CITY OF WESTMINSTER 45 West Main Street Westminster, Maryland 21157



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February 13, 2023

Senate Education, Energy, and the Environment Committee 2 West Miller Senate Office Building Annapolis, Maryland 21401

Re: SB 207 Drinking Water - Innovative Potable Reuse Pilot Program - Establishment

Dear Chairman Feldman and Committee Members:

The City of Westminster is writing to encourage you to support SB 407, which will offer the City of Westminster residents and businesses a new water source to address long-standing drought issues.

The City of Westminster owns and operates a water distribution system that provides service for 38,000 users within the City and in parts of unincorporated Carroll County. For decades the City relied upon drilled wells that were permitted for specific amounts of water. The distribution system's utilization was less water than was allocated by the permit, so by all accounts everything seemed fine. No one realized that we were stretching the system's limits because we were not exceeding permitted capacity. In 2001/2002, however, the region experienced drought conditions, which severely reduced the water available to support the existing customers on the system.

The outlook at the time was grim, and the City was forced to consider mandating rolling water outages in order to guarantee an adequate water supply to Carroll Hospital System. Instead of rolling outages, the City was able to truck in emergency water from Medford Quarry. This ensured continuity of operations for the hospital.

As a result of that dire situation, the Maryland Department of the Environment (MDE) issued the City with a consent order that outlined the amount of water that the City could allocate for new use/change in use, such as a new occupant to a vacant space. The total water allocation amounts permitted by the MDE consent order include not only the system's current wells and surface water plant, but also an agreement that the City has with Medford Quarry to provide approximately 750,000 gallons per day that we could access in an emergency. However, this emergency option is not a guaranteed solution; that agreement will expire in 8 years, and it includes a clause that allows the quarry property owner to terminate the agreement with only 180 days notice.

It is imperative for the City to find a water source that is both permanent and City-owned and operated. Without that the City cannot meet the compliance guidelines outlined in the MDE consent order. A permanent solution for this is PUREWater Westminster, which is an indirect potable water reuse project that the City has been designing and piloting for the past 3 years. The water purification process for this

indirect potable reuse project includes 3 steps: nanomembrane filtration, reverse osmosis, and advanced oxidation with ultraviolet light. The end result is purified water safe for drinking. However, since this is an indirect potable reuse project, the PUREWater Westminster product will be stored in the Cranberry Reservoir, blended with the reservoir's natural water, and then treated again through the Cranberry Surface Water Plant. This type of project exists in other states throughout the country but will be the first indirect potable water reuse project in the State of Maryland.

The City funded the pilot demonstration project for PUREWater Westminster through a grant from the United States Bureau of Reclamation (USBR). The City received letters of support for its pilot demonstration project from Senator Van Hollen, MDE, Carroll County, Chesapeake Bay Foundation, Carroll County Water Resource Coordination Council, Carroll County Chamber of Commerce, University of Maryland, Maryland General Assembly Legislative District 5 Delegation, and Water Reuse. Copies of those letters of support are attached. The pilot demonstration project was operated by City of Westminster staff, directed by our engineering firm WATEK Engineering Corporation, tested by the University of Maryland, and reviewed by the MDE.

Once fully implemented, the PUREWater Westminster project will provide the City with a new drinking water source that is City-owned, permanent, and completely drought-resistant. The PUREWater Westminster project is able to offer up to 1,000,000 gallons a day, which covers the 750,000 gallons a day of emergency water and offers the City a small amount (250,000 gallons) to address new uses, such as the new Carroll County sheriff's office building.

The City has exhausted all other options to provide new water sources to the region. The City's PUREWater Westminster project is an efficient and effective solution to this compliance issue. Upon implementation, the City will be able to protect the health and safety of its water customers, while ensuring water to the hospital and for fire protection.

Total implementation cost for this project is \$6,590,000, and includes an engineering cost of \$1,590,000, funded by the City, and a construction cost of \$5,000,000. The City received a federal earmark in the FY23 budget in the amount of \$2,945,000 to fund construction, as well as a grant from Carroll County in the amount of \$1,530,152 for construction. The City is prepared to fund the remaining construction balance if no other grants become available.

The PUREWater Westminster project is the highest priority for the City of Westminster. This is a regional issue that we think requires a regional response. We appreciate your support and encourage you to approve SB 407.

