



Water Supply Bank

2016 Report for the Board's Water Supply Bank

Executive Summary

The Idaho Water Supply Bank (Bank) is the temporary water right and storage water exchange market operated by the Idaho Water Resource Board (Board). There are two divisions of the Water Supply Bank: water district rental pools, in which allocations of storage water can be rented, and The Board's Bank, in which natural flow surface and ground water rights are leased and rented. This report summarizes calendar year 2016 lease and rental transactions in The Board's Bank.

Demand to lease water rights into the Bank declined in 2016, as evidenced by a drop in the number of water rights being leased. However, demand for rental water rights remained strong and the total number and associated water volumes of water rights being rented was only slightly down from 2015. More than six hundred thousand dollars was paid out to water right holders whose water rights were rented from the Bank during 2016.

Continued advances in early-season application processing enabled the Board's Bank to process more lease and rental applications earlier in the year, which was beneficial as processing power declined during the summer.

2016 Accomplishments

Key accomplishments of the Water Supply Bank include:

- Efficient early (fall and winter season) processing of lease and rental applications enabled the Bank to execute a significant number of lease and rentals transactions in advance of the irrigation season, which further supported Department efforts to have staff conduct field work in the summer;
- Software development of a lease rental application processing and management system was concluded and all future transactions will be archived and stored in the databases system.

2016 Activity Summary

As evidenced by the graph below, demand to deposit water rights into the Bank declined during 2016, though requests to rent water rights remained strong.

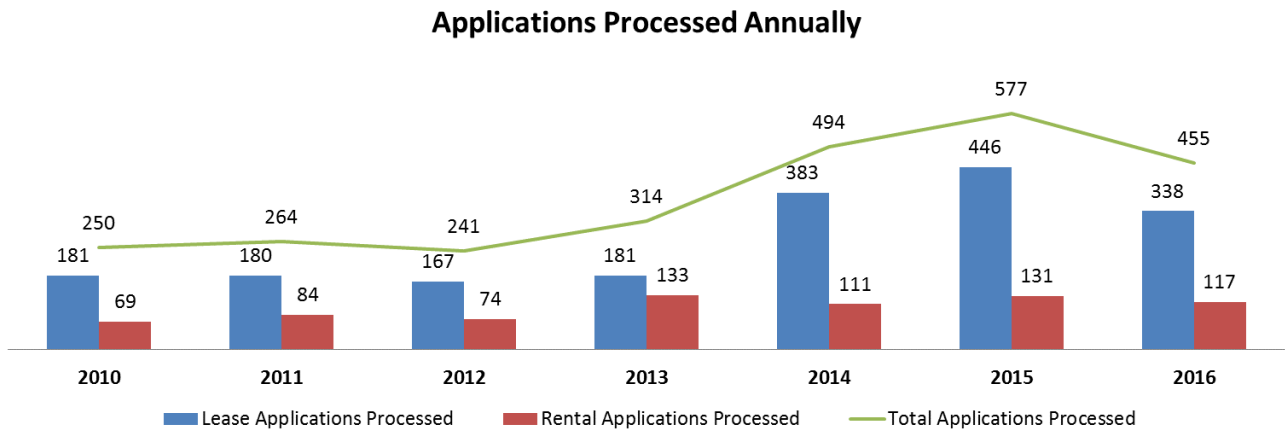


Chart 1. Total applications processed, 2010 - 2016

The Water Supply Bank requires one lease application per water right and one rental application per requested beneficial use. The cost to submit a lease application is \$250. Where multiple water rights are stacked together, the Bank caps the lease application filing fee at a maximum of \$500. There is no cost to submit a rental application.

The 338 water rights proposed for deposit into the Bank during 2016 was a decline of 108 water rights (or -24%) from the previous year high of 446 water rights leased in 2015. Interestingly, the 24% decline in total water right leases corresponded with a 38% decline in revenue from leases during 2016 (\$49,000 was received from processing leases in 2016, a decrease of \$29,000 from the 2015 high of \$78,000).

Though the total number of water rights being leased into the Bank declined during 2016, the total number of water rights being transferred through the Bank to authorize a simultaneous rental (referred to as companion applications) increased during 2016.

Companion Applications

Though the total number of applications processed last year declined, the proportion of lease and rental applications processed to authorize pre-negotiated transactions, referred to as companion applications, was up significantly. As chart two shows below, 132 of 338 water rights proposed for lease into the Bank during 2016, approximately two of every five water rights, were leased into the Bank to authorize a companion rental application.

