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Audubon

## Talk Outline

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What is an “environmental flow”?

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Examples of what has New Mexico done to develop tools for environmental flows

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What are critical considerations for New Mexico in keeping our rivers alive and beautiful?

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## "Environmental flows" means...



### **Understanding the water needs (science)**

Quantity, timing and quality of water flows needed to sustain freshwater ecosystems.

...or bare bone water needs to keep our rivers alive and beautiful.

### **Protecting the resource (legal-management)**

Protection of river needs through legal, social, management and restoration mechanisms.

### **Benefits nature and people:**

NM rivers: healthy waterways

NM economy: outdoor recreation and tourism

NM communities

NM farmers and compacts

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## *New Mexican examples*



- 1) San Juan Chama Water and the Middle Rio Grande**
- 2) NM Strategic Water Reserve on the Pecos River**
- 3) Audubon private lease on the Rio Gallina**
- 4) MRGCD Conservation Program**

***Most of New Mexican environmental flow work has revolved around protection for endangered species (ESA).***

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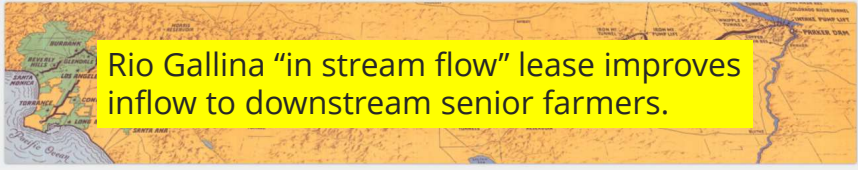
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## NMOSE In Stream Flow Permits Audubon

JFLECK AT INKSTAIN

A few thoughts from John Fleck, a writer of journalism and other things, living in New Mexico

ABOUT THE COLORADO RIVER



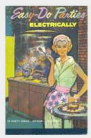
Rio Gallina "in stream flow" lease improves inflow to downstream senior farmers.

### Historic New Mexico Instream Flow Right Approved

Posted by [j.fleck](#) on 25 November 2019, 3:18 pm

<b>Point of Diversion:</b>	Ditch Diverting from the Rio Gallina at Latitude = 36° 22' 07" and Longitude = 106° 41' 50"
<b>Purpose of Use:</b>	Move-from: Irrigation (from the Rio Gallina)  Move-to: Instream Use (within the Rio Gallina and Rio Chama) for fish and wildlife purposes
<b>Place of Use:</b>	Move-from: 26.70 acres in SW¼ of Sec. 25, T25N, R2E, known as Tract GAL 10.1 on Map 8 of the Rio Chama Hydrographic Survey, Rio Gallina Section  Move-to: Within the Rio Gallina from the adjudicated point of

This project is, as they say, "self-funded". You can support my work here.



Books I have written

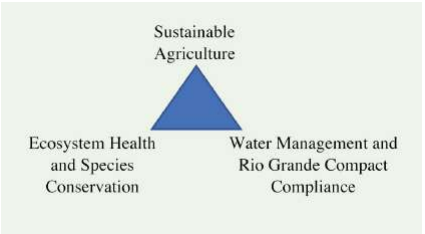
Science Be Dammed

ERIC KOHN AND JOHN FLECK


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## MRGCD's Conservation Program Audubon



- Water delivery efficiency improvements.
- On-farm efficiency improvements.
- Improvement to irrigation scheduling and water delivery practices.
- Technical and financial resources to support productive agriculture and efficient water use.
- Voluntary water leasing within the District's service area through the District's water bank to promote innovative and successful farming, ecosystem health, and species conservation.
- Habitat restoration and development to improve effectiveness of species conservation.




MRGCD Pilot Conservation Program improves irrigation efficiency, resources for small farms, and habitat for the Silvery Minnow.


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Slide c/o Casey Ish, MRGCD

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Our rivers need help 






Dry rivers are not good!  
 Not good for plants and animals  
 Not good for local communities  
 Not good for NM economy  
 Not good for delivering water to farms  
 Not good for delivering water to cities  
 Not good for delivering water to Texas

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Water Foundation-Thornburg Survey 

PROTECTING RIVER HEALTH

		
<b>84%</b>	<b>82%</b>	<b>69%</b>
feel it is important to protect the health of rivers and streams.	feel it is important to protect fish, and wildlife.	support increasing funding to help improve the health of rivers and streams.

In late 2021, Research and Polling, Inc., conducted 706 phone interviews of registered voters from a representative cross-section of rural, suburban, and urban parts of the state.

