Gerrit Jobsis: All right. Well, thank you, Ben, very much. That was a great presentation. Again, Ben is very willing, as he said, to take questions afterwards. I hope you all are thinking about the questions that you want to ask during our session after this. Please write them down now so you don't forget.

Our next speaker is Cory Toye with the Wyoming chapter of Trout Unlimited. He is going to talk about a non-governmental program that involves different water users.

Cory Toye: All right. Well, thank you. It's a pleasure to be here. I really appreciate the opportunity. I need to start out this presentation with an apology, which actually isn't that uncommon for me. But, I am with the award-winning now Trout Unlimited, and I regret that I wasn't here last night to accept that award with Pat. I understand he did a good job. My mother lives here in Fort Collins, so I made the choice to hang out with her last night, and it was great. Had some Greek food, which doesn't happen too often. Pavilion, Wyoming is where I'm from. We have 140 people, and so I took the opportunity to have some Greek food with my mom. Bought some jeans. It was a great night. So, again, thanks again on behalf of all of us to you we're just flattered by that, so.

I will say I found out about that this morning. Usually when you miss a meeting like that you find out you were volunteered to be like an officer to something, which is how I got to be the president of the Wyoming Water Association last spring. You know you miss one meeting, and all of a sudden you're president of the damn thing.

But, anyway, I thought I'd take the chance to walk through some of the efforts that we have going on in Wyoming, both with our project work and our policy work. It's really been a validating effort the last few years, seeing how the relationships that we've built on the ground in the trenches with a lot of the water users in the state has led to some paradigm shifts and hopefully some long-term policy discussions.

You know Pat touched on this a little bit, but the world that we operate as far as Trout Unlimited goes, is in the reconnect and restore part of this graph. We have staff across the nation that work on public lands issues, a responsible oil and gas development. And then me and my crew we work on the reconnect and restore. So, trying to put degraded habitats back together, and reconnecting historical migratory corridors for both native and wile trout. We also have a sustained component, which focuses mostly on education. Our youth education program in Wyoming specifically is geared towards trying to encourage the next generation of stewards, so there's people picking up where we leave off.

This slide is a tone setter here. I don't do statistics or graphs that well. I'm a recovering attorney that you'll see in the brochure. But I do try to fit a Springsteen quote into all my presentations. I think that this one does a pretty good job of setting the stage for our business plan in Wyoming. My predecessor was Scott Yates. The program that he created in Wyoming about 11 years ago was put staff in the communities, in our trout-rich communities in the state of Wyoming, and invest locally, develop those trusts, and work with agriculture communities that you know if you're going to do any substantial cold water conservation in the state of Wyoming they're incredible and necessary allies. So, they're responsible for over 90% of the water use in the state. So, if you're going to

do anything with water, they have got to be part of the team, rather than perceived as a threat to our mission.

So, that's what we do. We have five or six staff now across the state that all they work on is restoration and water use issues with landowners. It's been rewarding. It's been successful. In the last 11 years we have over 100 projects now that we've completed. We tow over 1,500 miles of reconnected habitat, and we're looking at close to 30 million dollars invested into cold water conservation.

A couple of the highlights I'll show. Basically these projects have multi-facets, but a lot of this is dealing with low flow conditions, whether through irrigation, or whatever the practices may be. You know for restoration projects like this, this is down the Encampment River. This had a history of tough uses in the past with tie hack drives, with overgrazing where these channels become over widened. During those low flow conditions during the year will become non-available for trout and disconnect habitats actually just through thermal.

So, we'll go in and reconnect those tributaries by creating low flow channels. Instead of that water being an inch wide and a mile deep, we'll narrow it down so fish have a chance to survive that time of year, and also access habitat upstream that may be cooler. Another shot of just the before and after. This is a picture from Facebook, which I can't say I participate in, but it was from the ranch. He was talking about the massive trout increase as far as the population goes, just in two years since these projects came online. I can't actually read that either, but I promise you it was an impressive number. Something that he took note of, and it was always good to have that anecdotal evidence from a landowner that may or may not be that interested before the project, but they then become super invested afterwards.

Just below this project on the Encampment River is a barrier now that took almost 10 years of trust building to get our opportunity to address this for fish passage. So, we'll be tearing this dam out and putting in a ladder that will reconnect this entire tributary to the North Platte, over 150 miles of habitat available for the first time in nearly 60 years. So, just building that trust to reestablish another important tributary, both for expanding trout population, but also allowing refuge from low flow or high temperature conditions.

