Narrative of Whitewater Baldy Complex Fire
May, 23rd, 2012 to June 19th, 2012
Observations and Actions
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Prelude

I have been thinking that I should try to capture my thoughts and observations on the Whitewater Baldy Complex, and have even been reminded several times by various individuals that it is my "duty", but have been putting it off. It seemed like such a huge amount of work, and I'm not sure what would come of it besides giving me something to remember what a nightmare it all was. But after an interview with Bill Derr, Ron Morsback, Barbara Romero and Roger Seewald, I came to the realization that there are so many rumors, erroneous comments, misconstrued conversations, uninformed experts, etc, that the story needs to be told by each individual whose lives have been affected by this incident over the few short weeks in May to early June, 2012. Events that they will remember for the rest of their lives. They need to be written down just so the facts are on paper.

What is really ironic about the Whitewater Baldy Complex is that the two fires that make up the Complex (Baldy and Whitewater) could have been named a number of other things, but they became known (and will always be known) as the Whitewater Baldy Complex or fire, pointing to Whitewater Baldy itself, the vanguard of the Mogollon Range itself, standing 10,892 feet above sea-level, with its sister peaks to the north and south, all over 10,000 feet. The mountain hosts on its broad shoulders and various slopes the headwaters of almost every major perennial stream that gives life to the Gila River as well the eastern tributaries of as the San Francisco River. Thus the Whitewater Baldy Fire will have major affects on the Gila River and its tributaries for years to come, just like the mountain itself has for centuries.

For every one of the firefighters who wears the Whitewater Baldy Complex t-shirt in pride to show there were there, there is one of us who looks at the event as a failure in natural resource management and missed opportunities, who failed to recognize the signs of a new paradigm, and wonder, if given the opportunity to make different decisions, would we see them in time and make those adjustments next time. It is a wonder that there were no serious injuries or deaths with this mega-fire, the only thing that was permanently lost were 12 summer homes. That fact in itself shows the professionalism and solid commitment to safety to the firefighters as well as the public. But, given what we know now, I feel this was the perfect set up by a higher power that had grown tired of our inability to use common since in forest management and chose to set things right in his own way. This is my story of the Whitewater Baldy Fire, the facts may be little different from others, but so are my eyes. The point here is not to argue different interpretations, but to recognize what we have seen and to learn from them.

The Fire

The Whitewater Baldy Complex (WBC) started May 9th, 2012 with the detection of the Baldy Fire. I was attending a line officers meeting in Silver City when I got a text from the Silver City Dispatch office that small smoke had been spotted in the vicinity of Mogollon Baldy. The initial fire, (named the Baldy fire) started by lighting, was less than ¼ acre and was burning in and around the Snow Park area on extremely steep grassy slopes. There was a fresh dusting of new snow in the area with patches of snow on the north/northeast/ east slopes, with what looked like minimal growth potential. The Gila National Forest staff decided to put the fire in monitor status as there was no way to get firefighters to the fire. It was also had numerous fire scars in all directions, most notably the Miller and Jack Complex Fires from 2011, as well as Cub, Dry Lakes, LL Complex and several others, so there was natural fuel breaks in place on the east and south sides from the previous years. To the west lay the broken, scabby country of the Southern Mogollon Mountains with steep slopes, rock slides, cliffs and numerous natural barriers, none so important and the piñon/juniper transition line at the bottom of the mountain range. The only area that did not

have solid containment lines already in place was to the north towards West Fork Saddle and Center Baldy, but there were trail options to use if the fire moved thru the moist, shaded northeast facing slopes. By May 13th, the fire had grown to about 750 acres and was primarily burning on the ground with very little active crown fire. As stated above, To the east were areas that had seen natural fire several times over the last few years and there was no reason that the fire would become any more than a successful point protection/ perimeter control fire accomplishing multiple resource objectives as it burned through several fires from the previous year. On Sunday (5/13) Gabe Holguin called and asked if I could come down and be the Type 3 IC for the fire. I asked if he was ordering the Type 3 Team, and he said only a Type 3 IC. I told him I was committed to the Type 3 Team and shortly after that received a notice that Reinarz Type 1 team was being assigned the Gladiator Fire in Arizona. I called Gabe back and said I was going with the Type 1 Team as the Strategic Operational Planner (SOPL) and then he said he would order me for the Baldy Fire as a Type 3 IC/SOPL. As I had already committed to the Gladiator Fire, I let him know I would go to the Gladiator, but if there was a need to help on the Baldy Fire in the future, I would get done what I was responsible for and then let him know if I could come back to help with the Baldy Fire.

The Whitewater Fire was started by a lightning strike towards the end of the following week. After several attempts by the initial attack forces to check the fire's spread and keep it from crossing Whitewater Creek, it finally got across and started burning up the flanks of Willow Mountain as well as south and east, up Whitewater Creek towards Whitewater Baldy. Thought was given to using aerial resources (Helicopters and Air tankers) but it was determined that it would be unsafe for either type of platform and that crews could not effectively follow up the retardant drops with hand crew work in a safe manner. John Pierson's Type 2 Team was ordered and the in brief was held in Reserve on or about 5/18. All of us, which included John, myself, Bob Lineback, District FMO James Scola, G. Holguin among others felt that the fire would eventually make a run at the crest of the Mogollons but felt that fire behavior would mitigate once it crossed into the cool, wet northeast facing slopes between of Willow Mountain and Whitewater Baldy. There were still patches of snow on some in some of these areas. The primary work that was done over the ensuing days was to brush out the Crest Trail (# 182), cut a fire line on the Wilderness Boundary Ridge from just north of Beads Springs to just above the Willow Creek Ranch Subdivision, establish management action points that would trigger actions to protect resources or trigger an attempt to check or stop the fires spread, and to establish landing zones for Helicopter crew shuttles if that tactic became possible. Discussions between myself, District FMO Jack Dickey and Pierson about a delegation of authority for suppression actions on private lands (Willow Creek primarily with Mogollon a back up) centered on the fire crossing the Willow Mountain-Whitewater Divide at which I would issue the delegation. There were no other critical values at risk as far as private property was concern. The old Growth Mixed Conifer Stands, Mexican Spotted Owl Protected Activity Areas and Gila Trout Waters were the primary natural resource issues.

