District of Columbia Water and Sewer Authority
George S. Hawkins, General Manager

Joint Utility Construction Contractors Outreach Forum

"A Presentation on DC Water's Upcoming Water and Sewer Construction Programs"

Hosted and Presented by:

DC Water *and*
the DC Chapter of the
National Utility Contractors Association
(NUCA)

Presentation Agenda

Welcome/Opening Remarks – Gus Bass, DC Water and Dan Buckley, NUCA DC Chapter

Forum Overview, CIP, & Contracting – Paul Guttridge, DC Water

Water Infrastructure – Gert VanDerwalt, DC Water

Sewer Infrastructure – Getachew Melsew, DC Water

EPA Good Faith Efforts (Fair Share Objective) – Kenneth Pantuck/Atif Khadir, EPA and Rhonda Green, DC Water

DC Water Bidding Requirements – Lisa Reynolds, DC Water

Q&A – All panel members

Closing Remarks – Gus Bass, DC Water

Following Q&A, there will be 30 minutes for networking and work discussion.

Past Engineering and Construction Dollars Committed

- From 2010 to present, DC Water committed more than $2.8 billion for engineering and construction projects in the areas of:
  - Blue Plains upgrades and improvements
  - Combined sewer overflow (CSO), outfall rehabilitation, and pumping station projects
  - Sanitary pumping facilities and trunk sewer upgrades
  - Water distribution and water facility upgrades

Water main and sewer break repair along Spring Place, in Washington, DC.

Our Capital Improvement Program (CIP) for the next 10 years is valued at $3.8 billion, and over the next 20 years, $8.4 billion.

MBE and WBE Requirements

- DC Water's MBE and WBE Fair Share Objectives are:

Services	Fair Share Objectives (%)	
	MBE	WBE
Professional (A/E Agreements)	**28**	**4**
Construction	**32**	**6**

- Objectives are based on goals established by EPA Region 3: DC, DE, MD, PA, VA, & WV
- DC Water's policy is to meet or exceed EPA objectives for MBE and WBE participation in prominent and leadership roles

Note that some of the projects discussed today may or may not have EPA small business goals. DC Water continues to encourage the use of small businesses.

We Will Work with *you!*

- Over the last years (FY 2012 – FY 2014), DC Water has awarded:
  - 61 Design, Construction, and CM contracts with an award value of $1.33 billion
- Of this total, over 36% (or $479 million) was awarded to:
  - Minority Business Enterprises (MBEs), Women Business Enterprises (WBEs), Local Small Business Enterprises (LSBEs), and Certified Business Enterprises (CBEs)
  - MBEs and WBEs have been awarded $384 million
  - LSBEs and CBEs have been awarded $95 million

For Design-Build contracts, the prime firms indicated that they will continue to pursue opportunities to exceed the goals of:

MBE = 32% and WBE = 6% for construction contracts

MBE = 28% and WBE = 4% for A/E contracts

Vendor Registration

- Register online to receive solicitations, amendments, and contract awards via email
- To become a registered vendor:
  - Go to: www.dcwater.com
  - Click on: "Business Opportunities"
  - Then select: "Vendor Portal"
- Solicitations are published on
  - DC Water's website http://vendor.dcwater.com/solicitations_overview.cfm?FilterByType=1
  - The *Washington Post*, *Afro-American*, *Washington Hispanic*, *Engineering News Record*

