



Working Lands Working Communities Appendix

Collaboration

WGA is an essential partner in bringing states together and fostering an environment of collaboration and creativity. (Government - State)

Whether you like it or hate it, the 30x30 initiative has opened a new and important national conversation on what conservation means, what counts, and who gets to decide. (Private Landowners)

When you have shared goals, a willingness on the part of key stakeholders and partners to come together, positivity, and the right resources, all kinds of good things can happen. (Private Landowners)

Our need for leadership is urgent, but that leadership is not just up to the governors, it's up to us as the stakeholders. (Private Landowners)

The transition from suppression resources to community responsibilities is really abrupt at the community level. I think they feel that especially on a really large fire you have large camps, now multiple camps, set up due to covid. You have a huge infrastructure that comes in that manages the fire and then once it's contained they do the demo really quickly. (Forestry)

There's a core group of folks who know this stuff, who understand this stuff, who know the - you know - statutes and the regulations and everything inside and out and they have some really good concepts of how we can streamline this process...As there's a handful of NGOs that do this quite well. They facilitate this work really well but they're really small and they can only deal with so many fires or so many communities. (Forestry)

Communities need a subject-matter expert on post-fire restoration and risk management to guide them through recovery roadmap and the resources detailed within. This navigator would serve as a liaison between communities and agencies conducting risk management and restoration work. (Forestry)

Forestry and land management agencies have separated fire management from land management. That's one of the biggest challenges, how we reintegrate that is a huge challenge. (Forestry)

The beauty and the difficulty of the way we do things is that we leave a lot of decisionmaking to local areas. A lot of the equation for success in collaboration is personality-driven. If you've got people committed to partnership and willing to work together, you've got a lot of the solution right there. (Forestry)

CO has generated a lot of collaborative solutions to forest health and resilience challenges...at these different local regional and state levels, and each one has coordinating capacity gaps that need cultivation and support and funding. At the end of the day, robust community capacity is at the

heart of collaboration at all levels. (Education)

The ability to sustain commitment, energy, and momentum over time is a huge challenge. (Land Conservation)

Few collaboratives last without sustained coordination and investment in coordination. (Forestry)

How else can we show the merits of coordination if we're not looking at the participating partners and the benefits (these partnerships) create on the ground. (Forestry)

You've heard, a few times here already today, that some communities have developed local dues structures to help sustain their coordination but I would point out that this is more easily done when there are larger participants to pay in the dues, like large municipal water providers, but it's very challenging to do when the scale of the forest dwarfs the scale of the intertwined communities within those forests. It's harder for (those communities) to pay in those dues to the scale of the problem. (Forestry)

Growing from that local perspective, we were able to work with the community of Pagosa Springs and developed the San Juan Headwaters Forest Health Partnership and began to think about that landscape - building off of local knowledge, taking the experiences that our community members in Pagosa had with the landscape. (Forestry)

To simplify the complex system that supports community collaboratives, ask if there is an existing program before creating new resources. (Forestry)

Statewide networks to support collaboratives are necessary to share knowledge, especially when policy landscape is in constant flux. (Forestry)

Vision...to the extent that we as CO could have a clear vision of where we collectively want our forests to go and create some kind of streamlined way to get there so we can all pull in the same direction...that will help a lot. (Land Conservation)

Leverage your collaborative to support both public and private land treatments - one cannot happen without the other. Don't let it all be about the Forest Service when working with a collaborative. (Forestry)

Often what starts as trying to work together to avoid something bad turns into energy to do something good for the community. (Land Conservation)

Some collabs come together around wildfire-urban interface concerns and are looking too near-sighted. Need to educate those communities around the impact of restoration work farther from their neighborhoods. (Land Conservation)

Oftentimes communities spin their wheels around planning restoration exactly right. Don't let perfect be the enemy of the good - make land healthier, not necessarily the healthiest. (Forestry)

We need to transform our metrics from acre-based to outcome-based. Part of that is making sure that we don't just count acres but make acres count. That means it's going to be in the hard, nasty, contentious places, but your best dollars will be spent, sometimes, in those places. (Government -

Federal)

The regulatory environment involved in utilities at different states, and even at the local level, is pretty difficult. [It is difficult] to navigate to get those power purchase agreements. My academic answer would have been power purchase agreements are an impediment to doing this work. (Government - Federal)

Feedback we've heard [about 30x30] is that communities want to be involved...be part of the discussion. (Government - Federal)

We've been able to work collaboratively with leadership at the state and local level, with private landowners, and with federal land managers to address priority threats related to the sage-grouse. Now NRCS has moved beyond just the sage grouse initiative. On the other side of the continental divide we have the great plains grassland framework through Working Lands for Wildlife as well. That helps overlap with previous priorities for lesser prairie chicken, and takes it from a species-specific initiative and puts it into more of this broad landscape initiative to where we can address multiple priority species. We can address wildlife corridors and migration routes, and we can address concerns that private landowners have with how they can manage the landscape or management tools that they have available. It all starts with communication and collaboration at that local level. (Government - Federal)

Working Lands for Wildlife projects are great examples of how collaboration can work. (Government - Federal)

When you have the core of the relationship at the local level, that's how you create lasting relationships. (Government - Federal)

Nobody operates in a vacuum, and there is increasing interest in branching out and engage with other sectors. (Forestry)

The DOI Invasive Species Strategy contains many strategies relevant to invasive species cross-boundary or cross-jurisdiction. DOI should review that strategy for strategies and actions touching federal rangeland and resources management plans. (Government - State)

Cheatgrass and other annual grasses are a great concern but are also beyond eradication at a western scale. Other rangeland and resource management concerns such as feral swine are poised to become equally as damaging without prevention and coordinated western response. Performing a 'horizon scanning' exercise to identify other invasive species of concern to western rangeland and resources would help avoid widespread damage and loss. (Government - State)

Cooperative Weed Management Areas, or Cooperative Invasive Species Management Areas are excellent examples of non-regulatory collaboratives uniting managers and landowners for common goals. (Government - State)

Resources exist but they are siloed between multiple agencies with various missions and opportunities. Organizing the equivalent of a jobs fair to highlight various agencies and opportunities to state and local partners would be informative. (Government - State)

The Regional Conservation Partnership Program (RCPP) has been an effective initiative in Arizona. It has been used around the state for grassland restoration efforts (removing overstocked juniper

and mesquite). Project boundaries typically cross multiple counties and landownerships and partners include various State and Federal agencies as well as Wildlife Conservation Organizations. Another initiative is DOI's secretarial order 3362 that promotes cross jurisdictional efforts to enhance big game migration coordinators and winter range through an annual RFP. Both DOI and DOA contribute to this effort and NFWF administers the project selection and funding. Consideration of this order and project preparation could enhance resource management plans in eligible field offices and districts. (Government - State)

Efforts through the Western Regional Panel on ANS have allowed federal, state and other organizations to collaborate on plans/products that balance the need to control aquatic invasive species while continuing boater access while limiting the impact to boaters. By have consistent messaging and Watercraft Inspection and Decontamination (WID), boaters are less likely to be [surprised] by WID when traveling to other waterbodies and states. (Government - State)

I'm still trying to get a better feel for how both Shared Stewardship and Good Neighbor Authority as "newer" strategies will help cross-boundary and cross-jurisdictional programs. Most DOI agencies in WY (BOR, BLM) are moving away from Cooperative Agreements and utilizing sole-source contracting under Good Neighbor Authority to work with County Districts. This maybe more efficient from an accountability standpoint, but I'm still not sure how it will improve landscape scale management. We are in the infancy of trying to use Shared Stewardship for USFS project planning. However, right now I don't see any indications that it will increase the USFS capacity to cooperate, nor can anyone clearly explain how they won't "rob Peter to pay Paul" when a program is identified and implemented. (Government - State)

The Wyoming Wildlife and Natural Resource Trust is a great example of a program that rewards collaboration when protecting natural resources. Fundamentally, any management effort where resources are pooled and utilized based on need, not on jurisdictional boundaries should be the key to making it a successful balance. Another program that came close to achieving this was the National Fish and Wildlife Foundation's Pulling Together Initiative which promoted concepts such as Cooperative Weed Management Areas (CWMAs) when planning landscape scale management. (Government - State)

There is a unique window for western governors to work with fed counterparts to lower risk of catastrophic fire, improve hydrology, improve wildlife habitat, improve economy. This can only happen in collaboration with our federal partners. (Government - State)

To our federal partners: please listen to people close to the land. DC and VA are great, but its impossible to understand what it's like to be in the west. People here care more about the land and about preserving landscapes. (Government - State)

Urban communities don't survive without working lands. If we aren't protective of those working landscapes, then the communities that rely on them don't exist. (Government - State)

What works for us is the cooperating agency status with federal partners. Being able to comment on the plan and have those comments incorporated. We've done the research and many times are commenting on something the federal partners haven't thought of. (Government - State)

Partnerships with universities could help in developing good policy in working lands. Counties don't think about partnerships with universities nearly enough! University extension has been a big help in SJ county. (Government - County)

I'd love to give WGA a shoutout on the coordination that they give to the states. They come out with statements on a ton of issues that really help. (Government - State)

Is important that we continue to work with outside entities. It shows how well the state and federal government can work together to address the problems on the ground. (Government - Federal)

Water Restoration Initiative (WRI) is 15 years old and is the shining example of how we've been able to complete enables cross boundary and cross-jurisdictional projects. (Government - State)

When we developed these regional teams we set these regional areas up to kind of work together and the most important thing I think we did in the beginning is we made it a very open process - we made it very welcoming anybody could participate. (Government - State)

One of the challenges the federal gov has is trying to figure out ways to go find partners. Sometimes its about collaborating and matching, sometimes its about money management. (Government - Federal)

When I look at other BLM states in the west, I see this siloed approach. Having a partner like WRI that can help with funding, scoping, planning etc. is great because the hard work is already done. (Government - Federal)

Our problems are real and they are all solvable when we can recognize which parties are gaining financially and have each of those parties chip in [to care for our trails]. (Outdoor Industry / Recreation)

Not everybody is going to win on the left or the right, but there is a lot of middle-ground to be gained. (Outdoor Industry / Recreation)

Congressman Stewart... said we've got to do [Wild Horse and Burro management] differently because what's working or what's going on right now is not working so how can we do something different to everybody's credit that was invited to this group we've all stuck together and made this work so it's a program called the path forward. If you had asked me before if we would ever get these groups together to find a solution to this problem, I would have said nope. It took us 2 years to draft The Path Forward. (Government - State)

Being a political scientist and an economist, I tell my brothers that are engineers and scientists that those are not the hard sciences. They have equations and solutions, whenever you deal with people, there are no clear cut equations. (Water)

We have an enormous responsibility to create a perpetual tourism economy. One that is properly integrated with all the other economic activities of rural and urban Utah. One that protects communities [and] has deep engagement with the communities to make sure that we build the tourism economy in their region, in the way they want to. It's about prioritizing not just the quantity of visitors, but the quality of visitors [and] the quality of the visitor experience. (Government - State)

