FEMA

National Incident Management System NIMS

Typed Resource Definitions Public Works Teams

Federal Emergency Management Agency (FEMA)
508-7

NIMS Overview

The National Incident Management System (NIMS) provides a consistent nationwide template to enable Federal, State, tribal, and local governments, nongovernmental organizations (NGOs), and the private sector to work together to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity. NIMS represents a core set of doctrines, concepts, principles, terminology, and organizational processes that enables effective, efficient, and collaborative incident management. This consistency provides the foundation for utilization of NIMS for all incidents, ranging from daily occurrences to incidents requiring a coordinated Federal response. Homeland Security Presidential Directive - 5, *Management of Domestic Incidents* (HSPD-5) directed the development and administration of NIMS.

The NIMS documents integrate best practices into a comprehensive framework for use by emergency management and response personnel in an all-hazards context nationwide. HSPD-5 requires all Federal departments and agencies to adopt NIMS and to use it in their individual incident management programs and activities, as well as in support of all actions taken to assist State, local, and tribal governments. State, local, and tribal governments are **not** required to participate in NIMS or adopt these best practices. As applied to non-Federal entities, NIMS documents contain guidance which is not legally binding. However, in order to participate in NIMS and to be considered NIMS-compliant, it is necessary for entities to adhere to the standards, practices, and/or minimum criteria presented in the NIMS guidance documents. It is also important to note that although a State, local, or tribal government or NGO is not required to apply for Federal preparedness assistance, HSPD-5 requires Federal departments and agencies to make adoption of NIMS by State, local, and tribal governments and NGOs a condition for Federal preparedness assistance through grants, contracts, and other activities.

A basic premise of NIMS is all incidents begin and end locally. The Federal government supports State, local and tribal authorities when their resources are overwhelmed or anticipated to be overwhelmed. The intention of the Federal government in these situations is not to command the response, but rather to support the affected State, local, and tribal authorities. This is most easily achieved when all the entities are participating in a unified system of emergency management and incident response. NIMS also recognizes the role that NGOs and the private sector have in preparedness and activities to prevent, protect against, respond to, recover from, and mitigate the effects of incidents. As such, DHS strongly emphasizes the importance of NIMS training for all emergency management and incident response personnel, NGOs, and the private sector.

NIMS Resource Management

NIMS recognizes resources such as personnel, equipment, or supplies are needed to support critical incident objectives. The flow of resources must be fluid and adaptable to the requirements of the incident. NIMS defines standardized mechanisms and establishes the resource management process to identify requirements, order and acquire, mobilize, track and report, recover and demobilize, reimburse, and inventory resources.

Resource management should be flexible and scalable in order to support any incident and be adaptable to changes. Efficient and effective deployment of resources requires resource management concepts and principles be used in all phases of emergency management and incident response.

The resource management process can be separated into two parts: resource management as an element of preparedness and resource management during an incident. The preparedness activities (resource typing, credentialing, and inventorying) are conducted on a continual basis to help ensure resources are ready to be mobilized when called to an incident. Resource management during an incident is a finite process with a distinct beginning and ending specific to the needs of the particular incident and applies to local and State mutual aid as well as Emergency Management Assistance Compact (EMAC) requests, national disasters, and serious national incidents.

Resource Typing
Resource typing is categorizing, by capability, the resources requested, deployed, and used in incidents. Measurable standards identifying resource capabilities and performance levels serve as the basis for categories. Resource users at all levels use these standards to identify and inventory resources for local and State mutual aid as well as EMAC requests, national disasters, and serious national incidents. Resource kinds may be divided into subcategories to define more precisely the capabilities needed to meet specific requirements.

Damage Assessment Team – Debris

DESCRIPTION	This team assesses the magnitude of the debris generated by an incident		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is multidisciplinary and designed dependent upon the incident This team records observations, photographs, and estimates disaster damage by types of debris	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES							
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**	**TYPE I**	**TYPE II**	**TYPE III**	**TYPE IV**	**NOTES**
Personnel	Hours of operation per shift		12 hours	12 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Duration of self-sustained operation		72 hours	0 hours			
Personnel	Positions per team		Dependent upon mission	2 Technical Specialists			
Training	Courses completed		Debris Management Course (Emergency	Debris Management Course (Emergency			

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			Management Institute)	Management Institute)			
Equipment	Quantity and kind based on mission assignments		Personnel transportation, Global Positioning System (GPS), office supplies, laptop, digital camera, measuring devices, reference materials, appropriate software	Personnel transportation, GPS, office supplies, laptop, digital camera, measuring devices, reference materials, appropriate software			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Damage Assessment Team – Facilities and Buildings

DESCRIPTION	This team assesses the magnitude of damage to facilities and buildings caused by an incident		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is multidisciplinary and designed dependent upon the incident and may include engineering specialist with structural background This team records observations, photographs, and estimates disaster damage by types of facility and building	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES							
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**	**TYPE I**	**TYPE II**	**TYPE III**	**TYPE IV**	**NOTES**
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		Dependent upon incident	1 Civil Engineer and 2 Technical Specialists			
Equipment	Quantity and kind based on mission assignments		Personnel transportation, GPS, office	Personnel transportation, GPS, office			

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			supplies, laptop, digital camera, measuring devices, reference materials, appropriate software	supplies, laptop, digital camera, measuring devices, reference materials, appropriate software			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Damage Assessment Team – Roadway Bridges

DESCRIPTION	This team assesses the damage to roadways and bridges		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is multidisciplinary and designed dependent upon the incident and may include engineering specialist with structural background This team records observations, photographs, and estimates disaster damage by types of facility and building	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-sustained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		Dependent upon incident	1 Civil Engineer and 2 Technical Specialists			
Equipment	Quantity and kind based on mission assignments		Personnel transportation, GPS, office supplies, laptop,	Personnel transportation, GPS, office supplies, laptop,			

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			digital camera, measuring devices, reference materials, appropriate software	digital camera, measuring devices, reference materials, appropriate software			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment	Safety equipment and personal gear			

Comments	
Reference(s)	

Debris Management Team – Operations

DESCRIPTION	This team, reporting to the Operations Section, implements the plan for the removal and disposal of debris generated by an incident		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team implements the debris management plan, including collections, transportation, separation, volume reduction, and disposal	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-sustained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Coordinator 1 Field Inspector, 2 Temporary Disposal Site Reduction (TDSR) Specialist, 2 Administrative support,	Dependent upon incident			

