Response to IRC Recommendations

City Council Work Session
August 22, 2023

THE CITY OF ASHEVILLE



Presentation Overview

- Key Takeaways
- IRC Report Overview
- Project Management and Approach
- Review of key sub-committee recommendations and staff responses
  - Water System/Operations
  - Emergency Response
  - Communications
- Next steps

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Key Takeaways

- The City appreciates the work of the Independent Review Committee (IRC).
- An interdepartmental team spearheaded by staff in the Asheville Fire Department was formed to develop responses and action steps to each report recommendation.
- Many of the action items are already underway to address the recommendations identified in the IRC Report, as well as implementing actions identified in the Water Resources Department Water Outage After Action Report.
- The update of the Emergency Operations Plan (EOP), which is currently underway, is the framework for both the City organization and community becoming more resilient in how we prepare for, respond to, and recover from a disaster.
- Based on the recommendations of the IRC, staff will develop and prioritize resource needs and capital projects through the annual budget process.

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IRC Report Overview

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IRC Report Overview

- Following a prolonged water outage, City Council appointed an Independent Review Committee (IRC) on January 24, 2023 to review and provide a comprehensive account of the water outage, an assessment of the response, and needed infrastructure and procedural enhancements.
- The first IRC meeting was February 20, 2023 and the committee divided into three distinct subcommittees: Water System/Operations; Communications; Emergency Response.
- The final IRC report and presentation were presented to City Council on June 13, 2023.

Committee Members and Sub-Committees

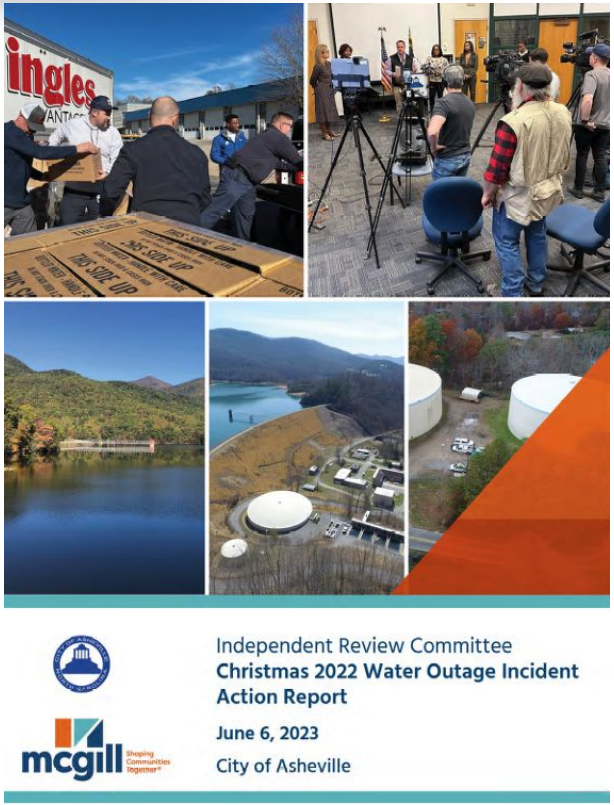
Name	Role
John McLaughlin	Water Subject Matter Expert
Ted Tyree	Water Subject Matter Expert
Michael Holcombe	Water Subject Matter Expert
Mike McGill	Communication Subject Matter Expert
Rob Brisley	Communication Subject Matter Expert
Dennis Fagnant	Emergency Management Subject Matter Expert
Michele Ashley	Residential Water Customer
Kim "Dirt" Murphy	Residential Water Customer
Carolyn Roy	Business Water Customer

Sub - Committees

1. Water System
2. Communication
3. Emergency Response

IRC Report Overview

- The IRC report included an overview of the water outage incident, an overview of the water production and distribution system, a hydraulic modeling report, and a total of 37 recommendations:
  - 10 - Water System/Operations
  - 11 - Communications
  - 16 - Emergency Response
- City staff has also initiated follow-up actions not included in the IRC final report recommendations.