Destination development is about figuring out ways to help communities and regions grow in the way they want to [grow]. (Government - State)

Most recreators don't care whose land they're recreating on, they care that they're recreating on land. So whether it's BLM or Forest Service or State Park or National Park, you know they just want to recreate and so what does that mean - it becomes tricky to manage over all of those different entities that are that are managing these lands. (Government - State)

We have to come at it from all fronts to get to all the people we need to educate. It takes a unified effort between multiple agencies and stakeholders to get this education process going. (Government - State)

If you don't have an Office of Outdoor Recreation in your state, please get one and work with your representatives to create one. That is the purpose of these offices...to bridge the gap between the private sector and the land management agencies. (Outdoor Industry / Recreation)

One strategy that [we] use to make sure we collaborate well with our local governments and communities - make sure that our local park managers are on a first name basis with [county leaders and stakeholders]...if they have that relationship, they're going to be able to solve issues before they become problems. (Government - State)

Private landowners are the link that connects public lands together. (Government - Federal)

One skill that I think would be important for our communities as a whole - across federal, state, NGOs and the local community to develop - is empathy. It's a skill that we don't talk about enough, but we need to be able to put ourselves in each other's shoes and find out where the solutions that we want to bring to the table can be across different interests. The reason we're at the table could be different but the solutions could have a benefit to varying needs on the landscape. (Government - Federal)

The Key to NRCS programs is voluntary conservation rather than mandates. The lack of a mandate lowers the "pain level." (Government - Federal)

Producers need somebody to help orient them toward collaborating with agencies. When no-till farming started in North Dakota there were a few folks that that that jumped on it but most of the farmers were critical of it because they saw the weeds and if you have weeds on your farm you're not a good farmer. So when you look at a community champion what kind of things are out there to maybe incentivize protect and mitigate the risks that [producers] are taking well i think for us that's one place where our program has been able to step in and provide that champion support to make things happen because they don't know how to deal with the bureaucracy they can have an idea and they can champion it. (Government - State)

We often think of the financial incentives that a producer might want. It's more than that financial assistance, it's the people connection that carries forward the process. (Government - Federal)

I can't overstate the important of getting producers together...they talk about what works for them and by doing that and by sharing successes we may be able to reach out and grow areas that haven't been involved as much in the past. (Government - State)

We must help partners celebrate little victories along the way. Incremental wins are important to maintaining large coalitions, as are regular meetings that help inform participants and keep everybody in the loop. (Government - State)

At the end of the day, people matter in getting things done. Understanding how these projects impact people on the landscape is really critical. (Government - Federal)

The wider audience you can get and work with, the more permanent your solutions will be. (Government - State)

It's important to realize that we don't have enemies. The people who have lived on the land and provided for their family on that land for generations know the land best. We need to rely on their opinions and their experience as we work to preserve rangeland and manage them in such a way that it will be there for future generations. (Government - State)

All state, federal, private landowners have a role to play in providing policy, regulations, and access for the tourism sector to grow and operate. (Tourism)

One of the things we've suggested...is a one-stop-shop for permitting. That would be a huge success for tourism industry businesses and land managers. (Tourism)

Ecotourism and hunting are an example of conflicts between industries. A system of known corridors for specific activities would help to prevent these conflicts. (Economic Development)

At our land forum, there are often representatives from governors' offices. Inviting them plus land managers to convene eliminates the more fragmented approach to land management. (Tourism)

Companies that are investing in mines want to know the rules and follow them. They don't want the rules to change every four years. (Government - State)

[Regulatory] Predictability is incredibly important to this industry. (Mining)

We need there to be consistency of permitting and policy around mine development. (Economic Development)

We need to work with people to get their head out of the sand. These armchair environmentalists...we need to show them what the reality is. In order to have EVs and PV panels, we need to campaign to teach people why we need mining and how we're doing it right. The demand is increasing and it will be met somewhere, why not here where we will do it right? (Government - State)

In forestry, we are starting to round a corner toward public acceptance of active forest management. (Government - State)

In one case, trust land was adjacent to communities who didn't want to harvest their local forests, so we conducted a land exchange for more remote parcels that improved communities' willingness to permit the harvest. This did, however, introduce complexity around access. (Government - State)

In a broader sense we need to adapt to a changing political environment, anything could happen at any time. (Government - State)

We need to advocate for more localized and regional decisionmaking control in order to improve certainty. (Economic Development)

Let's talk about NMFS. We have a good working relationship with the agency, but feel that they are imposing a management model that is insensitive to the truth on the ground. What we need from the feds is cooperation rather than a top-down method. (Government - State)

When it comes to the EPA, we both have the same mission. That said, they have the perception that big brother needs to come in and tell us how to do it. We don't agree with that. (Government - State)

The way that the feds interpret conservation is "as little touching the land as possible" we have a different understanding. (Government - State)

Alaska is fully capable of resolving Water Quality Standards issues with the Canadian government. We need to resolve water quality issues at the local level, and we can solve these issues. (Government - State)

Another thing that makes Alaska unique is that we don't border another state, just Canada. If Alaska can seek mutually beneficial outcomes with another country, states can do the same with other states. (Government - State)

The strongest thing that drives us to reach agreeable solutions with Canada is that if we don't, the issue could be punted back to Washington. (Government - State)

States have primacy over fish and game, full stop. Federal land management gets in the way not only of how fish and game are managed, but how they are used. Access challenges are affecting land users' relationship to these resources. (Government - State)

When it comes to water management, predictability in the rule of law is key. States will always care about their waters more than the federal government will. (Government - State)

When you iteratively evaluate the data from a collaborative team perspective, it gives added durability and value to your decisions. It may not be faster, but it's better. (Government - State)

Tribal conservation districts are a tool for building partnerships and facilitating natural resource work. (Government - Federal)

The NPR-A Working Group is comprised of all members of communities working directly with the BLM on conservation and management projects. The group also provides direct feedback on planning efforts. (Government Relations)

Regional native organizations are not considered a cooperating agency, which creates differences in their ability to influence agency action compared to a tribal conservation district. (Rural Development)

Forming long term partnerships [with federal and state agencies] is key. (Government - Federal)

There was always tension between what a regional corporation would like to see on their lands, but it wasn't receiving consultation through the federal agencies where the tribes, you know, we're focused on more protection of water and lands and subsistence resources. (Government Relations)

The Intertribal Agriculture Council is a national organization with technical assistance specialists that provide a link between USDA and the tribes. The IAC helps to break down barriers between tribes and the fed agencies. (Government - Federal)

If there's a caribou migration and it's going past the Red Dog mine they stop... along the 52 mile road from there to the port, if they're seen they stop and they stop a long ways off and then they'll sit there until that herd of several thousand caribou go cruise across the road or just hang out - it could be a few minutes, it could be a few hours but we do always have a subsistence advisory committee that looks after those things. (Rural Development)

Alaska Eskimo Whaling Commission has a co-management partnership with NOAA, the International Whaling Commission, and tribes to identify quotas for whale harvest. (Government Relations)

What we need is a ring-leader with decision authority that can keep permitting agencies accountable to a particular timeline. (Energy)

From the state perspective, there isn't anything customers can do to affect permitting. We need legislation and vision from the Governor's office to ensure permits are issued quickly and with minimal cost. (Telecommunications)

Streambed improvements [like flow rate reduction] improve range quality and haying; [the costs] pay for themselves in 3-4 years for the landowner. (Water)

Cooperative programs are essential, but educating communities is a vital part of them. (Government - State)

We have great model in my county. Technical Teams who serve as experts on a broad range of topics to assist landowners/NGOs/agencies in local implementation. Designate one lead per project. (Government - State)

You need local knowledge and institution knowledge to make sure you're not repeating mistakes from history and performance oversight teams help to contextualize success (Water)

Technical linkages underlie partnerships, and we need to explore these connections to build more wholistic projects. (Water)

Cheatgrass on the landscape doubles the risk of wildfire, and we want to flip the script on how this happens. (Government - State)

In order to move away from random acts of conservation which don't address the scale of the threats we are facing, we need partnerships which can provide better solutions. (Land Conservation)

Rangeland Fire Protection Associations (RFPAs) have been instrumental in mitigation. RPFA's in the Twin Falls district were started in the 2012 fire season, nearly 2 million acres burned from 2002-2012. Only 618,415 acres have burnt since 2012. (Agriculture)

How can we get everyone invested in an idea? Even if we don't get a grant we need to continue trying. Establishing shared values will carry us through difficult times if we can look back on why

we began this work. The Shared Stewardship Model is applicable to so many topics. (Land Conservation)

Focusing grazing in communities with perennials while they're dormant. Strategically located fuel breaks in areas where cheatgrass has not yet taken over will protect them from post-fire conversion. (Agriculture)

Targeting grazers and rangeland users, and advertising and targeting these programs to ranchers would provide better service. (Agriculture)

There are so many programs it's hard to interpret. Interacting with tribal governments and building institutional knowledge is also important because they want to contribute. (Government - State)

I mentioned used cattle for fine-fuel management. For a long time we had a no-touch approach to improve habitat, but eventually it gets dead and woody and burns. (Livestock and grazing)

The numerous large wildfires in the last 20 years are opportunities for us to take folks out and talk to them about how the fire moved and how it could have been different if the area had been treated. (Government - Federal)

We want to look at changes to GNA authority, extension of revenue provisions past 2023, making it more useful to counties and tribes, and working on road language. (Government - State)

Dealing with more difficult projects (lower value timber contracts) is time and resource consuming for little payoff. Partners' tools open up many options for more efficient execution. (Government - Federal)

GNA builds cooperative atmosphere. We have a better understanding and appreciation for what the feds do. (Government - State)

In every state where GNA programs are being stood up, you have the same scenario where you can leverage the revenue aspect and areas where you can't. We try to limit spending revenue from one forest in a different forest but it's possible. (Government - State)

When the master agreement expires what happens to those projects? It was the interpretation of the Washington office that we could roll existing contracts into GNA. Is it still disruptive? Yes. 20-year agreements would be better than 10-year agreements. But it's not the point of barrier we thought it would be. (Government - State)

I think if we're going to get counties and tribes more involved - and we need to - the states have a role to play in helping them stand up these programs and helping them understand how GNA works and how it can work. There's a lot of collaboration and there's a lot of potential to incorporate new parts. (Government - State)

Working with counties will become bigger in the future - states will reach terminal velocity and reach the place as USFS where we say we need help. (Government - Federal)

When BLM and other agencies [resources] are taxed by responding other incidents, RFPAs fill essential gaps. (Government - State)

RFPAs having working knowledge of the land - better than even the federal crews. They know all the roads, jeep trails, local weather patterns [...] they grew up here. (Government - Federal)

Are all RFPAs the same? NO. We function in different structures and implement our resources in different ways. (Forestry)

