

**WaterSMART:
Drought Resiliency Project Grants for (FY) 2016**

Title Page

Gallup/NGWSP Water Commons - Drought Contingency Plan

FOA No. R16-FOA-DO-005

TASK A

(CFDA) Number: 15.514; Reclamation States Emergency Drought Relief

City of Gallup, New Mexico

Name of Entity: City of Gallup
PO BOX 1270
Gallup, NM 87305

Contact: Elizabeth Barriga
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Technical Proposal

Gallup / NGWSP “Water Commons” Drought Contingency Plan

Executive Summary

NGWSP is being designed to serve a future population of approximately 250,000 people by the year 2040. All these people could be impacted by drought conditions at any period of time in the future. The success of NGWSP depends on managing water demand during a variety of minor and major drought situations. NGWSP and the City of Gallup could experience widespread and severe economic and environmental impacts of “worst-case” droughts at any future time period. The City of Gallup and NGWSP stakeholders have a dire need for a brand new Gallup/NGWSP Water Commons - Drought Contingency Plan (DCP). To evaluate our water capability and to meet water demand preparing for all stages of droughts impacts. As a final product, have in place adequate plans to deal with water emergencies. It should be a planning priority to prepare NGWSP constituents and the City of Gallup for these drought situations.

The City is proposing a Two Year, ***Gallup/NGWSP Water Commons - Drought Contingency Plan***. That affects both ground and surface water that the City of Gallup and Native Americans who plan to utilize NGWSP water. Since the BOR has an investment role in Navajo-Gallup Water Supply Project, the bottom line is if the San Juan River is affected by drought – all recipients of that water are reduced proportionately. **An extended drought and worst case scenario is: if there is not enough wet water to be delivered by pipe to Gallup and surrounding Navajo Nation communities, that the approximately \$1 Billion NGWSP investment becomes a wasted effort.** The BOR has high stakes in drought planning efforts, as anyone living in the “Water Commons”.

The City of Gallup proposes to develop a ***Gallup/NGWSP Water Commons - Drought Contingency Plan***. This *Gallup/NGWSP Water Commons - Drought Contingency Plan* will call for annual reporting on local and regional indicators to be monitored as triggers for implementing or rescinding various stages of drought response that may be required to ensure the City of Gallup’s water resources and system characteristics are not compromised. The plan will decide upon triggers for escalating drought response stages that meet statutory requirements for drought response indicators to be directly tied to NGWSP and the City of Gallup’s water resource availability and its ability to deliver these resources. This water resource availability requires review of both regional (NGWSP) and local conditions that may impact supplies.

The future *Gallup/NGWSP Water Commons - Drought Contingency Plan* will create drought response stages, and an outlined action plan for responding to potential drought-related and emergency impacts on the City of Gallup’s system and regional NGWSP water supplies.

The City of Gallup will supply 50% matching funds for the *Gallup/NGWSP Water Commons - Drought Contingency Plan* and it is ranked and considered as a citywide high priority.

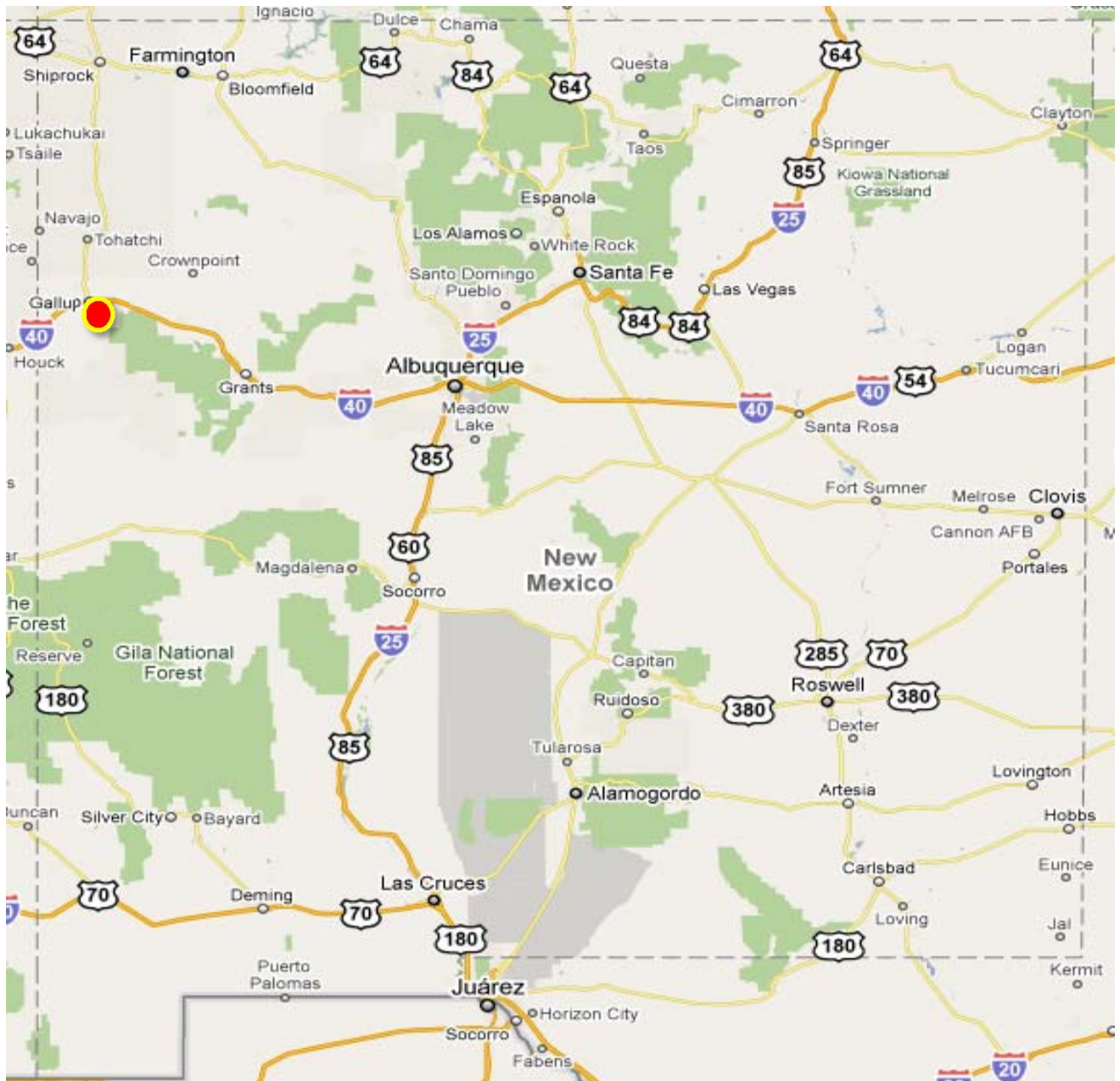
Please see a detailed breakdown of all Consultant and Sub-Consultant tasks, timeline, and work plan is found on the last pages of this application.

