

LANE

PREPAREDNESS

COALITION



Ice Storm 2016: Lessons Learned

February 8, 2017

AGENDA

- Call to order, LPC Chair Jill Hoyenga



Photo courtesy of Dr. Geoff Simmons

PUBLIC AGENCY PANEL

- City of Eugene Public Works, Scott Milovich
- City of Eugene Risk Services, Kevin Holman
- City of Springfield, Ken Vogeney
- Eugene Water & Electric Board, Jeannine Parisi



Photo Courtesy of Dr. Geoff Simmons

Photo courtesy of Dr. Geoff Simmons

CITY OF EUGENE PUBLIC WORKS EMERGENCY COMMAND CENTER (ECC)

- Scott Milovich, Parks Operations Manager
- **Activated ECC December 14**
 - December 15 – 18 Operated on 12 Hour Shifts
 - Returned to 8 hour shifts Monday December 19 for safety reasons
- **Initially for sanding/de-icing and tree debris removal**
 - Primarily a tree event
 - Shifted to ice/snow removal as needed – 24 hours
- **Currently in a debris clearing/recovery operation**
 - Plan to complete operations mid-March



Photo Courtesy of EWEB Wire Watch

CITY OF EUGENE PUBLIC WORKS ESTABLISHED GOALS



Photo Courtesy of EWEB Wire Watch

- **Primary focus on priority transportation routes**
 - Public and employee safety
 - Ice/snow removal
 - Tree debris removal
 - Hazardous tree identification and removal
- **Initial Response**
 - Tree hazards and closed roads based on reports from public, agencies and scouting
 - Ice/Snow based on response plans and zones
- **Ongoing Response**
 - Tree hazards identified, verified and prioritized by scouting
 - Ice/Snow based on response plans and zones
 - Area approach

CITY OF EUGENE PUBLIC WORK AFTER ACTION REPORT

- **Strengths**

- Use of technology
 - Tree scouting GIS application
- Coordination and resource sharing internally
- Communication with outside agencies and City EOC

- **Areas for improvement**

- Internally filling roles in ICS structure
- Resource challenges
- Building relationships with outside/neighboring agencies



Photo Courtesy of EWEB Wire Watch

CITY OF EUGENE

EMERGENCY OPERATIONS CENTER (EOC)

- Kevin Holman, Emergency Manager

December 15, 2016

- Estimated 17,000 services without Power
- EWEB estimated 5 to 7 days to correct outages
- NOAA below 32°F through Sunday December 18
- City and County coordination meeting held
- City executives notified – partial activation
- Verbal approval for an emergency declaration
- The City Disaster Operations Task Team (DOTT) notified

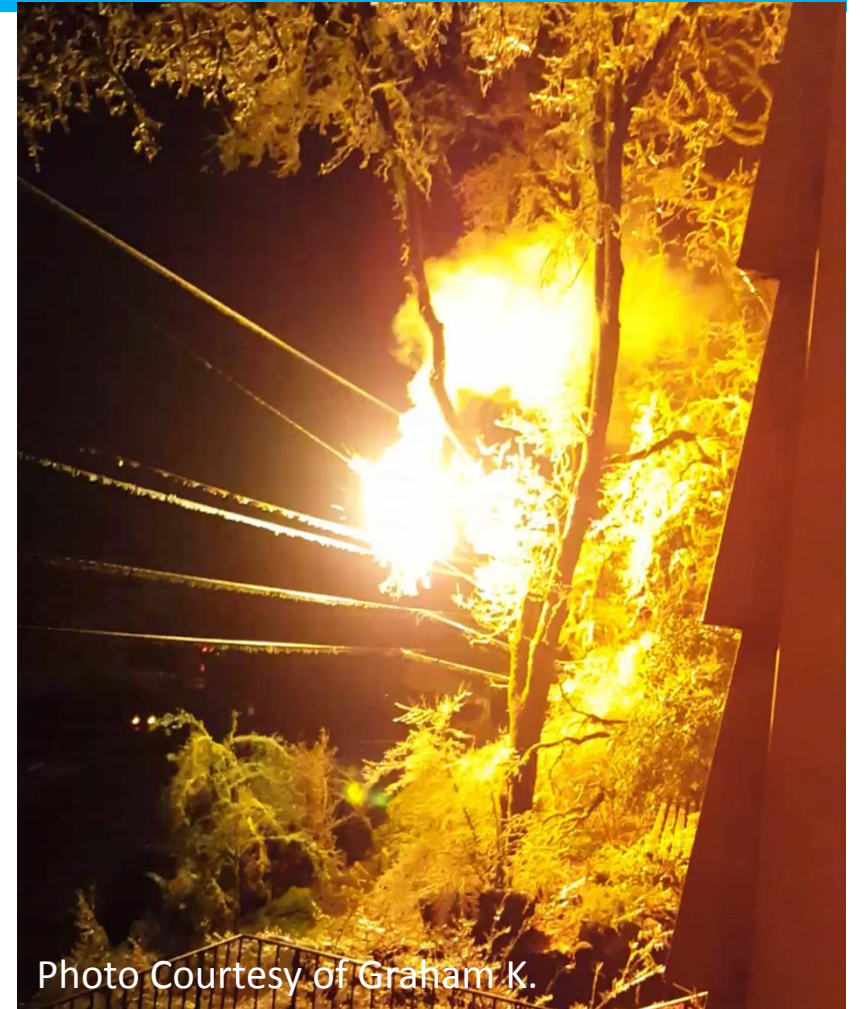


Photo Courtesy of Graham K.