All non-federal firefighting entities are under the auspices of the state. Rangeland Fire Protection Associations (RFPA) have to form agreements with states before they sign with feds. There are steps, certifications, proof of function, and RFPA's are set up as nonprofits - they are nontaxing districts. They have a Board of Directors, Articles of Incorporation, bylaws, a responsible person registered with Secretary of State's office, file with IRS as 501(c)3, liability insurance, letters of recommendation from the county commissioners, and talk to local fire districts about non-competition. (Government - State)

[On] a lot of fires, the Rangeland Fire Protection Association controls it completely, and BLM never has to show up. (Government - Federal)

The biggest barrier is finding the core group who will carry the load from "we think we need a Rangeland Fire Protection Association" to being approved by the IRS. Most RFPAs are up and running now but I don't envy the early guys. (Government - State)

Working with Rural Fire Departments can be difficult because they don't receive the same wildland training we do. (Forestry)

USFS has signed some agreements allowing RFPAs to work on USFS land. The public land ranchers know that land very well. (Government - Federal)

Blue Mountain Oregon RFPA has entered agreements with BLM to deliver roadside/fence RX fire. It was a great achievement to make that step. (Government - Federal)

To attract local working groups, you need to convey the why adequately - why are we doing this? [...] You also need to show them the results of your project work. Show them it's not just talk. (Government - State)

The shared positions have been a huge help, and passionate federal employees are integral to pulling local working groups together - especially because they are co-located in state offices. (Government - State)

We rely heavily on cooperating agencies to organize organic events to engage the local communities. (Government - Federal)

The power of collaboratives is to take local input and turn it into influence to find the common ground you want to see. (Extension)

The relevance of the shared stewardship strategy, like GNA, is an opportunity for states to leverage the federal government into helping prioritize land management activities that the states seek to accomplish. (Government Relations)

We are monitoring impacts of wild horses and grazing – 50% of grazing allotments have been ruined by wild horses and we are unable to achieve the quality necessary to issue permits.
(Extension)

University of Wyoming (Tex Taylor, since retired) has offered to do baseline economics report for every county using public information. (Government – County)

We have always been a cooperative county with the fed agencies. Their major fault across all of them is that they never attempt social-economic assessment. BLM has attempted SEA but they are extremely weak in scope and equality. Especially in counties like ours with a lot of agriculture and extractive industry, the economic assessment is extremely important to quantify and understand the impact of restrictions. We need to be able to quantify impacts, model them, and project them outwards. (Government – County)

AMF is a conservation NGO, our mission is to empower private landowners to do right by their land. This group of family landowners - 10, 20, 50 acres - is critically important because they actually own more forestland than the federal government. (Land Conservation)

We're getting [to a place where we can ensure investments on private lands are contiguous, incentivized, and being match on public land] but we're not there yet, being able to stitch together public and private land. Landscape Planning on the front end, with all the parties present so they can talk to each other is critical. Sometimes we skip over the question "what do we want to do with the landscape?" Often the communities, landowners, agencies, have different visions. (Land Conservation)

I joke a lot that our job is like being a marriage counselor between communities and agencies. They need to receive training and opportunities to understand how to do things like submit grants correctly, or even just be willing to communicate. No two communities are the same and the agencies need to understand. (Land Conservation)

Wildfire Risk Reduction Infrastructure Team - the BIL has funding for recreation, restoration, reclamation, roads/trails, grants and agreements, FFT pay, CWPPs, and research. (Government - Federal)

Where do critical firesheds, communities, and community infrastructure overlap? Years 1-2 of the USFS strategy will focus on early implementation, years 3-10 will focus on delivering the right work to the right places at the right scale. (Government - Federal)

We [in Idaho] are prepared – we have been working toward [the USFS' 10 year strategy] – writing forest action plans, identifying high risks forests, best locations for investments – for 10 years!
(Government - State)

Idaho, Montana, Oregon, we've all worked closely with our partners through GNA and SSA. I think we have 15 full time GNA staff. We've embraced the concept of no-boundaries forestry. This really is all lands, all hands. (Government - State)

One of our largest challenges is educating the public. If you want to do fuels treatment, there's going to be smoke – so the question we have to ask nicely is "how do you want your smoke?"
(Government - State)

The people who do move here want their piece of paradise in the WUI, but they're not equipped with the knowledge or skills to manage it and that increases our risk. (Government - State)

Focused so much on suppression that we got away from our land management objectives, but we've gotten back on that and increased our proactive management. (Government - State)

For the first time in decades, last year we treated more land than was burned. (Government - State)

The more lead time we can give on [forest stand] contracts, the better our results are. (Government - State)

We had to get all our managers together (state/fed/local/everyone) to put together a institutional map of all of our contracts and contractors so we could figure out what projects are even feasible. It helped us understand that the NV forestry industry isn't attractive to companies out of ID, WA, OR, and guided us on how to build our own capacity. (Government - State)

IDDEQ manages smoke, but IDL authorizes burns - if we can get prescribed fire education to the point where we can put fire on the ground without regulation, that would make us more effective and fit Idaho's culture. (Government - State)

Tools like SWRM help locals help themselves. The public isn't equipped to understand the technical aspects, GIS, fire science, etc. SWRM alleviates capacity issues for communities. They don't have FEMA type horsepower, or grant writers, etc. (Professional Services)

Making the tools publicly available, we're working on that. And my message to the governors would be to promote these tools among your agencies and your citizens. (Professional Services)

We wanted to encourage action based on SSA that were signed. How do we prove we are working across boundaries? Better communicate before we spend money, avoid random acts of conservation, and support landscape scale collaboration. (Professional Services)

Fire tolerant invasive species are changing our fire regimes. With the expansion of invasive grass range, we see larger fires and that further degrades habitat and reduces native biodiversity as well as putting threatened and endangered species at risk. (Government - Federal)

Smoke exposure from invasive grass fueled wildfires is a public health risk. (Government - Federal)

What is IPM? It's very simplified, but there are four buckets - prevention, avoidance, monitoring, suppression. All of these tools should be considered when we are thinking about management strategies. (Government - Federal)

Invasive grasses go hand in hand with so many of our critical habitat issues. Both sage grouse and mule deer rely on quality habitat, and this affects their habitats as well as their migration corridors. We are not going to get ahead of invasive annual grasses if we don't take a landscape scale approach. (Government - State)

Post fire work is vital for us, and if we can defragment policies across our partners, it will improve our ability to quickly and holistically get treatment on the ground. (Government - State)

Grassy fuels are the driver of large fires in our rangelands – the accumulation of grasses is what feeds this. Our perennial grasses have always contributed, but when our annuals have large growth years, they're followed by large fire years. Recently, cheatgrass actually produced more above ground biomass than our native grasses. (Government - Federal)

Having trouble hiring people too, not just in the weed industry. We have capacity issues with sourcing herbicide and chemicals as well. (Government - State)

If I had a choice I wouldn't do any restoration, I would go to areas of quality habitat and defend those. (Government - Federal)

The availability of seed is a big issue, as well as the viability of that seed in different area of Wyoming. Nevada is writing a State Seed Strategy, and we would like to. The other thing I am interested in is make this land productive for ag users. (Government - State)

I think we have overlooked the role of the seed in this process. These are annual species so their entire goal is to pump out seeds and die. We don't talk about seed movement, and unless we talk about vectors and how those seeds get introduced we won't make progress. (Government - Federal)

Indaziflam is the evolution of the herbicide component but it's not the silver bullet and it won't work in every situation. Grazing can be utilized in some respects to reduce seed banks and fuel loads in the right systems. We are still in the position where we are looking at better tools. I hope research will play an important role in the coming years. (Government - State)

There was an IPM project regarding allelochemicals, not on grasses, but there are results and they are a tool. But I am not aware of any recent literature on them. And it goes back to context – it won't be successful in a highly degraded site. (Government - Federal)

I have not been tracking allelochemical research, but I want to expound on the need for R&D. We are learning so much about how alive our soils are, and we have a lot to learn about how that affects our management success. (Government - Federal)

Definitely education. A lot of residents in the WUI do not understand the fire cycle or the science behind it, and building that community knowledge of both invasive species and the wildfire cycle would help a lot. (Government - State)

Education, education, education. One thing to think about is that we have an education delivery issue – the land grant universities do a lot, and extension is using technology to increase their reach. (Government - Federal)

Doing the research from the bottom up is something the University of Wyoming does, and while I can't point you to a specific paper, building the response from the community up is good approach. (Government – State)

Collaboration Subcategory: Data

The policy priorities include post-fire coordinator designation, creating a post-fire master agreement, improving data and information sharing, aligning federal response with community

needs, improving incident management and post-fire handoff, and integrating land management and fire management responsibilities. (Forestry)

It's important for state and local governments to understand the need for good data to improve management plans and decisions made by federal agencies. (Government - County)

Standards in data is really important for us especially...if two datasets aren't standardized, it creates room for error. (Government - Federal)

We've come across issues where there's important data locked up in a PDF file or a JPEG. Data standards and formats that are useable and sharable is THE strategy that would make this as easy and seamless as possible. (Government - Federal)

Gold standard of data sharing success: WYGISC is the de facto data hub for Wyoming's GIS data. Data maintenance is all done via handshake agreements and ad hoc efforts. (Education)

One of the baseline components of this in my mind is: who are the intermediate players that help get data from the local to the federal level? Having a coordinator or middleman will help with data flow. In WY there is no state-level data coordinator and it interferes with this goal. (Education)

Federal funding often comes with data reporting requirements for states: we need early dialogue around what will be expected and we also need a feedback mechanism for states. (Forestry)

Having good relationships that help link the players along the data value chain: if we can connect dots more effectively, we would make a lot of headway toward increased capacity for data producers. (Forestry)

A lot of datasets are living. They are dynamic. They need care and feeding...there need to be resources there to support that. (Forestry)

To capture how the land is changing: if we're not already collecting that data, we need to start now. (Government - Federal)

One of the critical things for all of us to remember is that we will get the best information when we work with one another. (Forestry)

An invasive species privacy issue forum should be held between state and federal agencies. Authorities and laws should be inventoried, and a data sharing agreement should be the goal. In most cases, I would anticipate that the data is not protected and does not contain Personally Identifiable Information subject to protection. (Government - State)

Federal agencies operate upon fulfilling specific requests made to the correct point of contact. Not fully understanding the data being requested is a large barrier in formulating a specific request. Often, federal agencies have specific roles for data access, in that a program manager may not have the same access as a data steward. Federal agencies should determine two points of contact for data requests at a western scale – including one decision maker or program manager, and one data steward or technical specialist. (Government - State)

One issue is likely to be private property concerns. Some landowners do not want to share data regarding what is on their land. Current state law prohibits sharing wildlife related data on private

lands without the landowner's permission. (Government - State)

The biggest obstacle is data availability and maintenance of data in data silos. The data is often not available in an easily accessible format which makes it a time-consuming task to access the data. This can also lead to a lack of knowledge regarding what data the agencies have. This could be overcome by making data available and searchable through web services or an API or making the data available to one of the major data aggregators. (Government - State)

