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NM Interstate Stream Commission

New Mexico TRIBAL WATER REPORT

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PREPARED BY:
TRIBAL WATER WORK GROUP

NM ISC EXHIBIT
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TABLE OF CONTENTS

- I. PREAMBLE
- II. EXECUTIVE SUMMARY
- III. CLIMATE CHANGE IMPLICATIONS ON TRIBAL WATER RESILIENCE
- IV. STATE-TRIBAL RELATIONS ON WATER MANAGEMENT
- V. TRIBAL WATER CLAIMS
- VI. TRIBAL BENEFICIAL USES OF WATER
- VII. INDIGENOUS TRADITIONAL ECOLOGICAL KNOWLEDGE
- VIII. FARMING AND IRRIGATION
- IX. WATER QUALITY AND WATER ACCESS
- X. CAPACITY AND FUNDING FOR TRIBES, PUEBLOS AND NATIONS
- XI. NM IAD BUDGET AND CAPACITY
- XII. CONCLUSION
- APPENDIX A: TRIBAL WATER RECOMMENDATIONS**
- APPENDIX B: END NOTES**

PREAMBLE

Water is central to the existence, maintenance, and continuity of cultural identity and the physical well-being of New Mexico's Nations, Tribes, and Pueblos. Since time immemorial, Nations, Tribes and Pueblos have recognized water as the source of life for humans, animals, plants, and supernatural beings. For its life-affirming properties, water continues to hold inherent sacredness deserving of perpetual respect and reverence.

Protecting water in all its hydrological forms, including in springs, aquifers, in-stream flows, reservoirs, rivers, and precipitation, is integral to Nations, Tribes and Pueblos to uphold the interconnected spiritual nature of water in traditional cultural practices and life ways. Other natural resources – plants, animals, air, soil – which are also recognized as traditional Tribal cultural resources, rely on clean, sufficient water as fundamental to continuing life on earth.

This report documents the concerns, respect, prayers, and hopes that Nations, Tribes and Pueblos have for protecting our shared water, the natural world, and our ways of life, now and in the future. We extend gratitude to the past, present, and future generations of our communities for the collective effort to preserve, protect, and revitalize our Mother Earth and water.



EXECUTIVE SUMMARY

New Mexico Governor Michelle Lujan Grisham called for the Office of the State Engineer (OSE) and the Interstate Stream Commission (ISC) to serve as the lead agencies to develop the 50 Year Water Plan. The 50 Year Water Plan will serve as a high-level summary to inform decision-makers on how to best prepare for the impacts of climate change on water over the next 50 years.

The New Mexico Bureau of Geology and Mineral Resources (NMBGMR) convened a team of New Mexico scientists to compile relevant research, technical reports and datasets that examine how climate change will impact our water resources in New Mexico. This assessment, known as the Leap Ahead Analysis Assessment, provides the foundation for the NM 50 Year Water Plan.

To ensure the inclusion of NM's Tribal Nations in the development of the New Mexico 50 Year Water Plan, the OSE and ISC requested support from the New Mexico Indian Affairs Department (IAD). IAD responded to the request by creating the Tribal Water Work Group (TWWG) in September 2021. At IAD's request, Tribal leaders sent their designees to serve on the TWWG in an advisory capacity. The TWWG consisted of a diverse group including Tribal water technical experts, natural resource professionals, Tribal Historic Preservation Officers, and cultural leaders, all of whom provide guidance and technical expertise in serving their respective Tribes on water issues. The TWWG provided informed perspectives and meaningful discussion on strategies to increase Tribal water resiliency and noted the challenges and obstacles that Nations, Tribes and Pueblos face as the New Mexico climate grows more arid. The TWWG discussed and debated both general concepts and small details to ensure the report achieved the goals set forth while considering respect for Tribal sovereignty and cultural sensitivity.

It is important to note that this report, and the gathering of information from participating Tribes, was not conducted as Tribal consultation on behalf of IAD or any other New Mexico state agency. State-Tribal consultation must be established on a government-to-government basis in respect to the political status of sovereign Tribal nations. This document does not intend to detail the impacts of climate change on

Tribal and Pueblo water resources. Rather, it aims to illustrate the various considerations emerging from TWWG discussions concerning opportunities for State-Tribal coordination and collaboration in addressing and mitigating climate change impacts on our collective water resources. It aims to provide policy recommendations drawn from collective Tribal input, and to support continued government-to-government consultation, communication, and decision-making between the State, its agencies, and individual Nations, Tribes and Pueblos. Where there are not specific procedures delineated within the recommendations, the State should collaborate with Nations, Tribes and Pueblos on an implementation process that advances alternative, specific solutions as each Tribal Nation deems effective.

The TWWG met 10 times, not including subcommittee meetings. The TWWG studied the Leap Ahead Analysis and the Resilience Assessments, and attended Climatic Regional webinars specifying how climate change will impact New Mexico's water resources over the next 50 years. On November 19, 2021, the State agencies convened Tribal leaders for a Tribal Water Forum to learn more about the 50 Year Water Plan. On May 4, 2022, the State agencies held a second Tribal leader meeting to review the Tribal Water Report and Recommendations. The Tribal Water Recommendations are placed within the 50 Year Water Plan and the Tribal Water Report provides a detailed illustration of the Recommendations.



