

PREVENTION STRATEGIES

Definition:

Prevention means to detect and ameliorate the conditions that cause or favor the presence of competing or unwanted vegetation.

Implementing prevention strategies means to analyze the risk of noxious weed invasion during the project planning process and develop tactics to avoid introduction or spread of specific noxious weeds before land management decisions are made and actions are taken.

Inclusion of Prevention Strategies in Project Planning

The following land management activities will always require consideration and evaluation of prevention strategies during the planning process. Prevention strategies will be incorporated into project planning documents (including NEPA documentation as appropriate), and into any appropriate site plans, contracts, and permits.

- Timber management activities, including but not limited to harvest activities, timber stand improvement where significant ground disturbing activity is likely to occur, slash treatment, and site preparation.
- Road construction/re-construction and maintenance activities (including management of closed roads).
- Construction and use of rock pits.
- Recreational activities including construction, areas of concentrated use, areas of dispersed use involving livestock (hay), trailheads, and trail construction or maintenance.
- Range management activities, including development of Allotment Management plans (AMP's), re-vegetation activities, and construction practices.
- Mining Activities
- Wildlife enhancement projects, re-introduction projects, feeding activities.
- Fire suppression and rehabilitation activities.

- Any other projects likely to result in ground disturbing activities, or that occur where noxious weeds are present, or that are likely to result in the invasion or spread of noxious weeds.

Prevention Strategies and Tactics

Noxious weed management will be considered in NEPA planning activities where ground disturbance is likely. Prevention will be addressed as a part of the management constraints or requirements as well as being an evaluation criteria where appropriate.

Where appropriate, NEPA analyses must consider the costs associated with preventing the occurrence or spread of noxious weeds.

Project level personnel should be able to recognize noxious weeds occurring on or adjacent to their Districts and should be able to recognize potential invaders.

The Forest will develop a training program, to include obtaining a color photo guide to noxious weeds, that would assist project level personnel in weed identification and in implementation of strategies provided under this plan.

To the extent practical and feasible, with full consideration of other silvicultural and resource objectives, silvicultural prescriptions should strive to maintain as much shade as possible on site and to limit the amount of soil disturbance.

Logging systems should consider the objectives of maintaining ground cover, maintaining shade providing features, and minimizing ground disturbance, when designing logging systems for a particular stand.

Stand exams, botanical inventories, range analyses, and other resource inventories will include a process for inventorying noxious weed occurrences by stand, species, size of infestation, and location as a minimum.

Project or contract maps will show currently inventoried high priority noxious weed infestations as a means of aiding in avoidance or monitoring.

Commensurate with anticipated risk of invasion or spread of noxious weeds, ground disturbing activities may need to include both a pre- and one or more post-project surveys to document pre-existing infestations and to evaluate the effects of the project on noxious weeds. The intensity and frequency of this survey should vary according to the risk/probability of the project affecting or being affected by noxious weed infestations. This risk should be evaluated during initial or periodic project planning and should

be coordinated with the District noxious weed coordinator. Where monitoring is needed, it should be planned to continue for at least five years on a scheduled basis.

Where existing inventories or pre-project inventories indicate that an infestation occurs on or near a ground disturbing project, the project will be designed, in coordination with the District noxious weed coordinator, to plan for the long term management of the infestation and to prevent the spread of the infestation off site.

Depending on an assessment of the potential risk for introduction or spread of noxious weeds, this will often involve designing projects (including the implementing contracts, permits, etc.) so that the operator will not be working on high risk areas during the time when the weeds are capable of being spread by the operation. In the timber sale contract, C5.12 (Use of Roads by Purchaser), C5.4 (General and Special Maintenance Requirements), and C6.315 (Sale Operation Schedule) give the Districts the flexibility to keep contract vehicles out of high risk areas during the high risk times of the season. These type of requirements can also be incorporated in Federal Acquisition Regulation (FAR) contracts in Section H - Special Contract Requirements.

Contract clause language will be developed along the following general lines. These clauses will be submitted to the Regional Office for review and final approval. Implementation will not occur until such time as the clauses have received Regional Office approval.

- If an assessment of risk conducted by the Forest Officer in charge of a project, and in full coordination with the District noxious weed coordinator, indicates a high risk of introduction or spread of noxious weeds through transport by logging, road construction or other ground disturbing equipment, and unless otherwise agreed to in writing, all equipment to be operated on a project area will be cleaned in a manner sufficient to prevent noxious weeds from being carried on to the project area. This requirement does not apply to passenger vehicles or other equipment used exclusively on roads. Cleaning, if needed, will occur in a site to be established by the District Ranger, in coordination with the equipment owners or operators and the County Weed Board, Cleaning will be inspected and approved by the Forest Officer in charge of the specific project.

