

# SKAGIT RIVER PROJECT FIRE

Response and Recovery

Michelle Vargo | May 18<sup>th</sup>, 2016





# CITY LIGHT

## OUR VISION

To set the standard—to deliver the best customer service experience of any utility in the nation.

## OUR MISSION

Seattle City Light is dedicated to exceeding our customers' expectations in producing and delivering environmentally responsible, safe, low-cost and reliable power.

## OUR VALUES

Excellence, Accountability, Trust and Stewardship.



# SEATTLE CITY LIGHT



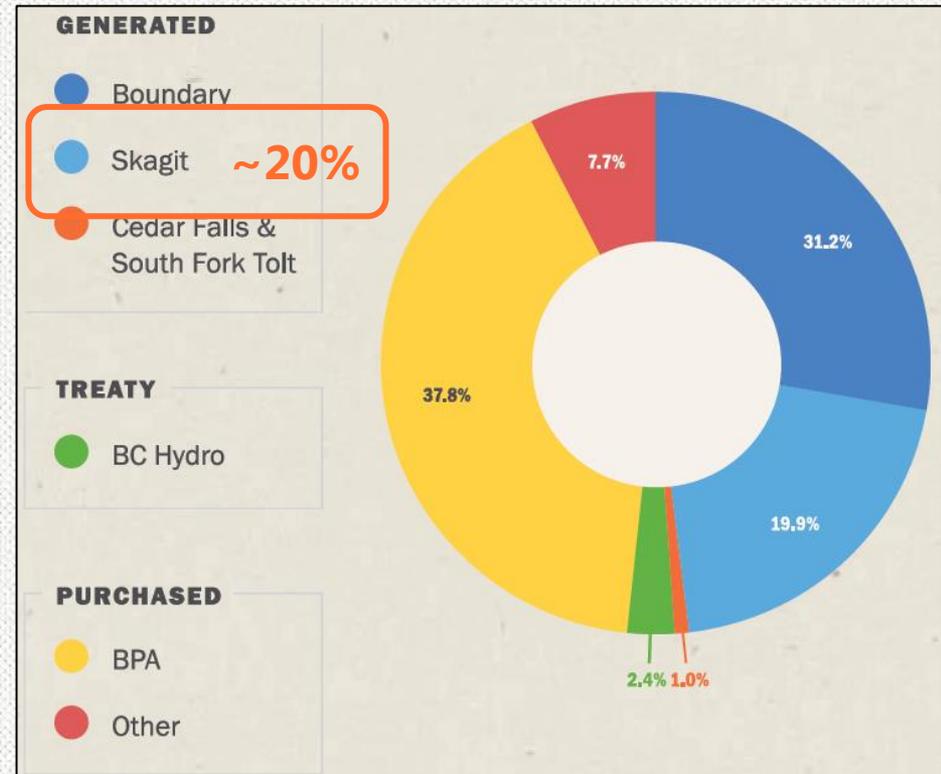
- **Public: Municipally-Owned utility**
- **Incorporated 1902**
- **131 Sq. mi. service area**
- **776,336 Population served**
- **1835 Employees**
- **7 Hydroelectric Plants**
- **15 Major Substations**
- **1810 MW Generation Capacity**
- **656 Transmission Circuit Miles**
- **2,313 Distribution Circuit Miles**
- **317 Network Distribution Circuit Miles**
- **Net-Zero Greenhouse emissions since 2005**

# SKAGIT RIVER PROJECT

## POWER SUPPLY GENERATED BY CITY LIGHT

City Light Plants	Locations	Date in Service	Capability (MW)	% of Total
Boundary	Pend Oreille River	8/23/67	1,078.4	54.6
Ross	Skagit River	12/30/52	450.0	22.8
Gorge	Skagit River	9/27/24	207.5	10.5
Diablo	Skagit River	10/20/36	190.4	9.6
Cedar Falls	Cedar River	10/14/04	30.0	1.5
S. Fork Tolt	S. Fork Tolt River	11/20/95	16.8	0.9
Newhalem	Newhalem Creek	1921	2.0	0.1
Total System Generation Capability			1,975.1	100.0

