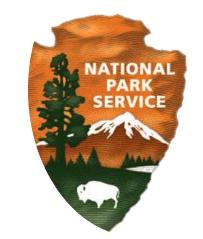
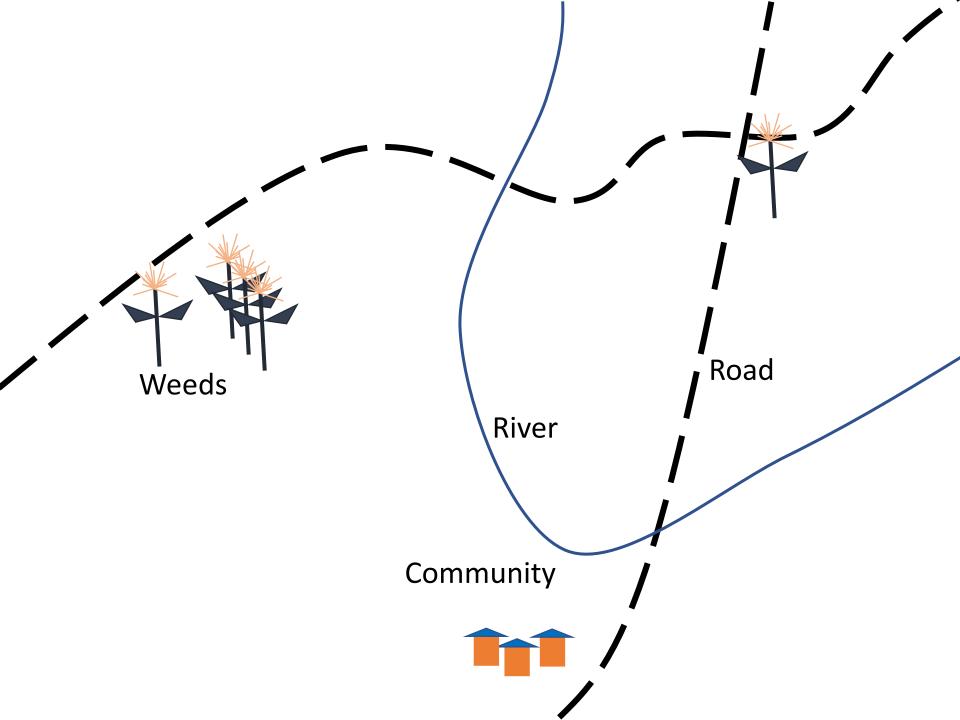
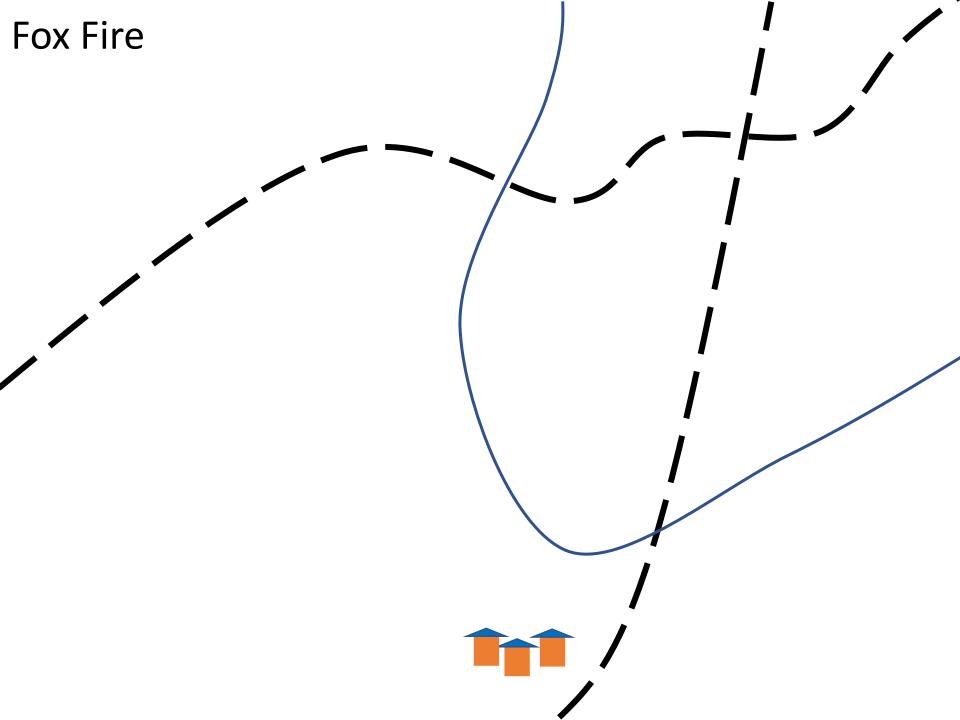
Surveying for invasive plants after fire

