



COUNTY ADMINISTRATOR'S OFFICE

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C.H. HUCKELBERRY
County Administrator

September 8, 2008

United States Department of the Interior
Bureau of Reclamation
Phoenix Area Office
6150 West Thunderbird Road
Glendale, Arizona 85306-4001

Attention: PXAO-1500, Ms. Sandra Eto

Re: Comments on Notice of Public Scoping for Preparation of an Environmental Assessment on the Proposed Community Water Company's Central Arizona Project Water Distribution System and Recharge Facility

Dear Ms. Eto:

Pima County offers the following comments on the proposed Environmental Assessment (EA) on the proposed Community Water Company's (CWC's) Central Arizona Project (CAP) Water Distribution System and Recharge Facility.

Rosemont Mine

Pima County recognizes the need to deliver CAP water to the water companies serving the Town of Sahuarita, Green Valley and surrounding communities. However, it should be noted that this scoping by the Bureau would not be needed but for the funding proposal by Rosemont Copper (Rosemont), a subsidiary of Augusta Resource of Canada. The proposal is linked to the mine by virtue of allowing Rosemont to recharge the CWC's CAP allocation. In fact, in the first 15 years Rosemont will use all of 7,000 acre-feet per year recharged at the site. Hence no net benefit to the aquifer.

Recharge in the Sahuarita-Green Valley area has been proposed as a mitigation measure for the Environmental Impact Study (EIS) now underway for United States Forest Service lands to be impacted by the Rosemont mining proposal. In essence, Rosemont's arrangement with CWC constrains mitigation alternatives for the impacts of groundwater withdrawal for the

2.0 SCOPE OF SERVICES

The scope of work will follow a phased approach to evaluate the preferred locations and methods of CAP recharge in the vicinity of the preferred CAP extension as identified in the 1998 Malcolm Pirnie Report.

2.1 Review of Water Usage Findings (Task 1)

The consultant will review at a minimum the following resources:

- A. Sahuarita-Green Valley Area CAP Water Use Feasibility Analysis and Delivery System Optimization Study, Malcolm Pirnie, 1998.
- B. Long-term Green Valley Water Supply, Pima County, 2007
- C. Arizona Department of Water Resources data in support of Item D
- D. Estimated Water Usage for USC/PUG Geographical Area, Years 2006-2030, USC/PUG Fact Finding Subcommittee, 2008.

Based on this information, the consultant will evaluate the findings and recommendations of the USC/PUG report and identify omissions, shortcomings or deficiencies in the projections, if any.

2.2 Development of Recharge Site Selection Criteria and Site Selection (Task 1)

The USC/PUG has developed an estimated usage and recovery estimate of 32,250-39,000 that is needed to achieve safe yield by 2030. In addition, the amount of available CAP at the CAP terminus may be between 24,000-40,200 AF/yr. Based on these estimates, a 36-inch pipeline will be needed along Pima Mine Road, then south along the Old Nogales Highway to as far as Canoa Ranch.

Based on the above alignment and volumes, the consultant will evaluate viable locations of potential recharge facilities, including, but not limited to the Santa Cruz River and tributaries, off channel constructed sites, gravel pits and a Groundwater Savings Facility at FICO pecan orchards. Methods considered will include but not be limited to in channel discharge and regulation of flow, in-channel levees, in-channel dual notched weir grade controls, in-channel basins, off channel basins, check dams in arroyos and rubber dams. Any combinations of the above should be considered.

Technical site selection criteria will include but not be limited to infiltration rates, mounding potential, available storage capacity, groundwater quality, perched water table conditions and subsurface impeding layers, proximity to landfills and waste disposal sites, environmentally sensitive areas (cultural resources and biological sensitivity), potential to enhance riparian habitat, and land ownership. Data for these criteria are readily available in the literature and from agencies, including EPA, ADWR, ADEQ, Pima County, and local water providers.

Conceptual layouts will be developed for each facility selected. The layouts will provide plan views, sketches and profiles where needed. The acreage, period of recharge and estimated annual recharge volume will be developed.

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mine to one location and two beneficiaries (Rosemont and CWC), while ignoring others who bear the impacts of the groundwater withdrawal proposed by Rosemont. Separating the recharge project from the mining proposal without consideration of the links between the two could be interpreted as an attempt to piecemeal the Rosemont Mine EIS. While separating the two impact evaluations may be possible, nothing in this announcement provides any notice to the public that the Bureau understands the link with activities of its sister federal agency.

