



BOARD OF DIRECTORS REGULAR MEETING

Tuesday, July 11th, 2023 – 9:00A.M.

AGENDA

1. Consent Agenda (approved with one motion).
 - a. Minutes of June 6th, 2023, Regular Board meeting.
 - b. Status of Investments Report – June 30, 2023.
 - c. Treasurer’s Report– June 30, 2023.
 - d. Status of Investments Report – June 30, 2022.
 - e. Treasurer’s Report– June 30, 2022.
 - f. Claims.
2. Cloud seeding overview.
3. Drainage Improvement District #11 update.
4. National Pollutant Discharge Elimination System (NPDES) permit update.
5. Industrial Systems contract authorization (water management technology).
6. Union Gap Irrigation District emergency intertie water carriage agreement.
7. Watermaster’s report.
8. District Manager’s report.
9. Engineering Manager’s report.
10. Executive Session:
 - a. Executive session pursuant to RCW 42.30.110(1)(i). Potential and pending litigation- State v. Acquavella, Terrace Heights Sewer District, Clean Water Act.
 - b. Executive session pursuant to RCW 42.30.110(2)(a)(iii). To evaluate the legal risk of a proposed action.

Item #1

REGULAR MEETING MINUTES

June 6, 2023

The Board of Directors for the Roza Irrigation District convened in regular session on Tuesday June 6, 2023. Present were Vice-President Jim Willard, Director Tanner Winckler, Director Jason Sheehan, Director Jason Don, and District Manager Scott Revell. Engineering Manager Wayne Sonnichsen, Watermaster Dave Rollinger, Assistant Watermaster Aaron Wiederspohn, Maintenance Superintendent Dave Clampitt and Assessment Clerk/Assistant Secretary Kristel Espinoza.

Via telephone conference: District Attorney Brian Iller.

The President called the meeting to order at 9:00 A.M. and requested the Board consider the consent agenda as presented:

- a. Minutes of May 9th, 2023, Regular Board meeting.
- b. Status of Investments Report – May 31, 2023.
- c. Treasurer’s Report– May 31, 2023.
- d. Claims.

The following claims are approved for payment: Payroll numbers 29666 - 29667 in the amount of \$417.88. Voucher numbers 68672 – 68684, 68745 – 68774, 68775, 68776 – 68844 and 68845 – 68911 in the amount of \$1,618,785.25 and electronic payments in the amount of \$305,792.64 from the period of May 1, 2023, to June 6, 2023.

District Manager Revell requested to modify agenda and add “Water supply update and revised operation plan”. Mr. Willard moved, seconded by Mr. Winckler, and unanimously approved amending the agenda and added “Water supply update and revised operation plan”.

District Manger Revell discussed the water supply being at 77%, down from 86% in May, followed by Engineering Manager Sonnichsen reviewing the revised 70% and 77% drought operation plans and proration scenarios.

District Manager Revell updated the Board on the drain maintenance the district has been in the process of clearing out in recent years. Very good progress has been made in many locations, clearing out weeds, brush and trees that need to be removed. Mr. Revell noted the purchase of the excavator mounted mulcher has expedited the work and the district is simultaneously attempting to keep up with maintenance where trees and brush have been removed so that they do not become overgrown.

District Manager Revell updated the Board on the Draft Union Gap Irrigation District water carriage agreement and noted that the agreement terminates at the end of the 2023 season and requires Roza to do the connection work and include an additional insurance requirement amount. No action was requested from the Board.

District Manager Revell reported to the Board on the recent NPDES Aquatic Herbicide permit renewal. Roza submitted detailed comments on the draft permit in March and Ecology issued partial permit revisions in May, which did not address many of the issues identified previously. Roza has scheduled a meeting with the permit writer and supervisor. Staff has been preparing the

REGULAR MEETING MINUTES

June 6, 2023

administrative record for an appeal to the Pollution Control Hearings Board since late 2021 and has informed Ecology executives of those preparations. No action was requested from the Board.

District Manager Revell and Tom Tebb- Director of the State Department of Ecology Office of Columbia reported to the Board on future state funding opportunities. Staff have discussed plans for Roza to apply for up to \$10 million in funding for each of the three canal piping projects during the 2025-2027 state budget biennium as well as separate applications in the 2027-2029 and 2030-2032 biennia for major concrete replacement in the Main Canal floor in the Moxee area and Main Canal piping below Wasteway 6 in conjunction with expansion of the Wasteway 6 Re-Regulation Reservoir.

Watermaster Dave Rollinger presented, and the Board reviewed the Watermaster's monthly report.

District Manager Revell presented, and the Board reviewed the District Manager's monthly report.

Engineering Manager Sonnichsen presented, and the Board reviewed the Engineering Manager's monthly report.

The President declared the Board to be in executive session for an estimated five minutes beginning at 10:40 A.M. pursuant to:

- a. Executive session pursuant to RCW 42.30.110(1)(i). Potential and pending litigation- State v. Acquavella, Terrace Heights Sewer District.
- b. Executive session pursuant to RCW 42.30.110(2)(a)(iii). To evaluate the legal risk of a proposed action.

The President returned the Board to regular session at 10:45 A.M.

No further business appearing and upon motion duly made, seconded, and unanimously passed, the Board did there upon adjourn at 10:45 A.M. on Tuesday June 6, 2023.

ATTEST:

PRESIDENT

SECRETARY

ROZA IRRIGATION DISTRICT
TREASURER'S FINANCIAL STATEMENT
June 30, 2023

	EXPENSE	CONST.	RESERVE	MEMO	TOTAL
Balance First of Month	21,153,267.01	352,291.59	288,000.00	27,715.18	21,821,273.78
Collections	154,402.15	1,154.23			155,556.38
Miscellaneous	10,933.18				10,933.18
Matured Investments					0.00
Interest	86,867.93				86,867.93
Transfers					0.00
TOTAL	21,405,470.27	353,445.82	288,000.00	27,715.18	22,074,631.27
LESS:					
Voucher Checks Issued	1,381,692.60				1,381,692.60
Misc. Checks Issued	497,474.96	31,674.96			529,149.92
Tier 2 Checks					0.00
NSF Check Returned					0.00
Bank Charge	9.29				9.29
Void Check	-5,180.35				-5,180.35
TOTAL PAID	1,873,996.50	31,674.96	0.00	0.00	1,905,671.46
Balance End of Month	19,531,473.77	321,770.86	288,000.00	27,715.18	20,168,959.81

**ROZA IRRIGATION DISTRICT
STATUS OF INVESTING ACCOUNTS
June 30, 2023**

BANK	\$ AMOUNT	INTEREST EARNED	INTEREST RATE	BALANCE
L.G.I.P.	\$19,934,597.78	86,612.47	5.1988%	\$20,021,210.25
U.S. - MIA INV.	\$121.48	6.90	0.09697%	\$128.38
U.S. - SAVINGS	\$18,776.78	2.37	0.02%	\$18,779.15
U.S. - CHECKING	\$128,799.90	42.13	0.01%	\$128,842.03
			TOTAL	\$20,168,959.81

**ROZA IRRIGATION DISTRICT
STATUS OF INVESTMENTS
June 30, 2023**

INVESTMENT	RATE	MATURE	EXPENSE	TOTAL
			0.00	0.00
TOTALS:			0.00	0.00

TOTAL OF ALL CASH	20,168,959.81
MINUS RESTRICTED CASH	637,486.04
(Construction/Reserve/Memo \$)	
(Drought)	4,049,213.59
(WSD)	4,031,161.26
TOTAL O & M CASH	11,451,098.92

COMPARATIVE BALANCE SHEET
Roza Irrigation District
For the Five PERIODS ENDING May 31, 2023

	CURRENT PERIOD	PRIOR YEAR	DIFFERENCE
CASH IN BANK/CHECKING	210,462.07	249,991.93	(39,529.86)
CASH IN BANK/O & M	20,942,804.94	19,204,817.99	1,737,986.95
CASH IN BANK/CONST	352,291.59	366,821.55	(14,529.96)
CASH IN BANK/PREPAIDS	27,715.18	27,453.95	261.23
CASH IN BANK/USBR RESERVE	288,000.00	288,000.00	0.00
PETTY CASH	100.00	100.00	0.00
TOTAL OF ALL CASH	<u>21,821,373.78</u>	<u>20,137,185.42</u>	<u>1,684,188.36</u>
ACCOUNTS RECEIVABLE	15,752.53	452,039.12	(436,286.59)
TOTAL CURRENT RECEIVABLES	<u>15,752.53</u>	<u>452,039.12</u>	<u>(436,286.59)</u>
ASSESSMENT RECEIVABLE/O & M	633,309.12	598,194.12	35,115.00
ASSESSMENT RECEIVABLE/CONST	5,467.08	6,639.75	(1,172.67)
ASSESSMENT RECEIVABLE/DELIQUENT INTEREST	37,381.68	25,449.99	11,931.69
ASSESSMENT RECEIVABLE/MISC BILLS	1,222.26	1,200.41	21.85
TOTAL ASSESSMENT RECEIVABLES	<u>677,380.14</u>	<u>631,484.27</u>	<u>45,895.87</u>
INVENTORY/GAS & OIL	8,261.42	(16,300.55)	24,561.97
INVENTORY/VEHICLE SHOP	77,124.02	48,548.46	28,575.56
INVENTORY/SUPPLIES	565,943.03	492,988.69	72,954.34
INVENTORY/EQUIPMENT PARTS	0.00	846.40	(846.40)
TOTAL INVENTORY	<u>651,328.47</u>	<u>526,083.00</u>	<u>125,245.47</u>
PREPAID INSURANCE	268,996.26	221,990.52	47,005.74
PREPAID O & M/POWER	0.00	386,217.94	(386,217.94)
PREPAID SVID JOINT DRAINS	187,689.11	223,837.84	(36,148.73)
PREPAID COSTS/WARRANTYS	903.76	169,802.26	(168,898.50)
TOTAL PREPAIDS	<u>457,589.13</u>	<u>1,001,848.56</u>	<u>(544,259.43)</u>
TOTAL OF ALL CURRENT ASSETS	<u>23,623,424.05</u>	<u>22,748,640.37</u>	<u>874,783.68</u>
LAND & LAND RIGHTS	467,633.44	467,633.44	0.00
BUILDINGS	90,689.05	90,689.05	0.00
ENCLOSED CONDUIT SYSTEM	37,904,537.08	35,899,536.50	2,005,000.58
PUMP UPGRADES	580,422.09	356,459.35	223,962.74
WW6 REREG	336,280.37	336,280.37	0.00
WW7 REREG	539,933.11	539,933.11	0.00
WW5 REREG	30,891,678.06	30,891,678.06	0.00
CONST & MAINT EQUIPMENT	7,993,050.11	7,635,133.18	357,916.93
MISC EQUIPMENT	1,146,162.37	1,089,840.37	56,322.00
OFFICE EQUIPMENT	103,023.07	103,023.07	0.00
COMPUTER SOFTWARE	44,813.41	44,813.41	0.00
TOTAL CAPITAL ASSETS	<u>80,098,222.16</u>	<u>77,455,019.91</u>	<u>2,643,202.25</u>
BUILDINGS/ACCUMULATED DEPRECIATION	(90,689.05)	(90,689.05)	0.00

COMPARATIVE BALANCE SHEET
Roza Irrigation District
For the Five PERIODS ENDING May 31, 2023

	CURRENT PERIOD	PRIOR YEAR	DIFFERENCE
ECS/ACCUMULATED DEPRECIATION	(11,552,546.53)	(10,838,295.02)	(714,251.51)
WW6 REREG/ACCUMULATED DEPRECIATION	(336,280.37)	(336,280.37)	0.00
WW7 REREG/ACCUMULATED DEPRECIATION	(381,817.16)	(353,914.35)	(27,902.81)
WW5 REREG/ACCUMULATED DEPRECIATION	(2,986,195.50)	(2,368,361.94)	(617,833.56)
EQUIPMENT/ACCUMULATED DEPRECIATION	(4,377,747.34)	(4,023,397.24)	(354,350.10)
MISC EQUIPMENT/ACCUMULATED DEPRECIATION	(919,956.69)	(784,851.77)	(135,104.92)
OFFICE EQUIPMENT/ACCUMULATED DEPRECIATION	(93,497.21)	(91,386.73)	(2,110.48)
COMPUTER SOFTWARE/ACCUMULATED DEPRECIATION	(36,817.92)	(27,855.24)	(8,962.68)
CAPITAL ASSETS ACCUM DEPRECIATION	<u>(20,775,547.77)</u>	<u>(18,915,031.71)</u>	<u>(1,860,516.06)</u>
USBR CONST OBLIGATION REC.	0.00	52,332.31	(52,332.31)
TOTAL CONST RECEIVABLE	<u>0.00</u>	<u>52,332.31</u>	<u>(52,332.31)</u>
NET PENSION ASSET	<u>1,148,795.00</u>	<u>3,196,979.00</u>	<u>(2,048,184.00)</u>
TOTAL NET PENSION ASSET	<u>1,148,795.00</u>	<u>3,196,979.00</u>	<u>(2,048,184.00)</u>
TOTAL OF ALL ASSETS	84,094,893.44	84,537,939.88	(443,046.44)
DEFERRED OUTFLOWS/PENSIONS	<u>1,161,227.02</u>	<u>391,672.02</u>	<u>769,555.00</u>
TOTAL DEFERRED OUTFLOWS/PENSIONS	<u>1,161,227.02</u>	<u>391,672.02</u>	<u>769,555.00</u>
TOTAL ASSETS AND DEFERRED OUTFLOWS	85,256,120.46	84,929,611.90	326,508.56
ACCOUNTS PAYABLE/EXPENSE	1,381,692.60	536,560.94	845,131.66
ACCOUNTS PAYABLE/USBR/CONST	49,677.10	66,730.78	(17,053.68)
TOTAL ACCOUNTS PAYABLE	<u>1,431,369.70</u>	<u>603,291.72</u>	<u>828,077.98</u>
ACCRUED ANNUAL LEAVE PAYABLE	424,370.68	400,997.70	23,372.98
ACCRUED SICK LEAVE PAYABLE	576,482.78	533,157.57	43,325.21
ACCRUED SALES TAX PAYABLE	442.81	10,239.58	(9,796.77)
ACCRUED TAXES PAYABLE	135.03	172.61	(37.58)
FICA TAXES PAYABLE	0.00	(0.15)	0.15
ACCRUED IND INS PAYABLE	16,311.01	29,521.08	(13,210.07)
UNION DUES PAYABLE	112.00	0.00	112.00
ACCRUED RET. DEDUC & MATCH	37,319.56	37,264.08	55.48
MISC PAYROLL DEDUCTIONS	4,252.00	4,235.00	17.00
ACCR WA PD LEAVE DEDUCT&MATCH	5,016.66	4,546.47	470.19
TOTAL ACCRUED EXPENSES	<u>1,064,442.53</u>	<u>1,020,133.94</u>	<u>44,308.59</u>

COMPARATIVE BALANCE SHEET
Roza Irrigation District
For the Five PERIODS ENDING May 31, 2023

	CURRENT PERIOD	PRIOR YEAR	DIFFERENCE
DEPOSITS/EXTRA WATER	134.79	0.00	134.79
DEPOSITS/ FULL COST WATER	27,715.18	27,453.95	261.23
OVERPAYMENT	0.00	16.76	(16.76)
TOTAL PREPAIDS/DEPOSITS	<u>27,849.97</u>	<u>27,470.71</u>	379.26
CONTRACT PAY/USBR CONST	0.00	52,332.31	(52,332.31)
TOTAL LONG TERM LIABILITIES	<u>0.00</u>	<u>52,332.31</u>	(52,332.31)
NET PENSION LIABILITY	663,236.00	304,735.00	358,501.00
TOTAL NET PENSION LIABILITY	<u>663,236.00</u>	<u>304,735.00</u>	358,501.00
TOTAL OF ALL LIABILITIES	3,186,898.20	2,007,963.68	1,178,934.52
DEFERRED INFLOWS/PENSIONS	1,210,702.00	3,349,279.00	(2,138,577.00)
TOTAL DEFERRED INFLOWS/PENSIONS	<u>1,210,702.00</u>	<u>3,349,279.00</u>	(2,138,577.00)
RESERVE/USBR - CONST OBLIG	288,000.00	288,000.00	0.00
TOTAL RESERVES	<u>288,000.00</u>	<u>288,000.00</u>	0.00
UNAPPROPRIATED SURPLUS	74,150,320.04	71,796,792.49	2,353,527.55
NET INCOME (LOSS)	6,420,200.22	7,487,576.73	(1,067,376.51)
TOTAL UNRESERVED	<u>80,570,520.26</u>	<u>79,284,369.22</u>	1,286,151.04
TOTAL EQUITY	80,858,520.26	79,572,369.22	1,286,151.04
TOTAL LIABILITY, EQUITY & DEFERRED INFLOWS	85,256,120.46	84,929,611.90	326,508.56

STATEMENT OF INCOME EXPENSE
Roza Irrigation District
For the Five PERIODS ENDING May 31, 2023

	CURRENT PERIOD	2023 YTD	2022 YTD
ASSESSMENT INCOME/O & M	0.00	14,094,693.78	13,512,649.02
ASSESSMENT INCOME/CONST	0.00	1,351.05	1,624.70
TOTAL ASSESSMENT INCOME	0.00	14,096,044.83	13,514,273.72
INTEREST INCOME/INV/DELINQ	1,619.93	8,966.32	8,420.75
INTEREST INCOME/INV/OTHER	94,678.17	355,153.66	24,378.39
TOTAL INTEREST INCOME	96,298.10	364,119.98	32,799.14
RENTAL INCOME/HOUSES	525.78	2,559.66	2,688.50
TOTAL RENTAL INCOME	525.78	2,559.66	2,688.50
DISP OF FIXED ASSETS INCOME	0.00	0.00	969.60
MISC INCOME	1,366.35	1,366.35	3,218.02
TIER 2 INCOME	729.63	763.81	0.00
MISC. INCOME/HEALTH/SAFETY	9,942.95	39,446.34	39,244.92
TOTAL MISCELLANEOUS INCOME	12,038.93	41,576.50	43,432.54
TOTAL OF ALL INCOME	108,862.81	14,504,300.97	13,593,193.90
MC/LINED/BURNING	477.75	11,429.34	13,407.61
MC/LINED/CLEANING	0.00	4,654.74	15,101.65
MC/LINED/GROUTING	10,994.34	24,420.63	39,024.31
MC/LINED/REPAIR	81.90	12,621.96	63,003.65
MC/LINED/SEALING	0.00	0.00	219,687.68
MC/LINED/DRAINS	1,236.20	8,070.74	3,663.09
MC/UNLINED/BURNING	694.57	39,328.54	30,366.61
MC/UNLINED/CLEANING	808.84	24,898.43	36,172.63
MC/UNLINED/CORING	0.00	0.00	20,678.81
MC/UNLINED/REPAIR	3,114.93	28,566.76	27,896.55
MC/GROUND WEEDS/SPRAY	7,656.80	33,575.64	20,077.59
MC/GROUND WEEDS/PULL	0.00	574.00	0.00
MC/GROUND WEEDS/MOW	39,639.29	51,952.24	66,721.33
MC/AQUATIC WEEDS	10,182.79	144,108.65	142,316.58
MC/STRUCTURES/CLEANING	1,205.81	12,403.68	28,095.21
MC/STRUCTURES/CONST	1,456.42	5,937.06	30,474.23
MC/STRUCTURES/GRAVEL PACK	3,416.62	20,769.19	14,325.60
MC/STRUCTURES/GROUT	0.00	244.45	131.56
MC/STRUCTURES/REPAIR	1,243.50	13,311.87	39,273.68
MC/WATER MEASUREMENT	0.00	10,851.63	5,270.40
MC/SCADA/O & M	1,035.54	2,392.17	4,423.99
MC/AUTOMATED STRUC/REPAIR	4,026.75	33,335.31	40,774.29
MC/ROADS/CONST	0.00	0.00	411.70
MC/ROADS/BRIDGES,CATTLE GUARDS	0.00	0.00	5,393.05
MC/ROADS/REPAIR	4,091.82	7,803.81	163,240.88
MC/WASTEWAYS/BURN	0.00	3,197.13	4,080.27
MC/WASTEWAYS/CLEAN	3,140.24	4,185.93	339.08