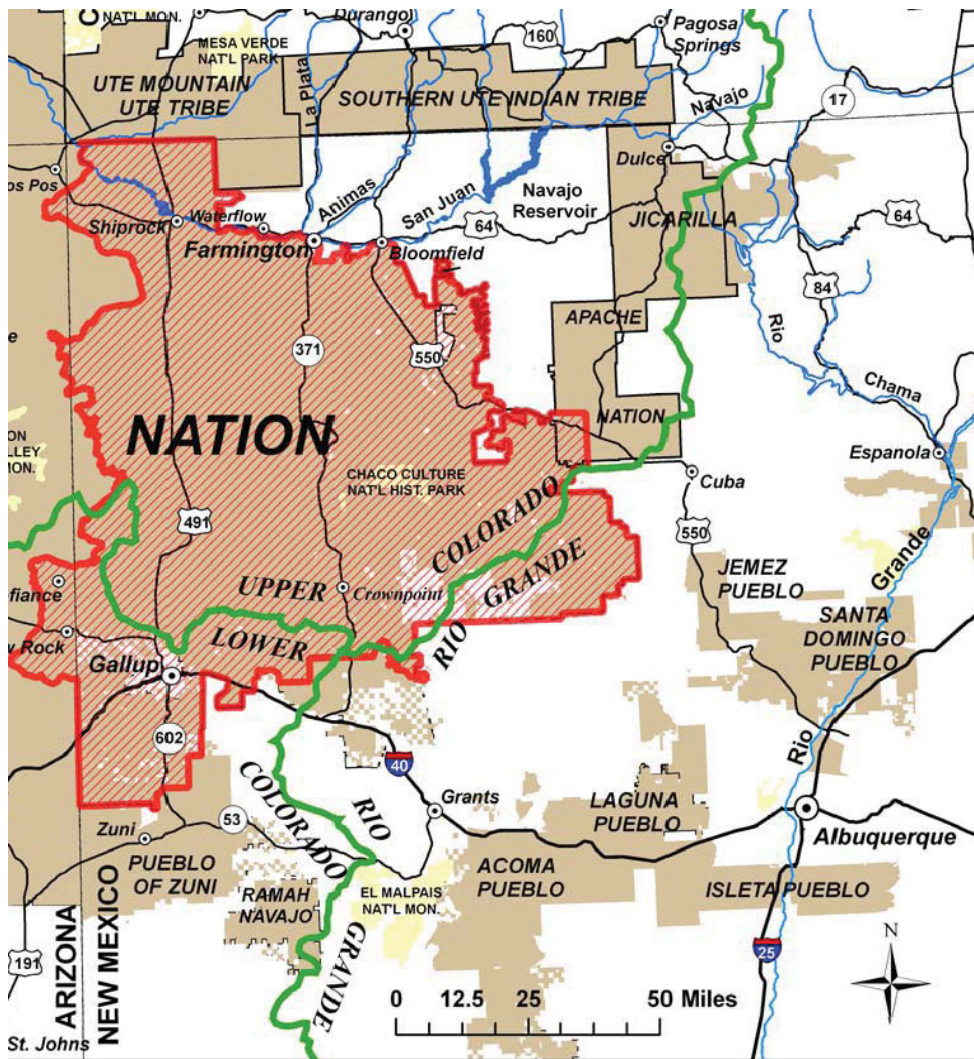
Background Data

Maps

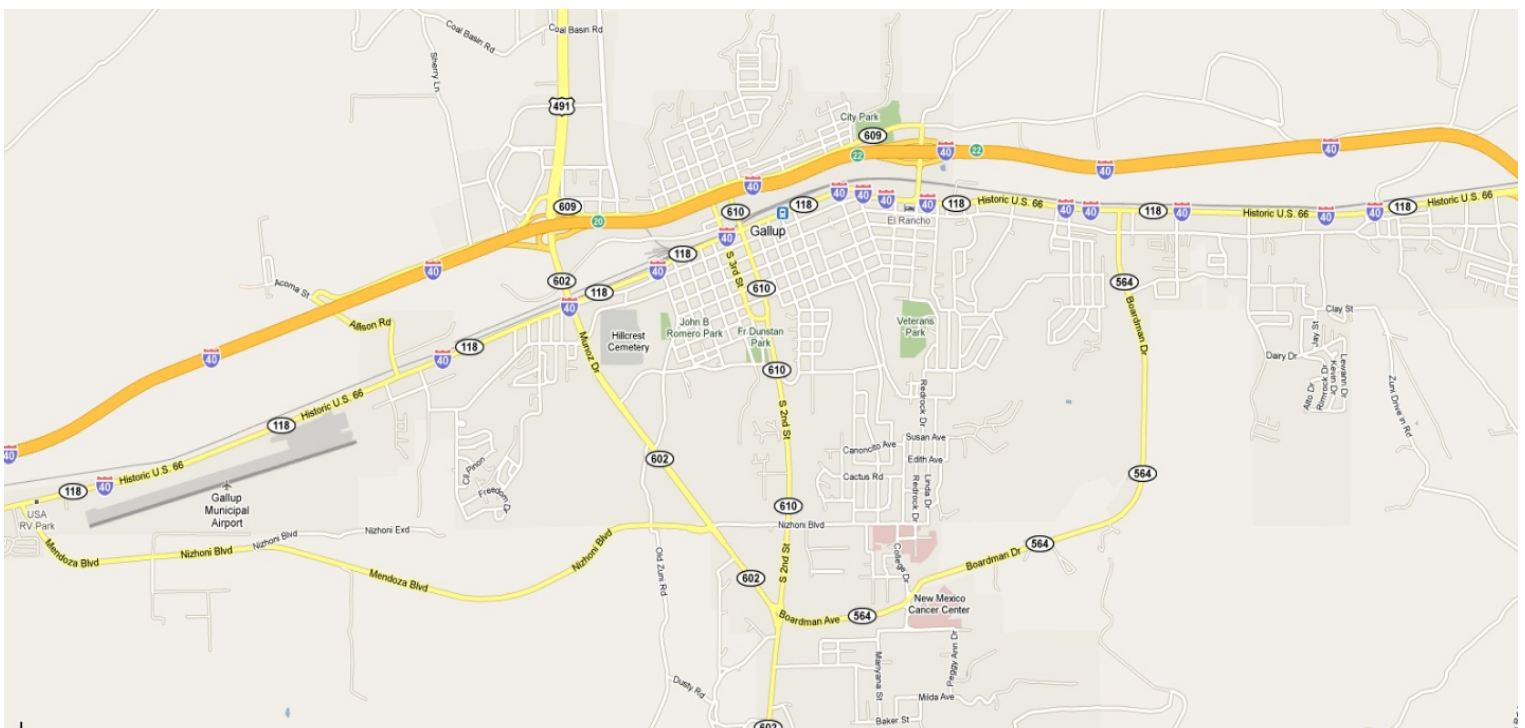
This City of Gallup is located 40 miles east of the Arizona border and 140 miles west of Albuquerque in the state of New Mexico. It is the county seat of McKinley County.

New Mexico





NGWSP Stakeholder Area Map



City of Gallup

On the Navajo Nation, existing groundwater supplies are dwindling, have limited capacity, and are of poor quality. More than 40 percent of Navajo households rely on water hauling to meet daily water needs. The city of Gallup's groundwater levels have dropped approximately 200 feet over the past 10 years, and the supply is not expected to meet current water demands within the decade. The City anticipates a 1-million gallon-per-day shortage during peak periods as early as this year.

The City of Gallup is a community of about 20,000 people at the center of numerous low-income communities throughout McKinley County, and the Zuni and Navajo Reservations. Most of these communities have no businesses, schools, or hospitals. This makes Gallup the central economic and social hub for the area, and with a county population that is nearly 80 percent Native American, the city is often called the "Heart of Indian Country."

The area that Gallup serves has a history of chronic poverty. According to the latest data available from the Census Bureau, in 2010, the average per capita income is \$18,824 in Gallup. Per capita income in the city was \$8,000 a year less than the national figures. Nearly 21 percent of families in Gallup live below the poverty level. The economic picture of the county and reservations shows even less prosperity. On the Navajo Reservation, the per capita income is \$13,794. Nearly a third of the families in McKinley County live below the federal poverty level.

The low tax base stemming from this historically torpid economy has left the area's infrastructure needs unfulfilled. Therefore, many of these communities on the reservations and in the county don't even have basic water utilities, much less roads or electricity. According to the BOR's 2007 Navajo-Gallup Water Supply Project Planning Report and Draft Environmental Impact Statement, more than 40 percent of Navajo households still rely on water hauling to meet daily water needs. This leaves many of them dependent on the City of Gallup for their water supply. The local government maintains a water station for these residents, and it's a common sight around town to see rural residents hauling water in plastic tanks mounted on the back of their pickup trucks.

The city relies solely on a groundwater supply that continues to be progressively mined with little recharge into the source aquifers. Based on current projections, severe shortages in the groundwater supply are expected within the next decade, which would have severe social and economic impacts on the city and on neighboring Navajo communities.

The Navajo-Gallup Water Supply Project is currently in the planning and design-build stages to bring a dependable potable water supply source to the Navajo Nation and the City of Gallup. This project's 2015 cost estimate is \$1 billion public investment and will take decades to complete. The City of Gallup and Navajo-Gallup Water Supply Project (NGWSP) stakeholders have a strong commitment to emergency drought planning, all of whom depend on critical, yet vulnerable potable water supplies. The NGWSP investment should be protected with drought preparedness planning inviting collaboration with all stakeholders.

Technical Project Description

The City is proposing a Two Year, ***Gallup/NGWSP Water Commons - Drought Contingency Plan***. That affects both ground and surface water that the City of Gallup and Native Americans who plan to utilize NGWSP water. Since the Bureau of Reclamation (BOR) has a huge investment role in Navajo-Gallup Water Supply Project, the bottom line is if the San Juan River is affected by severe drought – all recipients of that water are reduced proportionately. **An extended drought and worst case scenario is: if there is not enough wet water to be delivered by pipe to Gallup and surrounding Navajo Nation communities, that the approximately \$1 Billion NGWSP investment becomes a wasted effort.** Again, the BOR has high stakes in drought planning efforts, as anyone living in the “Water Commons”.

The City of Gallup proposes to develop a ***Gallup/NGWSP Water Commons - Drought Contingency Plan*** that will call for annual reporting on local and regional indicators to be monitored as triggers for implementing or rescinding various stages of drought response that may be required to ensure the City of Gallup’s water resources and system characteristics are not compromised. The plan will decide upon triggers for escalating drought response stages that meet statutory requirements for drought response indicators to be directly tied to NGWSP and the City of Gallup’s water resource availability and its ability to deliver these resources. This water resource availability requires review of both regional (NGWSP) and local conditions that may impact supplies.

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The City of Gallup will supply 50% matching funds for the Gallup/NGWSP Water Commons - Drought Contingency Plan and it is ranked and considered as a citywide high priority.

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Evaluation Criteria

V.A.1 Evaluation Criterion A: Need for a Drought Contingency Plan (40 points)

Describe the severity of the risks to water supplies that will be addressed in the Drought Contingency Plan. What are the risks to water supplies within the applicable geographic area that will be addressed in the plan or plan update, and how severe are those risks? Describe the existing or potential drought risks to specific sectors in the project area (e.g., impacts to agriculture, environment, hydropower, recreation and tourism, forestry). Risks should be quantified and documented to the extent possible. For example, risks could include but are not limited to:

- *Whether there are public health concerns or social concerns associated with existing or potential drought conditions. For example, are there water quality concerns including past or potential violations of drinking water standards, increased risks of wildfire, or past or potential shortages of drinking water supplies? Does the community have another water source available to them if their water service is interrupted?*

Potential drought risks in the geographic area of NGWSP project risk would be to the diverted 37,376 acre-feet of water annually from the San Juan River Basin and conveying it via approximately 280 miles of pipeline, several pumping plants, and two water treatment plants. The risks to this water supply would affect a future population of approximately 250,000 people by the year 2040. A water service contract between the Jicarilla Nation and the City of Gallup will provide the city with up to 7,500 acre-feet of water annually was approved. It is critical to protect and manage this BOR water from emergency or drought conditions in the future.

The NGWSP is designed to provide for the water needs of approximately 250,000 people in Native American communities by the year 2040. The City of Gallup and tens of thousands of Native Americans do not have any wet, running water from NGWSP. Which is why planning for drought conditions is incredibly important for all these people.

Severe Drought risks include critical public health concerns during a possible water emergency or severe drought such as a potential water shortage of drinking water supply leading to unsanitary conditions. That could quickly escalate such as an increased risk of wildfires without fire water supply protection. Also, Gallup's economy will be severely impacted creating potential shortages of drinking water supplies as mentioned in the local economic losses question below.

The City of Gallup currently does not have another water source available to us.

