

Invasive Weed Management Post-Wildfire: Closer Look at Camp Fire Invasive Weeds in Right-of-ways

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Overview

- Fire & Invasive Weeds
- Camp Fire - Case Study :
Weeds in Right-of-Ways
- Discussion & Questions



Closer Look at Camp Fire Invasive Weeds in Right-of-ways



Fires & Weeds

Fires & Weeds



Fires & Weeds



Fires & Weeds



Prevention

Prevention is the first step and most cost-effective measure in invasive weed management!

- Limit Ground disturbance
- Limit Vector
- Known Invasive Weeds



Detection

- Surveys
- Known vectors
 - Access roads
 - Tails
 - Right-of ways
 - Equipment parking
 - Staging areas
- Other Vulnerable Areas?

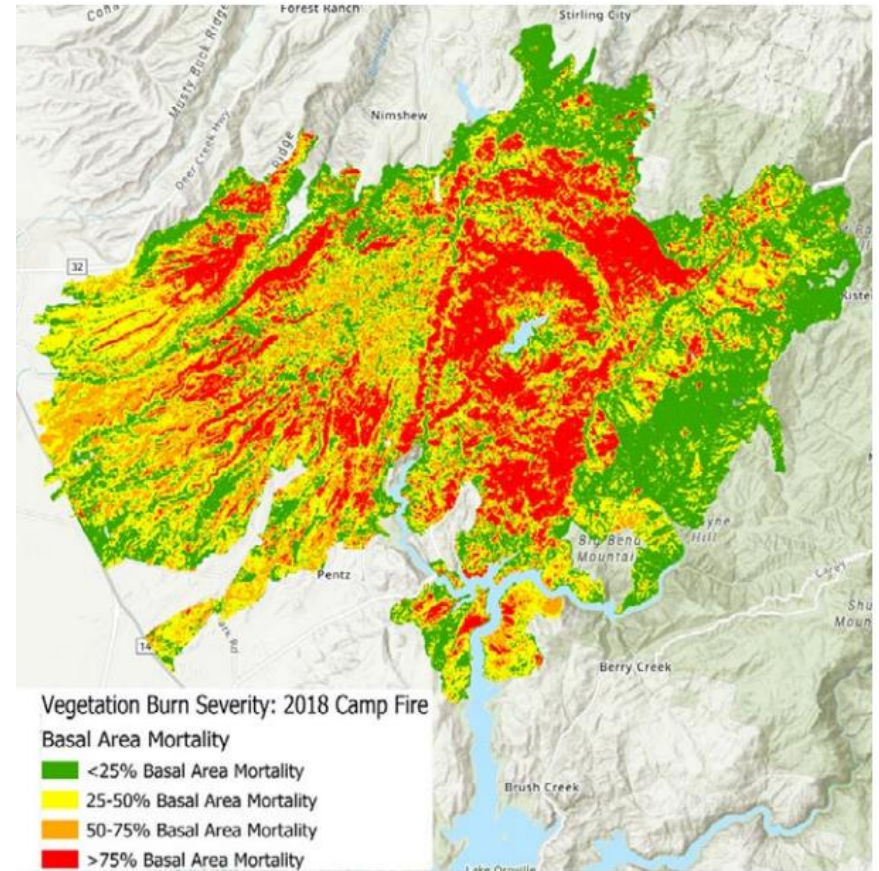


Closer Look at Camp Fire Invasive Weeds in Right-of-ways



Camp Fires

- 153,336 acres
about 240 square miles



Camp Fire Burn Severity Map (USFS, 2018)

Site 1 – Pre Fire



Site 1 – Pre Fire

- Yellow Starthistle
- Himalayan blackberry
- Pre-Treatment foliar application of Milestone[®] in May of 2018.

Site 1 – Burned



Site 1 – Post Fire



Site 1 – Post Fire

- Effectiveness of treatment - a variety of grasses are growing in the spring following the fire with no observations of YST.
- This pre-fire treatment may likely minimize weed spread during moderate- to high severity fire events.

Site 1 - Pre & Post Fire



Site 2 – Pre Fire



Site 2 – Pre Fire

- Yellow Starthistle
- Pre-Treatment foliar application of Milestone® in May of 2018.

Site 2 – Post Treatment



Site 2 – Burned



Site 2 – Post Fire



Site 2 – Post Fire

- Site burned at high severity
- Pre-fire treatment of YST likely reduced potential for spread.
- Additional post-fire monitoring is recommended.

Site 2 - Pre & Post Fire



Site 3 – Pre Fire



Site 3 – Pre Fire

- Yellow Starthistle
- Treated with a foliar application of Milestone[®] in May 2018
- AVOIDED Native vegetation manzanita bush (Arctostaphylos manzanita))

Site 3 – Pre Fire



Site 3 – Burn back



Site 3 – Burn back



Site 3 – Burned



Site 3 – Post Fire

- Site burned with moderate to high fire severity
- Post Camp Fire activities called for the removal of the manzanita bush skeleton
- Emergent YST plants have now established after the fire and post-fire activities.

Site 3 - Pre & Post Fire



Site 4 – Pre Fire



Site 4 – Pre Fire

- A pre-fire population of YST had been treated with a foliar application of Milestone[®] in May 2018

Site 4 – Post Fire



Site 4 – Post Fire Restoration



Site 4 – Post Fire

- Following the fire...
- Crews moved rock for armoring drainage features and rock fence installation
- Disturbing soil = Yellow Star Thistle

Site 4 – Post Fire Restoration



Management Implications

Case Studies

#1 & # 2 An active management program = better control invasive weed populations

#3 - Weeds was left uncontrolled pre –fire = post fire weeds

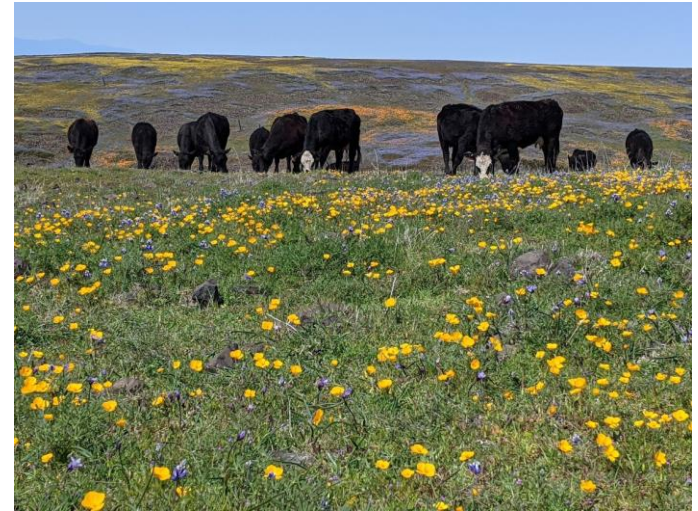
#4 – Post fire weed establishment

Why Now?



Questions

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