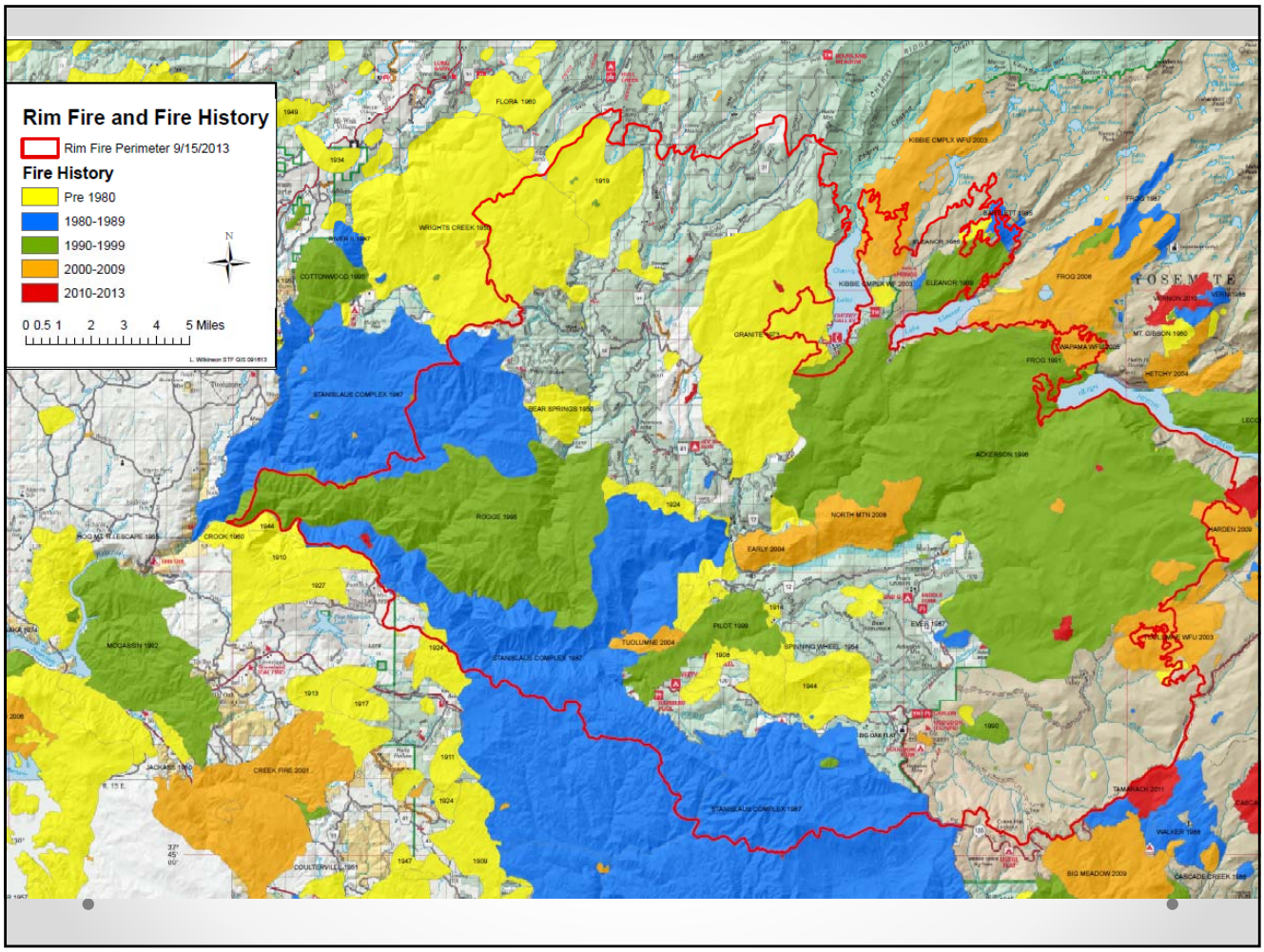
Rim Fire
Vegetation &
Resilience
FOREST SERVICE
U S
DEPARTMENT OF AGRICULTURE