Dr. Mone Back

Dr. Mona Becker Mayor

CHRIS VAN HOLLEN MARYLAND

SH-110 HART SENATE OFFICE BUILDING WASHINGTON DC 20510 OFFICE (202) 224-4654 FAX (202) 228-0629

United States Senate

COMMITTEES

APPROPRIATIONS

BANKING, HOUSING, AND URBAN AFFAIRS

BUDGET

ENVIRONMENT AND PUBLIC WORKS

December 3, 2019

Ms. Yuliana Porras-Mendoza Program Administrator, Bureau of Reclamation U.S. Department of the Interior Research and Development Office PO Box 25007 Denver, CO 80225-0007

Dear Ms. Porras-Mendoza:

I am pleased to support the application of the City of Westminster, Maryland for grant funding through the Bureau of Reclamation's Desalination and Water Purification Research Program. The grant funds would be used for the City's indirect potable reuse pilot project.

Westminster's pilot project is needed because, unlike other jurisdictions in Maryland, the City is uniquely affected by water supply constraints. The City's efforts to identify and develop new water sources for new development are significantly restricted, negatively impacting the City's residential, industrial, and commercial growth.

As the first potable reuse project in the State of Maryland, Westminster's pilot project will pave the way for the future of water resource planning and protection through pilot testing advanced technologies with innovative strategies. The City's project will be a model for developing guidelines for similar initiatives in the State of Maryland and around the country.

I strongly support the City of Westminster's application for grant funding through the Desalination and Water Purification Research Program and urge you to give it full consideration.

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Chris Van Hollen United States Senator

CVH/bk

Молтдомеру Социту 111 Rockville Pike Suite 960 Rockville, MD 20850 Phone (301) 545–1510 Fax (301) 545–1512 ANNE ARUNDEL & SOUTHERN MARYLAND 60 WEST STREET SUITE 107 ANNAPOLIS, MD 21401 PHONE (410) 263–1325 EASTERN SHORE 204 CEDAR STREET SUITE 200C CAMBRIDGE, MD 21613 PHONE (410) 221–2074 BALTIMORE REGION 1900 NORTH HOWARD STREET SUITE 100 BALTIMORE, MD 21218 PHONE (667) 212–4610

STATE OFFICES

WESTERN MARYLAND 32 WEST WASHINGTON STREET SUITE 203 HAGERSTOWN, MD 21740 PHONE (301) 797–2826 PRINCE GEORGE'S COUNTY 1101 MERCANTILE LANE SUITE 210 LARGO, MD 20774 PHONE (301) 322–6560



Larry Hogan, Governor Boyd K. Rutherford, Lt. Governor

Ben Grumbles, Secretary Horacio Tablada, Deputy Secretary

November 27, 2019

Ms. Yuliana Porras-Mendoza, Program Administrator, Bureau of Reclamation **Research and Development Office** P.O. Box 25007, MS 08-10000 Denver, CO 80225

Re: Letter of Support for City of Westminster Pilot Project - Funding Opportunity Announcement No. BOR-DO-20-F004 - Desalination and Water Purification Research Program by the Bureau of Reclamation

Dear Ms. Porras-Mendoza:

The Maryland Department of the Environment is expressing its enthusiastic support for the City of Westminster's application to the Bureau of Reclamation for a grant to support the City's pilot project for indirect potable reuse. The City has assembled an impressive project team to initiate the first indirect potable water reuse project in Maryland. Although Maryland is often viewed as a water rich state, we are susceptible to droughts and have cities such as the City of Westminster that face severe water shortage problems. To ensure long-term water sustainability, water reuse must be included and expanded in the state water resources portfolio.

As the Chair of Maryland Commission on Climate Change, I strongly encourage and support communities' efforts to include practices that embrace climate change and water change resiliency. I concur with the City's commitment to public health protection as its highest priority in the application of potable reuse as well as the research addressing the efficient use of energy through application of advanced technology. The City's proposed project will advance Maryland's vision of achieving long-term water sustainability. We look forward to collaborating with the City, and my y to assist the City with this important project. Appreciate the Byreau's for angoing leadership on water and support for the National and support for the National Water heuse Action Plan. Water heuse Thurks technical staff are ready to assist the City with this important project.

Sincerely,

Ben Grumbles Secretary

Board of County Commissioners

Stephen A. Wantz, President Edward C. Rothstein, Vice President C. Richard Weaver, 2nd Vice President C. Eric Bouchat Dennis E. Frazier



Carroll County Government

225 North Center Street Westminster, Maryland 21157 410-386-2043; 1-888-302-8978 fax 410-386-2485 MD Relay 711/800-735-2258

November 25, 2019

Mr. Jeff Glass, Public Works Director City of Westminster 56 West Main Street Westminster, MD 21157

RE: Letter of Support Grant Application - Pilot Indirect Potable Reuse Project – Westminster, Maryland Department of the Interior, Bureau of Reclamation Funding Opportunity Number: BOR-DO-20-F004

Dear Mr. Glass:

I write this letter to you on behalf of the Carroll County Board of Commissioners to support the City of Westminster's grant application for funding of an indirect potable reuse pilot project.

