Water Marketing and the Law

Mark Squillace

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WATER MARKETING AND THE LAW

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MOVING THE WEST'S WATER TO NEW USES:
WINNERS & LOSERS

Natural Resources Law Center
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I. Background.

A fundamental premise of this presentation is that water marketing can lead to more efficient use of water resources while at the same time protecting the public interest, which I define to encompass environmental values. See e.g., B. Saliba & D. Bush, Water Markets in Theory and Practice, (Westview Press, 1987). But there are significant legal impediments to transfers in many jurisdictions that inhibit transfers and increase transaction costs. I will explore some of these impediments focusing principally on the six states involved the water transfer study funded by the U.S. Geological Survey.

A. The prospects for water marketing are good. While the demand for water has increased over time, the prospects for development of new surface and groundwater resources is limited. With respect to surface water, most of the best available dam sites have either been used or declared unavailable for use. Further, environmental values have resulted in far greater scrutiny and higher costs for new surface water development projects. Groundwater holds additional promise in some areas. But many states
Currently allow groundwater mining, and as aquifers become depleted or contaminated, these groundwater users can be expected to bring added pressure to other available supplies. Although not a panacea, water marketing may be able to relieve some of the pressure for additional water resources.

B. Where will the water come from? The charts below indicate the percentage of water in the six study states that are used by various enterprises. As Table 1 illustrates, agricultural uses dominate other uses in all of the study states. Somewhat surprisingly, however, agriculture plays a relatively minor role in the economic picture for these same states as indicated in Table 2. Thus, the agriculture community will necessarily play a key role in determining whether water transfers to other uses occur. Importantly, and as described in greater detail below, such transfers do not necessarily translate into a reduction in the agricultural sector of the economy.
Table 1.
ESTIMATED CONSUMPTIVE FRESHWATER USE BY STATE, 1985
(In millions of gallons per day)

<table>
<thead>
<tr>
<th>State</th>
<th>Irrigation</th>
<th>Domestic</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>3170 (85.4%)</td>
<td>275 (7.4%)</td>
<td>266.8 (7.2%)</td>
<td>3711.8</td>
</tr>
<tr>
<td>California</td>
<td>19300 (91.3%)</td>
<td>879 (4.1%)</td>
<td>993 (4.6%)</td>
<td>21172</td>
</tr>
<tr>
<td>Colorado</td>
<td>4570 (94.2%)</td>
<td>145 (3%)</td>
<td>138 (2.6%)</td>
<td>4853</td>
</tr>
<tr>
<td>New Mexico</td>
<td>1270 (83.9%)</td>
<td>106 (6.9%)</td>
<td>154.1 (10.1%)</td>
<td>1530.1</td>
</tr>
<tr>
<td>Utah</td>
<td>1940 (88.1%)</td>
<td>119 (5.3%)</td>
<td>193.5 (8.6%)</td>
<td>2252.5</td>
</tr>
<tr>
<td>Wyoming</td>
<td>2560 (95.8%)</td>
<td>30 (1.1%)</td>
<td>83.4 (3.1%)</td>
<td>2673.4</td>
</tr>
<tr>
<td>Totals</td>
<td>32810</td>
<td>1554</td>
<td>1828.8</td>
<td>36192.8</td>
</tr>
</tbody>
</table>

Approx. percentage 91% of all uses


Table 2.
GROSS STATE PRODUCT (1988)
(In millions of dollars)

<table>
<thead>
<tr>
<th>State</th>
<th>Total</th>
<th>Farms, Forestry, Fisheries &amp; Ag Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>53,253</td>
<td>1,122 (2.1%)</td>
</tr>
<tr>
<td>California</td>
<td>533,816</td>
<td>11,282 (2.2%)</td>
</tr>
<tr>
<td>Colorado</td>
<td>59,177</td>
<td>1,517 (2.6%)</td>
</tr>
<tr>
<td>New Mexico</td>
<td>23,603</td>
<td>513 (2.2%)</td>
</tr>
<tr>
<td>Utah</td>
<td>24,008</td>
<td>400 (1.7%)</td>
</tr>
<tr>
<td>Wyoming</td>
<td>11,673</td>
<td>219 (1.9%)</td>
</tr>
</tbody>
</table>

Adapted from Statistical Abstract of the United States, 1989, Table No. 696.

