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Memorandum

To: Rosario Property Owners Association

CC:

From: Harry Seely, WestWater Research, LLC

Date: September 5, 2007

Re: Estimated Market Value of Rosario Water Rights

Purpose and Background

WestWater Research completed a valuation of the water rights held by Rosario Utilities, LLC in 2006. The valuation was requested by the Eastsound Water Users Association (EWUA) to help guide water resource planning efforts and assist with the potential purchase of a portion of the water rights to meet future water demands in the EWUA service area. The purpose of this memorandum is to provide Rosario Property Owners Association (RPOA) with a summary of the Rosario Utilities' water rights valuation completed by WestWater Research for Eastsound Water Users Association (EWUA) in 2006. RPOA has requested the summary of the report in support of upcoming discussions with Washington Utilities and Transportation Commission (WUTC) regarding the sale of Rosario Utilities and a portion of the water rights to Cascade and Mountain Lakes.

Description of Water Rights

The water rights are currently held by Orcas Water Holdings. A small portion of the water rights are currently being used in support of domestic uses in the vicinity of Rosario Resort. Use of the rights for domestic supply is limited to 0.489 cfs (approximately 220 gpm) and can not exceed 183 acre-feet annually. The maximum rate of diversion for hydropower production from the natural flows of Cascade Lake is 2.934 cfs not to exceed 521 acre-feet per year. Water used for hydropower production Cascade Lake can not to exceed 3.067 cfs and 1,170 acre-feet annually. Water used in support of hydropower production greater than 1,170 acre-feet annually is counted towards the 521 acre-feet available under the natural flow right.

A summary of the water rights by use is provided in Table 1. The total maximum appropriative quantity of all rights for all purposes is 1,879 acre-feet per year.

Table 1
Summary of Rosario Utilities Water Rights

Use	Combined (cfs)	Combined Quantity (AFY)	Source
Domestic Supply	0.489	183	Cascade Creek
Hydropower	2.934	521	Cascade Lake and Natural Flow
Hydropower	3.067	1,170	Cascade Lake and Stored Water
Irrigation	0.10	5	Cascade Lake. Natural Flow and Stored Water
Fire Protection	As Needed	As Needed	
Total		1,879 AFY	All Sources

Source: S1-27616 Water Permit Report of Examination

Orcas Water Holdings is currently in the process of combining all three rights into a single municipal right. The total annual volume is anticipated to be 1,708 acre feet per year[1] with an instantaneous diversion rate of 2.543 cfs.[2] The preliminary estimate of annual volume is based upon the quantity of the previously perfected water rights and the current permitted quantity. The outcome of the water right change applications is uncertain, however.

1 Preliminary estimate from Paul Fabiniak WDOE, 10/28/2005

2 According to Paul Fabiniak WDOE, the rate may be too high, based upon the total volume. This might be a previous mistake on Ecology's part that will need to be worked through during the application for change process.

Previous Valuation Analysis

During late 2005 and early 2006, WestWater Research completed a valuation report for EWUA. Two valuation methods were considered for the water rights. Research for a Comparable Sales Analysis was conducted to arrive at an estimated value for the water rights. A Cost Replacement Analysis was also considered to estimate the cost of developing 100 million gallons (MG) from sources other than the Olympus water rights. The results of the two valuation methods are described below.

Cost Replacement Analysis

The analysis considered a Cost Replacement Approach to estimate the value of the subject water right. The Cost Replacement Approach estimates the current cost of reproducing or replacing an equivalent quantity of water to that supplied by the surface water right. The approach is commonly used in areas where the market price for water rights is dominated by investment alternatives to increase water supply. The Cost Replacement Approach is typically viewed as an alternative approach to comparable sales or income capitalization methods. It should be noted that in areas where water supplies are constrained the cost of developing new water sources theoretically represents the maximum value that a buyer would pay for access to water associated with an existing water right provided the water supplies have comparable characteristics (e.g. quality, reliability). Consequently, when considered from the potential buyer's perspective, the Cost Replacement method typically represents an upper bound on the market value for an existing water right.

EWUA has a variety of water supply development alternatives available to meet projected increases in peak demand. In order to meet the projected increase in peak demand, EWUA would be required to complete a number of smaller projects. The combined total cost of these projects represents the "least-cost" alternative available to EWUA for developing an additional 100 MG supply.

