



Impacts and Costs of Wildfire Season 2020

Senate Agriculture, Water, Natural Resources, and Parks Committee

George Geissler, State Forester

Washington DNR

December 2, 2020

1

Fire Season Summary

- Conducted firefighting operations by utilizing COVID-19 mitigation strategies to help prevent the spread of the virus. Minimal number of positive cases, and no outbreaks. Spent nearly \$200,000 to keep firefighters in COVID PPE during the season.
- Utilized a wide compliment of engines across the state (120). Pre-positioned resources during the season, especially mid-August to end of September.
- Aviation assets included (10) Type 2 DNR helicopters, (1) Type 3 DNR helicopter, (2) Type 1 contracted helicopters, (5) contracted Single-Engine Air Tankers (SEAT), and (2) additional contracted Type 1 "scoopers" (CL 215s) from Montana.
- Governor's Emergency Declaration allowed DNR to bring National Guard into the response effort: (2) Blackhawks for water delivery; and, (3) crews for Whitney, who then went to Inchelium Complex.
- DNR has (3) Type 2 hand crews, helitack in Olympia and Yakima (pre-positioned based on need), and Camps Crews (10-person).
- Part of the national system, state-to-state agreements, mutual aid with fire service, and NW Compact with Canada to bring in additional resources.

Aviation in Action

Type 2 DNR tanked helicopter on Mima Road fire in South Puget Sound Region.



National Guard Blackhawk taking water from Bonney Lake during Summer Grade.



- 5,638,988 gallons of water delivered this season.
- Estimated cost to provide for IA readiness, pre-positioned aircraft, and large fire support - ~\$20M.



Kmax (DNR Contracted Type 1 Helicopter) supporting dozer operations on Palmer Fire in NE Region.



Resource Summary

DNR ground resources available for Initial Attack, 2020 Fire Season.

Region	Engines	Type 2 Crews (20-person)	Camps Crews (10-person)	Dozers
Northeast	41	2	6	1
Southeast	29	1		
Olympic	8		9	
South Puget	13		9	
Pacific Cascade	19		12	
Northwest	10			
Totals	120	3	36	1

DNR and Washington Fire Service (WFS) resources dispatched out of state.

STATE	DNR Engines	DNR Crews	WFS Overhead	DNR Overhead	Grand Total Overhead
Alaska				5	5
Arizona		2	1	5	6
California	20		47	96	143
Colorado			19	30	49
Idaho				2	2
Nevada				4	4
New Mexico				1	1
Oregon	19	3	201	336	537
TOTAL	39	5	268	479	747



Weather and Fuels

- Three events shaped the fire season: a relatively dry spring that resulted in many escaped debris and open burning fires; a dry lightning storm in mid-August; and, the Labor Day wind event.
- Due to little rainfall in July, fuel conditions were at or below critical thresholds in eastern Washington.
- August continued the precipitation deficit, with a single wetting rain across most of the state on Aug. 6 and a rain event that impacted only the west side on Aug. 19-22.
- In September, a very strong thermal trough brought hot and dry conditions for a prolonged amount of time. On Labor Day weekend, there was an alignment of critical fuels, critical weather and abundant new ignitions.
- During the Labor Day event, widespread winds were sustained at 30-40 mph, with frequent gusts as high as 50 mph.