II. Legal Impediments to Transfers. The common law rule regarding transfer of water rights in prior appropriation states is the "no injury" rule. Under this rule, transfers are permitted so long as they can be completed without causing injury to any persons lawfully...
using water at the time of the transfer. On its face, the "no injury" rule suggests a rather simple test for determining whether to authorize a transfer. But transfer decisions can become complex due, in part, to the very nature of water rights, but due also to nuances in individual state laws. For example, many water rights afford the owner the right to divert water from a stream at a certain rate, usually expressed in cubic feet per second (CFS). Where the owner of that right diverts such water seasonally, rather than year round, as with many agricultural rights, defining the water right available for transfer may become a complex (and controversial) task. Furthermore, even where rights can be accurately quantified, predicting the affect of a transfer on other users can be difficult and expensive. Conflicting forecasts are not uncommon.

Although individual states regulate transfers in different ways, the differences among state laws which affect water transfers do not always relate to the provisions for transfers themselves, but often to other aspects of a state's water laws. A state which offers a useful illustration of this phenomenon is Arizona. The fundamental precept of western water law is that prior appropriators of water for beneficial use have preference over other users. Some western states, including Arizona, however, apply different rules to non-tributary
groundwater. In Arizona, groundwater rights have historically been tied to surface ownership. Prior appropriation for a beneficial use is not required. Instead a landowner has a right to appropriate all of the water that can be out to a reasonable and beneficial use. ARIZ. REV. STAT. ANN. § 45-453(1). Although changes in the State's groundwater laws in 1980 established restrictive rules for areas where significant groundwater mining was taking place (ARIZ. REV. STAT. ANN. § 45-401 to 651), aquifers outside these areas remained largely unaffected. This fact has led to the speculative acquisition of groundwater rights. Several large companies and municipal governments have purchased large tracts of land in southern Arizona -- water farms -- either to secure future groundwater supplies for their residents or in hopes of selling water rights at a great profit. The opportunities to purchase water farms appears to have hampered the market for water rights and thus resulted in minimal transfer activity.

The State of Wyoming offers a contrasting problem. Unlike Arizona, Wyoming adheres to a prior appropriation scheme for allocating both surface and groundwater rights. But from the time Elwood Mead served as Wyoming's first state engineer, Wyoming has approached transfers reluctantly. In 1909, the State adopted legislation expressly prohibiting any change in use or
place of use of a water right without loss of priority. WYO. STAT. § 41-3-101. Although this provision has never been repealed, the legislature has, over time, carved out exceptions to the law, and in 1973 Wyoming finally adopted legislation expressly authorizing transfers under certain specified conditions. But significant impediments to transfers remain. In addition to the traditional "no injury" rule, a transferee in Wyoming may not increase the rate of diversion of the water, nor decrease the return flows, nor increase the historical levels of beneficial consumptive use. Furthermore, the law gives the Board of Control discretion to deny transfers upon consideration of economic losses to communities that will lose the water right, the extent to which that loss will be offset by the new use, and whether other sources of water are available. WYO. STAT. § 41-3-104.

Ironically, even where a state actively promotes transfers, transfer activity may be limited. Since the early 1980s, California has had what are among the most progressive water transfer laws in the country. See e.g., CAL. WATER CODE § 109. These laws actively encourage water transfers. In particular, California law actively promotes the transfer of surplus water, that is water rights that exceed the real needs of the transferor, and conserved water, water that is saved by
making a water diversion or use system more efficient. Gray, California Water Transfers Law, 31 Ariz. L. Rev. 745, 771 (1989). Yet few transfers have occurred, other than temporary annual transfers among users within large irrigations districts. The reason for this limited market activity is uncertain but appears in part related to fact that so much of the water in California is tied in with large water projects. Although California law expressly authorizes local or regional water agencies to transfer water rights (CAL. WATER CODE, § 381-382), resistance to transfers among the agencies water users may impose political limitations on such transfers. Federal involvement in certain water projects may further hamper the marketability of water in California. It is probably too early to assess the impact of the California legislation on California water markets, but the state's efforts have yet to bear significant fruit.