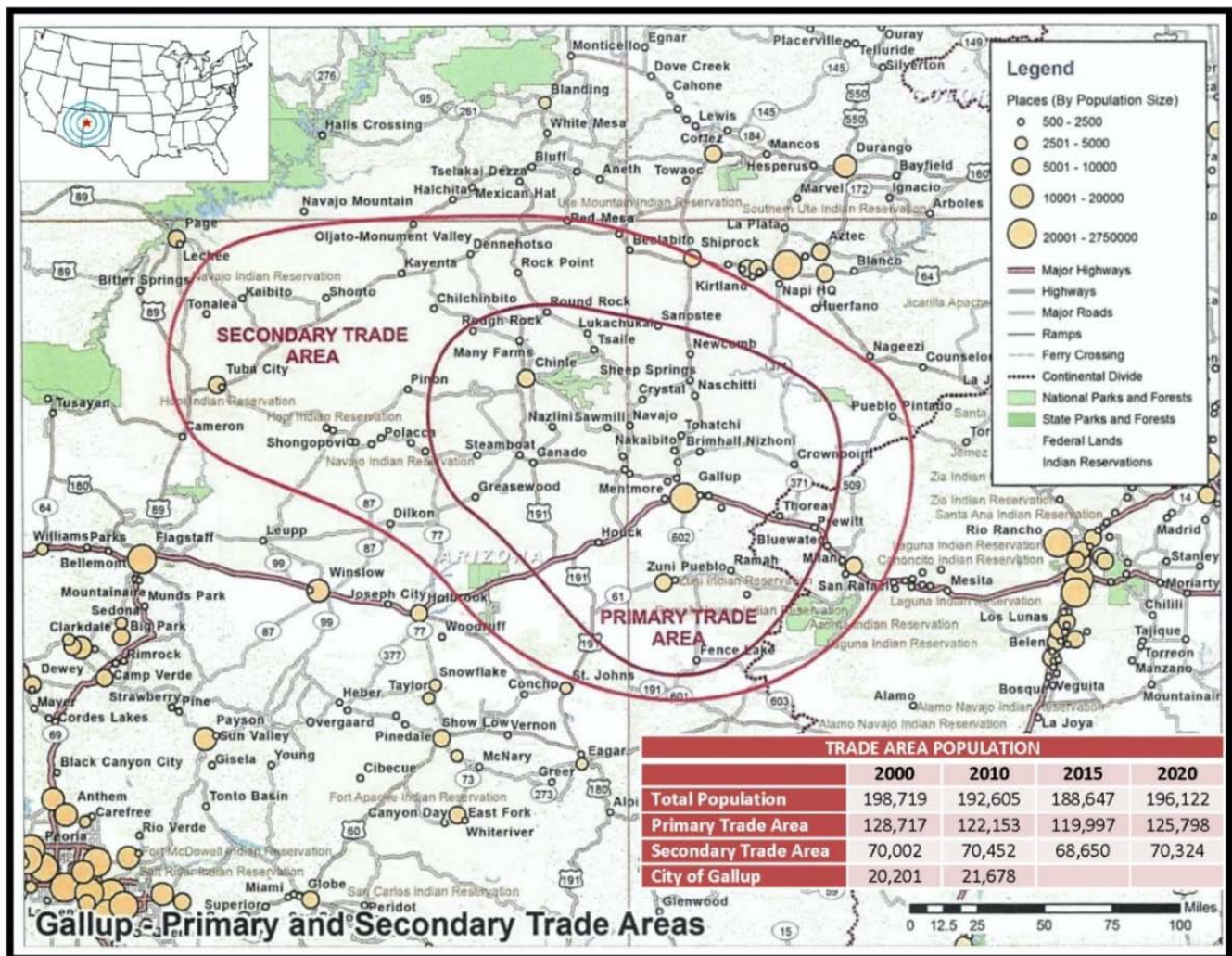
- *Whether there are environmental concerns, such as existing or potential impacts to endangered, threatened or candidate species.*

Since City of Gallup and Navajo potable water supplies originate from underground aquifers and discharges are into a normally dry Puerco. Currently, there are no environmental impacts to endangered, threatened or candidate species concerns with Gallup's water quality per the annual CCR report.

Gallup currently relies on 17 wells tapping underground supplies from aquifers which range from 300 to 3,500 feet deep. They receive no recharge from surface sources (such as rain or snow). Being confined, and not being in immediate contact with surface water, this water source is being used up. These existing wells are not a long term reliable water source which is why we are seeking planning to mitigate a variety of possible drought scenarios.

- Whether there are local economic losses (past, ongoing, or potential) associated with drought conditions (e.g., business, agriculture, reduced real estate values)

The City of Gallup and Navajo Nation's Tribal Water Utility Authority water supply is at severe risk if a potential water crisis should occur. Local economic losses could potentially involve a 50-mile trade area with a 200,000 population trade area. The City of Gallup population makes up only 10% of the total trade area population. YES, severe drought can affect all City of Gallup businesses and reduce real estate values since we all depend on water for basic human needs. Retail businesses dominate Gallup's economy and is the principal destination of dollars that flow into the city. The trade actual revenues in relation to revenues expected based on communities income for retail is a remarkable 379% (2002). In total, retail trade draws \$272 million into the city on a net basis, offsetting net losses in all other sectors of Gallup's economy. As in most states, local governments collect far more. New Mexico's localities collected \$574 per capita in property taxes in fiscal year 2009, which is the latest year the Census Bureau published state-by-state property tax collections. (source: the Greater Gallup Economic Development Corporation, <http://gallupedc.com/gallup>)



Our local, regional businesses are a vital component of the well-being of all New Mexicans and our future economic development.

Drought leads to water and food shortages and is likely to have a long-term environmental, economic and health impact on the population.

- **Demographic pressure on the environment;**
- **Food insecurity;**
- **Economic systems strictly dependent on agriculture;**
- **Poor infrastructure e.g. irrigation and water supply and sanitation systems;**
- **Poor health status of the population before the disaster;**
- **Time of the year, with the most critical period being before the harvest;**
- **Absence of warning systems;**
- **Population displacement;**

Concurrent situations include: economic crisis, political instability, and armed conflict.

August 2012, the New Mexico's Drought Monitoring Working Group determined that the previous 24 months were the warmest and driest in New Mexico history.

Major fires burned in many parts of New Mexico during both 2011 and 2012, which saw the two largest fires in state history. During the summer of 2011, fires charred large areas near Ruidoso and Raton, as well as in the Gila Forest of southwestern New Mexico. The Las Conchas fire near Santa Fe blew up to 40,000 acres in the course of one day in late June 2011, and ended up as the largest New Mexico wild fire up to that time. The Las Conchas fire burned 156,000 acres and caused devastating impacts to the Pueblo of Cochiti and the Pueblo of Santa Clara. But the Las Conchas fire kept that record for only one year. In the dry spring of 2012 large fires were burning once more throughout the state, and by June of 2012 the Whitewater Baldy Complex fire in southwestern New Mexico approached 300,000 acres in size.

These large burns have an effect on New Mexico's surface water resources. Many recent burn areas have since experienced severe flooding and erosion problems, impacting reservoir storage and surface water quality and usability. The City of Santa Fe's diversion from the Rio Grande had to be shut down during times when ash from the Las Conchas fire zone washed into the river upstream of the City's intake. Bonito Lake near Ruidoso, an important source of water supply for the City of Alamogordo, became unusable as a result of silt and ash from runoff in the aftermath of the Little Bear fire, and is likely to remain so for several years. *(Source: the New Mexico Governor's Drought Task Force webpage: http://www.nmdrought.state.nm.us/fin_economy.html)*

- *Are other drought-related risks not identified above (for example, tensions over water that could result in a water-related crisis or conflict, or risks to tribes).*

YES, tensions could easily escalate since NGWSP is on Navajo Nation land water which is connected and intertwined with the City of Gallup's population, both of which are comprised of approximately 70-80% Native Americans. This could most likely lead to tribal competition for water. The conflicts are likely to intensify in the future as resource scarcity increases.

As competition for water resources increases with population growth and climate change, Indians and non-Indians alike are seeking assurances that their water rights are secure.

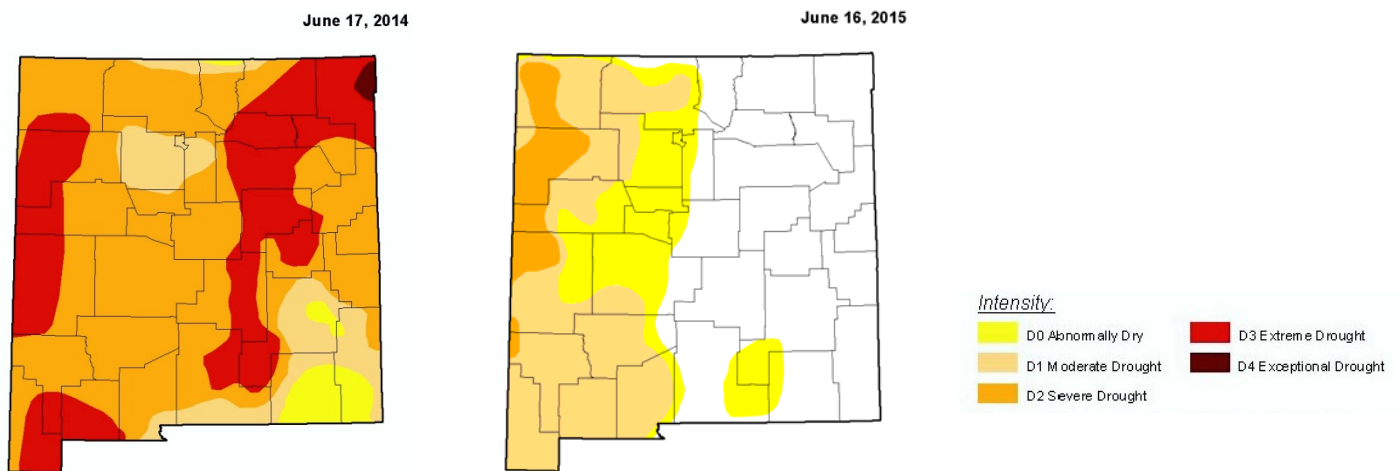
University of Arizona – The Arizona Journal of Environmental Law & Policy. Indian Water Right, <http://www.ajelp.com/articles/indian-water-rights-how-arizona-v-california-left-an-unwanted-cloud-over-the-colorado-river-basin/>

This **Gallup/NGWSP Water Commons – Drought Contingency Plan** will help assure that their water rights are secure.

Describe existing or potential drought conditions to be addressed in the Drought Contingency Plan.

- Will the proposed plan or plan update address a geographic area that is currently suffering from drought or which has recently suffered from drought? Please describe existing or recent drought conditions, including when and how long the area has experienced drought conditions (please provide supporting documentation, [e.g., Drought Monitor, <http://droughtmonitor.unl.edu>]).

Per the Drought Monitor website, the City of Gallup NM, the Navajo Nation reservation and the San Juan River area drought intensities have been recorded as Moderate, Severe and Extreme Drought zones.



- Describe any projected increases to the frequency, severity, or duration of drought in the geographic area resulting from climate change. Please provide support for this response (e.g., reference a recent climate change analysis, if available).