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			2 Technical Specialists				
Training	Courses completed		Training in Occupational Safety and Health Administration (OSHA), US Environmental Protection Agency (EPA) and public health regulations and Hazardous Materials (HZMT) awareness Debris Management Course from Emergency Management Institute (EMI)	Training in OSHA, US EPA, and public health regulations and HZMT awareness			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment	Quantity and kind based on mission assignments		Personnel transportation, GPS, office	Personnel transportation, GPS, office			

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			supplies, laptop, digital camera, measuring devices, reference materials, appropriate software	supplies, laptop, digital camera, measuring devices, reference materials, appropriate software			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment. personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Debris Management Team – Planning

DESCRIPTION	This team develops and monitors the plan for the removal and disposal of debris generated by the incident		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is experienced in assessing the scope, planning, and implementing of a debris management plan, including collections, transportation, separation, volume reduction, and disposal	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-sustained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		Dependent upon incident	Dependent upon incident			
Training	Courses completed		Debris Management Course from EMI	Debris Management Course from EMI			
Equipment	Duration of sustained		Up to 14 days	Up to 14 days			

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
	operation						
Equipment	Quantity and kind based on mission assignments		Personnel transportation, GPS, office supplies, laptop, digital camera, measuring devices, reference materials, appropriate software	Personnel transportation, GPS, office supplies, laptop, digital camera, measuring devices, reference materials, appropriate software			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, and safety equipment	Safety equipment and personal gear			

Comments	
Reference(s)	

Debris Removal Team

DESCRIPTION	This team implements the removal and disposal of debris generated by an incident		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is experienced in appropriate equipment operator training and knowledgeable in FEMA requirements and processes	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Requester should specify availability of fuel and tires Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	METRIC / MEASURE	CAPABILITY					
Personnel	Hours of operation per shift		12 hours				
Personnel	Duration of self-sustained operation		72 hours				Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 supervisor, 2 truck drivers, 2 heavy equipment operators, 4 laborers				

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Training	Courses completed		Training in OSHA, US EPA and public health regulations and HZMT awareness				
Equipment	Duration of sustained operation		Up to 14 days				
Equipment	Quantity and kind based on mission assignments		Pickup truck, lowboy/stake truck/flatbed with appropriate capabilities, debris loading equipment, 2 tandem dump trucks				Type of equipment should be based on debris to be removed
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone				
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, safety equipment and personal gear				

Comments	
Reference(s)	

Disaster Management Recovery Team – Public Works

DESCRIPTION	This team manages and provides oversight of the overall Public Works disaster recovery process		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	The team should organize and manage the recovery process, investigate and record damage, analyze the significance of affected infrastructure, estimate cost of repair or replacement, establish initial priorities for recovery, assign recovery teams, establish oversight teams, and track and report on progress	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-sustained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		Total = 9 1 Executive Manager; 2 Operations Managers/Supervisors; 2 Logistics/Planning 2 Administrative	Total = 9 1 Executive Manager; 2 Operations Managers/Supervisors: 2 Logistics/Planning 2 Administrative			This team should be multidisciplinary to include project management, engineering specialists, logisticians, environmental experts, communications specialists, subject matter experts, and support staff, as needed

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			Assistants; 1 IT Support; 1 Environmental Engineer	Assistants; 1 IT Support; 1 Environmental Engineer			
Equipment	Quantity and kind based on mission assignments		Personnel transportation, GPS, office supplies, laptop, digital camera, measuring devices, reference materials, appropriate software	Personnel transportation, GPS, office supplies, laptop, digital camera, measuring devices, reference materials, appropriate software			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite. phone	Cell phones, portable radios, satellite. phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids food, shelter, sanitation, safety equipment and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Preventative Maintenance Team – Light Equipment Public Works

DESCRIPTION	This team performs preventative maintenance on response vehicles and equipment		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is experienced in light repairs, lubrication, and other preventive maintenance of vehicles and light equipment	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Qualified Technician; 1-3 Service Technician	1 Qualified Technician; 1-3 Service Technician			
Equipment	Duration of sustained		Up to 14 days	Up to 14 days			

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
	operation						
Equipment	Quantity and kind based on mission assignments		1 Field service truck Necessary tools and equipment	1 Field service truck Necessary tools and equipment			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Preventative Maintenance Team – Heavy Equipment Public Works

DESCRIPTION	This team performs field repair of vehicles including emergency and heavy equipment		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team makes repairs in the field with off-road heavy equipment (i.e. fire trucks, tub grinders, tandems)	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES							
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**	**TYPE I**	**TYPE II**	**TYPE III**	**TYPE IV**	**NOTES**
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		2 Qualified technicians (heavy/light duty and emergency vehicle technicians)	2 Qualified technicians (heavy/light duty and emergency vehicle technicians)			

Preventative Maintenance Team – Heavy Equipment Public Works

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment	Quantity and kind based on mission assignments		(1) 1-Ton or larger truck with equipment boom Necessary tools and equipment	(1) 1-Ton or larger truck with equipment boom Necessary tools and equipment			
Equipment (Communications)			Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Repair/Restoration Team – Water/Wastewater Plant

DESCRIPTION	This team repairs and restores plant operations (water/wastewater)		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Public Works Team (with personnel/equipment components
OVERALL FUNCTION	This team repairs and restores water/wastewater plant control systems	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Qualified plant controls technician 1 Support technician	1 Qualified plant controls technician 1 Support technician			
Equipment	Duration of sustained		Up to 14 days	Up to 14 days			

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
	operation						
Equipment (Vehicle and specialized equipment)	Quantity and kind based on mission assignments		1 Pick-up truck Necessary tools for plant controls and repairs, fluke meter, 4-20 milliamp signal generator, laptop computer with serial port	1 Pick-up truck Necessary tools for plant controls and repairs, fluke meter, 4-20 milliamp signal generator, laptop computer with serial port			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Public Works Emergency Management Support Team

DESCRIPTION	This team may be deployed to staff an Emergency Support Function (ESF) #3 desk or to relieve local Public Works management		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is multidisciplinary and designed dependent upon incident The team may include Public Works Professionals with education and experience in the fields of solid waste management, debris management, roadway and structural maintenance and construction, traffic management, fleet management, building management, water and wastewater, utility restoration, and other typical Public Works functions	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		Total = 9 1 Executive Manager; 2 Operations Managers/ Supervisors;	Total = 9 1 Executive Manager; 2 Operations Managers/ Supervisors;			

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			2 Logistics/ Planning; 2 Admin Assistants; 2 IT Support	2 Logistics/ Planning; 2 Admin Assistants; 2 IT Support			
Personnel	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment	Quantity and kind based on mission assignments		Personnel transportation, Global Positioning System (GPS), office supplies, laptop, digital camera, reference materials, appropriate software	Personnel transportation, Global Positioning System (GPS), office supplies, laptop, digital camera, reference materials, appropriate software			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation,	Safety equipment and personal gear			