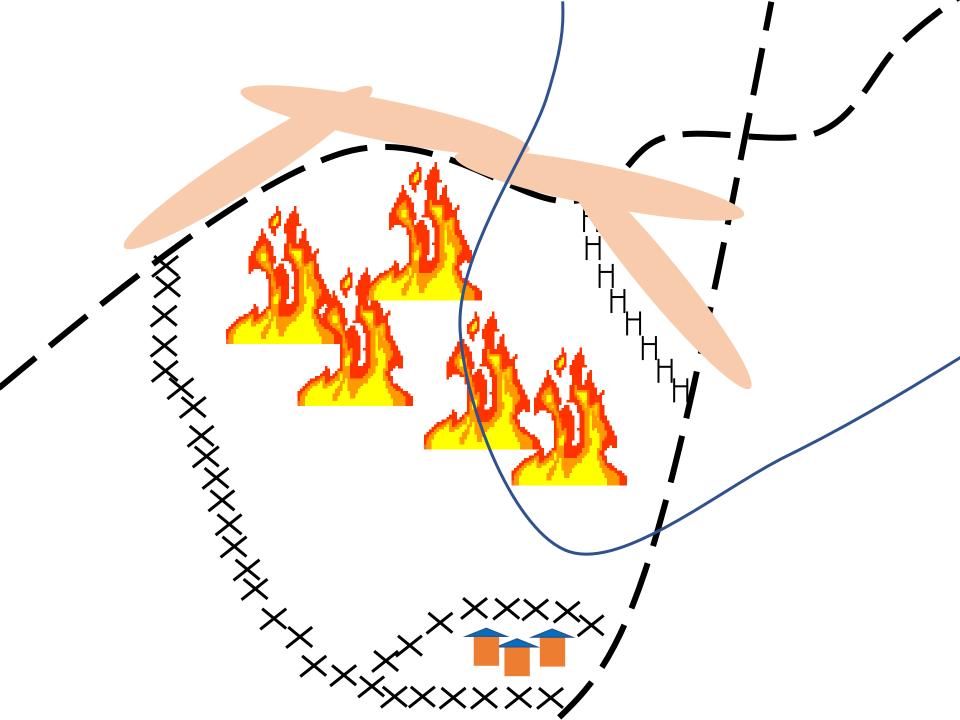
Garrett Dickman
Yosemite National Park
Garrett\_Dickman@nps.gov