AZ Department of Forestry and Fire Management has a grant program open in communities, non-profits, landowners and municipalities that aid in the removal/control of invasive plants (aquatic and terrestrial). This allows groups to take action on local invasive plant issues, especially when government agencies do not have the resources to handle localized infestations. The grant applications are evaluated by a team of subject matter experts from across the state to ensure a balanced approach to the awards. The Department provided data from our iMapInvasives to the AZ Department of Forestry and Fire Management to help support grants for invasive species control. The data are used to help determine best areas for restoration and help rank the grant applications. Department staff have also participated in evaluation team in past grant years. (Government - State)

The iMapInvasives platform facilitates the management and sharing of invasive species information and seeks to support all those working to protect our natural resources from the threat of invasive species. (Government - State)

If collection protocols were the same across the board for all agencies/counties/state and the standards are simple so they are easy to understand and follow for everyone. There is too many discrepancies and differences on how everyone is doing data. Even how data that is collected and submitted by district offices, within the same agency, can differ. SIMPLIFY and STANDARDIZE. (Government - State)

Data collected on private lands cannot be shared without landowner consent and shouldn't be. Streamlined landowner consent process to share information, in addition to making sure landowners are actively involved in the planning phase of landscape scale projects is really the only solutions. (Government - State)

BLM doesn't want to share their data...and a lot of USFS data is unaccounted for (entry backlog?). Allowing partners who collect the data from federal lands to share it when timing is critical to local landscape scale project planning would alleviate some of the backlog issue, without unduly expecting state and county partners to be responsible for federal agency responsibilities. Someone needs to figure out where this bottleneck problem with data sharing is, because agencies and partners are pointing fingers at each other both internally and externally. Working with the NAISMA Standards and Technology Committee would be a great first step. (Government - State)

We need to create a synchronized and annual method for collecting visitor data across all federal agencies that tracks where visitors are recreating and what activities they're participating in. (Economic Development)

Permittees have the option to collect and submit data though the National Rangeland Council, which would be an excellent way to monitor invasives. (Agriculture)

Landowner outreach goes a long way, but maintaining those relationships is a bottleneck. Fortunately, IDL has developed an interagency database to assist in documenting outreach events and interactions. (Government - State)

Standardizing data that gets collected is critical – especially for interstate collaboration. (Education)

Previously federal agencies would not ask to use county data, they would just give us a report. Now they know they need to be more proactive, but we don't have the budget to keep our own datasets current. Can NaCO offer a model or framework for us to maintain datasets? It's a money issue for us. (Government – County)

A lot of time the feds have their own plans which don't align with county-planned economic development. They need to use our economic development data, because if federal agencies take an exclusive recreation focus in their plans, then the community dies because the tourism money is seasonal. (Government – County)

Discrepancies between state and federal data is stunting housing development in our county. (Government – County)

Data often can't be used across agencies due to format incompatibility. Our local BLM office is using Google Earth and .kml files while everyone else is using dedicated GIS. (Government – County)

We ask BLM for usage reports, and we know they log it, but it takes them 6 months to get it to us and by then they tell us it's probably not accurate anymore. (Extension)

Our local BLM is doing road classifications, and the data they're using is from the 1990s, submitted by a contractor who took anecdotal data for another project on paper. (Government – County)

We have some aggressive/enthusiastic mountain bikers who care about trails, could be mobilized for data collection purposes. (Government – County)

Our county is jealous of those with GIS capacity. The most helpful thing for us would be the ability to graphically display land use with an economic overlay. (Extension)

Bob Rankin passed legislation that would provide counties financial support to work with feds on data. We were bound by other state laws to match funds, which limited our spending. We only got 25% of the money we needed [on our end] but state agencies stepped up. We need the same funding but without the strings. (Government – County)

We should be putting money into university departments and centralize the county data capabilities at the state level through those universities. See: Wyoming Geographic Information Center. (Extension)

Counties [collectively] retain a natural resource attorney on staff, but we'd need a full time hire to get a data clearinghouse up and running, and the maybe part time staff to maintain it. I think housing it outside of a university would be less bang for our buck. (Government – County)

The National Association of Counties could be a valuable organization to stand up a data clearinghouse. (Extension)

Socio-economic *analysis* and not just acknowledgement is our definition of success when working with federal agencies. I define success as constant engagement with feds, and at least listening to our data concerns. Outcome based approaches won't help. (Government – County)

Yes! There are downsides to collecting data, especially if the data doesn't meet presupposed assumption. Ex: Raptors – we thought raptors were more adaptable but then we learned our impact was much bigger. Data leads to hard truths that public may not be ready for. (Government – County)

Centralization is the way to improve invasive species data, but then you run into the problems of private land privacy concerns and sharing that. (Extension)

Data from conservation easements is highly protected, so we can't fully understand the impacts in those areas. (Government – County)

We need to work with private entities to improve their openness on data sharing. The states also keep data at section [land unit] level or industry level, so we never know who the individual is. Even if it's a powerplant [public facing entity], we never find out the "landowner." (Government – County)

Building out automated data dashboards could help us with automated reporting. (Extension)

AK has a unique regulatory structure for wildlife management where advisory committees consisting of locals provide info to the F&G board to inform recommendations. (Government - State)

Farmers only trust other farmers for new information. State funding to build a peer-to-peer learning group [can help] facilitate education on soil health practices. (Land Conservation)

Collaboration Subcategory: NEPA and Planning

I love NEPA, I think it's one of the coolest ideas we've had...we want to be sure people get a voice in managing public lands. (Forestry)

USFS needs to embrace regional collaboratives. NEPA opens the door to tough conversations, but we need to engage communities earlier to ensure full benefit of the NEPA process. (Forestry)

We don't mind going through the [NEPA] process, but we would sure like to see them sped up a little bit. A little more common sense to the NEPA process would be great. (Government - State)

SJ county recognized how important it is to be part of NEPA process, especially with BLM. BLM allowed county to send planner and a staff member to cooperate with the agency so the county is up-to-date on their work. (Government - County)

NEPA takes a long time, but markets move fast. Discussing sale schedule process with neighbors early on can help to coordinate. (Forestry)

In fairness, I think NEPA says 300 pages is the max. Mega-long processing times and big EIS's were never part of the plan. (Government - State)

Grazing permits are restricted by dates, and while it seems like an easy fix, NEPA, staff turnover, and other challenges make it difficult. Of the 84 permits I oversee, we have only processed 2. (Agriculture)

We've had great success with collaboratives here in Idaho, and other states can take a cue. Having a collaborative plan in place can get in front of litigation and NEPA troubles. (Government - State)

We need to go slow to go fast, once we put the work in on the front end with NEPA we are cleared for future projects. Less administrative red tape, projects are already approved, and we can avoid bottlenecks. (Government - Federal)

NRCS would like to roll entire area-wide plans under one NEPA and realize multiple resource benefits. (Government - Federal)

We help to drive policy. We comment on every [grazing related] environmental analysis. That's making a difference. We're paying attention. The state is weighing in, we're taking the place that in FLPMA we were given to be a coordinating partner. (Government - State)

Just having the BLM quantify and acknowledge socioeconomic analysis in an EIS is a win for us. (Government - County)

Thought-shift with the feds: more active management is good and that is supported by state/local plans. These plans really forced the coordination because they're defensible. How to improve? Need to get personnel on the ground quickly – especially more planning staff at the BLM and USFS. (Government - State)

Counties are not focused on planning enough until the state pushed for a resource management plan at the county level. Legislature provided funding to help with planning process. Having a county plan when approaching the federal agencies helps be more persuasive and helps with crafting the state plan. (Government - County)

Two communities on Alaska's north slope are within federal designated lands. There are conservation projects that would benefit those communities and the protected lands. The NPR-A working group integrates traditional ecological knowledge to the BLM planning processes. (Government Relations)

To ensure our hydropower development project ran smoothly, we worked in advance of submitting FERC license application to ensure all agencies were on the same page. That way, we got agreement before filing the license application, which accelerated the process. (Energy)

From the federal perspective, the biggest permitting problem is the quagmire of multiple agencies without coordination. There is no "shot clock" so these processes can extend forever. (Telecommunications)

Planning starts long before what we often define as the planning process. Getting engaged way ahead of time, setting priorities, and thinking about where we're going means we need that assistance from local communities, collaboratives, and tribal officials. Helping balance the local input with the defined planning process is critical to successfully implement projects on the ground, where the planning process ends. (Government - Federal)

If we're planning together, then we can work together. (Forestry)

The Department works closely with members of the Western Regional Panel on Aquatic Nuisance Species (WRP) to coordinate watercraft inspection and decontamination (WID) as well as standardizing inspection, decontamination, sampling and monitoring and other protocols. For example, the Department participates and has contributed to the Quagga-Zebra Mussel Action Plan. This plan outlines needs and activities that manage the spread of aquatic invasive species (AIS) in the Western US. This plan is also used to direct federal grants to states and other organizations. (Government - State)

All 29 counties in UT have resource management plans, as well as the state itself. The federal agencies are supposed to coordinate with local gov and state gov according to FLPMA and the federal partners are taking a serious look at those plans. This is a “real game changer for our offices”. (Government - State)

I think also, the benefit we've had [from] the collaborative relationships we've developed, the states working together with the federal agencies and being able to be responsive and prepare plans together, to be responsive to these current conditions. Yeah I really agree and I have been really impressed with the response that we have from the drought this year and how willing people were to let their lawns go yellow. (Water)

In Utah we have a history where land use planners go to one corner to plan and the water users go to another corner to plan. In the last 18 months we've had the four large water districts work with the Utah League of Cities and Town which represents all the towns and cities to talk about a way we can combine the planning of water and land. (Water)

Statewide strategic tourism plan can create a roadmap for improving coordination between tourism operators. (Tourism)

Coordinating project timelines and schedules between states and federal agencies would make planning complex transboundary projects much easier. (Energy)

One person in the woods can do what twelve did 20 years ago, but we haven't got that efficient in planning. Besides our forests being on fire, our hair is on fire trying to solve the problem. What can we do from an efficiency standpoint? (Government - State)

Federal agencies should be engaged with each states' state-wide-action-plan. These plans centralize data and prioritize habitat needs. (Government - State)

Collaboration Subcategory: Social Dynamics and Decisionmaking

Sometimes its trust, sometimes its who gets credit...People need to let down their guard and say 'lets all

Building trust is the #1 thing we worked on from the beginning. (Government - State)credit for what we got done' instead of just saying 'me' all the time. (Government - Federal)

When we work together, the federal land managers get more help, the local and state government gains more influence on the lands that surround their communities, and we get better decisions and better implementations. (Outdoor Industry / Recreation)

One keyword that comes to mind is trust. We get in our silos and we forget that we're working with people. Passion can cloud their judgement, but trust can build a lot of relationships. (Outdoor Industry / Recreation)

Tribes are right here. Show up, knock on the door, walk in...we've been here. Have you tried giving us a call? That's the first step and that cold call builds a lot of trust. (Government - Federal)

GNA has built a lot of trust across the agencies, USFS work no longer feels like an 'invasion'. (Government - Federal)