Rim Fire and Fire History
Rim Fire Perimeter 9/15/2013
Fire History
Pre 1980
1980-1989
1990-1999
2000-2009
2010-2013
N
0 0.5 1 2 3 4 5 Miles
L. Wilkinson STF GIS 091613
FLORA 1960
WRIGHTS CREEK 1952
COTTONWOOD 1995
STANISLAUS COMPLEX 1987
BEAR SPRINGS 1950
ROGGE 1996
CROOK 1960
MCCASSIN 1992
CREEK FIRE 2001
JACKASS 1950
COULTERVILLE 1951
TUOLUMNE 2004
PILOT 1999
SPINNING WHEEL 1954
EARLY 2004
NORTH MTN 2008
ACKERSON 1996
GRANITE 1973
KIBBIE CMPLX WFU 2003
ELEANOR 1999
FROG 2006
FROG 1991
WAPAMA WFU 2008
MT. GIBSON 1960
HETCHY 2004
HARDEN 2009
TAMARACK 2011
WALKER 1988
BIG MEADOW 2009
CASCADE CREEK 1988
YOSEMITE

# Daily Fire Growth & Weather Summary

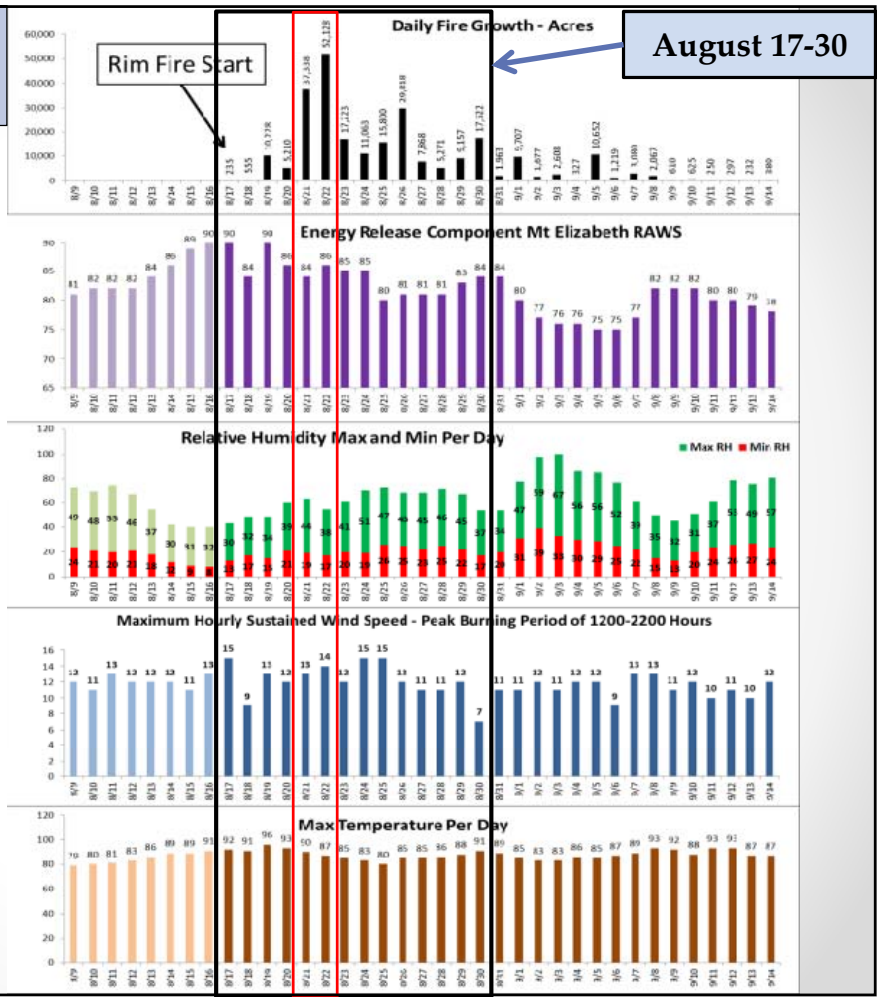
Daily Growth in Acres

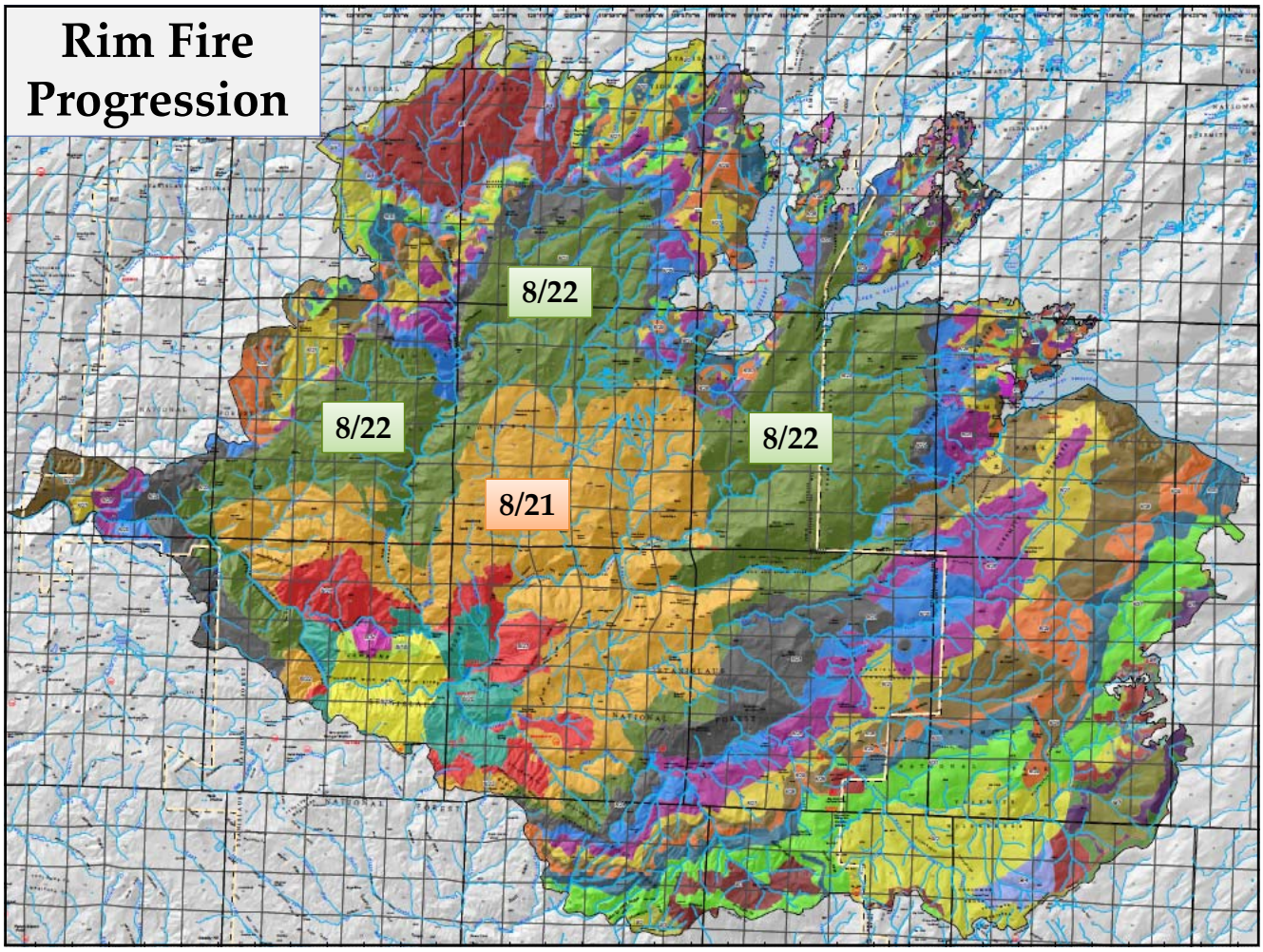
Energy Release Component

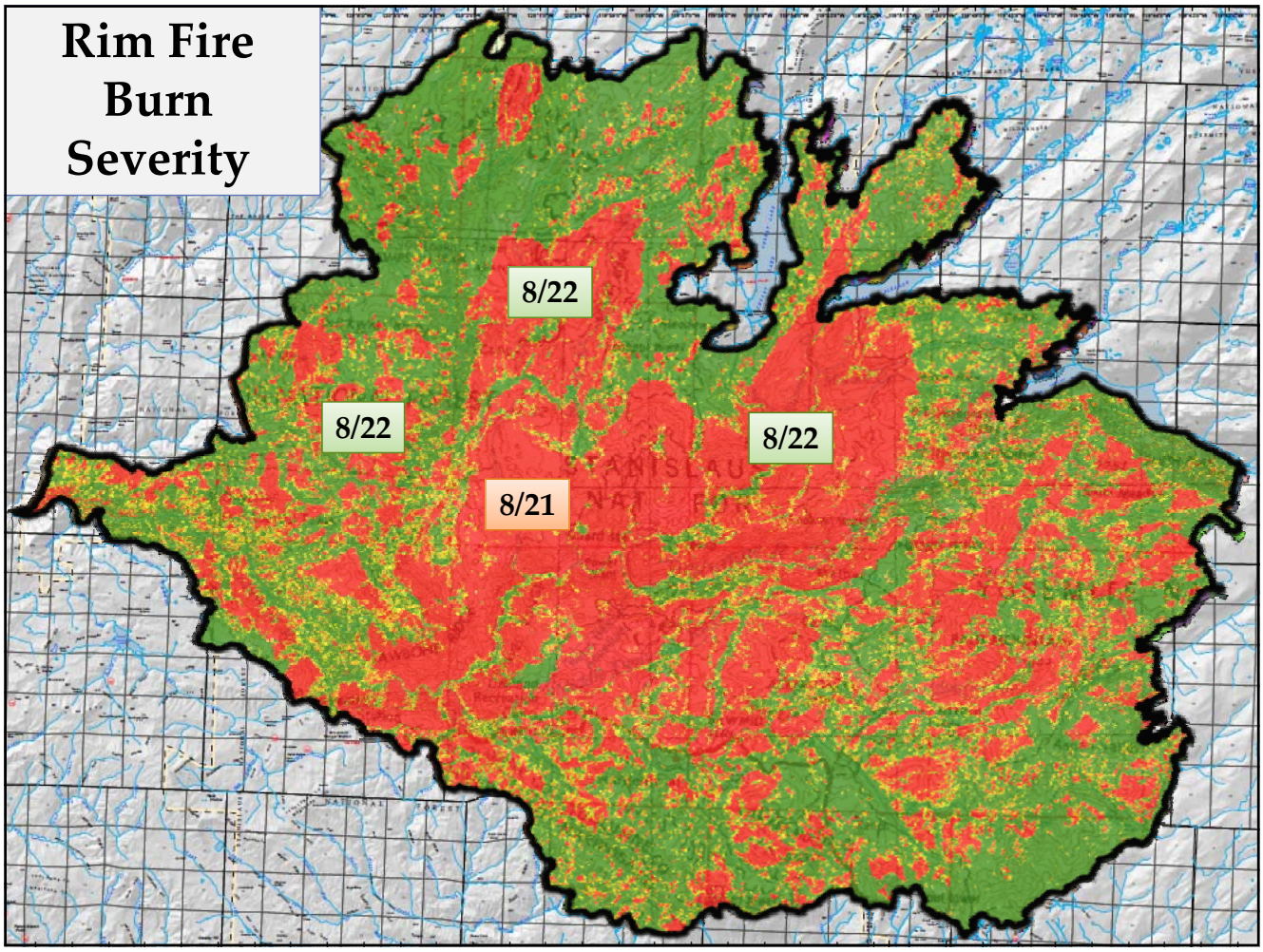
Relative Humidity (daily max & min)

