

CATEGORY	QUESTION/COMMENT	RESPONSE
Carlene Anders		
	Describe your experience with post-fire recovery.	Very different perspectives that speak to all transitions of post-fire disaster
	What were the most successful components of your recovery interactions with federal and state agencies?	In 2014, we had federal and state authorities come in during the largest wildfire in Washington state history. It was chaos; we didn't understand the system, there were transitions and rotations between state and federal, there was no continuity. So our biggest success came when we were able to voicing our needs after that fire. When we were hit by the biggest fire season the following year in 2015, we saw a totally different system. More time was taken in assessments, agencies worked with the locals, and there was continuity in the rotation of state teams (rather than state, fed, state, fed).
	Where could the federal and state agency response be improved?	As as result of the fires in 2014 and 2015, federal and state agencies become much better with communication and our community gained the continuity it needed in disaster response. How you transition between response to relief, relief to recovery is critical. Since then, we have altered policies and changed the way we communicate state and nationwide in regards to post-fire disaster.
	Examples of where policy changes could have improved your recovery.	We know assesements are regulated to be completed quickly, we extended the amount of time given for those. In 2015, we probably took too much time, but nothing was missed like it was in 2014. A lot of FEMA policies have changed over the last decade to support grassroot organizations supporting community needs; the more these grassroot organizations become supported, the more the situation improves. The biggest change that needs to be made is the amount of time for policies to be implemented; recovery takes place years after a fire and policies need to reflect that.

	Carlene. They missed 124 homes. Who is they?	"They" is State Emergency Management Group within FEMA's initial assessment.
Bill Short		
	Describe your experience with post-fire recovery.	My experiences are focused on the immediate post-fire hazard response; particularly rapid evaluations of post-fire hazards. We work at the US CA Geological Survey with CAL FIRE's watershed protection group for these assessments that we share with communities and agencies. We work closely with the USGS post-fire hazards group and with the NRCS emergency watershed group on federal and state fires. We are sure to coordinate our post-fire assessment with the BAER team.
	What were the most successful components of your recovery interactions with federal and state agencies?	We've come a long way in communications between our federal and state partner agencies. We have implemented cross-training with FEMA and Army Corps of Engineers and work with agencies to release informational documents. Having dedicated staff at higher levels that can communicate clearly at a high levels, working together during disaster declarations staffed with coordinators who can host collaboration between state and federal agencies, and education; these are keys to recovery interaction success. The Silver Jackets have been an excellent facilitator for interagency collaboration and interagency prepared guidance and informational documents.
	Where could the federal and state agency response be improved?	Dedicated coordination staff within agencies, better understanding all roles and responsibilities
	Examples of where policy changes could have improved your recovery.	This can be achieved by a more formalized and expansive multi-agency coordination and trainings. We would have a broader understanding of how to be more successful if we had pre-fire hazard assessments.

	<p>Bill, can you talk a little more about how your organization is set up for post-fire response (size, funding source(s), sections/areas of responsibility) and how you interact with feds? with local communities? How long can you stay involved?</p>	<p>We are organized as a team with CalFire for assessing post-fire hazards on state and private lands. CalFire funds CGS for these rapid assessments which are modeled after the BAER process, however we only focus on hazards to life, property, infrastructure since we are not the "landowners" like USFS, NPS, BLM. We have a WERT guidebook that we follow, this guidebook is updated annually based upon our previous year's experiences. When requested we also support local agencies typically flood-control/public works after our rapid assessments are done. We have no dedicated funding for this second aspect, so our support is not as robust as it could be. On major fires and those that are classified as State or Federal disasters, we work closely with CalOES, and FEMA to relay our findings for their recovery operations. On all fires where we do assessments we interact with USGS, NWS, and NRCS, as well as local responsible agencies. Our WERT assessments are usually completed within 2 weeks, and our major involvement ends when we have a closeout meeting with local responsible agencies. We maintain limited involvement on State and Federal disasters, or when local agencies request our input. The key limiting factor for us is dedicated funding to: provide more robust post WERT assessment support, monitoring of fire effects to enhance our understanding of processes and build more robust models, and most importantly conduct Pre-Fire planning for Post-Fire hazards.</p>
Jeff Sickles	<p>Describe your experience with post-fire recovery.</p>	<p>I ran the state's 2013 Colorado EWP Flood Recovery Program from 2015 to 2018, then jumped into the post-fire recovery EWP program for the 2018 Spring Creek Fire in Huerfano County. Had the opportunity to compare these two EWP implementations.</p>

What were the most successful components of your recovery interactions with federal and state agencies?