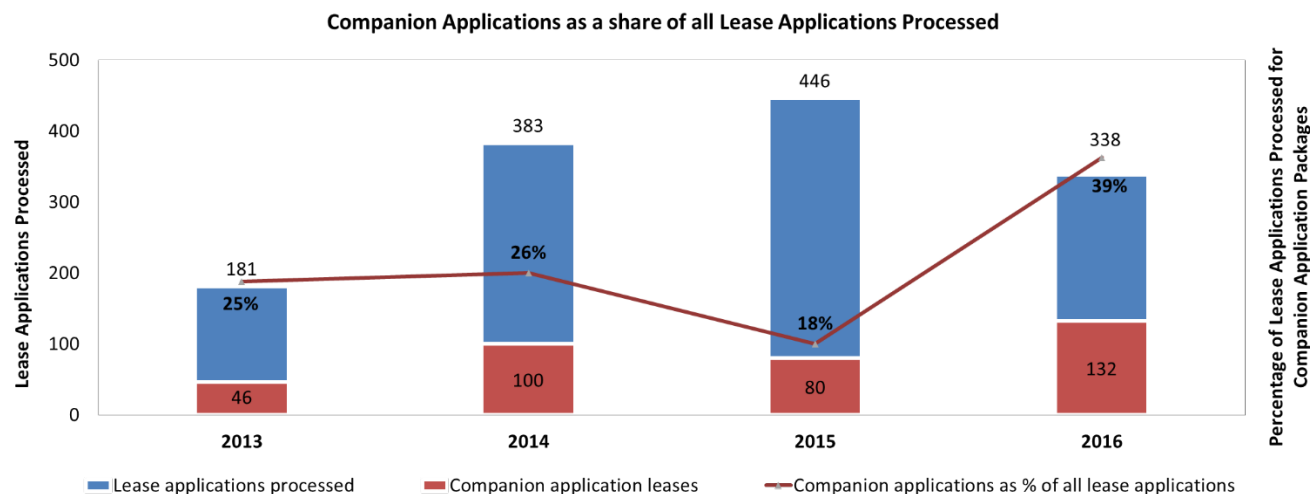


Chart 2. Companion applications as a percentage of lease applications, 2013-2015

Corresponding to the increase in the proportion of leases submitted to accommodate rentals, the total number of pre-established lease and rental packages processed in 2016 was up during 2016, from 125 in 2015, to 181 in 2016, an increase of 45%.

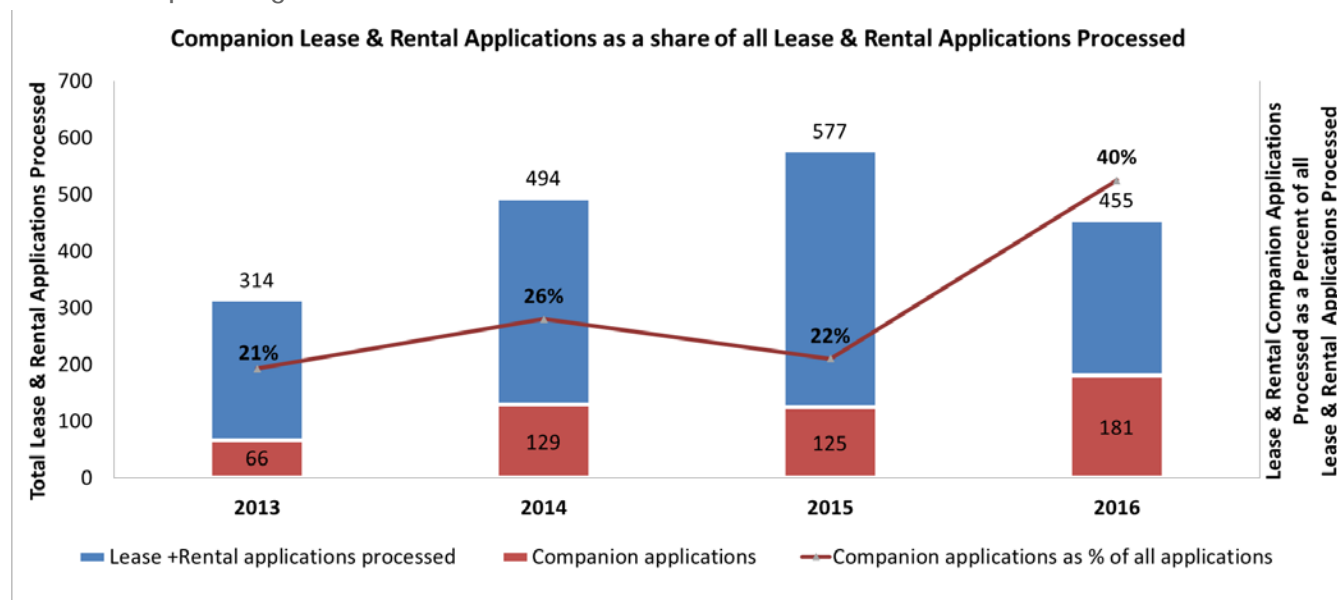


Chart 3. Companion applications as a percentage of all Bank applications, 2013- 2015

Applications Processing Times

Staying consistent with efforts begun in 2014, the Bank continued to process as many rentals as early as possible. Whereas prior to 2014, the Bank processed a majority of rentals in April, May, June and July, the most active months for the executing rental requests during 2016 was January, February and March, an improvement over the previous success in processing a majority of 2015 rentals during March, April and May.

