THREE ADDITIONAL FORMS OF WATER TRANSFER

This discussion is in Colorado legal terms, but the ideas appear transferable to prior appropriation states. Three forms of transfer appear to meet known needs, with the existing agricultural loans authority and the existing substitute water supply program authority (and maybe a few plain old sales too.). These are alternatives to "buy-and-dry" for many purposes. Discovering value "in-basin" may support better prices "out-of-basin." Please also see the Suggested Principles page. **Note:** With the needed investment in development of the legal forms, the fallowing and interruptible supply programs could be done in the form of a sale, creating shared ownership. This would risk challenges, as every innovation in water law has been fiercely challenged.

1. **LONG-TERM ROTATIONAL CROP MANAGEMENT OR SIMILAR:** **Features:** long-term contracts or sales; should follow principles elsewhere described. Transferor organization allocates "fallow" internally, water not used for irrigation is transferred. The water rights are obligated to the transfer however the contract specifies. No other rights or property need be constrained except that what is sold is sold (e.g. use of some part of water right as specified.) Could be permanent.

   **Expected Use:** Base-load water supply for M&I, perhaps high-capital agricultural use.

   **Financing:** Up-front infrastructural investments in conveyance; could be shared among cooperating users; spreads annual water payments for good match of costs and benefits for users; avoids use of municipal bonding capacity for water acquisition, though bonding should be considered for infrastructural investments, to match costs and benefits over time (pay-off in large measure by tap fees for new supply). Avoids revegetation requirements.

   Transferors would likely receive initial infrastructural improvements (e.g. Highline-Aurora-Co. Springs lease) and subsequently annual payments for water, fallowing expenses, etc. Parties should negotiate all details of payment. Ditch and Reservoir companies are parties as well as their shareholders. Asset value retained by irrigators; facilities, capacity, socio-economics more stable, less adverse than "Buy-And-Dry". Because impacts dramatically reduced, mitigation minimized.

   **Authority:** May have been possible; now have C.R.S. 37-92-103, -305. Should include water court process since long-term arrangements are involved (decades). Standards for acceptability of prior determinations of transferable fraction are needed. Adoption of suggested principles as refined, by rulemaking. Currently, it looks as though permanence will be demanded.

2. **LONG-TERM INTERRUPTIBLE SUPPLY CONTRACT OR SIMILAR:** **Features:** long-term contracts or sales, similar to rotational crop management, except that transfer of water is not as predictable.

   **Expected Use:** Firming, with three main applications: (1) dry-year and post-drought recovery "calls" on schedule of price adjustments to account for time when option exercised, cover expenses; (2) facility-out-of-service substitutions, same schedule of price/time of call; (3) wet-year calls at different set of prices to enable storage filling, aquifer storage or recharge, etc. while farmer uses wet year for not, less or differently irrigated crops; could involve negotiated risk sharing arrangements, etc.

   **Financing:** Similar to LTRCM, with difference of schedule of prices to reflect different expenses or investments depending on time of call for use of option; probably annual payment for retaining option (income stabilization for irrigator and ditch company). Also avoids revegetation requirements. Economic and social impacts and mitigation dramatically reduced.

   **Authority:** Would be similar to LTRCM. Because long-term, careful adjudication warranted. NOT authorized in current C.R.S. 37-92-309, which is limited to 3 of 10 years and 10 year term. Also seems likely that "permanence" is demanded.

3. **WATER BANK:** **Features:** short-term contracts, reversible transfers, very low costs, very quick changes; affordable fast small deals. Duration of approvals limited to 3 years (2? – intent to fill gap if needed while long-term arrangements are made, but should not be substitute. Could even be 18 months, if substitute water supply authority currently available is retained.)

   **Expected Use:** "spot market". Flexibility for surprise needs, surprise opportunities (e.g. expectations for markets due to local or competitor region conditions), and for security of investment in high-capital technology where infrequent needs arise to maintain investment (e.g. fruit trees, greenhouses). (Northern District: 1/3 of transfers (1/4 of volume moved) of CBT water are "ag-to-ag"; see Howe and Goemans in Colorado Water, 2002, or Journal of American Water Resources Association, 2003.)

   **Financing:** Ad hoc, by definition. Any source available, deals as negotiated.

   **Authority:** Similar to current water bank authority (C.R.S. 37-80.5-101 et seq.) but not limited to in-basin, maximum duration to be specified to distinguish from Interruptible Supply deals; procedural clean-up may be required (Wiener, "next steps" memorandum; other presentations available); and add specification that potential transferors may seek pre-qualification (e.g. show adequate prior determination of HCU). Proposed second water bank makes progress. Price discovery and information is still a current need for these activities.