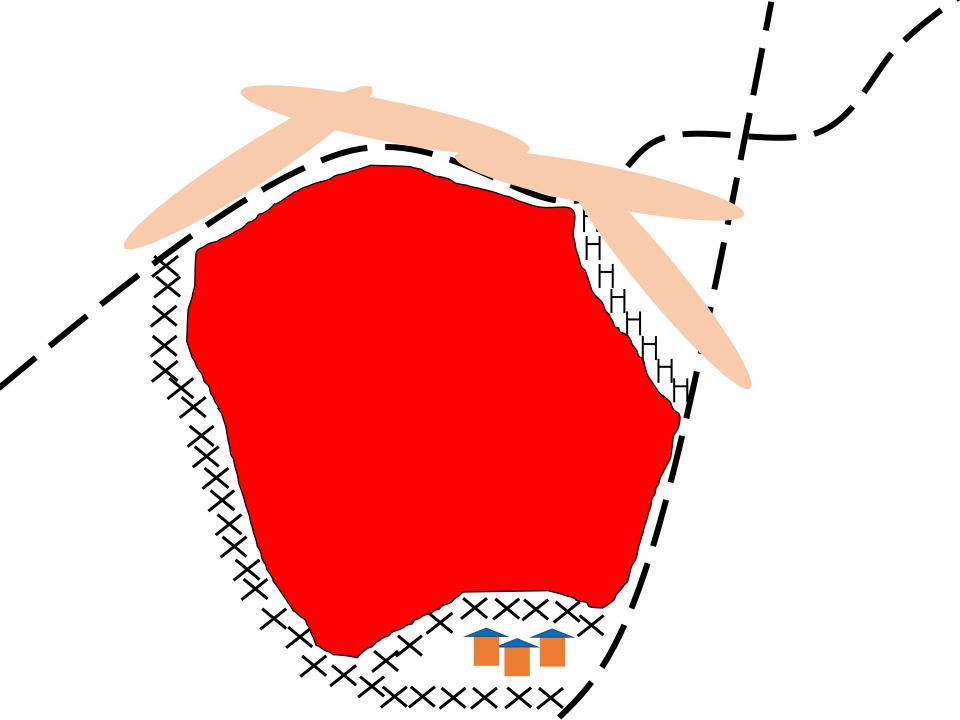












# Impact types

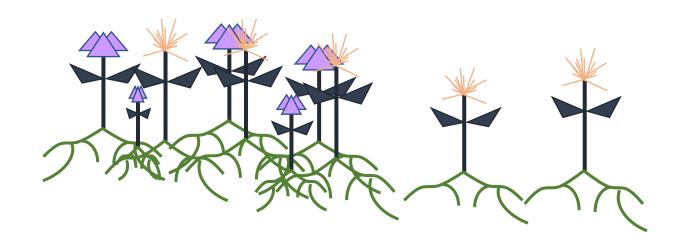
- Direct
- Operational



# Direct Impacts



# Many weeds are early colonizers





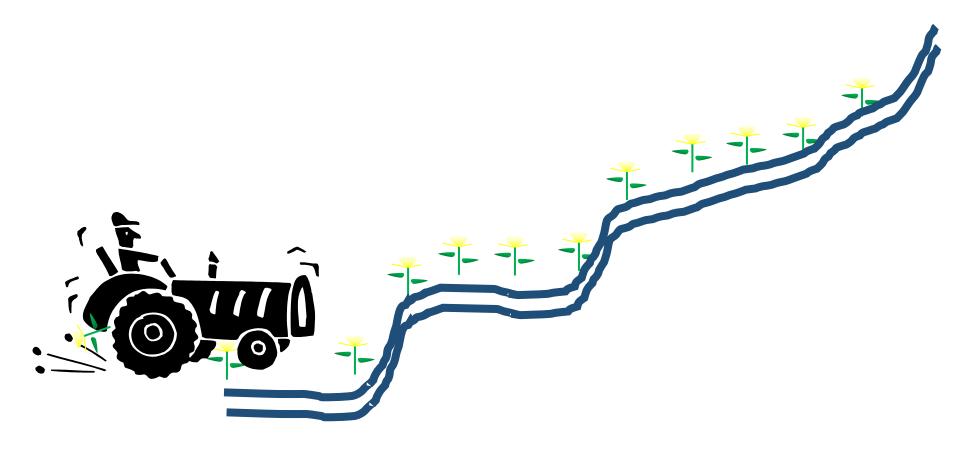