Further, a number of the scoping issues for the Rosemont EIS encompass and will affect the proposed EA for CWC's utilization of CAP. For instance, the extent to which Rosemont can use CAP directly for the mine, or construct a recharge site near its well fields, affects this proposal. Rosemont and CWC have studied some alternative sites for the pipeline and for the recharge project and these should be evaluated in the EA. Recharge areas closer to the project impact area should also be studied. Alternative dimensions for the pipeline have also been discussed.

Pima County objects to this EA for CAP recharge being performed separately from the Rosemont Mine EIS. It is strongly recommended that the Bureau coordinate with Interior Department solicitors on whether this EA can be performed separately from the Rosemont Mine EIS.

CAP Allocations for the Sahuarita-Green Valley Area

Extension of the CAP pipeline to the Sahuarita-Green Valley area has been the subject of study and discussion for many years. In addition to the CWC, the Green Valley Domestic Water Improvement District also has a CAP allocation and there are several member lands in the area for which the Central Arizona Groundwater Replenishment District (CAGRD) has replenishment obligations. For the Rancho Sahuarita Water Company, the CAGRD provides recharge near Marana for replenishment for excess groundwater pumped in Sahuarita by the Rancho Sahuarita Water Company.

One of the concerns with CAGRD's replenishment is that there is no hydrologic connection between where CAGRD's replenishment occurs and the location of excess groundwater withdrawals for service member lands and member service areas. Extending the CAP pipeline and construction of recharge facilities in the Sahuarita-Green Valley area would enable the CAGRD to replenish groundwater in close proximity to where the groundwater withdrawals occur. Additionally, there are State Trust Lands that are yet to be developed and the State Land Department also has a CAP allocation that can be used to provide renewable water to these lands. Currently, there is no infrastructure to deliver renewable water to the water providers in the Sahuarita-Green Valley area.

Because there are several entities that have CAP allocations, and because it would be desirable to bring renewable water supplies to this area, additional alternatives to deliver and recharge CAP water should be evaluated as part of the EA.

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The Environmental Assessment (EA) scoping process should evaluate a number of alternatives that are feasible for this area. These include, but are not limited to:

1. The proposed CAP pipeline as described in the Bureau of Reclamation's (Bureau) Notice of Public Scoping.
2. Direct delivery of CAP water to the proposed Rosemont Mine. The Proposed CWC/CAP Water Distribution System and Recharge Facility would not be under consideration were it not for the Rosemont action.
3. A CAP pipeline alternative that includes delivery to CWC, and ANC/FICO. ANC/FICO announced on August 25, 2008, their intent to work jointly with regional partners in the development of a pipeline to deliver CAP water to the Upper Santa Cruz Valley (see attached press release dated Monday, August 25, 2008).
4. A CAP pipeline alternative that includes delivery to all lands that have or could have access to renewable water including water providers with a CAP allocation, CAGRD member service areas and member lands and State Trust lands. This should include direct delivery of CAP water to the existing local mines.
5. No action alternative.

Other EA Scoping Issues

Additional scoping issues to be considered for the EA include:

1. This proposal will enable the proposed Rosemont Mine to recharge CAP water in the Green Valley area and recover it at wells located east of the Town of Sahuarita on Davis Road. The hydrologic mounding and drawdown, as well as the water quality impacts, should be evaluated as this is a direct consequence of the proposed project. This should include specific impacts to Pima County residents in Sahuarita Heights.
2. The scoping process should include a review of the findings of the studies mentioned below and a feasibility study to identify optimum recharge locations and recharge methods (see attached Green Valley/Sahuarita CAP Recharge Site Selection Feasibility Study Draft Scope of Work).
 - A. Review of the Sahuarita-Green Valley Area CAP Water Use Feasibility Analysis and Deliver System Optimization Study, Malcolm Pirnie, 1998.
 - B. Review of the Evaluation of Sustainable Water Supply Options in Green Valley, Pima County, 2007.

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C. Review of the Estimated Water Usage for USC/PUG Geographical Area, Years 2009-2030, Upper Santa Cruz Providers and Users Group, April 2008.