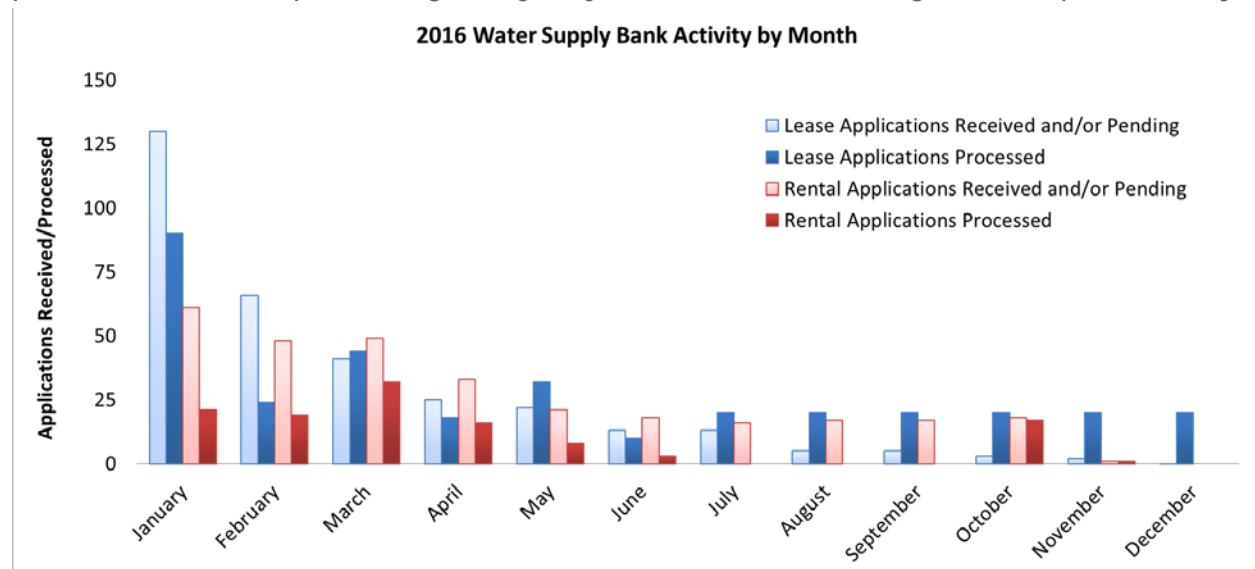


Chart 4. Lease and Rental Application Processing, by month, during 2016

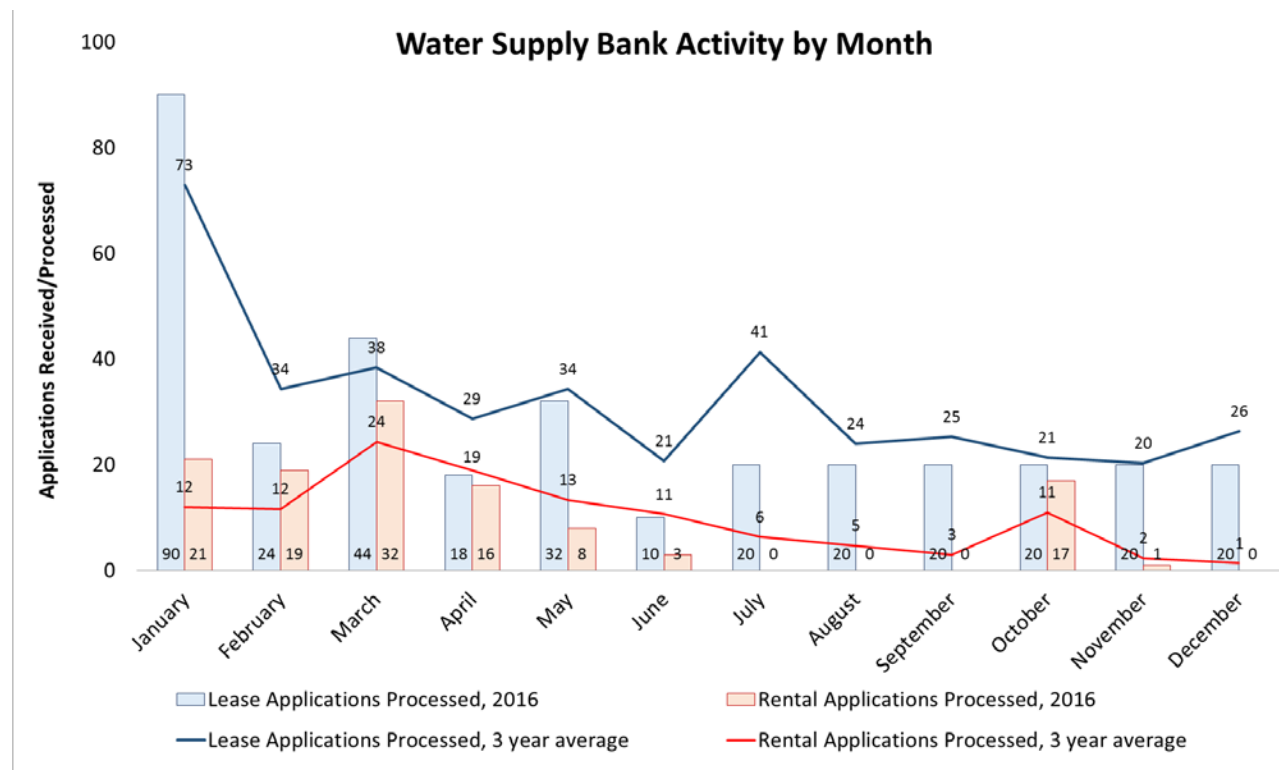


Chart 5. 2015 Application Processing & Processing Averages, 2014-2016

As evidenced in Chart 5 where the red bar is above the red trendline, a greater than average number of rental requests were processed in the months of January through March during 2016. The payoff from this effort was that water users who submitted rental requests during late 2015 or early 2016 received certainty that they had authorized rentals prior to the irrigation season. The total number of lease and rental applications received and processed in 2015 is summarized in Table 1 below.

Month	Lease Applications Received	Lease Applications Pending	Lease Applications Processed	Rental Applications Received	Rental Applications Pending	Rental Applications Processed	Total Applications Received	Total Applications Pending	Total Applications Processed	Lease App Percentage Processed	Rental App Percentage Processed
January	130	130	90	61	61	21	191	191	111	81%	19%
February	26	66	24	8	48	19	34	114	43	56%	44%
March	41	41	44	20	49	32	61	90	76	58%	42%
April	28	25	18	16	33	16	44	58	34	53%	47%
May	22	22	32	4	21	8	26	43	40	80%	20%
June	23	13	10	5	18	3	28	31	13	77%	23%
July	13	13	20	1	16	0	14	29	20	100%	0%
August	12	5	20	1	17	0	13	22	20	100%	0%
September	5	5	20	0	17	0	5	22	20	100%	0%
October	18	3	20	1	18	17	19	21	37	54%	46%
November	2	2	20	0	1	1	2	3	21	95%	5%
December	0	-18	20	0	0	0	0	-18	20	100%	0%
Sum	320	-18	338	117	0	117	437	-18	455	74%	26%

Table 1. Application Processing Data from 2016

Annual Rental Volumes

There was a slight decrease in the total volume of water rented from the Bank. Chart 6 shows the total volume rented during 2016, while Chart 7 plots the total volume rented by water basin.