Similarly, in the Bighorn Basin, we have the Greybull River System, which is home to native cutthroat trout. There is large irrigation diversion structures up here that have also disconnected habitat. This project mimics one we completed a few years ago on the Greybull that we installed this fish ladder. You can see from this graph the purple is the newly available habitat made over 140 miles in the first time in 80 years, again overnight. This next project that we'll be doing on the Wood River is similar in scope, but will also allow migratory passage for all fish for all life cycle requirements as well as escaping low flow conditions.

Another strategy that we're using in the state is consolidating irrigation diversions, and making irrigation efficiency a reality. I think in Wyoming, and probably it's the same way in a lot of the western states, there's a lot of infrastructure improvement that can be

made on these ranches, that they're interested in doing, but have never been able to afford it. So, for the first time in you know a while, or maybe the first time ever, we've been able to justify a lot of these infrastructure improvements, and pay for it on the back of cold water fish, trout. So, we're putting in advanced sprinkler systems, consolidating ditches into single ditches, so we're increasing passage and using less water.

On this project here ... It's going to be tough to ... But, historically, diversions were taken out of this tributary. This is the east fork of the Wind River. It's a conservation population of Yellowstone cutthroat. But these two tributaries were what was historically used to irrigate this bench here. Water would be taken out of Pine Creek, ran on this bench, dumped into Meadow Creek, and then all of the water would be taken out onto these meadows. So, these two tributaries were effectively dry most of the year. This is a tough angle here. Our project over here pretty much put in a couple of sprinkler systems, and then we put in a pump station down on the main stem river, so that all the water they needed for their sprinklers could be drawn out of a larger water body. Then these two tributaries are completely free of any kind of disturbance for Yellowstone cutthroat trout. Som, improving flows through moving the diversion point to a larger system.

Finally, in the Henry's Fork of the Green River, we're participating in a salinity program with the NRCS, basically improving irrigation operations so that there are better flows during those tough times of the year, improving passage as well.

So, I'll just show this real quick. This is going to be talked about later. This is Fontenelle Reservoir, and this is Fontenelle Creek. We've been doing diversion projects on this system for quite a while, but now it is also becoming a key player in some of our policy projects that we're pursuing now.

As I mentioned, in the last few years we've had the opportunity through a program to encourage or see if landowners would take advantage of conservation activities if there was incentives, if it was negotiated and temporary. Historically Wyoming has been a very difficult playground for streamflow. As many of you known, Tom Annear has been a champion of streamflow in the state of Wyoming for a long time, and has taken some beatings. He is one of my heroes, because that guy is as tough as they get. It's been a tough situation for streamflow, but I think we're starting to finally make some shifts, because we're starting to change the direction of where the champions are coming from. Trying to encourage landowners and water users in this discussion has really started to shift the conversation.

But, anyway, I mean just to highlight, in Wyoming streamflow and conservation is more or less discouraged. You know we have the Free River Doctrine, which is listed there, which pretty much says you have your appropriated water right, which is fine. But, you can actually take whatever you want, if there is water in the stream. So, that's encouraging users to take as much water and irrigate during times of springtime or whenever we have lots of water in the channel. But, what that does, is it can discourage conservation activities, because it effectively takes away any way to protect conserved water in stream from nonparticipating head gates. So, if you have somebody upstream

that's doing a conservation activity leave water in the stream, the next guy down can take it, or the guy above you can take it. There's no legal mechanism to protect that.

So, that kind of leads to a tough playground, which we're still in. We have had a path, so we've had a history of trying to introduce streamflow legislation to allow us to leave water in the stream during certain times of the year. It would allow landowners to use a portio of their water right for streamflow. That's been an on again, off again process for the last 12 years or so. I mean we're always trying hard, and we're always trying to figure out a way or a tool that landowners can use. Making it flexible, making it date-based, making it compensated. You know, we're basing this on the idea that a water right is private property, and that a landowner should have the ability to maximize its use or value, if he has that opportunity.

So, we continue to move forward with that kind of resilience, but time and time again this is what it looks like in Cheyenne. About 2011 was the last time we tried to introduce streamflow legislation. I knew it was going to be a boxing match. I tell people that I actually got knocked out before we got in the ring that year. I mean it was a bill that we had some support for, but unfortunately in Wyoming, it's still a very tough discussion with the agriculture industry because it's still perceived as a threat. All of our water bills start in the ag committees. So, it's, you know we didn't do our homework quite as good as we thought we did. It's a good way to stay humble. So, we'll continue to do that.

Now, four years ago, the Upper Colorado River Commission, who is the authority of the Colorado River Compact, introduces the SCPP, the System Conservation Pilot Program, which has been mentioned a few times, to see if there is a tool available for water users in the basin to voluntarily, temporarily leave water in stream through incentive measures, through getting paid. Would they be willing to lease this water, and is there enough demand that a program like this could help offset shortages in the Colorado River Basin?

