#### JOURNAL OF COMMISSION WORK SESSION March 3, 2015

City Commission Work Session Civic Center, Commission Chambers Mayor Winters presiding

**CALL TO ORDER:** 5:30 p.m.

**ROLL CALL:** City Commissioners present: Michael J. Winters, Bill Bronson, Fred Burow, and Bob Jones. Commissioner Kelly was excused.

**STAFF PRESENT:** City Manager; Deputy City Manager; City Attorney; Directors of Fiscal Services, Park and Recreation, and Public Works; Police Captain; City Engineer; Utilities System Manager; Environmental Division Supervisor; Water Plant Supervisor; Fiscal Services Operations Supervisor, and the Deputy City Clerk.

\*\* Action Minutes of the Great Falls City Commission. Please refer to the audio/video recording of this meeting for additional detail. \*\*

#### 1. PUBLIC COMMENT

There were no comments from the public.

#### 2. ADVISORY COMMISSION ON INTERNATIONAL RELATIONSHIPS UPDATE

Advisory Commission on International Relationships (ACIR) board member Charity Jacobson reported ACIR is currently comprised of nine appointed members. She explained that members are interested in seeing the City's international populous flourish, and many members have a personal connection to another country. ACIR exists to provide support, coordination, and an exchange of information for international programs in the community.

Ms. Jacobson discussed current projects including an international speaker series and an open world program hosting project. She provided a handout of a *Tribune* article on the Ukrainian doctors' visit in October, 2014. She also discussed the twinning relationship with the City of Lethbridge, and a citizen welcoming committee that has been recently formed.

#### 3. UTILITY RATE REVIEW

Public Works Director provided and discussed a PowerPoint 2015 Utility Rate Analysis presentation. He also display charts of maps including a water main break map, water transmission main upgrades map, trenchless sanitary sewer lining map, and a storm drainage basins map.

#### CITY OF GREAT FALLS UTILITIES

- □ Provides water, sewer and storm drain services to:
  - Approximately 18,700Residential Properties
  - Approximately 2,300
     Commercial Properties
     (64,000+ users)

This includes operations, maintenance, replacement, upgrade of 660+ miles of utility pipes, treatment plants and appurtenances.

#### **Proposed Rate Adoption Process**

- Proposed Rates are being presented at tonight's March 3, 2015 City Commission Work Session
- March 3, 2015 City Commission sets the Public Hearing Date
- Public Notices will be published three times
- □ Individual Customer Notices will be mailed
- Public Hearing to be held at the April 14, 2015 City Commission Meeting
- New Rates to take effect at least 10 days after City Commission adoption. Proposed for May 1, 2015.

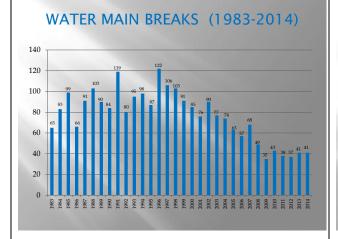
#### **WATER UTILITY**











#### WATER SYSTEM PIPE AGE COMPARISON

CITY	OLDEST PIPE	AVERAGE PIPE AGE
BILLINGS	1889	27.0
BOZEMAN	1888	30.0
KALISPELL	1924	31.4
GREAT FALLS	1890	41.5

#### WATER MAIN REPLACEMENT

<u>YEAR</u>	<u>COST</u>	<u>FOOTAGE</u>	MILES	
2008	\$1,948,587	11,688	2.21	
2009	\$2,187,471	17,672	3.35	
2010	\$2,335,886	15,923	3.02	
2011	\$1,556,083	13,072	2.48	
2012	\$1,531,862	9,246	1.75	
2013	\$1,680,436	12,831	2.40	
2014	\$1,388,989	7,392	1.40	

#### WATER TREATMENT DIVISION



## Water Treatment Plant Facility **Upgrades**

- Project Priorities:
  - Employee Safety
  - · Ammonia Feed upgrades
  - Regulatory Compliance
    - UV Disinfection
  - Reliability
  - · Replace Main Electrical
  - Switchgear
  - · Replace Aging Infrastructure
  - Site security/visitor access
  - · Administration Building
  - · Substation Upgrades



- Ultraviolet (UV) light
- disinfection Surge Tank
- Chemical Feed and Storage Systems
  - Ammonia Chlorine

