

MWCA – IWM Committee

K. Goodwin, 24 June 2008, revised 3 Nov 2008

Montana Weed Management Plan Action Item considerations:

**Risk Analysis and Prevention**

**Management – New Invaders and Established New Invaders**

D. E. Hanson, 7/1/08

**Management – Widespread Weed Infestations**

## **RISK ANALYSIS AND PREVENTION**

**1) Ensure Montana's efforts complement APHIS programs regarding introduction of exotic species quarantine and control, including national and regional EDRR system.**

**Responsibility:** APHIS, MWCA Prevention Task Force, MDA

**Action required:** Meet with APHIS to review prevention programs in Montana.

Goodwin: USDA – APHIS – PPQ programs focus on pests of national concern (insects, diseases, nematodes) on the basis of important national commodity groups (grain, citrus, grapes, etc.). Pests of state concern (Category 2, 3, and 4 weeds) are a lower priority. APHIS is domestically expanding emergency response to invasive species, but these species would be emerging pests, not those already domestically established like Category 2, 3, and 4 weeds. I spoke with Lori Witham (APHIS – PPQ) to determine how federal and state agencies in Montana and county weed districts may support APHIS programs specific to new invaders. I submitted a formal request for information on Nov 2. She plans to formulate a reply within a couple weeks.

Hanson: Many of the Category 2, 3, and 4 weeds in Montana are more serious (*i.e.*, widespread) noxious weeds elsewhere. An increased effort for coordinated programs should be emphasized for those species.

**2) Early detection/rapid response (covered under management)**

Goodwin: Important components of EDRR are scattered throughout these two action item chapters, but this management approach does not seem to be addressed in a logical, step-wise fashion. That is, invasion pathways, identification of high risk invasion sites, identification of weed-free areas, prevention strategies, education, funding, etc. are all good and included, but not in a logical order users may follow and effectively implement. (And where are action items for monitoring of high risk sites?) I believe most of the components are present, but they might just need to be reorganized. If the plan is final, we may have to wait until the next revision.

Hanson: Need to include *practical* mechanisms and/or training in early detection. Rapid response (at least at the county level) is not nearly so challenging.

### **3) Work with federal ~~funding~~ agencies to ensure compliance with Executive Order 13112.**

**Responsibility:** Weed districts, MDT

**Action required:** (no action specified)

Goodwin: This action item is unclear. It seems the word “funding” does not fit within the action item. That is, EO 13112 does not mention “funding,” but it does note “federal agency duties” in Sec. 2. That said, does this action item mean we should work with federal agencies to ensure they are complying with the EO? This does not seem reasonable, since federal agencies already have national invasive species management plans in place to support the Invasive Species Management Plan of 2001. This plan was issued by the National Invasive Species Council, which was established by EO 13112. It seems federal agencies are complying with EO 13112. I may be misreading the action item. Maybe it should be revised to read: “Support federal agencies in Montana to ensure compliance with EO 13112 and implementation of the Invasive Species Management Plan of 2001.” How do we do this? Maybe the next step is to ask federal representatives what type of support they need.

Hanson: There has been some conversation about the "unfunded" mandate for Noxious Weed Management at the Federal level. Cooperative partnerships might be useful in leveraging Federal funds.

### **4) Include monitoring and regulatory protocols in the proposed MDA Nursery Program procedures Manual.**

**Responsibility:** MDA, MWCA Prevention Task Force

**Action required:** Write protocols regarding nurseries and other mail order outlets that distribute plants into and within Montana.

Goodwin: The Montana Nursery Act should be obtained and the Nursery Quarantine Import/Export Officer with MDA should be contacted to determine the current customs and regulations. A review of the program should be written and presented at the MWCA annual conference. Information regarding the review and program improvements should be gathered from conference participants. Protocol should then be formulated and submitted to the MDA or MWCA Prevention Task Force for further action. This document should be published as an Extension Service MontGuide.

Hanson: What about including any related state nursery growers association in the development of such protocols?

### **5) Identify and delineate non-infested ecosystems within the state as part of current inventory and mapping system.**

**Responsibility:** Private, weed districts, agencies, SWCD

**Action required:** Identify non-infested sites as part of weed inventory program.

Goodwin: This action could begin with each county estimating the gross infested acres vs. weed-free acres as a starting point. Mapping weed-free areas should be launched in eastern Montana, and then eventually implemented in western Montana. Coordinators in eastern Montana could submit a county map with broad delineations of weed-free areas as a baseline and, if necessary, exact delineations of infested areas. These weed-free delineations could be hand-drawn on paper maps and digitized later or entered and submitted as polygons in GIS software. This information should be requested in the county noxious weed management plans. This action plan may be also addressed under the “inventory” section.

Hanson: A clear distinction should be made between areas that are known to be free of specific weed and those where the status is uncertain. The data should also include some temporal component (*e.g.*, this information is current as of ...) and the name and contact information of the individual providing it.

