



Water Supply Bank Report:

Analysis of Processing Costs & Revenue for Years 2018-2022

with Alternative Fee Scenarios for the Board's Bank

December 18th, 2023

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Introduction

Each year, a general balance of the bank via the costs of operating versus the revenue generated by the Board's Water Supply Bank (Bank) has been submitted within an annual report for the Board's Bank. A reoccurring focal point since 2010 is that the cost of processing and maintaining applications and approved transactions annually exceeds the revenue generated, typically resulting in a negative operating balance each year, or deficit. In 2011, lease application fees were introduced to assist in offsetting the operational costs of the Bank, while rental fees have been increased several times on a scheduled basis since 2014. Chart 1, below, depicts financial transactions by year from 2011-2022, where the deficit has been as high as \$134,644 in 2018, with a ten-year average deficit of -\$83,226.20 and median deficit of -\$89,461.50 for years 2013 through 2022.

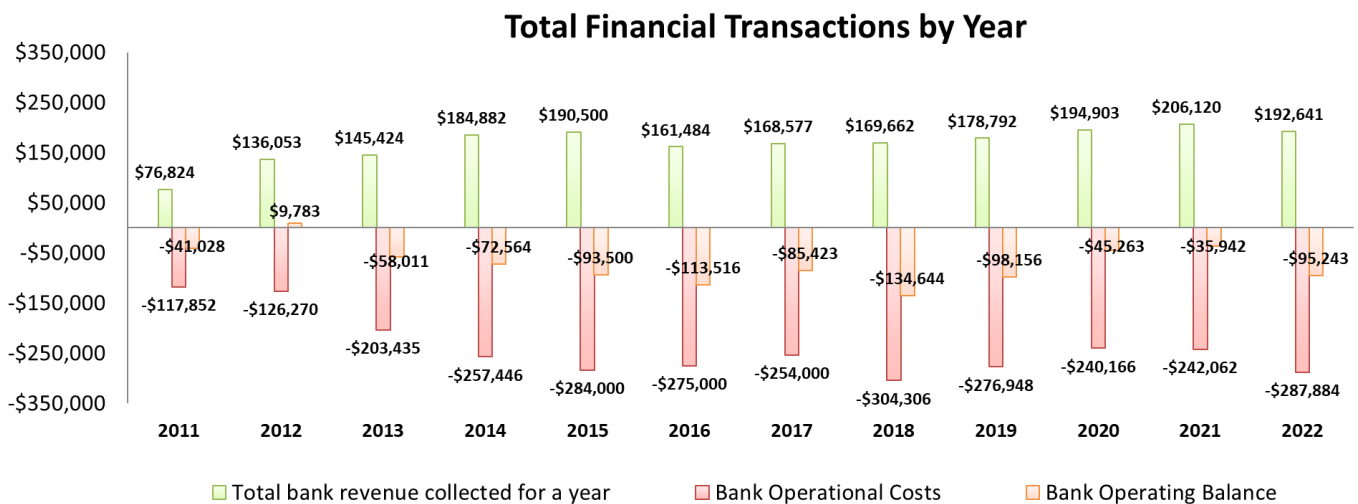


Chart 1, Bank Financial Transactions, 2011-2022

The Board's Bank operating costs include processing lease and rental applications, maintaining records of current contracts and agreements, concluding transactions at the end of the term, payments to owners for rented rights each year, and research and development for improving processes for the Bank. The percentage of time spent performing all duties related to the Board's Bank have been tracked and reported in each annual report for the last several years, as compiled and tabulated below.

Service Function	2018	2019	2020	2021	2022	Average
Processing lease applications	27%	24.9%	22.0%	27.7%	22.8%	25%
Processing rental applications	27%	29.4%	35.9%	29.8%	39.3%	32%
Processing applications, total	54.1%	54.3%	57.9%	57.5%	62.1%	57%
Managing lease contracts	9%	8.8%	5.7%	9.1%	5.8%	8%
Managing rental agreements	8%	7.8%	11.8%	11.1%	6.5%	9%
Managing transactions, total	17.1%	16.6%	17.5%	20.2%	12.3%	17%
Communications & coordination	16%	10.3%	7.0%	9.9%	16.2%	12%
Research & development	13%	18.9%	17.6%	12.4%	9.6%	14%
Total	100%	100%	100%	100%	100%	100%

Table 1, Hours Billed per WSB Service Function, 2018-2022

In order to fairly evaluate the deficit of the bank, the cost per process performed by the bank must then be compared to the revenue in which it provides. Since the cost of Communications and Coordination and Research and Development do not return a direct income, these costs could be proportionately allocated to the processes they support: lease and rental processing and the annual maintenance of these transactions. By rearranging the previous table of the percentage of hours spent processing and managing transactions into leases or rentals, as well as assigning Research and Development (R&D) to rental costs and Communications and Coordination (C&C) to lease costs, we can simplify all of this data into Chart 2 to illustrate the annual percentage of hours billed to leases or rentals, as a whole compared to the percentage of income which is provided by their respective fees for years 2018 through 2022.

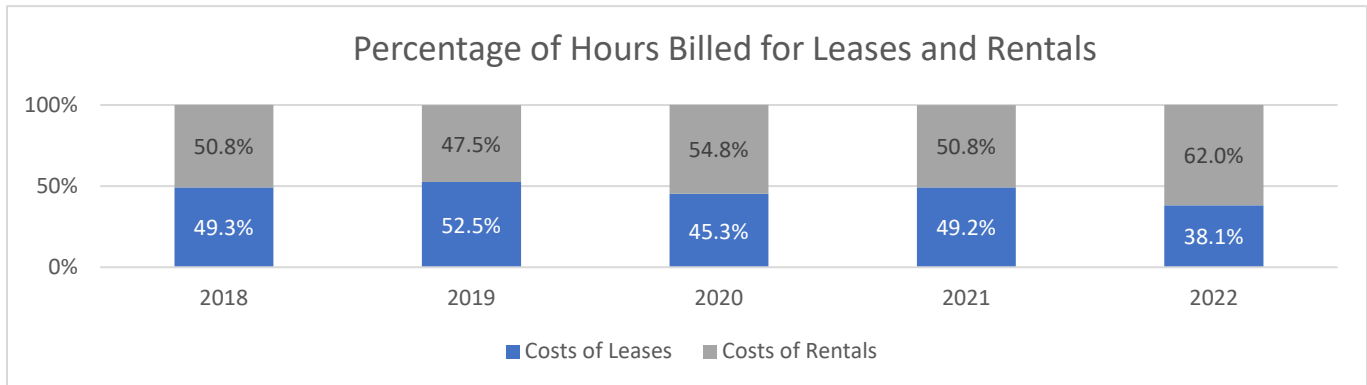


Chart 2, Hours billed for leases with C&C and rentals with R&D, 2018-2022

Revenue for the Board's Bank is currently received in two forms: the lease application filing fees, of \$250 per application, with a maximum of \$500 for stacked rights; and the Rental Administrative Fees, equal to 10% of the total Rental Fee, which was priced at \$17 per acre foot from 2014 through 2017, and \$20 per acre foot, from 2018 through 2022. Pricing in 2023 increased to \$23 per acre foot until 2030. Chart 3, below, shows the percentage of revenue to operating costs by lease filing fees, rental admin fees, and the percent of deficit/loss remaining, for years 2018-2022.

