

# Full-a-Weeds WMA Noxious and Invasive Weed 2008 Supplemental Project Proposal

**Contract Lead Group and Contact Person(s)** (name, phone number, email, and address):

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**Please Confirm.** If selected, all projects described in this proposal will be in 1 contract with (if more than 1 contract is desired, please describe here): Confirmed, 1 contract with Full of Weeds County X.

**WMA Structure and Partners:**

Full-a-weeds County Noxious Weed Management Group, a three-county WMA group, began a yellow starthistle leading edge and outlier infestation control program in 2000. The group is lead by the Full-a-weeds Co. Ag Dept, which holds quarterly meetings and coordinates the WMA. Currently active partners include:

- Full-a-weeds County Department of Agriculture
- Full-a-weeds National Forest
- California Department of Food and Agriculture
- Full-a-weeds Department of Transportation
- Full-a-weeds Municipal Utility District
- Bureau of Land Management
- Audubon Society
- CA Native Plant Society
- Full-a-weeds Farm Bureau
- Full-a-weeds Horsemen's Assoc.
- US Forest Service

**Past Performance of WMA and Partners in Weed Control:**

The Full-a-weeds WMA has met 4 times in the past 12 months. One was a community meeting which pulls in our less active members.

The Full-a-weeds WMA has a MOU (recently updated), Strategic Plan (recently updated), Website and an email list.

Under AB1168 & SB1740 we have undertaken the following projects:

- Printed a brochure of top ten weeds of the county.
- Map all of the yellow starthistle in the county.
- Eradicated 17 outlier populations of yellow starthistle.
- Conducted a cost-share program with private landowners for 6 priority weeds.
- Held a yearly outreach workshop for land managers and ranchers
- Controlled 156 acres of distaff thistle.

Other cooperative projects completed by the Full-a-weeds Weed Management Area:

- The County Ag Department carries out a comprehensive weed detection program on behalf of the whole county.
- Held yearly California State Weed Week activities in July.
- Created an educational display for public functions.
- Coordinated a Arundo mapping project with the High School, the Boy Scouts and the Community College
- Gave a joint multi-agency presentation to the County board of supervisors.
- Hold cooperative weed pull days at rotating sites throughout the county once a month.
- Put together a set of slides on weed control, which are played at the local movie theater.

**General In-kind contributions:** As projected by WMA partners over the period of this proposed grant (not counting expenses included as in-kind line items in the budget). This does include time and mileage for WMA meetings, WMA educational events, cooperative control projects involving more than one member of the WMA, funded WMA projects through other grants. = **\$13,384.**

## **Proposed Projects**

### **Project Title: Project 1 – Spotted Knapweed Eradication on BLM and Private Lands**

#### **Project Goal:**

To eradicate the incipient infestations of spotted knapweed in the Sierra Mountains near Fullaweeds Co. X, and prevent its spread into the adjacent private, county, state and Federal lands.

Full-a-weeds Weed Management Area members will coordinate their efforts to eradicate spotted knapweed completely from Full-a-weeds Co. and other surrounding counties. This spotted knapweed infestation is the only one existing in Full-a-weeds County and is limited to private property and roadsides at this time. By eradicating the infestation, the Full-a-weeds Weed Management Area will prevent its spread onto US Forest Service Property adjacent to these communities. This will protect the native plant communities and the wildlife that call the Full-of-Weed National Forest home.

#### **What are the project's long-term benefits and/or region-wide significance:**

Spotted knapweed grows and spreads very rapidly in disturbed areas. There are some indications that it releases chemical substances that inhibit the growth of adjacent plants. Therefore, spotted knapweed has the potential to become the yellow starthistle of the high Sierra. Native vegetation, and associated wildlife, would be negatively impacted. Timber harvest activities would be delayed or curtailed entirely. Infestations of meadows and grazing areas would have a negative impact the cattle industry. Early detection and treatment is much more efficient, cost effective and beneficial to many land users. Due to the limited distribution of spotted knapweed and its ability to rapidly spread, delimitation surveys and treatment to eradicate this weed is critical.

