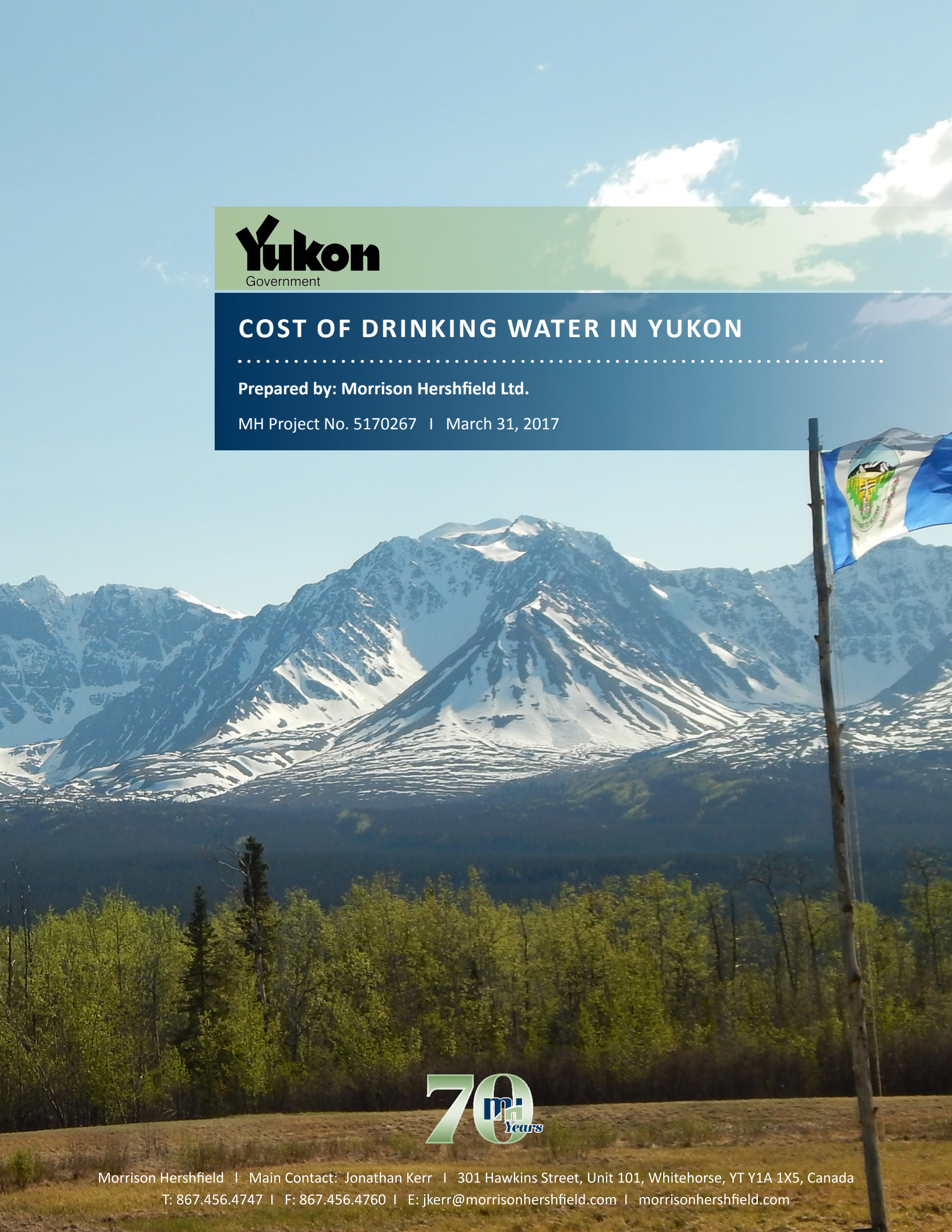

Yukon Government

COST OF DRINKING WATER IN YUKON

Prepared by: Morrison Hershfield Ltd.

MH Project No. 5170267 I March 31, 2017

Morrison Hershfield I Main Contact: Jonathan Kerr I 301 Hawkins Street, Unit 101, Whitehorse, YT Y1A 1X5, Canada
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MORRISON HERSHFIELD

March 31, 2017 MH Job No. 5170267

Chris Evans, Manager Environmental Affairs
Community Development, Government of Yukon
Box 2703 (C9)
Whitehorse, Yukon
Y1A 2C6

Dear Chris Evans:

Re: Cost of Drinking Water in the Yukon

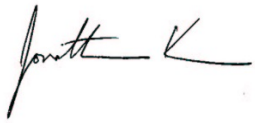
We are pleased to present this report with the results of our study to assess the cost of providing drinking water in Yukon communities. We have included a brief overview of how we conducted the study, what information we were able to compile (with the allocated resources and data collection limitations), and provide a list of recommendations to continue this important work.

This report presents the preliminary finding associated the collection of baseline data (namely operating/maintenance costs and water treatment plant production rates) to quantify the cost of drinking water from fifteen service locations across the Yukon. The data quality is quite variable, however the findings include a number of key insights and data gaps for future study.

This information is a starting point that will help Yukoners better understand the costs of providing water in their communities, will enhance the public's perception of water value, and will help contribute to long term sustainable water use. This information may also provide decision makers with evidence to help support and develop policy or contribute to sustainable water infrastructure planning.

Yours truly,

Morrison Hershfield Limited



Jonathan Kerr, M.Sc., P.Geo.

Hydrogeologist

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Study Rational and Purpose

In 2014, the Yukon Government developed a strategic comprehensive approach on which to base its water management decisions and allow everyone in the Yukon involved with water management to work towards a common goal; to ensure Yukoners will always have water for nature and water for people. The “Yukon Water Strategy and Action Plan” (2014) specifically identifies more than 50 actions items that the Yukon Government will undertake to help achieve this goal.

There are 6 priority areas within the strategy, of which one is entitled “Maintain/Improve Access to Safe Drinking Water”. This priority area is the subject of this proposed study. In particular, the study is a response to the following action item to ***Gather baseline data to assess drinking water use and the real cost of providing water in the Yukon*** **(2014 p. 19).**

The Yukon Government has and continues to make significant investments in community drinking water systems in order to provide Yukoners drinking water and to meet standards outlined in the Yukon Drinking Water Regulation. However, the evaluation of drinking water usage rates and the related cost efficiencies of providing drinking water remains somewhat unknown. A first step is to build Yukoner’s understanding and application of the value of drinking water.

The results of this study is a first step to build Yukoner’s understanding of the value of drinking water in their community.

There are many variables that directly impact water usage rates and the associated O&M costs to produce and deliver a single liter of potable water to a citizen. The data collected from one water system may not be directly comparable to the data collected from another. However, the focus of this study was to obtain and compile existing water system information in three broad categories.

Study Methodology and Limitations

The overall purpose of this study is to conduct the first comprehensive assessment of the cost of providing drinking water for Yukon communities. The data collected focused on three primary categories which included:

1. Level of Service (i.e. piped, trucked, etc.);
2. Operation and Maintenance Costs (including fees/charges to users); and
3. Water Usage Rates (the rate and volume of water that passes through a system).

For the purposes of collecting and comparing a broad and meaningful data set, water use and the associated cost of production, were collected from as many service locations (water treatment plants) as was possible with the allocated resources. The following table summarizes the locations where information was successfully obtained.

Piped Water System Location	Self-Serve Fill Location	Trucked Water System Location
Whitehorse Dawson Watson Lake Haines Junction Faro Mayo	YG Tagish Army Beach Marsh Lake Firehall Mendenhall Deep Creek	Telsin Ross River Carcross Old Crow Keno

The data sources that were utilized as part of the study included:

- YG Community Affairs: Operation and maintenance cost information for water systems from certain municipalities in the Yukon were made available through engaging YG Community Affairs. The quality and format of this information varied substantially.
- YG Community Operations: Many water systems within unincorporated communities are supported by YG Community Operations, and both flow data and financial data were available for some systems operated by YG.
- Other Data Sources: The project team also utilized existing local knowledge and contacts in certain municipalities to obtain flow and financial data. Interviews with key personnel, communities or operators were often required to verify or obtain supplementary information.
- Waterline (Yukon Water Board): For systems operating under a water license, flow data was obtained through searches on Waterline's online public database. Annual reporting often included monthly flows, however, for smaller communities the flow data was often

very limited (i.e. not provided or yearly totals only). Reporting typically covered the desired date range from 2012-2016, however this was not the case for all communities.

- Level of service information was verified through discussions with operators, as well as by reporting information from EBA's 2017 DRAFT Yukon Source Water Protection Study, which summarizes various water supply systems throughout the Yukon. Specifically this document help provide and verify details regarding the type and complexity of treatment many service locations.

An attempt was made to collect data from the past five years. Specifically the following data categories were compiled where possible:

- Monthly flow data;
- Financial data (broken out into Labour, Operations, and Replacement costs); and
- Population data.

In some cases, the population that is utilizing a particular service location was estimated. Further confidence would be required at these locations as they service a transient or sub population of a given community or area.

A completed summary of the data collection sources, assumptions, and limitations is provided in **Appendix C.**

Pertinent Findings

The findings of this study have been summarized into three general figures. The following provides a brief overview for each figure.

- **Figure 1** provides a breakdown for 2016, showing all fifteen water treatment plants and their respective water production / utilization rates. Not surprisingly the City of Whitehorse, which has the largest population, uses approximately 70% of all potable water produced in the Yukon.

- **Figure 2** provides a breakdown for 2016, showing all fifteen water treatment plants and the amount of water used per year, per person (m^3/year/person -dark blue bar graph). The secondary axis (green bar graph) presents the cost of water per meter cube ($/$m^3$).

- **Figure 3** is a poster that has been created as an educational tool to help present the major findings of this study.

- **Appendix A** is a summary table that describes the level of service and cost of drinking water for each of the service locations studied.

- **Appendix B** is a graphical representation of the data for each individual service location studied.

The preliminary findings indicate that the cost of water produced by a given water treatment plant depends on many variables including level of service (trucked, self-serve, or piped),the geographic location, type and complexity of treatment plant, density of population, and local operational challenges.

Next Steps

Improvement of Data Quality and Accuracy

A number of key limitations and challenges encountered throughout this study pertain to data quality and accuracy. To help improve this limitation, the following next steps may include:

1. Identify water treatment plants that do not collect routine flow data and help operators develop appropriate data collection methods.

2. No baseline data was collected for some of the water systems in Yukon. Follow up work should include these systems to help expand the data.

3. Further study is needed to improve the representativeness of the data. For example, at some water treatment plants, water is provided to a transient population or only to a subset of a given community (i.e., the Marsh Lake Fire Hall provides water to only some of the population living in the area). It is recommended that site surveys be conducted at key locations to help further understand this variability. One suggestion is to take advantage of programs such as the Yukon Youth Conservation Corps (Y2C2). Such programs could be utilized to engage resources to assist in this data collection process. (http://www.env.gov.yk.ca/environment-you/y2c2.php - application deadline isApril 30, 2017).

4. Additional effort should be taken to confirm and verify the financial data provided to the project team during this study. A number of assumptions were used to develop the financial estimates based on various forms of communication and reporting. Data verification is therefore recommended to provide an increased level of data confidence in this regard.

5. Given that there are other studies ongoing related to the Water Strategy, it is recommended that study collaboration and data integration be conducted (if possible) to optimize future data manipulation and utilization (i.e. integrate this data into a GIS platform).

Financial Accountability and Cost

1. The findings of this study only accounted for water production costs associated with the operation of the water system. Capital costs of infrastructure and infrastructure replacement (i.e. asset depreciation) contribute significantly to the overall cost of water and should be included in future analyses. Collectively, this information can assist with future infrastructure planning and may also be used to support the develop of comprehensive infrastructure service agreements for neighboring communities to share infrastructure costs and benefits.

2. Many jurisdictions across Canada face infrastructure deficits and have been working for decades on a variety of cost recovery mechanisms. The implementation of these

programs are often faced with public scrutiny. Many municipalities and local governments responsible for providing water servicing have worked through the challenge of putting a value on drinking water and implementing a cost recovery program. As part of a review of cost recovery mechanisms, these communities can offer valuable insights to the Yukon Government and provide an effective approach based on experience.

3. The findings of this study could be used to inform a cross jurisdictional review to help provide a broader context on the value of water. The operation, maintenance and capital costs, the level of servicing, and per capita water use data could be compared to other jurisdictions to provide a relative measure of performance, where applicable.

Public Engagement / Education

1. Water production costs and the associated level of service (piped, self-serve fill points or trucked delivery) collectively play a role in how water and the value of water is perceived by the public. The preliminary findings of this study should be included in the development and implementation of an educational program related to valuing water in Yukon communities.

Figure 1. 2016 Water Use in Yukon Service Locations

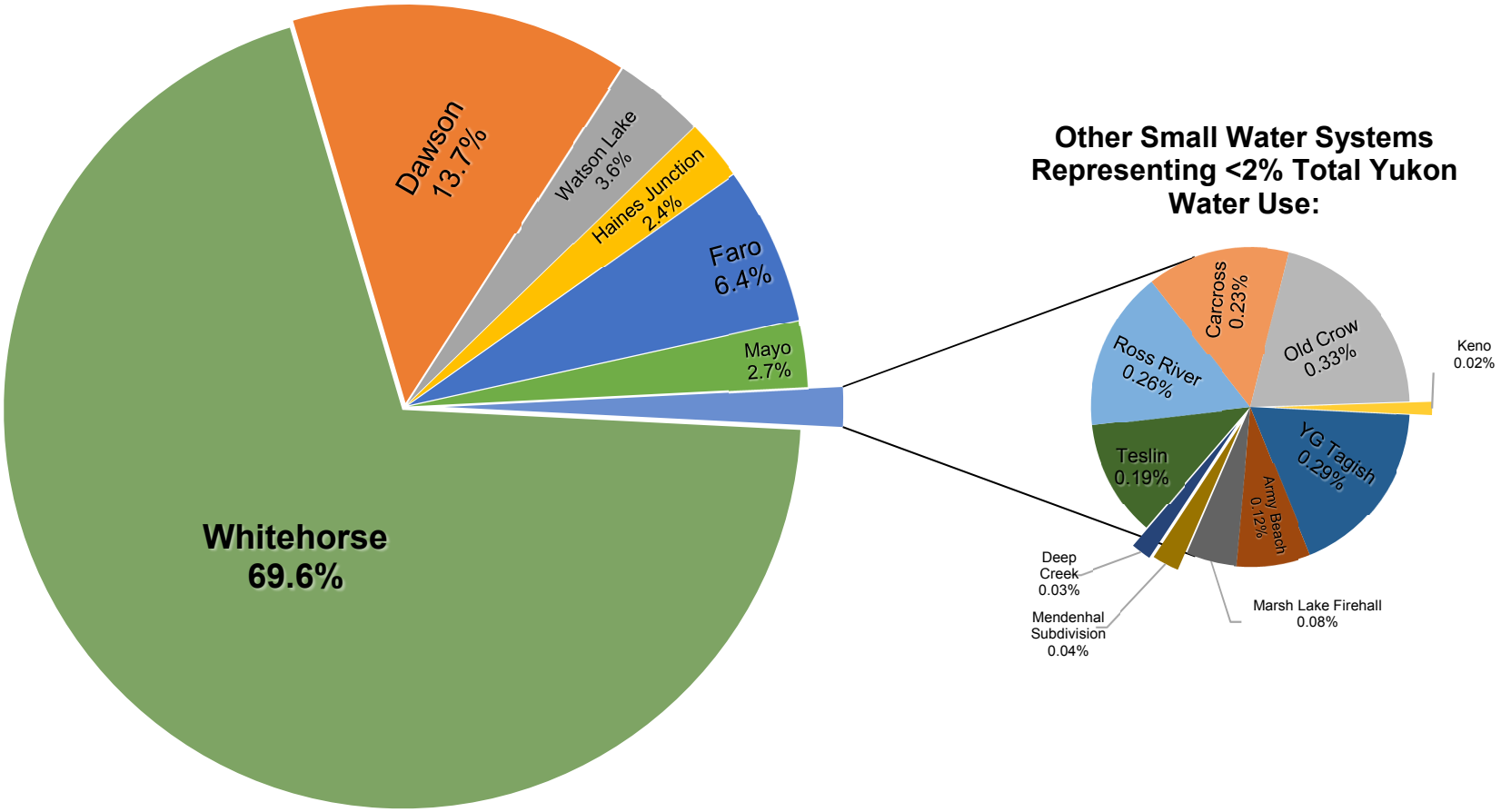
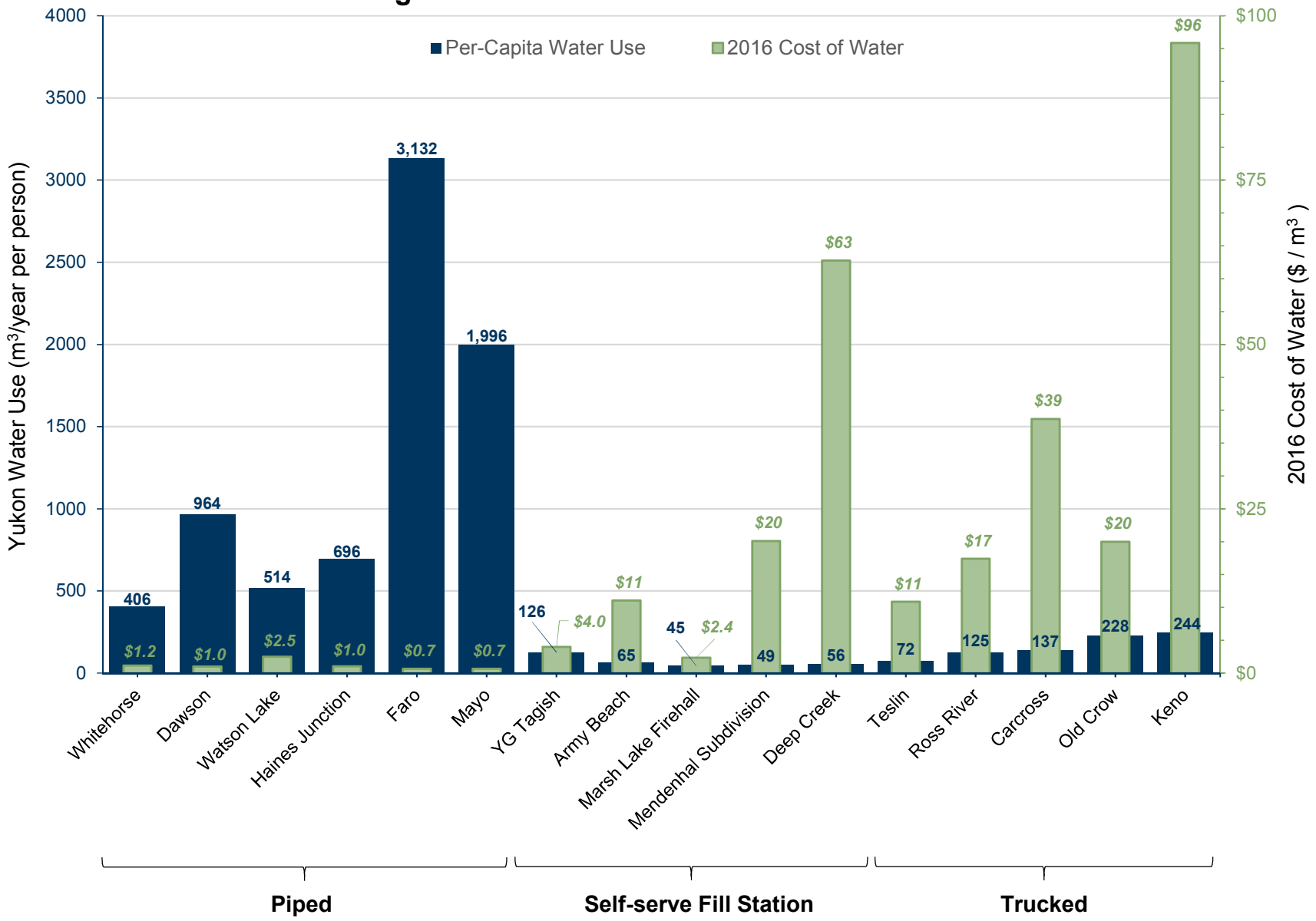


Figure 2. 2016 Water Use and Cost of Water

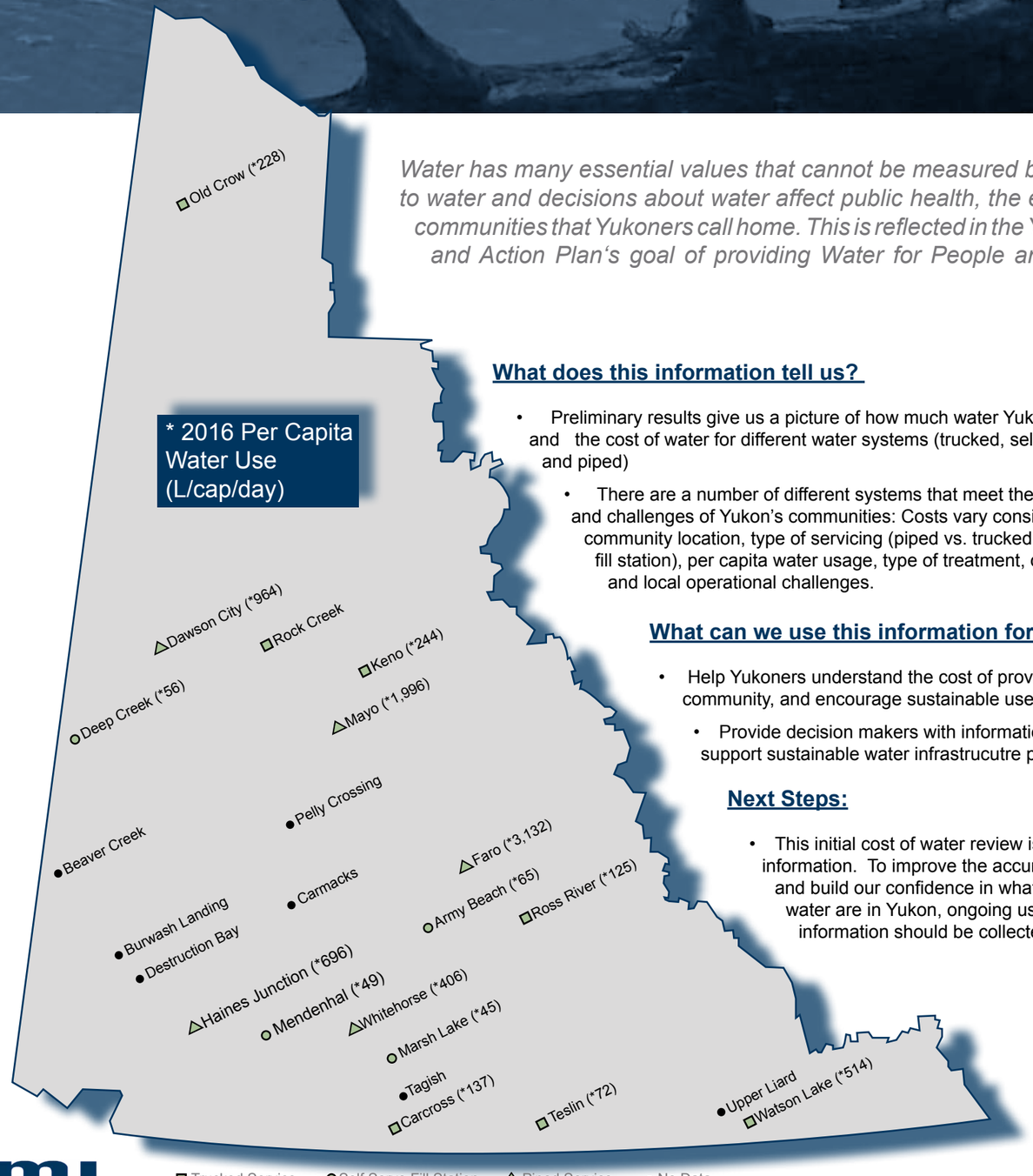


MORRISON HERSHFIELD

Yukon Water Strategy:

Assessing Water Use and the Cost of Providng Water in the Yukon

Water has many essential values that cannot be measured by cost alone; access to water and decisions about water affect public health, the environment, and the communities that Yukoners call home. This is reflected in the Yukon Water Strategy and Action Plan's goal of providing Water for People and Water for Nature.



Note: 1. Only Service Locations with data that could be obtained have been considered at this time.
2. All water usage values reflect potable water produced by the water systems.

What does this information tell us?

- Preliminary results give us a picture of how much water Yukon communities use and the cost of water for different water systems (trucked, self-serve fill station, and piped)
- There are a number of different systems that meet the unique needs and challenges of Yukon's communities: Costs vary considerably based on community location, type of servicing (piped vs. trucked service vs. self-serve fill station), per capita water usage, type of treatment, density of population, and local operational challenges.

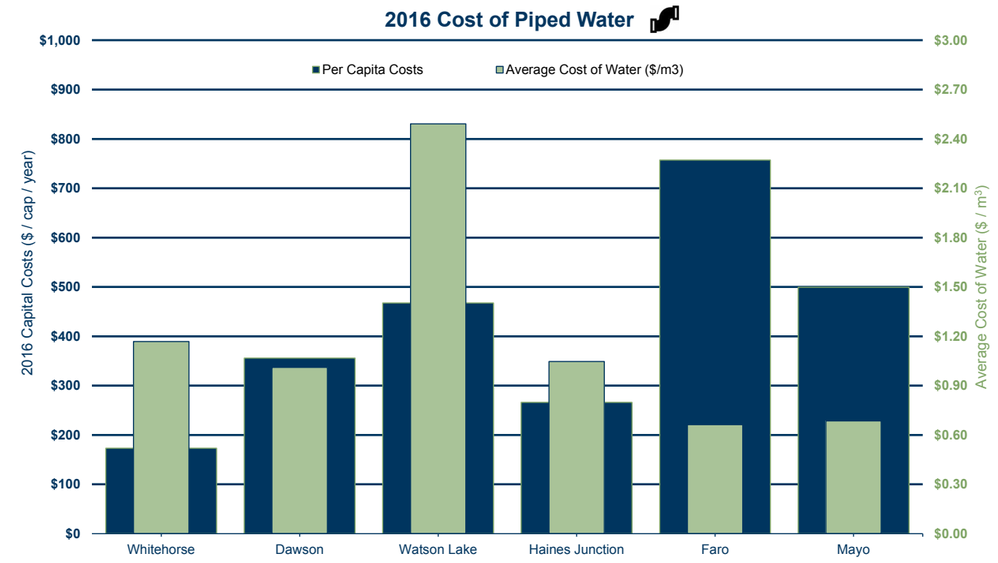
What can we use this information for?