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			safety equipment, and personal gear				

Comments	
Reference(s)	

Repair/Restoration Team – Communication Systems

DESCRIPTION	This team repairs and restores communication systems		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team repairs communication systems	**COMPOSITION & ORDERING SPECIFICATIONS**	Requestors should indicate types of controls, Programmable Logic Controllers (PLC), SCADA*, telemetry equipment, radios, and network cable (e.g., fiber optic, copper) used Major repair components to be provided by requestors or others, unless otherwise arranged Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	METRIC / MEASURE	CAPABILITY					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Qualified plant controls technician	1 Qualified plant controls technician			

Repair/Restoration Team – Communication Systems

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			0 - 1 Support technician	0 - 1 Support technician			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment (Vehicle and Specialized Equipment)	Quantity and kind based on mission assignments		1 Heavy-duty pick-up truck, 1 Bucket truck Necessary tools for repair of radios and radio towers, and laptop computer with serial port	1 Heavy-duty pick-up truck, 1 Bucket truck Necessary tools for repair of radios and radio towers, and laptop computer with serial port			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	* SCADA = Supervisory Control and Data Acquisition. PLC = Programmable Logic Controllers
Reference(s)	

Repair /Restoration Team – SCADA

DESCRIPTION	This team repairs and restores SCADA* and Programmable Logic Controllers (PLC) systems (water/wastewater)		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	The team repairs and restores SCADA* and radio telemetry systems	**COMPOSITION & ORDERING SPECIFICATIONS**	Requestors should indicate types of controls, PLC, SCADA*, telemetry equipment, radios, and network cable (e.g., fiber optic, copper) used Major repair components to be provided by requestors or others, unless otherwise arranged Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Qualified plant controls technician	1 Qualified plant controls technician			

Repair /Restoration Team – SCADA

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			1 – 3 Support technicians	1 – 3 Support technicians			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment (Vehicle and Specialized Equipment)	Quantity and kind based on mission assignments		1-2 Heavy-duty pick-up trucks Necessary tools for SCADA* repairs, 4-20 milliamp signal generator, laptop computer with serial port	1-2 Heavy-duty pick-up trucks Necessary tools for SCADA* repairs, 4-20 milliamp signal generator, laptop computer with serial port			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	* SCADA = Supervisory Control and Data Acquisition. PLC = Programmable Logic Controllers
Reference(s)	

Sewer CCTV Team

DESCRIPTION	This team provides nondestructive CCTV (Closed Circuit TV) services		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	The team provides sewer mains CCTV inspections and rehabilitation services	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Sewer CCTV lead technician 1 Sewer CCTV technician	1 Sewer CCTV lead technician 1 Sewer CCTV technician			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			

Sewer CCTV Team

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Equipment (Vehicle and Specialized Equipment)	# and kind of per team		1 Sewer CCTV truck Necessary CCTV support equipment	1 Sewer CCTV truck Necessary CCTV support equipment			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Damage Assessment and Repair Team – Sewer Mains

DESCRIPTION	This team is responsible for assessment/repair of all types of wastewater mains		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is responsible for the assessment and repair of all types of wastewater collection, storm water collection, and reclaim water distribution facilities, including gravity mains, force mains, aerial mains, and manholes, including excavation through backfill Pump repairs are addressed as a separate team	**COMPOSITION & ORDERING SPECIFICATIONS**	Requestor should specify facilities in which repair expertise is needed, specific main materials and size ranges in need of repair, and typical depth of facilities and soil conditions, as well as any materials that should be provided by the responders Requestor to provide plans showing main locations and coordinate notification of "call-before-you dig" service used in region Traffic control considerations to be coordinated by requestor and responding utility Pipe provided by requestor or others Specific types of facilities in need of assessment and repair:_____ Main sizes and materials: _____ Typical depth range: _____ Soil conditions:_____ Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		Total = 8 1 Team leader 1 Excavator operator 1 Backhoe-loader operator 2 Tandem dump truck drivers 1 Lead repair technician 2 Repair technicians	Total = 8 1 Team leader 1 Excavator operator 1 Backhoe-loader operator 2 Tandem dump truck drivers 1 Lead repair technician 2 Repair technicians			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment (Vehicle and Specialized Equipment	# and kind of per team		1 Large track excavator 1 Backhoe-loader 2 Tandem dump trucks	1 Large track excavator 1 Backhoe-loader 2 Tandem dump trucks			

Damage Assessment and Repair Team – Sewer Mains

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			1 Team/equipment 1 Supervisor's light truck 1 tow truck Necessary pneumatic and hand tools for repairs indicated	1 Team/equipment 1 Supervisor's light truck 1 tow truck Necessary pneumatic and hand tools for repairs indicated			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Sewer System Cleaning Team

DESCRIPTION	This team is responsible for cleaning and cleanup of Combined Sewer Overflow (CSO) and Sanitary Sewer Overflow (SSO) in sewer systems		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team provides cleaning of sewer mains and manholes with sewer jet/vacuum truck	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Lead sewer cleaning technician 1 Sewer cleaning technician	1 Lead sewer cleaning technician 1 Sewer cleaning technician			
Equipment	Duration of		Up to 14 days	Up to 14 days			

Sewer System Cleaning Team

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
	sustained operation						
Equipment (Vehicle and Specialized Equipment)	# and kind of per team		1 Jet/vacuum truck Necessary tools and equipment	1 Jet/vacuum truck Necessary tools and equipment			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Tire Repair Team

DESCRIPTION	This team repairs tires		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is experienced in tire repairs	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Tire Service Technician 1-3 Tire Service Technician Assistant	1 Tire Service Technician 1-3 Tire Service Technician Assistant			
Equipment	Duration of sustained		Up to 14 days	Up to 14 days			

Tire Repair Team

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
	operation						
Equipment	# and kind of vehicles per team		1 Tire truck or equivalent Necessary tools and equipment	1 Tire truck or equivalent Necessary tools and equipment			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Damage Assessment, Repair and Start-Up Team – Wastewater Lift and Pump Station (400 HP +)

DESCRIPTION	This team assesses and repairs all types of wastewater lift and pump stations utilizing pumps greater than 400 horsepower (HP) Degree and type of repair and start-up capability are screw, submersible, wet well/drywell and vertical-turbine solids-handling pumps greater than 400 HP		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is responsible for the assessment and repairs of all types of wastewater lift station and pump facilities, regardless of size, including conveyance facilities, treatment plants, and pump stations, excluding structural and similar scale repairs	**COMPOSITION & ORDERING SPECIFICATIONS**	Requestor should specify the following: Specific types of pump facilities in need of assessment and repair: _____ Specific materials that should be provided by responders: _____ Specific control systems used: Electronic_____ Pneumatic_____ Hydraulic_____ Facility capacity, Millions of Gallons Per Day (MGD):_____ Maximum pump voltages: 4160_____ 480_____ Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 Hour	12 Hour			
Personnel	Duration of self-contained		72 hours	0 hours			Support external to the teams will be needed from the requestor such as

