Forests and Watersheds

A Newsletter for Decision-Makers

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New Mexico Forest and Watershed Restoration Institute

NEW MEXICO
FOREST AND WATERSHED
RESTORATION INSTITUTE
AT NEW MEXICO HIGHLANDS UNIVERSITY

Developing partnerships for watershed policy

By Ron Gardiner

Twenty years ago, watershed and forestry policy and management was at the margins of state government and budgets. With each wildfire, the economic costs of such events in our state become harder to ignore. With each drop of water levels in reservoirs and wells the question rises with regards to the source of that water.

Unlike our different water uses that tend to split us apart, watershed policy can draw us together. Facing New Mexico's watershed challenges will be an all-hands-on-deck endeavor where everyone has skin in the game.

The goal of this newly initiated newsletter is to keep legislators, elected officials and practitioners informed on New Mexico's watershed health, policy and administration. There are many administrative tools and funding sources in New Mexico available to communities to help them be better prepared to live with drought and wildfire.

The times demand using all resources available to prevent catastrophic fire rather than trying to react to the aftermath. These programs are spread across the wide spectrum of state water and natural resource agencies and levels of local government. And yet there aren't enough funds to address the problems of fuel loading that are needed as prevention before the fires impact our landscape and economies.

Wildfires have dictated an expanding mission for government agencies. Before the large-scale fires began in the mid-1990s, there had yet to be a New Mexico State Water Plan or a New Mexico Forest and Watershed Health Plan. Forty-five community wildfire protection plans (CWPPs) had not been developed and adopted. While we have come a long way as a state in terms of awareness, we have a long path ahead to effectively connect communities to the primary resources of their wells and watershed.

What we see today is that all of our agencies practice some form of watershed planning and project work to address a variety of issues and conditions. Most require community and public understanding and support and most also require cooperation across jurisdictional boundaries. We know the dire need to create fuel breaks around communities and deep in the forest so the fires cannot run as far.

The New Mexico Forest and Watershed Restoration Institute (FWRI) was established to promote practices that reduce the risk of catastrophic wildfire. This task covers a broad range of activities, including mapping and monitoring. It especially includes support to those who will cut the trees, explanations of why they need to cut this tree and leave that tree, and how we can work together to restore the land.

Our goal is to work across all jurisdictional boundaries and provide forestry support services and resources for New Mexico watershed project work. This biannual newsletter will keep up with developments in the community of forestry and watershed practitioners and provide paths and connections to state and federal resources that can help your communities be better prepared to live with drought and wildfire by. If there are topics that you would like to see addressed in our newsletter let us know. We will do our best to research the topic and present it to the readership. Also, please share the newsletter with other legislators or state, tribal or local elected officials that may have an interest in all things watershed and want to be on our distribution list. You can visit our website at www.nmfwri.org. ◆

What is new at NM FWRI

By Ron Gardiner

Dr. Kent Reid

In October 2013, Dr. Kent Reid was appointed as Director of the New Mexico Forest and Watershed Restoration Institute by a selection committee at New Mexico Highlands University, where FWRI is based. Reid is a professional forester who moved to New Mexico in 1996. He has international private and public sector experience and a long-time familiarity with the U.S. Forest Service and the BLM.

Reid has been with the institute for six years and has appeared in front of interim committees several times. His knowledge of the broad range of project work around the state and experience with federal partners give him an advantage at effectively working on behalf of the state and communities at risk of wildfire and drought.

The FWRI and Reid's staff provide New Mexico with resources to address an ever-growing need to understand watershed conditions and the pursuit of preventative measures. Reid and FWRI work on a local basis and provide training, technological and scientific support to communities and practitioners attempting to plan and achieve desired watershed and forestry outcomes. Training and monitoring are a component of the mission for this New Mexico research and public service institution.

The FWRI staff and Reid are available to the legislature collectively or individually if you have questions about watershed health and forestry. The FWRI is funded in part out of the Wildland Fire and Hazardous Fuels line item in the U.S. Forest Service's budget, and by the state of New Mexico through New Mexico Highlands University. ◆

It's a matter of scale

By Dr. Kent Reid Director NM Forest and Watershed Restoration Institute

Sometimes things don't work out and you wonder why. Other times they do, and you still wonder why, but you are grateful. Now is one of those times that minds and efforts seem to be converging, and I am grateful.