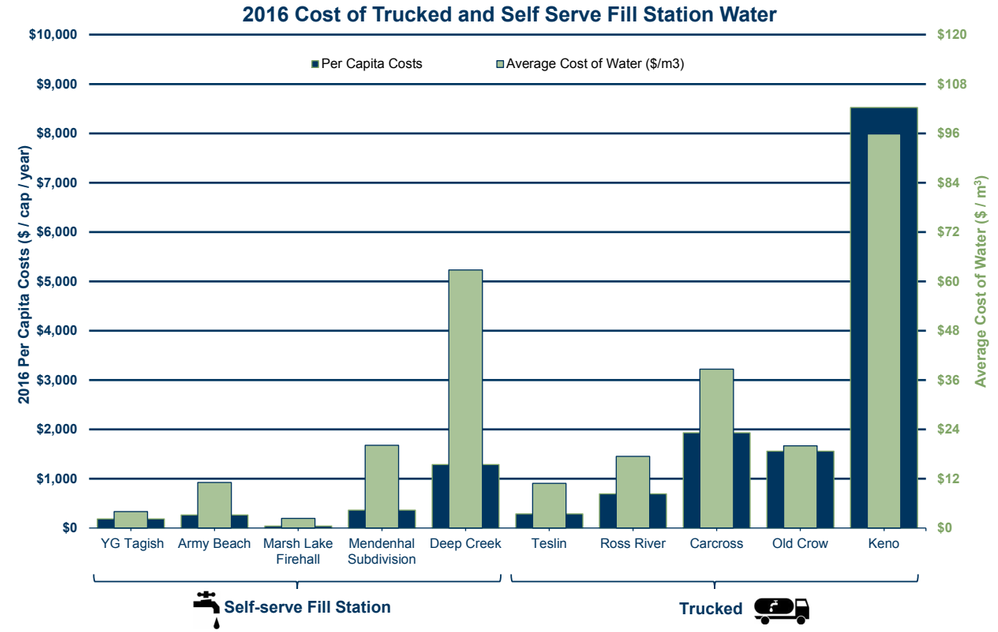
- Help Yukoners understand the cost of providing water in their community, and encourage sustainable use
- Provide decision makers with information to develop policy and support sustainable water infrastrucutre planning.

Next Steps:

- This initial cost of water review is based on limited information. To improve the accuracy of this information and build our confidence in what the true costs of water are in Yukon, ongoing usage and costing information should be collected and considered.

Information Based on Preliminary Data





Appendix A)

Summary Table: Level of Services and Cost of Drinking Water in Yukon

Appendix A) Summary Table: Level of Services and Cost of Drinking Water in Yukon

Service Locations	Assumed Service Population	Type of Treatment*	Date of Last Known Major Work*	Serivce Type: Bulk Water Fill Station, Trucked Water Delivery (including Distance)	Piped Fire Protection (Fire Hydrants, Fire Pumps, and Backup Power)	2016 Annual Water Use (m^3/year)	Per Capita Water Use (L/cap/day)	2016 Annual Operating Cost ($/year)	Per Capita Cost ($/cap/year)	2016 Average Cost of Water ($/$m^3$)
Whitehorse	29,057	Chlorination	2010, 2014	Piped Service	Yes	4,307,649	406	$ 5,030,364	$ 173	$ 1.17
Dawson	2,400	Chlorination	2014	Piped Service	Yes	844,598	964	$ 853,390	$ 356	$ 1.01
Watson Lake	1,200	Unknown	2013	Piped Service	Yes	225,191	514	$ 561,000	$ 468	$ 2.49
Haines Junction	593	Chlorine injection, pH adjustment (CO_2 injection), oxide arsenic filtration	2013, 2016	Piped Service	Yes	150,747	696	$ 157,753	$ 266	$ 1.05
Faro	344	UV and Chlorination	2014	Piped Service	Yes	393,304	3,132	$ 260,475	$ 757	$ 0.66
Mayo	226	Cartridge filtration (5 micron and 1 micron), UV disinfection and chlorination	2015	Piped Service	Yes	164,649	1,996	$ 112,849	$ 499	$ 0.69
YG Tagish	391	Iron and manganese removal by filtration, chlorination	2015	Self Serve Fill Station	No	17,985	126	$ 72,079	$ 184	$ 4.01
Army Beach	310	Filtration (0.02 micron) and chlorination	2010	Self Serve Fill Station	No	7,404	65	$ 81,916	$ 264	$ 11.06
Marsh Lake Firehall	310	Chlorination	Unknown	Self Serve Fill Station	No	5,098	45	$ 12,000	$ 39	$ 2.35
Mendenhal Subdivision	150	Uranium removal (media filtration) and chlorination	2015	Self Serve Fill Station	No	2,695	49	$ 54,204	$ 361	$ 20.11
Deep Creek	100	Pressure filtration and chlorination	2014/2015	Self Serve Fill Station	No	2,046	56	$ 128,440	$ 1,284	$ 62.77
Teslin	450	Greensand filtration to remove iron and manganese, granular ferric hydroxide filters to remove arsenic from	2013	Trucked Service	No	11,791	72	$ 128,239	$ 285	$ 10.88
Ross River	404	Filtration and Chlorination	2013	Trucked Service	No	16,058	125	$ 279,620	$ 692	$ 17.41
Carcross	289	Cartridge filtration, UV disinfection, chlorination	2013	Trucked Service	No	14,419	137	$ 557,331	$ 1,928	$ 38.65
Old Crow	262	Manganese-iron removal filtration, disinfection	2013	Trucked Service	No	20,401	228	$ 407,871	$ 1,557	$ 19.99
Keno	15	No treatment plant - water trucked from Mayo	-	Trucked Service	No	1,334	244	$ 127,841	$ 8,523	$ 95.85
Missing Key Data										
Rock Creek Firehall	25	Unknown – likely filtration, UV and disinfection as we understand it was upgraded in 2012 for GUDI source	2012	Trucked and Pick Up	No	TBD	TBD	$ 34,774	TBD	TBD
KFN Community Water Supply (Burwash Landing)	106	Primary and secondary disinfection	2012	Trucked Service	No	TBD	TBD	TBD	TBD	TBD
CTFN Water Plant (Tagish)	Unknown	Chlorination and manganese removal	Unknown	Trucked Service	No	TBD	TBD	TBD	TBD	TBD
Liard First Nation (2 mile Watson Lake)		Unknown		Piped and Trucked	TBD	TBD	TBD	TBD	TBD	TBD
Selkirk First Nation (Pelly)	200	Filtration (10 and 1 micron steps) and chlorination		Piped and Trucked	TBD	TBD	TBD	TBD	TBD	TBD
White River First Nation Beaver Creek Community Water Supply	Unknown	Filtration (10 and 1 micron) and chlorination	2011	Piped Service	TBD	TBD	TBD	TBD	TBD	TBD
Beaver Creek	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Destruction Bay	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD

Legend
Green: Municipality
Red: Unincorporated Community
Blue: FN

*Works Cited: EBA Tetra Tech. Water System Bios (2017, Draft)

Appendix B)

Individual Service Location Summary Graphs

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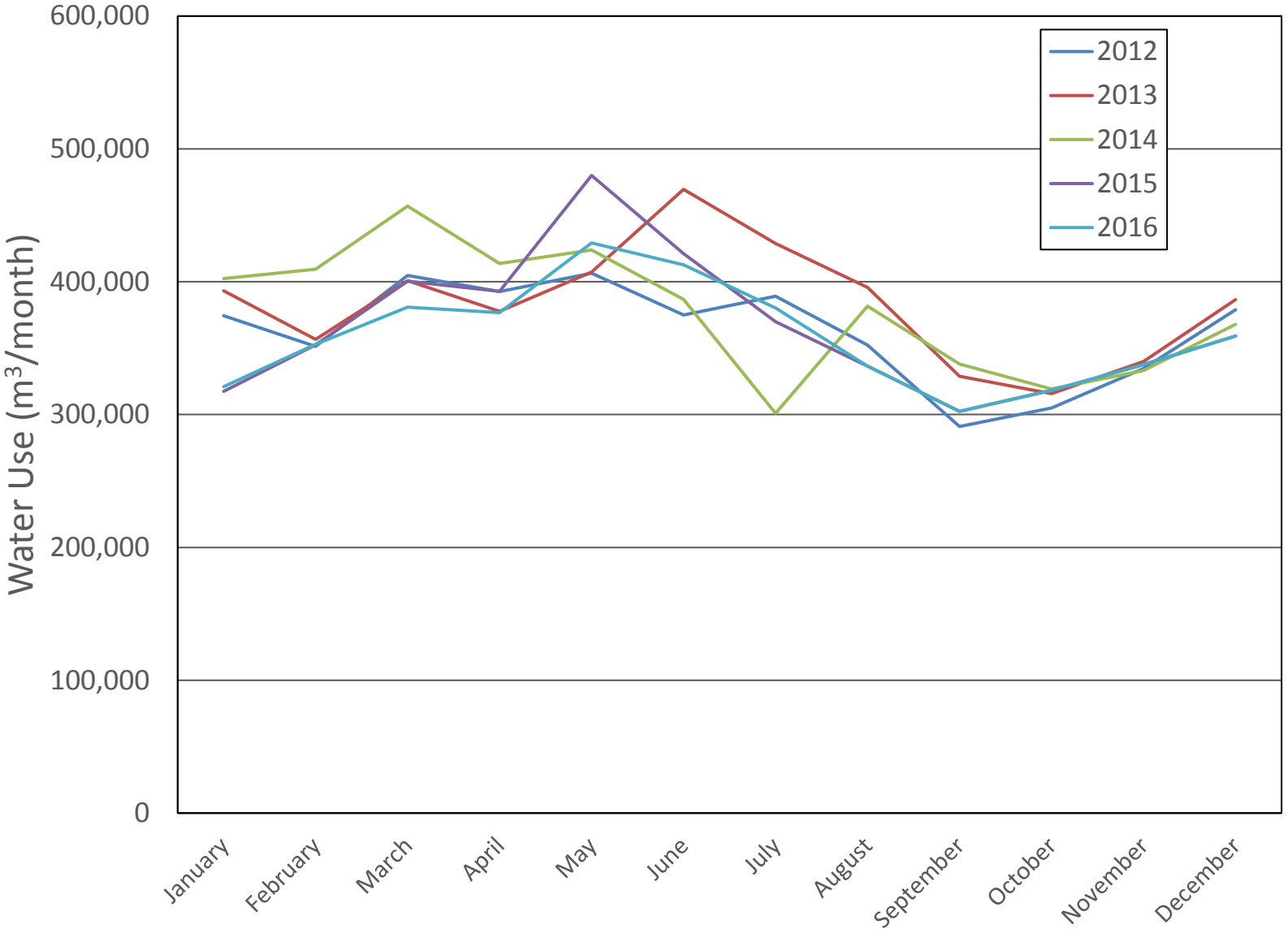
MH # 5170267

03/22/2017

City of Whitehorse Treated Water Flows

(MN93-001)



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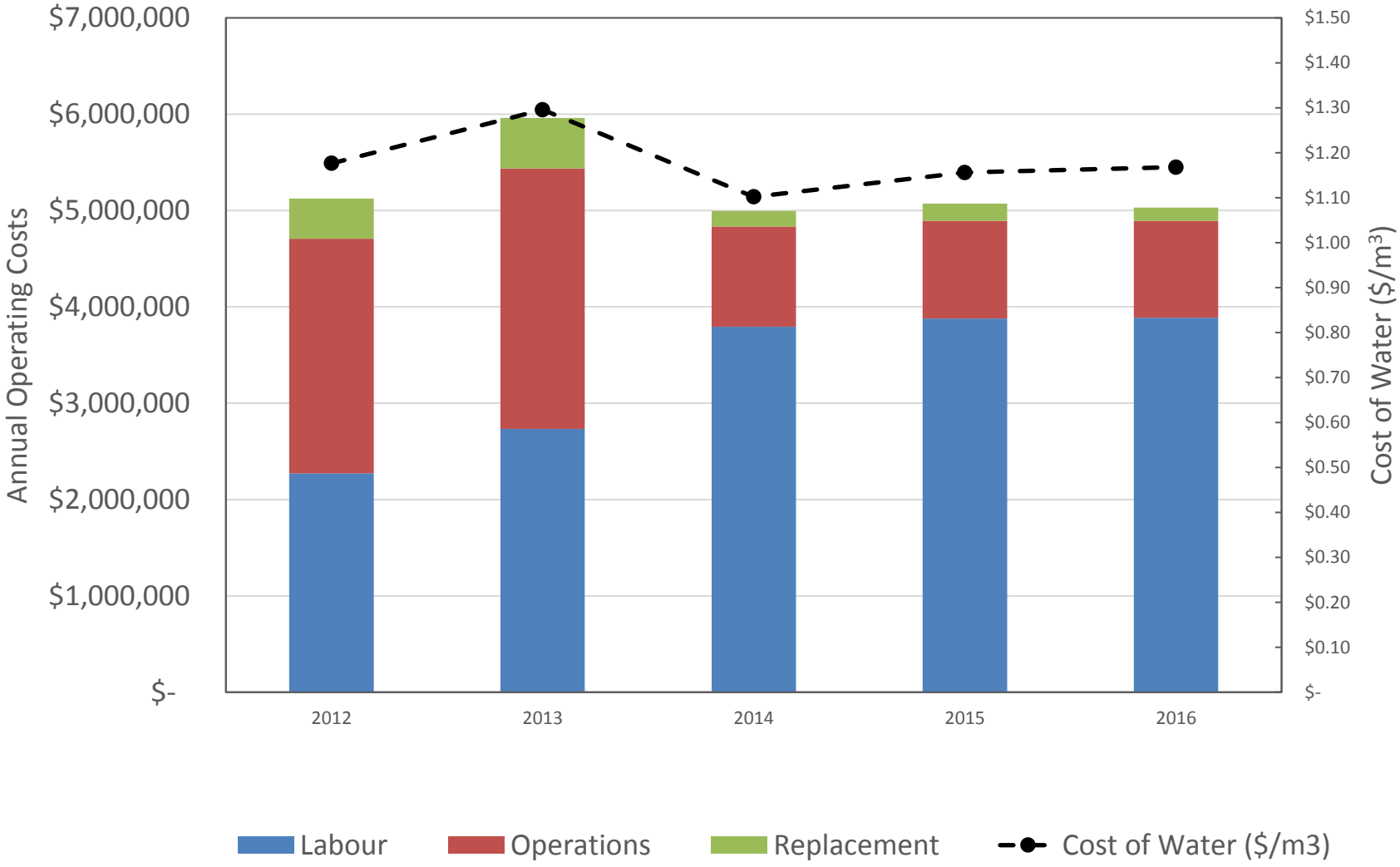
Yukon Government

MH # 5170267

03/22/2017

City of Whitehorse Water System Operating Costs

(MN93-001)



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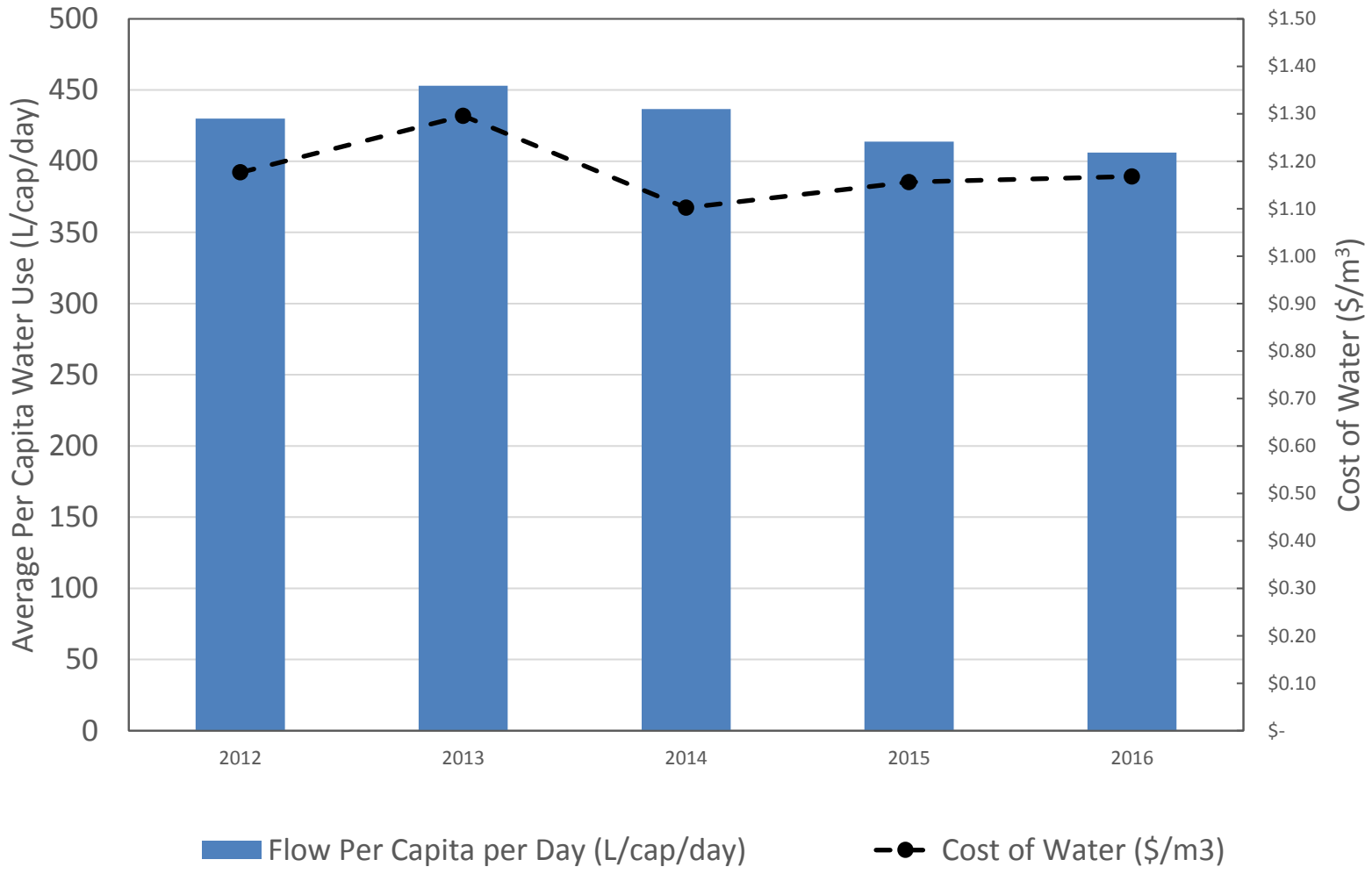
03/22/2017

City of Whitehorse Water System Per Capita Water Use

(MN93-001)



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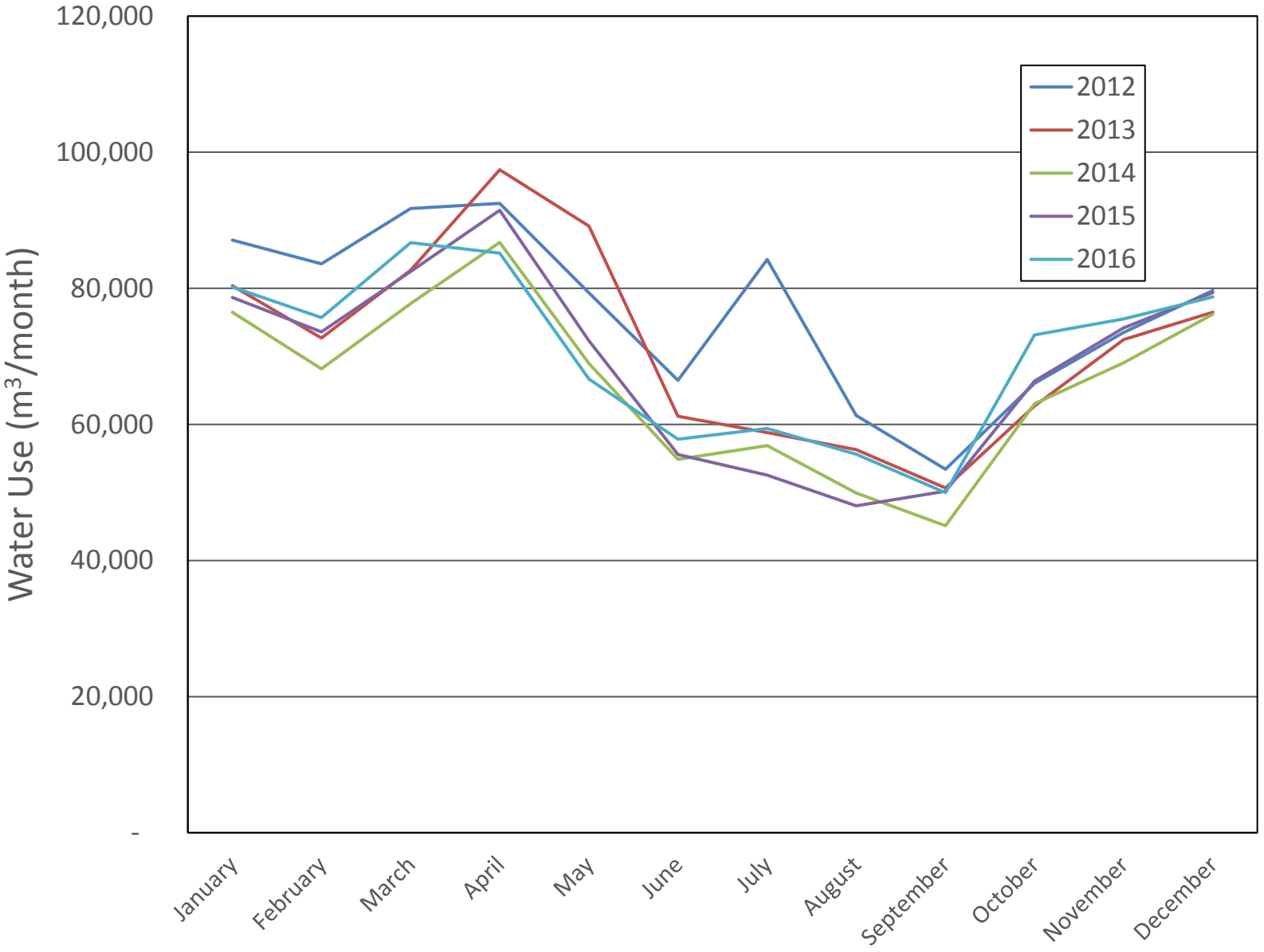
03/22/2017

Dawson City Treated Water Flows



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Dawson City Water System Operating Costs

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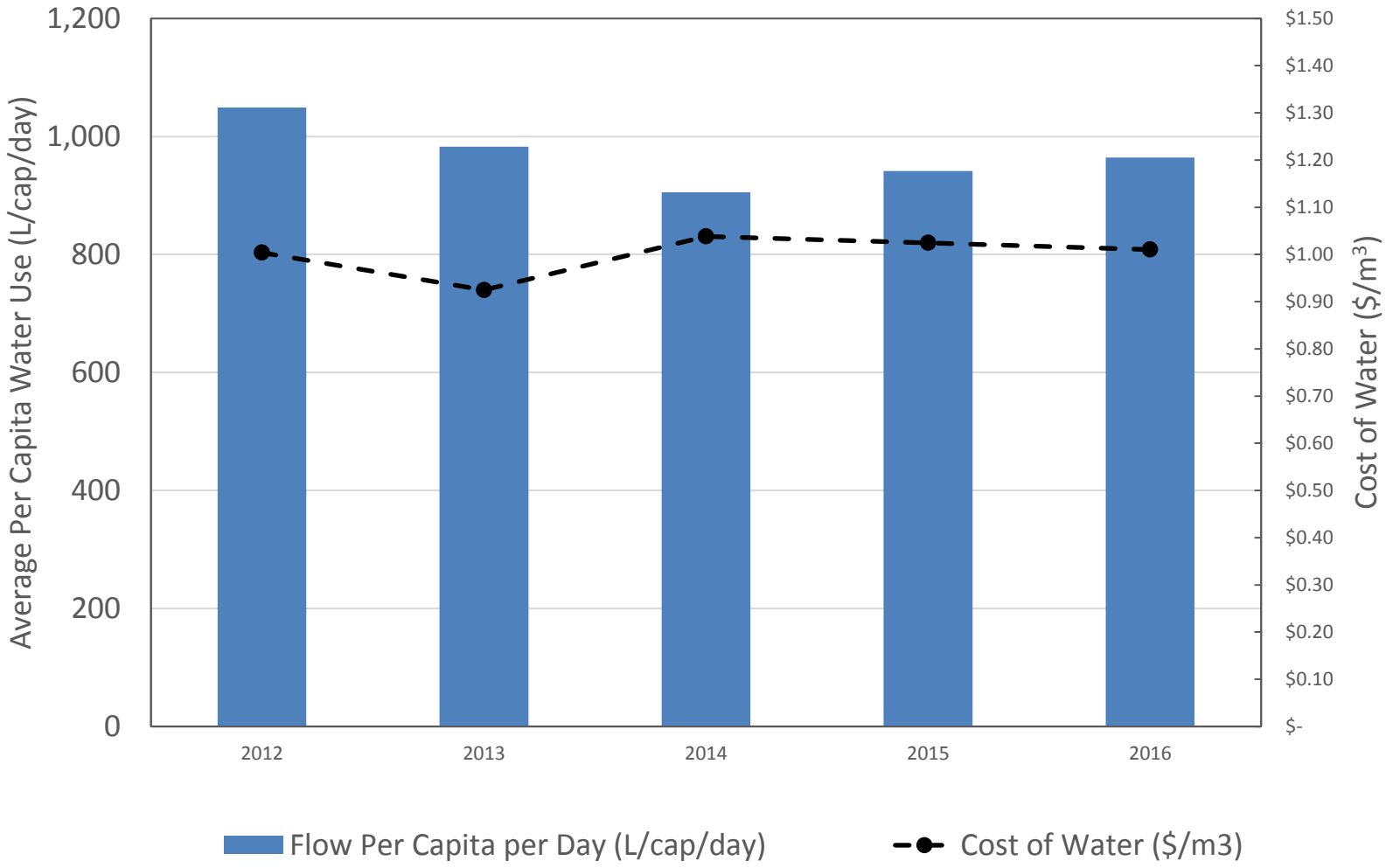
MH # 5170267

03/22/2017

Dawson City Water System Per Capita Water Use



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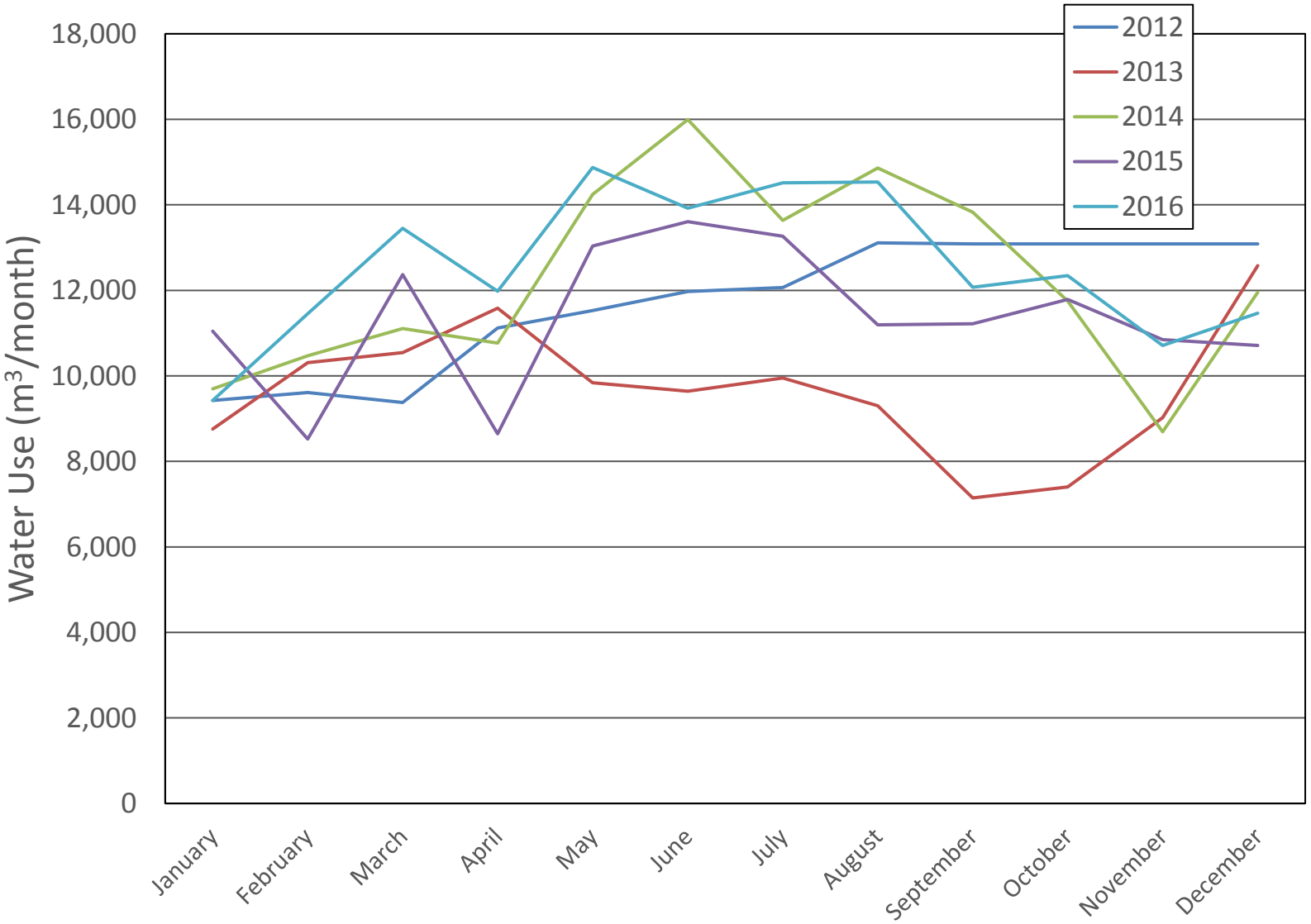
MH # 5170267