The vision USFS had was that FS would start projects and then hand them over to states to finish. We are learning that there are new ways to do things, our partners have different tools and are better at doing some things than us. GNA contracts just feel like a bigger team and the constant communication builds teamwork and trust. Increased employee flow between state and federal agencies is a sign of positive relationship building. (Government - Federal)

It goes back to trust – we're personal friends now. We get to the fire first, we take incident command, and the BLM trusts us enough that I can call in assets – air attack, additional resources. They know we won't overstate the need. Once BLM crews and assets are on scene we integrate and continue to attack. (Forestry)

Why seek collaboration? It builds leverage trust and support. Local input is critical to long-term success. (Livestock and grazing)

Sometimes the loudest voices have the most presence but that doesn't mean they are the most representative. Having a trained facilitator goes a long way. (Extension)

Building trust [is an important thing to remember]. The interagency relationships that are trying to manage and oversee programs in our cross-boundary works require dedicated time towards building trust and mutual respect. This has been the launching pad to all of our successful projects. (Government - State)

Any professional engaging in the collaborative project – agency professionals, local experts – can benefit from facilitation training. (Extension)

Building the trust component is huge, especially across land ownership boundaries [in the western states]. It's all gotta work together as a landscape to make it a sustainable community. We need to understand that that trust and local input is what sustains these working communities. (Livestock and grazing)

It all goes back to social license – how can you explain management actions that don't seem helpful to the layperson? Even for forest thinning, there are groups who oppose it but don't understand the ecology. You need to build trust and understanding, and we haven't done a great job of that over the last few decades. (Government - Federal)

What we must do together is create a culture of shared stewardship, both of land and of people, across boundaries and jurisdictions, and I hope this initiative will take us a step closer in that direction. (Private Landowners)

Since 2012 the difference is night and day. BLM internal culture has come around to accept and appreciate RFPAs. (Government - State)

Our cultural shift has been driven by our Grant Management Officers. Bringing everything under one funding source allows us to match the speed of state and county work. (Government - Federal)

[With respect to Shared Stewardship] we need help with gaining “social license” to do forest treatments and we need ongoing funding from Congress for Shared Stewardship, perhaps an advocacy campaign. (Government - State)

Major limitations for timber harvesting on state and private lands is public perception. Earning “social license” to harvest is critically important. (Government - State)

Local leadership and support – you need people who are dedicated to invasive species management. When you find someone who cares, they will get things done. We at the higher levels should be in a supportive role and not dictating actions on the ground. (Government - State)

Having conversations is the glue. When you’re in prevention mode you have time to set up meetings and committees and get everyone on board. (Government - Federal)

Colorado Forest Restoration Institute has been a really influential catalyst for collaboratives by providing facilitation, science support, monitoring support...essential functions collaboratives need to stand themselves up. (Land Conservation)

In collaborative work, the following rule helps: you can’t say “no” to the group without offering a viable alternative. Independent facilitation is critical in these projects. (Education)

Collaboration Subcategory: Funding

When the (Joint Chiefs Landscape Restoration Partnership) program came around we were able to talk specifically about where we thought we could use funding. We got one of the first Joint Chiefs programs and through that work then we were able to really begin to work across private and public lands. (Forestry)

We could do a better job of carving out funding to support those collaboratives. (Forestry)

Federal funding to state agencies to create local stewardship councils or landscape/rangeland health cooperatives could be helpful. Taking the model of a Cooperative Weed/Invasive Species Management Area and broadening the scope. (Government - State)

For invasive annual grasses and their relationship to wildfire and sage grouse, the Western Weed Action Plan is a current strategy/initiative that can easily be referred to and prioritized. As the point, if groups or individuals are writing new initiatives and strategies they are basically re-writing plans that likely already exist. The problem isn’t with the initiatives and strategies, it’s the lack of CONSISTENT funding within the federal agencies, lack of consistent personnel within federal agencies and districts, and policy barriers that fracture localized efforts. (Government - State)

Difference between WRI and other programs is that UT actually leads the projects. We as the state take in the funding, pull it together, and redistribute it. (Government - State)

We have to be able to communicate the vision for these programs with legislators who control the funding. Once they get started, its very easy to get the elected officials out on the land to show them the results of the funding they have put into these programs. (Government - State)

One of the biggest barriers that I see is the support for our soil and water conservation districts. So our soil and water conservation districts are made up of those community members and they really help us - as federal agencies - connect to their neighbors um their friends the community as a whole but they're sorely underfunded um and they're you know volunteer boards and so like I was mentioning before you know if you're volunteering on six different boards in a community it's really hard to be that champion that can carry a project through. Your time is just split too much and so I know that's a really important partner for NRCS to get our work done and so i do see that as a big barrier. (Government - Federal)

GNA and Stewardship contracting authority is hampered by a lack of federal funding for projects. There is not enough money in the economy for the government to pay for projects. We need to stop looking at what we need from the government and start treating them as business ventures that have to pencil out. (Government - State)

We have the regional conservation partnership program, this matches funding 1-1 to do community scale projects that can be cross-boundary. The joint chiefs program is great for coordinating across agencies. I think we're on the doorstep of a new set of resources that are coming through Congress. (Government - Federal)

State grant programs to support collaboratives are a powerful start. (Land Conservation)

More grant opportunities for fireshed or watershed scale projects. Any grant which can support a regional council or local expert group will help aggregate people who can develop the details of a plan. (Water)

Maximizing the use of [IIJA] money and utilizing GNA can circumvent red tape through single source contracts. (Government - Federal)

I agree that taking GNA revenue and spending that money on restoration actions would be useful. (Government - State)

Market Innovation

The cost of land is out of proportion with the livelihoods that these lands support. Without a way to reverse this dynamic, only the wealthy will be able to afford landownership. (Private Landowners)

We need a predictable, 10-20 year wood supply to make sawmill investment easier. (Forestry)

Treatment is needed, but oftentimes very costly...many benefits we see from treatments are non-market benefits. (Forestry)

When I look at the opposite side of the coin where you have an inconsistent wood supply you'll see mills reduced. They can't get funding, they can't get financing, and pretty soon they start curtailing then the next step is the mill closes down what I see and I come from a town of 400 people with 100

employees then you devastate that community - you destroy it. (Forestry)

Oftentimes we look to revenues to help offset those costs, so we can treat more acres at lower cost but a lot of the materials coming off these types of treatments are low grade. (Forestry)

New markets can help to create more favorable financial conditions for treatments, but they can be risky investments with high barriers to entry. These markets are evolving - there are these exciting technologies coming online but these things can be pretty risky for investment because they don't necessarily have a lot of market transaction evidence to guide investment. (Forestry)

Wouldn't it be nice if we can use forest biomass to produce products that tap into agricultural markets which might be much larger than some niche market that we have locally, but can we tie into the agricultural sector and maybe the energy sector as well public-private partnerships. (Forestry)

Biochar is a pulverized or fine-grained charcoal product that we can use as a soil amendment, sometimes in coordination with composting or other things. It can be used in agriculture it can be used in forestry and one of the reasons why we're so excited on the R&D side about this is it cuts across a whole bunch of objectives. Land management objectives tied to improving the quality of soils, improving their water holding capacity, drought resistance, and the bulk density of soils. (Forestry)

Long-term supply is a significant challenge and it will continue to be so. (Land Conservation)

During COVID and now with the resurgence of the housing boom, all of the sawmills in the west has accumulated an excess of biomass. (Forestry)

Biomass power at utility scale presents a lot of opportunity, but the rise of wind and solar energy sources suppressed the growth of biomass. (Forestry)

There is market failure to represent the true value of a bioenergy supply chain. (Forestry)

One of the things that federal agencies can do is look at their procurement policies for forest restoration, reclaimed mine sites, things like that. How can we be an example of not just biomass supply but bio-product demand in terms of our procurement so that the two things anyway at the federal level there's always been a strong desire to subsidize wind and solar but there's always been kind of a downplay on biomass particularly if it came off of federal lands. I'm hoping that we're seeing a change, and with all the fires out west and the bugs, I'm hoping we're seeing a change in attitude towards that, because you have a renewable energy that we're putting up in smoke either by the wildfires or in the slash piles. (Forestry)

Looking at dead trees on our forests should be viewed as an ephemeral supply. We don't want to build forest around treating dead trees - we want to build around live trees and being proactive on the landscape (Forestry)

The vast majority of shortgrass ecoregion covers the eastern region of the state...it will be impossible to achieve any meaningful conservation targets in this area without the flexibility to draw upon incentive based conservation tools. (Government - Federal)

Your food dollar can have a conservation value. That's what's exciting for us – connecting with others who give a damn. (Food)

Use my marketing background to empower consumers to be part of the solution. (Land Conservation)

How do we have durable public policies that support grassland conservation and partner that with durable market signals that support grassland conservation. That connection is what it's going to take for this to be long-term. (Land Conservation)

Stories and narratives are how we connect to consumers in stores. It's a crowded marketplace, and authentic storytelling around biodiversity and climate are how we differentiate. (Land Conservation)

We're in a global market for wood products, we've had to scale up substantially to be competitive. (Forestry)

District cost-share programs or landowner assistance grants such as the USFS State and Private Forestry grant program. Simply put, if you want landowner participation you need to have a way to help them with the costs. Agriculture producers understand invasive species from the economics perspective, but the cost of treating weeds is not cheap, so if there is a wildlife or natural resource need for their involvement, it has to make financial sense to be involved. Additionally, the assistance needs to be based on long-term needs not a one and done philosophy that is typical to most grant programs. (Government - State)

Transient room tax (hotel tax). A portion of that tax can help fund the services Bruce is talking about. (Government - State)

The biggest issue though honestly is the single year funding that has always been an issue for us though even though we're planning 10 years out we get year by year funding, and so it's tough to fund a program that needs two or three years of dedicated funding and saying we can only guarantee one year of funding for you. (Government - State)

We're a short-term lending institution when it comes down to it. You know we'll have handshake deals or the BLM will tell us hey we'll give you three million dollars but we can't get it to you for six months and we basically move that project forward and take on the risk of them not actually coming through with that funding so being at the forefront, being the leader, but also taking on a lot of the risk I think has helped build that trust. (Government - State)

The appropriation doctrine is an adaptive management strategy that has served us well for decades...It provides certainty and that is a necessary prerequisite for efficient water markets. (Water)

Water suppliers need to look at rate structures to compensate for reduced use. Possibility of "drought surcharge" to supply necessary funding for water districts' fixed overhead. (Water)

We'd also like to improve the certainty and consistency of timber or wood product supply from national forests to support this wood utilization industry and then we'd like to increase the number of jobs in forest management fuels reduction and timber and wood product processing and

utilization. (Government - State)

We'll be working on a wood innovations grant. Forestry, fire, and state lands plans to apply for this grant to establish a statewide wood utilization team and establish increasing wood products manufacturing capacity and markets that support forest ecosystem restoration. (Government - State)

Biochar improves soil functions, reduces emissions from biomass, and has carbon sequestration value. (Government - State)