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## What can help our rivers



**NM needs a coordinated state effort to protect the water for nature and people- all rivers**

**Teams of experts working locally in concert with all water needs to develop creative agreements and solutions**

**Developing shortage sharing agreements and other water management strategies that include river health**

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## Important NM e-flow considerations



**To date- very focused on ESA areas; very little attention to the other streams**

**NM examples demonstrate that environmental flows can work in concert with other water demands during shortage**

**Keeping environmental water leases local keeps water local for other water uses**

**Creative solutions needed- one size does not fit all**

**Dynamic agricultural leasing programs can provide resiliency for farms and rivers**

**Funding the NM Strategic Water Reserve is a good place to start; addresses both compact and ESA water needs**

**NM needs increased capacity to utilize all tools for supporting the benefits of environmental flows for nature and people**

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# Healthy Rivers Mean a Healthy New Mexico

## Acting Now Can Save the State's Economy, Homes, and Birds

In **New Mexico**, rivers are the ribbons of life for our land, culture, economy, and our way of life. Healthy river ecosystems safeguard water quality, protect the groundwater supply that 90% of New Mexican's use as their primary source of drinking water, reduce fire risk, and provide critical habitat. Healthy river ecosystems are also part of our state's cultural heritage, agricultural economy and a billion dollar per year recreation industry.

### The Climate Crisis and New Mexico's Rivers

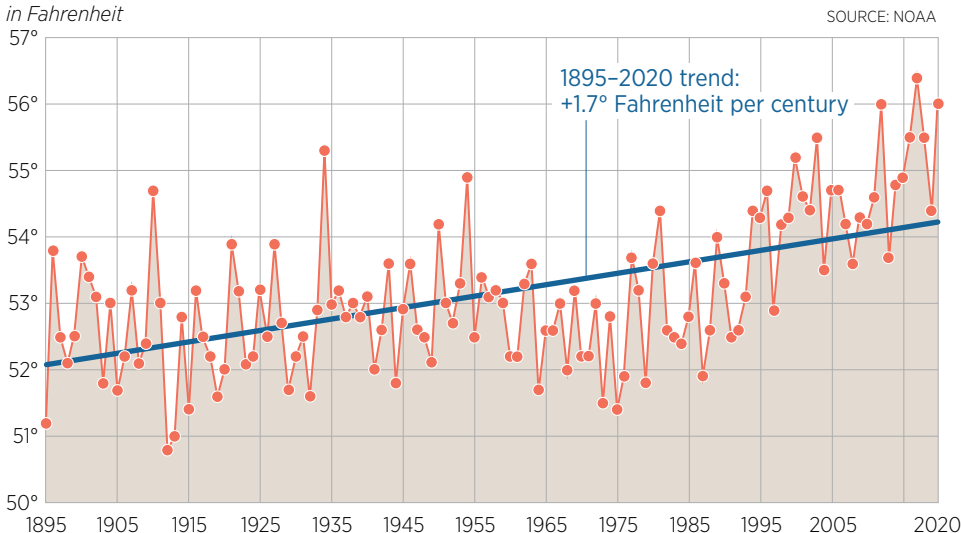
Communities, economies, and natural systems function more efficiently when rivers are clean and ecologically robust. From flood control to groundwater storage to downstream water delivery, healthy rivers keep water resources in balance. In turn, healthy rivers are beautiful rivers and **are crucial to New Mexico's** ecotourism economy. But climate change, drought, increasing demand for water, failing infrastructure, and outdated water rights laws are pushing water supplies to their limits. Assuring that rivers can be resilient in the face of these stressors



Rio Grande near Belen, New Mexico. Photo: Quantina Martine/Audubon New Mexico

requires prioritizing healthy rivers through programs and activities that provide water to rivers during drought while providing assurances and incentives to property owners.

### New Mexico Average Temperature in Fahrenheit



**4,500**  
different species of plants and animals live in New Mexico

**6,500**  
miles of perennial streams making healthy rivers a key component to the state's strategy for conserving biodiversity

**80%**  
of New Mexico's at-risk species depend upon the riparian or aquatic habitat on these stream systems at some time in their life cycle



# Nearly 400 Bird Species Rely on New Mexico Waterways



**Yellow-billed Cuckoo**

Photo: Kevin Jordan/Great Backyard Bird Count



**Yellow-breasted Chat**

Photo: Megumi Aita/Audubon Photography Awards



**Yellow-throated Warbler**

Photo: Judy Lyle/Great Backyard Bird Count



**Willow Flycatcher**

Photo: John Morrison/Audubon



**Bell's Vireo**

Photo: Sherman Barr/Audubon Photography Award

## Environmental Flow Programs Can Be a Benefit to Landowners

Environmental flow programs **are not** a threat to existing water rights and water users. Environmental flow programs work within State water law to find solutions that work for both rivers and people, and typically include temporary water leasing arrangements, on-farm efficiency projects and habitat restoration. Water leasing programs provide drought year funding options to irrigators for temporarily leaving their water in a river while maintaining their water rights.