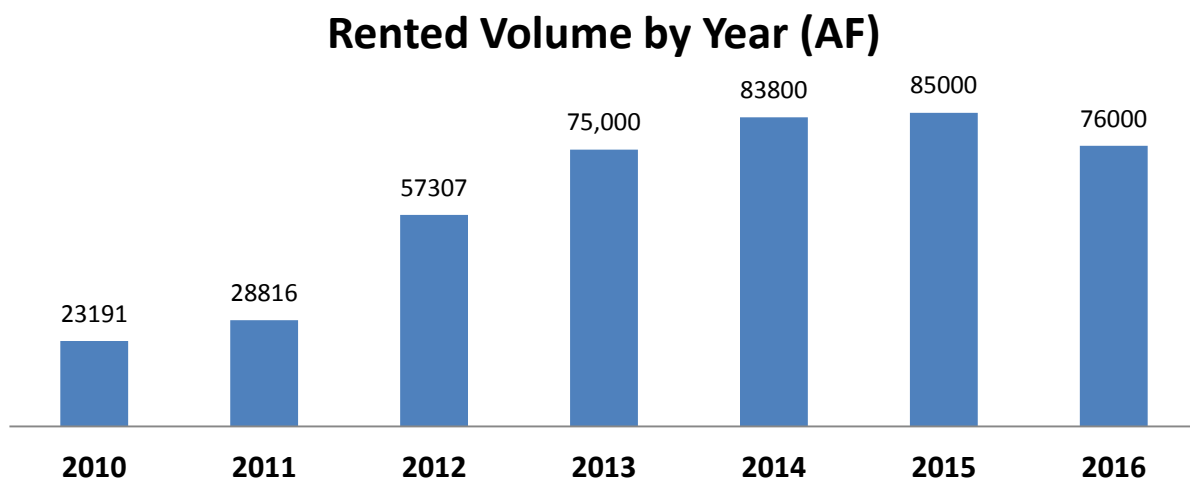


Chart 6. Annual rental volumes

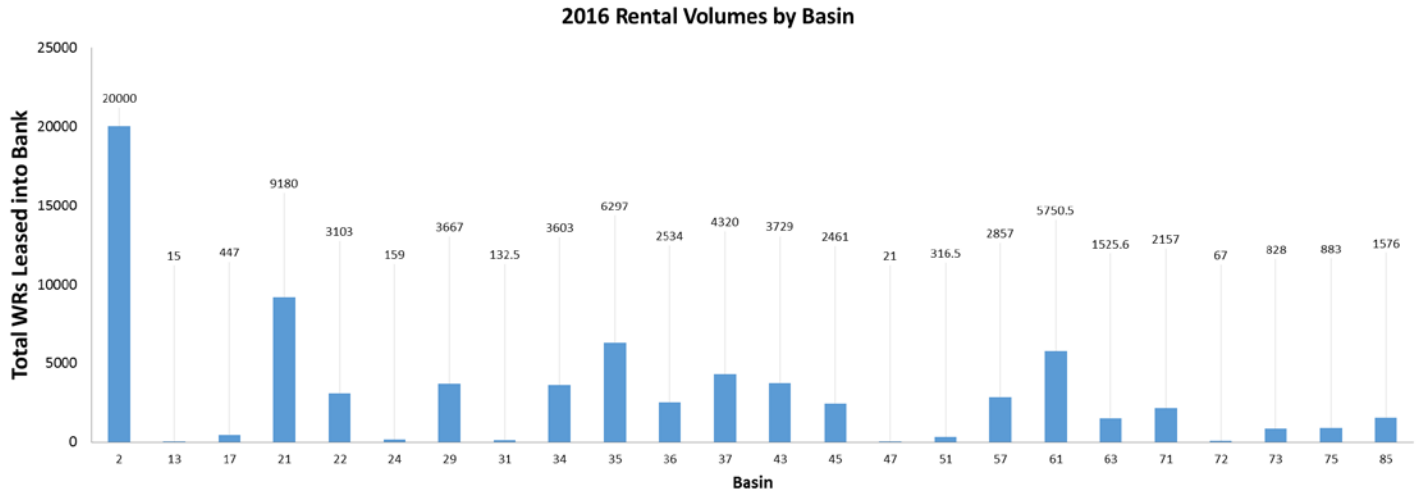


Chart 7. Annual acre-foot rental volumes, by water basin

The majority of water rented in 2016 was from basins 2 (the Snake River below Milner Dam), 21 (Henrys Fork of the Snake River), 35 (American Falls region, ESPA ground water), 61 (Mountain Home region ground water) and 37 (Wood River Valley & Camas Prairie).

2016 Financial Summary

Revenue for the Board's Bank declined in 2016, largely attributable to the decrease in the number of water rights being leased to the Bank. One hundred and sixty two thousand dollars were generated last year, primarily through rental administrative fees.