Mass timber and CLT (cross laminated timber) could be a huge market for low-value wood...there are a lot of emerging wood products in the construction industry that are able to utilize lower value lumber. (Government - State)

Improving forest related economic opportunities is critical to improving our forest conditions overall. (Government - State)

I think that is an avenue for biochar and just goes back to removing that hazardous fuels for forest health and meeting our action plan goals through these market driven approaches. (Government - State)

A lot of producers need long term agreements to make sure they can get the materials they need to operate. We also need to increase the awareness of different markets. A lot of them are new or emerging and have huge potential but we need to get forest product partners aware of the opportunities. (Government - State)

We might be subsidizing some of these industries, but the alternative is that if we lose a community or a watershed [it's] going to be more expensive down the road. (Government - State)

I know Gene Shakroff talked yesterday from Central Utah Water Conservancy District about the fire that they had in the Dollar Ridge and Starvation Reservoir, it took them 26 million dollars to upgrade their plant and that's what we need to look at. If we don't put money into this we're going to continue to spend money on restoration and rehabilitation, and to that end we've been working with a number of water conservancy districts in the state and Central Utah is the first to step up this year and start investing in mitigation projects and so we're really excited about where that's going to lead and they're excited, and we expect that a number of water conservation districts in the state are going to follow [their] lead. (Government - State)

If we're able to scale up biochar to an economy of scale, I think we would have a really profitable market. (Government - State)

Building codes changed recently to allow for development of mass timber construction, but now we are in the early stages of planning new mass-timber buildings. The opportunity for mass timber projects is there, we just need to find the developers. (Government - State)

Education is one of the main keys to addressing [responsible recreation]. If people understand how to recreate safely and responsibly they're more likely to do it. A lot of the folks that might be creating issues simply might not know better because they've never recreated outside. (Government - State)

Something that has been super important for me is to be an ally and a partner to help [The Utah Office of Outdoor Recreation] to be as big and bold and to have as much money as we can find for it. The outdoor recreation economy is so vital, not just to quality of life and the visitor economy, but to other economic development. (Government - State)

Land managers need more flexibility to use revenue generated onsite. (Tourism)

As we transition into renewable energy resources, silver becomes increasingly important in that space. (Mining)

There is no on/off switch to mineral development. We have to be attracting investment into Alaska right now in order to realize that investment in a few years. (Mining)

When you look at mining law reform at a national level, you're looking at incredibly significant changes to the industry that is a big change to the economics of the deposit. This drives interest away from federal lands. (Mining)

Reforming our national mining policy will force investment onto private and state lands, but that's bad news for places like Alaska with majority-federal lands. (Mining)

If mine reclamation requirements change, our economic bottom line does too. (Rural Development)

From an investment climate perspective, large reclamation bonds are probably not appealing to companies, but it's one way we do it right in Alaska. (Government - State)

Working forests are an essential part of diverse local communities. (Government - State)

A variant on the hedging strategy is to harvest a little less than what grows back every year and in doing so build up a bank account. Keeping a bank account helps to smooth over regulatory uncertainty. (Government - State)

Harvest market strateg[izing] with timber contractors allows shared risk and shared profit. (Government - State)

We have to have a timber management paradigm that integrates both old growth and second growth trees. (Economic Development)

Land should be utilized for some benefit that provides sustainability for our state. The foundation of the Alaskan constitution is that we will develop our resources to pay for our own way. (Government - State)

In the electric utility co-op model, ratepayers are directly affected by regulatory changes. (Energy)

A "restoration economy" is exactly what rural Idaho needs. The first thing we need is a permanent base of conservation funding. The second is a durable clear shared vision. The third is that knowledges must be respected, accessed, and incorporated. The fourth is humility to acknowledge mistakes. The fifth is ownership/responsibility must be inclusive. The sixth is that the costs and risks of conservation be weighted to the collective benefit. The sixth is financial stability. The

seventh is monitoring to determine if a practice is providing an outcome. (Government - State)

Some barriers for farmers are the novel equipment to try [soil health experiments] out. It's difficult to get these tools to farmers, so state funding for conservation districts to purchase this equipment [can help]. We need to expand crop rotations but we're stuck with three main crops. Expansion of markets would support this as well. (Land Conservation)

We need to invest in the science behind the projects to make data available to quantify benefits. Better access to this data will make projects easier. Reflecting the real cost of restoration is important, and we need to know exactly what it costs to build this economy. (Water)

I can not overstate how much the restoration economy has transformed our community. (Government - State)

Private ranches and public lands are inseparable. This land is shared with other user groups who bring their own economic markets to the equation. (Education)

There are only so many dollars in a cow and distributing them to our rural communities is getting harder and harder. How can we continue to have rangeland production but still attract visitors to our state? Consumptive use is taking over our rangelands and driving tourists to spend money in other communities like Boise. (Livestock and grazing)

The sheep industry upcycles unwanted land to provide products for consumers and support local communities. (Livestock and grazing)

The sheep industry plays an important role in prevent wildfires and preventing Idaho taxpayers from footing the bill for mitigation. We need to discover the economic value of targeted grazing; Sheep are being brought to solar sites, orchards, and wineries to keep vegetation down. There are many opportunities for small ruminants to play in alternative economies. (Livestock and grazing)

One of the social challenges we face are trends in nutrition, popularization of plant based diet (Livestock and grazing)

Food is generational. Food buying habits are generational. If we continue to reduce our consumption of animal-based foods, eventually we will be unable to recover. (Livestock and grazing)

The fact that two well educated people couldn't tell you [how to incentivize climate smart practices as an alternative market for ranchers] means that this is an underdeveloped area. (Education)

We benefit from very stable forestry regulations, and the high volume Idaho maintains has kept the industry moving as well as adapting. The Southwest has almost entirely lost their industry due to low volume of fiber products. (Forestry)

Providing a certainty to invest is what builds the [forest product] industry. There is going to be multiple-use balance of course, but coming together to find that balance is what makes us successful. (Forestry)

On the public lands side, one of our struggles is losing mill structure and loggers due to not providing that stability. Due to the long term nature of forest products, if we can't guarantee

products in 10 years no one will want to invest. A mix of private, state, and federal land provides the sustainability here in Idaho. (Government - Federal)

How do we innovate additional technologies for low value wood to create additional value - We are looking at carbon credits. (Government - State)

The housing market is not compatible with competitive pay in the forestry industry. (Government - State)

How do we build on voluntary successes like we see with NRCS/FSA and apply them to forestry? We want to avoid regulatory management. A clearinghouse similar to agricultural lands would be positive development within USFS. Either credit trading or other incentives would avoid regulatory mechanisms. (Forestry)

The private industry has looked at USDA climate smart credits. We are seeing a mad dash to live in traditionally forested areas - is there a portal where small landowners can be educated on forest management practices? Folks buy 10 acres of paradise but never manage it. (Forestry)

I think its unlikely the public sector alone can pay for the restoration work that is needed. (Land Conservation)

There is very little business line investment in hazardous fuels reduction. We don't see the big donors - Microsoft, google - because there are not data driven values here. There is not an established price or known value here. (Land Conservation)

We know the price of fires, but we have a hard time substantiating the value of proactive treatments. We don't have an answer when investors ask "what's in it for me?" (Land Conservation)

Based on our model, we saw a 21-59% reduction in probable financial loss following active forest management. This is front loaded though and there are additional costs for maintaining treatments, the degradation of timber value, etc. Based on this work though, I'm confident that there is a positive ROI for investors. Now the question is how can we establish a willingness to pay. We've relied on science and stories for so long, but we need to speak the language of money now. (Land Conservation)

There is a need to better align existing economic systems with the value of natural resources, especially ecosystem services. (Private Landowners)

Most producers don't have adequate options to capitalize on the investments in their land - Audubon Conservation Ranching is amazing, but not everyone can access it. (Private Landowners)

Carbon and climate markets - if sequestration is the only metric being used, the west is going to get left behind. We have massive carbon sinks in the west, but we need policies and markets that incentivize productive landscapes. (Private Landowners)

Some of the current models over prioritize carbon sequestration to the point where they lead to monoculture crops which excel at sequestration but have detrimental effects on biodiversity and habitat. (Private Landowners)

The Growing Climate Solutions Acts is a very interesting development that could create more durability and more room for private actors in the marketplace. (Private Landowners)

If you try to achieve everything, something is going to go wrong. There are models you can pull from though; Grassland CRP has been wildly effective, so you don't have to start from scratch and run in blind. Let's look at what we have that works and build from there. The harder part will be figuring out the payment scheme. (Land Conservation)

Existing carbon markets are fairly narrow, and there's an opportunity to expand. Not sequestering more carbon, but reducing the carbon we're using. How do we think about new markets in the space that don't involve bringing carbon out of the atmosphere. We also can't say "this is what it's worth" if no one is going to bite. (Private Landowners)

Well there's not one model to rule them all so some things get left out. The metrics absolutely matter though. And the entities you show the models to care about different things – Denver Water cares about sedimentation and they'll pay for it, AT&T doesn't but they do care about down time. You need to put yourself in the buyers' shoes. (Land Conservation)

The True Cost of Wildfire Study, and the second version coming soon, are really great for telling the story in a relative way, but they don't show a concrete ROI for Investor X in Watershed Y working with producer Z. (Land Conservation)

Any management practice increases yield and productivity, but ultimately its up to the decision making of the producer. For example, producers in NorCal are moving orchard crops north, which is great for producers but degrades great wet habitat. There's a lot of room for conversation but ultimately it's up to producers and the people who use these programs. (Government - Federal)

Housing and recruitment is another challenge for us – we used to worry about housing our part time staff, now we're worried about keeping our full-time staff. (Government - State)

Our main problems are recruitment and retention. Both among full time staff, but more importantly among firefighters. Fire intensity, housing costs, and burnout are the main causes. Supply chain for equipment has bene troubling too. We can't find vehicles, chainsaws, etc. to implement these larger and more intense management plans. (Government - State)

We've built a system around a focus on fire suppression, low costs, low pay, and maximum results. How do we change how we fundamentally value alternate treatments? (Forestry)

Infrastructure Investment

Public investments in infrastructure tend to cut across a lot of different sectors of the economy and then get multiplied forward. (Forestry)

Forest infrastructure is how you get work done. You can come up with ideas all day long but unless you have companies and infrastructure to do that work, they're just ideas. (Forestry)

when we look at insect epidemics and the ability of forest treatments to reduce the scale of those epidemics, we'll never stop having wildfires on the landscape and we'll never stop having insect

epidemics on the landscape, but we do have a choice with forest infrastructure on the landscape. We have a choice in the scale of those mortality events. (Forestry)

now we're down to about 30 sawmills and that has a number of implications on trying to [address] challenges facing communities. One: finding a company with the ability to do the work on a meaningful scale close enough to them and two: finding somebody that can actually utilize the material that they have. As the companies have been reduced over time it's put a lot of strain on and spread those companies to greater travel distances. That reduces the value of the material to either a land owner or an agency trying to get the work done. (Forestry)