CITY OF EUGENE EOC RESPONSE EFFORTS



Photo Courtesy of Karen Edmonds

December 16

- EOC initial briefing

December 17

- American Red Cross shelter set-up
- EOC Community Information Call Center
- Community Organizations Active in Disaster (COAD)
- Library and Community Centers
- **December 21**
 - EOC Demobilized

CITY OF EUGENE AFTER ACTION REPORT

Strengths

- Public information process/plan worked well
- People from across the organization (Library, Recreation, and Cultural Services - LRCS)
- Virtual EOC combined with regular meeting was positive

Areas for Improvement

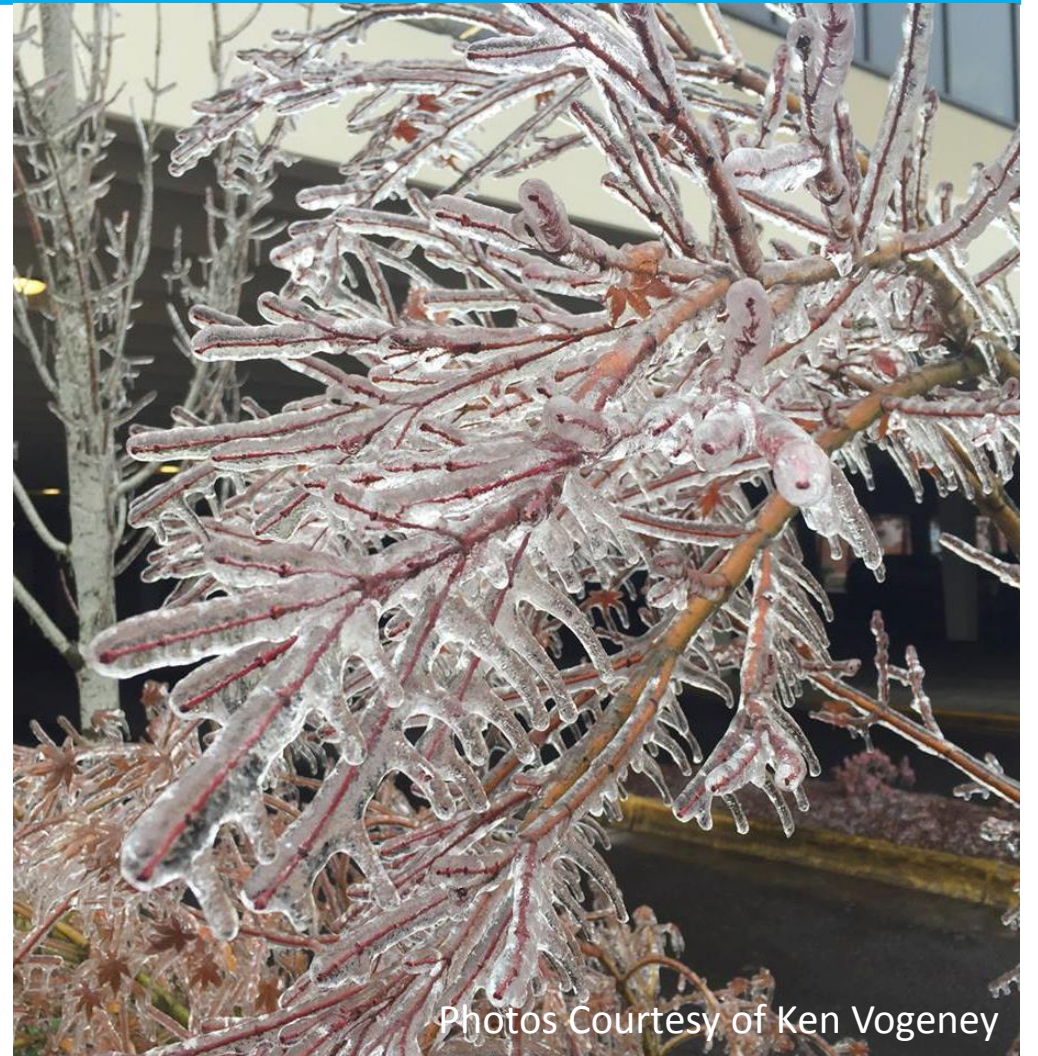
- Employee childcare
- On-boarding specialists
- Real-time tracking for payroll



Photo courtesy of Jill Hoyenga

CITY OF SPRINGFIELD

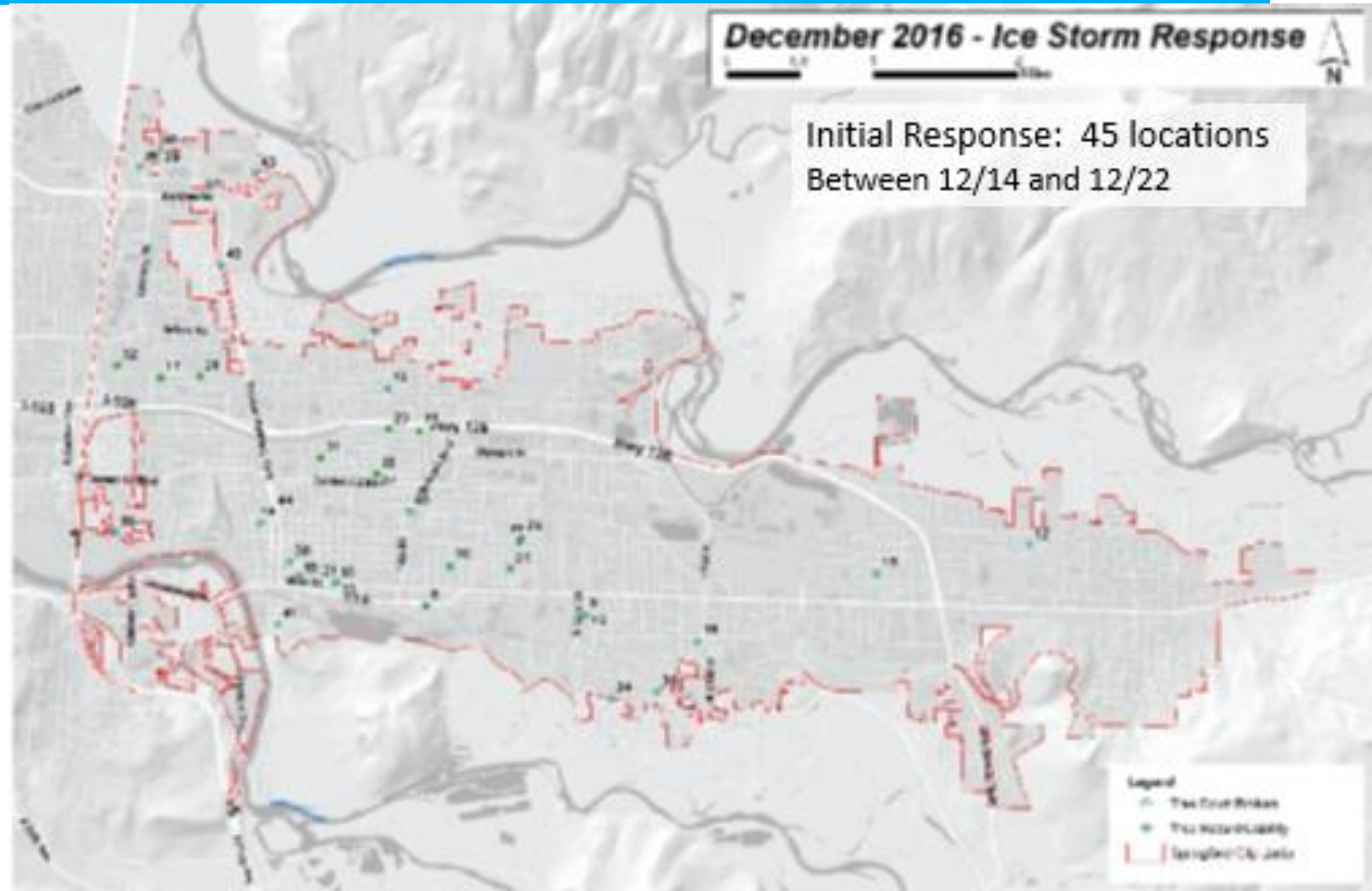
Ken Vogeney, PE, Emergency Manager
Incident Roles: Emergency Manager/
ICS Planning Section