Questions

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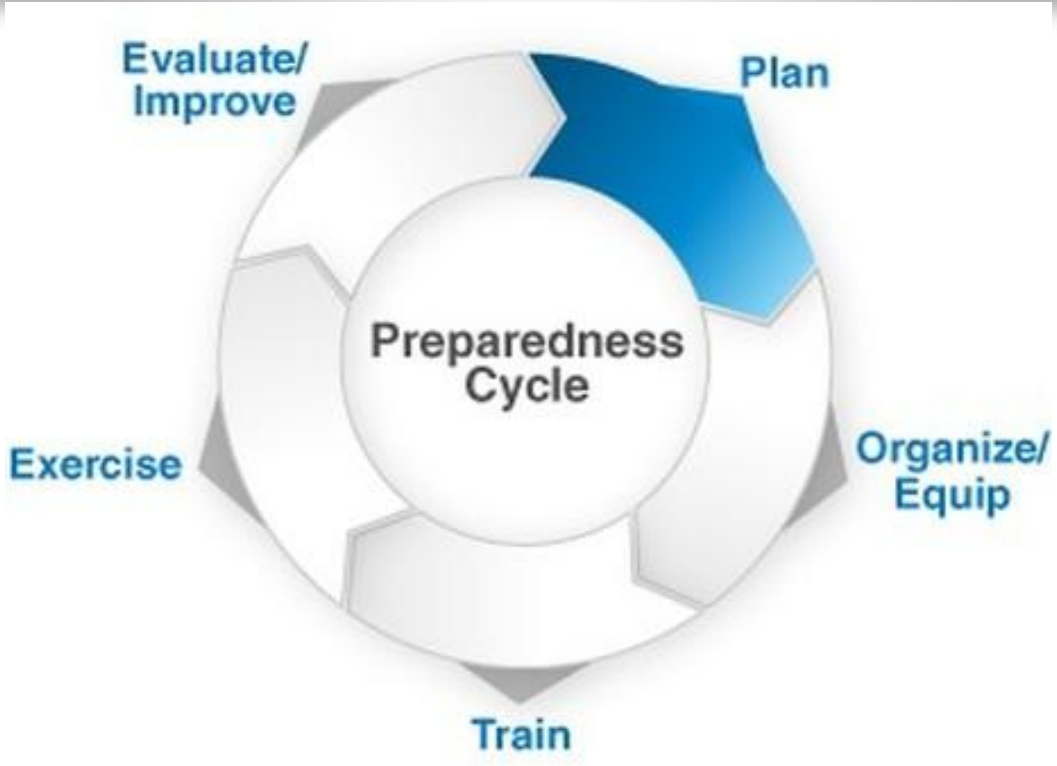
Project Management and Approach

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Project Management and Approach

- IRC Report implementation added to City Organizational Work Plan
  - Project manager and interdepartmental team identified
- Project tasks identified:
  - Thoroughly review IRC report and recommendations
  - Conduct research and gather relevant information
  - Create a matrix that includes City response and status update for each recommendation
  - Develop and prioritize resource and budget needs
  - Provide regular reporting to City Council and the community
- Citywide approach using FEMA POETEE analysis

Approach


Evaluate/
Improve
Plan
Preparedness
Cycle
Exercise
Organize/
Equip
Train

Questions

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Water System/Operations Recommendations

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Key Water System Recommendations

- The Water System/Operations Subcommittee developed a total of 10 recommendations.
- Key recommendations include:
  - Begin regular large diameter valve assessment
  - Expedite implementation of the AMI project
  - Reevaluate the role of the Water Resources Department Engineering Division
  - Evaluate the East Asheville Booster Pump Station

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Large Diameter Valve Assessment

- A closed transmission valve contributed to the recovery of the system during the water outage event.
- The water system includes a total of +/- 20,000 valves. Approximately 500 of these valves are 16” or larger.
- Valves are commonly used to isolate sections of the water system, direct the flow of water, and control pressure.



- Valves can often be difficult to locate for a variety of reasons.
- Five new positions approved in FY24 Budget to establish a dedicated valve crew.

