# High Waters

A publication of the New Mexico Floodplain Managers Association

#### A Quarterly Newsletter

**April 2018** 

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## Spring Workshop

The Spring 2018 NMFMA Workshop and Conference will be **April 10-13, 2018** at the <u>Drury Hotel</u> in Santa Fe. Michael Garcia <u>MGarcia@rio-arriba.org</u> is your conference director. For more information visit:

DRURY
PLAZA HOTEL
in Santa Fe

NMFMA Spring Workshop & Conference

### FROM THE CHAIR

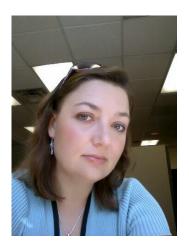
Greetings NMFMA Members, I hope everyone has recovered from the holiday rush. We find ourselves quickly approaching our Spring Workshop. I look forward to seeing many of you there.

We are pleased to announce that Jonah Ruybalid will be serving as the Region 1 Director. Thank you Jonah for your readiness to serve your fellow NMFMA community. Also, Michele Truby-Tiller will be changing from serving as the 1<sup>st</sup> Vice Chair to serving as the 2<sup>nd</sup> Vice Chair. As always, Michele, NMFMA appreciates all that you do for the organization. And as we welcome new, we are also saying good-bye to a dear friend. Mike Czosnek has retired, the lucky duck. We will be honoring him at the Workshop Awards Dinner. Please sport your best Hawaiian Shirts in his honor.

The Board has been busy with several initiatives to better help serve the membership. The Board is working to get some new Flood Models and hope to have two new models and cases by the end of the summer. We are also looking at getting a display that can be set up with the models or at any outreach events. We have had several discussions about how this organization can not only best serve its membership but also keep up with the changing times. You can expect to see a questionnaire soon regarding changes to the website and workshops.

If you have any ideas, questions, or would like to become more involved, please reach out to myself or any Board member. We are here for you. See you in Santa Fe.

Sincerely,
Nicole Friedt, P.E., CFM



## From the State Floodplain Coordinator

Greetings Floodplain Managers,

The Spring Workshop is fast approaching and I look forward to meeting those who I haven't had the opportunity to meet in person yet. This year we are fortunate to have IMMERSED: A VR Experience about Flood & Resilience at the Spring Workshop on Wednesday and Thursday of the conference. I encourage all attendees to participate in this unique experience. A facilitator will be available to guide participants through the experience and there will be a short presentation on Wednesday afternoon. This virtual reality experience allows the user to experience a major flooding event from the perspective of a community leader. As we know, flooding is one of the most frequent and costly hazards in New Mexico. IMMERSED explores expected challenges during a flood event such as damages, evacuation, and mitigation decisions.

As in past workshops the Spring Workshop will include a Silver Jackets presentation by USACE. For those who may not know, New Mexico has had a Silver Jackets Charter since 2010. The cooperating agencies that form the steering committee for Silver Jackets are FEMA, USACE, and NM DHSEM. The mission of the New Mexico Silver Jackets includes enabling effective information sharing, leveraging available State, Tribal, and Federal agency resources, and focusing outreach efforts to ensure the message of flood risk management reaches all communities in New Mexico. With this mission in mind, if any community has a flood risk challenge that could benefit from coordinated efforts or you would like to more about how Silver Jackets can support your community's floodplain program, please contact me.

#### Veronica Chavez State Floodplain Coordinator

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## **New Mexico Certified Floodplain Managers**

The CFM exam that is used in New Mexico is the same exam used everywhere in the US. Over the past several years the exam has undergone lots of changes in an effort to bring its status closer to other exams used by professional groups and agencies. The exam now has 2 maps instead of one and includes several questions about flood-plain management in coastal regions. The questions on the exam fall into several categories: Overall Context of Floodplain Management, NFIP Regulatory Standards, Regulatory Administrative Procedures, Flood Insurance, Floodplain Mapping, Natural and Beneficial Functions, and Flood Hazard Mitigation. A good study document for preparation to take the exam is the FEMA 480 Desk Reference and Study Guide for Local Officials. You can find this study guide at: <a href="https://www.floods.org/index.asp?menuid=388&firstlevelmenuid=180&siteid=1">https://www.floods.org/index.asp?menuid=388&firstlevelmenuid=180&siteid=1</a>

Congratulations to the new CFMs who passed the CFM exam at the FEMA 273 course proctored at the Bernalillo County EOC in Albuquerque:

Veronica Chavez, CFM NMDHSEM

Michael Garza, CFM Doña Ana County Flood Commission

Govinda Karki, CFM

Michael Larisch, CFM

Anna Larson, CFM

Desirae Lujan, CFM

Louis Berger

Grant County

Cibola County

Los Alamos County

City of Sunland Park

Zusset Nieto, CFM

City of Las Cruces

City of Artes

Steven Saavedra, CFM City of Aztec

The CFM exam is proctored at each NMFMA conference/workshop and after the FEMA 273 classes. If you are interested in taking the exam, please remember that **YOU MUST SUBMIT A CFM EXAM APPLICATION PACKET** to the Certification Board before you can be scheduled to take the exam. The packet is downloadable from the Certification page of the NMFMA website. You can either mail your application and fee to the Roswell address noted in the packet, or pay for the exam when you register for the conference or class and email the application to me at <a href="mailto:nmcfm@cableone.net">nmcfm@cableone.net</a>. Let me now if you have any questions.