Labor Day event

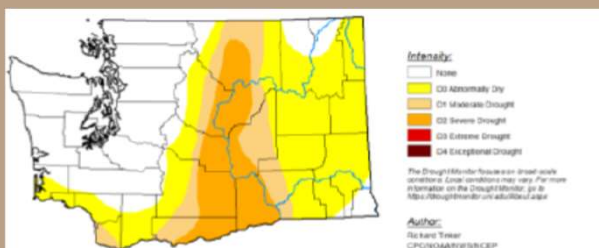
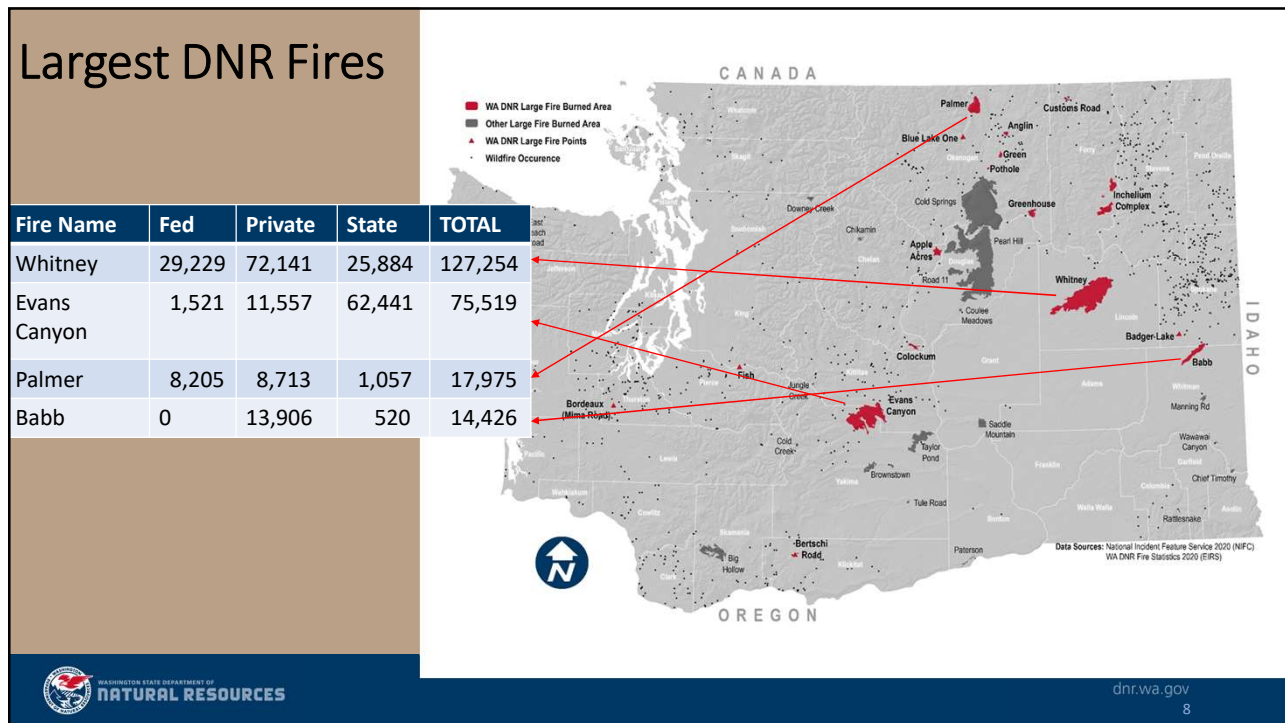
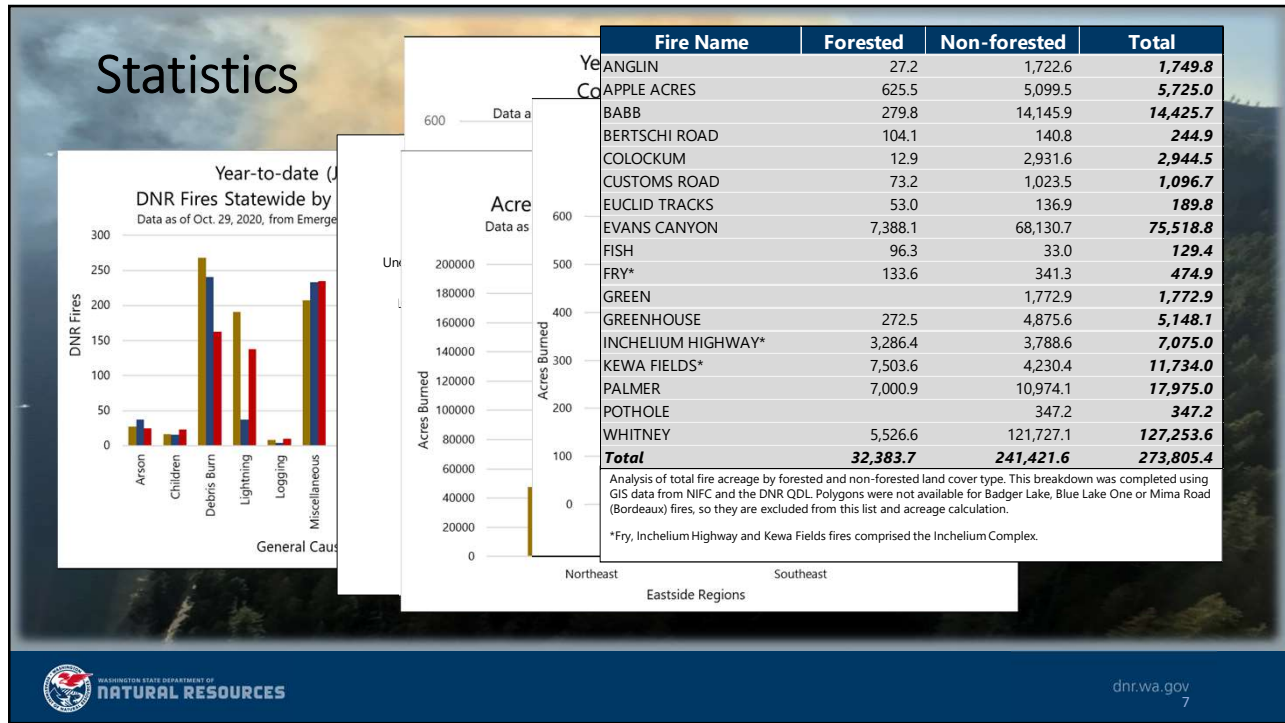


Figure 1. Washington State drought status issued 10 September 2020 by the U.S. Drought Monitor.