Blue Plains CIP & Contracting

by Paul Guttridge

DC Water CIP

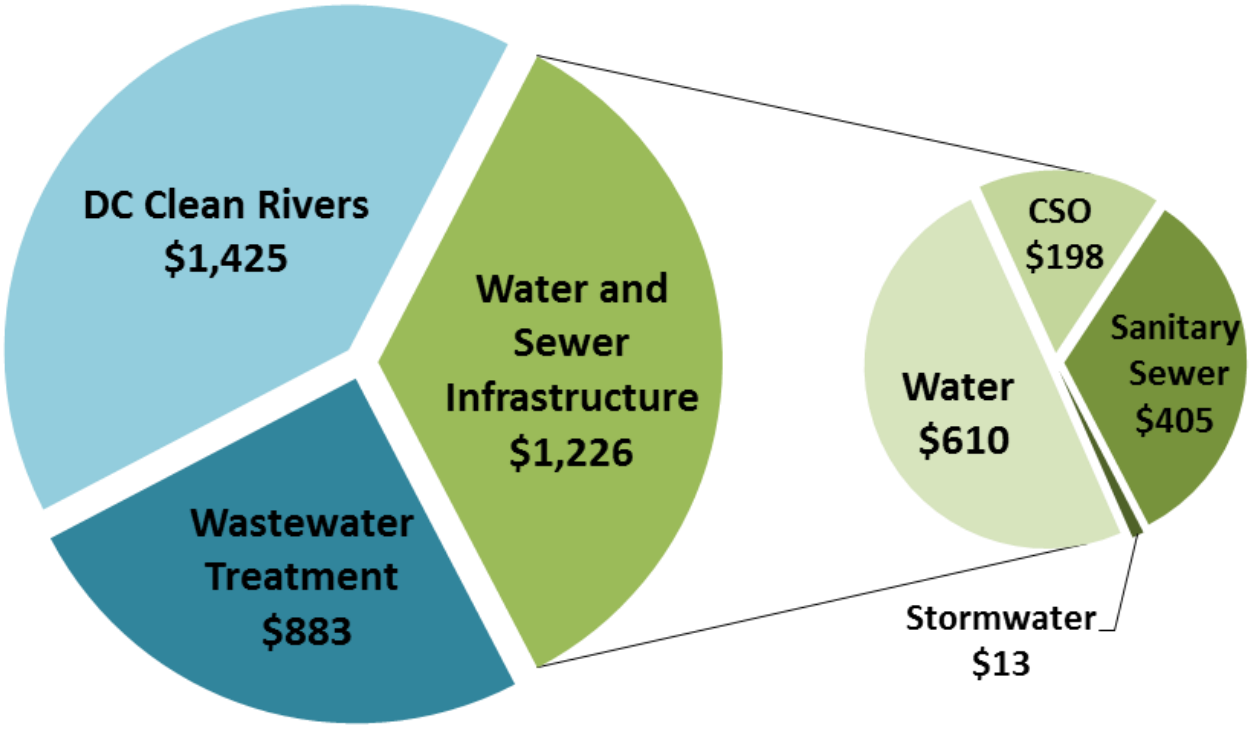
- $3.8 billion 10 year spending plan - All areas
  - FY16 $549,040
  - FY17 $442,145
  - FY18 $373,126

- Total Sewer spending FY16 to FY18 $136.2 M
- Total Water spending FY16 to Fy18 $177.4 M

Disbursement Plan by Service Area

Service Area ($000's)	FY 2015 Revised	FY 2016 Proposed	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Total
Wastewater Treatment	206,260	149,375	121,268	110,405	62,461	64,267	52,006	50,750	37,094	29,285	883,171
Sanitary Sewer	40,258	42,175	51,076	42,956	39,711	44,960	25,896	33,524	45,712	39,116	405,384
Combined Sewer Overflow	271,101	238,703	159,531	129,091	165,594	176,571	136,958	115,203	139,437	91,442	1,623,631
Stormwater	2,559	1,178	1,726	1,848	760	772	691	1,115	970	1,270	12,889
Water	65,006	67,546	58,968	50,862	48,795	61,249	68,201	61,153	59,828	68,645	610,250
Engineering Managed	**585,183**	**498,977**	**392,570**	**335,162**	**317,321**	**347,818**	**283,752**	**261,745**	**283,041**	**229,758**	**3,535,326**
Total AMR / Meter / CIS	7,900	14,389	14,707	11,345	6,672	1,000	500	500	500	500	58,013
Washington Aqueduct	10,000	10,864	10,850	10,936	11,060	11,045	11,226	11,212	11,081	10,842	109,116
Capital Equipment	22,191	24,810	24,018	15,683	14,282	9,058	9,058	8,058	7,433	7,017	141,608
Sub-Total	**40,091**	**50,063**	**49,575**	**37,964**	**32,014**	**21,103**	**20,784**	**19,770**	**19,014**	**18,359**	**308,737**
Total CIP	**625,274**	**549,040**	**442,145**	**373,126**	**349,335**	**368,921**	**304,536**	**281,515**	**302,055**	**248,117**	**3,844,063**
Prior Board Approved CIP	**628,779**	**522,921**	**420,070**	**402,945**	**329,994**	**253,022**	**235,898**	**229,586**	**269,603**	**-**	
Increase/(Decrease)	**(3,505)**	**26,119**	**22,075**	**(29,819)**	**19,341**	**115,899**	**68,638**	**51,929**	**32,452**	**248,117**	

