



Deliveries of Water in Metropolitan's System in an Emergency

Engineering and Operations Committee

Item 6c

March 11, 2019

Concept

Providing options after a significant emergency

- Emergency deliveries of **agency water** in Metropolitan's system should be considered in a **proactive and measured** way, rather than ad-hoc after a significant natural disaster or emergency



Water System Reliability

Addressing seismic vulnerabilities and system resiliency

● Infrastructure Reliability

- Rehabilitation of prestressed concrete cylinder pipe
- Seismic upgrades of treatment plants and conveyance systems



● Emergency Response

- In-house manufacturing and construction capability
- Emergency communications
- Mutual assistance agreements with partners



Maintaining Water Deliveries during Emergencies – Current Options

- Utilize flexibility in Metropolitan's system to deliver water from multiple supply sources, feeders and/or reservoirs
- Utilize interconnections or operating agreements with other agencies



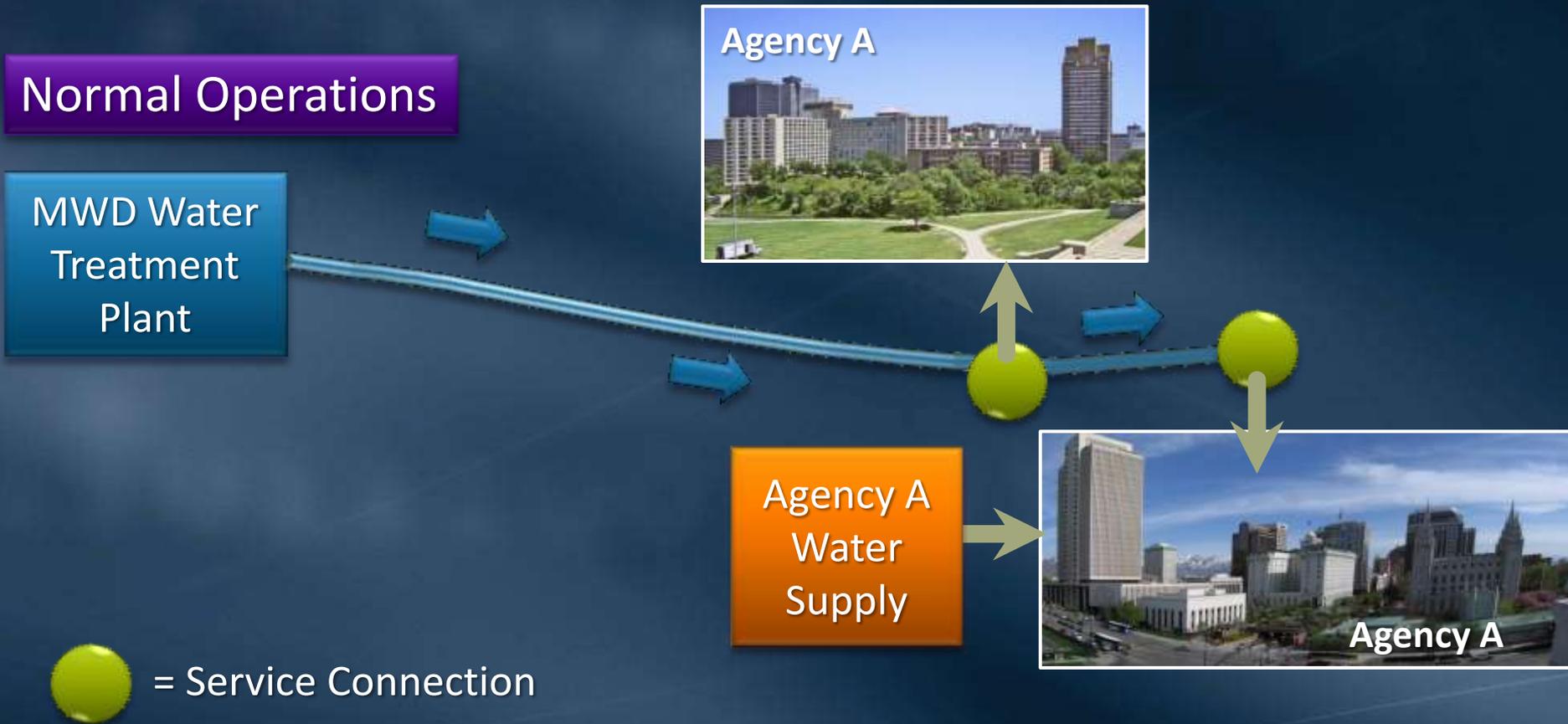
Maintaining Water Deliveries during Emergencies – *Potential Future Option*

- Agencies may benefit from a proactive approach for utilizing Metropolitan's system during emergencies
- Approach would only be used if there is no other way to deliver water to a portion of the agency service area
- Approach would not substitute for local agencies to take steps to improve emergency preparedness