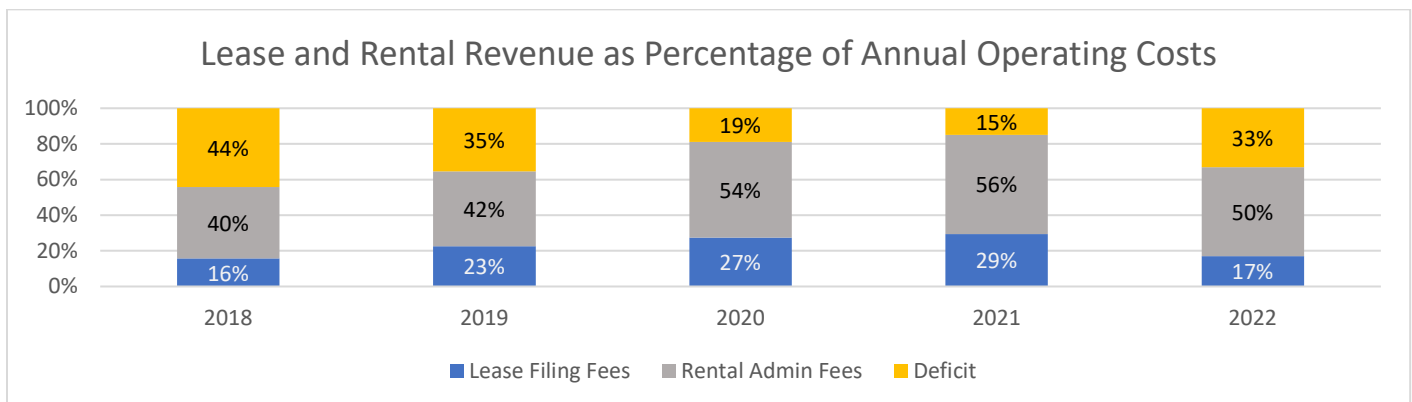


Chart 3, Lease and rental income as a percentage of total revenue, 2018-2022

Comparing Charts 2 and 3, we can see leases filing fees only contribute 25% of the total annual revenue to offset operating costs, while on average cost closer to 50% of the operating costs, whereas rentals provide 40% to 50% of the revenue required to offset annual operating costs.

Using this same basic concept of comparing the costs of leases and rentals to the revenue each contribute to the annual operating balance of the Bank, we can now expand to a larger range of data to fully appreciate the operating balance and where increasing or adding revenue would be most appropriate to balance the bank. This model has R&D and C&C separate from leases and rentals for simplicity.

Operating Costs and Revenue					
	2018	2019	2020	2021	2022
Lease Applications Processed	152	198	201	210	150
Hrs billed processing leases	1736	1400	1465	1775	1674
Hrs per application processed	11.4	7.1	7.3	8.5	11.2
% of time for program	27%	25%	22%	28%	23%
Hrs per lease application	11.4	7.1	7.3	8.5	11.2
Ave processing cost per lease application	\$ 543	\$ 352	\$ 263	\$ 319	\$ 437
Total cost to process	\$ 82,569	\$ 69,678	\$ 52,784	\$ 67,042	\$ 65,520
Lease revenue from applications	\$ 48,000	\$ 62,500	\$ 66,000	\$ 71,250	\$ 49,250
Active contracts	504	678	675	622	593
Hrs billed managing leases	624	490	378	581	427
Total cost to manage	\$ 29,679	\$ 24,387	\$ 13,619	\$ 21,944	\$ 16,713
Leases - Total Cost	\$ 112,248	\$ 94,065	\$ 66,403	\$ 88,986	\$ 82,233
Leases - Gain/Loss	(\$64,248)	(\$31,565)	(\$403)	(\$17,736)	(\$32,983)
Rentals Processed	103	88	105	125	119
Hrs billed processing rentals	1727	1650	2396	1912	2889
Hrs per application processed	16.8	18.8	22.8	15.3	24.3
% of time for program	27%	30%	36%	30%	40%
Hrs per rental application	16.3	18.8	22.8	15.3	24.3
Ave processing cost per rental application	\$ 773	\$ 933	\$ 822	\$ 578	\$ 950
Total cost to process	\$ 79,662	\$ 82,121	\$ 86,328	\$ 72,216	\$ 113,075
Rental revenue from admin fees	\$ 121,662.00	\$ 116,292.00	\$ 128,903.00	\$ 134,870.00	\$ 143,391.00
Active Rentals	107	184	192	207	224
Hrs billed managing rentals	517	437	789	711	541
Total cost to manage	\$ 24,590	\$ 21,749	\$ 28,428	\$ 26,854	\$ 21,175
Rentals - Total Cost	\$ 104,252	\$ 103,870	\$ 114,756	\$ 99,071	\$ 134,250
Rentals - Gain/Loss	\$ 17,410	\$ 12,422	\$ 14,147	\$ 35,799	\$ 9,141
Rental volume annually	61,890	59,712	65,283	68,997	73,439
Dollar per acre-foot average	\$ 1.97	\$ 1.95	\$ 1.97	\$ 1.95	\$ 1.95
Total costs of leases + rentals	\$ 216,500	\$ 197,936	\$ 181,159	\$ 188,057	\$ 216,483
Total revenue from leases + rentals	\$ 169,662	\$ 178,792	\$ 194,903	\$ 206,120	\$ 192,641
Lease/Rental Gain or Loss	(\$46,838)	(\$19,144)	\$13,744	\$18,063	(\$23,842)
Communication & Coordination	\$ 49,180	\$ 28,618	\$ 16,898	\$ 23,946	\$ 46,577
Research & Development	\$ 39,049	\$ 52,259	\$ 42,299	\$ 30,027	\$ 27,515
Hrs billed	1855	1625	1643	1429	1893
Total C&C and R&D Cost	\$ 88,229	\$ 80,876	\$ 59,197	\$ 53,973	\$ 74,092
Total service hours billed	6,398.0	5,565.0	6,667.0	6,409.0	7,355.0
Coordinator and Specialist hrs billed	3,838.0	3,594.0	3,490.0	3,133.1	2,981.0
Ave annual hrly cost total hrs billed	\$ 47.56	\$ 49.77	\$ 36.03	\$ 37.77	\$ 39.14
Actual Operating cost of Bank (hrs billed)	\$304,306	\$276,948	\$240,166	\$242,062	\$287,884
Total Gain or Loss	(\$134,644)	(\$98,156)	(\$45,263)	(\$35,942)	(\$95,243)

Image 1, Operating Costs & Revenue Spreadsheet, 2018-2022

Application Processing

The average cost to process a lease application from 2018-2022 has increased to \$383 per application from the previous average of \$255 per application for years 2015-2019, with an average processing time of 9.1 hours per lease application for years 2018-2022. As was mentioned earlier, the cost to lease a water right into the bank is \$250, with a maximum of \$500 for stacked rights which can be placed on the same lease contract for management. This price was adopted by the Idaho Water Resource Board, and subsequently passed in the 2011 Legislative Session as an addition to the Water Supply Bank Rules, IDAPA 37.02.03. Using a US inflation calculator, the price set in 2011 of \$250 was equal to \$300 in 2021 and then over \$350 in 2023. As we can see in the previous spreadsheet for the costs versus revenue, the cost just to process lease applications is still higher than the inflation rate for the same period.

An item to consider in the cost of reviewing and processing lease applications to balance the bank operating cost is whether the lease applicant is offering the entire water right, or only a portion, since splitting a water right takes more consideration and review than accepting an entire water right. For reference, when someone sells a portion of their water right and the new owner files their change in ownership with IDWR, the cost to change ownership of a split right is \$100, compared to \$25 for a change in ownership for a water right which is not split. In 2021, just over 40% of all water rights offered and accepted for lease to the bank were only for a portion of the water right.

Additionally, another item to consider in the cost for processing lease applications is the number of water rights which are offered to the bank and the actual number of contracts with stacked water rights upon approval, since each water right requires its own application, but a contract will be made up of a suite of water rights which are stacked. For example, in 2021 there were 346 water rights approved for lease, on 210 contracts. To further underscore this point, Chart 4 shows the number of water rights offered for lease in a given year, the average number of water rights per approved contract, and the maximum number of water rights on a single approved contract, for years 2018-2022. Again, stacked water rights which make up a portfolio or suite and will be part of a single lease contract will max out at \$500 filing fee. So, for example, in 2020 there was a single approved contract with 24 water rights and a filing fee of only \$500 because the rights are fully stacked. The max rights on a single lease contract range from 6 to 24, and average 15, while the average number of water rights per approved contract is just under two.