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Large Diameter Valve Assessment



- Water Resources has begun the process to contract for services to begin the valve assessment while new staff is hired and trained.
- The assessment will access and record valves 16” and larger to determine condition, position, GPS coordinates, and operational observations.

- Timeline - August 2023 contractor estimates; Fall 2023 onboard new staff for dedicated valve crew.

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AMI Implementation

- City Council approved $28m to move forward with Advanced Metering Infrastructure (AMI) technology.
- Implementation of the AMI project began in May, 2023.
- The project replaces approximately 63,000 water meters.



- Newly installed AMI meter technology provides customers and Water Resources with information related to customer usage (customer side leaks, usage trends, etc.).

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AMI Implementation

- The AMI platform is also expandable to accommodate District or Zone Meters, and pressure sensors.
- AMI implementation is an Organizational Work Plan Project and aligns with the *Improve & Expand Core Services* Council Strategic Priority.
- Water Resources and the project contractors are fully committed to prioritizing and implementing AMI technology as quickly as possible.
- Timeline - project is five percent complete and is projected to be substantially complete at the end 2025.

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Water Resources Engineering Division

- The Engineering Services Manager is a member of the Water Resources Department (WRD) Leadership Team.
- The WRD Engineering Division currently has eight employees, three of whom are licensed Professional Engineers (PE).
- One of the these PEs will begin to take a more active role in Water Production projects/activities. Another PE position will be requested as part of the FY25 Budget.
- WRD is researching best practices across the Water industry to improve the department's knowledge retention strategies. The Engineering Division will be involved with this process.
- Timeline - Fall 2023 existing PE more active in Water Production; FY25 budget request for Water Production PE.

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East Asheville Booster Pump Station (EABPS)

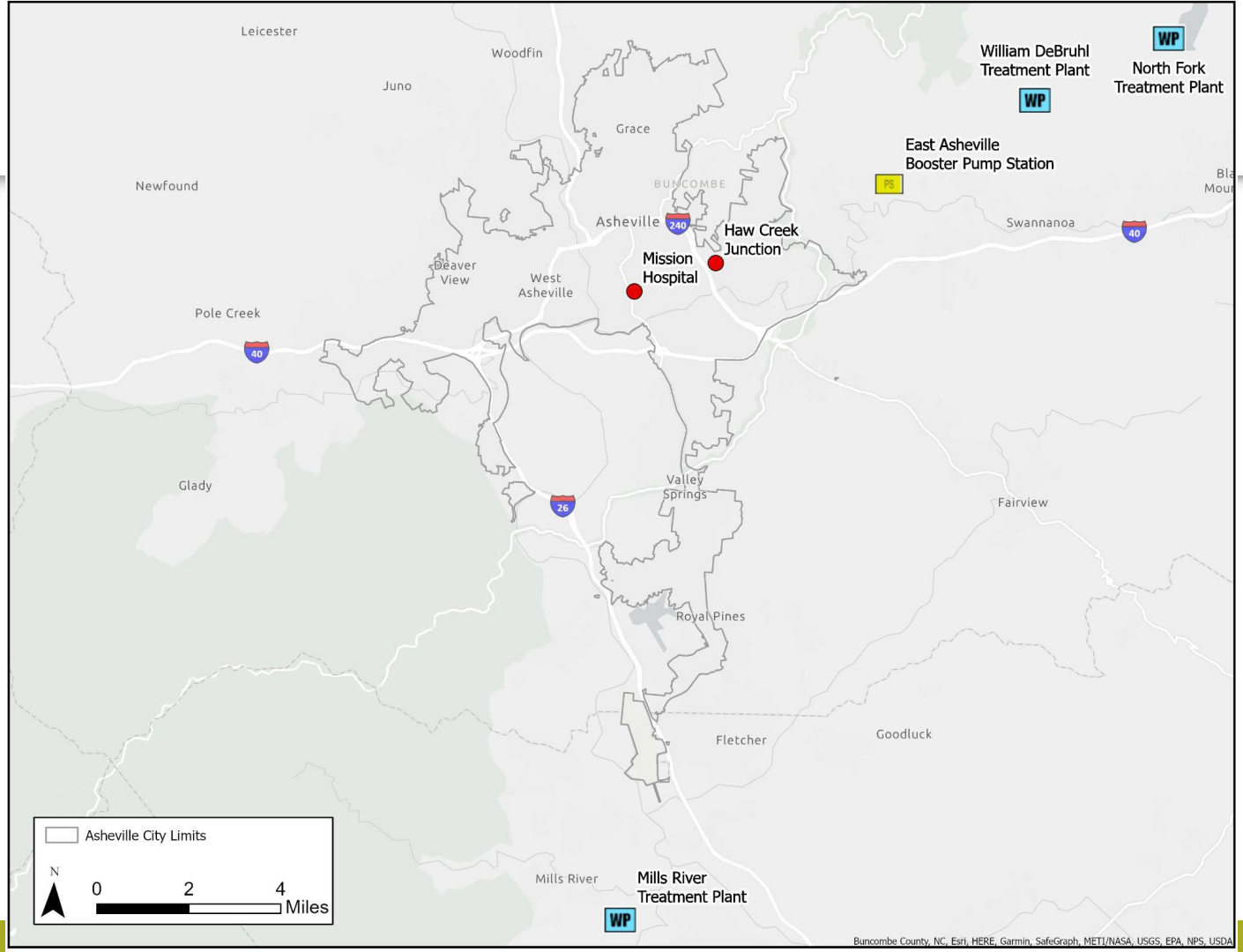
- The EABPS was <u>not</u> available during the water outage
- The EABPS was taken offline in 2010 due to a failure in the Programmable Logic Controllers (PLC) that control the Variable Frequency Drives (VFD) that control pump operations.