STATEMENT OF INCOME EXPENSE
Roza Irrigation District
For the Five PERIODS ENDING May 31, 2023

	CURRENT PERIOD	2023 YTD	2022 YTD
MC/WASTEWAYS/REPAIR	684.03	4,359.16	1,692.84
MC/WASTEWAYS/SPRAY	0.00	0.00	376.72
MC/SIPHON & TUNNELS/CLEAN	0.00	4,896.99	11,982.15
MC/SIPHONS & TUNNELS/REPAIR	164.62	24,809.42	14,744.45
MC/UNDERSHOTS/CLEAN	0.00	6,615.42	8,444.86
MC/UNDERSHOTS/REPAIR	0.00	1,181.52	0.00
TOTAL MAIN CANALS	<u>95,352.76</u>	<u>540,496.41</u>	<u>1,071,593.05</u>
LATERAL/PIPED/CONST	0.00	29,382.05	0.00
LATERAL/PIPED/REPAIR	6,333.93	21,477.13	16,690.17
LATERAL/PIPED/LOCATING	79.20	2,218.88	521.78
LATERAL/OPEN/BURNING	0.00	23,040.06	24,044.74
LATERAL/OPEN/CLEAN	453.96	16,233.24	53,401.17
LATERAL/OPEN/CORING	781.73	781.73	0.00
LATERAL/OPEN/REPAIR	2,505.91	11,170.24	11,066.25
LATERAL/GROUND WEEDS/SPRAY	504.90	9,046.06	3,939.02
LATERAL/GROUND WEEDS/MOW	209.00	935.74	9,123.98
ECS/REPAIR	8,449.65	101,976.90	175,009.51
ECS/LOCATE	0.00	0.00	1,068.90
LATERAL/AQUATIC WEEDS	675.50	1,097.78	883.34
LATERAL/STRUCTURES/CONST	101.58	132.38	4,265.00
LATERAL/STRUCTURES/REPAIR	1,038.97	1,180.97	5,291.64
FLOWMETER/REPAIR	2,618.91	3,185.73	2,555.55
LATERAL/ROADS/REPAIR	436.73	1,768.51	0.00
LATERAL/WASTEWAYS/CLEAN	636.19	975.66	23.10
LATERAL/WASTEWAYS/REPAIR	100.10	100.10	0.00
TOTAL LATERALS	<u>24,926.26</u>	<u>224,703.16</u>	<u>307,884.15</u>
DRAINS/OPEN,TOE/BURN	0.00	1,706.90	3,144.30
DRAINS/OPEN,TOE/CLEAN	82.02	82.02	591.39
DRAINS/OPEN,TOE/PULL	0.00	0.00	94.00
DRAINS/OPEN,OUTLET/BURN	0.00	557.39	3,354.69
DRAINS/OPEN,OUTLET/CLEAN	0.00	0.00	3,030.90
DRAINS/OPEN,OUTLET/REPAIR	0.00	0.00	1,229.64
DRAINS/OPEN,OUTLET/PULL	0.00	0.00	431.32
DRAINS/OPEN,OUTLET/MOW	0.00	0.00	1,579.54
ROZA MAINT/DID #11/CLEAN	2,239.12	3,866.34	0.00
ROZA MAINT/DID #11/REPAIR	0.00	0.00	10.45
ROZA MAINT/DID #11/MOW & CUT	5,510.28	5,510.28	0.00
JOINT DRAINS/SVID	37,873.90	157,611.98	117,767.70
DRAINS/DID #11	351.71	351.71	106.44
DRAINS/PIPED,TOE/CONST	0.00	0.00	348.10
DRAINS/PIPED,TOE/REPAIR	3,023.97	3,309.79	1,107.41
DRAINS/PIPED,OUTLET/REPAIR	0.00	0.00	3,109.29
TOTAL DRAINS	<u>49,081.00</u>	<u>172,996.41</u>	<u>135,905.17</u>
PUMP PLANT/PUMP	8,732.76	88,436.84	46,932.36

STATEMENT OF INCOME EXPENSE
Roza Irrigation District
For the Five PERIODS ENDING May 31, 2023

	CURRENT PERIOD	2023 YTD	2022 YTD
PUMP PLANT/MOTOR	2,022.89	53,463.39	31,156.54
PUMP PLANT/CONTROLS	23,126.19	73,769.58	13,507.76
PUMP PLANT/STRUCTURES	0.00	430.51	561.90
PUMP PLANT/PIPE & VALVES	828.28	11,717.88	8,689.28
PUMP MAINT SHOP	31.91	191.61	513.63
PUMP PLANT/SCREENS O & M	0.00	806.28	6,887.47
PUMP PLANT/ELECTRICAL STRUCTURES	0.00	29.70	0.00
PUMPS/SILT REMOVAL	0.00	3,895.84	6,310.97
FLOATING PUMP PLANT/STUDY	4,966.00	22,642.60	35,401.60
P14 UPGRADE	1,922.65	6,412.16	36,325.67
P16 UPGRADE	750.31	9,421.10	44,421.27
TOTAL PUMPS	<u>42,380.99</u>	<u>271,217.49</u>	<u>230,708.45</u>
SAFETY	3,483.30	9,149.67	8,090.83
DRUG TESTING	282.00	1,529.12	1,046.25
PORTA POTTY'S	443.42	1,984.37	2,849.56
TOTAL SAFETY/DRUG TESTING	<u>4,208.72</u>	<u>12,663.16</u>	<u>11,986.64</u>
17-18 PRESSURE PROJECT	0.00	0.00	26.59
21-22 PRESSURE PROJECT	60.65	97,671.13	92,774.98
22-23 PRESSURE PROJECT	6,627.44	468,941.74	256,103.23
23-24 PRESSURE PROJECT	(4,251.40)	974,453.84	0.00
TOTAL PRESSURE PROJECTS	<u>2,436.69</u>	<u>1,541,066.71</u>	<u>348,904.80</u>
REIMB/Private INDIV	901.34	9,366.14	6,304.31
TOTAL REIMBURSABLES	<u>901.34</u>	<u>9,366.14</u>	<u>6,304.31</u>
EQUIPMENT EXPENSE	(12,205.20)	(16,983.54)	(31,010.64)
EQUIPMENT EXPENSE/MISC	2,276.99	10,754.20	6,107.78
EQUIPMENT EXPENSE/TOOLS	1,279.40	3,936.26	11,739.53
STOREHOUSE EXPENSE	15,306.19	68,493.25	55,750.60
SHOP EXPENSE	4,049.33	19,688.34	14,488.19
YARD BUILDING EXPENSE	352.59	675.25	596.98
OFFICE BUILDING EXPENSE	504.94	10,247.99	2,209.42
SHOP BUILDING EXPENSE	0.00	359.22	178.92
WAREHOUSE BUILDING EXPENSE	0.00	0.00	203.48
GROUNDS EXPENSE	4,746.07	19,251.91	16,439.84
DISTRICT HOUSES/MISC	736.40	736.40	0.00
DISTRICT HOUSE/WW3	170.04	170.04	0.00
DISTRICT HOUSE/P13E	4,218.39	4,218.39	0.00
DISTRICT HOUSE/P13W	176.80	191.94	0.00
DISTRICT HOUSE/P14W	7,125.15	7,140.11	1,085.51
SHOW UP TIME	0.00	0.00	63.52
RADIO	10,664.12	10,664.12	0.00
UTILITIES/SHOP & WAREHOUSE	307.29	3,391.92	2,984.90
UTILITIES/GATES & WASTEWAY	38.51	276.02	400.51
WW6 REREG/O & M	891.68	5,454.34	35,285.23

STATEMENT OF INCOME EXPENSE
Roza Irrigation District
For the Five PERIODS ENDING May 31, 2023

	CURRENT PERIOD	2023 YTD	2022 YTD
WW7 REREG/CONST	0.00	46.20	0.00
WW7 REREG/O & M	340.66	10,505.38	2,703.54
WW5 REREG/O&M	28,430.78	34,194.47	66,015.82
TOTAL EQUIPMENT/BUILDINGS	<u>69,410.13</u>	<u>193,412.21</u>	<u>185,243.13</u>
WATER MANAGEMENT	92,781.08	215,492.56	211,186.13
TOTAL WATER MANAGEMENT	<u>92,781.08</u>	<u>215,492.56</u>	<u>211,186.13</u>
CONTRACT/USBR/STORAGE	401,000.00	802,000.00	321,000.00
CONTRACT/USBR/RESERVED WORK	159,500.00	319,000.00	174,500.00
CONTRACT/USBR/POWER	556,675.00	1,113,350.00	556,675.00
TOTAL USBR CONTRACTS	<u>1,117,175.00</u>	<u>2,234,350.00</u>	<u>1,052,175.00</u>
ADMIN & GENERAL SALARIES	90,980.46	377,888.09	375,530.93
DIRECTOR'S FEES	1,408.00	4,224.00	5,760.00
ENGINEERING MATERIALS	0.00	2,721.90	1,992.53
COMPUTER EXPENSE	0.00	4,587.26	80.05
COMPUTER PROGRAMS	0.00	4,571.26	0.00
COMPUTER MAINTENANCE	379.00	1,974.28	1,559.01
HEALTH & SAFETY COORD	6,304.09	27,362.20	26,919.23
ANNUAL LEAVE/UNION	7,052.80	57,040.35	49,146.64
SICK LEAVE/UNION	3,477.01	62,505.07	49,362.67
HOLIDAY/UNION	0.00	36,591.82	23,722.50
KEPT ON SALARY/UNION	0.00	0.00	2,142.24
ADMINISTRATIVE LEAVE/UNION	0.00	2,519.20	8,273.26
SOCIAL SECURITY & MED TAXES	23,676.87	121,114.81	112,295.57
TAXES/UNEMPLOYMENT/UNION	0.00	0.00	2,128.72
INDUSTRIAL INSURANCE	6,185.80	29,451.36	42,740.99
GROUP INSURANCE/UNION	31,090.74	160,931.70	162,675.78
STATE RETIREMENT	31,596.50	158,474.67	148,409.58
WA. PAID LEAVE	674.40	3,349.69	2,349.58
ANNUAL LEAVE/NON-UNION	4,646.62	23,256.08	31,590.75
SICK LEAVE/NON-UNION	426.36	8,829.79	11,489.21
HOLIDAY/NON-UNION	0.00	17,119.16	10,724.44
GROUP INS/NON-UNION	14,265.22	71,326.10	69,716.10
TRAVEL & MILEAGE/ADMIN & SUPV	8,338.90	64,205.78	51,222.73
TRAVEL & MILEAGE/DIRECTOR	1,960.29	4,820.79	1,840.99
TOTAL ADMIN & GENERAL EXPENSES	<u>232,463.06</u>	<u>1,244,865.36</u>	<u>1,191,673.50</u>
ACCOUNTING & LEGAL SERVICES	0.00	0.00	9,976.00
LEGAL	1,300.00	13,426.44	25,086.18
LEGAL/WATER RIGHTS	2,148.25	86,059.50	81,875.00
TOTAL LEGAL EXPENSES	<u>3,448.25</u>	<u>99,485.94</u>	<u>116,937.18</u>
INSURANCE/PROPERTY	3,079.96	15,399.80	12,792.25
INSURANCE/INJURY & DAMAGES	27,279.61	137,139.77	112,045.57
INSURANCE/DIRECTORS & OFFICERS	1,759.98	8,799.90	7,309.85

STATEMENT OF INCOME EXPENSE
 Roza Irrigation District
 For the Five PERIODS ENDING May 31, 2023

	CURRENT PERIOD	2023 YTD	2022 YTD
INSURANCE/OTHER	833.33	4,266.65	4,266.65
TOTAL INSURANCE EXPENSES	<u>32,952.88</u>	<u>165,606.12</u>	<u>136,414.32</u>
PHONE/877-3880	77.63	630.18	660.08
PHONE/973-2441	73.64	653.25	714.35
CELLULAR PHONES	4,276.24	18,287.89	18,307.46
TOTAL PHONE EXPENSES	<u>4,427.51</u>	<u>19,571.32</u>	<u>19,681.89</u>
A/P DISCOUNTS	(410.39)	(2,014.49)	(1,294.89)
GIS	201.74	1,331.81	827.38
MISC. TAXES	0.00	144.13	213.91
UTILITIES/OFFICE	384.19	3,701.96	3,505.61
ROZA-SVID BOJC	0.00	388,977.00	338,166.00
OFFICE EQUIPMENT	0.00	11,035.32	6,422.94
OFFICE EXPENSE	4,222.98	20,098.78	14,279.47
PUBLISHING	0.00	1,916.01	2,913.10
DUES & SUBSCRIPTIONS	8,700.00	38,449.50	38,404.50
TOTAL MISCELLANEOUS EXPENSES	<u>13,098.52</u>	<u>463,640.02</u>	<u>403,438.02</u>
DEPRECIATION/EQUIPMENT	24,026.46	120,132.30	120,546.00
DEPRECIATION/ECS	59,520.96	297,604.79	297,604.79
DEPRECIATION/WW5 REREG	51,486.13	257,430.65	257,430.64
TOTAL DEPRECIATION	<u>135,033.55</u>	<u>675,167.74</u>	<u>675,581.43</u>
TOTAL OF ALL EXPENSES	1,920,077.74	8,084,100.75	6,105,617.17
NET INCOME (LOSS)	<u>(1,811,214.93)</u>	<u>6,420,200.22</u>	<u>7,487,576.73</u>

Item #2



To: Board of Directors
From: Scott Revell, District Manager
Date: July 11, 2023
Re: Cloud Seeding to Enhance Water Supply

Attachments

1. UBSR Cloud Seeding Fact Sheet (2 pages)
2. Idaho Power Cloud Seeding Summary and FAQ (1 page)
3. Wall Street Journal article dated 6/9/23 (10 pages)
4. RCW 70A.10 Weather Modification & WAC 173.495 (14pages)

Background

As detailed in the attached information, modern cloud seeding occurs in many places across the west and the world to induce additional precipitation in the form of both rain and snow. Some estimates have shown a 10% to 15% increase in precipitation. The costs are generally very low on a per acre foot basis (e.g. less than \$25/AF).

Most cloud seeding in the west occurs from October through March using silver iodide dispersed using airplanes at the direction of a meteorologist. Cloud seeding is now so common that the North American Weather Modification Council was formed in 2011. Their website is www.nawmc.org and has a great deal of informative background material.

When done in the right way, at the right time, and in the right place cloud seeding can be a positive enhancement to snowpack and water supply. Generally, drier years have fewer opportunities for cloud seeding because there are fewer storms over the basin. Each river basin and each weather year are somewhat different.

- **Prior Cloud Seeding in the Yakima Basin-** The state paid for cloud seeding in 1977 from February to June, through a contract between DNR and UW. Roza paid \$0.50/acre in 1979. The forerunner of the Yakima Basin Joint Board proposed cloud seeding for the 1980 season and Roza allocated \$0.05/acre but chose not to move forward. The UW team prepared a white paper describing the program which can be emailed.

There were several flights which occurred in August-Oct 1979. In some cases the plane did not encounter suitable clouds to seed. On at least one flight the area around Wenatchee was seeded, presumably in a storm headed toward the Cle Elum area.

There was also a proposal for cloud seeding during the early part of 1980 using crushed dry ice (CO₂) crystals dispersed from a converted B-23 bomber.

The cost was about \$20K. There is a permit requirement from the state dept of ag pursuant to state statute and the Yakima irrigation association took it as far as issuing the notice for the hearing in Olympia. The target area in 1980 appears to primarily have been the area up basin from the reservoirs.

Cloud seeding was examined at least at a cursory level in the 1990s as part of the Yakima basin Watershed planning effort.

- **Other Cloud Seeding Programs**-USBR had a very active cloud seeding program from the 1960s through the 1980s in several areas, particularly in Colorado and in the Sierra Nevada mountains in California. Those efforts were reduced when issues with flooding liability became a concern, along with interstate water interception (which also arose between Washington and Idaho in the 1990s), and with a 2003 report on cloud seeding from the National Resources Defense Council which raised several issues. USBR is currently in a limited pilot program capacity.

Idaho Power has had a cloud seeding program since 2003 and their research shows precipitation increases of up to 12% in the Payette, Wood & Boise River basins in addition to the upper Snake River basin. Following a breakthrough in 2018 using a well instrumented study, Idaho Power was able to demonstrate snow falling on radar in the areas which were along the flight paths of the seeding program.

- **Permitting & Licensing**- State statute RCW 70A.10.060 requires a permit be issued from the Department of Ecology's Air Quality Program for weather modification activities. The statute requires public notice of a hearing which is conducted in Olympia by staff at the state department of Ecology. The lead time appears to be approximately 30 to 45 days. A permit has not been proposed in nearly 25 years and only two have been issued.

Weather modification activities must be conducted by a person licensed by Ecology, although there are licensing exemptions for water shortage emergencies. Staff have been in contact with Ecology's Air Quality permitting staff to better understand the permitting process.

- **Outside Expertise**- Staff has been in contact with the Bureau of Reclamation's cloud seeding expert, Dr. Ken Nowak who manages USBR's Research and Development Office in Denver who has provided a great deal of background information.

Staff has also contact the Idaho Power staff responsible for managing their program, which is recognized as being among the most scientifically advanced.

- **Additional Issues**-The following areas require additional research:
 - ✓ Potential water yields to total water supply available (TWSA) and potential net water supply enhancements to Roza;
 - ✓ Costs (total and per acre foot) and program funding (Roza vs state or others);
 - ✓ Most effect target locations (e.g. above reservoirs? Naches arm vs Mainstem or both? Portions of the basin that do not drain through a reservoir?);
 - ✓ Most effective timing (winter only? Winter and summer when proper condition exist?);
 - ✓ Long term expectations if successful (e.g. all years vs. expected drought years when certain conditions exist such as an El Nino);
 - ✓ Liability and insurance issues;
 - ✓ Available contractors;
 - ✓ Permitting & licensing logistics; and
 - ✓ Effects on proratable water supply including future water storage projects.

Summary

If the Board is interested in obtaining more information about cloud seeding staff can report back at the August board meeting with updated information on the above topics.

Cloud Seeding

[Home](#) » [Energy and the Environment](#) » [Energy](#) » [Our Energy Sources](#) » [Hydroelectric](#) » [Cloud Seeding](#)

Cloud Seeding

[Cloud Seeding Frequently Asked Questions](#)

[Hydroelectric Plants](#)

[Other Renewables](#)

[Relicensing](#)

[Solar](#)

[Natural Gas](#)

[Our Path Away from Coal](#)

[Wind and Other Renewables](#)

Idaho Power meteorologists monitor winter storms as they pass across the central Idaho mountains, looking for opportunities to increase the amount of snow that falls in drainages that feed the Snake River.

The goal of our cloud-seeding program is to provide additional water for Idaho Power's hydropower projects, which provide reliable, affordable, clean energy for our customers. Increased snowpack also benefits irrigators, winter recreationists, river users, and fish and wildlife.

The original program began in 2003 to increase snow accumulation in the south and middle forks of the Payette River watershed. In 2009, Idaho Power expanded its cloud-seeding efforts by enhancing a program operated by a group of counties and other stakeholders in the upper Snake River system above Milner Dam.

