FIRE MGT. STANDARDS

Listed Aquatic Species Habitat and Sensitive Watersheds

# *OBJECTIVES*

* Protect the Threatened, Endangered and Sensitive (TES) listed Aquatic species and their habitat.
* Reduce impacts to sensitive Watersheds and Riparian Areas.
* Adhere to PACFISH/INFISH Standards
* Utilize low-impact technologies and techniques when managing fire incidents.

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| **Suppression** | **Mop-Up** | **Rehabilitation** | STANDARDS |
|  |  |  | CHEMICAL (Foam, surfacant, retardant), PETROLEUM PRODUCTs and PUMP USE: |
| **X** | **X** | **X** | Storage and use of diesel, fuel, and chemicals   * *All amounts:* Store and use outside of designated Riparian Habitat Conservation Areas (RHCAs) Spill pads and plastic liners are required under fuel barrels, jerry cans and tanks. These pads will be changed every 12 hours of use or when 50% saturated. Pads and liners will be bagged and hauled out to drop points or designated site at ICP. (RA-4) * *Under 55 gallons per site*: See above. * *Over 55 gallons per site:* Provide spill containment measures for extended use. Provide for spill containment with adequate spill apron. Have fuel spill kit on hand at fuel site. |
| **X** | **X** | **X** | All hazardous waste spills (ie. chemical, fuel, other) shall be promptly reported and properly cleaned up in accordance with the Forest’s Hazmat Plan. |
| **X** | **X** | **X** | Do not pump directly from stream if chemical products are to be injected into the system. If chemicals are used, pump from a fold-a-tank located out of riparian area - minimum 150 feet from water sources, springs, lakes, streams. |
| **X** | **X** | **X** | Avoid back flushing pumps and charged hose into live streams, lake, ponds or wetlands. |
| **X** | **X** | **X** | Spill pads and plastic liners are required under all pumps. These pads will be changed every 12 hours of use or when 50% saturated. Pads and liners will be bagged and hauled out to drop points or designated site at Incident Command Post (ICP). |
| **X** | **X** |  | Use water for suppression/mop-up in riparian areas, and near live streams and other water bodies. |
| **X** | **X** |  | Avoid retardant application within designated Riparian Areas (ie. streams, lakes, or ponds), and use special care in mapped areas. Retardant in these areas may be used after consultation with Resource Advisor and Fisheries Biologist (FM-3) and approved by Line Officer. |

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| **Suppression** | **Mop-Up** | **Rehabilitation** | STANDARDS |
|  |  |  | FIRELINE (Hand & Dozer) and INTERIOR FIRE AREA: |
| **X** |  |  | Avoid dozer line construction and use in riparian areas and meadows. If however dozer line is critical to incident suppression then consult with Resource Advisor for suitable location and avoidance of key habitat areas. |
|  | **X** | **X** | Scatter slash piles along and onto fireline. Knock down all slash piles higher than 18 inches. |
|  | **X** | **X** | Obliterate fireline- scatter slash, replace rocks, flatten berms within 100 feet where it intercepts trails, roads or stream crossings. Dozer or Excavator use within Riparian Habitat Conservation Areas will be authorized by Resource Advisor. |
|  | **X** | **X** | Pull back all sod (roots down) and cover with slash on all fireline. |
|  | **X** | **X** | Construct waterbar on firelines on slopes exceeding 10%, including burned over firelines inside the fire perimeter and backup lines. See general guide for waterbar construction – design, locations and spacing. |
|  | **X** | **X** | Scatter seed and rake into ground on all exposed soil. Location, rate and seed mix to be determined by Resource Advisor. |
|  |  | **X** | Place boulders, logs and slash on all firelines to discourage use and camouflage entrance points. |
|  | **X** | **X** | Construct waterbars, scatter slash piles, and pull back sod on all interior access trails or firelines |
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|  |  |  | CAMPS (ICP, SPIKE, and COYOTE) |
| **X** |  |  | Locate incident bases, camps, staging areas and other centers for incident activities outside of RHCA. Exemption may be granted following a review and recommended location by a resource advisor. (FM2) |
|  |  | **X** | Return camp to pre-fire size by replacing logs and rocks removed from site. Dozer or Excavator use within Riparian Habitat Conservation Areas will be authorized by Resource Advisor or District Fisheries Biologist. |
|  |  | **X** | Scatter seed/fertilizer and rake into ground on all exposed soil. Location, rate and seed mix to be determined by Resource Advisor. |
|  |  | **X** | All bedding areas dug or leveled will be re-contoured and rocks/logs replaced on site. |
|  |  | **X** | In compacted sites, scarify soils 2-4 inches and scatter area with needles, twigs, rocks and dead branches. |
|  |  | **X** | Replace any boulders, gates, and/or barriers on closed trails opened for camp access. |
|  |  | **X** | Place boulders, logs and slash on all ‘user built ‘foot paths. Discourage future use and camouflage entrance points – pull slash onto paths and construct water bars where needed. |

