
CONSERVATION & DEMAND MANAGEMENT PLAN

July 2019 – June 2024



MUNICIPALITY OF
West Perth

JULY 1, 2019
WEST PERTH
169 St David St, Mitchell

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Background on O.Reg. 507/18

O.Reg. 507/18 was created under the Electricity Act, 1998 on December 12, 2018. It was Filed on December 14, 2018 and Published on e-laws the same day. This Ontario Regulation was developed to replace the revoked O. Reg. 397/11, which was filed under the repealed Green Energy Act, 2009.

This Ontario Regulation requires that every municipality, municipality service board, post-secondary education institution, public hospital and school board (public agencies), update their previous Conservation and Demand Management Plans by July 1, 2019, and update it every five years afterwards.

The Conservation and Demand Management plans should include two sections. The first section should discuss the public agency's annual energy consumption and the emissions associated with their operations. The second section must provide a description of previous, current and proposed ways to conserve or reduce energy that is consumed by the operations of the public agency. This in turn assists in the management of the public agency's demand for energy and will forecast the results of current and proposed measures.

Each report must include:

1. The address at which the operation is conducted
2. The type of operation
3. The total floor area of the indoor space in which the operation is conducted and, in cases where subsection (4) applies, the total indoor floor area of the building or facility in which the operation is conducted
4. A description of the days and hours in the year during which the operation is conducted and, if the operation is conducted on a seasonal basis, the period or periods during the year when it is conducted
5. The types of energy purchased for the year and consumed in connection with the operation
6. The total amount of each type of energy purchased for the year and consumed in connection with the operation
7. The total amount of greenhouse gas emissions for the year with respect to each type of energy purchased and consumed in connection with the operation
8. The greenhouse gas emissions and energy consumption for the year from conducting the operation, calculating,
 - a. The annual mega-watt hours per mega litre of water treated and distributed, if the operation is a water works
 - b. The annual mega-watt hours per mega litre of sewage treated and distributed, if the operation is a sewage works, or
 - c. Per unit of floor space of the building or facility in which the operation is conducted, in any other case

Validity Period

This plan is valid between the dates of July 1, 2019 – June 30, 2024. According to O.Reg. 507/18, it will need to be updated before or on July 1, 2024.

Energy Management Planning

The Municipality of West Perth has established plans in the past that guided the previous Energy Plan. The previous plan was guided by the Mission and Vision statements of the *Corporate Strategic Plan: 2012-2017*, which stated:

Mission Statement: To provide opportunities for growth and business development while maintaining a comfortable lifestyle and a balance of service for taxes

Vision Statement: West Perth is a thriving, caring community that offers diverse opportunities to live, work, and play.

The Corporate Strategic Plan from 2012-2017, while not directly energy-related, had set the goal of exploring innovative strategies to deliver efficient, accountable and relevant public services, which can correlate with energy management strategies.

West Perth realizes that successful energy management is dependent on the integration of efficiency measures and practices into the everyday business as usual conduct of staff and the organization. The municipality is committed to increasing energy efficiency and reducing the production of Greenhouse Gas emissions and Energy intensity.

Currently, West Perth is operating a solar panel at 5949 Frank Street, Mitchell, which is a ground mounted tracker style, and was installed in the fall of 2013. The solar panel operation was inconsistent due to technical issues, however it has recently been up and running.

Vision

We will continually strive to reduce our total energy consumption and associated carbon footprint through wise and efficient use of energy and resources, while still maintaining an efficient and effective level of service for the residents of our Community and the general public.

West Perth is in the process of developing a new strategic plan. It is anticipated that greenhouse gas reductions will be included as a priority in the upcoming strategic plan.

Goals

1. To create a culture of conservation
2. To improve the energy efficiency of our facilities by utilizing best practices to reduce our operating costs, energy consumption and greenhouse gas emissions
3. To maximize fiscal resources through direct and indirect energy savings

Objectives

1. Improve the Municipality's understanding of energy consumption
2. Increase staff awareness and motivate staff to use energy more efficiently
3. To improve the energy efficiency of our facilities through normal practices and low-cost opportunities
 - a. Continue regular maintenance practices which involve energy efficiency
 - b. Considering more energy efficient versions/models when replacing capital equipment

Municipally Owned Operations

Building Name	Address	Operation Type
Friendship Centre ¹	55 Montreal St, Mitchell	Community Centre
Mitchell Lions Pool Boathouse ²	19 Blenheim St, Mitchell	Outdoor recreational facilities
Mitchell Operations Centre ³	50 Arthur St, Mitchell	Storage facilities where equipment or vehicles are maintained, repaired or stored
West Perth Fire Hall ⁴	169 St. David St, Mitchell	Fire stations and associated offices and facilities
Brodhagen Community Centre ⁵	6708 Perth Line 44, Brodhagen	Community center
Hibbert Operations Centre ⁶	3276 Perth Road 18, Staffa	Storage facilities where equipment or vehicles are maintained, repaired or stored
Logan Operations Centre ⁷	6082 Perth Line 44, Bornholm	Storage facilities where equipment or vehicles are maintained, repaired or stored
Visitors Centre Farmers Market ⁸	9 Huron Rd, Mitchell	Cultural facilities
Water Treatment 1 2 3 (Well 1 & 2) ⁹	132 St. George St, Mitchell	Facilities related to the treatment of water
Fullarton Hall ¹⁰	5692 Perth Line 20, Fullarton	Community center
Fullarton Operations Centre ¹¹	5692 Perth Line 20, Fullarton	Storage facilities where equipment or vehicles are maintained, repaired or stored
Mitchell Wastewater Treatment Plant ¹²	5949 Frank St, Mitchell	Facilities related to the treatment of sewage
Water Treatment and Well 4 ¹³	48 Arthur St, Mitchell	Facilities related to the treatment of sewage
Dublin Pavilion ¹⁴	7015 Helen St, Dublin	Community center
Former Logan Office ¹⁵	6082 Perth Line 44, Bornholm	Administrative offices and related facilities rented for community use
Mitchell Arena/Community Centre ¹⁶	185 Wellington St, Mitchell	Indoor recreational facilities
OPP/Water Building ¹⁷	132 St. George St, Mitchell	Police stations and associated offices and facilities

West Perth Municipal Office ¹⁸	169 St. David St, Mitchell	Administrative offices and related facilities, including municipal council chambers
West Perth Public Library ¹⁹	105 St. Andrews St, Mitchell	Public libraries
Elevated Water Structure ²⁰	125 Clarke St, Mitchell	Water Tower
Well #3 ²¹	100 St. George St, Mitchell	Water Treatment/Storage
Water Booster and Standpipe Building ²²	87 Arthur St, Mitchell	Water Treatment/Storage
Herbert St Pumping Station ²³	79 Herbert St, Mitchell	Wastewater Treatment Facility
James St Pumping Station ²⁴	130 James St, Mitchell	Wastewater Treatment Facility

Total Fuel Consumption (2018)

Type of Energy Source	Consumed by Municipality?	Energy Source Supplier	Unit of Measurement	Total Amount of Energy Source Consumed/Used
Water	Yes	Municipality of West Perth – Mitchell Water System	Mega Litres (ML)	
Electricity (Hydro)	Yes	Erie Thames Powerlines Hydro One	Kilowatt Hours (kWh)	
Natural Gas	Yes	Union Gas	Cubic Metres (M ³)	142,419.1
Propane	Yes	Hensall and District Co-op Sparlings Propane	Litres (L)	1,155
Fuel Oil (#1 & #2)	No	N/A	Litres (L)	0
Fuel Oil (#4 & #6)	No	N/A	Litres (L)	0
Coal	No	N/A	Metric Tonnes (MT)	0
Wood	No	N/A	Metric Tonnes (MT)	0
District Heating	No	N/A	Giga Joules (GJ)	0
District Cooling	No	N/A	Giga Joules (GJ)	0

Facility Consumption (2018)

Common Facility Name	Water		Electricity (Hydro)		Natural Gas		Propane	
	ML	%	kWh	%	M ³	%	L	%
Friendship Centre	0.01	0.31	12,345.74	0.33	0	0	0	0
Mitchell Lions Pool Boathouse	0.706	21.75	45,808.86	1.24	3,866.21	2.71	0	0
Mitchell Operations Centre	0.186	5.73	53,930.9	1.46	37,713.13	26.48	0	0
West Perth Fire Hall	0.019	0.59	19,752.44	0.53	7,505.93	5.3	0	0
Brodhagen Community Centre	0	0	69,659.63	1.88	0	0	1,155	100
Hibbert Operations Centre	0	0	8,072.67	0.22	0	0	0	0
Logan Operations Centre	0	0	5,175.43	0.14	0	0	0	0
Visitors Centre Farmers Market	0.039	1.2	13,698.75	0.37	0	0	0	0
Water Treatment 1 2 3 (Well 1 & 2)	0	0	160,188.43	4.33	0	0	0	0
Fullarton Hall	0	0	6,868.28	0.19	0	0	0	0
Fullarton Operations Centre	0	0	3,051.68	0.08	0	0	0	0
Mitchell Wastewater Treatment Plant	0.265	8.2	2,029,793.22	54.8	1,999.11	1.4	0	0
Water Treatment and Well 4	0	0	209,687.86	5.66	0	0	0	0
Dublin Pavilion	0	0	17,576.63	0.47	2,457.81	1.73	0	0
Former Logan Office	0	0	5,175.43	0.14	0	0	0	0
Mitchell Arena/Community Centre	1.229	37.85	442,160.8	11.9	45,667.22	32.06	0	0
OPP/Water Building	0.1447	4.46	79,590.86	2.15	2,380.44	1.67	0	0
West Perth Municipal Office	0.575	17.7	98,762.21	2.67	37,529.63	26.35	0	0
West Perth Public Library	0.053	1.6	32,262.25	0.87	3,299.62	2.32	0	0
Elevated Water Structure	0	0	26,725.52	0.72	0	0	0	0
Well #3	0	0	87161.37	2.35	0	0	0	0

