

California Department of Food and Agriculture's Noxious Weed Program

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The objective of this paper is to provide the reader with a brief overview of the California Department of Food and Agriculture's (CDFA) Pest Prevention Plan; to define the purpose, objectives, and mutually agreed items of the Memorandum of Understanding that outlines the state and federal agencies' plan to control weeds and undesirable vegetation; and to identify CDFA's current Exotic Pest Plant Control Coordinator program.

CDFA currently implements a five-pronged (exclusion, detection, control and eradication, analysis and identification, and public information) pest prevention plan against the introduction and establishment of a myriad of pests that would be detrimental to California's agricultural industry. The responsibility for implementing the pest prevention system is assigned to four branches within the Division of Plant Industry: Pest Exclusion, Pest Detection and Emergency Projects, Plant Pest Diagnostics, and Integrated Pest Control. A brief synopsis of each branch is presented below. Although each branch is involved with many agricultural pests, this paper will focus on noxious weeds.

Pest Exclusion (Interior and Exterior) is responsible for intercepting noxious weeds before they enter the State (exterior), or prohibiting certain pests from being moved within the State (interior). In coordination with the United States Department of Agriculture (USDA) and the County Agricultural Commissioners, the Pest Exclusion Branch monitors routes of possible entry of noxious weeds into the State. They conduct inspections for pests at roadside border stations, airport terminals, marine ports, pedestrian points of entry; and freight shipping terminals such as United Parcel Service, United States Postal Service, and other common carriers.

Pest Detection and Emergency Projects conducts surveys for plant pests that have already entered the state and conducts eradication efforts of insect pests. Currently detection activities for noxious weeds are conducted by Integrated Pest Control biologists. Detection surveys are conducted in areas that have a high potential for introduction of noxious weeds. Survey areas include the Colorado River, Sacramento Delta, and numerous lakes for aquatic weed pests such as hydrilla. Terrestrial weed detection surveys are conducted in areas such as interstate highways, rest areas, points of interest, locations with similar terrain, altitude, and climate of known infestations. When a sample of a potential noxious weed is collected in the field, it is forwarded to the Plant Pest Diagnostics Center in Sacramento for positive identification and pest rating.

Plant Pest Diagnostics receives potential noxious weed specimens or seeds from the field for positive identification. The specimen is then given a rating of "A", "B", "C", or "Q"

that relates to its damage potential to agriculture with “A” being the greatest and “Q” being unknown. The identification is then forwarded to the county agricultural commissioner where the sample was collected and to the Integrated Pest Control Branch for further survey of the infestation and initiation of the appropriate eradication action. The pest ratings are as follows:

“A” rated weed species: Eradication, containment, rejection, or other holding action at the State-County level. Quarantine interceptions to be rejected or treated at any point in the state.

“B” rated weed species: Eradication, containment, control, or other holding action at the discretion of the agricultural commissioner.

“C” rated weed species: State endorsed holding action and eradication only when found in a nursery; action to retard spread outside of nurseries is at the discretion of the agricultural commissioner; reject when only found in a cropseed for planting or at the discretion of the agricultural commissioner.

Integrated Pest Control is responsible for the control and eradication of “A” rated noxious weeds within the State. Methods of eradication include biological, mechanical, chemical, habitat modification (water drawdown), and land use alteration. Biological methods are generally used to control noxious weeds in situations where eradication is not feasible.

The office of External Affairs and Communications is responsible for disseminating information regarding noxious weed eradication projects to the public. Integrated Pest Control does produce and distribute brochures and informational handouts for the identification of hydrilla and other high profile eradication projects as needed.

On August 24, 1995, CDFA entered a Memorandum of Understanding (MOU) with 14 other federal and state agencies ... “to initiate fulfilling the requirements of Section 15 Amendment to the Federal Noxious Weed Act for the cooperative integrated management of undesirable vegetation between federal land management agencies and the respective State agencies responsible for weed control programs in the State.”