Every NMFMA member gets a reminder email from our web site to submit the annual NMFMA membership renewal fee of \$35 by January 1. Those CFMs whose biannual CFM renewal fee of \$25 is due on January 1 will also get a reminder letter from me by email. Don't get confused. Some of you will get 2 reminders and they are BOTH due. You can pay your membership dues by logging onto the web site and clicking on the payment due link under your name. You can also pay your CFM renewal online by going to the Event Calendar, January 31 or June 30 (whichever coincides with your renewal due date) and clicking on CFM Renewal. Follow the instructions as though you were registering for a workshop. Click on complete registration. Enter your card info and submit. Don't forget to email me a copy of your renewal application to complete the process. If you renew before the deadline of January 1 or July 1, the fee for renewal is \$25. If you wait til later, the fee is \$25 plus a \$25 late fee, or \$50.

Grant Pinkerton, CFM CFM Program Administrator

## Collaborative Landscape-Scale Watershed Restoration Projects: The Rio Fernando Revitalization Project – Taos, New Mexico

Written by: John Miller, CZO, CFM; Senior Planner, Town of Taos

#### "Whiskey is for drinking, water is for fighting" - Mark Twain

When you think about New Mexico and the unique qualities that tie the people who live here to the places they cherish, so often you return to the connection of the people to the land and the water. It's a symbiotic connection that is centuries old and one that has allowed for cultures flourish, traditions to develop, and communities to provide for themselves on the isolated frontier of Northern New Mexico. In modern times, this connection to land and water still exists, but is fading. The connection is slowly being removed from the population due to modernization of labor, globalization, and ultimately lack of agricultural necessity; but there is a group of people working in Taos to use collaboration centered around *the rootedness of people to place*, to potentially solve the issues of land-scape scale watershed restoration in a way that is different than anything tried before.



#### **Using Collaborative Groups to Manage Landscape Scale Ecosystems?**

Too often, multiple organizations within a community or region are working towards similar goals without any idea as to how their peers and partners are also simultaneously working towards similar objectives. Called the *Silo Effect*, this pattern of isolated work can be extremely detrimental to the effectiveness and efficiency of landscape scale restoration projects. In order to combat the *Silo Effect*, a new collaborative model is gaining traction internationally, where very diverse stakeholder groups are coming together (sometimes with resistance) to effect change in their communities by working together to find common ground to solve common issues. Here in Northern New Mexico, we are at the spearhead of collaborative work happening nationally, with a number of projects already moving forwards that are focused on land and water resiliency over cross-jurisdictional landscapes. Since 2014, collaborative groups such as the Rio Grande Water Fund and Taos Valley Watershed Coalition have focused on the upland forests of the watershed – dealing with wildfire mitigation by creating resilient forests in the hopes of reducing the risk of catastrophic conflagrations and post fire flooding. While this work is crucial to the health of our forests and overall watershed health, it may have left out a critical component – the interconnection of people, place and tradition with the landscape that surrounds it. The hope in Taos, is to harness and embrace this historical

co-linear trajectories regarding water use and agriculture, green infrastructure, open space preservation, and forest restoration so that we can begin to have the difficult conversations that are needed to make change on landscape-scale restoration projects.

#### Rio Fernando de Taos Revitalization Project Collaborative

Authors Note: Collaboration is hard; collaboration around water sharing is really hard. When we first started this project, it seemed as if agreement between collaborative stakeholders was in no way possible. Our biggest disagreements centered on things like the cause of E.coli impairments (grazing vs. septic tanks), effect of beavers and their dams on riparian areas and water recharge, proper vegetative cover within a riparian areas, importance of green infrastructure, priority of water uses, and a number of other issues. By working together and literally sitting and talking for hours — all stakeholders have been able to come to consensus based agreements including a shared narrative around these specific topics in a way that is no longer confrontational, but supportive of each groups individual mission within the Taos Valley. We now have acequia commissions asking water quality groups about the best management practices for incorporation of Green Infrastructure on acequia projects. This is a radical paradigm shift in that these groups, rather than argue about methods, have come together to work towards common goals that have been identified through the collaborative approach.



The Rio Fernando Revitalization Core Team on a site visit to a "wet meadow / fen" in Taos Canyon.

The Rio Fernando de Taos Revitalization Project is a dynamic collaborative comprised of individuals, organizations, and government entities within the Taos Valley, all working together to support and implement meaningful and lasting revitalization projects within the Rio Fernando watershed. The focus areas of the collaborative include increased water quality and quantity through ecosystem management, increased acequia use of surface water, working land revitalization, green infrastructure and flood mitigation, and access to open space centered on the river throughout the watershed.

