INFORMATIONAL MEMORANDUM

TO: **Transportation & Infrastructure Services Committee**

FROM: **Hari Ponnekanti, Public Works Director/City Engineer**

BY: **Brittany Robinson, Public Works Grant Analyst**

Bryan Still, Operations Manager

Adib Altallal, Utilities Engineer

CC: **Mayor Allan Ekberg**

DATE: **July 15, 2022**

SUBJECT: **Citywide Water Meter Digitization Project**
WaterSMART Grant Application

ISSUE

Approval of an application to the WaterSMART Water & Energy Efficiency grant program to upgrade the City to an advanced metering infrastructure (AMI) water system.

BACKGROUND

The City's water system is currently on AMR portable radio-based reading system. Meters in the City require a City crew member to drive a route and activate the radio to get a read. Currently, the read is taken once a month and only provides total monthly water consumption per meter. Upgrading to an AMI fixed-base system will enable real-time alerts for leaks, reduce unaccounted-for water loss and allow City staff more data to make better decisions regarding operational and customer concerns.

DISCUSSION

On May 2, 2022, the United State Department of Interior (USDOI) opened their call for projects for the WaterSMART Water & Energy Efficiency grant program. This grant program funds projects that conserve and use water more efficiently; increase the production of renewable energy; and contribute to sustainability. The deadline to apply for funding is July 28, 2022.

The City would like to request $2.5 million from the WaterSMART grant to upgrade City owned water meters to an AMI system. This project will include replacing old meters with OMNI meters in residential and commercial districts, installation of two antennae poles with collector systems that will allow for wireless readings, radios, and AMI software and training.

FINANCIAL IMPACT

In preparation for this funding opportunity, City staff requested a cost estimate from Ferguson Meter and Automation group to determine potential costs of the project. Ferguson estimated the total project cost to be approximately $2.5 million. There is a 50% match required, which would be covered by the Water Enterprise Fund.

	Cost Estimate	**Funding Source**	**Budget**
AMI Upgrade	$2,500,000	Grant	$1,250,000
		Water Fund (50% match)	1,250,000
Total	**$2,500,000**		**$2,500,000**

Not included in the project total are ongoing software costs, which will be approximately $18,000 annually.

RECOMMENDATION

The Transportation and Infrastructure Services Committee is being asked to approve an application submittal for the WaterSMART Water & Energy Efficiency grant to upgrade the City to an advanced metering infrastructure (AMI) water system.

ATTACHMENT: Cost Estimate

FERGUSON® Waterworks

2042 112th St S

Tacoma, WA 98444

Cell Phone: 503-780-6170

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City of Tukwila

Date: **6/30/2022**

Sensus FlexNet Material W/Basestation Install

Item No	QTY	Description	Unit	Unit Price		Total	
1	**QTY**	**Sensus Meters and Radios**			**$**		**1,963,814.26**
1.1	1376	3/4" I-Perl Water Meters	ea	$ 167.29	$		230,191.04
1.2	313	1" I-Perl Water Meters	ea	$ 254.53	$		79,667.89
1.3	326	1 1/2" OMNI C-2 Water Meters	ea	$ 1,377.93	$		449,205.18
1.4	186	2" OMNI C-2 Water Meters	ea	$ 1,589.92	$		295,725.12
1.5	39	3" OMNI C-2 Water Meters	ea	$ 2,013.89	$		78,541.71
1.6	27	4" OMNI C-2 Water Meters	ea	$ 3,497.81	$		94,440.87
1.7	18	6" OMNI C-2 Water Meters	ea	$ 6,041.44	$		108,745.92
1.8	18	8" OMNI C-2 Water Meters	ea	$ 9,759.86	$		175,677.48
1.9	3	10" OMNI C-2 Water Meters	ea	$ 12,593.35	$		37,780.05
1.11	2300	Smartpoint 520M MXU Radios	ea	$ 179.93	$		413,839.00
2		**Sensus AMI Collection Equipment**			**$**		**200,000.00**
2.1	2	Sensus M400 Collector with Install	ea	$ 100,000.00	$		200,000.00
2.2	1	Prop Study Refund	ea	$ (750.00)			
3		**Sensus Analytics Software and Training**			**$**		**45,992.50**
3.1	1	Sensus Analytics Software Hosted Year 1	ea	$ 32,292.50	$		32,292.50
3.2	1	Sensus Installation and Configuration Fee (One Time)	ea	$ 6,500.00	$		6,500.00
3.3	1	Sensus RNI Core Training	ea	$ 7,200.00	$		7,200.00
3.4	1	Project Management (TBD on Deployment)	mth	$ 8,250.00	$		8,250.00
3.5	1	Sensus Analytics Software Hosted Year 2	ea	$ 17,115.00			
3.6	1	Sensus Analytics Software Hosted Year 3	ea	$ 17,678.75			
3.7	1	Sensus Analytics Software Hosted Year 4	ea	$ 18,261.25			
3.8	1	Sensus Analytics Software Hosted Year 5	ea	$ 18,947.00			
		Sensus FlexNet Hardware & Software Total			**$**		**2,209,806.76**