It is important that the analysis only consider projects that are likely to be pursued rather than hypothetical projects that have little chance of completion due to financial, political, or physical characteristics. It should also be noted that there is no evidence to suggest that water providers in the region have paid for water rights based upon the costs to develop alternative water supplies. As such, there is little empirical support to the concept that there are prospective buyers for water rights priced at development costs. Under these circumstances, the Cost Replacement Approach may not provide an estimate of value that accurately reflects market conditions.

WestWater Research reviewed available published information concerning water supply alternatives and costs. In addition, information on the estimated costs of potential water supply of other projects that have not been formally reviewed was provided by EWUA. However, due to the speculative nature of the alternative projects and estimated costs, WestWater Research believes that there is inadequate information available from which to complete a reliable Cost Replacement Approach.

At the request of EWUA, WestWater Research reviewed a preliminary analysis prepared by RH2 Engineering.[3] The preliminary analysis provided a valuation of 100 MG of water associated with the Rosario water rights in order to provide a basis for continued negotiation. As stated by RH2, the analysis was not intended as an appraisal and required a number of assumptions that may require adjustments to improve the estimate. The RH2 analysis considered both a "comparative basis (comp)" and "opportunity cost" approach to develop the estimate of value for a portion of the Rosario water rights. WestWater Research provides the following observations:

- The "comparative" approach is quickly dismissed from further consideration by RH2 as "It was clear that no recent market sales were applicable since the block of water magnitude (1,000 million gallons supplied over a ten year period) substantially exceeded any known amount available on Orcas Island." WestWater Research is unclear as to the meaning of this statement and therefore is unable to offer a complete review of this point.[4] Furthermore, the proposed transaction by EWUA only involves 100 MG of water. While WestWater is unclear on the intent, only 100 MG should be considered in a valuation analysis if there is no impact to Rosario Utilities (RU) existing operations. For the purpose of our analysis, WestWater has assumed that RU would not experience any changes to operation as a result of the sale of 100 MG of water. This assumption was developed based on the available information and RU's water needs relative to the size of the water rights held by the utility.

WestWater agrees that sole consideration of water supplies on Orcas Island would not provide adequate information concerning water right sales or wholesale water supply contracts from which to base an opinion of value.

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3 "Block Water Supply Valuation (Preliminary)", memorandum prepared by RH2 Engineering for Eastsound Water Users Association, Olympus Real Estate Partners, and Gemstone Resorts International, LLC, March 25, 2005.

4 WestWater Research contacted RH2 in an attempt to obtain additional supporting information for the analysis. However, due to contracting issues, the information could not be obtained at that time.

However, WestWater believes that market sales of water rights in other regions experiencing a combination of growth and constrained water supplies do provide a relevant basis from which to value the Rosario water rights. Water supply conditions on Orcas Island are not so unique as to preclude such a comparison. In fact, the overall water supply and demand conditions for the island indicate that the Rosario water rights are capable of meeting both the projected needs of Rosario as well as EWUA. This is somewhat unusual as most areas with water right trading activity do not have surplus water supplies and instead require that existing water uses be retired to support a higher valued use (e.g. retirement of irrigated acreage to support increased municipal use).

- The "opportunity cost" analysis presented in the RH2 report provides an estimate of the least-cost alternative available to EWUA to increase water supply by 100 MG (307 acre-feet) per year. The results of the analysis provide an estimated range of value for 100 MG (307 acre-feet) of the Rosario water right of $5.7 to $6.5 million. This is equivalent to a unit value of approximately $19,000 to $21,000 per acre-foot, a value range far higher than observed market prices for water rights in Washington, or most other western states for that matter. The estimated value is based, in part, upon an assumption that a raise of Purdue Dam by 23 feet represents the only reasonable and likely water supply alternative for EWUA. The potential alternative does not appear to be a reasonable alternative given the high incremental water costs associated with the project and the inability for EWUA to take Purdue Lake offline for the period of time necessary to complete the project.[5] A smaller dam raise (e.g. 3 feet) following the development of additional reservoir storage is the more likely and lower cost alternative.[6]

- In addition to the assumed dam raise, the RH2 analysis relies upon estimated costs to acquire groundwater rights associated with wells located within the EWUA service area. These costs appear to be overstated based upon the actual costs of well acquisitions provided by EWUA. Furthermore, the RH2 analysis does not appear to account for operations and maintenance costs associated with each of the alternatives, an important consideration.