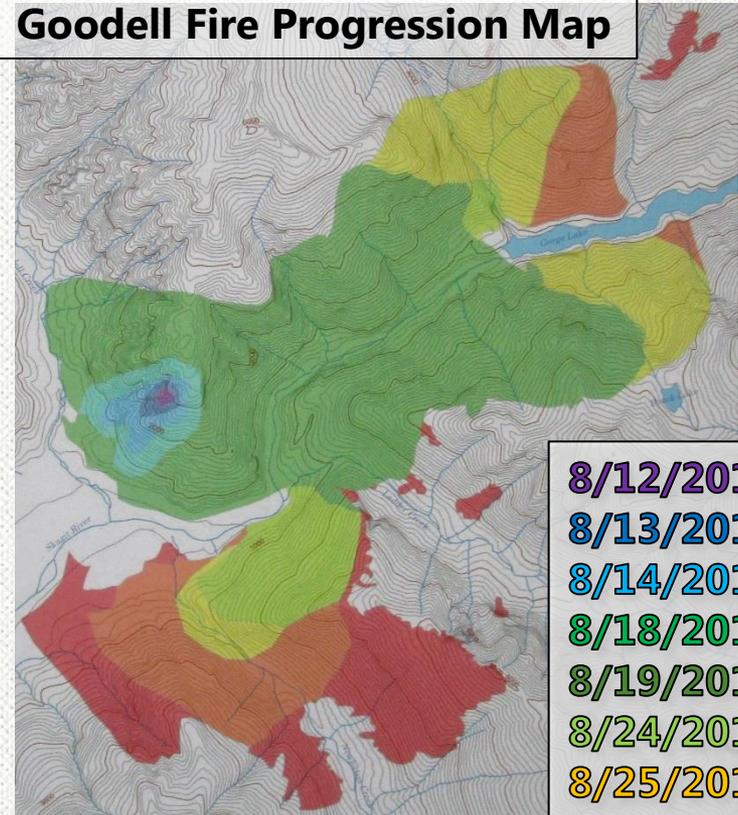
~43%



# GOODELL FIRE

Date	Daily Acres	Total Acres
8/11/15	.1	.1
8/12/15	7	7
8/13/15	22	29
8/14/15	79	108
8/15/15-8/17/15	NA	108
8/18/15	148	256
8/19/15-8/23/15	2961	3217
8/24/15	452	3669
8/25/15	979	4648
8/26/15	926	5574
8/27/15	1137	6711

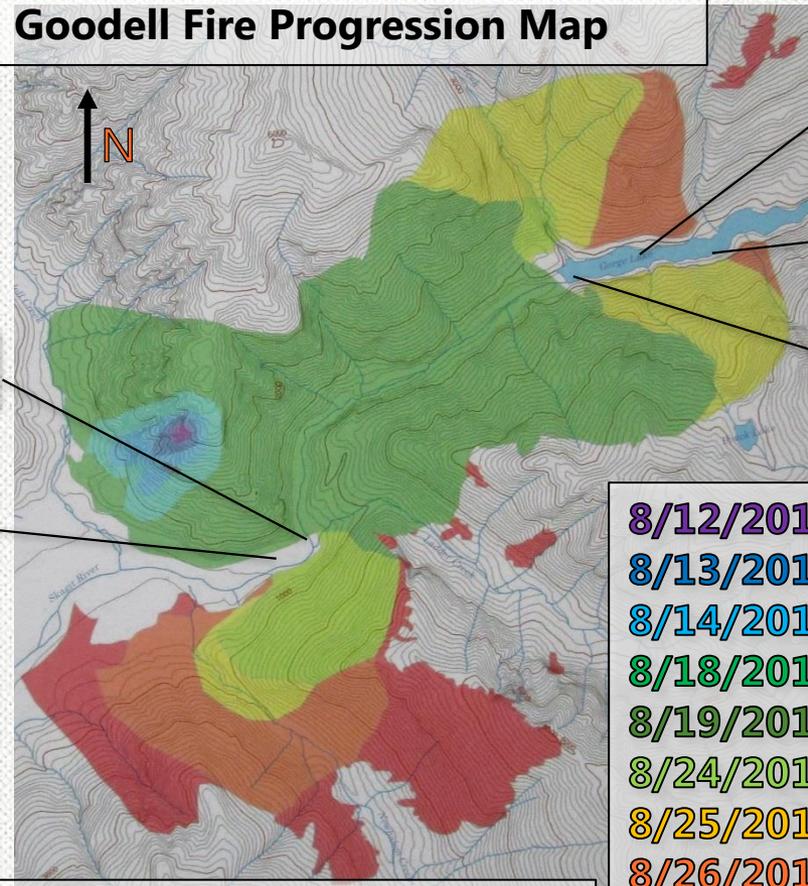
**Goodell Fire Progression Map**



- 8/12/2015
- 8/13/2015
- 8/14/2015
- 8/18/2015
- 8/19/2015
- 8/24/2015
- 8/25/2015
- 8/26/2015
- 8/27/2015