Idaho Power operates remote-controlled, ground-based generators and aircraft to target the Payette, Boise and Wood river basins as well as the upper Snake River system.

Analyses conducted by Idaho Power since 2003 indicate the annual snowpack in the Payette River Basin increased an average of approximately 12%.

The typical cloud seeding season runs from Nov. 1 through April 30.

For additional details, see our [Frequently Asked Questions](#).

The Idaho Farm Bureau's [Dirt Road Discussions](#) podcast featured a conversation with Idaho Power's cloud-seeding team about the program. You can [listen here](#) or find it on your favorite podcast platform.

To learn more, visit the following websites:

- [North American Weather Modification Council](#)
- [Weather Modification Association](#)



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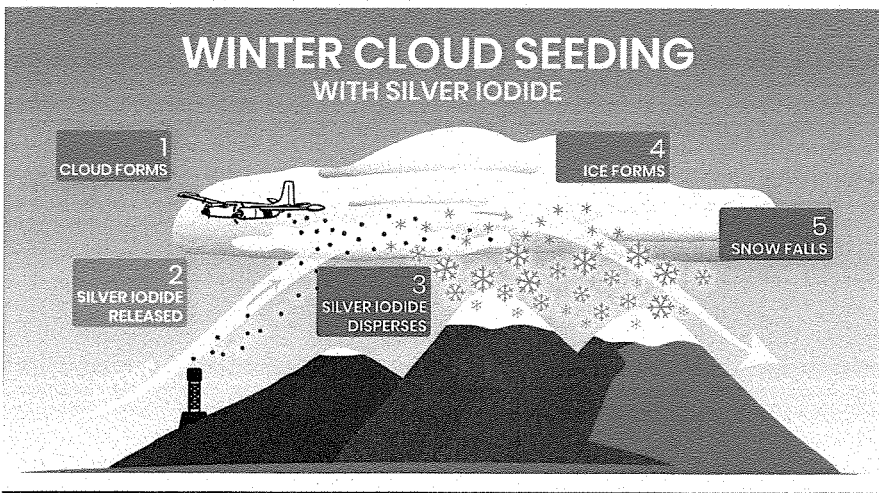


WINTER OROGRAPHIC CLOUD SEEDING PRECIPITATION ENHANCEMENT

Enhancing Snowfall

In mountainous regions where the water supply depends on winter snow pack, cloud seeding is a technology that aims to enhance snowfall by dispersing silver iodide (AgI) particles into clouds to form ice and cause, or enhance, snowfall. Cloud seeding may use ground-based generators and/or aircraft to disperse AgI into the clouds.

Differentiating the effects of cloud seeding on precipitation amounts versus those from natural variability is a challenge. Historically, cloud-seeding studies used randomized statistical experiments to assess changes in precipitation between conditions with and without seeding, but statistically significant results have rarely been obtained. This is partly because the impact of seeding is likely small compared to the large natural variability of the weather. Despite these challenges, several notable advances during the last decade are bringing us closer to the capability to quantify the impacts of cloud seeding.



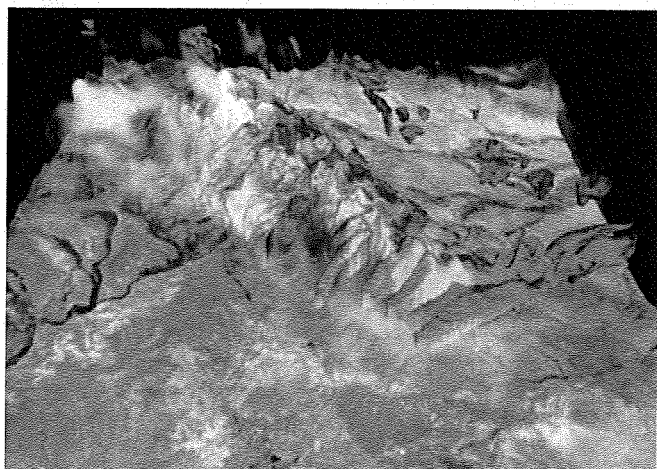
Recent Advances

- Direct observations of cloud-seeding effects
- Model evaluation of cloud seeding
- Real-time forecasting for cloud-seeding opportunities
- Simulations can now inform cloud-seeding program designs

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COMPUTER MODELING

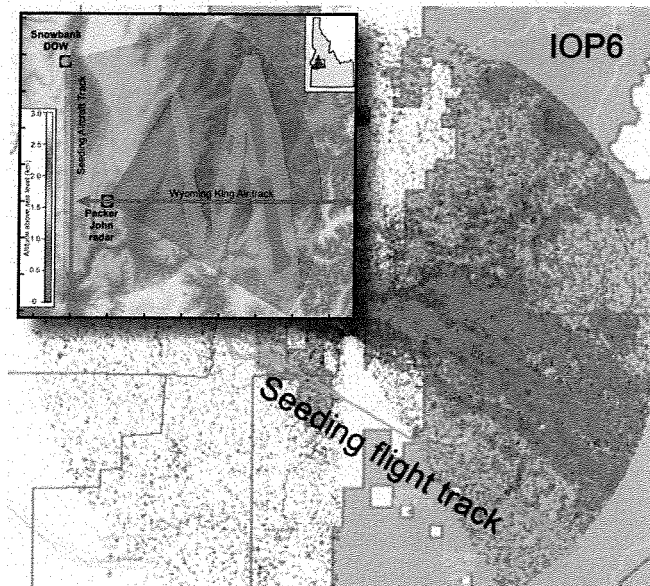
In recent years, supercomputing capabilities and weather models have advanced significantly, providing new opportunities to assess the impact of cloud seeding. Model simulations can be performed with and without seeding, for many storms and locations, which helps overcome the challenge of obtaining statistically significant findings using only statistical approaches. These advances also open the door for new applications for cloud-seeding modeling, such as model evaluation of cloud-seeding activities, real-time forecasting for cloud-seeding opportunities, and simulations aimed to inform new cloud-seeding program designs.



Model simulation of clouds (white), ice (yellow) and AgI seeding plumes (blue). Grid resolution is 667 m.

OBSERVATIONAL STUDIES

While the advances in computer modeling are promising, detailed observations are still needed to verify that the model is accurately representing orographic clouds, precipitation formation, and the response to cloud seeding. SNOWIE—Seeded and Natural Orographic Wintertime clouds: the Idaho Experiment—was conducted in 2017, collecting unprecedented measurements from seeded clouds, using a variety of technologies. Findings include the unambiguous evidence that cloud seeding resulted in precipitation, as observed via radar. Specifically, a zig-zag pattern of precipitation was observed mimicking the dispersion pattern of AgI released by a seeding



Hypothesized (left) and radar-observed effect of cloud seeding in SNOWIE

aircraft. These and other SNOWIE data are being used to better understand the physical response of seeded clouds and improve the cloud-seeding modeling capability. Together, these observational and modeling advances set the stage for new opportunities to address the research, program design, and evaluation of cloud seeding.

NEW OPPORTUNITIES

Clouds that contain supercooled liquid water are candidates for cloud seeding to enhance the efficiency of their snow formation process. However, not every mountain range is the same, nor is every storm the same. Therefore, it is necessary to understand the nature and characteristics of clouds in a region of interest before starting a cloud-seeding program. Recent advances in modeling and observations of seeding impacts from SNOWIE provide new opportunities to understand the impacts of cloud seeding and to more efficiently design and operate cloud-seeding programs.

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<https://www.wsj.com/articles/texas-drought-cloud-seeding-rain-40196a60>

Cloud Seeding Makes Hot Comeback as a Solution to Drought

Demand has skyrocketed across the Western U.S. and Mexico to boost rain, snowfall

By *Eric Niiler* [Follow](#)

June 9, 2023 10:00 am ET

SAN ANGELO, Texas—Inside a small office at the San Angelo Regional Airport, Jonathan Jennings is looking for a big opportunity. He’s checking weather radar for an approaching storm system, so he can send up a plane to chase the moisture-laden clouds.

The pilot will inject them with a spritz of nontoxic chemicals, known as cloud seeding, to boost rainfall on the ground.

“It is like we are taking a dripping sponge and squeezing it,” said Jennings, project meteorologist for the West Texas Weather Modification Association.

Cloud seeding—a technology that has been deployed in various forms since the 1950s—is having a renaissance.

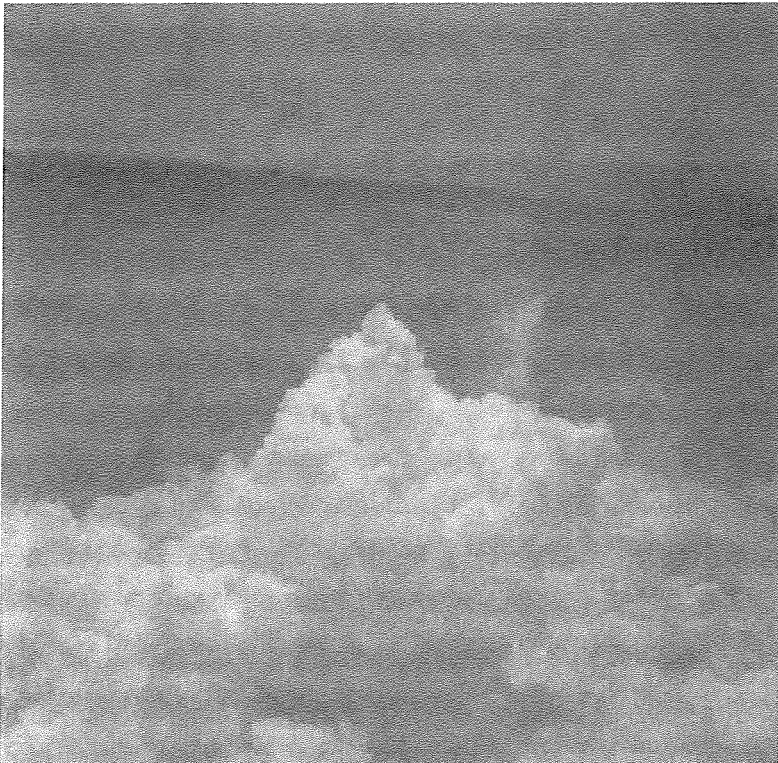
Jennings and other advocates of cloud seeding say their data show it can increase rain by 15% over a given area, compared with clouds that aren’t seeded. That is enough to bring an extra 2 inches of rain a year, water that can help crops survive a dry spell and recharge underground aquifers vital for farmers, ranchers and rural residents.

Across the Western U.S. and Mexico, demand for cloud-seeding has skyrocketed as increasing periods of extreme drought and a warming climate make it a cheaper alternative to big-ticket technological solutions such as the desalination of water piped inland from the Pacific Ocean or Gulf of Mexico. Cloud-seeding programs to boost both rain and snowfall are now under way in Texas, Utah, Colorado, Nevada, Idaho, New Mexico and California.

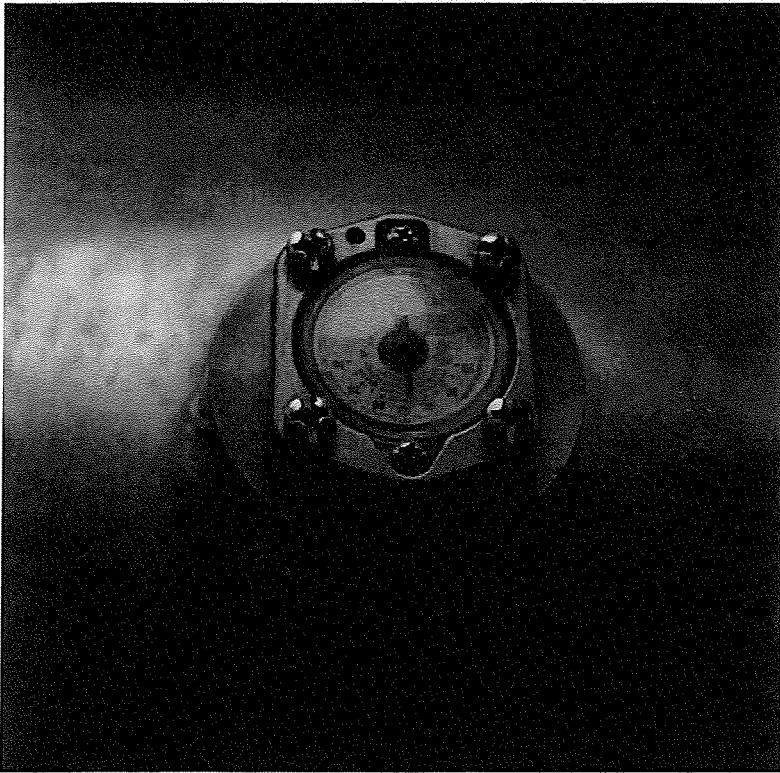
Arizona officials are considering two new programs. In Mexico, federal officials are seeding clouds across five Mexican states that have been suffering from an extended drought.



Military pilots depart to inject a liquid silver iodide mixture into a storm above the state of México, the country's most populous.



Cloud-seeding produces rain about 20 minutes after it reaches the cloud.



Pressurized tanks release silver iodide into the atmosphere.
LUIS ANTONIO ROJAS FOR THE WALL STREET JOURNAL

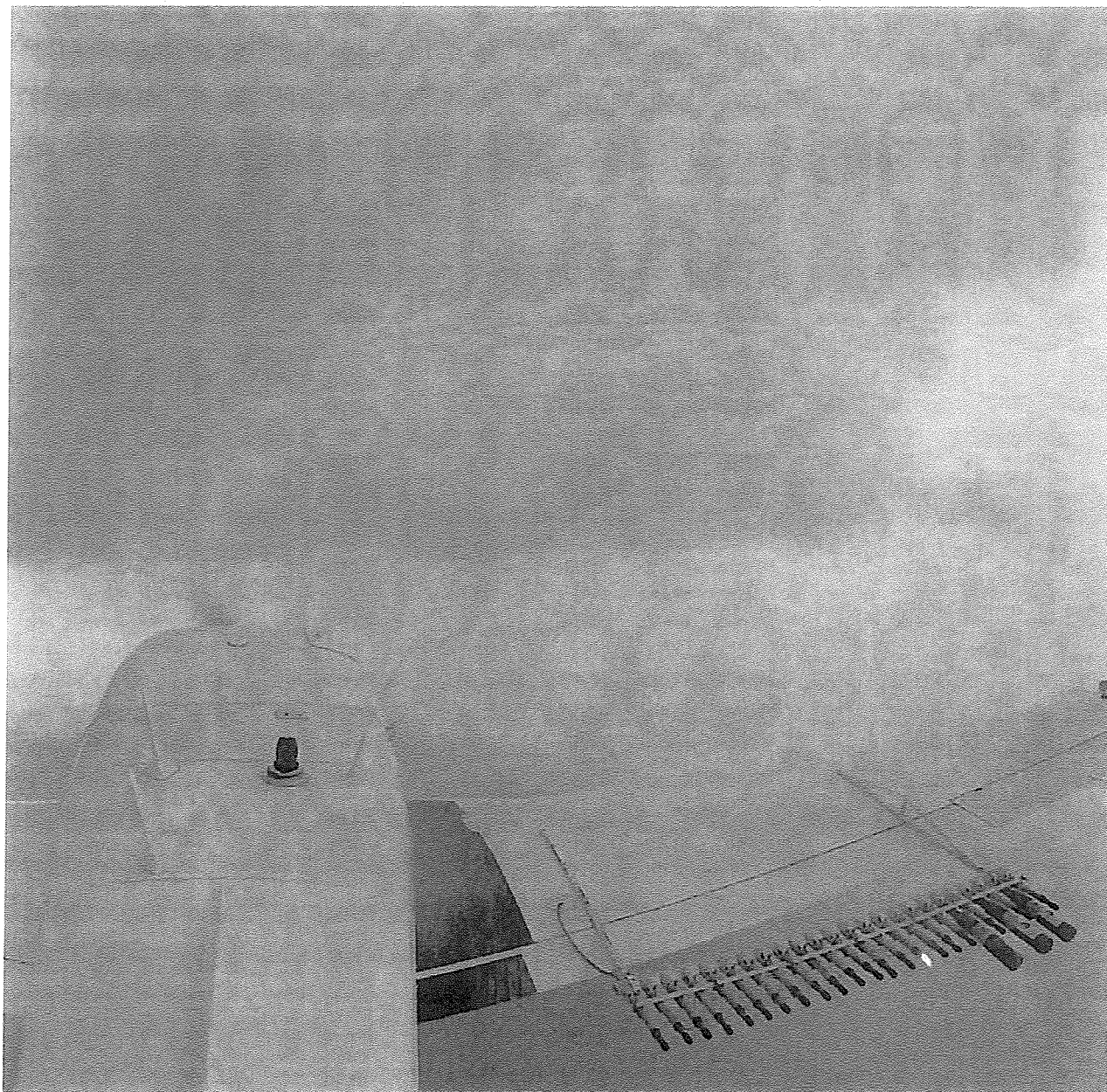
Cloud-seeding can work in the air or on the ground, where chimney-like generators send chemicals into air masses as they move up the side of mountains. Most cloud-seeding efforts use particles of silver iodide which have a crystal structure similar to ice. Once the chemicals are injected, the air temperature must reach 20 degrees Fahrenheit—then water vapor begins to freeze around the silver iodide, getting big enough to fall to the ground as either rain or snow.

In the summer, cloud-seeding firms use the water-attracting properties of salt crystals such as calcium chloride to do the same thing, except in warmer, humid clouds.

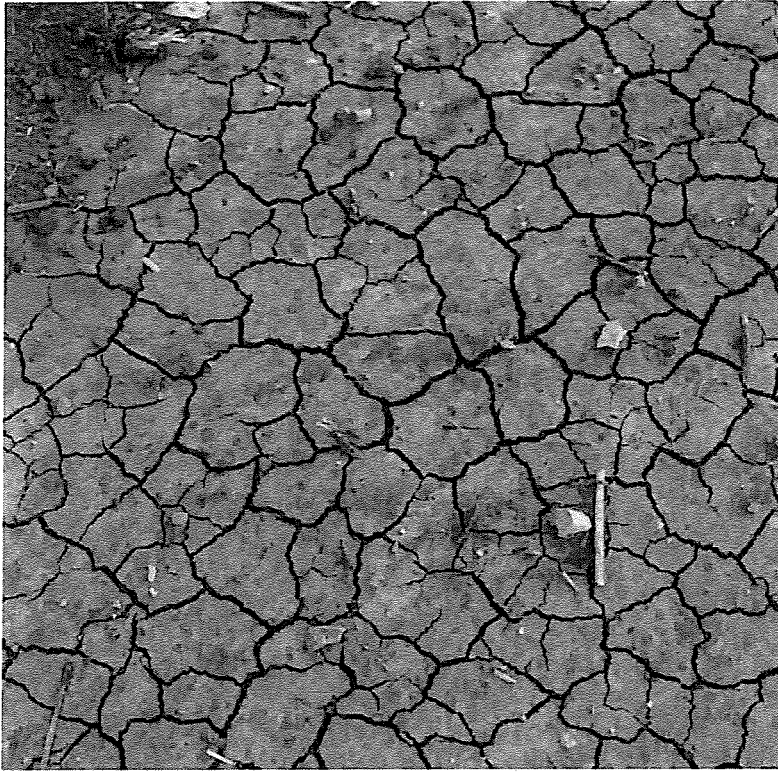
“In looking at the technology and the environmental impact, we came to the decision that it really was a safe and effective way of increasing local water supplies,” said Scott Griebing, water resources engineer for the St. Vrain and Left Hand Water Conservancy District in Longmont, Colo. “It was a no-brainer, especially in the long term.”

