RE: Proposal for Coconino County, Arizona Feasibility Study

Dear Ms. Kiefel,

I am pleased to submit the attached proposal in accordance with the Water Resources Reform and Development Act of 2014 to complete the Coconino County, Arizona Feasibility Study (formerly referred to as the North Central Arizona Water Supply Feasibility Study). We are asking that our proposal be included in the Annual Report to be issued by the USACE in February 2015.

The Coconino Plateau Watershed Partnership took unanimous action at their October 31st meeting to submit this proposal advocating a joint effort between the USACE and Reclamation to complete the study. The study has already had a significant amount of Federal and non-Federal monies directed toward it. We are proposing that the original scope, as proposed by Reclamation, be reduced to the level identified in the proposal so that a useable, portable study will result that can continue to be used for water resource planning on the Coconino Plateau.

Thank you. Please direct any questions or comments regarding our proposal to the Partnership’s coordinator Ron Doha. His contact information is rdoba@cox.net or he may be reached by phone at 480-299-5764.

Sincerely,

Mandy Metzger, Coconino County Supervisor
Board Chair
Feasibility Study Proposal for Inclusion in the U.S. Army Corps of Engineers (USACE) Annual Report

In Accordance with the Water Resources Reform and Development Act of 2014

Coconino County, Arizona

Feasibility Study

Submitted November 24, 2014

By the

Coconino Plateau Watershed Partnership
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Introduction

The Bureau of Reclamation completed the North Central Arizona Water Supply Appraisal Study in 2006. The Study considered existing water supplies in the Coconino Plateau region and found that with projected growth there would be unmet water demands in the region by 2050. Several alternative scenarios to address this unmet demand were identified in the Appraisal Study, but a more detailed and technical feasibility study is necessary to determine the viability of each alternative. The Appraisal Study was pursued under the guidance of the Coconino Plateau Water Advisory Council (CPWAC). The Coconino Plateau Water Advisory Council is a 501(c)(4) non-profit corporation that has since formed an affiliate 501(c)(3) entity named the Coconino Plateau Watershed Partnership (CPWP). This proposal is submitted by the CPWP.

Coconino County submitted an application on behalf of the CPWAC in August, 2010 to obtain authorization and funding to pursue the North Central Arizona Water Supply Feasibility Study (NCAWSFS) through the Bureau of Reclamation’s Rural Water Supply Program. Reclamation gave authorization, and a Federal grant of $500,000 was approved for the first year of the study. In June, 2011, Reclamation was awarded an additional $450,000 towards this study ($950,000 total). To date, Reclamation has been awarded $2.68 million in Federal monies towards the study. Reclamation has renamed the NCAWSFS the Coconino County, Arizona Feasibility Study. This proposal will refer to the study as the Coconino County, Arizona Feasibility Study (CCAFS).

The Rural Water Supply Program grant requires a cost-share agreement from non-Federal partners. The cost split is 41% Federal and 59% non-Federal. Total estimated project cost to study all of the three alternative scenarios identified in the initial scope of work was approximately $14,700,000. The costs associated with the study were based on the alternatives which were to be studied to meet identified future unmet water demands for the regional demand centers including Flagstaff, Page, Williams, Grand Canyon/Tusayan, and communities on the Navajo Nation and Hopi Reservation. Since the commencement of work in 2010 by Reclamation, some non-Federal cost share partners have chosen to not participate or reduce their level of participation. The total project cost is now estimated to be $10,853,000. Non-Federal parties have contributed a total of $2,217,937 thus far as cash or in-kind services. In addition to changes in participation, the scope of the project has been reduced to remove the Environmental Impact Statement and Economic Analysis tasks (included in the $10,853,000). Remaining non-Federal cost share partners include the City of Flagstaff, Arizona Department of Water Resources, City of Page, Navajo Nation and Hopi Tribe.

Non-Federal cost share partners have been informed by Reclamation that continued Federal funding toward the 41% Federal share is doubtful. Current proposed legislation, including H.R. 4420 and S.715 may provide for construction of “authorized rural water projects” but not completion of feasibility studies that are in progress. The non-Federal partners would like to see the feasibility study completed to at least the 30% design level that will include construction cost estimates for the alternatives being evaluated. This will provide a level of completion that is portable and can continue to be utilized for discussion and planning purposes. The total cost to
complete the study to the 30% design stage is estimated by Reclamation to be $8,273,000. The $8,273,000 estimate is only for the 30% design completion and does not include the Environmental Impact Statement and Economic Analysis that was included in the $10,853,000 project cost estimate. After deducting the Federal and non-Federal contributions to date, the remaining cost to complete the study is estimated to be $3,375,063. This proposal is for the Water Resources and Development Act of 2014 to fund 50% of the remaining $3,375,063 amounting to $1,687,532.

Non-Federal Interests

The following parties, for the purpose of this proposal, are the non-Federal interests acting as sponsors or contributing toward the non-Federal cost share.

