# DULUTH PUBLIC UTILITIES COMMISSION Tuesday, February 21, 2017 City Council Chambers AGENDA

- 1. Roll call
- 2. Approval of previous meeting minutes
- 3. Old business:
  - 3.1 Gas transport rate
  - 3.2 Water utility discussion
- 4. New business:
  - 4.1 2016 WLSSD year-end adjustments
  - 4.2 17PUC-001 RESOLUTION OF THE DULUTH PUBLIC UTILITIES COMMISSION RECOMMENDING THAT THE CITY OF DULUTH APPROVE THE 2016 WATER SUPPLY PLAN.
- 5. Updates from staff
- 6. Upcoming Council actions
- 7. Commissioner questions or comments
- 8. Preview of upcoming business

# DULUTH PUBLIC UTILITIES COMMISSION Meeting Minutes January 17, 2017

**Members Present:** Jen Julsrud, Jim Lewis, Rob Prusak, Councilor Joel Sipress, Jason Thorsell, Councilor Em Westerlund

Members Absent: Councilor Zack Filipovich

Staff Present: Bob Asleson, Jim Benning, Leanna Gilbert, Howard Jacobson, Eric Shaffer, Glenn Strid

**Call to Order:** The meeting was called to order at 5:20 p.m. by President Prusak.

#### Approval of previous meeting minutes

Old business:

#### Gas transport rate

Eric Shaffer stated that we would probably recommend a small increase to the transport rate, but he is still reviewing this with gas control personnel. There are no customers currently affected by this rate. ME Global has a separate contract.

#### New business:

#### Water utility discussion

The Commission previously discussed studying the water utility for a few months and forming a plan of action for rate modifications. Commissioner Julsrud would like to follow the WLSSD model of small annual rate increases. President Prusak would like to discuss some different scenarios next month. Commissioner Julsrud suggested meeting at the water plant again after the new commissioners begin their terms so that they can get an overview of the system.

#### Water Supply Plan

No action is required at this time. The Water Supply Plan has been submitted to the State for review and acceptance. Once accepted by the State, the plan will be sent back to us for adoption. There was some discussion about the content of the document.

#### Upcoming vacancy – at large member

Jason Thorsell has opted not to be reappointed when his term expires on March 31<sup>st</sup>. There are currently two applications on file, but it appears that only one applicant lives within City limits. Commissioners should encourage others to apply as well.

#### Election of officers

Commissioner Julsrud nominated Rob Prusak for President, and he was elected unanimously. Commissioner Sipress nominated Jen Julsrud for Vice President, and she was elected unanimously.

#### Updates from staff

Eric Shaffer stated that the Engineering staff is working on plans for the upcoming construction season. They are also working on the water model, but there is an issue with calibration. Up until a few years ago, the most natural gas used was about 36,000 MCF in one day. During the really cold winter, we used about

It is the mission of the Duluth Public Utilities Commission to ensure safe, reliable, efficient utilities services at reasonable rates.

46,000 MCF. We only have contracts to buy 42,000 or 43,000 MCF, so we exceeded our limit. We had a day recently that was up around 40,000 MCF. We installed a new 12" pipe down 4<sup>th</sup> Street that has made operation of the system substantially better. If we get more big customers, we will be at our limit and may need to either buy more capacity or shut interruptible customers off during cold weather. Cirrus uses a lot of gas, and they are not up to capacity yet. We won't know how much they will really use until next year. A discussion of interruptible and transport rates followed. Staff will provide a list of current interruptible customers to commissioners as requested.

#### **Upcoming Council actions**

The new committee chair for Public Works & Utilities is Councilor Hobbs.

#### Commissioner questions or comments

Commissioner Sipress reported that the annual resolution to purchase caustic soda went through Council. Because of what he has learned on the Commission, he was able to educate other councilors and the public about caustic soda.

Commissioner Julsrud asked if a mathematician would be of value to the Commission. Jim Benning replied that an economist might be a better fit.

President Prusak stated that he has an interruptible power rate through MN Power and was shut off when it was bitterly cold. The house got really cold, so he called them the next day to opt out of it. When he saw how much money he was saving with the interruptible rate, he decided not to opt out.