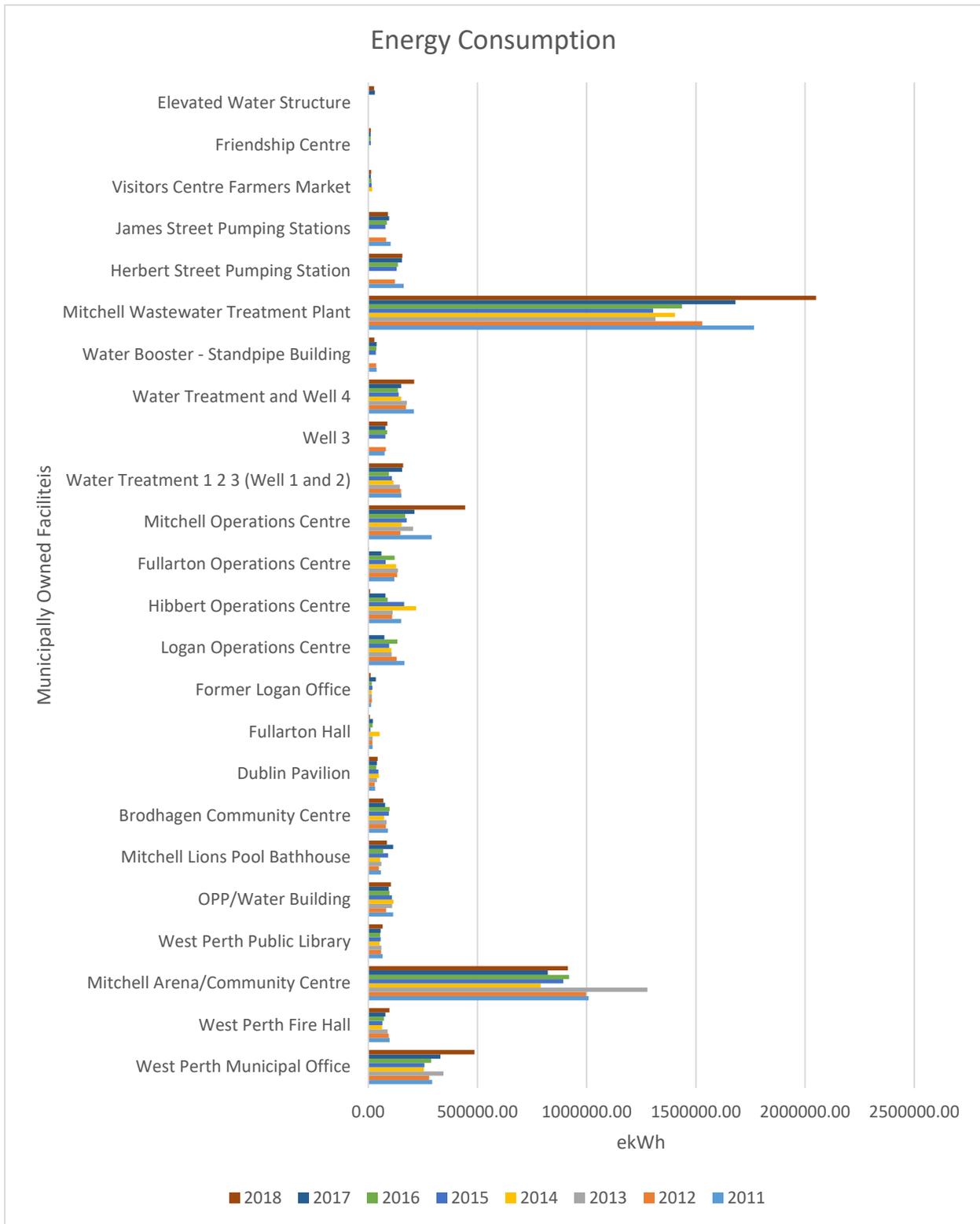
Water Booster and Standpipe Building	0	0	28,348.36	0.77	0	0	0	0
Herbert St Pumping Station	0	0	156,012.53	4.21	0	0	0	0
James St Pumping Station	0.02	0.61	90,296.64	2.44	0	0	0	0
TOTAL	3.2467	100	3,702,106.49	100	142,419.1	100	1,155	100

Associated Emissions (2018)

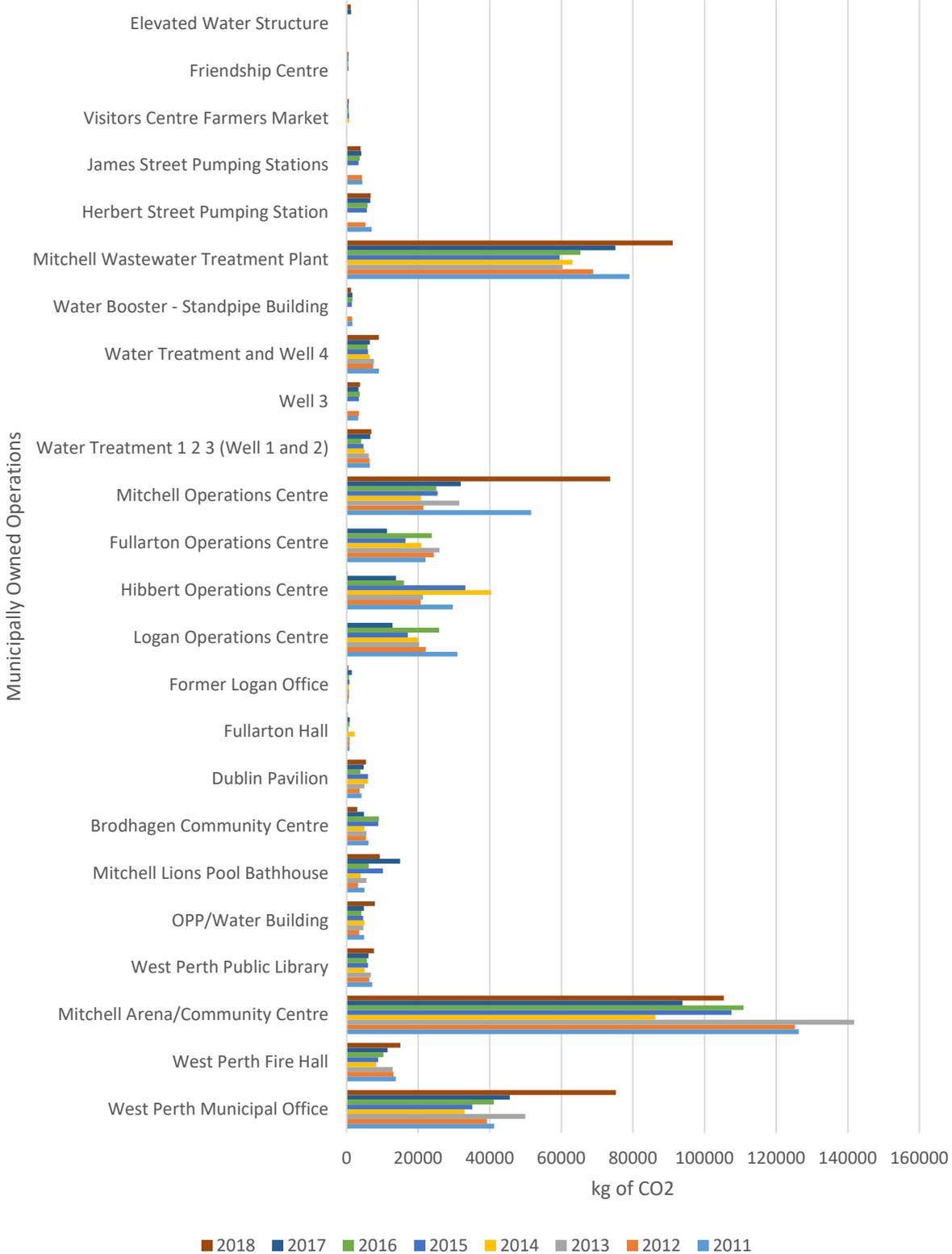
Common Facility Name	Total Floor Area (sq./ft.)	GHG Emissions		Energy Intensity	
		KG CO ₂ e	%	ekWh/sq.ft	%
Friendship Centre	624	530.87	0.12	19.78	19.8
Mitchell Lions Pool Boathouse	3,948	9,280.78	2.17	21.72	0.97
Mitchell Operations Centre	30,350	73,634.56	17.18	30.91	0.65
West Perth Fire Hall	4,823	15,043.07	3.51	20.17	0.90
Brodhagen Community Centre	7,880	2,995	0.7	8.84	0.39
Hibbert Operations Centre	5,616	347.12	0.08	1.44	0.06
Logan Operations Centre	6,710	222.54	0.05	0.77	0.03
Visitors Centre Farmers Market	480	589.05	0.14	28.54	1.27
Water Treatment 1 2 3 (Well 1 & 2)	3,057	6,888.1	1.61	52.4	52.4
Fullarton Hall	3,080	295.34	0.07	2.23	0.10
Fullarton Operations Centre	5,392	131.22	0.03	0.57	0.03
Mitchell Wastewater Treatment Plant	2,070	91,061.43	21.25	990.6	44.04
Water Treatment and Well 4	1,296	9,016.58	2.10	161.8	7.19
Elevated Water Structure	175	1,149	0.27	152.7	6.79
Dublin Pavilion	4,134	5,403.51	1.26	10.39	0.46
Former Logan Office	4,692	222.54	0.05	1.1	0.05
Mitchell Arena/Community Centre	41,432	105,369.63	24.59	22.06	0.98
OPP/Water Building	6,608	7,923.82	1.85	15.77	0.7
West Perth Municipal Office	18,654	75,215.31	17.55	26.08	1.16
West Perth Public Library	6,394	7,626.86	1.78	10.38	0.46
Well #3	169	3,748	0.87	515.7	22.93

Water Booster and Standpipe Building	780	1,219	0.28	36.3	1.62
Herbert St Pumping Station	598	6,709	1.57	260.9	11.6
James St Pumping Station	2,496	3,883	0.91	36.2	1.61
TOTAL	161,458	428,505	100	2,249.3	100

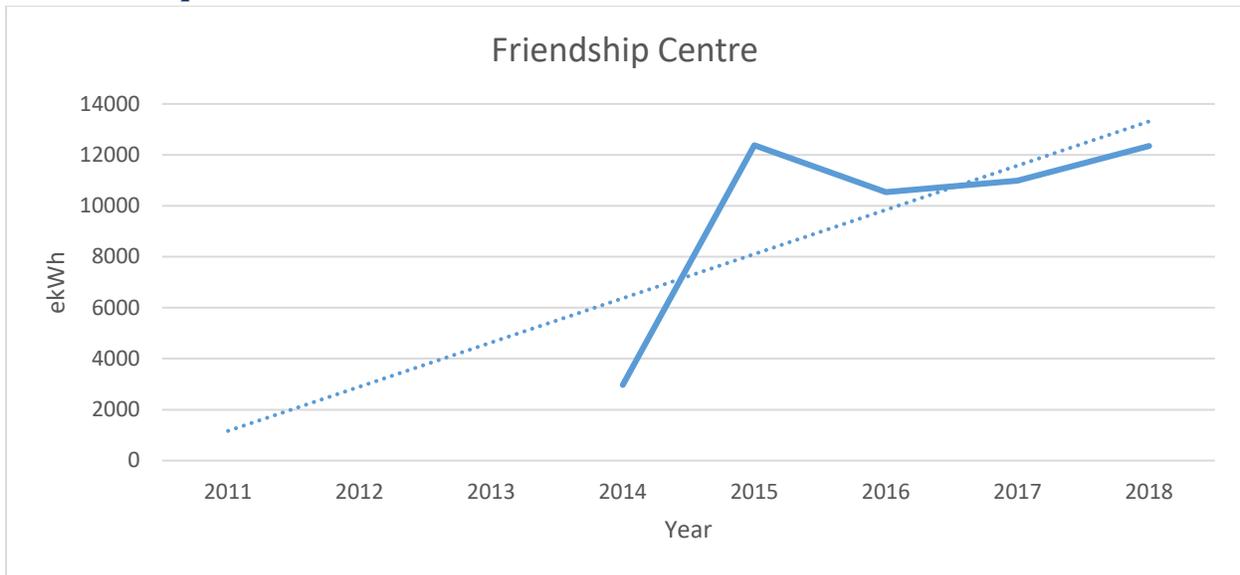
Energy Consumption and Emissions 2011-2018