The Rio Fernando runs through the town of Taos, playing an integral part in the health of the town's citizenry and surrounding wildlife. The Rio Fernando de Taos watershed begins at the top of Taos Canyon (ev. 9500 ft.) in the Sangre de Cristo Mountains and covers 66.4 square miles of land as it flows west towards the Town of Taos. It has been relied on for centuries for water and other natural resources, and serves as a historic and modern corridor between the Taos Valley and the plains to the east of the Rockies. The waters from the Rio Fernando are critical for supporting and enhancing vibrant agriculture in the Taos area by feeding a complex system of seven acequias (irrigation ditches): Acequia del Canon Norte, Acequia del Canon Sur, Acequia Vigil Y Romo, Acequia de Jose Venito

Martinez, Acequia de Los Alamitos, Randall Reservoir Ditch and the Los Pandos Acequia. As the closest drainage to Taos with substantial public lands, the Rio Fernando de Taos watershed provides many recreational opportunities for the Taos Community; community members enjoy the lands and waters of the Rio Fernando watershed for hiking, camping, mountain biking, cross country skiing, horseback riding, picnicking and Christmas tree harvesting. As the river flows through the heart of the developed areas of Taos, it passes through and is adjacent to many public spaces including the Taos Hot Air Balloon Park, the Taos County building complex, Rio Fernando Park and Fred Baca Park before joining with the Rio Pueblo de Taos.

Despite the important role the river and watershed play, the Rio Fernando de Taos watershed experiences multiple stressors that have many possible causes. E.coli contamination impairs the entire length of the river, eutrophication creates nitrogen rich waters that limit ecological function, and sedimentation of the river paired with variable runoff events create water flow issues varying from flood events that damage infrastructure within the corridor in the spring to lack of water for acequias to irrigate with in the summer. Many sections of acequias stemming from the Rio Fernando need to be rebuilt or improved due to wear or lack of upkeep over the years. It should be noted that the acequia network has traditionally acted as a flood control system in addition to an irrigation system. Water during runoff events can be diverted to a number of acequia networks throughout the valley and dispersed on the lands that they flow through. By increasing capacity for these systems to act as the release valve, we can prevent infrastructure and property damage throughout flood zones within the system.

#### The Future of Collaboration in Taos

You must remember - watersheds are dynamic and constantly in flux. Changing climate patterns and land use policies have altered the traditional ecosystem function of our watersheds. Forests are becoming overgrown fire risks, wetlands are becoming impacted and reduced in size due to grazing and reduced inflow, acequias are being lost due to lack of use and loss of water rights, and rivers are increasingly being used as a means to convey water downstream rather than provide ecological functions that result in healthy watershed for people and animals. In addition to these glaring issues, there are other auxiliary effects of these changes that are harder to notice. For example, a reduction in irrigable acreage of the Taos Valley Acequia system results in a loss of tree canopy and native vegetation within the Valley landscape. Fallow fields are changing ecologically after decades of abandonment, from areas that traditionally provided food to the population to areas overgrown with invasive species and pests. Financially, it's becoming difficult to maintain ownership of these parcels due to increased taxes and loss of agricultural exemptions and due to this, young people are beginning to split the water from the land and sell the property to pay for high costs of living.

Unless we continue and increase collaborative problem solving to address these issues at a regional level, we will continue to work in isolated silos and not utilize the human capital that comes with living in a small community. Each group in the Taos Valley specializes in subject matter that allows our individual organizations to continue to succeed - but more often than not, we all have overlapping values and priorities that lend themselves to partner-ships that can only be achieved by working together and developing the relationships that are needed to succeed.

Private funding to date is approximately \$200,000 for the formation of the collaborative and development of a work plan with the goal of effecting change in the above mentioned priority areas. At this point, the collaborative is moving forward to leverage additional monies in order to continue implementation of projects identified in the Phase 1 work plan. Approximately \$90,000 has been used to this point for acequia repairs, engineering, green infrastructure design, and public park creation. Additional funds are to be used in 2018 for 2 miles fencing and head-cut infrastructure in the headwaters to prevent damage to the water storage and carrying capacity of wetlands and riparian areas.

#### For more information, please contact:

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## Purpose of the NMFMA

- 1. To promote public awareness of proper floodplain management;
- 2. To promote the professional status of floodplain management and secure all benefits resulting there from;
- 3. To promote a liaison between individual concerns with proper floodplain management and to encourage the exchange of ideas;
- 4. To keep individuals concerned with proper floodplain management well informed through education and professional seminars and to provide a method for dissemination of information, both general and technical;
- 5. To inform concerned individuals of pending floodplain legislation and other related management matters, and;
- 6. To study and support legislation pertinent and necessary to the effective implementation of floodplain management matters.

#### **Executive Board**

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