Previous years, such as during 2006, New Mexico has had year of very extreme climate regimes. The January-June period was the 2nd driest of 112 years.

The arid and semiarid American Southwest constantly faces precipitation variability. What moisture the region receives to feed the Colorado River and its major tributaries the Green River and San Juan River, is the result of various climatic conditions. (Source from Geo/SAT2 “Drought in the Colorado River Basin: Shrinkage of Lake Powell” by Professor Paul Baumann)

The State of New Mexico still suffers extreme quantity water-related conditions; parts of the state are suffering from extreme drought. The New Mexico Drought Task Force is looking carefully into how New Mexico can better manage and prepare for such extreme climate conditions and is pleased to provide recommendations. (Source from New Mexico Governor’s Drought Task Force, http://www.nmdrought.state.nm.us/df_planning.html)

Describe the status of any existing planning efforts. Please explain how this drought contingency plan or plan update relates to other planning efforts ongoing or recently completed in the planning area and how this effort will complement, not duplicate ongoing or completed planning efforts.

The City of Gallup and NGWSP has no existing formal Drought Contingency Plan, and we are in dire need of one to plan for any future emergency or drought related sequence of events.

Currently, the City of Gallup utilizes a “Water Conservation Ordinance” for drought events which states:

8-2-7: EMERGENCY WATER USE RESTRICTIONS: For the reasons of public welfare, health, and safety, the City Manager may, upon notification by the Executive Director of Gallup Joint Utilities of pending or probable water shortages due to the effects of drought, equipment failures or catastrophic events which decrease the availability and/or delivery capability or due to increased water use, may impose emergency water use restrictions. Emergency water use restrictions may include, but are not limited to, one or any combination of 7 restrictions: labeled (A) through (G), such as restricting the time of day of irrigation. The last City of Gallup Water Conservation Ordinance Emergency water use restriction declares:

“(G) Other restrictions as deemed necessary by the Executive Director of Gallup Joint Utilities and approved by the City Manager.”

This is the City of Gallup’s and only current and only official drought response plan. NGWSP has yet to create a Drought Contingency Plan and we are in dire need of a Water Commons - Drought Contingency to plan for any future drought sequence of events.

V.A.2 Evaluation Criterion B - Inclusion of Stakeholders

(30 points)

Identify stakeholders in the planning area who have committed to be involved in the planning process and describe their commitment e.g., will they participate on the Task Force, contribute funding or in-kind services, or otherwise engage in the planning process? Do these stakeholders represent diverse interests (e.g., agricultural, municipal, environmental, recreation, tribal)? Be sure to include the specific interest that each stakeholder has in the Drought Contingency Plan. Documentation could include letters from stakeholders committing to be involved in the planning process; such letters should explain what their specific interest is and how they plan to participate.

Gallup/NGWSP Water Commons – Water Contingency Plan stakeholders are a diverse range of regional agencies including a mix of both internal and external stakeholders who have supplied Commitment letters and will be involved in the planning process and which who include:

The Navajo Nation Water Management Branch, New Mexico Office of the State Engineer, Northwest New Mexico Council of Governments, NTUA, McKinley County, Navajo Area Indian Health Services, Rehoboth McKinley Christian Health Care Services, Gallup Police Department, Gallup Fire Department, Gallup Risk/Emergency Management, Gallup Water + Sanitation & Electric Departments, Gallup McKinley County Chamber of Commerce, and CH2M Hill.

Every stakeholder has committed to participate in Gallup/NGWSP Water Commons – Water Contingency Plan meetings and many agencies have offered meeting locations.

These stakeholders represent incredible diverse interests especially since over 70% of the stakeholder representatives are Native Americans, while the City of Gallup represents municipal and recreational interests.

It is very timely for the City of Gallup and its Water Commons stakeholders to receive funding for this plan. New Mexico Office of the State Engineer and the Interstate Stream Commission are facilitating the update of the Region 6 (NWNM) Regional Water Plan and the Statewide Water Plan.

The NWNMCOG can optimize this synergy by:

- **Diverse and Strengthening Stakeholders and Participates:** Utilizing their larger, more diverse, and multiple sector Steering Committee to pull membership onto our Drought Task Force;
- **Tie into Regional and State Water Plans:** From our planning process, the COG will identify and prioritize mitigation and response actions that can be lifted up in the RWP and NMWP.
- **Innovative Engagement Approach:** the COG will utilize their approach and model in developing an innovative Community & Outreach Plan.

Describe stakeholders in the planning area who have expressed their support for the planning process, whether or not they have committed to participate. Support can include letters of support from stakeholders or a description of feedback from interested stakeholders; such letters should identify the stakeholder's specific interest.

Gallup/NGWSP Water Commons – Drought Contingency Plan regional committed partners include: The Navajo Nation Water Management Branch, the New Mexico Office of the State Engineer, Northwest New Mexico Council of Governments, NTUA, McKinley County, Rehoboth McKinley Christian Health Care Services Hospital, Navajo Area Indian Health Services Hospital, the Gallup Police Department, Gallup Fire Department, Gallup Risk/Emergency Management, Gallup Water & Sanitation + Electric Departments, Gallup McKinley County Chamber of Commerce, and CH2M.

Every stakeholder has committed to participate in Gallup/NGWSP Water Commons – Water Contingency Plan meetings and many agencies have offered meeting locations.

Describe what efforts that you will undertake to ensure participation by a diverse array of stakeholders in the development of a plan or plan update. If specific stakeholders have not yet been identified, or if some sectors are not yet represented, explain how you will accomplish this in the first few months after an award. Support could include a description of key stakeholder interests in the planning area and what efforts that you will undertake to engage them in the planning process, including outreach to stakeholders or collaborating with other groups or partners.

The City of Gallup as proven with 13 regional agency commitment letters, will ensure participation of these diverse array of regional stakeholders. Once awarded this grant opportunity, we will initiate outreach - contacting each agency's POC, inviting them to each planned Gallup/NGWSP Water Commons – Drought Contingency Plan meetings. Our esteemed professional planning consultant: the Northwest New Mexico Council of Governments (NWNMCOG) is a highly skilled at engaging stakeholders in the planning process throughout McKinley County. NWNMCOG will make this grant opportunity strategic plan information available to stakeholder and water managers, disseminated through participating agency staff members.

V.A.3 Evaluation Criterion C- Project Implementation (20 points)

Up to 20 points may be awarded based on the extent to which the proposal supports the applicant's ability to meet the program requirements within the two-year timeframe, based on the following:

Describe the approach for addressing the six required elements of a Drought Contingency Plan within the two year timeframe. Please address the following:

Describe how each of the six required elements of a Drought Contingency Plan, as applicable, will be addressed within the two-year timeframe.

The professional sub-consultant engineering firm: CH2M will spearhead the Gallup/NGWSP Water Commons - Drought Contingency Plan's (6) Required Elements listed below that will be Included in and incorporated into the new Drought Contingency Plan.

- Establishment of a Drought Planning Task Force
- Development of a detailed work plan
- Development of a communication and outreach plan
- Drought Monitoring
- Vulnerability Assessment
- Mitigation Actions
- Response Actions
- Operational and Administrative Framework.
- Plan Update Process

NWNMCOG and CH2M Technical Proposals are addressed at the end of this document.

Describe how each of the six required elements of a Drought Contingency Plan, as applicable, will be addressed within the two year timeframe.

The six required elements of a Drought Contingency Plan mentioned above will be addressed within the two year timeframe with sub-consultant: CH2M Hill's proposal:

Task 2 - Data Collection and Analysis

CH2M will develop methods for defining drought for evaluation, including methods such as the Palmer index, increasing demand beyond expectation, or supply shortage. CH2M will collect and analyze available data, including identification of peak demands, large users, seasonal distribution, system capacity, future vulnerabilities, and potential future supplies. CH2M will conduct a vulnerability assessment to identify vulnerabilities such as well and system capacity limitations, water rights issues, storage limitations, "downstream" impacts to businesses and residents, and peaking demand during characterized events. CH2M will develop mitigation measure or ways to reduce vulnerability, such as the addition of wells and storage. CH2M will develop short-term drought response measures to mitigate impacts, such as setting actions associated with drought stages, and actions and policies to reduce demand and risk at each drought stage. Information will be documented in the DCP report described further in Task 3.

Task 3 – Report Preparation CH2M will prepare a Draft Drought Contingency Plan (DCP) and deliver it to the City for review. CH2M will meet with the City during a two (2) hour Draft DCP Workshop to provide an overview of the Draft DCP and discuss City comments. CH2M will address City comments and prepare a Final DCP.

CH2M will develop an addendum to the DCP after it has been presented to the Drought Task Force (DTF). The addendum will consist of an Operational Framework for execution of the DCP. The Operation Framework will include criteria to identify drought stages, responsibility for declaration of drought, and enforcement of set actions/policies.

Deliverables: will include: a Draft DCP (PDF copy delivered via email); a Final DCP (PDF copy delivered via email); and an Operational Framework addendum to the DCP Task 4 – DTF and Public Meeting Upon delivery of the Final DCP, CH2M will present the plan to the DTF. In addition, CH2M will present the DCP at one public meeting. Each meeting is assumed to be held at the City offices (or other appropriate location in Gallup) and be approximately 2 hours. CH2M's project manager or project engineer will present information at the meetings. During each of the meetings CH2M will provide an overview of the DCP, with the goal of providing an understanding of the planned actions to be taken during times of drought and proposed mitigation measure from the DCP to limit the impact of drought on the community.

Deliverables:

- Meeting Summary from Draft DCP Workshop (PDF copy delivered via email)
- Meeting Summary from the public meeting (PDF copy delivered via email)

Please include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates.

