

Real life examples of invasive weed introduction via contaminated hay and straw – and outcome.

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Cal-IPC Weed Free Forage Training

There was no yellow starthistle in the Lake Tahoe Basin prior to the Angora Fire. Straw wattles used for erosion control were contaminated with YST. Eldorado county was able to promptly and successfully treat it.

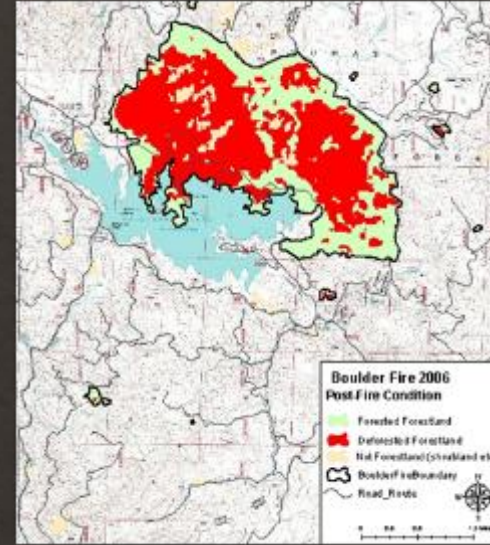


2006

BAER for Boulder Fire on the Plumas
NF Hay bales used in stream – bales
brought in medusahead and barbed
goatgrass



Photo: Steve Matson



BAER hydrologist used hay bales in Lost Creek to slow sediment delivery into Antelope Lake. The BAER team asked the local feed store if they had weed free hay bales, the feed store called the Ag Dept. to ask if they would certify the bales at the store as weed free. The county examined the bales as best they could and certified them. In 2007, barbed goat grass (*Aegilops triuncialis*) and yellow starthistle (*Centaurea solstitialis*) that had already gone to seed. We have been hand pulling the site since desperately trying to contain the infestations