Greenhouse Gas Emissions



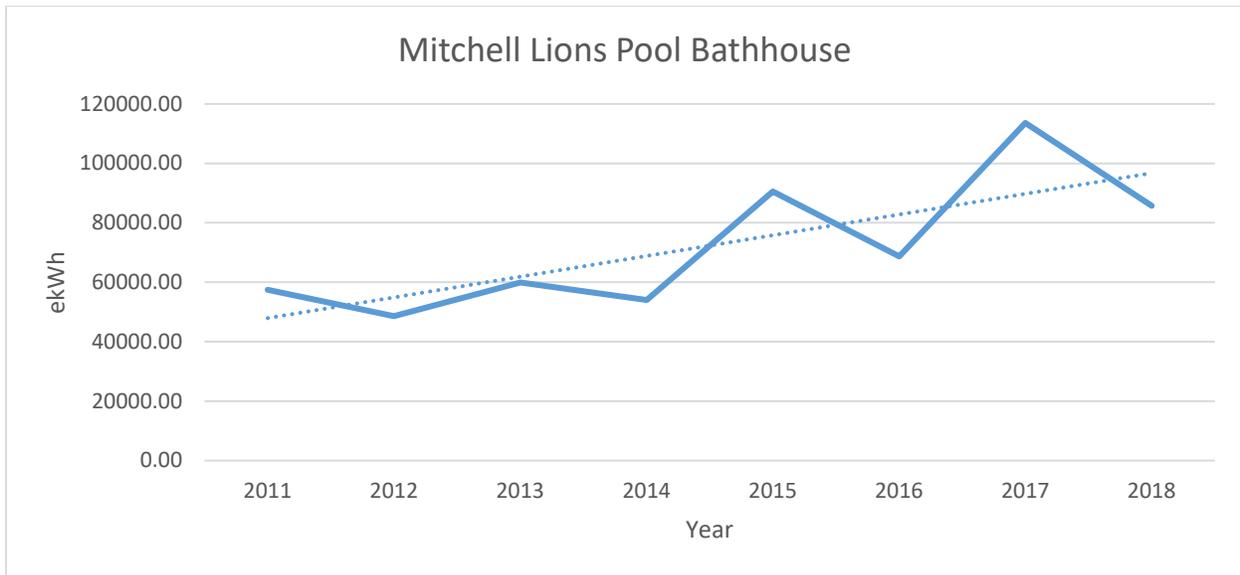
Friendship Centre



The Friendship Centre was constructed in 1984, and acquired in June of 2014. In October 2018, the T-8 lights were replaced with LED lights. The municipality is considering options for consolidating the program space that is provided in this building into a new Fire Hall or a new renovated municipal building so that this asset can be removed.

The Friendship Centre opened in 2014, with a full first operating year of 2015. Over the four years of operation, its total energy consumption has increased. In 2014, consumption totaled approximately 2,969ekWh, and in 2018, consumption totaled to approximately 12,345.7ekWh, which is about a 316% increase. Emissions also increased with energy consumption. Emissions totaled approximately 128 kg of CO₂e in 2014, and increased to about 530.87 kg of CO₂e. This increase in consumption and emissions is associated with an increase in bookings at the facility.

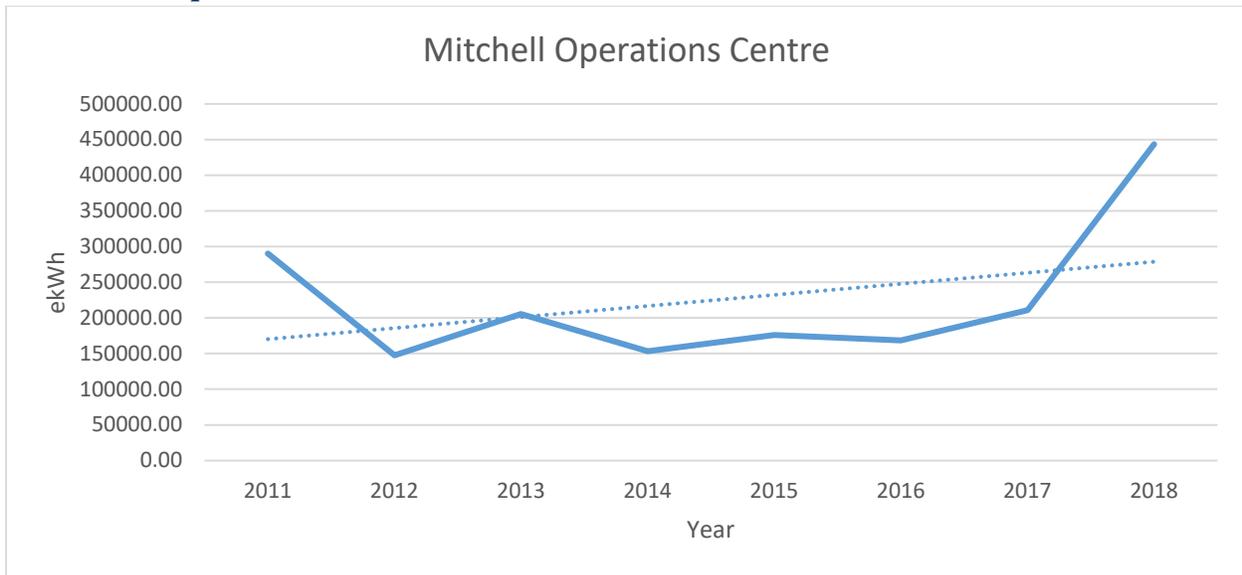
Mitchell Lions Pool Bathhouse



The pool house was constructed in the year 2000. The pool house uses a solar heating system, which was installed in the spring of 2010, which heats the pool's water. Supplementary natural gas heating for the water is also in place. In 2019, new solar blankets were installed to retain more heat.

From 2011 to 2018, the pool boathouse has increased its energy consumption by nearly 50%, or 28,245ekWh. In 2018, Mitchell Lions Pool Boathouse consumed a total of approximately 85,746.8ekWh. Emissions associated with the Pool boathouse also increased with energy consumption. Emissions increased by about 85% since 2011, or 4,270 kg of CO₂e, to emit a total of 9,280.8 kg of CO₂e.

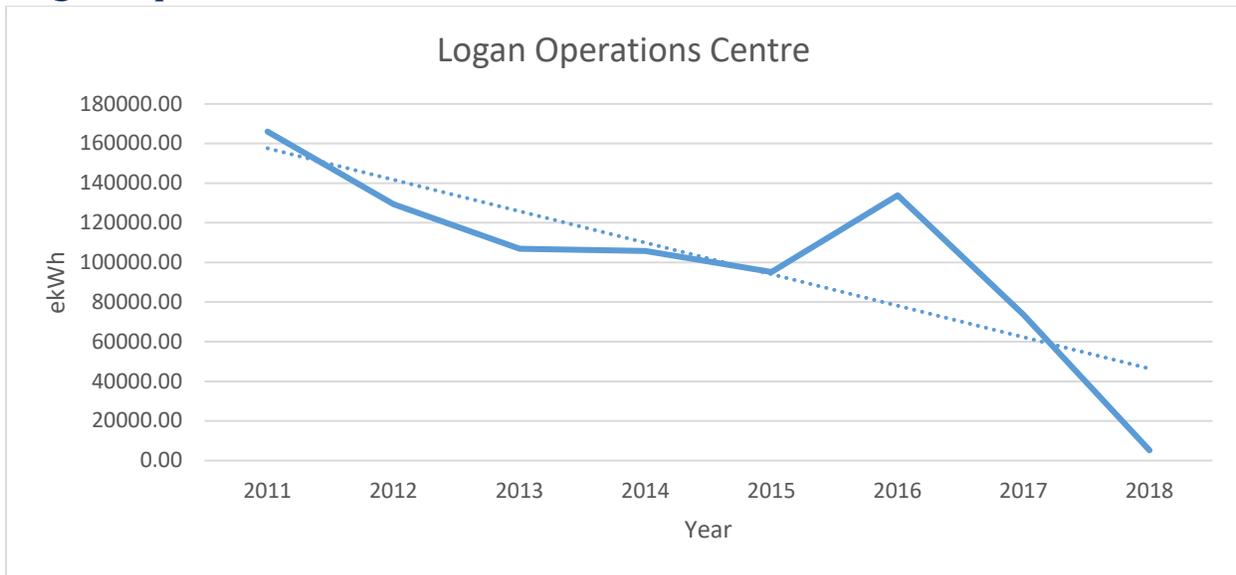
Mitchell Operations Centre



The Mitchell Operations Centre was constructed in 1995. In early 2018, a second 80 ft. x 200 ft. (16,000 square foot) shop was added.

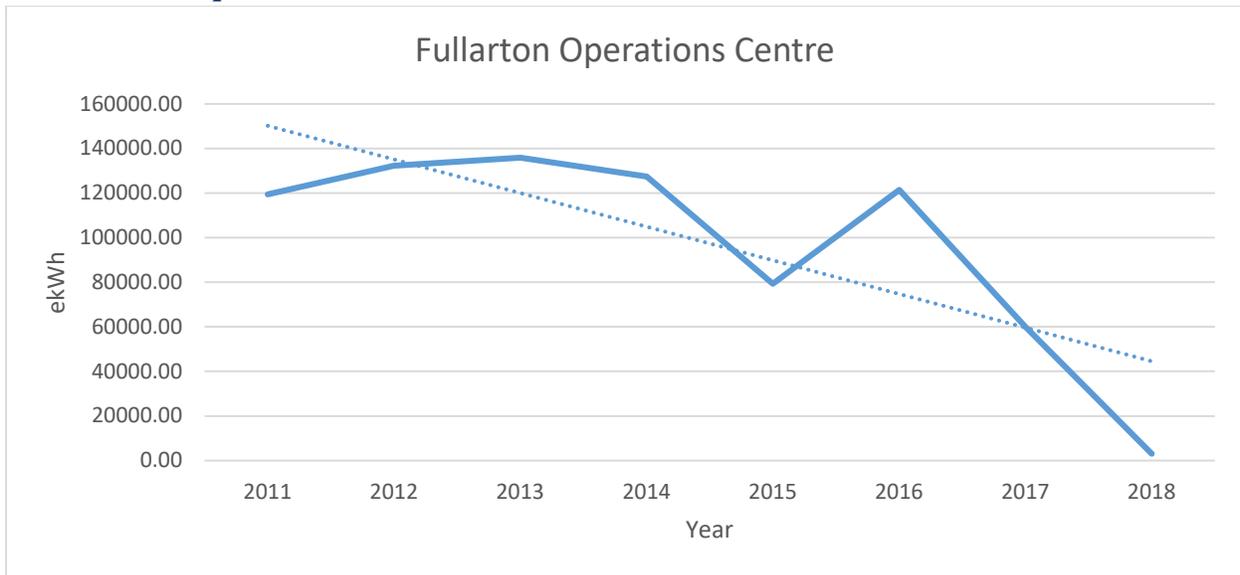
The Mitchell Operations Centre increased its energy consumption since 2011, as the three other operations centres closed in early 2018. A second shop was added to the facility after the closing of the three operations centres. Energy has increased by approximately 53% since 2011. 2018 saw a total consumption of 443,507.5kWh. Between 2017 and 2018, with the increase in floor area, the energy intensity of the facility stayed approximately the same, with an intensity of 15kWh/square foot, however, energy intensity has increased since the baseline year. Associated emissions also increased by approximately 43% or about 22,045.25 kg of CO₂e over 2011 by 2018. The total emissions in 2018 were about 73,634.6 kg of CO₂e. In the first year of consolidating the Operations Centres, there was a decrease in 52,636 kWh from 2016 (the last year of full operation of each facility), to 2018. Continued monitoring should be done on energy consumption to show the trend of efficiency.