CLIMATE CHANGE IMPLICATIONS ON TRIBAL WATER RESILIENCE



Since our beginnings, Indigenous Peoples have observed and navigated the natural world and its climatic cycles. These observations and experiences have helped build our cultural understandings and respect for traditional cultural landscapes, the lands we currently reside upon, and their natural resources. The observations, experiences, and lessons are embedded in our culture, art and prayers and continue to provide a foundation for our communities and serve as a guide for the future.

Though unique to each Nation, Tribe and Pueblo, changes to the natural environment and ways of life have always been felt by Indigenous communities. Nations, Tribes and Pueblos understand climate change as a new phenomenon caused by human activity. Whether a hunting and fishing community or a farming community, each of our Nations, Tribes and Pueblos continue to be negatively affected by climate change in one way or another. Diverse worldviews and systems of governance affect how Tribes individually and collectively approach climate change adaptation and mitigation, informing how we address impacts on our cultures, economies, multilateral governance relationships, and stewardship responsibilities toward the environment and future generations.

The State was divided into four distinct regions in the Leap Ahead Analysis; the high mountains, northwestern high desert, Rio Grande Valley and southwest basins, and the eastern plains. Each of these regions contains ancestral Tribal homelands, cultural landscapes and current reservation lands. While a majority of the State will experience similar climatic impacts, there will be some variation for specific geographic locations with different topography.

The Leap Ahead Analysis corresponds to the science and data collected by national and international scientists, confirming that we are in the midst of a climate crisis. As a result of human activity altering carbon dioxide levels in our atmosphere, it is estimated that temperatures will increase by between 5° to 7° F over the next 50 years. This rise in temperatures will most likely exacerbate aridity in New Mexico. Soil moisture will likely decrease, stressing the vegetation and ultimately intensifying the drought. Severe drought conditions lead to the threat of fire concern for many Tribal communities,

which in turn is likely to cause many other environmental challenges.

Climate change impacts are cyclical in nature. As average temperatures rise, less snow will accumulate in the higher mountain regions and for shorter periods of time. Many communities are already observing this change as people remember longer, colder winters of the past. The lack of sustained moisture in the mountains means frail vegetation and strong potential for wildfires. Wildfires can damage watersheds, soil and water quality.

One of the most profound effects of climate change is the increase of frequency and intensity of water-related natural disasters. As precipitation events become less predictable in New Mexico, the number of extreme weather events has risen. Due to the unpredictability of precipitation, New Mexico has experienced various natural disasters in recent years whose causes are related to climate change. These natural disasters include, but are not limited to, wildfires, floods, severe storms, extreme heat and drought, landslides, and lack of winter storms. When these types of disasters hit, they can contaminate, disrupt, and even destroy entire water supplies and watersheds that New Mexico's Nations, Tribes and Pueblos depend on for community and cultural health.

For major disaster and emergency assistance, Nations, Tribes and Pueblos must navigate complex federal processes to pursue a FEMA Presidential Emergency or disaster declaration, which does not always provide sufficient coordination, technical assistance, and funding resources for safe and proper recovery. It is important that the State recognize that the frequency and intensity of such events are expected to increase as a result of climate change. the State must also commit to meaningful collaboration with Nations, Tribes and Pueblos to build and strengthen preparedness and response measures, processes, protocols, and funding mechanisms for extreme natural water-related events. This will ensure greater protection of all generations of New Mexican communities, Nations, Tribes and Pueblos.

As Nations, Tribes and Pueblos navigate ongoing wildfire events, we continue to see that mutual commitment to collaboration and coordination is especially crucial for the safety and longevity of our communities. This includes ensuring that cultural ways of life are recognized and accounted for in response efforts. Awareness must be established across all state and federal agencies of the fact that the cultural domain of Nations, Tribes and Pueblos extends outside of their current reservation boundaries.



Ancestral Tribal and Pueblo people have, since their beginnings, occupied and ecologically maintained extensive areas of New Mexico and these areas continue to be culturally significant and central to their existence. In particular, fire suppression operations such as the ongoing and proposed use of fire retardant, heavy machinery, and water drops in areas that contain dense concentrations of Tribal cultural resources continue to be a concern among Nations, Tribes and Pueblos. As we have observed from recent wildfires, these methods and activities have the potential to significantly impact, disrupt, and even destroy invaluable and irreplaceable traditional cultural properties and sacred sites, and may even surpass the fire's ecological impacts.

Water resources, including aquatic flora and fauna, have in the past been seriously affected by suppression activities that cause long-term or permanent erosion, sedimentation, turbidity, and chemical contamination. As a result, there is a lack of safe water for cultural ceremonial purposes, among many other important uses. While the urgent need to conduct specific suppression methods is well understood by Nations, Tribes and Pueblos, it is important that their needs also be considered, addressed, and implemented in the development of proposed actions for emergency response efforts.