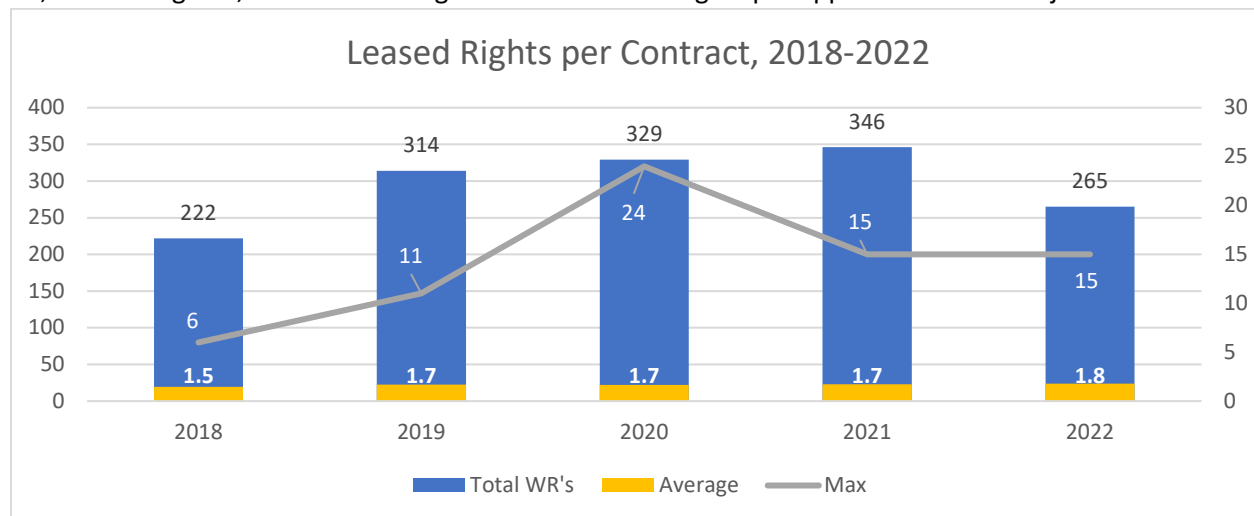


Chart 4, Average and maximum water rights on a single lease contract, 2018-2022

For years 2018 through 2022, the number of water rights offered per lease contract, and the actual fee charged and retained was analyzed in order to find what the actual increase in fees would be if the filing fee was increased. While this analysis provided in the table below does not include such complexities as whole versus partial water rights, or changing the maximum number of water rights charged a filing fee for stacked rights, it does show the actual revenue which was retained and the revenue which would have been retained if the base fees were increased based on the maximum charge for two or more water rights which are stacked. Additionally, the amounts within the table in bold font are the revenue for lease filing fees which would have covered leases costs, with Communication and Coordination, for that year.

Lease Filing Fees	Current Fee \$250/\$500	If fee was \$375/\$750	If fee was \$450/\$900	If fee was \$500/\$1000	If fee was \$750/\$1500
2018	\$48,000.00	\$72,000.00	\$86,400.00	\$96,000.00	\$144,000.00
2019	\$62,500.00	\$93,750.00	\$112,500.00	\$125,000.00	\$151,500.00
2020	\$66,000.00	\$99,000.00	\$118,800.00	\$121,000.00	\$198,000.00
2021	\$71,250.00	\$106,875.00	\$128,250.00	\$144,500.00	\$213,750.00
2022	\$49,250.00	\$73,875.00	\$88,650.00	\$98,500.00	\$147,750.00

Table 2, Lease filing fees retained and scenarios for increasing the base fee to reach operating costs , 2018-2022

Using the maximum required lease application filing fee of \$750/\$1500 and applying to all years within this analysis, 2018-2022, the deficit for lease costs with C&C should be close to covered. Using this information and applying to the same cost versus revenue analysis, the additional filing fees would have closed the costs in the years 2019-2022, but not 2018, falling nearly \$18,000 short, as seen in the last two lines of Image 2, below. Increasing the lease application filing fee would require proposed changes to the Water Supply Bank rules before Legislature, if adopted by the IWRB.

	2018	2019	2020	2021	2022
Lease Applications Processed	152	198	201	210	150
Cost per Application	\$ 543	\$ 352	\$ 263	\$ 319	\$ 437
Lease revenue from applications	\$ 48,000	\$ 62,500	\$ 66,000	\$ 71,250	\$ 49,250
Leases - Total Cost	\$ 112,248	\$ 94,065	\$ 66,403	\$ 88,986	\$ 82,233
Total cost w/ C&C	\$ 161,428	\$ 122,683	\$ 83,301	\$ 112,932	\$ 128,810
Leases - Gain/Loss	(\$64,248)	(\$31,565)	(\$403)	(\$17,736)	(\$32,983)
if Lease Filing Fee was max 750/1500	\$ 144,000	\$ 151,500	\$ 198,800	\$ 213,750	\$ 147,750
if then - Gain/Loss	\$ (17,428)	\$ 28,817	\$ 115,499	\$ 100,818	\$ 18,940

Image 2, Lease processing costs and revenue with highest application fee scenario applied, 2018-2022

Similarly, the average cost to process a rental application for years 2018-2022 increased to \$811 per application from an average of \$710 per application for years 2015-2019, as can be seen in the previous operating costs versus revenue spreadsheet on page 5. For the years 2018-2022, there were an average of 19.5 hours billed per rental application, or two times longer than the average for lease applications. There is not an application filing fee for rentals like there is for lease applications, and the only time revenue is received for rental applications is if they are ultimately approved and accepted, as an annual administrative fee, typically based on the volume which is rented.

Of the 103 rental applications reviewed in 2018, 84 resulted in an approved rental, and 54% of those generated an administrative fee of less than \$250. Not all rental applications take the same amount of

time to process, because the reason for rental and the location in the state, as well as timing for the application received, all impact the complexity of the request. Cost variations to processing rental applications by purpose, requests for changes in nature of use of the leased right(s) for the rental purpose, and locations of rental applications are examined below.

Timing of Rental Applications

Rental application processing begins on November 2nd, with select staff from the Water Allocations water rights section assisting with processing applications, beginning with lease processing in October and then shifting priorities to rental processing on November 2nd. After March 31st, staff from the water rights section are re-prioritized to other water right processes, with only the WSB Coordinator and Specialist dedicated to processing applications, and a water rights section supervisor to execute approvals on behalf of the Department and the IWRB. Rental applications received on or before November 1st (preceding the first rental calendar year) have equal priority for review, and any received after November 1st are reviewed in the order they are received, if any sufficient supplies remain. Most rental applications are received during and after the window of time when additional staff are assigned to assist with processing, as illustrated in Chart 5.

In 2021, 90% of the rental applications for 2021 were received after November 1st 2020, with 25 of the rental applications received during March of 2021 with an immediate start date request, and four of the rental applications were received as late as November 2021 with an immediate requested start date.

