Water markets are increasingly being used to facilitate the transfer of water assets between willing buyers and sellers. This market development is largely driven by growing populations in semi-arid regions of the southwestern United States, and by municipalities, real estate developers, power generators, and industries seeking reliable water supplies to facilitate future growth or satisfy regulatory requirements. On the supply side, agricultural producers are the largest water users, providing water to these new markets.

Water transfers range in size from a few acre-feet to millions of acre-feet and include both surface water and groundwater assets. Both the private sector and public agencies are engaged in such transfers, which generally occur in a local market due to the complexities and variations of each water asset transaction.

**Sound Advice for Entering the Market**

Because water markets are rapidly forming, relevant and timely information is not always easy to find. WestWater Research, a leading water marketing firm, has developed a few guidelines for those looking to enter the water market.

1. **Finding Buyers and Sellers**
   When entering the water market, a significant challenge is identifying potential trading partners. Unlike other more developed markets such as land, relatively few methods exist to identify buyers or sellers. These include:
   - **Online or bulletin boards:** Local water management districts often provide posting services for their members. Local water brokers are also beginning to provide online opportunities for advertising water assets.
   - **Newspaper ads:** Classified ads for water buyers and sellers are becoming common in local newspapers of water-short communities that are experiencing rapid growth. The limitation of this approach is that it can result in a flood of inquiries by curious “tire-kickers.” Water transfers can be controversial if not well managed, and this approach may expose buyers or sellers to criticism before they are able to release a comprehensive plan.
   - **Personal networking:** Personal contacts continue to be the most efficient method of identifying trading partners. A skilled and well-connected professional can help expedite the search.
   - **Water rights research:** Water rights and landownership records are cross-referenced to identify likely trading partners that meet one’s water needs. Once this information is obtained, potential trading partners can be contacted individually, discretely, and on one’s own terms.

2. **Pricing and Valuing Water**
   Once a water supply has been identified, the next step is to determine and negotiate a fair market value for the water asset. Given the limited price information available due to the undeveloped and private nature of water markets, this can be a difficult step. Appraisals, which usually incorporate sales comparisons, income capitalization, land value differentials, and/or development costs, are becoming a common requirement for water transactions.

The value of water varies widely according to location and use. Any appraisal must address the technical and legal complexities of the water assets that drive value. The appraisal process should analyze how the asset value is impacted by the following factors:

- **Validity of water rights:** Prior to purchase, buyers should require a legal evaluation to ensure the water rights are valid and in good standing.
- **Transferability:** Legal requirements and physical characteristics significantly define the market for water. Legal requirements may
limit the quantity, type of use, and location of a water transfer, while areas with extensive water transport infrastructure may meet a wider geographic range of demands.

- **Water availability:** In areas with fully appropriated supplies, securing additional water is often difficult and involves transferring rights from existing users. In areas where water is not fully appropriated or where efficiency gains are possible, the price of water is constrained by the costs of developing new supplies (such as the costs of drilling a well or lining a canal).
- **Water quality:** This is an important determinant of value, as it can limit potential new uses and could require treatment prior to use.
- **Water quantity:** The size of the transaction can influence the per unit sale value, typically denoted in dollars per acre-foot. Generally, transactions involving large quantities of water sell for less on a per-unit basis than small water sales because transaction costs are spread over a larger number of acre-feet. Generally, transactions involving large quantities of water sell for less on a per-unit basis than small water sales because transaction costs are spread over a larger number of acre-feet.
- **Water right characteristics:** Water rights are the most common instrument traded in water markets. The value is significantly determined by legal characteristics of the water right, including the priority date, annual quantities, instantaneous flow rates, and current use.

### Structuring Contracts

Water assets may be acquired through a variety of acquisition and contracting options. Contracts are essential to the deal and, if properly crafted, can manage both regulatory and financial risk.

Each buyer and seller should consider different purchase and leasing agreements to determine a structure that best fits the specific transaction. Contract structures can be generalized into three categories: permanent, contingent, and spot-market transactions.

Under a permanent transfer, a water buyer typically purchases the water asset for a one-time fixed cost. Contingent transfers are temporary agreements under which the buyer agrees to lease the water asset under specific conditions in order to meet demands due to dry-year conditions, higher demand, or supply interruption.

### Converting Water Rights to Current Use

A comprehensive due diligence phase can save time and money during the regulatory review and overall transaction. Here is a helpful checklist.

- **a.** Review state water right records. Nearly all states maintain files on individual water rights. Reviewing these records will help you understand the terms and conditions of the subject water right.
- **b.** Develop beneficial use and water usage estimates. Most states limit the transferable quantity of the water right to the amount that has been beneficially and consumptively used. The following records help quantify the transferable portion of the water right:
  - Cropping, harvest, and yield records
  - Power use records
  - Irrigation system design
  - Irrigation district delivery records

### Managing the Regulatory Process

Unlike many real estate transactions, nearly every water deal requires approval of a local, state, or federal regulatory body. This review process is essential to ensure the water right is valid and the transfer will not unduly harm other existing water users. Each state has specific laws and agencies to regulate water asset transfers. This process can create time delays and other problems that can terminate a deal if not appropriately addressed. However, some general steps can be followed to prepare for the review process.

- **Perform a due diligence review to identify any ownership or regulatory issues.**
- **Prepare a complete and accurate transfer application.**
- **Address ownership, environmental, and public concerns.**

With these considerations in mind, you’ll be prepared to enter the water market.

Visit WestWater Research at www.waterexchange.com for more information. Contact Andrea Larsen at alarsen@waterexchange.com.