Coconino Plateau Watershed Partnership
The CPWP is an Arizona 501(c)(3) non-profit corporation that is the sponsor of the proposal. The coordinator for the CPWP (Ron Doba, rdoba@cox.net, 480-299-57640) shall be the point of contact for this proposal. The CPWP is a watershed stakeholder group made up of participants on the Coconino Plateau that includes cities, towns, State and Federal agencies, Indian Tribes and environmental organizations. Detailed information for the CPWP can be found on the website at www.cpwac.org. The CPWP is not a beneficiary of the proposed project but has contributed $37,824 toward the non-Federal cost share of the project. This was done in an effort to help the benefiting parties keep the study going when the Federal government indicated no additional Federal monies were available. Future contributions from the CPWP cannot be identified at this time due to limited financial resources and undetermined project costs.

Arizona Department of Water Resources (ADWR)
ADWR initiated and has supported the completion of the CCAFS in the past. ADWR has contributed $282,000 toward the non-Federal cost share of the project. ADWR has indicated it is willing to continue providing additional monies but will not identify an amount until it sees what the non-Federal parties continue to provide toward the project. This decision has been made on an annual basis.

Coconino County
Coconino County is a beneficiary of the project. Coconino County has contributed $10,000 in cash and $46,695 in-kind services toward the non-Federal cost share in the past. Future contribution is identified as $$278,414. Should a 50/50 funding authorization be available, the County’s future cost share will be $139,207.

Hopi Tribe
The Hopi Tribe is a direct beneficiary of the project and has contributed $50,000 toward the non-Federal cost share in the past. Future contribution necessary by the Hopi Tribe is $1,438,399. Should a 50/50 funding authorization be available, the Hopi’s future cost share will be $719,199.

Navajo Nation
The Navajo Nation is a direct beneficiary of the project and has contributed $24,810 in cash and $69,000 in-kind services toward the non-Federal cost share in the past. Future contribution
necessary by the Navajo Nation is $1,197,596. Should a 50/50 funding authorization be available, the Navajo future cost share will be $598,798.

City of Page
The City of Page is a direct beneficiary of the project and has contributed $5,156 in cash toward the non-Federal cost share in the past. Future contribution necessary by the City of Page is $4,262. Should a 50/50 funding authorization be available, the City of Page future cost share will be $2,131.

City of Flagstaff
The City of Flagstaff is a direct beneficiary of the project and has contributed $30,000 in cash and $1,662,452 in-kind services toward the non-Federal cost share in the past. Future contribution necessary by the City of Flagstaff is $456,393. Should a 50/50 funding authorization be available, the City of Flagstaff’s future cost share will be $228,197.

Intent of Proposal
The proposal is for completion of a feasibility study. The study was authorized in 2010 by Reclamation under the authority granted in the Rural Water Supply Act of 2006 under Section 106 (a)( 1). Since authorization, Federal funding for feasibility studies under this authority has ceased in order to focus remaining available dollars on construction projects that have begun. This study is not complete (even to its reduced level of scope) and has a total of $2,680,000 in Federal dollars and $2,217,937 in non-Federal cash and in-kind services invested in it. The reduced level of Federal funding and number of remaining participants increases the amounts required from the non-Federal cost share partners to complete the study. The remaining participants wish to complete the project to a 30% design level so that cost estimates are available for future decisions regarding final design and construction of the project. The intent of this proposal is to secure 50% assistance in Federal dollars that can be used by the remaining participants to complete the study. It is anticipated that the agency completing the work effort is determined between the USACE and Reclamation.

Project Purpose
The North Central Arizona Water Supply Study (NCAWSS) is an appraisal level study completed by Reclamation in 2006. The study may be found on the Reclamation website at http://www.usbr.gov/lc/phoenix/reports/ncawss/ncawss.html. It identified the following present and future populations and future demands for communities on the Coconino Plateau. Future water supplies are designated for residential, domestic, municipal, and some light industrial demands. The rural project does not include any impoundments and no water will be used for commercial irrigation.
North Central Arizona Water Supply Study

<table>
<thead>
<tr>
<th>Community</th>
<th>2000 Population</th>
<th>Future (2050) Population</th>
<th>Future (2050) Unmet Demand (af/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tribal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coppermine</td>
<td>673</td>
<td>2,273</td>
<td>275</td>
</tr>
<tr>
<td>LeChee</td>
<td>1,890</td>
<td>6,382</td>
<td>771</td>
</tr>
<tr>
<td>Bodaway Gap</td>
<td>1,837</td>
<td>6,203</td>
<td>750</td>
</tr>
<tr>
<td>Cameron</td>
<td>1,231</td>
<td>4,157</td>
<td>819</td>
</tr>
<tr>
<td>Tuba City</td>
<td>8,736</td>
<td>29,000</td>
<td>5,648</td>
</tr>
<tr>
<td><strong>Total Navajo</strong></td>
<td>14,367</td>
<td><strong>48,515</strong></td>
<td><strong>8,263</strong></td>
</tr>
<tr>
<td><strong>Total Hopi</strong></td>
<td>10,571</td>
<td>19,160</td>
<td>4,048</td>
</tr>
<tr>
<td><strong>Non-Tribal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Page</td>
<td>9,570</td>
<td>18,770</td>
<td>3,091</td>
</tr>
<tr>
<td>City of Flagstaff</td>
<td>63,107</td>
<td>113,684</td>
<td>8,027</td>
</tr>
<tr>
<td>Flagstaff to Williams (dispersed)</td>
<td>2,150</td>
<td>5,726</td>
<td>640</td>
</tr>
<tr>
<td>Flagstaff Surrounding Communities</td>
<td>13,330</td>
<td>28,081</td>
<td>1,625</td>
</tr>
<tr>
<td>Williams</td>
<td>2,905</td>
<td>4,826</td>
<td>420</td>
</tr>
<tr>
<td>Williams to Grand Canyon National Park (dispersed)</td>
<td>2,559</td>
<td>7,059</td>
<td>785</td>
</tr>
<tr>
<td>Grand Canyon National Park</td>
<td>1,460</td>
<td>2,639</td>
<td>790</td>
</tr>
<tr>
<td>Tusayan</td>
<td>562</td>
<td>1,372</td>
<td>425</td>
</tr>
<tr>
<td><strong>Total Non-tribal</strong></td>
<td>95,643</td>
<td><strong>182,157</strong></td>
<td><strong>15,803</strong></td>
</tr>
<tr>
<td><strong>Total Study Area</strong></td>
<td><strong>120,581</strong></td>
<td><strong>235,413</strong></td>
<td><strong>28,114</strong></td>
</tr>
</tbody>
</table>