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| **Suppression** | **Mop-Up** | **Rehabilitation** | STANDARDS |
|  |  |  | ROADS and TRAILS (SYSTEM and NON-SYSTEM): |
|  |  | **X** | Replace any boulders, gates, and/or barriers on closed roads opened for fire access. |
|  |  | **X** | Rip road bed (12-18 inches) and cover with adjacent slash on any closed roads opened for fire access. Specific roads to rip will be identified by the Resource Advisor. |
|  |  | **X** | Road should be restored including surface, ditches, culverts, barriers, gates, cattleguards and signs. |
|  | **X** | **X** | Water the heavily used roads to control dust and loss of surface material. Heavily used roads should be watered and bladed to restore their condition. |
|  |  | **X** | Scatter seed/fertilizer and rake into ground on all exposed soil. Location, rate and seed mix to be determined by Resource Advisor. |
|  |  | **X** | Reconstruct waterbars with native on-site materials at flagged sites along trails. Resource Advisor to oversee locations, and design. See general guide for waterbar construction – design, locations and spacing. |
|  |  | **X** | Replace any boulders, gates, and/or barriers on closed trails opened for fire access |
|  |  | **X** | Rehabilitate any switchbacks, or non-system “trails” used for accessing fire. Restore contour and pace slash rocks on area to discourage use. |
|  |  | **X** | Trail should be restored including surface, ditches, culverts, retaining walls, puncheons, gates and signs impacted by fire suppression activity. |
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|  |  |  | **DROP POINTS and HELIPSOTS/BASE** |
| **X** |  |  | Locate helibases, staging areas, helispots, and other centers for incident activities outside of RHCA. Exemption may be granted following a review and recommended location by a resource advisor. (FM2) |
|  |  | **X** | Scatter slash piles at Drop point. Knock down all slash piles higher than 18 inches |
|  |  | **X** | Return drop point to pre-fire size by replacing logs and rocks removed from site. Dozer or Excavator use within Riparian Habitat Conservation Areas will be authorized by Resource Advisor. |
|  |  | **X** | Replace any boulders, gates, and/or barriers on closed roads opened for fire access. |
|  |  | **X** | Scatter seed/fertilizer and rake into ground on all exposed soil at Drop Points and Helispots/helibases. Location, rate and seed mix to be determined by Resource Advisor. |
| **X** | **X** | **X** | All hazardous waste (chemical, fuel, other) spills shall be promptly reported and properly cleaned up in accordance with the Forest’s Hazmat Plan. |

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| **Suppression** | **Mop-Up** | **Rehabilitation** | STANDARDS |
|  |  |  | DROP POINTS and HELIPSOTS/BASE (Cont’d) |
|  | **X** | **X** | Scatter slash piles along and onto fireline. Knock down all slash piles higher than 18 inches. |
|  |  | **X** | Place boulders, logs and slash on all foot paths. Discourage future use and camouflage entrance points – pull slash onto paths and construct water bars where needed |
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|  |  |  | PUMPER CHANCES and WATER SOURCES |
|  |  | **X** | Replace any boulders, gates, and/or barriers on closed roads opened for fire access. |
|  | **X** | **X** | Remove stream channel modifications from temporary water source developments. |
| **X** | **X** | **X** | All hazardous waste (chemical, fuel, other) spills shall be promptly reported and properly cleaned up in accordance with the Forest’s Hazmat Plan. |
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|  |  |  | SAFETY ZONES and SAFETY AREAS |
|  |  | **X** | Scatter slash piles at all Safety Zones and Safety Areas. Knock down all slash piles higher than 18 inches |
|  |  | **X** | Scatter seed/fertilizer and rake into ground on all exposed soil. Location, rate and seed mix to be determined by Resource Advisor. |
|  |  | **X** | Dozer or Excavator use within Riparian Habitat Conservation Areas will be authorized by Resource Advisor. |