- Where log trucks, or other large equipment, make delivery to or haul from purchasers'/contractors' yards infested by noxious weeds, the yard owner will be required to eradicate the noxious weeds from the yard/scaling site through an amendment to the yard scaling agreement or other contract provision as appropriate.

Where timber purchasers' log yards or other contractors equipment yards, are known or suspected to be infested by noxious weeds, encourage their cleanup through working with the purchaser/ contractor and the County Weed board.

Ensure that all disturbed ground is re-vegetated as soon as possible after disturbance. Consider regeneration or other resource objective needs in planning for species to be seeded, timing, rates, etc. Rehabilitate bare ground unless it can be documented that natural or artificial regeneration can accomplish the same prevention objectives as seeding within a reasonable time frame.

Favor the use of native species in preference to introduced species for seeding for site protection when the native species can accomplish the site objectives in a reasonable timeframe and costs are not excessive.

Within the constraints of meeting other resource objectives, use the species and mixes that will most rapidly occupy a site. Consider seeding a fast germinating annual in the mix to provide a suitable ground cover as rapidly as possible.

Where there are no other multiple resource constraints, such as along road cuts and fills, consider using sod-forming species as a major part of the mix.

All seed purchased or otherwise designated or accepted for use on National Forest System Lands, will be required to be tested for "all states noxious weeds" according to AOSA (Association of Official Seed Analysts) standards and will be certified in writing by a Registered Seed Technologist or Seed Analyst as meeting the requirements of the Federal Seed Act and the appropriate State Seed Law for the state in which application is planned to occur, regarding the testing, labeling, sale and transport of prohibited and restricted noxious weeds.

When hay or straw is to be used for mulching, for erosion control, fire rehabilitation or other uses, it should be noxious weed free. Until a Regional or State process can be developed to ensure certification of hay or straw, the following process will be followed:

- ❑ Contact the local County Extension Agent to determine which farmers in the area are participating in the certified grass seed or grain programs. The County Agent may also be able to aid in determining which of the certified growers may also be baling the straw. To the extent possible, use only straw obtained from fields participating in the certification program.
- ❑ Monitor the application site on a scheduled basis for a minimum of five years after use of the straw. This program will not ensure that the straw is totally weed free but is the best option available at this time.

In the development of Allotment Management Plans and Annual Operating Plans, consider the potential for introduction of noxious weed seeds through animal transport. Where the livestock are entering the Forest from a known noxious weed infested area, consider requiring the feeding of the animals (at permittee expense), weed free hay (or other weed free forage or feeds) for 9 to 10 days prior to permitting ingress onto the general area of the National Forest allotment. The feeding area will, if at all possible, be on non-National Forest System lands. If this is not practical, confine the animals in as small a pasture as feasible for the 9-10 day period. This pasture will then require annual monitoring for the occurrence of noxious weeds (and management as appropriate). Under no circumstances will this strategy be applied in a manner inconsistent with Forest Plan standards nor in a manner which will result in resource degradation.

Consider the exclusion of livestock (and wildlife where feasible) from high priority noxious weed sites where the animals are likely to cause a spread of the weed off site.

In the AMP's, to the extent possible, provide for the use of livestock as a tool in preventing palatable, non-poisonous noxious weeds from setting seed (ex: sheep grazing of leafy spurge).

In the Annual Operating Plans, provide a map showing key noxious weed infestations. To the extent possible after seed set, encourage livestock to avoid sites where the seeds are likely to be transmitted by the livestock (i.e., either through ingestion and excretion or through attachment to the animal and then dropping off).

In the Annual Operating Plans, provide information to the permittees regarding noxious weed identification, methods of spread and prevention measures.

Review Mineral Operating Plans to ensure that proper actions are taken to prevent the establishment of new infestations or the spread of existing ones. Ensure that disturbed sites are rehabilitated and revegetated as soon after disturbance as possible. Consider the use of annual cover crops where an area will be left in a disturbed condition for a period of time prior to being re-worked.

For recreational livestock use authorized under permit (such as outfitter-guide permits), permit only the use of feeds with a high probability of being free of noxious weeds (such as heat treated and pressurized pelletized feed).