# GOODELL FIRE

Goodell Fire Progression Map



Gorge Lake

HWY 20 Crossing

Gorge Dam

Gorge Powerhouse

Newhalem

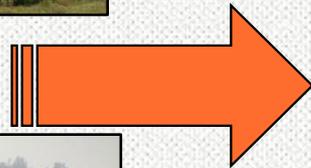
- 8/12/2015
- 8/13/2015
- 8/14/2015
- 8/18/2015
- 8/19/2015
- 8/24/2015
- 8/25/2015
- 8/26/2015
- 8/27/2015

Approximately 2 miles from Gorge Powerhouse to Gorge Dam

# GOODELL FIRE-FIRST WEEK



8/14/2015



8/19/2015



# GOODELL FIRE-PROTECTING CRITICAL ASSETS

Gorge Powerhouse



Diablo Powerhouse



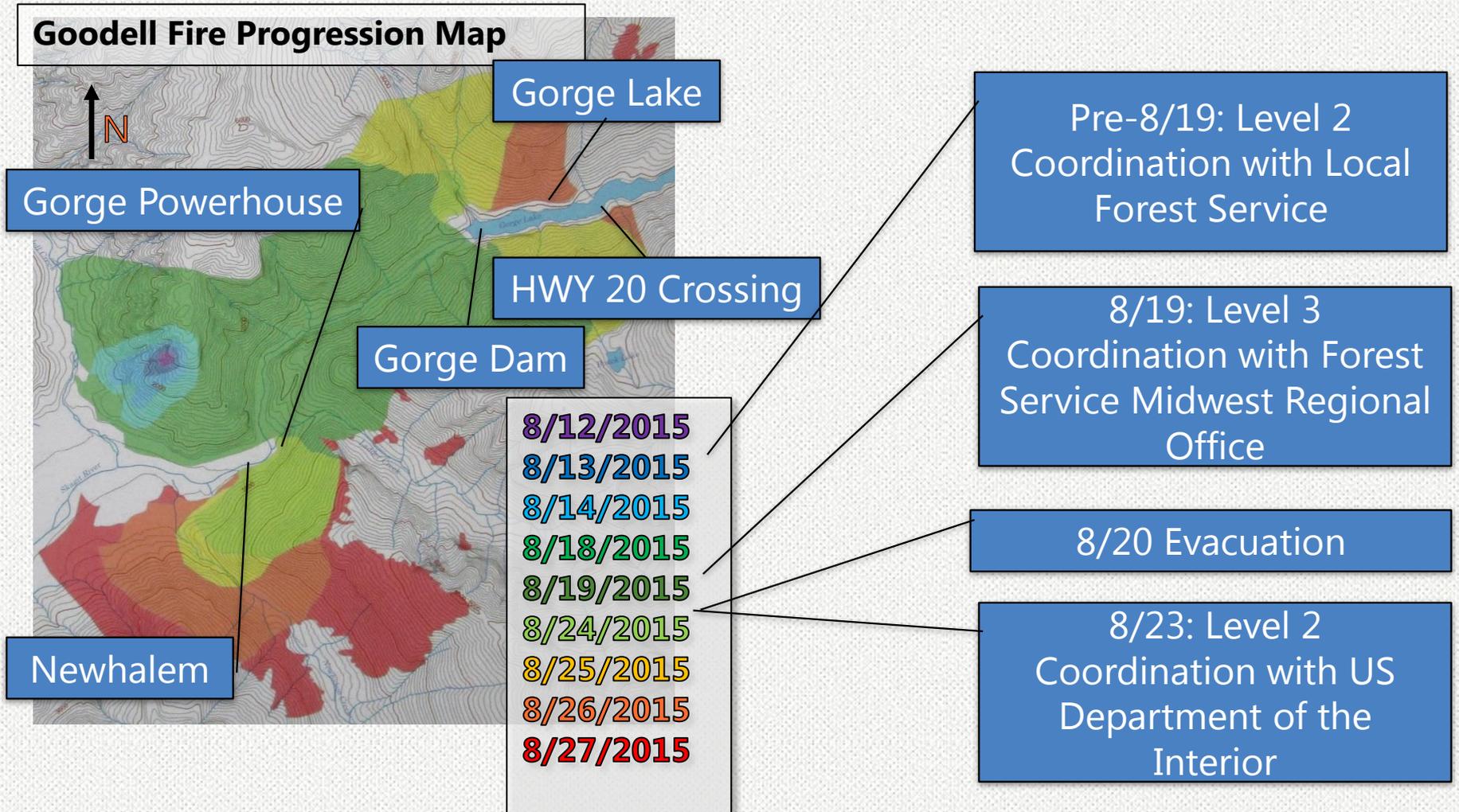
Newhalem Powerhouse



# GOODELL FIRE-AFTER MATH



# GOODELL FIRE



# GOODELL FIRE-ICS EFFORTS

## INCIDENT OBJECTIVES (ICS 202)

1. Incident Name:	2. Operational Period: DAY	
UPPER SKAGIT COMPLEX	Date/Time From: 08/25/2015 0600 TUE	Date/Time To: 08/25/2015 2000 TUE

3. Objective(s):

**COURSE OF ACTION:** Full Suppression and Confine - alternative provides the least amount of exposure to responders and greatest chance for success of meeting objectives.  
 Goodell Fire – Full Suppression  
 Thursday Creek - Confine with a Suppression Strategy

**CORE VALUES:**  
 • Ensure firefighter and public safety is not compromised while weighing values at risk against costs and  
 • Strive to maintain open and transparent communication and coordination with partners, cooperators, I informed on status and planned actions.

**CONTROL OBJECTIVES:**  
 • Minimize Goodell Fire spread toward communities of Newhalem (down drainage) and Diablo (up drain infrastructure. Aggressively attack the fire with aerial resources as available, utilize point protection for site closures with public safety officials.  
 • Keep Thursday Creek Fire to the north of Big Beaver Creek to minimize impacts to Ross Lake Resort a  
 • Keep Rocky Beaver Fire to the south of Silver Creek (not allowing spread into Canadian Border Suppr (listed on national historic register) and SNOTEL site.  
 • Minimize impacts to local economies by limiting duration of road and site closures along HWY 20 and  
 • Fires are located in the Stephen Mather Wilderness. Utilize Minimum Impact Tactics (MIST).

Location	Device/System	Status	Remarks
Gorge Dam	Standby Generator	Out of service	A mobile generator is providing temporary backup power.
