

USDA Forest Service

# URBAN FOREST CONNECTIONS

*webinar series*

Second Wednesdays | 1:00 – 2:15 pm ET

[www.fs.fed.us/research/urban-webinars](http://www.fs.fed.us/research/urban-webinars)



# GREEN READINESS, RESPONSE, AND RECOVERY: STEWARDSHIP OF NATURAL RESOURCES IN THE CONTEXT OF DISTURBANCE



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Green Readiness, Response, and Recovery: Stewardship of natural resources  
in the context of disturbance

*A Green Recovery in Cunningham Park: Drury University Responds to the Joplin Tornado*



Outline

Disturbance: Joplin Tornado

Timeline of Recovery

Case Studies

    Volunteer Tribute

    Butterfly Garden & Overlook

Lessons Learned

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# Joplin Tornado

May 22, 2011

EF5 Tornado

38 minutes

$\frac{3}{4}$  miles wide x 13 miles long

7500 homes damaged

161 lives lost



# Cunningham Park

Icons fall

Urban forest destroyed

Tree City USA



## Outline

Disturbance: Joplin Tornado

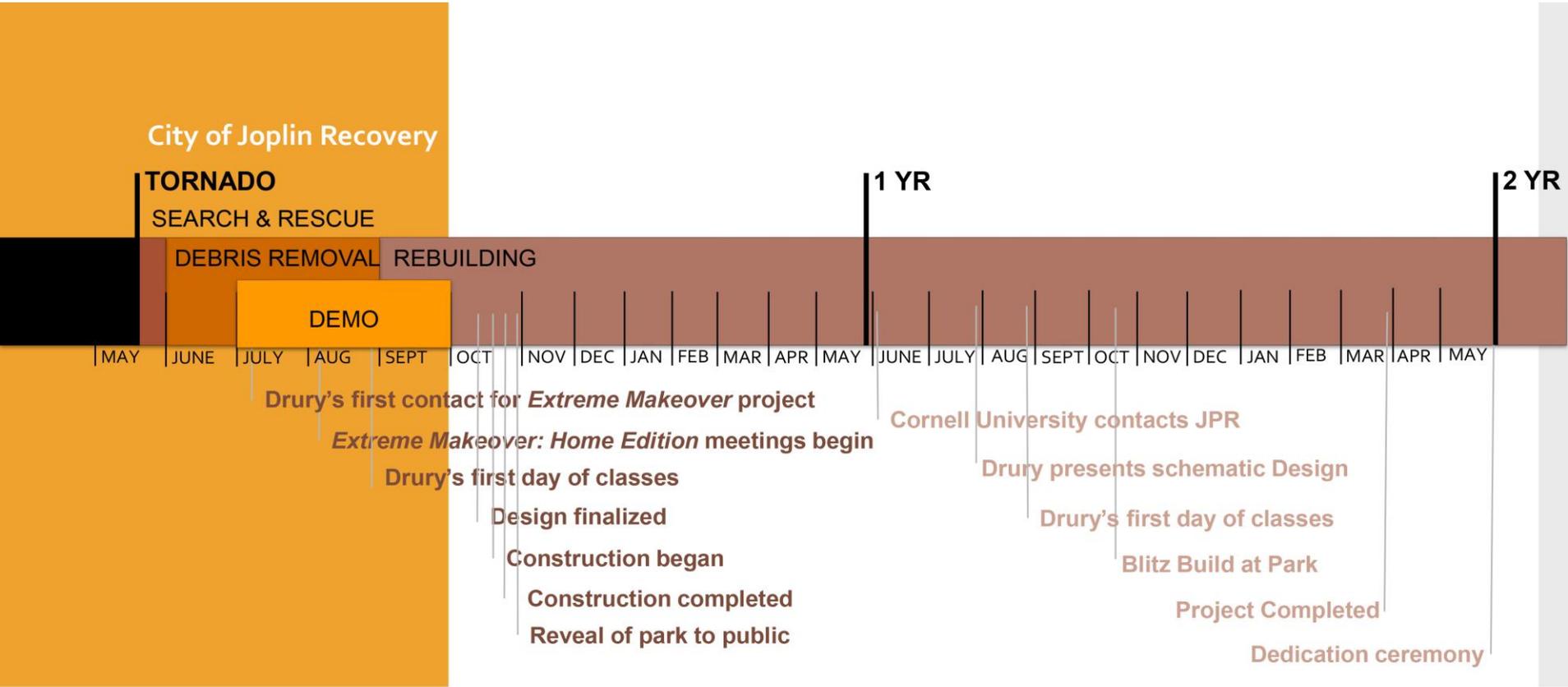
### **Timeline of Recovery**

Case Studies

Volunteer Tribute

Butterfly Garden & Overlook

Lessons Learned



*Volunteer Tribute: Drury University timeline*

*Butterfly Garden: Drury University timeline*

## Outline

Disturbance: Joplin , Missouri Tornado

Timeline of Recovery

### **Case Studies**

**Volunteer Tribute- Cunningham Park, Joplin**

Butterfly Garden & Overlook - Cunningham Park, Joplin

Lessons Learned