III. CONCLUSIONS AND RECOMMENDATIONS: Reallocation of water supplies through the transfer mechanism holds much promise for more effective use of limited water resources. But the water laws in some states continue to hamper beneficial water transfers and, accordingly, these laws should be changed. Set forth below are recommendations for improving state water transfer laws. Some states have already moved in the direction of many of these recommendations.
A. Allow the transfer of conserved or salvaged water.

With a few notable exceptions, including Oregon and California, states have resisted efforts to allow users to transfer salvaged water, i.e., water that is saved through increased efficiency, either by selling the water to another user or using the water on new lands. These prohibitions generally apply even where no one will be injured by such action. Thus, for example, if you save water by lining your ditches, cutting down vegetation along your ditches or installing an efficient sprinkler system, you are prohibited in many states from transferring the water saved. As a result, farmers with early priority dates who are using inefficient irrigation methods have little incentive to become more efficient.

B. Establish a presumption in favor of transfers.

California, Colorado, New Mexico and Utah actively encourage transfers by establishing a presumption in favor of the transfer. Thus, after an applicant has made a prima facie case that no injury will occur, the ultimate burden falls on the protestant to show that the applicant is wrong and injury will occur. A legitimate concern about this proposal is that it places a substantial burden on person not involved in the transfer to discover and protest their potential injury. This concern can be addressed, however, by
allowing downstream users to invoke a trial transfer provision as described below.

C. Encourage trial transfers. One of the most significant problems with transfers concerns the difficulty in predicting the actual impact of a transfer on the hydrology of an area generally, and on other users in particular. As a result, states like Wyoming take a very conservative approach toward transfers as a means for protecting existing water users. Such an approach is unnecessary if the transfer decision can be reopened for appropriate adjustments based on actual stream conditions. This practice has been used with considerable success in Colorado and to a more limited extent in California.

D. Return to the "no injury" rule. None of the study states restricts transfers to the extent that Wyoming does, but many states refuse to transfer water beyond the historic consumptive use. A historic consumptive use determination may be useful, as an evidentiary matter to help the fact-finder in deciding whether injury to other appropriators will occur. This is because injury is unlikely if total consumption will not increase. But injury may be avoided in some cases even where the consumption increases. States should avoid concerning themselves with the private benefits that may result from transfers so long as such
transfers provide incentives to increase the efficient use of water resources.

E. Include the public interest within the scope of injury considered in transfer applications. While most of the suggestions made here encourage transfers, they should not be approved without fair consideration of the public interest values at stake. Thus, if a transfer would not injure other appropriators but would cause unacceptable damage to fish or wildlife resources, states should deny such transfers. To help alleviate uncertainty that public interest considerations might bring, state agencies should define the phrase "public interest" through rulemaking or other public proceedings.

F. Define the phrase "public interest". The phrase "public interest" should be defined to ensure protection of the stream environment and other values. Further, if the definition is not set out in a statute, as for example in Alaska (ALASKA STAT. § 46.15.080(b)), the relevant agency should engage in rulemaking proceedings to define the term. This will allow for a full opportunity for consideration and evaluation of public comments.

G. Encourage innovative reallocation schemes. In order to maximize use of existing water resources states should encourage innovative reallocation
schemes. For example, a state might establish a water bank to encourage more efficient use of water. Water saved as a result of adopting modern irrigation practices could be banked without risk of loss through abandonment. States might also encourage cities and others who need a secure supply of water, even during dry years, to purchase "dry land options" from agricultural users. In normal years, the option would not be exercised since the user would have sufficient supplies from existing sources. In dry years, the city could exercise its option by making an additional payment to the farmer who sold the option. The land that was normally farmed would thus be retired only during the drought years.

Water marketing holds much promise for the West because of its potential for making water usage more efficient. Although some states have made great strides in promoting water transfers much can be done to further encourage water marketing opportunities, while at the same time protecting the public interest.