

Overview of post-fire response

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COOPERATIVE EXTENSION

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Post-fire response

- Establish objectives based on resource concerns
- Assess fire severity (damage) & erosion potential
- Determine capacity for intervention/mitigation
- Develop plan that prioritizes tasks over space and time
- Integrate monitoring based on program needs



HAWAII WILDFIRE MANAGEMENT ORGANIZATION

Hawaii Post-Fire Response Assessment Guide



**College of Tropical Agriculture
and Human Resources**
University of Hawai'i at Mānoa

Forestry and Natural Resource Management
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Post-Fire Vegetation and Soil Monitoring in Hawai'i



Post-fire response – the fed model

0-1 year

- Bare Area Emergency Response (BAER) and Emergency Stabilization (ES)
 - Impact assessment
 - Erosion control
 - Weed control
 - Infrastructure repair (e.g. fencing)
 - Mitigating suppression impacts

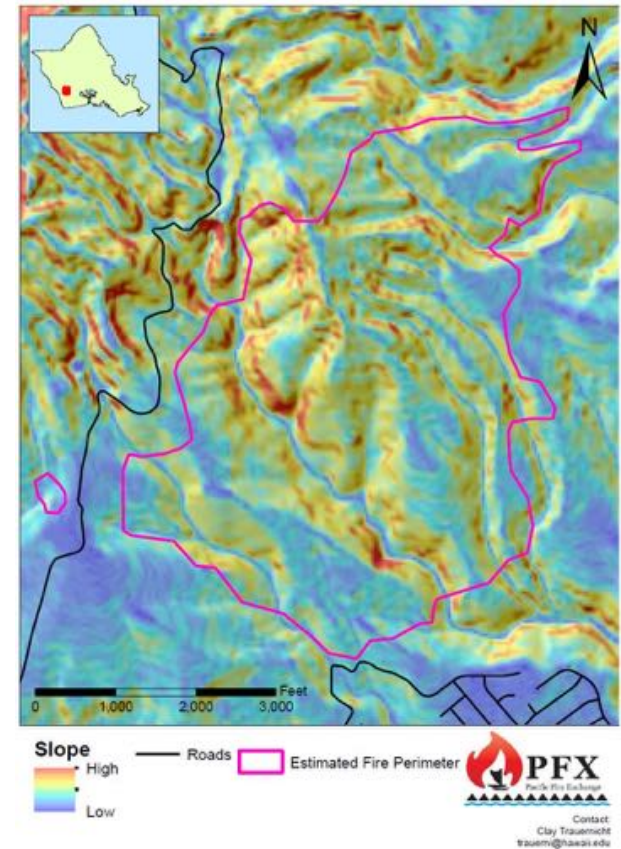
1-3 years+

- Bare Area Rehabilitation (BAR)
 - Revegetation/restoration



Prioritizing in space

- High burn severity
- Steep slopes
- Resources/Assets damaged or at risk



Prioritizing in space

Assessing fire severity

- **Vegetation Burn Severity Indicators:**

- crown scorch
- Plant mortality
- Litter/duff consumption (soil exposure)

- **Soil Burn Severity Indicators:**

- burn depth
- Color
- Texture
- aggregation
- infiltration



Soil burn severity examples

HIGH



MODERATE



LOW



Prioritizing in time

Fire severity and ecological succession inform response



Prioritizing in time

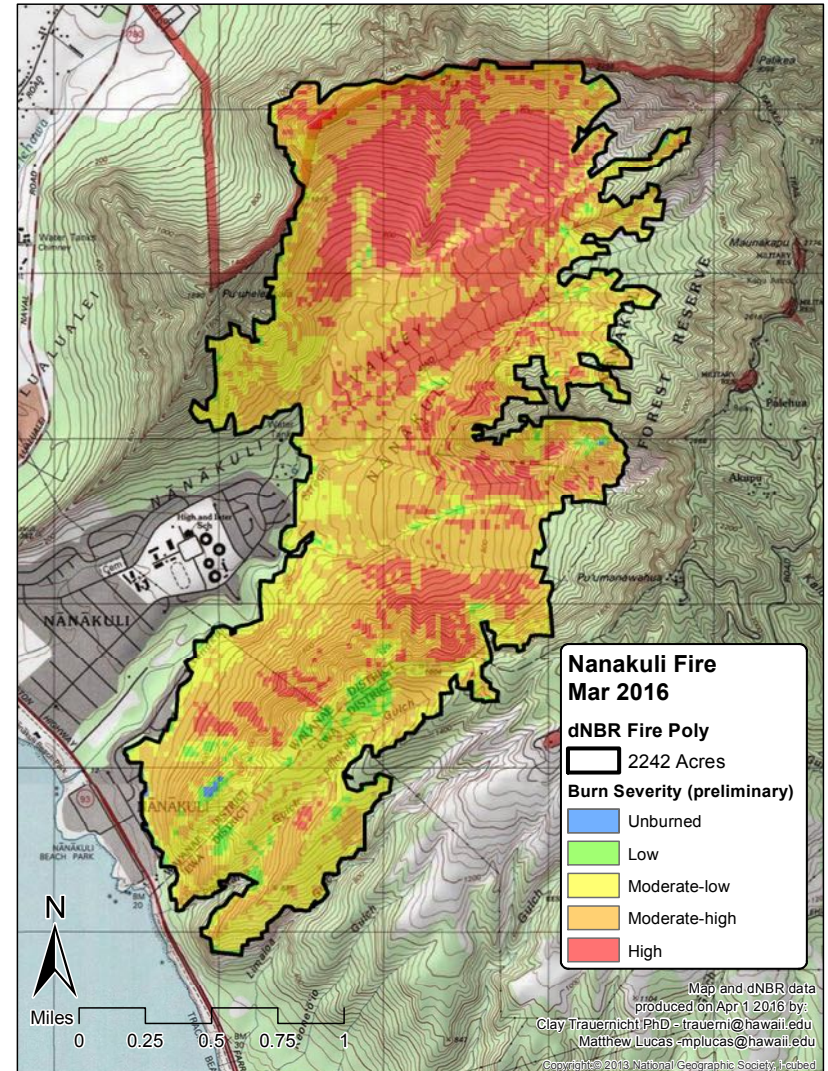
Fire severity and ecological succession inform response