- WestWater Research was not provided adequate information regarding the assumptions employed to develop the "Total Joint Treatment,

5 Personal communication with Jim Nelson, EWUA, January 2006.

6 Personal communication with Jim Nelson, EWUA, January 2006.

Pipe & Storage" cost estimates used in the analysis or how these costs were distributed among Rosario and EWUA.

- RH2 states that the value of the Rosario water rights "will increase accordingly" if the volume of water available from Rosario increases. Again, WestWater Research is unclear as to the specific meaning of this statement or how it would be applied to an estimate of value of the Rosario water rights. The large fixed costs associated with development of the Rosario water right for use by EWUA create significant challenges when attempting to assess the value of different volumes of water. For example, reducing the annual volume below 100 MG is unlikely to proportionally reduce the capital costs of conveying, storing, and treating the Rosario water. Consequently, the costs to EWUA of using a smaller portion of the Rosario water right (e.g. 50 MG) may exceed the costs of developing smaller, incremental alternative water sources, suggesting that the value is zero.

The RH2 analysis attempted to provide a benchmark for value of 100 MG of the Rosario water rights by considering the replacement cost value to EWUA. As stated by RH2 in the report, the values are based upon a large number of assumptions and preliminary project cost estimates. The uncertainty surrounding potential alternative projects, associated water supply, and costs result in the Cost Replacement Approach as a poor choice for valuing the Rosario water rights. Additional research and analysis would be required to resolve these uncertainties before a meaningful estimate could be provided. Even then, the lack of market evidence suggesting that water rights are trading at or near the costs of developing alternative supplies makes sole reliance on such an estimate unwise.

Comparable Sales Analysis

Valuation of the RU water rights poses several challenges. The markets for water rights in San Juan County and on Orcas Island are relatively inactive and no market transfers of water rights separate from other real property were identified during research completed for the analysis. Demand for water in San Juan County and on Orcas Island in particular is primarily for domestic use. Water supply for domestic use is often available through exempt wells that are not required to have an associated water right. In addition, some supplies are provided from rain catchments that are required to have a water right but that are not strictly enforced. Consequently, the demand for acquisition of existing water rights is low and market information in San Juan County is limited. To account for this, the geographic area of analysis was expanded beyond Orcas Island to include the Puget Sound region. Differences in socioeconomic and water supply and demand

characteristics between Orcas Island and the Puget Sound region were identified in order to present a relevant range of value for the water rights. The follow section provides an updated review of water right market activity in the Puget Sound region.

Review of Current Prices for Water Transactions

The market for water rights separate from other real property in western Washington remains relatively immature. Transaction activity is driven primarily by municipal, property development and mitigation needs in regions that are closed to new water appropriations. Consequently, most transactions involve relatively small volumes of water. Many of the recorded transactions have occurred in the southern Puget Sound region. The buyers in western Washington generally include: municipalities, private water purveyors, golf courses, real estate developers, and industrial developments.

WestWater Research maintains a database of water right sales and leases in Washington. The database contains information on transactions occurring from 1995 to the present. The majority of the water right sales have occurred in more recent years as population growth, environmental needs, and drought have stretched available water supplies in some parts of the state. This demand pressure is occurring in the Puget Sound region and is resulting in an increasing number of water right sales as water supply is reallocated to new uses.

For comparison purposes, approximately 40 permanent water right sales taking place in western Washington from 1995 forward were reviewed.[7] Table 2 provides a summary of water right transactions in western Washington.[8] All reported prices have been adjusted using the Consumer Price Index (CPI) to reflect 2006 values. The majority of the transactions occurred during the period from 2002 to the present indicating that the sale and purchase of water rights within the region is increasing in frequency.

The reported transactions included purchases of both surface and groundwater right rights. Twelve of the reported transactions involved surface water rights totaling approximately 27,542 acre-feet of water traded. However, the majority of this quantity is represented by one major transaction. A total of twenty-six transactions representing

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[7] A number of small individual transactions associated with the same water right were combined and are represented as a single sale in this analysis.

[8] Two recently reported transactions occurring at unit prices between $8,800 and $10,000 per acre-foot in the Lacey area were excluded from this analysis. Recent regulatory requirements pertaining to water supply for development projects within the Lacey UGB have resulted in water supply and demand conditions that are not considered comparable to Orcas Island. In addition, WestWater has been unable to confirm the values associated with the transactions.

more than 9,146 acre-feet involved groundwater rights. One large transaction involving 6,140 acre-feet comprised 67 percent of the total groundwater volume traded. The majority of both surface and groundwater right transactions involve relatively small quantities of water rights. Generally, transaction sizes range from 10 to 200 acre-feet with smaller transactions exhibiting higher unit prices in many cases.