Photos Courtesy of Ken Vogeney

AFFECTED AREAS IN SPRINGFIELD

- Storm mostly on west side
 - 7 sites east of 28th St.
- Tested field data collection tool for damage assessment – ArcGIS Collector
- Tested Springfield Quick Reference Guide



POWER OUTAGES IN SPRINGFIELD



- SUB had over 3,000 customers lose power (about 10%)
- SUB restored all of their system power by 8 pm on 12/16
- 2 water supply wells lost power
- 2 wastewater pump stations lost power

Photo Courtesy of Ken Vogeney

SPRINGFIELD EMERGENCY MANAGEMENT



Photos Courtesy of Ken Vogeney

Having an emergency preparedness kit in your vehicle is a good idea.

These weather items may come in handy when driving:
a shovel & salt/sand, ice scraper, blankets,
water, extra clothing & flashlight.

Check out our Emergency Management Program
web page for more resources and tips.

<http://www.springfield-or.gov/dpw/EmergencyManagement.htm>

EUGENE WATER & ELECTRIC BOARD

- Jeannine Parisi, Government & Community Coordinator
- Served during several shifts as EWEB Public Information Officer



Photo Courtesy of EWEB Wire Watch

FIRST 48 - 72 HOURS IN EUGENE

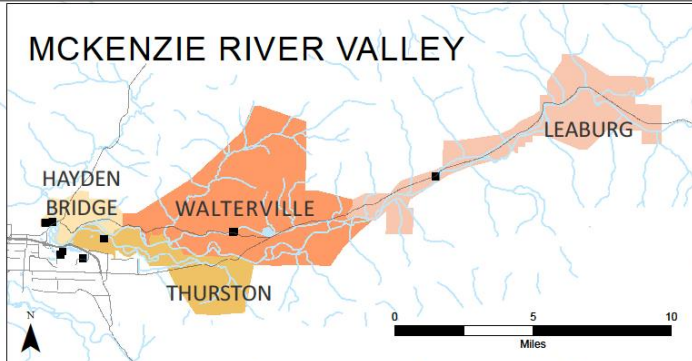
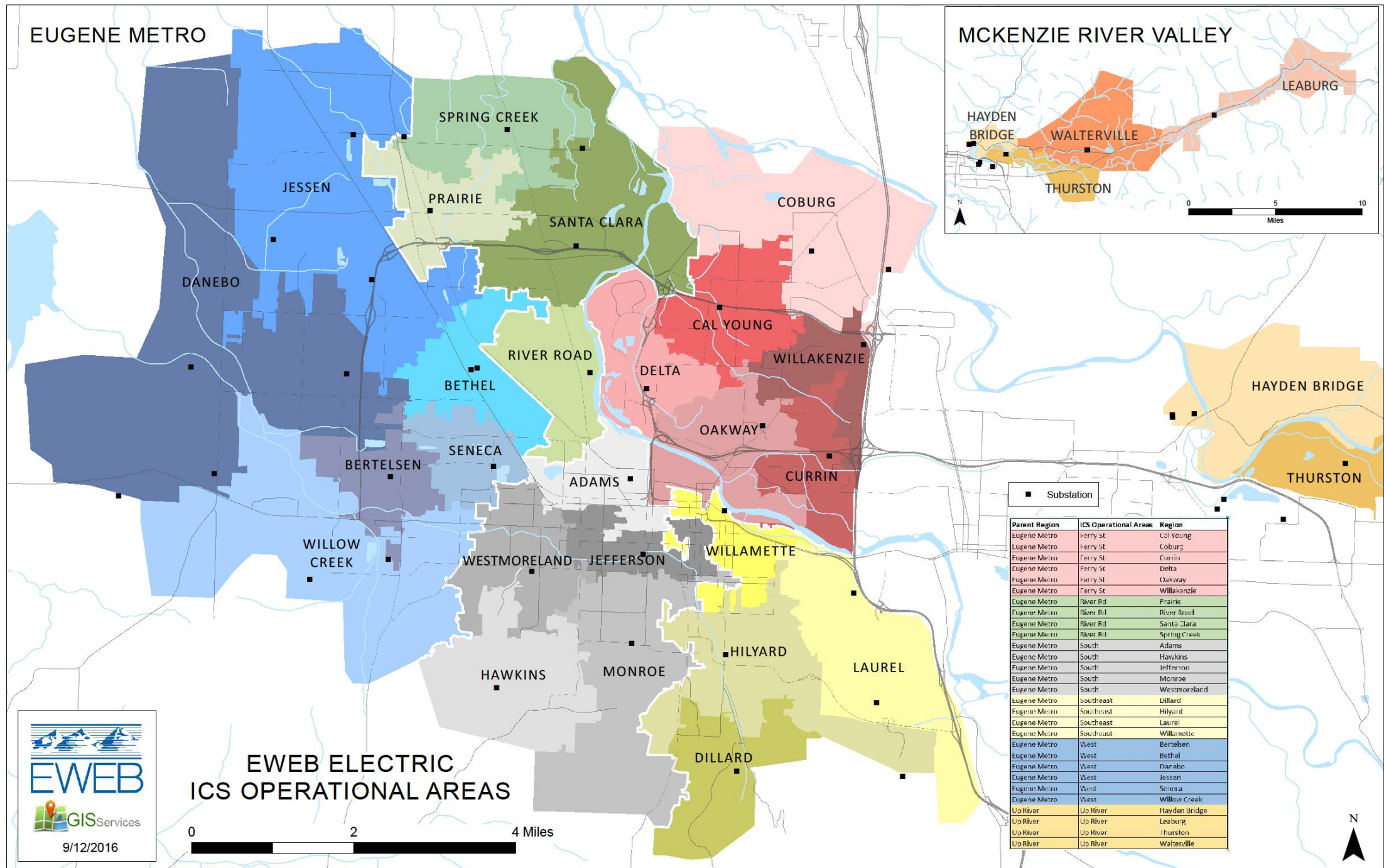
- Incident Command Center established
- Temperatures remained below freezing
- 22,000+ customers out of power (about 25%)
- Damage to electric system widespread, affecting numerous 'feeders' & several transmission lines.
- Make safe first priority
 - Downed wires
 - Tree incidents
 - System foundation work