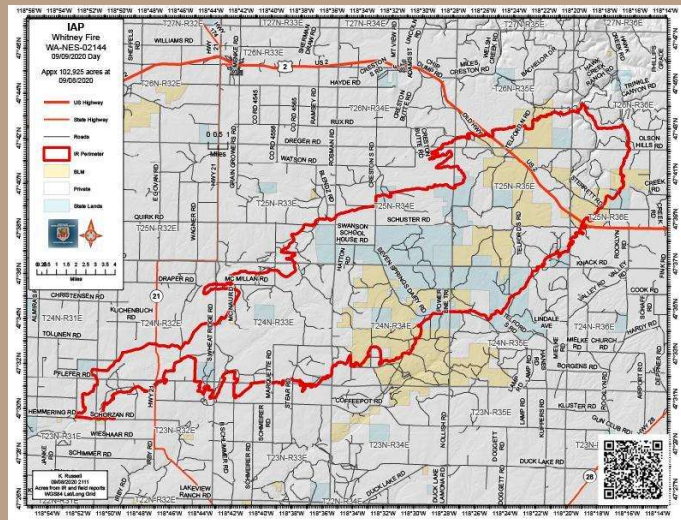
	September 6		September 7		September 8		September 9	
	AM	PM	AM	PM	AM	PM	AM	PM
Red Flag Warning			Red	Red	Red	Red	Red	Red
Dust Storm Warning			Orange	Orange				
Blowing Dust Advisory			Yellow	Yellow				
High Wind Warning			Green	Green	Green	Green		
Wind Advisory			Green	Green	Green	Green		

- Continued drought conditions.
- Red Flag Warning in place for several days.
- High Wind Warning in place for days.
- Tree damage from wind with debris falling on power lines, and power outages occurred.
- 39 new fires started on Sept 7.
- Strong winds resulted in several fires burning long distances, including Cold Springs fire, which burned 50 miles on the 7th alone.
- Aviation was limited in response due to high winds lasting for multiple days after the main event.
- Smoke became a factor and created poor visibility for Aviation as well.



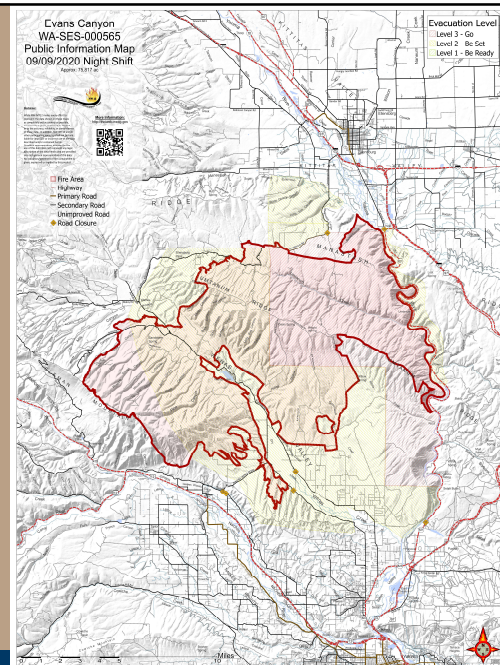
Whitney

- The fire started on Sept 7. Cause is under investigation.
- The fire burned on lands protected by DNR, BLM, and Fire Service. State mobilization was provided by Washington State Police.
- The fire threatened grazing, recreation, and homes. Fuels burned were timber, sagebrush, range, and farmland.
- 145 structures damaged or destroyed, with 55 of those being homes destroyed.