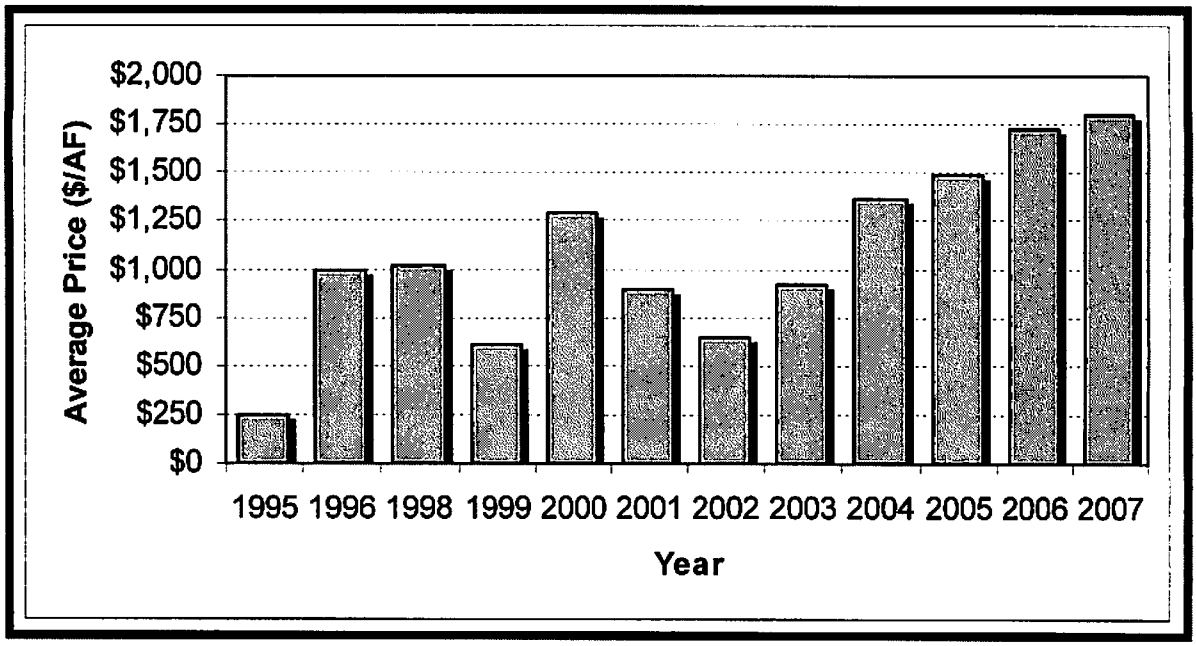
Recorded transaction prices varied widely with prices ranging from $65 to $5,869 per acre-foot. The wide price variation can be attributed to differences in water right characteristics, location, and the relatively undeveloped nature of the market. The average and median unit price for the selected transactions is $1,610 and $1,284 per acre-foot, respectively. Table 2 provides summary statistics for all reported sales, surface sales only and groundwater sales only. In general, the market does not appear to be differentiating among water sources as prices paid for surface and groundwater sources have not shown significant variation.

Table 2: Summary Statistics for Selected Water Right Transactions

All Water Right Sales	Volume (AF)	Unit Price ($/AF)
Mean	1,020.44	1,619.77
Median	56.25	1,296.09
Hi	6,721.00	5,869.36
Low	1.30	65.45
Surface Water Rights		
Mean	2,295.15	1,715.39
Median	80.00	1,435.67
Hi	5,474.00	5,000.00
Low	1.30	65.45
Groundwater Rights		
Mean	383.08	1,575.63
Median	48.73	1,104.19
Hi	6,721.00	5,869.36
Low	12.70	102.71

Price dispersion remains relatively wide both within and across different regions of the state. In general however, prices for water rights in Washington have been increasing in recent years. This trend is expected to continue due to continued population growth and environmental pressures. In addition, Washington water right prices remain low relative to many other states indicating that there remains significant opportunity for price appreciation in the market. Figure 1 provides average water right prices in Washington.

