

From: Hall, Joshua D -FS on behalf of FS-Northern NM Riparian and Aquatic Watershed Restoration
Sent: 7 Nov 2019 16:52:57 +0000
To: Meredith Zaccherio
Subject: FW: Northern New Mexico Riparian, Aquatic and Wetland Restoration Project



Josh Hall
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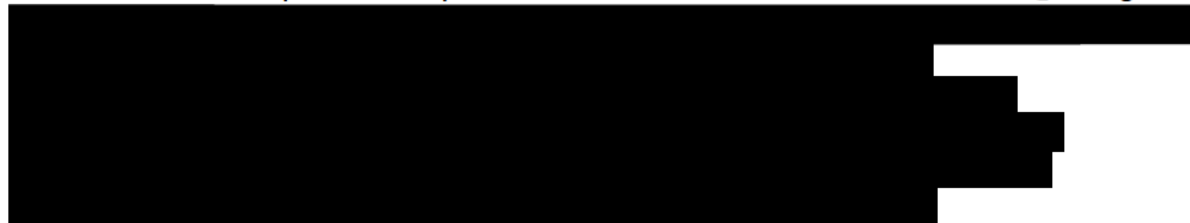
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Caring for the land and serving people

From: Mark Schuetz [mailto:nmwatershed@gmail.com]
Sent: Monday, November 4, 2019 8:02 AM
To: FS-Northern NM Riparian and Aquatic Watershed Restoration <SM.FS.NNMRAWR@usda.gov>



Subject: Northern New Mexico Riparian, Aquatic and Wetland Restoration Project

Good Morning USDA Forest Service Staff,
Thank you for the opportunity to comment on the Wetland Restoration Project
I support the Project goals. I would like to mention a few specific recommendations I have had with regard to fulfilling the effort.

1. Use thinning and fire as appropriate to fragment canopy connectivity every few hundred feet in the riparian zone, so fire cannot run the length of the stream corridor in very dry years. The fragmented canopy connectivity I recommend should extend into the nearby forested upland to create an anchor point for fire suppression efforts. Maintain canopy cover over most of the riparian areas to protect wildlife habitat, shelter the water in the stream channel, to keep the water cool and to prevent evaporation. Several previous projects I have been professionally involved in have successfully thinned in the riparian corridors. As conditions warm and periodically dry, reducing the fuel load in segments will be essential to preventing the riparian zone from becoming a "fuse", that ignites the

entire forest. Particularly important is to disconnect the continuity of fuels from the stream corridors and the acequias in the valley floor from the mountains. As you know, human activity in the valley floor increases the likelihood of ignition, so multi-jurisdictional collaboration to reduce fuel connectivity in the riparian zones will be essential to protect our watersheds.

2. Protect the Wetland Jewels that Amigos Bravos has identified and critical wetlands and stream areas across the forest by excluding ungulates and ORVs with fencing. As you know, consistent hoof and grazing pressure compromises the quality and quantity of water delivered, and can dry up springs and contribute to down-cutting on stream channels. Provide nearby drinkers as needed, or single point defended access in the case of stream channels for livestock and wildlife.
3. Provide access gates to those exclosures and monitor them for opportunities to graze them for very short times in order to maintain control over invasive weed infestations and to provide short term and limited disturbance to maintain ecosystem function there. There will be a need for locks on those gates.
4. Thin in the riparian zone where appropriate to create stocking diversity and to support conditions that wildlife prefer and that support healthy ecosystem function. Select for preferred vegetation species and diversity along with a reasonable balance of woody debris.
5. I fully support reconnecting the flood plain with the stream channel wherever possible as described in the plan, and as described in "Let the Water Do The Work" by 30 year USFS veteran and wildlife biologist Bill Zeedyk.
6. I suggest that the porosity of the entire landscape has been compromised by downcutting in the stream channels, in the ephemeral tributaries and even within the historic skid trails (**rastrones** from *arrastrar* - to drag, and *rastro* -trail). In some areas there is a **rastron** every 80 or 120 feet across the slope and running downslope, each of which has become a source of water hemorrhaging off the landscape. Before the logging operations used mules, oxen, horses, and later skidders and dozers, those areas were water infiltration zones. It is my suggestion that on every thinning, logging or salvage harvest activity that takes place on sloped terrain, woody debris be laid cross slope within these gullies to capture sediment and stall water on the landscape, so it has a chance to infiltrate. When implemented concurrent to timber stand treatments, this benefit can be realized for minimal additional cost. Debris in gullies must also be fragmented in order to avoid creating a "fuse" where fire can run. "Segmented in-channel debris installation for historic skid trail reclamation." In some cases, check dams could direct that water to nearby sheet flow as called for by the plan. As you know, an important part of returning resilience to the riparian zones is the infiltration of water into the uplands - the source of seeps and springs.
7. I support an education program that familiarizes the public with savanna conditions that existed historically in the riparian zone and across the landscape prior to the condition we have today where the grass component of the ecosystem is much diminished. As you know, bare soil erodes and grass covered soil is stabilized, so when activities are underway in the riparian zone, if people know the goals, it will be easier to win their support.
8. I oppose the use of any pesticides in the riparian zone. The umbilical tissue of every child born in the US today has in excess of 170 chemicals that our grandparents did not

have, and with our skyrocketing rates of chemically caused degenerative disease, it would be best to do all we can to keep the water pristine beginning at the headwaters.

. https://www.ted.com/talks/tyrone_hayes_penelope_jagessar_chaffer_the_toxic_baby?language=en

Summary: As you know, the ecosystem services that have provided relatively consistent aquifer recharge and irrigation water across New Mexico are in peril. The risk of crown fire across the landscape and including within the riparian zones is of tremendous concern and in need of immediate attention. We are wise when we consider every square foot of the landscape as a component of the "soil-carbon sponge" which supports the plant life that shelters and builds the soil and banks the water in the aquifer that contributes to the springs and rivers.. The USFS effort to improve the conditions of the riparian zones as described in the project literature is commendable and I offer the suggestions above as complementary to those goals. I trust that the USFS and its partners can in fact offer a significant helping hand to our riparian, aquatic and wetland areas if we work together to facilitate ecosystem function. Best of luck.

Sincerely and In Stewardship,

Mark A. Schuetz

Chair, Taos County Water Advisory Committee

Member, Taos County Community Wildfire Protection Plan CORE TEAM

Member, Taos Valley Watershed Coalition

Chair, Acequia Madre de la Otra Banda

Board Member, Taos Valley Acequia Association

Member, New Mexico Acequia Association

Owner, Watershed Dynamics, Forest Restoration Company

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