  - Lime
  - Corrosion Inhibitor Sulfuric Acid



### **Proposal Evaluation Results**

≿				SCC	DRE	
6		EVALUATION	Medium F	Pressure	LPF	
CATEGORY	EVALUATION CRITERIA	WEIGHT (%)	Calgon 24-in Sentinel	Trojan UVSwift 4L24	Trojan UVTorrent 16SL48	WEDECO K143 12/5(6)
Щø						
¥8	1 VALIDATION & DESIGN	10	7.5	7.2	8.8	8.5
SER	2 UV SYSTEM OPERATION, MONITORING & MAINTENANCE	10	8.6	8.0	8.2	7.2
DESIGN & SERVICE CONSIDERATIONS	3 MANUFACTURER EXPERIENCE, QUALIFICATIONS & SUPPORT	10	8.7	9.3	8.3	10.0
Š	4 FACILITIES	10	9.3	8.3	6.5	6.3
E O	SCORE:		34.0	32.8	31.9	32.0
PRESENT WORTH	1 UV Equipment capital cost (inc. alt. C deduct)		\$561,301	\$467,000	\$812,000	\$522,500
ESI	2 O&M present worth costs	60	\$321,955	\$404,050	\$209,763	\$210,927
ਲ ≥	3 TOTAL PW COST		\$883,256	\$871,050	\$1,021,763	\$733,427
	PW SCORE:		49.8	50.5	43.1	60.0
OTAL	SCORE (out of 100):		83.8	83.3	74.9	92.0

## The City and Montana DEQ approved - Wedeco K143

- Lowest total present worth cost
- Robust design with minimal equipment needed for future expansion
- Reputable manufacturer with experienced service and local support



## Switchgear Replacement

- Existing equipment is 50+ years old.
- Spare part availability is an issue.
- Replacing failed parts requires shutdown of existing system.



#### Seasonal Clearwell Replacement

- The current Seasonal Clearwell has deteriorated "structurally" to the point that replacement is the most cost effective action. The new tank will be located West of its current location.
- The storage volume of the Seasonal Clearwell will be incorporated into the new Surge Tank.



### New Administration Building

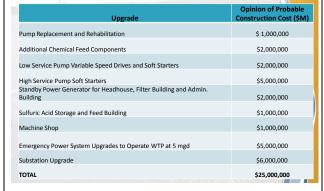
- Training and conference room
- Receiving area for water quality samples
- Visitor entry and site security
- Staff offices
- Records storage
- Break room



# Phase 1 - Facilities and Cost Opinion

	Upgrade	Opinion of Probable Construction Cost (\$M)
Base Project		
	Wedeco UV disinfection system, Surge Tank, switchgear replacement, ammonia storage and feed replacement	\$23,000,000
Additive Alternate Items		
	Administration Building, New access Road	\$2,000,000

# Future Phases - Facilities and Cost Opinion



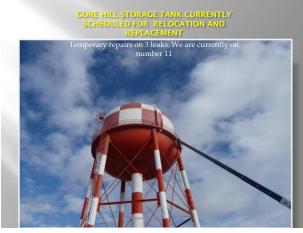
## **Project Schedule**

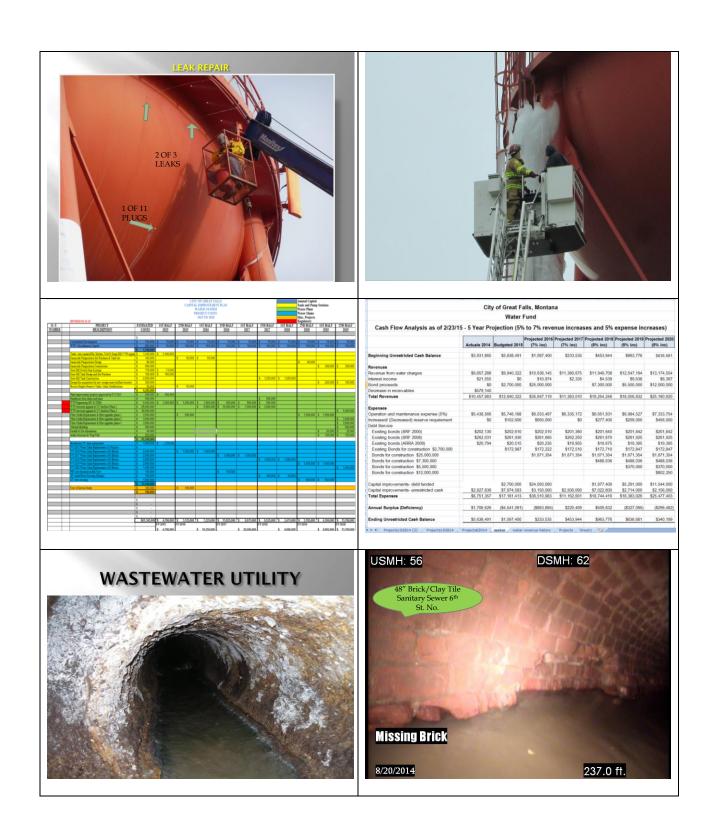
Milestone	Date
Engineering Notice to Proceed	August 2012
Preliminary Engineering Report	February 2015
Phase 1 Construction Bid Opening	1st Quarter 2016
Phase 1 Construction Complete	2nd Quarter 2018
Future Phase Engineering & Construction	TBD