# Stewardship: Volunteer Tribute

Extreme Makeover: Home  
Edition (10,000+ Volunteers)  
Drury University  
Joplin Parks & Recreation  
City of Joplin  
International, National, Local  
Volunteers  
Local Contractors



# Drury SmartMob!

*A Flash Mob  
with purpose*



# Re-greening

120 SmartMob! volunteers  
re-green park in 45 minutes



# Volunteer Tribute

Honors the over 170,000 volunteers that came to Joplin's aid

Four rings represent the four phases of recovery

*Search & Rescue*

*Debris Removal*

*Demolition*

*Rebuild*



# Design Elements

Wristband sculpture

Four bronze tool sculptures

Tribute & tornado shard pedestals

Butterfly mosaic



# Sacred Ground

Cunningham Park - 1<sup>st</sup> park in Joplin & ground zero of tornado

10,000+ walk tornado path on one year anniversary

Walk of Unity culminates at Cunningham Park



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**Butterfly Garden & Overlook - Cunningham Park, Joplin**

Lessons Learned

# Stewardship: Butterfly Garden & Overlook

Drury University  
USDA Forest Service  
Cornell University  
Joplin Parks & Recreation  
TKF Foundation  
Wal-Mart Foundation  
Forest ReLeaf of Missouri  
Great River Associates  
CART (Citizen Advisory Recovery  
Team)  
Master Gardeners  
Local Volunteers





## Butterfly Garden & Overlook

Immersing in nature to heal  
Worden's four phases of grieving  
Four TKF elements  
House frames  
38 minute water wall  
Butterfly Pavilion  
Story boards