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Leicester
Woodfin
Juno
Grace
Newfound
BUNCOMBE
Asheville
240
Haw Creek
Junction
Mission
Hospital
Deaver
View
West
Asheville
Pole Creek
40
Glady
Valley
Springs
26
Fairview
Royal Pines
Fletcher
Goodluck
Mills River
Mills River
Treatment Plant
WP
William DeBruhl
Treatment Plant
WP
North Fork
Treatment Plant
East Asheville
Booster Pump Station
PS
Swannanoa
40
Asheville City Limits
N
0
2
4
Miles
Buncombe County, NC, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA

East Asheville Booster Pump Station (EABPS)

- The City supports the IRC recommendation for a Preliminary Engineering Report (PER) of the EABPS by a consulting engineer.
- WRD will evaluate available budget and develop a Request For Qualifications for consulting engineers. It may require up to 18-months to complete the PER.
- The PER evaluation will include an assessment of the facility (location, operational structure and equipment sizing), and potential impacts or benefits of returning it to service.
- Timeline - Select firm and award contract first quarter 2024; up to 18 months; following results provide an update to Council.

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Additional Water Resources Actions

- Conducted a root cause analysis of the water outage event and implemented actions for improvement.
- Continued evaluation and improvements to water treatment plant infrastructure (redundancies, additional insulation, enclosing components, etc.).
- EPA required Emergency Response Plan (ERP) updated.
  - Supervisory and support level staff have all completed FEMA's Incident Command System training for levels 100 & 200.
  - The WRD maintains an annual training calendar that provides for table top exercises.
  - The department's ERP aligns with the city's Emergency Operations Plan (EOP).
- Water Resources reviewed and updated its equipment lists supplied through contracted vendors.
  - Verify any necessary equipment is listed, including specifications.
  - Determine which vendors have specified available equipment.

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Questions

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Emergency Response Recommendations

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Key Emergency Response Recommendations

- The Emergency Response Subcommittee developed a total of 16 recommendations.
- Key recommendations include:
  - Updating the Emergency Operations Plan
  - Integrated Preparedness Workshop/Plan
  - Development of a Complexity Analysis

Emergency Plans History

- As a part of the Fiscal Year 2023 Budget process City Council prioritized and budgeted for the creation of new citywide Emergency Operations and Continuity of Operations Plans.
- These plans were funded to support the City Council goal to build neighborhood resilience.
- The previous version of these plans were outdated as the last version was created in 2008.