A patched together panorama picture of the Mogollon Highlands, Whitewater Baldy is show in the left picture, Grouse Mountain (about where the Whitewater Fire started) is on the right picture above the horse's head.

The Perfect Storm

Then things changed. Both fires were gathering steam. The Whitewater fire was building energy in the old growth mixed conifer stands (some that had not seen fire in 300-400 years) and gobbling up acres in the upper 1/3 or Whitewater Creek with limited torching and crown runs. The Baldy Fire was exhibiting average fire behavior, backing thru mixed conifer stands with occasional runs and burning thru old burn scars with beneficial effects. The change was coming in the weather, 3 straight days of winds over 40 mph took a sleeping giant that totally overshadowed its smaller, older twin and created a mega-fire of which the Gila had never seen in our recorded history. It is my belief that if the Whitewater Fire had never started or could have been successfully initial attacked and kept at less than a few acres, the Baldy Fire would have become one in a long list of fire beneficial fires in the Gila Wilderness/Mogollon Mountains and would have been a blip on the national radar with limited concern or issues. It was the Whitewater Fire, which had the good fortune to start in the a steep narrow canyon that prohibited the use of aerial resources as well as a substantial amount of hand crews, that took a perfect weather event and expanded on it, creating its own weather pattern, overpowered vegetation that was dry but not overly dry, and used a test book chimney (the main fork of Whitewater Creek) to turn itself into true raging inferno that only a change in the fuels type or weather was going to stop.

Old Growth Mixed Conifer Stands near Bead Springs.

The winds carried the fire up and over Willow Mountain, Hummingbird Mountain, Whitewater Baldy and Center Baldy, throwing fire brands, some could have been as big as baseballs ahead of it, starting spot fires in the old growth mixed conifer (Live Engelmann Spruce, Sub-alpine Fir, Cork bark Fir) as well as the 200 years of fuels build up underneath the overstory, It threw spots into the Hummingbird, Little Hummingbird, Hidden and Aspen Forks of Willow Creek, into Upper Iron Creek, the West Fork as far east as Whiskey Creek and Turkeyfeather Mountain. I also think spots from the Whitewater Fire could have realistically landed in and around the Baldy Fire perimeter, helping it to create additional energy as well as establish crown fires in previously burned mixed conifer stands. Once established, the vortex winds that were being created at the ground by the eddy affect of the Whitewater Divide pushed the fire in all directions, basically followed this fuels bed north, south, east and west, uphill, downhill, across slope, it did not matter. I personally saw this during my recon flight later in the afternoon of May 23rd.

Baldy and Whitewater Fire coming together in the Upper West Fork of the Gila River and Iron Creek

I arrived on the fire about 1400 hours on 5/23. I had been released from the Gladiator Fire so that the Gila/Las Cruces Type 3 team could assume command of the Baldy Fire. It was my intent to go to the Whitewater Badly fire Incident Command Post (ICP), meet with John Pierson (IC) and complete a written delegation of authority for the team to be able to take suppression actions on the private lands when and if the fire made it to Willow Creek. (I had given him a verbal delegation the day before when the fire had crossed the Willow Mountain/Whitewater Divide and Crest Trail # 182, but we needed to complete the documentation). I had then planned to fly the Baldy Fire so I could see for myself the location and direction it was moving before I went on to the Wilderness Ranger District where I would meet the team and then officially take over the Baldy Fire.

When I got to ICP, John stated that he thought the fires had grown together, and we would wait till the end of the day to determine the needed organization for the continued suppression actions. One thought was that the Type 3 organization would be a branch of the Type 2, taking over operations on the south flank of the fire from Mogollon around to the Gila Cliff Dwellings. This would be logical as the Type 3 could locate somewhere south of the fire and have better access to both the Mogollon area and south flank of the fire; the Type 2 would focus on holding the fires north, northeast and east flanks. As stated before, the concern was not that the fire would move true east, and south as there were burn scars from the previous year's wildfires in this direction and it would take limited resources to check the fires spread in those directions. The major concern for containment was if the fire crossed Mineral Creek, Indian Creek and Willow Creek/Middle Fork of the Gila River as there were extensive areas of unburned vegetation in those directions. (The 2006 Bear Fire is also in this direction, but there are un-burned avenues around this 50,000 acre burn where the Whitewater Fire could continue.) I told John that since we did not know for sure if the fires had grown together, I was going to go take a recon flight, and then tie in with him when I got back.

Myself and Bobby Sutton, the acting representative for the Glenwood District to the team and I headed for Negrito Helibase for the flight around 1500. I guess both Bobby and I can say we were lucky (or cursed) to be in the air flying a recon of the fire about 45 minutes before the fire descended on Willow Creek. We approached the fire (smoke column) near Snow Lake and then started flying a counter clockwise mission so that I could get an idea of

where the active fire front was in relationship to Willow Creek and then the south perimeter so I could get an idea of what we could and could do along that flank. We could not see the head of the fire as we proceeded west along Gilita Ridge and then to Willow Creek Mesa but we could see flanking fire moving the north thru the headwater forks of Willow Creek. We crossed the Whitewater Divide southeast of Silver Creek Divide and could see the fire making runs up thru the Aspen stands on the southwest facing slopes of Willow Mountain. It looked like a crown fire in the Aspen but I think the tremendous amount of conifer regeneration under the aspen stands where providing the energy and the aspens were just getting vaporized in the tremendous heat.