Nations, Tribes and Pueblos maintain traditional cultural knowledge and technical expertise that has been developed over centuries in response to similar fire and natural disaster emergencies. Considering and implementing this knowledge in forthcoming discussions on strategy, disaster preparedness and response management will assist in minimizing the negative effects of suppression and other mitigation strategies on our Tribal cultural resources. ***We recommend the State, in collaboration with Nations, Tribes and Pueblos, develop natural disaster preparedness and response measures, processes, protocols, and funding mechanisms that include Tribal review, consideration, and agreement to ensure the protection, security, and mitigation of impacts to Tribal cultural resources and communities.***

STATE-TRIBAL RELATIONS ON WATER MANAGEMENT



New Mexico has one of the longest continuously traceable history of human water use in the United States. The organized management of water resources in New Mexico spans back at least 1,000 to 3,000 years ago, including irrigation structures and run-off collection systems of the Ancestral Pueblo people of the Four Corners region.¹

By the time Spanish explorers arrived in the 1540's, both the Pueblo and Navajo people had developed irrigation practices that depended on mandatory community responsibility for the maintenance of the irrigation canals and ditches. Over the centuries, the Pueblos and Tribes of New Mexico developed an intimate relationship to the changing environment. Throughout the Spanish, Mexican, and United States governments, Nations, Tribes and Pueblos have adapted, retained and continue to maintain use of water resources for traditional cultural use, domestic use, agriculture, economic use, and other community needs. Many of New Mexico's Nations, Tribes and Pueblos have developed Tribal water codes to administer pollution control, conservation, permitting, and overall water management and use. Of the twenty-two Tribes, the Navajo Nation and twelve Pueblos have individually promulgated the Environmental Protection Agency ("EPA") approved Tribal water quality standards and treatment in a similar manner as states under the Clean Water Act.² Many have implemented comprehensive water quality monitoring programs, water quality ordinances, assessments and reports to identify non-point sources of pollution, and wetlands protection programs.

The Native American Water Resources Program was created in 1995 to promote a spirit of coordination, communication, and goodwill between Tribal and State governments as separate sovereign entities. Under Governor Bill Richardson's administration, a statement of policy and process was signed with the 19 New Mexico Pueblos to work amicably, fairly and in good faith to resolve issues and differences in a government-to-government relationship. This policy and process also extends to other Nations, Tribes and Pueblos within the State. In 1953, the Office of Indian Affairs (formerly the Commission on Indian Affairs) was created by statute to serve State-Tribal relations for the 19 Pueblos, the Navajo Nation and the three Apache Tribes.

The State Tribal Collaboration Act (“STCA”) was signed in 2009 to promote effective communication and collaboration, positive government-to-government relations, improve cultural competency, and notify employees of each state agency about the provisions of the State-Tribal Collaboration Act. In the fall of 2009, the Governor’s Office established the “Protecting and Promoting New Mexico’s Environment Group” composed of representatives from the New Mexico Energy, Minerals, and Natural Resources Department, New Mexico Department of Game and Fish, New Mexico Office of State Engineer, New Mexico Environment Department, and New Mexico Department of Agriculture. The group was established to develop the overarching tribal communication and collaboration policy following the STCA.³ Thus, ***we recommend that OSE update its “Tribal Communications and Collaboration Policy” to add a segment to notify Tribal Nations if the water within their respective watersheds, basins or aquifers may be impacted by water permitting applications. The current notification system should be upgraded to allow for email notifications to all users within an affected watershed, basin or aquifer.***

New Mexico’s Nations, Tribes and Pueblos recognize the legacy that successful partnerships have on past, present, and future generations. Successful planning and implementation of projects that benefit Nations, Tribes, Pueblos, and New Mexico’s communities have depended, in part, on the ability of each to build meaningful relationships with one another and work in close coordination, cooperation, and collaboration on issues of mutual concern, including water management. The building of a strong partnership between Tribes and the State is predicated upon the State’s recognition of Pueblo and Tribal Nations’ sovereign control of their lands and natural resources, and the role that water management on Tribal lands has in the overall success of New Mexico’s administrative goals and objectives. In turn, Nations, Tribes and Pueblos recognize the impact that the State’s water management has on Tribal communities.

State-Tribal co-management of New Mexico’s interconnected water resources will help in effectively adapting to and mitigating the forthcoming impacts of climate change. Increased co-management of statewide water resources involves an exploration by Tribes and the State of opportunities for cross-jurisdictional, cooperative, and participatory collaboration in decision-making, planning, and enforcement. ***We recommend that the State acknowledge the value and importance of Tribes, Pueblos and Nations as co-managers of water. We also recommend the State and Tribes open a dialogue about improvements to the OSE’s processes and policies concerning how non-Indian water right transfers may affect Indian Water Rights.***

TRIBAL WATER CLAIMS



At the Tribal Water Forum on November 19, 2022, Tribal leaders had the opportunity to engage with the outgoing State Engineer John D'Antonio on capacity, funding needs, and New Mexico's overall water future. As tribes work with the State to increase Tribal water resilience, many Tribes are deeply concerned that current water demand exceeds our increasingly limited supply of wet water.