At the same time that local officials are embracing this weather modification technology, some weather experts question its effectiveness and whether it just pulls rainwater from one area to fall in another. They say conservation on the ground is a surer way to preserve scarce water supplies.

The World Meteorological Organization reviewed cloud-seeding programs across the globe in 2018 and concluded that cloud seeding is a promising technology but that the natural variability in each cloud system makes it difficult to quantify the difference seeding makes.



A single-engine aircraft flies over Texas, injecting cloud-seeding particles of silver iodide into clouds from a row of flares.



Farmers in West Texas have faced drought for the past year but hope cloud-seeding programs can boost rainfall.

ILANA PANICH-LINSMAN FOR THE WALL STREET JOURNAL

But local officials across the Western U.S. said it is a cost-effective way to increase both rain and snow. In Colorado, the St. Vrain water district spent \$40,000 in 2022 for winter cloud seeding to increase snowfall and build up the snowpack in surrounding mountains. State officials kicked in another \$90,000 to pay a cloud-seeding contractor.

In March, the U.S. Bureau of Reclamation announced a \$2.4 million grant for states in the Upper Colorado River Basin to conduct aerial and ground-based cloud seeding.

In Utah, the state's cloud-seeding program received a one-year, \$12 million boost, while its annual budget increased from \$800,000 to \$5.8 million, according to Jake Serago, water resources engineer for the Utah Division of Water Resources.

Serago said historic low water levels in Great Salt Lake and Lake Powell, which supplies water to California, Arizona and Nevada, have piqued interest in cloud-seeding. "We've had a very long drought," Serago said.

An experiment in Idaho found that winter cloud seeding using silver iodide produced the equivalent amount of snowfall to fill 300 Olympic-size swimming pools compared with clouds that hadn't been seeded, according to a 2020 paper in the Proceedings of the National

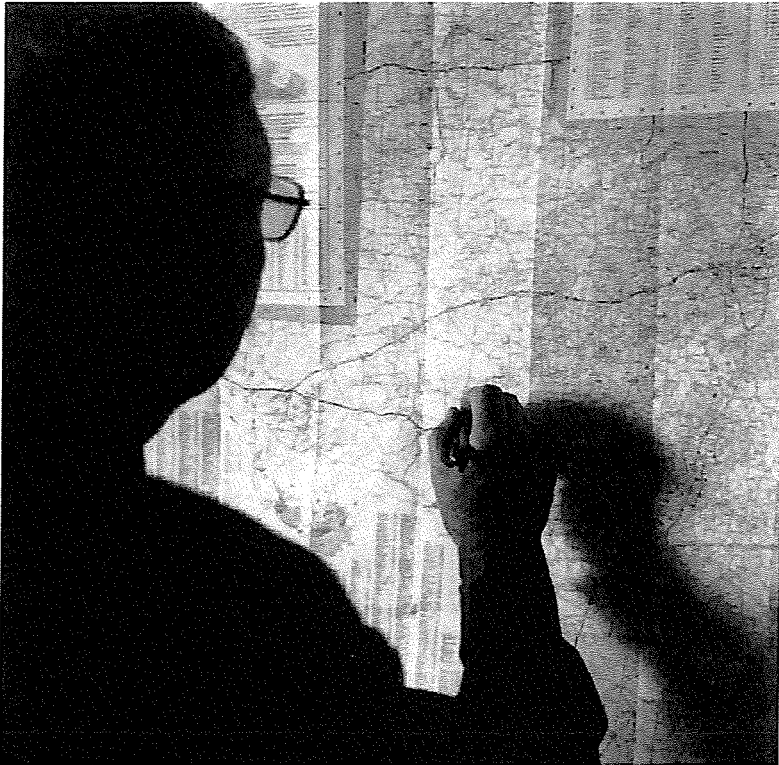
Academy of Sciences. The study used both radar and ground-based sensors to measure snowfall.

Sarah Tessendorf, an author of the study and project scientist at the National Center for Atmospheric Research in Boulder, Colo., said the environmental risks of cloud seeding are relatively benign since the amount of silver detected in the snow is below harmful levels.

“We’ve shown now that it can work,” Tessendorf said. “The key question we’re trying to figure out is under what conditions is cloud seeding most effective.”



Wheat planted last fall on a farm in West Texas didn't receive enough rain to harvest.



Farmer Steve Williams keeps track of the six-county region where a cloud-seeding program is under way.



Ty Williams inspects cotton seeds he has just planted.
ILANA PANICH-LINSMAN FOR THE WALL STREET JOURNAL

For 73-year-old West Texas farmer Steve Williams, the benefits of occasional extra rainfall is worth the minimal amount he pays in taxes to his local water district that are earmarked for cloud seeding, about \$20 a year.

Williams and his son, Ty Williams, farm 1,774 acres of cotton and wheat in Schleicher County, Texas, one of six counties covered by the aerial seeding flights from the West Texas Weather Modification Association in San Angelo.

Williams said he usually only gets one or two cloud-seeded rainfalls directly over his property each planting season. However the seeding drops rain on farms around him, recharging the underground aquifer that he and his neighbors depend on for irrigation and drinking water.

“It is a community effort,” Williams said. “Everybody benefits. If you happen to get under one of Jonathan’s clouds, you did pretty good.”

Back at the San Angelo airport, Jennings canceled flight operations after unstable air spawned three tornadoes and a dust storm that enveloped several nearby towns. The next day brought clear weather. A pilot loaded up the weather association’s single-engine Piper Comanche, climbed to about 5,000 feet, and crisscrossed Schleicher County before igniting more than two dozen seeding flares into the clouds.

Jennings said the resulting rainfall took about 20 minutes to form.

On the ground “there was rain all around us,” Williams said.



'It's a community effort,' cotton and wheat farmer Steve Williams says of cloud seeding. 'Everybody benefits.'

ILANA PANICH-LINSMAN FOR THE WALL STREET JOURNAL

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Chapter 70A.10 RCW WEATHER MODIFICATION

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RCW 70A.10.010 Definitions.

As used in this chapter, unless the context requires otherwise:

- (1) "Department" means the department of ecology;
- (2) "Operation" means the performance of weather modification and control activities pursuant to a single contract entered into for the purpose of producing or attempting to produce, a certain modifying effect within one geographical area over one continuing time interval not exceeding one year; or, in case the performance of weather modification and control activities is to be undertaken individually or jointly by a person or persons to be benefited and not undertaken pursuant to a contract, "operation" means the performance of weather modification and control activities entered into for the purpose of producing, or attempting to produce, a certain modifying effect within one geographical area over one continuing time interval not exceeding one year;

(3) "Research and development" means theoretical analysis exploration and experimentation, and the extension of investigative findings and theories of a scientific or technical nature into practical application for experimental and demonstration purposes, including the experimental production and testing of models, devices, equipment, materials, and processes;

(4) "Weather modification and control" means changing or controlling, or attempting to change or control, by artificial methods, the natural development of any or all atmospheric cloud forms or precipitation forms which occur in the troposphere. [1973 c 64 § 1; 1965 c 8 § 43.37.010. Prior: 1957 c 245 § 1. Formerly RCW 43.37.010.]

RCW 70A.10.020 Powers and duties.

In the performance of its functions the department may, in addition to any other acts authorized by law:

(1) Establish advisory committees to advise with and make recommendations to the department concerning legislation, policies, administration, research, and other matters;

(2) Establish by regulation or order such standards and instructions to govern the carrying out of research or projects in weather modification and control as the department may deem necessary or desirable to minimize danger to health or property; and make such rules and regulations as are necessary in the performance of its powers and duties;

(3) Make such studies, investigations, obtain such information, and hold such hearings as the department may deem necessary or proper to assist it in exercising its authority or in the administration or enforcement of this chapter or any regulations or orders issued thereunder;

(4) Appoint and fix the compensation of such personnel, including specialists and consultants, as are necessary to perform its duties and functions;

(5) Acquire, in the manner provided by law, such materials, equipment, and facilities as are necessary to perform its duties and functions;

(6) Cooperate with public or private agencies in the performance of the department's functions or duties and in furtherance of the purposes of this chapter;

(7) Represent the state in any and all matters pertaining to plans, procedures, or negotiations for interstate compacts relating to weather modification and control. [1973 c 64 § 2; 1965 c 8 § 43.37.030. Prior: 1957 c 245 § 3. Formerly RCW 43.37.030.]

RCW 70A.10.030 Promotion of research and development activities—Contracts and agreements.

The department shall exercise its powers in such manner as to promote the continued conduct of research and development activities in the fields specified below by private or public institutions or persons and to assist in the acquisition of an expanding fund of theoretical and

practical knowledge in such fields. To this end the department may conduct, and make arrangements, including contracts and agreements, for the conduct of, research and development activities relating to:

- (1) The theory and development of methods of weather modification and control, including processes, materials, and devices related thereto;
- (2) Utilization of weather modification and control for agricultural, industrial, commercial, and other purposes;
- (3) The protection of life and property during research and operational activities. [1973 c 64 § 3; 1965 c 8 § 43.37.040. Prior: 1957 c 245 § 4. Formerly RCW 43.37.040.]

RCW 70A.10.040 Hearing procedure.

In the case of hearings pursuant to RCW 70A.10.160 the department shall, and in other cases may, cause a record of the proceedings to be taken and filed with the department, together with its findings and conclusions. For any hearing, the director of the department or a representative designated by him or her is authorized to administer oaths and affirmations, examine witnesses, and issue, in the name of the department, notice of the hearing or subpoenas requiring any person to appear and testify, or to appear and produce documents, or both, at any designated place. [2020 c 20 § 1044; 2009 c 549 § 5113; 1973 c 64 § 4; 1965 c 8 § 43.37.050. Prior: 1957 c 245 § 5. Formerly RCW 43.37.050.]

RCW 70A.10.050 Acceptance of gifts, donations, etc.

(1) The department may, subject to any limitations otherwise imposed by law, receive and accept for and in the name of the state any funds which may be offered or become available from federal grants or appropriations, private gifts, donations, or bequests, or any other source, and may expend such funds, subject to any limitations otherwise provided by law, for the encouragement of research and development by a state, public, or private agency, either by direct grant, by contract or other cooperative means.

(2) All license and permit fees paid to the department shall be deposited in the state general fund.

[1973 c 64 § 5; 1965 c 8 § 43.37.060. Prior: 1957 c 245 § 6. Formerly RCW 43.37.060.]

RCW 70A.10.060 License and permit required.

Except as provided in RCW 70A.10.070, no person shall engage in activities for weather modification and control except under and in accordance with a license and a permit issued by the department authorizing such activities. [2020 c 20 § 1045; 1973 c 64 § 6; 1965 c 8 § 43.37.080. Prior: 1957 c 245 § 8. Formerly RCW 43.37.080.]

RCW 70A.10.070 Exemptions.

The department, to the extent it deems practical, shall provide by regulation for exempting from license, permit, and liability requirements, (1) research and development and experiments by state and federal agencies, institutions of higher learning, and bona fide nonprofit research organizations; (2) laboratory research and experiments; (3) activities of an emergent character for protection against fire, frost, sleet, or fog; and (4) activities normally engaged in for purposes other than those of inducing, increasing, decreasing, or preventing precipitation or hail. [1973 c 64 § 7; 1965 c 8 § 43.37.090. Prior: 1957 c 245 § 9. Formerly RCW 43.37.090.]

RCW 70A.10.080 Licenses—Requirements, duration, renewal, fees.

(1) Licenses to engage in activities for weather modification and control shall be issued to applicants therefor who pay the license fee required and who demonstrate competence in the field of meteorology to the satisfaction of the department, reasonably necessary to engage in activities for weather modification and control. If the applicant is an organization, these requirements must be met by the individual or individuals who will be in control and in charge of the operation for the applicant.

(2) The department shall issue licenses in accordance with such procedures and subject to such conditions as it may by regulation establish to effectuate the provisions of this chapter. Each license shall be issued for a period to expire at the end of the calendar year in which it is issued and, if the licensee possesses the qualifications necessary for the issuance of a new license, shall upon application be renewed at the expiration of such period. A license shall be issued or renewed only upon the payment to the department of one hundred dollars for the license or renewal thereof. [1973 c 64 § 8; 1965 c 8 § 43.37.100. Prior: 1957 c 245 § 10. Formerly RCW 43.37.100.]

RCW 70A.10.090 Permits—Requirements—Hearing as to issuance.

The department shall issue permits in accordance with such procedures and subject to such conditions as it may by regulation establish to effectuate the provisions of this chapter only:

- (1) If the applicant is licensed pursuant to this chapter;
- (2) If a sufficient notice of intention is published and proof of publication is filed as required by RCW 70A.10.120;
- (3) If the applicant furnishes proof of financial responsibility, as provided in RCW 70A.10.130, in an amount to be determined by the department but not to exceed twenty thousand dollars;
- (4) If the fee for a permit is paid as required by RCW 70A.10.140;
- (5) If the weather modification and control activities to be conducted under authority of the permit are determined by the department to be for the general welfare and public good;
- (6) If the department has held an open public hearing in Olympia as to such issuance.

[2020 c 20 § 1046; 1973 c 64 § 9; 1965 c 8 § 43.37.110. Prior: 1961 c 154 § 2; 1957 c 245 § 11. Formerly RCW 43.37.110.]

RCW 70A.10.100 Separate permit for each operation—Filing and publishing notice of intention—Activities restricted by permit and notice.

A separate permit shall be issued for each operation. Prior to undertaking any weather modification and control activities the licensee shall file with the department and also cause to be published a notice of intention. The licensee, if a permit is issued, shall confine his or her activities for the permitted operation within the time and area limits set forth in the notice of intention, unless modified by the department; and his or her activities shall also conform to any conditions imposed by the department upon the issuance of the permit or to the terms of the permit as modified after issuance. [2009 c 549 § 5114; 1973 c 64 § 10; 1965 c 8 § 43.37.120. Prior: 1961 c 154 § 3; 1957 c 245 § 12. Formerly RCW 43.37.120.]

RCW 70A.10.110 Notice of intention—Contents.

The notice of intention shall set forth at least all the following:

- (1) The name and address of the licensee;
- (2) The nature and object of the intended operation and the person or organization on whose behalf it is to be conducted;
- (3) The area in which and the approximate time during which the operation will be conducted;
- (4) The area which is intended to be affected by the operation;
- (5) The materials and methods to be used in conducting the operation.

[1965 c 8 § 43.37.130. Prior: 1957 c 245 § 13. Formerly RCW 43.37.130.]

RCW 70A.10.120 Notice of intention—Publication.

- (1) The applicant shall cause the notice of intention, or that portion thereof including the items specified in RCW 70A.10.110, to be published at least once a week for three consecutive weeks in a legal newspaper having a general circulation and published within any county in which the operation is to be conducted and in which the affected area is located, or, if the operation is to be conducted in more than one county or if the affected area is located in more than one county or is located in a county other than the one in which the operation is to be conducted, then in a legal newspaper having a general circulation and published within each of such counties. In case there is no legal newspaper published within the appropriate county, publication shall be made in a legal newspaper having a general circulation within the county;
- (2) Proof of publication, made in the manner provided by law, shall be filed by the licensee with the department within fifteen days from the date of the last publication of the notice. [2020 c

20 § 1047; 1973 c 64 § 11; 1965 c 8 § 43.37.140. Prior: 1961 c 154 § 4; 1957 c 245 § 14. Formerly RCW 43.37.140.]

RCW 70A.10.130 Financial responsibility.

Proof of financial responsibility may be furnished by an applicant by his or her showing, to the satisfaction of the department, his or her ability to respond in damages for liability which might reasonably be attached to or result from his or her weather modification and control activities in connection with the operation for which he or she seeks a permit. [2009 c 549 § 5115; 1973 c 64 § 12; 1965 c 8 § 43.37.150. Prior: 1957 c 245 § 15. Formerly RCW 43.37.150.]

RCW 70A.10.140 Fees—Sanctions for failure to pay.

The fee to be paid by each applicant for a permit shall be equivalent to one and one-half percent of the estimated cost of such operation, the estimated cost to be computed by the department from the evidence available to it. The fee is due and payable to the department as of the date of the issuance of the permit; however, if the applicant is able to give to the department satisfactory security for the payment of the balance, he or she may be permitted to commence the operation, and a permit may be issued therefor, upon the payment of not less than fifty percent of the fee. The balance due shall be paid within three months from the date of the termination of the operation as prescribed in the permit. Failure to pay a permit fee as required shall be grounds for suspension or revocation of the license of the delinquent permit holder and grounds for refusal to renew his or her license or to issue any further permits to such person. [2009 c 549 § 5116; 1973 c 64 § 13; 1965 c 8 § 43.37.160. Prior: 1957 c 245 § 16. Formerly RCW 43.37.160.]

RCW 70A.10.150 Records and reports—Open to public examination.

(1) Every licensee shall keep and maintain a record of all operations conducted by him or her pursuant to his or her license and each permit, showing the method employed, the type of equipment used, materials and amounts thereof used, the times and places of operation of the equipment, the name and post office address of each individual participating or assisting in the operation other than the licensee, and such other general information as may be required by the department and shall report the same to the department at the time and in the manner required.

(2) The department shall require written reports in such manner as it provides but not inconsistent with the provisions of this chapter, covering each operation for which a permit is issued. Further, the department shall require written reports from such organizations as are exempted from license, permit, and liability requirements as provided in RCW 70A.10.070.

(3) The reports and records in the custody of the department shall be open for public examination.

[2020 c 20 § 1048; 2009 c 549 § 5117; 1973 c 64 § 14; 1965 c 8 § 43.37.170. Prior: 1957 c 245 § 17. Formerly RCW 43.37.170.]

RCW 70A.10.160 Revocation, suspension, modification of license or permit.

(1) The department may suspend or revoke any license or permit issued if it appears that the licensee no longer possesses the qualifications necessary for the issuance of a new license or permit. The department may suspend or revoke any license or permit if it appears that the licensee has violated any of the provisions of this chapter. Such suspension or revocation shall occur only after notice to the licensee and a reasonable opportunity granted such licensee to be heard respecting the grounds of the proposed suspension or revocation. The department may refuse to renew the license of, or to issue another permit to, any applicant who has failed to comply with any provision of this chapter.

(2) The department may modify the terms of a permit after issuance thereof if the licensee is first given notice and a reasonable opportunity for a hearing respecting the grounds for the proposed modification and if it appears to the department that it is necessary for the protection of the health or the property of any person to make the modification proposed. [1973 c 64 § 15; 1965 c 8 § 43.37.180. Prior: 1957 c 245 § 18. Formerly RCW 43.37.180.]

RCW 70A.10.170 Liability of state denied—Legal rights of private persons not affected.

Nothing in this chapter shall be construed to impose or accept any liability or responsibility on the part of the state, the department, or any state officials or employees for any weather modification and control activities of any private person or group, nor to affect in any way any contractual, tortious, or other legal rights, duties, or liabilities between any private persons or groups. [1973 c 64 § 16; 1965 c 8 § 43.37.190. Prior: 1957 c 245 § 19. Formerly RCW 43.37.190.]

RCW 70A.10.180 Penalty.

Any person violating any of the provisions of this chapter or any lawful regulation or order issued pursuant thereto, shall be guilty of a misdemeanor; and a continuing violation is punishable as a separate offense for each day during which it occurs. [1965 c 8 § 43.37.200. Prior: 1957 c 245 § 20. Formerly RCW 43.37.200.]

RCW 70A.10.190 Legislative declaration.

The legislature finds and declares that when prolonged lack of precipitation or shortages of water supply in the state cause severe hardships affecting the health, safety, and welfare of the people of the state, a program to increase precipitation is occasionally needed for the generation of hydroelectric power, for domestic purposes, and to alleviate hardships created by the threat of forest fires and shortages of water for agriculture. Cloud seeding has been demonstrated to be such a program of weather modification with increasing scientific certainty. [1981 c 278 § 1. Formerly RCW 43.37.210.]