Whitewater Fire burning in Overstory Aspen/Understory Conifer Stands on Willow Mountain on5/23/12

We located a point where we could start the GPS track, then flew over Grouse Mtn. Lookout and Skeleton Ridge, then followed the fires edge back up towards Spruce Creek Saddle and then over the divide above Apache Cabin. We could look north from this ridge and see that the entire drainage southwest of Whitewater Baldy, (will call it for identification – Upper South Fork of Whitewater Creek) had supported a total stand replacement fire and most likely had been the source of the major spotting into Iron Creek, the upper West Fork and Turkeyfeather Mountain to the east. From there, we watched as a northeast facing slope just north of Mogollon Baldy exploded into a tremendous explosion of smoke and vapor. (I have thought of what caused this and I think, since this area had burned previously during the Baldy Fire, one of those spot from the Whitewater Fire had become established in an unburned pocket in the head of the West Fork and then with the pre-heating and drying of the Baldy fire, provided the source to burn this stand in a second entry crown fire.

Baldy Fire burning in Mixed Conifer north of Mogollon Baldy

Looking to the south, what would have been the southwest flank of the Baldy Fire proper was backing south and west, thru broken, scabby country, with very little activity, following available fuel beds around rock slides and drainage with very benign fire behavior.

Baldy Fire backing into the wind into Rain Creek.

We flew south and east and finally had to fly several miles south of the fire line due to the intense smoke. We picked up the northwest flank of the Miller Fire, flew over White Creek Cabin, the Jerky Mountains and then almost all the way to Double Springs and the Cooney Prairie before we could see well enough to turn north and then west near Middle Elk Mountain. From there it was relatively clear back to Snow Lake, Gilita Ridge, Willow Creek Mesa and back to our starting point in Whitewater Creek. I closed the GPS track and the devise calculated the acerage at just over 135,000 acres. (This date would be passed on the next morning during a conference call with the Forest Fire Staff, Regional Fire Staff and SW Coordinating Group.)

As we flew over the upper Willow Creek forks, we noticed that the fire have moved substantially north, had crossed the Bead Springs Fork and was held up on almost a straight line on the ridge just south of the Bursum Road (the location for the Wilderness Divide Fire line). It was also perched directly above the Willow Creek summer homes backing down the canyon towards the first serious of structures. Structure protection was in place but no

firefighters where in the canyon on orders from the Operations Section Chief for the Type 2 Team. By the time we got back from closing the GPS track, the fire had crossed the Wilderness divide fire line and moving north and downhill towards the Bursum Road and Mineral Creek, as well as within 200-300 feet of the first structures in Willow Creek.

The Whitewater Fire was within ¼ mile of these structures in Willow Creek when we flew over it. Notice the sprinkler lines set up and the lack of smoke. The cabin on the right survived the firestorm, the one in the middle and left did not.

The strong west winds from Mineral Creek were blowing the smoke and fire due east, but eddies and vortices were being formed in the deep canyons just above the private lands, being fed by the energy from both the active fire above Willow Creek to the south as well as the active fire on the Wilderness ridge to the west. It must be noted here that this was all heavy Mixed Conifer made up of dense stands of Ponderosa Pine/Douglas Fir/Spruce/Fir regeneration with a heavy overstory of the same species. All of the canyon bottoms held perennial streams that had lower than normal flows for this time of year but were thick with riparian vegetation (Willow, Alder, marsh grasses and marsh forbs and ferns).
We took several pictures and then headed back to Negrito Helibase. I hind sight, I wish I had taken more pictures and stayed a few more minutes because I would have witnessed what actually happened as the fire moved into Willow Creek and could have verified what I think happened. By the time Bobby and I got back to ICP, the Operations Section Chief reported that explosions were coming from the canyon and structures were being lost. As there was nothing to do in camp, Bobby and I decided to drive on over to Willow Creek to see for ourselves what was happening so that I could verify the structure loss and be ready to relay information to our Santa Fe office.

We got to the intersection of the Snow Lake/Willow Creek road at about 1530. All of the resources that were assigned to the Willow Creek Structure protection group were staged there as it was an outstanding lookout area as well as a safety zone. As I remember, someone stated that we could not proceed any farther, but I stated that I was the Line Officer/Agency Administrator for the State Forestry Division, and knew where I was going and would take precautions as needed. Both Bobby and I had our PPE as well as communications, so we proceeded to driver down into Gilita Creek. We meet the Structure Protection Specialist at the Game and Fish Cabin discussed the situation for a few minutes then I said I was going to drive up the canyon to see if we could determine the structure status as well as any operational options. I asked Bobby if he felt comfortable going with me, and he stated that he had his PPE and he felt comfortable because I was very familiar with the terrain and knew areas

here we could turn around or seek safety zones. We then notified the Operations section Chief who was on the mesa above Willow Creek of our intent and established communication with him and the Group Supervisor.

Whitewater Baldy Fire from the Forest Road 28 and 142 Intersection. Notice how the wind is driving the fire due east

Looking up Willow Creek Canyon. Notice blue sky to the right. The winds coming out of Mineral Creek had blown the fire due east instead of northeast, pushing most of the intensity away from the remaining structures.

