

Progress Report on Inquiry into Socio-economic Issues in Improved Water Transfers

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After earlier review and interviewing, a workshop meeting was held in Rocky Ford, CO and two were held in Fort Collins, CO; thanks to Lower Arkansas Valley Water Conservancy District, and Colorado State University for hosting – please note that neither of these institutions endorses or is responsible for this report or the project. There were two objectives: to examine issues raised in earlier inquiries concerning feared problems with new forms of transfer, and to inquire about any new concerns and recommendations. In turn, the next step is recommendation of research needed to avoid problems or facilitate new management which could provide climate responsiveness while meeting the array of other needs and interests. The Rocky Ford meeting had 7 participants. The Fort Collins meetings had 18 participants in one session, and 7 participants in the other session. Highlights of the discussions included these points:

- ◆ Rural **local government** roles concerning water issues, water futures and policy are not yet fully developed.
- ◆ Time pressure has affected willingness to accept offers for water; lack of **information about water markets** is an important problem for some participants, as well as lack of information about **prices** (and differences).
- ◆ Collective dealing has been very difficult so far, and may be a substantial "**sunk cost**" invested well before any return can be achieved. There have been important past **successes** in past agricultural organization.
 - ◆ Lessor organization problems include both **allocation and management** within and between ditches.
 - ◆ **Tax** impacts of different kinds of payments may be important.
 - ◆ **Revenue** allocation and assessment of different water values is a difficult problem.
 - ◆ A successful organization should be willing and able to accommodate **new-comers**.
 - ◆ A successful **model** is important; differences between California and Colorado are important.
 - ◆ **Demonstration** of the benefits will be more compelling than description.
- ◆ Technical problems in **measurement** of consumptive use increase costs and difficulty of transfers.
- ◆ New kinds of **agricultural planning** may be needed to effectively use long-term rotating crop management, long-term interruptible supply, and spot markets such as many forms of water banking.
- ◆ New kinds of **agricultural information** are wanted, including help with design of appropriate crop rotations for the new forms, and BMPs (best management practices) for using new forms while minimizing erosion and maintaining soil quality while seeking modified production goals (e.g. maximum returns rather than yields).
- ◆ "**Salvage**" legislation that provides for workable means to identify and use water no longer consumed due to changes in management practices would be very helpful, and may demand better estimation approaches.
- ◆ **Municipal goals** have become increasingly dominated by certainty rather than price of supply.
- ◆ Municipal **costs** of alternative forms may reflect avoiding use of bonds and debt, and may reflect avoiding costs of revegetation, but there is no known public information on cost comparisons and revegetation.
- ◆ Municipal **interests** may or may not be fully reflected given changing public preferences.
- ◆ **Lack of familiarity** with long-term contracts of all kinds is a problem.
- ◆ But, performance **monitoring is not a problem**; the State Engineer will administer any deal that is decreed by the Water Courts, regardless of what it is called, or any deal otherwise legally authorized.
- ◆ There may be important policy questions about **municipal control over water supply** sources, or default to developers who can "bring your own" from any source.
- ◆ Impact **mitigation** to local governments and areas of origin in water transfers would be more easily justified with stronger rationales and plans for use, if going beyond some term or payments in lieu of taxes.
- ◆ It is not clear how much water will be **returned** to rivers after water decreed for new uses has been moved, used and re-used, re-cycled, or the effluent has been sold.
- ◆ It is not clear whether land of poor quality or which contributes disproportionately to salinity or pollution can be "rotated out" every year in a rotating crop management program; people want less use of "**bad ground**."
- ◆ Increased **storage** is wanted for "smoothing" supply from rotation plans, but who will pay for it, own it, and will it be accessible to others (other payers) and for other purposes (e.g. state wildlife or local recreation)?
- ◆ **Market segmentation** by reliability is already in operation in water leasing, and is desired, and also segmentation for average, dry and wet years.
- ◆ "**Stacking**" interruptible supply contracts for unusual years "on top of" base-load contracts is desirable and should meet needs for different kinds of years with security and the benefits of alternative transfers.
- ◆ Beneficiaries should invest in **externality** benefits, as well as mitigation of externality costs. Missing interests should be involved in markets and definition of transfers which affect multiple interests.

Certainty for all participants is critical; greater understanding of how long-term contracts would work is critical. Education based on greater understanding of such contracts, price indexing, and other features is needed, and may in turn need greater investment in development of models. It is later added that permanent fractional sales with time dimensions as well as volume or percent of water right dimensions may be the next step, to avoid fears of leasing being too uncertain.