Peak Sustained Wind Speed

Maximum Daily Temperature




Rim Fire Progression
8/22
8/22
8/22
8/21


Rim Fire
Burn
Severity
8/22
8/22
8/22
8/21

# August 22 - 52,000 Acres Growth

# Area burned on August 22.

## Area burned after August 22.
## Cherry Lake in the Background.

# Recommendations

1. Consider the cumulative high/moderate fire severity patterns in terms of:
   A. Unsuitable for fire-sensitive management investments. Although areas are productive, the investment may not be returned as fires will likely continue to be frequent and/or severe.
   B. Most likely to burn again with high intensity.
   C. Possible candidates for reintroduction of fire on the landscape.
   D. Greater need for active vegetation management with earlier, more frequent and more aggressive management.
      i. Stands thinned to greater spacing;
      ii. The canopy pruned to greater heights;
      iii. Understory fuels reduced;
      iv. Surface fuels treated and maintained.

**Don't invest in high risk areas!**

# Recommendations cont.

2. Use topography as a guide to planting location and densities. Sites prone to frequent and moderate to high fire behavior include:
   A. low elevation,
   B. southerly aspect or are on a ridgetop, or
   C. steep slopes (>50%)

**Topography matters!**

3. Use the identified priority fire management areas similar to a pre-attack planning fire management map tool to inform wildfire management operational decision making. These needs to be an interdisciplinary process, not just Fire Management.
   A. Input and update these as necessary in WFDSS.
   B. Meet annually to identify areas where managers can manage fire and where suppression tactics are most needed.

**Prepare and share!**

# Recommendations cont.

4. Consider the likelihood of fire occurring on the landscape with as much weight as potential fire behavior.

**It's not "If", but "When!"**

5. Actively manage areas with a significant dead fuel component. These areas will present a condition for increased fire intensity in the future.

**Fix what we know is broken!**

6. Increase the range of acceptable mortality, scorch, and biomass removal in vegetation prescriptions when managing fire, implementing fuel treatments and maintaining fuels treatments in order to build a fire resilient landscape. Evaluate and incorporate lessons learned from fire effects in subsequent treatments.

**Bend now or "Break" later!**

# Recommendations cont.

7. Evaluate the landscape outside the Rim Fire where the same principles described in this report could be used to retain the existing resource values and create a landscape with increased resiliency to fire. Renew/design the Forest-wide treatment prioritization model for project maintenance and future project identification.

**Be proactive, think Forest-wide!**

8. Incorporate related research and modeling efforts in ongoing and upcoming planning efforts (e.g., Rim Fire Fuel Treatment Effectiveness Monitoring, PSW Science Synthesis and the Southern Sierra Risk Assessment).

**Don't forget the lessons we have already learned!**

# Goals Aiming Toward Longer Term Fire and Vegetation Resiliency

1. Fuel treatments must be continuously maintained to be effective.
2. Do not plant or create overstocked forests; manage areas that are already overstocked.
3. Manage for heterogeneous vegetation (gaps, clumps, age, and species).
4. Prepare landscape-scale vegetation to enable the reintroduction of fire as an ecosystem process where appropriate.
5. Manage wildfires that are candidates for multiple objectives.
6. Maintain strategies that focus on prescribed fire to reduce the vulnerability of the landscape to large, high severity fires.
7. Expand opportunities to increase the application of fire on the landscape which would enable larger burn compartments to be completed (e.g., staffing levels or air quality constraints).