03/22/2017

Village of Haines Junction
Treated Water Flows
(MN11-030)



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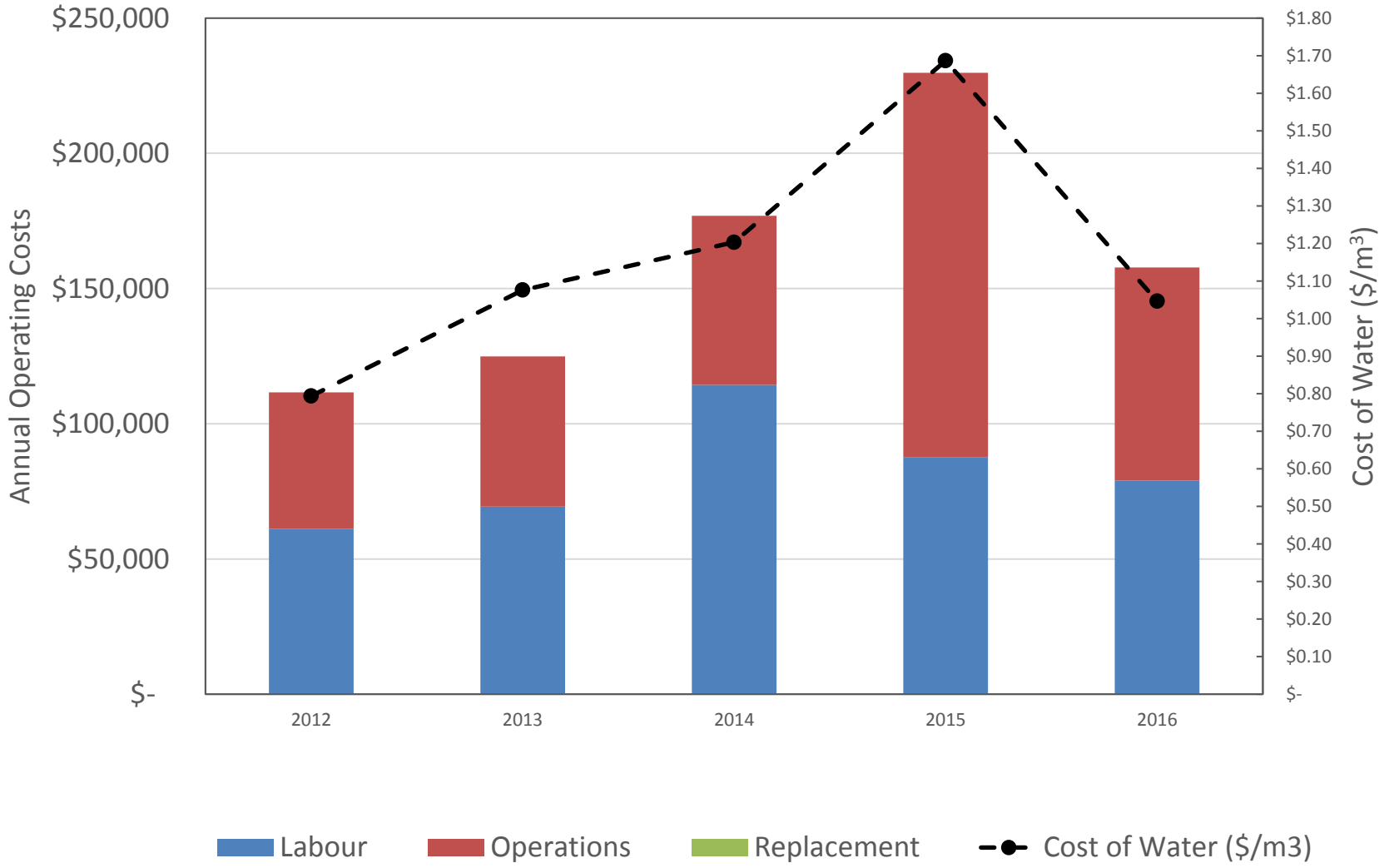
03/22/2017

Village of Haines Junction
Water System Operating Costs
(MN11-030)



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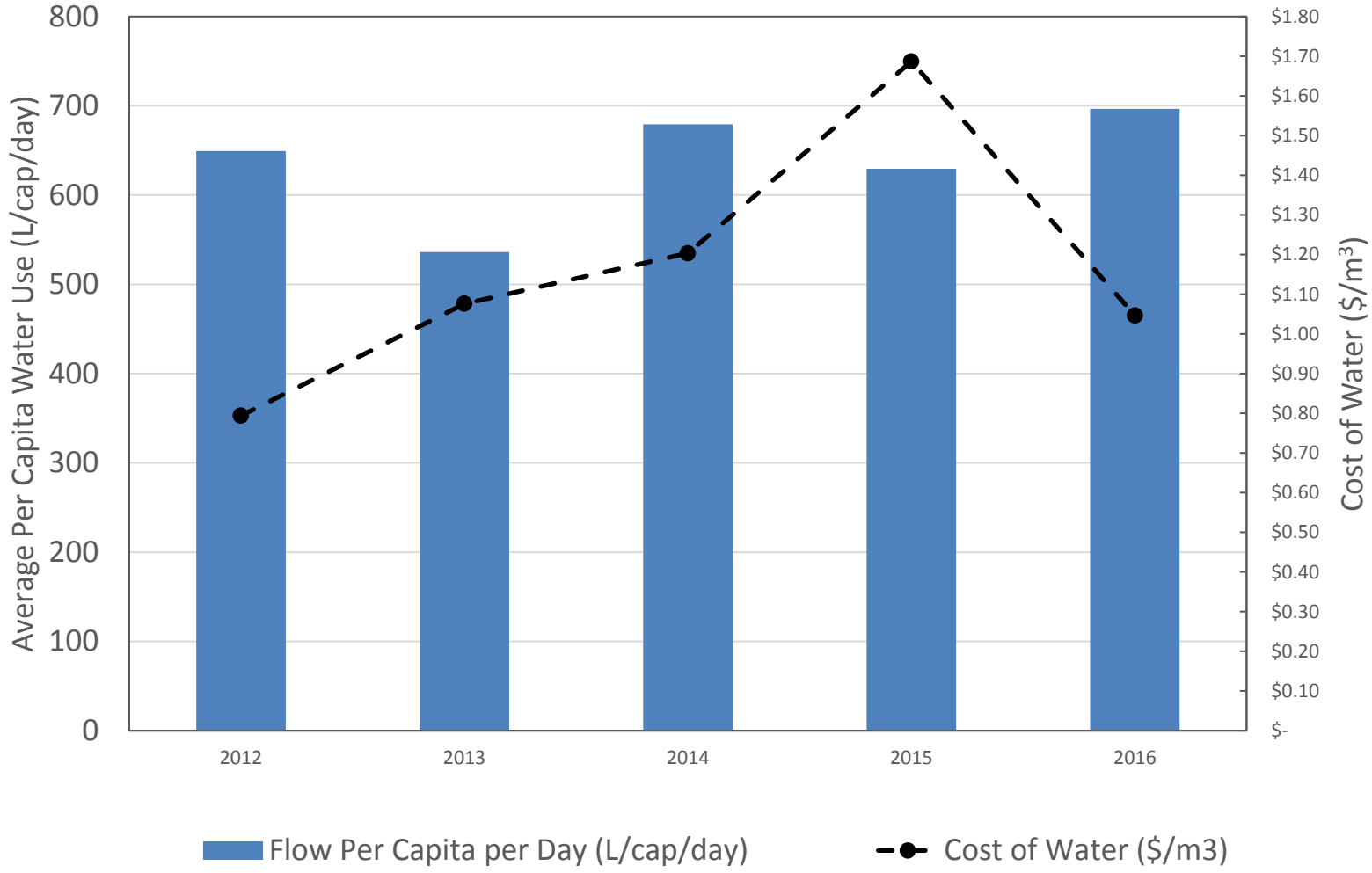
03/22/2017

Village of Haines Junction
Per Capita Water Use
(MN11-030)



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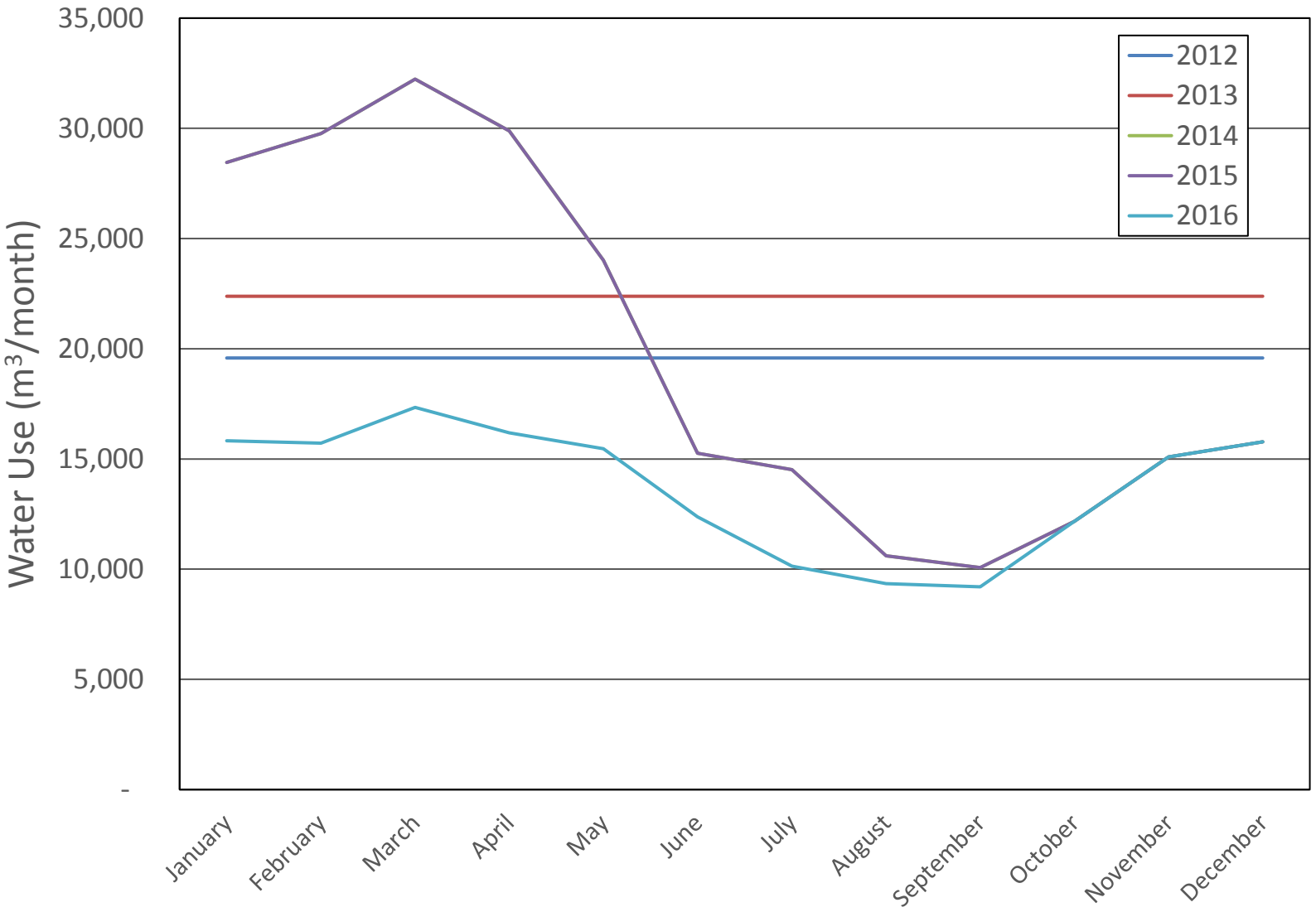
03/22/2017

Village of Mayo
Treated Water Flows
(MN10-055)



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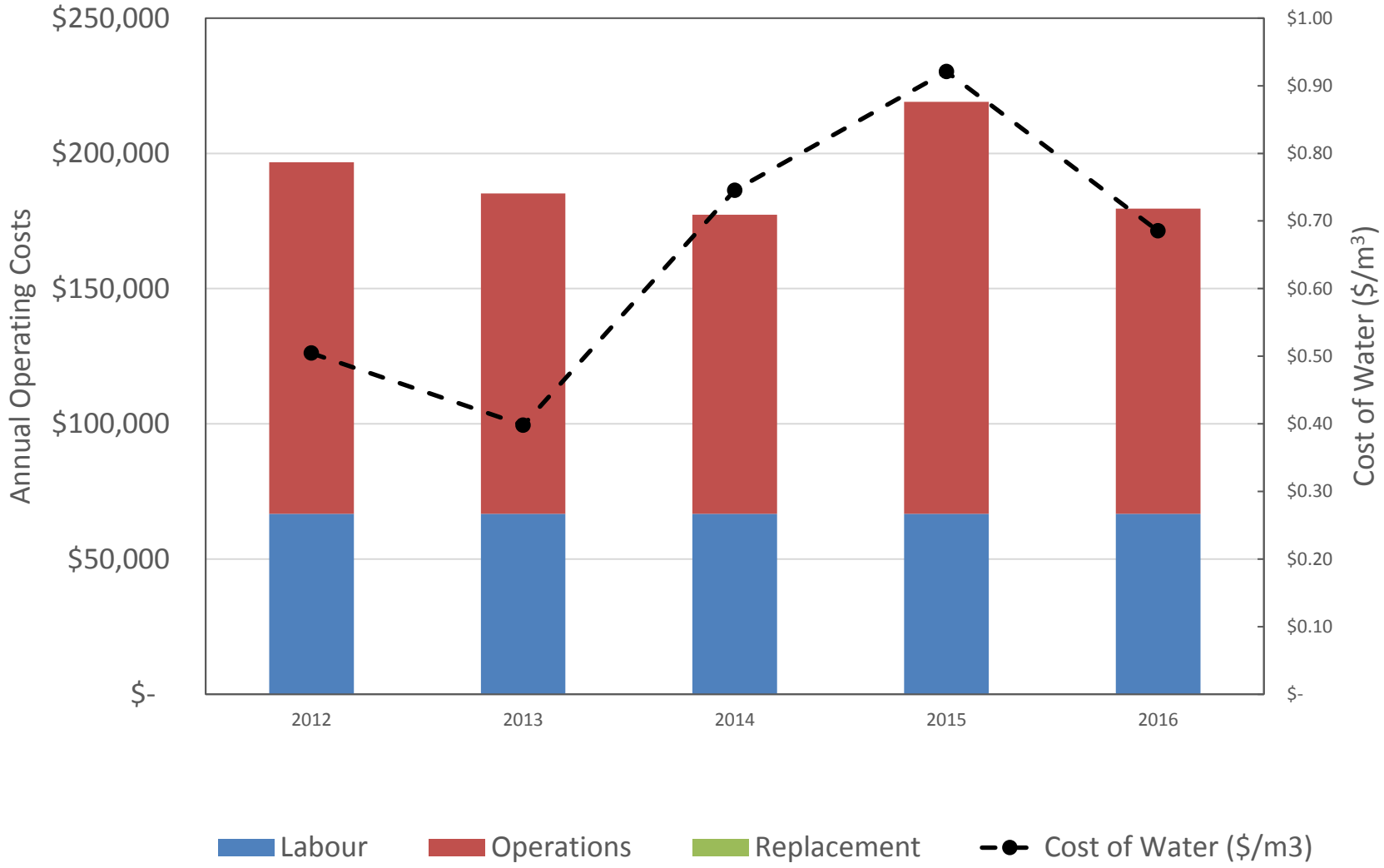
03/22/2017

Village of Mayo
Water System Operating Costs
(MN10-055)



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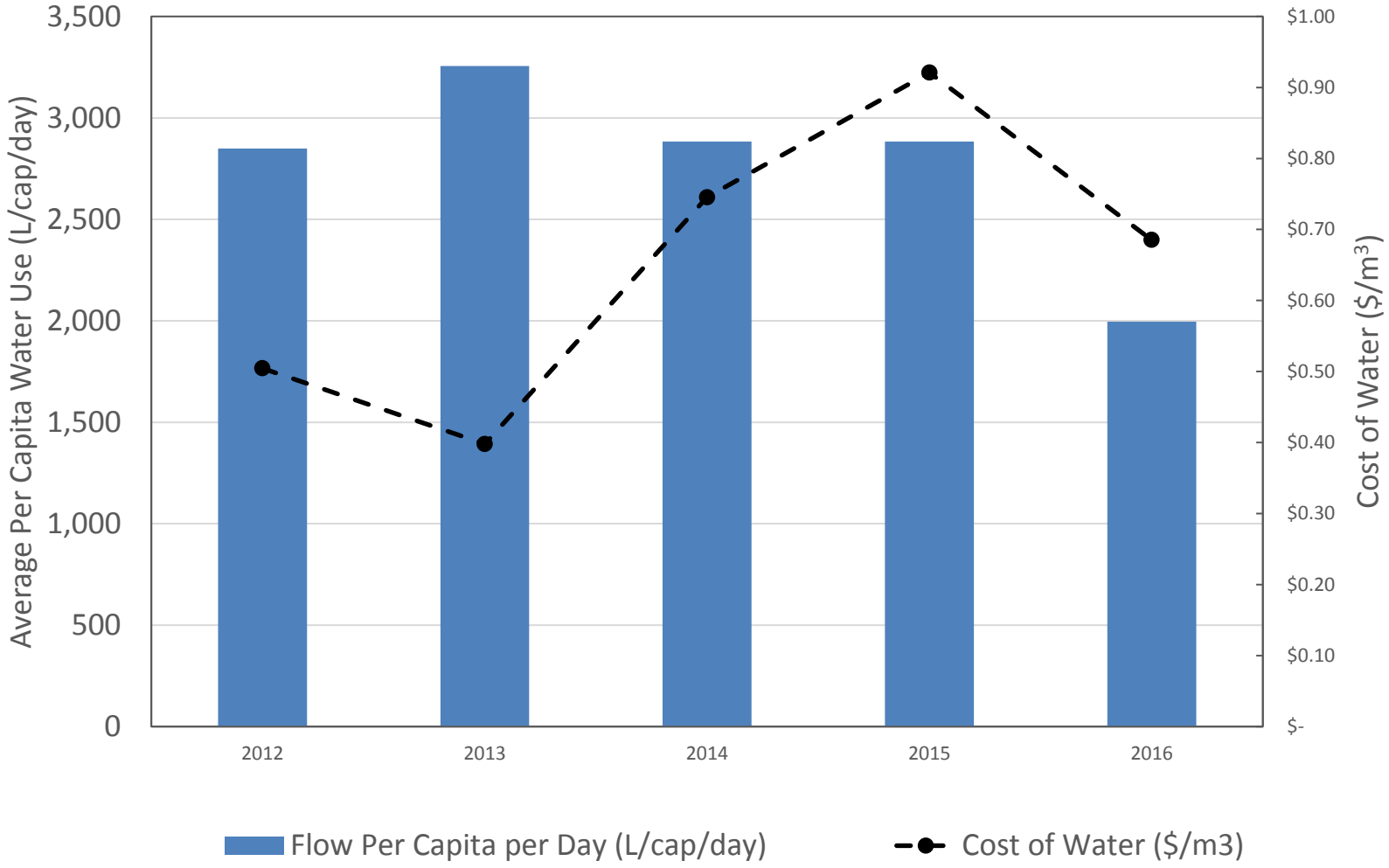
03/22/2017

Village of Mayo
Per Capita Water Use
(MN10-055)



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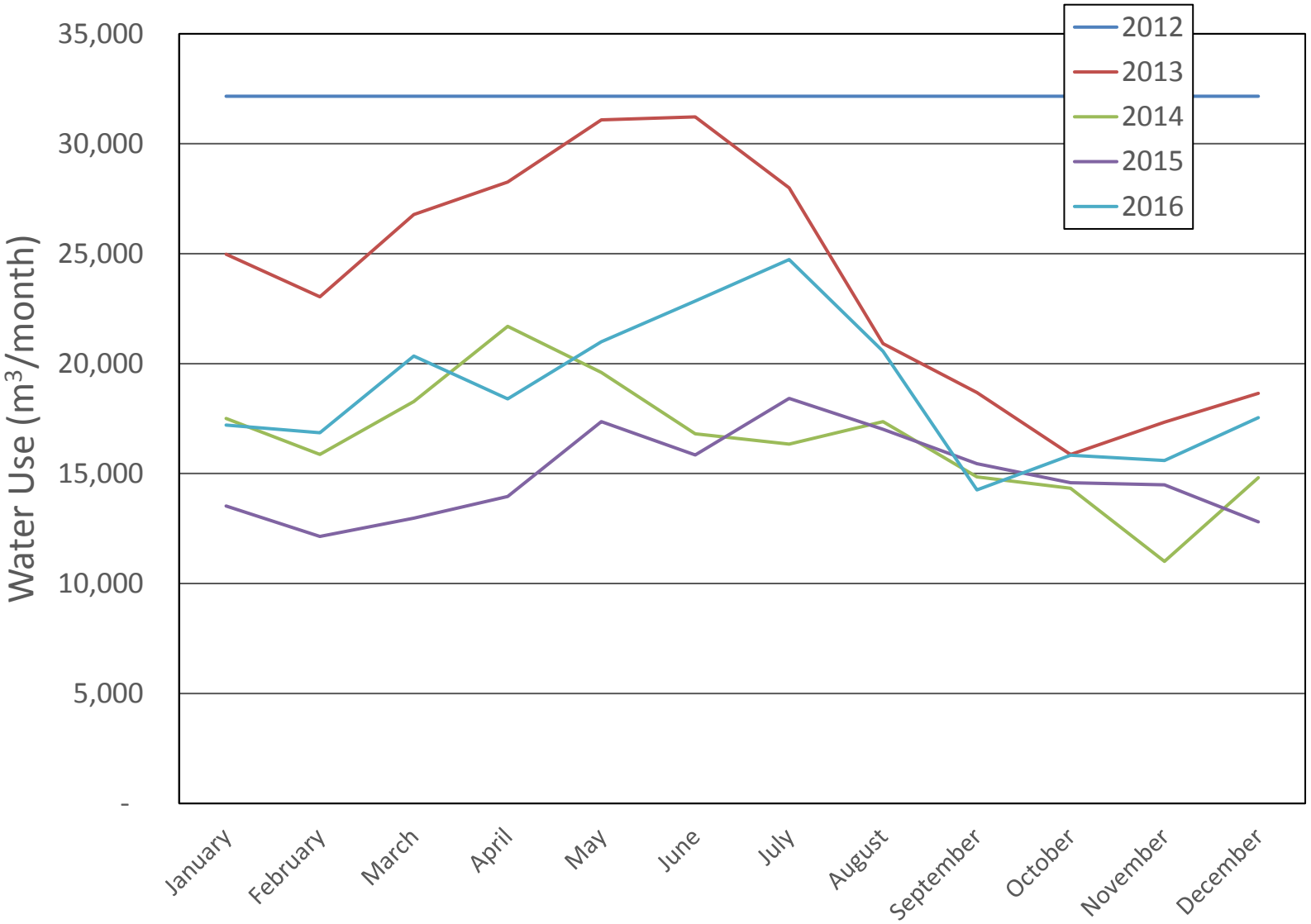
MH # 5170267

03/22/2017

Watson Lake
Treated Water Flows
(MN03-050)



Morrison Hershfield

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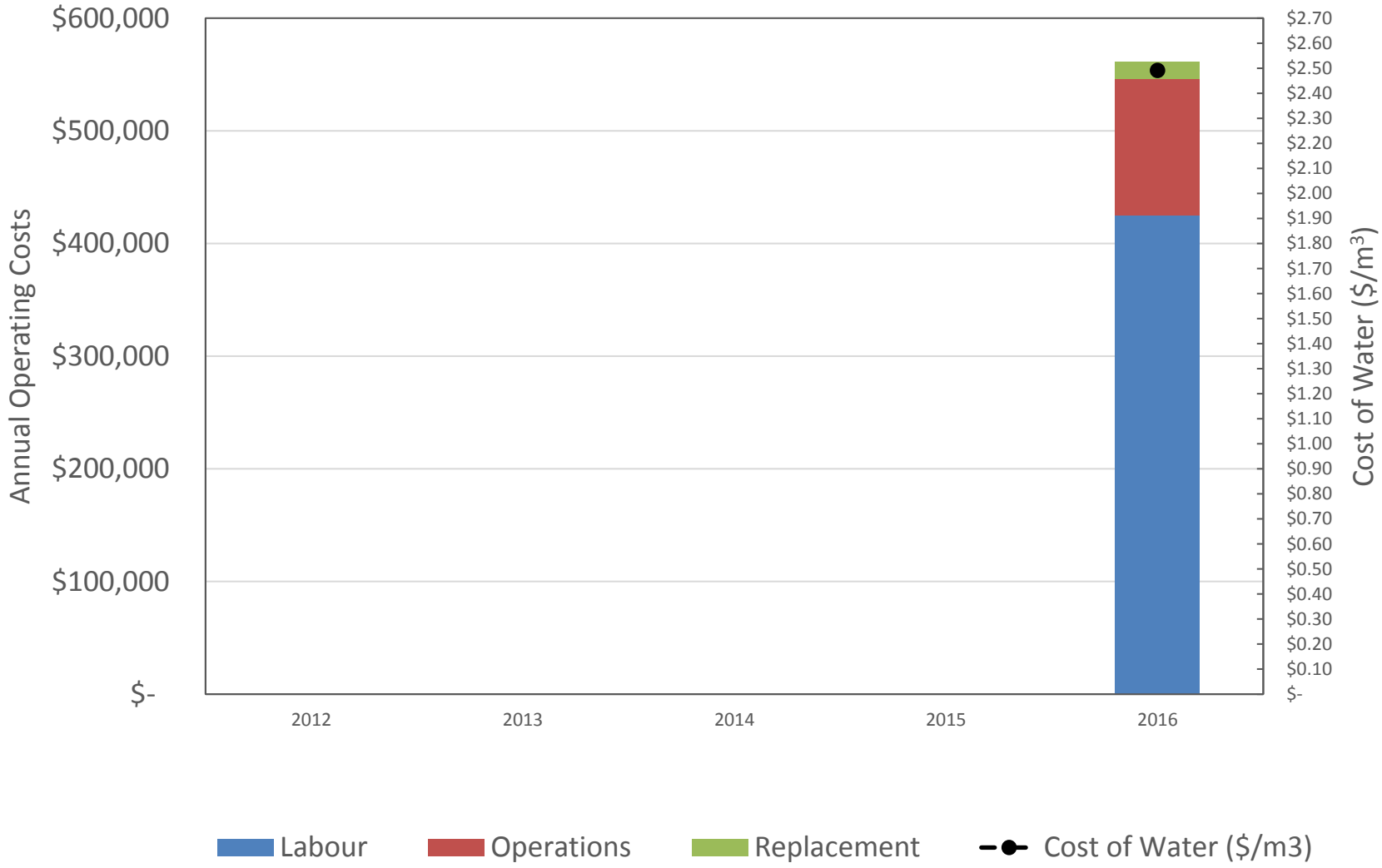
03/22/2017