*TKF Elements coupled with* Worden's four processes of Grief



*Portal* - Accepting the reality of the loss



*Path* - Processing the pain of Grief

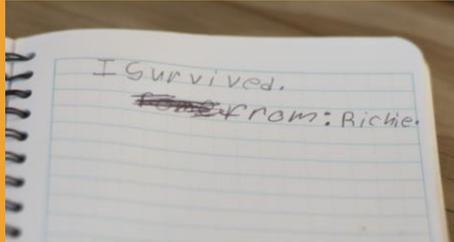


*Destination* - Creating a World without what was lost



*Sense of Surround* – Creating an enduring Connection to the past

# Journals



# 38 Minute Water Wall

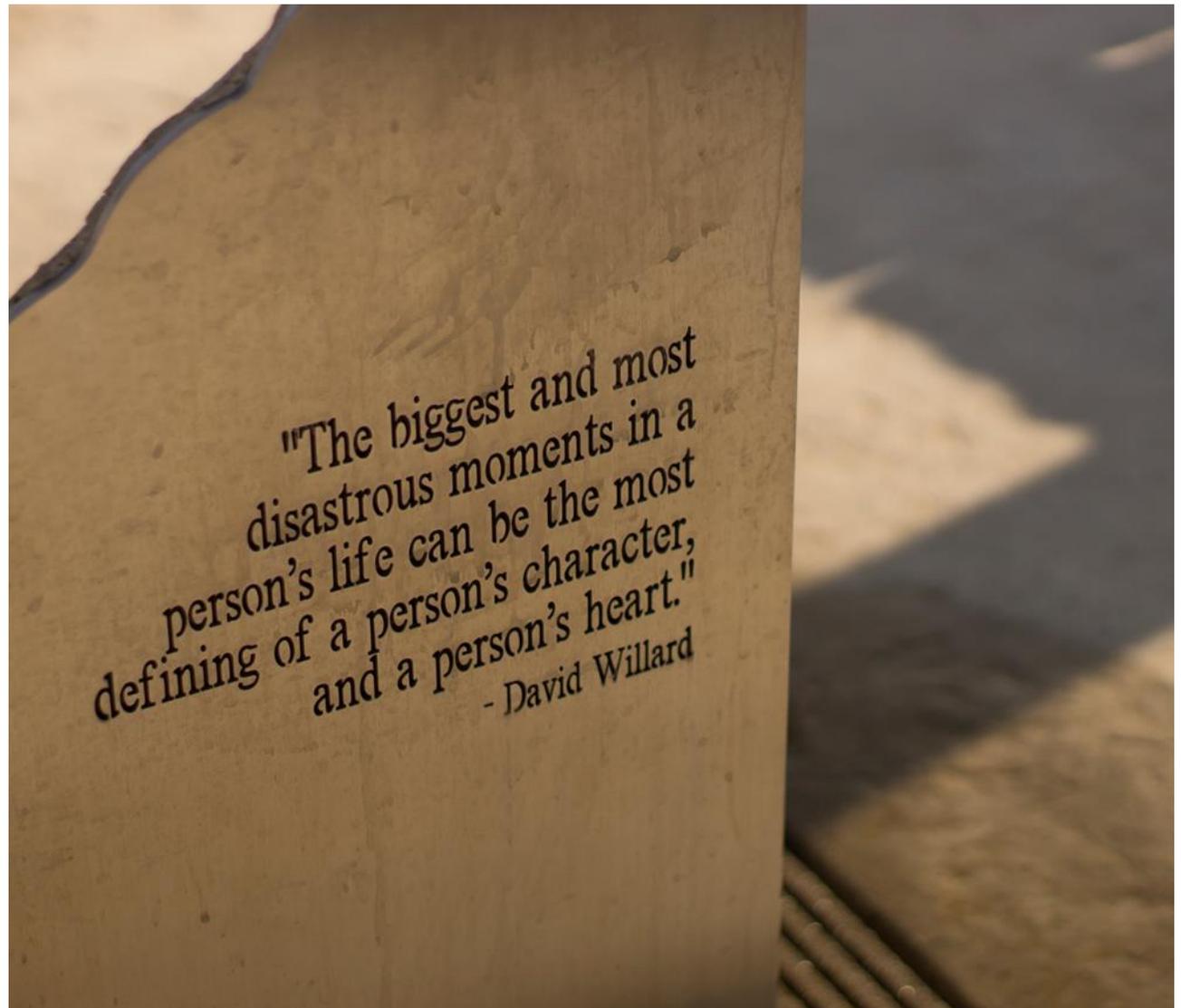
5:41 pm storm hits Cunningham  
Park and St. John's Hospital

Tornado winds reach 200+ mph



# Survivor quotes

Quotes, stories of survival and acts of heroism are collected, archived and appear in water features and story boards



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**Lessons Learned**

# Lessons Learned

Re-green as soon as possible to help people heal

Collaborate with partners and volunteers

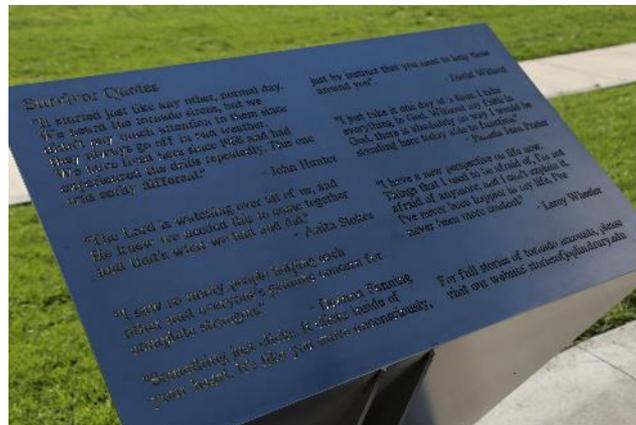


# Lessons Learned

Listen, be inclusive and be collaborative

Collect and archive stories

Stories reproduced publicly can be a source of pride



# Lessons Learned

Find a rallying theme to unite and uplift the community



# Lessons Learned

Recognize the community can have place attachment loss after a disturbance

Create enduring connection to what was lost;  
*We move on, but don't forget*



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