Disbursement Plan by Service Area



Sewer CIP Totals ($M) *Construction*

Category	2015	2016	2017	2018	2019	*Total*
Sewer Inspect/ Rehab	$17.8	$9.0	$22.0	$6.6	$10.9	**$66.3**
Creek Bed Sewer Rehab	—	$11.8	$19.2	$5.4	$26.1	**$62.5**
Pump Station	$0.4	$0.5	—	—	—	**$0.9**
Major Asset Inspect/Rehab	$5.5	$39.0	$9.0	$38.9	$53.5	**$145.9**
Other	$10.7	$9.4	$9.6	$9.8	$9.7	**$49.2**
Total	**$34.4**	**$69.7**	**$59.8**	**$60.7**	**$100.2**	**$324.8**

Water CIP Totals ($M) *Construction*

Category	2015	2016	2017	2018	2019	*Total*
Small Diameter Rehab	$11.0	$11.0	$13.0	$42.6	$18.0	**$95.6**
Valve Replacement	$6.7	—	—	—	—	**$6.7**
Large Diameter Rehab	—	$1.0	$0.3	—	$31.0	**$32.3**
Water Storage Rehab	$14.0	$2.8	$6.7	$2.2	—	**$25.7**
Other	$1.6	$10.4	$11.4	$9.2	$16.3	**$48.9**
Total	**$33.3**	**$25.2**	**$31.4**	**$54.0**	**$65.3**	**$209.2**

Water System Infrastructure

Upcoming Construction for Drinking Water Capital Projects

by Gert van der Walt

Drinking Water Project Categories

- Small-diameter water main
  - Replacements and rehabilitation
- Large-diameter water mains
  - Rehabilitation and replacement
  - Large valve replacements
  - Condition assessments with repairs
- Drinking water storage
  - Upgrades and repairs to underground reservoirs and elevated tanks
  - New elevated water storage tanks
- Drinking water pumping station improvements
- Miscellaneous drinking water projects

Small-Diameter Water Mains (SDWMR)

- New ductile iron water main in roadway replaces old pipe
  - Advertise 2 to 4 jobs per year on the open market
  - Each job has 2 to 5 miles of piping ($4.0M–$10.0M)
  - Pipe installation, mainly is 8-inch and 12-inch
  - Extensive water service replacements – typically 1-inch copper and meter boxes
  - Extensive pavement restoration with milling and overlay
  - Daily traffic control crews

Small-Diameter Water Mains (SDWMR)

- Some small-diameter lining projects
  - Expecting 1 job per year on the open market, 2 to 4 miles ($1.0M–$4.0M)
  - Cleaning of 8-inch and 12-inch water main and lining (cement mortar or CIPP)
  - Includes valves and hydrant replacements, but few water service line replacements
  - Temporary piping installation, and 24-hour maintenance
  - Paving and traffic control

Large-Diameter Water Mains

- Rehabilitation and repair projects
  - 1 to 2 jobs per year available to **pre-qualified bidders**
  - Each job ranges from $2.0M–$10.0M
  - Pipe sizes are 16-inch up to 66-inch
  - Materials include steel, PCCP, cast iron and ductile iron

  - Sliplining (HDPE or fPVC), internal joint seals, pipe replacement and installation of CP systems
  - Linestops and continuous bypass pumping are often required
  - Pavement restoration with milling and overlay
  - Weekly/monthly traffic control setups
  - Pressure testing, disinfection, and chlorination of water mains required

Large-Diameter Water Mains

- Large-diameter valve replacement projects
  - 2 jobs in 2015 to **pre-qualified bidder**, $2.0M–$5.0M
  - Eliminated backlog of defective valves, no projects scheduled till 2020
  - Extensive shut-down coordination and night-work required
  - Construction site lighting, paving, and traffic control