We were able to drive up the canyon to the first group of structures and started to go on up when we noticed that the pumps were no longer running on the structure protection sprinkler systems. We jumped out, found fuel and started getting the pumps going when we started hearing a serious of deep rumbles/explosions. At the time, I think thought they were propane tanks exploding, but have since learned that they were the sounds of structures that were on fire imploding. We got the first 2-3 sets of sprinklers systems going and feeling certain that we had a safety zone in back of us, started up the canyon to see if we could work to save any other structures.
The first live fire we saw was just below the second road crossing of Willow Creek. We stopped, then backed down to the next set of cabins and pumps to be sure there had plenty of fuel and were working ok, when the Operations Chief drove up on his truck. He had come up the canyon with a couple of Division Group Supervisors. We all came to the conclusion that we were tactically and strategically safe, and if we kept a small number of overhead in the canyon, we could work to save any additional structures, and still have escape routes and safety zones in place. We heard over the radio that John was ordering all personnel out of the canyon. The Operations Chief stated that we were in no danger of being overtaken by the fire, and that all personnel had LCES in place.

Since my truck was in the middle of the road, Bobby and I started up the canyon to the next serious of pumps while some of the Division Group Supervisors stayed at the pump we were working on. We crossed the second creek crossing and could see black smoke with ground fire on both sides of the canyon. We knew at that point that structures were engaged and the explosions we had heard earlier were not propane tanks exploding. We drove up the main road and I started telling Bobby which structures/cabins were on fire so he could make a list: Tim Curry, Kramer, Warner, Conant, Malone, Curry (Old Priestley Cabin), Matches, Dunagan, Aragon, Cone, Giordano, Willard. We saw spot fires next to the Graham, Mastler, Rydeski , White and Curry (Old Strong) Cabins and jumped out and pushed back the flames from Graham, Maslter and Rydeski Cabins. The Aragon Cabin had just become engaged with the southeast corner on fire and flames becoming established inside. The smoke cleared just enough to see the Tim Curry cabin was ok. There was a huge pile of firewood that had pretty much turned to charcoal 10 feet behind the White Cabin. Since we did not have a way to move it or get a large fire truck to the site, we set the sprinkles on all the outbuildings and wood around the pile to try to keep the heat from igniting anything else.

Somewhere around 6: 00 PM, I noted that there was a total of 6-8 of us strung out up and down the canyon working on structure protection and pumps. One crew was able to save the Curry (Old Strong) and main Curry cabin with pumps and hard work. Bobby and I kept working on the White Cabin, trying to keep the radiant heat from the pile of wood from starting the outbuildings, which would lead to the main building. . We asked for a Type 6 or Type 3 engine to come up so we could put a substantial amount of water/foam on the wood pile and structures but had no luck. The fires main thrust had come and gone and all we were dealing with was residual smoke from the burning forest as well as the structures.

At about 7:30 PM, we thought we had everything safe, disengaged and drove back to the dip site across the road from the Ranger Station and had a quick after action review. We all felt that we were never in danger and having just overhead on scene was the right thing to do. After that was over, we drove back to the ICP to brief the rest of the organization. During the evening planning session, John notified everyone that he had ordered a Type 1 Team and they would be arriving over the next 48 hours to take over the fire. He also had made the decision to move the ICP to the Catron County Fair Grounds. We also talked about having someone go back to Willow Creek to check on the pumps and make sure everything was ok. After the briefing, there was an Operations Section AAR that I was not invited to attend to discuss the day's activities and actions. At midnight, the Baldy and Whitewater Fires where officially renamed the Whitewater Baldy Complex with the Tony Sciacca's Type 1 Incident Management Team ordered and to be in command by the end of the week (Actual transfer of command took place on Saturday, 5/26/12). My official responsibility then became agency administrator/Line Officer/Resource Advisor.

Somewhere around 2200, two of the Division Supervisors headed back to Willow Creek to check on the pumps. I choose to follow them back over about 30 minutes later as I was still worried about the White Cabin and the pile of firewood. Sure enough, when I got back over there, the heat from the firewood pile had finally defeated the sprinklers and water and the entire cabin was totally engulfed with fire making it cabin number 12. (Note: I counted the Malone Cabin as destroyed by the fire. Actually, the heavy snows from the 2009/2010 winter had collapsed the cabin on its foundation, and various neighbors had worked over the preceding summer to clean up about ½ of the debris. The remaining debris was primarily wood-based and I feel that if the cabin had not collapsed before the fire, the fire would have destroyed it also).

We stayed till about 0330 working on pumps, checking other cabins and fixing a flat on one of the trucks. At that time, I drove back to ICP and the two Division supervisors slept in the meadow near the Game and Fish Cabin.

At the morning briefing at 0600, everyone in the room was very subdued. It is one thing to admit failure over the fire itself, but the loss of the cabins were on everyone's mind. John told me in a private conversation that he had been sick to his stomach during the night and asked how I was doing. I don't remember my response, but I knew

that I had to go back to Willow Creek, and because of my knowledge of the canyon and its residence, make an accurate count of what was lost and then start making calls. I completed this task about 0900. There are several counts on what was lost but knowing what was cabins, outbuilding, etc, my official count will always be: 12 primary, Structures, 13, secondary structures (sheds, outbuildings, etc) one ATV and a boat with trailer. (Since then, I have seen in print that it was 20 cabins, that is not correct, some structures that were counted where as cabins where in fact outbuildings and sheds). But, 48 cabins were still there and intact.

