

Cooperative Extension Strategic Plan for Managing Noxious, Invasive Plants within and across Arizona's Cooperative Weed Management Areas (CWMAs)

Cooperative Extension Noxious, Invasive Plant Working Group (Larry Howery, Kim McReynolds, Kai Umeda, Al Fournier, Ed Northam, Rob Grumbles, Jeff Schalau, Kevin Fitzsimmons, Barron Orr, Gerald Moore, Chris Jones)

Background: Noxious, invasive plants are harmful non-native species that are regulated by state or federal laws because they threaten agriculture, navigation, fish, wildlife, or human health on both public and private lands. As such, noxious, invasive plants threaten economic and ecological values of all Arizonans. There are also invasive plants of concern that while not listed as “noxious”, pose similar threats and need to be addressed. In Arizona, numerous cooperative weed management areas (CWMAs) have been established over the last decade to deal with specific noxious weed species and issues. Cooperative Extension has led the effort for several of these collaborative organizations.

Need: While communication and coordination *within* Arizona's CWMAs has generally been good in dealing with specific noxious weed problems, communication and coordination *among* CWMAs and other weed management groups is typically lacking. Much could be gained by sharing pertinent information, research findings, educational strategies, and more specifically, what has worked and what has not among Arizona's CWMAs. The timing for this approach is critical as the *Arizona Invasive Species Management Plan* was accepted and approved by Arizona's Governor on August 5, 2008. Two extension employees from The University of Arizona were co-authors on the Plan. The University of Arizona is also mentioned in the Plan as a leader in invasive species management.

Strategies vs. Tactics: Both strategies and tactics are needed to guide management decisions for noxious, invasive plants in Arizona. However, strategies and tactics require a different focus. Strategies should be fairly similar for each CWMA because they are an immutable “big picture” means of approaching noxious weed problems. On the other hand, tactics will vary with local circumstances and the current technologies available to manage specific weed problems. Tactics that are appropriate in one CWMA may or may not be appropriate in another due to any number of factors (e.g., type of weed species, degree of infestation(s), proximity of infestations to water sources, ecological sites, funding available to support the appropriate technology, political constraints, etc.).

Objectives: 1) Assess overall strategies used by Arizona's CWMAs to determine if they are aligned with or contain the strategic concepts outlined in the *Arizona Invasive Species Management Plan*, 2) Share both successful and unsuccessful tactics that have been used across Arizona's CWMAs, and 3) Improve coordination and communication within and across Arizona's CWMAs.

Recommendation: If not already in place, Cooperative Extension recommends that Arizona's CWMAs adopt the 5 “Strategic Concepts” outlined in the *Arizona Invasive Species Management Plan*. These Strategic Concepts provide broad starting points from which each CWMA could develop and refine specific tactics for dealing with the unique noxious, invasive weed problems that occur in their area.

Example: The following example lists 5 “Strategic Concepts” found in the *Arizona Invasive Species Management Plan*. Strategic Concepts are listed in **bold** and would be the same for each CWMA. Examples of possible tactics follow each Strategic Concept and are listed in *italics*.

Tactics presented in this example are very general. Actual tactics developed for each CWMA should be creatively tailored to address unique or specific needs and issues.

1) Leadership and Coordination -- *Identify local CWMA leaders who have demonstrated enthusiasm and vision for noxious weed management and who will have longevity in the process. Leaders should have demonstrated strong abilities to work across jurisdictional boundaries and with people that have varying viewpoints.*

2) Research and Information Management -- *Identify research and information leaders who have demonstrated the ability to provide science-based information to solve specific weed management problems (including the importance of early detection and rapid response). Make this information available on a regular basis via workshops, field days, and other educational events (e.g., #3).*

3) Anticipation and Outreach – *Hold periodic education and training events, conferences, planning sessions, and workshops. Develop a “most wanted list” for your CWMA. Distribute pertinent information widely to your CWMA participants and to adjacent CMWAs.*

4) Control and Management -- *At least once a year, develop priorities for short-, medium-, and long-term management objectives and practices. Implement science-based integrated weed management treatments. Set up monitoring and evaluation procedures for tracking successes and failures. Emphasize the importance of early detection and rapid response for new weed infestations.*

5) Funding -- *Identify local CWMA grant writers and coordinators who have demonstrated enthusiasm and vision for grant writing. Maintain an up-to-date calendar of funding opportunities. Seek opportunities to develop grants and share information with other CWMA.*

Methods: Several authors of this document are closely involved with one or more CWMA in Arizona. At least 3 CWMA with Cooperative Extension leadership will be used as “pilot studies” over the next year. The 3 objectives and basic principles described in this draft strategic plan will be applied to the pilot studies. Participating CMWAs will be asked to share or develop their current strategic or management plan (Objective 1) as well as successful (or unsuccessful) tactics that have been used to manage noxious weeds within their area (Objective 2). A list of strategies and tactics for each group will be summarized and posted on the Arizona Pest Management Center website, <http://cals.arizona.edu/apmc>. After lists are posted on the web, a workshop will be held to communicate and coordinate future directions for Arizona’s CMWAs (Objective 3). This workshop could be held as part of the annual meetings of the Arizona Vegetation Management Association, the Society for Range Management (Arizona Section), or some other professional vegetation management organization. If the pilot studies prove to be useful other CWMA throughout Arizona will be invited to participate in the process.