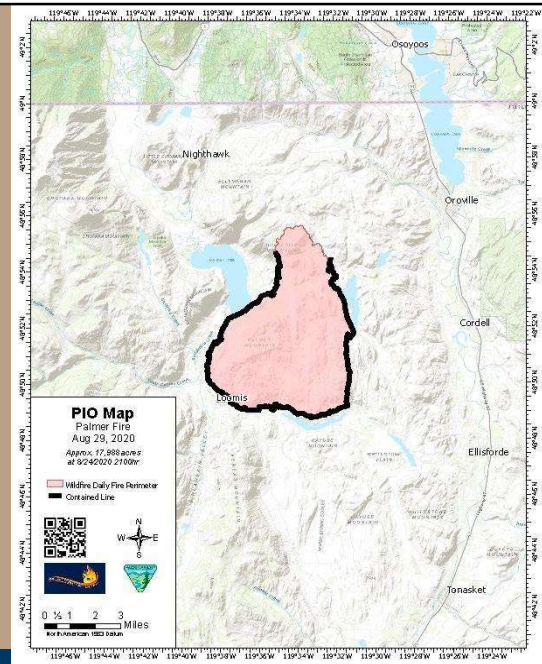
Evans Canyon

- The fire started on Aug 31. Cause is undetermined.
- The fire burned on lands protected by DNR and fire service. State mobilization was provided by Washington State Police.
- The fire threatened recreation and private property. Fuels burned were grass, brush, and timber.
- 6 homes were destroyed.



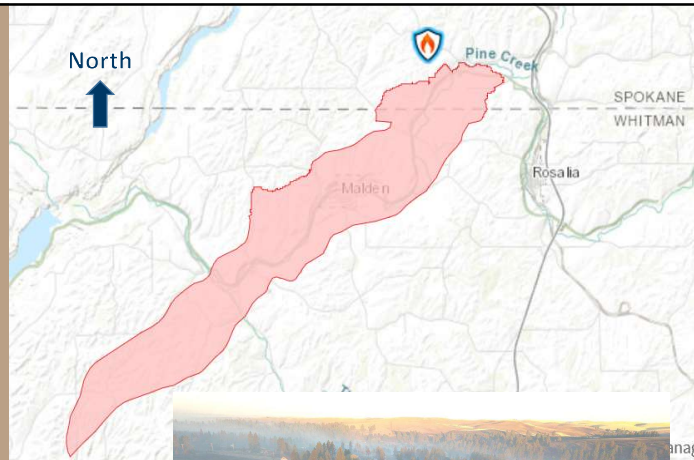
Palmer

- The fire started on Aug 18. Cause is under investigation.
- The fire burned on lands protected by DNR, BLM, and Fire Service. State mobilization was provided by Washington State Police.
- The fire threatened recreation, timber, farmland, and homes. Fuels burned were grass, brush, and timber.
- 37 structures damaged or destroyed, with 2 of those being homes destroyed.



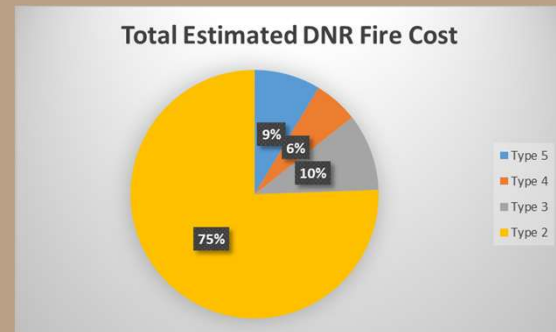
Babb

- The fire started on Sept 7. Cause is under investigation.
- The fire burned on lands protected by DNR and Fire Service. State mobilization was provided by Washington State Police.
- The fire threatened farmland, communities of Malden and Pine City, and range. Fuels burned were grass and timber.
- 228 structures were damaged or destroyed, and of the total, 4 homes damaged and 121 destroyed.



Financial Highlights – Estimated as of Sept 30

- DNR had 7 significant and costly incidents, incurring a cost of \$1M or greater.
- Three incidents exceeded \$500,000.
- Type 4 fires - \$2.4M
- Type 5 Fires - \$1.6M
- DNR is involved in 16 incidents that involve cost-share with other agencies.
- DNR will seek reimbursement from FEMA for 7 FMAG fires.



Impacts

- Whitman County hardest hit, resulting in Presidential Declaration for Individual Assistance submitted to FEMA on September 16, 2020. DNR and National Weather Service provided weather and climate data for EMD.
- Other counties impacted: Okanogan, Ferry, Pend Oreille, Chelan, Douglas, Kittitas, Yakima, Lincoln, Franklin, Skamania, and Mason.
- Damage Assessment Estimated (Wind and Fire):
 - Utilities - ~ \$20M
 - State Agency infrastructure - ~\$15M
 - Other Gov't/Districts - ~10M
- Total Structures Damaged/Destroyed: 464
- Total homes lost: 188
- Total Firefighter loss: 0
- Total Civilian Loss: 1



City of Malden, Babb Fire, KREM News