Watson Lake
Water System Operating Costs
(MN03-050)



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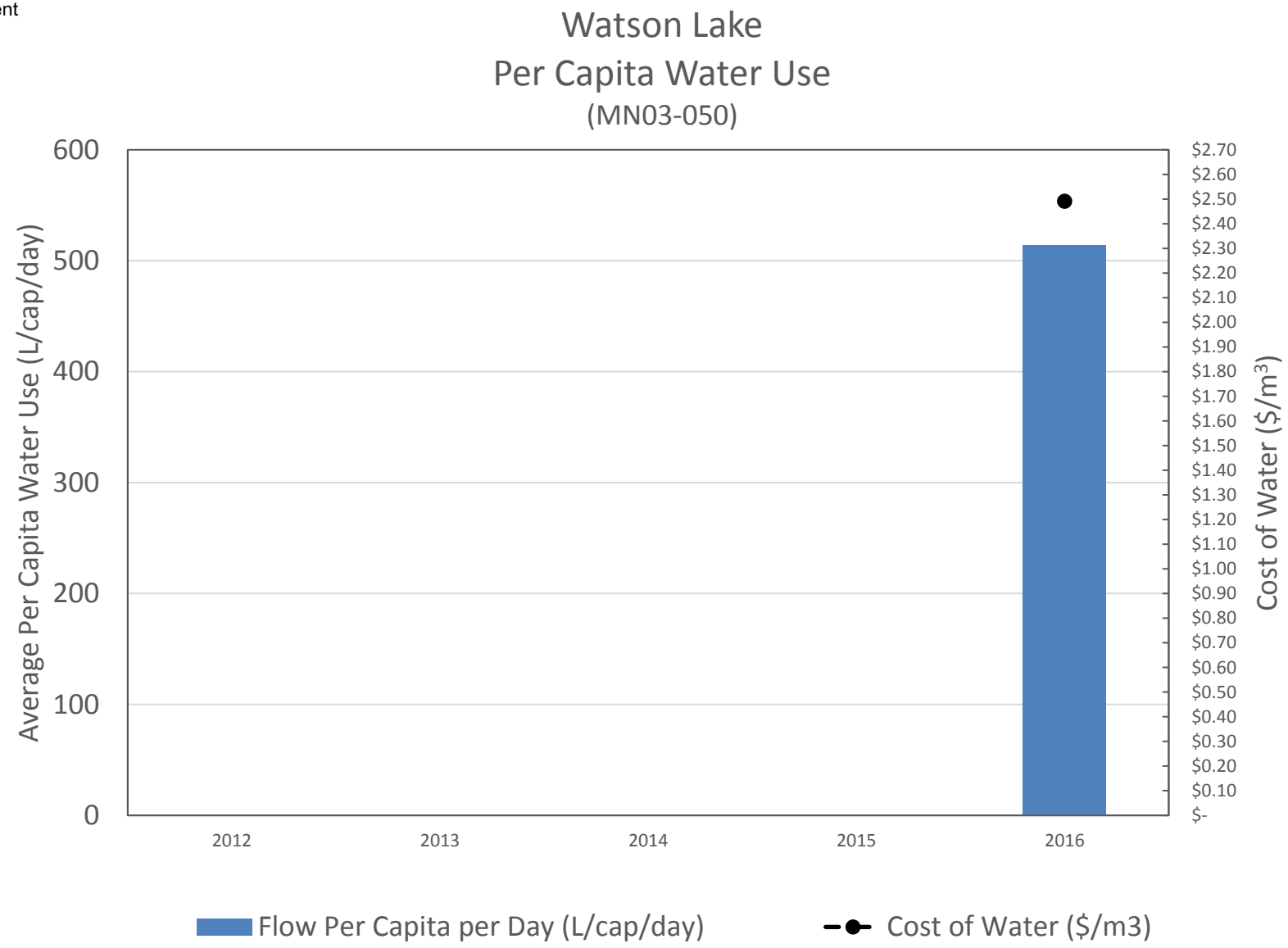


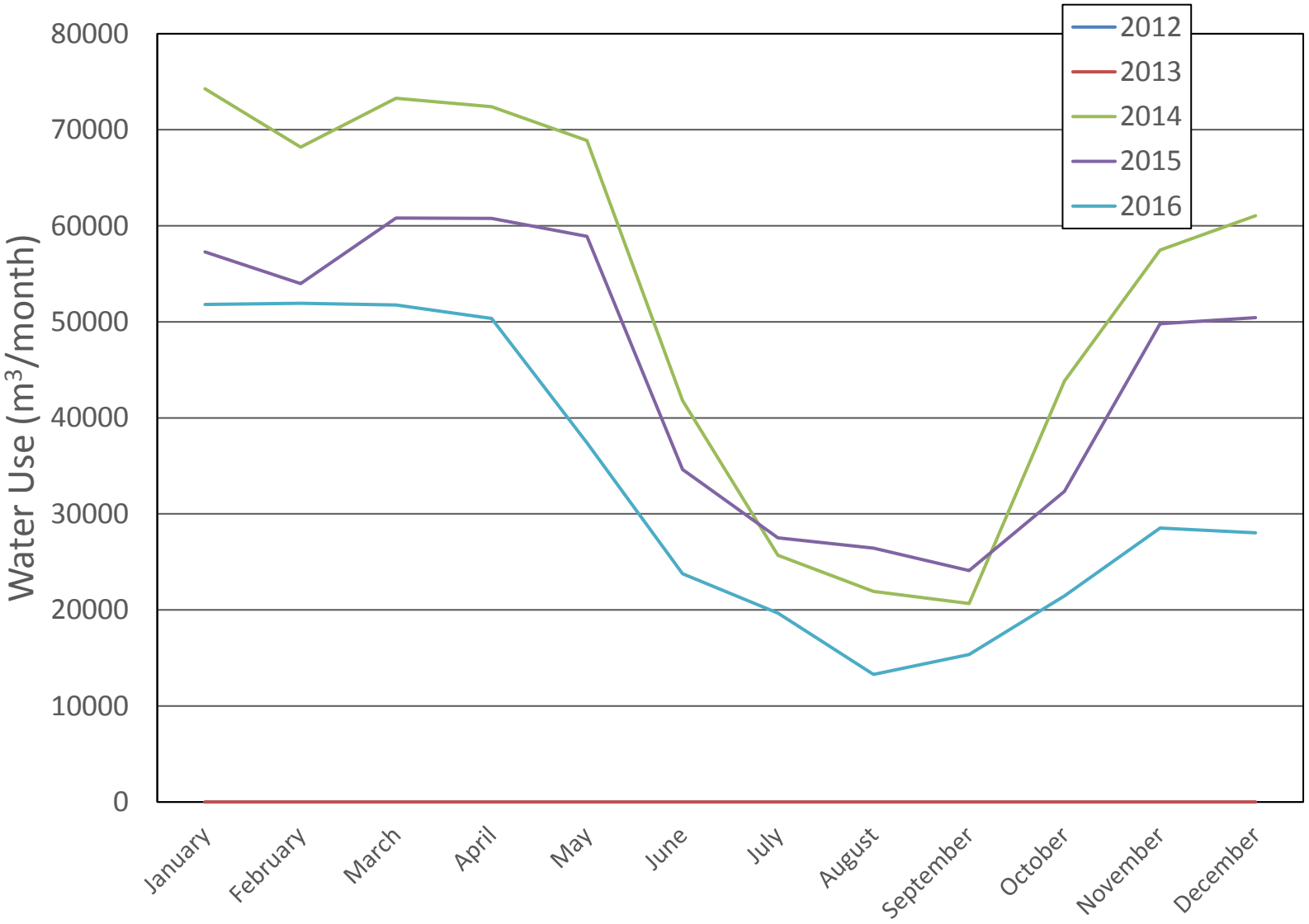
MORRISON HERSHFIELD

Yukon Government

MH # 5170267

03/22/2017

Faro
Treated Water Flows
(MN08-078)



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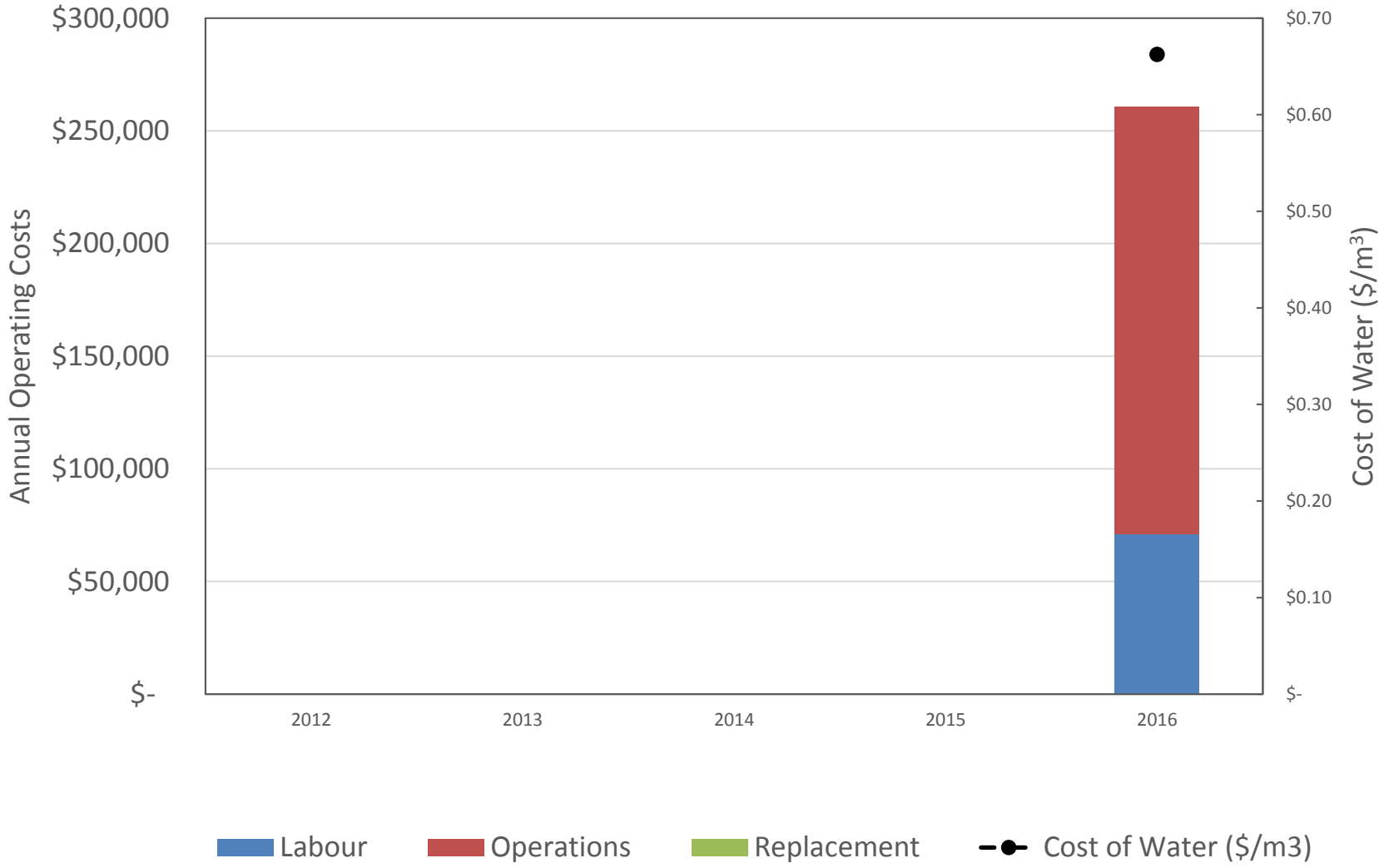
Faro
Water System Operating Costs
(MN08-078)



Yukon Government

MH # 5170267

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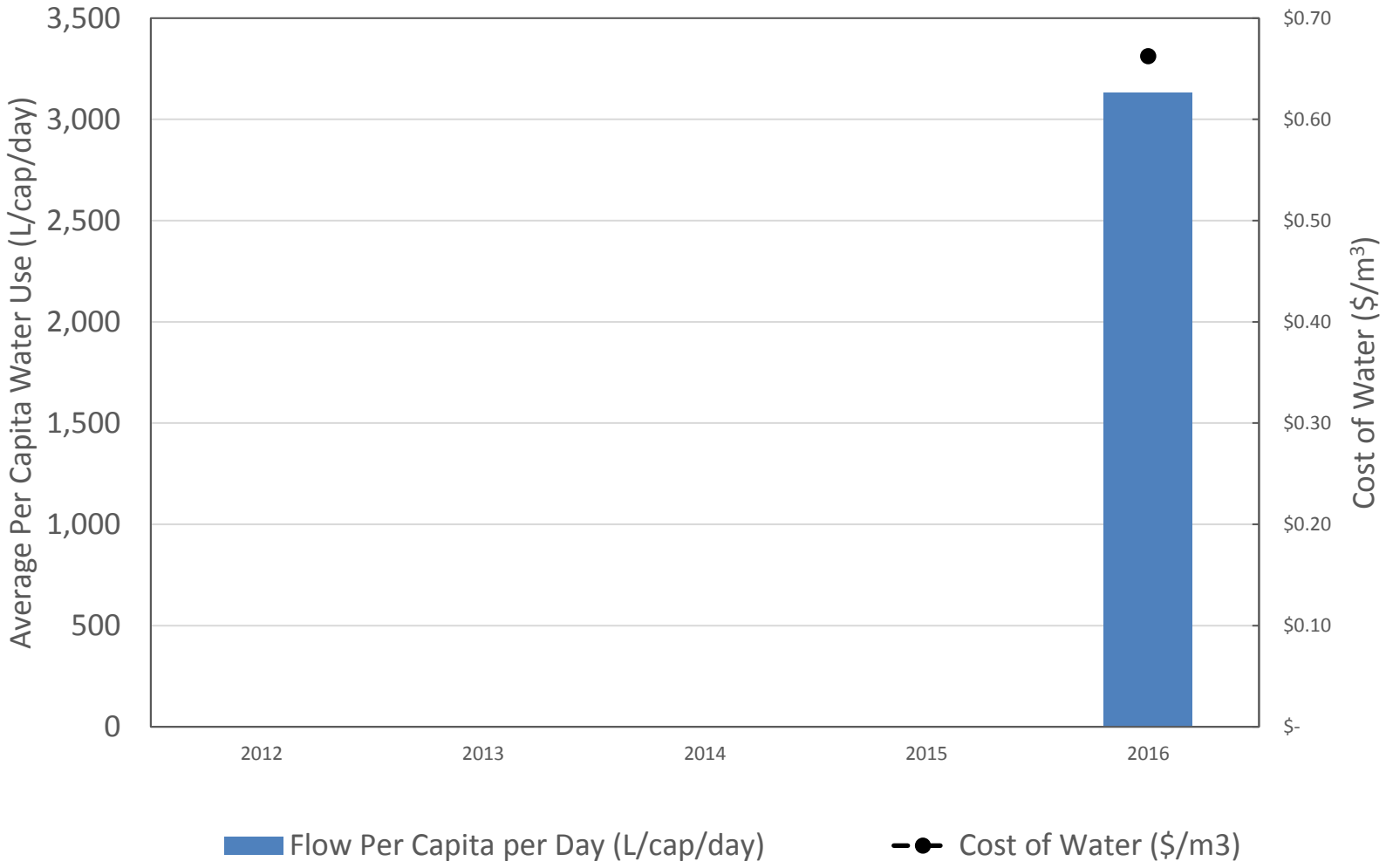
Faro
Per Capita Water Use
(MN08-078)



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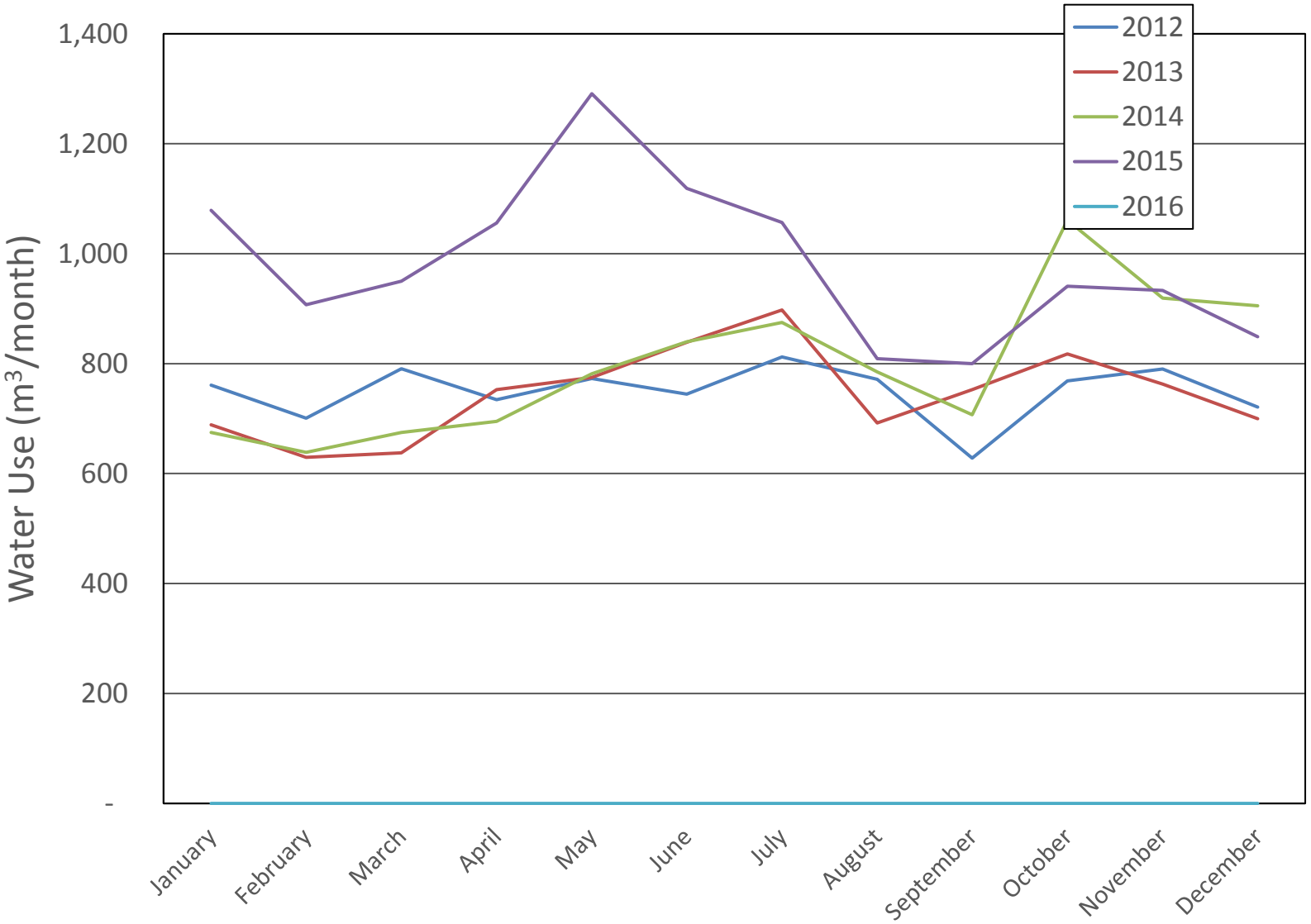
Yukon Government

MH # 5170267

03/22/2017

Teslin
Treated Water Flows
(MN99-025-1)



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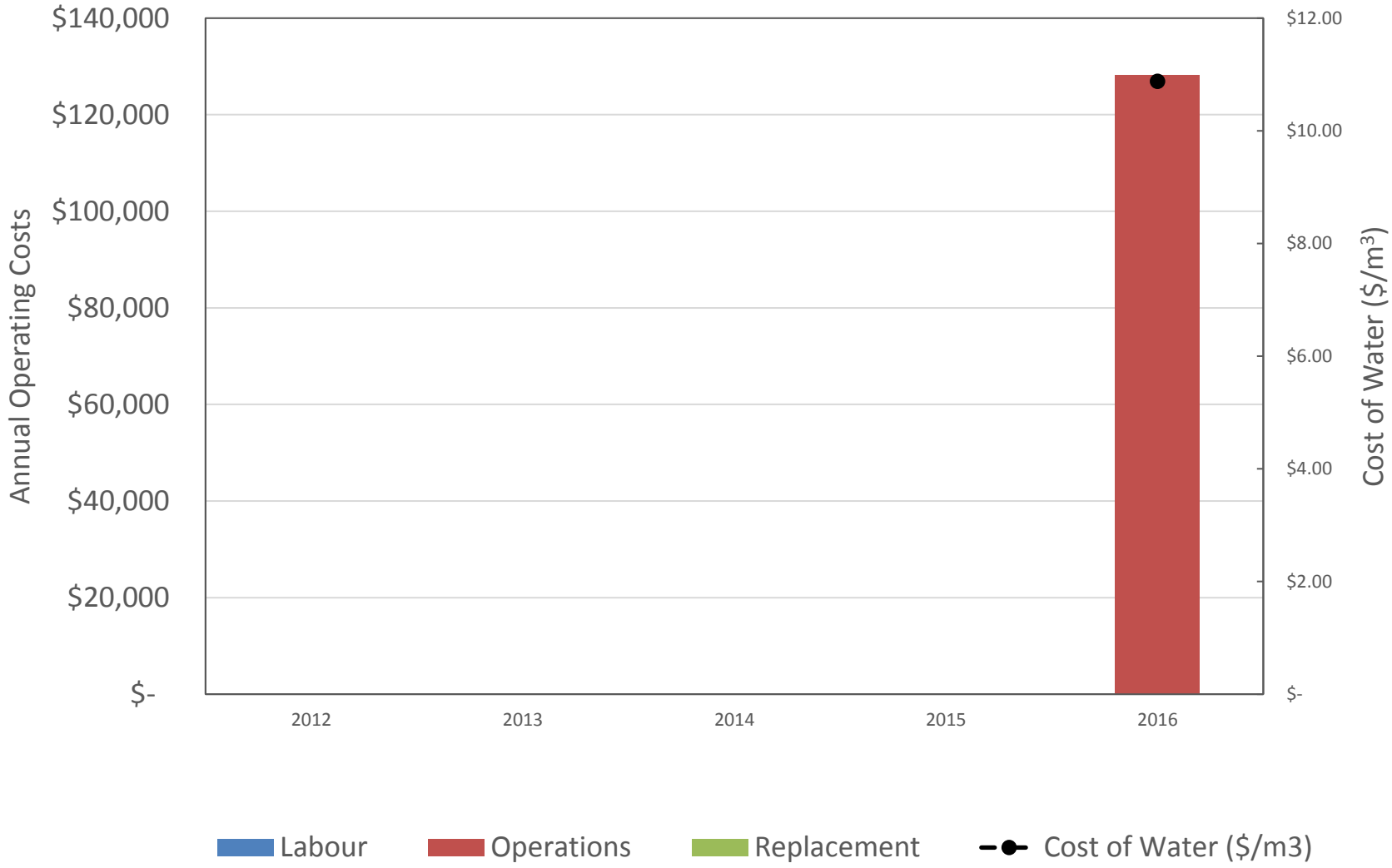
MH # 5170267

03/22/2017

Teslin
Water System Operating Costs
(MN99-025-1)



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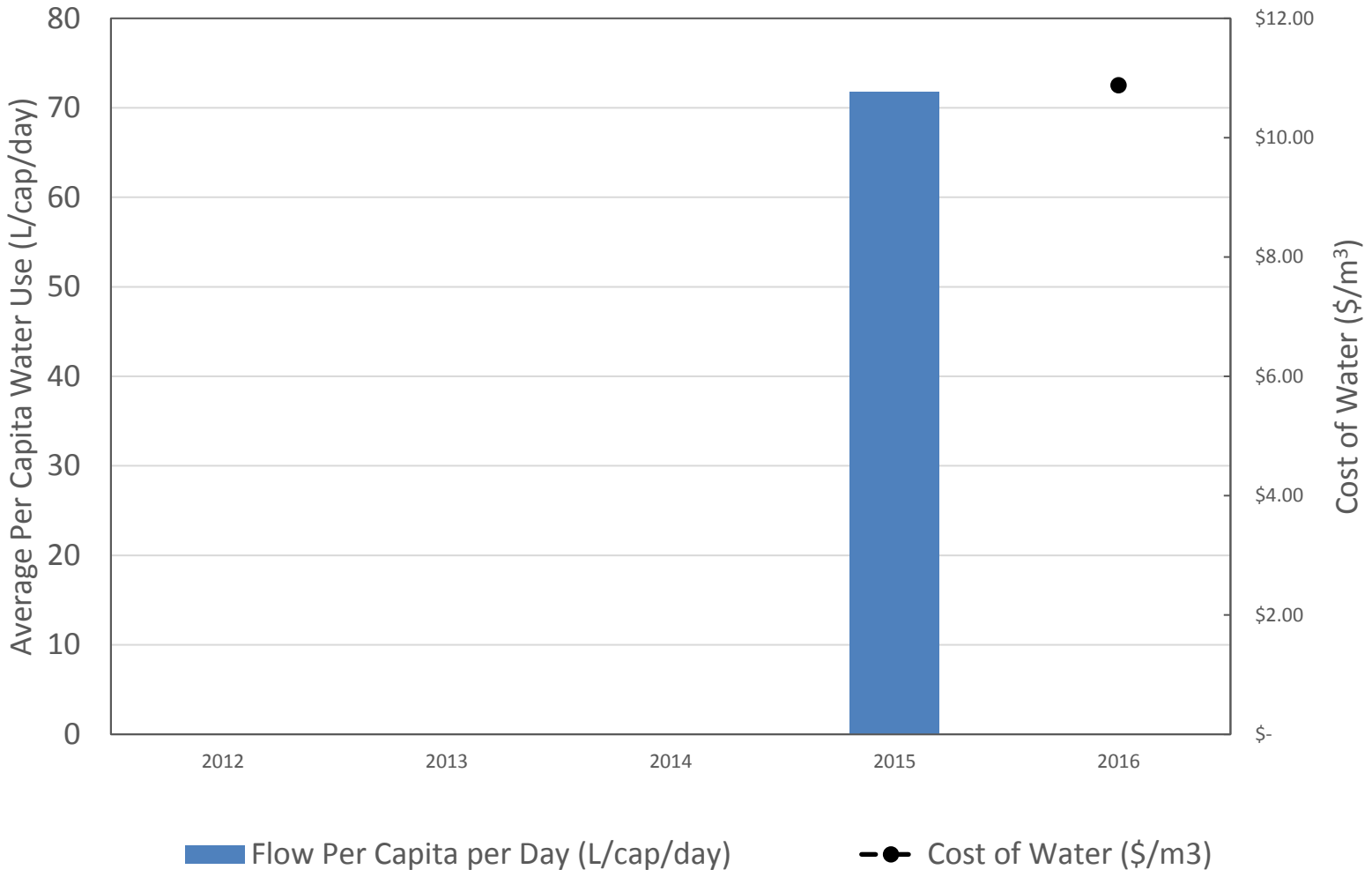
MH # 5170267