Estimated Project Schedule - Timeframe (2 years)

July – September 2016

- City Council passes Resolution (post-submission of grant application)
- Grant Award
- BOR approves grant and provides financial assistance agreement
- Quarterly grant report to BOR

July – September 2016 continued

- City Council accepts grant and executes financial assistance agreement
- Contact professional consultants
- Negotiate professional services contracts
- Quarterly grant report to BOR

October – December 2016

- Project Kickoff Meeting (Gallup City Hall)
- Coordinate and finalize the following Drought Contingency Planning steps:
 - Establishment of a Drought Planning Taskforce;
 - Development of a Detailed Work Plan; and,
 - Development of a Communication and Outreach Plan.
- Organize Meetings dates, times and locations of Taskforce meetings
- Monthly Check-In Meetings and Project Status reports and invoices
- Quarterly grant report to BOR

January – March 2017

- Data Collection and Analysis
- Develop of the Drought Monitoring and Vulnerability Assessment
- Draft Drought Contingency Plan (DCP)
- Monthly Check-In Meetings and Project Status reports and invoices
- Quarterly grant report to BOR

April 2016 – June 2017

- Draft DCP Workshop to review the Draft DCP
- Drought Task Force (DTF) Presentation
- Meeting Summaries from Draft DCP Workshop and Taskforce meetings
- Addendum based on City and DTF input, including Operational and Administrative Framework and Plan Update Process
- Monthly Check-In Meetings and Project Status reports and invoices
- Quarterly grant report to BOR

July - September 2017

- Final DCP presentation to the Drought Task Force (DTF)
- Final DCP presentation to the City Council as a public meeting (DTF)
- Quarterly grant report to BOR

October – December 2017

- Meeting Summaries from Final DCP Workshop and Council public meetings
- Monthly Check-In Meetings and Project Status reports and invoices
- Quarterly grant report to BOR

January – March 2018

- Submit finalized Gallup/NGWSP Water Commons - Drought Contingency Plan to BOR
- Quarterly grant report to BOR

April – June 2018

- Quarterly grant completion Report file 95% completion notice to BOR

July – September 2018

- Final grant completion notice and close-out report to BOR includes Drought Monitoring, Vulnerability Assessment, Mitigation Actions, Response Actions, Operational and Administrative Framework, Plan Update Process in the final Gallup/NGWSP Water Commons - Drought Contingency Plan report

Describe the availability and quality of existing data and models applicable to the proposed plan or plan update.

The availability and exceptional quality of existing NM Drought monitoring and models is found on the New Mexico (NM) Office of the State Engineer website in collaboration with the Governor's Drought Task Force. They have assembled a wealth of Drought monitoring data such as provides information across many sectors of our state. From experts in water, the environment, wildfires, New Mexico recreation, agriculture and health. The New Mexico current drought has impacted all New Mexicans. The Governor's Drought Task Force has The NM Drought Task Force posts online NM Drought information about water, economy, fire, recreation, health, and agriculture maps, studies, reports, statistics and monthly data to continuously monitor Drought conditions in New Mexico. The NMOSE and NM Drought Task Force website links to the New Mexico Environment Departments Surface Water Quality Bureau – "Drinking Water Watch", the USGS webpage, New Mexico Water Resources Research Institute to name a few collaborative agencies.

Gallup/NGWSP Water Commons - Drought Contingency Plan will utilize this NM Drought Task Force and NMOSE Drought websites to continuously monitor New Mexico Drought Patterns.

*Identify staff with appropriate **technical expertise** and describe their qualifications.*

NWNMCOG technical expertise and qualifications include:

Jeffrey G. Kiely, Executive Director's Role: Development of the Community & Outreach Plan and providing meeting facilitation services.

Expertise: Mr. Kiely brings over 25 years of water planning expertise in Northwest New Mexico and is a world-recognized facilitator with the Enlbra methodology. His expertise includes:

- Regional Water Plan: One of the main principles in drafting the Region 6 Water Plan that was adopted in 2004 by the Office of the State Engineer and Interstate Stream Commission. He is currently working with OSE/ISE on updating this plan and the Statewide Water Plan.
- NGWSP: He served for close to 20 years as the co-Chairman of the Navajo-Gallup Water Supply Project Technical Committee. He understands fully the connection of this project and BOR investment to long-term sustainability including drought mitigate and response actions.
- NADO: He is incoming President of the National Association of Development Organizations.

Evan Williams, Deputy Director's Role: Project Management and Staffing Support

Expertise: Mr. Williams provided project management services on the BOR Rural Water System appraisal level study for the McKinley County Water System Regionalization Project. He brings over 12 years in project management and process facilitation.

CH2M technical expertise and qualifications include:

Jennifer House - Principal-in-Charge

As Principal-in-Charge, Jennifer House is committed to providing the best team resources and knowledge to ensure we meet the Bureau of Reclamation project goals. Jennifer has spent the last 20 years successfully managing and delivering projects across New Mexico.

Jennifer's specialty is in community outreach, grantsmanship, and working with regulatory and funding agencies.

Greg Gates, PE - Project Manager & Quality Control

Greg Gates has worked on a wide variety of projects in both the water resources and environmental disciplines. As part of Reclamation's Colorado River Basin Water Supply and Demand Study, Greg led the demand task and co-led the Agricultural Conservation Workgroup as part of the Moving Forward process. In addition, Greg has an exceptional understanding of New Mexico groundwater, surface water, and water rights and has been engaged in the City's G-22 application. Greg has been the project manager and quality control reviewer for several Title XVI feasibility studies for the Albuquerque Bernalillo County Water Utility Authority, which have been used to apply for Reclamation funding. Greg also was part of a Reclamation WaterSMART drought contingency plan for the Eastern New Mexico Water Utility Authority (ENMWUA).

Jim Honea, PE - Assistant Project Manager & Project Engineer

Jim Honea is a water resources engineer with 9 years of experience in water supply planning. He recently completed a water conservation plan for the ENMWUA. Jim also serves as the Assistant Gallup/NGWSP "Water Commons"

project manager for the Eastern New Mexico Rural Water System (ENMRWS) project. Jim brings efficient project delivery, public communication experience, and excellent technical writing skills.

Sean Menk, EIT - Engineering Support

Sean Menk is a water resources engineer with 4 years of experience. Sean has experience in a variety of water resources projects, including alternatives evaluation, data collection, and data analysis. Sean recently assisted in developing historical pumping data for the City of Gallup's G-22 application. He also assisted with an alternatives evaluation for the City of Rio Rancho WWTP No. 1 rebuild. He has worked with both Jim and Greg on a number of different projects.

Organizational Experience & Professional Consultants

- **Elizabeth Barriga, Environmental Program Coordinator, City of Gallup**
Utilities Engineering, PO Box 1270, Gallup, NM 87301, PHONE (505) 863-1393
Elizabeth Barriga received her Bachelor's Degree at University of California Davis in 1987 and her Masters of Public Administration from Central Michigan University in 2004. She is responsible for citywide conservation programs, water waste, NMWCA treasurer, education and public outreach, planning, grant administration, program management, and budget preparation among other duties. Elizabeth Barriga currently serves as the Environmental Program Coordinator for the City of Gallup. Elizabeth will be instrumental in carrying out the grant administration work.
- **Richard Matzke, Acting Executive Water & Sanitation Director, City of Gallup**
Utilities Engineering, PO Box 1270, Gallup, NM 87301, PHONE (505) 863-1285
Interim, Acting Utility Director who oversees all City of Gallup Water & Sanitation Utility, and Electric Department critical daily operations and budgets which include: Water, Solid Waste, Wastewater, Electrical, Water Conservation, Environmental Program/s, and Utilities Engineering. Updates the City of Gallup combined utility financial budget to maximize City improvements and sustains Gallup's community growth. Extensive experience with public-private partnerships for community water, solid waste, wastewater, and electric development. Oversees multi-million dollar City of Gallup Capital Improvement Projects, Navajo Gallup Water Supply Project (NGWSP), and numerous city infrastructure contracts. Plans to secure a sustainable water and electric supply for the City of Gallup, giving updates on City Capital Improvement Plans, oversees planning documents & construction plans, and implementation of effective conservation programs for the City of Gallup.
- **Northwest New Mexico Council of Governments (NMNMCOG) – Evan Williams,**
106 W Aztec Ave, Gallup, NM 87301, (505) 722-4327, Fax (505) 722-9211
- **CH2M – Greg Gates**
3721 Rutledge Rd NE; B-1; Santa Fe, NM 87504-5102, (505) 827-6120

(Please see NWNMCOG and CH2M Technical Proposals on the last pages of this document)

What is the significance of the collaboration/support?

What is the significance of the collaboration/support?

The significance of collaboration / support for the City of Gallup and NGWSP water stakeholders depend on the technical expertise of professional firms such as the NWNMCOG and CH2M to lead our region to create a collaborative Drought Contingency Plan process. Without outside technical expertise, this Gallup/NGWSP Water Commons - Drought Contingency Plan would not become a reality.

V.A.4 Evaluation Criterion D - Nexus to the Bureau of Reclamation (10 points)

Describe the nexus between the proposed project and a Reclamation project or activity, including:

- *How is there a Reclamation project, facility, or activity within the planning area?*

YES – The project was authorized for construction by the Omnibus Public Lands Management Act of 2009 (P.L. 111-11) on March 30, 2009 as a major component of the Navajo Nation San Juan River Basin Water Rights Settlement in New Mexico.

The Gallup/NGWSP Water Commons - Drought Contingency Plan is connected to the Navajo-Gallup Water Supply Project (NGWSP). NGWSP is a The Navajo-Gallup Water Supply Project will provide a reliable long-term municipal and industrial water supply to the eastern section of the Navajo Nation, southwestern portion of the Jicarilla Apache Nation, and the City of Gallup, New Mexico. These areas currently rely on rapidly depleting groundwater of poor quality and inadequate to meet current and future demands. The City of Gallup's aquifers are rapidly being depleted, on average of 200 feet in ten years, and most estimates expect water shortages for the city in the near future.

The project will divert 37,376 acre-feet of water annually from the San Juan River Basin and convey it via approximately 280 miles of pipeline, several pumping plants, and two water treatment plants. This water supply will support a future population of approximately 250,000 people by the year 2040. A water service contract between the Jicarilla Nation and the City of Gallup will provide the city with up to 7,500 acre-feet of water annually was approved.

NGWSP allows for future indexing of costs based upon engineering indices. The Claims Resolution Act (P. L. 111-291) provides access to up to \$60 million in mandatory funding for the project in each of fiscal years 2012, 2013, and 2014. The mandatory funding is designated for several water rights settlements of which NGWSP is the first priority (in accordance with P.L. 111-11). The City of Gallup will have to repay, and currently is paying the BOR its portion of the project. Until then, Gallup continues to rely on groundwater mining for a water supply.

As one of the 14 infrastructure projects identified by the Obama Administration to be expedited through the permitting and environmental review process, Reclamation is working with federal, non-federal, and Tribal entities to facilitate construction activities as soon as possible. In addition to Reclamation, the city of Gallup, Navajo Nation, and Indian Health Service will simultaneously perform design and construction tasks for various project reaches under their own authorities in accordance with financial assistance agreements with Reclamation.