Damage Assessment, Repair and Start-Up Team – Wastewater Lift and Pump Station (400 HP +)

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
	operation						security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Qualified mechanic 1 Qualified electrician 2 Repair technicians (mechanic or electrician serves as team leader)	1 Qualified mechanic 1 Qualified electrician 2 Repair technicians (mechanic or electrician serves as team leader)			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment (Vehicle and Specialized Equipment)	# and kind of per team		1 or 2 Heavy-duty 4X4 pick-up trucks or equivalent, one with equipment boom, one (1) 30 ton crane preferred. Necessary tools and equipment	1 or 2 Heavy-duty 4X4 pick-up trucks or equivalent, one with equipment boom, one (1) 30 ton crane preferred. Necessary tools and equipment			Size of crane can be specified by requester
Equipment (Communications)	Quantity and kind based on mission		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			

Damage Assessment, Repair and Start-Up Team – Wastewater Lift and Pump Station (400 HP +)

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
	assignments						
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Damage Assessment, Repair and Start-Up Team – Wastewater Lift and Pump Station (26-400 HP)

DESCRIPTION	This team assesses and repairs all types of wastewater lift and pump stations utilizing pumps with 26-400 horsepower (HP). Degree and type of repair and start-up capability are crew, submersible, wet well/ drywell, vertical-turbine solids-handling pumps and suction-lift pumps 26–400 HP		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is responsible for the assessment and repairs of all types of wastewater lift station and pump facilities, including conveyance facilities, treatment plants, and pump stations, excluding structural and similar scale repairs	**COMPOSITION & ORDERING SPECIFICATIONS**	Requestor should specify the following: Specific types of pump facilities in need of assessment and repair: _____ Specific materials that should be provided by responders: _____ Specific control systems used: Electronic_____ Pneumatic_____ Hydraulic_____ Facility capacity, Millions of Gallons Per Day (MGD):_____ Maximum pump voltages: 4160_____ 480_____ Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	METRIC / MEASURE	CAPABILITY					
Personnel	Hours of operation		12 hours	12 hours			

Damage Assessment, Repair and Start-Up Team – Wastewater Lift and Pump Station (26-400 HP)

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
	per shift						
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Qualified mechanic 1 Qualified electrician 2 Repair technicians (mechanic or electrician serves as team leader)	1 Qualified mechanic 1 Qualified electrician 2 Repair technicians (mechanic or electrician serves as team leader)			
Equipment	Duration of sustained operation		up to 14 days	Up to 14 days			
Equipment (Vehicle and Specialized Equipment)	# and kind of per team		1 or 2 Heavy-duty 4X4 pick-up trucks or equivalent, one with equipment boom, one (1) 30-ton crane preferred Necessary tools	1 or 2 Heavy-duty 4X4 pick-up trucks or equivalent, one with equipment boom, one (1) 30-ton crane preferred Necessary tools			Size of crane can be specified by requester

Damage Assessment, Repair and Start-Up Team – Wastewater Lift and Pump Station (26-400 HP)

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			and equipment	and equipment			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Damage Assessment, Repair and Start-Up Team – Wastewater Lift and Pump Station (26 HP or less)

DESCRIPTION	This team assesses and repairs all types of wastewater lift and pump stations utilizing pumps less than 26 horsepower (HP) Degree and type of repair and start-up capability are submersible, suction-lift, grinder, Low Pressure Pipe (LPP), vacuum and pumps, less than 26 HP		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is responsible for the assessment and repairs of all types of wastewater lift station and pump facilities, including conveyance facilities, treatment plants, and pump stations, excluding structural and similar scale repairs	**COMPOSITION & ORDERING SPECIFICATIONS**	Requestor should specify the following: Specific types of pump facilities in need of assessment and repair: _____ Specific materials that should be provided by responders: _____ Specific control systems used: Electronic_____ Pneumatic_____ Hydraulic_____ Facility capacity, Millions of Gallons Per Day (MGD):_____ Maximum pump voltages: 4160_____ 480_____ Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security.

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	METRIC / MEASURE	CAPABILITY					
Personnel	Hours of operation per shift		12 hours	12 hours			

Damage Assessment, Repair and Start-Up Team – Wastewater Lift and Pump Station (26 HP or less)

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Qualified mechanic 1 Qualified electrician 2 Repair technicians (mechanic or electrician serves as team leader)	1 Qualified mechanic 1 Qualified electrician 2 Repair technicians (mechanic or electrician serves as team leader)			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment (Vehicle and Specialized Equipment)	# and kind of per team		1 or 2 Heavy-duty 4X4 pick-up trucks or equivalent, one with equipment boom, one (1) 30 ton crane preferred Necessary tools and equipment	1 or 2 Heavy-duty 4X4 pick-up trucks or equivalent, one with equipment boom, one (1) 30 ton crane preferred Necessary tools and equipment			Size of crane can be specified by requester
Equipment	Quantity and kind		Cell phones,	Cell phones,			

Damage Assessment, Repair and Start-Up Team – Wastewater Lift and Pump Station (26 HP or less)

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
(Communications)	based on mission assignments		portable radios, satellite phone	portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Wastewater Sampling and Field Analysis Team

DESCRIPTION	This team performs field laboratory sampling of wastewater systems		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	Wastewater collection and stream sampling and field analysis Capability of samples for BOD*, solids, fecal coliform, total coliform and E. coli analyses, and field analyses where possible	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Sampling technician 1 Sampling assistant	1 Sampling technician 1 Sampling assistant			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			

Wastewater Sampling and Field Analysis Team

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Equipment (Vehicle and Specialized Equipment)	# and kind of per team		1 Heavy-duty 4X4 Sport Utility Vehicle (SUV) or pick-up truck with enclosed bed Necessary tools and field lab testing equipment	1 Heavy-duty 4X4 Sport Utility Vehicle (SUV) or pick-up truck with enclosed bed Necessary tools and field lab testing equipment			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	*BOD refers to biological analysis in liquid form and is considered an industry title for scientific measurement
Reference(s)	