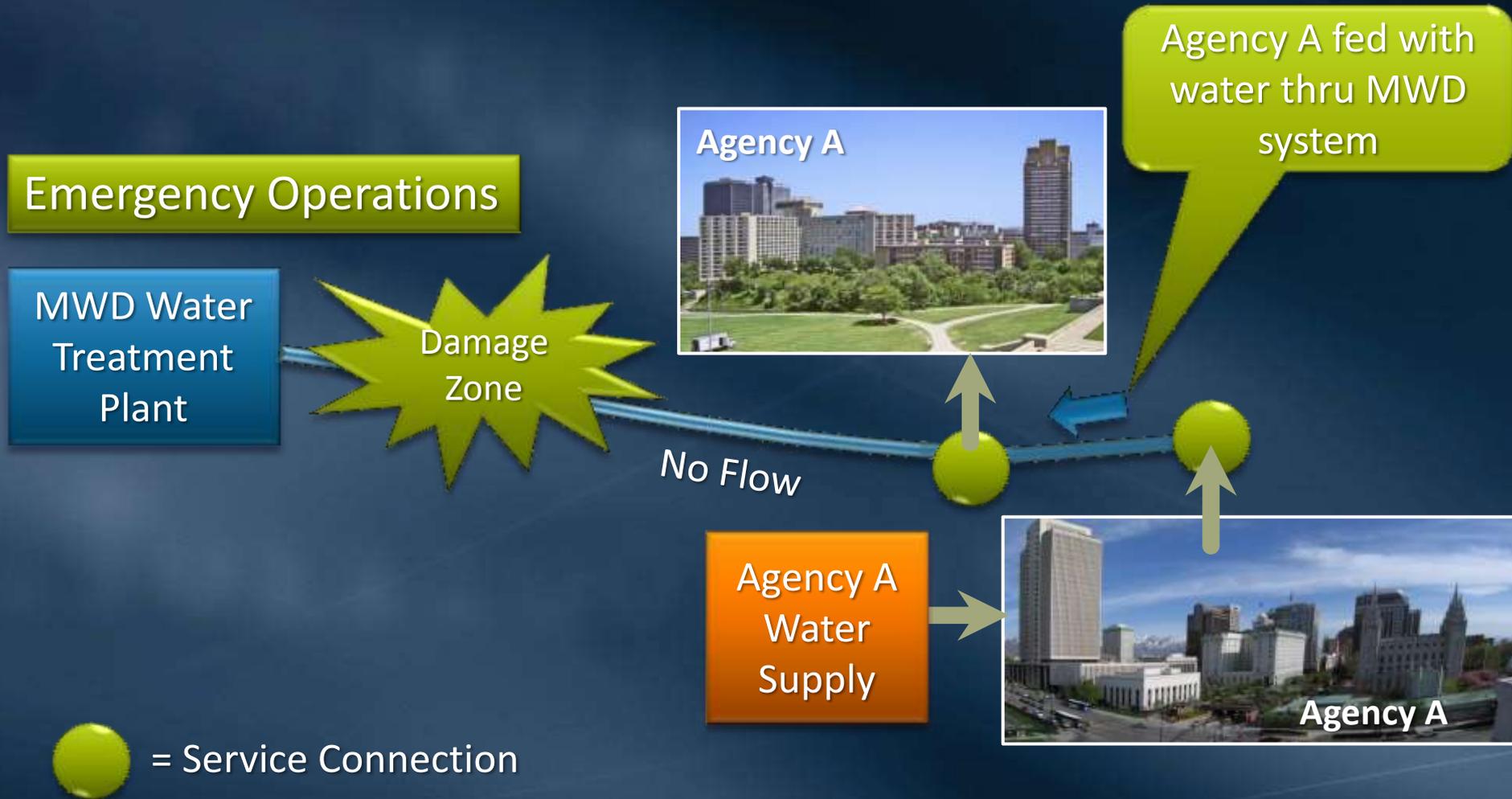
Emergency Scenario

- An area within Metropolitan's system is out of service for a prolonged period after an earthquake
- There are no other delivery options for part of the impacted area
- Metropolitan's system could be used to supply a portion of the local system that has no other delivery options, subject to specific conditions, until repairs are complete