As elected leaders of one of Maryland's county governments, we recognize the importance of water quality and quantity issues and its tremendous influence on growth and development. Carroll County Government is a staunch supporter and partner in Westminster's efforts to develop and implement a more sustainable water supply. We appreciate any collaboration between the city, county and other partners on water resource issues of mutual concern and the implementation of integrated water resource projects.

Carroll County believes it is critically important for the City of Westminster to explore options to develop a more sustainable water supply. It strongly supports Westminster's grant application to move forward with a pilot of indirect potable reuse and hopes the Department of the Interior Bureau of Reclamation will award the city with grant assistance.

Thank you for your consideration in this matter.

Sincerely,

Roberta J. Windham, Esq. County Administrator

C: Mayor Joe Dominick



CHESAPEAKE BAY FOUNDATION Saving a National Treasure

November 27, 2019

Mr. Jeff Glass, Director of Public Works 56 West Main Street Westminster, MD 21157

RE: Westminster Advanced Water Resource Recovery Facility – Pilot Project Funding Opportunity No. BOR-DO-20-F004

Dear Mr. Glass:

The Chesapeake Bay Foundation is pleased to support the City's application for the above-referenced pilot project. If funded, this project would yield valuable data and methods for advancing water re-use and water quality goals.

Located in the heart of the Chesapeake Bay watershed, the City has been an active member in the joint local, state and federal effort to reduce pollution and clean up our shared national treasure. Water re-use has the potential to significantly reduce nutrient discharges from the City's wastewater plant to this sensitive system while also helping the City meet demand for water supply. It may also limit or delay the need to further tax surface or groundwater supplies in the region.

CBF has pioneered water conservation efforts at the site scale through rainwater capture and treatment for human consumption and graywater reuse. We are excited to see the results of the City's project, as it will help evaluate and inform the potential to expand reclamation opportunities from a single site to a municipal system.

We hope the committee will look favorably on the City's application. Please feel free to contact me at 443-482-2096 if you have any questions.

GutoFito

Erik Fisher, AICP Maryland Assistant Director

Carroll County Water Resource Coordination Council

Hampstead * Manchester * Mt. Airy * New Windsor Carroll County Health Department



* Sykesville * Taneytown * Union Bridge * Westminster Carroll County Government

November 21, 2019

Jeff Glass, Public Works Director John Dick, Public Works Deputy Director 56 West Main Street Westminster, Maryland 21157

Re: Westminster Advanced Water Resource Recovery Facility: Pilot Project Grant Application

Dear Mr. Glass and Mr. Dick,

The Carroll County Water Resource Coordination Council (WRCC) is pleased to support the City of Westminster's application for funding for this pilot project. The City of Westminster has long been a leader in finding innovative solutions to water resource issues. We appreciate the active coordination between the City and the other WRCC members on water resource issues of mutual concern and the implementation of the integrated water resource projects in our jointly adopted Water Resources Element (Plan).

We are anxious to learn the results and outcome of this study, as it will push forward the effort at the State level to further develop guidelines and resources for water reuse in the state. Carroll County's unique position at the headwaters of the Piedmont region and State policy on water appropriation bring many challenges to water supply development. This project offers a valuable opportunity to evaluate and demonstrate the many financial, environmental, and public health benefits of the options available for water reclamation – locally, regionally, nationally, and within the Chesapeake Bay Watershed.

The WRCC strongly supports the City's application and hopes the Bureau of Reclamation's evaluation team will decide favorably to award this grant.

Sincerely,

Steve Miller Chair

C: Town of Hampstead Town of Manchester Town of Mount Airy Town of Union Bridge Town of New Windsor Town of Sykesville City of Taneytown Carroll County Health Department Carroll County Land & Resource Management



November 26, 2019

RE: Letter of Support for Westminster Indirect Water Reuse Pilot Study

To Whom It May Concern,

The Carroll County Chamber of Commerce, a business organization of close to 600 members and located in Westminster, Maryland, fully supports the City of Westminster's efforts to pursue a water reuse pilot study as a means of finding cutting edge solutions to the water shortage issue that has hampered the city's ability to grow and fully serve its residents and businesses. The technology exists to potentially make this a very viable option for obtaining sufficient water now and in the future.