03/22/2017



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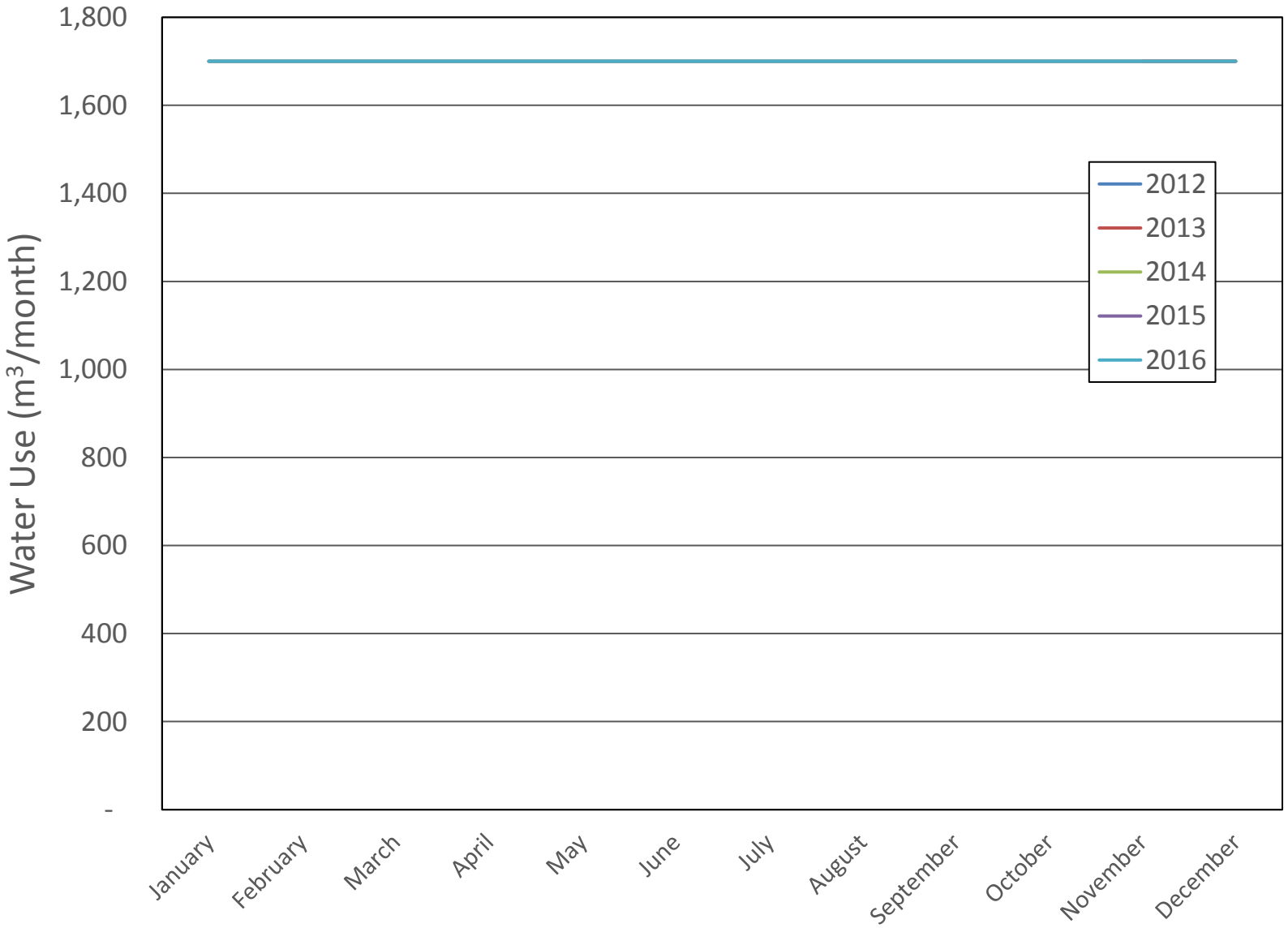
MH # 5170267

03/22/2017

Old Crow
Treated Water Flows



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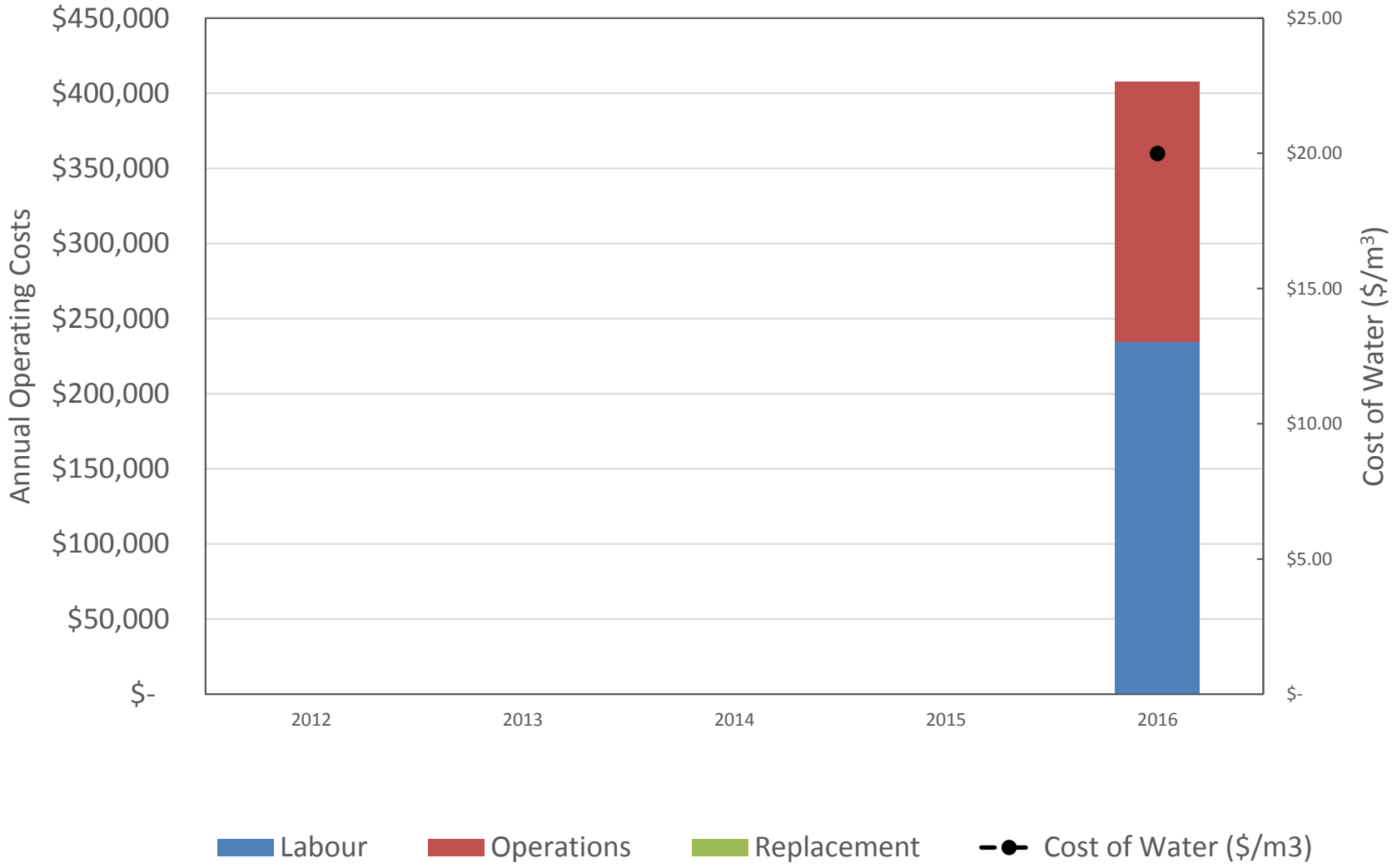
MH # 5170267

03/22/2017

Old Crow
Water System Operating Costs



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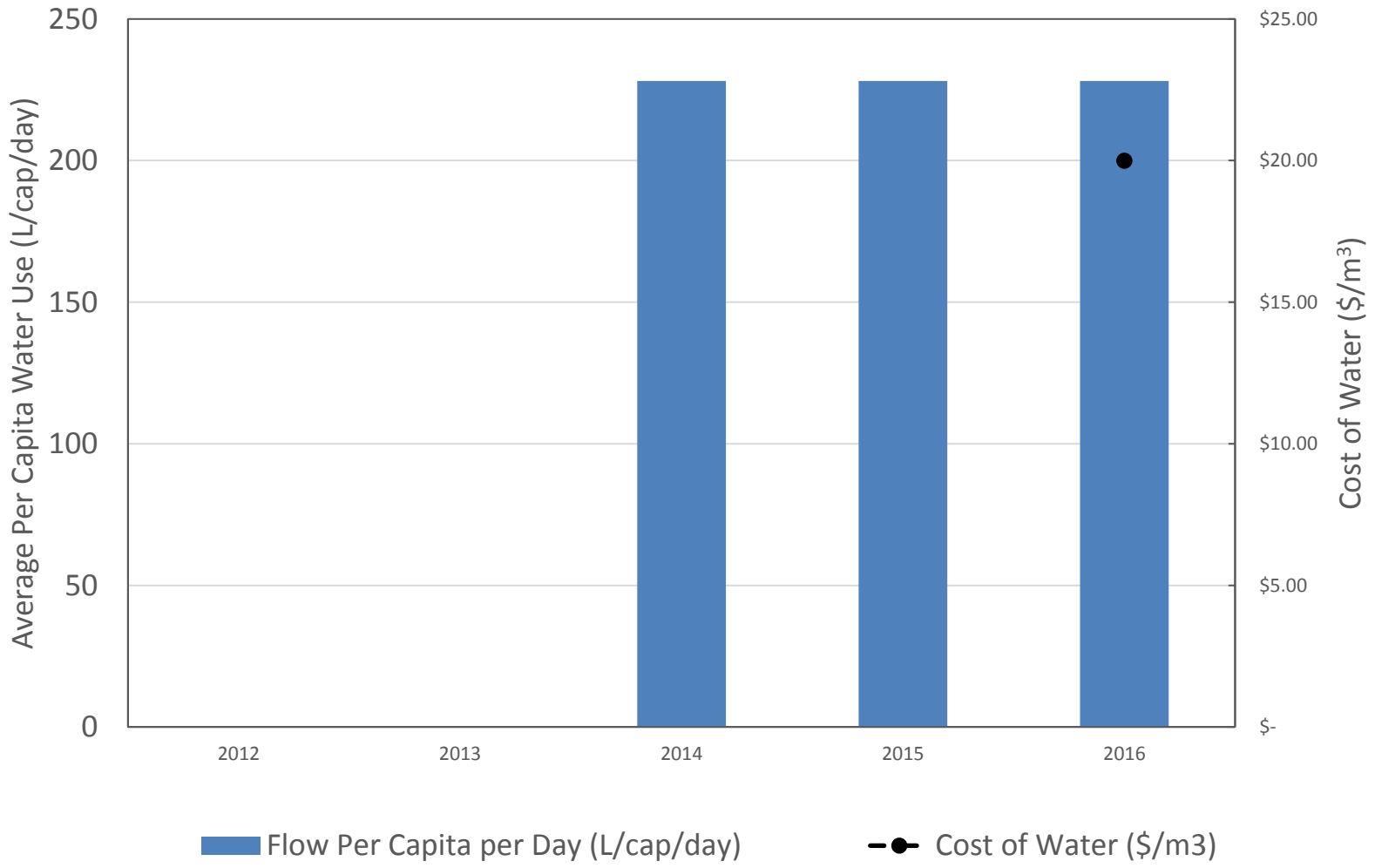
MH # 5170267

03/22/2017

Old Crow
Per Capita Water Use



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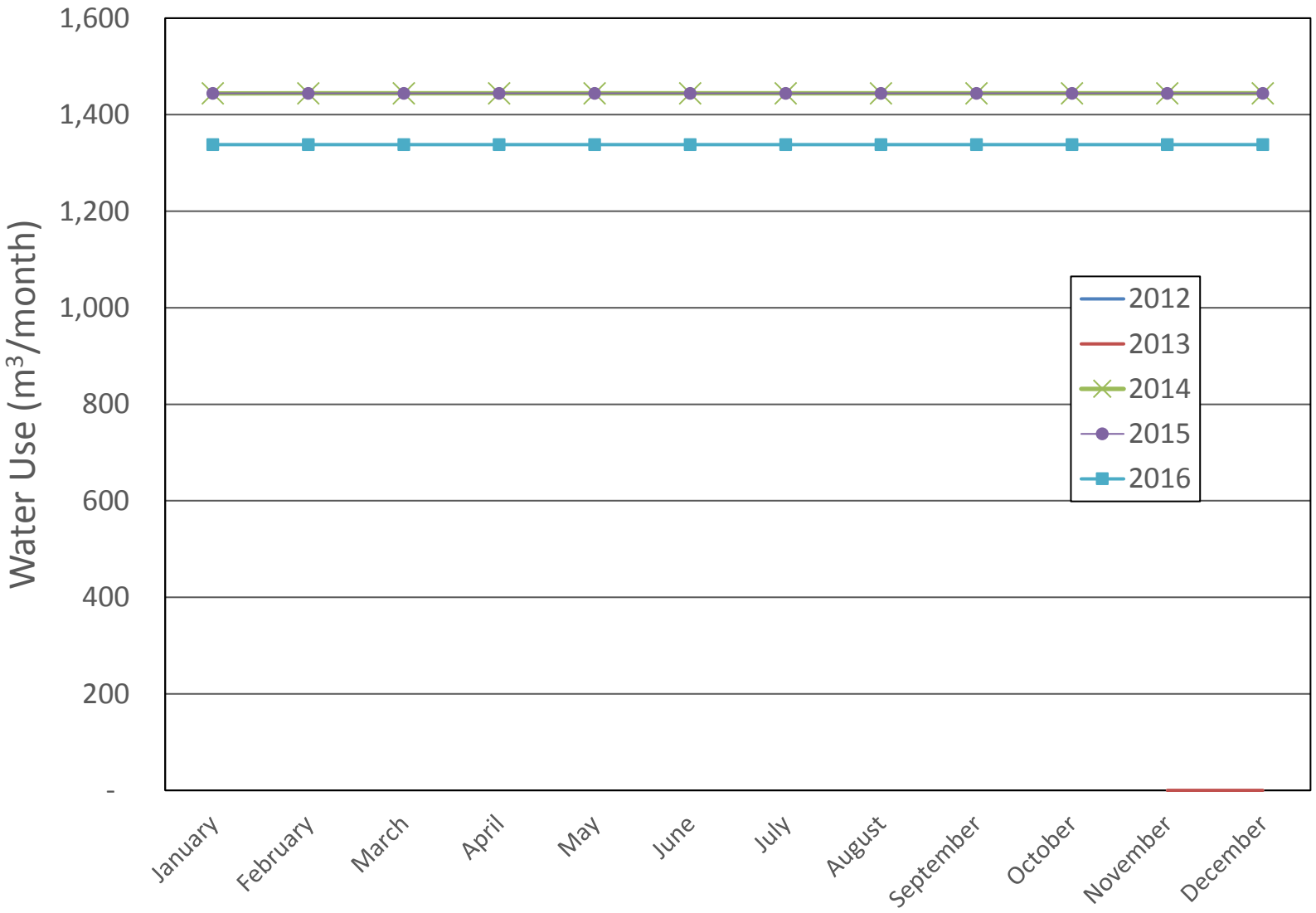
MH # 5170267

03/22/2017

Ross River
Treated Water Flows



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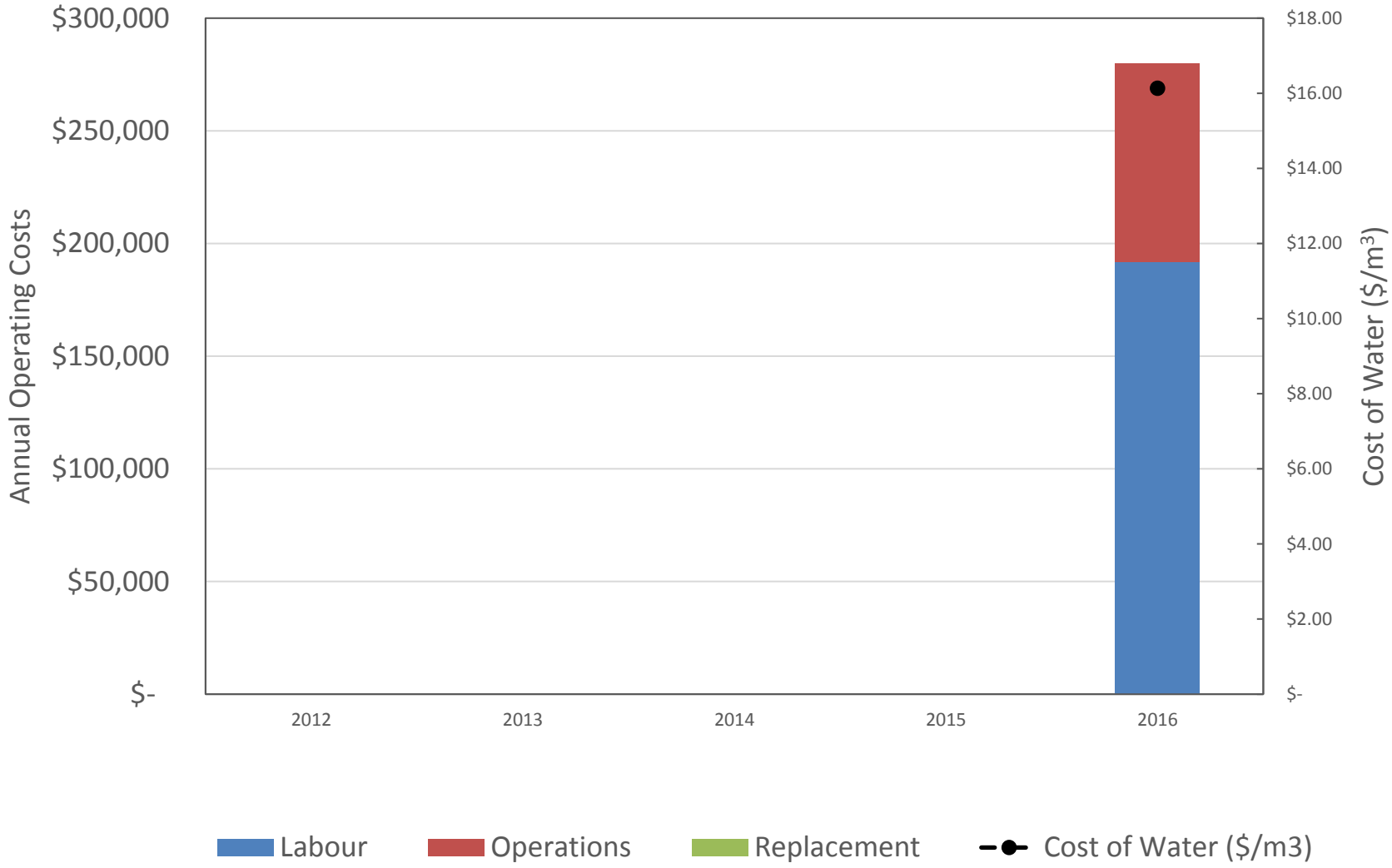
MH # 5170267

03/22/2017

Ross River
Water System Operating Costs



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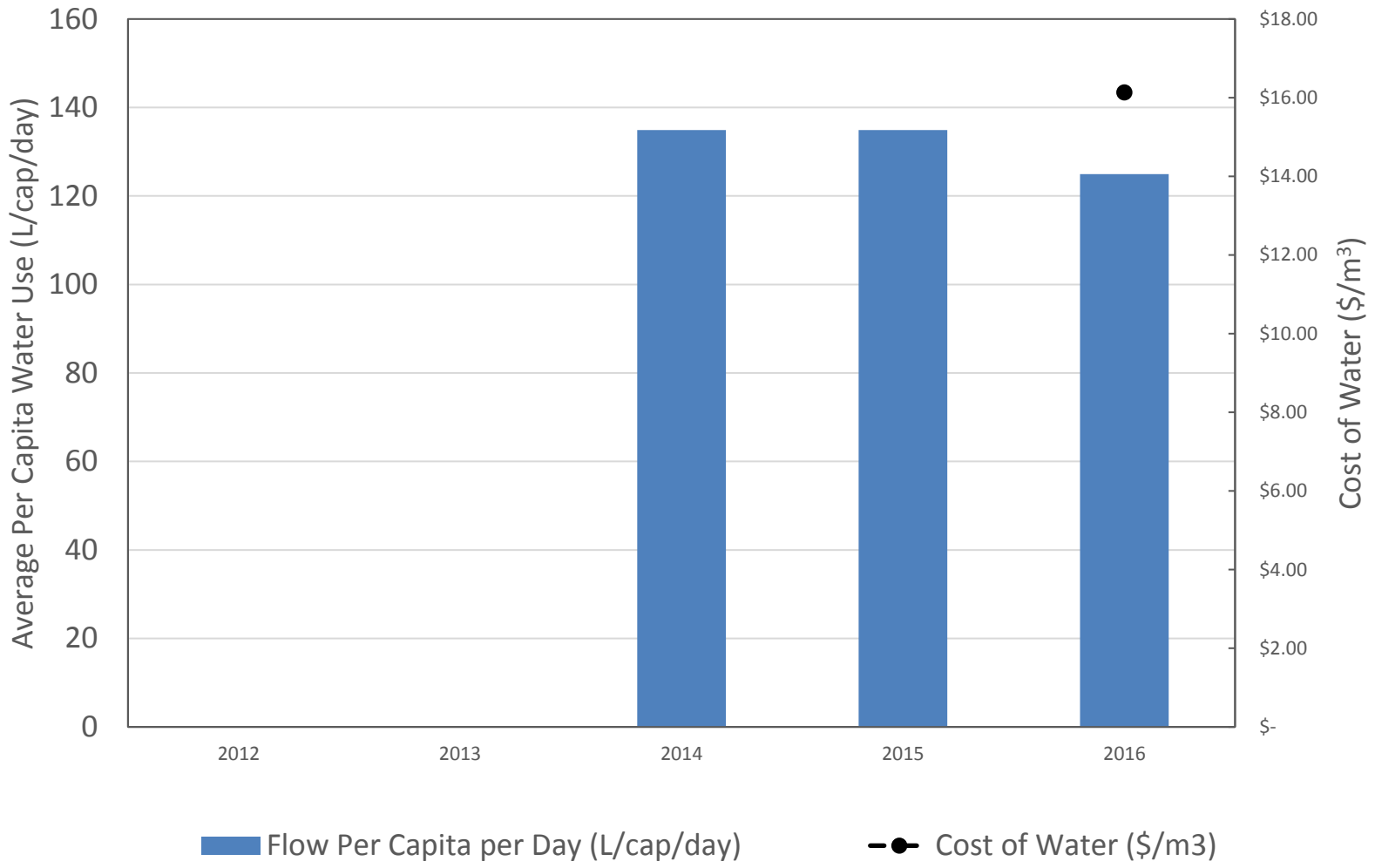
MH # 5170267

03/22/2017

Ross River
Per Capita Water Use



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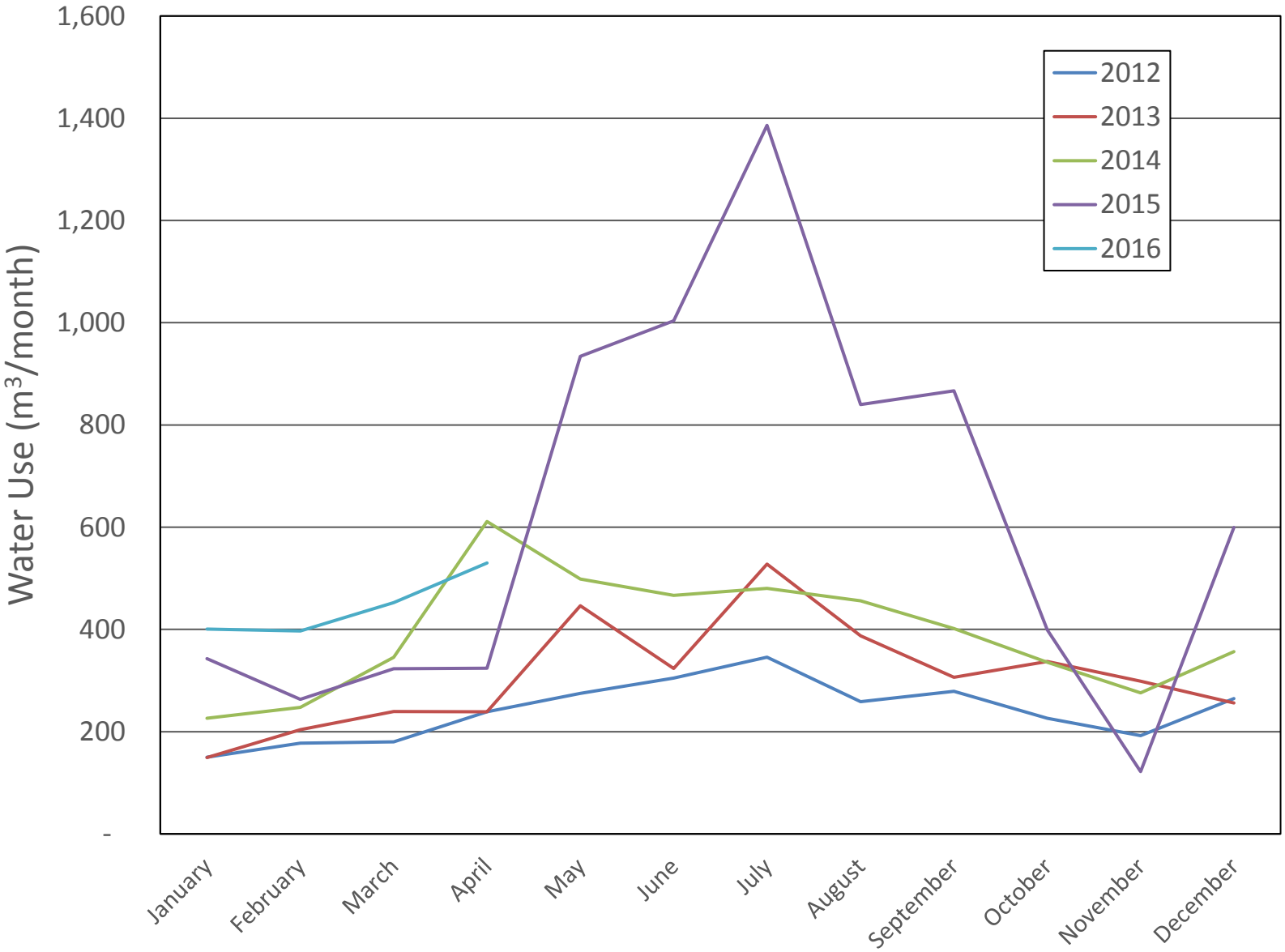
MH # 5170267

