperatures that helped that snow hold on.*
 - *That gage goes back 100 years and just in the last 3 years we've seen this change. That can't be coincidence.*
- Diversion reduction agreements:
 - Biologically based flow targets based on wetted perimeter.
 - Partitioned upper watershed into 5 sections.
- CCAA Streamflow Targets Met:
 - Target: After 10 years, streamflows will meet or exceed target values by at least 75% during normal snowpack years.
- Landowner contributions to streamflow:
 - Landowners contributed less during wet years like 2011 and 2018 when contributions were not needed as badly.
- Snowpack status and forecast:
 - Jefferson Basin currently at about 116% of average
 - Big Hole sub-basin: ~120% of average (but keep in mind that things can change dramatically as we move through the winter).
 - West of the Continental Divide, snowpack is not looking very good. In the Big Hole, we are looking ok, but warmer and average to potentially wetter conditions are forecasted for this winter.
 - ENSO neutral conditions are currently in play and will persist through the winter. (El Nino vs. La Nina)
 - Climate pattern can play a big part in winter conditions. Arctic oscillation – AO influences the number of arctic air masses that enter from the north – predictability limited to a few weeks.



Big Hole Arctic Grayling CCAA update: Habitat, Grayling, and Where is AGRP Going? – Jarrett Payne, FWP

- Jarrett grew up in Twin Bridges, went to school at MSU. Now employed as a Riparian Ecologist. Jarrett replaced long-time grayling biologist, Emma Cayer, about a year ago and has been working hard to get up-to-speed on the CCAA program.
- Native species management:
 - Goal: protect, maintain and restore native species
 - Life histories, genetic diversity, angling opportunity
 - FWP policy and state law mandate FWP focus energy on native species recovery
 - FWP Arctic grayling Recovery office – 3 fulltime staff
 - CCAA Program for Arctic Grayling
 - FWP – Permit holder
 - 20-year commitment
 - Coordinate program – 4 agencies (FWP, USFWS, NRCS, DNRC) FWP is lead.
 - Jarrett's Role: Administer the Big Hole and Centennial CCAA programs
 - Landowner relations
 - Enrollment and site plan development

- Project development (Partner's Program)
 - Permitting: 404, 124, 318, floodplain, etc.
 - Riparian management plans, restoration assessments, etc.
 - Assist with Native Species Biologist, Hydrologist, Partners Program, Big Hole River Fisheries Biologist (Jim Olsen), and other related riparian health projects.
- CCAA Program Current Status:
 - 148,326 private land acres
 - Not all landowner acres enrolled
 - 6,230 enrolled acres
 - 32 landowners
- Conservation practices addressed with CCAA:
 - Instream flows
 - Riparian habitat (initial score: 69%, now at 77%)
 - Riparian Ecology Realities:
 - Introduced grasses, competitive and slow to phase out.
 - Willow recovery: inadequate disturbances and competitive non-native graminoids (grasses).
 - What is the new timeline for sustainability?
 - Fish barriers:
 - Stream miles (%) accessible to grayling
 - Tier 1 – 82 (98 %, pre-CCAA: 87%)
 - Tier 2 – 61 (67%, pre-CCAA: 27%)
 - Tier 3 – 32 (20% pre-CCAA: %)
 - Grayling entrainment (trapped in irrigation ditches): fortunately, we don't see a lot of grayling going down ditches, which is a good thing.
 - Ditches surveyed every 5 years
 - Problematic ditches – annually (only 1 in particular, rescued 24 YOY)
 - Install fish screens
 - Rock Creek and LaMarche Creek
- Grayling Monitoring:
 - N_b – number of effective breeders
 - In 2019, we collected 260 YOY genetic samples through electrofishing.
 - Grayling N_b estimates: 97.3 (2008), 162 (2018) – 66% increase.
 - N_b (2019): 332!
- Program focuses going forward:
 - Build upon landowner relationships:
 - New team
 - Adaptive site-specific plans, maintain working landscapes through conservation.
 - Maintain landowner relationships: The success of these programs is due largely to relationships with landowners.
 - Restore and establish viable grayling populations:
 - French Creek
 - Selway Creek
 - Address concerns with climate change:
 - Riparian monitoring
 - Willow canopy cover
- FWP Staff involved with Big Hole Grayling:
 - Travis Horton, Region 3 Fisheries Supervisor
 - Matt Jaeger, Beaverhead/Centennial Fisheries Biologist, Oversees Grayling Recovery
 - Jarrett Payne, Riparian Ecologist/Grayling Recovery Program Administrator
 - Vacant: Native Species Biologist (hiring soon)
 - Jim Olsen, Big Hole River Fisheries Biologist
- Centennial Valley CCAA:

- Landowners enrolled: 3
- Current landowners in the enrollment process: 4
- Premised on the same four conservation threats as the Big Hole CCAA
- Next focuses:
 - Site plan development
 - Long Creek
- Currently evaluating Upper Red Rock Lake aerator to keep oxygen levels from nonlethal range
 - Winter severity and ice limiting factor for population

