

## Appendix I – Noxious/Invasive Weed Prevention Plan

### Frank Church – River of No Return Wilderness Noxious Weed Prevention Plan

It has been well-established that the most effective method for managing noxious weeds is to prevent their invasion. Prevention is both the most economical and ecologically sound method for weed management. However, no single element of Integrated Weed Management (IWM) operates independently. Within Prevention are aspects of Education, early Detection, on-going Monitoring, site Restoration, general Land Use Practices, and other elements of IWM. All elements of IWM are inter-connected in a variety of relationships. The challenge for land managers, and the primary philosophy of IWM, is to incorporate a variety of strategies in a coordinated, multi-disciplinary, ecological approach with the goal of maintaining or developing healthy plant communities that are relatively weed-resistant.



**Prevention is one element of IWM. All elements are inter-related. A coordinated approach of a variety of tactics is the primary strategy of IWM.**

## **Prevention Aspects of Integrated Weed Management**

The primary focus of this Prevention Plan is the Prevention/Education element of IWM. Its goal is to increase public and agency personnel awareness about the noxious weed issue. To be most effective, however, the elements of IWM should not function independently. Prevention goes well beyond public Education. To illustrate the broad-based, multi-disciplinary approach land managers in the FC-RONRW have taken, the Prevention aspects of other elements of IWM are highlighted below.

### **Inventory**

- Continuing inventory efforts provide the opportunity for repeated field visits and the detection of new invaders and new infestations of established species.
- Identification of weed-free areas provides baseline data on healthy, intact ecosystems.

### **Treatment**

- Treatment practices restrict the encroachment of noxious weeds onto adjacent lands.
- Treatment practices limit the number of seeds produced and/or inhibit rhizomatous growth.

### **General Land Management Practices**

- Minimizing soil disturbances by vehicles, machinery, wildlife, livestock, and recreation impacts is central to preventing weed establishment.

### **Monitoring/Evaluation**

- Annual monitoring efforts provide evaluation of effects of various treatments on weed populations and nontarget resources and determine population trends such as expansion rates and habitat susceptibility.
- Adaptive strategies can be determined and implemented to maximize prevention efforts.

### **Partnerships/Coordination**

- Information-sharing and a coordinated/cooperative approach within and outside the agency allow for a broad, regional perspective and rapid response to new infestations.
- The process of educating and motivating individuals to promote noxious weed management and prevention has positive, long-term, compounding effects.

### **Restoration**

- Establishment of competitive, healthy plant communities in areas susceptible to invasion hinders the introduction or re-introduction of noxious weeds.

The implications of Prevention encompass more than posting notices at trailheads and airing media segments. All elements of IWM--not only Education--contribute to Prevention.

## **Implementation Strategies**

In order to broaden the base from which support for noxious weed prevention can be drawn, Forest Service land managers in the FC-RONRW intend to enlist the assistance of a variety of groups and individuals for implementation of this plan. Environmental groups, regional, state, and local recreation associations, and community and civic groups are examples of potential partners who could play a part in Prevention. It is these stakeholders who can make the greatest



difference in preventing weed spread in the Wilderness. Current partners involved in Prevention measures in the Wilderness include the Student Conservation Association, private landowners, Western White Water Association, Idaho Aviation Association, the National Outdoor Leadership School, various jetboat outfitters, private and commercial float boaters, and volunteer groups and individuals.

A general framework for the Prevention process can be outlined as, "Planning a comprehensive (Information and Education) program is best achieved by adhering to certain principles and guidelines that have been developed through repeated trial and evaluation cycles....elements that appear to be common among planning models include: 1) identifying the issues or problems that the I&E program will address, 2) inventorying existing programs and materials, 3) identifying the audience or community, 4) developing goals and objectives, 5) designing messages, 6) selecting strategies to communicate the message, and 7) evaluating the I&E effort." (Laurie Matthews, *A Planning Model for Development of a Comprehensive Wilderness Information and Education Program*, 1996)

An adaptive Prevention strategy will be most effective. On-the-ground findings and feedback from Forest Service personnel and user groups will provide on-going evaluation of the Prevention Plan. Adaptation will refine the message and the audience(s) to which it is directed. In order to foster the inclusive nature of this plan, prevention actions can best be achieved through interaction and discussion with affected parties, rather than through regulation. The Forest Service would prefer to enlist the support and assistance of individuals and groups rather than alienate them.

### **Agency Direction**

Direction for the management of noxious weeds, and specifically their prevention, is outlined under the National Strategy for Invasive Plant Management (Pulling Together), the Federal Noxious Weed Act of 1974 as amended, Forest Service regulations at 36 CFR 222.8, Region 1 and Region 4 priorities for noxious weed management strategy, Forest Plan Direction from each of the managing National Forests, and Forest Service Order #04-00-052. Forest Service Manual Zero Code 2080 concerns Noxious Weed Management.

Preventing invasion of noxious weeds depends at least partly on an active and informed public and workforce. Forest Service employees and wilderness visitors must understand and do their part to ensure a weed-free environment. This Prevention Plan will address separately these two broad audiences: Forest Service personnel and wilderness visitors. Prevention measures targeted to a more broad audience are also outlined. Both current actions and possible future intentions are listed.

### **Internal Education**

Internal Education refers to the process of training employees and representatives of the agency in the various elements of IWM. Agency personnel, both permanent and seasonal, must be informed about the conditions under which weeds become established, how weeds are spread, and the effects weeds have on all resources. Implementing this knowledge can minimize weed



spread because of resulting altered land management activities. Personnel should be encouraged to incorporate weed prevention and control messages into their day-to-day work priorities and appropriate public information materials.