Logan Operations Centre



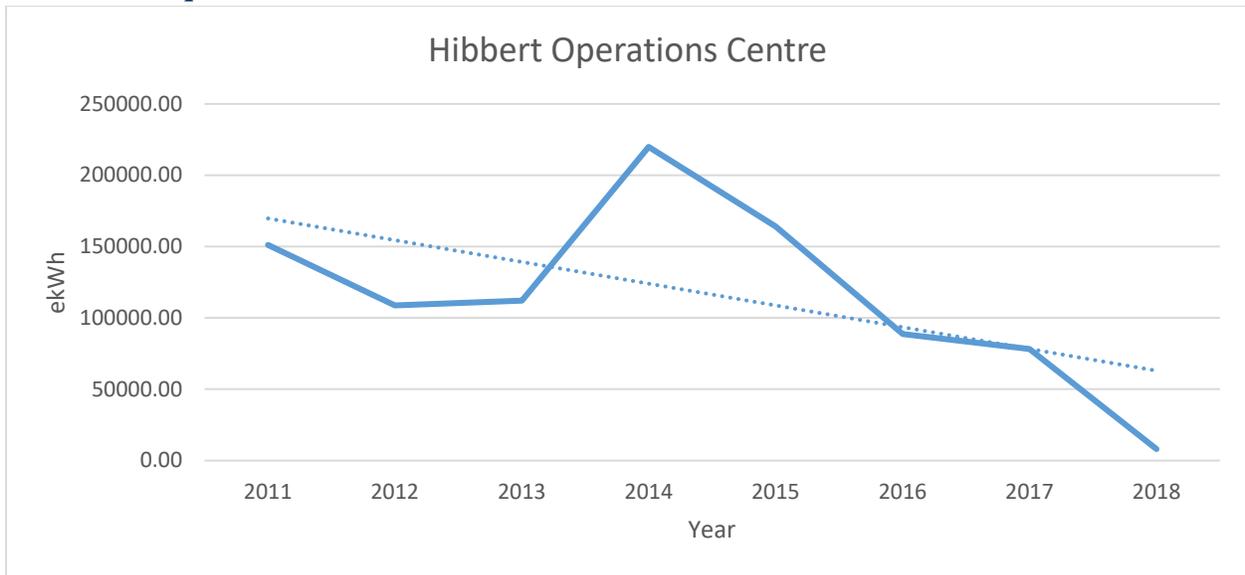
The Logan Operations Centre was sold in early February of 2018, so West Perth was only responsible for the energy consumption and emission count for the first month of 2018. Due to the facility being sold, energy consumption was reduced by approximately 97%. The total energy consumption for the Logan Centre totaled approximately 5,157.4kWh. Emissions also reduced with the operations centre closure for 2018, by approximately 99% or approximately 30,733.9 kg compared to 2011, to emit a total of 222.5 kg of CO₂e. The consolidation has already shown to help decrease the municipality's energy consumption.

Fullarton Operations Centre



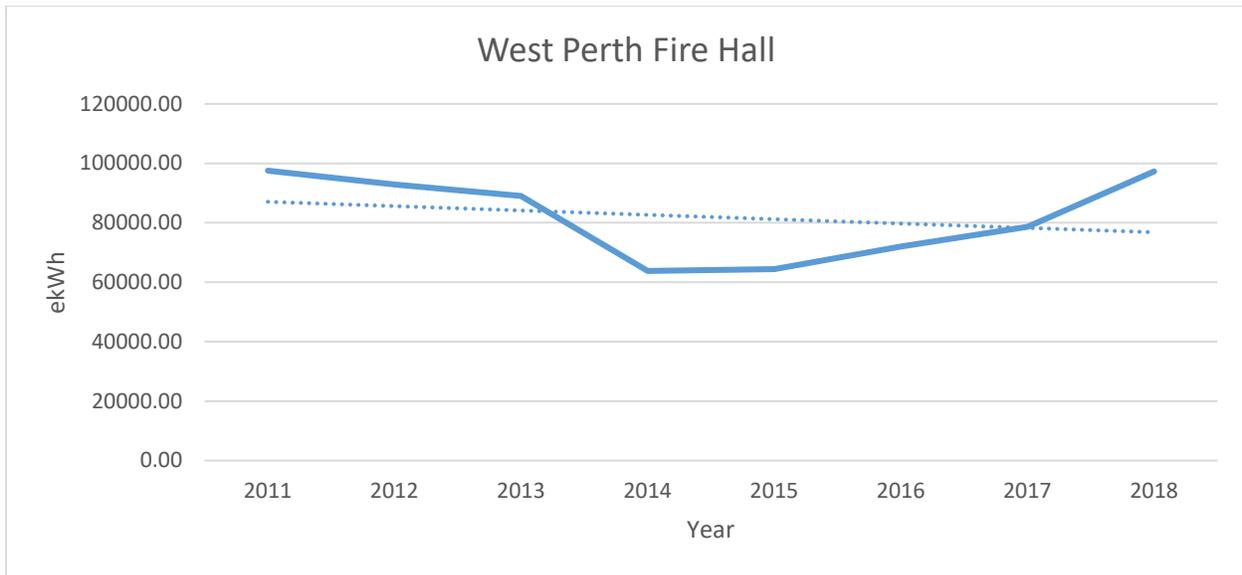
The Fullarton Operations Centre was sold in February 2018, and will not be reported on in future reports. Due to the facility being sold, energy consumption and emissions decreased substantially in 2018. Energy reduced by approximately 97% compared to 2011. In 2018, the Operations Centre consumed a total of 3,051.7ekWh. Emissions reduced by about 99% compared to 2011. The total emission count for the Operations Centre was 131.22 kg of CO₂e. The consolidation has already shown a savings in energy.

Hibbert Operations Centre



The Hibbert Operations Centre was sold in early 2018 and will not be accounted for in future reports. Due to the facility being sold, energy and emissions decreased, as only the first couple of months of 2018 were accounted for under West Perth's operations. In 2018, the Hibbert Operations Centre consumed a total of 8,072.67kWh, which is about 95% less energy consumption than 2011. Emissions associated with the facility also decreased by approximately 99% compared to 2011. In 2018, the Hibbert Operations Centre emitted a total of approximately 347.12 kg of CO₂e.

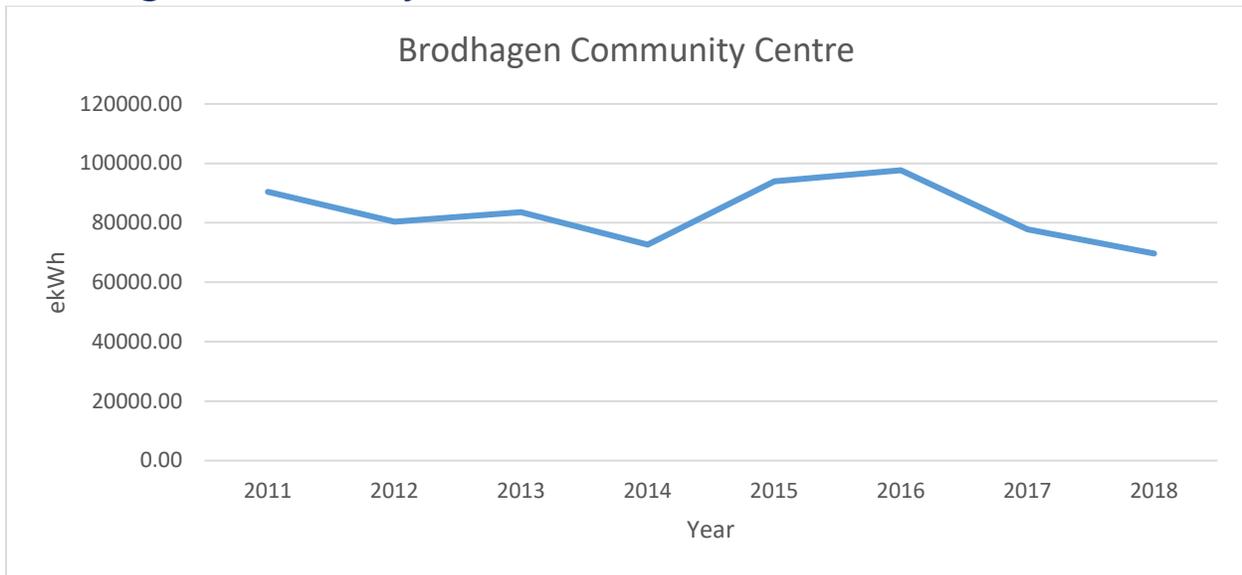
West Perth Fire Hall



The fire hall was built in 1962, and is attached to the municipal office.

The West Perth Fire Hall had a fairly consistent consumption total compared to its 2011 consumption total. In 2018, the Fire Hall consumed a total of 97,288.7 kWh, which was about 251 kWh, or 0.3% less than 2011. Emissions associated with the fire hall increased a bit since 2011, however. The total emission count from the Fire Hall was approximately 15,043 kg of CO₂e. Emissions increased by approximately 9.5% or 1,305 kg of CO₂e, compared to 2011.

Brodhagen Community Centre

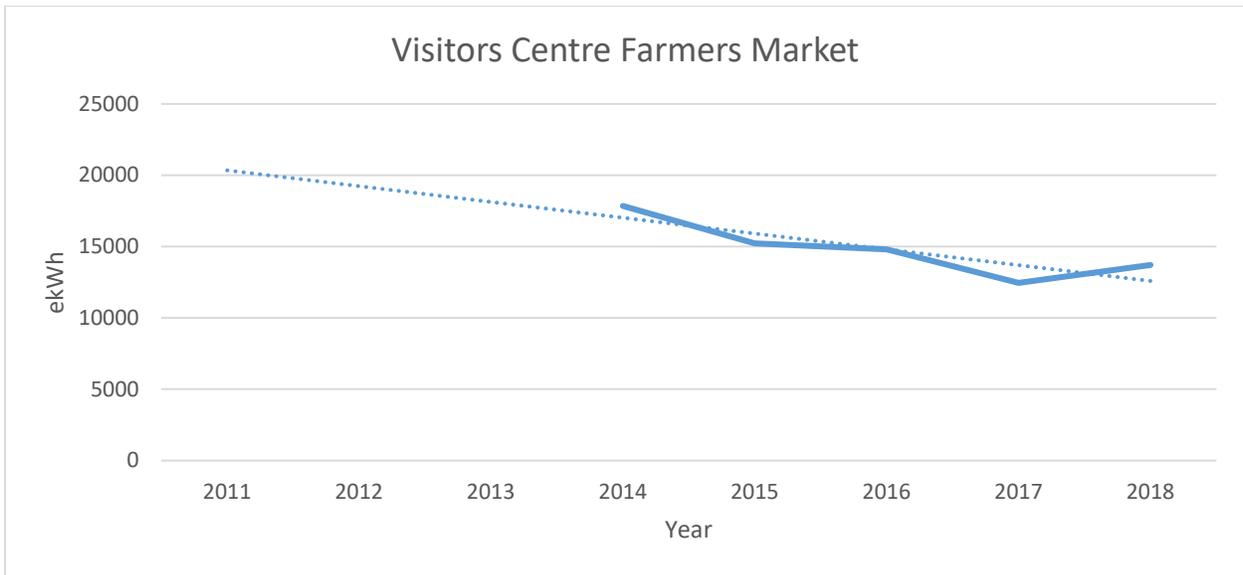


Energy consumption at the Community Centre decreased by approximately 23%, or 20,742ekWh since 2011. The Brodhagen Community Centre consumed a total of 69,660ekWh. Emissions also decreased at the community centre by approximately 51% or 3,124 kg of CO₂e, since 2011. In 2018, the community centre emitted a total of 2,995 kg of CO₂e.