The results of this study could enable the City of Westminster to allow existing businesses to expand and to allow new businesses to be established in the city. With growth basically held at a standstill until the water issues can be solved, it seems like this water reuse study is desperately needed.

Thank you for this opportunity to give voice to the support of this indirect water reuse pilot study and we sincerely hope that it will be approved.

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Mike McMullin President Carroll County Chamber of Commerce <u>mmcmullin@carrollcountychamber.org</u> cell: 410-977-3111



1173 Glenn L. Martin Hall College Park, Maryland 20742-3021 301.405.7768 TEL 301.405.2585 FAX www.cee.umd.edu

A. JAMES CLARK SCHOOL OF ENGINEERING Department of Civil & Environmental Engineering

November 25, 2019

Jeff Glass, Public Works Director John Dick, Public Works Deputy Director 56 West Main Street Westminster, Maryland 21157

Re: Westminster Advanced Water Resource Recovery Facility: Pilot Project Grant Application

Dear Mr. Glass:

I am writing to enthusiastically support the City of Westminster's application to the U.S. Bureau of Reclamation for Desalination and Water Purification Research funding. Westminster is taking a unique and forward-looking long-term view of water supply. I am committed to collaborating with this project, should it be funded.

My expertise is in water quality and treatment, specifically with inorganic pollutants. In this capacity, we will work with the City and other collaborators in analysis of heavy metals and metalloids that may be of specific concern in this water reuse pilot project. We have the ability to measure parameters of interest to include chromium (including hexavalent Cr), arsenic (As(II) and As(V)), nickel, and others. We also have the ability to analyze various inorganic species of phosphorus and nitrogen. Concentrations can be determined at various points in the treatment train to define efficacy of each unit process. Our most recent work has focused on determining trace levels of these pollutants in urban stormwater, and treatment processes for their removal.

This proposal has my full support. I anticipate that the results will of interest to many other water suppliers along the east coast as each struggles with challenges of growth and limited natural resources.

Best Regards,

Allen P. Davis, PhD, PE Professor and Charles A. Irish Sr. Chair in Civil Engineering



College Park, Maryland 20742-2611 301.405.1772 TEL 301.405.8397 FAX

SCHOOL OF PUBLIC HEALTH Maryland Institute for Applied Environmental Health

November 25, 2019

Jeff Glass, Public Works Director John Dick, Public Works Deputy Director 56 West Main Street Westminster, Maryland 21157

Re: Westminster Advanced Water Resource Recovery Facility: Pilot Project Grant Application

Dear Mr. Glass and Mr. Dick:

I am writing to express my enthusiastic support for the City of Westminster's application for funding to support this innovative pilot project. The City of Westminster is a proven leader in finding and implementing novel solutions to water resource challenges, and my team is delighted to collaborate with the City on what will be the first potable water reuse project in the State of Maryland.

Specifically, my group within the CONSERVE Center of Excellence here at the University of Maryland is happy to engage in the research aspects of the project. In particular, my group, along with the labs of Dr. Allen Davis and Dr. Amir Sapkota, will perform biweekly water sampling over a period of 9 months at 5 sampling points throughout the pilot water treatment process. In my lab, samples will be analyzed for *E. coli*, enterococci, antibiotic resistance and total bacterial taxonomy and function. In addition, we will perform high-volume water sampling that will enable us to test for enteric viruses and protozoa and compare results to existing log reduction values (LRVs) established by other states under the regulatory framework of the Safe Drinking Water Act "maximum contaminant levels" (MCLs) and LRVs.

I strongly support the City's application and look forward to this important collaboration that will ultimately enable the continued delivery of safe drinking water to the people of Westminster, Maryland.

ChySeptato

Amy R. Sapkota, Ph.D., M.P.H. Professor Director, CONSERVE Director, UMD Global STEWARDS



College Park, Maryland 20742-2611 301.405.8716 TEL 301.405.8397 FAX

SCHOOL OF PUBLIC HEALTH Maryland Institute for Applied Environmental Health

November 25, 2019

Jeff Glass, Public Works Director John Dick, Public Works Deputy Director 56 West Main Street Westminster, Maryland 21157

Re: Westminster Advanced Water Resource Recovery Facility: Pilot Project Grant Application

Dear Mr. Glass:

I am pleased to provide my enthusiastic support for the City of Westminster's application for funding to support this innovative pilot project. The City of Westminster is a proven leader in finding and implementing novel solutions to water resource challenges, and my team is delighted to collaborate with the City on what will be the first potable water reuse project in the State of Maryland.