For recreational and other livestock use not required to be under a permit, develop a process to prohibit the use of feeds on National Forest System lands unless they are accompanied by a certification insuring their weed free status or are such that they have a high probability of being free of noxious weeds (such as heat treated and pressurized pelletized feed).

For recreational and other Forest users in general, develop an informational package to be used to explain the noxious weed prevention program, to encourage the use of pelletized feeds, and to inform and involve the public in the detection and treatment of noxious weeds.

Where feasible, cooperate with the County Weed Boards and other cooperators to provide a hay exchange program during hunting seasons.

Where recreational vehicle activity such as off road vehicle (ORV) use is occurring in an area where noxious weeds are present or are resulting in a ground disturbing activity such that potential invasion sites are available for noxious weeds, consider closing the area to motorized vehicle use and/or conducting revegetation efforts to minimize sites available for weed spread or invasion.

Where ORV use is restricted to a specified area, that area, because of the extensive disturbance to the soil and vegetative cover will need to be closely monitored for noxious weeds. Planning for the ORV area must consider prevention as a high priority.

By District or Zone, conduct a Forestwide inventory for noxious weeds. Concentrate on high priority species (eg: Potential and New Invaders) and on areas where ground disturbing activities are common.

Road management objectives should consider the benefits and costs associated with allowing/encouraging desirable herbaceous vegetation growth on shoulders, cuts and fills versus the potential for invasion by noxious weeds and the long term costs associated with treatments and off site effects.

Road maintenance planning will address practices to prevent the spread of noxious weeds.

Where shoulders or drainage ditches are covered by desirable herbaceous cover, consider leaving it in place rather than blading it off if such a practice can be done without causing excessive damage to the road surface or significant public safety hazards.

When blading, brushing, rock raking, or otherwise maintaining a road surface where a noxious weed infestation is located the COR/ER (or Road Maintenance Foreman) will work with the District noxious weed coordinator to ensure that appropriate inventory and treatment measures are applied. The following are suggested practices:

- Ensure that the contractor notifies the COR/ER in a timely enough manner so that the road can be checked for the current status of noxious weeds prior to any work occurring. Weed sites should be managed as follows:
 - (1) If the weed is not in flower, or will not reproduce through damaged plant parts (e.g., vegetatively), proceed with maintenance.
 - (2) If the weed has flowered, either hand pull or cut all tops, bag in a plastic bag, then proceed with maintenance; or flag the site for avoidance by the contractor until the District can properly treat the infestation (dispose of weed seed heads by burning).
 - (3) If the weed is known or suspected to sprout vegetatively from cut parts, flag the site to ensure avoidance by the contractor until the weed can be treated by proper means.

- To the extent possible, in full consideration of road maintenance and public safety objectives as well as silvicultural needs, do not remove trees or brush from adjacent to the road. The objective is to provide as much shade as possible on the unvegetated or sparsely vegetated road surface, cuts and fills.

Pit/Quarry plans will consider noxious weeds in the development of long-term plans and will develop plans to prevent introduction or to prevent the spread of existing infestations. Minerals materials procured from non-Forest Service pits will also be checked to be sure the material is not infested with noxious weed seed.

In planning for Access and Travel management ensure that management of noxious weeds will be a consideration. If a road is to be closed, coordination with the District Noxious Weed Coordinator should occur to ensure that if noxious weeds exist within the closed portion of the road, the sites are inventoried, IWM decisions are made regarding their management, and provisions are made for access as needed to implement the IWM treatments and monitoring. Roads to be closed should be seeded (with tested and certified weed free seed) to minimize potential invasion sites.

Each District/Zone will coordinate closely with the associated County Weed Board to ensure sharing of information regarding infestations, treatments, etc.

Coordinate with adjacent Districts, Forests and BLM Areas to ensure that animals or equipment moving from the adjacent lands onto the District are either moving from weed free areas or are treated/quarantined as appropriate. Encourage coordinated policies between adjacent lands.

To the extent possible, do not use noxious weed infested sites for fire crew bases. Where emergency situations dictate that the base must be located on a site infested by noxious weeds, ensure that noxious weeds on the site are prevented from going to seed and that appropriate short and long term inventory, mitigation and management measures are applied to rehabilitate the site and to manage the infestation. Do not use noxious weed infested sites as helibases unless appropriate long term actions are taken to prevent seed production and to ensure eradication of the weeds and rehabilitation of the site.