

1. What did you learn today that encouraged you?

- The different entities represented in our class all see the need for at least some regionalization of water supply. Having lived in Colorado for 3 years, I realize that water supply is more fractured than I ever imagined! Perhaps start with implementation of a Regionalization Fee in each community on every tap. This would certainly start the discussion going and draw the populace into some basic understanding of water supply issues when such fees are on ballots.
- I was encouraged by the seemingly high quality staffs of the local municipalities and the efforts N. CO has made to reduce our water use per capita. I enjoyed learning more about the history of N. CO, Prior Appropriation, and Return Flows from Andy Jones.
- While I already knew of our proud history in the development of western water law it was neat to have that shared in front of others. I would hope this would encourage us to further advancements in how we use the precious resource in the future.
- I enjoyed the presentations and especially appreciate the book *Colorado Water Law for Non-Lawyers*. I am not a lawyer! Water laws are complex and difficult to understand and so I tend to shy away from legal issues. Thanks for the book! I feel encouraged and more willing to read about an issue which I know is really complex, aka water. I was encouraged by the programs and efforts municipalities have been making with their communities, i.e. education and water conservation. I live in a small town that has not joined in with similar effort. I believe education and awareness is crucial.
- I was very encouraged to hear ideas such like short term dry up of ag operations during determined drought periods with the opportunity to re irrigate in wet years. I think this is a brilliant idea and one we might look into.
- It encouraged me to hear from the municipalities how much work has been done in the realm of water conservation. This affirms my understanding that we are exploring the different tools in the toolbox, that conservation is taken very seriously, and that we are not building additional water storage and acquiring additional water rights without first thinking and acting very seriously on conservation.
- I learned that our area figured out in the mid-1800s how to co-exist with each other with respect to a limited resource by being creative enough to form its own version of water law. It seems like interested parties are still willing to talk so there is probably a path to solutions.

- So far, conservation (municipal) has allowed water usage to remain flat with a growing population (what next?)
- Today was a truly great class...almost overwhelming actually. A very aggressive agenda. I few thing that I can point out that encouraged me:
 - The ability, skills, and experience of the municipal water providers. I feel like our water is in “good hands”
 - The passion that was on display at the table, with different perspectives being offered and accepted in respectful and open-minded terms
 - The innovation- ideas circulating about technology, land use, economics, and communication led me to believe that you have assembled a great group of local leaders

2. What did you learn today that discouraged you?

- I knew this instinctively before, but now it has really sunk in: The water we have in Colorado today is all that we are going to have in the future for our rapidly growing population.
- I was discouraged by the further realization of how difficult it is to get new water storage projects approved. A recent example since our class is the new lawsuit that was filed against the Chimney Hollow project.
- I was discouraged by the length of time permitting takes and the costs associated with that long time table, but encouraged by the multitude of projects in the works with the focus on conservation, cost efficiencies, and new technology.
- That a decree is right even if it is wrong. While I understand the need for a measure of certainty in knowing the value of your water right I fear that advancements in science will not necessarily benefit us if we cannot always reserve the right to be smarter tomorrow than we are today.
- I was discouraged to learn it can take many years, (40 years is what Peter Binney mentioned) to bring new water storage on line. I can understand the frustration(s) from many leaders who have been working towards this and are engaged in the process. It is discouraging to hear that the time it takes and it may be longer than one’s career especially if you are with the same employer.
- Not a discouragement however a suggestion. We have so many speakers it leaves little time for question / debate. I like hearing opinions after a lead discussion as this becomes thought provoking especially when you look at the makeup of the group.
- While I loved the presentation from Andy Jones, and thought he did an excellent job distilling a complex topic, it was a little discouraging to hear “You can, but you can’t” in terms of water law. I think that there are some good aspects to our current form of water law, as Andy noted, but I do hope to learn more about the creative solutions that may exist within the existing legal framework so that we can figure out how we “can” do more things that make sense.

- Aurora's solution was buy and dry. That reinforced to me the human element that when in a corner people will do what they have to do to survive regardless of the consequences for others. It is a human trait that will have to be considered every step of the way.
- Early water rights efforts encouraged complete diversion of the river. Instream rights are very junior and require purchase and repurpose by senior water rights holders.
- The agenda was perhaps too aggressive. I don't want that to sound critical of you and Reagan. The plan made sense to me- Water Law Primer, a local municipal past status, current status, future status perspectives and a forward-looking discussion with an innovative mind in Mr. Binney. It was hard to get through it all AND get everyone's thoughts out. So, this is not really discouraging, because I am happy for the challenging curriculum...just wondering if we can really fit some of these topics into a 4.5-5 hour window!