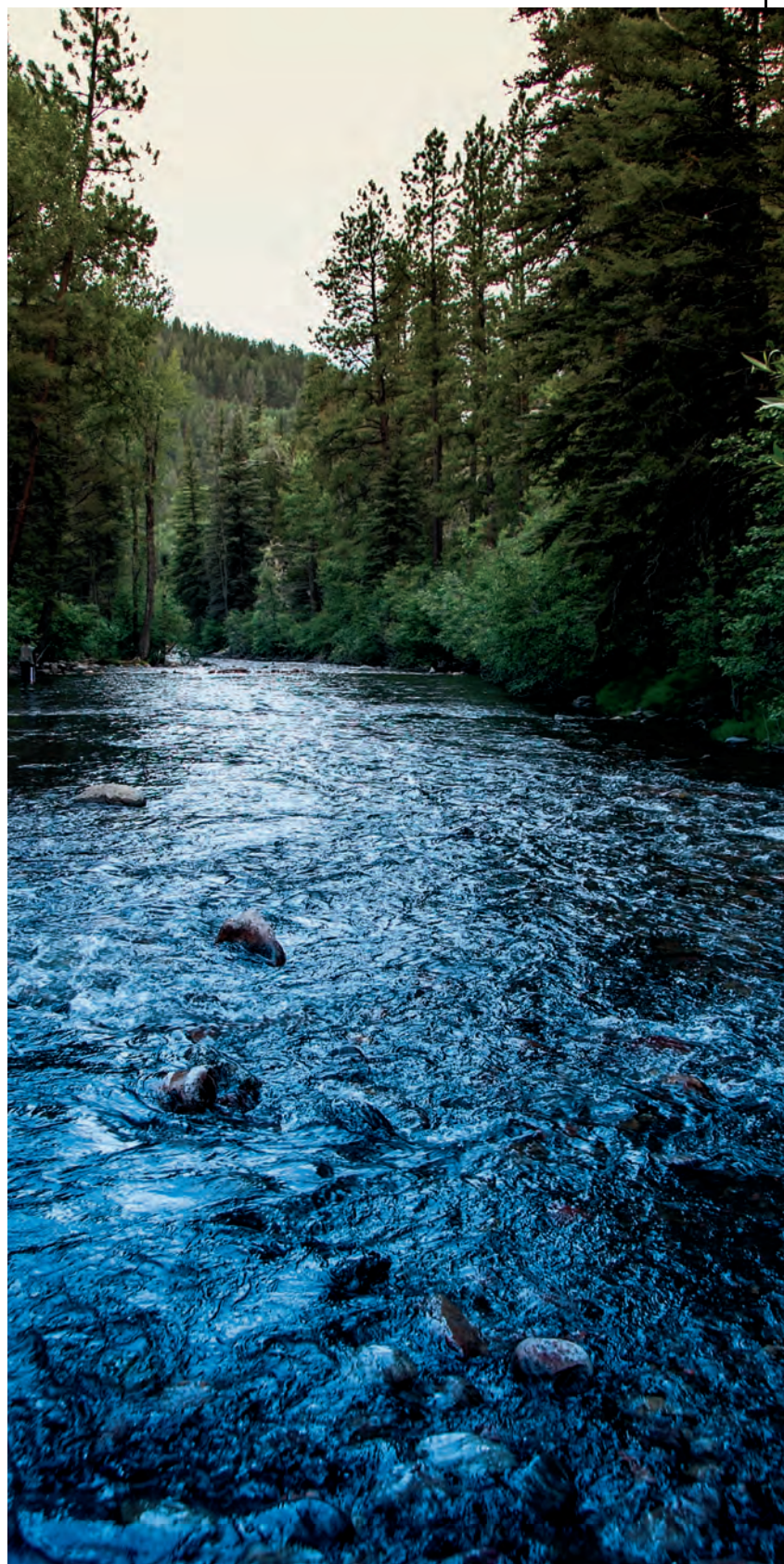
Tribal communities throughout New Mexico are affected by the growth and development of neighboring towns, cities, and counties. Tribes have had to deal with neighboring jurisdictions on both water availability and water quality issues and have experienced a lack of enforcement ensuring the protection of Tribes' senior water rights. The lack of oversight is an injustice to Tribes, often forcing legal and administrative action that is expensive and time-consuming for all parties. Examining the impacts of growth and development on surface and groundwater resources calls for a comprehensive review of development policies, especially those that impact long-term water quality and availability. As the State continues to develop and grow, ***we recommend that the State prioritizes the enforcement and protection of Tribes' senior water rights***, especially as our state grows more arid.

Currently, most of New Mexico's rivers are unadjudicated and have no pending adjudication. In order to ensure Tribal water resilience now and in the future, Tribes need the conclusion of wet water rights versus paper water rights. The United States requires all Tribal water settlements to be finalized through the court issuance of a final decree in a general stream adjudication. However, adjudication is not cost-effective and is a time-consuming process. In the absence of adjudication, it will be necessary for the Tribes, the State of New Mexico and the United States to agree on a process to achieve the finality of water rights.