- *Is the planning area in the same basin as a Reclamation project, facility, or activity?*

YES, the water planned for the NGWSP pipeline will come from the San Juan River a tributary of the Colorado River. The area includes an approximate 90 mile reach of the San Juan River valley from Navajo Dam, about 30 miles east of/upstream from Farmington, New Mexico.

- *In what way will the proposed plan benefit a basin where a Reclamation project, facility, or activity is located?*
NGWSP will provide potable running water to Native Americans, more than 40 percent of Navajo households are currently relying on potable water hauling from the back of their pick-up trucks, to their reservation residential houses to meet daily fresh water needs. These Native Americans currently have no running water from pipes available.
- *Does the proposed plan support implementation of a relevant Department of the Interior initiative?*
The project was authorized for construction by the Omnibus Public Lands Management Act of 2009 (P.L. 111-11) on March 30, 2009 as a major component of the Navajo Nation San Juan River Basin Water Rights Settlement in New Mexico.
- *Does the applicant receive Reclamation project water?*
The Bureau of Reclamation NGWSP project water is currently in the middle of planning, design, and construction stages. NGWSP is being designed with collaboration from the BOR in Farmington, NM office, the City of Gallup, NTUA, IHS, and the Navajo Nation.
- *Will the project help Reclamation meet trust responsibilities to any tribe(s)?*
YES – The NGWSP Project is a component necessary to implement the Navajo Settlement Agreement authorized by Congress in P.L. 111-11, meeting the Department of Interior’s trust responsibility.

Required Permits and Approvals

The Gallup/NGWSP Water Commons - Drought Contingency Plan will be in compliance with the National Environmental Policy Act (NEPA), ESA, NHPA and all applicable state, federal and local environmental, cultural, resource protection laws and regulations including the Clean Water Act.

Currently, any discharges from the City of Gallup’s Waste Water Treatment Plant are in compliance with its NPDES permit which was developed based on federal and state regulations.

This is Water Commons - Drought Contingency Plan project, being a regional drought plan, does not need engineering design or permits.

Commitment Letters

The *Gallup/NGWSP Water Commons - Drought Contingency Plan* has 11 letters of support.

- The Navajo Nation Water Management Branch
- New Mexico Office of the State Engineer
- Northwest New Mexico Council of Governments
- NTUA
- McKinley County
- Navajo Area Indian Health Services
- Rehoboth McKinley Christian Health Care Services
- Gallup Police Department
- Gallup Fire Department
- Gallup Risk/Emergency Management
- Gallup Water + Sanitation & Electric Departments
- Gallup McKinley County Chamber of Commerce
- CH2M Hill

Official Resolution

is going before City Council 4/26/2016. After being signed, this Resolution will be mailed to the BOR.

RESOLUTION OF THE GALLUP CITY COUNCIL

RESOLUTION No. R2016-_____

Approving submission of a Bureau of Reclamation (BOR) Grant # R16-FOA-DO-005 Application for the City of Gallup *Gallup/NGWSP "Water Commons" Drought Contingency Plan*

WHEREAS, this Resolution is to approve the new submission of the *Gallup/NGWSP "Water Commons" Drought Contingency Plan* # R16-FOA-DO-005 grant application between the Bureau of the Reclamation (BOR) and the City of Gallup, and;

WHEREAS, the City Gallup recognizes that the amount of water available to the City and its water utility customers is limited and subject to depletion during periods of extended drought. Drought also directly impacts NGWSP stakeholders and the Bureau of Reclamation's ability to deliver water and power to contractors, central to Reclamation's mission;

WHEREAS, if awarded, this planning process will create and develop a Drought Planning Task Force, a Detailed Work Plan and a Communication and Outreach Plan. Important components of this *Gallup/NGWSP "Water Commons" Drought Contingency Plan* and;

WHEREAS, this *Gallup/NGWSP "Water Commons" Drought Contingency Plan* has widespread, collaborative, multiple communitywide stakeholder support, and;

WHEREAS, the *Gallup/NGWSP "Water Commons" Drought Contingency Plan* will include elements of the National Drought Mitigation Center (NDMC) 10-Step Drought Planning Process – Stakeholders & Plan Objectives & Principals; Historical Drought & Impact Assessment; Drought Vulnerability Assessment; Drought Mitigation & Response Strategies; Drought Stages, Trigger Points & Response Targets; Staged Drought Response Program; Implementation and Monitoring; Plan Review and Updates; Implementation and;

WHEREAS, *Gallup/NGWSP "Water Commons" Drought Contingency Plan* total cost is estimated to be \$70,000 which includes a \$35,000 Federal Bureau of Reclamation grant funding, matched with \$5,000 In-Kind Water Conservation Coordinator grant administrative staff hours, and Water & Sanitation Department In-Kind expense of \$30,000. The NWNMCOG will be the lead professional consultant, and;

NOW THEREFORE, BE IT RESOLVED that the Governing Body of the City of Gallup does here-by approve the submission, and; if awarded, implementation of the *Gallup/NGWSP "Water Commons" Drought Contingency Plan* BOR funding application and partnership between the City of Gallup and the Bureau of Reclamation;

PASSED, ADOPTED AND APPROVED this ____ day of April 26, 2016, in a duly called meeting of the Gallup City Council at which a quorum was present, at Gallup, New Mexico, by a vote of ____ in favor, ____ opposed, and ____ abstaining.

BY: _____
Jackie McKinney, Mayor
City of Gallup

ATTEST: _____
Alfred Abeita, City Clerk

Funding Plan

Summary of non-Federal & Federal funding sources

FUNDING SOURCES	Funding Amount
Non-Federal Entities	
1. Project Administrator, Plans, Coordinates <i>Drought Contingency Plan</i> for 2 years	\$5,000
2. COG hired as Project Lead Consultant for: <i>Gallup/NGWSP "Water Commons" Drought Contingency Plan</i>	\$30,000
3. CH2M sub-contractor hired by COG as Sub-Consultant to create Gallup/NGWSP "Water Commons" Drought Contingency Plan	
Non-Federal Entities SUBTOTAL:	\$35,000
Other Federal Entities	\$0
Requested Reclamation Funding:	
1. COG	\$35,000
2. CH2M Hill (sub-consultant to COG)	
Requested Reclamation Funding:	\$35,000
Total Project Funding:	\$70,000

Funding Plan

The City of Gallup allocated In-Kind \$35,000 project cost share which will be paid by the City of Gallup to NWNMCOG as the lead professional consultant.

BUDGET PROPOSAL
City of Gallup / Water Commons- Drought Contingency Plan
 (two years) September 2016 through September 2018

EXPENSE	breakdown	Federal Share	City of Gallup Cost Share	Partner
Salaries & Wages (City of Gallup)				
Employee 1: Grant Administrator for program for 2 years	21.05 / hr	(= 237.52 hours / yr. = 14.8 days of work per year)	\$5,000.00	City of Gallup
Fringe Benefits				
Travel				
Materials & Supplies				
Other				
Contractual (COG)				
Salaries & Wages				
COG Employee : Jeff Kiely	See COG Proposal	\$3,060		COG
COG Employee : Evan Williams	See COG Proposal	\$19,440		COG
CH2M Employee : Greg Gates	See CH2M Proposal	\$12,500	\$6,642	CH2M
CH2M Employee : Sean Menk	See CH2M Proposal		\$19,519	CH2M
CH2M Employee : Gretchen Sage	See CH2M Proposal		\$703	CH2M
CH2M Employee : Connie Hathaway	See CH2M Proposal		\$474	CH2M
CH2M Employee : Laura Locicero	See CH2M Proposal		\$915	
Travel				
CH2M :	See CH2M Proposal		\$1,747.00	CH2M
Other				
		\$35,000	\$35,000	
Total Direct Costs:		\$35,000	\$35,000	
TOTAL PROJECT COSTS:		\$70,000		

Budget Narrative

City of Gallup - Project Grant Administrator

The project manager will coordinate with Professional Consultants, help with meetings of stakeholder planning and set-up, and create BOR quarterly project reports for two years. This City of

Budget Narrative continued

Gallup employee's salary will be \$5,000 for two years of the program. The City of Gallup is providing this in-kind service as a match for the total funding of the project.

Professional Consultants

The Northwest New Mexico Council of Governments (NWNMCOG) will be the lead Professional Consultant to create the NGWSP regional "Water Commons" Drought Contingency Plan. CH2M will be sub-consultant to NWNMCOG to simplify a strong Drought Resiliency Professional Consultant collaborative planning team. \$35,000 of the BOR Federal Share will be paid to NWNMCOG, who in turn will pay CH2M as a sub-consultant a grand total of \$42,500 from both In-Kind City of Gallup and BOR funds. The City of Gallup will use \$22,500 of In-Kind funds to also pay the lead consultant NWNMCOG.

Please see a detailed breakdown of all Consultant and Sub-Consultant tasks, timeline, budget estimate of time and rates is found on the last pages of this application.

Consultant Proposals



NORTHWEST NEW MEXICO COUNCIL OF GOVERNMENTS

1 PROPOSAL

The Northwest New Mexico Council of Governments (COG) is responding to the City of Gallup for a proposal to assist with the management and development of a Drought Contingency Plan under a potential Bureau of Reclamation (BOR) “WaterSMART: Drought Contingency Planning Grant – FY15”.

The COG will provide:

- Overall project and grant management services,
- Process and meeting facilitation,
- Formation and staffing of a Drought Task Force; and
- Development and implementation of an innovative Communication & Outreach Plan.

2 STAFFING

Jeffrey G. Kiely, Executive Director

Role: Development of the Community & Outreach Plan and providing meeting facilitation services.

Expertise: Mr. Kiely brings over 25 years of water planning expertise in Northwest New Mexico and is a world-recognized facilitator with the Enlibra methodology. His expertise includes:

- **Regional Water Plan:** One of the main principles in drafting the Region 6 Water Plan that was adopted in 2004 by the Office of the State Engineer and Interstate Stream Commission. He is currently working with OSE/ISE on updating this plan and the Statewide Water Plan.
- **NGWSP:** He served for close to 20 years as the co-Chairman of the Navajo-Gallup Water Supply Project Technical Committee. He understands fully the connection of this project and BOR investment to long-term sustainability including drought mitigate and response actions.
- **NADO:** He is incoming President of the National Association of Development Organizations.