The Cerro Grande fire started in May of 2000 and burned 48,000 acres, an area that was unprecedented. Eleven years later, the Las Conchas fire burned almost 157,000 acres, and one of the reasons it was finally contained was that it burned into the Cerro Grande fire scar. Again, this event was unprecedented in scope, but the new standard didn't last long. The next year, in 2012, the Whitewater-Baldy fire burned not quite 298,000 acres, and remains the largest fire in New Mexico history. As I write this in mid-June, our fire season has not been as bad as I expected, so let's hope that remains the record at the end of the year.

If we pay attention, the size of these fires points us in the direction we should be thinking; we should be thinking big and bigger. A successful program of the Forest Service, the Collaborative Forest Restoration Program, has an average project size of 300 acres, and awards maybe seven projects a year that do on-the-ground treatments. Outside of the CFRP, a big project on public land covers possibly 3000 acres. We need to increase those numbers by at least a factor of 10.

Signs are out there that people are beginning to pay attention. One of the most hopeful signs was the two Memorials from the last legislative session, House Memorial 80 and Senate Memorial 95. These memorials recognize the need for a large-scale restoration program, the inadequacy of existing efforts, and the absolute necessity for stable, increased funding. And despite the statement in the Memorials about the slowness of the federal efforts, I also see hopeful signs on that front.

The new regional forester for the Forest Service has publicly stated that a priority for him is water. I'm happy to hear that, and I strongly believe that the best way to produce water is to restore the watershed, thereby reducing the risk of bad fires that ruin the water. I'm also hopeful about landscape-level efforts that are happening across the state, in the Jemez, in the Zunis, and in the Manzanos. The nascent Rio Grande Water Fund, promoted by a large coalition of groups that includes the FWRI, is one of the more exciting ideas being discussed. While aimed at fuel treatments in the Rio Grande basin, it looks like it could serve as a model for restoring watersheds throughout the state. And locally, lower-level people from different agencies work together to see that things get done across the fence, on large landscapes.

I think that most of the pieces are in place for meaningful, large-scale watershed restoration to take place in New Mexico. The various federal agencies want it, the governor wants it, the Legislature wants it, communities and environmental groups want it, and the people who make their living from the land want it. The work on the ground will not be done in a vacuum, and will not be done without some disagreements among the interested parties, but I truly believe that together we can do this. I'm grateful that things seem to be working out. ◆

The 2014 New Mexico Legislative session

By Ron Gardiner

With each legislative session, the awareness for the connection between communities and their water uses with watershed conditions and health grows among legislators. More and more state and local representatives are connecting to their constituents' issue of local watershed health with its effects on local commerce and community stability.

The conversation began in earnest with SB-1 in 2001. The bill allowed county commissions to evoke emergency police power to remove fuel loads from federal lands. While its message was clear, states do not have that legal jurisdiction. The dialogue continues to recirculate, though, to what our communities' relationship is with federal lands and their managers. We have seen many community-based watershed groups developed for a variety of reasons in the past 20 years. State program work has developed on sometimes parallel tracks to deal with watershed issues that include water source protection, public safety from wildfires, local economies and habitat considerations.

With each session more and more bills and memorials are drafted to try to address these critical public policy issues. In the 2013 Legislative session three watershed memorials were passed: HM-65 (Rep. Yvette Herrell) HM-24 (Rep. Carl Trujillo) and HM-25 (Rep. Nick Salazar). HM-65 was one vote short of a unanimous vote in the House and unanimous in the Senate.

In the 2014 session, SM-95 Long-Term Forest & Watershed Plan sponsored by Water Interim Chairman, Sen. Phil Griego, and Rep. Zach Cook's companion, HM-80, were adopted unanimously, with all 112 votes. This memorial directs the 2014 Water and Natural Resources Committee to develop a long-term funding plan for federal, state, local and tribal agencies and diverse stakeholders to cooperate on forest and watershed restoration work in New Mexico. The broad base support and desire to meet the challenges is demonstrated with these votes.

www.nmlegis.gov/lcs/legislation.aspx

All of these memorials are efforts to advance the priorities to plan and coordinate with local, state, tribal and federal land and water managers and to produce actionable plans and outcomes that support preventive and proactive community projects. Quietly and consistently an advocate's coalition has loosely formed to pressure local and state government to provide more tools to deal with issues of watershed health and community welfare and safety.

Water users groups such as the farming and ranching communities have joined local governments such as the Soil and Water Conservation Districts and sportsmen and wildlife conservation interests to pursue these goals. The forest industry and conservation groups are working together to promote more opportunities to reach the goals of the New Mexico Forest and Watershed Health Plan and to advocate these memorials. Each year water managers are forced to address the impacts of these landscape size wildfires on water infrastructure and administration.

