Introduction to PDA Facility Considerations

The PDA Facility Considerations document is intended to complement the *Preliminary Damage Assessment (PDA) and* for use in collecting sufficient information to estimate the type, quantity, and cost of eligible damage to an area impacted by an emergency or disaster incident. The information captured on this form can then be used as a *PDA Tool* which summarizes damage by Applicant and County and used by FEMA as a validation tool. This would be a substantial time saving step in the PDA process and would help in determining the recommendation for a Declaration.

This checklist may not include all facilities or damage considerations, but provides a starting point for information collection.

Sources for Cost Estimating include:

- Invoices/receipts for current or historic costs
- Repair bids or completed costs
- A/E estimate
- Industry standard construction cost estimating resources (e.g., RSMeans, BNi Costbooks, Marshall & Swift, Sweet's Unit Cost Guide, etc.)
- FEMA cost codes (more appropriate for road and park estimates)

Items needed

- Insurance Policies
- Photos
- Flood Plain Information
- Environmental/Historical Issues

Event Date	Event Type	PDA Date	County	Applicant	Applicant Contact Name	Preparer's Name

Category	Damaged Item	Cost Considerations	Workspace to Estimate Quantity (Units)	Total Estimated Cost
A – Debris	▪ Trees and wood debris photos and GPS are needed for debris piles, trees and branches. [ ] Photos Attached	▪ Collection, transport, reduction, staging, and disposal; based on stump sizes • Add estimate for debris piles and scattered debris. • Small tree (<12" dia) = 6 CY • Medium tree (<24" dia) = 24 CY • Large tree (>36" dia) = 54 CY	Length___ x Width____ X Depth=____ divided by 27=_____CY X 1.5= _____TONS	Scattered Debris $10.00CY
	▪ Building components or contents	▪ Collection, transport, reduction, staging, and disposal • Building height per story = 10 ft • House volume of debris = 25 CY • House + basement = 50 CY	CY / TONS	$

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	▪ General debris (sand, mud, silt, gravel, other disaster-related wreckage)	▪ Collection, transport, reduction, staging, and disposal • Measure debris piles as cubes, not cones • Length of debris pile: 1 pace = 3 ft • 1 acre of debris 3.33 yards high = 16,117 CY	CY / TONS	$
	▪ Hazardous debris	▪ Special handling, staging, containment, and disposal for asbestos or other hazardous debris	CY / TONS	$
B – Emergency Protective Measures	▪ Road clearance, salting	▪ City-wide or site specific (sq miles) ▪ Number of staff members working ▪ Estimated overtime hours per person ▪ Average salary ▪ Equipment		$
	▪ Search and rescue, evacuation	▪ Number and type of vehicles/equipment ▪ Number of staff members working ▪ Estimated overtime hours per person ▪ Average salary		$
	▪ Shelters	▪ Number of shelters ▪ Number of people per shelter ▪ Quantity of supplies, meals, medical equipment ▪ Timeframe of operation		$
	▪ Provision of food, water, ice, and other essential needs for the community	▪ Number of staff members working ▪ Estimated overtime hours per person ▪ Average salary ▪ Quantity of materials ▪ Number of people served		$
	▪ Rescue, care, shelter, and essential needs for household pets and service animals	▪ Number of staff members working ▪ Estimated overtime hours per person ▪ Average salary ▪ Facility costs ▪ Quantity and type of supplies		$

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	▪ Removal of health and safety hazards (i.e. Buildings that pose an immediate threat)	▪ Number of staff members working ▪ Estimated overtime hours per person ▪ Average salary ▪ Quantity and type of equipment, materials, and supplies		$
	▪ Temporary construction • Levees, berms, dikes • Buttressing, bracing, shoring • Emergency repairs to protective facilities	▪ Number of staff members working ▪ Estimated overtime hours per person ▪ Average salary ▪ Quantity and type of equipment, materials, and supplies		$
	▪ Emergency Protective Measures • Boarding windows or doors • Covering the roof • Preventative mold remediation	▪ Number of staff members working ▪ Estimated overtime hours per person ▪ Average salary ▪ Equipment ▪ Quantity and type of materials/supplies		$
	▪ Emergency Operations Center	▪ Number of staff members working ▪ Estimated overtime hours per person ▪ Average salary ▪ Duties being performed by the center's personnel ▪ Quantity and type of equipment		$
	▪ Emergency Communications	▪ Quantity and type of equipment (i.e. mobile radio system or cell phones)		$
	▪ Sandbagging	▪ Number of staff members working ▪ Estimated overtime hours per person ▪ Average salary ▪ Type of materials/supplies ▪ Quantity		$
	▪ Pumping	▪ Capacity of pumps ▪ Number of hours of operation ▪ Quantity		$