### Operational Impacts

#### Impacts occur during management of the fire

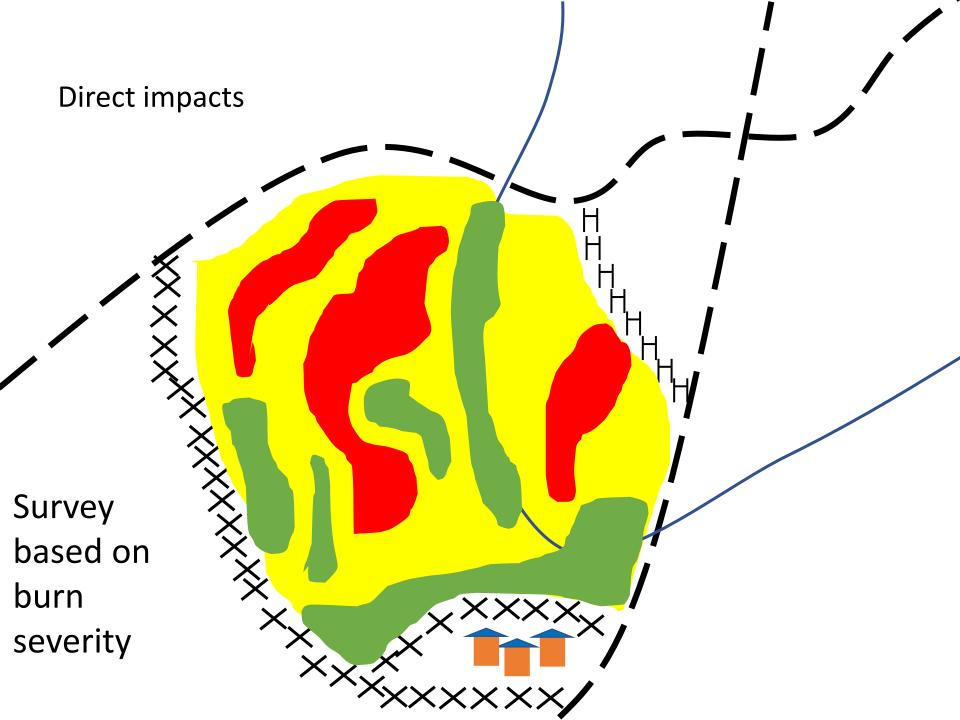
- Line construction
- Retardant and foam
- Mop-up
- Driving off-road
- Soil compaction
- Heli-spots
- Fire camp
- Burn outs