The community centre was constructed in 2009. Currently, the municipality is considering retrofitting the lighting and converting to LED lights.

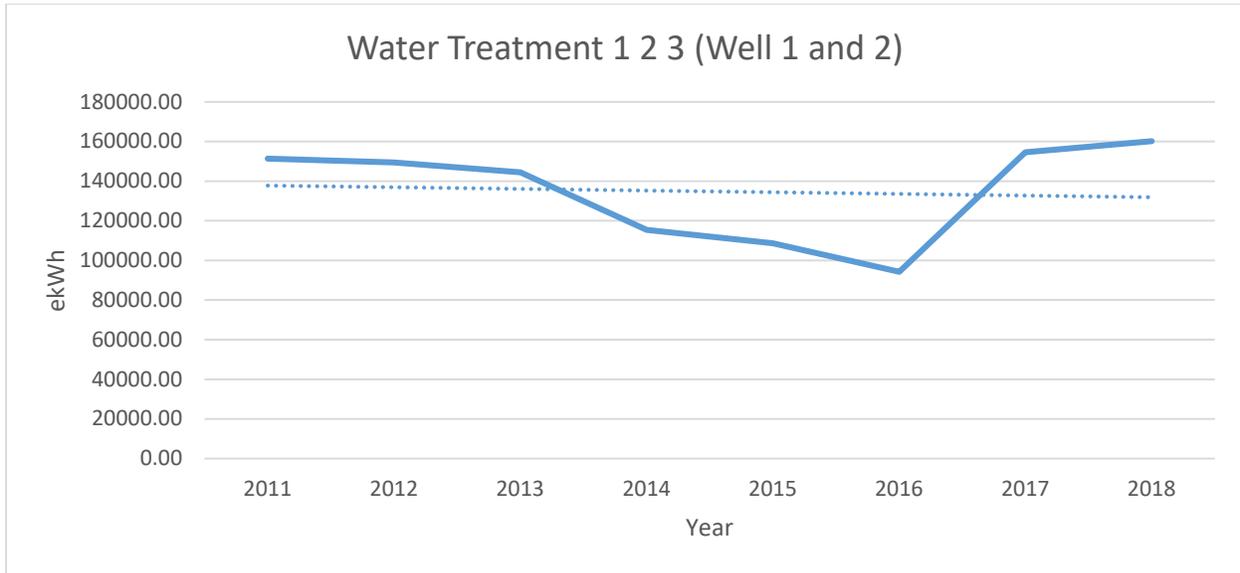
This facility uses a ground source heating and cooling system, which was installed in the fall of 2008. Supplementary propane heating is in place.

Visitors Centre Farmers Market



Energy consumption at the visitors centre decreased from its first operating year by approximately 23% in 2018. The total energy consumption for 2018 was approximately 13,698.8ekWh. Emissions also decreased at the farmers market visitor centre, by about 23%. The total emissions from the Visitors Centre were about 589.05 kg of CO₂e

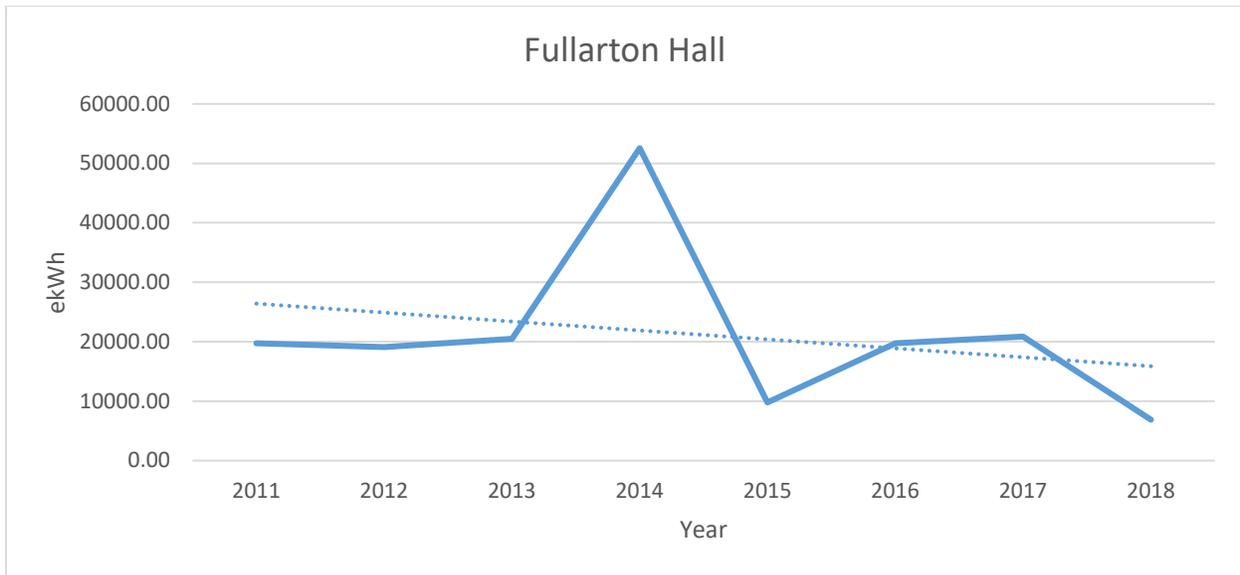
Water Treatment 1 2 3 (Well 1 & 2)



This facility was constructed in 1962. In 2017, the building was re-clad and the insulation was upgraded. In 2018, the municipality installed a variable frequency drive in one high lift pump. The municipality is currently considering an LED lighting retrofit.

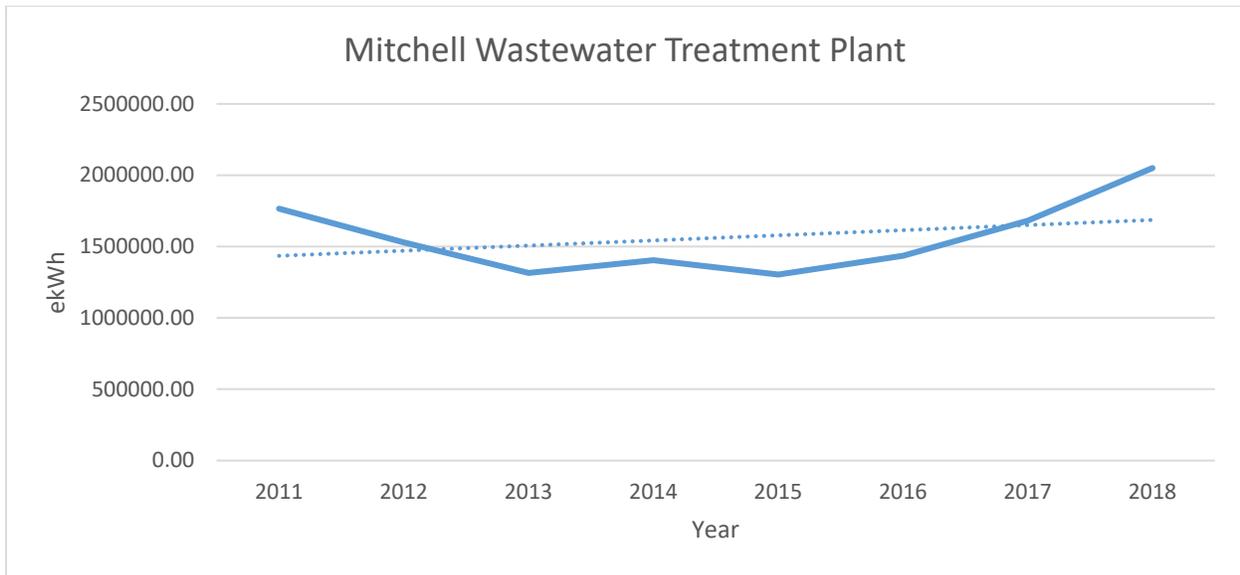
Energy consumption at the Water Treatment 1 2 3 (Well 1 & 2) slightly increased by nearly 6% or 8,769.2 kWh, since 2011. In 2018, the total energy consumption of the Water Treatment facilities was 160,188.43 kWh. Emissions also increased by about 6% compared to 2011. Emissions totaled approximately 6,888.1 kg of CO₂e in 2018.

Fullarton Hall



Fullarton Hall was sold in February 2018, which is why energy reduced significantly in 2018. Energy consumption in 2018 reduced by approximately 65%, or 12,879.7ekWh to a total of 6,868.3ekWh. Emissions reduced at a similar rate of 65% since 2011. The Fullarton Hall emitted a total of 295.34 kg of CO₂e.

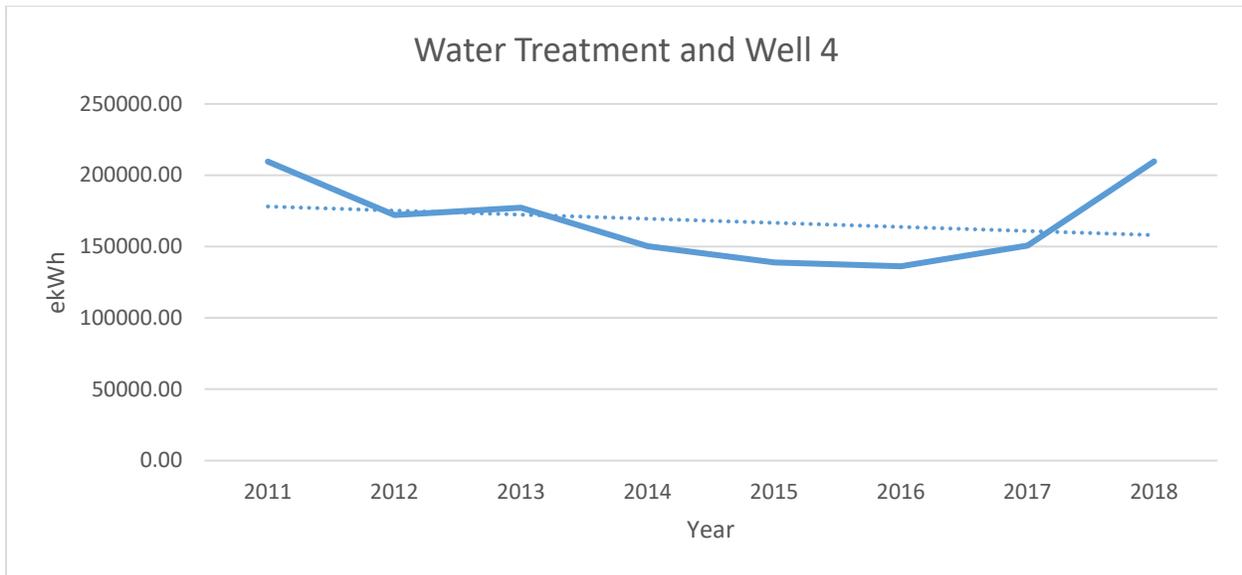
Mitchell Wastewater Treatment Plant



The Wastewater Treatment Plant was constructed in 1998. In 2018, there is a noted increase in energy consumption. This is due to the addition of a new large processing facility, Sofina Foods. In June of 2019, two new energy efficient turbo blowers were added.