Legislators have begun to coalesce into an Ad Hoc Watershed Caucus or a group of legislators with an interest in the topics of watershed policy administration and project work.

First steps on the path to connecting communities and watershed tools

Local officials and private property owners can contact:

- District Offices of NM State Forestry
- Offices of Soil and Water Conservation Districts
- Offices of the Natural Resource Conservation Service (NRCS)
- NM Association of Counties
- All About Watershed Web Site
- Local Firewise programs

Whiskey is for drinking; Water is for Fightin' over

By Senator William Sharer
State Senate, District 1, Senate Conservation Committee Member

This has been the path New Mexico and the West in general has taken for more than a century. It is time to rethink the solutions.

The New Mexico legislature spends nearly all of its water debate on who should sue whom to gain control of water. When the debate is not about suing it is about who should pay whom for the loss of the water. This is an endless circle of water envy that has not solved any problems of the past nor is it likely to be the solution in the future.

I suggest we need to look much further upstream, so to speak, to find the solution. When most of us think about water we think of rivers, lakes and the kitchen faucet. But in the west that is not where our water begins. Look further upstream. The mountain is a colossal water storage tank. The problem we face today is poorly managed forests, which do not allow water to reach the storage tank. Today we have forests that are terribly over grown, in the name of protecting some critter or another. With 500 to 2500 trees per acre the rain and snow simply cannot fall to the forest floor and be absorbed by the 'water tank'. The snow pack evaporates off the canopy and is lost.

Then nature gets involved and burns the forest. Unlike fires in a managed forest our current fires become raging infernos that not only burn the excess trees they destroy the very soil, thus we have no cover on the forests and the rains rush down the mountain pushing the ash into our rivers and lakes destroying those as well. Again the 'water tank' captures no water.

The solution is simple. Manage the forest. A properly managed forest has enough trees to shade the ground so the snow can reach the mountain and melt slowly into the 'water tank. There will be enough brush to provide homes for our critters and enough grass to protect the soil. Not over grow or clear cut, but a balance.

As a society we seem to have lost sight of balance. All too often the politically active demand all or nothing, this dichotomy has created the problem with the 'water tank'. It is over grown or burned barren either way we fail to capture the water nature deposits on our mountains. Managed forests are healthy forests that provide water, habitat for our critters, recreation, agriculture, beauty and human health. Manage the forest. ◆

New Mexico's local governments CLOSEST to the ground

By Debbie Hughes NMACD

Soil and Water Conservation Districts are political subdivisions of state government with locally elected boards. The NM Legislature gave the soil and water conservation district very unique authority and responsibility that enables them to work with private landowners; as well as tribal, state, and federal partners on a watershed basis across checkerboard ownerships.

The following excerpts from NMSA 73-20-44 explain some of the special legislative authority:

(C.) With the consent and cooperation of the landowner or the state or federal agency administering the land, conduct projects upon land within the district to demonstrate by example the methods by which soil and other natural resources may be conserved, by which soil erosion in the form of blowing and washing may be controlled or prevented and by which flood prevention and the conservation, development, utilization and disposal of water may be carried out; the projects may include, but shall not be limited to, engineering operations,

(D.) Assist, contract with and render financial aid to district landowners and state or federal agencies administering land within the district that are engaged in erosion control and prevention projects, flood prevention works or the conservation, development, utilization and disposal of water within the district;

(E.) Make available to district landowners, on such terms as the supervisors may prescribe, tools, machinery, equipment, fertilizer, seeds and other materials to assist the landowners in initiating and developing natural resource conservation and development projects;

(I.) Act as agent for any instrumentality or agency of the state or of the federal government in the acquisition, construction, operation or administration of a natural resource conservation, utilization or development project or program within the district;

The New Mexico Association of Conservation Districts (NMACD) has a contract with the Bureau of Land Management to work as the fiscal agent for the "Restore NM" Funds that are matching the USDA-NRCS EQIP dollars. Over 20 million dollars has been expended through partnership agreements statewide on various landscape scale watershed treatments. Over 3 million acres of private, state, and BLM lands have been improved through treatment of invasive species and other best management practices such as water developments and fencing.