Plans Overview

Emergency Operations Plan (EOP)

- Provides a framework for how the City of Asheville will prepare for, respond to, and recover from a disaster

Continuity of Operations Plan (COOP Plan)

- Identifies and plans for how the City of Asheville will continue providing essential functions during an emergency
- Enables the successful implementation of an EOP

Community Engagement

- We will leverage existing groups, relationships and the community to build the Emergency Preparedness Program
- We will use an equity lens to ensure all populations are included in planning
- We will also promote personal preparedness and resilience

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Project Recap (January – July)

- Project Kickoff
  - ✔ January 24
- Training
  - ✔ EOP Online Training
  - ✔ COOP Online Training
- Multiple 1:1s
  - ✔ All Departments
- Planning Workshops
  - ✔ February 21, March 15, April 19, June 21
- COOP & EOP Tabletop Exercise
  - ✔ Conducted May 24th
  - ✔ After-Action Report
- Community Engagement
  - ✔ Survey
  - ✔ Website
  - ✔ Meetings
- Stakeholder Engagement
  - Buncombe County, Mission Health, Biltmore, Duke Energy, MSD, Housing Authority, HIAC, Downtown Commission, West Asheville Business Assoc., others.
- Draft Emergency Operations Plan
  - ✔ 7 Hazard Annexes
  - ✔ 20 Departmental Annexes
- Draft Continuity of Operations Plan
  - ✔ 20 Departmental Annexes

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Integrated Preparedness Workshop/Plan

- Every City Department will participate in a workshop to create a citywide Integrated Preparedness Plan (IPP).
- The IPP will document all of the City of Asheville's preparedness priorities, activities and expectations relating to training.
  - Training and exercise calendar.
  - Elected officials guide and trainings.
  - Emergency Operations Center training
  - Position specific training

Complexity Analysis

- Incident Complexity is the combination of involved factors that affect the probability of control of an incident
- Staff has developed a tool that is specific to the City of Asheville and Western North Carolina
- This assessment of incident complexity will:
  - Enhance decision making process
  - Evaluate impact to the Whole Community
  - Determine appropriate management structure
  - Provide necessary and appropriate structure for response coordination

Incident Complexity Analysis

Level	Level of Threat to Life and Property	Time to meet incident objectives	Impacts to community	Geographic Area Involved	Availability of Resources	CBRNE Involvement/ Terrorism Nexus	Critical Infrastructure Impacts & Risk	Coordination needed with Senior Policy Group	Weather or other environmental impact	Likelihood of cascading events
5	None	1-2 hours	Few or no evacuations	Localized	Local resources suffice	None	None	Minimal or none	Common	None
	No	Yes	No	No	No	No	No	No	No	No
4	Low	Several hours-24 hours	Few or no evacuations	One or more		CBRNE involved but	Uncomplicated; service returned within 24 hours	Minimal	Common to somewhat uncommon	Low to none
	Yes	No	No				No	No	No	No
3	Moderate	At least 24 hours	Possible limited evacuations may require shelter				Adverse; service returned within 48 hours	Some coordination; Senior Policy Group activated	Less common	Medium
	No	No	Yes				No	No	No	No
2	High	Several Days	Possible evacuations may require shelter			concerns.	Destructive; requires coordination and support service returned within 7 days	Moderate coordination; Senior Policy Group activated	Uncommon or Extreme	High
	No	No	No	No	Yes	No	No	Yes	No	No
1	High	Days, Weeks, or Month	Evacuations likely shelter and long-term housing needs	Entire City and outside jurisdiction involved	Significant additional resources required	Significant public or environmental health concerns.	Highly destructive; requires long-term planning and extensive coordination; service outage lasting a week or longer	High coordination; Senior Policy Group activated	Uncommon or Extreme	High
	No	No	No	No	No	No	No	Yes	No	Yes

Scale*:

- 0-10 = Level 5
- 11-20 = Level 4
- 21-30 = Level 3
- 31-40 = Level 2
- 41-50 = Level 1

