

Table of Water Transfer Alternatives – Different Goals, Different Tools

Explanation of table: The purpose is to summarize the relative usefulness of different forms of transfer of water for different goals. Each kind of transfer may be considered as a tool, with different uses. The rankings are open to question and discussion – this table is the author's view, and not representative of any institution or agency, and comments are welcome! Please direct comment to John Wiener, <John.Wiener@Colorado.Edu>, or Campus Box 468, University of Colorado, Boulder, CO 80309-0468. The opinions here are not necessarily those of anyone else, and this does not represent any institution.

The **number** in each cell is an estimate of how well the form with specified additions serves specific goals from the transfer; 3 is best, 2 is moderate, 1 is small, 0 is not at all useful for the specified purpose.

The **goals** are interests or purposes or values that parties may want to serve. Not many transfers in the past have served multiple goals well, but with better participation from those helped or hurt by a proposed transfer, it is hoped that more goals can be served.

“Full Participation” refers to participation in the exchange by all interested parties, including not only the owner and seller, lessor or transferor of the water and the buyer, lessee, or other party, but also agents for State interests, local governments on behalf of their constituents’ present and future interests, and recreational and environmental interests. Parties may participate in exchanges using cash, using persuasion, or using other considerations such as easement incentives, local government provision of benefits, or other legal means. All exchanges are voluntary and take place only if all parties to them agree. Parties unwilling to accept other parties’ terms need not do so. And, of course, all participants should consider "side deals"; these include the traditional deals to resolve objections to proposed change decrees, and also could include many kinds of partnerships, payments-in-lieu of taxes, in-kind support for all sorts of services and enterprises, and land-use agreements, as well as combining different kinds of transfers to serve different goals.

All transfer forms are presumed to be developed and implemented in good faith with responsible terms in a reasonably working and adequately informed market.

Note 1: Although not a form of transfer, this may be part of a transfer or exchange. The effects depend on the design and dedication of the program. Taxes or fees could be good for goal or not relevant, depending on allocation of funds or exactions. The Arkansas Basin Roundtable Water Transfers Guidelines Committee has discussed severance taxes on water transfers, similar to severance taxes on mineral removal, and this seems worth considering since the logic appears to apply. Also, the State is currently applying some mineral severance tax revenues to "impact mitigation" paid to local governments affected by the mineral development boom, and again the logic may apply to water transfers.

Note 2: Purchase for the particular goal would help it; purchase for some other reason might have no effect or negative effect depending on the case in point and the use of land after the transfer. Salinity reduction may be pursued by reducing or ending irrigation which results in deep percolation onto salt-source substrates, or by lowering the water table. Dr. Tim Gates and others at Colorado State University are working on this problem, but have **not** suggested developing a "targeted" program for salinity reduction. Others have suggested the value of reducing or ending irrigation on lands already badly salinized; the net benefits should be carefully examined on a very localized basis. Regionally, it seems clear that salinity reduction is increasingly important.

Note 3: The effects of conservation easements or similar land-use and water-use dedications will vary with the intent. Arrangements might accommodate interruptible supply or emergency leasing if compatible with the purposes of the easement. The easement might coincide with salinity reduction or "get off bad ground" purposes, also, depending on the purposes and the other qualities of the land. Finally, the easement may secure environmental, recreational, and local amenity values. And, of course, easements on water should be considered in conjunction with other programs such as those administered by the USDA, such as the Conservation Reserve Program, with due care over terms and timing.

Note 4: Water providers have insisted on their need for permanence. There are two ways to this. Sale of the desired quantities and times of use of water could provide the same outcomes as long-term leases, but permanently. Or, within a lease form, terms could specify that parties will renew indefinitely, or at the least, offer rights of first refusal with specified terms allocating the risk of changes in the value of water. Certainty of supply for farming enables the largest ability to make plans and investments, and respond to opportunities and changed conditions, and to use credit.

TERMS AND ABBREVIATIONS: RCM is rotating crop management. ISK is interruptible supply contract. ST is short-term; LT is long-term. "Urban base load" is water wanted every year. Occasional supply may be drought or wet year needs for aquifer recharge or storage, or facility service needs. "Pay-as-use" – or "pay-as-you-go" as opposed to up-front, often debt-funded. **LEGAL FORM NOTE:** The same purposes may be accomplished with permanent sales of parts of water rights, by fraction or by volume, and with time dimensions, following the model of time-shares in real estate.

Table Summarizing Uses of Alternative Forms of Water Transfer

Please see explanation and notes, preceding page

Form of Transfer or action	Buy and Dry	RCM	RCM + Full Participation	ISK (long term)	ISK + Full Participation	ST Lease	ST Lease + Full Participation	Conservation Easement	Tax/Fee on transfers
Goals/ values from transfer									SEE NOTE 1
Urban “base-load” supply	3	3	3	1	1	0	0	0	SEE NOTE 1
Urban occasional supply	2	1	1	3	3	1	1	0 N.3	SEE NOTE 1
Urban or other unforeseen quick need	1	0	0	1	1	3	3	0 N.3	SEE NOTE 1
Permanence of supply (N.4)	3	Up to deal	Up to deal made	Up to deal	Up to deal made	0	0	0	0
Pay-as-use	0	3	3	2	2	3	3	N. 3	N. 1
Storage	2	2	2	3	3	2	2	0, N.3	0
Agricultural stability	0	3	3	3	3	2	2	2	N. 1
Ag. certainty (N.4)	0	Up to deal	Up to deal	Up to deal	Up to deal	2	2	3	N. 1
Ag. Sectoral support	0	3	3	3	3	2	2	2	N. 1
Ag. Income immediately	3	2	2	2	2	3	3	1	0
Agricultural Flexibility for farmers	0	3 – with limits	3 – with limits as agreed	3 – with limits	3 – with limits as agreed	3	3	0	N. 1
Ag. Tech. change	0	3	3	3	3	1	1	1 N.3	N. 1
Ag. water off less productive soils	1	3	3	1	2	0	0	2 N.3	N. 1
Water quality (salinity)	N. 2	1	3	1	2	0	0	2 N.3	N. 1
Env’t’l. habitat	N. 2	1	3	1	3	?	3	3	N. 1
Env’t’l. cumulative impacts	0	3	3	1	3	0	0	3	N. 1
Recreational opportunity	N. 2	1	3	1	3	0	1	3	N. 1
Local amenity values	N. 2	1	3	1	2	0	1	3	N. 1
Community stability	0	3	3	3	3	2	3, N. 2	1	N. 1
Community development or betterment	0	1	2	1	2	1	1	2 N.3	N. 1
Rural Economic diversification	0	1	2	1	2	1	2	2 N.3	N. 1