

Water Markets Concept

Summary of Coordinating Committee discussion and resulting **draft** plan language

Coordinating Committee

September 19, 2017

SUMMARY OF WATER MARKET DISCUSSION

Aaron Thompson introduced the idea of establishing a water market in the Republican Basin at the August Stakeholder Meeting. After much discussion, the stakeholder group agreed to have Aaron attend the next Coordination Meeting to explore the potential of such a market and bring back additional information at the next stakeholder meeting. Stakeholders did comment that the market should be set up in such a way that it would incentivize/encourage conservation and that the market be designed to reduce consumptive use.

At the coordination meeting Aaron refined his thoughts into a draft proposal which he presented to the group. Discussion followed on two "tracks":

- How the idea should be addressed in the planning document.
- Determining the best way to move the idea forward.

Planning Document

There was general agreement to approach the issue as a short term (within the first five years) Action Item under the general goal of Balancing Water Supply and Use. Given the schedule, there was concern that implementing a pilot and understanding the results would delay plan completion considerably. It was agreed that including the Action Item in the plan would give it traction and support as it relates to possible funding applications (i.e. WaterSmart). The Coordinating Committee asked for stakeholder input on whether the action item should be:

1. Cooperate in determining the feasibility of a Water Market in the Republican Basin and seek WaterSmart funding.
2. Cooperate in determining the feasibility of a Water Market in the Republican Basin, seek WaterSmart funding and test conclusions through implementation of the program in a pilot area.

The coordinating committee agreed this approach should not preclude a group of interested stakeholders in moving the idea forward as quickly as possible.

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Moving forward

Based on discussion at the Coordination Meeting there are a number of items to consider, probably more questions than answers. It is suggested that an independent group (a subset of the current stakeholder group possibly) begin work on the feasibility effort.

There are some items that the Coordination Meeting attendees found essential to any program:

- The Water Market be a truly cooperative effort between groundwater (GW), surface water (SW), State and Federal partners
- The program supports water conservation and **does not** increase consumptive use.
- Assumptions should be tested with a pilot program.
- The program should be voluntary.

The goal of the feasibility work and pilot program implementation is to provide information to users about the risks and costs associated with the program. Users need to determine from the results of the pilot if the concept is good for them personally and for the basin as a whole.

There is likely money available to support this effort. A joint application for WaterSmart funds between an irrigation district and an NRD with State and Federal support was discussed as the best idea.

In terms of where to start, the Coordination Committee talked about questions to be answered. They also talked about current practices of buying/selling/trading water in the Republican Basin and the need to understand and document these to help guide or contribute ideas to water market feasibility efforts.

Aaron Thompson's initial idea: *Establish a Pilot Water Market within the Nebraska Republican River Basin. To simulate the entire basin it is suggested that the pilot have a 10:1 ration of Ground Water and Surface Water users. The Pilot area will receive the same allocation. The pilot area will be allocating the supply not the shortage. To enter the "water exchange" or "water pool" a transaction cost will be paid by everyone in the exchange. Those in the exchange that do not have access to the entire allocation will be paid a stipend by the exchange. For example, if the allocation is 10" and someone only has an 8" supply the exchange will compensate the 2" difference with dollars or wet water. The exchange will then ask for willing buyers and sellers. Limits will be established on the amounts that can be bought and sold.*

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Questions Raised:

Aaron's proposal generated a lot of discussion and the following questions were raised in the Coordination Meeting in response. The group also talked about possible candidates for the pilot area, and other resources that may provide guidance to the feasibility effort.

1. Who holds the money and administers the program?
2. Who does the accounting?
3. How would the value of water be determined?
4. How would allocations be determined?
5. Can SW allocation move to a GW user? Vice versa?
6. How does the water market system work with already established compact accounting procedures?
7. What is the appeal of the water market to a GW user?
8. Can it work as a SW only market?
9. Is this really an opportunity to purchase offsets for a depletion? The offset of depletion appears to be the most marketable item. Should this be a market where people are basically buying offsets for depletion? It is simpler and may be a market some users would have an incentive to participate in.

Location of Pilot Area:

A desirable pilot area contains a GW/SW ratio that generally mirrors that of the rest of the Republican River Basin. A ratio of 10:1, GW:SW users was suggested as appropriate. It is also helpful to have the pilot area within one NRD.

Red Willow Basin was suggested as a possible pilot area.

Other Resources:

1. The Murray-Darling Basin in Australia is an example of a market of this kind, although it isn't clear that it covers both ground water and surface water. It may be a helpful template for developing the idea of a Water Market for the Republican Basin.
2. The Palo Verde, California GW/SW system may also be a valuable example.

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DRAFT PLAN LANGUAGE RESULTING FROM WATER MARKETS DISCUSSION

Objective 5.3: Evaluate the feasibility and potential outcomes of establishing water markets in the Basin

During Plan development, stakeholders were enthusiastic about the idea of trying a water market in the Basin for the purposes of exchanging water among groundwater and surface water users. Much is still unknown about the logistics, feasibility, and desirability of such water markets; therefore, the purpose of this objective is to conduct a study and possible pilot program to evaluate the feasibility and potential outcomes of establishing a water market or water markets within the Basin.

The intent is to complete this evaluation (Action Items 5.3.1 through 5.3.2) within five years of this plan taking effect and to report on findings from the evaluation as part of the first five-year technical review, provided that sufficient funding and staff resources are available to do so.

Nothing about this objective or its listed action items precludes NRDs or other entities from pursuing water markets in the Basin outside of this planning process.

Action Item 5.3.1: Cooperate in determining the feasibility of water markets in the Basin

This action item would include studying existing water markets, as well as working cooperatively with the US Bureau of Reclamation, water users, and irrigation districts, to evaluate the feasibility of water markets for surface water and groundwater users in the Basin. This feasibility analysis will include such considerations as Compact compliance obligations, program costs, regulatory framework, and water user interest. If the conclusions from these efforts indicate that water markets in the Basin would be feasible, then NeDNR and the NRDs may choose to proceed with testing their conclusions in a pilot area (Action Item 5.3.2).

Action Item 5.3.2: Test conclusions through implementation of a water market program in a pilot area, if feasible

If the evaluation in Action Item 5.3.1 indicates that water markets in the Basin would be feasible, and if sufficient funding and staff resources are available to do so, then NeDNR and the NRDs will work cooperatively with the US Bureau of Reclamation, the Basin's irrigation districts, and water users in the Basin to conduct a water market pilot program within a portion of the Basin.