I think the best way to avoid that bottleneck is to not create it in the first place, and where you have infrastructure like we do in Colorado, like we do in in other parts of this region, the best thing you can do is develop programs that keep that infrastructure here. (Forestry)

[During the pandemic] we saw how fragile our large scale food system is and how resilient we could be in a more regional-based system. (Food)

The black forest fire came through the ranch in 2013, devastated the community, and it has been our responsibility to now manage that land to recover from that and use livestock as a tool for that, and then manage the land in a way that helps protect our neighbors' homes because there will be another fire. (Food)

There is this laundry list of [benefits]...when you stand there and think about what that working land is doing. There's carbon that's already there and there could be more if you work to enhance the degraded grasslands. They're actively filtering water that makes it into streams, rivers, and downstream drinking water. They're critical habitat for a lot of species. (Land Conservation)

Land is actively working for us in ways that we can take for granted. (Land Conservation)

If Dallas isn't on that land, who is and what is happening to it? Conservation matters because if it's a Bed Bath and Beyond parking lot, it's a really crappy place to be a bird. (Land Conservation)

My hope within the direct market meats business is that because of overwhelming consumer support for mindful products, that then helps justify the investment [in more infrastructure.] (Food)

What I've noticed from colleagues in other states is that were at different levels of infrastructure across the west. (Government - State)

We can't know how things are changing if we don't have data to start with. (Government - Federal)

Being a data hub helps to house multiple agencies' data and distribute it – preventing individual agencies from having to make those investments individually or retain GIS/data science specialists. (Education)

We have a sense of hesitation about sharing data and making it too easily accessible. That is a barrier that we're working past...but we have a lot more room to grow there. Yes, the dataset may not be perfect...but we need to get it out [there nonetheless]. (Education)

Infrastructure is huge in working landscapes. Sheep industry could really use a woolen mill. Animal ag could use a processing plant. Tourism industry is exploding on us...we need a lot more toilets than we have. (Government - County)

We don't have a big budget for emergency management. All federal lands needs road maintenance, need fire services, law enforcement, EMS, waste management etc. When there is a monument designation or other change, and increases visitation, those services get even more strained and the dollars are spread even thinner. Trying to work with legislature to designate emergency services an Essential Service which will hopefully bring more funds to the counties dealing with the impacts of increased visitation. (Government - County)

Water management decisionmaking in 2009, with support from WGA and the Western States Water Council began an effort leading to what we call our water data exchange or WaDE it is wade is our effort with a goal of overcoming the lack of basin-wide and regional water use data and improving the information that we have available for decision makers really we're trying to make that data find findable accessible interoperable and reusable or reproducible. (Water)

We hope to see a bipartisan infrastructure bill out of congress soon with substantial funding for ACOE and USBR and other agencies...Infrastructure is not just roads and airports, but water as well - both quality and quantity. (Water)

The large infrastructure costs upfront for a lot of mills...trucks are just another piece of that equipment. It's worth the investment if you're able to get a return on it. (Government - State)

If we don't take care of these places, we'll lose them. (Government - State)

Access in our region on the heels of the pandemic has certainly be a challenging era. (Economic Development)

We need to look towards developing outdoor recreation infrastructure for multiple uses. Multiple uses are critical due to Alaska being large state with a relatively small economy. (Economic Development)

Marketing infrastructure is infrastructure too. (Tourism)

Everybody has their own plan, there's plenty of plans. Talk about great opportunities for traditional and non-traditional infrastructure projects: the infrastructure bill is a great opportunity to support the tourism and infrastructure sector. (Tourism)

America could be the country that underwrites the new green economy. It can be done here in America. (Government - State)

People coming out of jail, treatment, or foster care have added challenges to find housing, training, and jobs. (Government - Tribal)

When you look at AK, there is immense mineral opportunity. But we're infrastructure limited, we're access limited. When you're looking at developing a property in AK, it can be hard to justify when other regions have easier access for similar minerals. (Mining)

While it can be seen as a negative, taking 7 to 10 years to develop a mine, I look at it from a positive perspective. We're doing it right, we're making sure investors are putting their money into places that are caring for the environment. (Government - State)

Mines as industrial users can underpin the basic infrastructure that is needed for economic development in our rural communities. (Mining)

People are always asking for more broadband access, but the government needs to do their part and provide permits on a timely basis. Permitting should not be a profit center, it's a service. (Telecommunications)

From the utility perspective, come to us early! Let us know what you want because it can take a long time to permit and construct these projects. (Energy)

Regulatory uncertainty causes delays, and delays increase our costs. If administrations keep changing the rules on you, it makes it challenging to manage your risk effectively. From a renewable energy perspective, hydro needs to be viewed as an equal to other renewables. Solar and wind have had huge subsidies over the years. (Energy)

Co-locating infrastructure occurs with the original asset in place which makes it an advantage because of not having to go through NEPA. (Energy)

Distribution lines are located, to the extent possible, close to the Department of Transportation boundary. DOT [doesn't] want those assets farther from the boundaries in case they need to do maintenance. These are naturally conflicting goals, but ultimately colocation is beneficial to utilities. (Energy)

FERC classified one of our hydro stations as "high hazard" because of the potential for loss of life if it fails...except nobody lives anywhere near the dam. The regulatory requirements do not meet the truth on the ground. FERC needs to focus their attention on addressing actual issues on a case-by-case basis. (Energy)

Sheltered Cove Road has been permitted and funded for years, but this project will bring visitors farther from town and into areas without reception. Emergency services will need to be working farther afield, but don't have comms infrastructure to work in these areas. (Government - County)

Coordination between state and federal agencies of similar type is very helpful from the standpoint of permitting timelines. (Energy)

Hydroelectric dam relicensing is important to our organization and across Alaska. Anything we can do to reduce that burdensome process is worth doing. Hydropower is part of the decarbonization solution, and we need to find a way to reduce the timelines to relicensing so we can spend our time and effort decarbonizing. (Energy)

Harvest cost is one of our primary costs, and economies of scale have affected the packing industry. The small packing houses were all booked out a year and half. How do we get the small packing industry back up so we can keep this money in our local communities? This also feeds the food insecurity we saw during the pandemic. (Livestock and grazing)

If we can support smaller harvest plants to achieve profitability, this problem [of ranchers addressing food security] will solve itself. (Livestock and grazing)

NRCS was so helpful in post-fire restoration for burned forests. But we are lacking nursery capacity to bring trees back in. (Government - State)

Our coal mine and powerplant are going away so we're now a tourist economy. We have 50% public land, mostly Forest Service and 20% of the rest of the land is under permanent conservation easement. Developers are driven into incorporated areas due to extremely strict zoning rules and the county master plan drives developers into incorporated areas. (Government - County)

Recreation has resulted in the degradation of trails. We have a regional recreation partnership to create a GIS tool to Identify trails, as well as social and economic values to assess the impacts of visitation. Northwest Research Facility of USFS will develop the tool. (Government - County)

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Since NV does not have a strong forestry industry, so we don't have the infrastructure for biomass removal. We don't have hardwood trees, just pinyon juniper forests and those are difficult resources to capitalize on. (Government – State)

Workforce Development

There is a false idea that we need more money. And we do! We need more money. But we need a bunch of other stuff too...marry up of programs, addressing workforce capacity programs...we should be careful to not let "more money" be the only part of the conversation we focus on. (Forestry)

Restoration capacity during the extended fire-year is tough because many of the people who would be doing restoration work are actively fighting fires for longer into the year. (Government Relations)

there's really different levels of capacity in each of those watersheds. Some of the groups have you know multiple staff with ecologists on staff and really talented folks going out in the communities making those connections and some have less than one full-time employee. (Education)

What they all have in common is that they're a business. They need a consistent and adequate supply of materials coming in. (Losing these businesses) is an impact to the community and an impact to what we can do on the land. (Forestry)

Our mills are struggling to find workers too. When you pay people to not work (unemployment benefits), they don't work. (Forestry)

A climate conservation corps could have a huge impact. (Government - Federal)

One of our new initiatives is a statewide biomass assessment which will inform workforce development too. (Government - State)

The wealth of resources that are becoming available to address economic and workforce issues may be at its greatest point now. (Government - State)

Can timber industry provide a landing spot for unemployed coal industry workers?
(Government - State)

Every business I have worked with recently is suffering from lack of good workers. Our culture of sending youth to college vs. training them for trades has robbed the industry of reliable staff.
(Forestry)

Office of Economic Development has training grants for businesses, but one challenge is bringing awareness of those resources to rural areas. One good example though is a startup mill in southwest Colorado trained its entire staff through this program. (Government - State)

Civilian Conservation Corps could potentially be a huge resource in workforce development, but we need to do more in terms of a transition program from Civilian Conservation to their career.
(Forestry)

The majority of workers do on-the-job training – reduces productivity and is burdensome for business. Internship programs can help to offset those costs to small businesses. (Forestry)

Colorado programs and resources are too widely distributed...we need to network all available opportunities to increase awareness of these programs. (Rural Development)

Economic Development Administration within the Department of Commerce is a scalable agency with large-scale assistance and tons of competitive programs. (Government - State)

Future Farmers of America has a natural resources track – It gave me great hope that we can encourage the younger generation to be stewards of the land. (Forestry)

Traditional 4 year degree in forestry is great, but to get people into logging and manufacturing, that is not the best fit. (Forestry)

Veterans are a great population of people to keep in mind when creating these opportunities.
(Rural Development)

There is a tremendous pressure to lower labor inputs to our industry, not just because of costs but because of the difficulty of the work. (Government - State)

The [Grazing Improvement Program] has been enormously helpful to the ag community and especially the ranching community...however we don't have enough staff to address the planning issues. In my (Government - County)

Our county has only one planner. We do the best we can. (Government - County)

Declines in Utah's timber harvest volumes pose significant challenges to both the industry and for sustainability because the ability to conduct this vegetation management and mitigate these mortality impacts has decreased as we see these timber processors and forest operators going out of business, so this decrease in forest related businesses and jobs reflects reduction in the capacity of all forest management partners including federal state and local agencies. (Government - State)

Sometimes we can't find capacity to do projects, so some things we've planned to get done in a year don't happen. (Government - State)

[Redacted] mentioned it in his presentation - finding the labor force that wants to do this type of work and being able to fund that labor force - and that's a conversation we had out in the woods with some folks the other day and I know some schools in Oregon and places are turning towards doing programs like technical training on how to do this work and maybe that's something that we need to look at in this state is finding skilled people to do this type of work. (Government - State)

We're entering into an agreement with NRCS for an EQIP forester position [in order to expand agency capacity.] (Government - State)

We've got to get youth excited about [conservation]. (Government - State)

People need employment at a living wage. Temporary employment is easier to find, but it's not reliable year-round and does not generally pay a living wage. (Government - Tribal)

During covid, most members were clambering for info and resources to adapt to the pandemic. Now most requests to the Chamber of Commerce are around finding people to work. (Economic Development)

Covid is driving higher workforce turnover rates, which is expensive. (Mining)

[With the pandemic], more people are willing to move and Alaska is very appealing. Why not look at building the local workforce by bringing in talented people who are trying to move? (Government - County)