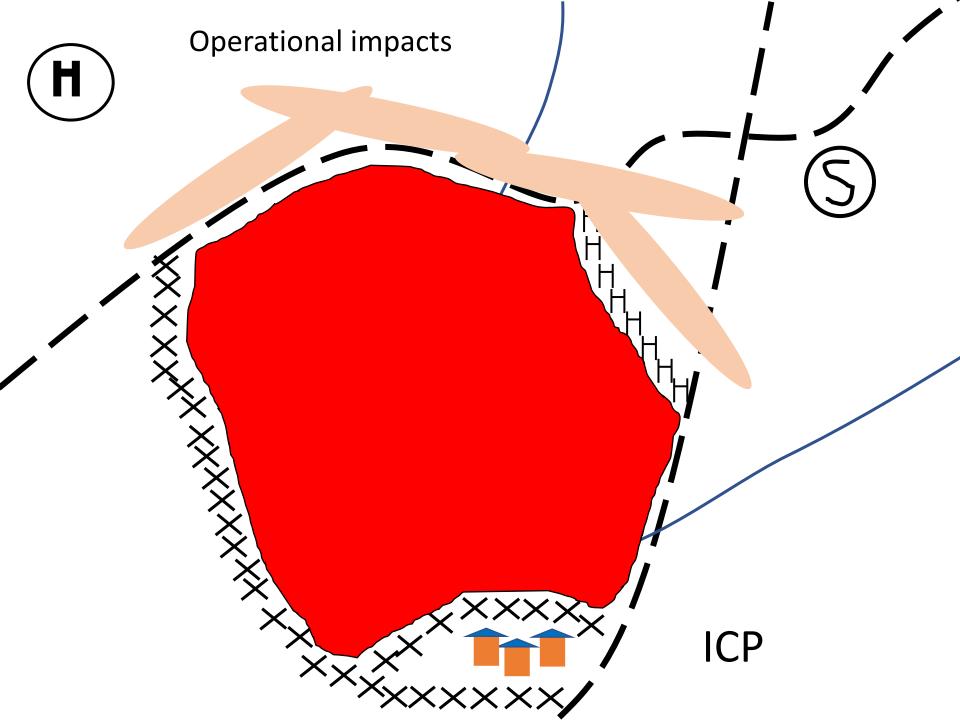


# Disturbance plus vector = invasive plant spread















#### Fire retardant is fertilizer





### Weeds at basecamp, spike camps, helispots



# Equipment and people are vectors

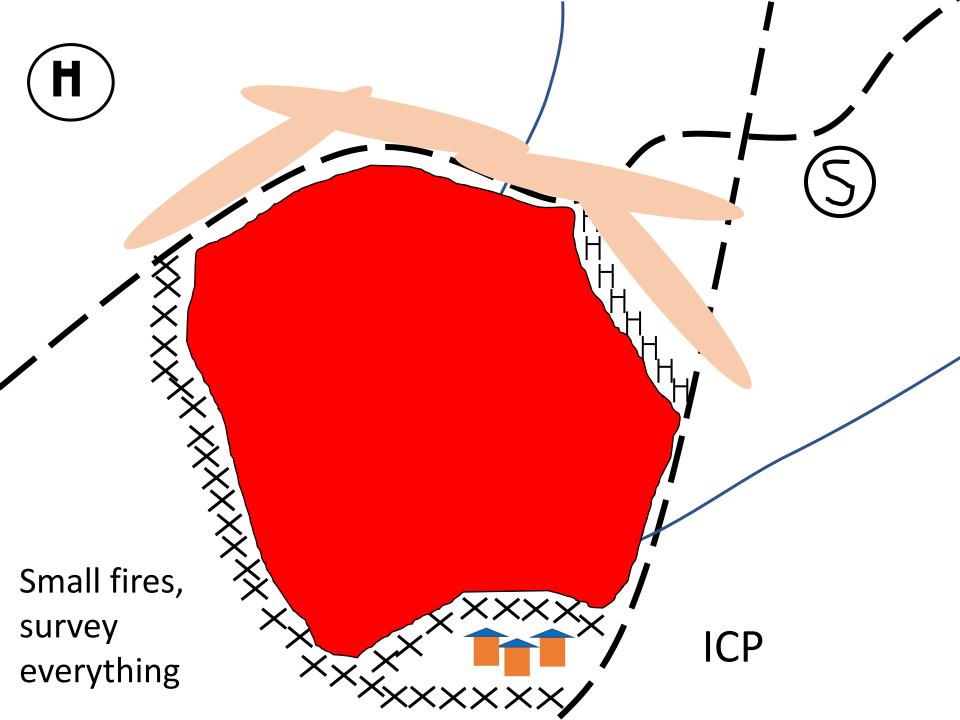


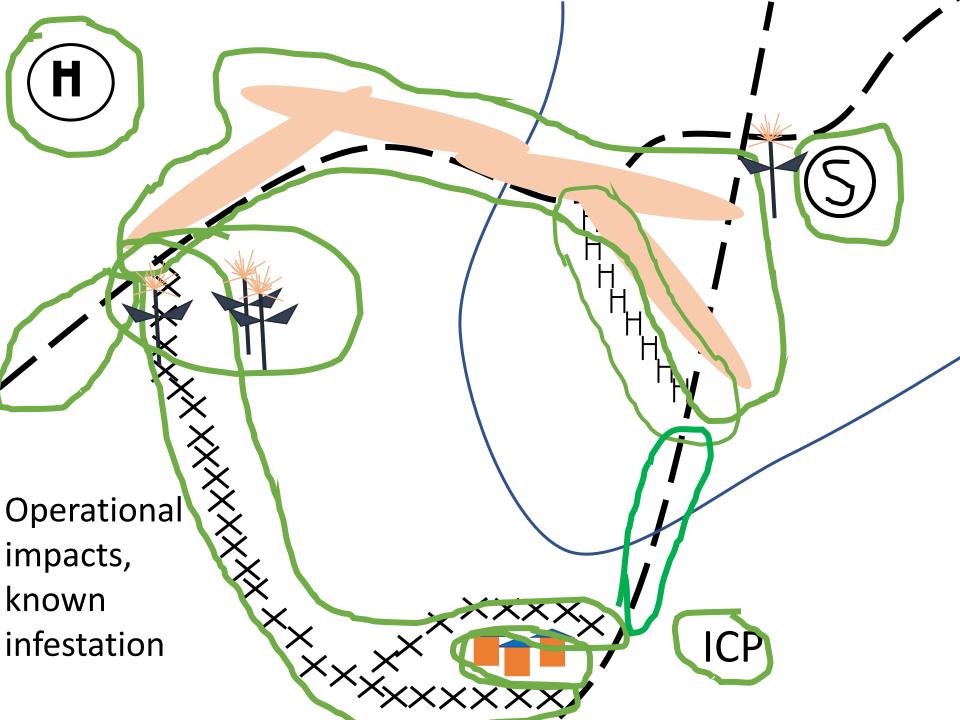


