



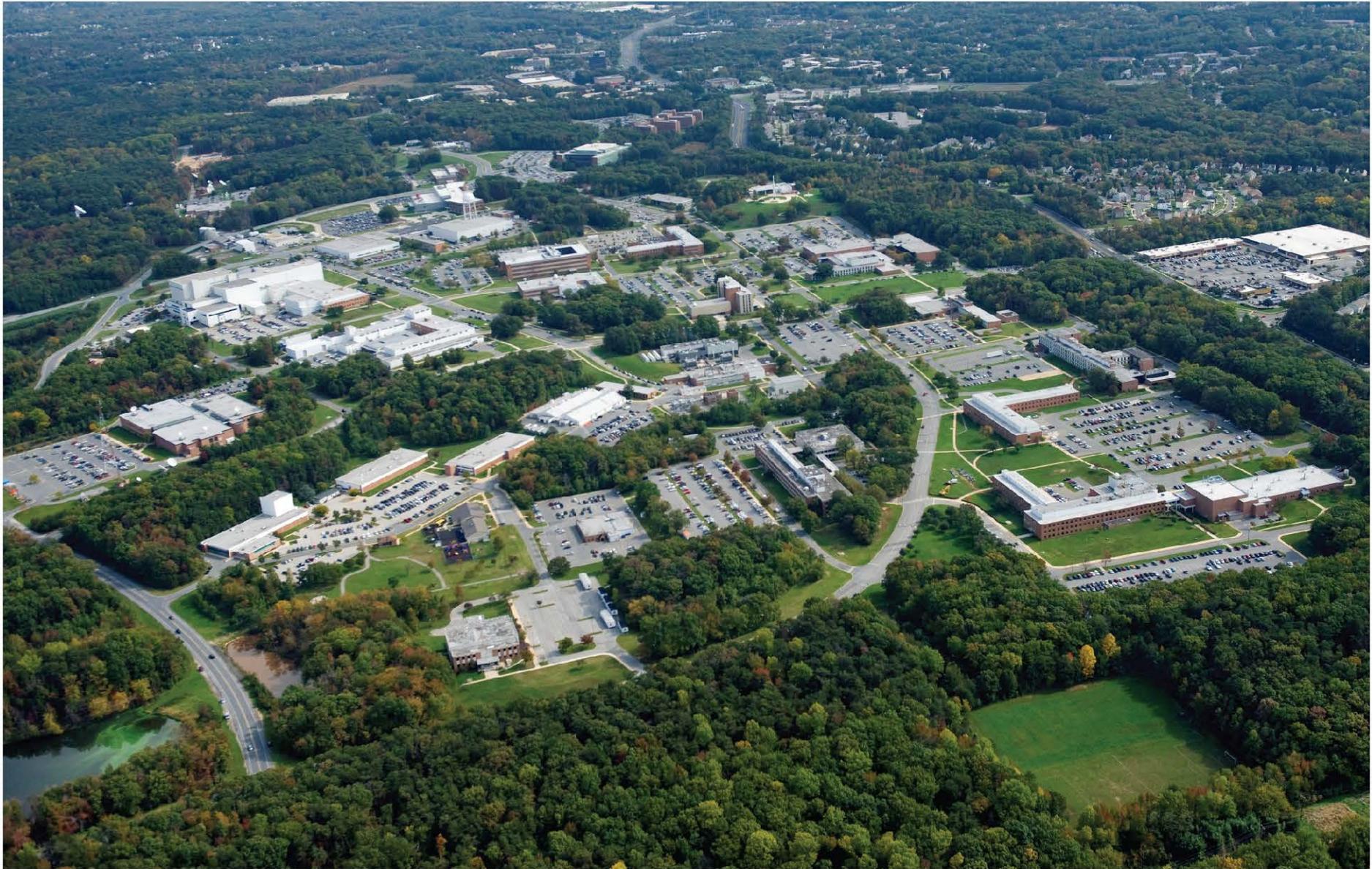
# June 2012 Center wide Power Outage

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# Agenda

- GSFC and Emergency Management Overview
- Derecho Overview
- Maryland Impacts
- Center Impacts
- Best Practices
- Lessons Learned
- Recommendations

