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Natural Resource Specialist Report

Subject: Plant species suitable for firebreaks
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I have been working in and around various fields of natural resource management since 1988. My primary emphasis and experience relates mainly to botany/vegetation communities and ecology.

The idea of using native plants for firebreaks has been a topic for many years and comments have been received regarding this subject in relation to the Minidoka Fuel Break project.. Several species have been proposed such as Sandberg's bluegrass and yarrow, among others. I have personally sought to find a native that would work since I favor native plants over introduced exotics and have a concern about the frequent fires which are eliminating sagebrush and allowing the spread of cheatgrass throughout the middle snake river plain. Although there may be some native species in some environments that could potentially work as a firebreak, I am unaware of any that would work in the 8-12 inch precipitation zone in and around the central snake river plain. Most natives are not aggressive enough to outcompete other vegetation and therefore maintaining a pure stand would be nearly impossible. Some plants like Sandberg's bluegrass is capable of growing in nearly pure stands although it cures out early and provides continuous fuels for a fire to spread through. The greatest overall problem with natives in the 8-12" precipitation zone, in the snake river plain, is that they all cure out or have low fuel moisture during the bulk of the fire season. Those that don't cure out until late summer/fall (ie yarrow) are incapable of growing dense enough, in this project area, to crowd out other burnable vegetation such as cheatgrass.

Some exotic plant species such as crested wheatgrass have been used for firebreaks. In my estimation, this has met with limited success due to the occurrence of cheatgrass in these strips or because crested wheatgrass generally grows dense enough and cures out early enough to allow fire to spread through it. Another exotic species, that I think has the potential to act as a good firebreak, is forage kochia. This subshrub can grow in nearly pure stands within the 8-12" precipitation zone on the snake river plain and remains quite green during summer. I have observed several strips of this species planted along the freeway between Glens Ferry and Boise, Idaho that appear to be good fire breaks due to sparse vegetation (fuel) in the interspaces. Research and other observations indicate that kochia does have some potential to spread in disturbed, or otherwise open areas, but does not appear to be a good competitor with relatively dense perennial vegetation such as is present in the project area.