1. Flagstaff to Williams dispersed communities include: Parks and 25% of the Coconino County Census County Division (within the study area)
2. Flagstaff surrounding communities include: Doney Park, Ft. Valley, Kachina, Mountainaire and 25% of the Coconino County Census County Division (within the study area)
3. Williams to Grand Canyon National Park dispersed communities include: Valle and 25% of the Coconino County Census County Division (within the study area)

**Feasibility Plan of Study**

Based on the demands shown above, the NCAWSS developed, analyzed and evaluated the viability of regional water supply alternatives. Subsequently, four of the Study alternatives were deemed to be viable and were recommended for study at the feasibility level. Each of the four alternatives included a common component – a pipeline from Page to Cameron (Component 1), and varying combinations of six additional components:

1. Pipeline from Page to Cameron (120 miles serving Coppermine, LeChee, Bodaway Gap, Cameron, Tuba City, Moenkopi and Lower Moenkopi)
2. Pipeline from Moenkopi to Kykotsmovi (50 miles serving the Hopi Mesas)
3. Pipeline from Cameron to Flagstaff (53 miles serving Flagstaff, surrounding and dispersed communities)
4. Pipeline from Flagstaff to Williams (32 miles serving Williams and dispersed communities)
5. Pipeline from Cameron to Grand Canyon and Tusayan (59 miles serving Tusayan, Grand Canyon, and dispersed communities)
6. C Aquifer Well Field at Red Gap Ranch and Pipeline to Flagstaff (41 miles serving Flagstaff)
7. R Aquifer Wells at Williams (serving Williams)

A Feasibility Plan of Study was prepared for each of the seven components. The Plan of Study was developed using Reclamation’s Feasibility Design Guidelines and includes detailed tasks in the Geologic, Engineering, Environmental, Economic, and Administrative categories. The estimated total Study cost for all 7 components was $14,700,000 (2009 estimate). The budget for the first year of the study was $600,000 ($247,000 Federal/$353,000 Non-Federal). Since 2006, the study alternatives have changed resulting from requests from the non-Federal participants as follows:

1. Pipeline from Lake Powell to Page (6 miles serving Coconino County, Hopi Tribe, Navajo Nation and Page)
2. Pipeline from Page to Tuba City (67 miles serving Coconino County, Hopi Tribe and Navajo Nation)
3. Pipeline from Bodaway Gap to Bitter Springs (26.5 miles serving the Navajo Nation)
4. Pipeline from Hwy 89 near Tuba City to Cameron (20.5 miles serving Coconino County and the Navajo Nation)
5. Pipeline from Moenkopi to Keams Canyon (81 miles serving the Hopi Tribe)
6. Pipeline from Cameron to Flagstaff (55 miles serving the City of Flagstaff)
7. Pipeline from Red Gap Ranch to Flagstaff (41 miles serving the City of Flagstaff)

The result of the changes in pipeline segments and the removal of the environmental assessment and economic analysis from the scope have reduced the cost estimate of the CCAFS to $8,273,000.

**Cost Estimate**

As previously indicated, the cost estimate of the study has decreased since 2010 from $14,700,000 to $8,273,000. Thus far a total of $4,897,937 has been paid for the study in the form of Federal, non-Federal and in-kind support. The amount needed to complete the study to the 30% design phase is $3,375,063. This proposal is for Federal funding that would provide 50%, or $1,687,532 of the remaining $3,375,063.