We recommend that the State, in collaboration with Tribes, develop a mechanism to resolve Tribal water rights claims and bind all water users in river basins that are not being adjudicated. The State will work with Tribes to develop a mechanism to resolve Tribal water rights claims in order to increase Tribal water resilience. In collaboration

with New Mexico's Nations, Tribes, and Pueblos, the State will develop a plan that will support Tribal efforts to fully manage their water rights. There is no current state or federal requirement that prevents Tribes and states from negotiating proposed water rights agreements. These agreements would be submitted to the United States for review and approval through Congressional legislation.

An added advantage is that if Tribes enter into negotiated settlements, they would be eligible to receive federal assistance to fund needed water projects. The State and Tribes could also develop solutions to water challenges that can be implemented sooner, rather than waiting for litigation to conclude. Furthermore, it is hoped that the State would find it in its own best interest to support the Nations, Tribes, and Pueblos' right to lease water, and improve infrastructure once water rights are settled. This would assist all parties' ability to face climate change in a partnered and equitable manner.



We recommend that the State support Tribes' determination to lease water as part of negotiated water settlements. Tribes who wish to could potentially lease water for in-stream flows to support river health and groundwater recharge and assist the State with temporary water shortages facing New Mexico communities.

TRIBAL BENEFICIAL USES OF WATER



Across the State, and as reaffirmed by the Leap Ahead Analysis and previous State water plans, Nations, Tribes and Pueblos continue to see the effects of climate change on the natural and cultural resources we are charged with protecting. Protection and maintenance of the ecological and spiritual relationships between Tribal communities and these resources, including water as a central sustaining component, is necessary for the longevity of Tribal and Pueblo cultural identity and ongoing religious practice.

Nations, Tribes and Pueblos use New Mexico's waters in a manner unique to tribal culture, tradition, ceremonies and lifeways. Water is integral to sustaining cultural practices as well as ensuring the longevity of other cultural resources in their continuous use by Tribes and Pueblos for purposes including hunting, production of food, medicine gathering, traditional cultural practices, production of crafts, and religious ceremonies. Cultural use of water is not currently recognized as a beneficial use. ***We recommend that the State, through OSE, recognize Pueblos' and Tribes' sovereign right to determine and define Tribal beneficial uses of water on Tribal lands, including but not limited to, traditional cultural uses of water, and to use those determinations in any action that may affect Tribal water use on Tribal lands.*** Existing state law does not limit the definition of beneficial use to "economic uses," and the State of New Mexico has an obligation to protect Tribal water use as defined by a Pueblo or Tribe under the doctrine of comity.

This recommendation benefits the State because many Tribal cultural uses of water take into consideration the fluctuating arid climate of the regions where Nations, Tribes and Pueblos are located. Nations, Tribes and Pueblos have withstood withering droughts a century in length, and they have survived and even flourished. By recognizing the beneficial nature of these uses that have been developed over a millennium, or longer, the State is acknowledging that Pueblos and Tribes have the right to make their own laws and be governed by them, and that the State has an obligation to recognize and not hinder that right.⁴ It also acknowledges that the State benefits from these continuing practices in a multitude of ways. Supporting Tribes' designation of specific beneficial uses, including those for traditional cultural purposes, can help protect water use activities specific to Pueblos and Tribes and their cultural uses of water. This will help

in the long-term to ensure the sustainability of traditional practices fundamental to Pueblo and Tribal culture, religious practices contributing to the spiritual and physical well-being of the world, and the State's wealth of multi-cultural diversity and unique Indigenous cultural heritage.



INDIGENOUS TRADITIONAL ECOLOGICAL KNOWLEDGE

VII

Indigenous Traditional Ecological Knowledge (ITEK) is a holistic, interdisciplinary, multidimensional, living knowledge system based on observations, practices, and understandings of human and community impact on ecological systems and promotes environmental sustainability through reciprocal and responsible stewardship of the dynamic nature of the environment. This knowledge continues to evolve from generation to generation through both written and oral transmission, and applies to phenomena across biological, cultural, and spiritual systems.

The sacred nature of water for New Mexico's Nations, Tribes and Pueblos can be seen as an ideational technology providing the foundation for tribal stewardship, caretaking, management, and use of water that has continued to shape Tribal communities and cultural identities over millennia.⁵

Tribes developed resilient water strategies and technologies in response to unpredictable changes in the physical, social, and cultural environment. Many Tribes developed broad systems of water management engineering, specifically for subsistence agriculture and other regenerative uses. For example, water harvesting and conservation practices contributed to riparian ecologies by enhancing groundwater resources for the benefit of flora, fauna, and human life.

We recommend that the State of New Mexico issue formal recognition of Indigenous Traditional Ecological Knowledge as contributing to the scientific, technical, social, and economic advancements of the State and to our collective understanding of our environment. We further recommend that the State work in partnership with the NM Indian Affairs Department to develop guidance for State agencies on consultation and application of ITEK. The State should engage with ITEK only through partnerships with Nations, Tribes and Pueblos, and in a manner that respects the rights of Nations, Tribes and Pueblos to control access to their knowledge and data, to grant or withhold permission, and to dictate terms of its application.