Four of the 12 cabins lost in Willow Creek. All four had defensible space created around the structures in 2010 as part of a hazard reduction/forest restoration projects completed in conjunction with NM State Forestry and Catron County

As far as the fire itself, the fire was long gone at this point. The winds had carried it up and away from Willow Creek with the little Turkey Creek Drainage taking the hit. I believe the winds coming out of the south fork of Mineral Creek, along with the vortices that had been created at the top of willow Creek, had created a huge eddy affect that created the firestorm in Upper Willow Creek but then helped pull the fire in and then drove the crown fire up over the ridge. You can see the affects of this wind current by looking at the line of unburned trees starting near the Matches cabin and then extending to the top of the ridge above the John Curry Cabin. That is why the three Curry Cabins did not burn, they survived a glancing blow, and then the thinning from the forest thinning / hazardous fuels reduction project from 2010 kept the fire on the ground and allowed us the time to get back into the canyon and suppress the ground fires backing towards these structures. It is my belief that if Bobby and I had not driven up into the canyon at the time we did, at least 6 more cabins would have been destroyed.

By 1000 the next day (5/24), I had personally called most of the landowners and told them of their loss. They all were wanting to get back into the canyon to see for themselves. I explained to them that there was still active firefighting taking place and that as soon as it was possible, we would make that happen. That trip actually took place on June 4th,

One other note before I talk about the rest of the Fire. At 1200 on 5/24, I participated win a Regional Conference Call where Gila National Forest Staff, Regional Office Staff, Southwest Coordinating Group members and others were present. Somewhere in the discussion, someone asked just how big this fire was going to get based on natural and man-made barriers that could , with 80% success (as directed by the Regional Forester) be used to check the fires spread. There was not comment for a while until I stated that the GPS track I had flown the previous day suggested at least 135,000 acres and that did not include the Bearwallow/Corner Mountain County if it crossed Mineral Creek, as well as the entire Mogollon Highlands as there was no logical options until the fire reached the piñon/juniper transition belt running south from Mogollon, past Glenwood and then southeast to Mogollon Creek until it reached a point where it would tie into the Dry Lakes Wildfire use from the early 2000's. From there, the Miller Fire from 2011 would probably hold it in check and the Bull Wildfire Use from 2005 would mitigate the fire intensities if it crossed the Middle Fork between Canyon Creek and the Gila Cliff Dwellings and got established at the base of Black Mountain. The only other area of concern would be from Snow Lake to the Double Springs Road, and this could be dealt with reasonable effort because this area had seen fire during the 2002 Middle Fire.

Priority had to be given to protecting Mogollon, and then catching the fires on the Reserve-Beaverhead Road, then patience was going to have to be exercised as the fire moved east into areas that had a large amount of fire history (Jerky Mountains, Iron Creek Mesa, Clayton Mesa, Lilly Park, Aeroplane Mesa, Black Mountain) , west as the fire back thru the real South Fork of White Water Creek, topped out above Glenwood and then back down to the piñon/juniper vegetation, and then south and west as it moved into the headwaters of Mogollon Creek and the Dry Lakes area. The Strategic Operating Plan developed by the Strategic Planner from the team and myself (along with another SOPL whose name I can't remember) charted this out and was a basis of the decision documented in the WFDSS analysis. This overall strategy was also validated by the Operations Sections Chiefs from Sciacca's type 1 Team and presented to the forest and regional office staff on 5/26/12 at the Reserve Ranger District office as a plan that had at least an 80% chance of being successful. The "box" was huge, somewhere between 250,000 and 300,000 acres. Someone made the comment that it would most likely pass the Las Conchas fire as the largest in state history, no one laughed.

So what happened with the rest of the fire after it burned thru upper Willow Creek? I will take that in cardinal directions. Let's go north first.

As the fire was eddying and destroying structures in Willow Creek, it was also moving downhill from the Wilderness boundary towards the Bursum Road. It crossed the Bursum Road somewhere in the night on 5/23 and then had an uninterrupted fuel bed to the bottom of Mineral Creek. How it crossed Bursum Road, we will never know, but I am sure it did in a very spectacular fashion, and in multiple places. Most of this terrain is extremely steep with old Mixed Conifer Stands intermixed with Aspen Clumps. I had the good fortune to complete stands exams on a lot of this slope in the mid 1980's and can attest to its steep rocky terrain and its extremely thick vegetation. Once it got to the bottom 1/3 of the slope, a process that was quickened by rolling logs, rocks and debris, it was aligned perfectly to go east towards upper Indian Creek and north up several long canyons to the crest of Bearwallow Mountain, which it did in due time. Going east did not buy it much because it ran right into the 2006 Bear Fire, which pretty much checked the fires spread in that direction. But, going north , it had an open gate into Ponderosa Pine and heavy Mixed Conifer stands that had seen little to no fire activity and limited amounts of forest management. It saw the opportunity and took, following canyons up over Bearwallow and Corner

Mountains where it was eventfully stopped on the Reserve Beaverhead Road Between sign Camp Canyon and Beaverdam Canyon several days later. It was relatively easy to check the fires after it crossed Bearwallow and Corner Mountains due to the Bear Fire Scar to the east and the transition from Ponderosa Pine to Pinon/Juniper to the west. The north flank was touch and go for a few days, but that area had seen several wildfires as well as intense forest management activities so it was more like a prescribed burn than a wildfire. One large spot did get established north of the South Fork of Negrito Creek but numerous prescribed burns, Wildfire use fires and logging in the past 30 years made this spot easy to contain before it build up excessive energy.

