



FOREST HEALTH PROTECTION 2018 HIGHLIGHTS OF TREE MORTALITY AND OTHER DAMAGE FROM INSECTS AND DISEASES

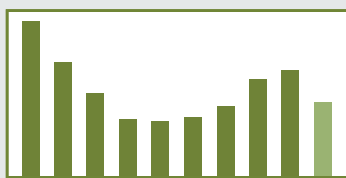
Approximately 450 million acres surveyed annually



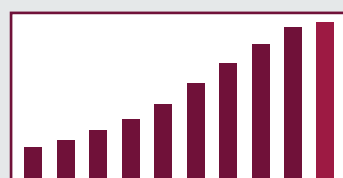
ACTIVITIES FOREST HEALTH PROTECTION SUPPORTED

LYMANTRIA DISPAR DISPAR	SOUTHERN PINE BEETLE	EMERALD ASH BORER	FIR ENGRAVER	SUDDEN OAK DEATH	SPRUCE BEETLE	RAPID 'ŌHI'A DEATH
Eradication, suppression, and slow-the-spread; (promote early intervention)	Suppression of active infestations and thinning forest for prevention	Provide technical assistance and outreach	Surveying, suppression, and developing management options	Stream detection and treatments in targeted areas to slow-the-spread	Pest suppression, detection, management, and treatments	Detection, suppression, and management including steam vacuum treatment

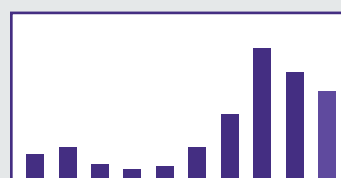
TREE MORTALITY SURVEY TRENDS 2009-2018



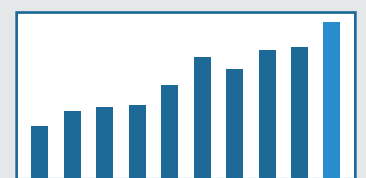
ALL TREE MORTALITY
6 MILLION ACRES
IN 2018



EMERALD ASH BORER
1050 COUNTIES IMPACTED
IN 2018



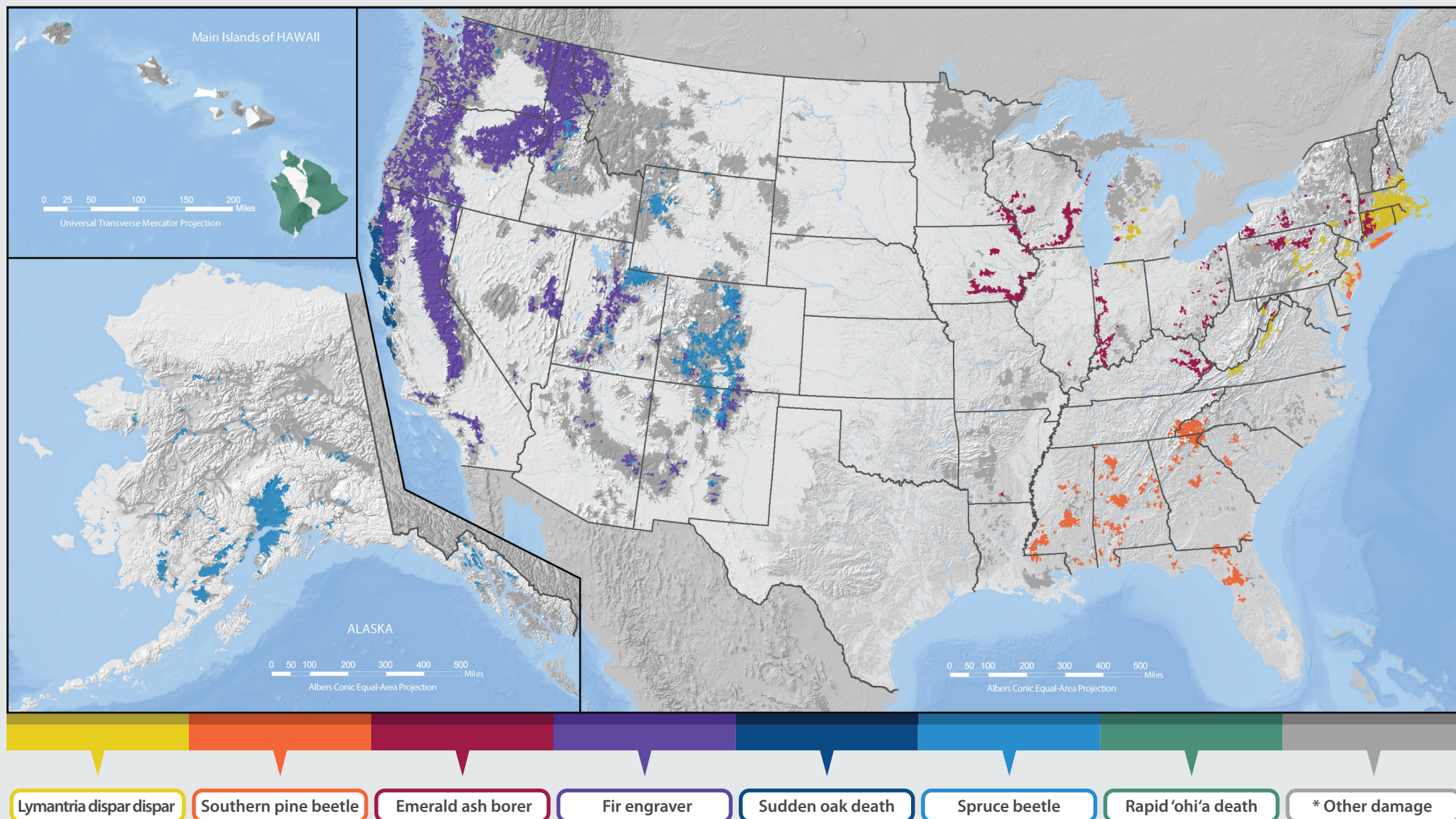
FIR ENGRAVER
1.9 MILLION ACRES
IN 2018



SPRUCE BEETLE
947 THOUSAND ACRES
IN 2018

2018 INSECT AND DISEASE SURVEY

WATERSHEDS WITH TREE DAMAGE



*Includes damage from forest tent caterpillar, western pine beetle, mountain pine beetle, Swiss needle cast, spruce budworm and many other less significant pests.