Collection, maintenance, and use of Tribal data is a controversial topic as many Tribes

and Pueblos have encountered the unauthorized use and misuse of Tribal data obtained through improper means. Simultaneously, Tribes have struggled to access reliable information, and are often relegated to use inaccurate data based on assumptions of Tribal communities, lands, and natural resources. The State should continue to provide funding and technical assistance to Nations, Tribes and Pueblos who request support in developing Tribally-sanctioned, community-driven data to address Tribal and state climate change and water resource impacts. The data should be built upon Tribal needs, concerns and perspectives, and include collaboration among Nations, Tribes and Pueblos. For example, the State could support a collaborative Tribal effort to measure the timing of snow runoff, in-stream flow levels, and/or water quality. Community-driven data can help discern local water priorities and support active water advocacy as we deal with an increasingly arid state.



FARMING & IRRIGATION

VIII

Tribal farmers, ranchers and traditional cultural leaders are on the frontlines dealing with the impacts of drought and climate change as they work to provide necessary sustenance for their communities. Tribes have navigated the challenge of water scarcity through traditional agricultural practices and water management systems that ensure the reciprocity and balance of entire ecosystems. “Agriculture” is much more than food production for New Mexico’s Tribes, Pueblos and Nations; it is a testament to our historical knowledge of how to live within our arid homelands. Utilizing traditional knowledge to cultivate our lands while working to integrate other techniques and strategies to promote food sovereignty efforts in Tribal communities is important to continue living sustainably and building resilience against climate change.

With the onset of climate change and an ongoing drought, Tribal communities are becoming increasingly concerned with the aging and dilapidated irrigation infrastructure serving our farmlands. There are many irrigation systems across Tribal communities that require attention, such as old turnouts, siphons, deteriorating road crossings, and structures. Reshaping and reconstructing stretches of our irrigation systems would be beneficial so that irrigation water is efficiently delivered to farmers.

The State needs to advocate for funding to repair and rehabilitate irrigation systems to increase the efficiency of water delivery. We also recommend that the State fund and offer training on effective methods for growing crops and improving soil health during extreme droughts for Tribes that request assistance. Tribal farmers have expressed that soil health is an integral part of the agricultural ‘infrastructure.’ Healthy soils are essential to continuing sustainable food sovereignty efforts in Tribal communities. Also, since the majority of Tribal agricultural lands receive their irrigation waters from surface water sources, it is important that the State provide funding to create and implement drought contingency and/or climate change plans.

WATER QUALITY & WATER ACCESS



Many Tribal communities in New Mexico have long struggled with legacy water contamination issues as a result of extractive oil, gas, mineral, and nuclear development. For example, New Mexico has one of the largest identified uranium ore deposits mined from the 1940's through the 1980's in what is known as the Grants Uranium Belt. The largest uranium spill in the country occurred in July 1979, releasing over 1100 tons of uranium waste into the Rio Puerco River. This mill spill contaminated the river, livestock and drinking water source for many Tribal communities, causing cancer and other illnesses. The contamination forced many to seek alternative water sources, placing an additional financial burden on communities that often must purchase and haul water to their homes. The battle to clean up these sites has been an ongoing, decades-long effort that, in many cases, is not yet solved.

Decades of underdevelopment, particularly of Tribal water infrastructure, resulting from systemic and structural barriers that limit Tribes' ability to generate or access predictable and sustainable revenues has created outsized consequences for Tribal communities as highlighted by the COVID-19 pandemic. Specifically, the pandemic has revealed the lack of access to potable water, which detrimentally affected the health and safety of many Navajo communities. The pandemic imposed significant economic stress on the Navajo people, who had to utilize a significant amount of resources to haul water to their homes. For most of these communities, drilling wells was not a feasible solution as many existing wells had low-quality water unfit for human consumption. The lack of infrastructure for potable water access is an ongoing concern that should continue to be a high priority for the State in partnership with the Navajo Tribe and the Federal government.

Tribal water security includes developing access to water. Although some Tribes have resolved their water rights claims, many do not have water delivery infrastructure in which to utilize their water. Without water delivery infrastructure, Tribes lose their capacity to improve their health and economic standing because Tribes are unable to fully utilize and benefit from their water rights. ***We recommend that the State work with Tribes that require additional funding and support to develop Tribal water delivery***

systems and infrastructure that builds access to quality water. It is vital to raise this issue as we think about the future and quality of our water needs and the importance of strong regulations and appropriate funding which keep water resources protected.

As climate change increases the temperature of our rivers, streams, and lakes, the quality of water available to our landscapes will be adversely affected. Higher water temperatures often cause increased growth of algal blooms and E.coli bacteria, as well as decreasing water quantity to dilute the pollutants flowing into water bodies.

We are concerned that at current funding and staffing levels, the New Mexico Environmental Department is only able to assess surface water for violations of state water quality standards on an eight-year cycle. Many of the state's surface waters flow into and through Tribal land. Currently, Tribes receive minimal federal grant funding to maintain water quality testing programs on Tribal land. These funding amounts have been flat for over a decade.