03/22/2017

Army Beach Treated Water Flows

(MS07-263)



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MH # 5170267

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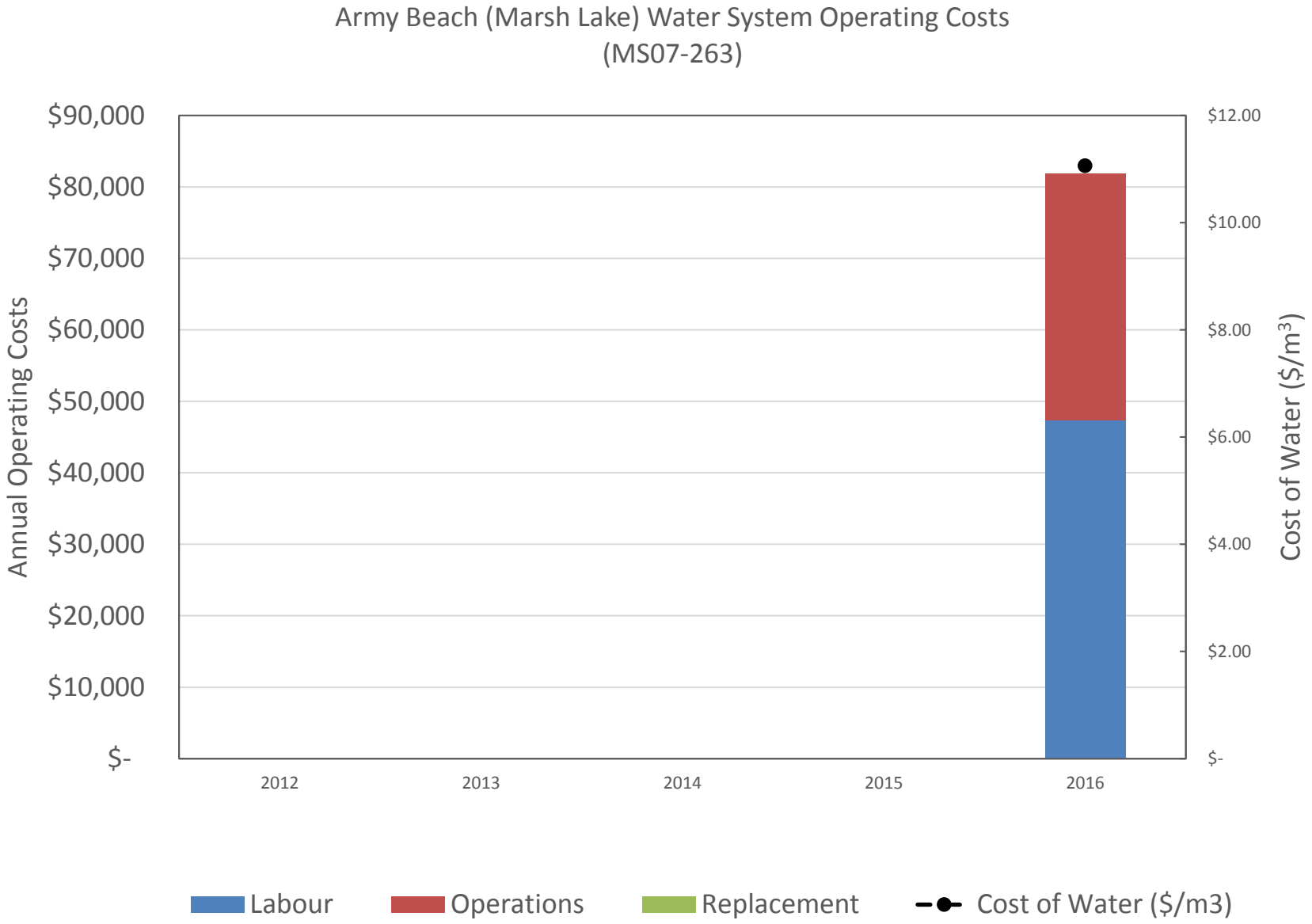

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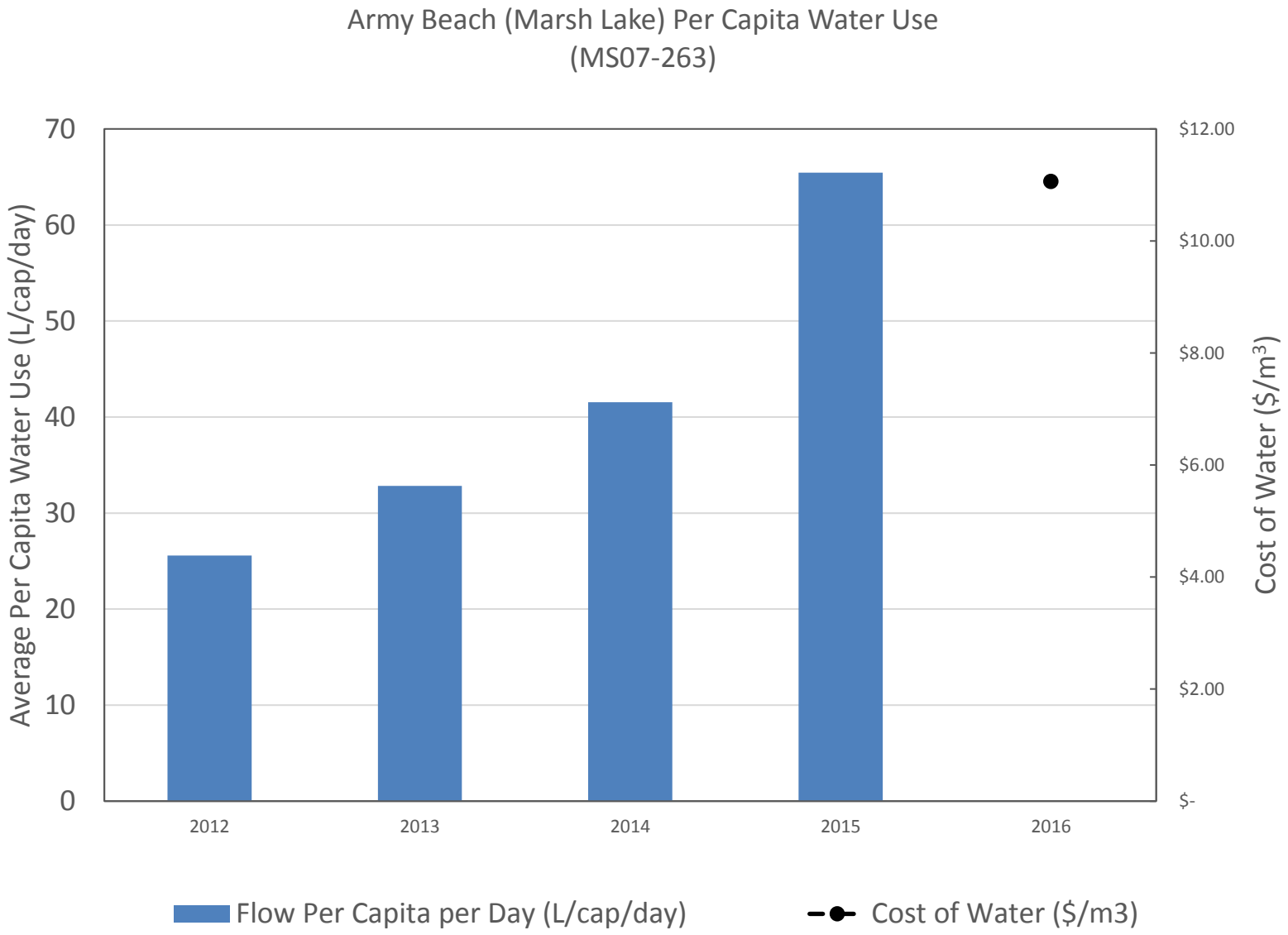
Yukon Government



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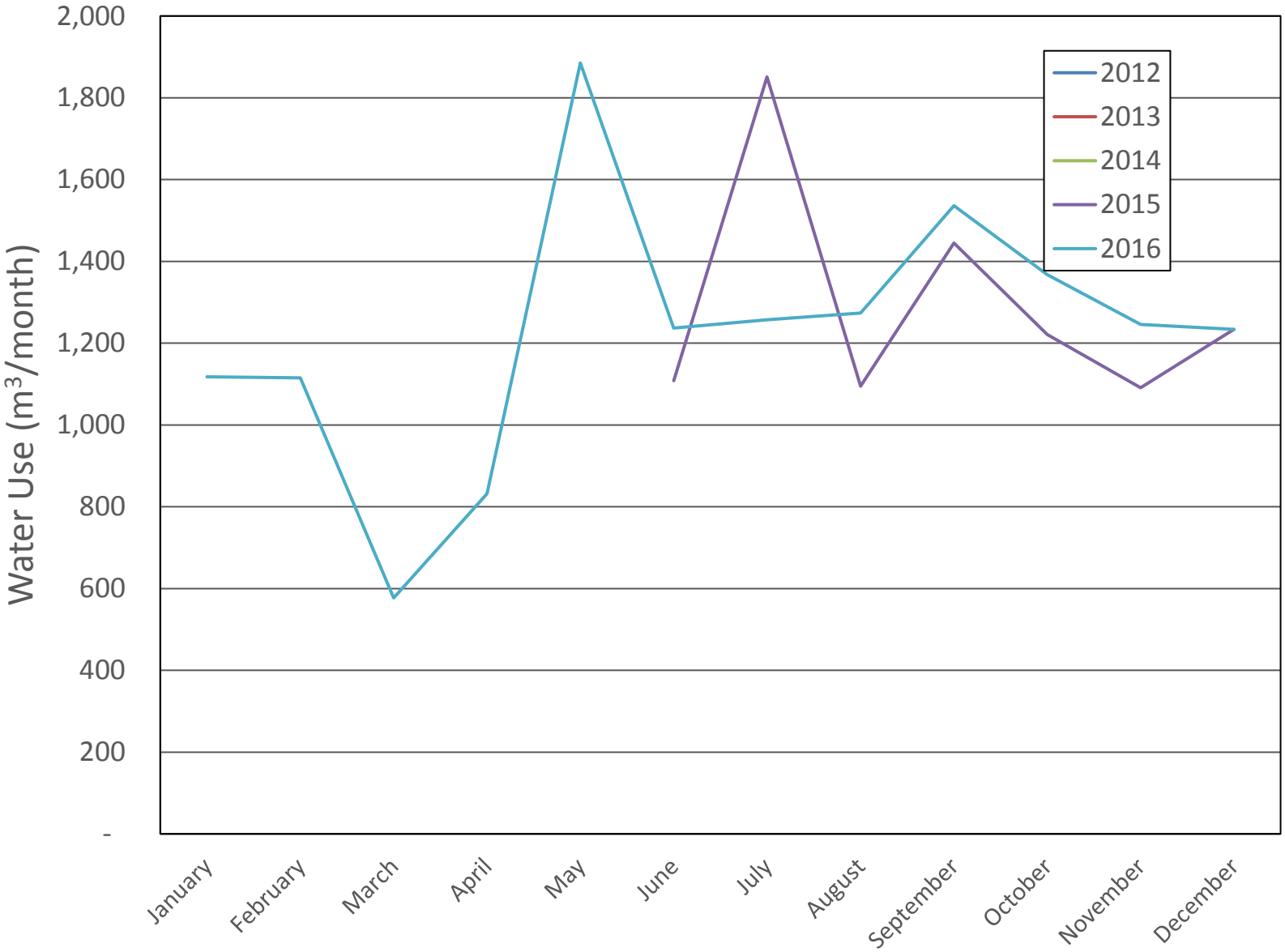
MH # 5170267

03/22/2017

Carcross Treated Water Flows

(MN11-016)

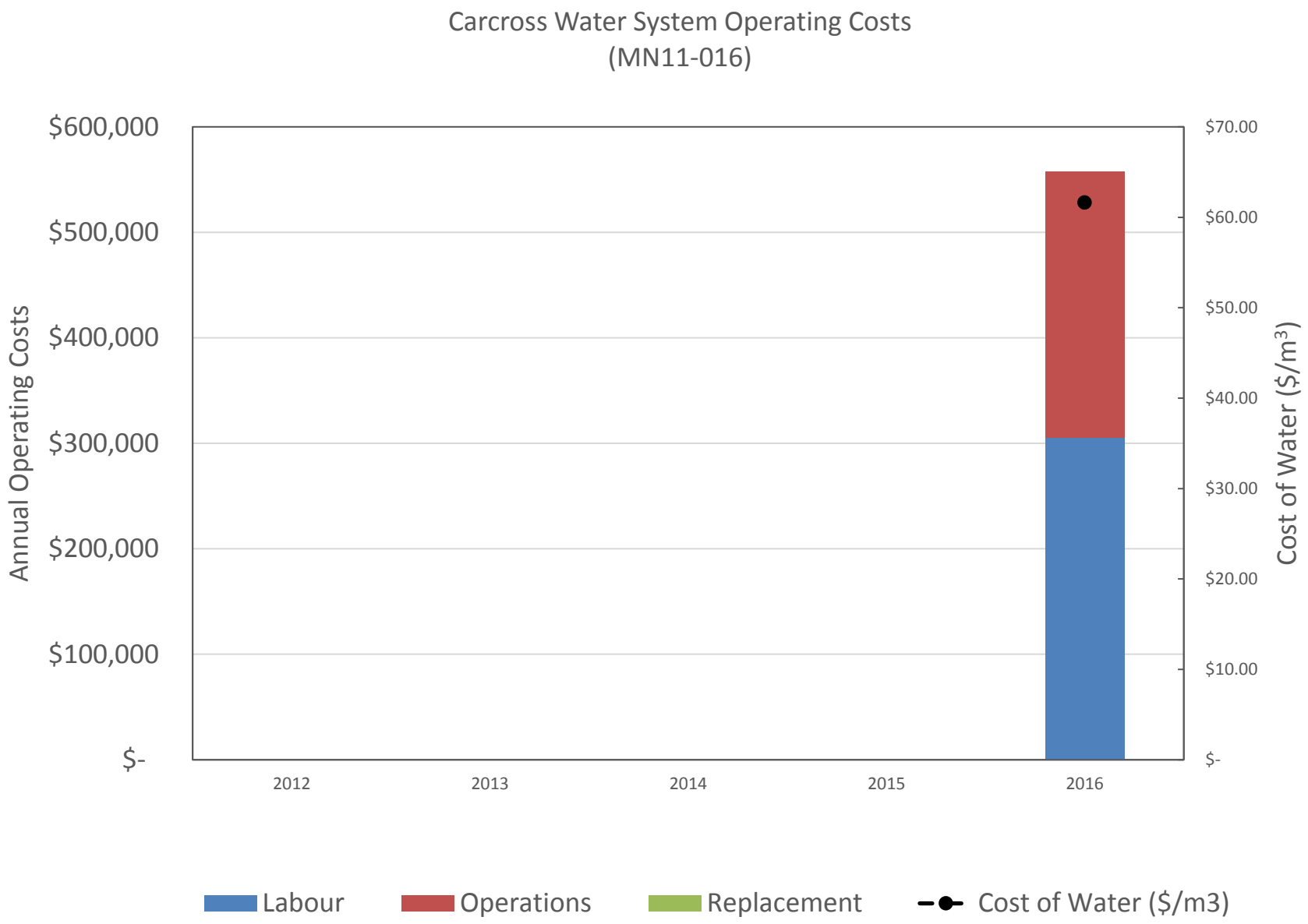


Morrison Hershfield

Yukon Government

MH # 5170267

03/22/2017



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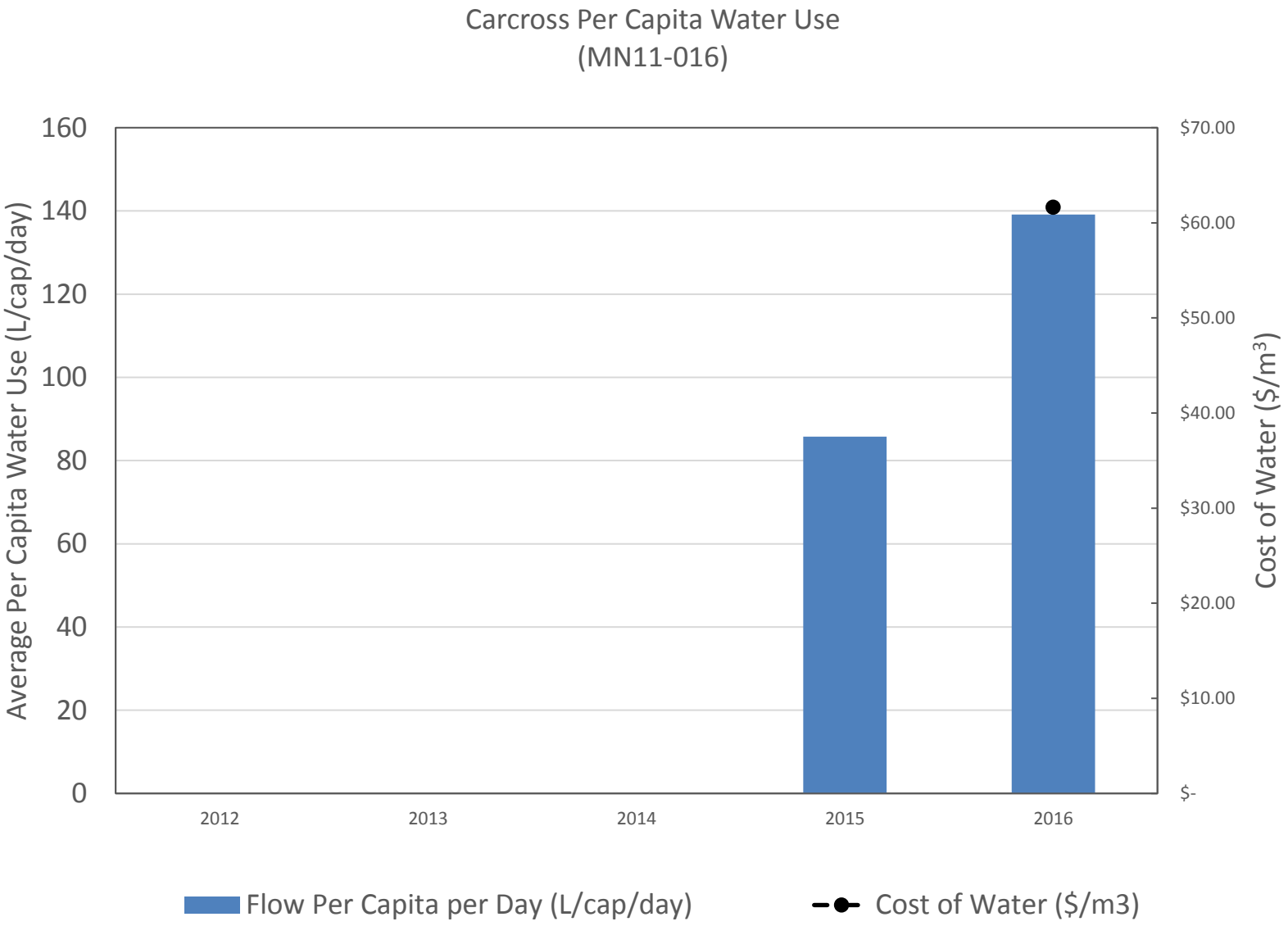
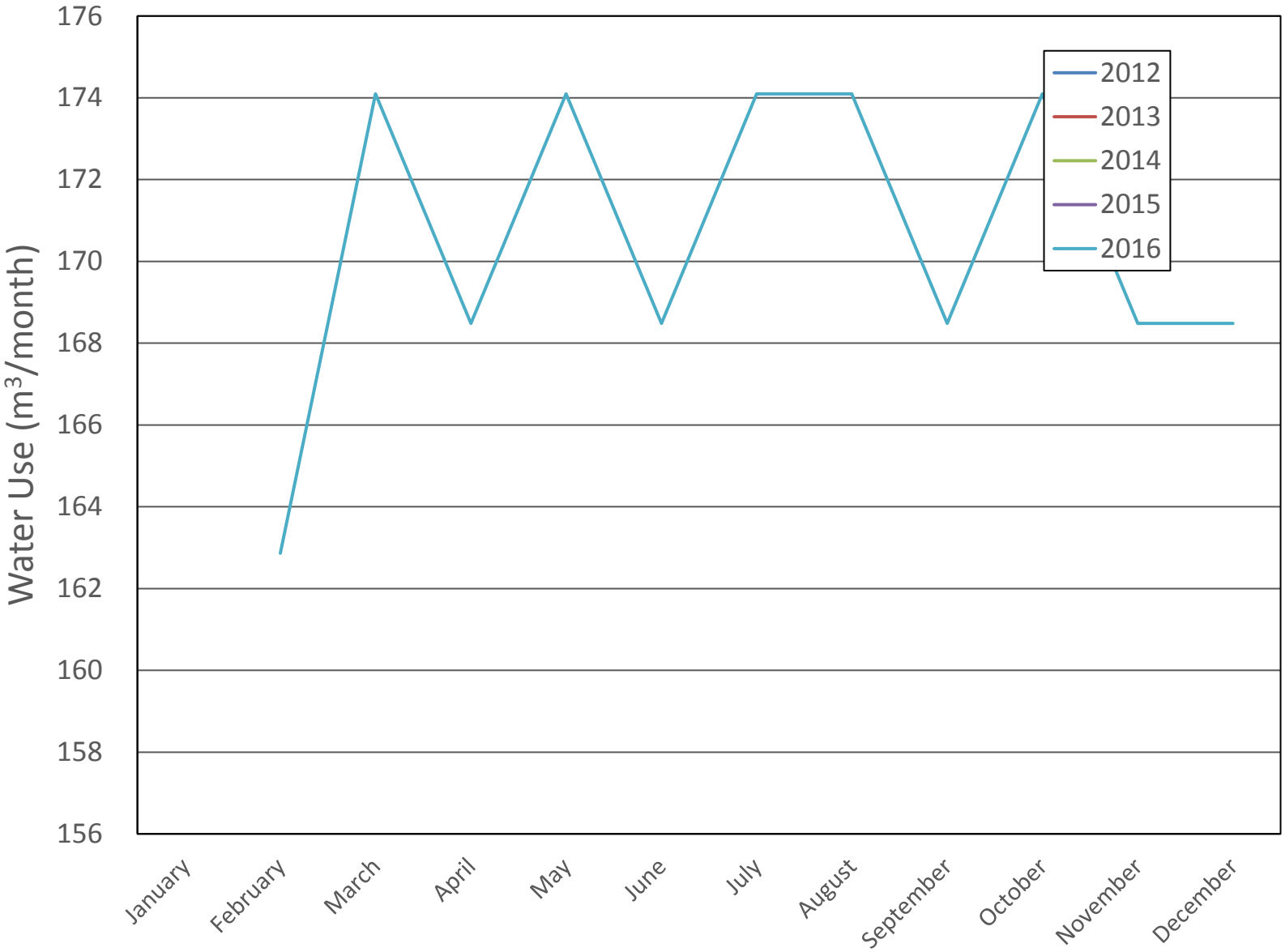


Yukon Government

MH # 5170267

03/22/2017

Deep Creek Treated Water Flows



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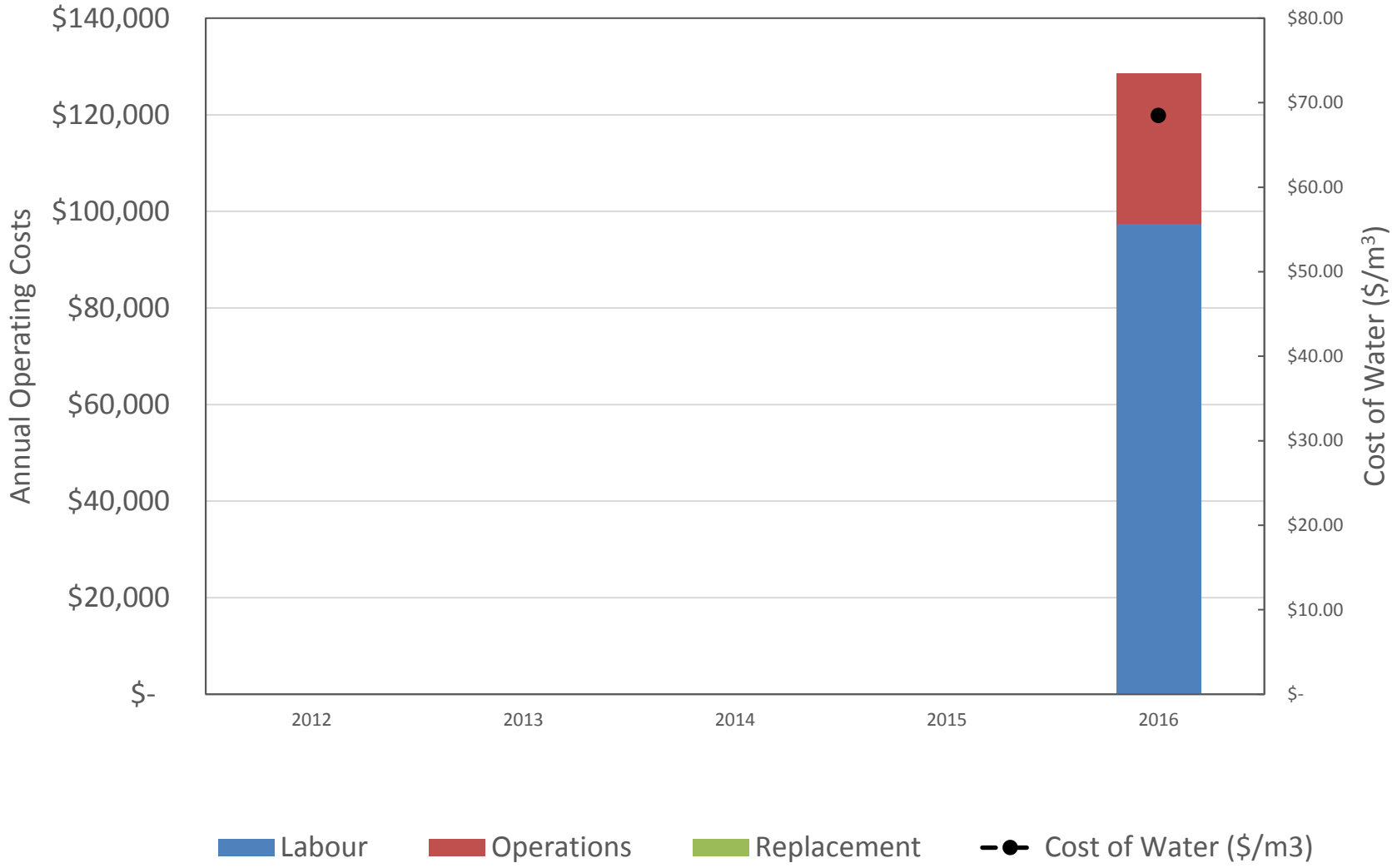
MH # 5170267