#### Preview of upcoming business

The next meeting is scheduled for Tuesday, February 21, 2017, at 5:15 p.m. in City Council Chambers. Jim Benning will work on the water utility timeline. Staff will also work on the gas transport rate and the list of interruptible customers.

**Adjournment:** The meeting was adjourned at 6:10 p.m.

### PROPOSED RATE ADJUSTMENT ANNUAL CYCLE

Month	Topic	Action
January	Next Fiscal Year Needs	Detailed discussion on FY+1 capital projects and O&M requirements for each utility. Set work priorities and determine budget shortfalls
February	Funding Options	Discuss options to fund capital projects and O&M costs for FY+1
March	Proposed Rate Adjustments	Determine potential rate adjustments to meet needs
April	Public Education	Public outreach and education for proposed rate adjustments
May	Finalize Rate Adjustments	Review comments from public outreach and education, draft context for rate adjustment PUC resolution
June	Public Hearing and PUC Vote	Hold Public Hearing and vote on PUC Resolutions for any rate adjustments. Rate changes would typically be effective January 1 <sup>st</sup> of the next year.
July	Typically no meeting	Staff prepares draft budget presentation
August	Budget Discussion	Review draft budget presentation based on approved rates and propose any necessary changes
September	Budget Discussion	Vote on PUC Resolution recommending the budget to the City Council
October	5-year plans	Review 5-year plans for each utility, compare needs to financially feasible revenues
November	5-year plans	PUC adopt 5 year plans for each utility
December	Typically no meeting	NA

This calendar represents an example of how to thoughtfully determine if a utility rate adjustment is necessary and the steps that should be followed on a continuous cycle.



2626 Courtland Street Duluth, MN 55806-1894 phone 218.722.3336 fax 218.727.7471 www.wlssd.com

### Western Lake Superior Sanitary District

January 31, 2017

Mr. Jim Benning Director of Public Works 207 City Hall Duluth, MN 55802

Subject: 2016 Wastewater Treatment Year-End Adjustments

Dear Mr. Benning:

At the close of each year, we notify our wastewater treatment users of the year-end adjustment based on the actual flow and load data, and treatment costs.

For 2016, the WLSSD Board has approved total wastewater charges of \$26,484,228 as shown in the attached comparison of billed (budget) to required charges (actual) for 2016. Each wastewater user will receive additional charges or credits based upon their actual flows and loads as compared to budget. This amount will be spread evenly over the 12-month period in 2017.

Attached is a table summarizing the 2016 billing as compared to the 2016 required actual. For Duluth the total year-end adjustment for 2016 is a charge of \$181,726 due to higher daily BOD and peak flow from Duluth as compared to that budgeted and billed. This will be included as a \$15,144/month charge on your 2017 monthly billing.

Please contact me at 740-4805 if you have any questions.

Sincerely,

Marianne Bohren Executive Director

xc: Eric Schaffer

Attachment

## 2016 Year End Adjustment

	BILLED 2016			% CHANGE
DULUTH	8,656,757	8,838,483	\$181,726	2.10%
CLOQUET	910,561	852,182	(\$58,379)	-6.41%
PROCTOR	290,861	288,120	(\$2,741)	-0.94%
HERMANTOWN	421,924	433,728	\$11,805	2.80%
ESKO	122,694	124,094	\$1,400	1.14%
SCANLON	91,545	103,063	\$11,519	12.58%
CARLTON	108,768	95,484	(\$13,283)	-12.21%
RICE LAKE	44,221	46,355	\$2,134	4.83%
TWIN LAKE	71,921	76,381	\$4,460	6.20%
PIKE LAKE	63,314	56,509	(\$6,805)	-10.75%
KNIFE RIVER	\$16,404	15,161	(\$1,243)	-7.58%
OLIVER	16,041	16,512	\$471	2.94%
THOMSON	8,067	7,960	(\$107)	-1.33%
WRENSHALL	19,871	19,155	(\$716)	-3.60%
JAY COOKE	3,920	4,412	\$491	12.53%
MIDWAY	4,030	6,690	\$2,661	66.03%
MPCA LANDFILL	21,121	20,050	(\$1,071)	-5.07%
DULUTH/NORTH SHORE	45,194	39,970	(\$5,223)	-11.56%
MUNICIPALITIES SUBTOTAL	10,917,213	11,044,310	\$127,097	1.16%
SAPPI	10,852,760	10,797,398	(\$55,362)	-0.51%
GEORGIA PACIFIC	75,254	75,254	\$0	0.00%
USG	452,854	447,148	(\$5,706)	-1.26%
VERSO DULUTH MILL	3,881,627	3,805,838	(\$75,789)	-1.95%
SPECIALTY MINERALS	304,520	314,280	\$9,761	3.21%
INDUSTRIES SUBTOTAL	15,567,015	\$15,439,918	(\$127,097)	-0.82%
TOTAL DISTRICT	\$26,484,228	\$26,484,228	\$0	0.00%