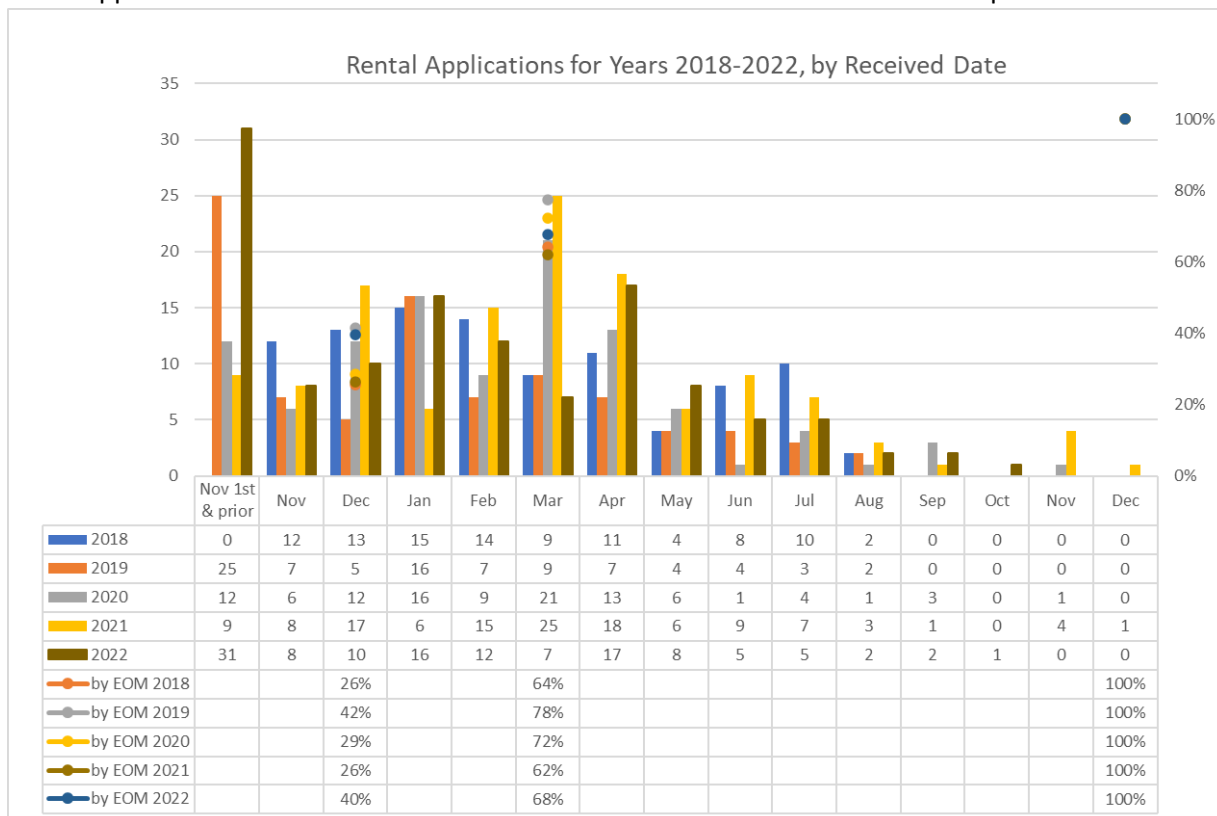


Chart 5, Rental applications for a year by received date, 2018-2022

Imposing a \$50 late filing fee for rental applications received after November 1 filing would have generated an additional \$5,700 based on 2021 data. Additionally, the number of spring late filings

received after February 1 represents 60% in 2020 and 70% in 2021. Proposing a late filing fee of \$50 for applications received after February 1 with a request to start during the same year received would have generated an additional \$4,350. Introducing a filing fee for rental applications would require resolution by the IWRB, and additional language within the Water Supply Bank rules since the rules are silent on rental application filing fees, and only reference rental fees which would be considered separate.

In 2021, 125 rental applications were submitted for a requested for a start in 2021. A base, or flat rental application fee of \$250, \$350, or \$500 would have resulted in \$30,750, \$43,050, or \$61,500 in rental application revenue, respectively. Alternatively, applying a scaled filing fee approach already in Idaho statute for filing fees of the Department, for applications of permanent transfers based on the diversion rate, pursuant to IC §§ 42-221(O),(1-6), would have resulted in \$64,920 for rental application fees for 2021, and \$48,960 in 2020. Since the fee amount is specific to the requested rate or volume on an application, the revenue per year would not be easily derived from simply the number of applications received, and therefore has only been calculated in two of the five years for an analysis.

Continuing from our earlier approach and analysis from page 5, a flat rental application filing fee of \$350, with the known retained administrative fee, would close the cost of processing and maintaining rental applications and the Research and Development costs for years 2018 and 2020-2022, although it falls \$9,037 short in 2019, as seen in the second to last line of Image 3, below. Alternatively, the last line for years 2020 and 2021 incorporates the fees which would have been imposed if rental application filing fees followed the filing fee schedule in IC §§ 42-221(O), for a different Gain/Loss than the \$350 filing fee scenario. The gain is more significant in the two years examined; however, it remains unknown whether there would be a gain or loss if calculated for the other three years.

	2018	2019	2020	2021	2022
Rentals Processed	103	88	105	125	119
Cost per Application	\$ 773	\$ 933	\$ 822	\$ 578	\$ 950
Rental revenue from admin fees	\$ 121,662.00	\$ 116,292.00	\$ 128,903.00	\$ 134,870.00	\$ 143,391.00
Rentals - Total Cost	\$ 104,252	\$ 103,870	\$ 114,756	\$ 99,071	\$ 134,250
Total Cost w/ R&D	\$ 143,301	\$ 156,129	\$ 157,055	\$ 129,098	\$ 161,766
Rentals - Gain/Loss	\$ (21,639)	\$ (39,837)	\$ (28,152)	\$ 5,772	\$ (18,375)
If rental app fee of \$350	\$ 157,712	\$ 147,092	\$ 165,653	\$ 178,620	\$ 185,041
if then - Gain/Loss	\$ 14,411	\$ (9,037)	\$ 8,598	\$ 49,522	\$ 23,275
if IC 42-221(O), then Gain/Loss	not evaluated	not evaluated	\$ 20,808	\$ 70,692	not evaluated

Image 3, Rental cost and revenue with application fee scenarios applied, 2018-2022

Withdrawn Rental Applications

The number of rental applications which were withdrawn or cancelled after an agreement was drafted and proposed, but before a rental fee could be collected represents 16% of the total applications received in 2021. The length of time reviewing and finalizing these rental applications to agreements ranges from one to five months, with a three-month average. Should paying renters be burdened with the additional cost to offset withdrawn and cancelled rental agreements? Non-refundable application filing fees should help to reduce the number of applications received and subsequently withdrawn, and if it does not at least the associated cost with partial administration of the application is recouped via an imposed filing fee schedule. This filing fee schedule could be set at a specific cost per application, or based on complexities, or triggers, of the rental which would cause longer review and processing times, and therefore higher costs to review. Similar to the current lease filing fees, denied or withdrawn

applications which were already under review would not have the filing fees returned to the applicant since the fees were expended during the review period.

Other considerations for generating revenue for rental applications in order to meet the operating costs associated with processing and maintaining rentals, as well as considering Research and Development is to implement fees specific to rental trends which increase processing times, and therefore operating costs.

Rental Beneficial use

The rental applications by use chart, below left, shows of the 123 approved rental application requests in 2021, 97 were for Irrigation. Examples of rental requests for irrigation by specific use are expanded from 2020 applications in the chart, below right, where growing a crop represented 73% of the irrigation requests. While there is not a proposed fee for rental requests of certain beneficial uses, it is important to understand for what purposes rentals are requested for, and while both charts are for two different years, each showed the most diversity of requests for that specific year.

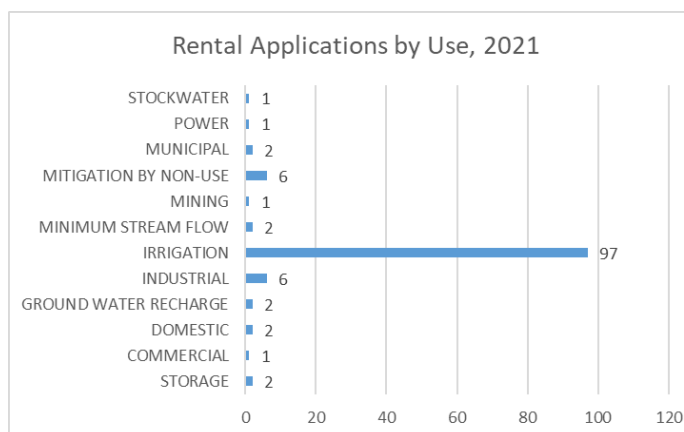


Chart 6, Rental applications by Beneficial Use, 2021

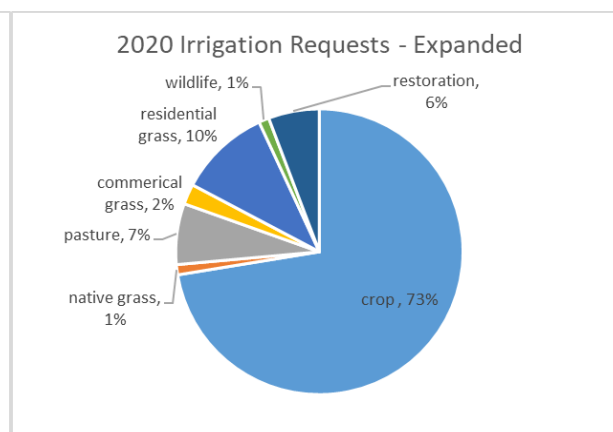


Chart 7, Specific irrigation use requested, 2020

Rental Change in Nature of Use

Conversely, a review of the rental applications received for 2021 found 21% had a Change in Nature of Use request of the leased right requested to the rental beneficial use requested. For example, renting an irrigation water right for mitigation or minimum streamflow maintenance. Change in Nature of Use requests are most often requested in either basins of short supply, or when the rental use is a use which a water right for the same purpose is not leased into the Bank. As was mentioned earlier, Section 42-221, Idaho Code has a fee schedule for permanent transfers, which includes an additional \$250 filing fee when the transfer includes a Change in Nature of Use. A change in nature of use requires more time to evaluate historic use, typically through Evapotranspiration Data and diversion records, to avoid enlargement through the rental. Implementing this same requirement and fee to the approved rental requests in 2021 would have generated an additional \$6,000.