Photo Courtesy of EWEB Wire Watch

EUGENE METRO

MCKENZIE RIVER VALLEY

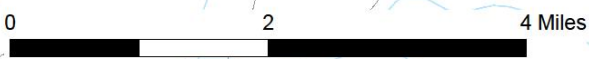


■ Substation

Parent Region	ICS Operational Areas	Region
Eugene Metro	Ferry St	Cal Young
Eugene Metro	Ferry St	Coburg
Eugene Metro	Ferry St	Currin
Eugene Metro	Ferry St	Delta
Eugene Metro	Ferry St	Oakway
Eugene Metro	Ferry St	Willakenzie
Eugene Metro	River Rd	Prairie
Eugene Metro	River Rd	River Road
Eugene Metro	River Rd	Santa Clara
Eugene Metro	River Rd	Spring Creek
Eugene Metro	South	Adams
Eugene Metro	South	Hawkins
Eugene Metro	South	Jefferson
Eugene Metro	South	Monroe
Eugene Metro	South	Westmoreland
Eugene Metro	Southeast	Dillard
Eugene Metro	Southeast	Hilyard
Eugene Metro	Southeast	Laurel
Eugene Metro	Southeast	Willamette
Eugene Metro	West	Bertelsen
Eugene Metro	West	Bethel
Eugene Metro	West	Danebo
Eugene Metro	West	Jessen
Eugene Metro	West	Seneca
Eugene Metro	West	Willow Creek
Up River	Up River	Hayden Bridge
Up River	Up River	Leaburg
Up River	Up River	Thurston
Up River	Up River	Waltherville

EWEB
GIS Services
9/12/2016

EWEB ELECTRIC
ICS OPERATIONAL AREAS



WHAT WORKED WELL



Photo Courtesy of EWEB Wire Watch

- Mutual Aid
 - 25 utility & contract crews
 - Work flow, available equipment, logistical support like lodging
 - Coordination with public works
- Social Media/Website
 - Avg 10,000 engagements/day
 - 888 EWEB updates on Twitter
- Staffing
 - 6 public info staff (2 PIO/3-4 social media channels)
 - 24/7 customer service
 - Planning and project design

CHALLENGES

- Outage line overwhelmed
 - 250,000 calls received
 - 148,000 texts
- Traditional communications missed
 - Info on community resources in EWEB lobby?
 - On-hold messaging sooner
- Technology limitations
 - No AMI = flying blind
 - Paper system for work orders/clearing jobs

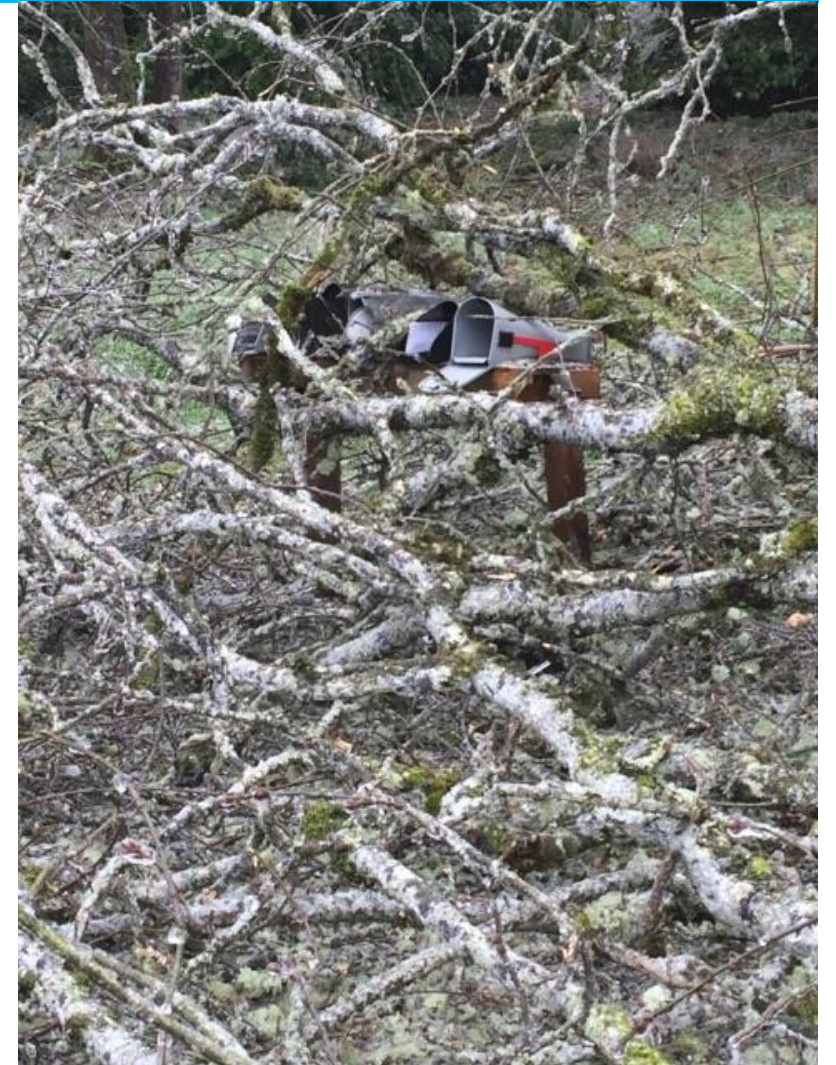


Photo Courtesy of EWEB Wire Watch

LESSONS LEARNED



Photo Courtesy of EWEB Staff

- Build bench strength
 - ICS & PIO
 - Outage system
 - Wire watch
- Train & document
- Public Outreach
 - Preparedness
 - Tree trimming
 - Customer contact info

