Wheeling Stakeholder Meeting #2
"Operations"
April 22, 2014 – 1:30 p.m.

The Wheeling Stakeholder Meeting #2 was called to order by Kenneth Seasholes, Manager, Resource, Planning & Analysis, at 1:30 p.m. The meeting was held at Central Arizona Project, 23636 N. 7th Street, Phoenix, Arizona 85024, in Conference Rooms 10 & 11.

Introduction and Overview of Meeting:
Mr. Seasholes indicated that the focus of today's meeting is operations – how the system will operate under a wheeling regime. Topics include scheduling, energy, losses, and water quality. In addition, today's meeting will revisit some of the themes and issues discussed at the stakeholder meeting #1.

Review of Meeting #1:
Mr. Seasholes reviewed a list of selected themes and comments from stakeholder meeting #1.

- The financial and regulatory hurdles related to acquiring non-Project water supplies will be substantial. Wheeling will be just one piece of that equation.
- Staff heard that potential wheeling parties cannot wait until the end of the regulatory review process to know whether a wheeling contract will be issues. There needs to be some certainty along the way that if a potential wheeling party gets through the other regulatory hurdles, a wheeling contract will be available.
- Staff heard that its concerns about "speculation" should be weighed against the benefits of flexibility and creative arrangements.
- Staff heard concerns expressed about the relationship between the proposed wheeling program and the CAGRD, and CAWCD's role in both of those arenas.

Mr. Seasholes asked for any comments/corrections to the summary for stakeholder meeting #1; none were offered.

Refinements to "Serve as You Come":
Mr. Seasholes indicated that there are places where additional flexibility and clarification can be incorporated into the wheeling program proposal. Such as:

Assignments: Mr. Seasholes reiterated that a wheeling contract is only meaningful when coupled with an underlying non-Project water supply, and cannot be separated. However, there may be straightforward instances, such as a change in corporate ownership, where there needs to be a process to amend the wheeling contract to reflect that there is a new owner. The draft wheeling contract that is part of the staff proposal will be amended to allow an assignment of the contract to a successor-in-interest. In response to a question, Mr. Seasholes indicated that he expects that to be a "pro forma" process analogous to transferring a CAP subcontract to a successor in interest.

Mr. Seasholes then discussed a different category of transfers – where the underlying non-Project water supply is wholly or partially transferred. Mr. Seasholes stated that those types of transfers would automatically trigger new wheeling contract actions, including an amendment to the wheeling contract of the entity transferring a portion of its non-Project supply, and a new wheeling contract for the recipient of the non-Project water supply. A question was posed: will the transfer of all or a portion of the underlying water supply always require a new contract? Mr. Seasholes answered that if the underlying non-Project supply is altered, then the wheeling contract will need to be amended to reflect the change.

Regulatory Approvals: Mr. Seasholes indicated that staff had clearly heard the comments from the stakeholder meeting #1 regarding regulatory approvals and the timing for issuance of a wheeling contract. Staff recognizes the need for flexibility in the process and some early assurance about the ability to obtain a wheeling contract if a potential wheeling party successfully navigates the regulatory review process. Mr. Seasholes noted that each transaction involving the acquisition of a non-Project water supply will be fairly unique. As such, the actual process and timing for issuance of a wheeling contract will be fact and circumstance specific. However, staff is willing to consider a mechanism, such as an "intent to contract", which would provide that if a potential wheeling party makes it through the regulatory review process and meets certain benchmarks in a timely manner, a wheeling contract will be available to it at the end of the process.

Long-term Storage Credits: Mr. Seasholes noted that the first stakeholder meeting included an extended and helpful discussion regarding the use of a non-Project supply to generate long-term storage credits for later use. Mr. Seasholes referred to one variation of this as the "square to rectangle" approach, where a user may hold the rights to a 20-year water supply, but would like to use that supply over a 40 to 60-year period. He expressed the view that this was contrary to the Serve as You Come concept, because it creates concerns about speculation and has significant implications regarding the manner and timing of adding capacity improvements to the system. However, Mr. Seasholes stated that staff does recognize there are legitimate situations in which there may be a need to generate some long-term storage credits, and it may be reasonable to use a supply in this manner for a period of time. Accordingly, staff is not proposing an absolute prohibition on generating long-term storage credits. To provide guidance for potential wheeling parties, staff contemplates there will be an updated Board wheeling policy, which will include a "declaration of intent" to the effect that wheeling contracts are meant to serve near-term annualized demand. Mr. Seasholes indicated that this has been the focus of the staff proposal for some time, and is a critical component of how the Serve as You Come concept works. The proposed wheeling program would still permit a user to generate long-term storage credits while their near-term demand is ramping up.

Mr. Seasholes stated that the concept of offering wheeling contracts to serve only near-term demands is consistent with the existing state and federal regulatory review processes governing the transfer of a Colorado River entitlement. Mr. Seasholes clarified that CAWCD is not proposing to add another layer of review to the existing regulatory review process governing Colorado River transfer, and that the Serve As You Come concept relies substantially on the existing regulatory review process to filter out speculative activity. However, for other supplies,

such as imported groundwater, there is no regulatory review process imposing similar protections. Accordingly, the staff proposal contemplates that the CAWCD Board will evaluate these types of transfers against its adopted wheeling policy to decide if wheeling is consistent with that policy.