To the west, the fire backed in a almost even north south line, down over Willow Mountain, passed the junction of the South Fork of Whitewater Creek and Whitewater Creek, skipped around Spruce Creek Saddle and over Sacaton Mountain and eventfully backed down the west face of the Mogollons until it reached the Pinon/Juniper and Oak transition zone where it checked itself or crews were able to take advantage of vegetation changes and lighter fuels. A lot of work was done to make sure the fire burned around Mogollon with not structures lost. This was done with indirect lines and thoughtful burnouts and backfires. Some aerial ignition work was done around Mogollon and then north of Mineral Creek in the Deep Creek Drainages to limit fire intensities and keep the fire squared up so that it would not make crown runs in ponderosa pine and mixed conifer stands. By June 18th, the fire had either hit this vegetation line or plans were in place to check it's spread.

To the south and east, the fire pretty much backed down to either the Miller Fire or into the Dry Lakes country where past fires affects either checked the fires spread or allowed for direct tactics where possible later on in mid June.

To the east, the fire burned out of the mixed conifer, into extensive Ponderosa Pine stands that had seen several prescribed natural fires, Fires use fires or both, burning thru fire scares in Jackass Park and McKenna Park where it lost most of intensity. It was almost a perfect maintenance burn in most of these areas burning the dead trees and blow down from previous events. As it moved into the dry ponderosa pine and Pinon/Juniper Stands between the Jerky Mountains and the Middle Fork of the Gila, it slowed down even more drastically to a point where, after crossing the Fork below the Meadows, it made very little progress to the east and was eventually "contained" between the Double Springs Ranch and the Middle Fork. I say contained because I do not feel it would have made it across these open grass lands on its own, checking actions and burn outs were done to assure that it would not, but these burnouts where not very clean. (It must be noted that on the official map of the fire, the foot prints of the three fires from the Jacks Complex from 2011 are clearly visible and the fire went right around them.).

To the north, as stated before, the fires spread was checked along the Reserve –Beaverhead Road. Successful burn out were completed along the Loco Mountain Road from Snow Lake to the Double Springs Ranch Road and then south to the Double Springs Ranch. This successfully checked the fires spread to the north and northeast. It must be noted that if the fire had crossed the Loco Mountain Road, past prescribed burns (Ten Cow, Bull, etc) would have limited fire intensity and made it easy to go direct and if that had not been successful, the Road between Collins Park and Beaverhead would have had 100% certainty of containment.

The next few weeks are now a blur of activity and I am not sure what we all did, but it seamed meaningful at the time. Working with the Type 1 Team, attending morning briefings and evening planning meetings, attending several community meetings in both Reserve and Glenwood and periodic checks to all the private lands within the fire's footprint were the order of the day. The Type 1 team timed out after a few weeks, then we spent time with the NIMO team until goals and objectives were meet. The Whitewater Baldy Complex was officially declared contained on July 17th and controlled on July 31st. Preparations for the aftermath soon took priority which meant working with the County and local communities to prepare for flooding and its effects on the landscape. We were able to remove most of the dead/dying trees in Willow Creek to allow for re-entry of the landowners, as well as cut

and remove many of the hazard trees along the road and stream channel. Similar work was done in all the major drainages to protect infrastructure and private property.

Final thoughts.

The Whitewater Baldy Fire, when perfect alignment was met (alignment meaning the perfect mix of fuels, weather and topography) was indeed a wildfire of historical significance. But, where treatments had taken place (both in and out of the Gila Wilderness), treatments being either prescribed fires, Fire for resource benefit fires, or forest management actions, the fire was more like a prescribed fire, coming close to mimicking the natural regime of periodic surface fires in which the affects were more beneficial than detrimental. Yes the old growth stand of Mixed Conifer that had been growing in the upper reaches of the Mogollon Highlands have been decimated and we will never, in our lifetimes see them as they once were. There will be long term resource damage in these areas, ranging from mud slides, debris flows, clogged and degraded mountain streams and damaging floods. Our efforts to " preserve these stands" and not let natural ignitions burn these stands in smaller patches undoubtedly played a part in whole watershed getting " blown out" instead of individual tributaries taking the hit this year and then 10 years from now the adjoining one taking the hit. I myself have been on 3 fires in the Whitewater Watershed (one as an observer as child, two as a Helitack crew member) that if left to burn in a natural fashion could have had an effect on the fire behavior of the Whitewater Fire. A fire about 5 years ago in the Beads Springs area, yes, in a dry year (but not as dry as 2012) was actively suppressed at 6 acres. If that fire had been allowed to burn, it may have burned enough of the huge fuel buildup to slow the fires spread and allow the Bursum Road to be used as a containment line. I was told 65 Mexican Spotted Owl protective areas were destroyed in the first 5 days of the fire. Those areas are permanently gone now, where one prescribed fire or Fire for Resource benefit fire would have negativity affected them for a year or two, now it will take hundreds of years for the stand structure to develop that will support not only the spotted Owl but all the other species that were part of that ecosystem. Streams that once supported Gila Trout populations, reintroduced at great expense have been swept clean and forever changed by the "blackwater" of the first summer rain. These are just some the short and long term affects from the Whitewater Baldy Fire. On the other hand, aspen seedlings are sprouting up everywhere and rejuvenated riparian area will become oasisis with the new growth and influx of nutrients from the rich ash and soil washing of the mountain slopes,

The Whitewater Baldy burn scar is recovering as we speak. With the restoration and rehabilitation efforts that have taken place, it should minimize some of the large scale erosion and floods. Native grass seeds and mulch have been spread by Helicopters and are showing signs of stabilizing the most severely burned areas. There are pockets of Mixed Conifer throughout the area that can provide seed sources for future stands. But, it will be several hundred years before large Mixed Conifer stands will once again cover the upper slopes of the Mogollon Highlands. Now, aspen suckers are exploding in many areas where they had been replaced by the dense overstory. This fire should provide us all kinds of lessons in ecosystem management as well as dealing with Mega-fires, fires that are becoming more and more common in our Western landscape.