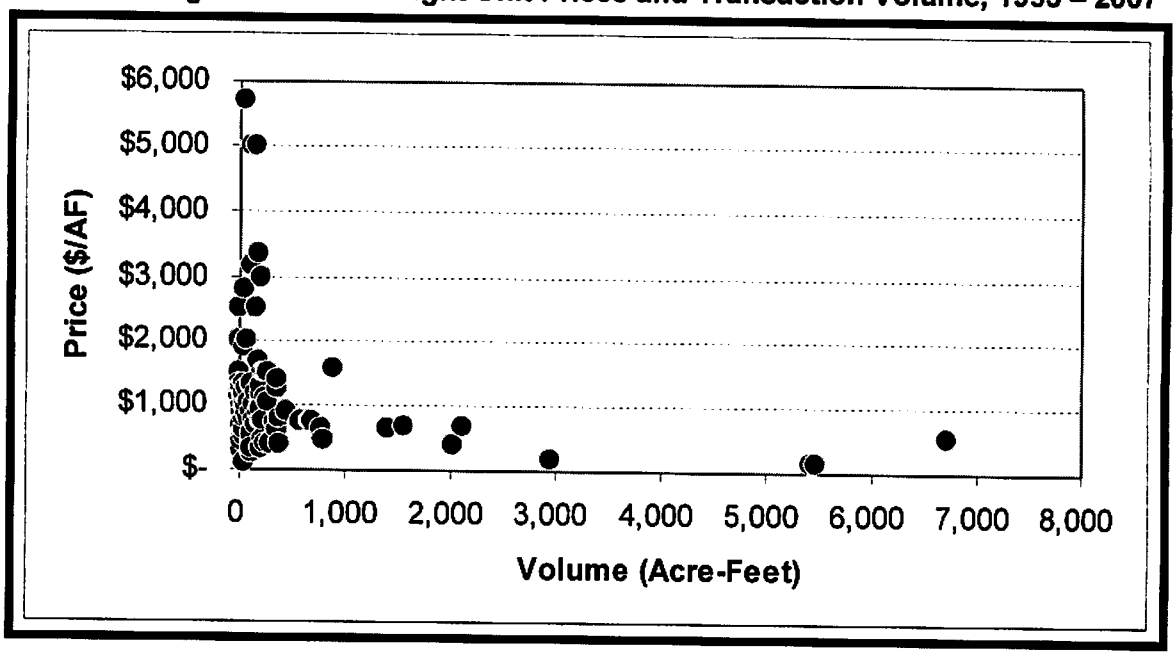
Figure 1: Average Water Right Prices, 1995 – 2007



The size of the transaction can influence the unit value of water trades. Evidence from areas with frequent water right trading indicates that transactions involving large quantities of water sell for less on a per unit basis than small water right sales. This is due, in part, to the fact that transaction costs are spread over a large volume of water as well as the smaller number of buyers that require large volumes of water. Limited market information makes quantifying the impact of water volume on unit price difficult. Few studies have attempted to quantify the effect that large transfers have on the unit price. In general, these studies have found a negative nonlinear relationship between unit price and transaction size, indicating that volume-induced price impacts diminish beyond relatively small volumes of water. In other words, the volume discounts tend to level off and approach a constant rate as transaction size increases.

Water right sales information for western Washington was analyzed to determine any relationship between transaction volume and unit price. Given the available market evidence, no statistically significant relationship was identified. However, as shown by Figure 2, the relationship appears to apply to large volume transactions but is inconsistent with respect to smaller volume transactions. As shown, smaller volume transactions exhibit wide price dispersion with unit prices both below and above those observed for large volume transactions.

Figure 2: Water Right Unit Prices and Transaction Volume, 1995 – 2007



Conclusions

Based upon the previous sales of water rights in the Puget Sound region, WestWater concluded that the fair market value of the water rights ranged between $1,500 and $2,000 per acre-foot. Given the relatively small increase in prices since completion of the report, the value of the water rights is likely closer to the upper end of the range.

About WestWater Research

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WestWater Research ("WWR") is the premier transaction and asset valuation advisory company to the water sector. WWR specializes in water asset sales and acquisitions; water resource economics, water right and asset appraisals, and project finance services.

With offices in Vancouver, Washington, Boise, Idaho, and Cornwall, Vermont, WWR is helping forge new approaches to water development by providing marketing and investment solutions to the financial industry, energy and water supply industry, municipalities, and real estate and property development sector.