Table 5
USER'S WASTEWATER FLOW AND STRENGTH CHARACTERISTICS
Flow and Strength Characteristics
Western Lake Superior Sanitary District
2016 Year End Adjustment

	Allocated (Lbs./Dav)		23,000	3.450	700	1.600	420	268	205	125	280	185	46	41	24	69	0	ο α	20	9.0	125	30,624		c	25,000	2,000	2,730	1,400	31,900	62,524
TSS	Actual (Lbs./Day)		16 286	2,515	548	1.180	300	268	160	66	246	139	34	34	17	43	4	ω	40	0	81	22,002		0	17 522	2,627	426	1,338	21,913	43,915
	Allocated (Lbs./Day)		18.500	2,010	592	1,600	320	268	157	125	280	185	46	41	24	69	ω	1	70	0	125	24,431		C	56.000	28,758	2,000	. 8	86,766	111,197
BOD	Actual (Lbs./Day)		13.064	1,463	470	1,180	250	268	130	66	246	139	34	34	17	43	4	7	40	0	81	17,573		0	50,361	25,011	1,345	9	76,723	94,296
Flow	Allocated (Mgd)		104.339	4.075	2.464	2.587	1.178	0.922	1.035	0.361	0.357	0.333	0.140	0.233	0.052	0.222	0.101	0.179	0.103	0.000	0.513	119.194		0.000	24.000	9.511	1.358	0.500	35.369	154.562
Peak Flow	Actual (Mgd)		104.339	4.075	2.464	2.587	1.178	0.922	1.035	0.361	0.357	0.333	0.140	0.233	0.052	0.222	0.101	0.179	0.063	0.000	0.513	119.154		0.000	23.368	9.511	1.358	0.452	34.689	153.843
low	Allocated (Mgd)		17.325	1.470	0.604	0.760	0.240	0.161	0.270	0.080	0.090	0.110	0.027	0.024	0.015	0.042	0.005	0.005	0.042	0.000	0.075	21.345		0.000	16.250	5.500	0.580	0.240	22.570	43.915
Base Flow	Actual (Mgd)		12.870	1.069	0.464	0.635	0.178	0.161	0.120	0.059	0.080	0.083	0.021	0.020	0.010	0.026	0.003	0.005	0.024	0.000	0.048	15.876		0.000	15.882	4.508	0.460	0.230	21.080	36.956
	Notes																									*			65	
	Billing Basis		Budget	Budget	Budget	Budget	Budget	DE	Budget	DE	Budget	DE	DE	DE	DE	DE	DE	DE	DE	DE	DE	1		Budget	Budget	Budget	Budget	Budget		
	Class of Service	Municipalities:	Duluth	Cloquet	Proctor	Hermantown	Esko	Scanlon	Cariton	RICE Lake	I win Lake	Pike Lake	Knite Kiver	Oliver	Inomson	Wrenshall	Jay Cooke	Midway	MPCA Landfill	Onused	North Shore	Totals-Municipalities	Industrials:	Unused	SAPPI	Verso Duluth Mill	USG	Specialty	Totals-Industrials	Totals-All Users
	Line No.		·	2 0	· .	4 r	Ω (	1 0	~ 0	0 (	n 5	2 5	= {	7 5	<u>.</u>	<u>4</u> ,	<u>ი</u> (	<u>o</u> ;	_ ;	21	19	20		21	22	5 53	24	67	26	27