# Goddard Space Flight Center



# Goddard Space Flight Center (GSFC)

	<b>Greenbelt Est. 1959</b>
Total Land Area owned	1147 Acres
Total Land Acres (permitted)	130 Acres
Other Paved Surfaces	140 Miles
Gross Square Footage (Buildings)	3,297,330 M Sq. Ft.
Trailers, Government owned & leased	21(11 Trailers)
Total Miles of Road	58.53 Acres Paved 7.38 Acres Unpaved
Fencing	16 Miles
Number of Buildings	65
Other areas (antenna range, tracking station, utility, observatories, magnetic test facilities)	10
Number of Critical Buildings	21

# Protective Services – Emergency Management

## **Functions/Services Include:**

Center Liaison

Event Management

- Incident Command And Control

- Building Emergency Drills

- Center Emergency Drills

Emergency Operation Center

- Emergency Public Address System (EPAS)

- Maintaining Emergency Communications

Emergency Management Tasking Group (EMTG)

Continuity of Operations Program Planning (COOP)

- Pandemic Planning

- Emergency Response Plans

- Natural Disaster

- Terrorism

Training & Equipment Procurements

- National Incident Management Training (NIMS)

- Center Table Top Exercises

- Automatic Electronic Defibrillator (AED) Maintenance Acquisition

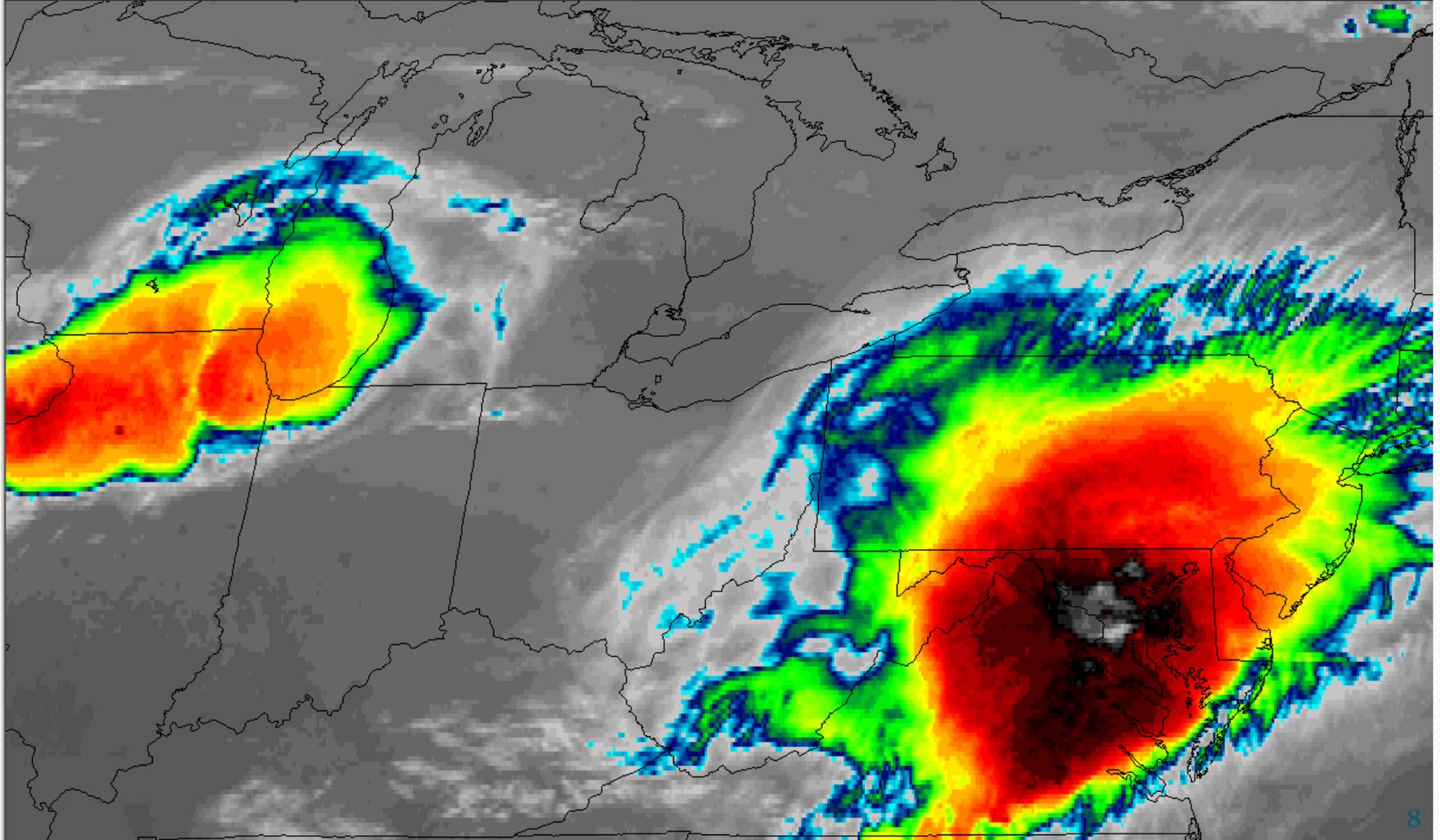
# Derecho

- A *derecho* is a widespread, long-lived wind storm that is associated with a band of rapidly moving showers or thunderstorms. Although a derecho can produce destruction similar to that of tornadoes, the damage typically is directed in one direction along a relatively straight swath. As a result, the term "straight-line wind damage" sometimes is used to describe derecho damage.

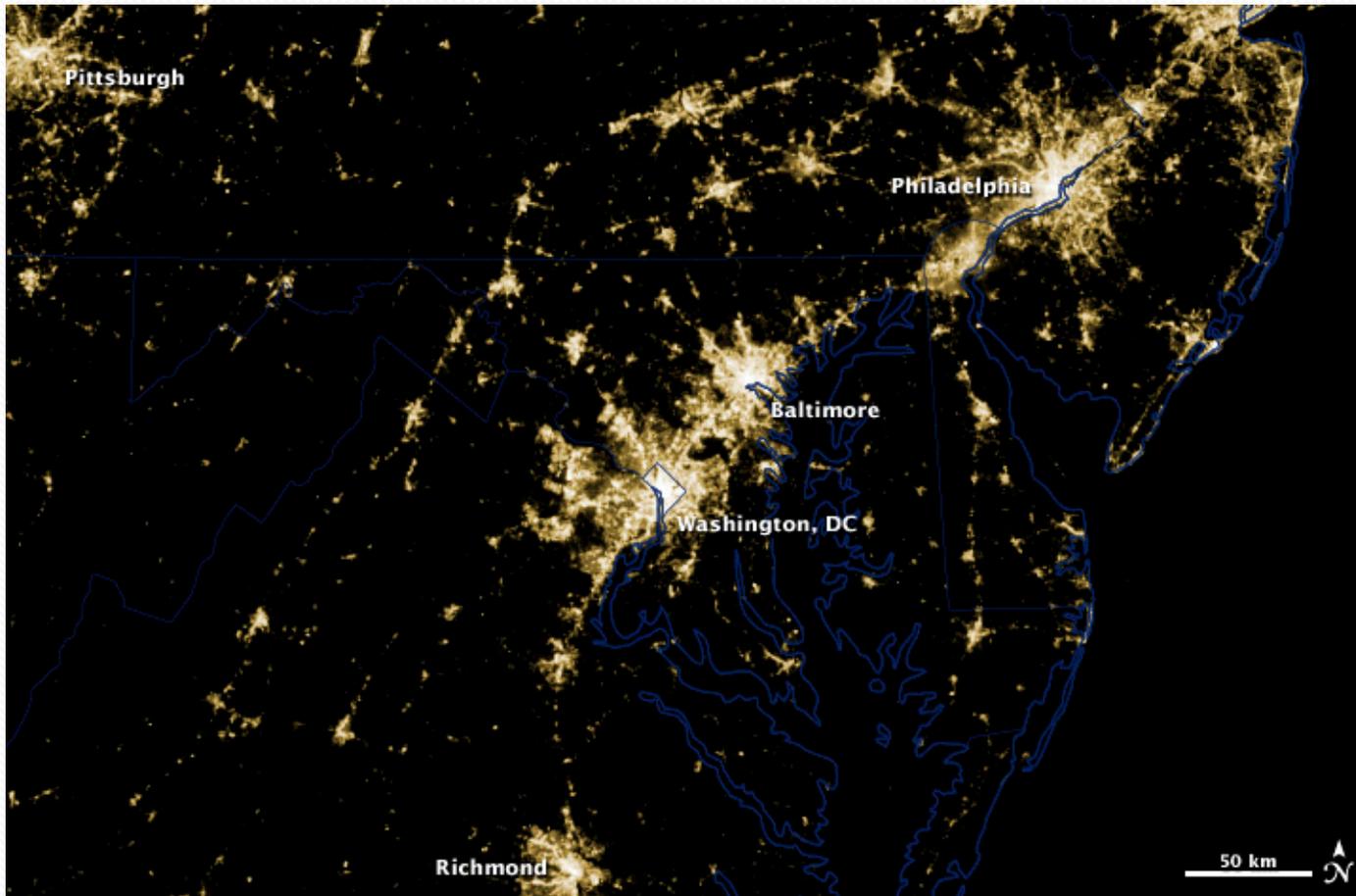
# Derecho cont.

