MINNEHAHA CREEK WATERSHED DISTRICT
QUALITY OF WATER, QUALITY OF LIFE

Meeting: Board of Managers
Meeting date: 12/18/2025
Agenda Item #: 7.6
Board Consent Item

Title:	Authorization to Purchase Replacement Sensors for RESNET
Resolution number:	25-079
Prepared by:	Name: Brian Beck Phone: 952-471-8306 bbeck@minnehahacreek.org
Recommended action:	Authorize purchase of replacement equipment for real-time sensor network
Budget considerations:	Fund name and code: Water Quality-Supplies/Equipment 5-5001-4570 Fund budget: $85,000.00 Expenditures to date**:** $41,875.07 Requested amount of funding: $11,000
Past Board action:	Res #: 20-007 Approval to Purchase Real-time Sensor Network Equipment Res #: 22-084 Adoption of the Climate Action Framework Res #: 24-048 Authorization to execute contract with Stantec for the Flood Action Plan

Summary:

Background

Climate change is measurably altering the distribution, frequency, and intensity of rainfall in Minnesota. Between 2013 and 2019, the Minnehaha Creek Watershed District (MCWD) experienced its wettest seven-year period on record. Over the past decade, Minnesota has faced both unprecedented flooding and severe drought conditions statewide, resulting in ecological impacts, stressed stormwater infrastructure, and billions of dollars in property damage. To successfully adapt to these increasingly volatile weather extremes, MCWD and partner communities must develop a more refined understanding of how water moves through MCWD to improve Grays Bay Dam management, interagency flood communication, and identification of landscape interventions.

The first stage of MCWD's Climate Action Framework, known as the "Understand and Predict" phase, involves leveraging advanced datasets and modeling techniques to forecast climate scenarios, evaluate vulnerabilities, and inform adaptation strategies. As part of this phase, MCWD implemented a real-time sensor network designed to enhance dam management, emergency planning and communication, and calibration of its two-dimensional (2D) hydrologic model.

Between 2021 and 2024, MCWD staff installed critical monitoring infrastructure and deployed 23 real-time level and flow sensors across the watershed. This sensor network has significantly improved MCWD's capability to manage Gray's Bay Dam and communicate real-time water level information to partner agencies.

However, sensor equipment at two essential locations on Minnehaha Creek in the City of Edina—Mill Pond and West 56th Street—is nearly five years old and approaching the end of its useful lifespan. Replacing the aging equipment at these sites in 2025 is critical, as sensor outages can disrupt reliable data collection. Timely replacement will ensure accurate water levels, thereby maintaining MCWD's ability to manage Gray's Bay Dam with a data-driven approach.

In addition to replacing the aging equipment, staff recommend purchasing two additional sensors to serve as redundant replacements within the real-time monitoring network. These sensors will be maintained as backup units that can be rapidly deployed in the event of unexpected equipment failure, storm damage, or prolonged maintenance needs at critical monitoring locations. Maintaining redundant sensors will minimize data gaps during high-flow or emergency

conditions, support uninterrupted dam operations and interagency communication, and reduce operational risk associated with sensor downtime during extreme weather events.

Recommendation

Staff are requesting approval of Resolution 25-079 authorizing the purchase of replacement equipment for two aging sensors and the acquisition of two additional sensors to serve as redundant replacements for the real-time monitoring network, in an amount not to exceed $11,000.

Supporting documents (list attachments):

OTT-Hydromet quote

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RESOLUTION

Resolution number: 25-079

Title: Authorization to Purchase Replacement Sensors for RESNET

WHEREAS, climate change is measurably changing the distribution, frequency and intensity of rainfall in Minnesota;

WHEREAS, during high water periods, the District has assumed a role to collect data and communicate information for and among its partner agencies and the public;

WHEREAS, watershed managers, in partnership with local communities, must accelerate efforts to monitor, evaluate and adapt to these changes;

WHEREAS, the Minnehaha Creek Watershed District, in partnership with Hennepin County and the U.S. Geological Survey, has developed a real-time remote sensing network (RESNET) to monitor precipitation and watershed response in high resolution;

WHEREAS, the District, with input from its partners, identified locations at which to obtain water-level data, and selected the suite of necessary equipment to provide real-time data;

WHEREAS, the District deployed sensors at 23 locations between 2021 and 2024 that have been utilized to support Grays Bay Dam management and high water level communication with partners;

WHEREAS, staff is recommending replacing the two aging level sensor units the outlet of West 56th St. and Mill Pond in the City of Edina to avoid equipment malfunction;

WHEREAS, staff is recommending replacing the two aging units to avoid equipment malfunction and two additional units as redundant backup;

WHEREAS, staff is recommending the purchase of reserve and replacement monitoring equipment from OTT-Hydromet;

NOW, THEREFORE, BE IT RESOLVED that the Minnehaha Creek Watershed District Board of Managers authorize the District Administrator to purchase reserve and replacement equipment from OTT-Hydromet in a total not to exceed $11,000.