So, this was right up our alley. The state engineer's office approached us, because of the landowner partners that we have had in that basin, in the Upper Green Basin in Wyoming, to see are there folks that would be willing to try this out to see if this demand is real, and to see if there is some kind of scope that could be reached in Wyoming where conserved water could make a difference, or add to the system supply in the Colorado River Basin.

Our role pretty much was knocking on doors and letting people know about this program. The state engineer did all of the technical work, which was great for us. They were able to determine if you fallowed a field during a certain period of time what the yield for conserved water would be, what the acre-foot savings would be through that measure. I know nothing about this, so don't even ask me a question about metric, the using satellite imagery to help determine consumptive use and determine evapotranspiration. The state engineer was in charge of that, but that's how we determined how many acre-feet would be conserved in our applications when we came up with dates for fallowing.

The first year we had a pretty short, quick turnaround with RFP as far as getting landowners signed up, and we had five applications. All of these were split-season fallow things, where they would irrigate as they traditionally had in the spring, put up their hay, leave their water off for the remainder of the year, and be compensated for that second part of the irrigation season. Again, the estimate came from the state engineer, that about 1,650 acre-feet of water would be conserved on 2,200 acres. The first application or proposal we asked for $200 an acre-foot for that conserved water, which was accepted, and all the applications were awarded for that year.

The second year, we bumped up a little bit with nine applications. Seven of them came through our partners. You see the numbers went up quite a bit. The price stayed the same. I put this picture in as a reminder. This is that second year you started seeing landowners actually look at this as a potential opportunity for their operations. I mean, it's pretty big money. For the first time ever, some of these landowners were looking at their water being worth more in stream than out. So, the issue as the program progressed, was how can we start guaranteeing that the conserved water is making it to Fontenelle Reservoir, making it to the Green River within the confines of Wyoming statutory code. The only way we can do that is if all the neighbors on a tributary participate, and so, there are actually no non-participating head gates.

That was the goal. One of our users on Fontenelle Creek who had originally said, "I'm happy to do this project, but I won't wave the flag for you." After the first year he saw the importance of this in the second year, and actually agreed to do a snippet with the Wyoming Public Radio. So, all of a sudden he went from being a little hesitant, to waving the flag, to doing a show on NPR for us. I asked him, I was like, "Well, that's kind of a big change from what you said when we first met." He was like, "Well, you know I thought about it, and NPR asked me to do a bit for them. I thought, you know I don't know anybody that listens to that shit anyway, so it's no big deal."

So, that next year, the third year then, we were able to put together our first tributary-wide model. This is again Fontenelle Creek. We had a huge increase in applications, but only four were accepted, mostly because they were trying to spread the wealth around the rest of the Upper Basin, but also really trying to emphasize that shepherding issue. How you get water delivered to somewhere where you can store it for later use. So, Fontenelle was the first to come together where every owner on the tributary lined up and did the same water management. So, no non-participating head gates. We set up pretty much the tributary model that we're encouraging and trying to do now.

It also started picking up with policy stuff where we were having to go to DC and look for additional funding. That third year there was seven and a half million dollars' worth of applications, but only 1.8 available in the pot. So, we went to DC to try to find more money. We had landowners come with us, and it's been pretty effective, as far as freeing up some additional funding.

This is the last year that we know of for the SCPP. We're going to DC again in May to try to get two more years of reauthorization. But, we had a huge year again. 28 applications this last year for the upcoming irrigation season. Four entire tributaries now. So, four major tribs to the Upper Green, where every landowner is participating. We're starting

to see some scope, and we're starting to see some opportunities for a longer term project, where what could these triggers be, where a tributary turns on, and how we develop that. Of the 29 applications that we have approved, that represents over 60,000 acres or land ownership in the Upper Green.

We're starting to address this as identifying some more opportunities. How do we move forward from this? This is a pilot program. What does something permanent look like? You know we needed competition is going to continue to develop the market, and the prices, but certainty needs to be created for buyers and sellers. Sellers of water like the landowners, so they can actually adjust their operations to have this be part of the revenue stream. And then buyers, downstream cities, are they getting what they're paying for?

A couple of policy things that we'll be working on. Again, you know, protecting water rights is the priority of the state engineer and us. We want to make sure that anybody that voluntarily conserves water is not putting anything at risk. What that looks like is going to be something that we work towards in the future. You know state engineer's office has made it very clear that, that is the most important thing, is that this is voluntary, and that no other water right holders are affected by this.

I think there's a lot of opportunity, basically because the Upper Green is set up where these tributaries you have large amounts of water with relatively few water users. The price right now this last funding the price fell to $150 an acre-feet, which still pencils out for a lot of these operations. So, that's where we're going. Then you know I'm required to say this is all good for fish, of course. So, good for fish.

Thank you.