The partnership has been so successful that NMACD now has a contract with the US Forest Service to help with coordination between federal, state and local partners. The hope is that more "one the ground" projects will be accomplished with better communication and leveraging of financial and technical resources. Our organization has 30 employees that are funded by state and federal dollars to assist with delivering farm bill programs and assisting the local conservation districts. We also have 25-28 "on demand" contractors that provide technical assistance on an "as needed basis". These contractors are range specialists, soil conservationists, wildlife biologists, engineering and archaeologists.

This very unique set of trained and experienced contractors has enabled NMACD to provide services to NRCS, BLM, & Forest Service as well as the local conservation districts. We are now also working to assist Acequias in NM to get more water development and delivery projects on the ground in a timelier manner.

NMACD is applying for Requests for Proposals in the new Regional Conservation Partnership Program that will leverage millions of financial, technical and in-kind support. More importantly, if funded will bring millions of additional dollars to NM producers to do more conservation on private, state and federal lands!

New Mexico is facing extreme drought and will continue to have devastating destructive wildfires if we are not Pro-active. NMACD is trying to do our part to address these issues. ◆

This newsletter is intended as a source of information for decision makers. As part of this service, we will print contributions by people associated with a wide variety of agencies, NGOs, and citizen groups. So that our readers may be able to fully understand what these groups do and how they think, we do not edit these contributions. We may not agree with all the details expressed by the contributors, and may envy their budgets, but we all want to work together to have a healthy landscape and healthy communities. – Kent Reid

Rio Grande Water Fund for Wildfire and Water Source Protection

By Laura McCarthy, The Nature Conservancy

New Mexicans' notion of what constitutes a "large" wildfire has grown substantially over the past decade. Since 2000, the size of the largest fire recorded in New Mexico has more than quintupled. Wildfire severity is increasing too, and in the case of the Las Conchas and Whitewater-Baldy fires, they are spreading at unprecedented rates. For example, the Las Conchas fire grew by 43,000 acres in 12 hours on the first day, causing some of the most severe watershed damage in the entire burn perimeter. Just six weeks later, average-size thunderstorms over the burn areas caused massive debris flows, and flushed ash, rocks, trees and more into streams and the Rio Grande. These combined factors of wildfire and flooding are the catalyst for the Rio Grande Water Fund.

The Rio Grande Water Fund is established to achieve the vision of healthy forests and watersheds that provide a reliable supply of high-quality Rio Grande water and other benefits for New Mexico. The water fund is a mechanism that allows government agencies, water users, community stakeholders and others to invest in protection of the forested headwaters that supply their water. Similar funds have been established in Latin America, where The Nature Conservancy and partners have 32 water funds in various stages of development that provide a steady source of funding for the conservation of more than 7 million acres of watersheds and secure drinking water for nearly 50 million people. In western U.S. cities, such as Denver, Salt Lake City and Flagstaff, water funds and other mechanisms enable water users to invest in healthy watersheds. And a successful pilot effort on a 17,000-acre municipal watershed in Santa Fe (the Watershed Improvement Program), has proven these tools can work in New Mexico.

The goal of the Rio Grande Water Fund is to protect storage, delivery and quality of water for communities in the Rio Grande Valley (from Belen north to the Colorado border and including the Rio Chama), through landscape-scale forest restoration treatments in tributary forested watersheds, including the headwaters of the San Juan Chama Project. The objectives of the water fund are to

1. Restore watershed functions by improving the health of streams and riparian areas.
2. Mitigate the downstream effects of flooding and debris flows after wildfires.
3. Reduce forest fuels in areas identified as high risk for wildfire and debris flow.
4. Support forest products industries' use of wood by-products from forest fuel reduction.
5. Maintain the reduced wildfire hazard in treated areas.
6. Secure sustainable financing from water users, government, investors and donors, and facilitate payments to upstream land managers.

Development of the Rio Grande Water Fund was guided by an advisory board, convened by the Nature Conservancy in April 2013, with 23 organizations and agencies participating. Over the course of a year, the advisory board grew to more than 45 diverse New Mexico entities, representing a constituency or stakeholder who cares about water security and wants to help implement large-scale forest and watershed restoration.

The Rio Grande Water Fund will have its official launch this summer, with two demonstration projects in the Sandia Mountains on national forest and near Chama on private lands. A comprehensive plan to guide water fund implementation will be available in July at: www.nmconservation.org/RGWF/RGWF_CompPlan.pdf.

Secure Commitments: The Rio Grande Water Fund will develop MOUs between participating agencies and organizations to secure commitments and leverage resources.