Damage Assessment, Repair and Start-Up Team – Wastewater Treatment Facilities

DESCRIPTION	This team is responsible for the assessment, repair, and start-up of all wastewater treatment facilities Degree and type of repair and start-up capability are physical/chemical and biological treatment, activated sludge, nutrient removal, tertiary filtration, gaseous chlorination, membranes, ultra violet (UV), dewatering, and bio solids handling		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is responsible for the assessment and repair of all types of wastewater treatment facilities, regardless of size, with various treatment systems, conveyance facilities, treatment plants, and pump stations, excluding structural and similar scale repairs Pump and lift station repairs are addressed as a separate team	**COMPOSITION & ORDERING SPECIFICATIONS**	Requestor to supply lead operator familiar with the treatment process and plant shut down, as well as startup and schematics of pipes and valves Requestor should specify treatment processes used, as well as any materials that should be provided by the responders Specific types of facilities and processes in need of assessment and repair:_____ Specific materials that should be provided by responders:_____ Specific control systems used: Electronic_____ Pneumatic_____ Hydraulic_____ Facility capacity, Millions of Gallons Per Day (MGD):_____ Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

Damage Assessment, Repair and Start-Up Team – Wastewater Treatment Facilities

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team	Team member capabilities for assessments and repairs of processes indicated	1 Qualified mechanic 1 Qualified electrician 1+ Operator 1 Instrumentation tech 2 Repair technicians request specific personnel based on incident needs	1 Qualified mechanic 1 Qualified electrician 1+ Operator 1 Instrumentation tech 2 Repair technicians request specific personnel based on incident needs			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment (Vehicle and Specialized Equipment)	# and kind of per team		1 or 2 Heavy-duty pick-up trucks or equivalent, one with equipment boom Necessary tools	1 or 2 Heavy-duty pick-up trucks or equivalent, one with equipment boom Necessary tools			

Damage Assessment, Repair and Start-Up Team – Wastewater Treatment Facilities

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			and safety equipment (e.g., air monitors)	and safety equipment (e.g., air monitors)			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Wastewater Treatment Facilities Operations Team

DESCRIPTION	This team can be deployed to either operate wastewater treatment facilities or relieve local staff Degree and type of repair and start-up capability are physical/chemical and biological treatment, activated sludge, nutrient removal, tertiary filtration, gaseous chlorination, membranes, UV, dewatering, and bio solids handling		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is responsible for the operation of all types of wastewater treatment facilities, regardless of size, with various systems, conveyance facilities, treatment plants, and pump stations Pump and lift station repairs are addressed as a separate team	**COMPOSITION & ORDERING SPECIFICATIONS**	Requestor should specify treatment processes used and in which expertise is needed, as well as any materials that should be provided by the responders Equipment for monitoring and testing of the process should be provided by the responder unless confirmed that requestor can supply Schematics of piping and valving should be provided by the requestor Specific types of facilities and processes in need of operation: _____ Specific materials that should be provided by responders: _____ Specific control systems used: Electronic_____ Pneumatic_____ Hydraulic_____ Facility capacity, Millions of Gallons Per Day (MGD):_____ Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

Wastewater Treatment Facilities Operations Team

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	**Metric / Measure**	**Capability**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Lead operator 2 Operators	1 Lead operator 2 Operators			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment (Vehicle and Specialized Equipment)	# and kind of per team		1 Light-duty vehicle Monitoring equipment	1 Light-duty vehicle Monitoring equipment			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Water and Sewer Main, Valve and Manhole Locating Team

DESCRIPTION	This team locates water and wastewater manholes and valves		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	The team is responsible for locating water mains, sewer mains, valves, and manholes for the purpose of system documentation	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		2 Locating technicians	2 Locating technicians			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			

Water and Sewer Main, Valve and Manhole Locating Team

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Equipment (Vehicle and Specialized Equipment)	# and kind of per team		2 Light-duty pick-up trucks Locating equipment, GPS equipment, if possible	2 Light-duty pick-up trucks Locating equipment, GPS equipment, if possible			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Water Distribution Sampling and Field Analysis Team

DESCRIPTION	This team performs field laboratory sampling of water distribution systems		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is responsible for sampling and field analysis where possible of bac-t*, pH*, turbidity, and chlorine residual	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Water sampling technician 1 Water sampling assistant	1 Water sampling technician 1 Water sampling assistant			
Equipment	Duration of sustained		Up to 14 days	Up to 14 days			

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
	operation						
Equipment (Vehicle and Specialized Equipment)	# and kind of per team		(1) 4X4 Sport Utility Vehicle (SUV) or pick-up truck with enclosed bed Necessary transport coolers and analytical testing equipment, sampling pump, if needed	(1) 4X4 SUV or pick-up truck with enclosed bed Necessary transport coolers and analytical testing equipment, sampling pump, if needed			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	*Bac-t and pH refer to laboratory analysis methods and are considered industry titles for scientific measurement
Reference(s)	

Damage Assessment and Repair Team – Water Distribution System (24" +)

DESCRIPTION	This team is responsible for assessment/repair of water mains 24” or greater		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is responsible for the assessment and repair of all types of water distribution facilities including mains, valves, hydrants, and storage facilities (assessment and light repairs only), including excavation through backfill Pump repairs are addressed as a separate team	**COMPOSITION & ORDERING SPECIFICATIONS**	Requestor should specify facilities in which repair expertise is needed, specific water main materials and size ranges in need of repair, and typical depth of facilities and soil conditions, as well as any materials that should be provided by the responders Requestor to provide plans showing water main locations and coordinate notification of “call-before-you dig” service used in region Traffic control considerations to be coordinated by requestor and responding utility Pipe provided by requestor or others Specific types of system components in need of assessment and repair:_____ Main sizes and materials:_____ Typical depth:_____ Soil conditions:_____ Hydrant makes / models:_____ Specific materials that should be provided by responders:_____ _____ Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

Damage Assessment and Repair Team – Water Distribution System (24" +)

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		Total = 6-8 1 Team leader 1 Backhoe-loader operator 1 - 2 Tandem dump truck drivers 1 Lead repair technician 1 - 2 Utility workers 1 Welder if steel mains indicated	Total = 6-8 1 Team leader 1 Backhoe-loader operator 1 - 2 Tandem dump truck drivers 1 Lead repair technician 1 - 2 Utility workers 1 Welder if steel mains indicated			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment	# and kind of vehicles per team		1 Medium track excavator, 1 Backhoe-loader, 1-2 Tandem dump trucks, 1	1 Medium track excavator, 1 Backhoe-loader, 1-2 Tandem dump trucks, 1			

Damage Assessment and Repair Team – Water Distribution System (24" +)

