

## SYSTEM FLUSHING AND FLOW TESTING TEAM – WATER DISTRIBUTION

<b>DESCRIPTION</b>	The System Flushing and Flow Testing Team - Water Distribution conducts a flushing cleanout of water distribution pipes, tests the water supply throughout the distribution network, and conducts basic water quality field testing
<b>RESOURCE CATEGORY</b>	Public Works
<b>RESOURCE KIND</b>	Team
<b>OVERALL FUNCTION</b>	The System Flushing and Flow Testing Team - Water Distribution: <ol style="list-style-type: none"> <li>1. Cleans water distribution pipes by flushing water through hydrants and blow-offs</li> <li>2. Tests the water supply throughout the distribution system</li> <li>3. Conducts basic water quality field testing</li> </ol>
<b>COMPOSITION AND ORDERING SPECIFICATIONS</b>	<ol style="list-style-type: none"> <li>1. Discuss logistics for deploying this team, such as working conditions, safety, length of deployment, security, lodging, transportation, and meals, prior to deployment</li> <li>2. Requestor specifies any mission-specific supporting resources and requirements necessary for deployment</li> <li>3. Requestor provides a representative familiar with the affected distribution system to accompany this team</li> <li>4. Requestor provides external support, such as vehicle fuel and power for phones, computers, and other rechargeable devices</li> <li>5. Requestor specifies any necessary safety qualifications and equipment</li> </ol>

Each type of resource builds on the qualifications of the type below it. For example, Type 1 qualifications include the qualifications in Type 2, plus an increase in capability. Type 1 is the highest qualification level.

COMPONENT	SINGLE TYPE	NOTES
<b>MINIMUM PERSONNEL PER TEAM</b>	2	Not Specified
<b>MANAGEMENT AND OVERSIGHT PERSONNEL PER TEAM</b>	1 - National Incident Management System (NIMS) Type 1 Water Operations Team Leader	Not Specified
<b>SUPPORT PERSONNEL PER TEAM</b>	1 - NIMS Utility Worker Specialist - Water Sector Infrastructure	The NIMS Utility Worker Specialist - Water Sector Infrastructure can be a welder, electrician, or mechanic. Requestor specifies worker specialty based on mission needs.
<b>SPECIALIZED EQUIPMENT PER TEAM</b>	<ol style="list-style-type: none"> <li>1. Diffuser</li> <li>2. Dechlorinator</li> <li>3. Flow testing gauges</li> <li>4. Sampling containers</li> <li>5. Field test kits, colorimeter/turbidimeter</li> <li>6. Reagents</li> <li>7. Transport cooler for field samples</li> </ol>	Requestor provides ice for sample transport as necessary.

COMPONENT	SINGLE TYPE	NOTES
<b>PERSONAL PROTECTIVE EQUIPMENT (PPE) PER TEAM MEMBER</b>	1. Hard hat 2. Reflective vest 3. Gloves 4. Protective clothing 5. Protective footwear 6. Flashlight	PPE is mission-specific and may vary by work environment; it includes protective footwear, protective clothing for skin exposure, eye and ear protection, respirators, gloves, and masks.
<b>ELECTRONICS EQUIPMENT PER TEAM</b>	1. Laptop computer 2. GPS 3. Appropriate software	1. Appropriate software includes word processing, spreadsheet, and database management programs. 2. Consider other equipment and supplies as necessary based on ordering specifications.
<b>COMMUNICATIONS EQUIPMENT PER TEAM</b>	1. Cell phone 2. Portable radio	1. Consider alternate forms of communication, such as satellite phones, based on the mission assignment and team needs. 2. Requestor provides radio specifications. 3. Provider supplies necessary chargers and backup batteries for battery-powered portable equipment.
<b>TRANSPORTATION EQUIPMENT PER TEAM</b>	1 - Truck/SUV	Vehicle must be capable of traversing rough terrain, flood conditions, and adverse environmental conditions, and must carry equipment necessary for maintaining vehicle operation.



## NOTES

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1. Nationally typed resources represent the minimum criteria for the associated component and capability.
2. Requestor and provider assume sampling under this team to be nonhazardous.
3. If utility requests additional personnel to support operations, use the NIMS Utility Worker Specialist – Water Sector Infrastructure.

## REFERENCES

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1. FEMA, NIMS 509: Utility Worker Specialist – Water Sector Infrastructure
2. FEMA, NIMS 509: Water Operations Team Leader
3. FEMA, National Incident Management System (NIMS), October 2017
4. FEMA, National Response Framework, June 2016