03/22/2017

Deep Creek System Operating Costs



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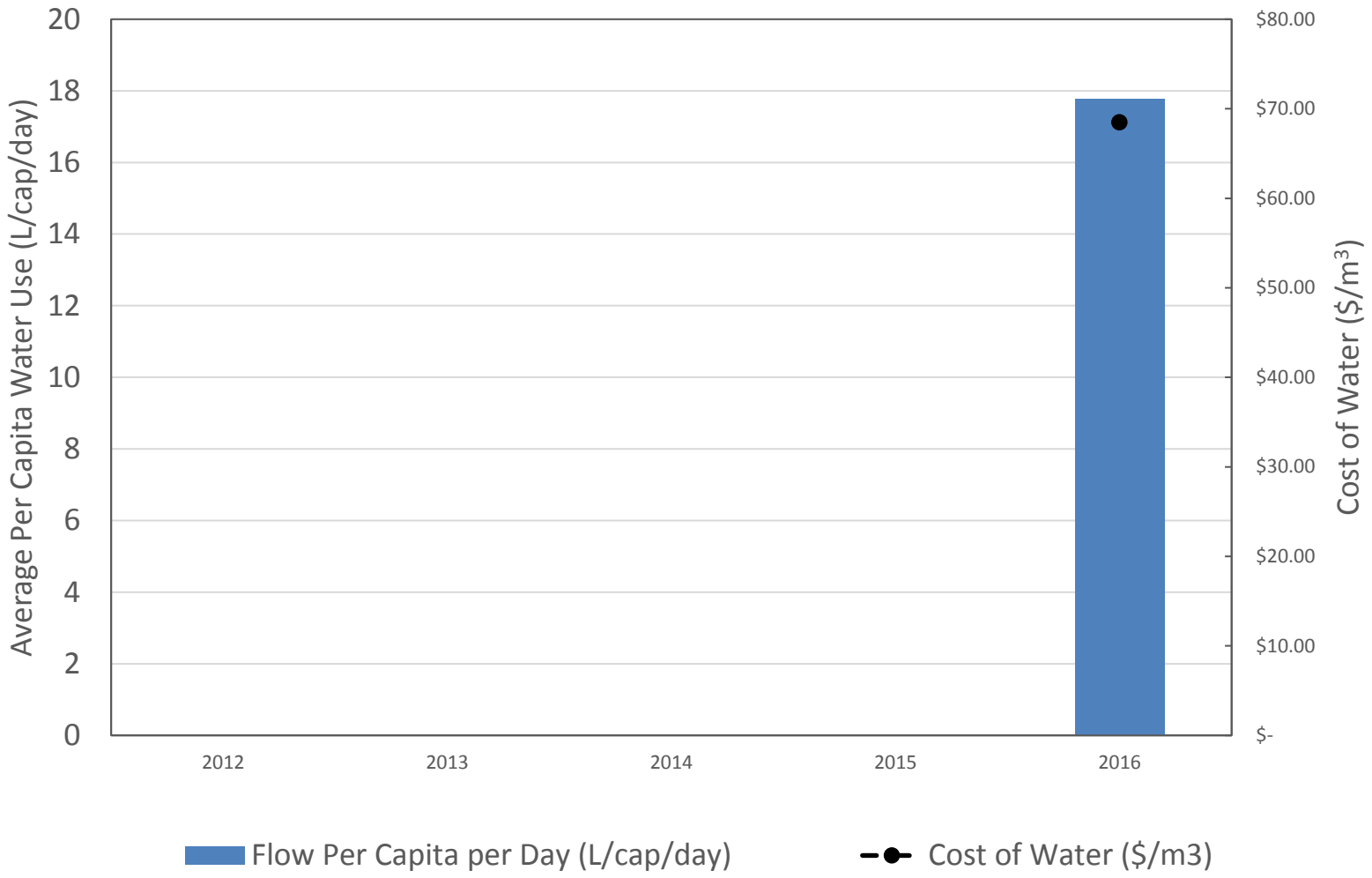
Deep Creek Capita Water Use

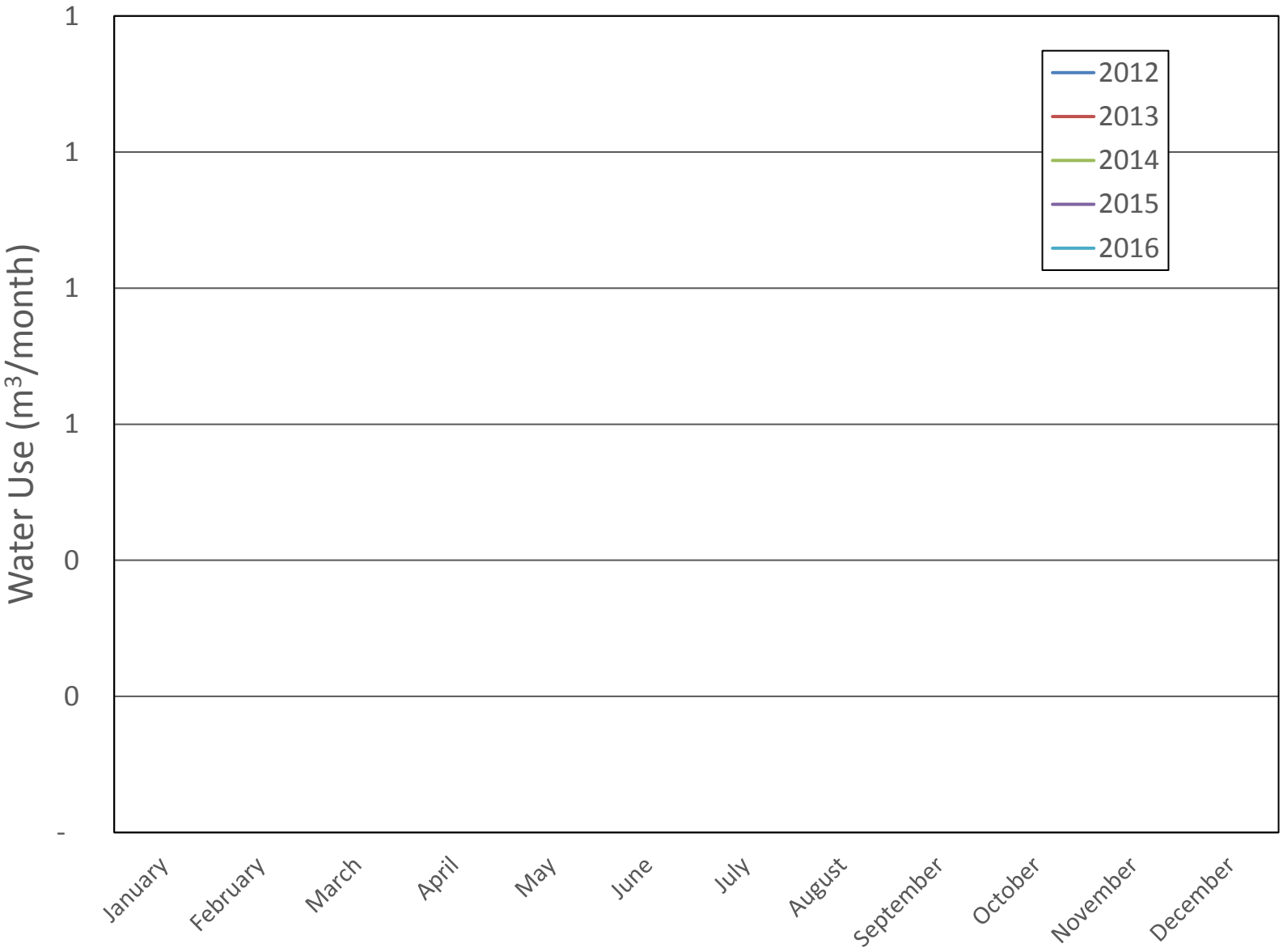


Yukon Government

MH # 5170267

03/22/2017

Keno Treated Water Flows



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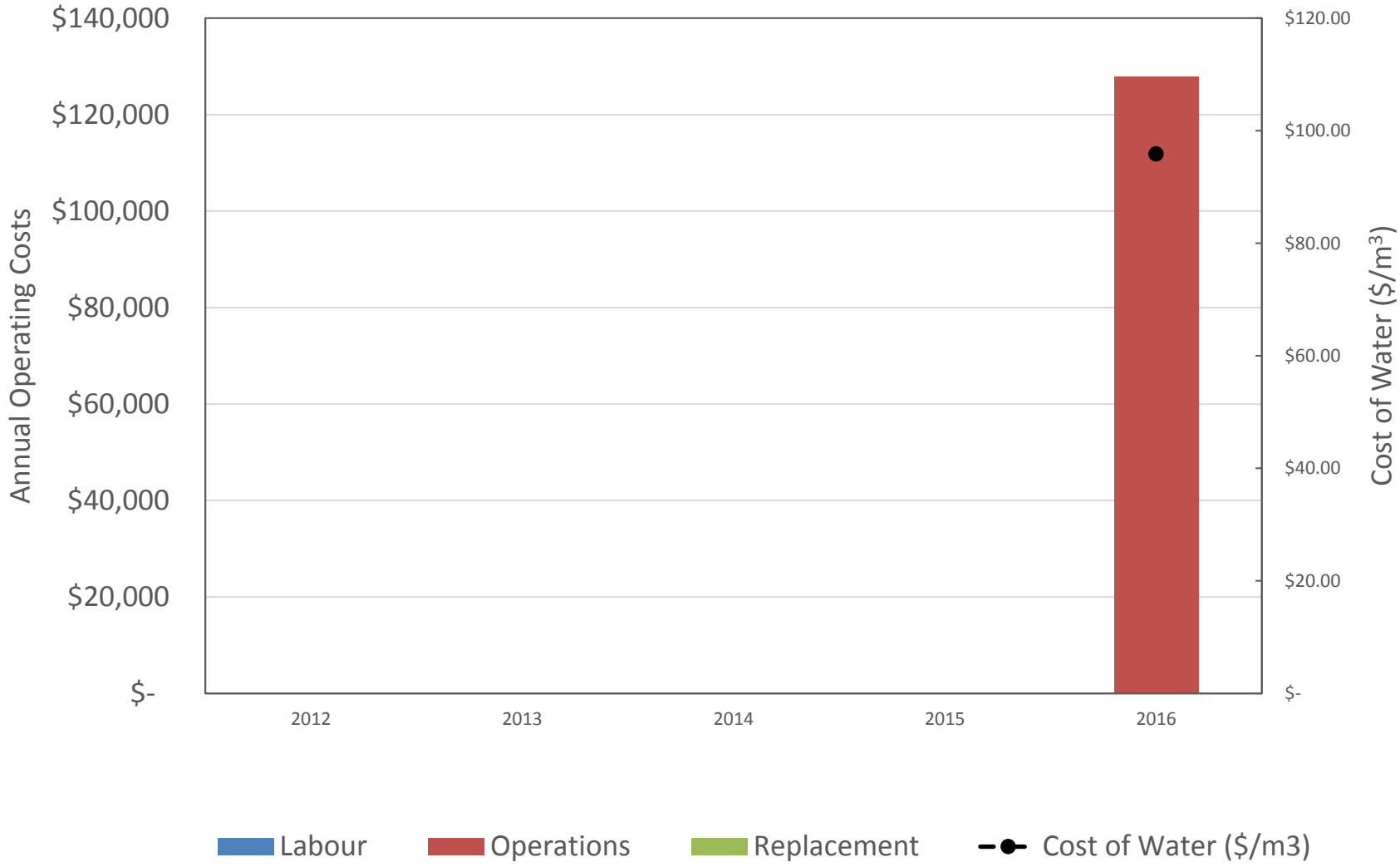
Keno System Operating Costs



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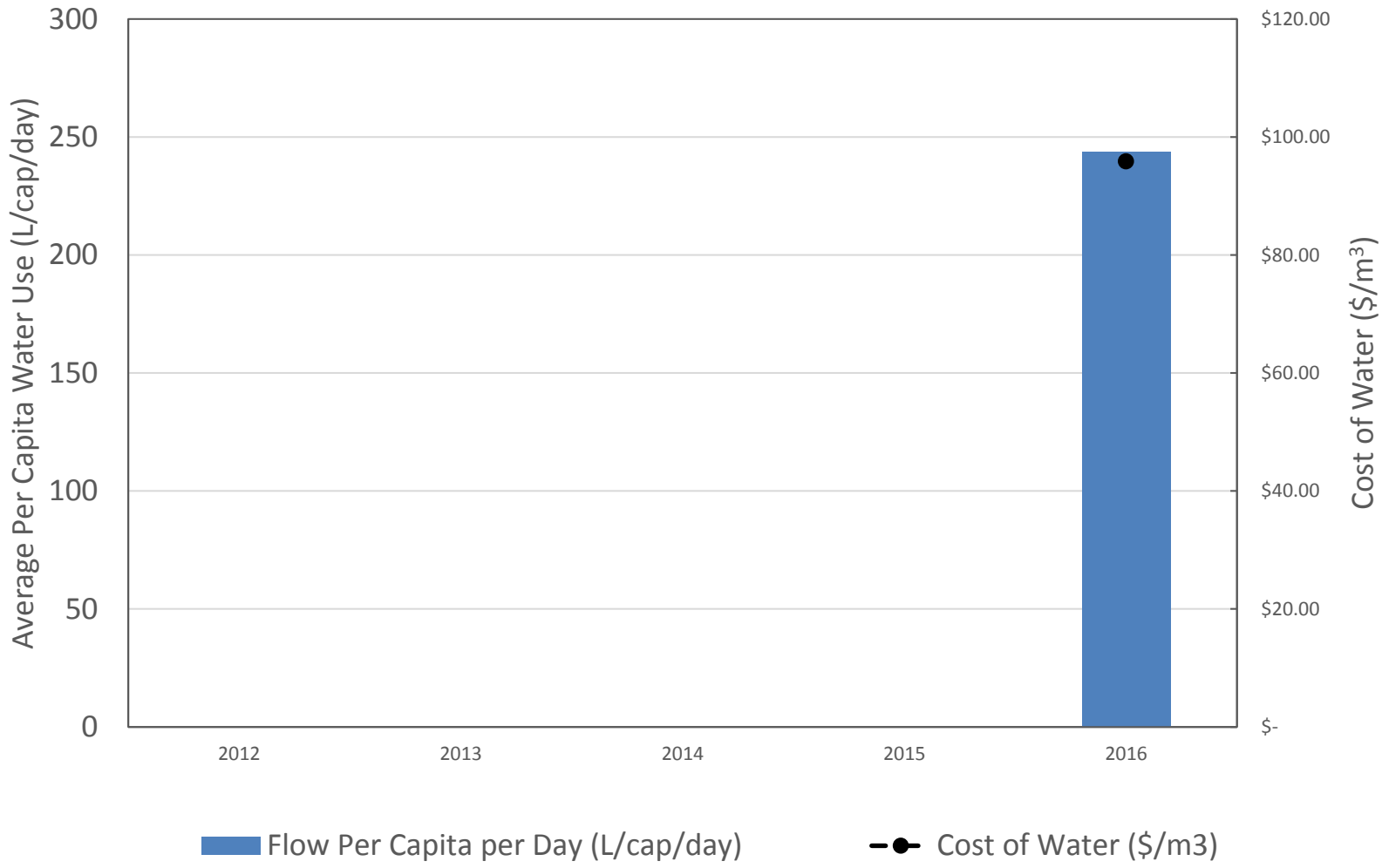
Keno Per Capita Water Use



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MH # 5170267

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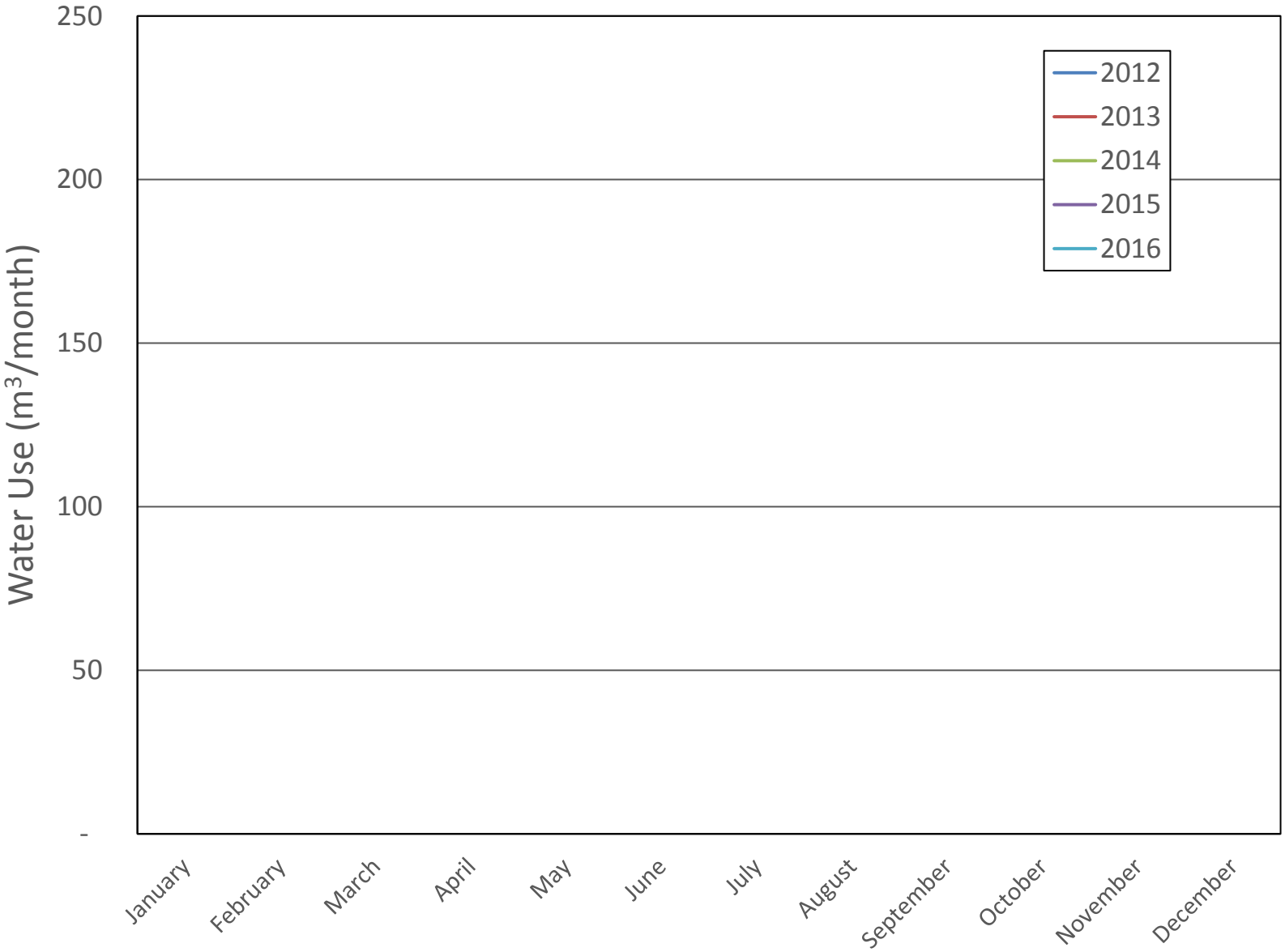
Mendenhall Treated Water Flows



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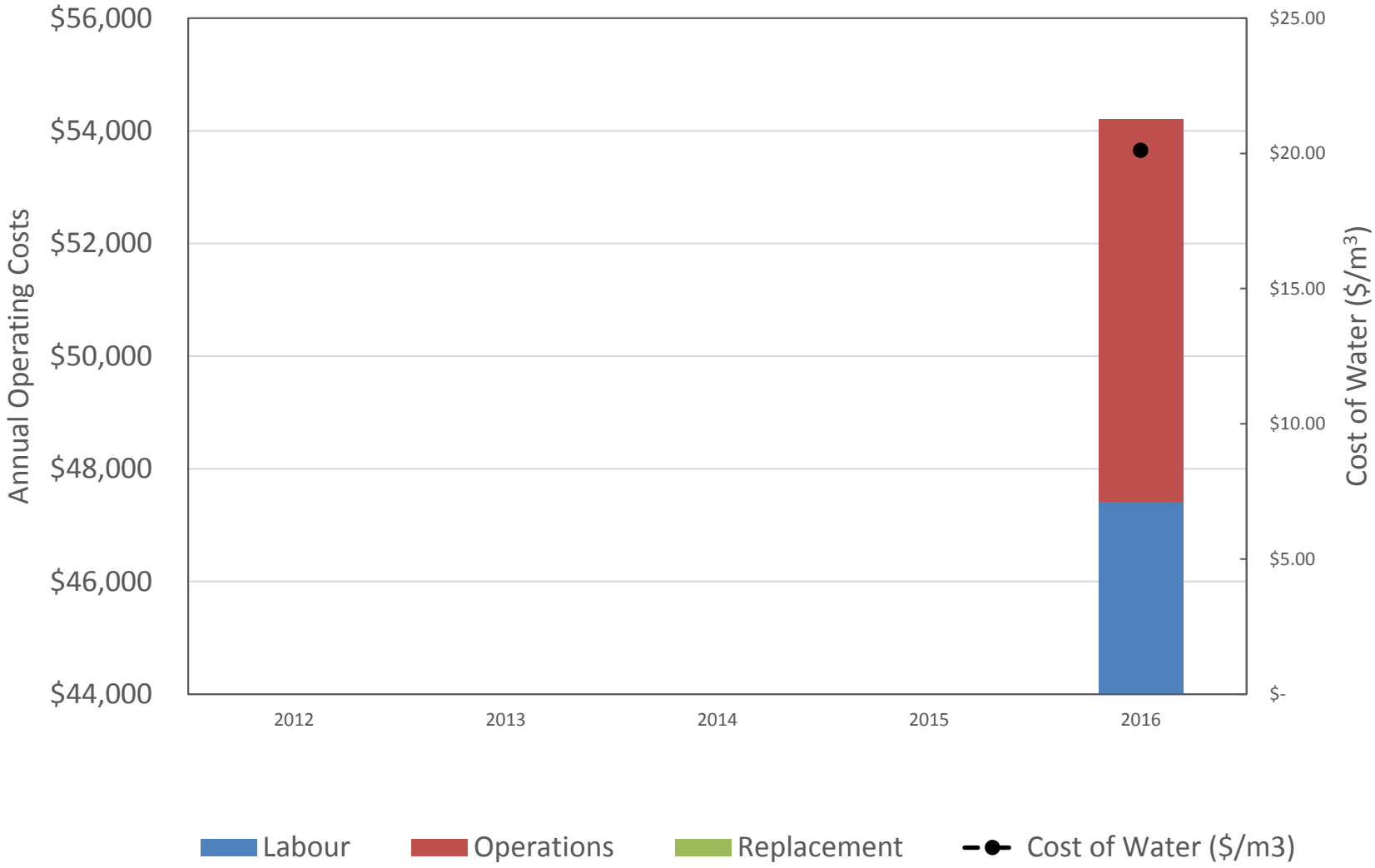
Mendenhall System Operating Costs



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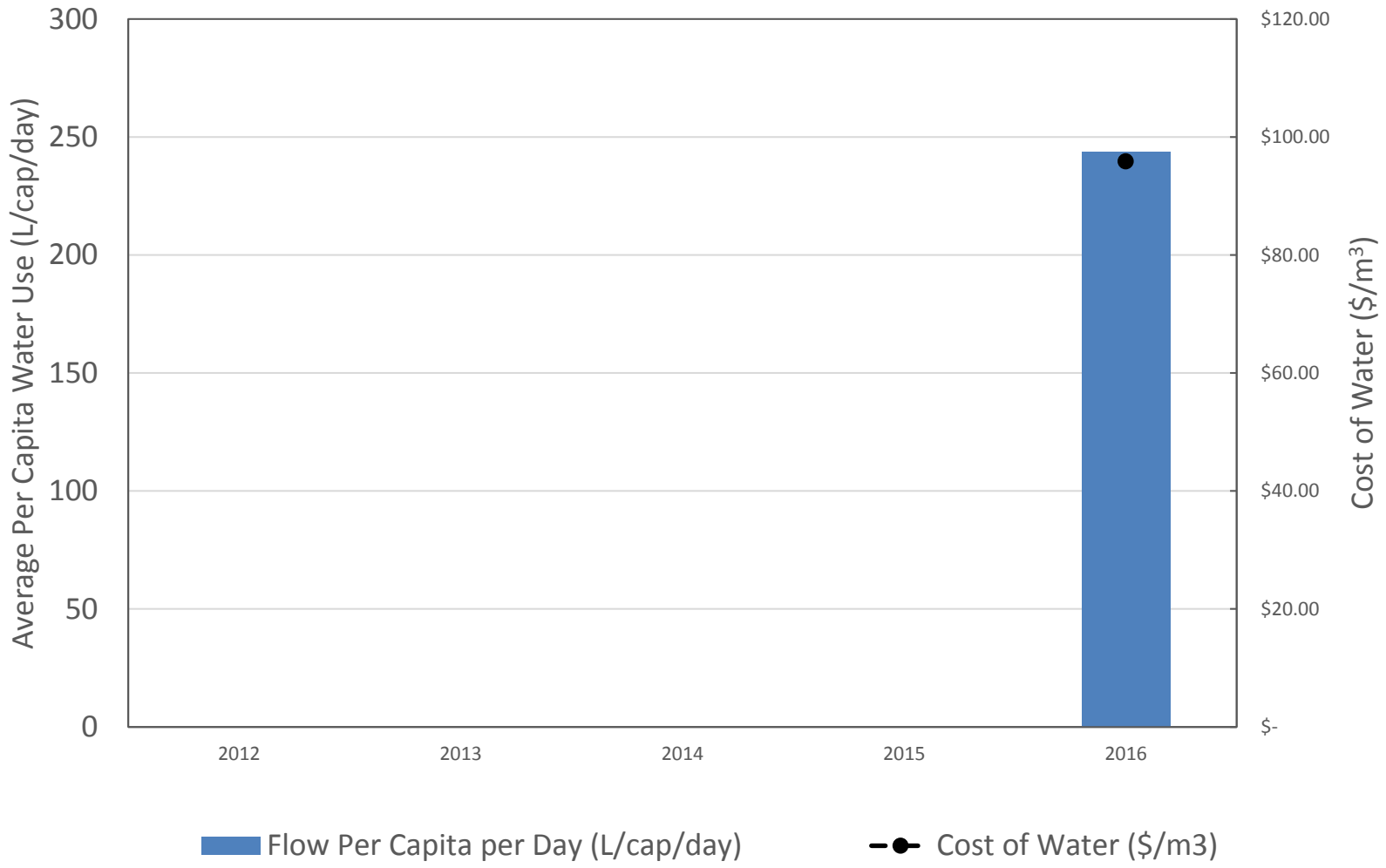
Keno Per Capita Water Use