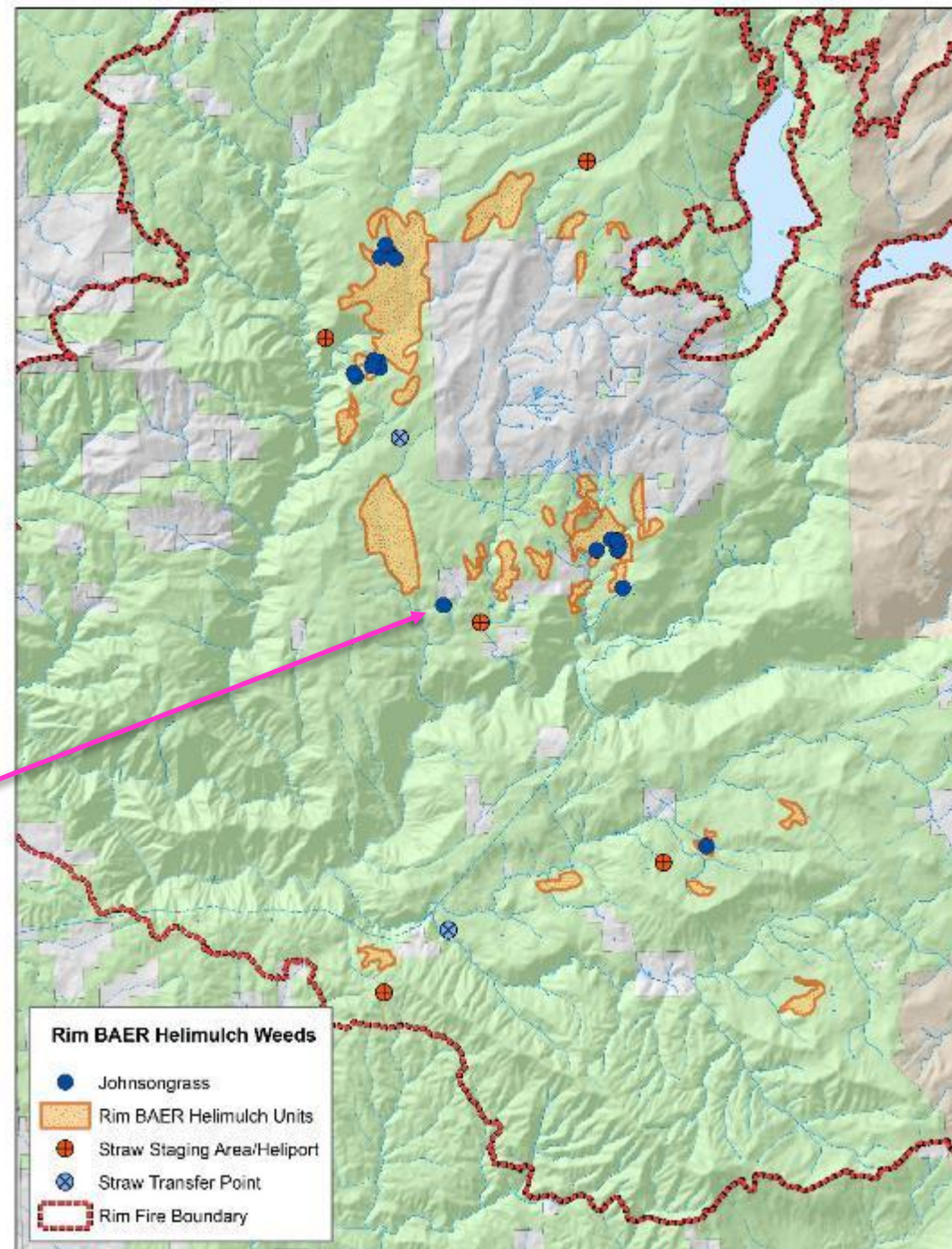
Example: from Jim Belsher-Howe, USFS

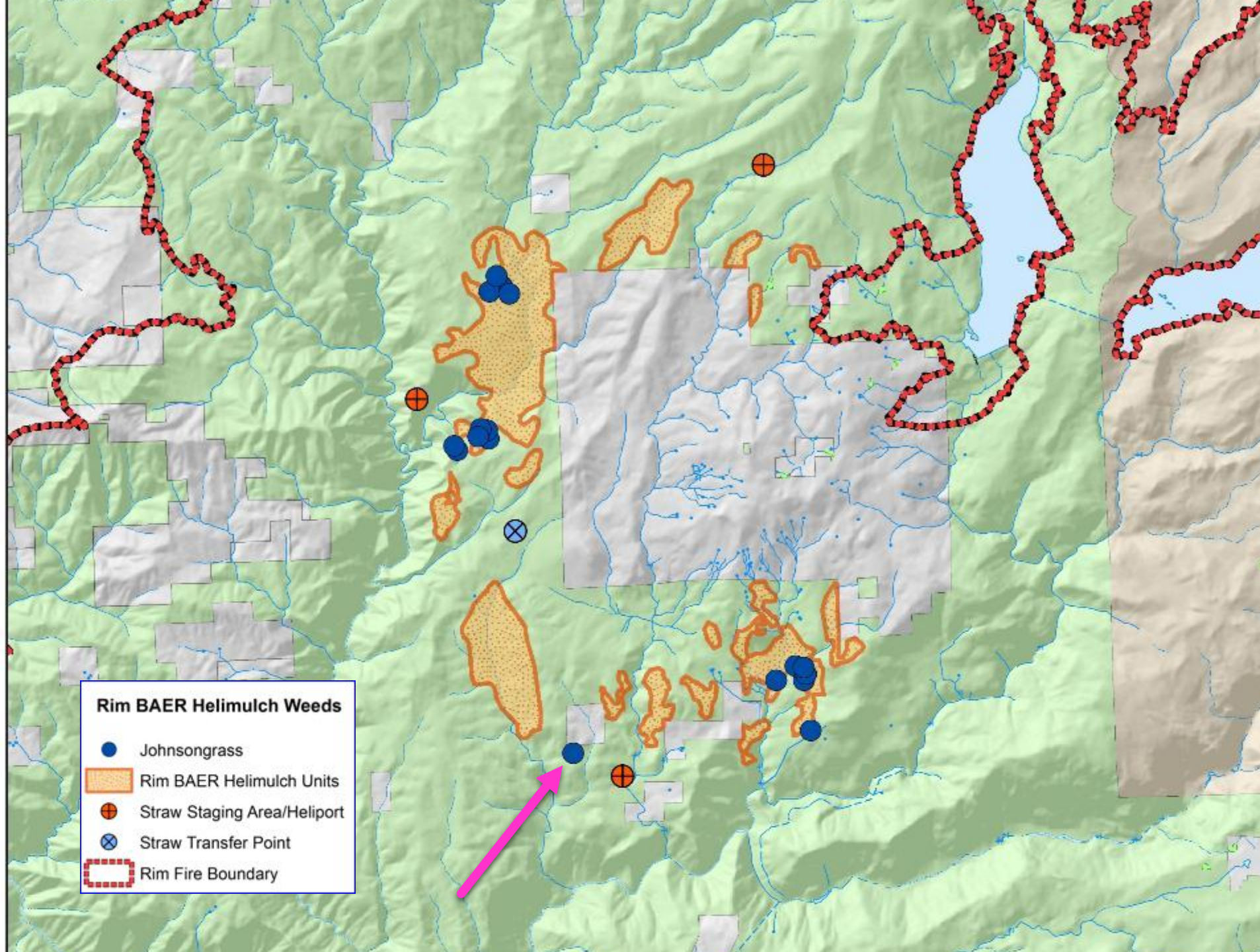
Rim Fire BAER 2013/2014 Stanislaus NF

Johnsongrass (*Sorghum halepense*)
from certified weed free rice straw applied for
erosion control.

