

REQUEST FOR COUNCIL ACTION

SUBJECT: 2015 Drinking Water System Master Plan Adoption

SUMMARY: City Staff has been working with Hansen Allen and Luce, Inc. to prepare an updated Drinking Water System Master Plan. This document will serve as the basis for preparation of the Drinking Water Capital Facility Plan. The Draft Plan was presented to the Public at an Open House with no adverse comments for adoption.

FISCAL AND/OR ASSET IMPACT: The report addresses recommended future Drinking Water System projects which will impact the Drinking Water budget.

STAFF RECOMMENDATION:

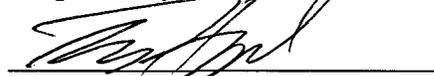
Staff recommends City Council adopt the 2015 Drinking Water System Master Plan.

MOTION RECOMMENDED:

I move to adopt Resolution 15-216 to adopt the 2015 Drinking Water System Master Plan and to have staff prepare an updated Drinking Water System Capital Facility Plan.

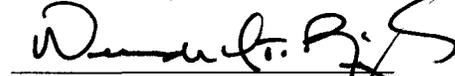
Roll Call vote required.

Prepared by:



Tim Heyrend, P.E.
Utilities Engineer

Reviewed by:



Wendell T. Rigby, P.E.
Director of Public Works

Reviewed as to Legal Sufficiency:



Darien Alcorn
Acting City Attorney

Recommended by:



Mark R. Palesh
City Manager

BACKGROUND DISCUSSION:

The City's Master Drinking Water System Plan was last updated in 2007, which included the assessment and recommendations for future water reservoirs, pipelines, pump stations, pressure reducing stations, system modeling, and a capital projects list. Since that time, the City contracted with Hansen Allen and Luce to complete a new Drinking Water System Master Plan.

The new Drinking Water System Plan uses water modeling software to evaluate the City's infrastructure. The Master Plan recommends new reservoirs and pumping stations as the City expands to the West. A cost analysis study was completed to determine if building water storage reservoirs in the Zone 5 pressure area, instead of pumping up to Zone 6 and trickling down was a cost-effective proposal. The study is included in the appendix of the master plan and shows that it will save the City millions of dollars over a 20-year and 50-year period to build the proposed Zone 5 reservoirs. A study of the City's supervisory control and data acquisition (SCADA) remote communication system was conducted with recommendations to upgrade some of the electronic equipment. The Capital Improvement Plan is shown in Chapter 8, Table 8-1 and Figure 5-4. The total cost for the Drinking Water System improvements is \$117,073,000 of which \$80,091,000 is eligible for impact fee reimbursement.

The City held a public open house on November 12th to discuss the proposed Master Plan. Only one comment was received, and that comment was to have more water conservation in the City during April and May. This study shows that on average the household indoor water use per day is 223 gallons per home, and the outdoor water use is 835 gallons per day per home.

A hard copy of the Drinking Water System Master Plan is available for your review at the City Clerk's office or digitally on the Global drive G:\Free Space\Council PPT Presentations\WJ Drinking Water Master Plan.



Melanie S. Briggs, MMC

City Clerk

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**THE CITY OF WEST JORDAN, UTAH
NOTICE OF PUBLIC HEARING**

A Public Hearing will be held before the City of West Jordan City Council on Wednesday, December 2, 2015 at the hour of 6:00 p.m., in the City Council Chambers at 8000 South Redwood Road, Third Floor, West Jordan, Utah to receive public comment prior to consideration and approval of the 2015 Drinking Water System Master Plan Update.

Published this 22nd day of November 2015

Melanie S Briggs, MMC

City Clerk

THE CITY OF WEST JORDAN, UTAH
A Municipal Corporation

RESOLUTION NO. 15-216

A RESOLUTION REQUESTING THE CITY COUNCIL REVIEW THE DRAFT FINAL DRINKING WATER SYSTEM MASTER PLAN

Whereas, the City of West Jordan has received the 2015 Drinking Water System Master Plan from Hansen Allen and Luce, Inc.; and

Whereas, the City desires the City Council to adopt the 2015 Drinking Water System Master Plan; and

Whereas, a public open house was held on November 12th at City Hall to receive public input on the 2015 Draft Final Drinking Water System Master Plan and no adverse comments were received, and

NOW, THEREFORE, IT IS RESOLVED BY THE CITY COUNCIL OF WEST JORDAN, UTAH:

To adopt the 2015 Drinking Water System Master Plan.

Adopted by the City Council of West Jordan, Utah, this 2nd day of December 2015.