Table 1 on page 8 shows the most recent cost estimates for the various pipeline segments involved in the CCAFS.
<table>
<thead>
<tr>
<th>Segment</th>
<th>Description</th>
<th>Miles</th>
<th>Total Cost</th>
<th>% of Total Project Cost (w/o Red Gap)</th>
<th>Benefiting Entities</th>
<th>Volume (Ac./Pt.)</th>
<th>Volume Percentage</th>
<th>Total Cost Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segment 1</td>
<td>Lake Powell to Page</td>
<td>6</td>
<td>$167,000</td>
<td>2% Coconino County</td>
<td>Hopi Tribe</td>
<td>2265</td>
<td>7%</td>
<td>$11,921</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Navajo Nation</td>
<td>3790</td>
<td>12%</td>
<td>$19,947</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Page</td>
<td>3093</td>
<td>10%</td>
<td>$16,278</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Flagstaff</td>
<td>12000</td>
<td>38%</td>
<td>$63,156</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>$167,000</td>
<td></td>
<td></td>
<td>31731</td>
<td>100%</td>
<td>$167,000</td>
</tr>
<tr>
<td>Segment 2</td>
<td>Page to Tuba City</td>
<td>67</td>
<td>$1,873,000</td>
<td>26% Coconino County</td>
<td>Hopi Tribe</td>
<td>2265</td>
<td>14%</td>
<td>$254,979</td>
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<td></td>
<td>Navajo Nation</td>
<td>3790</td>
<td>23%</td>
<td>$426,654</td>
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<td>Flagstaff</td>
<td>12000</td>
<td>64%</td>
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<td>Total</td>
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<td>16638</td>
<td>100%</td>
<td>$1,873,000</td>
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<td>Segment 3</td>
<td>Bodeway Gap to Bitter Springs</td>
<td>26.5</td>
<td>$741,000</td>
<td>10% Navajo</td>
<td>Hopi Tribe</td>
<td>3790</td>
<td>100%</td>
<td>$741,000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>$741,000</td>
<td></td>
<td></td>
<td>3790</td>
<td>100%</td>
<td>$741,000</td>
</tr>
<tr>
<td>Segment 4</td>
<td>Hwy 89 near Tuba City to Cameron</td>
<td>29.5</td>
<td>$573,000</td>
<td>8% Coconino County</td>
<td>Navajo Nation</td>
<td>10583</td>
<td>9%</td>
<td>$52,231</td>
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<tr>
<td></td>
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<td></td>
<td>Flagstaff</td>
<td>12000</td>
<td>43%</td>
<td>$244,046</td>
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<td>Flagstaff</td>
<td>12000</td>
<td>48%</td>
<td>$276,722</td>
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<td>Total</td>
<td></td>
<td>$573,000</td>
<td></td>
<td></td>
<td>24848</td>
<td>100%</td>
<td>$573,000</td>
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<tr>
<td>Segment 5</td>
<td>Moenkopi to Keams Canyon</td>
<td>81</td>
<td>$2,126,000</td>
<td>30% Hopi Tribe</td>
<td>Hopi Tribe</td>
<td>3790</td>
<td>100%</td>
<td>$2,126,000</td>
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<tr>
<td></td>
<td>Total</td>
<td></td>
<td>$2,126,000</td>
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<td></td>
<td>3790</td>
<td>100%</td>
<td>$2,126,000</td>
</tr>
<tr>
<td>Segment 6</td>
<td>Cameron to Flagstaff</td>
<td>55</td>
<td>$1,638,000</td>
<td>23% Coconino County</td>
<td>Hopi Tribe</td>
<td>2265</td>
<td>16%</td>
<td>$260,082</td>
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<td>Flagstaff</td>
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<td>84%</td>
<td>$1,377,918</td>
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<td>Total</td>
<td></td>
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<td>14265</td>
<td>100%</td>
<td>$1,638,000</td>
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<td>Sub Total</td>
<td></td>
<td></td>
<td>$7,118,000</td>
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<td></td>
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<td>100%</td>
<td></td>
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<tr>
<td>Segment 7</td>
<td>Red Gap Ranch</td>
<td>41</td>
<td>$1,155,000</td>
<td></td>
<td>Flagstaff</td>
<td>12000</td>
<td>100%</td>
<td>$1,155,000</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>$1,155,000</td>
<td></td>
<td></td>
<td>12000</td>
<td>100%</td>
<td>$1,155,000</td>
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<tr>
<td>Grand Total</td>
<td></td>
<td></td>
<td>$8,273,000</td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
<td>$8,273,000</td>
</tr>
</tbody>
</table>
**Anticipated Monetary and Non-Monetary Benefits**

The Coconino Plateau encompasses an area that includes more than 12 Navajo Nation chapters, all of the Hopi Tribe villages, 12 non-tribal communities, and the Grand Canyon National Park. The primary source of water for the region is groundwater. What little surface water does exist provides habitat for numerous listed and endangered species and/or is highly susceptible to drought which reduces its reliability and limits its use for domestic and municipal purposes.

The area’s urgent and compelling need for water is based on the physical absence of available water and infrastructure. More than 50% of the Navajo Nation chapters and Hopi Tribe villages are required to haul water to meet their basic needs. The location of these sources of water for hauling are also limited and may require tribal community members to travel up to 60 miles one way in order to obtain water. Many of the available supplies they haul from also do not meet safe drinking water standards, which contribute to a reduction in public health and safety. Throughout the region there are pockets of contaminated groundwater that exceed the Safe Drinking Water standards. The parameter most frequently exceeded in the well and spring sites measured is arsenic. There is a notable arsenic cluster in the vicinity of the several Hopi villages, all of which limits further development of groundwater resources without implementing costly water treatment facilities.

Groundwater mining is also occurring throughout the Coconino Plateau region, which will limit the availability of supplies even further as well as cause unacceptable impacts to both environmental and cultural resources. The *Appraisal Study* completed for the Coconino Plateau region in 2006 identified an unmet municipal water demand for the region of more than 28,100 acre-feet annually by the year 2050. The *Appraisal Study* also evaluated whether or not the projected unmet water demand for the region could be met by increasing conservation efforts. The results of this analysis indicated that there would still be an unmet water demand of more than 22,000 acre-feet annually by the year 2050 if an additional 20 percent reduction in water demands could be obtained through enhanced conservation activities over-and-above what is currently in place throughout the region.