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			Team/equipment tk. w/boom Air compressor, mud pump, welder (if steel) and necessary pneumatic, small power tools and hand tools for repairs indicated	Team/equipment tk. w/boom Air compressor, mud pump, welder (if steel) and necessary pneumatic, small power tools and hand tools for repairs indicated			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Damage Assessment and Repair Team – Water Distribution System (8" - 24")

DESCRIPTION	This team is responsible for assessment/repair of water mains 8”-24”		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is responsible for the assessment and repair of all types of water distribution facilities including mains, valves, hydrants, and storage facilities (assessment and light repairs only), including excavation through backfill Pump repairs are addressed as a separate team	**COMPOSITION & ORDERING SPECIFICATIONS**	Requestor should specify types of pump facilities in need of assessment and repair in which expertise is needed, as well as any materials that should be provided by the responder Major repair materials provided by requestor or others Specific types of pump facilities in need of assessment and repair:_____ _____ Specific materials that should be provided by responders:_____ _____ Specific control systems used: Electronic_____ Pneumatic_____ Hydraulic_____ Facility capacity, Millions of Gallons Per Day (MGD):_____ Maximum pump voltages: 4160_____ 480_____ Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

Damage Assessment and Repair Team – Water Distribution System (8" - 24")

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		Total = 6-8 1 Team leader 1 Backhoe operator 1 - 2 Dump truck drivers 1 Lead repair technician 1 - 2 Utility workers 1 Welder if steel mains	Total = 6-8 1 Team leader 1 Backhoe operator 1 - 2 Dump truck drivers 1 Lead repair technician 1 - 2 Utility workers 1 Welder if steel mains			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment	# and kind of vehicles per team		1 Medium track excavator, 1 Backhoe-loader, 1-2 Tandem dump trucks, 1	1 Medium track excavator, 1 Backhoe-loader, 1-2 Tandem dump trucks, 1			

Damage Assessment and Repair Team – Water Distribution System (8" - 24")

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			Team/equipment tk. w/boom Air compressor, mud pump, welder (if steel) and necessary pneumatic, small power tools and hand tools for repairs indicated	Team/equipment tk. w/boom Air compressor, mud pump, welder (if steel) and necessary pneumatic, small power tools and hand tools for repairs indicated			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Damage Assessment and Repair Team – Water Distribution System (2" - 6")

DESCRIPTION	This team is responsible for assessment/repair of water mains 2”-6” including services and small meters		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is responsible for the assessment and repair of all types of water distribution facilities including mains, valves, hydrants, and storage facilities (assessment and light repairs only), including excavation through backfill Pump repairs are addressed as a separate team	**COMPOSITION & ORDERING SPECIFICATIONS**	Requestor should specify types of pump facilities in need of assessment and repair in which expertise is needed, as well as any materials that should be provided by the responder Major repair materials provided by requestor or others Specific types of pump facilities in need of assessment and repair:_____ _____ Specific materials that should be provided by responders:_____ _____ Specific control systems used: Electronic_____ Pneumatic_____ Hydraulic_____ Facility capacity, Millions of Gallons Per Day (MGD):_____ Maximum pump voltages: 4160_____ 480_____ Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

Damage Assessment and Repair Team – Water Distribution System (2" - 6")

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		Total = 5-6 1 Team leader 1 Backhoe operator 1 Dump truck driver 1 - 2 Utility workers 1 Welder (if steel)	Total = 5-6 1 Team leader 1 Backhoe operator 1 Dump truck driver 1 - 2 Utility workers 1 Welder (if steel)			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment	# and kind of vehicles per team		1 Backhoe-loader, 1-2 Tandem dump trucks, 1 Team/equipment Air compressor, mud pump, welder	1 Backhoe-loader, 1-2 Tandem dump trucks, 1 Team/equipment Air compressor, mud pump, welder			

Damage Assessment and Repair Team – Water Distribution System (2" - 6")

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			(if steel) and necessary pneumatic, small power tools and hand tools for repairs indicated	(if steel) and necessary pneumatic, small power tools and hand tools for repairs indicated			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Water Distribution System Flushing and Flow Testing Team

DESCRIPTION	This team is responsible for flushing and flow testing of the water distribution system		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	The team is responsible for distribution system flow testing and flushing from hydrants and blow-offs	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Lead flushing technician 1 Flushing technician	1 Lead flushing technician 1 Flushing technician			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			

Water Distribution System Flushing and Flow Testing Team

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Equipment (Vehicle and Specialized Equipment)	# and kind of per team		1 Light-duty pick-up truck, 2 preferred Diffuser, Dechlorinator, flow-testing gauges and other necessary tools and small equipment	1 Light-duty pick-up truck, 2 preferred Diffuser, Dechlorinator, flow-testing gauges and other necessary tools and small equipment			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Water Mains Leak Location Team (Basic Audio)

DESCRIPTION	This team completes field testing using basic audio technology		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	The team locates leaks using basic audio technology	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Lead leak locator 0-1 Leak location assistant	1 Lead leak locator 0-1 Leak location assistant			
Equipment	Duration of sustained		Up to 10 days	Up to 10 days			

Water Mains Leak Location Team (Basic Audio)

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
	operation						
Equipment (Vehicle and Specialized Equipment)	# and kind of per team		1 Light-duty truck Necessary hand tools, lighting and safety equipment	1 Light-duty truck Necessary hand tools, lighting and safety equipment			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Water Mains Leak Location Team (Electronic Correlation)

DESCRIPTION	This team completes field testing using electronic correlation technology		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	The team locates leaks using electronic noise correlation technology	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours Sustained Operations (self-sufficient for 72 hours)	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Lead leak locator 1 Leak location	1 Lead leak locator 1 Leak location			

Water Mains Leak Location Team (Electronic Correlation)

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			assistant	assistant			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment (Vehicle and Specialized Equipment)	# and kind of per team		1 Light-duty truck with noise correlation leak locating system Necessary hand tools, lighting and safety equipment	1 Light-duty truck with noise correlation leak locating system Necessary hand tools, lighting and safety equipment			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Water Mains Leak Location Team (Geophones)

DESCRIPTION	This team completes field testing using geophone technology		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	The team locates leaks using geophone technology.	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Lead leak locator 1 Leak location assistant	1 Lead leak locator 1 Leak location assistant			
Equipment	Duration of sustained		Up to 14 days	Up to 14 days			

Water Mains Leak Location Team (Geophones)

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
	operation						
Equipment (Vehicle and Specialized Equipment)	# and kind of per team		1 Light-duty truck Necessary hand tools, lighting and safety equipment	1 Light-duty truck Necessary hand tools, lighting and safety equipment			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Damage Assessment, Repair and Start-Up Team – Water Production Facilities

