DISTRICT OF COLUMBIA
WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS

WATER QUALITY AND WATER SERVICES
COMMITTEE MEETING AGENDA

Thursday, October 16, 2015

11:00 a.m.

5000 Overlook Avenue, SW
Washington, DC 20032

11:00 a.m. I. Call to Order — Rachna Butani, Chairperson

11:05 a.m. II. Water Quality Monitoring — Charles Kiely

- **Coliform Testing**
- **LCR Compliance Testing**

11:15 a.m. III. Fire Hydrant Upgrade Program — David Wall

- **Status Report of Public Fire Hydrants**
- **Out of Service Fire Hydrant Map**

11:30 a.m. IV. Latex Spill Response — Jessica Edwards- Brandt/Jonathan Reeves

11:40 a.m. V. Blue Horizon 2020 Progress — Sarah Neiderer

11:50 a.m. Vl. **Executive Session***

Adjournment

*The DC Water Board of Directors may go into executive session at this meeting pursuant to the District of Columbia Open Meetings Act of 2010, if such action is approved by a majority vote of the Board members who

constitute a quorum to discuss: matters prohibited from public disclosure pursuant to a court order or law under D.C. Official Code § 2-575(b)(1); contract negotiations under D.C. Official Code § 2-575(b)(1); legal, confidential or privileged matters under D.C. Official Code § 2-575(b)(4); collective bargaining negotiations under D.C. Official Code § 2-575(b)(5); facility security under D.C. Official Code § 2-575(b)(8); disciplinary matters under D.C. Official Code § 2-575(b)(9); personnel matters under D.C. Official Code § 2-575(b)(10);proprietary matters under D.C. Official Code § 2-575(b)(11); decision in an adjudication action under D.C. Official Code § 2-575(b)(13); civil or criminal matters where disclosure to the public may harm the investigation under D.C. Official Code § 2-575(b)(14), and other matters provided in the Act.

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North Branch Potomac River

latex polymer discharge

Drinking Water Branch
Department of Water Services
and
Office of Emergency Management
Department of Distribution and Conveyance Systems

Presentation Outline

- Event information
- Notification
- Response discussions and actions
- Conclusions

Event Information

- Sept 23, 2015
- 10,000 gallons Trinseo Latex CP 620NA
- Verso Paper Mill in Luke, Maryland
- Material used in paper coating
- Valve left open at the paper mill during loading of product
- Latex product entered the Mill's waste collection system and traveled through Upper Potomac River wastewater treatment plant
- Treated water from the wastewater treatment plant with the latex product discharged into the North Branch of the Potomac River causing river to appear yellowish/white