3. In June 2006, the Arizona Department of Environmental Quality issued a consent order requiring Phelps Dodge to protect the CWC drinking water supply from sulfate contamination from the Sierrita copper mine. The EA scope should address the impacts of recharging CAP water on the mobility of the sulfate plume in this area.
4. The proposed recovery well appears to be in close proximity to Pima County's Green Valley Wastewater Treatment Facility and Quail Creek's Effluent Storage Facility. An impact analysis should be conducted to evaluate the recovery of CAP water and the existing Pima County wastewater percolation basins and the Quail Creek Effluent storage facility. The impact of the proposed recharge site on these facilities should be evaluated.
5. The impacts resulting from the mix of good quality groundwater and CAP water exported to another hydrologically separated basin should be evaluated.
6. It is possible the 20-acre recharge site referenced in the proposal may not be sufficient to accommodate the 7,000 acre-feet per year. If the facility cannot recharge this volume of CAP water, what other options could occur and will these options be assessed?
7. The proposal's pipelines utilize Pima County road rights-of-way for the alignments. Alignments that would not utilize County right-of-way should be evaluated.
8. Affects of the various pipeline alignments upon plants and wildlife including the Pima Pineapple Cactus should be investigated and, if appropriate, mitigation identified.

Thank you for the opportunity to comment on the proposed Environmental Assessment (EA) on the proposed CWC/CAP Water Distribution System and Recharge Facility. If you have any questions regarding Pima County's comments, please call Nicole Fyffe at (520) 740-8149.

Sincerely,



C.H. Huckelberry
County Administrator

CHH/jj
Attachments

- c: The Honorable Chairman and Members, Pima County Board of Supervisors
John Bernal, Deputy County Administrator, Public Works
Suzanne Shields, Regional Flood Control District Director
Michael Gritzuk, Regional Wastewater Reclamation Director
Kathy Chavez, Water Policy Manager, Regional Wastewater Reclamation Department
Nicole Fyffe, Executive Assistant, County Administrator's Office
Jeanine Derby, Forest Service Supervisor



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American Nevada
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Press Release

Monday, August 25, 2008

For Immediate Release

Contact: Matt Smith, 520-321-1111
Dick Walden, 520-791-2852
Dan Naef, 702-990-2137

ANC and FICO Announce Joint Effort

Companies Forge Comprehensive Regional Water Solution

(Sahuarita, Arizona) --- Farmers Investment Co. (FICO) of Sahuarita, AZ and American Nevada Company (ANC) of Henderson, NV today announced their intent to work jointly with regional partners in the development of a pipeline to deliver Central Arizona Project (CAP) water to the Upper Santa Cruz Valley.

Dick Walden, FICO President, and Dan Naef, ANC Senior Vice-President, stated their intent to build on the studies and good work of the Upper Santa Cruz Providers and Users Group (USC/PUG) and Pima County to design a CAP water delivery system and accompanying recharge areas. This regional effort would help offset the identified overdraft of groundwater from the Upper Santa Cruz Aquifer.

FICO operates the Green Valley Pecan Company, a 7,000-acre pecan production and processing facility in Sahuarita and Green Valley. ANC is the developer of the proposed 4,200-acre Mission Peaks planned community west of Sahuarita. ANC also owns 33% of the Sahuarita Water Company, which serves the Rancho Sahuarita and Rancho Resort communities and is intended to serve Mission Peaks.

“This joint effort by two established, respected companies would serve the best interests of the entire Sahuarita and Green Valley communities,” said Naef. “We’re delighted to pursue our common interest with FICO as we concurrently reach out to local, regional, state and, even, federal partners from both the public and private sector. Certainly, the Central Arizona Groundwater Replenishment District will be an important partner as we move forward.”

“USC/PUG has laid out a road map for a regional solution to our valley’s water challenges,” stated Walden. “Pima County continues to provide important information and valuable staff support to our efforts. We’re pleased to work with our new neighbors at ANC on an environmentally sustainable project that serves our communities’ needs.”

Pima County Administrator Chuck Huckelberry applauded this regional effort. “Pima County has consistently supported a regional approach to addressing the water concerns of the Upper Santa Cruz Valley,” he said. “We’ve been impressed with the good work of USC/PUG and the common efforts of its members.”

USC/PUG, formed in late 2007, is made up of the major water providers and users in the Upper Santa Cruz Valley. Its studies have confirmed a substantial overdraft of groundwater and have identified a multi-phased solution that would bring renewable sources of water to the valley to balance groundwater use with renewable water.

The Arizona Department of Water Resources, in cooperation with others, sponsored extensive studies of the aquifer and its water needs a decade ago. Pima County has agreed to update these studies, focusing on the selection of optimum recharge sites throughout the valley. One of those potential sites could be FICO’s Sahuarita Farm, which has a permitted Groundwater Savings Facility in place to accept, use and recharge CAP water in lieu of groundwater pumping.