#### **Priority Topic Area Being Addressed (from request for proposal announcement):**

This project addresses priority area #1, the eventual complete eradication of a small (.5 acre), pioneer infestation of an "A-rated".

#### **Project Objectives and Methods – list milestones and performance measures:**

**Objective:** Spotted knapweed detection and eradication will be conducted on private and public lands. The Full-a-weeds County X Department of Agriculture (FCDA) will lead this project. County Biologists will train and supervise a seasonal aide crew in spotted knapweed detection and control. The two-staff crew will then survey the known infested sites and map with GPS. Also, the County Biologist will treat any spotted knapweed plants found. Surveys will also be conducted outside the detection site. This will include county roads, horse pack stations, trails, summer grazing cattle drop-offs sites, and meadows on private lands. BLM botanist will survey along with FCDA staff. Areas to be surveyed are staging areas, pole lines, etc. Pacific Forestry Corp. crew will survey forestland adjacent to the infestation site. All activities will be recorded by GPS. Survey and spray work will be under the direction of the Weed Management Supervisor with FCDA. Materials to be used will be Transline and spreader. Hand pulling is an option for small infestations.

**Task 1:** The staff will **survey** previous infestation sites for spotted knapweed. Survey will continue outside the original infestation to determine the possible spread of spotted knapweed. Surveys will be performed by FCDA, Pacific Forestry Corp. and BLM staff.

**Task 2:** The FCDA staff will **treat** all known infestations and new detections of spotted knapweed on private property within the project area.

**Task 3:** A computerized GIS map of the project site will be created with the locations of detected spotted knapweed plants/populations and treatment sites. There will also be a record of previously detected locations that have been sprayed and considered controlled.

**Performance measures:** We will follow CDFA's weed monitoring protocol, measuring the cover of weeds or counting individual plants when feasible.

**Project Title: Project 2 – Stop the Spread of Yellow Starthistle into the Ridge Mountain Range**

**Project Goal:**

By defining a line of demarcation at the eastern leading edge of the yellow starthistle movement into the higher elevations, a control effort can be coordinated with land managers and owners to stop the spread into the Ridge Mountains.

**What are the project's long-term benefits and/or region-wide positive impacts:**

The project area is adjacent to Full-of-Weed National Forest. Any containment performed has a direct impact in prevention of further spread on to USFS lands. Further, private forested areas will benefit from containment, as the noxious weeds will be actively kept from encroaching on these noxious weed-free lands.

**Priority Topic Area Being Addressed (from request for proposal announcement):**

This proposal addresses priority topic area #2, the leading edge containment of a noxious weed. This proposal clearly addresses why the infestation is currently not eradicable and justifies why a containment strategy is being undertaken in the background section. A clear link to proposed containment activities preventing further spread towards USFS lands and other forested lands has been shown. A map clearly showing the total geographic area impacted by the infestation and proposed containment boundaries is included as an attachment.

**Project Objectives and Methods – list milestones and performance measures:**

**Task 1). *Intensify eradication efforts on Highway 2, including the landslide area*** near Riverton. This segment of Highway 2 continues to be the most difficult area to control yellow starthistle, due to the steep slope and size of the infestation. The area has been the site of extensive road repair work after a landslide and two fires in the past 15 years. Steps to complete the eradication include:

- detailed analysis of land ownership in the area to develop an intensified, cooperative control plan
- evaluate and develop an integrated pest management protocol for the area including the use of contract crews utilizing mechanical (pulling, digging, etc.) and herbicide spot treatment, as appropriate.

**Task 2). *Increase detection and survey work over the entire area*** including additional surveys in cooperation with private land owners and managers, beyond the current project partners. Detection and survey work will be coordinated by the Fullaweeds County Department of Agriculture utilizing seasonal weed crews and permanent staff.