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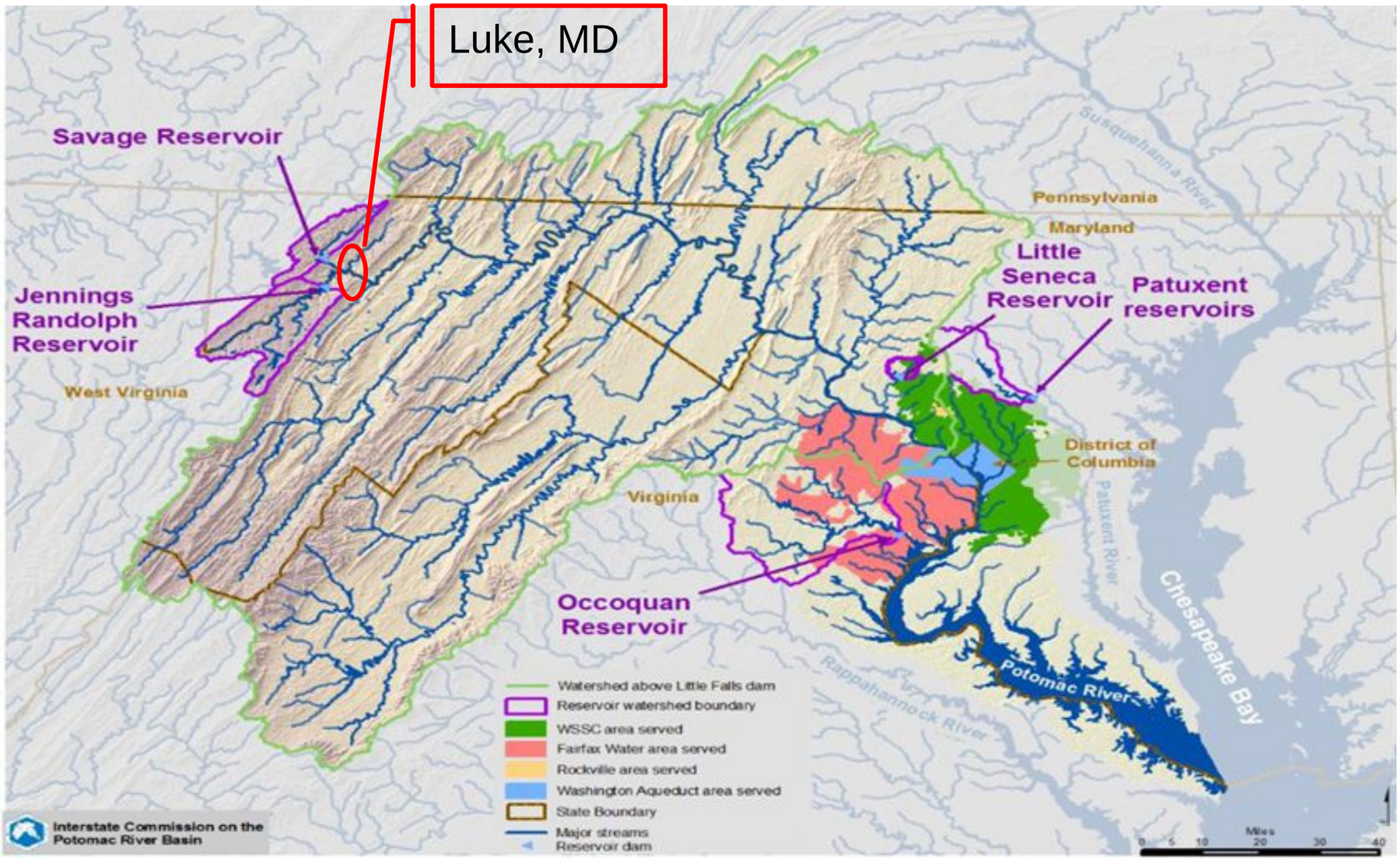
Potomac River



Notifications

- Interstate Commission on the Potomac River Basin (ICPRB) notified users through Spill Staff email list
- Email contained river model information and estimates for product to reach downstream water intakes
- Initial model predictions:
  - Reach Capitol Region intakes in ~3 weeks
  - Plume would take ~13 days to pass by intakes

Trinseo Latex CP 620NA

- Styrene-Butadiene based polymer
- Synthetic latex product (not a natural latex)
- Non-toxic
- Stable in water, but reactive with charged coagulants (important for treatment!)

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Response Actions

- Water utilities began planning and response discussions
  - Role and Responsibilities
  - Coordination of Information Sharing
  - Operational Considerations
  - Public and Staff Information

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Roles & Responsibilities

- **Maryland Department of the Environment (MDE)**
  - Lead response agency for the spill
- **Interstate Commission on the Potomac River Basin (ICPRB)**
  - Provided collaborative calls for information sharing with potentially impacted Water Utilities
  - Provided response information and plume travel information

Roles & Responsibilities

- **Environmental Protection Agency (EPA) Region 3**
  - Provided direct information from response efforts to Council of Governments (COG) for water utilities
  - Assisted in getting samples analyzed for MDE at Fort Meade
  - Arranged for samples to be available for WAD to conduct studies and to use for analyses
- **Council of Governments (COG)**
  - Assisted with information sharing of event and among water utilities

Roles & Responsibilities

- **DC Water**
  - Office of Emergency Management
    - Situational awareness information, collection, and distribution to partial IMT
    - Coordinated IMT collaboration calls with WAD
  - Drinking Water Division (Water Quality)
    - Review analytical information
    - Compiled questions of concern for response agencies to answer
    - Worked closely with WAD and other agencies on water quality concerns
  - Office of External Affairs
    - Generated talking points
    - Created staff awareness email

Coordination of Information Sharing

- DC Water led efforts in initiating information sharing with Washington Aqueduct, ICPRB, COG
- This coordination in turn led efforts to further discussions with regulators and regional response

Operational Considerations

- What is this product?
- Is shutting down the intakes an option?
- Can the product be treated?
- Any unintended consequences?

