SUGGESTED PRINCIPLES FOR WATER TRANSFER INSTITUTION DESIGN -

Avoiding unintended consequences and creating participation to provide certainty

- 1. Role of the State "Referee" for technical and administrative management, to protect property rights including but not limited to water rights. Defends interests in water quality, soil erosion etc., social impacts as directed, future conditions, and compliance with federal law and interstate compacts. Provides adequate information and institutions to allow successful markets and reduce transactions costs. Provides assurance of certainty of priority. Fosters capacity of local governments to identify and secure needs and interests, usually within markets.
- 2. Role of the Market Fair and reasonably transparent opportunity for trades of resources and arrangements for risk distribution and management. Opportunity for third-parties and governments to seek or preserve conditions they desire, for amenity, tax-related, recreational, environmental or other interests, by purchase, lease, easement or otherwise. Market allocation is preferred to political processes because it allows negotiation flexibility for unique needs and desires, and certainty of property rights. Use the market when adequately supported, including market as means for public interest realization.
- 3. Certainty is an Essential Purpose Creation of successful alternatives to sale of water rights requires correct specification of property interests, provisions for adjustment of deals, and adequate efforts to foresee and manage impacts and surprises. Impacts on transferor areas include regional and cumulative impacts, such as total changes in employment, habitats, species, salinity and flow impacts. Failure to anticipate thresholds and limits will threaten certainty. Therefore, the scales of impact analysis and the quality of assessment must be sufficient to anticipate adverse surprises which would remove incentives to avoid water rights sales. If a new program is launched without adequate efforts to provide certainty, surprises will favor some interests over others, and may deny achievement of the policy goals. Certainty of benefits creates value.
- **4. Allocation Within Thresholds is Important** Failure to anticipate thresholds has been illustrated in the South Platte and Arkansas Basins where well users were abruptly brought into compliance with prior appropriation and in some cases taken out of business. (Abrupt adjustment is also underway in the Republican River area). However a limit or threshold arises, from water law, endangered species, a TMDL, or intent to retain some level of agricultural activity, there will be need to allocate within the limit. Parties hoping to join a market who discover that all permits or all capacities are taken may threaten the legitimacy and certainty of arrangements privately made which suddenly prevent other participation. And, reallocation may be important in the future, as accelerating climate destabilization impacts both supply and demand.
- 5. Transferor and Re-Organizational "Internal" Allocation by Market Within ditches and districts, two sets of adjustments should be possible using market processes. First, resource re-allocation for public purposes, such as salinity reduction, or purchase of environmental conditions (e.g. wetland banking or preservation) may be important. Second, individual farmer situations call for flexibility; families may want different outcomes and things change. Certainty in the long term requires internal adjustability on the small scale, and proper scale to accommodate individual property rights and preferences while avoiding organizational crisis. Matching good water and good land improves farming, and as supply and demand change, moving water may be important for many operations. And, this may be critical as part of re-designing the uses of all of a ditch or district's assets, including the land uses, when creating agricultural resilience by appropriate change.
- **6. Scale Matters: Appropriate Collaborative Institutions** Impacts are related to scale, and cumulative impacts are often regional. Identification of impacts and interests is somewhat new in relation to water transfers, partly because of the history of mitigation problems. New transfer mechanisms may need formal collaborative organization (co-ops? districts? ditch companies?) to manage impact assessment and allocate within self-organized areas. There may also be need for regional recreational and environmental consideration, to represent interests new to the market and identify opportunities for coordination and efficiency. Enabling wider participation using markets should more fairly match costs and benefits. Scale issues include areal extent of transferor organization, regional impacts and participant preferences, as well as costs of management and organization. To date, no discussion of the state role or potential investment in public interest is known. Larger organization may also offer benefits and cost-savings in risk management, insurance, and operations for some uses.
- **7. Permanence, Practicality, Partnerships and Who Wants What.** Buyers of water under long-term deals (e.g. 75 years) will not want to risk insecurity of supply if prices and supplies have changed as they will. But, ownership and "buy-and-dry", or occasional lease-backs onto limping farm operations that won't support new technology and expense are not the only answers. Legally, this may be leasing, but economically and practically, it is partnership and shared ownership. In the city, the same people who pay water rates also voted 110 times in Colorado to spend \$3.4 Billion dollars in taxes on conservation, open space, and farm and land preservation (Trust for Public Land "conservation vote" on website). The city's job is not to "get water now as fast and cheap as possible" and forget the impacts. Cities may not be the best choice for managing farms, revegetation, and agricultural enterprise, but they can do other things at lower cost than farmers. Farmers on the land not forced into wasteful choices can conserve soil and agricultural capacity for the benefit of all.