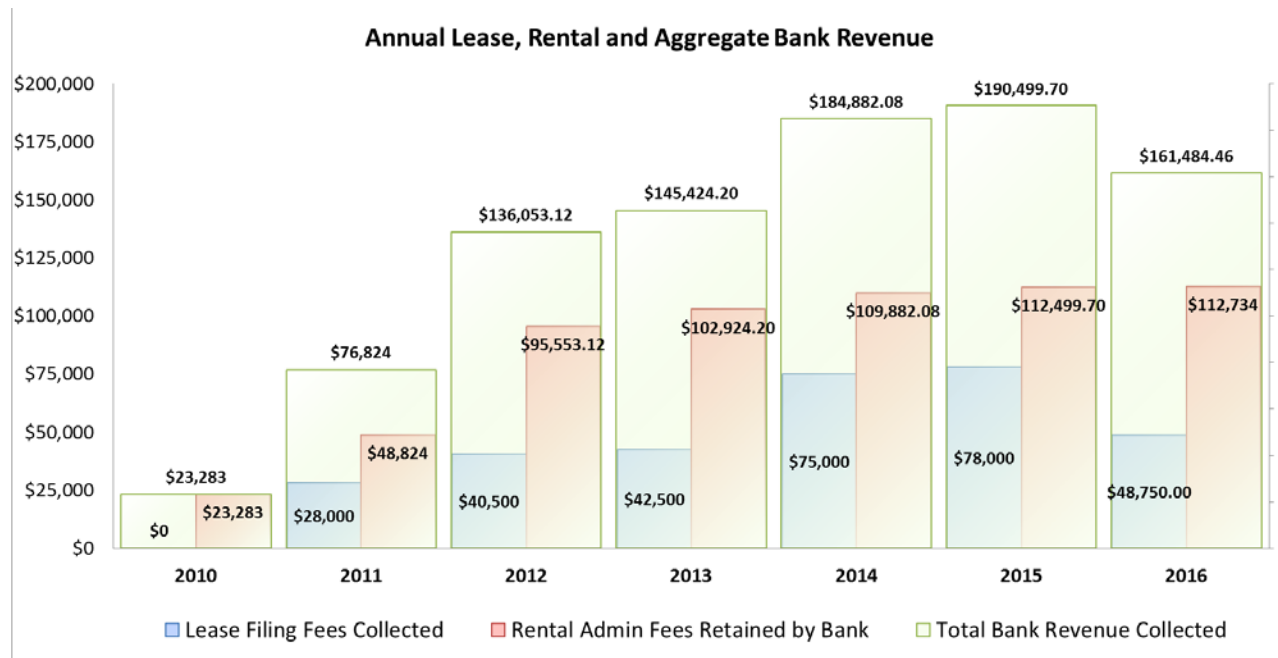


Chart 8. Annual revenue from lease application filing fees and rental admin fees

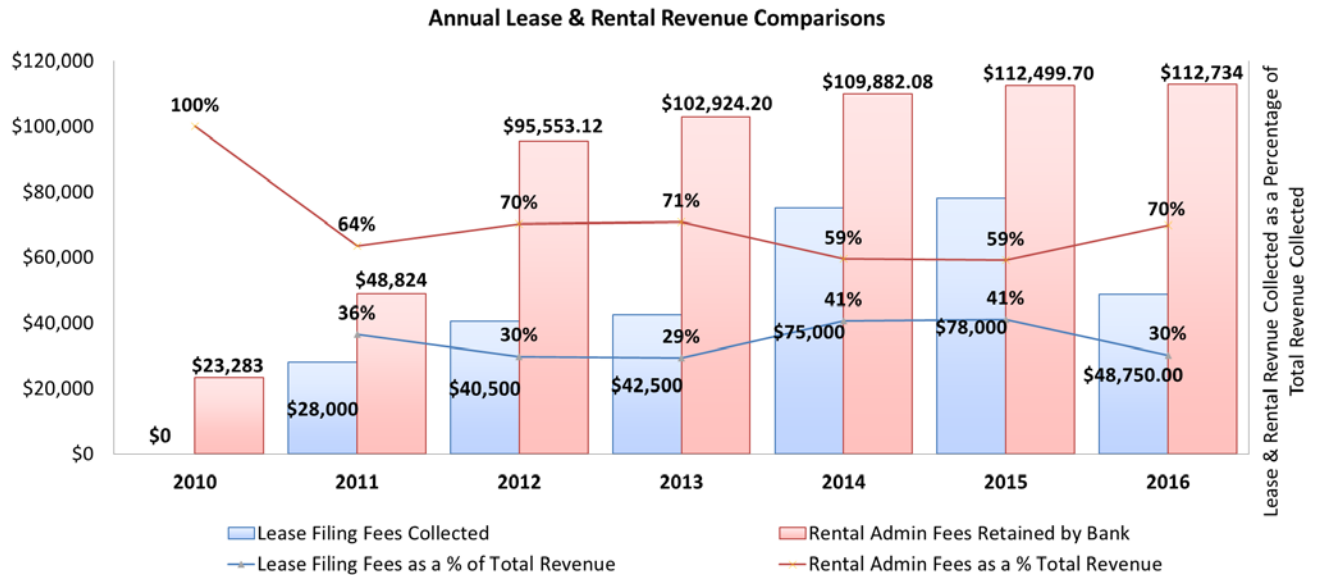


Chart 9. Annual revenue from leases and rentals as a percentage of total revenue

A comparison of total revenue and total salary expenditures compared against the total number of applications processed shows that revenue per application increased in 2016, though the improvement was not as large as the increase in expenditure per application. Chart 10 below displays the revenue per application processed, as well as the expenditure incurred per application processed, for the years 2010 through 2016.