Conservation practices are and have been emphasized and implemented extensively by non-tribal communities throughout the region. The members of the CPWP recognize the importance of conservation in the management of all natural resources and have been actively involved in conservation education as well as developing a water ethic and sustainable water management plan for the region. Flagstaff, the largest population center in the region as an example, has implemented extensive conservation measures over the past 20 years that have reduced its total gallons per capita per daily use (GPCD) from a high of 186 in 1989 to 113 last year. Flagstaff’s 113 GPCD is a total GPCD, which is determined by dividing the total potable water delivered for all uses (municipal, commercial, industrial) by the total population and then dividing that number by the number of days in a year (365). As a comparison a study conducted by the American Water Works Association determined the average “residential” GPCD including outdoor use is about 170. Although Flagstaff’s population has increased over the past 10 years, their strict conservation efforts have resulted in an actual decrease in total potable water use in that same time period.
For tribal communities, conservation is not a realistic option because of the currently limited availability of supply and infrastructure. As stated previously almost 50% of tribal members currently are required to haul water to meet their basic needs. The GPCD for tribal members that haul water is less than 10. For tribal members fortunate enough to have access to a water delivery system the average GPCD, which includes commercial and industrial uses, is around 89.

Without the implementation of a project that will augment and/or replace current supplies numerous tribal communities will be without any source of water to meet not only the legal requirements for drinking water standards, but their own basic needs. For the non-tribal communities continuation of groundwater mining will also result in reduced availability of supplies, contribute to the deterioration of water quality, and result in unacceptable impacts to the environment and ultimately to endangered species. Many of the springs that may be impacted by groundwater mining also serve as the water supply to the Havasupai Tribe located within the Grand Canyon.

Conducting the Feasibility Study of water augmentation alternatives in the *Appraisal Study* is essential for determining the most efficient and cost effective course of action to pursue that will ensure the availability and sustainability of water resources to meet current and projected municipal water demands for all communities on the Coconino Plateau. The implementation of a rural water supply alternative on the Coconino Plateau will also mitigate issues with federal, tribal, state, and regional laws associated with, but not limited to, the Safe Drinking Water Act, Endangered Species Act, and water management.

**Local Support**

Local support for completion of the feasibility study can be determined from the participants and formal actions of the Coconino Plateau Watershed Partnership. The CPWP has approximately 32 participating agencies that represent various interest on the Coconino Plateau. The CPWP is unique in that it brings together a diversity of interests (tribal, local, state, federal, environmental, etc.) that represent the entire Coconino Plateau with a common goal. They share a commitment to identify and develop one or more sustainable solutions that would ensure an adequate long term supply of water is available while preserving the environmental health on the Plateau. The uniqueness of this effort is a recognition and commitment by all members of the CPWP that the water resource needs of all tribal and non-tribal communities and the surrounding environment on the Plateau are addressed equally and cooperatively.

Coconino County is the nation’s second largest county by area, encompassing 18,617 square miles with a population density of approximately 6.25 persons per square mile (2000 census). Private land comprise only 12% of the land area of the County with Native American tribes at 38.4%, state land at 9.5% and federal land (USFS, BLM, NPS) the remaining 40.1%. Although the CPWP does not extend to all areas of the County, it includes a substantial portion and the majority of permanent residents. The CPWP membership extends beyond the boundaries of the County to the east, to include that portion of the Hopi Reservation which is located in Navajo County.
The current projected population for all of Coconino County is 136,539 (United States Census Bureau, 2013 estimate), the portion of the County included in the CPWP and North Central Arizona Water Supply Study comprise approximately 95% of this number. Over 50% of the County’s population is accounted for within City of Flagstaff at 68,667 (United States Census Bureau, 2013 estimate), and the remainder is fairly dispersed throughout the County, including Native American tribal lands for Navajo, Hopi, Havasupai, Hualapai, and San Juan Southern Paiute.

The communities whose demands were included in the Appraisal Study are dispersed throughout the majority of the County. In addition to Flagstaff, the incorporated communities of Williams (30 miles west of Flagstaff), Page (140 miles north of Flagstaff), and Tusayan (approximately 60 miles north of Williams and 70 miles north of Flagstaff at the entrance to the South Rim of Grand Canyon National Park) were included. The Appraisal Study also addressed demands for unincorporated communities and county residents dispersed throughout the region. According to the Appraisal Study it was estimated that the area population for the smaller communities and dispersed residents was 4,050 (as of 2002) with 50% of this dispersed population estimated to be living in the area between Williams and Tusayan, 25% in the area between Flagstaff and Williams, and 25% within the area surrounding Flagstaff (the greater Flagstaff region is described as a 525 square mile area in the 2001 “Flagstaff Area Regional Land Use and Transportation Plan”). Grand Canyon National Park, located 80 miles from Flagstaff, was also included in the Appraisal Study, as were portions of the Navajo Nation, and the Hopi Reservation which lies primarily in neighboring Navajo County. Total population for tribal communities included in the Appraisal Study is approximately 25,000.