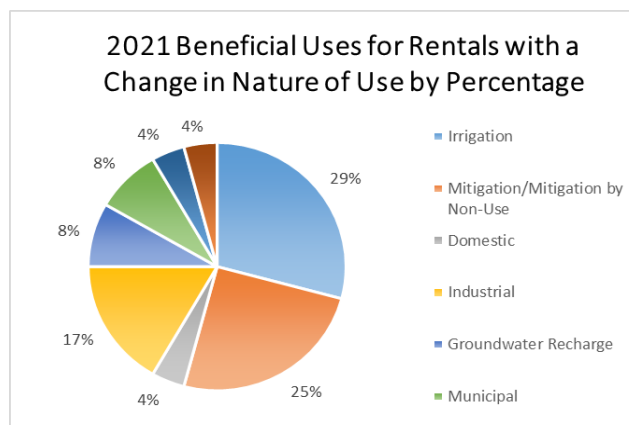


Chart 8, Change in Nature of Use by Beneficial Use, 2021

Location of Rental

Rental applications within a Ground Water Management Area (GWMA) or Critical Ground Water Area (CGWA), accounted for 65-70% of the rental applications received in 2020 and 2021. The 2020 GWMA Rental Applications in Chart 9, shows the number of rental applications for 2020 which had requested a ground water rental within a management area. While more than half of the rentals for diversion within a GWMA were within the Eastern Snake Plain Aquifer (ESPA), more importantly, ESPA rentals represented 40% of all rental applications received in 2020, shown in Chart 10, below right. ESPA rental requests are increasing each year and providing applicants with real-time accounting for available rights can be tedious and complex.

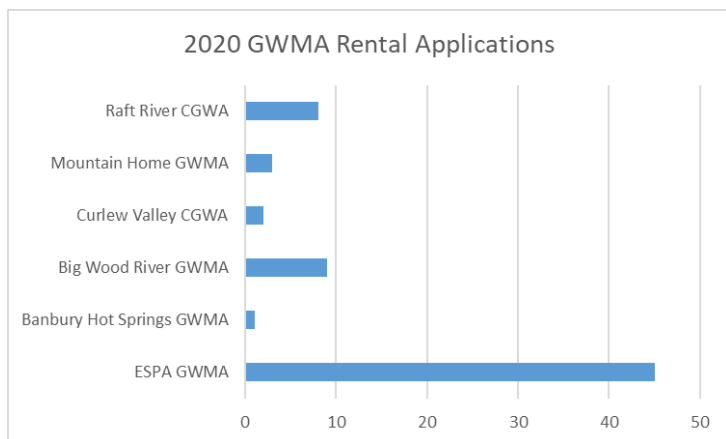


Chart 9, Rental applications for ground water in area of concern, 2020

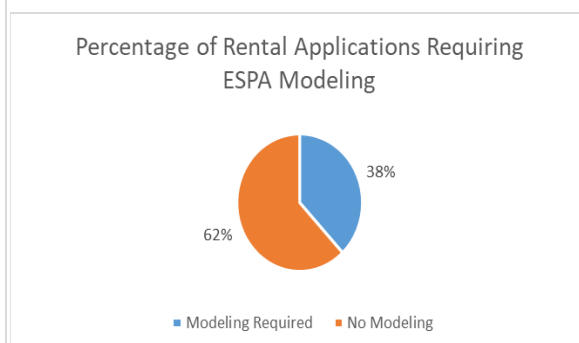


Chart 10, Eastern Snake Plain Aquifer Rental Applications , 2020

Verifying the water modeling required for ESPA and other certain rentals increases the review time for the agent processing the application. Pricing based on availability and by region has been discussed as a method for rentals from the Bank. Leased water within a GWMA/CGWAs is in high demand, and it takes additional review time to ensure there will be no injury. Reporting to representatives, applicants, and watermasters on leased and rented rights is commonly requested for ground water management areas, especially in the ESPA and Big Wood River areas. Introducing a \$50 rental processing fee for ground water diversions within a GWMA/CGWA would have generated \$3,400 in 2020 and \$3,950 in 2021. Adding an additional \$200 rental processing fee for ground water diversions in the ESPA, and/or rentals in which water modeling is required, would have generated \$9,000 in 2020 and \$9,400 in 2021. Both of these fees would help to cover the actual processing and maintenance costs of rentals within areas of ground water concern.

At right in Image 4 is a snapshot of the ground water rental diversions active during 2023 in Idaho, marked as purple squares. The large red outline is the ESPA, and other GWMA's have yellow borders. This snip helps to illustrate the roughly 70% of rentals in an area of concern. This mapping tool is available on IDWR's public site, under Water Supply Bank Resources.

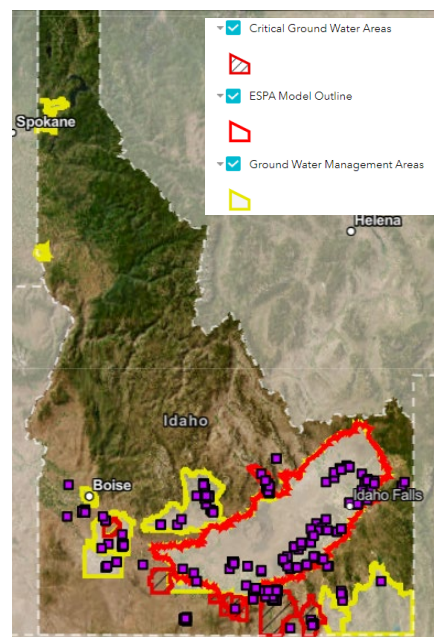


Image 4, WSB ground water rentals, 2023

Rentals within Ground Water Districts (GWD) were also examined as part of this analysis, shown in Chart 11, although no additional fees are proposed for these rentals. Rental requests within a GWD represented 39% of the active applications in 2021, and 53% of new applications in 2021. While Galena rentals outnumbered other GWDs with 44 of the 233 active rentals in 2021, it is important to note the rest of the GWDs at right have 50% or more of their boundary area within the ESPA.

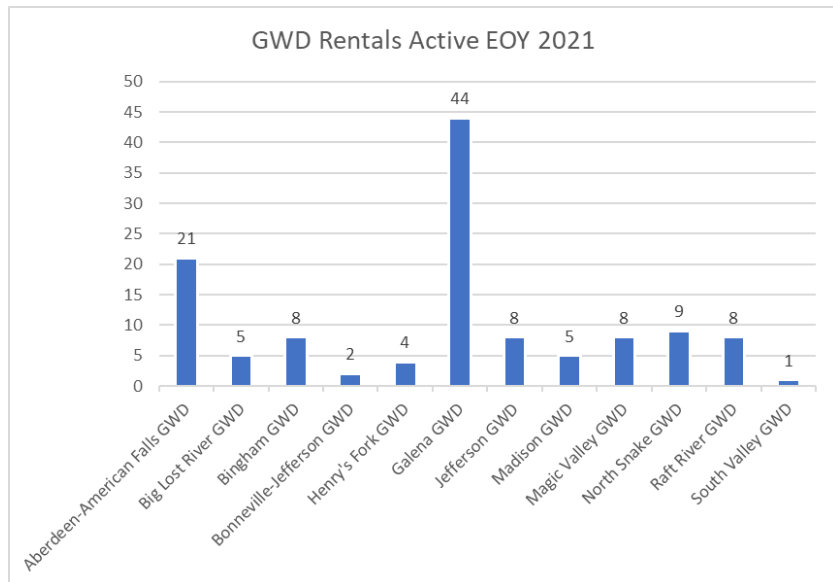


Chart 11, Ground water rentals within a ground water district, 2021

Stakeholder Sentiment

In 2018, the WSB program began an outreach initiative, through the Continuous Improvement Framework. As part of this initiative, a survey was created and sent to stakeholders in 2018, 2019, and 2020, as stages based on stakeholder group for their opinions on various questions pertaining to five core resources: Human, Knowledge, Technology, Water Supply, and Financial Resources.