*Remains in development

EOC Activation Levels

Level 5: Normal Operations	• No change to operational posture.
Level 4: Monitoring	• The Planning Section Chief is activated to monitor, notify, and coordinate as needed. • An EOC Manager will be identified and will coordinate with the Planning Section Chief. • Initial coordination calls will be conducted on an as needed basis with key city departments. • EOC staffing plan for potential activation developed.
Level 3: Command and General Staff	• A Lead PIO will be established to oversee the joint information process. • The EOC Manager will establish support for the incident/event and begin coordinating EOC activities. • Implement the City's EOP and supporting Departments. • Implement response actions in accordance with operational priorities.
Level 2: Command and General Staff plus Lead Departments	• Command and General Staff are activated. • Select Departments will staff the EOC as needed. • A field operations branch has been established to lead unique/incident dependent operations. • The Senior Policy Group is activated. • The Joint Information Center (JIC) is activated and operational.
Level 1: Full Activation	• Command and General Staff are activated. • All departments will send a representative to staff the EOC. • The City will assess the need for an Incident Management Team to support response and recovery. • The Senior Policy Group is activated. • The Joint Information Center is activated and operational.

Questions

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Communications Recommendations

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Key Communication Recommendations

- The Communications Subcommittee developed a total of 11 recommendations.
- Key recommendations include:
  - Hire a Public Information Officer (PIO) for the Water Resources Department
  - Emergency Management Protocol for Communication
  - Training
  - Bolster Media Relations

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Key Communication Recommendations

Hire a Public Information Officer (PIO) for the Water Resources

- Water Resources Department is in the process of hiring a PIO.
- Position will be integrated into the cross-departmental CAPE Team which will ensure coverage during a prolonged emergency.
- Position will have the full backing of CAPE staff to manage all channels of communication during a crisis. Team cohesion is critical.
- Water Resources Director and CAPE Director have agreed the new PIO's work plan will prioritize 1) communicating lessons learned from the water outage and 2) proactive winter weather outreach, including tips to prepare for winter weather and timely manner.
- **Timeline - November 2023**

Key Communication Recommendations

Emergency Management Protocol for Communication

- Communication roles and protocol are a critical component of the CoA Emergency Management Plan and will be the standard used to communicate in an effective and timely manner.

- **Timeline - plan complete and in action in Fall 2023**

Training

- ICS training for CAPE, Water Resources staff, and elected officials will be coordinated and tracked through the Integrated Preparedness Plan (IPP).

- **Timeline - CAPE staff members currently have ICS training certificates at various levels. All recommended trainings identified in the IPP will be complete in Fall 2023.**

Key Communication Recommendations

Bolster Media Relations

- Monthly “Coffee with CAPE”
- **Timeline - first event held Aug. 2, 2023**



Date: August 2, 2023
City of Asheville: Communication & Public Engagement Department
Contact: Kim Miller/ Communications Specialist: kmiller2@ashevillenc.gov

MEDIA INVITE: City of Asheville Communications team invites members of the media to the first monthly Coffee with CAPE

The City of Asheville Communications and Public Engagement team invites members of the media to take advantage of a monthly opportunity to meet with Kim Miller - Communications Specialist and media liaison.

Each month, Kim will set aside some time to chat with local media members to talk about items and projects coming up on the City of Asheville calendar. It’s also a great time to let us know what you’re teeing up or your specific areas of interest.

Questions

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Next Steps

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Next Steps

- Continued implementation and evaluation of the IRC Report recommendations.
- Implement and train on the soon to be completed updated Emergency Operations Plan (EOP)
- Develop and prioritize resource needs and capital projects through the annual budget process.
- Establish regular reporting to City Council and the community.

Key Takeaways

- The City appreciates the work of the Independent Review Committee (IRC).
- An interdepartmental team spearheaded by staff in the Asheville Fire Department was formed to develop responses and action steps to each report recommendation.
- Many of the action items are already underway to address the recommendations identified in the IRC Report, as well as implementing actions identified in the Water Resources Department Water Outage After Action Report.
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