

**From your perspective as a community leader in Northern Colorado, what is your key takeaway from today's session?**

- This is a much needed course on water issues and potential paths forward as so many of us are not Colorado natives and come from a water abundance perspective rather than a firm understanding of water scarcity. Water history and the complexity of water issues inside and outside of Colorado must be well understood to create successful future policy and programs.
- Great speakers. The first two were interesting, but stuff I already had some background in. However, Martin always stretches my head as we try to maneuver in our polarized world. He reminds me that I don't need to focus on trying to change others mind, but to work on my own perspective
- Water is extremely complicated and the issues that surround water in the Colorado Basin are not going away anytime soon unless we see several years of above average moisture that can replenish reservoirs & aquifers, increase snowpack, and make sure soil moisture is at or above historic levels. While Colorado has its own set of issues it appears lower basin states might be facing even more severe hurdles.
- My key takeaway from our September session is the importance of Colorado Water History. We really need to understand the history of the geography, hydrology, and legal parameters around Colorado water to shape how we manage water in the future. By understanding why and when certain decisions were made, we know what we can revisit, what mistakes to avoid, and what future paths to pursue.
- Water touches all areas of our community – its future, its ability to grow and thrive, and its relationship with other communities who also want to thrive. Western water management hasn't always been beneficial. From the beginning of western settlement, people have been abusing and overusing water in dry, arid places.
- As you well know, the first session was important and very well prepared and presented. All of the speakers were excellent!
- Mr. Kessler's Perspectives from Colorado's Western Slope presentation pointed out the fact that fishing the Colorado River has been shut down all the way to Rifle, while we on the Front Range remain under minimal watering restrictions at the same time. I am not a fisherman myself, but I had heard of the recent fishing closures through the media and hadn't previously connected those dots. I was also previously unaware that the Colorado River Compact does not hold the lower basin states to the same standard as the upper basin, so that was discouraging to learn.
- The Water Law system in Colorado is very unique compared to other Western States. In a lot of ways, it is far advanced compared to other states. Colorado has been the home to some very important people in the water systems now present in the western US.

2022-2023 Water Literate Leaders of Northern Colorado  
Homework Assignment for **September 2022 – Redacted**

- **KEY TAKEAWAY:** There were some really innovative thinkers in the early years. Amazing how Colorado (and other States) are still utilizing many of the Water Policies today.
- Water has been the topic of discussions for a very long time and will continue to be the topic of discussions as changes in supply and demand evolve over time and while those conversations may be complicated without a clear solution, there is potential for compromise and substantial progress.
- I knew on some level the issue of water supply would need to be a regional, even national conversation, but listening to the different speakers, I realize that collaboration with surrounding communities and states is imperative for water supply in the West. Accomplishment of a sound water policy that benefits everyone around us will need to be accompanied by some hard trade-offs and serious compromises.
- Current water leaders and the state of Colorado owe a great deal to our region's historical water innovators and masterminds whose water laws and policies protected Colorado water rights yet maintained a balance of water resources and dedications to the lower basin states. What a brilliant representation of what can be accomplished through cross-regional collaboration. A worthy goal to continue to build and strive with our present and future water resource management decisions.
- My key takeaways from our first session are the informative presentations on the history of Colorado water, the present and the critical necessity for all stakeholders to listen and collaborate on the wicked problem at hand. I am grateful to be part of such a diverse and talented group.
- Colorado is great. I really appreciated the content from Zane on the over-appropriation of the Colorado River and was impressed by the way that Colorado is about a century ahead of the lower basin in many ways. I am of the opinion that limits are not bad and it is clear that limits have forced Colorado to be collaborative and creative in some really encouraging ways (e.g. such as WLL). Limits are different from scarcity thinking and based on what he said, as well as Martin, Colorado is approaching these issues with a "limits are forcing us to grow and get creative" mindset, as opposed to a zero sum game. I'm grateful for that and excited for how we can continue to hold that posture through the course.
- Northern Colorado has played a significant role in establishing water agreements, rules and regulations for the State of Colorado. In addition, these items are still impacting us today and lead to difficult conversations and necessary collaboration.
- My key takeaway from the session is an appreciation for the historical fore site and present-day efforts to manage the scarce resource of water in the west. I

2022-2023 Water Literate Leaders of Northern Colorado  
Homework Assignment for **September 2022 – Redacted**

am grateful for what I learned re: Eaton and Carpenter and the pioneering roles they played in northern Colorado, respectively. It is a truly fascinating history.

- The 2022-2023 Water Literate Leaders cohort has a very broad range of experience, insight and perspective. It is also an engaged group that is not afraid to have a little fun along the way. I look forward to future sessions and further engaging with this group!
- Just how linked we all are around such a critical natural resource. So many stakeholders, each of whom have an important perspective.