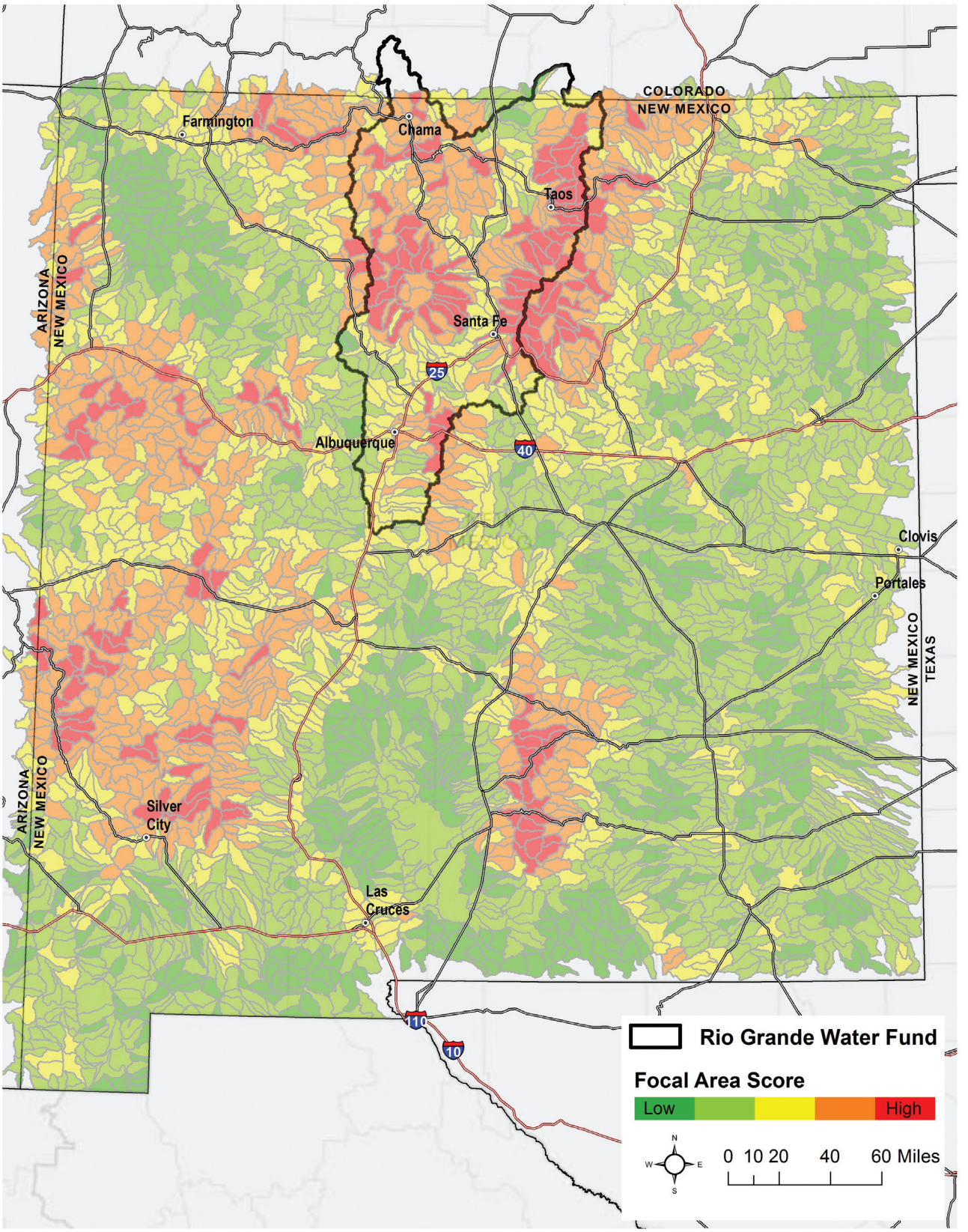
Funding and Restoration: The Rio Grande Water Fund already has received private donations, and will begin funding restoration projects with an RFP process in 2015.

Policy: Senate Memorial 95 and House Memorial 80 address the same issues on a statewide basis, calling for the appropriate interim committees of the New Mexico legislature to develop a long-term state funding plan to be considered in the 2015 session.

Jobs and Economic Development: Opportunities for wood utilization will increase as large-scale restoration projects are planned and implemented, with additional needs for workforce training and investment in equipment and facilities.