In Colorado in 2013, we were able to establish a centralized program identifying visions and goals that worked together to better leverage the recovery money amongst stakeholders. This allowed for recovery work to be done on a watershed scale, supported early planning to identify root issues and develop holistic solutions, and they allowed for time to secure funding. This was a unique experience and different from usually reactionary responses of typical EWPs. There was time and forethought in establishing watershed recovery plans, so that we may begin to make these improvements and mitigation projects work together. They were also supporting watershed coalitions as a model for stakeholder engagement. The local organizations make things happen on the ground; set up a centralized agencies that brings these local agencies together. Federal agencies are great with technical aspects of post-fire recovery.

	<p>Where could the federal and state agency response be improved?</p>	<p>Under a traditional EWP, actions are very reactionary. When working on the Spring Creek EWP, which was more traditional, outcomes were less resilient and more reactive, it wasn't implemented on a watershed scale but more so on a property scale, and limited leverage funding made it difficult to accomplish more holistic outcomes. There's more work to be done and it's unclear as to who is taking charge of that work (there isn't a great collaborative effort among groups). Though federal agencies are great on the technical side of recovery, they're not great with coordination. We need someone to coordinate between agencies. Because of lack of coordination there are technical inconsistencies and we end up with a lot of different evaluations (we ended up with 4 or 5 different hydrologic evaluations). There is an opportunity for us to put someone at the top to provide overall quality assurance. There is also a misinterpretation by communities (unclear messaging) that when the federal government shows up, they're going to run the show.</p>
	<p>Examples of where policy changes could have improved your recovery.</p>	<p>The state strategy of stepping in to play the role of coordinator; working with the agencies, be the central group providing oversight, consistency and quality assurance. Shared funding is also huge, with organizations and state agencies stepping in to provide match for federal funding. We developed a Colorado Disaster Recovery book for reference to lessons learned in delivering a centralized recovery program; guide on how to plan, react, adapt, evolve and achieve the best possible outcomes for our communities and stream corridors.</p>
	<p>Jeff is the Colorado Disaster Recovery Book available for purchase or viewing?</p>	<p>https://www.coloradoewp.com/lessons-learned</p>
<p>QUESTIONS ANSWERED IN SESSION BAER</p>		

Answered by Bill & Carlene	CA and WA have their own BAER teams . How are they trained and funded?	Bill: Luckily in California, CAL FIRE has the personnel to fight fire and study the effects of fire. In 2015, CAL FIRE allocated funding for rapid assessments. This was key in bringing in the US Geological Survey as co-team leads on assesments. Training; we have annual meetings, a guide book updated annually, and we bring in field professionals when necessary on assessments. Carlene: Initial funding of BAER came from a federal source and FAC has been sorting through how to secure permanent funding.
	Another vote for a state BAER team approach.	
Answered by Mike and Troy	How many states have implemented interagency BAER teams of state and local representatives?	Great question! We're aware that some states and local entities have established interagency BAER teams to address post-fire concerns, but the concept hasn't been a routine practice. The Wyden Amendment (16U.S.C.1011(a)) allows federal land managers to enter into cooperative agreements, including for post-fire restoration, for the protection, restoration, and enhancement of resources on public or private land and the reduction of risk from natural disaster where public safety is threatened on public lands. The key is that the agreement must produce a benefit on public lands. It's a good tool in certain situations but doesn't address many post-fire circumstances.
EWP		

Answered by Jeff & Carlene	EWP program overwhelmed and over load local NRCS offices	Jeff: Definitely. We saw it two years ago with the number of fires in Colorado. NRCS found they became overwhelmed to the point of not being able to deliver; that's where it would help to have some sort of centralized recovery office where needs can be identified early. Having a coordinated effort is very important. Carlene: If there are actions promised or programs listed to help communities within federal agencies, they need to be available when needed and there needs to be allocated funding for these actions/programs to be deliverable in a timely manner. It wastes community resources to pursue a recovery program, only to be told there are no longer recovery efforts available to their community.
Answered by Bill	What do you see as the next steps in helping solve some of the policy gaps, specifically with EWP?	Bill: Funding is the key & funding is limited. Especially locally, readily accessed funds in order to move mitigation and recovery actions can move forward quickly. Some of the policy gaps may be an acknowledgement that funding needs to be available for match funds. If there was an awareness of matching funds (and awareness of the negative implications without matching funds) maybe we could get policies changed.