RCW 70A.10.200 Program of emergency cloud seeding authorized.

The director of ecology may establish by rule under chapter 34.05 RCW a program of emergency cloud seeding. The director may include in these rules standards and guidelines for determining the situations which warrant cloud seeding and the means to be used for cloud seeding. [1981 c 278 § 2. Formerly RCW 43.37.215.]

NOTES: Actions during state of emergency exempt from chapter 43.21C RCW: RCW 43.21C.

RCW 70A.10.210 Exemption of licensee from certain requirements.

Upon a proclamation of a state of emergency, related to a lack of precipitation or a shortage of water supply, by the governor under RCW 43.06.210, the department shall exempt a licensee from the requirements of RCW 70A.10.090 (2) and (6) and 70A.10.120. [2020 c 20 § 1049; 1981 c 278 § 3. Formerly RCW 43.37.220.]

NOTES: Actions during state of emergency exempt from chapter 43.21C RCW: RCW 43.21C.210.

RCW 70A.10.900 Effective date—1973 c 64.

The effective date of this 1973 amendatory act shall be July 1, 1973. [1973 c 64 § 18. Formerly RCW 43.37.910.]

Chapter 173-495 WAC

Last Update: 9/6/07

WEATHER MODIFICATION

WAC Sections

- 173495-010** Purpose.
- 173-495-020** Definitions.
- 173-495-030** Requirement for licenses and permits.
- 173-495-040** Requirements for exempt activities.
- 173-495-045** Requirements for a regular license.
- 173-495-050** Requirements for a restricted license.
- 173-495-060** Procedures for issuing license.
- 173-495-065** Period of license.
- 173-495-070** Permit requirements.
- 173-495-080** Permittee's report of operations—Requirement.
- 173-495-100** Revocation, suspension, modification.
- 173-495-120** Proof of financial responsibility.

173-495-010 Purpose.

This chapter, adopted under chapters **43.37** and **70.94** RCW establishes the responsibilities for the supervision and control of all weather modification activities within the state, and representation by the state in all interstate contacts relating to weather modification and control. This regulation provides the basic framework for carrying out the state's responsibility for such a program through the establishment of license and permit requirements and procedures, reporting, and fee requirements. The provisions of this chapter apply to all weather modification activities in all parts of the state except as specifically exempted in this chapter.

[Statutory Authority: RCW **79.94.331**, chapters **70.94** and **43.37** RCW. WSR 00-01-009 (Order 99-14), § 173-495-010, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW **70.94.331**. WSR 90-19-062 (Order 90-10), § 173-495-010, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-010, filed 12/29/77. Formerly chapter 508-20 WAC.]

173-495-020 Definitions.

The definitions of terms contained in chapter **173-400** WAC are incorporated into this chapter by reference. Unless a different meaning is clearly required by context, words and phrases as used in this chapter have the following meanings:

(1) "Operation" means the performance of weather modification and control activities using a single permit or license under contract for the purpose of producing or attempting to produce a weather modifying effect within a geographical area.

(2) "Research and development" means theoretical analysis, exploration and experimentation, and the extension of investigative findings of theories of a scientific or technical nature into practical application for experimental and demonstration purposes. This includes the experimental production and testing of models, devices, equipment, materials, and processes.

(3) "Weather modification and control" means changing or attempting to change or control by artificial methods, the natural development of any or all atmospheric cloud forms or precipitation forms which occur in the troposphere.

[Statutory Authority: RCW **79.94.331**, chapters **70.94** and **43.37** RCW. WSR 00-01-009 (Order 99-14), § 173-495-020, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW **70.94.331**. WSR 90-19-062 (Order 90-10), § 173-495-020, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-020, filed 12/29/77. Formerly chapter 508-20 WAC.]

173-495-030 Requirement for licenses and permits.

No person shall engage in weather modification activities except under and in accordance with a license and a permit issued by ecology, unless specifically exempt from this requirement in WAC **173-495-040**.

[Statutory Authority: RCW **70.94.331**. WSR 90-19-062 (Order 90-10), § 173-495-030, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-030, filed 12/29/77. Formerly chapter 508-20 WAC.]

173-495-040 Requirements for exempt activities.

The following weather modification and control activities are exempt from the license and permit requirements of RCW **43.37.100**, and the liability requirements of RCW **43.37.190**:

- (1) All research and experiments related to weather modification control conducted within laboratories;
- (2) Those weather modification operations designed to alleviate sudden, unexpected, hazardous conditions which require expeditious localized action for:
 - (a) Protection against fire;
 - (b) Prevention of frost;
 - (c) Dispersal of fog;
- (3) Field research and development by institutions of higher learning;
- (4) Any person proposing to conduct weather modification and control activities as described in subsection (2) of this section shall notify the air quality program, department of ecology, headquarters offices in Olympia, Washington, before proceeding. Notification must include the type of activity to be carried out, the person carrying out the activity, and the materials and technique of the application to be used;
- (5) Any person proposing to conduct weather modification and control activities as described in subsection (3) of this section shall provide:
 - (a) A written description of the proposed program;
 - (b) Notice of actual operations ten days before beginning those activities; and
 - (c) Quarterly reports of operations and status to the Headquarters Office, Air Quality Program, Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. WSR 00-01-009 (Order 99-14), § 173-495-040, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. WSR 90-19-062 (Order 90-10), § 173-495-040, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-040, filed 12/29/77. Formerly chapter 508-20 WAC.]

173-495-045 Requirements for a regular license.

All applicants for a weather modification license must be certified professional members of the American Meteorological Society or possess the academic achievements and professional experience necessary to receive such a certification. In cases where the applicant is an organization, the individual or individuals who will be in control and in charge of the weather modification and control activities must be required to meet the above standard.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. WSR 00-01-009 (Order 99-14), § 173-495-045, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. WSR 90-19-062 (Order 90-10), § 173-495-045, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-045, filed 12/29/77. Formerly chapter 508-20 WAC.]

173-495-050 Requirements for a restricted license.

- (1) A restricted license may be issued to an applicant when:
 - (a) The applicant's proposed weather modification activities are limited solely to those designed to disperse fog over airports; and
 - (b) The applicant will be fully advised of the pertinent weather information by the meteorologist on duty during the airport fog dispersal activities.
- (2) Applicants for restricted licenses are not required to meet the qualifications otherwise imposed by WAC 173-495-040.

[Statutory Authority: RCW 70.94.331. WSR 90-19-062 (Order 90-10), § 173-495-050, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-050, filed 12/29/77. Formerly chapter 508-20 WAC.]

173-495-060 Procedures for issuing license.

(1) Any person or organization desiring to obtain a license or restricted license shall apply to ecology on the form prescribed, listing name, business address, etc.

(2) Ecology may require additional information of the applicant to determine competency in the field of meteorology. The additional information must be requested of the applicant by certified mail, and must be submitted in writing.

(3) Before issuing any license, the applicant shall pay a fee as outlined in chapter 173-455 WAC.

(4) The application shall be deemed received by ecology when received at the Headquarters Offices, Air Quality Program, Department of Ecology, P.O. Box 47600, Olympia, Washington, 98504-7600.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]650, [70.94.]745, [70.94.]892, [70.94.]011. WSR 07-19-005 (Order 07-10), § 173-495-060, filed 9/6/07, effective 10/7/07. Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. WSR 00-01-009 (Order 99-14), § 173-495-060, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. WSR 90-19-062 (Order 90-10), § 173-495-060, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-060, filed 12/29/77. Formerly chapter 508-20 WAC.]

173-495-065 Period of license.

(1) Licenses issued under chapter 43.37 RCW and these regulations are effective for a period of one year, and will terminate at the end of the calendar year of issuance.

(2) The licensee may request a renewal of the license no later than December 1st. Ecology shall review the license renewal request after receiving a renewal fee outlined in chapter 173-455 WAC.

(3) In the determination of whether or not to grant a license renewal, ecology shall consider information provided by the applicant on the facts and circumstances used to issue the original permit that were changed or altered. If ecology determines that the licensee no longer meets the requirements of competency in the field of meteorology, ecology may refuse to renew the license.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]650, [70.94.]745, [70.94.]892, [70.94.]011. WSR 07-19-005 (Order 07-10), § 173-495-065, filed 9/6/07, effective 10/7/07. Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. WSR 00-01-009 (Order 99-14), § 173-495-065, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. WSR 90-19-062 (Order 90-10), § 173-495-065, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-065, filed 12/29/77. Formerly chapter 508-20 WAC.]

173-495-070 Permit requirements.

(1) Each weather modification operation not specifically exempted by statute or these regulations requires a permit. A separate permit must be issued for each operation.

(2) A license holder desiring to conduct a weather modification operation shall submit an application for a permit to ecology.

(3) The permit applicant must hold a valid weather modification license from the state of Washington.

(4) The applicant shall publish a notice of intention at least once a week for three consecutive weeks in a newspaper that has general circulation within the county in which the operation is to be conducted or affected.

(5) The licensee shall file proof of publication of the notice of intention with ecology within fifteen days from the date of last publication of the notice.

(6) The notice of intention must contain at least the following:

(a) The name and address of the licensee;

(b) The nature and object of the intended operation and the person or organization on whose behalf it is to be conducted;

(c) The area in which and the appropriate time during which the operation will be conducted;

(d) The area intended to be affected by the operation; and

(e) The materials and methods to be used in conducting the operation.

(7) The applicant shall furnish proof of financial responsibility, as described in WAC 173-495-120 of this chapter.

(8) The applicant shall pay a permit fee outlined in chapter 173-455 WAC.

(9) Before issuing a permit, ecology shall state, in writing, that the weather modification and control activities proposed have been determined to be for the general welfare and public good.

(10) Ecology shall hold a public hearing before any weather modification permit is issued.

[Statutory Authority: RCW 70.94.181, [70.94.]152, [70.94.]331, [70.94.]650, [70.94.]745, [70.94.]892, [70.94.]011. WSR 07-19-005 (Order 07-10), § 173-495-070, filed 9/6/07, effective 10/7/07. Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. WSR 00-01-009 (Order 99-14), § 173-495-070, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. WSR 90-19-062 (Order 90-10), § 173-495-070, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-070, filed 12/29/77. Formerly chapter 508-20 WAC.]

173-495-080 Permittee's report of operations—Requirement.

The permittee is required to maintain reports on all operations on a daily basis, and submit them twice a month (1st day and 15th day) to ecology. The semi-monthly reports must include the following information:

(1) Number of days under contract;

(2) Number of days of operation and number of hours of each day, for all stations operated;

(3) The consumption rate and name of seeding agent used;

(4) A brief summary statement evaluating the past fifteen day period in regard to the seeding potential and experience;

(5) Location of operations;

(6) Name and mailing address of each individual, other than the licensee, participating or assisting in the operation;

(7) A brief statement of projected plans for the upcoming fifteen-day period;

(8) The permittee shall, in the event operations are unexpectedly terminated, submit a special report covering the portion of the half-month period of operation. All reports must be post-marked not later than one day after due date;

(9) All semi-monthly reports are public records, which are open to public inspection.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. WSR 00-01-009 (Order 99-14), § 173-495-080, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. WSR 90-19-062 (Order 90-10), § 173-495-080, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-080, filed 12/29/77. Formerly chapter 508-20 WAC.]

173-495-100 Revocation, suspension, modification.

(1) All permits authorized by RCW 43.37.110 must contain the following provisions: "Ecology may, if it appears that continuing operation under this permit will cause immediate injury to persons or property, terminate or otherwise modify the terms of this permit in order to alleviate an emergency situation by giving notice to the permittee by telegram or other writing."

(2) All permits authorized by RCW 43.37.110 may be revoked, suspended, or modified when ecology has reason to believe that good cause exists and that the revocation, suspension, or modification is required for the general welfare and public good. A written notice must be sent by certified mail to the permittee before any revocation, suspension, or modification of the permit is executed. Opportunity for comment by the permittee must be allowed. Any final ecology decision must be in writing.

(3) In the event the applicant desires to appeal any permit revocation, modification, or suspension action by ecology the appeal must be filed with the pollution control hearings board in Olympia within thirty days of ecology's action. An appeal does not constitute a stay. [Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. WSR 00-01-009 (Order 99-14), § 173-495-100, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. WSR 90-19-062 (Order 90-10), § 173-495-100, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-100, filed 12/29/77. Formerly chapter 508-20 WAC.]

173-495-120 Proof of financial responsibility.

A permit applicant shall furnish proof of financial responsibility to ecology by one of the following:

(1) Copy of insurance policy or binder for the operator;

(2) A current balance sheet showing sufficient assets to demonstrate financial responsibility;

(3) A bond for safe performance; or

(4) Other information the applicant may provide to ecology, in writing, if the alternate documents contained in subsections (1) through (3) of this section, are not feasible or available. If other information is provided, the applicants must explain the reason the documents listed in subsections (1) through (3) of this section are not provided.

[Statutory Authority: RCW 79.94.331, chapters 70.94 and 43.37 RCW. WSR 00-01-009 (Order 99-14), § 173-495-120, filed 12/3/99, effective 1/3/00. Statutory Authority: RCW 70.94.331. WSR 90-19-062 (Order 90-10), § 173-495-120, filed 9/17/90, effective 10/18/90; Order DE 77-29, § 173-495-120, filed 12/29/77.]

Item #3



To: Board of Directors
From: Scott Revell, District Manager *SR*
Date: July 11, 2023
Re: Drainage Improvement District #11 Update

Background


Board President Valicoff, Watermaster Dave Rollinger and I will meet with the DID # 11 Board of Directors on July 18th in Moxee to review their draft 2024 budget.

Generally speaking the DID #11 Board was interested in achieving greater economies of scale by having Roza crew perform some of the work and tracking the costs. This will begin in 2023 and will be re-assessed at the end of the year.

DID #11 assesses certain lands in the District and relies on revenue from Roza for the shared drains. The assessment formula is based on ongoing and continuous benefits and is not easily understood by either DID #11 or the assessed landowners. Adjoining properties pay very different amount in many cases and do not appear to be based on parcel size. Roza has provided mapping assistance to help the DID #11 Board understand the inequities.

Item #4



To: Board of Directors
From: Scott Revell, District Manager 
Date: July 11, 2023
Re: NPDES Aquatic Herbicide Permit update

Background

The permit was issued in 2012 and expired in 2017. Work on the renewal has suffered from staff turnover at Ecology and the impacts of COVID-19 on Ecology's staffing availability. The permit has now had three different permit writers assigned to it.

Roza submitted detailed comments on the draft permit in March. Ecology issued partial permit revisions in May, which did not address many of the issues that Roza and other irrigation districts had identified previously. Ecology crafted new permit language that was initially, in many cases, unresponsive to the issues raised. The current draft is under review by Roza staff and WSWRA members.

SVID's manager and I will also be meeting with the Ecology's Water Quality Program manager on June 7th. Roza has scheduled a met with the permit writer and her supervisors on June 9th.

Staff has been preparing the administrative record to build a base for an appeal to the Pollution Control Hearings Board (PCHB) since late 2021 and has informed Ecology executives of those preparations.

Item #5



To: Board of Directors
From: Wayne Sonnichsen, Engineering Manager *(WS)*
Date: July 11, 2023
Re: Industrial Systems Multiple Project Agreement

Attachments:

1. SCADA System Engineering Statement of Qualifications Ranking

Background:

Industrial Systems Inc. has been doing work related pump station upgrades for ECS projects, including electrical panel design and fabrication, and Programmable Logic Controller (PLC) and Man Machine Interface (MMI) programming, for the Roza Irrigation District under a 5-year Multiple Project Agreement For Professional Services with an end date of June 2023.

Nine Task Orders were executed under this agreement:

1. General maintenance services for the WW5 Reservoir. \$5,215
2. Wonderware and hardware upgrade. This was a general upgrade of our SCADA software. \$54,809
3. Pump station 15 upgrade for ECS. \$66,729
4. Programming and technical support for water measurement and flow control at MP11.0, Wasteway 6, and Wasteway 7. \$42,400
5. Programming and technical support for Pump station 15L and Wasteway 5. \$14,076.
6. Control system design and integration for pump plants 4, 16, and 17. \$142,158
7. Control panel design, construction, and programming for Pump 9A. \$64,992
8. Control panel design, construction, and programming for Pump 14. \$43,045
9. Control panel design, construction, and programming for Pump 10. \$42,432

As the District continues with the ECS projects, there will be a continued need for electrical panel and control systems design and construction, as well as general SCADA system maintenance. The cost of work related to ECS projects is accounted for within the ECS budget.

Other tasks not already budgeted will brought before the Board for approval on a case by case basis.

Staff advertised a Request for Qualifications (RFQ) in the Yakima and Tri-Cities Heralds on May 7th and May 14th. Statements of Qualifications (SOQ) were received from four companies.

Staff ranked the companies and Industrial Systems had the highest score. See attached.

Staff recommends entering into another 5-year Multiple Project Agreement with Industrial Systems, Inc. Work.

Recommended Motion:

I move to approve entering into a 5-year Multiple Project Agreement with Industrial Systems, Inc. for Professional Services.

SCADA System Engineering Statement of Qualifications Ranking (1 to 5 Scale)

Wayne

Firm	Wonderware Certification (Yes/No)	Wonderware Experience	PLC Programming Experience	Personnel Experience / Qualifications	WIN - 911 Experience	Proximity to Roza	SCADA Systems Experience	Cellular systems Experience	Total Score
RH2 Engineering	Yes	5	4	5	4	5	5	5	33
Industrial Systems	Yes	5	5	5	5	4	5	5	34
Eversolve Technologies	Unknown	4	5	5	5	1	5	5	30
ENGlobal	Unkown	4	5	5	5	1	5	5	30

Steve

RH2 Engineering	Unknown	4	5	5	3	5	5	3	30
Industrial Systems	Yes	5	5	5	4	4	5	4	32
Eversolve Technologies	Unknown	4	5	5	3	2	5	4	28
ENGlobal	Yes	5	5	5	3	2	5	4	29

Aaron


RH2 Engineering	Unknown	4	5	5	3	5	5	3	30
Industrial Systems	Yes	5	5	5	4	5	5	4	33
Eversolve Technologies	Unknown	4	5	5	3	1	5	4	27
ENGlobal	Yes	5	5	5	3	1	5	4	28

Aggregate

RH2 Engineering	Unknown	13	14	15	10	15	15	11	93
Industrial Systems	Yes	15	15	15	13	13	15	13	99
Eversolve Technologies	Unknown	12	15	15	11	4	15	13	85
ENGlobal	Yes	14	15	15	11	4	15	13	87

Item #6



To: Board of Directors
From: Scott Revell, District Manager 
Date: July 11, 2023
Re: 2023 Union Gap Irrigation District Water Carriage Agreement

Attachment

1. Draft 2023 UGID Water Carriage Agreement

Background

Roza has been conveying a portion of the Union Gap Irrigation District's water via the Roza Main Canal and an intertie with Wasteway 3 on a temporary basis since 2018.

Attached is revised draft carriage agreement with the Union Gap Irrigation District for the 2023 irrigation season. The agreement terminates at the end of the 2023 season.

The agreement requires Roza to do the connection work at UGID's expense and include an additional insurance requirement amount in section 8.

The agreement includes provisions for a fee at a still unspecified amount to Roza for carriage. UGID has proposed \$10,000 for the remainder of 2023.

The agreement has been reviewed by UGID. The revised agreement has been reviewed by Roza legal counsel.

Final revisions are under review and can occur following direction/action from the Board

Item #7



To: Board of Directors
From: Dave Rollinger, Watermaster *DR*
Date: July 11, 2023
Re: Recent Past and Future Maintenance Work

Staffing

- Brian Kukes has been hired full time and his first day was Friday the 23rd. Before coming to work for Roza, Brian worked for Washington State DOT on the road crew for the last 9 years. Hiring Brian brings the crew to 40 of 41 authorized positions.
- Steven Prieto has been hired as a 5 month temporary, Steve previously worked in construction for the last 3 years.