Large-Diameter Water Mains

- Condition assessment and leak detection projects
  - 2 to 3 jobs per year available ranging $0.2M–$2.0M
  - Assessment tools such as:
    - Magnetic flux leak detection
    - In-line acoustical tools
    - External acoustical tools
    - Eddy current inspections

  - Repair methodologies such as:
    - Carbon Fiber Reinforced Polymers (CFRP) – internal
    - Internal Joint Seals
    - Replacement of a pipe segment
    - Sliplining and other liners
  - Could also include large valves, linestops and cut-and-caps

Reservoir Improvements

- Underground concrete reservoirs – repairs and improvements
  - 2 projects in next 4 years: $1.0M–$5.0M each in construction
  - Piping, valves, and vaults; minor concrete repairs, joint repairs, and spall repairs
  - Water quality equipment – mixers, sampling pumps, and analyzer panels
  - Impervious membrane covers with earth work and related site work

Reservoir Improvements

- Elevated steel water tanks – repairs and improvements
  - Piping, valves, and vaults
  - Minor access structure repairs and painting
  - Water quality equipment—mixers, sampling pumps, and analyzer panels
  - Painting repairs and wholesale tank recoating
- New elevated water tanks
  - St. Elizabeth's tank is scheduled for bid in 2015
    - 2 MG composite-style with extensive site work and new large-diameter mains
  - Two more planned within 10 years

Pumping Station Improvements

- Improvement projects organized by discipline
  - Inside piping and valve improvements at Bryant Street PS
  - Reconstruction of roof and parapet walls at the warehouse building at Bryant Street PS
  - HVAC improvements and electrical repairs at Bryant Street PS




Miscellaneous Projects

- Residential Pressure Reducing Valve (PRV) installations
  - Anacostia 2nd high PZIP
    - 2016
    - Estimated at $3.0M
- On-call water main construction contractor (IR&R)
  - Normally 1 contractor working directly for DWS (water operations)
  - Next scheduled advertisement is 2016
- On-call pavement restoration construction contractor
  - Normally 1 contractor working directly for DWS (water operations)
  - Next scheduled advertisement is 2018

Sewer System Infrastructure

Upcoming Construction for Drinking Water Capital Projects

by *Getachew Melsew*

Sewer System Project Categories

- Pump station rehabilitation
  - Storm
  - Sanitary/combined
- Sewer inspection projects
- Sewer rehabilitation projects
  - Major sewer rehab
  - Service life restoration
  - Creek bed sewer rehab
  - Sewers under buildings rehab
- Miscellaneous projects

Pump Station Rehabilitation

- Stormwater pump stations
  - 12 of 16 scheduled for upgrades
  - Improve reliability and hydraulic capacity
  - Upgrade components to current standards and codes
  - Total budget is about $25M (design and construction)
  - A phased program (~3 phases)
  - Phase 1 construction expected to begin in 2016

Pump Station Rehabilitation

- Current and upcoming sanitary/combined pump station projects

Project	Schedule	Approx. Construction Contract Value
Potomac Pumping Station—Phase III Rehabilitation	Construction awarded in Sept 2014	$13.0M
Main St. and O St. PS Intermediate Upgrades	In Design Const. Start: June 2017	$25.0M
3rd St. and Constitution Ave NW Pumping Station Rehab	In Design Const. Start: June 2016	$2.2M

Inspection

- Inspect about 75 miles/year by CCTV about $2.2M per year budgeted
- Some specialty laser profiling, manned entry with hand held devices
- DC Water uses the National Association of Sewer Services Companies (NASSCO) Pipe Assessment and Certification Program (PACP) system

Rehabilitation

- The most frequently considered rehabilitation types and methods by DC Water are as follows:
  - Non-structural sealing and semi-structural rehabilitation for stopping leakage, preventing bedding migration, and repairing minor deterioration including packer injection grouting and masonry patches
  - Structural repair and reinforcement including cured-in-place pipe (CIPP), structural shotcrete, and sliplining
  - Pipe replacement including open-cut replacement and pipe bursting

Creek Bed Sewer Rehabilitation

- This project consists of multiple jobs to protect infrastructure in the vicinity of streams and creeks located throughout the District
- The scope is to relocate and rehabilitate manholes and sewer pipes vulnerable to flooding or erosion and infrastructure exposed to or adjacent to surface waters
- This project also includes rehabilitation for outfalls and other tasks required to protect exposed sewers due to stream bank erosion

Exposed manhole.