STORM STATS

About \$4.2 M

157 cross arms

135 miles of wire

40 transformers

28 poles

200 customer meters

1,000+ water customers on generators

NON-PROFIT SECTOR PANEL

- COAD Chair, Karen Edmonds, Food for Lane County
- University of Oregon, Krista Dillon
- Spencer Butte Neighborhood Association, Dr. Geoff Simmons



Photo Courtesy of Jill Hoyenga

COMMUNITY ORGANIZATIONS ACTIVE IN DISASTER (COAD)

Mission: *To bring together a broad array of **community organizations** to foster an effective **response** to the people of Lane County in times of disaster.*

COAD MEMBERS

- 211 Info
 - American Red Cross
 - Cascade Manor
 - Catholic Community Services
 - Central Aid Agency
 - City of Eugene Emergency Management
 - Episcopal Campus Ministry Student Food Pantry
 - FOOD for Lane County
 - Greenhill Humane Society
 - Halfway House Services
 - Junction City Local Aid
 - Lane Community College
 - Lane County
 - Lane Independent Living Alliance
 - Lane Transit District
 - Love INC
 - McKenzie Surgery Center
 - Mohawk/Marcola Disaster Response
 - New Hope Baptist Church
 - Northwest Youth Corps
 - Pearl Buck Center
 - Serenity Lane
 - ShelterCare
 - SnoTemp Cold Storage
 - South Lane Mental Health
 - Southeast Neighbors
 - St. Vincent de Paul
 - The Arc Lane County
 - The Salvation Army
 - United Way of Lane County
 - White Bird Clinic
 - Willamette Family
 - University of Oregon
- Red = Government
- Green = Non-profit
- Blue = Business

COAD ACTIVATION IN ICE STORM

OMG! There is a big ice storm coming!



Photo Courtesy of Lane County

OK, we'll be glad to help!



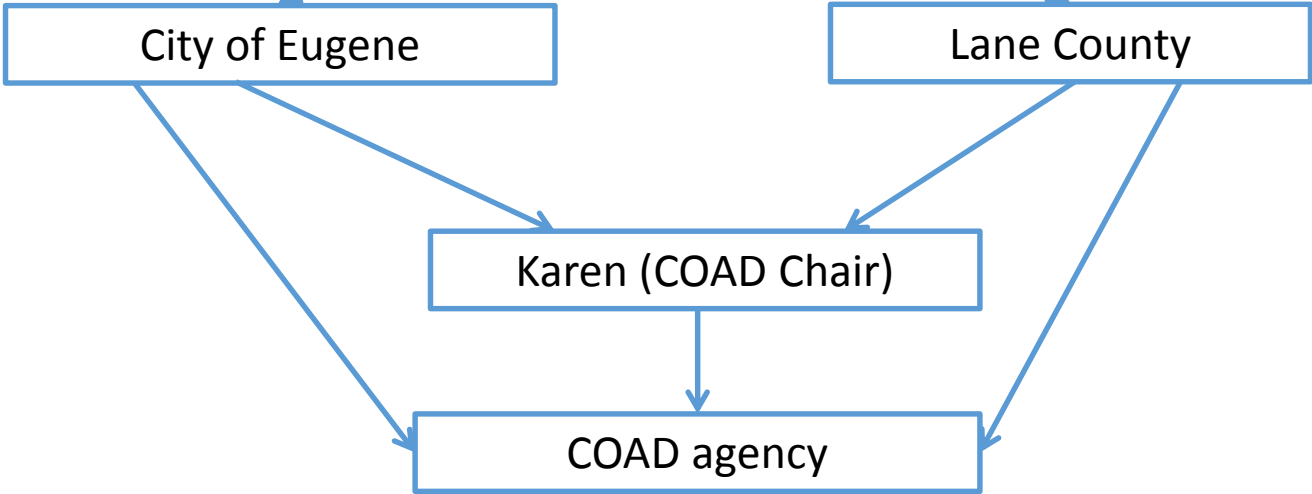
Photo Courtesy of Food for Lane County

211info
How can
we help?