Resolution Number 25-079 was moved by Manager_____, seconded by Manager_____. Motion to adopt the resolution____ayes,____nays,____abstentions. Date: 12/18/2025

_____ Date:_____Secretary

OTT HydroMet Corp. 22400 Davis Drive, SUITE 20164 Sterling VA UNITED STATES https://www.otthydromet.com/

QUOTATION

Customer Address:

MINNEHAHA CREEK WATERSHED DISTRICT
15320 MINNETONKA BLVD
MINNETONKA MN 55345
UNITED STATES

Delivery Address:

MINNEHAHA CREEK WATERSHED DISTRICT
15320 MINNETONKA BLVD
MINNETONKA MN 55345
UNITED STATES

Quotation No.:	E200003006	Customer No.:	C002716	Payment terms:	Net 30 Days
Validity:	01/14/2026	Incoterm:	FOB Delivery Address	Your Sales Tax ID:	1958234

Contact person
Beck, Brian
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Field Sales
Corcoran, Miles
Tel: +1 9703971094
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Quote creation
Miles Corcoran
Email: miles.corcoran@otthydromet.com

Line	Item	Description	Quantity	UM	Unit Price	Discount	Amount	
Data Logger & Communications								
10	XLINK500-C6-1	Xlink 500 LTE CatM1,NBIOT	4.000	EA	1,720.00	5.0%	6,536.00	USD
20	1291-1033	ANT,GPRS5BAND,3DB,SMA-M-RA,12	4.000	EA	20.00	5.0%	76.00	USD
		Subtotal from Data Logger & Communications:					6,612.00	USD
Pressure Transducers								
30	63.038.001.9051	PLS-C,SDI-12,0-10M, PRESSURE S	4.000	EA	2,621.00	15.0%	8,911.40	USD
40	97.000.033.9.5	PLS/PLS-C PROBE CABLE, METERS	20.000	EA	6.40	15.0%	108.80	USD
50	97.000.033.9.5	PLS/PLS-C PROBE CABLE, METERS	15.000	EA	6.40	15.0%	81.60	USD
60	97.000.033.9.5	PLS/PLS-C PROBE CABLE, METERS	15.000	EA	6.40	15.0%	81.60	USD
70	97.000.033.9.5	PLS/PLS-C PROBE CABLE, METERS	10.000	EA	6.40	15.0%	54.40	USD
80	63.037.025.3.2	FAD 5 HUMIDITY ABSORBER CONN B	4.000	EA	180.00	15.0%	612.00	USD
		Subtotal from Pressure Transducers:					9,849.80	USD
Tariff Surcharge								
35	Surcharge	7.500% Tariff Surcharge (Line 30)	1.000	EA	786.30	0.0%	786.30	USD

All business transactions shall be subject to our General Terms and Conditions see (www.ott.com/GTC).

OTT HydroMet Corp.
22400 Davis Drive, SUITE 100
20164 Sterling VA

Trade registered number:
Our Sales EIN: 54-1006352

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Line	Item	Description	Quantity	UM	Unit Price	Discount	Amount	
45	Surcharge	7.500% Tariff Surcharge (Line 40)	1.000	EA	9.60	0.0%	9.60	USD
55	Surcharge	7.500% Tariff Surcharge (Line 50)	1.000	EA	7.20	0.0%	7.20	USD
65	Surcharge	7.500% Tariff Surcharge (Line 60)	1.000	EA	6.98	0.0%	6.98	USD
75	Surcharge	7.500% Tariff Surcharge (Line 70)	1.000	EA	4.08	0.0%	4.08	USD
85	Surcharge	7.500% Tariff Surcharge (Line 80)	1.000	EA	45.90	0.0%	45.90	USD

Subtotal from Tariff Surcharge: 860.06 USD

Delivery time (approx.): weeks after receipt of order and clarification of all technical details.

Amount excl. Sales Tax:	17,321.86	USD
Sales Tax:	1,403.37	USD
Est. Freight:	0.00	USD
Total Amount Incl. Sales Tax:	18,725.23	USD