Damage from erosion.

Creek Bed Sewer Rehabilitation

- Construction is expected to begin in 2015 or 2016 on projects in Glover Archbold Park ($5.9M), Soapstone Park ($5.0M), or Foundry Branch Park ($5.0M)
- Approximately 23 other projects are expected to begin in 2019 and 2020 for a total value of $47.2M

Exposed pipe.

Damage from vegetation.

Miscellaneous Projects

- Rehabilitation of gates and structures – 3 projects, $ 5.3M
- Floatbale Debris Dock Replacement – $1.0M
- Inflatable dams: life cycle and implementation – $2.5M

Inflatable dam

- Flow metering and monitoring – $3.5M – recently awarded. Second phase expected in FY17.
- On-call sewer rehab construction contractor (IR&R)
  - One contractor working directly for DSS (sewer operations)
  - Next scheduled advertisement is 2017 or 2018

EPA Good Faith Efforts

Achieving your Fair Share Objectives through
Good Faith Effort Documentation

by Kenneth Pantuck/Atif Khadir/Rhonda Green

The Six Good Faith Efforts

1. Ensure DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities
2. Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules where the requirements permit in a way that encourages and facilitates participation by DBEs in the competitive process
3. Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs
4. Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually
5. Use the services of the SBA and the Minority Business Development Agency of the Department of Commerce
6. If the prime contractor awards subcontracts, require the prime to use **steps 1 through 5.**

Prime Contractor Responsibilities Prior to Contract Award

- Outreach
- Organize and document your outreach efforts
- Evaluation of bids
- Complete mandatory EPA Forms
- Submit complete package with your bid to DC Water

Mandatory EPA Forms

- EPA form 6100-2
  - This form gives a DBE subcontractor the opportunity to describe the work the DBE subcontractor received from the prime contractor, how the DBE subcontractor was paid and any other concerns the subcontractor may have
- EPA form 6100-3
  - This form captures an intended subcontractors description of work to be performed for the prime contractor and the price of work submitted to the prime
- EPA form 6100-4
  - This form captures the prime's intended use of an identified DBE subcontractor and the estimated dollar amount of the subcontract

All forms must be completed to include:

1. Statement of work
2. Estimate of work
3. Percentages (32% MBE-6% WBE)
4. MBE/WBE designation
5. Signatures (Prime and Subcontractors, if required)

Submission of Documents to DC Water

- **Cover Sheet**
  - Project name
  - Fair Share Objective
  - Prime name and address
  - Bidding firm status
  - Contact name and number
  - Bid Price
  - Price of MBE/WBE
  - Participation

- **Good Faith Effort Documentation**
  - Advertisements
  - Emails (outgoing and incoming)
  - Faxes (cover sheets and transmittal records)
  - Call logs
  - Response logs
  - EPA Mandatory Forms
  - Current DBE certification

Minority Outreach Resources

- www.Mdot.state.md.us/MBE_Program/directory
- www.thebluebook.com
- www.diversitybusiness.com
- www.uida.org
- http://cfpub.epa.gov/sbvps
- www.sba.gov/md
- http://ebidmarketplace.com
- www.mbda.gov
- www.dslbd.dc.gov
- www.baltimorecounty.md.gov

Minority Outreach Programs

SBA

http://sba.gov

The Washington DC Minority Business Development Center

info@dcmbec.org

National Association of Women Business Owners

national@nawbo.org

Maryland/Washington Minority Contractor Association

wrf@mwmca.org

Important Notes

- MBEs and WBEs must be certified in order to be counted toward a recipients accomplishments
- Primes who are MBE/WBEs CANNOT include themselves toward their MBE/WBE participation

Who Can Help?

- US Environmental Protection Agency
  http://www.epa.gov/osbp/grants.htm

- Rhonda Green, Grants Specialist, DC Water
  202-787-2276
  Rhonda.green@dcwater.com

- Ken Pantuck, Sr. Environmental Specialist, EPA
  215-814-5769
  Pantuck.kenneth@epa.gov

DC Water Bidding Requirements

by *Lisa Reynolds*

Where are the Requirements?