#### **6) Develop site-specific prevention strategies that include identifying pathways for weed invasion.**

**Responsibility:** Weed districts, agencies, regional weed-free barrier projects, universities, AES

**Action required:** Weed districts and agencies will include prevention strategies in management plans that include identification and mitigation of invasion pathways.

Goodwin: Large, weed-free areas should be delineated in each county and then prevention strategies formulated to these specific areas. County noxious weed management plans could promote the use of the CIPM prevention guidelines booklet by requesting a list of county-or watershed- specific strategies recommended by the booklet.

Hanson: Multiple scales are critical to the success of preventing invasion. "Site-specific" is too vague a term for prevention. Watersheds would be a more natural physiographic delineation for preventing invasions and lends itself readily to multiple scales.

#### **7) Enhance communication and education of invasive species professionals to facilitate early detection and eradication / control of newly invading species.**

**Responsibility:** CES, SNWAEC, universities, MAES

**Action required:** Continue training of CES, weed districts, agencies, and other weed management professionals.

Goodwin: Consider the annual addition of an EDRR strand at the MWCA annual conference. Regional weed experts and new invader task force committee chairs could be invited to present and share their knowledge.

Hanson: See comment on Item 2.

**8) Improve distribution of state authorized weed alerts with photographs and biological information.**

**Responsibility:** MDA

**Action required:** Formalize program and develop distribution procedure.

Goodwin: The Extension Rangeland Noxious Weed Specialist should work with MDA to prioritize and develop weed alerts as Extension Service bulletins. An on-line survey could be sent to each county to gather recommendations and prioritize species. Weed alerts for new invaders to eastern Montana have been published (saltcedar, EB 180; whitetop, EB 175; houndstongue, EB 176; yellow starthistle, EB 178; leafy spurge, EB 177; toadflax, EB 181; and knapweed, EB 179).

**9) Establish incentives to encourage noxious weed seed free forage production to enhance existing laws.**

**Responsibility:** MDA

**Action required:** Establish funding for the program.

Goodwin: Tonda Moon should advise.

Hanson: Better price isn't sufficient incentive?

**10) Encourage implementation of weed prevention strategies as outlined in CIPM Prevention Guidelines.**

**Responsibility:** Agencies and municipal gov't, SWCD, weed districts

**Action required:** Encourage implementation of CIPM prevention standards statewide.

Goodwin: see #6.

Hanson: Counties may not be the logical unit of organization for prevention activities for many weeds, especially those distributed by water. Application of the standards needs either a larger scale or some system of integration among affected counties.

## **MANAGEMENT - NEW INVADERS AND ESTABLISHED NEW INVADERS**

**1) Early Detection/ Rapid Response: designate/develop a fund for \$7.7 million for prevention, management of new invaders, task force operations, and support of SWAT Team.**

**Responsibility:** MDA, MWCA

**Action required:** MDA work with MWCA Prevention and Management Task Forces to designate funds for task force operations and EDRR programs.

Goodwin: Prevention is a strong message, but it is difficult to get people to address problems that are not yet obvious. Influencing public opinion will be critical to obtaining funding and sustaining EDRR approaches that are optimal in the long-term. For instance, the public is convinced wildland fire is a problem. As a result, fire management is accepted by the public and political pressure ensures adequate funding.

Hanson: Public opinion is a key element to successful weed management and seems to be moving in our favor. Two key elements to promote in gaining even better acceptance are to stress that herbicides are a tool rather than a panacea and that IWMS that combine management tools and tactics are the preferred method of weed management.

**2) Identification of high-risk areas for invasion.**

**Responsibility:** Invaders Database, weed districts, agencies, universities, MAES

**Action required:** Identify high risk sites for invasion for noxious weeds.

Goodwin: guidelines should be developed as an Extension Service MontGuide with a simple flowchart to guide decision-making on the degree of site invasion resistance or susceptibility. This action item should be supported by additional action items that then work to formulate prevention and monitoring strategies to protect these high risk sites from invasion (e.g., "Risk Analysis and Prevention" action items #6 and #10).

Hanson: Invasion resistance is a complex process to describe ecologically. There are some simple relationships between invasibility and site characteristics, but they are typically related to the quality of land management on the site. I would recommend minimal effort in the area except as it relates to distribution and movement of weed propagules.

**3) Organize a task force and develop a written management plan for newly invading species that are not covered under existing task force operations.**

**Responsibility:** MWCA, MDA, MNWSAC

**Action required:** Organize task forces and write management plans as needed.

Goodwin: this action item may be related to objectives of coordinated barrier zone networks along the Montana border. A blueprint for action is being written for the Continental Divide barrier zone in SW Montana and NE Idaho, along with multi-state, species-specific strategies for significant new invaders (e.g., rush skeletonweed, dyer's woad, etc.). The barrier zone coordinator could work with the existing task forces to share information and develop county-specific management plans.

#### **4) Revise existing management plans to include management budgets.**

**Responsibility:** Weed districts, agencies, MDA, steering committee

**Action required:** Provide format for management plans.

Goodwin: Our committee discussion with Dave Burch on Oct 14 indicated plans already include budgets.