Appendix

The following are questions that were the basis of the discussion on 8/20/12 with Bill Derr, Ron Morsback, Barbara Romero and Roger Seewald. My thoughts/ answers are in italics.

Baldy Fire

1) Should the Baldy Fire have had a timelier & aggressive initial attack in view of the cancellation of a prescribed burn on the Gila NF the same day, the public notice on the Red Flag system, & predicted weather involving high winds (reason for prescribed burn cancellation)?

I do not think there were any tactical options in place to aggressively and safely attack the fire at that time. Extreme Terrain, access issues Extreme slopes and heavy, receptive fuels were present as well as minimal resource availability.

2) Were firefighter safety concerns which precluded engagement with the fire at the outset valid? (Terrell Shelly claims that the fire could have been attacked safely).

Yes, I feel this was the main reason that engagement was not initiated. I understand Mr. Shelly's opinion, but in a day of massive oversight and never ending safety procedures, and when there were no major "values at risk", putting firefighters in places where logistical needs and safety issues cannot be mitigated, discretion is the better part of valor.

3) Would fixed &/or rotor wing resources have been effective in containing the fire until it could be safely engaged by ground forces?

Rotor wing resources, I would say no, there was not sufficient water in place to make it effective, Fixed wing, it would depend on the availability of the resource at that time. In either case, it would have taken ground forces along time to arrive on scene to back up the retardant work and then their effectiveness would have been questionable due to the extreme terrain and vegetation.

4) Was the decision to monitor the fire & keep it within pre-planned boundary's a wise one given the cumulative weather, fuel & fire danger conditions & its subsequent escape & merging with the Whitewater Fire & were sufficient resources allocated to the fire to keep it within planned containment lines?

Hind sight is always 20/20, I believe that if the Whitewater Fire had not started, the Baldy Fire would have burned 20,000 to 30,000 acres and would have accomplished management objectives while maintaining fire fighter safety and resource benefits.

5) Had the fire not exceeded 758 acres after May 16th , would resource benefits have resulted?

Yes, the alpine grasslands around Mogollon Baldy would have been treated, pushing back the Conifer encroachment as well as creating additional safety zones around the lookout itself.

6) What was the final acreage burned by the Baldy Fire & what percent was of resource benefit?

This is an almost impossible questions to answer, but I would say that the Baldy Fire would not have gone farther than Iron Creek on the northeast and Center Baldy on the northwest. More realistically, I think actions could have been taken to check the fires spread on trail systems that run along West Baldy, Center Baldy and Turkeyfeather

Mountain on the north, I think the Willow Creek/White Creek Trail could have checked the spread on the east, the Miller Fire would have checked its spread to the east and south (as it did anyway) and the broken terrain to the south and west would have checked the fires spread in that direction (as it did). I am estimating the final size of the fire would have been in the 30,000 acre range.

7) What influence did the Whitewater Fire have on the spread of the Baldy Fire or visa versa?

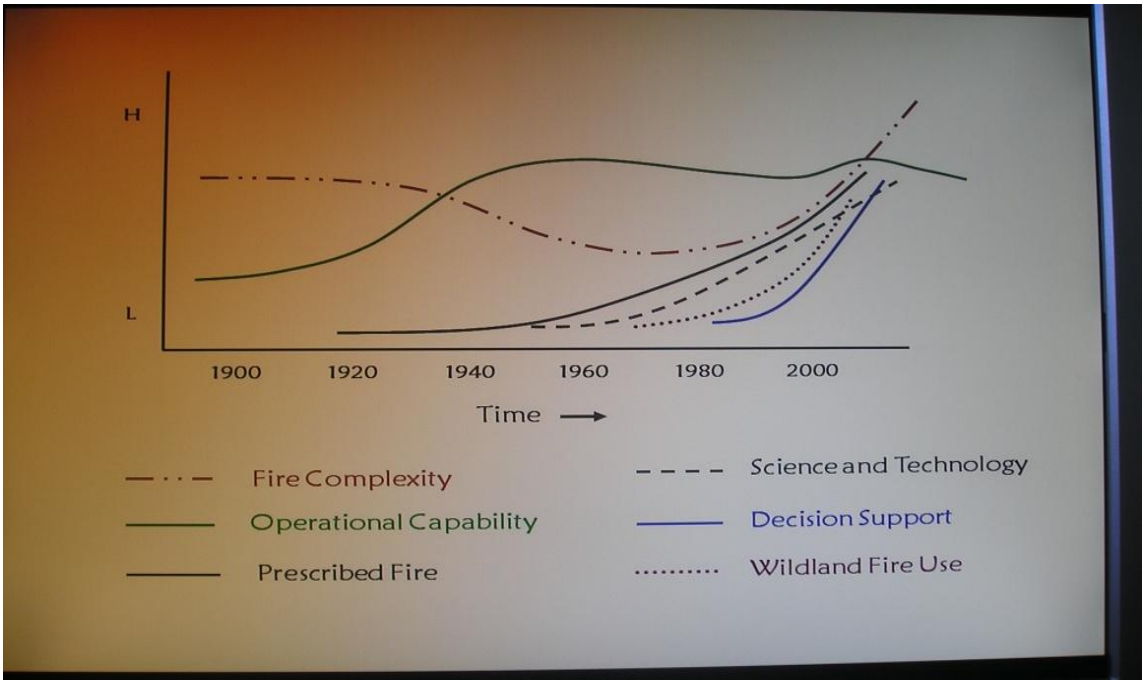
I believe the Whitewater Fire created so much energy in its run up Upper Whitewater Creek that is pulled the Baldy Fire north. This along with the intense spotting into Upper Willow Creek, Iron Creek and the West Fork of the Gila River created fire behavior that until recently, was unheard of, flame lengths in the hundreds of feet, intensities that are off the charts, as well as winds and eddies in the deep canyons that cannot be imagined. An example is upper Willow Creek. There is a meadow where the two main forks of Willow Creek come together. I found a dead cow elk that had no burn scars on her body. I think the intense heat and lack of oxygen is what killed her. She was in a place where eddies and vortices where all around her which prohibited her escape as well as created super hot gasses and air currents making the surrounding forest and canyons " explode". If that same thing happened in Iron Creek, the Upper West Forks, etc, it would have pulled the Baldy Fire north. My guess this is where the two fires actually burned together.

