

Wildland Fire Program

Jim Jones

Wildland / Forest Health Program Manager

11/08/2022



Reducing the risk to our people, facilities, critical mission deliverables, and neighbors

LANL Wildland fire history

- La Mesa Fire
 - June 1977
 - Human Caused
 - 15,500 acres
- Cerro Grande Fire
 - May 2000
 - Started as controlled burn
 - 43,000 acres
 - Loss of over 400 homes in Los Alamos area
 - \$342 Million in damage to Los Alamos National Lab
- Las Conchas Fire
 - June 2011
 - Electrical equipment failure
 - 150,000 acres
- Cerro Pelado Fire
 - April 2022
 - Still under investigation
 - 45,600 acres



Lessons learned from past fires

- Forested property must be managed, and fuels reduced to an acceptable level to prevent or minimize fire spread
- Evacuation routes must be kept clear to allow safe evacuation, earliest feasible notification of evacuation must be managed and executed
- Fire roads and breaks must be maintained to allow fire department access and areas in which they can stand their ground
- Defensible space must be maintained around facilities and firing sites
- Utility corridor vegetation must be maintained
- Redundant capability for utilities such as natural gas were needed
- Emergency Operation center was at best inadequate
- Coordination, working agreements and teaming with all agencies is essential



LANL Wildland Fire Program Today

- Program Managed by LANLs Emergency Management Division
- Annual budget of \$5.5M
- Key staff plus other support as needed
 - Program Manager
 - Wildland Fire Management Official
 - Project Coordinators
 - Environmental Subject Matter Expert and staff
- In house craft team and equipment to execute project work
 - 25 plus craft personnel including Operators, Teamsters, Laborers
 - 4 Barko Masticators
 - John Deere Forwarder
 - John Deere Feller Buncher
 - John Deere wheeled excavator with Masticator head
 - Caterpillar skid steers with masticator heads
 - Bergemann off road water truck
 - 2 10K gal elevated tanks
 - 20K gal dip tank



LANL Wildland Mitigation Equipment











LANL Wildland Mitigation Equipment











Enduring annual preparedness activities

Wildland / forest health program annual preparations

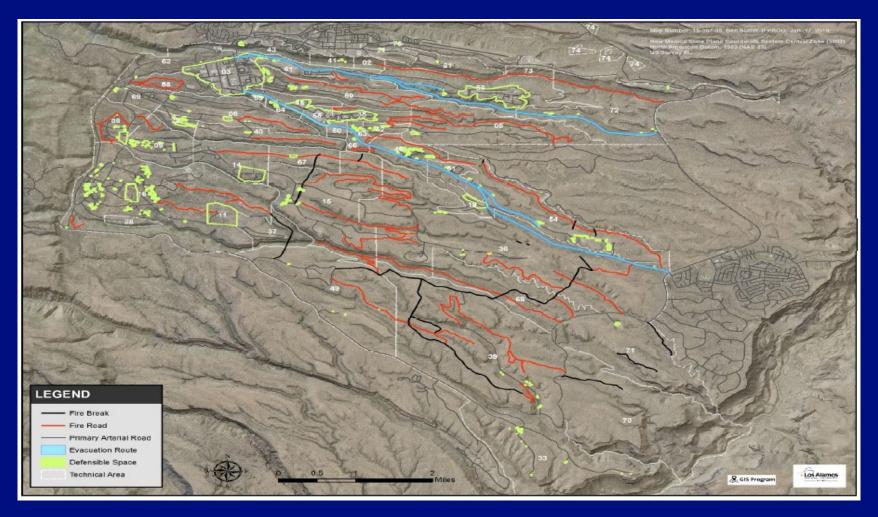
- Evacuation routes are cleared and made ready prior to fire season
- Fire roads and fire breaks are inspected and maintained
- Annual fuels reduction activities based on risk model
- Removal of approximately 2500 tons of fuels from site per FY
- Elevated tanks, dip tanks and portable tanks are inspected and ready
- Firing site fire risk mitigation activities completed
- USPS Law Enforcement patrol agreement in place