DPH – GSS	Fiber optic cable FC203/F201	Out of service	Need to replace section from B 81/38 N to Gorge Switchyard. Awaiting structural design. Investigating temporary repairs.
Newhalem	Trail of the Cedars	Out of service	Danger trees
Gorge Powerhouse	Ladder Creek Falls & Gardens	Out of service	Danger trees
Gorge Powerhouse	Visitor Gallery	Out of service	Minimize traffic near Ladder Creek
Generator 20	Generator 20	Out of service	Extensive damage to penstock saddles
Newhalem	Parking area north of SR 20	In service with warning signs	Will monitor rock fall during winter
Skagit	Skagit Tours	Cancelled	Cancelled for 2015
GPH – GHD	Gorge Dam feeder	Repaired	Restored on 9/30/15 @ 1711
GPH – GHD	Fiber optic cable FC201/F266	In service	Replaced and restored to service on 9/30/15 @ 1711
Newhalem Creek	USGS Gauging Station	In service	Restored on September 22
Diablo Lake	Ferry	In service	Returned to service on September 1
Diablo Heli stop	Weather Station	Repaired	Restored on September 1
DPH – BOT	D-1	Repaired	Energized 8/29/15 @ 1418
DPH – BOT	D-2	Repaired	Energized 8/29/15 @ 1418
DPH – BOT	D-3	In service	Restored on 9/27/15 @ 1330
DPH – GSS	D-4	Repaired	Energized 8/29/15 @ 1418
DPH – RPH	R-2	Returned to service	Energized 8/29/15 @ 1418

Location	Device/System	Status	Remarks
DPH – GSS	Fiber optic cable FC203/F201		Replace with greater capacity and an alternate route for Gorge Dam
Skagit	Vegetation Management		Investigate ways to reduce available fuel
Skagit	After Action Review		Implement lessons learned

## LESSONS LEARNED-SCL FIRE CHIEF

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- Set-Up Mutual Aid Agreements
- Identify Critical Assets
- Evacuation Procedure
- ICS Structure/Training
- Be Adaptive/Proactive
  - Fuel Reduction
  - FireWise 2 years before
  - Climate Change



## LESSONS LEARNED-DAM SAFETY

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- Utilize satellite for critical camera feeds
- Remote site critical camera feeds
- DOC critical camera feeds



## GOODELL FIRE-SAFETY

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- Smoke inhalation treatment
- 3 minor motor vehicles accidents
- No major safety incidents



# QUESTIONS

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