DESCRIPTION	This team is responsible for the assessment, repair and start-up of all water production treatment facilities		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is responsible for the assessment and repair of all types of water production facilities, regardless of size, with various settling systems, including intake facilities, raw water conveyance facilities, treatment plants, and pump stations, excluding structural and similar scale repairs This team should be experienced in pre-chem, post-chem, gaseous chlorination, chloramination, ozonation, purification of water, poly aluminum chloride, conventional filtration, membrane filtration, Reverse Osmosis (RO), and Ultra violet UV Pump repairs are addressed as a separate team.	**COMPOSITION & ORDERING SPECIFICATIONS**	Requestor to supply lead operator familiar with the treatment process and plant shut down and start up, as well as plant schematics Requestor should specify treatment processes used and any materials that should be provided by the responders Types of facilities / processes in need of assessment and repair: _____ _____ Materials that should be provided by responders: _____ _____ Specific control systems used: Electronic_____ Pneumatic_____ Hydraulic_____ Facility capacity, Millions of Gallons Per Day (MGD):_____ Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

Damage Assessment, Repair and Start-Up Team – Water Production Facilities

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		Total = 7+ 1+ Engineer / Manager 1+ Qualified mechanic 1+ Qualified electrician 1+ Plant operator 2+ Repair technicians Team Leader	Total = 7+ 1+ Engineer / Manager 1+ Qualified mechanic 1+ Qualified electrician 1+ Plant operator 2+ Repair technicians Team Leader			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment	# and kind of vehicles per team		2+ Heavy-duty pick-up trucks, one with equipment boom, compressor, welder, small	2+ Heavy-duty pick-up trucks, one with equipment boom, compressor, welder, small			

Damage Assessment, Repair and Start-Up Team – Water Production Facilities

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			electrical generator, infrared camera, laser alignment tool, vibration analyzer and other necessary hand tools and diagnostic equipment	electrical generator, infrared camera, laser alignment tool, vibration analyzer and other necessary hand tools and diagnostic equipment			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Water Production Facilities Operations Team

DESCRIPTION	This team can be deployed to either operate water production treatment facilities or relieve local staff		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is responsible for the operation of all types of water production facilities, regardless of size, with various settling systems, including wells, intake structures (excluding those that require boats), raw water conveyance facilities, treatment plants, and pump stations This team should be experienced in pre-chem, post-chem, gaseous chlorination, chloramination, ozonation, purification of water, poly aluminum chloride, conventional filtration, membrane filtration, Reverse Osmosis (RO), and Ultra violet UV	**COMPOSITION & ORDERING SPECIFICATIONS**	Requestor should specify treatment processes used and in which expertise is needed, as well as any materials that should be provided by the responders Operators can be provided in any agreed-upon quantity, with a minimum of two Specific types of facilities and processes in need of operation:_____ Specific equipment or materials that should be provided by responders:_____ Specific control systems used: Electronic_____ Pneumatic_____ Hydraulic_____ Facility capacity, Millions of Gallons Per Day (MGD):_____ Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Senior operator 2 Operators	1 Senior operator 2 Operators			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment	# and kind of vehicles per team		1 Light-duty vehicle preferred, diagnostic lab equipment	1 Light-duty vehicle preferred, diagnostic lab equipment			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	

Water Production Facilities Operations Team

REFERENCE(S)	

Damage Assessment and Repair Team – Water Pump Facilities (Motor over 400 Horsepower (HP))

DESCRIPTION	This team assesses and repairs all types of water pump facilities utilizing pumps greater than 400 Horsepower (HP)		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is responsible for the assessment and repair of all types of water pump facilities, regardless of size, including intake facilities (excluding those that require boats), raw water conveyance facilities, treatment plants, and pump stations, excluding structural and similar scale repairs which include raw, finished and booster pump stations with largest motor over 400 Horsepower (HP)	**COMPOSITION & ORDERING SPECIFICATIONS**	Requestor should specify types of pump facilities in need of assessment and repair in which expertise is needed, as well as any materials that should be provided by the responder. Major repair materials provided by requestor or others Specific types of pump facilities in need of assessment and repair:_____ Specific materials that should be provided by responders:_____ Specific control systems used: Electronic_____ Pneumatic_____ Hydraulic_____ Facility capacity, Millions of Gallons Per Day (MGD):_____ Maximum pump voltages: 4160_____ 480_____ Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

Damage Assessment and Repair Team – Water Pump Facilities (Motor over 400 Horsepower (HP))

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1+ Qualified mechanic 1+ Qualified electrician 2+ Repair technicians Team Leader	1+ Qualified mechanic 1+ Qualified electrician 2+ Repair technicians Team Leader			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment	# and kind of vehicles per team		2 Heavy-duty pick-up trucks, 1 with equipment boom Necessary tools and equipment	2 Heavy-duty pick-up trucks, 1 with equipment boom Necessary tools and equipment			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission		Water/fluids, food, shelter, sanitation,	Safety equipment and personal gear			

Damage Assessment and Repair Team – Water Pump Facilities (Motor over 400 Horsepower (HP))

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
	assignments		safety equipment, and personal gear				

Comments	
Reference(s)	

Damage Assessment Team – Water Pump Facilities (Motor 26-400 HP)

DESCRIPTION	This team assesses and repairs all types of water pump facilities utilizing pumps 26-400 Horsepower (HP)		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is responsible for the assessment and repair of all types of water pump facilities, regardless of size, including intake facilities (excluding those that require boats), raw water conveyance facilities, treatment plants, and pump stations, excluding structural and similar scale repairs which include raw, finished, and booster pump stations with largest motor 26 -400 Horsepower (HP)	**COMPOSITION & ORDERING SPECIFICATIONS**	Requestor should specify types of pump facilities in need of assessment and repair in which expertise is needed, as well as any materials that should be provided by the responder Major repair materials provided by requestor or others Specific types of pump facilities in need of assessment and repair:_____ _____ Specific materials that should be provided by responders:_____ _____ Specific control systems used: Electronic_____ Pneumatic_____ Hydraulic_____ Facility capacity, Millions of Gallons Per Day (MGD):_____ Maximum pump voltages: 4160_____ 480_____ Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1+ Qualified mechanic 1+ Qualified electrician 0 – 2 Repair technicians Team Leader	1+ Qualified mechanic 1+ Qualified electrician 0 – 2 Repair technicians Team Leader			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment	# and kind of vehicles per team		2 Heavy-duty pick-up trucks, 1 with equipment boom Necessary tools and equipment	2 Heavy-duty pick-up trucks, 1 with equipment boom Necessary tools and equipment			
Equipment (Communications)	Quantity and kind based on mission		Cell phones, portable radios,	Cell phones, portable radios,			

