Some Notes about Seeding Grasses following Wildfire

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Note: These notes come from personal experiences having worked on over a dozen California wildfires over the past 40 years and from research of studies conducted following various wildfires in the western United States over the past century.

Potential Positive Effects

- **Seeding can reduce non-native invasive encroachment through competition.**
- **Seeding can increase infiltration and reduce runoff and resulting soil erosion.**
- **Seeding may be used purposely to reduce shrub regrowth on rangelands.**
- **Seeding with proper grasses; proper seedbed preparation and location and proper care and maintenance can help reduce surface erosion, sediment and runoff in first and/or first 2 seasons following wildfire depending on site conditions, seed choice, water holding ability of soil, timing, supplemental irrigation, seeding cover, etc.**

Potential Negative Effects

- **Grasses are herbaceous with annuals having shallow root systems and have little to no effect on slope stability. In fact grasses increase infiltration which can have a negative effect where slopes are prone to sliding. Seeding, especially on slide prone slopes can be a factor that increases the likelihood of slope saturation and risk of debris flows.**
- **Seeding competes with and/or slows down regeneration of pre-existing native vegetation.**
- **Seeding uses up more ground moisture and reduces regrowth of native plants that regenerate from resident seed bank in the soil.**
- **Seeding has been shown to provide marginal effects/results in the first year following fire or not at all and no significant effect when slower native perennials are the plant of choice in the first year.**
- **Seeding may have long term negative effects on the ecosystem by changing plant community composition over time.**
- **Seeding is usually not cost effective and does not guarantee safeguard to human life or property.**
- **Seeding can attract pocket gophers leading to more opportunities for soil piping and "dry erosion". Studies shows that seeding can increase pocket gopher activity by 4.5%.**
- **Seeding that is successful especially on the unburned wildland interface can become a fire hazard in the following fire season.**
- **Seeding can give property owners a false sense of security.**
- **Reseeding annual or perennial grasses are not the climax species in a woodland or shrub land plant community and therefore may delay natural regeneration even longer. Seeded grasses would also complete with native pioneering grasses and forbs.**
- **Native grass seeding may cause gene pollution of resident native grasses especially if the grasses sowed were of different gene types and collected in other areas of the state.**
- **Seedbed preparation can cause disturbance to slopes, soil, pre-existing vegetation, native seedbank, etc.**