#### **5) Coordinate programs on Category 2 and 3 weeds at a multi-state level.**

**Responsibility:** Task Force

**Action required:** Montana Hawkweed Task Force will coordinate and participate in regional hawkweed efforts.

Goodwin: Improved coordination among multi-level stakeholders is needed to manage new invaders. A state-level coordinator could provide oversight and assist current and future task forces with planning, organization, and plan and grant writing. A management plan should be formulated for each category 2 and 3 weed with an annual operating plan. Funding to implement the operating plan should be annually requested from the NWTF.

Hanson: Do we need a one-weed-one taskforce structure or could they be grouped by category?

#### **6) Evaluate and monitor existing weed management efforts.**

**Responsibility:** MDA, agencies, Tribes, weed districts

**Action required:** Monitor existing weed management efforts.

Goodwin: The Extension Rangeland Noxious Weed Specialist should work to develop guidelines and publish as an Extension Service bulletin or MontGuide.

Hanson: Misses private efforts, which should also be included but could be challenging to obtain. Effort is difficult to quantify. There needs to be a more objective criterion for evaluation such as acres sprayed, dollars spent, percent change in infestation, etc. This item will require a data repository and some sort of annual report

## **7) Annual updates and refinement of weed inventories.**

**Responsibility:** Agencies

**Action required:** Update and refine inventories.

Goodwin: The State of Montana or MWCA should consider hiring a GIS specialist to collect and maintain noxious weed data, which would be annually submitted from counties. This would be the clearinghouse for state weed data, which could then be quality controlled and submitted to NRIS. County coordinators that still do not use GPS to map weeds should be given a free GPS unit and training. Or they should hire at least one crew member with GPS experience.

Hanson: Fremont County, Wyoming has hired a GIS tech who surveyed approximately ¼ of the County last year. Lars Baker gave presentation on their project at the Western Society of Weed Science in March. A weed inventory is a huge job that will require dedicated personnel and funding to complete properly. I doubt that the weed coordinators will not be able to fit it in even with equipment and training. GIS metadata will be *critical* to the project.

## **8) Develop management guidelines for Russian olive in Montana.**

**Responsibility:** MNWSAC 2009

**Action required:** Develop guidelines.

Goodwin: The Extension Rangeland Noxious Weed Specialist should work to develop guidelines and publish as an Extension Service bulletin.

## **MANAGEMENT - WIDESPREAD WEED INFESTATIONS**

### **1) Increase funding levels for county, state, and federal entities to provide long-term, consistent revenue for weed programs.**

**Responsibility:** MWCA, MACO, agencies, Tribes

**Action required:** Identify and secure funding sources for county, state, and federal weed management programs.

Hanson: The first step is to identify current levels of funding. There is a constant cry for "more money" often without a through understanding of the current budget situation. Is the revenue

stream intended to maintain a constant fiscal level, adjusted for inflation or intended to meet the long-term weed management goals, which will require an increasing level of funding to meet the needs of the expanding problem. County weed districts are conspicuously absent from the list of responsible parties and are key to providing necessary information about both the importance of the sustained funding and appropriate dollar values.

## **2) Expand CWMA concept to optimize weed management efforts, partnerships.**

**Responsibility:** MWCA, MACO, agencies, Tribes

**Action required:** Identify and secure regional, federal, state, and private grant revenue to expand CWMA.

Hanson: Host a workshop on CWMA development and provide assistance for development. Weed districts should be included in the responsible parties.

## **3) Promote and assist with implementation of integrated weed management systems.**

**Responsibility:** Weed district, agencies, CES, PI, private

**Action required:** Promote integrated weed management.

Hanson: There are several direct action items for this topic. First would be to create demonstration areas for IWMS projects. Related to that would be to host field days to discuss the process with interested parties. The field days would meet the objective in Item 7 below. It is also important to obtain (or write) an IWMS guide for land managers and distribute it widely. In addition, presentations to private landowners need to stress IWMS as a component of land management (See Item 5 below). Developing a land management plan with weed management as an integral component is a key message to convey as a part of IWMS. A Powerpoint presentation template developed with the base line information for this audience that could be modified to suit individual presentations. ( I have one that I would make available.) The county conservation districts and management-related NGOs should also be considered for addition to the responsible party list for this item. A uniform approach to IMWS training would be beneficial as one develops a network of practitioners

## **4) Develop cost-share programs for weed management on private lands.**

**Responsibility:** MWCA, NRCS, NWTF (MDA), SWCD, private

**Action required:** Identify and secure grant funds for private lands.

Hanson: We should be certain to fully utilize the existing cost-share programs rather than develop new ones. Should the requests outstrip the available fund then new sources could be

developed. Where possible the cost-share programs should focus on CWMA's or other groups rather than individuals.

**Items from the 2005 Plan**

(These items are included for completeness as they are still relevant although they may be subsumed in other items above.)

**5) Increase educational efforts on "TIPS" and developing land management plans that include IWM principles.**

**6) Prepare educators to train individuals on adoption and implementation of IWM methods to achieve desired land use goals.**

**7) Increase publicity of cooperative IWM programs by land managers.**