3. What did you learn today that surprised you?

- Water is classified into four types: Tributary, Non-Tributary, Not Non-Tributary, and Designated Basins. Plus exempt domestic wells.
- I really was surprised that I had not previously heard of Aurora's \$750 MM, 100% re-use water treatment facility previously. Peter was a fascinating speaking and I enjoyed hearing about his creative solution.
- I was surprised by the NISP, Halligen and the Seaman expansion plans and wondered why the entities of all 3 aren't working more closely together as I wonder if there would be some cost and time savings if there were more collaboration in those efforts.
- Advanced water meters to give real time consumption information. Windsor's ordinance to require non-potable systems on historically irrigated farms. The challenges in land use planning when there are multiple water providers in the municipality.
- I enjoyed the presentations from the water providers and could see similarities. However there were differences among municipalities which I would expect and I would imagine other municipalities would be similar. One is not better nor is one the "only" or "right" way and clearly each is unique to their individual situation. Also, the presentations differed in style but all described water supply and demand. Each of their purposes was the same 'supply' to meet 'demand' of water but what surprised me is how their priorities seemed different. Managers and leaders help guide and determine specific tasks but in Northern Colorado I am not sure all of us have the same priorities especially when it comes to water.

- I continue to be surprised at how farsighted our water leaders were in the late 1800's and early 1900's. Hope we can be so smart.
- There was a comment from one of the presenters alluding to environmental groups perhaps wanting to restore the river to a long ago time before human intervention, where flows were not regulated. To me, this does not seem like the prevailing attitude of the vast majority of conservation groups. With the natural resource practitioners I have had the chance to work with, they very much recognize that we will not return to a long ago era and that is not the desired goal. The current goals of conservation and restoration efforts are all about ensuring that our ecosystems have the ability to perform critical functions that we all depend upon for various elements of life.
- Evaporation at 45" to 85" annual. How does that fit into the law. If I take my water and put it underground and reduce evaporation by 90% do I get to keep that water or is the captured evaporation treated as return flows? What happens if a region decides to capture evaporation?
- Return flows – Deep percolation, ditch loss, etc. returning water to the river maybe a year down the road keep flows in the river year-round. We don't really want to return to a completely natural river, even from a conservation standpoint. "Buy and dry" implications of cities buying water rights...can only use the consumptive use portion....return flow needs to match historical marker (time, location, amount).
- That "Toilet to Tap", or some form of it, was already happening in Colorado (Aurora Water)

4. What did you learn today that you want to know more about?

- The next drought period will happen, but when? How to set up a rotational fallowing program before it is needed. How to mitigate the impact on the rural tax base when land is moved into non-production for a period of time.
- I still don't know what I don't know but, I would enjoy learning more about the various right rights that are prevalent in our region.
- Water oriented development.
- The term 'fallow' was discussed and possibly could be used for water storage. I had not heard of its use this way and think it is interesting and promising. I am familiar with the concept and how it's used in agriculture. A farmer who wants to grow a crop but does not have irrigation (water) to produce a sufficient crop would alternate planting or plant in strips to allow the soil to acquire enough moisture to grow a crop (usually wheat) .
- Above, short term dry up.
- I would love to learn more about creative mechanisms to achieve current goals within the current water law framework. I would also like to hear more about

examples of sustainable growth from other communities that experienced the population growth that we are facing here in Northern Colorado.

- Return flows – If a Municipality can use to extinction how can they provide return flows? Where can return flows be seen re-entering a river? How is return flow measured? What is Western slope doing when water is diverted? Are return flows accounted for on that side of the mountain?
- If the river systems are already over-appropriated, how do we accommodate growth? What happens to “farmers 3-10” that don’t have access?
- C-BT project and implications of Northern Water.
- What did you learn to that you want to know more about/engage in further? The whole “changing the paradigm on land use/water use/water-oriented development” was extremely interesting to me. Elements of climate adaptation, economics, communication, and behavior change...very intriguing indeed!

5. Was there anything today that captured your attention to the extent that you could see yourself engaging in it further—to study it further, to play a leadership role in bringing it to the attention of others?

- Promote education on water supply issues in my community; ie, the cost and funding for future water supply projects, water conservation seminars, smart meters & real time data for users, availability of more water conserving fixtures...
- I could see wanting to help a community like XXXXXXXXXXXX (where I conduct a fair amount of business) attempt to better prepare for the future by learning more about the infrastructure investments of its neighbors and how the lack of such efforts could negatively impact the community in the future.
- I am intrigued by the regional collaboration approach Peter Binney spoke about and have had a similar interest in something of this nature that I will speak further with some of my contacts about.
- I am going to gather some leaders from Windsor and maybe Timnath to explore the above concept.
- At the field trip, Ken Kehmeirer from CPW discussed working with the various water supply projects to find a workable solution to have the project continue, while also meet environmental needs. I found this interesting and I could see myself studying these efforts further and potentially playing a role in that type of work in the future.
- Not yet but I’m counting on the book that Andy Jones provided and the WD Farr book I’m assigned to provide inspirations and ideas.
- I look forward to reading the Water Law book we were given to better understand the complex legal issues we will be dealing with going forward.

Other Comments:

- I'd suggest asking Andrew Jones to come back at our last meeting for an open forum discussion. I think he would gain from all the perspectives that the class members have gained, and our class would certainly benefit from more interaction with him. Is there a map of all the ditches and pipelines? Please consider setting up a conference line so that class members who are out-of-town can call in and listen. Perhaps do it webinar style, so the PowerPoint can be seen.
- I was in a meeting yesterday with the Water Districts Collaboration Steering Committee and there were a number of things that I was able to understand due to what I have already learned in the class.