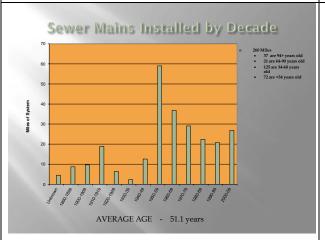












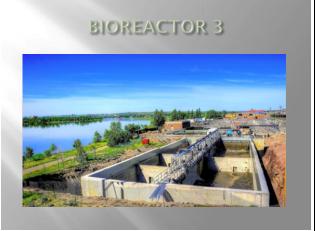
#### REHAB AND REPLACEMENT FOOTAGE **YEAR** COST MILES EMER. REPAIRS \$394.849 5,528 2008 0.76 \$133,494 4,000 1.05 \$149,735 \$536,736 6,420 1.22 2010 \$1,218,161 11,475 2011 2.17 2012 \$1,223,120 14,760 2.80 \$ 380,000 13,400 Increased sewer main rehabilitation from 20 blocks per year to 40 blocks per year.

SANITARY SEWER COLLECTION



















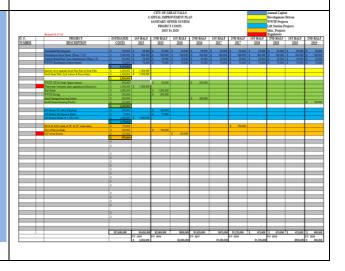


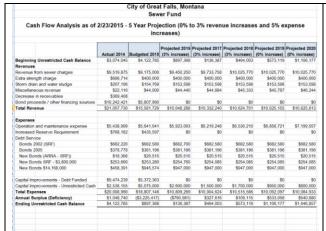






Waste Water Treatment Plant Construction Activity	Completed or Permit Dates
Notice to proceed provided to contractor.	6/10/13
Bioreactor 3 construction was completed and went online.	6/24/14
UV treatment facility construction was completed and went online	7/14/14
Bioreactor 2 construction was completed and went online. (Two active bioreactors allow for operation within the new permit limits)	9/29/14
Final effluent limits for E. coli bacteria, Total Residual Chlorine, and total ammonia as N	12/1/2014
Bioreactor 1 construction was completed and went online.	1/28/15









#### 18<sup>th</sup> Street South Storm Drain Improvements Completed Work Phase 1A 1A

Sand Hills Pond Expansion Fall of 2013 (\$325,000)

First Phase of Pipe and Inlet Improvements Summer of 2014 (\$1,965,000)

Phase 3 Chowen Park Pond Fall of 2014 (\$262,000)

#### Future Work

Phase 2

Second Phase of Pipe and Inlet Improvements Planned Summer of 2015 (Estimated at \$6,500,000)

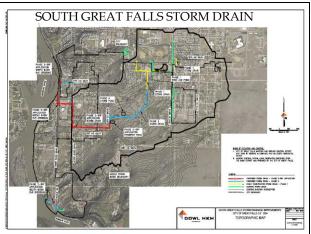
UGF Pond Planned Summer of 2015 (Estimated at \$1,000,000)