**What did you learn today that encouraged you, discouraged you, or captured your attention to the extent that you could see yourself engaging in it further?**

- The "1st" in the US for constitutional, State management, and river flow understanding was very interesting to me. The appetite for taxation regarding water conservation practices captured my attention and is a practice I will study further for our community as we plan for our future changing climate conditions.
- It is incredibly discouraging to hear how long it takes to get water policy adopted. It is like climate change – the world is “on fire” yet we spend our time debating not acting. In the case of western water, the parallel is that the “bathtub is almost empty” yet we cannot get folx to get serious about implementing conservation strategies now!!
- As with any major problem there are a lot of very smart and hardworking people that are working to solve them. It is apparent that all states in the Colorado River Basin understand the severity of the problem and are working to solve it.

The biggest thing that stuck out is how the rising temperatures have adversely impacted the river flow and it does not appear that the direction of flow will change anytime soon.

- I was very intrigued by Zane’s perspective of maximizing benefits in the average versus the extreme. Optimization functions are one of my favorite economic practices and I bring that into my work in conservation. This made his point really resonate with me as we do typically rely on averages, be it weather, cost, anticipated outcome, etc. It feels “representative” and “safe”. But more and more Colorado is facing extremes in their water management space. So why am I not also running my models in extremes? I think it comes down to not wanting to waste resources on a “possible extreme”, as opposed to “a consistent possibility”, but what isn’t captured in this is the volatility of water. Rarely did Zane’s graphs land at that anticipated average, it was more often a high or low extreme. I think that perhaps models need to be run on typical highs and typical lows, not an average of the two.
- I’m sad about the current state of water and how it’s been managed in the west, in the past, but encouraged that we have so many experts in Colorado and our immediate region looking to the future and being realistic about storage, supply, transmission/delivery.  
I want to learn more and engage more as a professional and person living in Northern Colorado. I want to be a champion of water management that works with our natural environment and how to protect water resources for future generations.
- As I expressed in class, the movie was a suburb, accessible vehicle to combine the story of our "waterscape" with the more detailed histories, say of

2022-2023 Water Literate Leaders of Northern Colorado  
Homework Assignment for **September 2022 – Redacted**

"Last Water Hole in the West" and the detailed discussion of events presented by Patti Rettig. I will review her presentation notes as well.

What I have reflected upon (a lot) are how a variety of personalities have been involved in our great projects, and how all have been necessary to pushing the projects forward. We have had "Project Champions" (often longer as projects stretch into decades) but we have also had many technical staff, economists, political leaders, and mediators to bring the projects to conclusion. We cannot let the projects devolve into simple contests of the "super-heros" vs. the "villains." The projects are more complicated than that, require a variety of skills and personalities, and the ability to evolve over time as demands change and conditions become apparent. A successful project will and must evolve as it moves forward.

- Someone in the group said something to the effect that such green lawns are "masquerading" as midwestern lawns in the arid west, which is true. I've always assumed that green lawns in this region would eventually become a thing of the past due to limited water resources and we appear to be approaching that time. I've been re-thinking certain aspects of non-potable irrigation systems lately, as they likely perpetuate a myth that green lawns must be sustainable in this region. While non-potable irrigation systems are good from the standpoint of keeping agricultural water on the land and not using treated water for irrigation, they also create a false sense of water supply for a resident that doesn't see that water in a metered water bill, ultimately leading to waste. I'm also concerned about on-going maintenance of such systems performed by HOAs or other entities not equipped for the task.
- There has been a lot of discussion between the states in recent years to solve water issues. Even though they may not agree on all issues, at least the discussions are happening which is very encouraging!
- LEARN: Encouraged by the amount of supportive people, committees, groups, organizations there are. Particularly the example of how the Environmental changes to PPP methodologies. Loved how Martin bridged the water challenges with the day-to-day way conversations and discussions and debates should operate.
- I found that the usage breakdown by basin to be both encouraging and discouraging. I am pleased to see that the upper basin is managing their use and concerned about the usage from the lower basin. Obviously, some changes are going to have to take place.
- I was actually encouraged about the level of collaboration already happening around the issue of water supply for the West and the level of concern and

2022-2023 Water Literate Leaders of Northern Colorado  
Homework Assignment for **September 2022 – Redacted**

willingness of people from all sides to work together to ensure a stable, steady supply of water for our community.