Given the complex hydrogeology of the region, the significant depth to groundwater, and limited surface water sources there is already great reliance on transporting water substantial distances in order to serve these dispersed areas. As some of these areas develop their own sources of water, the impacts of pumping from these deep wells (in excess of 3000’ in some parts of the County) are felt by other communities including the Havasupai Tribe, and within the natural spring system of Grand Canyon National Park. The Feasibility Study considers the different components of each of the identified alternatives not only for how they meet the needs of the demand centers, but also as they may impact the “downstream” communities.

The unincorporated non-tribal areas receive water through a variety of means including hauling, small community or private systems, or shared or individual wells. In many cases the hauled water comes from a municipal provider from one of the incorporated communities, thus having an impact on their system demands. Addressing these demands on a regional basis creates an economy of scale, making this the most sensible approach. Given the limited options for augmenting supplies to meet future unmet demands, a regional approach to pursue a regional solution minimizes duplication of effort and imprudent use of limited resources.

On September 26, 2014 the CPWP Board of Directors formally recommended the CPWP submit this proposal to the USACE for funding assistance to complete the CCAFS to a 30% design level. On October 31, 2014 the CPWP supported the Board’s recommendation and directed the CPWP coordinator to submit this proposal. Meeting agendas and minutes for these actions may be found on the organization’s website at www.cpwac.org.
Financial Ability

The current non-Federal interests include Coconino County, City of Flagstaff, City of Page, Hopi Tribe, Navajo Nation and Arizona Department of Water Resources. All are Cities, County, Indian tribes or state government and have the financial ability to meet their non-Federal cost share requirement. All non-Federal interests require authorization from their governing body prior to committing to a cost share agreement. The authorization will be a formal action and will be presented to the governing bodies for consideration upon notification from the USACE that the project is being considered for funding.
November 4, 2014

U.S. Army Corps of Engineers
Attn: CECW-CE (Lisa Kiefel)
441 G Street NW
Washington, D.C. 20314-1000

RE: Letter of Support – Coconino County, Arizona Feasibility Study (CCAFS)

Dear Ms. Kiefel,

The Arizona Department of Water Resources (ADWR) is a non-Federal cost share partner in the subject study which is also referred to as the North Central Arizona Water Supply Feasibility Study. The study was authorized by Congress in 2010 through the Bureau of Reclamation’s Rural Water Program to examine the feasibility of construction of a pipeline from Lake Powell to provide additional water supplies to water users in North Central Arizona. The feasibility study followed an appraisal level study that identified a future water supply and demand imbalance and potential alternatives to address the imbalance. Federal funding for the project has stopped and the non-federal partners are now being asked to provide cost share amounts greater than originally anticipated.

The ADWR supports the activities of local watershed partnership groups in their efforts to develop regional solutions to water supply issues. ADWR provides both technical and financial support for watershed partnership projects. Therefore, ADWR supports the submittal of the Coconino County, Arizona Feasibility Study for inclusion in the U.S. Army Corps of Engineers Annual Report to be issued in February 2015 and supports the efforts of project participants in all efforts to obtain funding.

If you have any questions regarding this letter, please contact Gerry Walker at 602-771-8511.

Sincerely,

Thomas Buschatzke
Assistant Director, Water Planning Division
November 13, 2014

U.S. Army Corps of Engineers
Attn: CECW-CE (Lisa Kiefel)
441 G Street NW
Washington, DC 20314-1000

RE: Letter of Support- Coconino County, Arizona Feasibility Study (CCAFS)

Dear Ms. Kiefel:

The Hopi Tribe is a non-Federal cost share partner in the subject study, which is also referred to as the North Central Arizona Water Supply Feasibility Study (NCAWSFS). The study was authorized by Congress in 2010 through Reclamation's Rural Water program. Since authorization, the Bureau of Reclamation has provided $2.68 million towards their 41% share of the project. The Initial cost estimate of the Study was $14.7 million. The Bureau of Reclamation has stopped funding the project, yet it remains the only ongoing effort to evaluate water resource development options on the Coconino Plateau. Non-Federal partners are now being asked to provide cost share amounts greater than originally anticipated.

The Hopi Tribe supports the submittal of the Coconino County, Arizona Feasibility Study for inclusion in the U.S. Army Corps of Engineers (USACE) Annual Report to be issued in February 2015. We would like to advocate the USACE work with Reclamation and, using available funding from the Water Resources Reform and Development Act of 2014, to complete this important study. The benefits cities, towns and Indian reservations in Northern Arizona faced with major projected unmet water demands.

The Hopi Tribe will consider a contribution to cost share in the study but will need the relevant cost share amount/information.

Sincerely,

Herman G. Honanie, Chairman
The Hopi Tribe
City of Flagstaff

October 30, 2014

U.S. Army Corps of Engineers
Attn: CECW-CE (Lisa Kiefel)
441 G Street NW
Washington, D.C. 20314-1000

RE: Letter of Support – Coconino County, Arizona Feasibility Study (CCAFS)

Dear Ms. Kiefel,

The City of Flagstaff is a non-Federal cost share partner in the Coconino County, Arizona Feasibility Study which is also referred to as the North Central Arizona Water Supply Feasibility Study (NCAWSFS). The study was authorized by Congress in 2010 through Reclamation’s Rural Water Supply Program. Since authorization, the Federal government has provided $2.68 million towards their 41% share of the project. The initial cost estimate of the study was $15 million. Federal funding for the project has stopped even though it remains the only ongoing effort to evaluate regional solutions for water resource development options on the Coconino Plateau. Non-Federal partners are now being asked to provide cost share amounts greater than originally anticipated.