BOD, and TSS strengths are computed using the District's standard domestic equivalent strengths. Formula: Flow x Strength(Mg/l) x 8.34. Standard domestic equivalent strengths for the District are: BOD-200 Mg/AIBS=200,8/I). 1/30/2017

### 2016 Year End Adjustment Wastewater Unit Costs

ė.	BUDGET 2016	REQUIRED 2016	% CHANGE
VOLUME			01,,,,,02
FLOW (MGD)	37.32	36.96	-0.97%
BOD (LBS/DAY)	84,059	94,296	12.18%
SUSPENDED SOLIDS (LBS/DAY)	46,585	43,915	-5.73%
O & M UNIT COSTS			
FLOW (COST/1000 GAL)	\$0.5304	\$0.5472	3.17%
PEAK FLOW	\$0.0422	\$0.0193	-54.25%
BOD (COST/LB)	\$0.1543	\$0.1432	-7.21%
SUSPENDED SOLIDS (COST/LB)	\$0.2781	\$0.3026	8.80%
O & M + DEBT SERVICE UNIT COSTS		В	
FLOW (COST/1000 GAL)	\$0.7043	\$0.7211	2.39%
PEAK FLOW	\$0.0934	\$0.0698	-25.29%
BOD (COST/LB)	\$0.2193	\$0.2082	-5.07%
SUSPENDED SOLIDS (COST/LB)	\$0.3611	\$0.3855	6.78%
DOMESTIC EQUIV (COST/1000GAL)	\$1.7658	\$1.7812	0.87%