Water Delivery

- Water diversions were reduced to 700 CFS on June 11th in preparation for mild proration on the 12th. Total water usage has been low and the ditchriders have been instructed to deliver all the water as it is ordered.

Distribution System Maintenance

- Crews demoed the last of the scheduled ditchriders houses at Pump 8 with the 330 excavator.
- Crews removed brush from the tail end of WW-3 using the 314 excavator and the mulcher for the first time in at least 32 years. Crews will now be able clean and maintain the wasteway.
- The mowing crews have completed mowing the Main Canal, laterals, and drains for the first time and will start on the Main Canal for the 2nd pass.
- Gravel packs have cleaned for the 2nd time this year. Gravel packs normally are cleaned 4 to 5 times yearly.
- Trouble shooters have made 6 pipe repairs in the month of June.
- Trouble shooters have installed the last of the Main Canal turnout railings.

Weed Control

- Sprayers continue to spot spray puncture vine on the Main Canal, laterals and facilities.
- Applicators have made a total of 9 Main Canal treatments in June. 3 Captain XTR Copper treatments and 6 Main Canal Acrolein treatments to control algae and vascular vegetation. Applicators treated all open laterals with copper sulfate to control algae.
- Applicators also treated Teton to all open laterals to control vascular vegetation. Treatments normally take 4 to 6 full time employees depending on how many treatment locations.

Equipment

- #166 our 1995 Kenworth lowboy lost a driveline while moving the 330 excavator. Joel Hughes was called in to hook up the lowboy trailer and move the excavator to Pump 8. Hooked up towing towed #166 to the Roza shop. The total cost hauling, towing and repair was \$2,382.
- The hood on #64 our 1998 Freightliner was badly damaged and could not be repaired. An employee was backing out on the road, he had a spotter on the road watching for traffic but hooked the right side fender and hood on a post. Roza mechanics found a used replacement hood.

Projected for July

- Continue mowing the Main Canal, laterals and drains.
- Continue spot spraying puncture vine on the Main Canal, laterals and facilities.
- Continue jetting and grouting voids behind the Main Canal concrete lining as man power allows.
- Continue to treat the Main Canal and laterals for algae and vascular vegetation

Item #8



To: Board of Directors
From: Scott Revell, District Manager *Scott*
Date: July 11, 2023
Re: District Manager's Monthly Update

Attachment

1. Family Farm Alliance Dinner invitation (Sept 15th)
2. Cle Elum Pool Raise Memo (21 pages)

Miscellaneous Items

1. USBR Commissioner Camille Touton was at Roza Dam on June 14th and toured the upper Yakima Basin.
2. Ecology Director Laura Watson and her entire executive team toured the Yakima Basin on June 13th.
3. Interest income to date in 2023 is tracking very favorably. \$400,000 was budgeted.
4. \$7,200 +/- in repairs and maintenance have occurred in the Lower End office in 2023. The exterior doors have been replaced with more sturdy security doors including a door for the detached garage, one door was removed and the space framed in, paint and new flooring in the main area, a tool locker have been installed, as well as blinds.
5. The black mold has been abated from the Lower End office. Total cost for testing and abatement was \$4,000.
6. Family Farm Alliance is conducting a tour through the area on Sept 15th with a dinner at Martinez Livestock in Moxee.
7. USBR Staff at the Yakima Field Office updated the irrigation district managers on 2023 expenses to date and potential 2024 expense trends.

June Meetings Report

- ✓ Yakima Basin Integrated Plan Policy Team (June 2nd)
- ✓ System Operations Advisory Committee (SOAC) (June 5th)
- ✓ River Operations (June 5th)

- ✓ Lower End demand management large water user meeting (June 7th)
- ✓ Yakima Tieton Irrigation District North Fork Cowiche Canyon Reservoir project review (June 12th)
- ✓ Ecology executive team tour (June 13th)
- ✓ USBR Commissioner tour of Roza Dam and the upper Yakima Basin (June 14th)
- ✓ Upper River Modeling @ USBR Boise (June 16th)
- ✓ Cle Elum Pool Raise Technical Group (June 21st)
- ✓ Tri State WA/OR/ID @ Spokane (June 23rd)
- ✓ Proratable district meeting (June 28th)
- ✓ Water 101 tour of the Yakima Basin (June 29th)
- ✓ Yakima Basin Joint Board (June 30th)

Revell, Scott

From: Mark Hansen <markphansen110@gmail.com>
Sent: Saturday, June 24, 2023 4:40 PM
To: Revell, Scott
Subject: Family Farm Alliance Dinner



Dear Scott and Board of Directors,

We hope this letter finds you in good health and high spirits. On behalf of the Family Farm Alliance, we are pleased to extend a warm invitation to you and your guests to our upcoming community dinner, where you can meet the leadership team of the Alliance, during their tour of Central Washington. We are excited to organize this event, which will bring Washington's irrigated agriculture community together with the Alliance.

Tri-tip & lamb BBQ dinner prepared by the Washington State Cattle Feeders Association

September 15, 2023, 5:30 p.m. - 9:30 p.m.

Martinez Livestock, 15250 Sr 24, Moxee WA 98936

\$35/person or \$350/table sponsorship (8 seats per table) Incl. 2 complimentary drinks per person

You can use our PayPal option to reserve your seats and/or table sponsorships in advance. Just click [here](#) or go to <https://www.familyfarmalliance.org/farmtour/>.

Alliance President Pat O'Toole, a rancher and hay grower from Wyoming, will speak at the dinner, along with Alliance Executive Director Dan Keppen and Washington, D.C lobbyist Mark Limbaugh. They will discuss the challenges facing irrigated agriculture resulting from federal policies, regulations and legislation, and the activities and accomplishments behind the Alliance's efforts to advocate for Western irrigated agriculture.

The Alliance is considered by many water resource stakeholders and policy makers across the West and in Washington, D.C. as the voice of Western irrigated agriculture. The organization is a key player in the Western water resources arena. For more information on the Alliance, please visit their website:

www.familyfarmalliance.org

The Alliance leadership team will be in central Washington for a few days to see firsthand the diversity of irrigated crops grown in the state. The dinner is a unique opportunity to mingle with others in Washington's irrigated agricultural community and learn more about the water resource challenges before us. We believe that your presence at this event will greatly contribute to its success and help us achieve our fundraising goals.

As an expression of our gratitude for your support, each guest will receive a complimentary one-year subscription to the electronic version of the Alliance's *Monthly Briefing* newsletter.

Please reach out to us if you have any questions. We look forward to seeing you there!

Best regards,

Charles Lyall
Phone: 509-830-3055
email: charlelyall@gmail.com

Mark Hansen
Phone: 509-859-2467
email: mhansen110@gmail.com

BRIEFING MEMORANDUM.

To: Bureau of Reclamation

From: Roza Irrigation District

Date: June 28, 2023

Subject: Cle Elum Pool Raise Project Takings Evaluation

SUMMARY

Roza Irrigation District provides this evaluation of the property ownership issues and potential paths forward for the proposed Cle Elum Pool Raise Project ("Pool Raise Project"), which will store an additional 14,600 acre-feet at Cle Elum Reservoir and raise the high water level three feet to 2,243 feet.

YRBWEP II specifies the Pool Raise Project storage is to be "exclusively dedicated to instream flows." See Public Law 103-434 (1994) ("YRBWEP II") at Sec. 1205(5)(b). The United States Bureau of Reclamation (Reclamation) further described the Project's purpose, in Exhibit A to the Application for a Reservoir Permit as:

The new storage water can be stored for later use for instream flow and fish purposes. New Storage capacity created here would not be part of TWSA. The secondary use of the stored 14,600 acre-feet shall be exclusively for instream flow for fishery and aquatic habitat, propagation or migration under and pursuant to the Yakama Nation's Treaty water right for fish and other aquatic life as determined annually by the System Operation's Advisory Committee. The Treaty water right for fish and other aquatic life has a time immemorial priority date. The water provided herein shall be above and beyond the amounts currently available under current conditions for the Treaty water right for fish and other aquatic life.

See Reclamation Application for a Reservoir Permit (August 25, 2016) (attached). Such flows advance environmental objectives and can be viewed as implementing the federal government's trust obligation to protect the Tribe's treaty rights. Therefore, the Pool Raise Project clearly advances a public purpose such that Reclamation may condemn property necessary to achieve the Project.

Upon initial review, several properties may potentially be partially inundated by the Pool Raise Project during certain times of the year. The United States Forest Service (USFS) ownership of shoreline parcels reduces the number of properties that require

condemnation. Resolving the uncertainty regarding the historic reservoir level may also reduce the number of properties that require condemnation.

For properties that likely require condemnation, Reclamation may use an expedited procedure to complete the Pool Raise Project *before* condemnation proceedings are completed. We recommend that Reclamation consider the potential use of this expedited procedure for condemnation.

For properties that Reclamation believes do not require condemnation, it may proceed with the Project subject to the risk of future suit for compensation by property owners. Such a suit would be unlikely to halt the project but may result in compensation for a property owner under the framework outlined in *Ark. Game & Fish Comm'n v. United States*. See also *Knick v. Township of Scott* 139 S.Ct. 2162, 2179, (2019) ("As long as just compensation remedies are available—as they have been for nearly 150 years—injunctive relief will be foreclosed").

DISCUSSION

I. Background of the Cle Elum Reservoir and Dam

The Cle Elum Dam was constructed by Reclamation in 1933, completing a system of six reservoirs to provide irrigation to the Yakima Basin. Currently, the Cle Elum Reservoir stores 436,900 acre-feet of water, with a typical high water level of 2,240' feet elevation.¹ However, the original storage capacity of the Reservoir is unclear from the documents we reviewed. The Washington Supreme Court reported that the total storage from the six reservoirs was consistently 1,070,700 acre-feet from 1933-1993, which suggests Cle Elum Reservoir always stored 436,900 acre-feet. *Surface Waters of the Yakima River Drainage Basin v. Yakima Reservation Irrigation Dist.*, 121 Wn.2d 257 (1993).² Similarly, in 1952 the U.S. Geological Survey listed the Reservoir as storing 436,000 acre-feet.³ Shortly thereafter the U.S. Court of Claims reported the storage as slightly less: 435,700 acre-feet. *Crites v. U.S.*, 132 Ct. Cl. 544 (1955). By 1970, Reclamation's data shows that the Reservoir stored 436,900 acre-feet with a typical high water elevation of 2,240 feet.⁴ However, it is possible that historically the Reservoir stored more water, reaching higher elevations and creating an expanded boundary. Ecology's

¹ U.S. Bureau of Reclamation, *Record of Decision for the Cle Elum Pool Raise Project* (June 25, 2015)(the "ROD").

² The court specifically stated in "1933 -- The Cle Elum Dam, the last of the projects in the Yakima Basin, was completed, giving the Bureau of Reclamation total control over the waters of the Yakima River. The Yakima Reclamation Project then, as now, had 1,946 miles of canals and six large reservoirs with a storage capacity of 1,070,700 acre feet of water." *Yakima Reservation Irrigation Dist.*, 121 Wn.2d at 257.

³ U.S. Geological Survey, 1952 Yakima Basin Streamflows.

⁴ U.S. Bureau of Reclamation, *Summary Report to the Commissioner* (1970) at 347-348.

modeling of water levels between 1966-1975 suggests the Reservoir *may* have regularly exceeded 2,240 feet, however, the figure is inconclusive.⁵

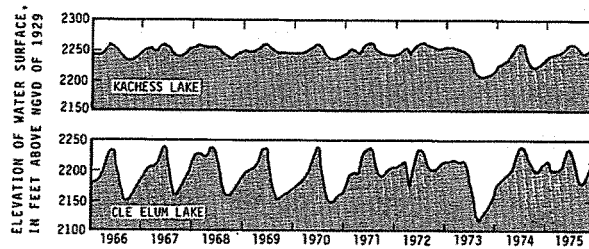


FIGURE 4.--Reservoir stage fluctuations of Kachess and Cle Elum Lakes, 1966-75.

Moreover, despite sources suggesting the Reservoir consistently stored approximately 436,900 acre-feet, Reclamation’s adjudicated water right is for 446,610 acre-feet, an amount that would likely result in a water level above 2,240 feet. *Ecology v. James Acquavella, et al.*, No. 99373-4 (Nov. 18, 2021)(Final Schedule of Rights) at 2154. The water right lists 446,610 acre-feet as the “active storage” with a priority date of 1905. We understand the adjudicated amount includes surcharge capacity.

With a few exceptions, private cabins and residences are clustered around the Southeast area of the Reservoir. Of these, the homes on Lake Cabins Road and Shadow Lane are on land owned by the USFS. The waterfront properties at Guzzie Lane, Sandelin Lane, Domerie Bay Road, and Timber Cove are privately owned. Several other large privately owned parcels are on the southwest edge of the Reservoir.⁶ The parcels that may face inundation from the Pool Raise Project are identified in orange in the attached figures from the Environmental Impact Statement for the ROD.

II. Pool Raise Project Takings Analysis

A. Takings Framework

The Fifth Amendment to the U.S. Constitution prohibits that “private property be taken for public use, without just compensation” otherwise known as the prohibition on “taking.” Generally, to establish a takings claim, the plaintiff must hold a “property interest for purposes of the Fifth Amendment.” *Members of the Peanut Quota Holders Ass’n v. United States*, 421 F.3d 1323, 1330 (Fed. Cir. 2005) (internal citation omitted). “If the

⁵ See Wash. Dept. of Ecology, *Hydrology of the Upper Yakima River Basin* (1985) (Figure 4).

⁶ The approximate parcel boundaries can be viewed on the Kittitas County GIS Viewer system “Compas” available here:

https://www.arcgis.com/apps/webappviewer/index.html?id=8bcc146d9c2847acb2e9aa239187c25e&query=TaxParcelQuery_326%2Ct2_ParcelNumber%2C232334

claimant fails to demonstrate the existence of a legally cognizable property interest, the court's task is at an end." *Am. Pelagic Fishing Co., L.P. v. United States*, 379 F.3d 1363,1372 (Fed. Cir. 2004). Second, the government's actions must have "amounted to a compensable taking of that property interest." *Id.* Finally, for the government to use the power of eminent domain to proactively condemn a property, it must be in pursuit of ends "rationally related to a conceivable public purpose." *Hawaii Housing Authority v. Midkiff*, 467 U.S. 229, 241 (1984).

Determining the property interest of shorefront parcels requires establishing the parcel boundaries. When private property abuts a navigable waterway, the typical property line is the ordinary high water mark (OHWM). See 43 U.S.C. §§ 1301; 1311 (granting "title to and ownership of the lands beneath navigable waters" to states "up to the ordinary high water mark"). Similarly, if private property owners acquired property directly from the federal government, the "[g]rants by congress of portions of the public lands . . . convey . . . no title or right below [the] high-water mark." *Shively v. Bowlby*, 152 U.S. 1, 57-58, (1894). Thus, the likely boundary will be the OHWM.

Resolving the precise parcel boundaries may also require a review of individual shorefront deeds. In addition to determining the OHWM, deeds may or may not expressly exclude from the parcel "that portion, if any, lying within the boundaries of Lake Cle Elum, as claimed by the United States."⁷ Such limiting language may help to clarify whether the property boundary is the historic or current OHWM.

While a landowner has a property interest in their parcel, the holder of a permit to use national forest lands does not. See *Osborne v. United States*, 145 F.2d 892, 896 (9th Cir. 1944) (permits not subject to takings claims). The USFS cabin lease program is structured as a "special use permit" permit, in which the permits "do not convey property rights like a lease does and [are] subject to revision by the Forest Service."⁸

In addition to the threshold factors, when the government creates a temporary invasion of private property through flooding or inundation, the court applies a five-factor test:

(1) time—the duration of the physical invasion; (2) causation; (3) intent or foreseeability, that is, "the degree to which the invasion is intended or is the foreseeable result of authorized government action;" (4) "the owner's reasonable investment-backed expectations regarding the land's use," including "the character of the land;" and (5) the "[s]everity of the interference.

In re Upstream Addicks & Barker (Texas) Flood-Control Reservoirs, 138 Fed. Cl. 658, 665 (2018) (quoting *Ark. Game & Fish Comm'n v. United States*, 568 U.S. 23, 38-39

⁷ See Statutory Warranty Deed, Parcel Number 291394 Kittitas County (2014)(attached).

⁸ National Forest Homeowners, Recreation Resident Program Overview, available at https://www.nationalforesthowners.org/page/Cabin_Program.

(2012). In *Ark. Game & Fish*, the Supreme Court held that the U.S. Army Corps of Engineers' new operation strategy for a flood control dam may have "taken" state property used to grow and harvest trees because the dam resulted in increased flooding of the state land. *Ark. Game & Fish*, 568 U.S. at 38-39.

Similarly, in *In re Upstream Addicks*, the Corps raised a reservoir water level approximately six feet above historic levels to respond to hurricane rains, causing temporary flooding of private properties. The court rejected the government's argument that the homeowners' awareness of the dam and potential for flooding negated their "investment back expectations" while explaining that takings in flooding cases are "fact-intensive" and subject to a complex "balancing process." *In re Upstream Addicks*, 138 Fed. Cl. at 665.

B. Analysis of Potential Takings Claims

Upon initial review, some of the shorefront properties at the Cle Elum Reservoir may lack a "property interest" in lands that may be submerged by the Pool Raise Project. The USFS owns a thin shoreline parcel that may or may not buffer properties at Sandelin Street and Guzzie Lane from inundation. Moreover, assuming the cabin owners on USFS land are operating under the typical agreement used by the USFS, the cabin owners have no property rights. By contrast, Timber Cove, Domerie Bay, and several other areas identified in the Pool Raise Project EIS may include private lands that would be inundated.

However, the property interest of these landowners may be in doubt if it can be confirmed that Cle Elum Reservoir was previously at 2243' elevation. Establishing this would require additional factual research to clarify the Reservoir's historic levels, the levels at the time private parcels were first acquired, and the terms of individual deeds.

If property owners have a property interest in shorefront lands, the properties would be subject to the five-part test in *Ark. Game & Fish*. This is a "highly fact-specific inquiry" and would require additional information regarding the property boundaries and the extent of inundation. That said, property owners with significant inundation would likely be able to establish many of the factors.

III. If Condemnation is Necessary, What Procedures are Available to Expedite the Pool Raise Project?

The power of eminent domain is vested in Reclamation in its Organic Act. See The Reclamation Act, Sec. 7 (1902); 43 U.S.C. § 421. The Pool Raise Project was specifically authorized by Congress in 1994. See Public Law 103-434 ("YRBWEP II").

Moreover, as described above, the Pool Raise Project clearly advances a public purpose in furtherance of the federal government's trust obligation to tribal treaty rights. *Id.* at Sec. 1205(5)(b).

Condemnation may occur through one of "three methods when [the United States] appropriates private land for a public purpose." *Kirby Forest Indust. v. U.S.*, 467 U.S. 1 (1984). A "straight condemnation" proceeds whereby an "officer of the Government" makes an application to the Attorney General, who then initiates condemnation proceedings. *Id.*; 40 U.S.C. § 257. Title does not pass to the government until the close of the proceeding, at which time the government has the option of purchasing the property at the adjudicated price or not. See Fed.R.Civ.P. 71A(i)(3). The second method is known as a "legislative taking" whereby Congress directly appropriates the property.