<p>Answered by Jeff, Bill & Mike</p>	<p>What would change if a starting issue for post-fire (& pre-fire) approaches was that the watersheds provide drinking water to downstream communities?</p>	<p>Jeff: This is particularly relevant. This is something that Chris Sturm at CWCB has really been thinking through; the how-to's and how-do's of pre-disaster planning, the flux and sediment in the fluvial hazard zone (fluvial zone mapping), and the structures that could be engineered that would be of significant use within these watersheds. Bill: We need to be aware of the local water supply entities and their equipment ability to handle high volumns of sediment erosion from burn scars. Local agencies need to understand and prepare backup plans; this would provide direction on where and how to head in regards to managing debris flows. Mike: From the messaging side, if the community understood their drinking water was being effected by post-fire debris flow, they may be willing to collectively invest in the issue. I know this happens in communities, and mostly likely, the smaller the community, the more likely they know where their water comes from.</p>
<p>Comments/questions made during panel</p>		
	<p>Policies for BAER teams to talk more with counties and communities.</p>	
	<p>Federal land management agencies that put together BAER teams and have the technical expertise do not have the statutory authority to do projects or emergency action onnonfederal lands or in appropriation bills. How do you plan to resolve this issue?</p>	<p>We are currently working with leadership to hopefully address this internally between USDA agencies</p>
	<p>EWP was a watershed program and shifted to a building protection program. Which was a quick within 30 day sandbag not a hardened structure. How do we get that watershed approach back combination</p>	<p>EWP can still be effectively used as a watershed program. The FS and NRCS have a strong partnership, though helping non-federal landowners understand their access is key.</p>

Funding		
	How can we get funding sources streamlined so that communities aren't scrambling to find all the funding resources after a disaster?	We are hopeful the Roadmap assists with showing communities the breadth of availability while the navigators can help the communities efficiently navigate. We have had multiple discussions about streamlining funding sources, but as they come from multiple pots and agencies, there is not a simple solution. We will continue to highlight challenges and inefficiencies to work toward more efficient outcomes
	Tabletop exercises with County commissioners & OEMs for post-wildfire flooding and funding for it.	agree
	Requirement for training and funding a dedicated post-fire staff person at state DHSEM agencies to work with FEMA...	currently socializing and building understanding
	No federal agencies have the staffing to deal with post-fire emergencies. Are there conversations occurring on helping to provide funding to hire more employees?	always ongoing - agencies are juggling multiple priorities and we will continue to highlight the challenges post-fire brings
	Please consider adding funding (match) issues to the major issues list.	
Policy Guidelines		
	Better policies for doing work on USFS & BLM lands that are higher up in the watershed	
	Changes to USFS and BLM rules/guidelines to be able to easily do more work on their lands.	
	The FEMA Post-Fire Hazard Mitigation Grant program is a rule bound program that may play a role. Does anyone on the panel have any suggestions or thoughts for this program?	
Data		

	It would be nice to have a pre-flood damage assessment Survey123 form (since most of our agencies use ESRI) that we can all use and share. They have templates for other damage assessments but non for post wildfire flooding.	CA Geological Survey and CalFire use Arc Collector app for our assessments.
	this may have come up and I missed it, but obtaining burn severity data for fires on private land is incredibly difficult.	
	setting up an easy way to obtain burn severity data for private land.	
Training		
	Multi agency coordination training.	
	What other state and local agencies and organizations would be good to include in post-fire response training to help provide knowledge prior to fires occurring? And how can we help make this happen?	
Navigator		
	If we can get a dedicated national coordinator, can we replicate the CO and NM post-fire resources available to non-federal landowners west-wide? This seems essential...	
	Being a Navigator cannot be one of those "other duties as assigned", as often happens now.	completely agree!
Miscellaneous		
	After reading the Interagency Disaster Response paper it appears that we need common definitions on the stages of post wildfire recovery. The first is the emergency stabilization (BAER or WERT), rehabilitation and then restoration. Common definitio	
Roadmap		

For making the roadmap interactive - would it help communities if the site was set up with a system that asked them yes-or-no questions that lead them to the specific information they are seeking, sort of like a dichotomous chart does?

that is one of the considerations. Thanks for the idea!