The Wastewater Treatment Plant increased its energy consumption by approximately 16%, or 284,2728ekWh, over 2011. In 2018, the Wastewater Treatment plant consumed a total of 2,050,444ekWh. Emissions associated with the Wastewater Treatment Plant increased as well in 2018, by about 15% over 2011's consumption. In 2011, the Wastewater Treatment Plant emitted a total of 91,061.43 kg of CO₂e.

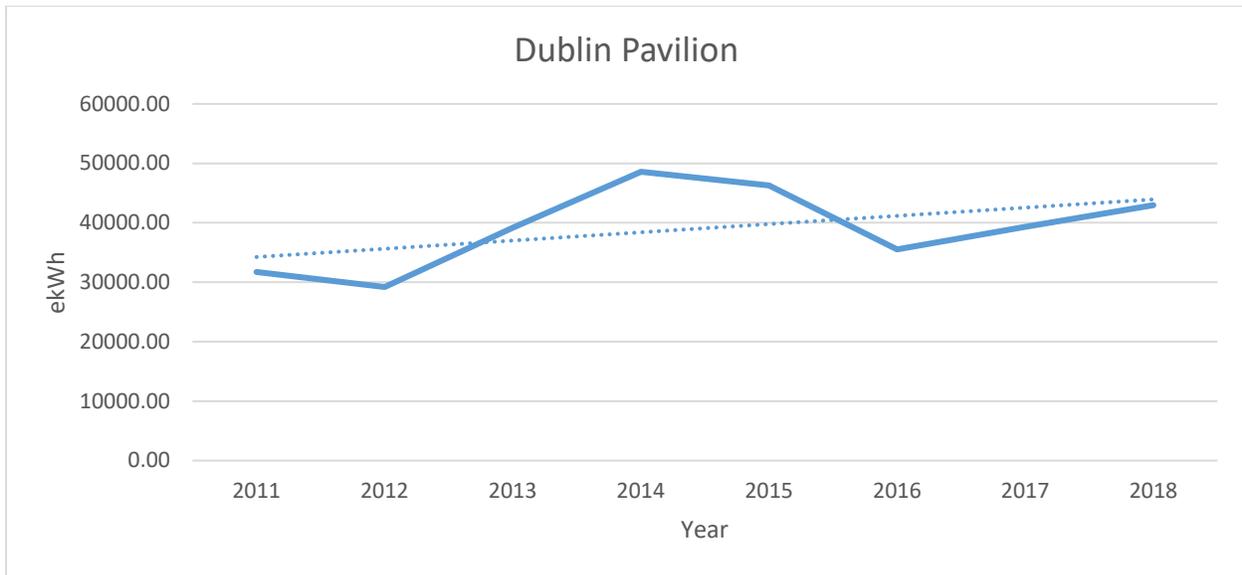
Water Treatment Well 4



This facility was constructed in 2007. The municipality is currently considering retrofitting to LED lighting.

Energy consumption in 2018 was approximately the same as in 2011, with a minor increase of about 77kWh. The total energy consumption in 2018 was about 209,687.9kWh. Emissions increased only 3 kg of CO₂e since 2011. The total emission count of the Water treatment and Well 4 facility was approximately 6,888.1 kg of CO₂e in 2018.

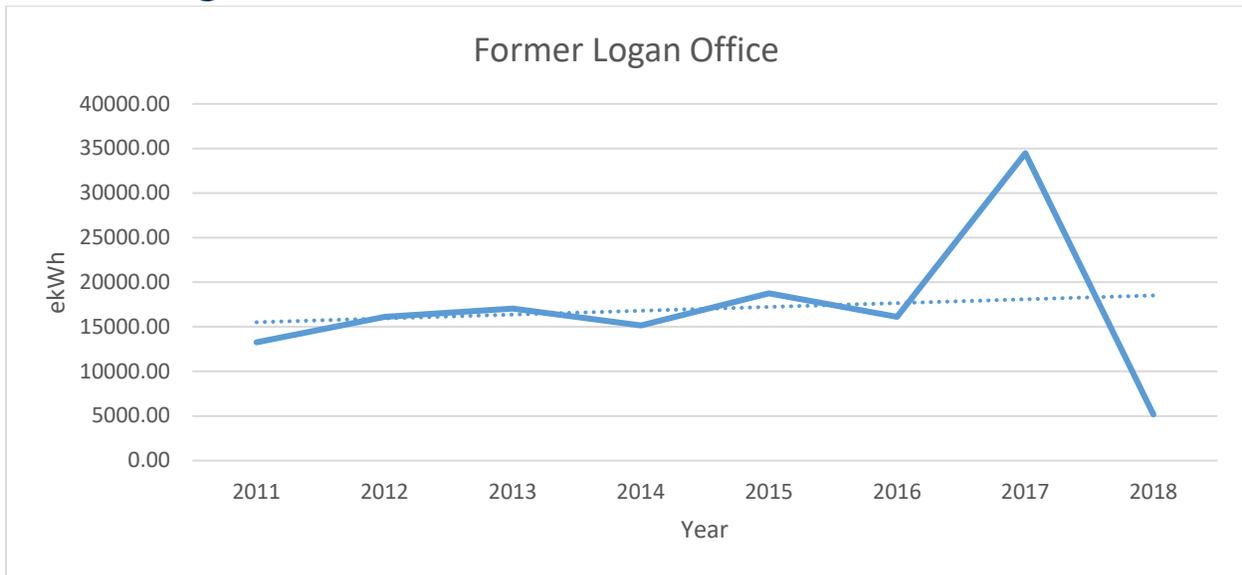
Dublin Pavilion



The Dublin Pavilion was constructed in 1977. In October 2018, the T-8 lighting was replaced with LED lights. With this retrofit, energy consumption is expected to reduce.

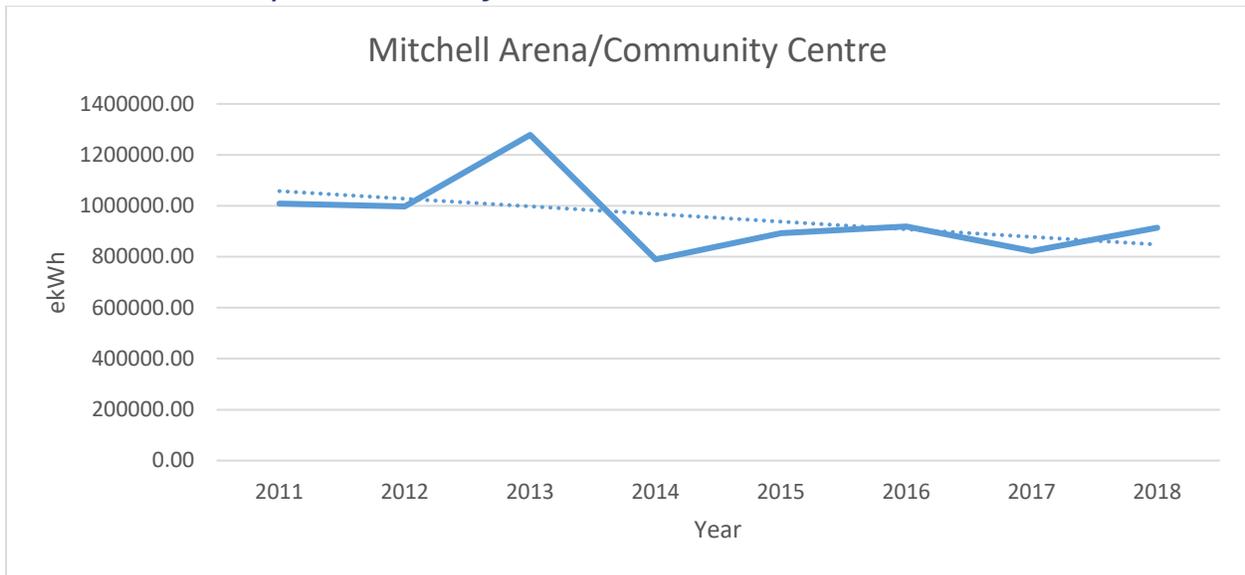
The pavilion has increased its energy consumption over 2011 by approximately 35.5%, or 11,259ekWh, in 2018. The total energy consumption for the Dublin Pavilion in 2018, was approximately 42,965.8ekWh. Emissions also increased at the Dublin Pavilion in 2018 by about 30% over 2011's emissions. In 2018, the Pavilion emitted a total of 5,403.5 kg of CO₂e.

Former Logan Office



This facility used a ground source heating and cooling system, which was installed in the summer of 1992. Supplementary Hydro for heating was in place. The facility was sold in early 2018, and will no longer be reported on in future reports. Due to the facility being sold, emissions associated with West Perth's usage decreased significantly. Energy consumption decreased by about 61%, or approximately 8,081.6ekWh, since 2011. In 2018, the Logan Office consumed approximately 5,175.4ekWh. Emissions at the former Logan Office decreased by approximately 61% as well, compared to 2011's emissions. In 2018, emissions totaled approximately 222.5 kg of CO₂e.

Mitchell Arena/Community Centre

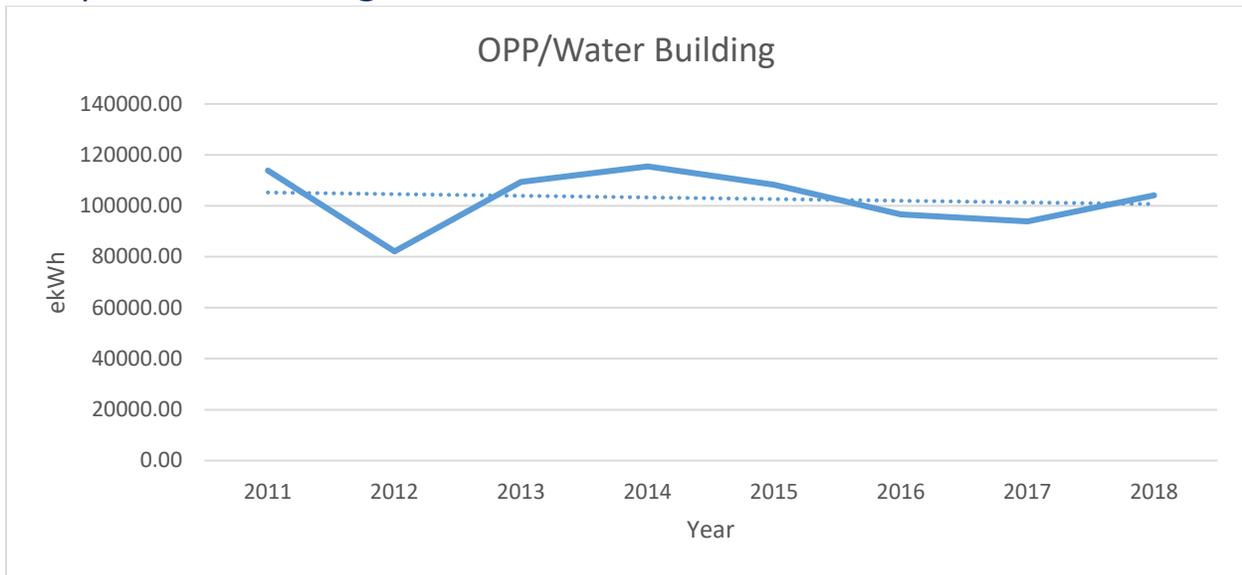


The arena/community centre was constructed in 1974. In 2016, two rooftop HVAC units were replaced, as well as two boilers, which were replaced with two new condensing high efficiency gas boilers. In 2018, T-8 lights were replaced with LED lighting. Upcoming projects for the community centre are replacements of the roof and siding, which will include new insulation.