The Verso paper mill in Luke, Maryland is the site of a synthetic latex product spill. (YouTube)

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Washington Aqueduct Treatability Studies

- **Proactive in response**
- Coordinated sample collection from spill plume
- Requested product sample from vendor
- Performed extensive treatability studies on spill water to best determine treatment options
- Reported out on treatability

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Monitoring

- MDE collected samples from the river
- EPA Region 3 Fort Meade Laboratory and private lab analyzed for styrene and butadiene, other water quality parameters
- No detections were noted in any samples

The Verso paper mill in Luke, Maryland is the site of a synthetic latex product spill. (YouTube)

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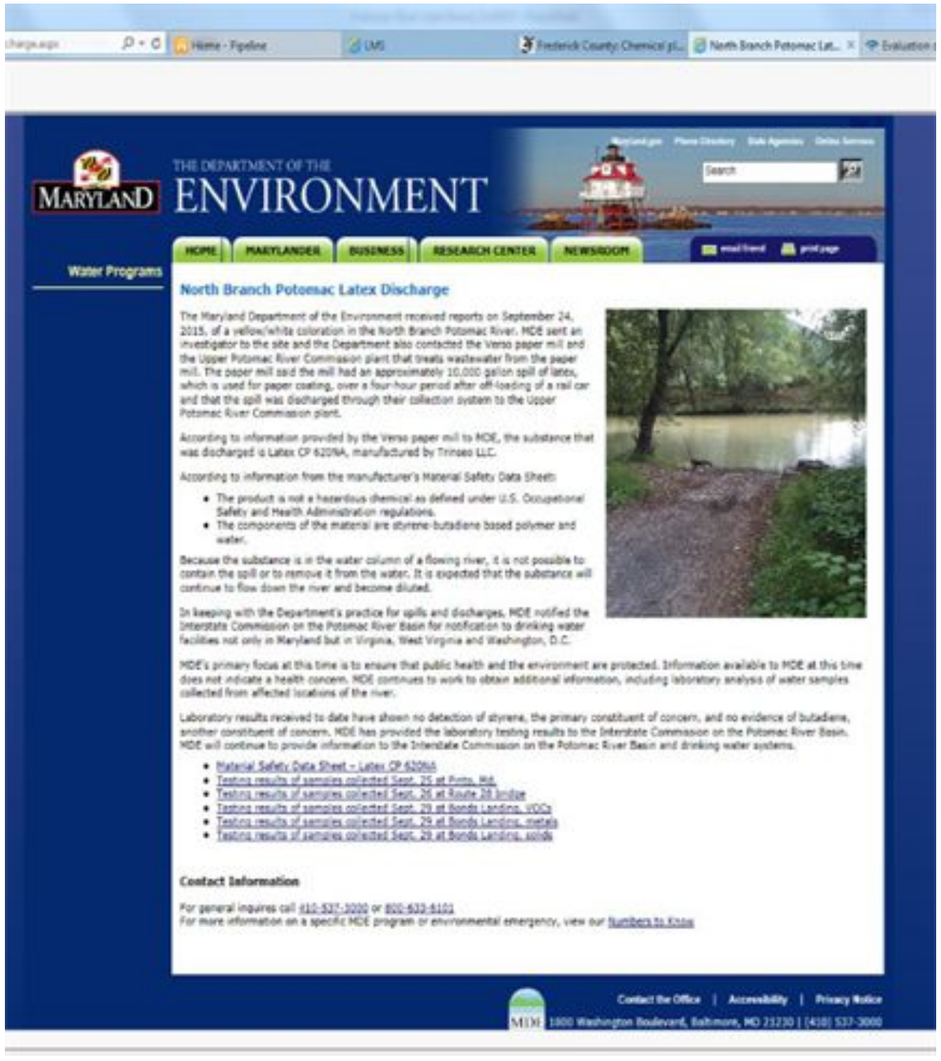
Public Information

- DC Water worked closely with other utilities and COG for messaging
- Developed Talking Points
- DC Water staff awareness email
- Several AP articles released



Event Outcome

- MDE regulator with MDE toxicologist indicated no issues with product
- Conventional treatment expected to remove polymer, in addition to dilution expected from rain
- Monitoring results indicated no styrene or butadiene in spill water

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What's next coming down the River?