Corporate and public clients look to WWR for assistance in sourcing and structuring funds for various types of water projects. Private Equity clients utilize WWR as a source of investment opportunities and as an advisor in evaluating projects that are in our core industry of expertise. WWR specializes in water rights sales and acquisitions, water banking, water conservation, water storage contracting, and alternative water asset sales and acquisitions.

The WWR team has an extensive background in water marketing, regulatory policy, and water asset valuation. This combination of experience allows WWR to develop innovative solutions to the multitude of challenges that can affect the success of a water project. WWR specializes in high valued water transactions and has advised on more than $500 million in water transactions throughout the United States.

Our asset due diligence and investment advisory services are the fastest growing part of our daily activity. This depth of experience supports the dynamic deal development activity for our private equity and investment based clients.

Water Transaction Services	*Water Asset Valuation*	*Project Due Diligence*
• *Marketing & Acquisition Strategy*	• *Appraisals*	• *Overall Project Feasibility Analysis*
• *Regulatory & Financial Risk Management*	• *Market Pricing*	• *Financial Analysis and Modeling*
• *Water Asset Management*	• *Financial Analysis*	• *Valuation and Asset Monetization Planning*
• *Discrete Brokerage Service*	• *Price and Demand Forecasting*	• *Exit Strategy Development*

The WestWater Team:

Clay Landry
Managing Director
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Clay Landry is the managing director and a principal of WestWater Research, a consulting firm providing water-marketing and water-asset-valuation services to a range of public and private sector clients. Landry has negotiated and advised on major water transactions throughout the United States. Recently, he assisted a major power generation company in leasing more than 10,000 acre-feet of water for drought emergency water supplies. Currently, he is advising and managing an auction of municipal effluent water rights expected to bring more than $50 million in proceeds for a small city in Arizona. Under Landry's management, WestWater has advised on more than $500 million in water transactions. In addition, Landry works regularly with private equity and hedge funds in structuring deals and sourcing funds for water development and acquisition projects. Prior to founding WestWater Research, Landry was an associate at the Political Economy Research Center (PERC), a public policy research institute that specializes in market approaches to natural resource management.

Landry is recognized as a leading authority on water pricing and is routinely called upon as an expert witness by clients such as the IRS, U.S. Department of Interior, Indian tribes, municipal governments and private companies. He has also worked internationally on water-marketing issues in Australia, Brazil, and the United Kingdom. Landry serves as an associate editor for Water Resource Impact, a monthly publication of the American Water Resources Association, and was previously the finance and regulation editor for Global Water Intelligence, an international water industry news magazine published in London, U.K. With a strong commitment to market-based stewardship, Landry helped establish the Montana Water Trust, a private non-profit that buys and leases water rights for stream flow protection. Landry holds a master's degree in agriculture and resource economics from Oregon State University and a bachelor's degree in economics from the University of Wyoming.

Harry Seely, M.S.
Water Resource Economist and Principal
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Mr. Seely has twelve years of experience in agricultural and water resource economic analysis. He holds a M.S. in natural resource and agricultural economics from Oregon State University and a B.S. in economics from Pacific Lutheran University. Over the last decade, Mr. Seely has applied mathematical programming and econometric analysis techniques to estimate the value of water. In addition, he has developed a variety of economic models as part of interdisciplinary teams to assess the regional economic costs and benefits of water quality, development and reallocation projects throughout the West.
In recent analyses, Mr. Seely has developed and utilized market information, simulation models, and econometric techniques to estimate the market value of water for federal and state agencies, nonprofits, and private industry in support of water trading activities. The valuations have spanned a wide variety of water uses including irrigation, municipal, industrial, hydroelectric generation, and fish propagation. One recent interdisciplinary team study included an assessment of the feasibility, marketability, and value of treating oil and gas water for alternative uses in southeast New Mexico. Other recent studies have assessed the direct and indirect economic benefits of improvements in water supply reliability to water users within the Yakima Basin, Washington and the economic costs of restrictions on irrigation drain water discharge affecting more than 100,000 acres in California's Central Valley.

• *Representative Clients*

WestWater Research's client list is diverse and includes both private and public sector entities ranging from energy developers, municipalities, state and local governments, law firms, nonprofit conservation groups, and several branches of the Federal government.