Damage Assessment Team – Water Pump Facilities (Motor 26-400 HP)

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
	assignments		satellite phone	satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Damage Assessment – Water Pump Facilities (Motor Less than 26 HP)

DESCRIPTION	This team assesses and repairs all types of water pump facilities utilizing pumps less than 26 Horsepower (HP)		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team is responsible for the assessment and repair of all types of water pump facilities, regardless of size, including intake facilities (excluding those that require boats), raw water conveyance facilities, treatment plants, and pump stations, excluding structural and similar scale repairs which include raw, finished, and booster pump stations with largest motor less than 26 Horsepower (HP)	**COMPOSITION & ORDERING SPECIFICATIONS**	Requestor should specify types of pump facilities in need of assessment and repair in which expertise is needed, as well as any materials that should be provided by the responder Major repair materials provided by requestor or others Specific types of pump facilities in need of assessment and repair:_____ _____ Specific materials that should be provided by responders:_____ _____ Specific control systems used: Electronic_____ Pneumatic_____ Hydraulic_____ Facility capacity, Millions of Gallons Per Day (MGD):_____ Maximum pump voltages: 4160_____ 480_____ Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

Damage Assessment – Water Pump Facilities (Motor Less than 26 HP)

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1+ Qualified mechanic 1+ Qualified electrician 0 - 2 Repair technicians (mechanic or electrician serves)	1+ Qualified mechanic 1+ Qualified electrician 0 - 2 Repair technicians (mechanic or electrician serves)			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment	# and kind of vehicles per team		2 Heavy-duty pick-up trucks, 1 with equipment boom Necessary tools and equipment	2 Heavy-duty pick-up trucks, 1 with equipment boom Necessary tools and equipment			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			

Damage Assessment – Water Pump Facilities (Motor Less than 26 HP)

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Water Valve Operations Team

DESCRIPTION	This team can be deployed to operate water valve systems		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	The team is responsible for water distribution valve box cleaning and valve operation	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Team Leader 1 Utility worker with valve experience	1 Team Leader 1 Utility worker with valve experience			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			

Water Valve Operations Team

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Equipment (Vehicle and Specialized Equipment)	# and kind of per team		1 Truck with truck-mounted or trailer-mounted vacuum unit and power valve operator Necessary tools and equipment	1 Truck with truck-mounted or trailer-mounted vacuum unit and power valve operator Necessary tools and equipment			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Emergency Power Connection Team - Water / Wastewater

DESCRIPTION	This team provides connections for generator services at water/wastewater facilities		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	The team responsible for connecting generators or power equipment to plant motor controls of Kilowatts (kW) indicated	**COMPOSITION & ORDERING SPECIFICATIONS**	Requestor must specify Revolutions Per Minute (RPM) of direct drive units Volts: 480_____ 4160_____ Revolutions Per Minute, (RPM): 540_____ 1100_____ Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Qualified mechanic 1 Mechanic's	1 Qualified mechanic 1 Mechanic's			

Emergency Power Connection Team - Water / Wastewater

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			assistant	assistant			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment (Vehicle and Specialized Equipment)	# and kind of per team		1 Truck capable of pulling drive unit(s) delivered Necessary tools for drive unit connection	1 Truck capable of pulling drive unit(s) delivered Necessary tools for drive unit connection			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	

Electrical Generator Team – Water / Wastewater

DESCRIPTION	This team delivers and connects generators for water/wastewater facilities		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	The team provides, delivers, and connects generators or power equipment to plant motor controls of Kilowatt (kW) indicated Personnel are qualified and capable of performing set up and field repairs of all sizes of portable generators	**COMPOSITION & ORDERING SPECIFICATIONS**	Requestor must specify Kilowatt (kW) and voltage of generators needed or existing Requestor should indicate type of connection provisions in place Trailer-mounted generators are preferred to skid-mounted Portable switch-gear preferred Refueling arrangements must be established Volts: 480_____ 4160_____ Revolutions Per Minute, (RPM): 540_____ 1100_____ Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		1 Qualified electrician 1 Electrician's assistant	1 Qualified electrician 1 Electrician's assistant			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment (Vehicle and Specialized Equipment)	# and kind of per team		1 Truck capable of pulling generator(s) delivered Necessary tools for generator connection	1 Truck capable of pulling generator(s) delivered Necessary tools for generator connection			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment,	Safety equipment and personal gear			

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			and personal gear				

Comments	
Reference(s)	

Emergency Management Support Team - Water / Wastewater

DESCRIPTION	This team may be deployed to assist or relieve local water/wastewater management		
RESOURCE CATEGORY	Public Works	**RESOURCE KIND**	Team (with personnel/equipment components)
OVERALL FUNCTION	This team steps into utility management role to supplement on-site personnel Team should be multidisciplinary and designed dependent upon incident May be deployed to staff Emergency Support Function (ESF) 3 desk or relieve/supplement local Water/Wastewater Management Team	**COMPOSITION & ORDERING SPECIFICATIONS**	Mission-specific to identify supporting resources necessary Security requirements should be determined by the requesting agency based upon actual field conditions and/or intelligence. Requesting agency should determine if it will provide security or if the responding team/personnel needs to provide security

RESOURCE TYPES			TYPE I	TYPE II	TYPE III	TYPE IV	NOTES
COMPONENT	**METRIC / MEASURE**	**CAPABILITY**					
Personnel	Hours of operation per shift		12 hours	12 hours			
Personnel	Duration of self-contained operation		72 hours	0 hours			Support external to the teams will be needed from the requestor such as security, fuel, recharging for phones, batteries, power for computers, etc.
Personnel	Positions per team		2-4 Qualified incident commander and individuals experienced in other National	2-4 Qualified incident commander and individuals experienced in other National			

Resource Types			Type I	Type II	Type III	Type IV	Notes
Component	Metric / Measure	Capability					
			Incident Management System (NIMS) / Incident command System (ICS) roles	Incident Management System (NIMS) / Incident command System (ICS)roles			
Equipment	Duration of sustained operation		Up to 14 days	Up to 14 days			
Equipment (Vehicle and Specialized Equipment)	# and kind of per team		1-2 Light-duty vehicles preferred. 2-4 laptop computers	1-2 Light-duty vehicles preferred. 2-4 laptop computers			
Equipment (Communications)	Quantity and kind based on mission assignments		Cell phones, portable radios, satellite phone	Cell phones, portable radios, satellite phone			
Supplies (Logistics)	Quantity and kind based on mission assignments		Water/fluids, food, shelter, sanitation, safety equipment, and personal gear	Safety equipment and personal gear			

Comments	
Reference(s)	