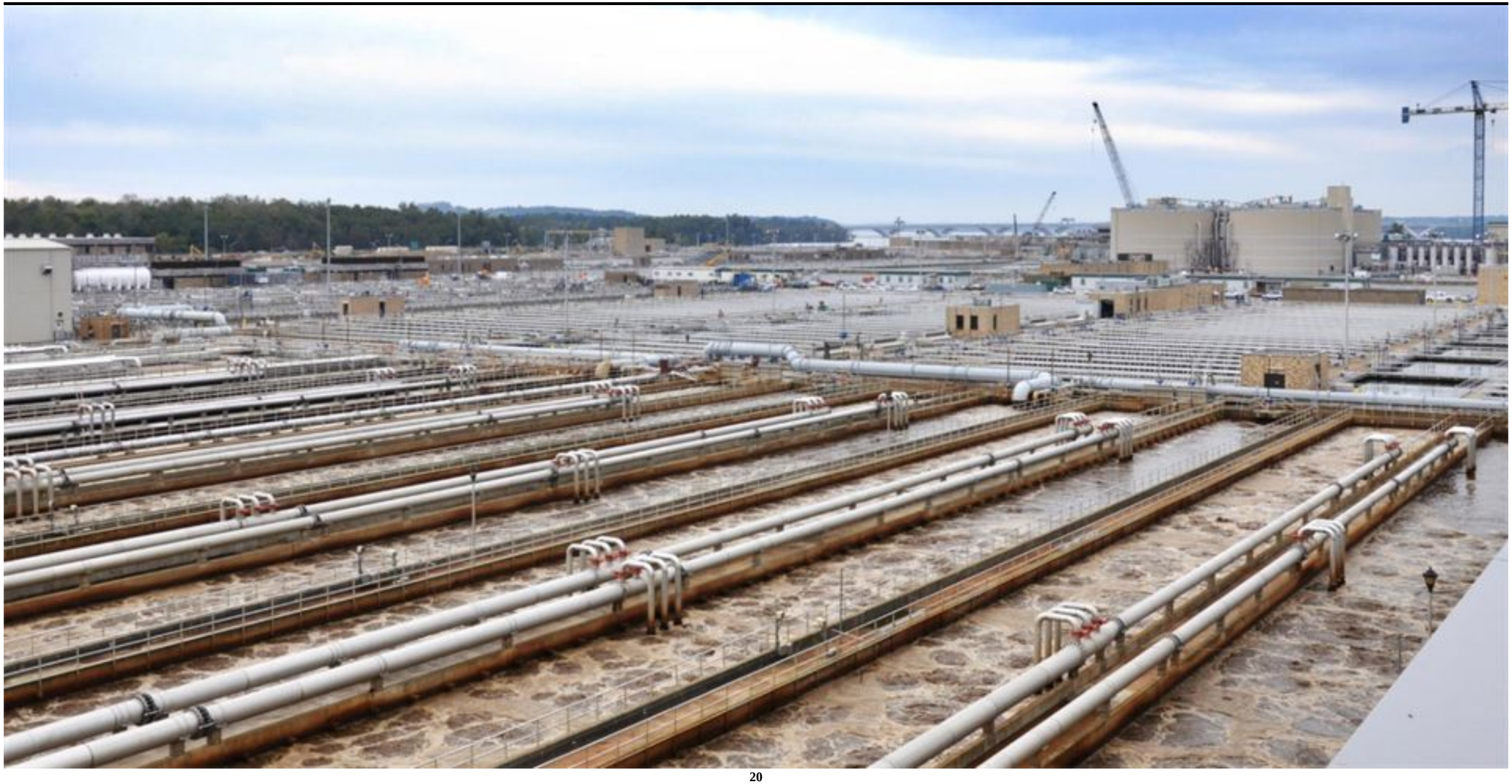
- Use this event to facilitate emergency response exercise coordinated by DC Water/EPA
- Use this event in consequence of failure evaluation
- Recognize importance of updating Source Water Assessment and Data Tool (currently on-going)

