Cal-IPC Policy on
Integrated Weed Management (IWM)

Approved by the Cal-IPC Board of Directors on April 5, 2008

Policy Statement:

The California Invasive Plant Council supports Integrated Weed Management (IWM), a strategic approach for reducing the ecological damage caused by invasive weeds. IWM requires integration of multiple program components—prevention, early detection/rapid response, mapping, control, revegetation and monitoring—with site-specific selection of on-the-ground control methods—mechanical, chemical, biological and cultural—based on factors including effectiveness, efficiency, practicality, ecological impact, and safety.

Background:

Invasive plants cause serious ecological damage to California's wildlands, and successfully addressing this widespread problem requires an approach that integrates diverse program components and control methods. IWM provides such complementary program components as well as a strategic structure for choosing from a wide range of control methods. IWM is based on widely accepted Integrated Pest Management (IPM) principles and best management practices.

Natural resource managers and researchers have developed many IWM program components and control methods. Key program components include prevention, early detection/rapid response, mapping, control methods for eradication or management, revegetation, and monitoring. Because control grows more difficult as invasive weed populations expand, it is most effective to first prevent invasive weeds from being introduced, and to detect and respond to new introductions as rapidly as possible. Mapping supports geographically strategic control efforts. Control efforts aim to reduce populations of invasive weeds to an acceptable level, and in some cases, to fully eradicate invasive weed populations. Revegetation is employed in some cases to restore native communities that cannot recover without active planting. Monitoring of control and revegetation efforts is necessary to ensure effectiveness over time.

On-the ground control efforts may employ one or more of a wide range of methods: hand tools for cutting and uprooting; heavy equipment for mowing, mulching, and uprooting; herbicide application; grazing; prescribed fire; "flaming" and other heat treatments; mulching and tarping to block sunlight and growth; competitive plantings; and release of host-specific organisms as biological control agents. One or several methods can be used in combination to address site-specific conditions and effectively control weed populations. Typically, control methods are applied for a limited time in order to allow restoration of a self-sustaining native habitat over the long term. Deciding which control methods to use for a given project is based on many factors, including effectiveness, non-target impacts, human health risk, cost, and availability of materials and labor. It is important that all available methods are evaluated scientifically for benefits and risks, and that the impacts of both invasive plants and control methods are examined when developing a control strategy for a specific project.