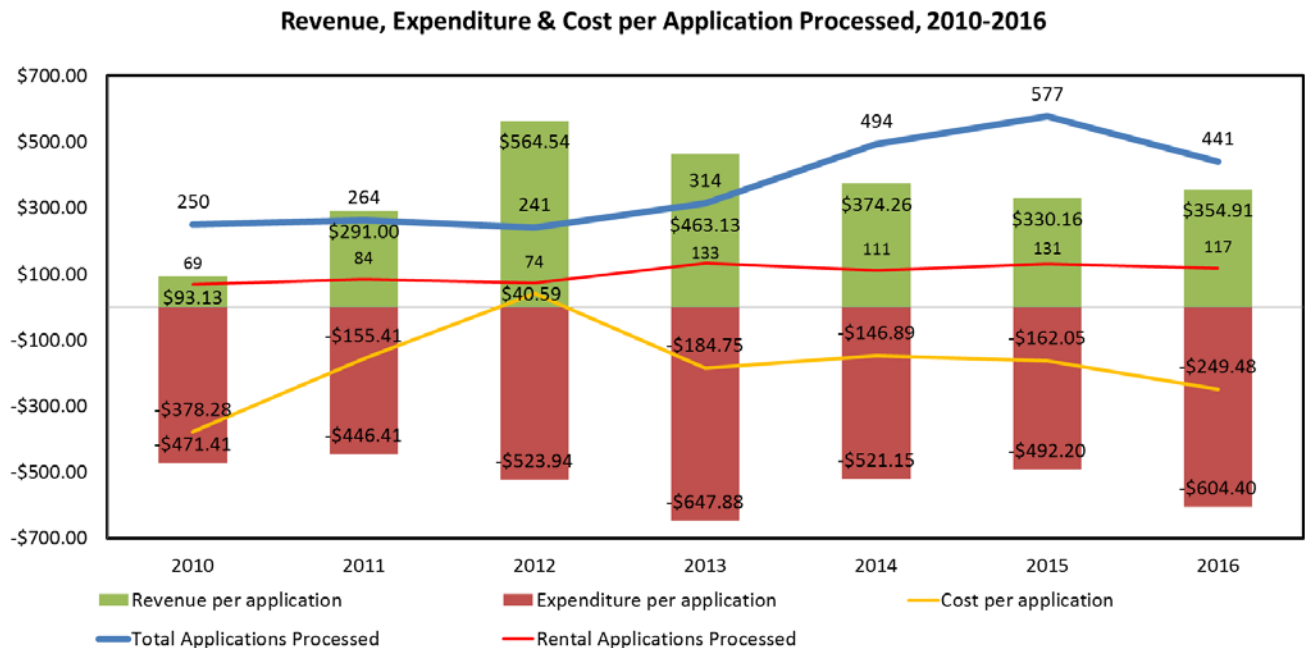


Chart 10. Revenue and Expenditure per application processed, 2010-2016

The red bar in Chart 10 is a representation of the total cost billed by Bank staff to process lease and rental applications in a given year, divided by the total number of applications processed. Similarly, the green bar represents the total revenue generated in a given year from the processing of all applications (and approved rental agreements), divided by the total number of applications processed that year. The net difference between the red and green bars is represented by the yellow line, which is the net cost or profit realized from the processing of a lease and/or rental application.

Another simplified analysis is provided below in Chart 11, which contrasts hourly staff expenditures to hourly revenue figures. During 2016, the total number of staff hours billed to the Bank was 5884.5. Dividing total expenditures billed during 2016 (\$275,000.00) by the total hours worked, provides an hourly staff expenditure rate of \$46.73/hour. Alternatively, dividing total revenue generated from processing and administering 2016 lease and rental transactions (\$162,000.00) by the total hours worked, provides an hourly revenue realization of \$27.44/hour. The difference between these two figures, charted in chart 11 below, shows that the hourly cost to operate the Bank remains negative, at \$19.29/hour.