Kim V. Rolfe
Mayor

ATTEST:

MELANIE S. BRIGGS
City Recorder

Voting by the City Council	"AYE"	"NAY"
Jeff Haaga	_____	_____
Judy Hansen	_____	_____
Chris McConnehey	_____	_____
Chad Nichols	_____	_____
Ben Southworth	_____	_____
Justin D. Stoker	_____	_____
Mayor Kim V. Rolfe	_____	_____



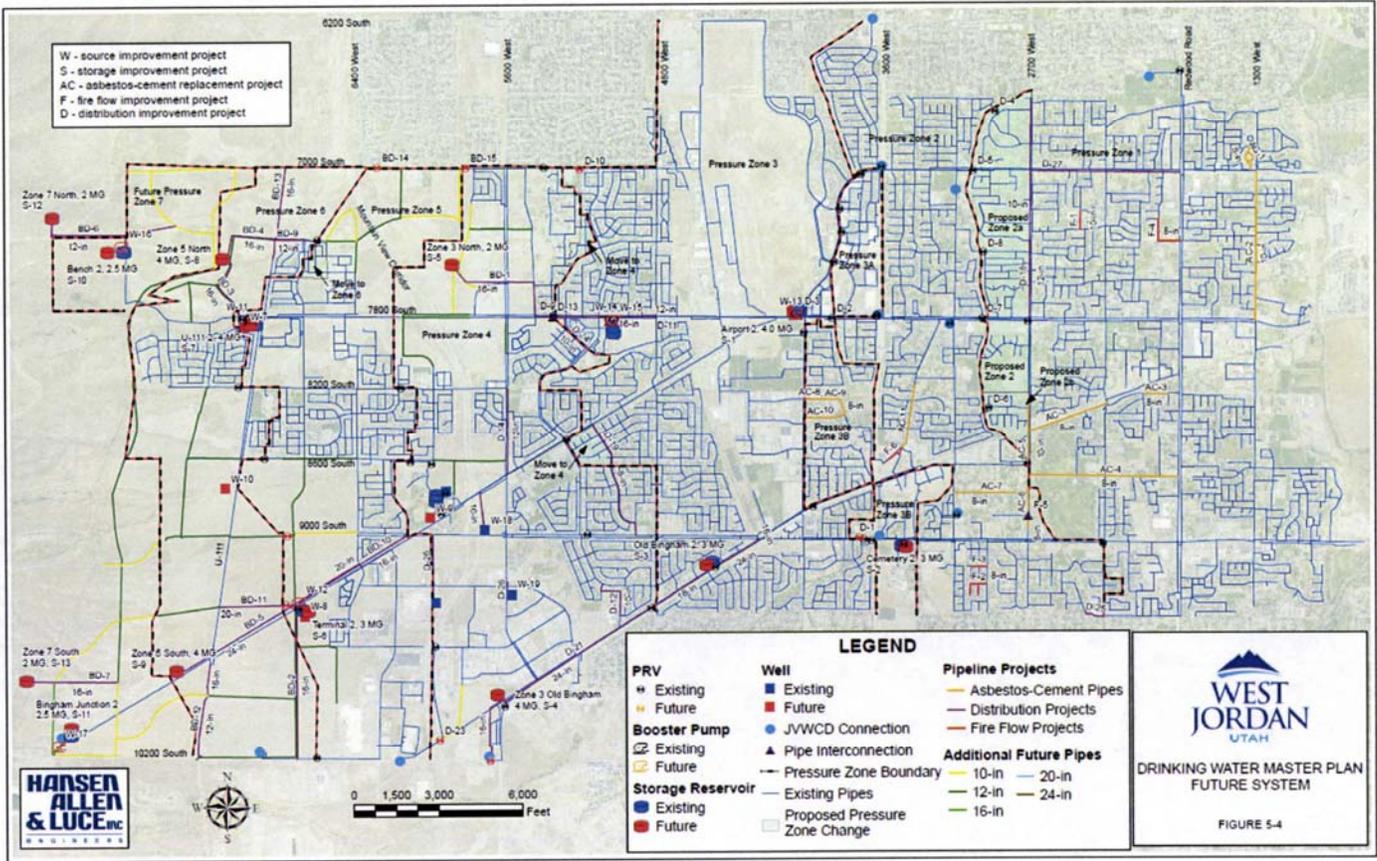
**DRINKING WATER SYSTEM
MASTER PLAN UPDATE**

**HANSEN
ALLEN
& LUCE**inc
ENGINEERS

DECEMBER 2015

MASTER PLAN ADDRESSES:

1. GROWTH PROJECTIONS
2. SOURCE
3. STORAGE
4. DISTRIBUTION SYSTEM
 - a) OPTIMIZATION
5. WATER QUALITY
6. SCADA SYSTEM
7. CAPITAL IMPROVEMENTS PLAN



Project Costs Organized by Type

Project Type	Total Cost	Future Cost	% Future
Source	\$13,191,000	\$13,056,000	99.0%
Storage	\$55,404,000	\$33,318,000	60.1%
Asbestos-Cement Pipe	\$3,898,000	\$0	0.0%
Fire flow	\$705,000	\$30,500	4.3%
Distribution	\$43,504,000	\$33,686,450	77.4%
SCADA	\$371,000	\$0	0.0%
Sum	\$117,073,000	\$80,090,950	68.4%

Project Costs Organized by Priority

Priority	Total Cost	Future Cost	% Future
1	\$1,009,000	\$30,500	3.0%
2	\$14,013,000	\$2,308,500	16.5%
3	\$43,487,000	\$24,606,950	56.6%
4	\$7,189,000	\$6,784,000	94.4%
5	\$51,375,000	\$4,6361,000	90.2%
Sum	\$117,073,000	\$80,090,950	68.4%