	Retinal 0.23-15			CAPITA	Y OF GREAT F. L. DIPROVEM BM DRAIN SY: PROJECT COST 2015 TO 2020	NT PLAN STEM				Annual Capital Misc. Projects North G.F 18th St - Contra South G.F Rorulatory	d Ave.	
O. F.	PROJECT DESCRIPTION	COSTS	1ST HALF 2015	2ND HALF 2015	1ST HALF 2016	2ND HALF 2016	1ST BALF 2007	2ND HALF 2017	1ST HALF 2018	2ND HALF 2618	1ST HALF	2ND HALF 2019
	Please two storm drain requirements (ASA)	5 225.000		5 25.000	5 25,000	\$ 25,000	\$ 25.00	5 25,000	5 25.000	5 25,000	\$ 25,000	5 25.00
_	Usuthetided Development			5 100,000		\$ 100,000		5 100,000		\$ 120,000		5 100.00
	Misc. Inlet and Valley Outter Projects			\$ 25,000		\$ 25,000		\$ 25,000		\$ 25,000		\$ 25,00
		\$ 1,475,000										
_		5 -										
	Alder Dr. Stoms Drain Improvements	\$ 50,000		\$ 50,000								
	NV Great Falls (Model and improvements)(FIR, 18, 1.6)	5 730,000		\$ 500,000	\$ 250,000							
	Valeria Way , Ph.3 Eding Old Storm Main	\$ 100,000					\$ 100,000					
	Valeria Way, PSE2	\$ 400,000						\$ 400,000				
_	Cestral Are Desirage Improvements	\$ 175,000		\$ 175,000								
	South Cooler & Beston Heights Det. Posits	5 400,000				\$ 200,000	\$ 200,000					
_	Store Drain Master Plan	5 200,000								\$ 200,000		
_		\$ 2,875,000										
	North Great Falls Storm Dean Project (Plane 1 & 2.)	\$ 2,500,000								\$ 1,500,000	\$ 500,000	\$ 500,00
	North Great Falls Storm Drain Project (Plane 3)	5 1,750,000										\$ 1,750,00
_	North Great Falls Storm Drain Project (Place 4)	\$ 75,000						\$ 75,000				
	North Great Falls Storm Dean Project (Place 5)	\$ 300,000										\$ 300.00
_	North Orest Falls Storm Dean Project (Place 6)	\$ 275,000									\$ 275,000	
_		\$ 4,700,000										
_	18th Street South, Central to 15th Ave So & 23rd St Phy 1							_				
_	18th Roset South, Central to 15th Ave So & 23ed St Plin 2			\$ 5,000,000	5 800,000							
	18th Steet South; Central to 15th Ave So & 23rd St Phs.3	5 -										
_	UGF Find			\$ 1,000,000	_	_		_				
_		5 31,001,000										
_	South Great Falls S.D. Improvements (Upper middle basis)	\$ 600,000						5 500,000				
-	South Censt Falls S.D Improvements (Lover middle basis)		\$ 1,400,000	5 1,400,000				_				
_	South Creat Falls S.D Improvements (North basin)	5 400,000		_	_	\$ 400,000		_		_		
_	South Great Falls S.D Improvements (South basis)	5 4295,000		_	_		\$ 400,000	_				
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_		\$22,650,000	\$ 4,725,000	\$ 0.225,000	5 1 200 000	\$ 750,000	\$ 850,000	\$ 1,225,000	\$ 110,000	\$ 1,850,000	\$ 925,000	\$ 2,700,00
-		-22,000,000	EN 2015	EN 2016	, contract	F/Y 2017		F/Y 2018	130,000	EW 2019		F/Y 2020
	+	_	5 4,725,000		\$ 9,475,000		\$ 1,600,000		\$ 1,375,000		\$ 2,775,000	

		Sto	orm Drain Fund				
Cash Flow Analysis as	s of 2/23/2015 -	5 Year Project	tion (0% to 10%	revenue incre	ases and 5% e	xpense increas	ies)
	Actuals 2014	Budgeted 2015	Projected 2016 (10% increase)	Projected 2017 (10% increase)	Projected 2018 (10% increase)	Projected 2019 (0% increase)	Projected 2020 (0% increase)
Beginning Unrestricted Cash Balance	\$4,130,671	\$2,771,212	\$915,710	\$326,347	\$1,053,675	\$412,076	\$901,654
Revenues							
Revenue from storm drain charges	\$1,867,072	\$1,843,000	\$2,027,300	\$2,230,030	\$2,453,033	\$2,453,033	\$2,453,033
Miscellaneous revenue	\$108,669		\$1,000				
Interest income	\$14,250	\$0	\$18,314	\$6,527	\$21,073	\$8,242	\$18,033
Bond proceeds		\$10,000,000		\$1,870,000		\$2,881,000	\$2,000,000
Total Revenues	\$1,989,991	\$11,843,000	\$2,046,614	\$4,106,557	\$2,474,106	\$5,342,275	\$4,471,066
Expenses							
Operation and maintenance expense	\$400,331	\$415,406	\$436,176	\$657,985	\$690,884	\$725,429	\$761,700
Increased (decreased) reserve requirement	(\$68,157)	\$380,000	\$0	\$71,060	\$0	\$109,478	\$76,000
Debt Service							
Existing bonds	\$285,669	\$286,528	\$286,373	\$286,736	\$286,373	\$286,736	\$286,73
Bonds for construction \$10,000,000		\$319,214	\$638,428	\$638,428	\$638,428	\$638,428	\$638,42
Bonds for construction \$1,870,000				\$125,020	\$125,020	\$125,020	\$125,02
Bonds for construction \$2,881,000						\$192,606	\$192,60
Bonds for construction \$2,000,000							\$134,00
Capital improvements - debt funded		\$9,620,000	\$0	\$1,600,000	\$0	\$2,775,000	\$1,924,00
Capital improvements - unrestricted cash	\$2,731,607	\$2,677,354	\$1,275,000	\$0	\$1,375,000	\$0	\$776,00
Total Expenses	\$3,349,450	\$13,698,502	\$2,635,977	\$3,379,229	\$3,115,705	\$4,852,697	\$4,914,49
Annual Surplus (Deficiency)	(\$1,359,459)	(\$1,855,502)	(\$589,363)	\$727,328	(\$641,599)	\$489,578	(\$443,42
Ending Unrestricted Cash Balance	\$2,771,212	\$915,710	\$326,347	\$1,053,675	\$412,076	\$901,654	\$458,23
*2017 increase of expenses due to 2 additional	al staff members.						
Revenue from charges for services	\$1,867,072	\$1,843,000	\$2,027,300	\$2,230,030	\$2,453,033	\$2,453,033	\$2,453,03
Operating expenses	\$400,331	\$415,406	\$436,176	\$657,985	\$690,884	\$725,429	\$761,70
Net operating income	\$1,466,741	\$1,427,594	\$1,591,124	\$1,572,045	\$1,762,149	\$1,727,604	\$1,691,33
Max debt service payment	\$285,669	\$302,871	\$924,801	\$1,050,184	\$1,049,821	\$1,242,790	\$1,376,79
% of Revenue Coverage	513%	471%	172%	150%	168%	139%	123