The City of Flagstaff strongly supports the submittal of the Coconino County, Arizona Feasibility Study for inclusion in the U.S. Army Corps of Engineers (USACE) Annual Report to be issued in February 2015. We would like to pursue the USACE working together with Reclamation and using available funding from the Water Resources Reform and Development Act of 2014 to complete this important study. The study benefits cities, towns and Indian reservations in Northern Arizona faced with projected, unmet water demands.

The City has been planning since the inception of the NCAWSFS in 2010, to meet its cost share of the project (roughly $2.8 million). To date, the City has provided $1.66 million towards water pipeline feasibility projects under the NCAWSFS. However, because of attenuated funding over the past several years, and now no Federal funding of the Rural Water Supply Program in FY16, City Council advised staff in July 2014 that they will not authorize additional funding towards the North Central Arizona Pipeline segment of the NCAWSFS until Federal funding becomes available.

Pivotal to completing the NCAWSFS is Federal commitment. We hope you will consider appropriating funds from the Water Resources Reform and Development Act of 2014 to
this important project for Northern Arizona. If you need any further information regarding the City's support please contact me at (928) 213-2420.

Sincerely,

[Signature]

Erin Young
Water Resources Manager

Cc: Mark Woodson, City of Flagstaff City Council and CPWP representative
    Ron Doba, Executive Director, Coconino Plateau Watershed Partnership
October 20, 2014

U.S. Army Corps of Engineers
Attn: CECW-CE (Lisa Kiefel)
441 G Street NW
Washington, D.C. 20314-1000

RE: Letter of Support – Coconino County, Arizona Feasibility Study (CCAFS)

Dear Ms. Kiefel,

The Navajo Nation Water Resources is a non-Federal cost share partner in the subject study which is also referred to as the North Central Arizona Water Supply Feasibility Study (NCAWSFD). The study was authorized by Congress in 2010 through Reclamation’s Rural Water Program and the appraisal study was completed previously. Since that authorization, the Federal government has provided $2.68 million towards their 41% share of the project. The initial cost estimate of the feasibility study was $15 million. Federal funding for the project has stopped but it remains the only ongoing effort to evaluate water resource development options on the Coconino Plateau in North Central Arizona. Non-Federal partners are now being asked to provide cost share amounts greater than originally anticipated.

We strongly support the submittal of the Coconino County, Arizona Feasibility Study for inclusion in the U.S. Army Corps of Engineers (USACE) Annual Report to be issued in February 2015. We would like to pursue the USACE working together with our group in using available funding from the Water Resources Reform and Development Act of 2014 to complete this important study. This study benefits cities, towns and Indian reservations in Northern Arizona that are faced with projected unmet water demands.

We need to know what our cost share amount is in order to obtain commitment from our Navajo Nation Council. If you need any further information regarding our agency’s support please contact me at (928) 729-4003.

Sincerely,

[Signature]

Ray Benally, P.E., R.L.S.
Director

C: NNDWR chrono
November 5, 2014

U.S. Army Corps of Engineers
Attn: CECW-CE (Lisa Kiefel)
441 G Street NW
Washington, D.C. 20314-1000

RE: Letter of Support – Coconino County, Arizona Feasibility Study (CCAFS)

Dear Ms. Kiefel,

The City of Page, dba Page Utility Enterprises is a non-Federal cost share partner in the subject study which is also referred to as the North Central Arizona Water Supply Feasibility Study (NCAWSFS). The study was authorized by Congress in 2010 through Reclamation’s Rural Water Program. Since authorization, the Federal government has provided $2.68 million towards their 41% share of the project. The initial cost estimate of the study was $15 million. Federal funding for the project has stopped while it remains the only ongoing effort to evaluate water resource development options on the Coconino Plateau. Non-Federal partners are now being asked to provide cost share amounts greater than originally anticipated.

Our organization strongly supports the submittal of the Coconino County, Arizona Feasibility Study for inclusion in the U.S. Army Corps of Engineers (USACE) Annual Report to be issued in February 2015. We would like to pursue the USACE working together with Reclamation and using available funding from the Water Resources Reform and Development Act of 2014 to complete this important study. The study benefits cities, towns and Indian reservations in Northern Arizona faced with projected unmet water demands.

Our agency has the financial ability to provide for the required cost share for the project but we need to know what that cost share amount is in order to obtain commitment from our governing body. If you need any further information regarding our agency’s support please contact me at 928-645-2419.

Sincerely,

[Signature]
Bryan Hill
Utility Manager
November 6, 2014

U.S. Army Corps of Engineers
Attn: CECW-CE (Lisa Kiefel)
441 G Street NW
Washington, D.C. 20314-1000

RE: Letter of Support – Coconino County, Arizona Feasibility Study (CCAFS)

Dear Ms. Kiefel,

Coconino County is a non-Federal cost share partner in the subject study which is also referred to as the North Central Arizona Water Supply Feasibility Study (NCAWSFD). The study was authorized through the U.S. Bureau of Reclamation’s (Reclamation) Rural Water Program in 2010. The Rural Water Program was authorized by Congress in 2006.