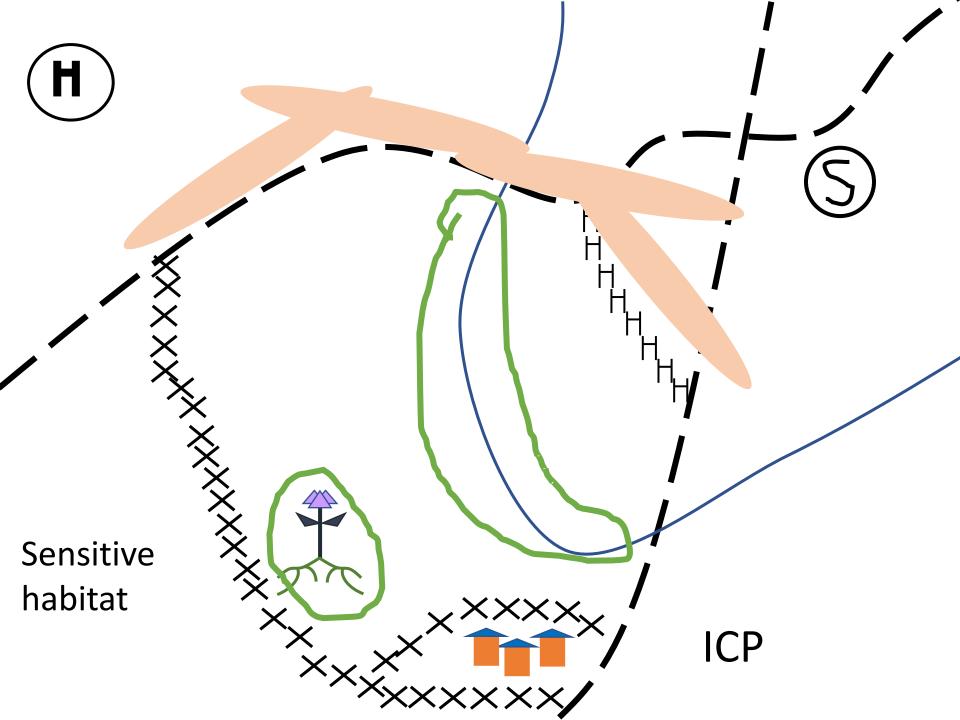












Fire size	Camps, helibase, drop points	Known infestations burned	Dozer lines	Hand lines	Retardant	High severity	Rare species habitat, sensitive habitat
100	X	X	X	X	X	X	X
1,000	X	X	X	X	X	X	X
10,000	X	X	X	X	/		
100,000	X	X	X	/			

X

X

1,000,000

X

