
Appendix H

Watdog Defensible Fuel Profile Zone Monitoring and Maintenance Guidelines

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Defensible Fuel Profile Zone Monitoring

A. Forest-Wide Defensible Fuel Profile Zone (DFPZ) Monitoring

The Herger-Feinstein Quincy Library Group (HFQLG) Record of Decision (ROD) (p. 13–14) outlines the monitoring strategy for the HFQLG Pilot Project. This strategy will also be applied to DFPZ maintenance projects and no additional monitoring will be required as a result of the HFQLG ROD (HFQLG, Final Supplement EIS, ROD, p. 3).

B. Project Level DFPZ Monitoring

While DFPZ effectiveness should not be seriously reduced for approximately 5 years in plantations and 10–20 years in natural stands, DFPZ monitoring would begin no later than 5 years after construction is completed, depending upon funding (see No DFPZ Maintenance).

A DFPZ monitoring program would be completed at 2 to 3 year intervals for the west side (less than 5,000 feet elevation) and 3 to 4 year intervals for the east side (greater than 5,000 feet elevation) of the Watdog Project Area, until termination of the DFPZ or funding (see Long-Term DFPZ Maintenance). The east side of the Watdog Project area has a longer monitoring interval as it is in the true fir vegetation type, receives more snow load, and brush response is slower than the west side.

C. DFPZ Site-Specific Monitoring Criteria

Objectives for DFPZs include retaining surface fuels, less than 3-inch diameter, around 5 tons per acre and retaining large down woody material, where available, at 10–15 tons per acre, after treatment.

When both surface fuels (i.e., needles, twigs, and branches) and fuel ladders (i.e., shrubs, brush, understory trees) exceed predetermined levels (table H-1), then DFPZ maintenance treatments may be evaluated and scheduled (see Short or Long-Term DFPZ Maintenance) on a site-specific basis. Priority for DFPZ treatment would entail stands that meet (1) both surface fuels and fuel ladder criteria, followed by (2) stands that meet the surface fuel criteria, and lastly, (3) stands that meet the fuel ladder criteria.

Table H-1. DFPZ monitoring criteria.

Surface Fuels	Treat if Surface Fuels Exceeds:	Retain After Treatment
0–3-inch diameter	Greater than 7 tons per acre	Around 5 tons per acre
Large down wood	Greater than 15 tons per acre	10–15 tons per acre
Fuel Ladder	Treat if Fuel Ladder Exceeds:	Fuel Height
Shrubs/brush	Greater than 25 percent ground cover	Greater than 5 feet
Understory trees	Greater than 15 percent canopy cover	Greater than 8 feet

Defensible Fuel Profile Zone Maintenance

A. Short-Term (Foreseeable) DFPZ Maintenance

The Record of Decision for the HFQLG Final Supplemental EIS calls for “consideration of all practicable methods of vegetation control for site-specific projects, including the use of herbicides.” As pointed out in the Supplemental EIS (p. 22), herbicides have to be used within about two years of the initial treatment to be most efficient and effective in delaying or preventing the buildup of understory fuels, since they change vegetation from shrubs to grasses, forbs, or ferns. By not proposing the use of herbicides at this time (within two years) for the Watdog Project, their use is essentially precluded. In the short-term, where DFPZ objectives are not met with mastication, an underburn would be the final treatment. Based on site-specific analysis of land allocations, slopes, vegetation types, and previous underburning treatments in the Watdog Project area, the foreseeable maintenance of the DFPZ would consist of prescribed fire, mechanical (i.e., mastication, grapple pulling), and hand treatments. The Forest Service will fully comply with *National Environmental Protection Act* (NEPA) requirements prior to conducting any maintenance activities.

B. Long-Term (Future) DFPZ Maintenance

Given the fact that this DFPZ project is part of a 5-year pilot project, it is uncertain if the Forest Service will decide to maintain these DFPZs when the time for maintenance of the natural stands is reached (approximately 10–20 years after initial treatment). By that time, the DFPZ prescription may be modified or even discontinued. If the Forest Service wishes to maintain these DFPZs in the future, sufficient funding and staffing may not be available, or other Forest Service priorities may prevent maintenance projects from being completed. Even if funding and staffing are available, it is not clear which method would be used – brush cutting by hand or heavy equipment, mastication of brush and down woody material with heavy equipment, livestock treatment, prescribed burning, or herbicide treatment. Because there are no specific plans for long-term maintenance at this point and many questions as to the timing, extent, and method of maintenance remain open, no specific DFPZ maintenance project is reasonably foreseeable and further analysis at this time is not practical. The Forest Service will fully comply with *National Environmental Protection Act* (NEPA) requirements prior to conducting any maintenance activities. Therefore, decisions about maintenance for a specific DFPZ would only be made at the time DFPZ maintenance is actually necessary (HFQLG, Final Supplement EIS, ROD, p. 3).

C. No DFPZ Maintenance

Even if no maintenance is conducted in these DFPZs in the future, the DFPZs should be effective for many years. In the natural stands, DFPZ effectiveness should not be seriously reduced for 10–20 years. In the plantations, DFPZ effectiveness should not be reduced for approximately 5 years. And, after these periods, the DFPZs will retain many of their beneficial characteristics for fighting fire and reducing fire intensity. For example, even if significant amounts of understory vegetation grow in the treated stands over the next several years, the proposed action will remove a significant amount of ladder fuel, such that the net amount of fuel will be reduced over time. Additionally, should there be a situation where a DFPZ has not been maintained for several years but the Forest Service determines that the DFPZ would provide a safe position from which to fight an oncoming wildfire, Forest Service staff could conduct emergency maintenance at the time of the wildfire, such that the DFPZ would regain full efficacy by the time the fire reached the area.