The following comments or questions were offered: Under what circumstances would CAWCD authorize the accrual of long-term storage credits? Mr. Seasholes responded that a ramp-up to serve annualized demand would permissible. What if a user needs a water supply to serve demands that won't materialize for 50 to 100 years? Mr. Seasholes noted that the existing state regulatory review process would most likely not authorize the transfer of a supply to serve demands that may not materialize for decades to come. A user may have the ability to go out and acquire a water supply it won't need for decades, but under the Staff Proposal that user may not be able to wheel that supply until actual, near-term demands have developed that will utilize that supply. Some stakeholders commented that the CAWCD proposal seemed inconsistent with the planning obligations of water providers needing to demonstrate an assured water supply. Others expressed the opinion that this issue needs more discussion and thought. Another stakeholder inquired about the use of a wheeling contract for annual storage and recovery. Mr. Seasholes clarified that annual storage and recovery is the equivalent of direct delivery to serve near-term demand; such activity would not be prohibited. Finally, a stakeholder inquired whether use of a supply for firming fit within the definition of near-term demand. Mr. Seasholes commented that the answer depends on the type and purpose of firming one proposes. Mr. Seasholes expressed the view that there is a substantial difference between using the CAP system to firm an entity's CAP water supply, and using the system to firm another type of supply. CAWCD staff believes there are ways to use the CAP system to firm Project water supplies that may not involve wheeling under Article 8.18.

Operations – Scheduling Priority:
Scheduling priority is a primary method used to allow long-term non-Project water supplies to be transported under Article 8.18, while also protecting Project water users, and protecting the United States' rights under Article 8.17. Under the current staff proposal, first priority is for project water, including excess CAP, and 8.18 non-Project water after improvement projects are complete, then next in priority is 8.17 non-Project water, and last, 8.18 non-Project water before improvement projects are complete. Mr. Seasholes indicated that staff identified two hypothetical situations that result in undesirable outcomes using that priority scheme.

Under the "2.0 MAF" scenario, a large Colorado River surplus could result in a Project water supply that is greater than the total system capacity. In the current priority proposal, the outcome is unclear, but Project water could potentially utilize the entire capacity, including that which was created with system improvements. The second scenario ("95% May") could occur during a month (e.g., May) when capacity in the central part of the system is almost fully used (e.g., 95%). In this case, without 8.18 wheeling, the 5% capacity is available for 8.17 use. However, under the current priority proposal, post-improvement 8.18 wheeling could utilize the entire 5%. Mr. Seasholes indicated that these scenarios were quite unlikely, but could be in conflict with the intent of the staff proposal is to avoid harm to 8.17 and project water. To remedy both of the hypothetical problems, a revised staff proposal is to schedule the west on an annual volume

(post-improvement 8.18, then Project Water, then 8.17, then pre-improvement 8.18) and schedule the central and south on a monthly basis (Project water, then 8.17, then 8.18). Mr. Seasholes stressed that even though the revised staff scheduling proposal is more complex, it generates identical results to the previous staff proposal for all other scenarios, and provides as much protection as possible.

Interruptions & Reductions:
Mr. Dent began his comments by noting that the wheeling program will require CAWCD to schedule a non-Project user's potential inputs to the canal. The non-Project user will be required to submit an annual schedule to CAWCD, and CAWCD will coordinate with the user regarding an annual delivery schedule. Mr. Dent indicated that if an unplanned outage occurs during the year, CAWCD will not make a distinction between Project and non-Project supplies. The standard form wheeling contract will have the same contractual provision regarding interruptions and reductions that is currently in the CAP M&I water service subcontract. Under this provision, CAWCD has the right to discontinue or reduce the delivery of water for investigation, inspection, construction, testing and maintenance. CAWCD will attempt to coordinate with the wheeling contractor and give notice in an emergency situation (i.e. power outages or a breach). In such cases, CAP and the U.S. have no liability for damages or reduced deliveries but the contractor is entitled to reimbursement or a credit for the charges paid for water scheduled, but not delivered.

Energy:
Mr. Dent articulated staff's proposal regarding the variable OM&R charge or pumping energy charge for wheeled water: The wheeling contractor shall be assessed a variable OM&R charge based upon the calculated amount of energy required to transport the wheeled water and an energy rate for water transportation established by CAWCD. Mr. Dent stated that CAWCD will establish a pumping energy rate for wheeled water ($/AF). Each pumping plant requires a different amount of energy to pump an AF of water (kwh/AF) as indicated on the PowerPoint slide. CAWCD will define the plants that the non-Project water must go through, then multiply the energy rate times the total kwh/AF required to transport the wheeled water from the point of input into the system to the point of delivery. The following questions were asked: Can I bring my own power? Mr. Dent stated, the short answer is probably no; the long answer is, it depends. CAWCD proposes to acquire energy for wheeling on a real-time, daily basis, making it difficult to attribute specific energy costs to specific water supplies. What would the energy cost if non-Project water did not have to travel through any pumping plant? Mr. Dent said it the cost of energy would be zero. Mr. Dent also noted that the energy rate will include not just the cost of the energy, but transmission and scheduling costs.