A third method, an expedited condemnation, allows an authorized official to file a "declaration of taking" to seize the lands, whereby the government immediately takes title to the property while depositing a sum equal to the estimated value of the property with the court. 40 U.S.C. § 258(a). A proceeding is then held to determine the precise value of the property, but the government takes possession prior to the completion of the proceeding. *Id.* Under this procedure, the Pool Raise Project may begin *before* condemnation proceedings are completed. Reclamation has used this process before. See *e.g.*, *Long v. Area Manager, Bureau of Reclamation*, 236 F.3d 910 (8th Cir. 2001).

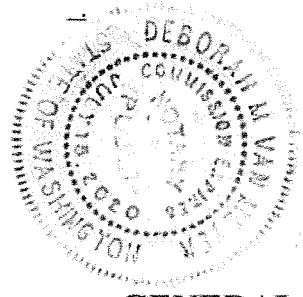
However, prior to initiating either a straight condemnation or an expedited condemnation proceeding, federal law requires the federal agency to "make every reasonable effort" to acquire the property by negotiation. 42 U.S.C. § 4651. At a minimum, this requires appraising the property in question and making an offer, not less than the appraisal, to the landowner. *Id.* While Reclamation must heed this statute, "§ 4651 provides no individually enforceable right." *Munoz v. City of Philadelphia*, No. 05-5318, 2006 U.S. Dist. LEXIS 5174 *7 (E.D. Penn. Feb. 10, 2006) (*citing* 42 U.S.C. § 4602(a)). As such, § 4651 does not require protracted negotiations and does not provide landowners with recourse. Therefore, Reclamation may proceed to an expedited condemnation if an agreement is not promptly reached through negotiation.

State of: WASHINGTON

County of: YAKIMA

} §

Signed and sworn to (or affirmed) before me on this 25th day of AUGUST, 2014



Seal
or
Stamp

Deborah M. Van Meter
(Notary Signature)

DEBORAH M. VAN METER
(Notary Printed Name)

GENERAL INFORMATION REGARDING RESERVOIR PERMITS

Please read carefully before filling out application form

GENERAL:

Regardless of the proposed use to be made of the impounded waters, construction of any dam or dike which will be capable of impounding water to a depth of 10 feet or more at any point, or will impound a volume of 10 acre-feet or more at normal pool level, may not be started until a reservoir permit for such construction has been obtained from the Department of Ecology. This requirement is applicable to any proposed impounding structure which obstructs a stream or watercourse and to any excavation and/or dike to be built off-channel from any stream or watercourse. This is also applicable to any impounding structure which will increase the depth or capacity of any existing reservoir such that it equals or exceeds the above standards.

Unless otherwise specified, a reservoir permit will allow the permittee to fill the reservoir once annually and to use the specified quantity of water, as a maximum, for the purposes stated in the permit. The permit shall state the period during each year when the reservoir may be filled. Under most conditions, such filling will be allowed only during winter or runoff periods.

Whenever the impounding structure is to be built in an off stream channel location and water is to be diverted thereto, the companion appropriation application is required regardless of the amount of water to be used or the purpose for which it is to be used.

EXAMPLES:

- A. For recreation, fish propagation, wildlife refuge, and other such non-consumptive uses, a reservoir permit allows initial or annual filling of the reservoir. If right for circulation water through the reservoir is also desired, an appropriation application should be filed in conjunction with the reservoir application.
- B. For irrigation, no related appropriation permit is required if the reservoir is situated on an intermittent stream which ceases to flow before arrival of the irrigation season. However, if the stream is perennial or flows for at least a portion of the irrigation season, and

natural flow waters during said season are also to be diverted, an appropriation application must be filed in conjunction with the reservoir application.

- C. An appropriation application must always be filed with the reservoir application where the water is to be used for hydro-power generation.
- D. A reservoir permit and/or appropriation permit will not be required provided the reservoir is used exclusively for silt retention or flood control purposes. Approval of plans and specifications may be necessary, as explained below.
- E. Where impoundment is for stock water purposes, and the reservoir is to be filled and its level maintained throughout the summer months, or for as long as water is available, an appropriation application must also be filed.

PLANS AND SPECIFICATIONS:

RCW 90.03.350 provides that any person intending to construct a dam or controlling works for the storage of 10 acre-feet or more of water as measured at top of dam level, shall, before beginning construction, submit plans and specifications thereof to the Supervisor and secure his approval as to its safety.

The plans and specifications must be prepared by properly-qualified, professional engineer registered in the State of Washington, and carry his/her signature and seal. They must be submitted in duplicate such that one copy may be retained in this office when the other is approved and returned to the applicant. No special plans will be required unless those submitted are found to be incomplete.

Plans and specifications prepared by government agencies not bearing the seal and signature of a professional engineer are acceptable only if endorsed by the principal or responsible engineer of the agency.

A general outline of minimum design criteria is available at this office and will be forwarded upon request.

FEES:

A statutory \$50.00 examination fee must accompany all applications for a reservoir permit. This basic fee will apply to all applications involving the storage of up to 1,000 acre-feet of water. For larger impoundments, additional examination fees are required and will be requested.

Publication of a legal notice is required under all applications and the applicant must bear the charges associated therewith. Additional fees will also be required at such time as permit and certificate issue.

Where plans and specifications of the impounding structure must be reviewed by this agency, a fee will be charged for review and approval. In examining and analyzing plans it may be necessary for this agency to employ a specialist in dam designs, in which instance the cost shall be charged to the owner of the proposed works.

EXHIBIT A
to
Application for a Reservoir Permit
by the United States Bureau of Reclamation

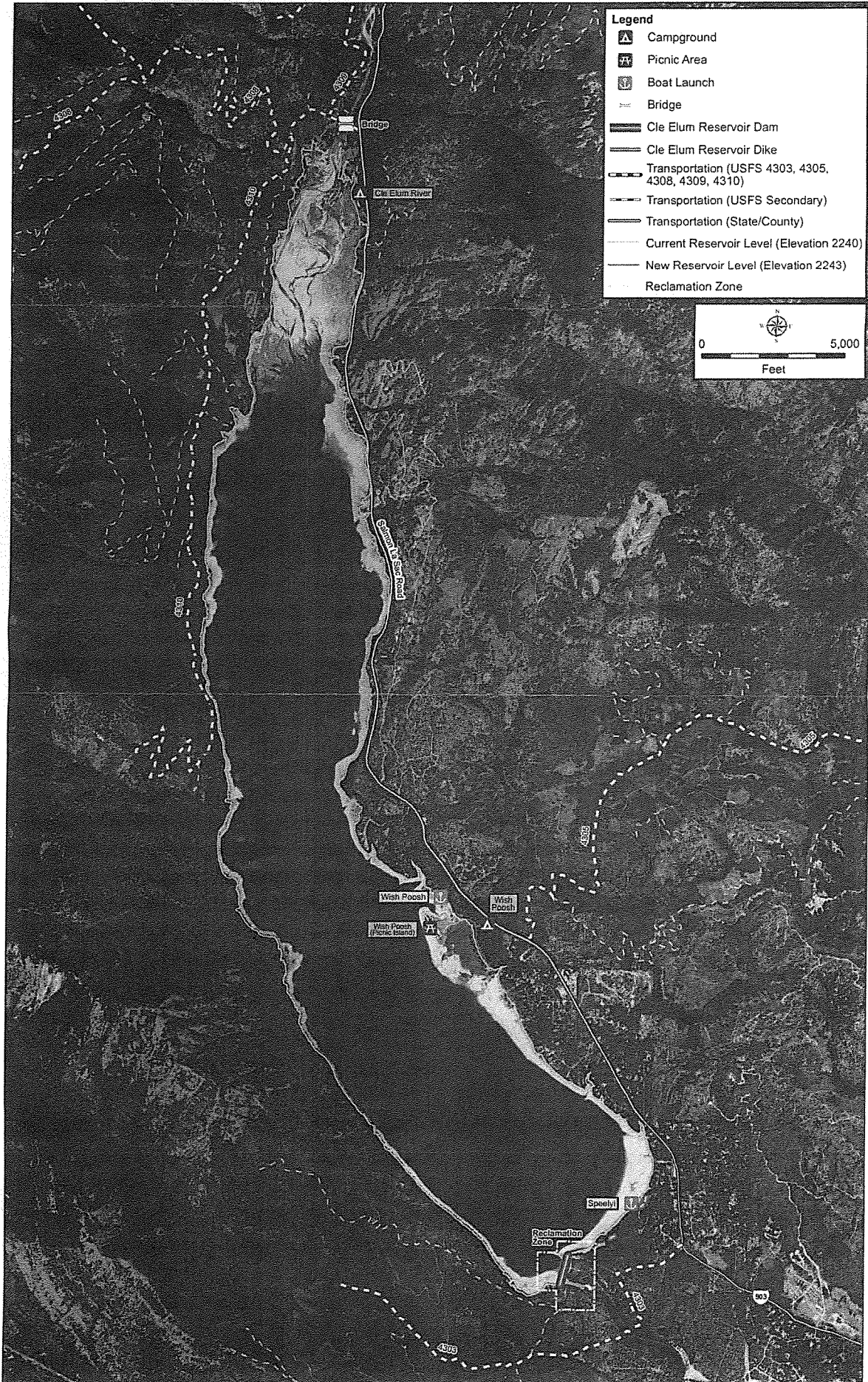
This Application for a Reservoir Permit seeks to store an additional quantity of water in the Cle Elum Reservoir by the United States Bureau of Reclamation ("USBR"). Pursuant to Pub. L. 103-434, October 31, 1994, as amended by Pub. L. 105-62, October 13, 1997 (hereinafter referred to as "YRBWEP II"), Congress authorized the raising of the Cle Elum Reservoir, which would enable storage of an additional 14,600 acre-feet of water in the Cle Elum Reservoir. This application seeks a permit to store the additional 14,600 acre-feet of water.

By applying for this permit, the United States does not waive or relinquish any of its rights under either the withdrawal of May 10, 1905, or under the Yakama Treaty nor does it waive its argument that a filing here is not necessary under applicable state or federal law.

Storage Right: The priority date for water stored pursuant to this permit in the Cle Elum Reservoir is May 10, 1905; provided, however, that (1) water stored under this permit is Yakima Project water, and (2) the right to store water under this permit shall be administered so as not to adversely affect or otherwise impair existing water rights supplied from the TWSA.¹

Secondary Use: The new storage water can be stored for later use for instream flow and fish purposes. New storage capacity created here would not be part of TWSA. The secondary use of the stored 14,600 acre-feet shall be exclusively for instream flow for fishery and aquatic habitat, propagation or migration under and pursuant to the Yakama Nation's Treaty water right for fish and other aquatic life as determined annually by the System Operation's Advisory Committee. The Treaty water right for fish and other aquatic life has a time immemorial priority date. The water provided herein shall be above and beyond the amounts currently available under current conditions for the Treaty water right for fish and other aquatic life.

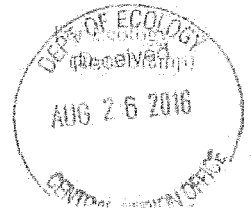
¹ See also, Supplemental Report of the Court, p. 9, *l.* 14 to p. 12, *l.* 16.





Water Resources Program Application for a R

Check 1189
\$50.00
TJB



WASHINGTON STATE
DEPARTMENT OF ECOLOGY

RECEIPT 209100

A\$50 non-refundable minimum statutory filing fee is required to be sent with this application to:
DEPARTMENT OF ECOLOGY
CASHIERING SECTION
PO BOX 47611
OLYMPIA, WA 98504-7611

1. Applicant Information

Applicant Name: U.S. Bureau of Reclamation (POC: Cha

Address: 1917 Marsh Rd

City: Yakima

Email Address (optional): cstuart@usbr.gov

Date and Place of Incorporation, if Applicant is a Corpora

2. Sources, Use, and Capacity of Reservoir

Name of Proposed Reservoir: Lake Cle Elum Reservoir

Name of Stream or Other Sources for Reservoir Supply: Cle Elum River

Use(s) to be Made of Impounded Water (irrigation, power, Exhibit A and Title XII, YRBWEP. SEE ATTACHED E

Number of Acre Feet to be Stored at Maximum Operating Level: 436,900 acre-feet plus 14, 600 acre-feet

Number of Acres to be Irrigated, if Used for Irrigation: N instream flow consistent with Exhibit A and Title XII, YI

Type and Capacity of Diversion Works is Water is to be the additional storage will be released into the Cle Elum YRBWEP and Exhibit A, the additional storage may be carried over from year and may be released from any other Yakima Project storage facility.

010-144

RECEIVED FROM: Bureau of Reclamation

FUND: General UST WWD Other

LOCATION:

PURPOSE:

DATE: August 26, 2016

DOLLARS: \$50.00

Cash

Check # 1189

MO #

By: TJB
Thank You

RECEIPT

Department of Ecology (4610)
PO Box 47611
Olympia, WA 98504-7611
(360) 407-7095

Receipt Number
Manual Receipt

17CJ004554
209100

Document Number 461T1707 CJ Date 08/31/2016 FM 14

Remitter Name US RECLAMATION BUREAU Receipt Name

Check/Draw Number 1189

Document Amount 50.00

Method of Payment Check

Comment Description WATER RIGHTS - CRO

REF NR	DOC	REF	INV NR	ID NR	SUB ID NR	T	C	R	FUND	MAJ	MAG	SUB	SRC	CNTY	WORK	PIC	AI	ORG	PRJ	SUB	PRJ	PHS	SUB	OBJ	SUB	GL	VAR	SUB	DR	SUB	CR	ALOC	AMT
																																	50.00

001 001 02 85 000011

Department of Ecology

AUG 31 2016

Water Resources Program



Check # 1189
\$50.00
TJB



Water Resources Program
Application for a Reservoir Permit

A \$50 non-refundable minimum statutory filing fee is required to be sent with this application to:
DEPARTMENT OF ECOLOGY
CASHIERING SECTION
PO BOX 47611
OLYMPIA, WA 98504-7611

FOR OFFICIAL USE ONLY

APPLICATION NO.: _____
 WRIA: _____
 COUNTY: _____
 PRIORITY DATE: _____
 TIME: _____
 ACCEPTED: _____

1. Applicant Information

Applicant Name: U.S. Bureau of Reclamation (POC: Chad Stuart)	Phone No: 509-575-5848 x 213	Other No:
Address: 1917 Marsh Rd		
City: Yakima	State: WA	Zip: 98901
Email Address (optional): cstuart@usbr.gov		
Date and Place of Incorporation, if Applicant is a Corporation: N/A		

2. Sources, Use, and Capacity of Reservoir

Name of Proposed Reservoir: Lake Cle Elum Reservoir

Name of Stream or Other Sources for Reservoir Supply: Cle Elum River	Tributary of: Yakima River
---	----------------------------

Use(s) to be Made of Impounded Water (irrigation, power, fish propagation, etc.): "Instream flow" as provided in Exhibit A and Title XII, YRBWEP. SEE ATTACHED EXHIBIT A)

Number of Acre Feet to be Stored at Maximum Operating Level: 436,900 acre-feet plus 14,600 acre-feet	Months of Year During Which Reservoir to be Filled: January - December
--	--

Number of Acres to be Irrigated, if Used for Irrigation: None: The additional 14,600 acre-feet is to be used for instream flow consistent with Exhibit A and Title XII, YRBWEP

Type and Capacity of Diversion Works is Water is to be Withdrawn: None: Once stored in Cle Elum Reservoir the additional storage will be released into the Cle Elum and Yakima Rivers. Consistent with Title XII, YRBWEP and Exhibit A, the additional storage may be carried over from year and may be released from any other Yakima Project storage facility.