8) Based on the Gila NF News & Events release that this fire was a "natural process" fire, was it for all practical purposes a typical resource benefit or as some say allowed to burn to meet management objectives? (Terminology from WFU to "Natural Change Agent" has evolved over the years, but, essentially means the same thing. A recent term is "Multiple Objective Strategy". I believe the Gila called the Baldy Fire a "Modified Suppression Strategy").

Since there was not a safe and viable way to actively suppress the fire in the initial attack phase, I think that the decision was made to allow the fire to burn to meet management objectives, and then, when it got to place where actions could be taken safely and effectively, I believe those actions would have taken place.

9) Are there any lessons to be learned regarding the Baldy Fire assuming a better outcome was possible?

The decisions made where based on the available information at the time. I am not sure that there were any better options available, even if we had known that the Whitewater Baldy Fire was going to become a factor. As stated in questions # 6 above, the tactic of inserting firefighters on the tail systems between West Baldy and Turkeyfeather Mountain to check the fires spread to the north would have put them directly in the path of the Whitewater Fire's historic run up Upper Whitewater Creek with no escape routes, safety zones, etc. , possibly resulting in serious consequences. The lesson that we must learn is that we are in the age of fires that we really are not prepared to deal with in a safe manner. As the following graph developed by Dr. Tom Zimmerman shows, we have maxed out our capability but the natural fire environment/complexity is still expanding.



Whitewater Fire:

1) Were lightning recons initiated after the last storm until discovery? If not, should they have been?
I do not know.

2) Would fixed &/or rotor wing resources have been effective in containing the fire until it could be safely engaged by ground forces?

Due to the extreme topography, I do not thin fixed & or rotor wing resources would have been effective. Fixed wing aircraft would have limited utility due to the extreme slope and unsafe ingress/egress issues. There would have been major operational issues with supplying water in sufficient quantity to make rotor wing work effective.

3) Were sufficient ground resources dispatched to the fire in a timely manner?

From what I understand, district resources as well as 2 crews were engaged in the fire with limited success. Too many more "bodies" would have been a hindrance more that help, due to extreme slopes and lack of escape routes and safety zones.

4) Were smokejumpers available & would they been effective in the early stages?

I am not sure they were available and there are limited jump zones in that area.

5) Should a Type 1 Team have been in place sooner?

A Type 1 Team would have not been able to do any more work that than the Type 2 before the fire blew out of Whitewater Creek. Because of the more offensive nature of the Type 1 Teams, structure protection in Willow Creek may have been initiated sooner, but also more resources could have been in harms ways when the fire exploded.

6) Were the suppression tactics the best practices given the task at hand?

Based on old paradigms, I would say yes, based on the new realities of mega fires, I am not sure and I am not sure what those would be besides get out of the way and initiate suppression actions on our terms.

7) Is there an accurate assessment of the short & long term resource benefit versus resource damage? If so, what is it?

We can list an extensive assessment of the short & along term resource benefit versus resource damage based on our past experiences and education of the fires that we have become accustomed to , but only time will tell with Mega Fires such as the Whitewater Baldy fire because our experience and education is somewhat limited. The BEAR Team work suggests that only 26,000 +/- acres of the fire received catastrophic fire affects. That leaves +/- 270,000 acres of beneficial effects, but whether those effects are truly beneficial is still the question.

8) What are the short & long term downsides to adjacent local communities; economical, clean water, & flood potential?

This will be a never ending list.

9) What lessons are there, if any?

Once these mega fires get started, the only thing that stops them are weather changes and vegetation type changes. Both happened on the Whitewater Baldy in conjunction with each other. The fuels, weather and topography created the energy that drove *the fire thru the Mixed Conifer vegetation types. The vegetation type change (Mixed Conifer to Ponderosa Pine/Pinon-Juniper) is what gave suppression resources an opportunity to stop the fires spread on favorable terms.*

Other:

1) Was this event a "Perfect Storm" & if so, what factors created it & what could have been done in the years preceding this event to mitigate the adverse conditions which made these fires so difficult to combat?

Yes, I think this was the "Perfect Storm". That is what it takes to create a condition such as this. I have identified many of the factors that I feel created this scenario in the narrative above.

2) Were the "Values at Risk: given due consideration in the decision process during the initial stages of these fires?

I personally know many of the people involved with the initial decisions as well as their experience and dedication to the local communities and it's issues, I feel they were aware of any "values at risk", and where making sound, thoughtful decision based on those values.

3) To what degree, if any, did cost containment figure into the allocation of resources decision process & if so did it hamper suppression efforts?

No knowledge of this