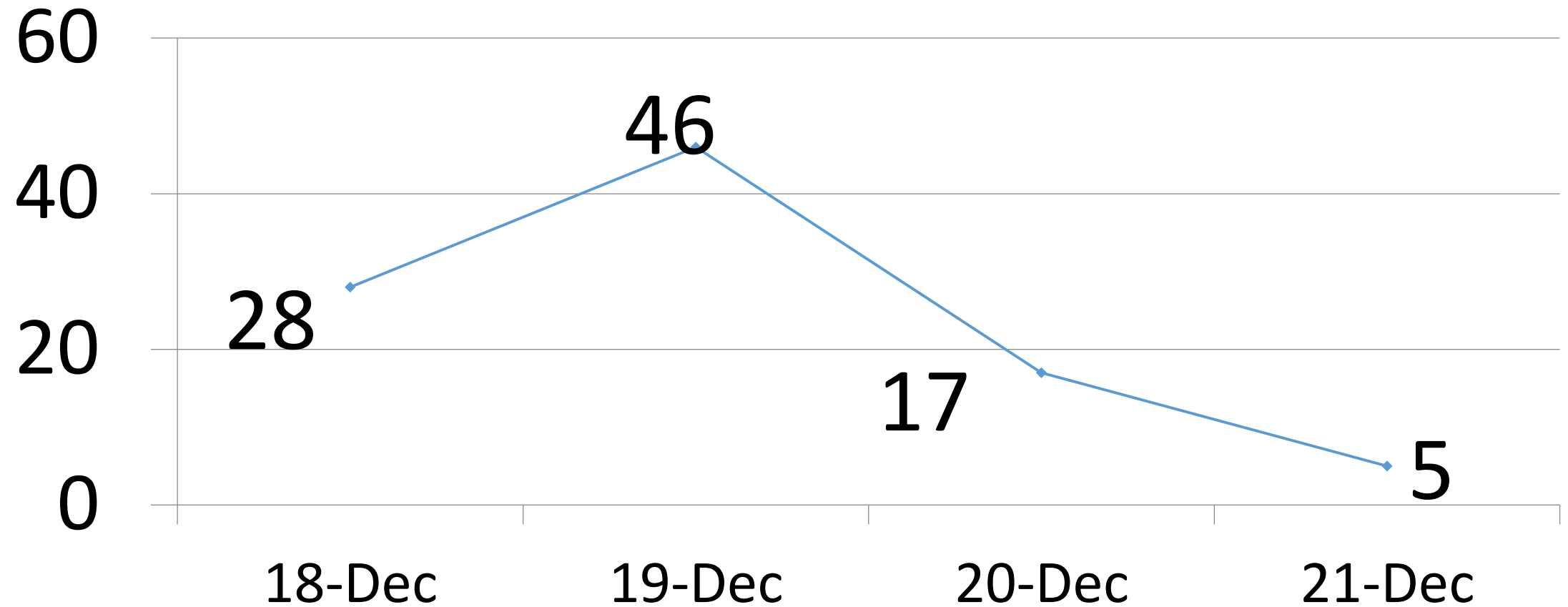


Help!
Help!

Unit Sales	Unit Price	Aug-06	Aug-07	Aug-08	Aug-09	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07
Flowers-Export	\$2.25	\$11,250	\$24,425	\$14,875	\$22,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000
Flowers-Local	\$2.00	\$174,900	\$0	\$500	\$10,375	\$14,275	\$11,000	\$23,400	\$20,400	\$15,400	\$19,400
Flowers-Global	\$1.43	\$3,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Flowers-Other	\$0.85	\$13,544	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Revenue A	\$0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Revenue B	\$0.00	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Sales	\$13,729,000	\$0	\$11,875	\$15,175	\$36,000	\$60,000	\$66,000	\$68,400	\$65,400	\$60,400	\$64,400
Direct Cost of Sales	\$109,450	\$0	\$1,450	\$4,475	\$4,440	\$11,000	\$19,200	\$19,700	\$19,700	\$19,700	\$19,700
Gross Margin	\$13,619,550	\$0	\$10,425	\$10,700	\$31,560	\$49,000	\$46,800	\$48,700	\$45,700	\$40,700	\$44,700
Gross Margin %	92.2%	0.0%	87.2%	70.1%	87.7%	81.7%	70.9%	71.2%	70.0%	67.4%	69.4%
Operating Expenses	\$159,410	\$14,700	\$17,360	\$11,410	\$26,420	\$49,000	\$51,400	\$50,000	\$50,000	\$50,000	\$50,000
Operating Profit	\$13,460,140	\$0	\$8,765	\$9,290	\$25,140	\$29,600	\$27,400	\$28,700	\$26,000	\$21,000	\$24,700
Operating Margin %	98.8%	0.0%	73.7%	61.3%	72.6%	49.3%	41.5%	42.0%	40.0%	36.4%	38.2%