- By definition, if the wind damage swath extends more than 240 miles (about 400 kilometers) and includes wind gusts of at least 58 mph (93 km/h) or greater along most of its length, then the event may be classified as a derecho.

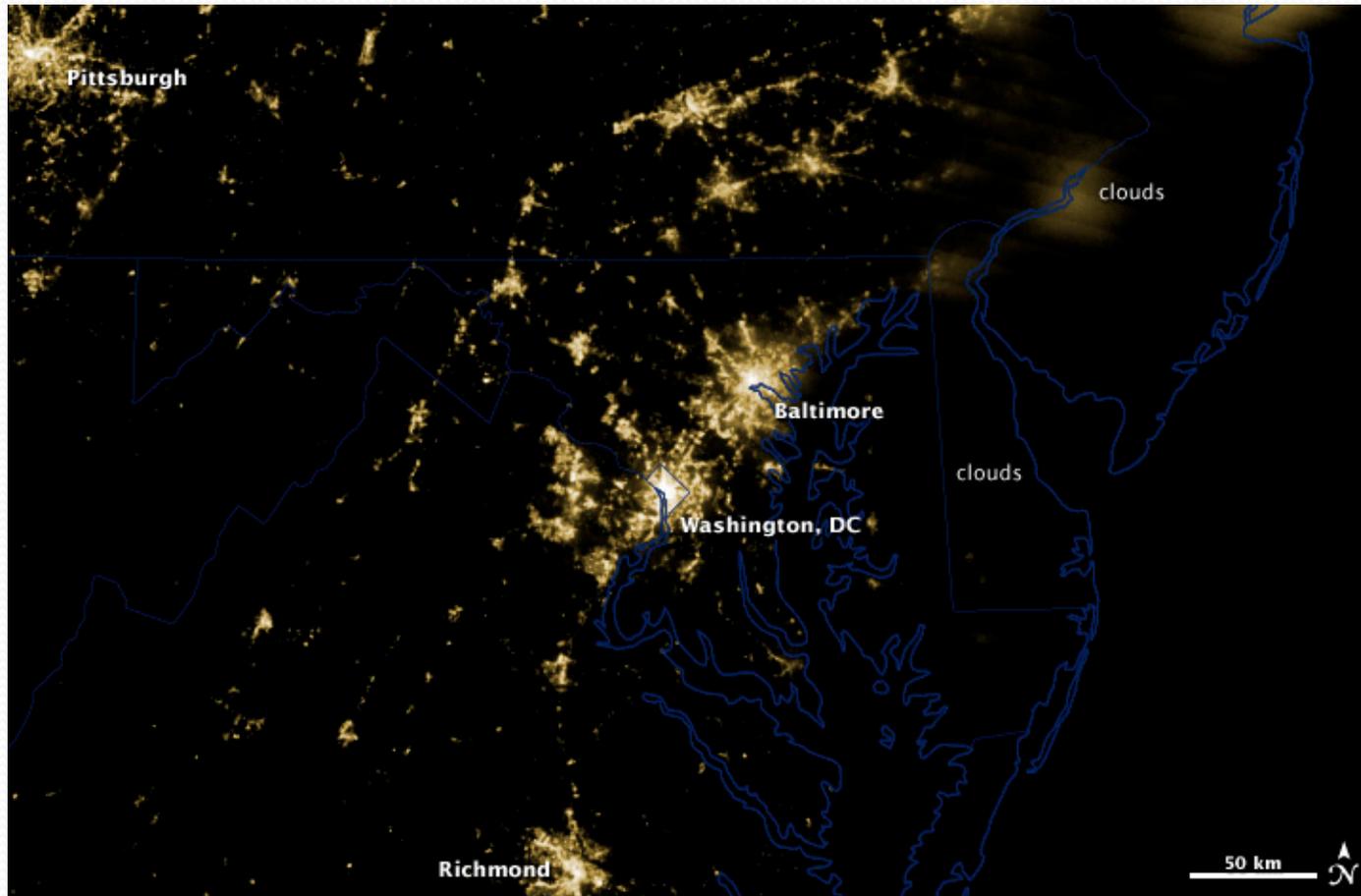
# Infrared Image Maryland



# Before the Storm 6/29



# After the Storm 6/30



# Maryland Impact

- Storm moved in Friday night June 29th
- June 30<sup>th</sup> State Emergency Declared
- 1 million power outages state wide
- State Emergency Operations Center activated
- Many Stoplights Dark
- Many Gas Stations Closed
- During a heat wave

# Communications issues

- Verizon - Main switching station lost power(backup failed)
- – Phone Lines Downed
- – Landline Comms Damaged
- • Many had limited/no ability to make/receive calls
- • Large 911 Outages - Northern VA (1.5M+ People)
- – Cell Phone Infrastructure Damaged
- • Large areas without service (text or voice)
- – FIOS/Cable phone accounts inop without power

# Goddard Space Flight Center

- Center wide Power Outages
- Fallen trees

# GSFC Timeline

- At 9:45 pm on June 29<sup>th</sup> Severe Storm starting to impact the Center.
- At 12:48 am Friday June 29<sup>th</sup> Center lost two of the three feeders
- At 12:55 pm Saturday June 30<sup>th</sup> the Center lost the last feeder
- At 7:15 am July 1<sup>st</sup> power was restored to one feeder
- At 2:45 pm July 1<sup>st</sup> Power was restored to all building
- At 9:10 pm power was restored to the second feeder
- At 10:29 pm July 3<sup>rd</sup> power was restored to the third power outage

# Best Practices

- Generators for critical mission buildings
- Center Wide Telephone Communications worked
- Telework agreements
- COOP planning
- Emergency Notification System (ENS)
- Emergency Public Address System (EPAS)
- Building Emergency Plans (BEPs)
- Quick response by Facilities and Protective Services

# Lessons learned

- Facilities and other personnel were unable to access, and in some cases egress, areas/buildings due to the failure of the Lenel system during the outage
- Hardcopies of essential records, such as the Continuity of Operations (COOP) Plan/Call-tree, should be maintained by all Directorates.
- Directorates are to develop standard operating procedures to identify measures they are to take during a power outage (i.e., orderly shutdown of operations)

# Recommendations

- For all critical mission facilities they should have backup power
- All non critical facilities should have the ability to be placed on generator power (quick connects)
- Tree and vegetation management
- Ways to open and close doors without power



**Questions**

# GSFC Emergency Management Program

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