Discussion:

- *How many grayling get washed out of Mussigbrod Lake?*
 - *Not very many, we see them right below the dam but no lower. We're not sure why. It shows up in our genetics too, the fish in Mussigbrod and Miner Lakes look very different from the BHR grayling. – Jim Olsen, FWP*
- *This genetics data is what you will use to support your case that grayling are recovering, right?*
 - *Yes, this data is really important and this is a much better method of determining how many fish are actually out there compared to the capture-mark-release method previously used.*
- *Have you addressed the relationship between grayling and Westslope Cutthroat trout in Upper Red Rock Lake?*
 - *Yes, Matt Jaeger could give you more detail, but basically monitoring is shown that spawning habitat and winter severity are the limiting factors for grayling – cutthroat trout don't seem to have a negative effect on grayling.*
- *What effect do pelicans have on grayling?*
 - *They eat them. (I imagine they can have an impact, but they are not selective to grayling and I don't have any information on their specific impact on grayling.)*
 - *It seems like there aren't as many pelicans around as 10 years ago, likely because pelicans don't do well in streams with healthy riparian areas – they need open water to "herd" fish and catch them.*

Upcoming Meetings

- *BHWC does not meet in December. See you in 2020!*
- *January 15, 2020 – 11am at Fairmont Hot Springs Resort. BHWC Annual Business Meeting. (For Board Members and Staff Only.)*
- *February 19, 2020 – 6pm at the Divide Grange. BHWC Monthly Meeting. Topic TBA.*

Adjourn

The Big Hole Watershed Committee urges individuals to join us in encouraging Senator Steve Daines, Senator John Tester, and Congressman Greg Gianforte to endorse the CSKT Water Compact. Sample language for letters and legislator emails are listed below.

About the CSKT Water Compact: The CSKT-Montana Compact is the result of more than a decade of negotiations to resolve the Tribes' claims to reserved water rights within the State. Montana's 2015 Legislature ratified the Compact (MCA 85-20-1901). The Compact is now awaiting congressional approval.

Passage of the Compact would result in granting 308 CSKT-MT Compact rights. Not passing the Compact would result in enforcement of 10,109 instream flow tribal rights that impact 2.5 million irrigated acres owned by 10,127 water right holders. Not passing the Compact would impact 45,485 individual water rights in 41 of Montana's 56 counties and in 51 of the 85 adjudicated basins. (Montana DNRC). If the Compact is passed, it will only require adjudication of .6% (308 rights) of the total rights that would need to be adjudicated if the Compact was not passed. With no compact, water rights in the basins that are already adjudicated would have to be re-adjudicated, setting Montana's water right adjudication process back decades and costing the state and water right holders millions of dollars we do not have. Individual water right holders in the Big Hole watershed would have to defend each of their rights against every Tribal right that impacts them. Each water right holder would have to object as an individual and defend their rights against the Department of Justice and the Tribe. This is no-win scenario.

Time is running short. The judicial stays on the claims filed with no Compact are scheduled to be lifted in January of 2020. The State Water Court and its administrative Judge are losing patience with the inaction at the federal level. The Big Hole Watershed Committee is asking OUR Congressmen to immediately cosponsor federal legislation to ratify the Compact and to reach settlement with the Tribe and Department of Justice.

Congressional Contacts

Senator Daines:

Jason Thielman, Chief of Staff
(202) 228-9673 | Jason_Thielman@daines.senate.gov

Ron Catlett, Northwest Montana Field Representative
(406) 257-3765 | Ron_Catlett@daines.senate.gov

Senator Tester:

Michael LaValley, Tribal Liaison
(406) 452-5020 | Michael_LaValley@tester.senate.gov

Congressman Gianforte:

Tripp McKemey, Legislative Assistant
(202) 225-3211 | Tripp.McKemey@mail.house.gov

Sample Language for Individual Letters Supporting the CSKT Water Compact:

"Hi, I am _____ a Montana citizen concerned about the lack of Congressional action on the CSKT Water Compact. Montana's tourism, agricultural, and real estate economy depends on a clear right to water. From irrigators to sportsmen, and municipalities to commercial users, Montanans demand the clarity and certainty the CSKT Water Compact provides.

I request that you do whatever you can to ensure that the CSKT Water Compact, as passed by the Montana Legislature, is ratified. It is the only sensible solution that will benefit all Montanans."

You can add flare and personal stories however you think best, like:

"I'm getting ready to sign an operating loan for this year and after reading your comments in the paper...."

"I'm frustrated that the compact's opponents do not have any skin in the game. I actually irrigate and my family's livelihood is at stake!"

"I do not want to risk litigation to retain a water right the Tribe has already freely conceded. Get this deal done."

For more information regarding the CSKT Water Compact, visit the DNRC's website, here:

<http://dnrc.mt.gov/divisions/reserved-water-rights-compact-commission/confederated-salish-and-kootenai-tribes-compact>