## 2015 UTILITY SERVICE RATE SUMMARY

# AVERAGE MONTHLY UTILITY BILL CITY OF GREAT FALLS

1" meter, 1250 ccf water, 650ccf sewer 7, 500 sq foot residential lot

2014		2015 ( P	roposed)	INCREASE
WATER	\$30.05	WATER	\$32.15	\$2.10
SEWER	\$22.90	SEWER	\$23.59	\$0.69
STORM DRAIN	\$4.27	STORM DRAIN	\$4.70	\$0.43
TOTAL	\$57.22	TOTAL	\$60.44	\$3.22

Monthly wat 1" meter, 125	er and sewer co 0 ccf water, 650			)
	WATER	SEWER	TOTAL	DIFF.
BOZEMAN	54.73	35.38	90.11	0.00
MISSOULA	69.41	19.32	88.73	0.00
KALISPELL	46.17	40.12	86.29	1.88
BUTTE	50.58	25.00	75.58	2.50
HELENA	38.95	24.00	62.95	1.41
BILLINGS	36.64	27.70	64.34	3.70
<b>GREAT FALLS</b>	32.15	23.59	55.74	2.79

Monthly water and sewer costs based on: 1" meter, 1250 ccf water, 1250 ccf sewer (With 7% Increase Water & 3% Increase Sewer)							
	WATER	SEWER	TOTAL				
KALISPELL	46.17	61.57	107.74				
BOZEMAN	42.61	53.61	96.22				
MISSOULA	69.41	25.91	95.32				
BUTTE	50.58	35.07	85.65				
HELENA	40.52	40.08	80.60				
BILLINGS	29.26	42.48	71.74				
GREAT FALLS	28.08	39.33	67.41				

2015 CITY COMPARISON (Commercial)

Commissioner Burow questioned the downward trend in replacing water mains. Director Rearden responded many projects have been done under MDT roadways, and replacement is usually project specific. He noted that replacement is sometimes based upon how much work contractors can reasonably get done.

Director Rearden noted that many of the City's storm drain systems have been installed since the 1940's and are undersized. Improvements are being made, including adding detention ponds. Storm drains have been an afterthought and were funded through the sewer department until the storm drain utility was created in 1990. From regulatory and flood control standpoints, storm drains are in the forefront.

Commissioner Bronson noted that out of a projected \$81.3 Million cost, approximately \$50 Million is driven by water system regulatory requirements.

#### 4. <u>DISCUSSION OF POTENTIAL UPCOMING WORK SESSION TOPICS</u>

City Manager Greg Doyon provided a handout Master Work Session Topic List. An update from the Police Department is scheduled for March 17<sup>th</sup>. A Port Authority meeting is planned at 5 p.m. prior to either the March 17<sup>th</sup> or April 7<sup>th</sup> Work Session.

Discussion followed for returning the Work Session meetings to the Gibson Room. The consensus of the Commission was to use the approximate \$7,800 budgeted funds to install the necessary cameras to allow televising the Work Session from the Gibson Room.

#### **ADJOURN**

There being no further discussion, Mayor Winters adjourned the informal work session of March 3, 2015, at 6:34 p.m.