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Green Valley/Sahuarita CAP Recharge Site Selection Feasibility Study

Draft Scope of Work July, 2008

1.0 INTRODUCTION

1.1 Objectives

Several previous CAP route evaluations indicate the potential for recharge of CAP water when available in the Green Valley/Sahuarita area south of Pima Mine Road. The methods of CAP recharge include riverbed recharge to the Santa Cruz River and tributary washes, off-channel constructed sites and Groundwater Savings projects at the Farmer's Investment Company (FICO) pecan orchards. The Malcolm Pirnie (1998) Sahuarita-Green Valley Area CAP Water Use Feasibility Analysis and Delivery System Optimization Study describes the preferred CAP route. Errol Montgomery and Associates (1998) provided a preliminary assessment of hydrogeologic conditions, technical feasibility of CAP recharge and potential impacts from CAP recharge.

The Malcolm Pirnie (1998) Study included annual water use projections, estimated delivery flow rates and projected water demand at delivery points. In October 2007 Pima County prepared a report, *Evaluation of Sustainable Water Supply Options in Green Valley*, which summarized the current and projected water use in the Green Valley area and evaluated the costs of water supply options based on an equitable share of capital costs according to water use.

The Upper Santa Cruz Providers and Users Group (USC/PUG) was formed in November 2007 to discuss the long-term future of the aquifer serving the southern part of the Tucson Active Management Area. A Fact Finding Subcommittee was formed to develop a base of data that could be used to formulate and implement an operation plan. The results are found in a report, *Estimated Water Usage for USC/PUG Geographical Area, Years 2009-2030 (April 2008)*. The report reviews a significant amount of information and contains updated water usage projections and annual aquifer overdraft estimates.

This scope of work (SOW) goes two steps further by:

- 1) Reviewing the findings developed by the USC/PUG fact finding subcommittee and identification of shortcomings, if any; and
- 2) Conducting a feasibility study to identify optimum recharge locations and recharge methods in the vicinity of the preferred CAP pipeline route. This SOW will build upon the other studies in the area to select feasible sites based on the selection criteria outlined below and agreed upon by the USC/PUG, Pima County Regional Flood Control District (RFCD) and the consultant.

2.3 Economic Considerations (Task 3)

The consultant will evaluate the cost of constructing each facility as well as the operations and maintenance costs. For the proposed recharge facilities, costs should include any additional conveyance facilities, earthwork, and hydraulic structures. The annualized cost per acre-foot will be developed to facilitate cost comparisons of the candidate recharge facilities. Using conceptual layouts developed in Task 1, the cost information will be presented. Data from other recharge facilities will be presented regarding capital and annual operations and maintenance costs as a basis for comparison and estimation.

A separate cost analysis will be presented for any land and easement acquisitions. A discussion of privately held and publicly held land and the costs associated for acquisition or lease will be included.

2.4 Selection of Preferred Recharge Facilities (Task 4)

Based on Tasks 1 and 2, the consultant with USC/PUG and RFCDD will select the preferred recharge facilities based on the volume of CAP needed, selection criteria and cost considerations. A selection matrix will be prepared of the sites, and the sites will be prioritized with a schedule of construction dates with probable costs coordinated with CAP extension.

2.5 Permitting Requirements and Data Deficiencies (Task 5)

Each selected proposed site will be evaluated regarding the permits needed and the additional data needed to complete preliminary and final designs. All necessary permits such as ADWR Storage Facility, USCOE 404, Pima County Floodplain Use, and other permits will be described with explanation of the data needed and costs for permits completion.

2.6 Summary Report (Task 6)

The Consultant will prepare a summary report describing the results of the evaluation. The Task 5 summary report should include:

- Location map with proposed recharge sites and CAP alignment
- Results of the evaluation of the USC/PUG report
- Geologic cross sections with potential impeding layers described
- Mounding analyses for the proposed recharge facilities
- Table of physical characteristics of each proposed site, including depth to water, estimated infiltration rate, estimated transmissivity and specific yield, storage capacity, total site area, presence or absence of perching zones, water quality problems
- A ranking of the sites as most feasible, feasible and least feasible with qualitative ranking table.
- A ranking of costs for all sites
- Recommendations regarding data needs to complete preliminary and final designs, monitoring and permitting.

The report will be submitted to the USC/PUG for distribution to the Project Team. The Consultant should plan to attend up to three meetings to discuss work and results of the feasibility evaluation.

3.0 PROJECT SCHEDULE

Task 1 will be completed within one month of the Notice to Proceed. Task 2 will be completed one month after completion of Task 1 with a presentation to the USC/PUG.. Task 3, 4 and 5 will be completed within two months after Task 2 is complete with a presentation to the USC/PUG. The report in Task 6 will be completed within one month after completion of Task 5. This project shall be completed within 6 months after issuance of a notice-to-proceed.