- The impacts of climate change will become even more crucially important in crafting water resource management and allocations in the lower river basin. The lower basin states would highly benefit from following the lead of states like Nevada in implementing innovative water conservation measures to reduce the strain on the western region's water supply.
- It was encouraging to know that we are all working together towards solutions. Each presentation and books captured my interest to learn, participate and collaborate with my cohort.
- I'd like to keep learning about what it would look like for the lower basin to live within its means. That was a fascinating discussion, as well as the legal decisions that don't make the lower basin carry its own evaporative loss. As I mentioned in the session, I'd love to keep the conversation going about how land use codes affect water use (e.g. minimum lot size).
- I was encouraged to learn that Colorado is ahead, in terms of water management practices, in comparison to other states in the compact. However, Colorado continues to understand its role in the future of the Colorado River everyone will need to make changes to ensure a team mentality is maintained with the other states and geographic regions in Colorado. It gives me hope that we can engage the public on these items to try and create even greater change. I was especially hopeful to hear other large municipalities are able to continue to grow while decreasing their water consumption. Would love to understand policies and procedures like San Antonio have been able to implement to achieve a 35% reduction in water usage during record growth.
- I was discouraged by the discussion of the lower basin of the Colorado not living within the limits of the water compact and yet encouraged by stories of locations like Las Vegas, Nevada figuring out how to have population and economic growth in concert with water management. I was also encouraged to learn about Martin Casson's approach to leading dialogue on contentious issues to find common ground and work toward shared goals.
- A. I was not aware of the extent of resources available from CSU's Water Resources Archive, and I can see myself exploring the archive in search of local water history (e.g. Poudre River resources). I was also intrigued to hear that some of these resources are eligible for a book report.  
B. Martin Carcasson's session was particularly interesting to me. While I am aware of biases (both my own and others'), I had not heard an explanation of the science behind it. This was quite intriguing to me, and I hope to learn more from Dr. Carcasson through some of the opportunities described in

2022-2023 Water Literate Leaders of Northern Colorado  
Homework Assignment for **September 2022 – Redacted**

class. I suspect this will be useful in discussions related to water resources and beyond.

- The CSU professor discussing bias, discourse, civility. Great way to set the stage for difficult conversations.

**What questions do you have based on what you heard from today’s speakers and group discussion?**

- I would like to learn more about environmental/three birds and fish policies and what actions local governments could/should be discussing as we plan for the future. I would also like to learn more about the challenges and wicked problems my classmates are attempting to solve.
- It was great to hear from the varied perspectives in the room. It would be great for you to call on some of the quieter ones, we need everyone’s perspective not just us “un-shy” ones....
- I would like to know which states outside of Colorado face the biggest challenges going forward and what they’re doing about reducing their water consumption (conservation efforts) and if Colorado is looking at implementing the same things. I’m still surprised that more municipalities in Colorado aren’t requiring less grass, shrubs, trees (irrigation) on new residential and commercial developments.
- I’m curious what is making Colorado Water such a popular topic in the past 5-ish years? It is clear from our presenters that there have been droughts and water management struggles in Colorado for a long time. If we have dedicated so much time and effort to developing Colorado water to be well managed and cutting edge, why does it feel like we are in an critical state and don’t know what to do? A lot of work has been made, but a lot more still has to be done. Some work has been more “behind the scenes” like Zane comparing Colorado and California water management. But why, culturally is Colorado behind? Why do Coloradan’s still love their lawn? Why, after so many droughts and other regions changing their norms, has that not happened here on the same scale? Why are we running into issues if we are apparently on the cutting edge of water management?
- No other questions. I look forward to October’s session.
- No questions!
- I have no questions this month.
- I would like to look into additional information on water rights laws for neighbouring states (Utah, Nevada, Arizona and California). So that I can better understand the Colorado River Compact.
- QUESTIONS: No additional questions at this time, just diving into all the Citizen Books that were provided. Lots of repeat information, but from various angles and perspectives.
- What are the potential solutions for over-use in the lower basin?



2022-2023 Water Literate Leaders of Northern Colorado  
Homework Assignment for **September 2022 – Redacted**

- At the moment, I do not have any questions, but I am sure that will change.



- What percentage of impact can agricultural practices help the western region move towards the 35% reduction in future water conservation goals?

What Colorado municipalities have demonstrated the most resourceful water management and conservation best practices & policies?

What are those best practices and policies?

- I hear conflicting arguments or advisement on whether federal oversight should be present. Some Coloradans suggest that the lower basin needs to be federally mandated on their water management while the same Coloradans are passionate about no federal mandates/ oversight on Colorado. Should the Colorado River have federal oversight on management?
- Can Colorado hire Martin to run conversations between the upper and lower basin? He was fantastic and we need to have more conversations about the river as a whole. Or are there broader discussions about that balance of water use? I'd love to learn more about that.
- At what point would the Federal government step in to take over the Colorado River Compact? Do they technically have the authority to force a resolution?
- Who is leading the current tough decision making re: the Colorado River Water Compact?

Where is the balance between incentives to manage water better/conserves and mandates to change? What works better? How much time do we have to test different approaches before a critical tipping point?

Will we be learning the approach Native nations or Latinos did or do take to water management, so that our lens is not solely a Caucasian nor colonial one?

- A. What resources are contained in the Water Resources Archive and how does one begin to discover its contents?  
B. How can I better recognize bias in myself and in others, and how to have positive, productive conversations even when biases are clearly present?  
C. What is on the agenda for October?
- Desire to better understand the Colorado River Compact and implications of not employing conservation measures across all 7 states.