211info - NUMBER OF CALLS



SERVICES PROVIDED



LESSONS LEARNED



UNIVERSITY OF OREGON

- Kelly McIver
- Public Information Officer

Photos courtesy of University of Oregon Environmental Health and Safety Staff



Facing Knight Library from
Schnitzer Museum of Art



Facing University Health Center
from Oregon Hall






Bean Hall

Storm Damage as of 12/16 10:00AM

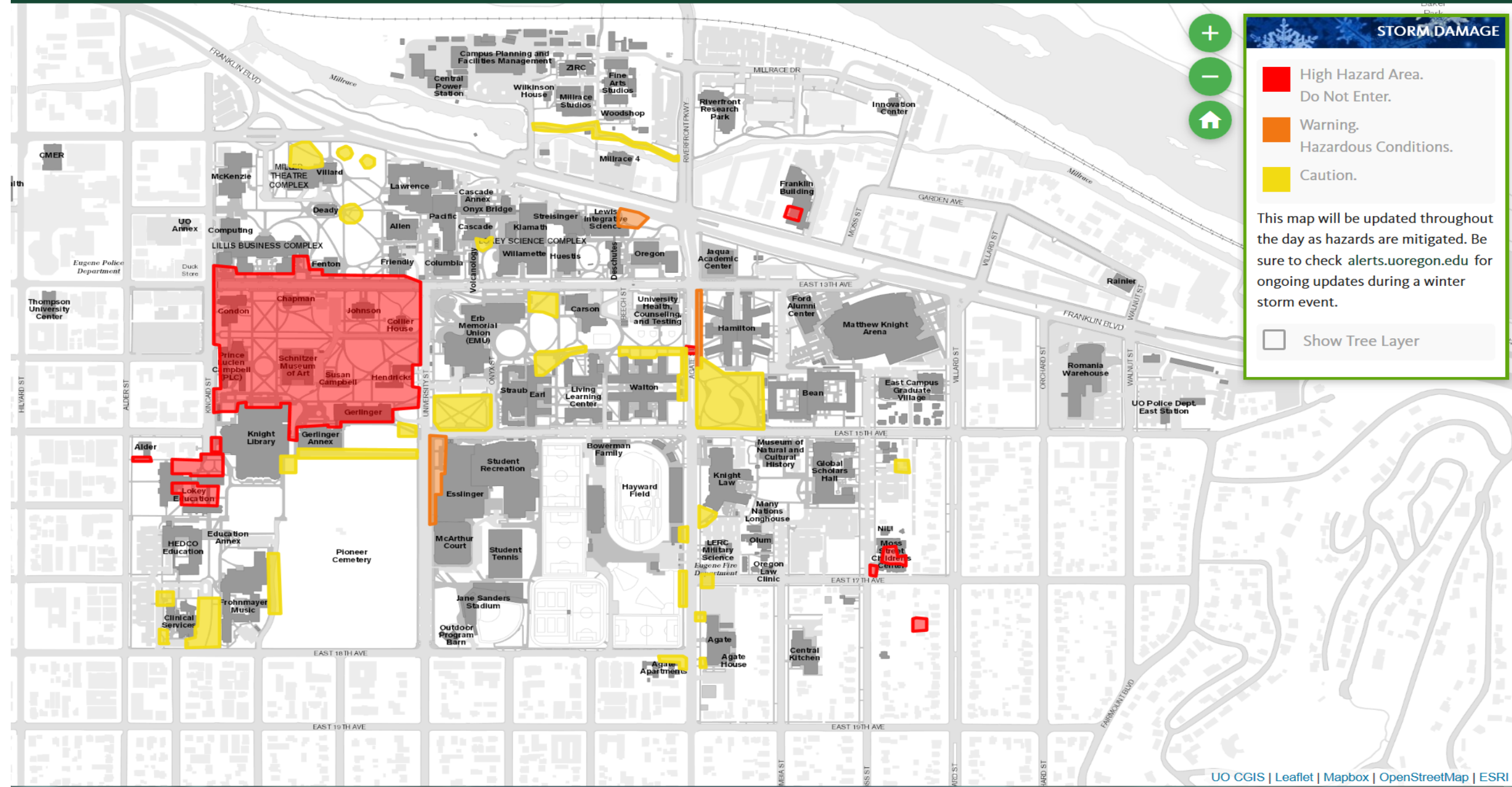


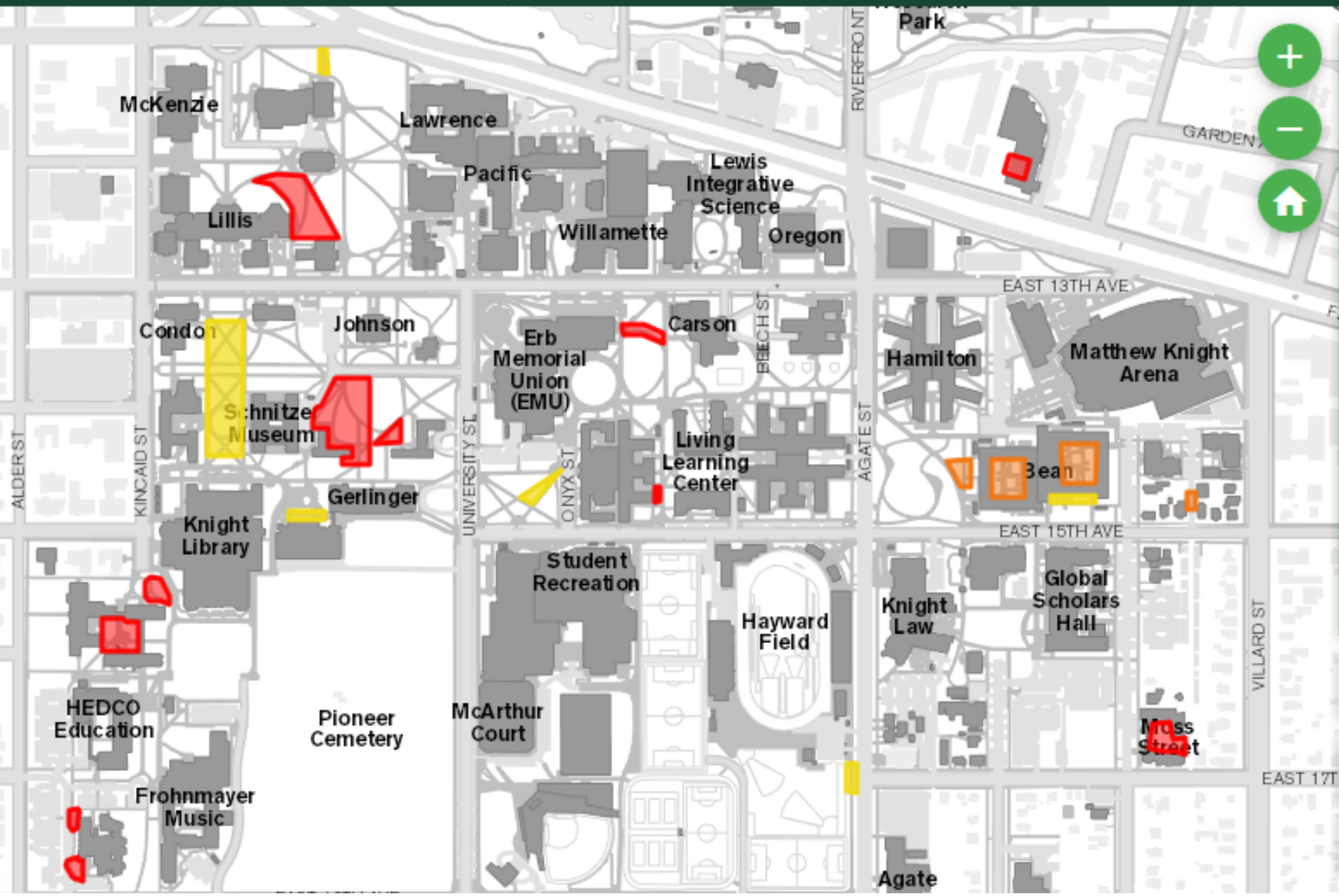
STORM DAMAGE

-  High Hazard Area.
Do Not Enter.
-  Warning.
Hazardous Conditions.
-  Caution.




This map will be updated throughout the day as hazards are mitigated. Be sure to check alerts.uoregon.edu for ongoing updates during a winter storm event.

Show Tree Layer





STORM DAMAGE

-  High Hazard Area.
Do Not Enter.
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This map will be updated throughout the day as hazards are mitigated. Be sure to check alerts.uoregon.edu for ongoing updates during a winter storm event.

