DPW OPERATIONS – MAJOR STORM RESPONSE ON AUGUST 10, 2021

Danielle Rodriguez, DPW Director of Operations Randy Krouse, Forestry Services Manager



DPW OPERATIONS – MAJOR STORM RESPONSE

- Magnitude of Storm
- Emergency Response and Coordination
- DPW Response
- Forestry Service Requests
 - How Prioritized
 - Progress
- Operations Impacts Forestry & Sanitation Services

DPW OPERATIONS EMERGENCY RESPONSE

August 10th 2021 a severe Mesoscale Convective System ("MCS") moved through Milwaukee from 7-10pm.

- 1) strong sustained straight-line storm winds, as high as 40mph for 15+ minutes
- 2) well saturated soil after several prior days of heavy rainfall (3-6" over the preceding week, more than we'd seen through June & July combined!)



Source: Innovative Weather (UWM)

DPW OPERATIONS EMERGENCY RESPONSE

EMERGENCY - unplanned event; civil unrest, large scale accidents, natural disasters such as storms/tornados

Plan - safety plan/process; monitor weather, assign on-call emergency crews/staff

Communicate - EOC (City, County, local municipalities, utilities) and residents/elected officials

Maintain Safety - (public/crews) and public right of way/transportation routes

Assess Damage & Take Action - establish & prioritize needs, create work plan, clean-up efforts

Debrief – EOC & DPW Operations discuss success and improvements



DPW OPERATIONS EMERGENCY RESPONSE

Communication was key!

EOC - DPW, MFD, MPD, Health Department, County OEM, MCDOT, MCSO, County Parks, WE Energies

City - DPW, MFD, MPD

Infrastructure - Electrical Services, Street Lighting, Traffic Lighting, Sidewalk Repair Operations - Fleet (special equipment), Forestry, Sanitation, Parking



CRITICAL RESPONSE

- Priority given Ist to threats to safety such as trees and branches on houses/vehicles, and 2nd public access blocking complete street access
 - Highly technical, hazardous work
- Staff worked in high heat, humidity
- Some staff without power in own homes
- Safety is priority!







CRITICAL RESPONSE









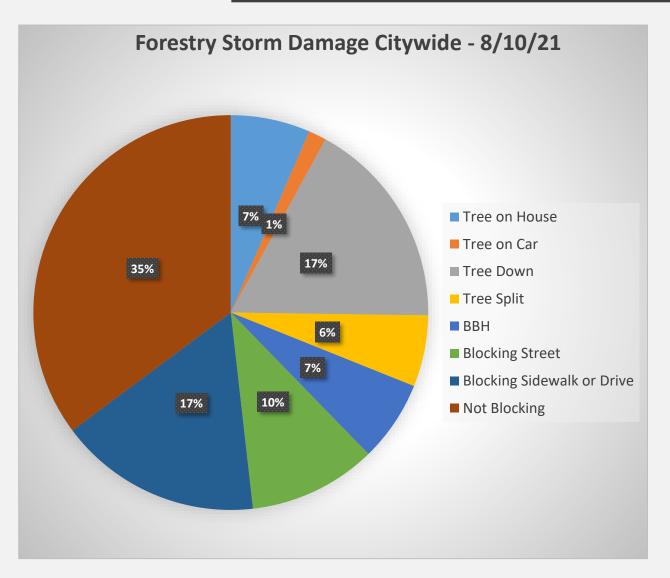
CRITICAL RESPONSE

- Crews worked 24
 hour shifts on critical,
 priority emergency
 work.
- Most critical priority work was completed within 7 days.



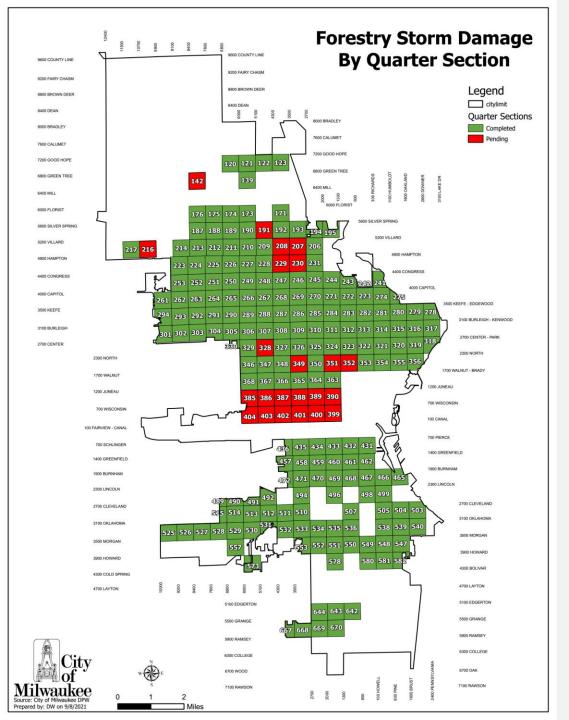


DAMAGE STATISTICS



As of 9/1/21:

- 3,242 calls for service.
 - 2,128 work orders completed.
- 660 mature street trees lost (141 uprooted).
- 2,192+ other street trees incurred damage.
- 153 properties damaged (house, car, etc).
- Cleanup operations (non-emergencies).
 - Proactive 1/4 section sweeps.
 - Non-blocking branch and brush removal.
 - Public & private brush.
 - Coordinated effort with Forestry, Sanitation, and Fleets.



CLEANUP OPERATION

As of 9/8/21:

• 201/217 (93%) ¹/₄-Sections completed.

As of 9/1/21:

- 353 tons of wind-damaged tree debris removed and scaled.
 - Not including brush chipped by Forestry.
 - Not including large wood recycled and shipped out for processing.
- 2,162/2,393 private brush piles removed by Sanitation.
 - 233 tons.

FORESTRY OPERATIONS IMPACT

FORESTRY OPERATION

WEEK

Costs as of 9/8/21: \$269,425-Salaries and equipment rental

IMPACTS (LOSS OF SERVICE)

#UNITS

August 10 - 30	TREE PRUNING (requested)	0		-261
*Work orders	TREE REMOVALS	3	38	-175
completed.	STUMP GRINDING	0		-303
Does not include	EMERGENCY TREE SERVICE	77	*1565	
1/4 section sweep	EAB INJECTIONS	5	1153	-938
	SERVICE REQUESTS	0		-600
	HAZARD TREE SURVEY	0		-108
	TRAINING	0		Delayed
	BOULEVARD MOWING/LITTER PICKUP	2		2 Cycles
	BOULEVARD BED MAINTENANCE.	0		2 Cycles
	NURSERY	3		
	CITY LOT MAINT./CODE ENFORCEMENT	7		Lot inspection delays

DAILY STAFFING



SANITATION IMPACT

Redeploying resources to support storm response resulted in reduced personnel on:

- Street sweeping
- Bulky waste pickup
- Cart repair/replacement
- Brush requests increased
- Collection weights heavier due to spoiled food from power outages
- Special equipment used to aid debris cleanup (Prentice Loader, Skids)
- Garbage/recycle routes impacted by impassable streets, alleys (limited)