- Access Golf LLC
- AquaSeed
- Capital Valuation Appraisers
- Davis Properties Inc.
- Ellicott Springs Resources, Inc.
- Josephson & Dringman, PC
- Magnum Hunter Resources
- Natural Resources Consulting Engineers
- Northwest Economic Associates
- Prebon Energy
- Schwabe Williamson & Wyatt, PPC
- Semitropic Water Storage District
- Tractebel Power
- US Bureau of Reclamation
- USDA - NRCS
- Winrock International
- City of Rosyln, WA
- Northwestern Energy Corporation
- PGE
- Perkins Coie
- Internal Revenue Service
- Silver Point Capital
- Fortress Investment Group
- Akin Gump
- City of Arlington, WA
- Mile High Conservation District
- World Bank
- Paulina Meadows, LLC
- US National Park Service
- Northern Cheyenne Tribe
- Oak Lodge Water District
- The State of Oregon
- The Water Companies
- Oregon Water Resources Congress
- Silver Eagle Refinery
- The Oregon Water Trust
- CME Investments
- Port of Umatilla
- Washington Department of Ecology
- Perkins Coie LLP
- Western Development and Storage
- Basin Electric
- Puget Sound Energy
- Wild Carey and Fife
- Shoshone Bannock Tribes
- International Paper
- Edgewood Capital
- Goldman Sachs
- Pegasus Capital
- Hawkins Development

• Selected Water Right Marketing Experience

City of Arlington Water Rights Acquisition

Client: City of Arlington, WA

Project: The City of Arlington is evaluating alternatives for acquiring additional water supplies for anticipated future demand. Acquisition of water rights is one of several alternatives WestWater Research is assisting Arlington with implementation of a water rights acquisition strategy. WestWater Research is acquiring between 500 and 700 acre-feet of water rights for the City of Arlington to expected growth in the area.

Project Status: Ongoing

City of Roslyn Water Rights Acquisition

Client: City of Roslyn, WA

Project: WestWater Research is identifying prospective sellers and negotiating the permanent purchase of 400 acre-feet of water to mitigate out-of-priority withdrawals of water by the City of Roslyn. WestWater developed an acquisition strategy that addressed complex legal and technical issues associated with the City's existing junior water rights. Specifically, WestWater Research prioritize water rights, initiating and finalizing all aspects of negotiations, water right due diligence, and regulatory filings.

Project Status: Ongoing

City of Olympia Water Rights Acquisition

Client: City of Olympia, WA

Project: WestWater Research is identifying prospective sellers and negotiating the permanent purchase of 100 acre-feet of water to mitigate withdrawals of water from Lake St. Clair and the Deschutes River by the City of Olympia from their McAllister Springs Wellfield. WestWater has identified water rights that could mitigate the increased withdrawals by the City of Olympia and is in the process of obtaining contracts from water right owners for the purchase rand transfer of those water rights for mitigation. Once WestWater has the contracts in place, staff will begin the application process through Washington Department of Ecology.

Project Status: Ongoing

Quad Cities Mitigation Water Rights Acquisition

Client: Washington Department of Ecology – Olympia, WA

Project: WestWater Research is negotiating the permanent purchase of approximately eight cfs or 5,780 acre-feet to satisfy a mitigation settlement the Washington Department of Ecology stipulated to as part of a new water right issued from the Columbia River. WestWater Research is responsible for all aspects of the acquisition process, including identifying and prioritizing candidate water rights, contacting and negotiating with prospective sellers, due diligence, and support for regulator submissions.

Project Status: Ongoing

Property Development Water Acquisition

Client: Private Commercial Development Company – Pullman, WA

WestWater developed and implemented an acquisition strategy to acquire 250 acre-feet of water rights for a commercial property development project located near the City of Pullman, WA. The water will be used for commercial and domestic needs associated with the development project. WestWater is responsible for identifying prospective water rights, contacting and negotiating transaction terms with water right owners, conducting due diligence and assisting with regulatory approvals to transfer the water right.

Project Status: Ongoing

Town of Prescott Valley Water Credit Auction

Client: Town of Prescott Valley, Arizona

WestWater Research has been hired by the Town of Prescott Valley, Arizona, to promote and implement an auction of water credits. Project tasks involve development of due diligence materials in support of the auction, advertising the auction to local, regional, and national interests, and development of a price floor agreement.

Project Status: Ongoing

Shoshone Bannock Tribes Water Marketing Plan

Client: Shoshone Bannock Tribes

Project: The Shoshone Bannock Tribes hold significant water rights that were established through a 1990 settlement agreement with the State of Idaho and the United States. A component of the settlement agreement provides for water marketing opportunities. WestWater Research is developing a marketing plan for a portion of the Tribe's water in order to identify the economic opportunities associated with leasing water for use both on and off the reservation. This document will serve as a component of a comprehensive water management plan.