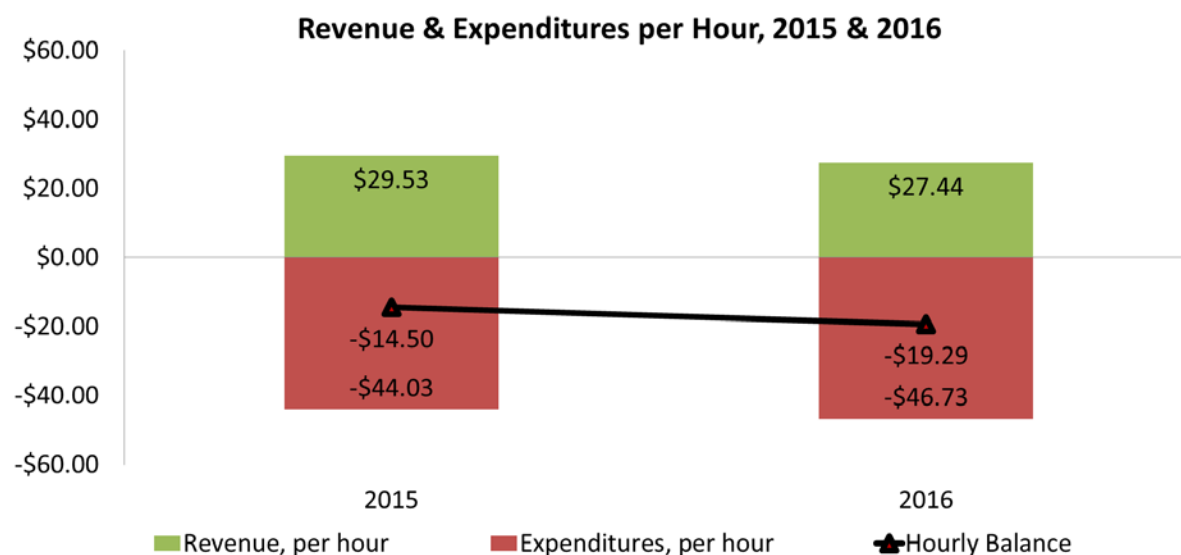


Chart 11. Revenue and Expenditure per hour, 2015 & 2016

The hourly rate to operate the Bank can be made neutral or positive, through improvements in staff training opportunities, continued procedural guidance from the IWRB and through increased efficiencies realized with the roll out the new Water Supply Bank software. Additionally, further research must be done to identify specific cost centers and opportunities to increase revenue per hour and/or application.

Annual revenue, expenditures and warrant payouts are summarized in Chart 12 and Table 2 below.

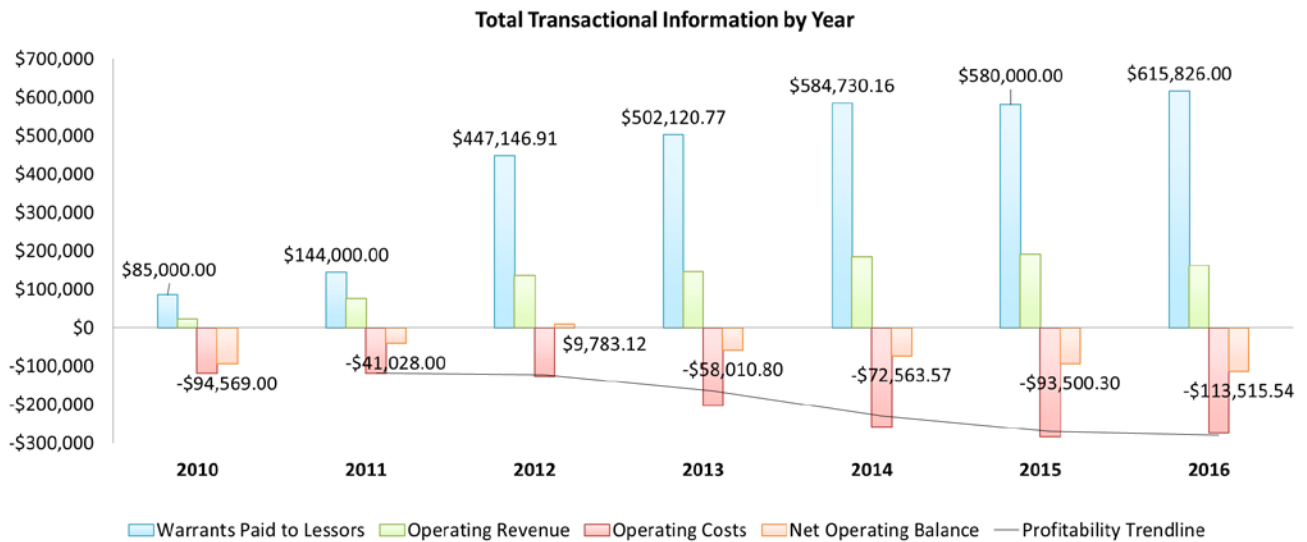


Chart 12. Bank revenue, operational costs and warrant payouts to water right holders

Year	Rental Fees Collected	Warrants Paid to Lessors	Rental Admin Fees Retained by Bank	Lease Filing Fees Collected	Total Bank Revenue Collected	Bank Operational Costs	Bank Operating Balance
2010	\$108,283.00	\$85,000.00	\$23,283	\$0	\$23,283	-\$117,852.00	-\$94,569.00
2011	\$192,824.00	\$144,000.00	\$48,824	\$28,000	\$76,824	-\$117,852.00	-\$41,028.00
2012	\$542,700.03	\$447,146.91	\$95,553.12	\$40,500	\$136,053.12	-\$126,270.00	\$9,783.12
2013	\$605,044.97	\$502,120.77	\$102,924.20	\$42,500	\$145,424.20	-\$203,435.00	-\$58,010.80
2014	\$694,612.24	\$584,730.16	\$109,882.08	\$75,000	\$184,882.08	-\$257,445.65	-\$72,563.57
2015	\$692,499.70	\$580,000.00	\$112,499.70	\$78,000	\$190,499.70	-\$284,000.00	-\$93,500.30
2016	\$728,560.46	\$615,826.00	\$112,734	\$48,750.00	\$161,484.46	-\$275,000.00	-\$113,515.54

Table 2. Bank revenue, expenditures, operating balance and warrant payouts