Emergency Preparedness

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Types of Emergencies

- Fires
- Severe weather
- Explosions
- Criticalities
- Radiation Releases

The Sheep Fire (right) burned over 110,000 acres in the summer of 2019, the largest fire in INL history. Below, traffic slowed to a crawl on eastern Idaho highways following the 2017 total eclipse.

Priorities in an Emergency

Protect:

- People
- Property
- Sensitive information
- Environment

Keeping our people safe, including responders and workers on site, is the top priority in an emergency.

Planning for Emergencies

Using Fire as an Example

The INL anticipates and prepares for wild fires. The power poles above were painted with a fire retardant. The poles to right, which belong to a local utility, were not. In the Sheep Fire last summer, the INL lost only 12 power poles to fire – the utility had to replace 100.

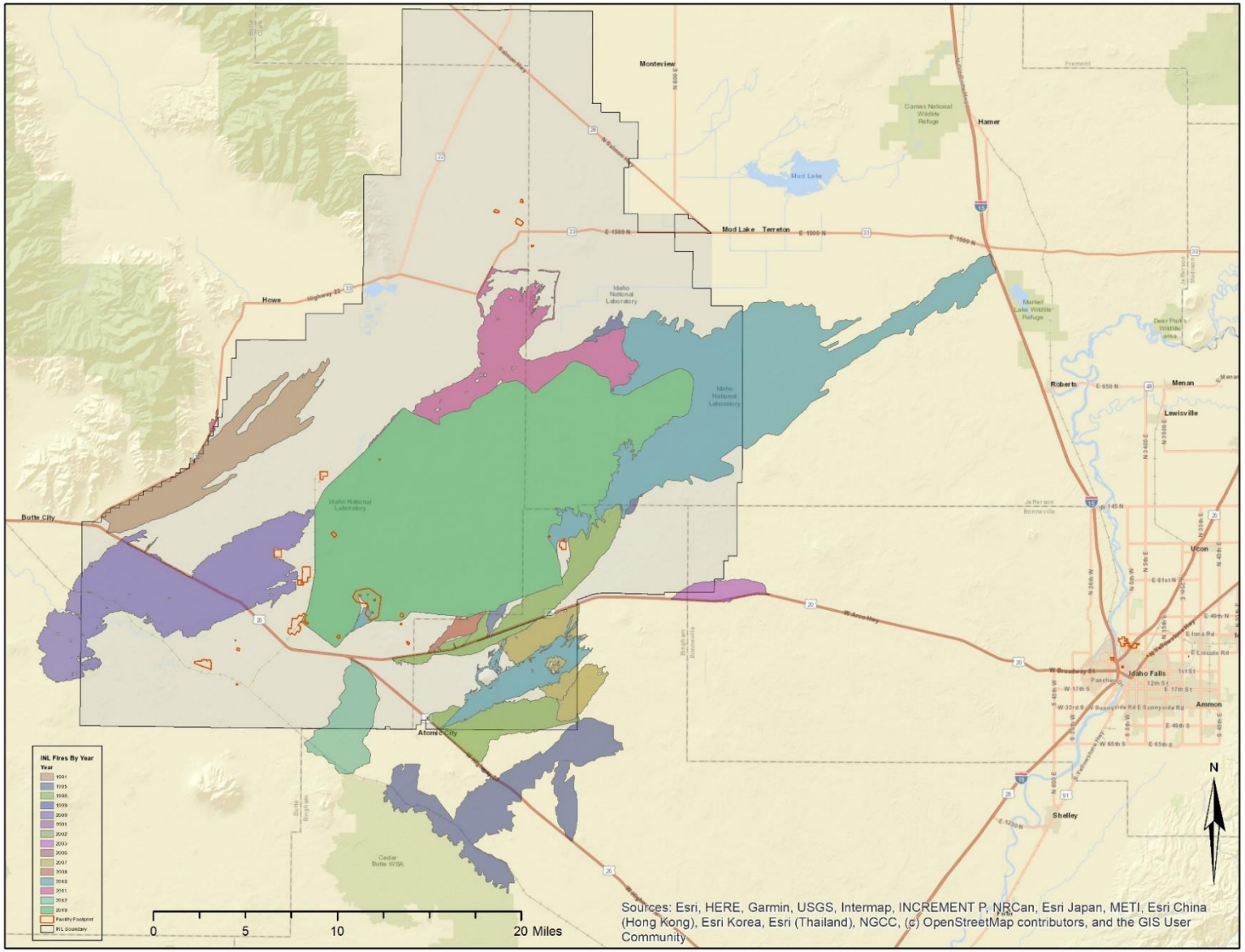
- Wild fires are an annual event, and so are planning and preparation.
- Seasonal preparation activities include: mowing of 30-foot defensible space for all improved property on the site; mowing within 10 feet of highways through site; field work restrictions based on fire danger; annual vegetation inspection to assure defensible space near facilities; training of responders; equipment readiness.

Fire Preparations (continued)

BLM provides the capability for air drops of fire retardant on INL wildland fires.

