

Water Price Prediction for Increasing Market Efficiency Using Random Forest Regression: A Case Study in the Western United States

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Table S1. Deflated Water Transfer Prices by Duration and Transfer-Direction, 1987–2010^a (per Committed Acre-foot).

	Sales			One-Year Leases			Mid-Term Leases ^b			Long-Term Leases ^b		
	Number of Cases	Mean Price	Median Price	Number of Cases	Mean Price	Median Price	Number of Cases	Mean Price	Median Price	Number of Cases	Mean Price	Median Price
Agriculture-Agriculture	224	265.90	143.58	234	67.31	24.81	9	24.09	9.59	25	32.12	8.11
Agriculture-Urban ^c	1173	439.24	311.29	165	152.49	69.32	47	153.88	115.48	46	174.94	50.68
Agriculture-Environment	72	269.92	92.80	181	62.84	50.71	33	202.33	44.39	8	87.25	28.53
Urban-Urban	191	195.52	110.52	109	274.68	110.05	24	201.51	129.78	15	526.10	106.85
Urban-Agriculture	10	23.45	4.82	22	135.31	21.76	3	16.34	3.72	0	---	---
Urban-Environment	6	19.45	5.31	47	46.83	51.53	6	65.88	70.01	1	354.77	354.77
Miscellaneous ^d	36	233.78	98.71	90	91.11	44.68	3	9.17	9.30	3	357.54	213.65

^a Year 2010 dollars per committed acre-foot; “exchange” trades are not included. ^b Mid-term leases refer to leases >2 years and ≤ 10 years; long-term leases refer to leases >10 years. ^c Urban includes water uses for cities, towns, municipal water districts and industries. ^d Miscellaneous includes Environment-Environment, recycled and combination trades. Combination refers to transfers that involve multiple original or new uses; recycled refers to water reuse after treatment.

Table S2. Deflated Water Transfer Prices by State and Duration, 1987–2010 ^a (per Committed Acre-foot).

	Sales			One-Year Leases			Mid-Term Leases ^b			Long-Term Leases ^b		
	Number of Cases	Mean Price	Median Price	Number of Cases	Mean Price	Median Price	Number of Cases	Mean Price	Median Price	Number of Cases	Mean Price	Median Price
Arizona	103	95.46	82.63	45	215.39	82.58	11	247.32	296.68	3	82.21	88.24
California	50	139.24	72.20	321	141.35	89.06	23	326.82	108.68	18	510.67	152.59
Colorado	1236	459.01	340.32	99	134.52	21.58	10	117.79	37.52	24	181.61	39.29
Idaho	18	8.24	5.72	85	22.27	7.86	0	---	---	3	27.15	31.42
Montana	2	181.61	181.61	15	32.30	25.62	21	57.48	20.64	12	18.16	16.93
New Mexico	59	182.01	152.52	56	57.04	52.35	8	63.49	70.01	3	163.34	133.19
Nevada	92	383.56	224.94	4	44.27	43.37	2	334.50	334.50	2	335.28	335.28
Oregon	17	13.02	10.13	49	41.73	22.00	10	69.24	23.72	7	28.14	13.01
Texas	70	61.72	45.70	101	150.02	36.68	32	145.99	120.28	20	169.01	65.91
Utah	49	82.76	50.32	14	34.56	8.87	3	19.20	13.18	1	20.70	20.70
Washington	12	58.18	38.15	19	108.57	38.69	5	42.61	38.39	0	---	---
Wyoming	4	94.26	102.76	41	42.51	41.96	0	---	---	5	2.36	2.33
All	1712	374.03	188.34	849	112.63	50.71	125	155.47	83.09	98	192.52	34.32

^a Year 2010 dollars per committed acre-foot; “exchange” trades are not included. ^b Mid-term leases refer to leases >2 years and ≤ 10 years; long-term leases refer to leases >10 years.