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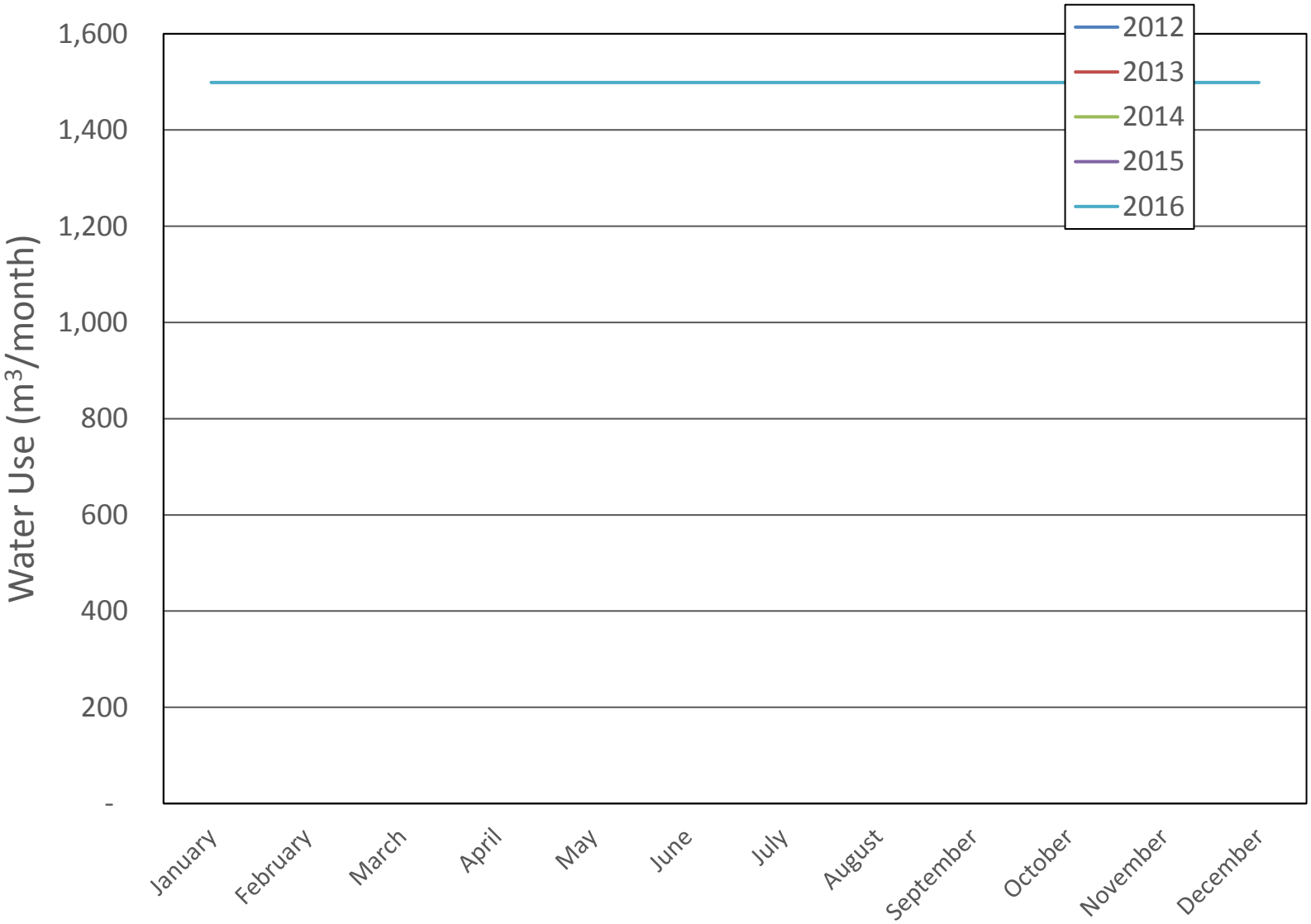
MH # 5170267

03/22/2017

YG Tagish
Treated Water Flows



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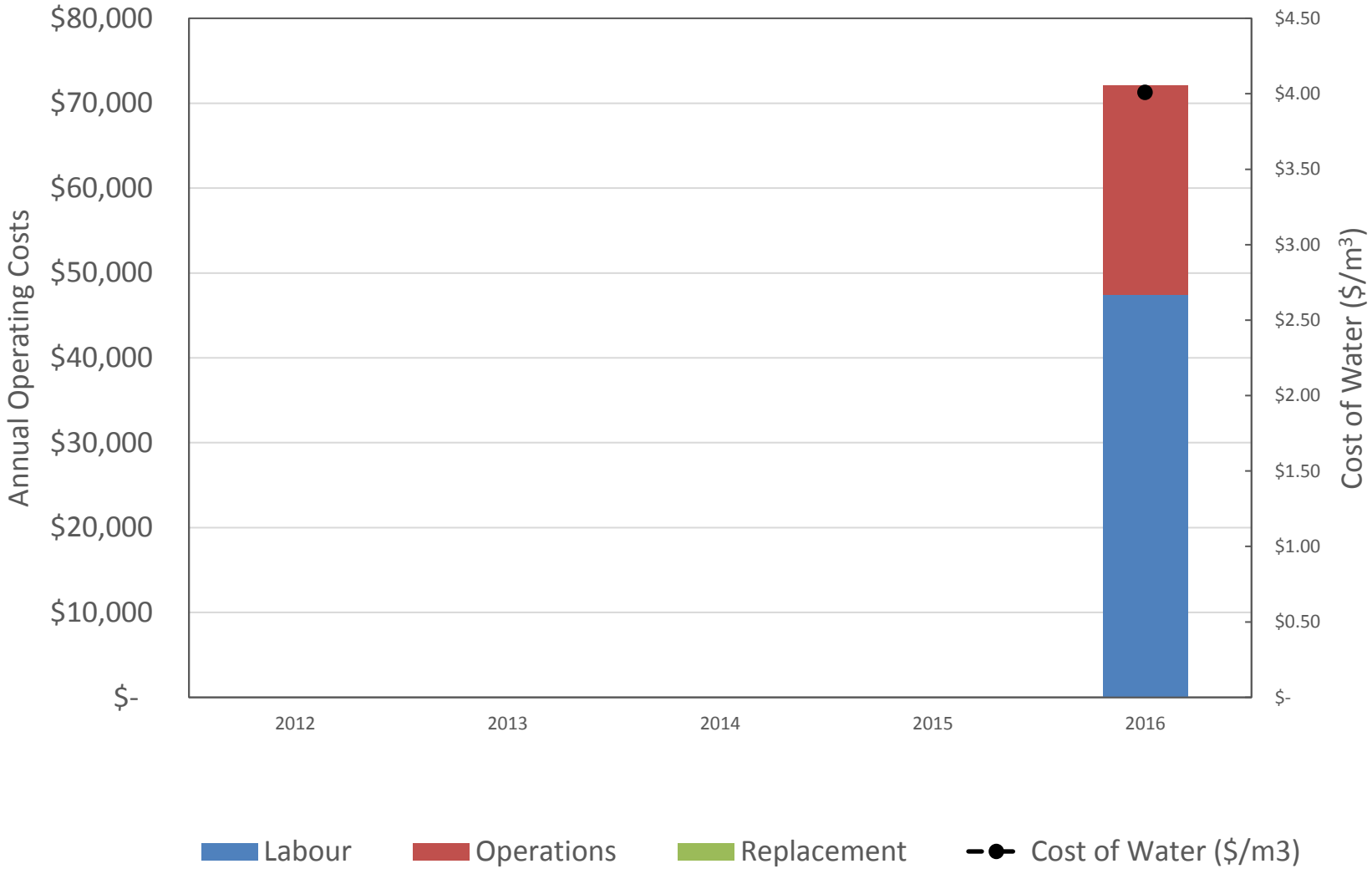
MH # 5170267

03/22/2017

YG Tagish
Water System Operating Costs



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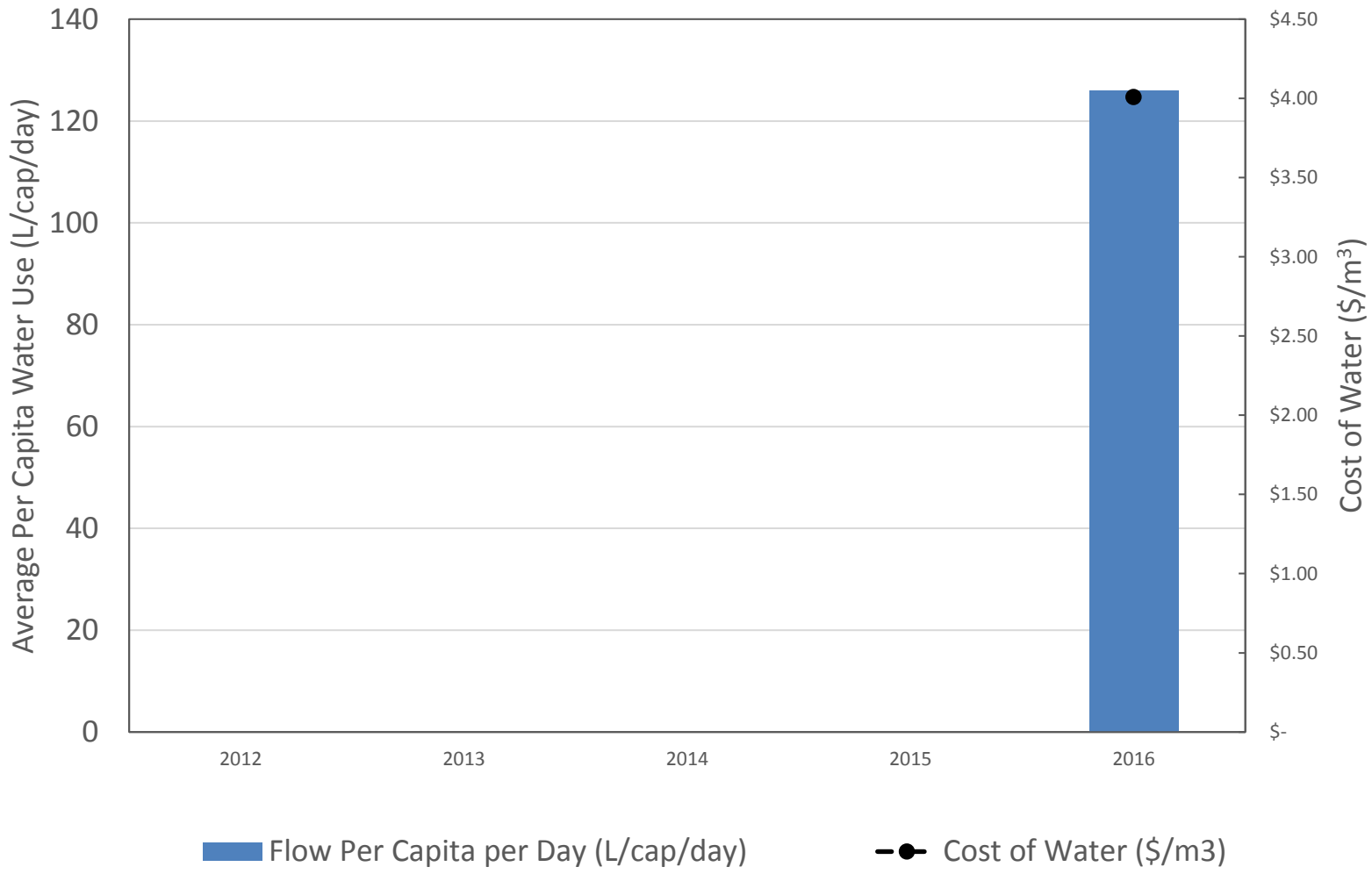
YG Tagish
Per Capita Water Use



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MH # 5170267

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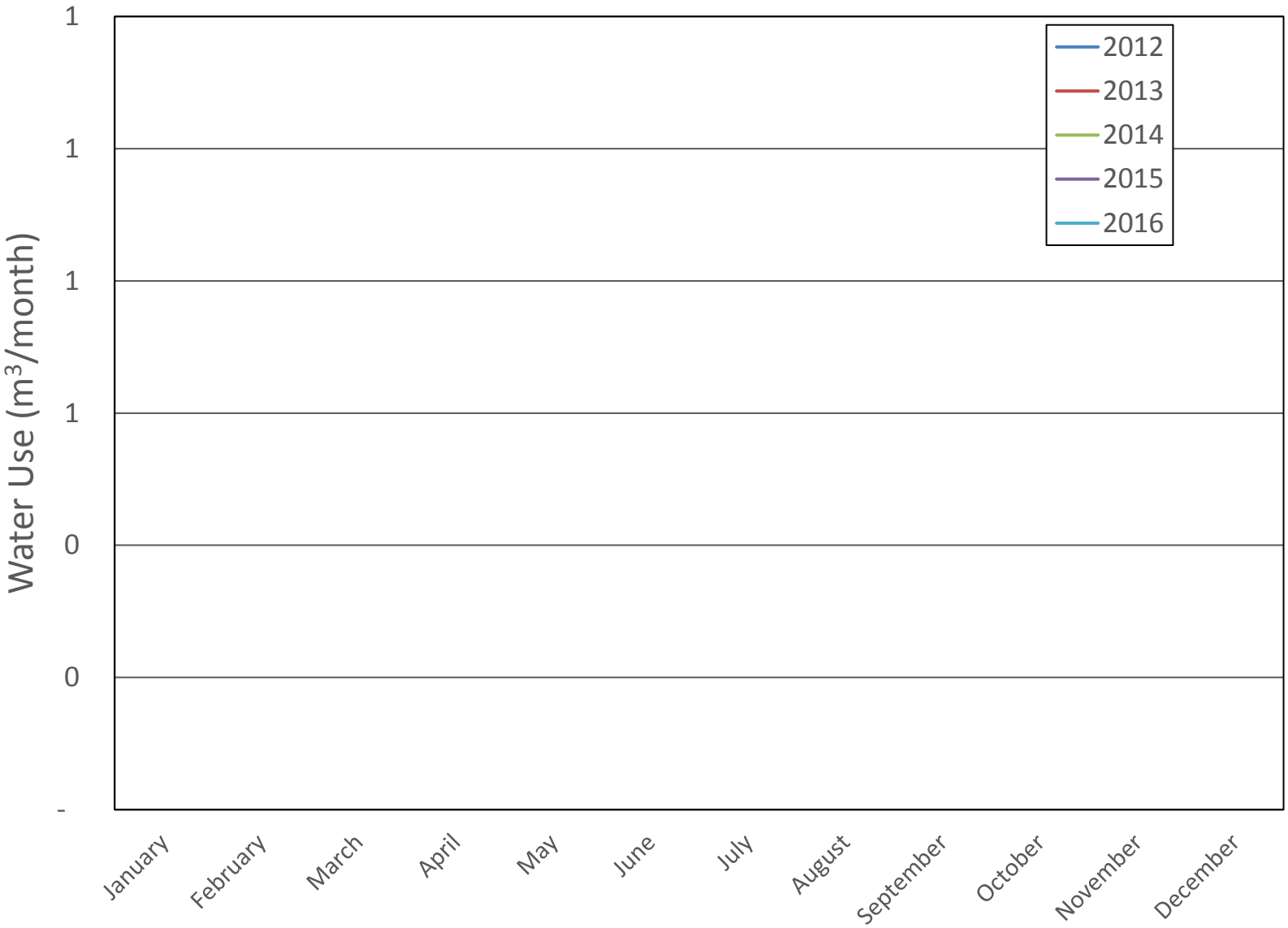
Marsh Lake Fire Hall
Treated Water Flows



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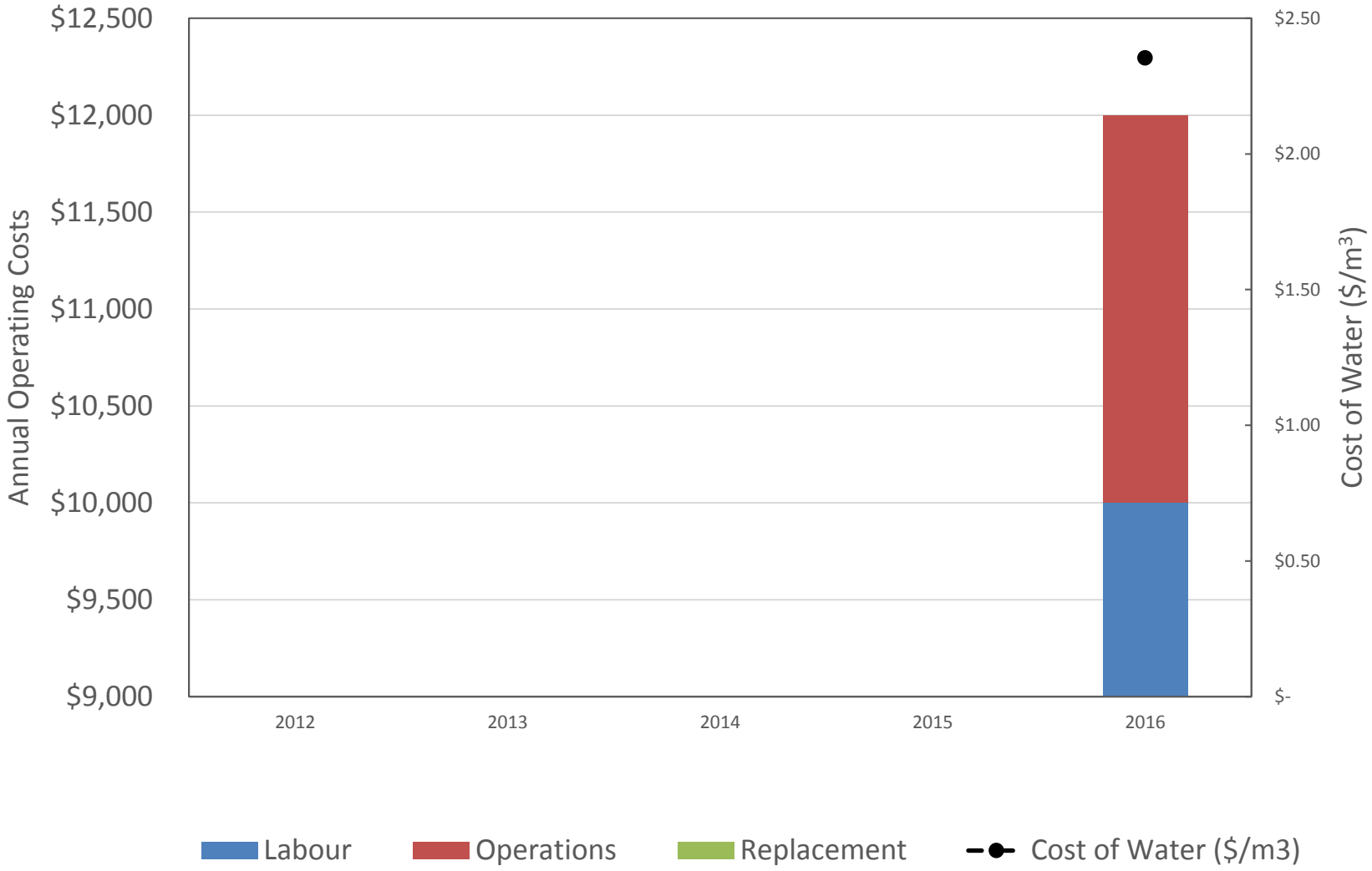
MH # 5170267

03/22/2017

Marsh Lake Fire Hall
Water System Operating Costs



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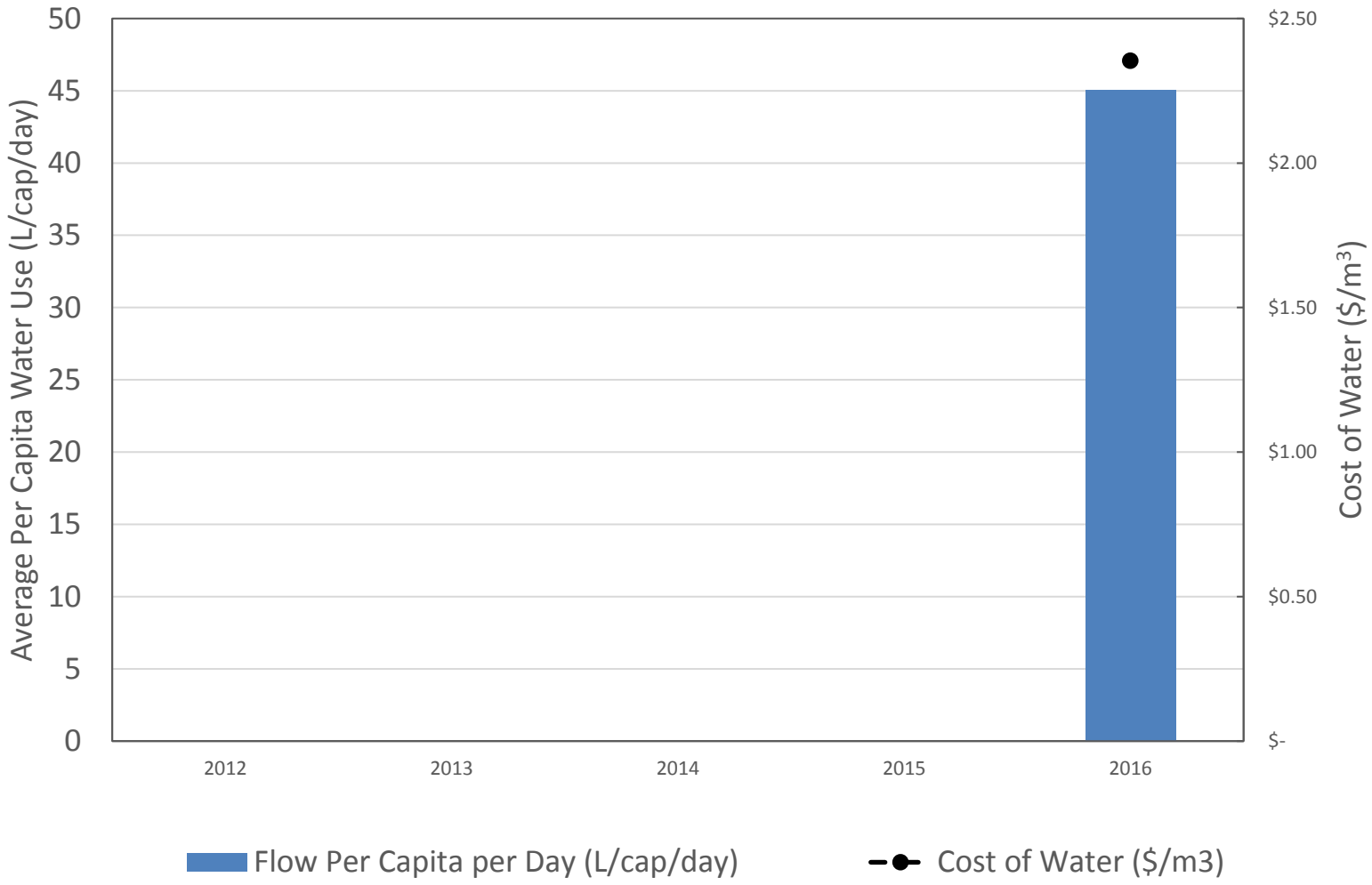
MH # 5170267

03/22/2017

Marsh Lake Fire Hall
Per Capita Water Use



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Appendix C)

Data Sources and Assumptions Table

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Appendix C) Data Sources and Assumptions

Service Locations	Flow Data Sources	Financial Data Sources	Population Data Sources	Data Quality and Assumptions
Watson Lake	WaterLine	Sarah Russo, YG-Community Affairs	http://www.watsonlake.ca/about-watson-lake/statistics/	Financial data is only for 2016
Whitehorse	WaterLine	Whitehorse Operations	Annual Reports on WaterLine	None: Full Data Set
Haines Junction	WaterLine	Donna Istchenko, Treasurer	http://www.yukoncommunities.yk.ca/haines-junction/population-and-labour-force	No annual service population reporting
Dawson	Marc Richard, Sr. Utility Operator	Joanne Van Nostrand, CFA	http://www.yukoncommunities.yk.ca/dawson-city/population-labour-force	Estimated average annual population based on summer-winter fluctuations
Mayo	WaterLine	Barbara Barchen, Clerk/Tresurer; Scott Hamilton, Operations	Based on 2011 census	No annual service population reporting
Faro	WaterLine	Sarah Russo, YG-Community Affairs	http://www.yukoncommunities.yk.ca/faro/population-and-labour-force	Financial data is only for 2016, Population Data not reported annually
Deep Creek	YG-Community Operations (*Dwayne Muckosky, Monti Patterson, Steve Perrin)	YG-Community Operations	YG-Community Operations (estimate as per discussion with Dwayne Muckosky)	Service population estimate only, 2016 financial data only, No monthly flow data, financial information based on reporting and discussions of labour costs with Dwayne Muckosky
Mendenhal Subdivision	YG-Community Operations	YG-Community Operations	YG-Community Operations (estimate as per discussion with Dwayne Muckosky)	Service population estimate only, Some assumptions made for financial data, 2016 financial data only, financial information based on reporting and discussions of labour costs with Dwayne Muckosky, No monthly flow data
Army Beach	WaterLine	YG-Community Operations	YG-Community Operations (estimate as per discussion with Dwayne Muckosky)	Service population estimate only, Some assumptions made for financial data, 2016 financial data only, financial information based on reporting and discussions of labour costs with Dwayne Muckosky
Marsh Lake Firehall	YG-Community Operations	YG-Community Operations	YG-Community Operations (estimate as per discussion with Dwayne Muckosky)	Service population estimate only, Some assumptions made for financial data, as per discussions with Dwayne Muckosky, 2016 financial data only, No monthly flow data, inconsistencies in flow reporting as reported by Monti Patterson
Carcross	YG-Community Operations	YG-Community Operations	http://www.yukoncommunities.yk.ca/carcross/population-and-labour-force	Service population estimate only, 2016 financial data only, financial information based on reporting and discussions of labour costs with Dwayne Muckosky No monthly flow data, inconsistencies in flow reporting as reported by Monti Patterson, no flow data for years previous to 2015
Old Crow	YG-Community Operations	YG-Community Operations	Ref. Tetra Tech System Bios (2017, draft): citing Yukon Bureau of Statistics 2015	Some assumptions made for financial data, 2016 financial data only, financial information based on reporting and discussions of labour costs with Dwayne Muckosky
Ross River	YG-Community Operations	YG-Community Operations	Ref. Tetra Tech System Bios (2017, draft): citing Yukon Bureau of Statistics 2016	Some assumptions made for financial data; 2016 financial data only, financial information based on reporting and discussions of labour costs with Dwayne Muckosky
Teslin	Waterline	Sarah Russo, YG-Community Affairs	Village website (2015)	2016 financial data only; Population Data not reported annually
YG Tagish	YG- Community Operations	YG-Community Operations	http://www.yukoncommunities.yk.ca/tagish/tagish-population-labour-force	Limited years to study (built in 2015), no monthly flow data available, 2016 financial data only, financial information based on reporting and discussions of labour costs with Dwayne Muckosky
Keno	YG-Community Operations	YG-Community Operations (estimate as per discussion with Dwayne Muckosky)	https://en.wikipedia.org/wiki/Keno_City	As per conversation with Dwayne Muckosky, flow data based on estimated frequency of truck deliver (3 summer, 2 fall/winter/spring), and full 3000 Gal. truck, Population data is estimated only (2006 Canadian Census), Some assumptions made for financial data
Missing Key Data				
Rock Creek Firehall	YG- Community Operations: No flow data available yet	TBD	Ref. Tetra Tech System Bios (2017, draft): citing Yukon Bureau of Statistics	Key information is missing for this system, financial information based on reporting and discussions of labour costs with Dwayne Muckosky
KFN Community Water Supply (Burwash Landing)	TBD	TBD	Ref. Tetra Tech System Bios (2017, draft): citing Yukon Bureau of Statistics	Key information is missing for this system
CTFN Water Plant (Tagish)	TBD	TBD	Unknown	Key information is missing for this system
Liard First Nation (2 mile Watson Lake)	TBD	TBD	Service population unknown, Number of trucked and piped service locations is cited in Tetra Tech System Bios (2017, draft)	Key information is missing for this system
Selkirk First Nation (Pelly)	TBD	TBD	Estimated population based on service connections (piped and trucked) cited in Tetra Tech System Bios (2017, draft)	Key information is missing for this system
White River First Nation Beaver Creek Community Water Supply	TBD	TBD	Service population unknown, Number of trucked and piped service locations is cited in Tetra Tech System Bios (2017, draft)	Key information is missing for this system
Beaver Creek	TBD	TBD	TBD	Key information is missing for this system
Destruction Bay	TBD	TBD	TBD	Key information is missing for this system

Legend
Green: Municipality
Red: Unincorporated Community
Blue: FN