There is a strong correlation between where
“certified weed free rice straw” was applied
and where Johnsongrass was found in the
Rim burned area.

Only one site has not been found in a
helimulch unit. However, it is on a flight line
from staging to a unit (center of
map). Johnsongrass is a C-Rated California
noxious weed. There was only one known
site before the fire – it isn't shown on this
map.





Rim BAER Helimulch Weeds

- Johnsongrass
- Rim BAER Helimulch Units
- ⊗ Straw Staging Area/Heliport
- ⊗ Straw Transfer Point
- ⋈ Rim Fire Boundary

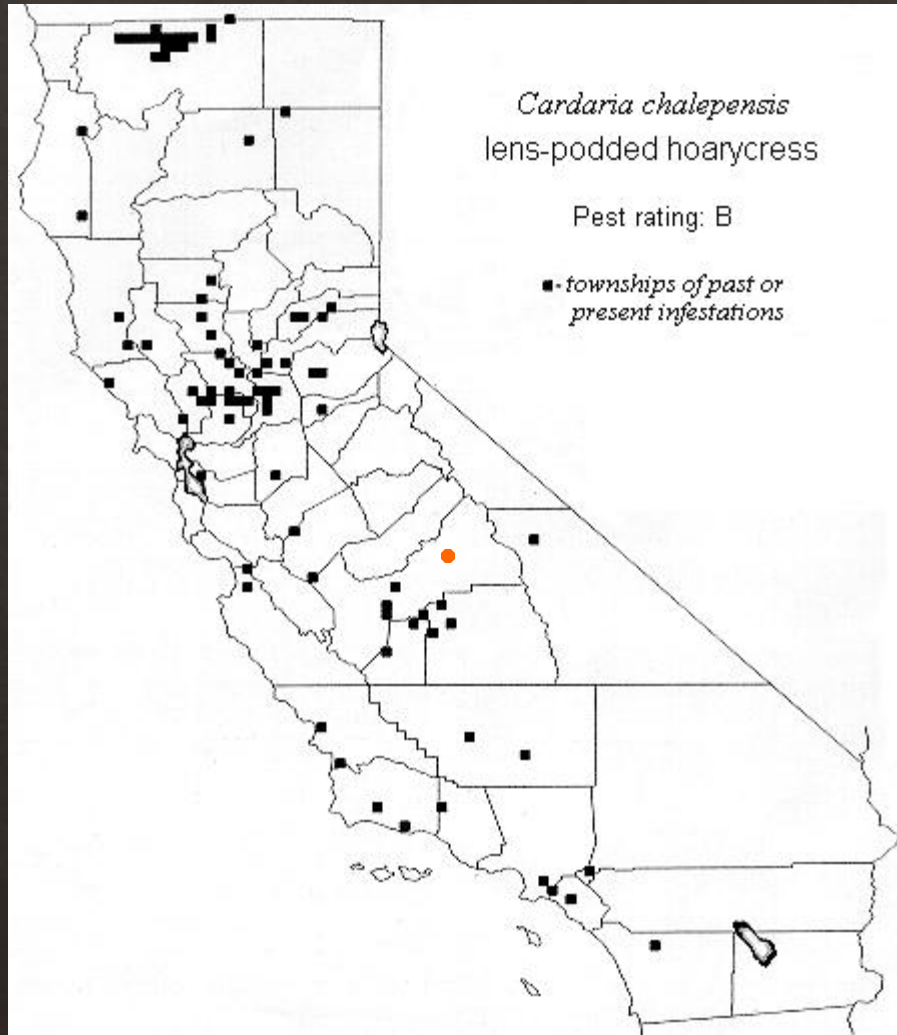
Cardaria chalepensis –
Lens-podded hoarycress

Next to commercial pack
station and riding stables.

We suspect hay
but can't prove it



Lens-podded hoarycress



- ◇ Discovered in 2003 at Dinkey Pack Station (1,523 plants pulled)
- ◇ Logged through in 2006 (oops)
- ◇ 7 large garbage bags pulled in 2009 – had not spread beyond original site
- ◇ Hand-pulled each year since, 2016 one person spent a couple of hours. Need herbicides!





Questions?