Show Tree Layer

 COLOR

 GRAY

 NIGHT



Drones photos courtesy of Dean Walton



Removing ice topped tree from Susan Campbell Hall





Memorial Quad West of Schnitzer Museum of Art

SPENCER BUTTE NEIGHBORHOOD

- Dr. Geoff Simmons
- Spencer Butte neighborhood location

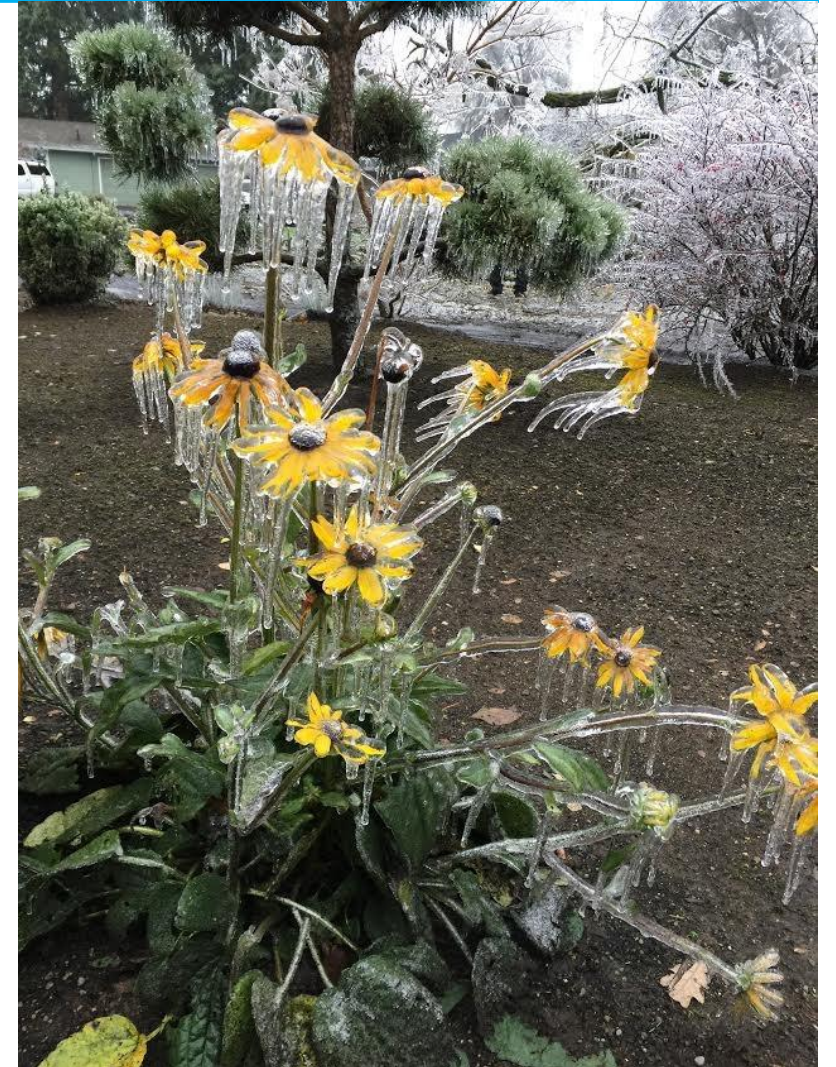


Photo courtesy of Dr. Geoff Simmons

STRUCTURAL & PROPERTY DAMAGE



Photos courtesy of Dr. Geoff Simmons

ROAD CLOSURES & POWER OUTAGES



Photos courtesy of Dr. Geoff Simmons

TABLE SHARING



Photo courtesy of Dr. Geoff Simmons

- Introduce yourselves, assign a note taker
- Share lessons learned with each other
 - What went according to plan?
 - What challenged your plans?
- Tips that may be helpful to the wider business community for next time
- Please take notes to be added (anonymously) to the slide show when posted to the website

TABLE SHARING

WHAT WENT ACCORDING TO PLANS?

- Tools to share restoration information, such as Basecamp, work well for those who use them and more agencies intend to use those tools in the future (Note that each November the LPC training includes orientation for a community Basecamp website that local agencies use to coordinate and communicate during inclement weather)
- Training and staging for emergency work went well but more training is needed in specific ICS protocols to enhance interagency cooperation
- GIS and field mapping tools proved to be very helpful

TABLE SHARING

WHAT CHALLENGED YOUR PLANS?

- Business sector
 - Workforce communication
 - Road closures, access to workplace
 - Production slow down or stoppage
 - Reporting to work expectations, problems on the home front
 - Trucking problems for supplies and sending goods to market

TABLE SHARING

WHAT CHALLENGED YOUR PLANS?

- Government sector
 - Cities were contacted to help rural residents with large quantities of water for livestock (power outages, frozen well heads)
 - Need to identify water sources for livestock ahead of disaster
 - Needed to purchase emergency response equipment and supplies during the storm
 - Need to implement annual fall inventory and equipment readiness testing
 - Need to establish more than one supplier
- Contractors were not always as available as expected
 - Local contractors were great
 - Out of town contractors were expensive

TABLE SHARING

TIPS TO PREPARE FOR NEXT TIME

- Yes, there will be a next time! This is the second big storm in three years. Extreme weather events are becoming the new normal. We need to acclimate people to this and encourage a culture of household and business preparedness. We need to emphasize winter weather preparedness rather than only preparing for Cascadia Subduction Zone earthquake.
- Underground utilities would mitigate power outages (This infrastructure upgrade is noted in the Natural Hazard Mitigation Plan to help make possible Federal grant monies available)
- Add downed power line safety to CERT training (for example, EWEB Wire Watch curriculum)

TABLE SHARING

TIPS TO RESPOND BETTER NEXT TIME

- Some agencies have more advanced tools than others, this presents a coordination opportunity and challenge
- Some agencies were closed which could have made staff available to other agencies, a coordination opportunity
- Possibly have high school students help with clean up (coordinated by a non profit agency)
- The utilities know which areas are affected and are in communication with every customer in need of power restoration, they provide a unique opportunity to provide a conduit for resources

TABLE SHARING

TIPS TO COMMUNICATE BETTER NEXT TIME

- Need for multiple channels of communication to connect people to resources, new online and cell phone tools are a big improvement, but not all customers have access
- We need a better outreach strategy to vulnerable populations
- Radio broadcasting might be utilized to share more information that school closures (for example, road closures)
- People need a clearer definition of what the utility means by “make safe”

SPEAKER APPRECIATION

- A round of applause for our speakers today
- A shout out to the LPC Steering Committee for organizing this training
- Thank you for making time to participate today
- This slideshow will be soon be posted on the website
- Archive of 2016 training slideshows are on the website
 - preparelane.org



Photo courtesy of Jill Hoyenga

2017 COALITION TRAININGS

TOPIC: 911: The Next Generation

DATE & TIME: May 10, 2017 2:30 p.m. to 4 p.m.

TOPIC: Employee Preparedness to Assure Business Continuity

DATE & TIME: August 9, 2017 2:30 p.m. to 4 p.m.

TOPIC: Annual Winter Weather Briefing & Flu Forecast

DATE & TIME: November 8, 2017 2:30 p.m. to 4 p.m.