- Preparedness levels ensure INL Fire Department has resources available during initial phases of wildland fire.
- Mutual aid agreements with BLM and local firefighting agencies provide access to additional resources, including aircraft.

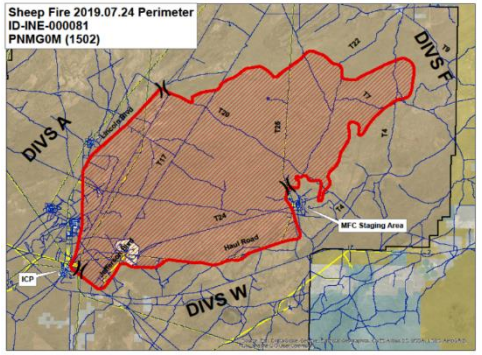
INL Fires Over the Years



Impacts of Sheep Fire

- Acres burned: 112,106
- 175 square miles
- Largest in INL history
- Injuries: 0
- Structures lost: 0
- Fire costs: $179,270 (INL); $710,00 (BLM)
- Evacuated non-essential employees

The Sheep Fire burned 112,106 acres, but there were no injuries and no structures lost.



Resources required to fight Sheep Fire:

- 24 engines
- 9 water tenders
- 7 dozers
- 1 helicopter
- 1 air attack
- 2 single engine air tankers
- 1 heavy air tanker; 2 very large air tankers

Characteristics of All Good Emergency Responses

- Pre-Planning
- Identifying threats in advance
- Training of responders
- Ensuring availability of necessary people and resources in advance
- Mutual aid agreements in place with other agencies
- Required actions (i.e., mowing) completed in advance
- Good information and good communications during response
- Ability to adapt to changing conditions
- Strong “command and control” organization in place

The INL Emergency Operations Center coordinates communications, supplies resources and manages the outward flow of information during emergencies.

Cooperation with Other Agencies Key

- DOE and INL have 26 active MOUs and mutual aid agreements in place with off-site agencies.
- These include: tribes, private entities, medical facilities, fire districts, law enforcement agencies, cities, counties, state and multiple federal agencies.
- Goal of agreements: establish roles and responsibilities for likely emergency management events.

The following video shows how INL and off-site agencies and entities cooperate in a recent emergency exercise:

Backup slide to follow

Responding to Fire in Contaminated Area

- Soil Contamination Areas (SCAs) identified on fire base map
- Calculated maximum rad dose from fire in area is .33 mREM (much less than occupational exposure limit of 2,000 mrem/year)
- Offsite resources not used to suppress fire in these areas
- Rad techs and industrial hygiene support provided as appropriate

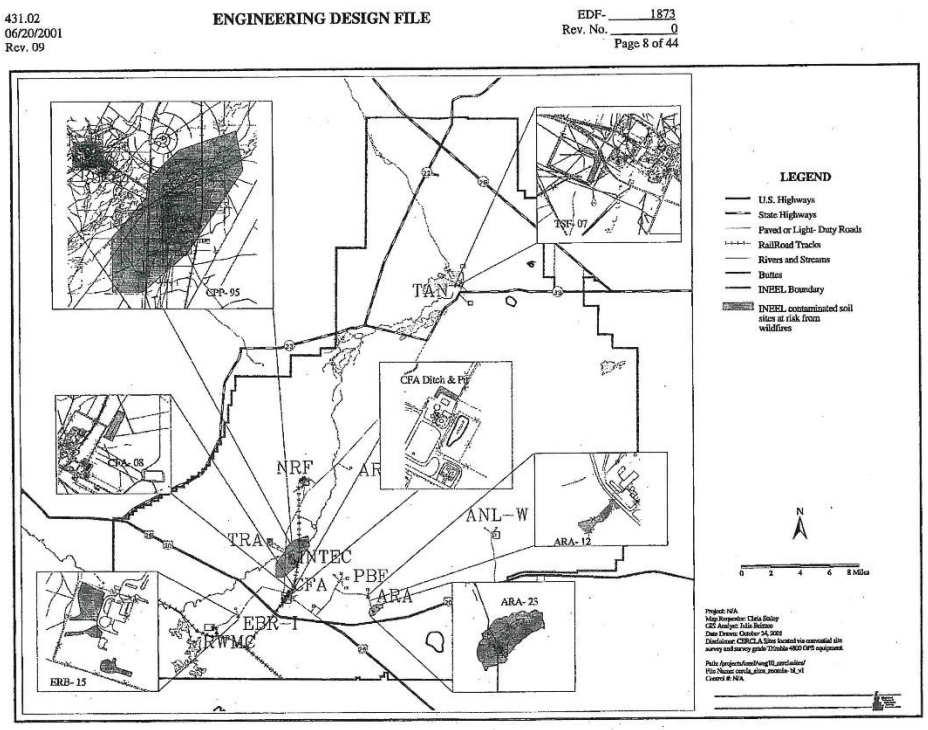


Figure 1. Map of INEEL showing locations of contaminated soil areas evaluated in this EDF.