Emergency Management and partner preparedness activities

- Multi-agency Wildland Fire drill completed each year
- LAFD equipment inspected and prepared
- USFS helicopter on-site and ready at TA49 at beginning of fire season
- Response personnel USFS Red Card certifications are reviewed and completed annually



Fire Road / Break Map





Wildland / Forest Health FY21/22 Highlights





Wildland / Forest Health FY21/22 Highlights





Joint Fire Center

- Joint Center located on DOE property at Los Alamos National Lab
- Staffed by US Park Service, US Forest Service and LANL
- 3 Helicopter Pads
- Type 3 helicopter onsite during fire season
- 20K gallon Dip tank filled and maintained during fire season



Joint Fire Center





LANL Emergency Operation Center





Wildland Program activities in response to Cerro Pelado fire provided additional protection to the site and support for Incident Command

- Defensible space thinning around WETF completed
- Prepared defensible line at SR4/West Jemez to protect against oncoming Cerro Pelado fire
- Deployed equipment and personnel to type 1 team on Cerro Pelado fire
- Reduced fuel loading on LANL property with the removal of another 750 tons
- Deployed three 3500-gallon portable tanks along SR4
- Deployed 10K gallon elevated tank
- LANL Wildland Fire Management Official worked closely with Type 1 Incident Command Team
- Effort was a partnership between all agencies and LANL

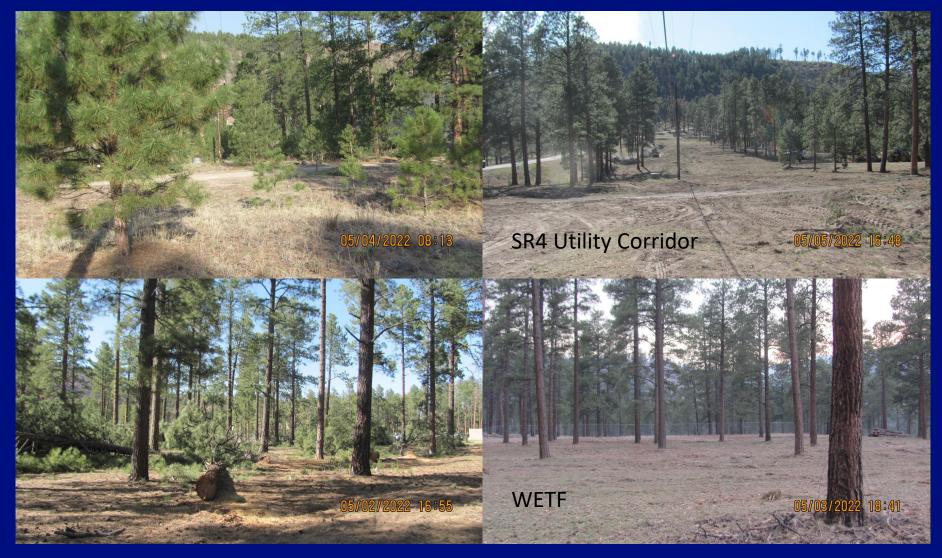


Cerro Pelado Mitigation Activities





Cerro Pelado Mitigation Activities





The Wildland / Forest Health Program is dedicated to sustained protection of LANL's people, property, assets, missions, and neighbors

- We have learned from and applied lessons from past fires and continue to learn and improve
- LANL is better prepared for a wildland fire now than we have ever been
- EM Division, EPC Division and other stakeholders work collaboratively to meet
 Wildland / Forest Health goals and protect LANL
- Larger scale thinning projects in high-risk areas planned and executed
- Continue annual maintenance activities on fire roads and breaks, defensible space, and utility corridors
- Wildland / Forest Health five-year plan approved and funded
- Enduring plan for future years will better position LANL to reduce wildfire risk





