EcoAdapt™

Fire-Related Climate Adaptation Actions

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Climate Adaptation Action	General Description	Climate Relevance
Thinning	Reducing forest density by cutting and/or physically removing vegetation from the landscape • Relevant Practices: commercial and pre-commercial thinning, daylighting, improvement cuts, regeneration practices, salvage	• Reduces fire risk by reducing fuel quantities and disrupting fuel continuity (i.e., surface and ladder fuels) • Improves growing conditions and health/vigor of fire-resistant species, increasing individual tree and overall landscape resilience to fire
Mechanical Fuel Treatments	Using machines to physically remove dead, downed, and other fuels from the landscape • Relevant practices: Thinning, pruning	• Reduces fire risk by reducing fuel quantities and disrupting fuel continuity (i.e., surface and ladder fuels)
Prescribed Fire	Intentional artificial ignition and subsequent management of fire on the landscape • Relevant Practices: pile burning, broadcast burning (wilderness & non-wilderness, various ignition methods)	• Reduces risk of catastrophic or stand-replacing fire by targeting and reducing surface and ladder fuels • Allows for re-introduction of natural fire regimes on the landscape • Prepares seedbed for planting and/or natural re-seeding of fire-resistant species
Managed Wildfire	Allowing naturally ignited fires to burn on the landscape, but actively managing fires (i.e., controlling burn path and extent) to protect areas of concern (i.e., structures, no-burn areas) • Relevant Practices: wildland fire use	• Regulates forest density and fuel conditions and build-up, preventing uncharacteristic forest conditions and minimizing future risk of catastrophic or stand-replacing wildfire • Facilitates return of landscape to historical fire-resilient structure and composition
Seeding fire-resistant species	Artificially planting and/or creating ideal conditions for natural regeneration of fire-resistant species • Relevant Practices: reforestation, regeneration treatments, fill plant, improvement cuts, prescribed burning	• Increases stand and landscape resilience to fire
Removal of fire-prone species	Targeted selection and removal of tree species and/or individual trees that are vulnerable to fire • Relevant Practices: improvement cuts, regeneration practices, commercial/pre-commercial thinning, salvage	• Increases stand and landscape resilience to fire

Descriptions of Relevant Practices:

- Commercial/Pre-Commercial Thinning: Reducing existing tree density to a target residual density. Typically includes retention of desired species (e.g., fire-resistant, shade-intolerant tree species).
- Daylighting: Removing vegetation adjacent to a target tree to increase tree growth and vigor by reducing immediate competition.
- Improvement cuts: Treatments conducted to remove trees of undesirable species, form, age or condition and improve overall stand condition.
- Salvage: Removal of dead, dying, or damaged trees.
- Pruning: Removal of lower tree branches to minimize ladder fuels.
- Pile burning: Burning of fuels that have been gathered into distinct piles with no fuel connectivity to other piles.
- Broadcast burning: Prescribed burns that occur over large(r) areas in both wilderness and non-wilderness. Can include aerial and hand ignition.
- Wildland fire use: Managing naturally ignited wildfires to achieve natural resource objectives.
- Reforestation: Increasing amount of vegetation on the landscape via natural regeneration (i.e., tree reproduction, seeding, and growth) and artificial (i.e., hand-planting) methods.
- Regeneration: Various treatments (e.g., to increase forest stand health and resilience (i.e., by removing disease-prone individuals, maintaining fire-resistant and/or old-growth tree reserves)
- Fill plant: Planting of trees in previously treated areas to supplement and meet reforestation/regeneration goals and achieve target stand densities.

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