Some particular messages to be communicated through the process of Internal Education are as follows:

- Weeds can be spread by many land management activities and are detrimental to many activities on public lands.
- Integrating preventive measures into daily and authorized activities can improve the health of the land at little cost.
- Integrating prevention messages into informational materials will raise awareness at little additional cost.
- Weeds are spreading at an alarming rate--ignoring them is not an option.
- Working with partners in the weed control effort is vital to helping improve the health of the land.
- Using pilot projects and demonstration areas, education and outreach efforts will help illustrate the nature of the problem and options for dealing with it.

Region 1 and Region 4 of the Forest Service have developed weed prevention measures, referred to as "Best Management Practices". These weed prevention measures have been issues as manual direction in both Regions. The objectives of the prevention measures are to reduce the risk of spreading noxious weeds, prevent the establishment of new invaders, integrate weed management into all resource programs, and build awareness within the agency.

### **Wilderness User Groups**

Wilderness access and recreation are two of the primary means of introduction and continuing spread of weed infestations. Some of the most common areas in which weed infestations are located in the FCRONR are along trail systems, in boater camps, adjacent to backcountry airstrips, and in and around horse and backpacker camps. To reverse this trend, a well-planned, comprehensive education program targeted at recreationists is necessary.

Recreationists must understand the threats posed by invasive plant species, change behavior that results in the spread of nonnative plants, and provide support for management efforts. To bring about this understanding, the Forest Service must reach targeted audiences with clearly articulated messages.

The lists below outline currently implemented Education measures targeted at particular recreation groups as well as suggestions which have been proposed for the future. As noted above, the Forest Service is seeking assistance in the implementation of this plan. The intention is to have representatives of the various user groups and other stakeholders implement measures to reach their constituents. These lists should not be considered a finalized plan. They are

merely provided as draft examples of the extensive variety of Education options available for development and implementation.

**River Users (Float Boaters/Jet Boaters):**

Current Actions

- Noxious weed information included in permit packages to river users.
- General noxious weed information and specific management actions posted at all launch sites.
- Noxious weed information and education incorporated into oral presentations to all private float groups at launch sites.
- Variety of weed materials (brochures, identification cards, etc.) available to floaters at launch sites.
- Forest Service River Patrol personnel provide noxious weed information in their contacts with river user groups.
- Established network of volunteer groups, individuals, outfitters, and landowners for treatment, inventory, and logistical support.

Future Intentions

- Develop and provide I&E package to rafting and jetboat outfitters.
- Develop and implement I&E actions with recreation associations (Western Whitewater, Idaho Whitewater Association, etc.)

**Horse packers / Backpackers:**

Current Actions

- Noxious weed information posted at trailheads.
- Weed-Seed Free Feed regulation enforced.

Future Intentions

- Standardize and elaborate trailhead display.
- Coordinate with State agencies and their Education efforts to increase compliance with the certified Weed-Seed Free Feed regulation.
- Develop and implement I&E actions with recreation associations (Backcountry Horsemen of America, Rocky Mountain Elk Foundation, Foundation for North American Wild Sheep, local riding and hiking groups, etc.)
- Develop and provide I&E package to hunting and pack-trip outfitters.
- Make I&E materials available at outdoor and feed/stock supply retailers.
- Coordinate prevention measures with the Idaho Department of Fish and Game.
- Incorporate noxious weed information into Hunter Education courses, IDFG Check Stations, and during hunting/fishing license purchase.

**Backcountry Pilots:**

Current Actions



- Established network of volunteer groups and individuals (Idaho Aviation Association, 180/185 Club) for treatment, inventory, and logistical support.
- High Inventory and Treatment priority given to all backcountry airstrips in the Wilderness.

#### Future Intentions

- Coordinate Education and Prevention efforts with applicable state aviation agencies.
- Coordinate efforts with state, county, and local agencies for implementation of IWM principles at airports outside of Wilderness.
- Provide I&E materials at airfields outside of Wilderness.
- Develop and implement I&E actions with recreation associations (Idaho Aviation Association, 180/185 Club, etc.)

#### Other Audiences

The following is a list of Prevention and Education measures targeted to a more general audience. While these efforts may not specifically address Forest Service personnel and Wilderness users, they are included in this Prevention Plan because of their inherent value. Other audiences (for example non-Wilderness Forest visitors, children, and community and volunteer groups) may benefit from noxious weed Prevention and Education.

#### Current Actions

- Initiation of FCRONR Cooperative Weed Management Area to coordinate management efforts with state and federal initiatives
- Completion of display board depicting species identification, the impacts of noxious weeds, and the FCRONR Noxious Weed Management Plan for use at County Fairs, conferences, annual meetings, and in Forest Service offices.
- Survey of noxious weed I&E materials by Student Conservation Association crew.
- Variety of programs in local school systems.
- On-going process of Partnerships in the effort to combat noxious weeds.

#### Future Intentions

- Design of a web page for noxious weed management in the Wilderness.
- Television and/or Radio segments dealing with weed prevention.
- Newspaper articles and layouts dealing with weed prevention.
- Development of multi-media program(s) for presentation to interested parties.

#### Conclusion

The most effective method for managing noxious weeds is to prevent their invasion. While all elements of Integrated Weed Management contain aspects of Prevention, this plan specifically addresses Prevention's relationship to Education.

Two primary audiences to target have been identified: agency personnel and Wilderness user groups. Lists of potential strategies have been created. The Forest Service is now seeking

partners to assist in developing and implementing this Prevention Plan. A comprehensive, coordinated, and multi-disciplinary prevention program must be instituted. The impacts of noxious weed infestation have been well documented. An excellent opportunity is at hand for groups and individuals to work toward Wilderness resource protection.

**R-1 and R-4: Prevention and Control Measures (see Appendix J).**