Since authorization, the Federal government has provided $2.68 million towards their 41 percent share of the project. The initial cost estimate of the study was $15 million. While Federal funding for the project has stopped, the project continues to be the only ongoing effort to evaluate water resource development options on the Coconino Plateau. Due to the decrease in Federal funding, non-Federal partners are now being asked to provide cost share amounts greater than originally anticipated.

Coconino County strongly supports the submittal of the Coconino County, Arizona Feasibility Study for inclusion in the U.S. Army Corps of Engineers (USACE) Annual Report to be issued in February 2015. Coconino County supports the USACE working with Reclamation and using available funding from the Water Resources Reform and Development Act of 2014 to complete this important study. The study benefits cities, towns, counties and Native American Tribes in Northern Arizona faced with projected unmet water demands.

We appreciate your support of this important project. If you need any further information regarding Coconino County’s support please feel free to contact me at (928) 679-7154.

Sincerely,

Mandy Metzger,
Chair, Coconino County Board of Supervisors
November 5th, 2014

U.S. Army Corps of Engineers
Attn: CECW-CE (Lisa Kiefel)
441 G Street NW
Washington, D.C. 20314-1000

Re: Letter of Support – Coconino County, Arizona Feasibility Study (CCAFS)

Dear Ms. Kiefel,

The “Coconino Natural Resource Conservation District” (CNRCD) is a participant in the “Coconino Plateau Watershed Partnership” (CPWP) and is familiar with the efforts to have the subject study completed. The study was authorized by Congress in 2010 through the Bureau of Reclamation’s Rural Water Program. Since authorization, the Federal government has provided $2.68 million towards their 41% share of the project. The initial cost estimate of the study was $14.7 million. Federal funding for the project has stopped, yet it remains the only ongoing effort to evaluate water resource development options on the Coconino Plateau. Non-federal partners are now being asked to provide cost share amounts greater than originally anticipated.

Our organization strongly supports submittal of the Coconino County, Arizona Feasibility Study for inclusion in the U.S. Army Corps of Engineers (USACE) Annual Report to be issued in February 2015. We would like to propose the USACE working together with Reclamation and using available funding from the “Water Resources Reform and Development Act of 2014” to complete this important study. The Study benefits cities, towns and Indian reservations in Northern Arizona faced with projected unmet water demands.

If you need any further information regarding our organization’s support, please contact me at (928) 779-1745.

Sincerely,

Mike Macauley, CNRCD Chairman

Coconino Natural Resource Conservation District
703 E. Sawmill Road
Flagstaff, Arizona 86001
RE: Letter of Support - Coconino County, Arizona Feasibility Study (CCAFS)

Dear Ms. Kiefel,

The Tusayan Sanitary District is a participant in the Coconino Plateau Watershed Partnership (CPWP) and is familiar with the efforts to have the subject study completed. The study was authorized by Congress in 2010 through Reclamation’s Rural Water Program. Since authorization, the Federal government has provided $2.68 million towards their 41 share of the project. The initial cost estimate of the study was $14.7 million. Federal funding for the project has stopped yet it remains the only ongoing effort to evaluate water resource development options on the Coconino Plateau. Non-Federal partners are now being asked to provide cost share amounts greater than originally anticipated.

Our organization strongly supports the submittal of the Coconino County, Arizona Feasibility Study for inclusion in the U.S. Army Corps of Engineers (USACE) Annual Report to be issued in February 2015. We would like to propose the USACE working together with Reclamation and using available funding from the Water Resources Reform and Development Act of 2014 to complete this important study. The study benefits cities, towns and Indian reservations in Northern Arizona faced with projected unmet water demands.

If you need any further information regarding our agency’s support please contact me at 928-638-0906.

Sincerely,

Robert Petzbolt
Superintendent
RE: Letter of Support; Coconino County Arizona Water Supply Feasibility Study

Dear Ms. Kiefel;

The Little Colorado River Plateau RC&D is a participant in the Coconino Plateau Watershed Partnership (CPWP) and is familiar with the efforts to have the subject study complete.

The City of Flagstaff falls within the boundaries of the Little Colorado River Watershed, which is a portion our service area as a Federally authorized 501 (c) 3 IRS Certified Not-for-Profit Arizona Corporation.

The CPWP Feasibility Study was authorized by Congress in 2010 through the Bureau of Reclamation Rural Water Program. Since then, the Federal government has provided $2.68M towards their 41% share of the project. The initial cost estimate of the study was $14.7M.

Federal funding of the project has ceased, yet it remains the only ongoing effort to evaluate water resource development options on the Coconino Plateau. Non-Federal partners are now being asked to provide cost-share amount much greater than originally anticipated.

The Little Colorado River Plateau RC&D strongly supports the submittal of the Coconino County Arizona Feasibility Study for inclusion in the USA CE Annual Report to be issued in February 2015. The proposal is that the USACE work together with the Bureau of Reclamation and accesses available funding from the Water Resources Reform and Development Act of 2014 to complete this important study.

The study benefits cities and towns (Flagstaff, Page, Cameron, Tusayan) and Tribal Reservations (Hopi, Navajo) in northern Arizona faced with unmet water demands.

If there is any further information needed, please feel free to contact the RC&D at the numbers shown.

Your Truly;

David M. Newlin
Business Manager and Watershed Projects Director

cc/ Clayton Honyumptewa, President; Board of Directors