Specifically, my group will analyze water samples for emerging contaminants including pharmaceuticals and personal care products using state of the art liquid chromatography isotope dilution tandem mass spectrometry (LC-ID-MS/MS) based methods. My group has extensive track record of publication for the analysis of such contaminants in water samples, and I am very happy to support your work from this perspective.

I strongly support the City's application and look forward to this important collaboration that will ultimately enable the continued delivery of safe drinking water to the people of Westminster, Maryland.

Amir Sapkota, Ph.D. Professor Director, EXPOSOME Small Molecule Core Facility



DELEGATE SUSAN W. KREBS DELEGATE APRIL ROSE DELEGATE HAVEN SHOEMAKER

THE MARYLAND GENERAL ASSEMBLY LEGISLATIVE DISTRICT 5 CARROLL COUNTY

December 2, 2019

Ms. Yuliana Porras-Mendoza Program Administrator Bureau of Reclamation Research and Development Office Attn: Ms. Yuliana Porras-Mendoza P.O. Box 25007, MS 08-10000 Denver, CO 80225

Re: Grant Application – Westminster, MD Pilot Indirect Potable Reuse Project Department of the Interior, Bureau of Reclamation Funding Opportunity Number: BOR-DO-20-F004 Funding Opportunity Title: Desalination and Water Purification Research Program

Dear Ms. Porras-Mendoza:

We would like to express our strongest support for a request from the City of Westminster for grant funding from the Department of the Interior, Bureau of Reclamation. The grant funds would be used for the City's pilot indirect potable reuse project.

For more than 15 years, the City of Westminster has experienced periods of severe water shortage, resulting in periodic building moratoriums. In response to the City's limited water supply, Westminster adopted a new water allocation policy in March 2018 to ensure an adequate supply until new sources could be brought online. Notwithstanding the City's efforts to find and develop new water sources, Westminster's water resources for new development remain significantly restricted, negatively impacting the City's residential, industrial, and commercial growth.

Recognizing the need for a more sustainable water supply, the City is now planning to pilot test indirect potable reuse, by further purifying effluent from the City's Westminster Wastewater Treatment Plant. As the first potable reuse project in the State of Maryland, Westminster's pilot project will serve as a model and pave the way for similar initiatives in the State of Maryland in the future.

We request that the Bureau of Reclamation approve the City of Westminster's application for grant funding through the Desalination and Water Purification Research Program.

Senator Justin Ready

Delegate April Rose

Delegate Susan Krebs

Delegate Haven Shoemaker



November 26, 2019

Attn: Ms. Yuliana Porras-Mendoza Program Administrator Bureau of Reclamation Research and Development Office P.O. Box 25007, MS 08-10000 Denver, CO 80225

Re: Westminster Advanced Water Resource Recovery Facility Pilot Project Grant Application

Dear Ms. Porras-Mendoza:

The purpose of this letter is to communicate the WateReuse Association's (WRA) full support of the City of Westminster's Grant Application submitted for the U.S. Department of the Interior Bureau of Reclamation Research Development Group II grant (FOA No. BOR-DO-20-F004).

As the nation's leader and the only trade association that focuses solely on advancing laws, policy and funding to increase water reuse, WRA is proud to support the City of Westminster, which is a member of our organization, in their proactive initiative to be the first municipality to pilot test potable reuse in the State of Maryland.

The WateReuse Association is a not-for-profit trade association for water utilities, business, industrial and commercial enterprises, non-profit organizations, and research entities that engage in facilitating the adoption of water recycling practices. WateReuse and its state and regional sections represent more than 250 water utilities serving over 60 million customers, and over 250 businesses, research institutions, and organizations across the county.

We are aware that City of Westminster's project is critically needed because while most of the jurisdictions in the East Coast face minimal to no immediate water shortage challenges, at the local level, even after implementing conservation measures and tapping into available ground and surface water sources, the City is still facing source water challenges. This project enables the City to explore feasibility of including potable reuse as a part of its source water portfolio, while protection of public health remains its highest priority.

We are impressed by the leadership exhibited by the City of Westminster, leveraging their unique position as an authority that controls their entire water and wastewater systems, and assembling a strong support team of local and national consultants as well as university researchers to move this important project forward.

President Paul Jones, II Eastern Municipal Water District, CA

Vice President Gilbert Trejo El Paso Water Utilities, TX

Treasurer Diane Taniguchi-Dennis Clean Water Services, OR

Secretary Craig Lichty Black & Veatch, CA

Past President Guy Carpenter Stanley Consultants, AZ We look forward to working with the City of Westminster and providing support for the project team.

D. ·

Patricia Sinicropi Executive Director