Western Lake Superior Sanitary District Billing Detail 2016 Year End Adjustment

													ži)	
Line	Open of Control	Budget	Operating Exp	penses, based	Operating Expenses, based on Actual Flows and Loads	ws and Loads			Debt Svc	Debt Svc - based on Allocated Flows and Loads	cated Flows a	nd Loads		TOTAL
		Basis	Flow	Excess FI	BOD	TSS	TOTAL	FLOW	PEAK FLOW TOTAL FLOW	TOTAL FLOW	BOD	TSS	TOTAL	
	Municipalities: Duluth-													
-	Duluth	Budget	\$2 570 311	\$645,000	2687 888	\$4 700 756	000							
2	Clouret	1000010	20,000	600,000	9007,000	00/100/10	296,969,962	\$1,152,245	\$900,465	\$2,052,710	\$443,226	\$645,586	\$3,141,522	\$8,838,483
ומ	Droctor	nager	4213,494	861,154	\$16,474	\$277,777	\$588,943	\$89,244	\$64,554	\$153,798	\$42,638	\$66,802	\$263,238	\$852.182
> <		Budget	\$92,667	\$14,103	\$24,568	\$60,526	\$191,864	\$38,771	\$26,661	\$65,432	\$13,131	\$17,693	\$96.256	\$288 120
4 1	Hermantown	Budget	\$126,818	\$13,762	\$61,681	\$130,329	\$332,590	\$34,596	\$19,946	\$54,542	\$19,252	\$27.344	\$101 138	5433 728
o (	ESKO	Budget	\$35,549	\$7,049	\$13,068	\$33,134	\$88,800	\$12,955	\$8.421	\$21,376	\$5 841	\$8.076	835,204	6424,004
9 1	Scanlon	DE	\$32,154	\$5,368	\$14,009	\$29,600	\$81,131	\$8,202	\$5.857	\$14 058	53.760	84.14	621,033	410,431
_	Carlton	Budget	\$23,966	\$6,455	\$6,795	\$17,672	\$54,888	\$19,257	\$13.569	\$32,826	\$3 213	\$4,54	\$40.507	605,003
ω (	Rice Lake	DE	\$11,783	\$2,127	\$5,175	\$10,934	\$30,019	\$6,104	\$4,336	\$10,439	\$2.579	83,330	416,336	490,404
D (	I win Lake	Budget	\$15,977	\$1,954	\$12,859	\$27,170	\$57,960	\$5,566	\$3,939	\$9,505	\$4 238	\$4 677	\$18 420	676 381
2 ;	Pike Lake	DE	\$16,576	\$1,761	\$7,266	\$15,352	\$40,956	\$6,137	\$4,130	\$10,267	\$2.425	\$2,860	\$15,553	846 400
- 5	Knife River	DE	\$4,194	\$840	\$1,777	\$3,755	\$10,566	\$1,217	\$1,853	\$3.070	\$659	\$865	\$4 595	615 151
77.	Oliver		\$3,994	\$1,502	\$1,777	\$3,755	\$11,029	\$1,633	\$1,209	\$2,842	\$1.146	\$1 495	\$5,483	616,101
2 ;	Inomson		\$1,997	\$295	\$872	\$1,878	\$5,042	\$1,093	\$757	\$1.849	\$500	\$569	\$2.018	47 080
4 ,	Wrenshall	DE	\$5,193	\$1,381	\$2,248	\$4,749	\$13,570	\$2,046	\$1.344	\$3,390	\$1 044	\$1 152	84.78	610 166
15	Jay Cooke		\$599	\$690	\$209	\$442	\$1,940	\$584	\$452	\$1,036	\$631	\$805	62,00	64.43
91	Midway	DE	\$899	\$1,224	\$575	\$884	\$3,681	\$1,381	\$856	\$2 237	8323	8449	62,000	214,44
17	MPCA Landfill	吕	\$4,793	\$278	\$2,091	\$4.418	\$11.580	83 336	\$1 075	CH 244	0700	7 6	90,00	080'00
18	Unused	DE	80	\$0	OS	0\$	0001113	000,00	0.6	- 0.00	\$2,093	190,14	48,471	\$20,050
19	North Shore	DE	59 586	43 282	VCC V3	00000	0 000	000	000	04	0.0	0.0	\$0	\$0
		1	0000	40,202	94,234	\$6,940	\$26,048	\$4,669	\$4,356	\$9,025	\$2,134	\$2,763	\$13,922	\$39,970
21	Totals-Municipalities		\$3,170,649	\$728,278	\$918,565	\$2,430,077	\$7,247,569	\$1,389,034	\$1,064,680	\$2,453,713	\$548,833	\$794,194	\$3,796,741	\$11,044,310
	Industrials-													
22	Georgia Pacific		80	80	\$0	050	OS	\$11 040	CE 534	617 400	200			
23	Sappi		\$3,171,847	\$52,789	\$2,632,486	\$1.935.270	87 792 393	\$942 828	\$402,032	917,460	\$45,550	\$12,224	\$75,254	\$75,254
24	VERSO		\$900,308	\$35,277	\$1,307,383	\$290,147	\$2 533 114	\$314 060	\$125,002	6420,760	010,111,14	9470,309	93,000,000	\$10,797,398
25	nse		\$91,868	\$6,332	\$70,306	\$47,051	5215 557	836 140	622,620	9400,100	9103,433	226,6214	\$1,272,723	\$3,805,838
27	Specialty Minerals		\$45,934	\$1,568	\$314	\$147,779	\$195,595	\$21,701	\$9,205	\$30,906	\$303	\$88,570	\$231,591	\$447,148
28	Totals-Industrials		\$4,209,957	\$95,964	\$4,010,489	\$2,420,248	\$10,736,659	\$1,336,687	\$565 156	\$1 901 842	\$2 004 956	670E 4E1	64 700 DED	070 007 1170
Č	:									200,000,0	000,100,24	01,0874	94,703,239	919,459,916
30	I otals-All Users	п	\$7,380,607	\$824,242	\$4,929,054	\$4,850,325	\$17,984,228	\$2,725,720	\$1,629,836	\$4,355,556	\$2,553,789	\$1,590,655	\$8,500,000	\$26.484.228

#### RESOLUTION NO. 17PUC-001

# RESOLUTION OF THE DULUTH PUBLIC UTILITIES COMMISSION RECOMMENDING THAT THE CITY OF DULUTH APPROVE THE 2016 WATER SUPPLY PLAN.