The participants include the following agencies: CDFA; California Agricultural Commissioners and Sealers Association; California Resources Agency; (USDA) Animal Plant Health Inspection Service; USDA Forest Service; US Department of Defense (Air Force, Army, and Navy); Department of the Army, US Army Corps of Engineers, South Pacific Division; US Department of the Interior (Fish and Wildlife Service, Bureau of Indian Affairs, Bureau of Land Management, Bureau of Reclamation, and National Park Service).

The purpose or intent of the MOU was to coordinate the management of undesirable plants on federal and state lands. The MOU is intended to further the intent of the Federal Noxious Weed Act of 1974 which instructed federal agencies to enter into agreements with local agencies to control undesirable weeds on federal property.

The objectives of the MOU are:

1. To coordinate the management of undesirable plants on federal, state, and private lands where such lands are associated together with manageable infestations or threats of infestations of undesirable plant species.

2. Promote and implement an integrated management system with consideration of using all available methods for the prevention, eradication, control, and containment of undesirable plants.
3. Exchange information and awareness among the parties to the MOU regarding locations of infestations, management techniques, and strategies for managing undesirable plants.
4. Identify opportunities between agencies for the further development of joint or cooperative management projects for specific locations needing undesirable plant management.

The role of CDFA's Integrated Pest Control Branch as outlined in the MOU is as follows:

1. Provide a current list of "Pest Ratings of Noxious Weed Species and Noxious Weed Seed" from the California Department of Food and Agriculture.
2. Recommend the proper treatment method for "A" rated weeds, in coordination with the county agricultural commissioner and the affected agency.
3. Organize the annual meeting for all signing agencies of the MOU.
4. Provide technical assistance to agencies requesting control methods available for undesirable plant management.
5. Identify biological control organisms that could be introduced or that have become established and could be disseminated to other locations.
6. Distribute annual reports concerning eradication activities and acreage to all signing agencies.

The signing parties agreed to the following actions:

1. Designate an individual from each agency to coordinate undesirable plant management with other agencies. Each agency should appoint a designated individual within 30 days of the signing this memorandum and identify any replacement thereafter.
2. Create a working group among the groups represented in this MOU to share information on undesirable plant species and various methods of prevention and control. This group should meet at least annually.
3. Cooperate with each other in the eradication or containment of state rated "A" noxious weeds and "B" and "C" rated noxious weed species where feasible opportunities exist. CDFA may be limited by statute and/or funding to participate in the management of undesirable plant species not identified on the above lists.
4. Promote and implement an integrated pest management approach to undesirable plants using all available methods, including, but not limited to the following: a) education; b) preventive measures; c) physical or mechanical methods; d) biological agents; e) herbicide; f) cultural methods; g) general land management practices, e.g., manipulation of grazing, reseeding with native species, etc.
5. Identify further opportunities among the appropriate agencies for the development of site specific management projects to be implemented at the local level within the agencies jurisdictional and financial capabilities for the management of the undesirable plants.
6. Allow for the development of cooperative agreements between cooperating agencies for the management of undesirable plants on a local basis.

As designated in the MOU, the Integrated Pest Control (IPC) Branch has already initiated the following:

1. Designated an individual from CDFA to coordinate undesirable plant management with other agencies.
2. Coordinated the first annual meeting for signatories on January 30, 1996 at CDFA's Sacramento headquarters.
3. Encouraged cooperation through outreach programs such as participation in the 1995 California Exotic Pest Plant Council Symposium with other agencies primarily regarding "A" rated noxious weeds.
4. Initiated the establishment of an electronic database system for managing information regarding noxious weed locations throughout the state. Through the utilization of Global Positioning Systems (GPS) in combination with a Geographic Information System (GIS), IPC will be able to conduct the following operations. The first operation will be to track current "A" rated noxious weed infestations while the second operation will be to document the historical locations and distribution of noxious weeds.

Current infestations will be priority one. The GIS will be used to map, measure, spatially analyze, connect to reality, direct, maintain data bases for application methods, track the rate of spread of infestations, and monitor the spread of bio-control agents. GPS will be utilized to gather field data to augment existing data bases and provide for effective and efficient eradication activities.

5. Historical locations will be important, but our mission or task is eradication and this information would be secondary. Integrating this information with other data bases would be important to state/county projects, but could be useful to academia, conservationists, land use managers, and the general public.