Table 2 tabulates responses to certain questions about Water Supply and Financial Resources by two different stakeholder groups: water users (lessors and renters) and watermasters. Some important findings include:

The Bank should maintain a list of available rights; 75% agree or are not opposed to implementing a rental filing fee; although 50% said a \$250 filing fee would be too high, another 40% found it to be acceptable. Finally, 78% agree or did not oppose variable rental pricing.

Financial	Watermasters & Water District Staff	Water Users & Representatives
<i>The Water Supply Bank should maintain a list of water rights that are available for purchase (Q25)</i>	65%	100% agree, or do not disagree
<i>The Water Supply Bank should actively seek to purchase water rights that can be sold by the Bank (Q26)</i>	55%	62% agree, or do not disagree
<i>The annual operational costs of the Water Supply Bank program should be fully and completely offset through the collection of fees from leases and rentals (Q28)</i>	75%	62%
<i>I support instituting a rental application filing fee to meet operational costs (Q32)</i>	65%	75% agree, or do not disagree
<i>A rental application filing fee of \$250 seems: TOO HIGH (Q33)</i>	60%	50% too high, 38% acceptable
<i>I support variable rental prices, based on different water use considerations, such as diversion rate, irrigable acres, diversion volumes, location, priority date, etc (Q34)</i>	85%	78% agree, or do not disagree

Table 3, Stakeholder sentiment on WSB finance questions

Rental Administrative Fee

The minimum administrative fee, equal to 10% of the rental rate, which was received on a 2020 rental approval was \$4.00 for fish propagation storage offset. Nearly 33% of all rental applications approved in 2020 generated under \$100 in administrative fees per approval. The maximum administrative fee received on a 2020 rental approval was \$8,542.00 for crop irrigation. Of all the rental applications approved in 2020 and shown in Chart 12 below, about 70% generated less than \$700 in administrative fees each.

Comparatively, in 2021, 51 of the approved rentals resulted in an annual administrative fee of less than \$200, and 73 generated less than \$500. Applying a minimum \$200 administrative fee in 2021 for the 51 rentals would have generated an additional \$7,760 and applying a \$500 minimum to the 73 rentals would have generated an additional \$38,350 in revenue.

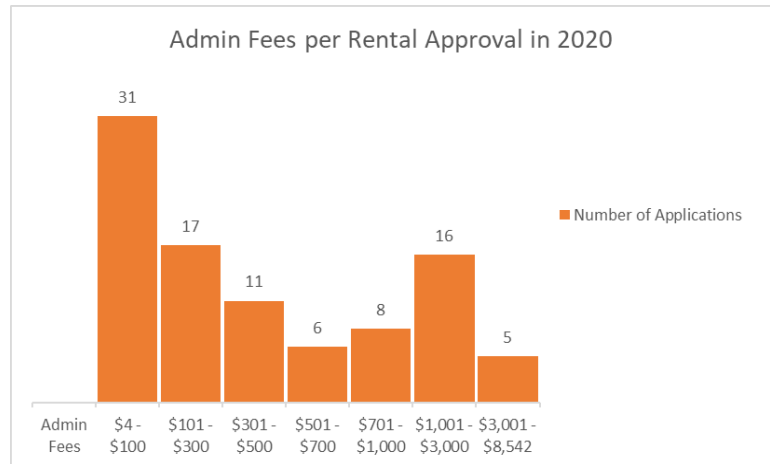


Chart 12, Approved rental applications, by administrative fees, 2020

Alternatively, if the rental rate was raised, the amount retained for the 10% administration fee would also increase. Several different scenarios have been explored in earlier reports, such as the Rental Pricing Framework published in 2019. Table 4 illustrates an analysis of the actual volume charged from approved rentals, the associated rental admin fee retained, and the rental fee which would need to be implemented to meet the operating costs of the bank (Operating cost minus the revenue received from lease filing fees divided by volume charged), per year.

Year	Current Rental fee	Volume Charged	Average 10% Admin Fee per Acre-Ft	Revenue 10% Admin Fees	Billed Hours Operating Costs	Deficit	10% Admin Fees to meet deficit	Revenue Rental Fees @ \$3.25 ave + Actual Lease Fees	Revenue Rental Fees @ \$4.21 max + Actual Lease Fees	New Loss/Gain with \$3.25 Rental Fee	New Loss/Gain with \$4.21 Rental Fee
2022	\$20/af	73,439.3	\$ 1.95	\$143,391.17	\$ 287,884.10	\$ (95,242.93)	\$ 3.25	\$ 287,927.86	\$ 358,429.63	\$ 43.76	\$ 70,545.53
2021	\$20/af	68,997.2	\$ 1.95	\$134,870.82	\$ 242,062.11	\$ (37,192.00)	\$ 2.49	\$ 295,490.79	\$ 361,728.07	\$ 53,428.68	\$ 119,665.96
2020	\$20/af	65,283.9	\$ 1.97	\$128,903.16	\$ 240,165.86	\$ (45,537.00)	\$ 2.67	\$ 278,172.56	\$ 340,845.07	\$ 38,006.70	\$ 100,679.21
2019	\$20/af	59,712.0	\$ 1.95	\$116,292.27	\$ 276,948.00	\$ (98,557.00)	\$ 3.60	\$ 256,564.07	\$ 313,887.60	\$ (20,383.94)	\$ 36,939.60
2018	\$20/af	60,831.0	\$ 2.00	\$121,662.00	\$ 304,306.00	\$ (134,644.00)	\$ 4.21	\$ 245,700.75	\$ 304,098.51	\$ (58,605.25)	\$ (207.49)
average							\$ 3.25		sum	\$ 12,489.96	\$ 327,622.81
2018 in red is estimated from annual report, not verified											

Table 4. Minimum rental rate required to meet operating costs. 2018-2022

As you can see, the minimum rental rate required varies greatly between each of the five years examined, with a maximum rate of \$42.10 per acre-foot in 2018 (the same year with the highest operating cost), an average over the five years of \$32.50 per acre-foot, and the lowest cost per acre-foot of \$24.90 based on 2021 data. Both the average price of \$3.25 and maximum of \$4.21 are multiplied by the actual volume charged for each of the five years to find the admin fee revenue which would have

been generated if that were the rental fee imposed over those five years. This is then summed with the actual lease filing fees retained for the specific year, to find the new loss or gain in the final two columns. The average rental fee of \$32.50, where the 10% equal to \$3.25 per acre-foot charged would have been retained, along with the lease filing fees retained for the same year, would have closed the operating balance in three of five of the years examined, missing 2018 and 2019 targets, but also barely meeting the operating costs in 2022 by \$43.76. It is clear from the data that a rental fee of just above \$42.10, along with the retained annual lease filing fees, would sufficiently cover the operating costs in all years, although that price would be double the actual rental fee charged for the same period.

Lease Maintenance

Finally, rental agreements are not the only transactions with annual maintenance costs; warrant payments to the owner of each right leased and conclusion notices, as well as changes to ownership and water right splits, are all associated with lease contracts. Typical lease contracts are five years in length, with about 500 active lease contracts for a five-year term in 2021. In total, there were 634 active lease contracts in 2021, and 555 active lease contracts in 2020.

Multiple lease contracts are often combined to fulfil a single rental request. Some lease contracts have multiple water rights, which could be owned by different people, and some individual water rights are split between multiple owners, or request 50/50 payment to joint owners of a right. Calculating and consolidating payments made to each individual water right from multiple rental agreements, and then dividing into each owner of that particular right, is a complex accounting practice. There were over 420 credits to individual water rights for rentals in 2021, which resulted in warrant payments to 108 individual water right owners. Additionally, 140 of the 622 lease contracts expired at the end of 2021, of which most were multi-year contracts, and a notice of expiration is sent in advance of their end date to prompt new filings. As was reported in the 2020 & 2021 WSB Annual Report, and again on page 5 of this report, there were 1,290 hours spent on transaction management in 2021, of which 45% of those hours were for lease management.

Applying an annual maintenance fee of \$50 per active lease contract, including new approvals, to cover the cost of managing leases in 2021 would have returned \$31,100 in additional revenue. This fee would help cover costs associated with calculating and issuing payments, concluding contracts, ownership changes for changing or adding new owners, amendments to contracts for transfers which split water rights under contract, and all document processing and electronic filing.