Fair Share Objective (FSO) is addressed in several locations:

- Instructions to Bidders (00 20 00)
- Certification of Outreach Efforts (00 40 21)
- Bid Document Checklist (00 40 25)
- Federal Contracting Requirements (Appendix B – Inserts)

Instructions to Bidders
00 20 00

- Establishes FSO of 32% MBE and 4% WBE
- Reference to full text of EPA's DBE Program website
- Emphasizes Good Faith Efforts during bidding
- Minimum directories to search (DOT, DDOT, SBA, etc.)
- Requirement to submit plan and documentation of efforts with the bid

Instructions to Bidders 00 20 00 (cont.)

- Documentation:
  - Work to be subcontracted
  - DBEs solicited and bidder's evaluation of each proposal received
  - List of qualifying subcontractors and suppliers, whether MBE or WBE, role in contract, value of services, percentage of total contract value
  - Completed forms
    - 00 40 21 DBE Outreach Certification
    - 00 45 08 Intent to Subcontract MBE/WBE
    - 00 45 10 DBE Subcontractor Participation Form
    - 00 45 11 DBE Subcontractor Performance Form
    - 00 45 12 DBE Subcontractor Utilization Form

Instructions to Bidders 00 20 00 (cont.)

- Failure to comply may be cause to declare the bid non-responsive.
- Provide updated information immediately – either before or after contract award – including reason for change
- Include information on payment to WBE/MBE on each invoice
- Only DBEs with acceptable certification count toward goal

DBE Outreach Certification 00 40 21

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
DEPARTMENT OF ENGINEERING AND TECHNICAL SERVICES

CERTIFICATION OF OUTREACH EFFORTS

INIVITATION NO.: 000000
PROJECT NAME: XXXXX
LOCATION: XXXXXX
Washington, DC

The documentation [illegible] bidder proposed to su[illegible] work into the smallest tasks that [illegible]ically feasible and obtain the required docu[illegible] permitting. The submitted documentation must identify minority businesses and women business enterprises that were solicited as potential subcontracting sources and the bidder's evaluation of each MBE and WBE subcontractor proposal received.

Bidder certifies that the required information is being submitted with its bid and acknowledges that failure to comply with these requirements may cause its bid to be declared non-responsive.

_____
Company Name

_____ _____
Authorized Representative Signature Printed Name

_____ _____
Title Date

Bid Document Checklist
00 40 25

SUBMISSION REQUIREMENT		ITEMS SUBMITTED (BIDDER'S INITIALS)
SECTION NUMBER	DOCUMENT TITLE	
00 40 00	BID FORM	
00 40 10	SCHEDULES OF PRICES	
00 40 20	BID BOND	
00 40 21	DBE OUTREACH CERTIFICATION	
00 40 25	BID DOCUMENT CHECKLIST	
00 45 08	DC WATER CONTRACTOR'S INTENT TO SUBCONTRACT WBE OR WBE	
00 45 09	DC WATER WBE – MBE INTENT TO SUBCONTRACT	
00 45 10	EPA FORM 6100–2 DBE SUBCONTRACTOR PARTICIPATION FORM	
00 45 11	EPA FORM 6100–3 DBE SUBCONTRACTOR PERFORMANCE FORM	
00 45 12	EPA FORM 6100–4 DBE SUBCONTRACTOR UTILIZATION FORM	
00 45 13	PAYMENT TO SUBCONTRACTORS AND SUPPLIERS CERTIFICATE	
00 45 14	DC WATER DEBARMENT STATUS STATEMENT	
	TIFICATION REGARDING	
	TIFICATION INFORM	
	NDARD FORM NO. 717E	
	***CERTIFIED FINANCIAL STATEMENT	
	**** MBE & WBE OUTREACH PLAN	

**** **MBE & WBE Outreach Plan:** See Section 00 20 00 Instruction to Bidders, Article 31 "Subcontracting Goals (MBE & WBE)" (Water & Sewer Projects), Paragraph 31.3

Thank you

Questions & Answers

Visit us online at www.dcwater.com
and DETSConstructionBidInquiry@dcwater.com

dc water is life