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	▪ Temporary generators	▪ Power of generators ▪ Number of hours of operation ▪ Use/function of generators ▪ Quantity		$
C – Roads and Bridges	▪ Road	▪ Material type (i.e. paved, gravel, dirt) ▪ Size (length x width) ▪ Significant lighting or signage	SF	$
	▪ Bridge	▪ Material type (i.e. concrete, metal, wood) ▪ Access requirements ▪ Size (length x width) ▪ Removal	SF	$
	▪ Culverts/drainage structures	▪ Material type (i.e. concrete, metal) ▪ Size (length x width, diameter)	LF	$
	▪ Low water crossings	▪ Material type (i.e. paved, concrete) ▪ Size (length x width)	SF	$
	▪ Rip rap	▪ Material type (i.e. rocks, geotextile, gabions) ▪ Size (diameter) of rip rap ▪ Length of embankment ▪ Depth ▪ Quantity	CY	$
D – Water Control Facilities	**Dams, Levees, Drainage Channels, Canals, Sediment Basins, Shore Protective Devices**			
	▪ Embankment	▪ Material type (i.e. earth, concrete, rock, wood) ▪ Size (length x width x depth)	CY	$
	▪ Lining	▪ Material type (i.e. concrete, geotextile) ▪ Size (length x width)	SF	$

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	▪ Rip Rap	▪ Material type (i.e. rocks, geotextile, gabions) ▪ Size (diameter) of rip rap ▪ Length of embankment ▪ Depth ▪ Quantity	CY	$
	Pumping Facility			
	▪ Pumps (fuel tanks)	▪ Capacity (GPM) ▪ Power source (electric vs. diesel) ▪ Quantity	HR	$
	▪ Generators	▪ Power (kW, HP) ▪ Quantity ▪ Number of hours of operation	HR	$
	▪ Electrical (wiring, valves, controls, SCADA)	▪ Overall length of wiring ▪ Type of wiring ▪ Size of facility (SF)	LF	$
	Other Water Control Facilities			
	▪ Hydroelectric plant	▪ Size/area of plant (SF) ▪ Powerhouse ▪ Generator (quantity and power) ▪ Turbine (quantity and size)	SF	$
	▪ Fish ladder	▪ Type (pool & weir, baffle, elevator, rock-ramp, vertical slot) ▪ Size (length x width)	SF	$
	▪ Outfall structure	▪ Material (concrete, rock, earthen) ▪ Type (pipe, culvert, rock bed, detention pond) ▪ Size (length x width)	SF	$
	▪ Piping	▪ Material type (PVC, metal, concrete) ▪ Diameter ▪ Length	LF	$

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	▪ Service Road	▪ Material type (i.e. paved, gravel, dirt) ▪ Surface area (length x width)	SF	$
	▪ Security Fence	▪ Material type (chain link, wood privacy, electric, barb wire) ▪ Height ▪ Length	LF	$
E – Buildings and Equipment	**If building is visually > 50% damaged, estimate total building replacement**			
	▪ Building	▪ Building type (library, office, school, etc.) ▪ Age (historic structures) ▪ Construction type (concrete, masonry, timber, etc.) ▪ Size (SF) ▪ Number of floors	SF	$
	If building is visually < 50% damaged, assess damaged elements			
	Exterior Building Damage			
	▪ Roof	▪ Material type (shingles, metal, slate) ▪ Percent damaged ▪ Building / roof area	SF	$
	▪ Siding, façade	▪ Type (brick, aluminum, stucco, wood) ▪ Area (length x width)	SF	$
	▪ Windows	▪ Size (length x width) ▪ Quantity	SF	$
	▪ Doors	▪ Size (length x width) ▪ Quantity	SF	$
	▪ HVAC	▪ Type (heating, A/C, ventilation, etc.) ▪ Size ▪ Quantity	EA	$
	Interior Building Damage			