The current ice re-surfacer is electric, and uses an umbilical cord feed. A new battery-operated model has been ordered, and is expected to begin operating in September 2020. There is current consideration for adding soft start compressors as the current compressors begin to reach their useful life.

The Mitchell Arena/Community Centre reduced its energy consumption by approximately 9.4%, or approximately 95,063.4ekWh, compared to 2011. In 2018, the Community Centre consumed a total of 913,903.2ekWh. Emissions associated with the Mitchell Arena/Community Centre also reduced in 2018, by approximately 16.6% below 2011's emission total. In 2018, emissions totaled approximately 105,369.6 kg of CO₂e.

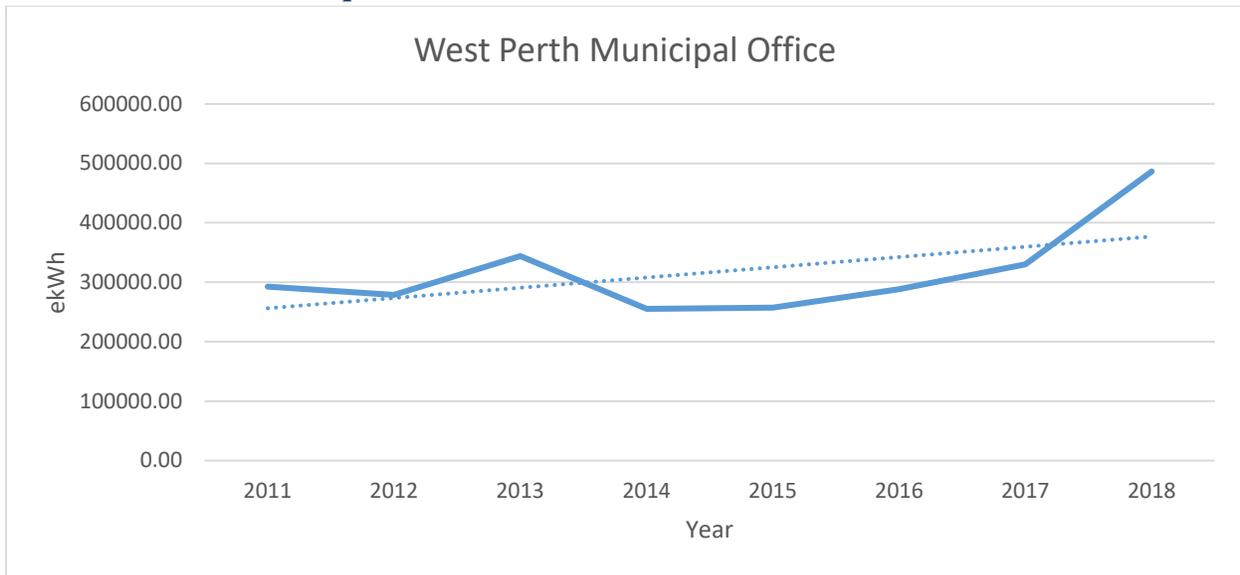
OPP/Water Building



The OPP/Water Office was constructed in 1964. In 2017, the electric heating for the building was replaced with a high efficiency natural gas furnace. In October 2018, the T-8 lights were converted to LED lights.

The OPP building has reduced its energy consumption by about 8.5%, or approximately 9,685.8ekWh, since 2011. The facility consumed a total of 104,180.8ekWh in 2018. While energy has reduced at the OPP building, emissions have increased substantially due to the increase in natural gas consumption. The building saw an increase in emissions of about 62% since 2011. Emissions in 2018, totaled approximately 7,923.8 kg of CO₂e. In 2018, the Water Division equipment was removed from the basement of the OPP building.

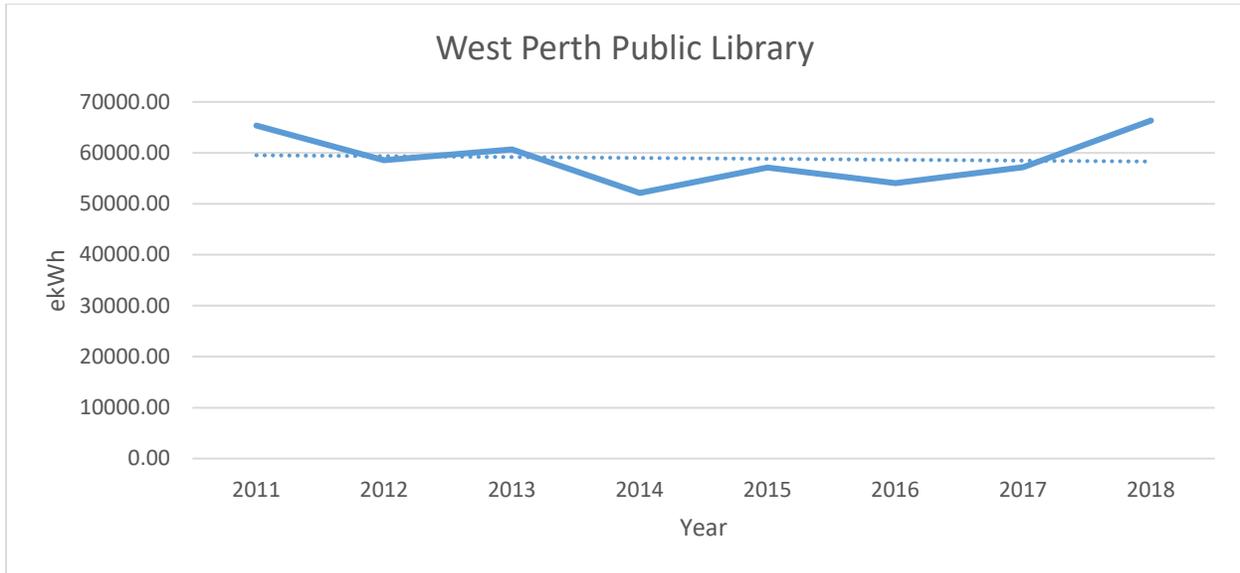
West Perth Municipal Office



The municipal office was constructed in 1924, as a high school building. In October 2018, the T-8 lights were replaced with new LED lighting. This is expected to aid in energy reduction in future years.

Energy consumption at the Municipal office has increased by approximately 66%, or about 193,825.3ekWh, since 2011. In 2018, the Municipal office used approximately 486,443.29ekWh. Emissions increased at the municipal office by about 82.5% since 2011. The municipal office emitted a total of 75,215.3 kg of CO₂e in 2018, due to the increase in usage of natural gas.

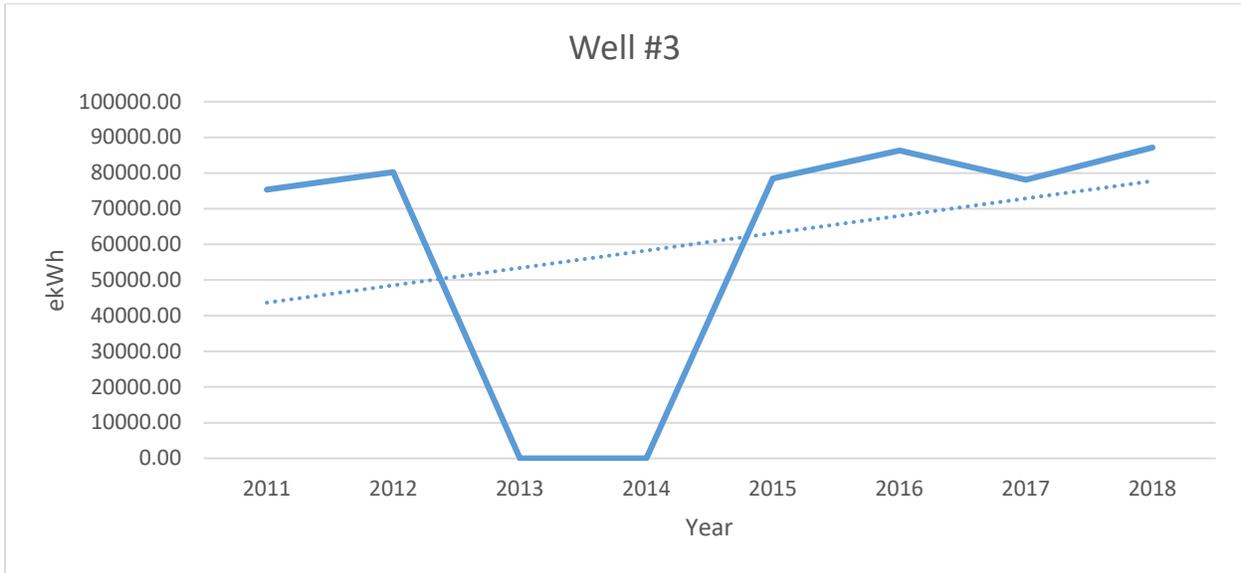
West Perth Public Library



The library was constructed in the year 1908. The T-8 lights were replaced with LED lighting in October 2018, which is expected to reduce energy consumption.

Energy consumption at the Public Library has increased by approximately 1.5%, or about 1,000ekWh, since 2011. In 2018, the library consumed a total of 66,347.3ekWh. Emissions at the library increased by approximately 7% compared to 2011. In 2018, the library emitted a total of 7,626.9 kg of CO₂e.