Evan Williams, Deputy Director

Role: Project Management and Staffing Support

Expertise: Mr. Williams provided project management services on the BOR Rural Water System appraisal level study for the McKinley County Water System Regionalization Project. He brings over 12 years in project management and process facilitation.

3 SCOPE OF SERVICES

The Northwest New Mexico Council of Governments (COG) has aligned its scope of services to that of the proposed technical consultant and engineering firm, CH2M HILL Engineers, Inc. (CH2M). This was to eliminate duplication and create the most efficient approach to this project.

TASK 1 – Project Management

The COG will provide overall project management services, including staffing support for the Project Kickoff Meeting at the City of Gallup with key staff. The Project Kickoff Meeting will include CH2M's technical team members, COG staffing, and City representatives to identify project goals, communications pathways, and reiterate project scope and schedule. During the Project Kickoff Meeting, the team will available data and discuss a preliminary list of methods that could be used to define drought. Project management services will include a monthly check-in meeting with the City designated project manager and CH2M staff. COG will work with City on all needed reporting.

TASK 2 – Data Collection and Analysis

This task will be the responsibility of CH2M, see CH2M proposal.

TASK 3 – Report Preparation

The COG will work with CH2M to facilitate and document the meetings described under this task in the CH2M proposal.

TASK 4 – Drought Planning Task Force (DTF) and Public Meeting

The COG will work with CH2M to facilitate and document the meetings described under this task in the CH2M proposal.

TASK 5 – Drought Planning Task Force Formation

The COG will work with City staff to identify, engage, and recruit a diverse and multi-sector task force. The COG will utilize grassroot stakeholders both local and regional to improve and drive the development of the Drought Contingency Plan. The COG will utilize a similar recruitment approach as the ISC Regional Water Plan, including factsheet, Youtube video, website, toolbox, and personally inform members one-on-one. The COG in its experience believes that inviting folks to a big meeting on Drought does not lead to invested involvement. The stakeholder list should representation key folks from:

- Agricultural – groundwater user
- Agricultural – surface water user
- Local and Tribal Government Officials
- Environmental interests
- Federal and State agencies
- Business and private sector interests
- Water associations and Rural
- Tribal including Navajo Tribal Utility Authority
- Watershed interest

TASK 6 – Communication & Outreach Plan

The COG will work with City staff to draft a Community & Outreach Plan. Our approach is to heavy on quality involvement and engagement and light on meetings. The Community & Outreach Plan will include:

- The **Bi-Lingual Promotional Plan (BLPP)** will be developed to promote Drought Contingency Plan and inform stakeholders in primarily English and Navajo languages. The intent of the plan is to provide opportunities to keep stakeholders and the public up to speed on the project.
- A **Stakeholder Outreach Plan (SOP)** will be developed to specify all project outreach activities, levels of support and staffing/resource commitments among Drought Planning Task Force (DTF) and Project Team members. The Project Team will conduct a survey of executive level managers at the stakeholder agencies to determine their level of understanding, commitment, potential concerns and appropriate communications, protocols, and methodologies.
- **Public Outreach:** The Project Team will design, schedule, promote, lead, document and provide English/Navajo project education and outreach services for a series of interactive workshops and meetings in the Water Commons area. These shall take place at appropriate points in the planning process after the PAC and Project Team have been established. The intent is to help community members to understand the goal of the Drought Contingency Plan, the planning process, and the protocols involved with drought, climate change, and mitigation and response actions. The public events will serve a number of specific purposes, including:
 - Giving the public opportunities to identify issues of concern and opportunities for improvements related to drought and community resiliency at the outset of the planning process.
 - Providing opportunities to share information about responses proposed in the plan area over short-, mid, and long-term horizons.
 - Providing opportunities for the public to make comments, express concerns, or offer other suggestions regarding drought, data monitoring, actions, and framework affecting their communities.
 - The Project Team will develop and maintain a list of attendees of public events and other individuals who wish to receive meeting materials and notification that events will be taking place.

4 SCHEDULE

The schedule will follow the timeline provided by the City in the grant application. If awarded and based on the Communication & Outreach Plan, these activities and events will be added to that overall timeline.

5 BUDGET

The COG proposes to provide the services outlined in this proposal for \$22,500, including all applicable taxes. Table 1, breakdowns this down by task and by COG staff.

Northwest Regional Water Plan Update – Proposed Steering Committee

Members of the steering committee should fulfill one or more of the following criteria:

- Be or represent a water right owner.
- Be directly affected by the outcome of water management decisions.
- Have or represent the authority to make decisions and implement outcomes.
- Represent one or more of the water use groups listed below.

Water User Group ^a	Name ^b	Organization / Representation
Agricultural – groundwater user	Kathy Landers, County Extension Agent	McKinley County Extension Office New Mexico State University
Agricultural – groundwater user	Dudley Byerley, Board President	McKinley Soil & Water Conservation District
Agricultural – surface water user		
County government	Doug Decker, County Attorney	McKinley County
County Government	Carol Bowman-Muskett, Commission Chair	McKinley County
County Government	Kathy Landers	McKinley County/NMSU Extension
County government	Pat Simpson, Commissioner	Cibola County Commission
County government	Bob Gallagher, Interim Cibola County Manager (Judy Horacek, Projects Manager may be assigned)	Cibola County Manager
County government	Lloyd Felipe, Commissioner	Cibola County Commission
Environmental interest	Eytan Krasilovsky	Forest Guild
Environmental interest		Bluewater Coalition

^a Updated Regional Water Planning Handbook: Guidelines to Preparing Updates to New Mexico Regional Water Plans (NM ISC, 2013), Section C.

^b Regions may appoint multiple representatives in each category, as desired and appropriate.

Water User Group ^a	Name ^b	Organization / Representation
Environmental interest		NM Wilderness Alliance (?)
Environmental interest		Other? ask Forest Service and SWCD folks if they know of any other active groups (some NGOs work on projects in the watersheds)
Extractive industry	Joe Lister, Mine Manager	Mt. Taylor Mine, Rio Grande Resources
Federal agency (technical support to the region)	Pat Page, Project Leader	Navajo-Gallup Water Supply Project Western Colorado Area Office, US Bureau of Reclamation
Federal agency (technical support to the region)	Bernadette Tsosie, Hydrologist	Bureau of Indian Affairs
Federal agency (technical support to the region)	Rudy Keedah	Bureau of Indian Affairs
Federal agency (technical support to the region)	David Shoultz	Navajo Area Indian Health Service (IHS officer, assigned to NTUA)
Federal agency (technical support to the region)	Jeanne Dawson District Ranger	U.S. Forest Service/Cibola NF
Federal agency (technical support to the region)	Steve Etsitty, Executive Director	Navajo EPA
Federal agency (technical support to the region)	Herilene Yazzie	Bureau of Indian Affairs
Federal agency (technical support to the region)	Richard Montoya, District Conservationist	NRCS Lava Soil & Water Conservation District
Federal agency (technical support to the region)	Evert Oldham, Rural Development Area Director	USDA
State agency (technical support to the region)	Attila Ballity	Park Service/EI Morro
State agency (technical support to the region)		NM State Land Office

^a Updated Regional Water Planning Handbook: Guidelines to Preparing Updates to New Mexico Regional Water Plans (NM ISC, 2013), Section C.

^b Regions may appoint multiple representatives in each category, as desired and appropriate.

Water User Group ^a	Name ^b	Organization / Representation
State agency (technical support to the region)	David Bishop	New Mexico Environment Department
State agency (technical support to the region)	Jeff Kiely, Executive Director Evan Williams, Deputy Director	Northwest NM Council of Governments
Local (retail) business	David Hinkle, President & CEO	Gallup/McKinley County Chamber of Commerce
Local (retail) business	Dominic Orozco, President Tessa Jimenez	Grants Cibola Chamber of Commerce
Local (retail) business	Eileen Yarbrough, Exec. Director	Cibola Communities Economic Development Foundation
Local (retail) business	Patty Lundstrom, Executive Director	Greater Gallup Economic Development Corporation
Local (retail) business	Michael Sage, Deputy Director	Greater Gallup Economic Development Corporation
Local (retail) business	Miles Morgan, Water Resources Engineer	Tri-State Generation & Transmission
Local (retail) business	Mack Juarez, Member Services Manager	Continental Divide Coop
Municipal government	Paul Peña, Public Works Director	City of Grants
Municipal government	Marcella Sandoval, Village Manager	Village of Milan
Municipal government	Vincent Tovar, Executive Director	Gallup Joint Utilities, City of Gallup
Other groups as identified by the steering committee	Lee Maestas, Board President	Cebolleta Land Grant

^a Updated Regional Water Planning Handbook: Guidelines to Preparing Updates to New Mexico Regional Water Plans (NM ISC, 2013), Section C.

^b Regions may appoint multiple representatives in each category, as desired and appropriate.

Water User Group ^a	Name ^b	Organization / Representation
Other groups as identified by the steering committee	Johny Cresto	Gallup McKinley County Schools – Director of Construction
Other groups as identified by the steering committee	Marc DePauli	Engineer working with various municipalities
Rural water provider	Sherry Botkin	Thoreau Water & Sanitation District
Rural water provider	Mike Daly	White Cliffs MDWCA
Tribal (as applicable)	Steve Juanico	Acoma Pueblo
Tribal (as applicable)	Dr. Sharon Hausam, Director	Tribal Planning & Development Pueblo of Laguna
Tribal (as applicable)	Kirk Bemis	Water Works Department Pueblo of Zuni
Tribal (as applicable)	Jason John, Director	Department of Water Resources Navajo Nation
Tribal (as applicable)	Roger Slate	Navajo Tribal Utility Authority
Tribal (as applicable)	Ben Cowboy	Navajo Water Rights Commission
Tribal (as applicable)	Michelle Begay	IHS
Tribal (as applicable)	Gil Arviso, Commissioner	Navajo Water Rights Commission
Watershed interest		Zuni River Watershed
	Larry Winn	McKinley & Lava SWCD

^a Updated Regional Water Planning Handbook: Guidelines to Preparing Updates to New Mexico Regional Water Plans (NM ISC, 2013), Section C.

^b Regions may appoint multiple representatives in each category, as desired and appropriate.

Sub-Consultant Proposal

Attachment 1 Scope of Work Drought Contingency Plan

CH2M HILL Engineers, Inc. (CH2M) will provide the engineering services described in this Scope of Work for the City of Gallup (City).