Accountability: The Rio Grande Water Fund will provide interim and annual reports for donors and investors. Monitoring is already underway, and a full program will be in place when the first projects are funded. ◆

To develop the map on Page 9, a diverse group made up of representatives from the Water Fund Advisory Board reviewed the available statewide information to identify focal areas for restoration. Several data layers were chosen and combined to help set priorities: wildfire risk, risk to drinking water, forest health, economic values such as potential for wood use, and wildlife habitat importance. Wildfire risk and risk to drinking water were most heavily weighted. The result shows New Mexico divided into small watersheds, and each watershed ranked with a combined focal area score. Lower priority watersheds are green and higher priority watersheds are red. The final map is courtesy of the New Mexico office of The Nature Conservancy.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New Mexico Forest and Watershed Health Plan

By Susan Rich, New Mexico Forestry Division

We are approaching ten years since New Mexico adopted the state Forest and Watershed Health Plan and it's a good time to reflect on how far we've come and the work we still need to accomplish.

The plan was the work of a diverse group of people who shared a vision for New Mexico's land and natural resources and the communities that depend on them. They agreed that working on a watershed basis was the best approach to restoring healthy ecosystems, although they sometimes disagreed on how to go about it. After nearly a year of intense work, the authors produced a plan with twenty recommendations, each outlining a set of state-level actions required to achieve their common vision.

So what have we as a state accomplished since then?

A statewide coordinating group representing agencies, organizations and the private sector continues the collaboration begun by the plan's authors. The member entities and their stakeholder groups, individually and collectively, have taken many of the actions recommended in the plan:

We completed a statewide natural resource assessment, and are updating it a layer at a time as new data comes in.

We created an online forest and watershed health information clearinghouse, and made it available for all New Mexicans to use.

We have steadily moved away from many isolated entities doing small "in-my-backyard"-type projects to larger collaborative projects that address multiple objectives like reducing fuels, improving habitat and protecting water supplies.

We do more collaborative planning. That has allowed us to:

- identify common priorities and work toward common objectives;
- apply a broader pool of knowledge to improve project design and evaluation;
- increase effectiveness through complementary placement of projects;
- share resources like equipment, surveys, and personnel, increasing efficiencies;
- work across jurisdictions and treat larger areas of land by leveraging different sources of funding.

We identified ways to reduce the barriers that can hinder, or even prevent, forest and watershed restoration projects, and we strive to keep from erecting new barriers.

We also built products like the just-released After Wildfire guide. More and more, public outreach efforts are coordinated to deliver a unified message and reach a larger audience.

Efforts to expand watershed treatments were given a boost this year by special appropriations such as the $6.2 million approved by the State Legislature.

The authors of the Forest and Watershed Health Plan were visionary in another way: they recognized that solving a problem a century in the making would require a long-term commitment. During the last ten years we've begun the work of restoring our watersheds and built a strong foundation for future success. We look forward to continuing that work in the years ahead.◆

Putting Skin in the Game

By Dr. Brent Racher, President
New Mexico Forest Industry Association

There is broad agreement that the pace and scale of forest/watershed restoration needs be increased. "How this can be accomplished?" becomes the next question. There is not anybody alone that can take this on successfully. The need becomes to prioritize and coordinate, for everyone to be at the table. Downstream water-users recognize the need to protect and improve the water sources in the watershed; tourism and agricultural economies recognize the values that maintain the economic base; and urban populations must have reliability in their water supply to provide for development and growth. There is definitely a public interest for all New Mexicans to change the trajectory of our forested watersheds. There is also the need to attract private investment to the solution. First, someone is going to need to do the work, and second, if private investments are not attracted to an increased pace and scale of forest restoration, the public will end up footing the entire cost forever.

Active management of forested watersheds need to be increased 10-fold. The private investment for this will be substantial. The hard part will be to proactively develop and leverage investment in forest treatment and utilization infrastructure to coincide with the expansion of watershed treatments. If businesses are going to invest in growth, they must have some confidence that their investments are going to result in a return. Simply put, if businesses are going to borrow money that takes 10 years to pay back, we need to see a way to pay that back and make some profit commensurate to our risk.

This is where it is in both the public and private interests to work together. Separately, the likelihood of success is slim. Together, a public/private partnership can accomplish the mutual interests. To get there from here, the public needs to make the long-term commitment to forested watershed management, too. And this commitment needs to be at the federal, state, and local level.

When everyone gets some skin in the game, it makes them diligently work for success. Since watersheds are dynamic, we know that we are going to always have watershed management to address. I know we New Mexicans can do better than the status quo, and New Mexico businesses are ready to be part of that solution. ◆

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