Closing the Gap – Incorporating Lease and Rental Fee Scenarios

The following table incorporates all of the lease and rental fee scenarios suggested within this report for the years 2018 through 2022 and is divided into three sections: Lease Costs and Revenue with C & C costs; Rental Costs and Revenue with R & D costs; and Operating Balance. Dollar amounts are calculated from all data available, while the italicized amounts are assumptions made on calculated values.

Current and Proposed Revenue vs Actual Cost		2018	2019	2020	2021	2022	
Cost	Communication & Coordination Cost	\$ 49,179.81	\$ 28,617.75	\$ 16,898.07	\$ 23,946.18	\$ 46,576.60	
	Current Lease Costs	\$ 112,247.91	\$ 94,065.30	\$ 66,403.29	\$ 88,986.12	\$ 82,233.14	
	Sum Total of C&C and Lease Costs	\$ 161,427.72	\$ 122,683.05	\$ 83,301.36	\$ 112,932.30	\$ 128,809.74	45%
Revenue	Lease application filing fee (Current cost \$250/water right with \$500 max)	\$250, max \$500	\$ 48,000.00	\$ 62,500.00	\$ 66,000.00	\$ 71,250.00	\$ 49,250.00
		If Partial, \$500, max \$1000	\$ 67,200.00	\$ 87,500.00	\$ 92,400.00	\$ 101,500.00	\$ 68,950.00 ¹
		\$375, max \$750	\$ 72,000.00	\$ 93,750.00	\$ 99,000.00	\$ 106,875.00	\$ 73,875.00
		\$450, max \$900	\$ 86,400.00	\$ 112,500.00	\$ 118,800.00	\$ 128,250.00	\$ 88,650.00
		\$500, max \$1000	\$ 96,000.00	\$ 125,000.00	\$ 121,000.00	\$ 144,500.00	\$ 98,500.00
		\$750, max \$1500	\$ 144,000.00	\$ 151,500.00	\$ 198,000.00	\$ 213,750.00	\$ 147,750.00
	Number of applications		152	198	201	210	150
	Lease Maintenance Fee (None currently in place)	\$50 / year	\$ 25,200.00	\$ 33,900.00	\$ 33,750.00	\$ 31,100.00	\$ 29,650.00
		Number of active contracts	504	678	675	622	593
	Current Lease Revenue		\$ 48,000.00	\$ 62,500.00	\$ 66,000.00	\$ 71,250.00	\$ 49,250.00 ^{22%}
Cost	Research & Development Cost	\$ 39,048.96	\$ 52,258.50	\$ 42,299.22	\$ 30,027.15	\$ 27,515.42	
	Current Rental Costs	\$ 104,252.16	\$ 103,870.21	\$ 114,755.55	\$ 99,070.71	\$ 134,250.20	
	Sum Total of R&D and Rental Costs	\$ 143,301.12	\$ 156,128.71	\$ 157,054.77	\$ 129,097.86	\$ 161,765.62	55%
Revenue	Rental application filing fee (None currently in place)	\$250	\$ 25,000.00	\$ 22,000.00	\$ 25,000.00	\$ 30,750.00	\$ 28,750.00
		\$350	\$ 35,000.00	\$ 30,800.00	\$ 35,000.00	\$ 43,050.00	\$ 40,250.00
		\$500	\$ 50,000.00	\$ 44,000.00	\$ 50,000.00	\$ 61,500.00	\$ 57,500.00
		IC § 42-221	\$ 45,000.00	\$ 39,600.00	\$ 48,960.00	\$ 64,920.00	\$ 51,750.00 ²
	Rental Application Add On Fees (None currently in place)	Nov Late fee \$50	\$ 1,236.00	\$ 2,816.00	\$ 4,500.00	\$ 5,700.00	\$ 4,105.50 ³
		& Feb Late Fee \$50	\$ 2,420.50	\$ 1,760.00	\$ 3,200.00	\$ 4,350.00	\$ 2,915.50 ⁴
		Or Feb Late Fee \$100	\$ 4,841.00	\$ 3,520.00	\$ 6,400.00	\$ 8,700.00	\$ 5,831.00 ⁵
		GWMA \$50	\$ 3,090.00	\$ 2,640.00	\$ 3,400.00	\$ 3,950.00	\$ 3,570.00 ⁶
		ESPA \$200	\$ 8,240.00	\$ 7,040.00	\$ 11,000.00	\$ 9,400.00	\$ 9,520.00 ⁷
		Change in Use \$250	\$ 5,150.00	\$ 4,400.00	\$ 6,000.00	\$ 6,000.00	\$ 5,950.00 ⁸
		Number of applications	103	88	105	125	119
	Rental Admin Fee 10% (Rental rate currently \$20/acre-foot; Increases to \$23/acre-foot 2023)	\$20/acre-foot	\$ 121,662.00	\$ 116,292.27	\$ 128,903.16	\$ 134,870.82	\$ 143,391.17
		\$25/acre-foot, increase	\$ 30,415.50	\$ 149,280.00	\$ 163,209.75	\$ 172,493.00	\$ 183,598.25
		\$30/acre-foot	\$ 182,493.00	\$ 179,136.00	\$ 195,851.70	\$ 206,991.60	\$ 220,317.90
		\$35/acre-foot	\$ 212,908.50	\$ 208,992.00	\$ 228,493.65	\$ 241,490.20	\$ 257,037.55
		\$40/acre-foot	\$ 243,324.00	\$ 238,848.00	\$ 261,135.60	\$ 275,988.80	\$ 293,757.20
		\$45/acre-foot	\$ 273,739.50	\$ 268,704.00	\$ 293,777.55	\$ 310,487.40	\$ 330,476.85
	Minimum Admin Fee (None currently in place)	Min admin \$100	\$ 2,798.23	\$ 2,674.72	\$ 2,964.77	\$ 3,102.03	\$ 3,298.00 ⁹
		Min admin \$200	\$ 8,516.34	\$ 8,140.46	\$ 9,023.22	\$ 9,440.96	\$ 10,037.38 ¹⁰
	Number of Active Agreements		107	184	192	207	224
	Current Rental Revenue		\$ 121,662.00	\$ 116,292.27	\$ 128,903.16	\$ 134,870.82	\$ 143,391.17 ^{48%}
Cost	Total Operating Costs		\$304,306.00	\$276,948.00	\$240,165.86	\$242,062.11	\$287,884.00 ^{100%}
Revenue	Total Current Revenue		\$ 169,662.00	\$ 178,792.00	\$ 194,903.00	\$ 206,120.00	\$ 192,641.00 ^{70%}
Balance	Operating Balance - Gain/Loss		\$ (134,644.00)	\$ (98,156.00)	\$ (45,262.86)	\$ (35,942.11)	\$ (95,243.00) ^{-30%}

1 – 2021 value calculated by actual approvals. Increase in fee amount equal to 42.5%

2 – 2020 & 2022 values calculated by actual approvals. Dollar estimates in 2018, 2019, & 2022 is 90% of \$500 filing fee.

3 – data in 2018 based on 2019-2022 average of 76% of application filings arriving after November 1st

4 & 5– data in 2018 based on 2019-2022 average of 54% of application filings arriving after February 1st

6 – Dollar estimates in 2018, 2019, & 2022 are 60% of approvals, based on 64% of 2020 and 67% of 2021 values calculated from actual approvals.

7 – Dollar estimates in 2018, 2019, & 2022 are 40% of approvals, based on 38% of 2020 & 44% of 2021 values calculated from actual approvals.

8 – Dollar estimates in 2018, 2019, & 2022 are 20% of approvals, based on 2020 & 2021 20% values calculated from actual approvals.

9 – Dollar estimates across each of the five years are based on a 2% increase. The revenue increase calculated from setting a minimum on actual administrative fees levied for 2020 approvals was 2.3% and 3.6% in 2021.

10 – Dollar estimates across each of the five years are based on a 7% increase. The actual increase for 2020 approvals was 7% and 9.2% in 2021.