It is important that the NMED's surface water quality program has increased funding to support water quality assessments on a more frequent basis to address pollutant loading from increasing sources. Both Tribal and statewide water quality will benefit from these assessments. *We recommend that the State advocate with its federal partners for an increase in EPA Section 106 funding for tribes that wish to collect water quality samples to develop mitigation strategies that will improve water quality.*



CAPACITY & FUNDING FOR TRIBES, PUEBLOS & NATIONS



“Tribal nations make critical contributions to the economic health of their communities and surrounding regional economies. Since enactment in the 1970s, the tools of self-governance have transformed economic systems in Indian Country and beyond.”

National Congress of American Indians⁶

The 50 Year Water Plan prioritizes climate change funding, water infrastructure projects and policies needed to ensure New Mexico’s water resiliency. Nations, Tribes, and Pueblos have political, economic, environmental, and cultural interests in how the federal, state and local jurisdictions expend resources to deal with climate change. Tribes are significant contributors to the State’s economy, uplifting many local jurisdictions that depend on Tribal enterprises and job creation. As New Mexico prepares for climate change, there is a need to strengthen our collective capacity to meet the stewardship, sustainability, and equity goals of the 50 Year Water Plan.

Currently, most government funding is geared toward large-scale projects. This type of funding is not always the most effective option when dealing with smaller, rural Tribal communities with distinctive needs. ***We recommend that the State support our position and advocate that Federal funding guidelines be restructured to allow for smaller projects that Tribes and Indigenous-led non-governmental organizations can initiate.*** This will enable diversified solutions and partnerships needed to deal with New Mexico’s wide-ranging regional differences.

Tribes will need resources to either update existing drought plans or begin to develop climate change mitigation and adaptation plans. ***We recommend that the State ensure Tribes have the resources to develop mitigation and adaptation plans. These plans will help forecast needed forestry, protection of cultural resources and other strategies identified to increase Tribal Water resiliency.*** These plans will allow tribes to proactively

forecast the resources, tools and preparations needed to increase Tribal water resiliency. It should be understood that many tribes have been hesitant to engage in research projects due to research frameworks that promote and result in colonized solutions that do not work for most Tribal communities. Tribes are also wary of data collection for many of the same reasons. However, it is understood that research and data can be helpful if managed appropriately. Tribal ownership over research and data collection can strengthen tribal equity in climate change debates. ***We recommend that the State partner with Tribes who wish to create culturally appropriate research frameworks and data collection to measure aspects of climate change on Tribal lands; Tribes may request assistance from state agencies as needed. The data shall be owned by and for each sovereign Tribe to decide how they will utilize their data.***

Increasing Tribal capacity to deal with climate change is necessary to ensure equitable and sustainable solutions. We need Tribal water professionals committed to understanding the unique concerns and needs of Tribal water issues. ***We recommend that the State increase its support to Tribal and community colleges to offer educational opportunities for careers in water management, renewable energy and the clean up of legacy sites that have impacted water and land resources, especially on Tribal lands.*** These courses should include on-the-job training programs that apply skills and knowledge in emerging technologies, leading to entry-level jobs with a pathway to professional-level manager and expert positions. Workforce development can help transcend inequity issues, contribute to New Mexico's economy and diversification, and help Tribes maintain cultural integrity. We need Tribal water professionals committed to understanding the unique concerns and needs of Tribal water issues.

When developing climate change and water resource solutions, it's important that the State recognizes the interconnectedness of water and ecological systems and considers strategies that achieve multiple objectives. Indigenous knowledge recognizes and values relationships across spatial, cultural, spiritual, temporal, and political dimensions. Therefore, Tribal responses to climate change attempt to find solutions that include sustainable ways to renew and continue ecological and cultural health as a whole, as opposed to a compartmentalized approach that focuses narrowly on individual technical solutions. ***We recommend that all state agencies work more collaboratively and do more interagency planning and information sharing to ensure Tribal-driven programs and projects meet goals that may require a high level of coordination to appropriately implement.***

NM IAD BUDGET & CAPACITY

XI

We requested that IAD be consulted on several of our recommendations. However, for IAD to be effective, it will be essential to increase the funding and capacity of the department. IAD is often expected to guide other agencies in their efforts to reach out to Nations, Tribes and Pueblos on various policy and funding issues without adequate support. ***We recommend that the State increase the NM Indian Affairs Department's budget to partner with and provide leadership among state agencies and Tribal Nations working on climate change mitigation and adaptation strategies.*** We also propose that IAD's capacity is increased by developing a stronger working relationship amongst all Tribal liaisons that serve other agencies. The idea is to increase clarity on how Tribal liaisons collaborate with Tribal communities and how they can support the leadership role that IAD plays for all state agencies to define best practices and protocols that strengthen partnerships between the State and Nations, Tribes and Pueblos.



CONCLUSION

XIII

The diverse impacts of climate change on water demonstrate the need to look at the crisis through a holistic and cumulative lens. Tribal climate change plans that utilize interconnected, culturally appropriate strategies may require the State to do more interagency planning and information sharing to ensure that Tribal programs are not siloed and rendered ineffective. In the spirit of interconnectedness, we reiterate the need to work with Tribes, Pueblos and Nations as co-managers of our water resources. Affirming our government-to-government relationships allows us to deal with the deeply concerning impacts of climate change on our precious landscapes and water resources in a coordinated manner.

