WATER MAIN LEAK LOCATING TEAM – WATER DISTRIBUTION

DESCRIPTION	The Water Main Leak Locating Team - Water Distribution locates and documents water main leaks needing repair
RESOURCE CATEGORY	Public Works
RESOURCE KIND	Team
OVERALL FUNCTION	The Water Main Leak Locating Team - Water Distribution locates the locations of water main leaks and documents these locations for repair crews
COMPOSITION AND ORDERING SPECIFICATIONS	1. Discuss logistics for deploying this team, such as working conditions, length of deployment, security, lodging, transportation and meals, prior to deployment 2. Requestor provides water system maps and other resources to help this team locate leaks; if possible, requestor provides a representative familiar with the affected location to accompany this team 3. Requestor provides details on the water main system, such as pipe materials, geologic conditions and surface conditions 4. Requestor provides external support, such as vehicle fuel and power for phones, computers and other rechargeable devices 5. Requestor specifies any necessary safety qualifications and equipment, such as confined-space entry capabilities

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
MINIMUM PERSONNEL PER TEAM	2	Not Specified
MANAGEMENT AND OVERSIGHT PERSONNEL PER TEAM	1 - National Incident Management System (NIMS) Type 1 Water Operations Team Leader	Not Specified
SUPPORT PERSONNEL PER TEAM	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
SPECIALIZED EQUIPMENT PER TEAM	1. Infrastructure-locating equipment 2. System maps 3. Marking paint 4. Expendable supplies 5. Hand tools as necessary for the task and location 6. Traffic management cones or other traffic control devices	1. Infrastructure-locating equipment may include basic acoustic leak-locating, geophone leak-locating, electronic noise correlation and infrared equipment 2. Hand tools may include tape measures, screwdrivers, bolt cutters or other cutting tools, assorted wrenches, shovels, crowbars or lift tools, chainsaws and trowels
PERSONAL PROTECTIVE EQUIPMENT (PPE) PER TEAM MEMBER	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

COMPONENT	SINGLE TYPE	NOTES
ELECTRONICS EQUIPMENT PER TEAM	1. Laptop computer 2. Appropriate software 3. Global positioning system (GPS)	1. Appropriate software includes word processing, spreadsheet, Geographic Information Systems (GIS) and database management programs appropriate to the mission 2. Consider other equipment and supplies as necessary based on ordering specifications
COMMUNICATIONS EQUIPMENT PER TEAM	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
TRANSPORTATION EQUIPMENT PER TEAM	1 - Truck or sport utility vehicle (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

Nationally typed resources represent the minimum criteria for the associated component and capability.

REFERENCES

1. FEMA, NIMS 508: Repair Team – Water Distribution System
2. FEMA, NIMS 508: Repair Team Sewer Mains – Wastewater
3. FEMA, NIMS 509: Utility Worker Specialist – Water Sector Infrastructure
4. FEMA, NIMS 509: Water Operations Team Leader
5. FEMA, NIMS, October 2017
6. FEMA, National Response Framework, October 2019