BLUE HORIZON 2020 STRATEGIC PLAN

Implementation Progress Report and Proposed Revisions

Presentation to the Water Quality and Water Services Committee

October 15, 2015



Agenda

- Blue Horizon 2020 Overview
- Goals 6 & 7: Implementation Progress
- Goals 6 & 7: Proposed Revisions

DC Water's Strategic Direction

Vision

To be a world-class utility

Values

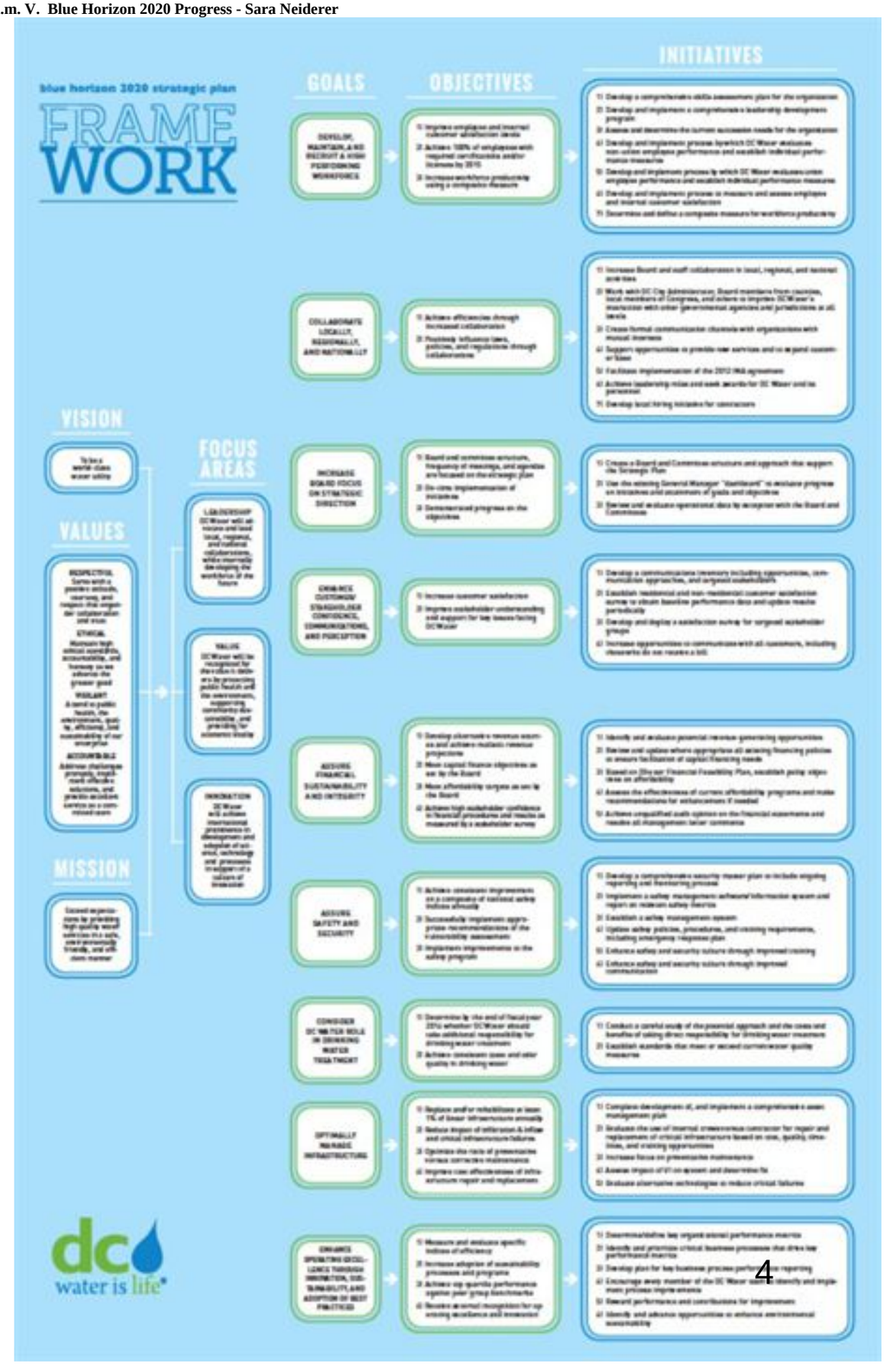
Respect, Ethics, Vigilance and Accountability