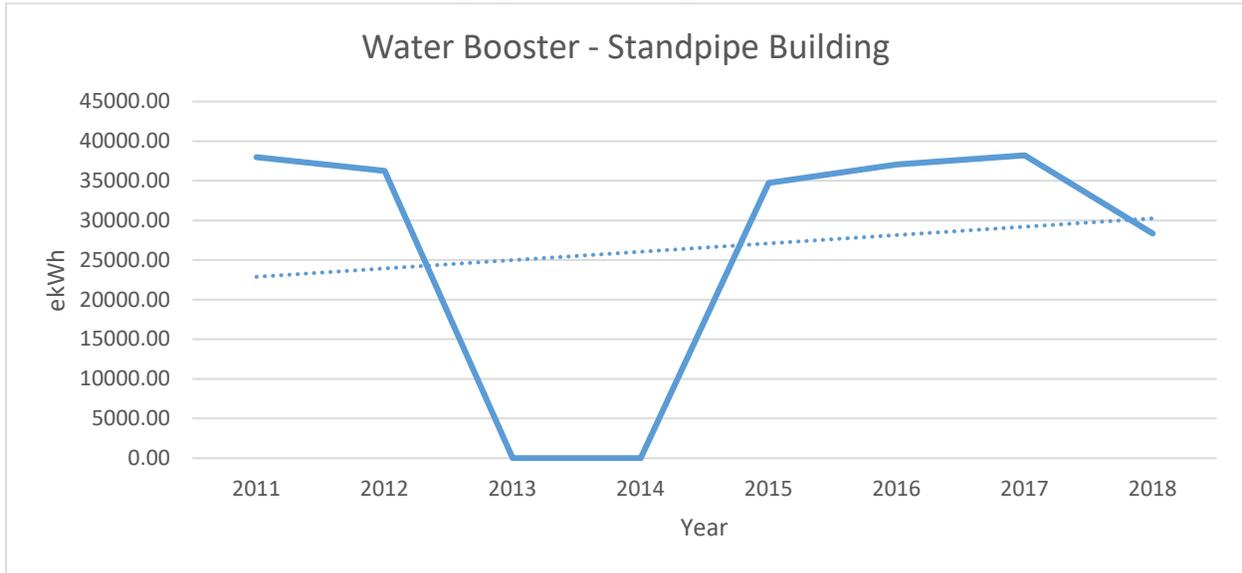
Well #3



Well #3 was constructed in the year 1967, and runs 24/7, year round.

Energy consumption and greenhouse gas emissions at the well have been consistent throughout the six years, only increasing approximately 15.6% since 2011, to a total of 87,161 ekWh, and an associated 3,748 tonnes of CO₂e.

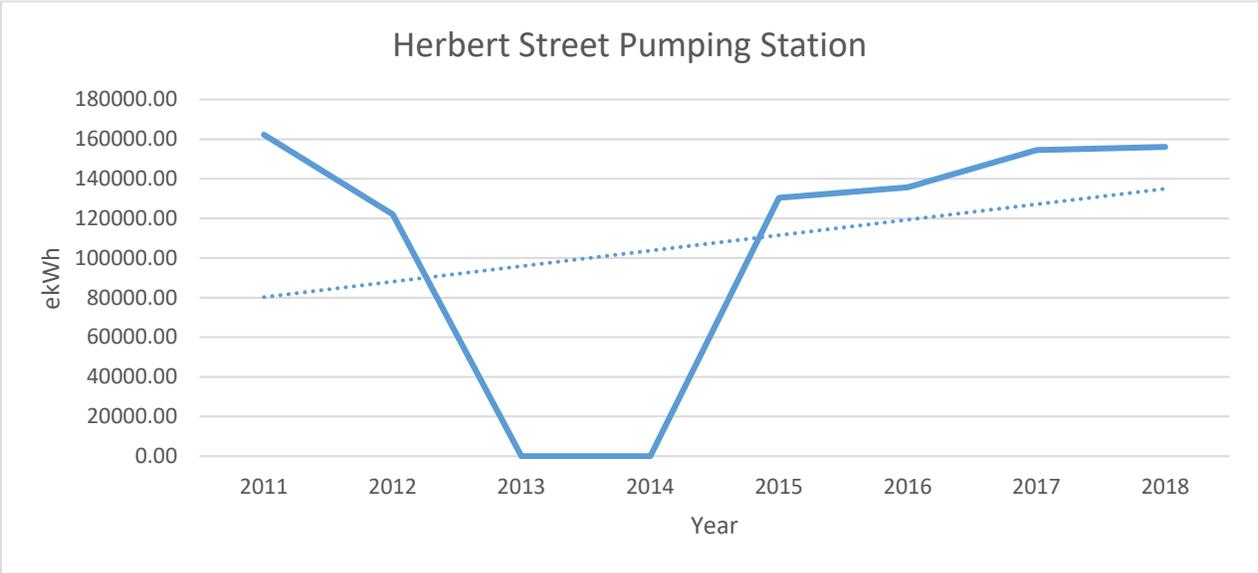
Water Booster and Standpipe Building



The Water Booster and Standpipe Building was built in 1980 and runs 24/7, year round.

This facility has reduced its energy consumption compared to 2011. Energy consumption and greenhouse gas emissions have reduced by approximately 25%, using a total of 28,348 ekWh with an associated emission total of 1,219 tonnes of CO₂e.

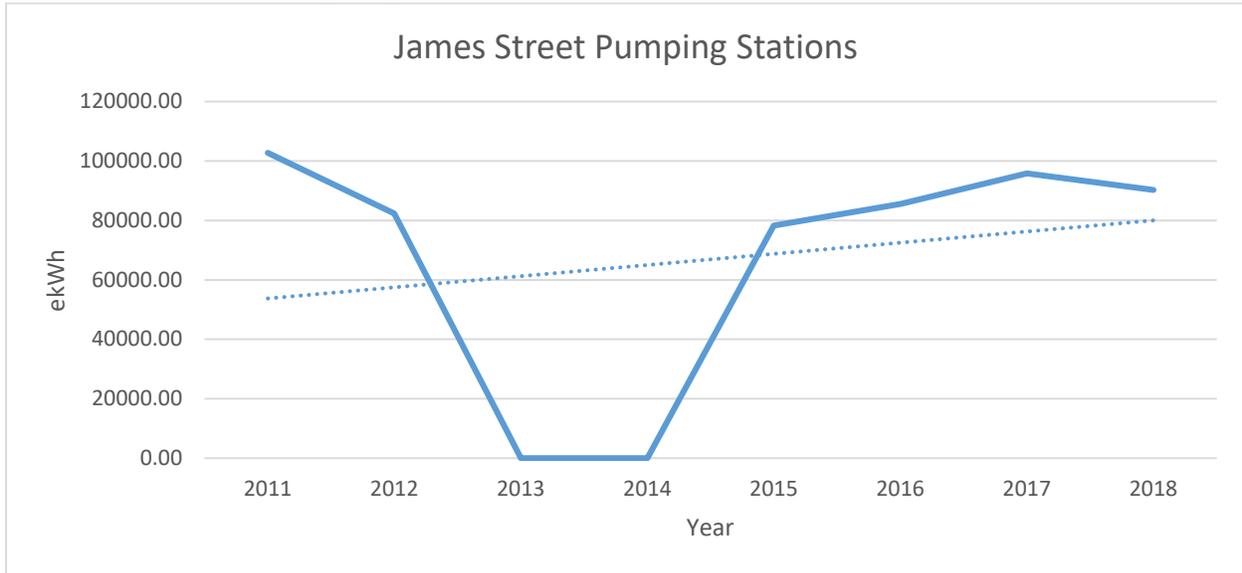
Herbert Street Pumping Station



The Herbert St Pumping Station was built in 1983 and runs 24/7, year round.

The energy consumed and the associated emissions by this facility, have remained consistent for the past six years, only decreasing by approximately 3.8% since 2011. The facility consumed 156,013 ekWh, and emitted an associated 6,709 tonnes of CO₂e.

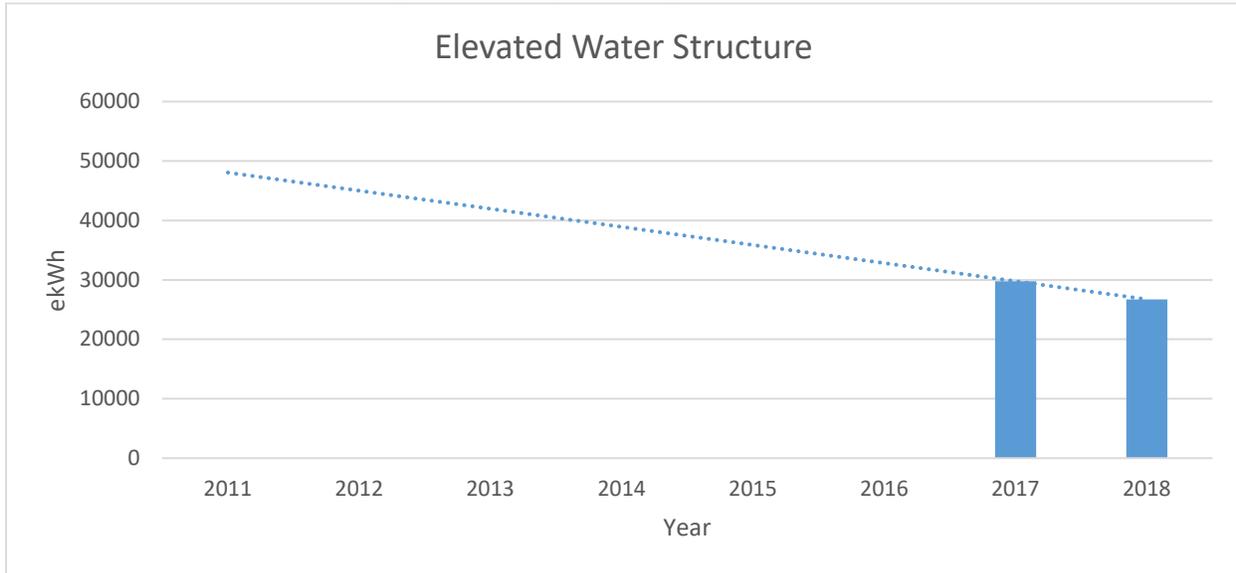
James Street Pumping Station



The James St Pumping Station was built in 2004 and runs 24/7, year round.

The facility has slightly reduced its energy consumption, but overall has remained consistent in its energy consumption over the past six years. In 2018, energy consumption and emission production were approximately 12% lower than in 2011. The facility consumed 90,297 ekWh and emitted an associated 3,883 tonnes of CO₂e.

Elevated Water Storage Tank (EWST)



The Elevated Water Storage Tank was constructed in 2017, and commissioned in September 2017 at 125 Clarke St in Mitchell.

In 2018, the EWST consumed an approximate total of 26,725.5kWh, which was about 10%, or 3,046kWh lower than the first year of operation in 2017. Emissions from the EWST reduced as well between 2017 and 2018. In 2018, it emitted a total of 1,149.2 kg of CO₂e, which is approximately 10% less than 2017.

Future Plans

The Municipality of West Perth consumes a significant amount of energy. This plan will be used to aid in the reduction of energy and to aid in the implementation of impactful strategies, retrofit management, as well as monitoring and tracking consumption patterns. Future energy plans and goals will be considered on a regular basis. The goals need to be annually established along with the Council's approval of the municipal budget.

West Perth is currently in the process of looking at replacing the Fire Hall and building a larger and more efficient building. We are considering the possibility of installing solar panels on this facility and the feasibility of this investment.

West Perth is also considering options for the current municipal office and evaluating the best options for this facility. Consideration of upgrades or a new facility are being done currently with energy efficiency as a high priority in this decision.

The Municipality has future plans to replace the compressor and chiller in the Mitchell Arena and Community Centre and it is expected that this project will lead to energy savings in future years. Opportunities for continued energy savings at the Wastewater Treatment Plant will also be considered as improvements are made.