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	▪ Walls	▪ Damaged layers (i.e. sheet rock, insulation, gypsum) ▪ Surface area (length x width)	SF	$
	▪ Flooring	▪ Type (carpet, wood, tile) ▪ Floor area (length x width)	SF	$
	▪ Ceiling	▪ Ceiling area (length x width)	SF	$
	▪ Kitchen (cabinets, countertops)	▪ Material ▪ Length	LF	$
	▪ Bathroom (sinks, toilets, tub/showers)	▪ Quantity of each	EA	$
	▪ Lighting	▪ Type ▪ Quantity	LS	$
	▪ Electrical	▪ Area of building or length of wiring	LS	$
	▪ Fire protection (sprinklers, alarms)	▪ Type of system ▪ Quantity	LS	$
	▪ HVAC	▪ Type ▪ Size	EA	$
	Contents & Equipment			
	▪ Contents	▪ Quantity ▪ Specialty or high dollar items	LS	$
	▪ Vehicles	▪ Type of vehicles (passenger cars, police cars, fire trucks, etc.) ▪ Number of vehicles	EA	$
	▪ Equipment (Medical, Other)	▪ Type of equipment ▪ Quantity	LS	$
	▪ Animals, Birds, Fish, Insects (juvenile specimens)	▪ Quantity	EA	$
	▪ Other	▪		$

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F – Utilities	**Water Distribution / Water and Wastewater Treatment**			
	▪ Utility building damage	▪ If already included in Category E, do not include; if supplemental, include in Category F ▪ Area (length x width)	SF	$
	▪ Pumps	▪ Capacity (GPM) ▪ Quantity ▪ Hours of operation	Hrs	$
	▪ Pipes	▪ Material type (PVC, metal, concrete) ▪ Diameter ▪ Length	LF	$
	▪ Generators	▪ Power (kW) ▪ Quantity	EA	$
	▪ Clarifier	▪ Size ▪ Capacity ▪ Quantity	EA	$
	▪ Water storage tank	▪ Size ▪ Capacity ▪ Quantity	EA	$
	▪ Water intake	▪ Size ▪ Capacity	EA	$
	▪ Chlorination system	▪ Size ▪ Capacity	EA	$
	▪ Filters	▪ Size ▪ Type ▪ Quantity	EA	$
	▪ Controls, valves, SCADA	▪ Size of facility ▪ Estimated cost of system	LS	$
	▪ Electrical conduit	▪ Type ▪ Length	LF	$
	Power Lines			

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	▪ Poles	▪ Condition (fallen, leaning, destroyed) ▪ Material (metal, wood) ▪ Utility types at each pole (cable TV, phone, electric) ▪ Height	EA	$
	▪ Conductors	▪ Condition (hanging low, fallen, displaced from insulator) ▪ Quantity per pole ▪ Diameter	EA	$
	▪ Insulators	▪ Type ▪ Quantity per pole	EA	$
	▪ Transformers	▪ Size ▪ Quantity	EA	$
	▪ Service Road	▪ Material type (i.e. paved, gravel, dirt) ▪ Area (length x width)	SF	$
	▪ Other pole mounted equipment	▪ Type ▪ Quantity	EA	$
G – Recreation, Other	**Parks**			
	▪ Lighting	▪ Height ▪ Quantity of bulbs per lamp	EA	$
	▪ Equipment (i.e. scoreboards, bleachers, dugouts)	▪ Type ▪ Dimensions	LS	$
	▪ Fence	▪ Type (chain link, WPF) ▪ Height ▪ Length	LF	$
	▪ Picnic tables, permanent grills	▪ Type ▪ Material ▪ Quantity	EA	$
	▪ Tennis court	▪ Court surface ▪ Area (length x width)	SF	$

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	▪ Structures (i.e. toilets, concessions)	▪ If already included in Category E, do not include; if supplemental, include in Category G ▪ Area (length x width)	SF	$
	▪ Statues or signs	▪ Type ▪ Quantity	EA	$
	Pools			
	▪ Pool lining	▪ Material (concrete, tile) ▪ Area (length x width)	SF	$
	▪ Filtration system	▪ Type	EA	$
	▪ Apron	▪ Material (concrete, tile) ▪ Area (length x width)	SF	$
	▪ Changing room	▪ If already included in Category E, do not include; if supplemental, include in Category G ▪ Area (length x width)	SF	$
	▪ Equipment (i.e. bleachers, diving platform)	▪ Type ▪ Material ▪ Dimensions	LS	$
	▪ Fence	▪ Type (chain link, WPF) ▪ Height ▪ Length	LF	$
	Golf Courses			
	▪ Irrigation system	▪ Number of heads ▪ Size and type of pipe ▪ Area of grounds (SF)	LS	$
	▪ Golf cart path	▪ Material type surface and base (i.e. paved, gravel) ▪ Area (length x width)	SF	$
	▪ Lights	▪ Pole height ▪ Light wattage ▪ Quantity	LS	$

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	▪ Fence	▪ Type (chain link, WPF) ▪ Height ▪ Length	LF	$
	Improved Beaches			
	▪ Sand replacement	▪ Elevation ▪ Quantity (length x width x depth) ▪ Grain size ▪ Slope	CY	$