Project Status: Completed, January 2006

Drought Water Supply Leasing

Client: Basin Electric Power Cooperative, Wyoming

Project: WestWater Research developed and implemented a drought water supply leasing for Basin Electric, located in Wheatland, Wyoming. The project included an evaluation of water rights and other water supply sources capable of supplementing Basin Electric's water needs for power generation and cooling purposes. To provide a basis for valuing water supply agreements, WestWater Research developed a water valuation model for the lower Laramie River Basin. WestWater Research was also responsible for contacting landowners and negotiating water lease agreements on behalf of the facility.

Project Status: Completed 2005

Lake Tapps Water Right and Marketing Advisement

Client: Puget Sound Energy – South Puget Sound, WA

Project: Participated on Negotiation team. Advised on the market value of Lake Tapps water rights that were historically used for hydropower generation and may now be available for municipal use. A financial model was developed to evaluate pricing and marketing alternatives of the water rights. Valuation technique utilized in the project include comparable sales of wholesale water right transactions, development cost approach of new water source development, and income revenue approach based a wholesale rate modeling. The valuation is being used as the basis for price negotiations with potential buyers.

Project Status: Completed 2005

Water Marketing Plan for Tribal Water Rights

Client: The Northern Cheyenne Tribe, Montana

Project: Develop a comprehensive water marketing plan for the Northern Cheyenne Tribe. The water marketing plan develops short and long term water pricing policy, contract requirements, and marketing strategies for tribal water rights located in the Tongue and Big Horn River basins. In addition, the project will develop protocol with the US Bureau of Indian Affairs for leasing and payment of trust assets.

Project Status: Ongoing

Yakima Basin Water Right Acquisitions

Client: Private Landowner – Yakima, WA

Project: Conducted an analysis of existing water rights with the Yakima River Basin to identify water acquisition options for a private landowner seeking to develop vineyards within the Red Mountain region. WestWater Research is implementing an acquisition strategy by identifying candidate water rights and conducting negotiations with water right owners.

Project Status: Completed April 2006

Lewis County Water Right Marketing Strategy

Client: Private Water Right Holder – Lewis County, WA

Project: Developed and implemented a marketing strategy for a water right holder within Lewis County. The marketing strategy includes identifying and qualifying candidate buyers and advising on price, terms, and regulatory strategies for completing the sale.

Project Status: Completed 2005

Groundwater Banking Program Expansion

Client: Semitropic Water Storage District – Central Valley, CA

Project: Summarized background information on the current state of California's water market to provide potential investors and lenders with a clear idea of the market opportunities and risks associated with a groundwater banking program.

Project Status: Completed 2004

Market Demand and Feasibility Analysis for Semitropic Ground Water Banking Program

Client: Layne Water Development and Storage, California

Project: WestWater Research conducted a demand and market feasibility analysis for the development and expansion of the Semitropic Groundwater Banking Program in partnership with Layne Water Development and Storage. The groundwater banking expansion was financed through tax-free, interest-deferred bonds issued by Semitropic. WestWater Research's demand and feasibility analysis assisted in rating project related bonds for credit purposes.

Project Status: Completed 2003

Water Rights Acquisition for Chehalis Power Generation

Client: Chehalis Power Generation, L.P. (wholly-owned subsidiary of Tractebel) – Chehalis, WA
Project: Conducted an analysis of existing water rights within the Chehalis River Basin to identify water acquisition options for Chehalis Power Generation. The company constructed a new power generation facility within the basin and was required to mitigate for increased water usage. WestWater Research implemented an acquisition strategy by identifying candidate water rights and conducting negotiations with water right owners. The analysis involved acquiring the water rights information database maintained by Ecology and selecting candidate water rights based on legal and physical criteria. The location of candidate water rights was mapped using GIS. Ownership information and use were identified through field verification and Lewis County Assessor records.

Project Status: Completed 2003

Magnum Hunter Water Asset Inventory

Client: Magnum Hunter Resources – Dallas, TX

Project: Conducted a water rights due diligence review and market assessment based on document review, agency correspondence, and on-site investigation resulting in the identification of several options for marketing and realizing value from water assets.

Project Status: Completed 2003