Emergency Example: One Agency

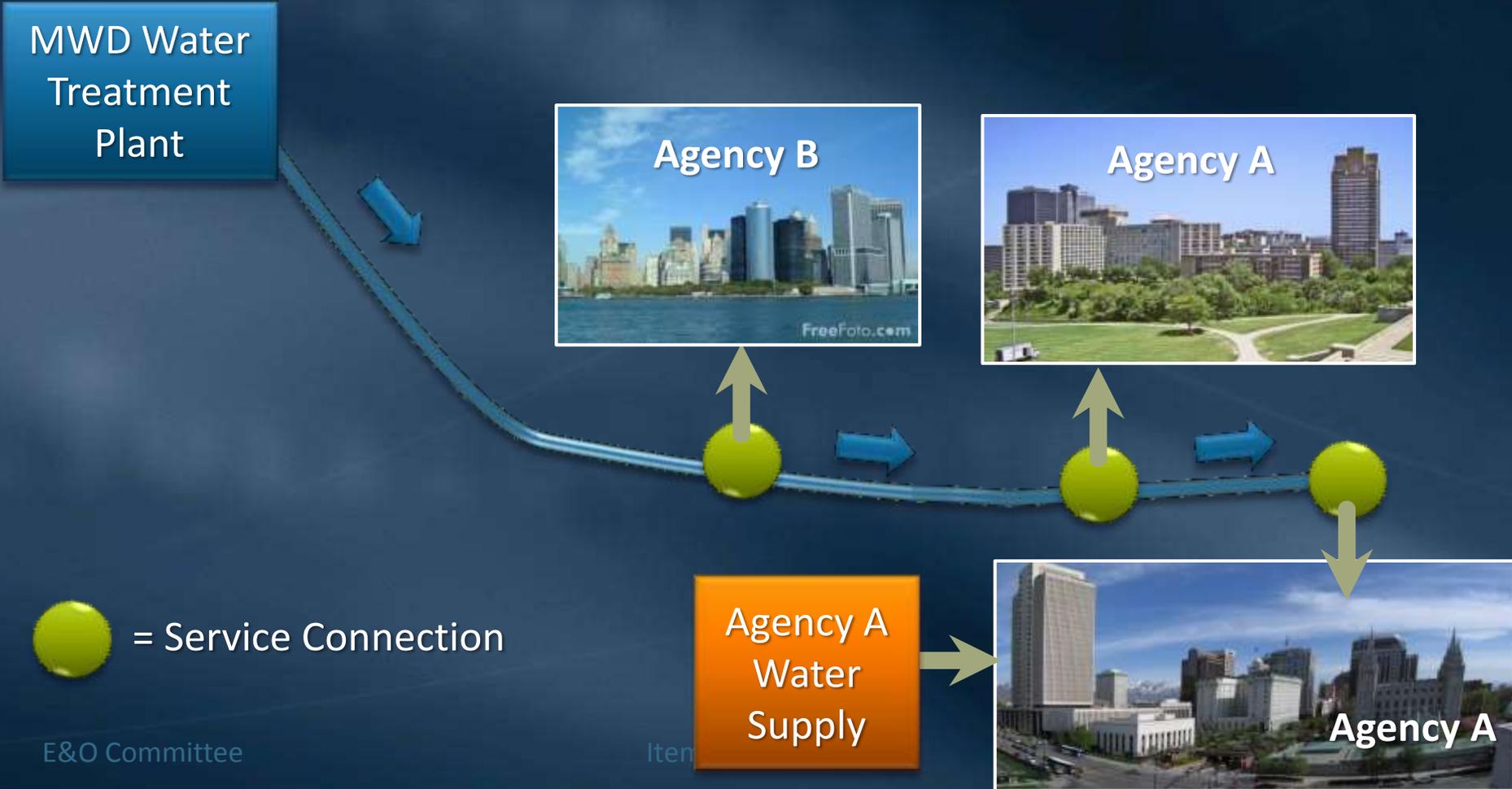


Emergency Example: One Agency



Emergency Example: Two Agencies

Normal Operations



Emergency Example: Two Agencies

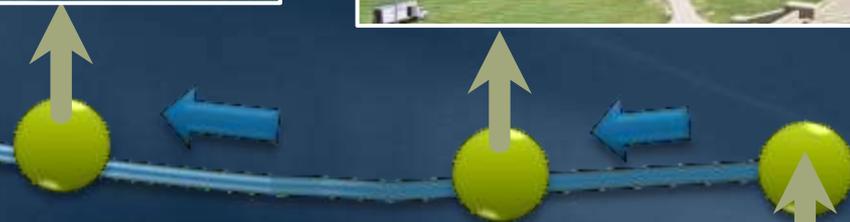
Emergency Operations

MWD Water Treatment Plant



No Flow

Agencies A and B fed with Agency A's water thru MWD system



Agency A Water Supply



 = Service Connection

Proposed Concept: Conditions for Emergency Water Deliveries

- Provide member agencies with the option of using Metropolitan's system for agency water deliveries in an emergency, under specific conditions
- Board and member agency feedback is essential for policy development
- "Emergency" definition
 - Metropolitan is physically unable to make deliveries to a member agency service connection for a specified period after an emergency, as determined by Metropolitan's General Manager

Proposed Concept: Conditions for Emergency Water Deliveries (cont.)

- Use of Metropolitan's system for emergency deliveries
- Ability to serve
- Water quality standards and liability
- Indemnification



Proposed Concept: Conditions for Emergency Water Deliveries *(cont.)*

- System integrity
- Compensation
- Operational requirements
- Term for emergency deliveries



Summary

- Emergency water deliveries in Metropolitan's system should be considered in a proactive and measured way before a major emergency
- Emergency deliveries must not displace other agency efforts to prepare for emergencies
- Amendments to Metropolitan's Administrative Code would be required
- Discussions with the member agency managers on this topic took place in January and February 2019

Next Steps

- Input from the Board and member agencies is needed to develop a robust and mutually beneficial policy
- More detailed discussions with the member agencies will continue in March, and beyond if needed
- A board letter will be published that considers the input received