Mission

Exceed expectations by providing high quality water services in a safe, environmentally friendly, and efficient manner

3

- 9 Goals
- 27 Objectives
- 44 Initiatives
- 146 Milestones



Blue Horizon 2020 Goals

GOAL		COMMITTEE	GOAL CHAMPION
1	Develop, Maintain and Recruit a High Performing Workforce	Human Resources/Labor Relations	Rosalind Inge
2	Collaborate Locally, Regionally, and Nationally	Governance	John Lisle
3	Increase Board Focus on Strategic Direction	Strategic Planning	Randy Hayman
4	Enhance Customer/Stakeholder Confidence, Communications, and Perception	DC Retail and Sewer Rates	Charlie Kiely
5	Assure Financial Sustainability and Integrity	Finance and Budget	Mark Kim
6	Assure Safety and Security	Water Quality and Water Services	Aklile Tesfaye
7	Consider DC Water Role in Drinking Water Treatment	Water Quality and Water Services	Charlie Kiely
8	Optimally Manage Infrastructure	Environmental Quality and Sewerage Services	Len Benson
9	Enhance Operating Excellence Through Innovation, Sustainability, and Adoption of Best Practices	Audit	Biju George

Implementation Progress

Goal 6

Assure Safety and Security

Goal 7

Consider DC Water Role in Drinking Water Treatment

6

6	Assure Safety and Security	% COMPLETE
6.1	**Achieve consistent improvement on a composite of national safety indices annually**	
6.1.1	Implement a safety management software/information system and report on relevant safety metrics	100
6.1.2	Establish a safety management system	100
6.2	**Successfully implement appropriate recommendations of the vulnerability assessment**	
6.2.1	Develop a comprehensive security master plan to include ongoing reporting and monitoring process	75
6.3	**Implement improvements to the safety program**	
6.3.1	Update safety policies, procedures, and training requirements, including emergency response plan	100
6.3.2	Enhance safety and security culture through improved training	100
6.3.3	Enhance safety and security culture through improved communication	40

7	Consider DC Water Role in Drinking Water Treatment	% COMPLETE
7.1	**Determine by the end of fiscal year 2014 whether DC Water should take responsibility for drinking water treatment**	
7.1.1	Conduct a careful study of the potential approach and the cost and benefits of taking direct responsibility for drinking water treatment	100
7.2	**Achieve consistent taste and odor quality in drinking water**	
7.2.1	Establish standards that meet or exceed current water quality measures	100

Proposed Revisions

Goal 6

Assure Safety and Security

Goal 7

Consider DC Water Role in Drinking Water Treatment

Goal 6

Adopted in 2013

- **Goal**
  - Assure Safety and Security
- **Objectives**
  - Achieve consistent improvement on a composite of national safety indices annually
  - Successfully implement appropriate recommendations of the vulnerability assessment
  - Implement improvements to the safety program

Goal 7

Adopted in 2013

- **Goal**
  - Consider DC Water Role in Drinking Water Treatment
- **Objectives**
  - Determine by the end of fiscal year 2014 whether DC Water should take responsibility for drinking water treatment
  - Achieve consistent taste and odor quality in drinking water

Proposed Revisions

- **Goal**
  - Maximize water quality treatment, compliance and efficiency
- **Objectives**
  - Optimize DC Water's Role in drinking water treatment
  - Achieve distribution system optimization to enhance water quality
  - Ensure compliance with sewer and water systems permits and regulations
  - Advance innovation in drinking water and wastewater treatment processes

Questions?