APPENDIX A: EXAMPLES OF RESOURCES FOR WHICH TYPING HAS BEEN COMPLETED

As an illustration of how national resource typing is used, Table A-1 shows a single resource that has been completely typed, a Track Dozer. Table A-2 is an example of a team resource that has been completely typed, a Swiftwater/Flood and Rescue Team.

Table A-1. Single Resource (Track Dozer) That Has Been Typed

Resource: Track Dozer						
Category:	Public Works and Engineering (ESF #3)			Kind:	Equipment	
Minimum Capabilities:		Type I	Type II	Type III	Type IV	Other
Component	Measures					
Equipment	Example	D10R – Cat 3412E Turbo Charged Diesel	D6N – Cat 3126B Diesel	D3G – Cat 3046 Diesel		D10R WHA (Waste Handling) – Cat 3412E Turbo Charged Diesel
Gross Power	RPM	1,900	2,100	2,400		1,900
Gross Power	kw/hp	457/613	127/170	57/77		457/613
Operating Weight	lbs	144,191	34,209	16,193		144,986
Blade Capacity	yd^3	24.2	5.6	1.88		63.9
Digging Depth	in	26.5	20.5	21.8		26.5
Height	ft/in	6′11″	4′1″	3′.8″		10′5″
Ground Clearance	ft/in	4′11″	3′2.7″			4′10″
Total Tilt	ft/in	3′3″	2′2.2″	1′2.5″		3′6.3″
Width Over End Bits	ft/in	15′11″	10′6″	8′.9″		17′3″
Blade Lift Height	in			27.1		
Digging Depth	in			21.8		
Multishanks Arrangements		1 to 3	3			1 to 3
Ground Clearance Under Tip	in	35	19.9	16.2		35
Machine Ground Clearance	in			14.7		
Max Penetration	in		14.2			37
Max Reach at Ground Line	in		29.1	29.1		

Table A-1. Single Resource (Track Dozer) That Has Been Typed—continued

Resource: Track Dozer						
Category:		Public Works and Engineering (ESF #3)		Kind:	Equipment	
Minimum Capabilities:		Type I	Type II	Type III	Type IV	Other
Component	Measures					
Equipment	Example	D10R – Cat 3412E Turbo Charged Diesel	D6N – Cat 3126B Diesel	D3G – Cat 3046 Diesel		D10R WHA (Waste Handling) – Cat 3412E Turbo Charged Diesel
Width	ft/in	9′7″	7′2.7″	8′.9″		9′7″
Winch-Drum Capacity	ft	226	371	371		226
Fuel Capacity	gal	293	79	43.6		293
Max Line Pull Bare Drum	lbs			40,000		
Full Drum	lbs			25,000		
Equipment	Example	D10R	D6N	D3G		D10R WH
Comments:	Caterpillar is used as an example only. The major difference for D10R WHA (Waste Handling) – Cat 3412E Turbo Charged Diesel is that it contains a larger blade and protection guards to prevent landfill type debris from tangling its drives. General Example					

Table A-2. Team Resource (Swiftwater/Flood Search and Rescue Team) That Has Been Typed

Resource: Swiftwater/Flood Search and Rescue Team					
Category:	Search and Rescue			Kind:	Team
Minimum Capabilities:		Type I	Type II	Type III	Type IV
Component	Measure				
Personnel	Team Composition	14-member team: 2 managers 2 squad leaders 10 personnel	6-member team: 1 squad leader 5 personnel	4-member team: 1 squad leader 3 personnel	3-member team: 1 squad leader 2 personnel
Personnel	Minimum number: Technical Animal Rescue	2	1	1	
Personnel	Minimum number: ALS Certified	2			
Personnel	Minimum number: Helicopter/Aquatic Rescue Operations	4	2		
Personnel	Minimum number: Powered Boat Operators	4	2		
Personnel	Minimum number: SCUBA-trained Support Personnel with Equipment	4	2	2	
Personnel	Number and level EMTs	14 EMTs – B 2 EMTs – P	Same as Type III	Same as Type IV	1 EMT – B
Team	Sustained Operations	Same as Type II	24-hour operations	Same as Type IV	18-hour operations
Team	Capabilities	Manage search operations Power vessel operations Helicopter rescue operations Animal rescue HAZMAT ALS Communications Logistics	Manage search operations Power vessel operations Helicopter rescue operations Animal rescue HAZMAT BLS	Assist in search operations Nonpowered watercraft Animal rescue HAZMAT BLS	Low-risk operations Land-based HAZMAT BLS
Team	Specialty S&R Capabilities	Same as Type II	Same as Type III plus: Technical rope systems	In-water contact rescue Dive rescue	

Table A-2. Team Resource (Swiftwater/Flood Search and Rescue Team) That Has Been Typed—continued

Resource: Swiftwater/Flood Search and Rescue Team					
Category:	Search and Rescue			Kind:	Team
Minimum Capabilities:		Type I	Type II	Type III	Type IV
Component	Measure				
Team	Training	Same as Type II except: Divers to have 80 hours of formal public safety diver training	Same as Type III plus: Helicopter operations awareness Technical rope rescue	Same as Type IV plus: Divers to have 60 hours of formal public safety diver training	Class 3 paddle skills Contact and self-rescue skills HAZMAT ICS Swiftwater rescue technician
Team	Certifications	ALS Advanced First Aid & CPR	Same as Type IV	Same as Type IV	BLS Advanced First Aid & CPR
Equipment	Transportation Resources	Equipment trailer, personnel support vehicle			
Personnel	Team Composition	14-member team: 2 managers 2 squad leaders 10 personnel	6-member team: 1 squad leader 5 personnel	4-member team: 1 squad leader 3 personnel	3-member team: 1 squad leader 2 personnel
Equipment	Communication	Same as Type II	Same as Type III plus: Aircraft radio	Same as Type IV plus: Headset	Batteries Portable radios Cell phone
Equipment	Medical	ALS medical kit Blankets Spineboard Litter	Same as Type III plus: Spineboard	Same as Type IV plus: Litter	BLS medical kit Blankets
Equipment	Personal	Same as Type II	Same as Type III plus: Life vests HEED except: PFD Type V	Same as Type IV plus: Fins Lamps	Light sticks; Flares; Markers; Flashlight; Bags; Helmets; Gloves; Knives; PFD Type III/IV; Shoes; Whistles

Table A-2. Team Resource (Swiftwater/Flood Search and Rescue Team) That Has Been Typed—continued

Resource: Swiftwater/Flood Search and Rescue Team					
Category:	Search and Rescue			Kind:	Team
Minimum Capabilities:		Type I	Type II	Type III	Type IV
Component	Measure				
Equipment	SCUBA	Same as Type III	Same as Type III	SCUBA cylinder Buoyancy compensator Weight belt 2 cutting tools Chest harness & snap shackle Full face mask Underwater communication Dry suit Search line Spare SCUBA cylinder	
Vehicle	Rescue Boat	2 - Fueled	1 - Fueled	1 - Nonpowered 4-person	
Comments:	Conduct search and rescue operations in all water environments, including swiftwater and flood conditions. Water rescue teams come with all team equipment required to conduct operations safely and effectively. For a complete list of recommended training, skills, and equipment, please refer to the FIRESCOPE Swiftwater/Flood Search and Rescue definition at http://www.firescope.org/ics-usar/ICS-SF-SAR-020-1.pdf.				

Note: ALS = advanced life support; EMT = emergency medical technician; BLS = basic life support; CPR = cardiopulmonary resuscitation; HAZMAT = hazardous material; HEED = helicopter emergency egress device; PFD = personal flotation device