Quality of life is an economic driver. (Government - State)

Whatever investment is put into people from the tribe or from here, is going to come back out of them. Investing in training or housing is an investment that comes back to you. (Government - Tribal)

By investing in our communities at the high school age, we're hoping to develop some more workforce capacity there. (Mining)

Unfortunately the mining industry was losing workers pre-COVID. When you see a big reduction in mining school enrollment, fewer people looking at the trades...all of this was exacerbated by COVID. (Mining)

Mining engineers are now in demand in other industries based on shared skillsets, our globalized economy is drawing engineers into other locations or sectors. (Mining)

Yes there's a shortage in the workforce. We're having to rapidly respond in how we recruit and build compensation packages. It's going to be a real challenge to keep our workforce moving forward. (Mining)

One of the hardest things for people who build capacity from within is the education. You get a lot of people who come on and start on the bottom. Experience becomes education. Does that makes them less valuable as an employee, because they have experience but no degree? (Government - Tribal)

In Alaska, \$21 to \$25 an hour is a livable wage. Even for people that are employed, there is a lot of difficulty in finding housing. (Government - Tribal)

Not everybody wants to go to college or a trade school, employers need to think critically about credentials that aren't necessarily based upon diplomas and certificates. (Government - Tribal)

Limited private land ownership in Alaska leads to a limited housing stock. Migration into rural areas due to remote work further complicates this. (Mining)

Housing is a hot topic in workforce development. Its not just the supply, but also the type and quality. If you want to raise a big family, small studio apartments or small homes won't cut it. (Mining)

We had to be very creative on training people during the CVOID era, but the housing shortage presents a large challenge. (Government - Tribal)

It's important that we, as human beings, make everybody feel like they are the greatest resource weather they are at their lowest or their highest. When we talk about workforce capacity, we have a lot of people at their lowest and have lost a lot If were not helping them feel important and like they have something to offer, who is? As leaders, we have to draw that out and its one of the most important things we can do. (Government - Tribal)

Local hiring should be a community priority because of how it benefits those communities. (Mining)

Active forest management serves our community in terms of jobs and resources. (Forestry)

Who do you know that's 18 years old that wants to go to college to be a forester? We need to tell a different story about what workforce needs are in western states. These are high paid jobs that need skilled professionals. (Forestry)

Asking for project or program support from people who wear many hats is hard. Their bandwidth is limited and that is a big challenge for NANA. NANA worked to address this dynamic by providing additional capacity to tribes. (Rural Development)

Rural Alaska typically has a single teacher for a classroom that contains a range of age groups. It gets difficult to get a quality education from a certain metric. It becomes problematic for us to train folks to enter the workforce when they haven't had that foundational education. (Rural)

Development)

Our agency is focused on forming cooperative agreements with tribal colleges to enhance the applicant pool. (Government - Federal)

If these permitting processes are taking this long, maybe these agencies need additional staffing...they have to have proper funding so they can respond in a timely manner. (Energy)

Local experts – If we cannot find a local contractor to implement projects we lose a lot. We have external contractors train locals who are not yet capable. (Government - State)

Having infrastructure in place to develop workforces and create opportunities for training. Investing in high schools, community colleges, etc. to invest in local contractors. Especially younger individuals who will maintain the knowledge base. (Water)

This is something we have talked about for years. It's about staffing and people. If we could keep the same staff working on the same project from initiation to completion we would see a huge increase in success. (Agriculture)

There aren't enough workers on the science side, on the field side, truckers, mill operators. We need to take this one step at a time and ensure we're delivering this money correctly. (Government - State)

The relationship between private, state, and federal is crucial for implementing the IIJA funds. Staffing at every step of the process. (Government - Federal)

Utilize interagency shared positions to increase representation. Shared salary funding for partnership coordinators. (Government - State)

We have an opportunity to work with Tom Vilsack and USDA – they're concerned about the average age of ranchers and farmers, because we need to keep ranchers on ranches and farmers on farms. We also need to look at the average age of loggers, because we won't have healthy forests without a healthy forestry industry. (Forestry)

Capacity is definitely a money issue for us. We can't hire a central worker or agent that handles our data work and does outreach, we can barely keep up with the state mandated reporting. (Government – County)

If we could understand the why/how/where of emigration patterns it would be amazing. (Government – County)

CA has the same issues with losing employees and being unable to bring new folks on due to housing prices. (Forestry)

This work is inherently place based, so we need employees in these communities and that's getting more difficult to achieve. (Forestry)
It's not just getting bodies to do revegetation and the physical work – we need -ologists and experts who can design plans, coordinate activities, provide strategic vision and build future capacity. (Forestry)

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There is a tremendous pressure to lower labor inputs to our industry, not just because of costs but because of the difficulty of the work. (Government - State)

The [Grazing Improvement Program] has been enormously helpful to the ag community and especially the ranching community...however we don't have enough staff to address the planning issues. In my county we have 1 planner. We do the best we can. (Government - County)

[Redacted] mentioned it in his presentation - finding the labor force that wants to do this type of work and being able to fund that labor force - and that's a conversation we had out in the woods with some folks the other day and I know some schools in Oregon and places are turning towards doing programs like technical training on how to do this work and maybe that's something that we need to look at in this state is finding skilled people to do this type of work. (Government - State)

People need employment at a living wage. Temporary employment is easier to find, but it's not reliable year-round and does not generally pay a living wage. (Government - Tribal)

We're entering into an agreement with NRCS for an EQIP forester position [in order to expand agency capacity.] (Government - State)

[With the pandemic], more people are willing to move and Alaska is very appealing. Why not look at building the local workforce by bringing in talented people who are trying to move? (Government - County)

Most of the folks in the tourism industry bring up their own workers and plan ahead by hiring people months in advance. None of that could happen this year. (Economic Development)

Whatever investment is put into people from the tribe or from here, is going to come back out of them. Investing in training or housing is an investment that comes back to you. (Government - Tribal)

By investing in our communities at the high school age, we're hoping to develop some more workforce capacity there. (Mining)

Mining engineers are now in demand in other industries based on shared skillsets, our globalized economy is drawing engineers into other locations or sectors. (Mining)

Yes there's a shortage in the workforce. We're having to rapidly respond in how we recruit and build compensation packages. It's going to be a real challenge to keep our workforce moving forward. (Mining)

One of the hardest things for people who build capacity from within is the education. You get a lot of people who come on and start on the bottom. Experience becomes education. Does that makes them less valuable as an employee, because they have experience but no degree? (Government - Tribal)

Not everybody wants to go to college or a trade school, employers need to think critically about credentials that aren't necessarily based upon diplomas and certificates. (Government - Tribal)

It's important that we, as human beings, make everybody feel like they are the greatest resource weather they are at their lowest or their highest. When we talk about workforce capacity, we have a lot of people at their lowest and have lost a lot If were not helping them feel important and like they have something to offer, who is? As leaders, we have to draw that out and its one of the most

important things we can do. (Government - Tribal)

Local hiring should be a community priority because of how it benefits those communities. (Mining)

Active forest management serves our community in terms of jobs and resources. (Forestry)

Having infrastructure in place to develop workforces and create opportunities for training. Investing in high schools, community colleges, etc. to invest in local contractors. Especially younger individuals who will maintain the knowledge base. (Water)

Our agency is focused on forming cooperative agreements with tribal colleges to enhance the applicant pool. (Government - Federal)

This is something we have talked about for years. It's about staffing and people. If we could keep the same staff working on the same project from initiation to completion we would see a huge increase in success. (Agriculture)

There aren't enough workers on the science side, on the field side, truckers, mill operators. We need to take this one step at a time and ensure we're delivering this money correctly. (Government - State)

The workforce responsible for NEPA is very specialized and we need to build that capacity. (Government - Federal)

Utilize interagency shared positions to increase representation. Shared salary funding for partnership coordinators. (Government - State)

We have an opportunity to work with Tom Vilsack and USDA – they're concerned about the average age of ranchers and farmers, because we need to keep ranchers on ranches and farmers on farms. We also need to look at the average age of loggers, because we won't have healthy forests without a healthy forestry industry. (Forestry)

During covid, most members were clambering for info and resources to adapt to the pandemic. Now most requests to the Chamber of Commerce are around finding people to work. (Economic Development)

Covid is driving higher workforce turnover rates, which is expensive. (Mining)

Unfortunately the mining industry was losing workers pre-COVID. When you see a big reduction in mining school enrollment, fewer people looking at the trades...all of this was exacerbated by COVID. (Mining)

Who do you know that's 18 years old that wants to go to college to be a forester? We need to tell a different story about what workforce needs are in western states. These are high paid jobs that need skilled professionals. (Forestry)

Other

There is a false idea that we need more money. And we do! We need more money. But we need a bunch of other stuff too...marry up of programs, addressing workforce capacity programs...we should be careful to not let "more money" be the only part of the conversation we focus on. (Forestry)

What they all have in common is that they're a business. They need a consistent and adequate supply of materials coming in. Losing these businesses is an impact to the community and an impact to what we can do on the land. (Forestry)

Economic Development Administration within the Department of Commerce is a scalable agency with large-scale assistance and tons of competitive programs. (Government - State)

Declines in Utah's timber harvest volumes pose significant challenges to both the industry and for sustainability because the ability to conduct this vegetation management and mitigate these mortality impacts has decreased as we see these timber processors and forest operators going out of business, so this decrease in forest related businesses and jobs reflects reduction in the capacity of all forest management partners including federal state and local agencies. (Government - State)

Sometimes we can't find capacity to do projects, so some things we've planned to get done in a year don't happen. (Government - State)

We've got to get youth excited about conservation. (Government - State)

Quality of life is an economic driver. (Government - State)

In Alaska, \$21 to \$25 an hour is a livable wage. Even for people that are employed, there is a lot of difficulty in finding housing. (Government - Tribal)

Limited private land ownership in Alaska leads to a limited housing stock. Migration into rural areas due to remote work further complicates this. (Mining)

Housing is a hot topic in workforce development. Its not just the supply, but also the type and quality. If you want to raise a big family, small studio apartments or small homes won't cut it. (Mining)

We had to be very creative on training people during the CVOID era, but the housing shortage presents a large challenge. (Government - Tribal)

Asking for project or program support from people who wear many hats is hard. Their bandwidth is limited and that is a big challenge for NANA. NANA worked to address this dynamic by providing additional capacity to tribes. (Rural Development)

Rural Alaska typically has a single teacher for a classroom that contains a range of age groups. It gets difficult to get a quality education from a certain metric. It becomes problematic for us to train folks to enter the workforce when they haven't had that foundational education. (Rural Development)

If these permitting processes are taking this long, maybe these agencies need additional staffing...they have to have proper funding so they can respond in a timely manner.
(Energy)

Local experts – If we cannot find a local contractor to implement projects we lose a lot. We have external contractors train locals who are not yet capable. (Government - State)

The relationship between private, state, and federal is crucial for implementing the IIA funds.
Staffing at every step of the process. (Government - Federal)