Losses:
Mr. Dent articulated the staff proposal regarding losses: Non-Project water wheeled through the CAP shall be assessed uniform losses of 5%. Mr. Dent provided a graph showing historic CAP system losses since 2000. CAWCD evaluates CAP system losses on a monthly basis. The CAP is a 'low loss' system; most of the losses are attributable to evaporation, and most of that is attributable to Lake Pleasant. One stakeholder commented that this proposal was unfair to a wheeling contractor that only needed to move its non-Project water a short distance through the

CAP system. In response, Mr. Dent reiterated the staff proposal is not based on actual losses associated with individual wheeling contracts. Rather, the staff proposal is in the nature of a uniform cut to the system.

Water Quality:

Mr. Dent outlined the potential process CAWCD may use when evaluating requests to have non-Project water, other than Colorado River water, imported into the CAP system. That process may be similar to the current process CAWCD follows when a water user proposes to build a turnout on the CAP system. For example, the water user's plans to build a "turn-in" on the CAP system would undergo technical review by CAWCD, which could include the potential to damage the CAP canal (subsidence) and water quality impacts. Mr. Dent explained that CAWCD has a well-established water quality sampling program. CAWCD has a water quality testing program that includes both real-time continuous monitoring, along with monthly and quarterly testing at a number of sampling sites along the canal. The results are published on CAWCD's website. CAWCD also publishes an annual water quality report. CAWCD tests for 141 constituents; almost all of those constituents have been within drinking water quality standards.

Mr. Dent reviewed the current staff proposal regarding water quality, which provides that CAWCD shall not be obligated to transport non-Project water if it fails to meet water quality parameters established by CAWCD and the United States. Mr. Dent then outlined several new refinements to the staff proposal regarding water quality: First, there shall be no harm to the system. Mr. Dent made a particular point of noting that CAP water is nutrient limited, so there is a particular concern about the importation of water with high levels of nutrients, such as nitrates or phosphates, which could cause an algae bloom and degrade the delivery capacity of the CAP system. Second, there shall be no harm to other customers. Existing CAP subcontractors are very concerned about the quality of water reaching their treatment plants. And, third, there shall be no harm to public health. In short, drinking water standards will be the presumptive default parameters that water imported into the CAP system must meet.

Mr. Dent stated that an entity desiring to wheel non-Project water will be required to prepare a water quality impact analysis as a part of the application to obtain a wheeling contract. Also, CAWCD will develop monitoring requirements and enforcement provisions to be included in the standard form wheeling agreement. The following questions were asked: Would the water quality provisions developed for the standard form wheeling agreement apply to water wheeled pursuant to the United States' 8.17 rights? Leslie Meyers from Reclamation's Phoenix Area Office stated that the United States had not developed any criteria for 8.17 wheeling yet. However, she imagined that 8.17 water quality provisions may be similar to those developed in this context, as the United States and CAWCD share similar interests in protecting the quality of the CAP supply. Another stakeholder representing municipalities holding CAP subcontracts commented that these entities are very concerned about the quality of CAP water coming into their treatment plants and the ability of the municipalities to maintain compliance with the water quality standards. Finally, Mr. Dent clarified that the staff proposal does not contemplate that dilution is a permissible solution for imported non-Project supplies with poorer quality than CAP

system water. Imported supplies will be expected to be of comparable quality to CAP system water.

Wrap-up & Next Meeting:

Mr. Dent and Mr. Seasholes addressed a question about the timing and costs for increasing the capacity of the canal. The next wheeling stakeholder meeting will address these issues. Mr. Seasholes reminded the stakeholders, under the staff proposal, water may be wheeled before the completion on an actual system improvement project. However, a wheeling contract cannot be issued and water cannot be transported until the United States has issued a certification for a specific system improvement project.

A question was asked whether water could be wheeled through Lake Pleasant. Mr. Seasholes responded that CAWCD does not account for water that enters and leaves Lake Pleasant on a contract-by-contract basis. Mr. McCann stated that if the question was whether wheeled water could be stored in Lake Pleasant and carried over to the next year, the answer is, no.

A question was asked how the staff proposal fits with CAP shortages and the ability to utilize dry-year options to firm CAP supplies during times of shortage. Mr. Seasholes explained that the program is not well designed for interruptible, shortage-related needs, largely because shortage replacement supplies don't implicate the need for additional system capacity. However, in a different context, (the AWBA program for firming long-term CAP M&I subcontracts and Reclamation's and AWBA's shared obligations to firm certain long-term CAP Indian contracts), Reclamation and CAWCD have determined they have the ability to perform these firming responsibilities within existing authorities; they do not need to rely on 8.17 or 8.18 wheeling. Mr. Seasholes acknowledged the question raises important issues that CAWCD desires to address, but those issues don't fit within this wheeling conversation.

The meeting was adjourned at 3:10 p.m.