Department of Ecology

AUG 31 2016

Water Resources Program

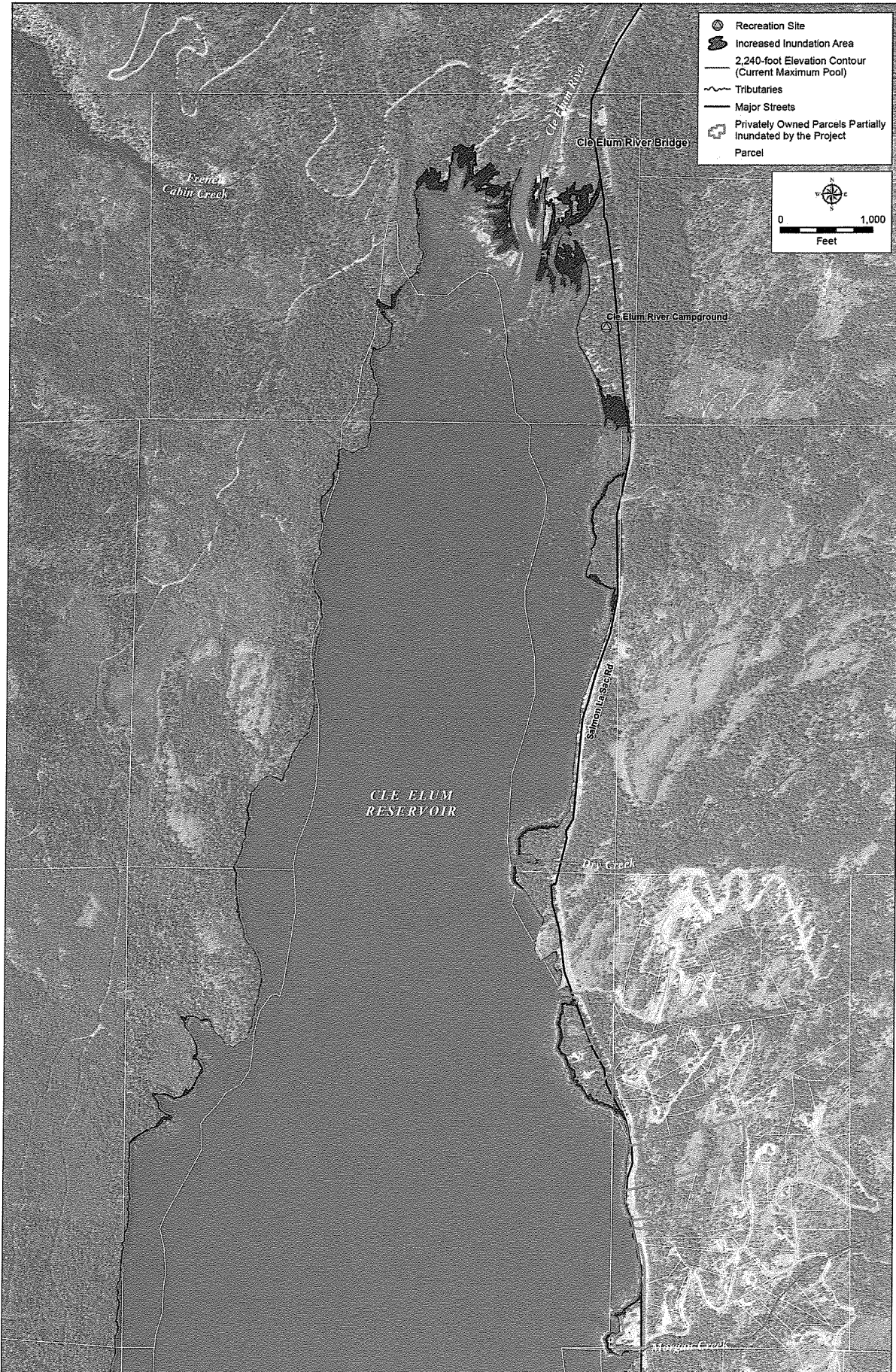


Figure 2-4. Project Area - North

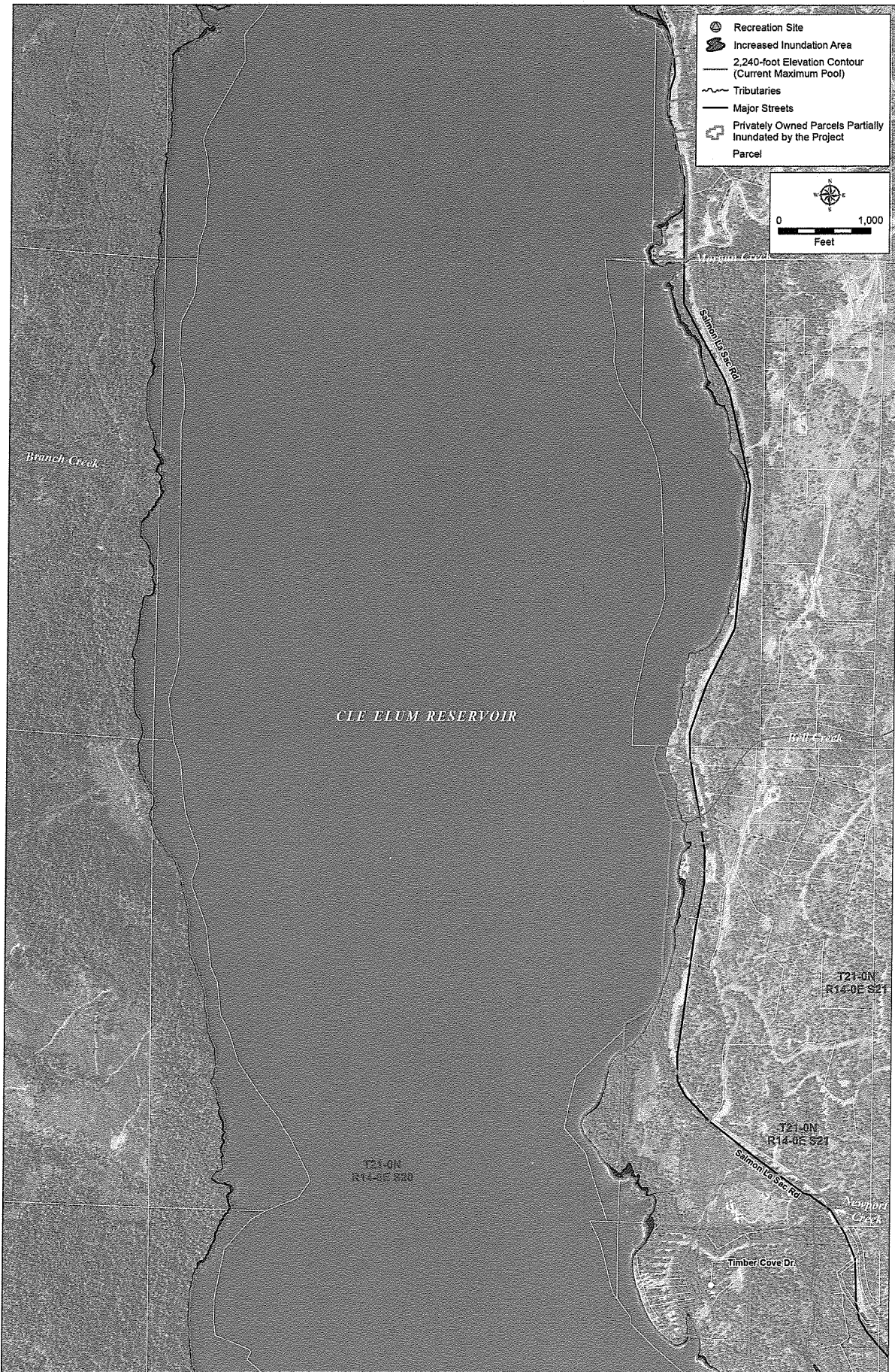


Figure 2-5. Project Area - Southwest

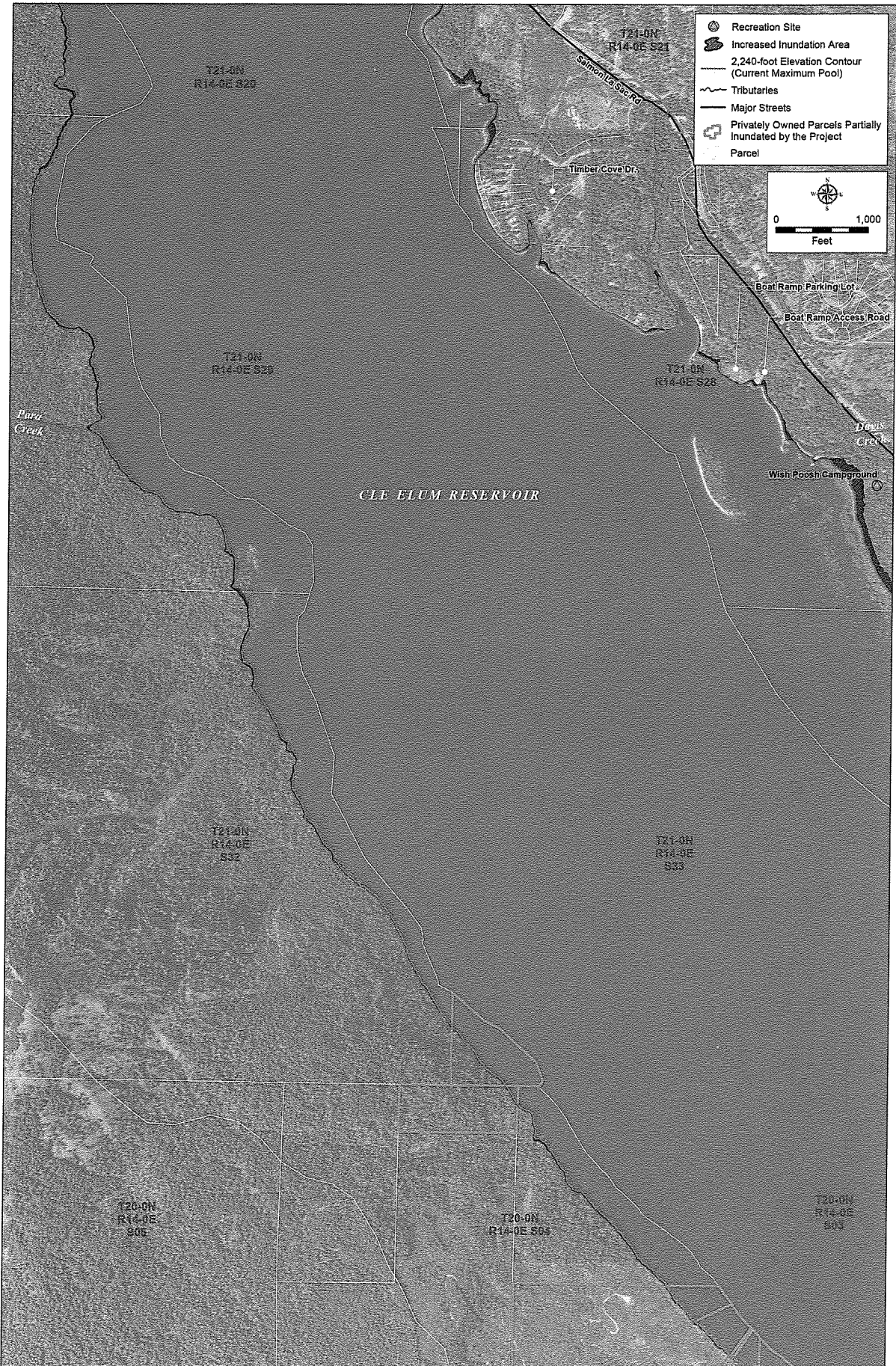


Figure 2-6. Project Area - Southeast

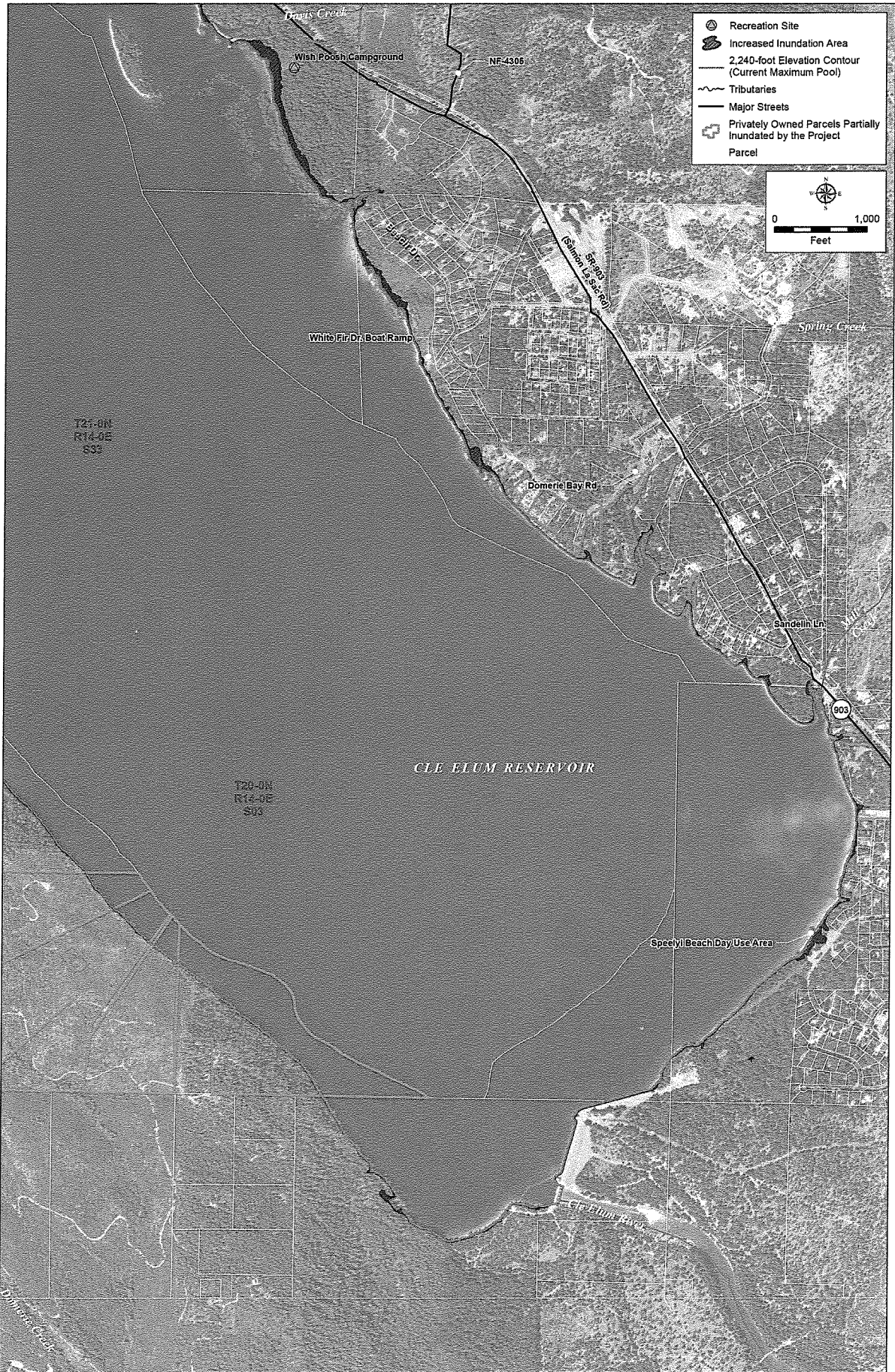


Figure 2-7. Project Area - South

10/24/2014 04:50:34 PM

201410240021

\$75.00
Warranty Deed AMERITITLE
Kittitas County Auditor

Page: 1 of 4



When recorded return to:
Shawn Schubring and Kirsten Schubring
2457 78th Avenue NE
Medina, WA 98039

Filed for record at the request of:



CHICAGO TITLE
COMPANY OF WASHINGTON

10500 NE 8th St., Suite 600
Bellevue, WA 98004

Escrow No.: 0025265-OC

RE EXCISE TAX PAID
Amount \$1,507.50
Date OCT 24, 2014
Affidavit No. 2014-1889
KITTITAS COUNTY TREASURER
By B. Baumgartner

STATUTORY WARRANTY DEED

AMT 21120Am \$75

THE GRANTOR(S) Dieter M. Bierek, a single individual
for and in consideration of Ten And No/100 Dollars (\$10.00), and other valuable consideration
in hand paid, conveys, and warrants to Shawn Schubring and Kirsten Schubring, husband and wife

the following described real estate, situated in the County of Kittitas, State of Washington:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

Abbreviated Legal: (Required if full legal not inserted above.)

Ptn S Half NW Quarter, AND Ptn Parcel 2, Volume 4, pgs 70-71; ptn Gov Lot 3,
AND Parcel A, Book 14, pg 24; ptn Gov Lot 3, ALL IN Section 2, Township 20N, Range
14E, W.M.

Tax Parcel Number(s): 291934

Subject to:

Exceptions Set forth on attached exhibit and by this reference made a part hereof as if fully
incorporated herein.

Dated: October 17, 2014

Dieter M. Bierek

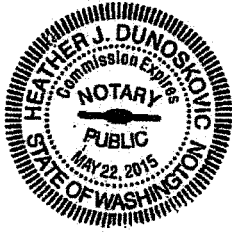
STATUTORY WARRANTY DEED
(continued)

State of Washington
County of Kittitas

I certify that I know or have satisfactory evidence that Dieter M. Bierek is the person who appeared before me, and said person acknowledged that he signed this instrument and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in this instrument.

Dated: 10-17-2014

Heather J. Dunoskovic
Name: Heather J. Dunoskovic
Notary Public in and for the State of WA
Residing at: Poulsbo County WA
My appointment expires: 05-22-2015



Unofficial Copy

EXHIBIT "A"
Legal Description

PARCEL A:

That portion of the South Half of the Northwest Quarter of Section 2, Township 20 North, Range 14 East, W.M., Kittitas County, State of Washington, which is described as follows: Beginning at a point on the South boundary line of said South Half of the Northwest Quarter of said Section 2, which is 683 feet West of the center of said Section; and running Thence North 0°30' West, 230 feet; Thence North 6°07' West, 137 feet; Thence North 2°25' West, 150 feet; Thence North 12°31' East, 169 feet; Thence North 56°30' West, 124 feet; Thence North 27°07' West, 72 feet; Thence North 5°46' West, 114 feet; Thence North 16°20' West, 285 feet; Thence North 40°50' West, 158 feet to the North boundary line of said Half of Quarter Section, the true point of beginning; Thence South 40°50' East, 60 feet; Thence East parallel to the North line of said Half of Quarter Section, 100 feet; Thence North 40°50' West, 60 feet to the North line of said Half of Quarter Section; Thence West along said North line to the true point of beginning.

EXCEPT that portion, if any, lying within the boundaries of Lake Cle Elum, as claimed by the United States of America.

Together with an easement for the existing house as provided for in Judgment and Decree entered May 9, 1976, in Kittitas County Superior Court Cause No. 20494, and Together with an easement for access 10 feet in width as granted in Instrument recorded November 17, 1967, under Auditor's File No. 343049 and confirmed by Judgment and Decree entered May 9, 1976, in Kittitas County Superior Court, Cause No. 20494 and running Westerly along the North boundary line of the Southeast Quarter of the Northwest Quarter of said Section 2, from State Highway 2E to the Northern 10 feet of the East boundary line of said premises.

PARCEL B:

Parcel 2 of that certain survey as recorded March 16, 1978, in Volume 4 of Surveys, pages 70 and 71, under Auditor's File No. 420743.

Being a portion of Government Lot 3, Section 2, Township 20 North, Range 14 East, W.M., Kittitas County, State of Washington;

EXCEPT that portion of said Parcel 2, lying within the Southeast Quarter of the Northwest Quarter of said Section 2;

EXCEPT that portion, if any, lying within the boundaries of Lake Cle Elum, as claimed by the United States of America; and

EXCEPT:

Parcel B of that certain survey as recorded August 22, 1985, in Volume 14 of Surveys at page 24, under Auditor's File No. 489982, records of Kittitas County, State of Washington;

Being a portion of Government Lot 3, Section 2, Township 20 North, Range 14 East, W.M., Kittitas County, State of Washington.

PARCEL C:

Parcel A of that certain survey as recorded August 22, 1985, in Book 14 of Surveys at page 24, under Auditor's File No. 489982, records of Kittitas County, Washington;

Being a portion of Government Lot 3, Section 2, Township 20 North, Range 14 East, W.M., Kittitas County, Washington.

**EXHIBIT "B"
EXCEPTIONS**

Order No.: 0025265-OC

The provisions contained in instrument from Cascade Lumber Company, a corporation,
Recorded: October 18, 1939,
Instrument No.: 149789.

As follows: "Excepting and reserving unto the Grantors, its successors and assigns, forever, all minerals of any nature whatsoever, including coal, iron, natural gas and oil, upon or in said land, together with use of such of the surface as may be necessary for exploring for and mining or otherwise extracting and carrying away the same."

Pendency of Yakima County Superior Court Cause No. 77-2-01484-5, State of Washington, Department of Ecology, Plaintiff, vs. James J. Acquavella, et al, Defendants; notice of which is given by Lis Pendens recorded on October 14, 1977, in Volume 90, page 589, under Kittitas County recording number 417302, and supplemental notice of Lis Pendens recorded June 4, 1980, in Volume 131, page 63, under Auditor's File No. 442263; being an action for the determination of the rights to divert, withdraw, or otherwise make use of the surface waters of the Yakima River Drainage Basin, in accordance with the provisions of Chapters 90.03 and 90.44

Revised Code of Washington.

(Attorney for Plaintiff: Charles B. Rose, Jr., Senior Assistant Attorney General)

NOTE: The policy/policies to be issued include(s) as one of the printed exceptions to coverage: "Water rights, claims or title to water" as set forth as Paragraph 5C in the general exceptions which are printed on Schedule B herein. The pending action involves such water rights and therefore, will not be set forth as a separate exception in said policy/policies

The provisions contained in survey in Volume 4 of Surveys, page 70 and 71,
Recorded: March 16, 1978,
Instrument No.: 420743.

As follows: Encroachment of deck into the boundaries of Lake Cle Elum.

Item #9



To: Board of Directors

From: Wayne Sonnichsen, Engineering Manager *WS*

Date: July 11, 2023

Re: Engineering Manager's Report

Miscellaneous items of note:

- Work on the Pump 3 Low ECS project is progressing. Staff has begun meeting with key landowners to get a better idea of whether or not the proposed pipe route is optimal.
- I am currently working on the bid documents for Main Canal sealing with the goal to award a contract in September. The Department of Ecology has committed to awarding the Roza Irrigation District approximately \$600k for this project.
- Reconstructing the north embankment of the Wasteway 5 Reservoir will require removal of a section of the liner. In correspondence with liner supplier (Coletanche), it has been determined that the section of removed liner should be replaced with new liner. The main reason for this is that each overlapping piece to be welded should be single thickness (per the engineers at Coletanche). The embankment at the north end of the reservoir is curved, so very few liner sections run parallel to one another and the overlapping sections are numerous. I have the folks at Coletanche working on a quote for enough material delivered to preplace the entire end section; 5,300 square meters, which I estimate will cost about \$72k.

A request for quotes is also out for enough geocomposite drainage material to replace section below the north embankment. Quotes are due by July 11th.

- Steve has been mostly working on customizing reports in the water accounting software (TruePoint).
 - 10 day out list – Corrected calculations estimating usage since the last meter reading.
 - Customer Distribution Report – Corrected several calculations with allocation adjustments.
 - Pool overdraw report was not correctly calculating usage for some customers.
 - He is working with TruePoint to make changes necessary to allow the ditchriders to switch to cellular enabled tablets connected directly to the water accounting software. This will enable real time data entry and access to reports, eliminating the need for the ditchrider app morning and evening data transfers.
- TruePoint has made changes to the Customer Portal per the District's request so that water can only be ordered for one parcel on given delivery. This was done to eliminate duplicate water orders.