RESOLVED, that the Duluth Public Utilities Commission hereby recommends that the City of Duluth approve the City of Duluth Water Supply Plan Third Generation 2016, attached hereto as Exhibit A, pursuant to DNR Permit No. 1981-2066 as required by Minnesota Statutes Section 103G.291 Subd. 3 and execute the Certification of Adoption attached hereto as Exhibit B.

Approved by the DPUC:	
	(date)
Submitted to City Council:	
(where appropriate)	(date)
ATTEST:	
	_
Director	
Public Works and Utilities	
City of Duluth	

#### STATEMENT OF PURPOSE

The purpose of this resolution is to recommend to the City that it adopt the 2016 version of its Water Supply Plan and so certify to MnDNR, all as required by State statute.

Minnesota Statutes Section 103G.291 Subd. 3 requires that the City develop and adopt a water supply plan which addresses projected demands, adequacy of the water supply system and planned improvements, existing and future water sources, natural resource impacts or limitations, emergency preparedness, water conservation, supply and demand reduction measures, and allocation priorities that are consistent with State law.

It further requires that the plan be updated every 10 years. Staff has updated the City's existing plan, and it has been reviewed and approved by the appropriate DNR officials. It must now be approved by the City Council.

As the advisor to the Council on matters related to the City's utilities, it is appropriate for the PUC to make a recommendation to the Council as to its adoption. This resolution would fulfill that duty.



MINNESOTA DEPARTMENT OF NATURAL RESOURCES
NORTHEASTERN REGION
525 Lake Ave South Suite 415
Duluth, MN 55802
218-302-3249

January 30, 2017

City of Duluth Howard Jacobson 520 Garfield Avenue Duluth, MN 55802

Dear Mr. Jacobson:

RE: WATER SUPPLY PLAN APROVAL, CITY OF DULUTH, ST. LOUIS COUNTY

Our office has completed the review of your 2016 Water Supply Plan for public water supply authorized under DNR Permit 1981-2066.

I am pleased to advise you that in accordance with Minnesota Statutes, Section 103G.291, Subdivision 3, and on behalf of the Commissioner of Natural Resources, I hereby approve your plan. The Department requires receipt of a completed copy of the attached "Certification of Adoption" form once the plan has been adopted. Please return the form to my office as soon as the City Council officially adopts the plan.

An optional administrative amendment for additional water supply and wells authorized under Permit 1981-2066 was not requested during the Water Supply Plan approval process. As such, all terms and conditions of your existing permit shall remain in effect.

Thank you for efforts in planning for the future of the City of Duluth water supply and for conserving the water resources of the State of Minnesota. If you have any questions or need additional assistance with your water appropriation permit, please contact me, at 218-302-3249 or <a href="mailto:greg.root@state.mn.us">greg.root@state.mn.us</a>, in our Duluth area office.

Sincerely

**Greg Root** 

Regional Water Appropriations Hydrologist

Cc:

Mike Peloquin, Regional Hydrologist

St. Louis County SWCD

Steve Colvin, Deputy Director

Carmelita Nelson, Water Conservation Consultant

# CERTIFICATION OF ADOPTION WATER EMERGENCY AND CONSERVATION PLAN

City or Water System	Name:		
Name of Person Author Certification on Behal			
Title:			
Address:			
Telephone:	Fax:	•	
E-mail:	,		
I certify that the Water Resources has been ac services.	· Emergency and Conservati lopted by the city council or	on Plan approved by the Department witility board that has authority over w	of Natural ater supply
	¥	e e	
Signed:	Г	ate:	
		•	
		<b>v</b>	
	*		
Fax (218/327-4263) oı	mail this certification to:	DNR Ecological & Wa 525 Lake Ave South S Duluth, MN 55802	
Or email to:		greg.root@state.mn.us patricia.fowler@state.	