The 50 Year Water Plan is only the beginning. We offer the Tribal Water Recommendations to be included in the 50 Year Water Plan, recognizing that as we fully grasp the nature of the challenges we face, there will be a continual need to revisit these strategies over time.

APPENDIX A TRIBAL WATER RECOMMENDATIONS

The information contained herein was generated by the Tribal Water Work Group (TWWG) which is comprised of tribal water experts, staff and professionals from various Pueblos, Nations, and Tribes working solely in an advisory capacity to develop a collection of broad-based policy recommendations. Each Tribe, Pueblo, or Nation reserves the right to hold their own sovereign position on each of these recommendations.

We recommend that:

1. the State, in collaboration with Tribes, develop natural disaster preparedness and response measures, process, protocol, and funding mechanisms that should include Tribal review, consideration, and agreement to ensure the protection, security, and mitigation of impacts to Tribal cultural resources and communities.
2. the Office of the State Engineer update its “Tribal Communications and Collaboration Policy” to add a segment to notify Tribal Nations if the water within their respective watersheds, basins or aquifers may be impacted by water permitting applications. The current notification system should be upgraded to allow for email notifications to all users within an affected watershed, basin or aquifer.
3. the State acknowledge the value and importance of Tribes, Pueblos and Nations as co-managers of water.
4. the State and Tribes open a dialogue about improvements to the OSE’s processes and policies concerning how non-Indian water right transfers may affect Indian Water Rights.
5. the State prioritize the enforcement and protection of Tribes’ senior water rights.

6. the State, in collaboration with Tribes, develop a mechanism to resolve Tribal water rights claims and bind all water users in river basins that are not being adjudicated.

the State support Tribes' determination to lease water. Tribes who wish to, could

7. potentially lease water for in-stream flows, to support river health and groundwater recharge and assist the State with temporary water shortages facing New Mexico communities.

the State, through OSE, recognize Pueblos' and Tribes' sovereign right to determine

8. and define Tribal beneficial uses of water on Tribal lands, including but not limited to, traditional cultural uses of water, and to use those determinations in any action that may affect Tribal water use on Tribal lands.

the State issue formal recognition of Indigenous Traditional Ecological Knowledge

9. as contributing to the scientific, technical, social, and economic advancements of the State and to our collective understanding of our environment. We further recommend that the State work in partnership with the NM Indian Affairs Department to develop guidance for State agencies on consultation and application of ITEK. The State should engage with ITEK only through partnerships with Pueblos and Tribes, and in a manner that respects the rights of Pueblos and Tribes to control access to their knowledge and data, to grant or withhold permission, and to dictate terms of its application.

10. the State advocate for funding to repair and rehabilitate irrigation systems to increase the efficiency of water delivery. We also recommend that the State fund and offer training on effective methods for growing crops, and improving soil health during extreme droughts for Tribes that request assistance.

11. the State work with Tribes that require additional funding and support to develop Tribal water delivery systems and infrastructure that build access to quality water.

12. the State advocate with its federal partners for an increase in EPA Section 106 funding for tribes that wish to collect water quality samples to develop mitigation strategies that will improve water quality.

13. the State work with Nations, Tribes and Pueblos to increase Tribal capacity to deal with climate change impacts on water by:

a) advocating to the Federal government that funding guidelines should be restructured to allow for smaller projects that Tribes and Indigenous-led Non-governmental Organizations can initiate.

b) ensuring Tribes have the resources to develop mitigation and adaptation plans. These plans will help forecast needed forestry, protection of cultural resources and other strategies identified to increase Tribal Water resiliency.

c) partnering with Tribes who wish to create culturally appropriate research frameworks and data collection to measure aspects of climate change on Tribal lands; Tribes may request assistance from state agencies as needed. The data shall be owned by and for each sovereign Tribe to decide how they will utilize their data.

d) increasing support to Tribal and community colleges to offer educational opportunities for careers in water management, renewable energy and the clean-up of legacy sites that have impacted water and land resources- especially on Tribal lands.

e) increasing collaborative interagency planning and information sharing.

14. the State increase the NM Indian Affairs Department's budget to partner and provide leadership with state agencies, and Tribal Nations working on climate change mitigation and adaptation strategies.

APPENDIX B

END NOTES

- ¹ Damp, Johnathon E, et al. "Early Irrigation on the Colorado Plateau Near Zuni Pueblo, New Mexico." *American Antiquity*, vol. 60, no. 04, Oct. 2002.
- ² New Mexico Interstate Stream Commission. *New Mexico State Water Plan: Gaining a Statewide Perspective through Analysis and Integration of Water Planning Activities, Including New Mexico's 16 Regional Water Plans*. State of New Mexico, 6 Dec. 2018.
- ³ Available at: <https://www.iad.state.nm.us/tribal-collaboration/state-tribal-consultation-collaboration-and-communication-policies/>
- ⁴ United Nations Declaration on the Rights of Indigenous Peoples, ART. 26.
- ⁵ Hayes, Amy. *Native Peoples of the Southwest*. Gareth Stevens Publishing, 2017
- ⁶ <https://www.ncai.org/policy-issues/economic-development-commerce>

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