## Protection of Stream Flows in NM

Already, New Mexico found some ways to address the flow needs of endangered species along the Rio Grande and Pecos Rivers. These solutions include the New Mexico Strategic Water Reserve and the leasing of San Juan Chama water on the Middle Rio Grande. Recently (2019) the New Mexico Office of the State Engineer recognized the environmental “beneficial use” of leaving a water right in a river. Because of these programs, New Mexico is well positioned to develop a more comprehensive stream flow enhancement program that works within the existing framework.

## Call to Action

By prioritizing healthy rivers, New Mexico can better combat the changes associated with climate change. To accomplish this, New Mexico must understand where and when flow is most needed, have legal and administrative mechanisms for conducting flow protection, and procure staff and financial resources to activate such a program. In the coming years, we believe New Mexico should pursue the following goals:



Emphasize instream flows as a beneficial use by including environmental flows in the state's upcoming 50-year water plan and encourage the State Engineer's Office to issue more instream flow permits.



Identify and implement adaptive water management strategies such as environmental water leasing agreements, conservation and

## Major NM Rivers

— River      ● Cities      ● National park or refuge      ● Lake/reservoir  
— Continental Divide      ● National forest      ● State park      ○ Intermittent lake



Map: Carol Zuber-Mallison/ZM Graphics

efficiency projects, habitat restoration projects and water shortage sharing agreements.



Adequately fund water infrastructure and conservation projects through New Mexico programs like the Strategic Water Reserve, the Water Trust Board and the River Stewardship Program.



Create a state-wide river protection program that addresses environmental flow needs.

Audubon Southwest is working with diverse partners on the ground and in coalitions to work towards healthy rivers and modernized water policy





# NEW POLL SHOWS THAT NEW MEXICANS ARE CONCERNED ABOUT THE STATE'S WATER RESOURCES.

A majority of voters throughout New Mexico and across political parties are concerned about current and future water supply issues. They agree that immediate action is needed to ensure future generations have an adequate water supply.

New Mexicans want to see solutions that address water reliability, quality, and affordability, and that protect rivers, fish, and wildlife.

Moreover, residents want state leaders to make policy changes and provide the funds needed to make these solutions happen.

## URGENCY

**75%** 

of voters agree we need to act now to ensure that future generations have an adequate water supply.

**63%** 

agree that drought and lack of water supplies threaten our way of life in New Mexico.

In late 2021, Research and Polling, Inc., conducted 706 phone interviews of registered voters from a representative cross-section of rural, suburban, and urban parts of the state.

## SUSTAINABILITY

**82%** 

believe expanding water recycling programs is important.

**74%** 

support increasing funding for water infrastructure projects to ensure water supplies for future generations.

**60%** 

support more closely monitoring and regulating groundwater pumping to make sure supplies are not depleted.

**67%** 

agree New Mexico needs to modernize and dedicate more funding to the management of water quality and water supply.

## WATER DATA

**84%**



support requiring state agencies to share all water data information with other agencies and the public.

**64%**



support increasing funding to modernize the state's water data management systems.

## SECURE DRINKING WATER SUPPLIES

83%



feel keeping water rates affordable is important.

68%



support offering funding and technical support to small rural water systems that seek to form regional water systems, while maintaining local control.

## PROTECTING RIVER HEALTH

84%



feel it is important to protect the health of rivers and streams.

82%



feel it is important to protect fish, and wildlife.

69%



support increasing funding to help improve the health of rivers and streams.

## FARMING & RANCHING

84%



feel it is important to ensure a reliable supply of water for farms.

61%



support using public funds to help improve water efficiency on New Mexico farms and ranches.

It's clear that voters support action now. They want the state government to make changes in water policy and to fund these changes. Ensuring a sustainable future for New Mexico's farms and ranches, while maintaining secure and affordable supplies for New Mexico's communities and for the environment, requires investment and a newer, modern system of management and regulation.

The poll was conducted by Research and Polling, Inc., and commissioned by the Water Foundation and the Thornburg Foundation.

For further information, contact:

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