All mapping will be completed utilizing Global Positioning System (GPS) data collection and Geographical Information Systems (GIS) for data management and map production. The mapping of yellow starthistle along Highway 2 began in 2000 by the California Department of Food in Agriculture and has continued to be managed by the Fullaweeds County Department of Agriculture for the past four years. Digital photos will be taken to document the extent and success of the control efforts.

**Performance measures:** We will follow CDFA's weed monitoring protocol, measuring the cover of weeds or counting individual plants.

**Project Title: Project 3 – Arundo Removal from Critical Watershed**

**Project Goal:**

To stop the spread of Arundo (*Arundo donax*) in the Fullaweeds Creek project area to other areas through integrated weed management techniques.

Control efforts are critical to prevent this invasive noxious weed from further encroachment into county waterways. Control methods are coordinated with the agencies involved, water managers, and landowners to stop the spread of Arundo using chemical methods, mechanical removal, and mowing and mulching depending on the treatment areas.

**What are the project's long-term benefits and/or region-wide positive impacts:**

The project area is adjacent to and drains directly into rangeland and rural residential areas in eastern Full-a-weeds County. Arundo (or Giant Reed) is a non-native aggressive perennial grass that chokes stream channels, crowds out native plants, increases fire potential, and reduces habitat for wildlife. Arundo can float downstream and rapidly initiate new infestations from root and stem fragments. Once established, it has the ability to out compete and completely suppress native vegetation. Any control of this pest has a direct impact on the prevention of further spread onto not only government lands, rangeland, and private areas, but also the Full-a-weeds River drainage and Weedless National Park. Continued survey and control efforts will be necessary to prevent this weed from further encroachment and movement into adjacent noxious weed-free drainages. In addition, efforts need to be made to educate other agencies and the public as to the threat Arundo presents, various control options, and try to stem its spread into the Full-a-weeds River and other drainages and ultimately Weed-less National Park.

**Priority Topic Area Being Addressed (from request for proposal announcement):**

This proposal addresses Priority topic area #1, eventual complete eradication of the non-native invasive weed Arundo (*Arundo donax*) in 2 miles of Full-a-weeds Creek. Control efforts (using all the tools in the vegetation management toolbox perfected by Team Arundo del Norte) are needed for eradication within the current project boundaries. Maps showing the total geographic area impacted by the infestation and proposed treatment boundaries are included as attachments as well as photos of the infested areas in Full-a-weeds Creek.

**Project Objectives and Methods – list milestones and performance measures:**

**Task 1 – Initiate control efforts in the targeted area -- 2 miles of Full-a-weeds Creek from Hwy 010 to Bear Crossing.**

1. Contact and work with property owners and agencies on Full-a-weeds Creek for control of Arundo with integrated weed management methods (mechanical, weed-whacking, mowing, mulching, and chemical). Full-a-weeds Resource Conservation District Event and volunteer coordinator.
2. Contract with a Pest Control Operator to treat Arundo with Aquamaster™ or Rodeo® or other herbicides to continue an aggressive assault in the project area, particularly along the creek sides
3. Employing mowing, weed-whacking, and mulching using California Native Plant Society and Audubon Society volunteer crews in the project area after herbicide treatments.
4. Disposal of weed material.

**Performance measures:**

1. Evaluate the treatment success by surveying and monitoring the project area using UC Cooperative Extension. Based on the results of the treatment, follow up sprays may be required.
2. Survey and photograph the treated areas just before treatment, at 6 months, and 1 year after treatment of using UC Cooperative Extension and Full-a-weeds Resource Conservation District staff.

Gather monitoring data (estimate of number of plants killed after follow-up visits, number of plants treated each year, a number of plants requiring re-treatments, and other quantitative data) to be kept and used in the next phase of the Arundo survey and eradication project.