Project Staffing

CH2M proposes the following technical staff to support this project:

Jennifer House Principal-in-Charge	As Principal-in-Charge, Jennifer House is committed to providing the best team resources and knowledge to ensure we meet the Bureau of Reclamation project goals. Jennifer has spent the last 20 years successfully managing and delivering projects across New Mexico. Jennifer's specialty is in community outreach, grantsmanship, and working with regulatory and funding agencies.
Greg Gates, PE Project Manager & Quality Control	Greg Gates has worked on a wide variety of projects in both the water resources and environmental disciplines. As part of Reclamation's Colorado River Basin Water Supply and Demand Study, Greg led the demand task and co-led the Agricultural Conservation Workgroup as part of the Moving Forward process. In addition, Greg has an exceptional understanding of New Mexico groundwater, surface water, and water rights and has been engaged in the City's G-22 application. Greg has been the project manager and quality control reviewer for several Title XVI feasibility studies for the Albuquerque Bernalillo County Water Utility Authority, which have been used to apply for Reclamation funding. Greg also was part of a Reclamation WaterSMART drought contingency plan for the Eastern New Mexico Water Utility Authority (ENMWUA).
Jim Honea, PE Assistant Project Manager & Project Engineer	Jim Honea is a water resources engineer with 9 years of experience in water supply planning. He recently completed a water conservation plan for the ENMWUA. Jim also serves as the assistant project manager for the Eastern New Mexico Rural Water System (ENMRWS) project. Jim brings efficient project delivery, public communication experience, and excellent technical writing skills.

This proposal including all data, information, concepts, and approaches contained herein is proprietary information and shall not be disclosed to third parties without the express consent of CH2M HILL Engineers, Inc..

Sean Menk, EIT Engineering Support	Sean Menk is a water resources engineer with 4 years of experience. Sean has experience in a variety of water resources projects, including alternatives evaluation, data collection, and data analysis. Sean recently assisted in developing historical pumping data for the City of Gallup's G-22 application. He also assisted with an alternatives evaluation for the City of Rio Rancho WWTP No. 1 rebuild. He has worked with both Jim and Greg on a number of different projects.
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Scope of Services

CH2M will perform the services described below related to the development of a Drought Contingency Plan.

Task 1 – Project Management and Quality Control

CH2M will provide project management (PM) and quality control (QC) services. PM services will include a Project Kickoff Meeting at the City's offices. The Project Kickoff Meeting will include CH2M's technical team members and City representatives to identify project goals, communications pathways, and reiterate project scope and schedule. During the Project Kickoff Meeting, the team will discuss available data and discuss a preliminary list of methods that could be used to define drought. PM services will also include a monthly check-in meeting with the City designated project manager and monthly project status reports and invoices.

Deliverables:

- Monthly Check-In Meeting
- Monthly Project Status Reports and Invoices

Task 2 – Data Collection and Analysis

CH2M will develop methods for defining drought for evaluation, including methods such as the Palmer index, increasing demand beyond expectation, or supply shortage. CH2M will collect and analyze available data, including identification of peak demands, large users, seasonal distribution, system capacity, future vulnerabilities, and potential future supplies. CH2M will conduct a vulnerability assessment to identify vulnerabilities such as well and system capacity limitations, water rights issues, storage limitations, "downstream" impacts to businesses and residents, and peaking demand during characterized events. CH2M will develop mitigation measure or ways to reduce vulnerability, such as the addition of wells and storage. CH2M will develop short-term drought response measures to mitigate impacts, such as setting actions associated with drought stages, and actions and policies to reduce demand and risk at each drought stage. Information will be documented in the DCP report described further in Task 3.

Deliverables:

- Data request to the City

This proposal including all data, information, concepts, and approaches contained herein is proprietary information and shall not be disclosed to third parties without the express consent of CH2M HILL Engineers, Inc..

Task 3 – Report Preparation

CH2M will prepare a Draft Drought Contingency Plan (DCP) and deliver it to the City for review. CH2M will meet with the City during a two (2) hour Draft DCP Workshop to provide an overview of the Draft DCP and discuss City comments. CH2M will address City comments and prepare a Final DCP.

CH2M will develop an addendum to the DCP after it has been presented to the Drought Task Force (DTF) in Task 4. The addendum will consist of an Operational Framework for execution of the DCP. The Operational Framework will include criteria to identify drought stages, responsibility for declaration of drought, and enforcement of set actions/policies.

Deliverables:

- Draft DCP (PDF copy delivered via email)
- Final DCP (PDF copy delivered via email)
- Operational Framework addendum to the DCP

Task 4 – DTF and Public Meeting

Upon delivery of the Final DCP, CH2M will present the plan to the DTF. In addition, CH2M will present the DCP at one public meeting. Each meeting is assumed to be held at the City offices (or other appropriate location in Gallup) and be approximately 2 hours. CH2M's project manager or project engineer will present information at the meetings. During each of the meetings CH2M will provide an overview of the DCP, with the goal of providing an understanding of the planned actions to be taken during times of drought and proposed mitigation measure from the DCP to limit the impact of drought on the community.

Deliverables:

- Meeting Summary from Draft DCP Workshop (PDF copy delivered via email)
- Meeting Summary from the public meeting (PDF copy delivered via email)

Schedule

CH2M understands the important nature of this project. It is our intent to provide the City with a motivated project team to clarify the project scope and move quickly into executing the DCP following the Bureau of Reclamation's WaterSMART grant process.

The Draft DCP will be delivered three (3) months after notice to proceed (NTP). It is assumed that the City will meet with CH2M for the Draft DCP Workshop within five (5) days of receipt of the Draft DCP, and that the City will provide one set of review comments within five (5) working days of the Draft DCP Workshop. CH2M will deliver the Final DCP within ten (10) working days of receipt of all City review comments. Once the Final DCP is delivered, CH2M will work with the City and/or its consultants to schedule a presentation to the DTF and a presentation at a public meeting. The Operational Framework addendum to the DCP will be delivered within ten (10) working days of the DTF Workshop. Meeting summaries from the Public Meeting will be delivered within five (5) working days of the Public Meeting.

Compensation

CH2M proposes to provide the services outlined in this proposal for the City of Gallup Drought Contingency Plan on a Time & Material (T&M) basis for \$42,500, excluding New Mexico Gross Receipt Tax (NMGR), as further shown in Table 1. Labor will be billed at a raw labor multiplier of 3.1 and Subconsultant expenses billed at actual cost plus multiplier of 1.1 (if subconsultants needed). CH2M will

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make reasonable efforts to complete the work within this budget and will keep the City informed of progress toward that end so that the budget or work effort can be adjusted if necessary.

These services will be performed under the terms and conditions in CH2M's proposed Standard Agreement for Professional Services, Attachment 2. Additional services can be negotiated through mutual written agreement of both parties.

Table 1, Drought Contingency Plan Compensation Summary			
Role	Team Member	Effort Hours	Fee Summary
Project Manager / Quality Control Reviewer	Greg Gates	47	
Assistant Project Manager / Project Engineer	Jim Honea	91	
Engineering Support	Sean Menk	152	
Contract Administration	Gretchen Sage	4	
Project Accounting	Connie Hathaway	6	
Project Administration	Laura Locicero	8	
Estimated Hours Total:		308	
Estimated Labor:			\$ 42,000
Estimated Travel & Expenses:			\$ 500
Estimated Total Fee*:			\$ 42,500
*Amount shown in this table excludes NMGR.			

Assumptions/Clarifications

As a basis for this proposal, the following assumptions have been considered:

- Timely completion of the project will depend on the City's response time to questions and data requests from CH2M.
- CH2M assumed a five (5) month project duration and this schedule is the basis for the proposal including activities such as project management and accounting. The final project schedule will be developed with the City's input after the grant application has been processed and the project timing is better understood.
- The fee was developed based on 2016 labor rates. If work on this project extends past March 2017, the rates for each team member will be revised to the 2017 labor rates.

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- The City will provide data to facilitate timely project completion in accordance with the project schedule.
- CH2M assumed one (1) monthly check-in meeting per month completed over the phone.
- CH2M assumed time and travel from Albuquerque for four (4) visits to Gallup, to include the Project Kickoff Meeting, the Draft DCP Workshop, the DTF Chartering Workshop, and one (1) public meeting.
- CH2M will participate in a workshop with the DTF that will last up to two (2) hours. During this workshop, CH2M will present the Final DCP.
- CH2M will participate and present the DCP at one (1) public meeting to communicate the findings of the Drought Contingency Plan to the public. Public meetings will be held in Gallup at a location to be determined and coordinated by the City and/or its consultants. CH2M will prepare for and present at the meeting. CH2M assumes that the public meeting will require up to six (6) hours of preparation and the public meeting will be up to two (2) hours in length.
- CH2M will not be responsible for following up on public comments or questions. No modifications to the DCP based on public comments or comments from the DTF are included in this scope.
- The Operational Framework will be finalized and agreed to by the DTF during the DTF Chartering Workshop. Once delivered, modifications to the DCP and Operational Framework are the responsibility of the City of Gallup.

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CH2M HILL'S OFFICE ADDRESS: 3721 Rutledge Road, NE Suite B1, Albuquerque, NM 87109
CH2M HILL'S PROJECT NO.:
PROJECT NAME: Drought Contingency Plan
CLIENT: City of Gallup (City or CLIENT)
CLIENT'S ADDRESS: P.O. Box 1270, Gallup, NM 87305

CLIENT requests and authorizes CH2M HILL Engineers, Inc. (hereinafter "CH2M HILL") to perform the following Services:

Scope of Services

Refer to Attachment 1, Scope of Work for Drought Contingency Plan dated March 18, 2016.

Compensation

Refer to Attachment 1, Scope of Work for Drought Contingency Plan dated March 18, 2016.

Schedule

Refer to Attachment 1, Scope of Work for Drought Contingency Plan dated March 18, 2016.

Other Terms

None.

Services covered by this AGREEMENT will be performed in accordance with the Provisions and any attachments or schedules. This AGREEMENT supersedes all prior agreements and understandings and may only be changed by written amendment executed by both parties.

CLIENT:

Signature _____
Name (printed) _____
Title _____
Date _____

CH2MHILL Engineers, Inc.:

Signature _____
Name (printed) _____
Title _____
Date _____