The previous table provides an opportunity at estimating the income which would have been received across the five-year span, if certain fees had been in place at the time. Additionally, there are percentages to the right of the costs, revenues, and operating balance, which represent the percent that line fulfills the operating costs. For example, the sum of Leases and C & C with the sum of Rentals and R & D equal 100% of the Operating Costs, as they should. The revenue from Leases is only 22% of the Total Operating Cost, and Rentals is only 48% of the Total Operating Cost, leaving 30% of revenue deficit, which is supported by the Operating Deficit percentage of 30%.

The choices then are to either balance the budget by leases to 50% and rentals to 50%, or to offset the operating costs in one or the other. Another important factor to consider is that the dollar amount in a section may be the additional revenue, or the total revenue, depending on if there was a base fee already in place. For example, there is a lease filing fee of \$250 per water right with a max of \$500 per water right when stacked, with a revenue of \$48,000 received in 2018. If the filing fee instead was increased to the 'If partial, \$500, max \$1,000,' then the new revenue to replace the \$48,000 in 2018 would be \$67,200. The amount in 2021 was calculated after identifying whether the rights which were ultimately accepted into the bank were either for a portion, or for the entire rights, and from the fee which was received, the new fee would be applied to the applications with only a portion offered and the actual amount received remained for the whole applications. Of the applications received in 2021, 40% offered only portions of the water rights, and the increase in revenue was 42.5%. By assuming a slightly less increase of 40% for other years, the 40% was then applied to the other years to estimate the amount in revenue which would have been collected, if the same were applied. Alternatively, fees which would be new to the program have the dollar amount of increase that could be expected if they were applied. For example, adding the lease maintenance fee would add another \$25,200 in revenue for 2018.

Recommendation

Based on the available data within this report, there are a number of ways in which the IWRB and program could move forward to balancing the bank, with the first to simply increase the rental fee, which would only require passing a resolution by the IWRB. Increasing the rental rate to \$42.10 per acre-foot across all rentals has shown it would have filled the last 30% of operating costs in 2018 and resulted in a gain in other years. There is also the option to increase the rental fee to only \$25 or \$30 per acre-foot for most rentals, except when they are for ground water in a designated area of concerns, like Ground Water Management Areas, where the fee could be raised to much higher, at \$50 per acre-foot. While variable pricing depending on source or location has not been fully explored for the WSB, if supported, this option can be analyzed for the same five-year period. Increasing the rental fee within areas of concern could also incentivize lessors to place their rights into the bank for availability, since their return would be much higher. The current rental fee, as of the writing of this report, is at \$23 per acre-foot in 2023, with no increase set for a future date.

If an increase in rental fees was considered for adoption, the date or year on which the new fee would go into effect would be of importance/significance. Rental agreements which were approved for five-year terms in 2022 are set to expire in 2026, and as of the writing of this report, 2024 rentals are currently under review and approval, with the five-year terms set to expire in 2028. Additionally, and as was mentioned much earlier in this analysis in regard to lease filing fees, it would also be advisable to

consider inflation in setting a schedule for increasing rental fees, while also weighing the economic cost to renters, both commercial and private.

Other options examined within this report would be to increase the lease application fee, introduce a lease maintenance fee, introduce a rental application fee, and any add on amounts for requests such as a Change in Nature of Use, or to even adopt the filing fee schedule of the Department, pursuant to IC §§ 42-221(O). These changes in fees would require modification to the Water Supply Bank Rules, IDAPA 37.02.03, in order to change the lease fee in rule, introduce language for rental filing fees, or referencing to IC §§ 42-221(O).

If the IWRB decides to work towards updating the WSB rules in pursuit of increasing fees to cover the operating costs, my recommendation for the new fees would be: Increase lease application filing fees for partial water rights to \$500, with max of \$1,000; Add a Lease Maintenance Fee of \$50 per approved lease contract, paid upfront at the time it is accepted by the lessor for all years of the contract (i.e., a five year contract would require \$250 upon approval for the five years of maintenance); Introduce a Rental Application Filing Fee of \$250 with the add on fees for an additional \$100 for applications received after February 1st with requests to begin the same year and the \$50 Change in Nature of Use fee; Increase the rental fee rate to \$30 per acre-foot; and modify the admin fee to 10% of the rental rate or \$100 per year, which ever is greater. Applying these seven options to all five years results in a positive operating balance for the years 2018-2022, of \$8,376, \$56,182, \$122,200, \$146,000, and \$74,862, respectively, as summarized in the following simplified table for comparison.

Current and Proposed Revenue vs Actual Cost			2018	2019	2020	2021	2022
Cost	Communication & Coordination Cost		\$ 49,179.81	\$ 28,617.75	\$ 16,898.07	\$ 23,946.18	\$ 46,576.60
	Current Lease Costs		\$ 112,247.91	\$ 94,065.30	\$ 66,403.29	\$ 88,986.12	\$ 82,233.14
	Sum Total of C&C and Lease Costs		\$ 161,427.72	\$ 122,683.05	\$ 83,301.36	\$ 112,932.30	\$ 128,809.74
Revenue	Lease application filing fee	\$250, max \$500	\$ 48,000.00	\$ 62,500.00	\$ 66,000.00	\$ 71,250.00	\$ 49,250.00
	(Current cost \$250/water right	If Partial, \$500, max \$1000	\$ 67,200.00	\$ 87,500.00	\$ 92,400.00	\$101,500.00	\$ 68,950.00
	Number of applications		152	198	201	210	150
	Lease Maintenance Fee	\$50 / year	\$ 25,200.00	\$ 33,900.00	\$ 33,750.00	\$ 31,100.00	\$ 29,650.00
	(None currently in place)	Number of active contracts	504	678	675	622	593
	Current Lease Revenue		\$ 48,000.00	\$ 62,500.00	\$ 66,000.00	\$ 71,250.00	\$ 49,250.00
Cost	Research & Development Cost		\$ 39,048.96	\$ 52,258.50	\$ 42,299.22	\$ 30,027.15	\$ 27,515.42
	Current Rental Costs		\$ 104,252.16	\$ 103,870.21	\$ 114,755.55	\$ 99,070.71	\$ 134,250.20
	Sum Total of R&D and Rental Costs		\$ 143,301.12	\$ 156,128.71	\$ 157,054.77	\$ 129,097.86	\$ 161,765.62
Revenue	Rental application filing fee	\$250	\$ 25,000.00	\$ 22,000.00	\$ 25,000.00	\$ 30,750.00	\$ 28,750.00
	Rental Application Add On Fees (None currently in place)	Or Feb Late Fee \$100	\$ 4,841.00	\$ 3,520.00	\$ 6,400.00	\$ 8,700.00	\$ 5,831.00
		Change in Use \$250	\$ 5,150.00	\$ 4,400.00	\$ 6,000.00	\$ 6,000.00	\$ 5,950.00
	Number of applications		103	88	105	125	119
	Rental Admin Fee 10%	\$20/acre-foot	\$ 121,662.00	\$ 116,292.27	\$ 128,903.16	\$ 134,870.82	\$ 143,391.17
	(Rental rate currently \$20/acre-foot;	\$30/acre-foot	\$ 182,493.00	\$ 179,136.00	\$ 195,851.70	\$ 206,991.60	\$ 220,317.90
	Minimum Admin Fee	Min admin \$100	\$ 2,798.23	\$ 2,674.72	\$ 2,964.77	\$ 3,102.03	\$ 3,298.00
	Number of Active Agreements		107	184	192	207	224
Current Rental Revenue		\$ 121,662.00	\$ 116,292.27	\$ 128,903.16	\$ 134,870.82	\$ 143,391.17	
Cost	Total Operating Costs		\$304,306.00	\$276,948.00	\$240,165.86	\$242,062.11	\$287,884.00
Revenue	Total Current Revenue		\$ 169,662.00	\$ 178,792.00	\$ 194,903.00	\$ 206,120.00	\$ 192,641.00
Balance	Operating Balance - Gain/Loss		\$ (134,644.00)	\$ (98,156.00)	\$ (45,262.86)	\$ (35,942.11)	\$ (95,243.00)
	New Revenue with options		\$ 312,682.23	\$ 333,130.72	\$ 362,366.47	\$ 388,143.63	\$ 362,746.90
	New Gain/Loss		\$ 8,376.23	\$ 56,182.72	\$ 122,200.61	\$ 146,081.52	\$ 74,862.90