- **GOOD:** remnant kipuka, native regeneration
- **BAD:** target incipients, long-lived woody invaders
- **UGLY:** nonnative before fire, widespread est. weeds

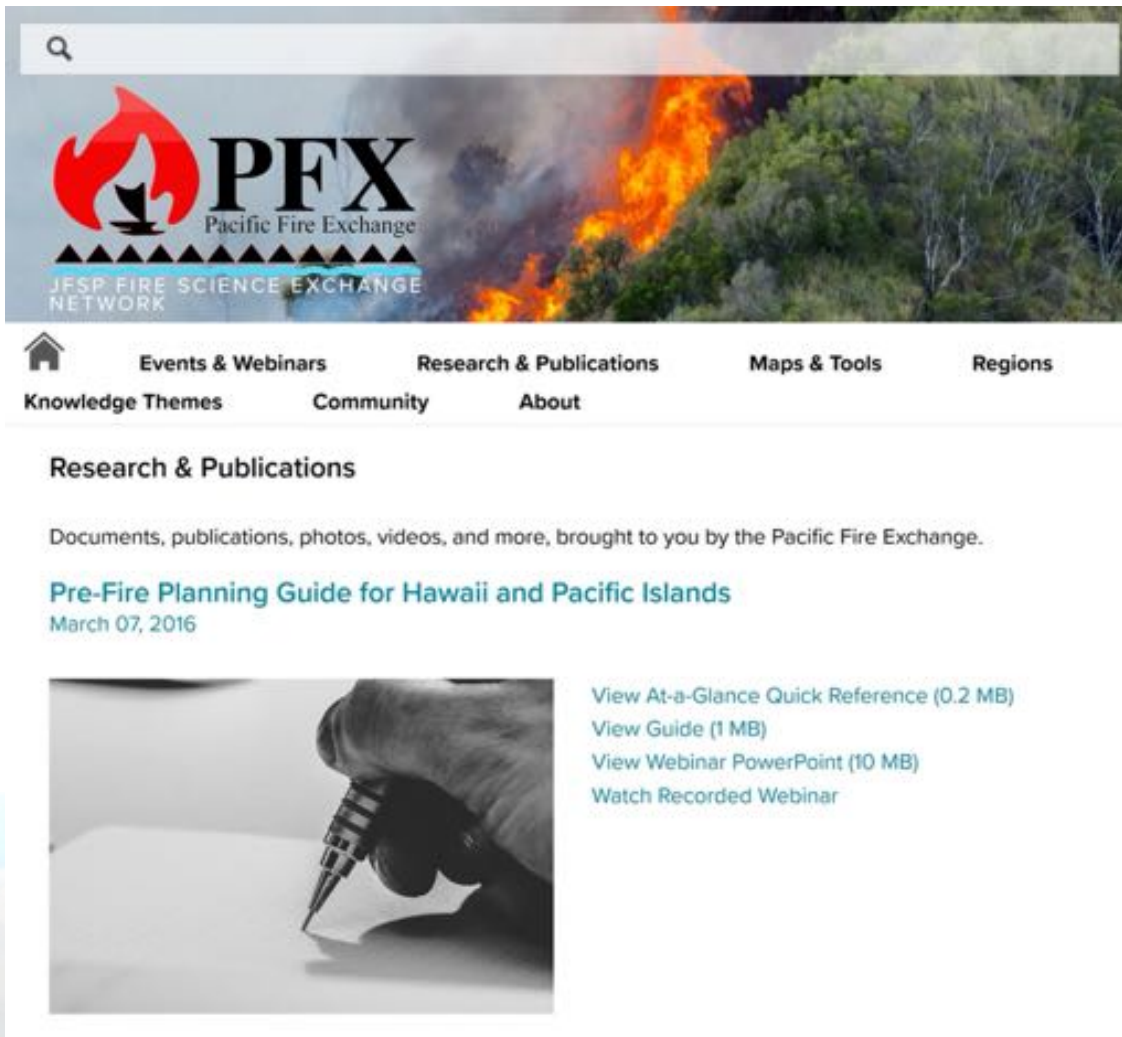


Needs

- Preparedness for post-fire response
 - Bare Area Emergency Response (BAER) team(s) for Hawaii
 - Anticipating suppression impacts
 - Erosion control materials
 - Seed sources
- Funding sources
- Validating new technologies
 - Burn severity mapping
 - UAV monitoring
- Scaling up restoration
 - Seed scattering trials
 - Minimizing site prep
- Increasing post-fire species diversity
- OTHERS?



More Resources



**Pre-Fire Planning Guide for
Hawaii and Pacific Islands**

**Pacific Island Fuel Breaks and
Management Guide**

Available at:

www.PacificFireExchange.org

Search:

‘Planning Guide’ and
‘Fuel Strategies’

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