



Recommendations to Marin County Board of Supervisors Regarding Department of Agriculture's 10-Year Invasive Weed Management Plan for Marin County

December 4, 2013

To: Marin County Board of Supervisors & Department of Agriculture

From: MOMS Advocating Sustainability (MOMAS)

Below are MOMAS' supplemental recommendations regarding The Department of Agriculture's 10-Year Invasive Weed Management Plan for Marin County ("Plan")

As stated, MOMAS is in agreement with the need for a long-term, comprehensive, and collaborative plan to control and manage non-native weeds in Marin County, and we agree that the plan should be science-based and grounded in robust Integrated Pest Management (IPM) principles. We continue to have concerns with the Plan as proposed, in particular with the likelihood of using herbicides as a primary tool initially, with no enforceable limits, parameters or site plans. Our concern is heightened by the proposed application of herbicides by spraying, both by workers on the ground and by aerial spraying, as well as the non-biodegradable, highly mobile and persistent nature of the herbicides proposed.

Please refer to MOMAS' Oct. 28, 2013 Comments for particular concerns about the two proposed herbicides, Milestone & Transline, as well as comments submitted by physicians on MOMAS' advisory board, the Center for Environmental Health, Marin's beekeepers and others which detail our concerns.

MOMAS' goal is to support our farmers and ranchers while also protecting the health of our residents, our water, sensitive habitat and wildlife. With this in mind, MOMAS supports the Plan if it has the following parameters:

1. Develop a case-study for review for 1st year pilot program

The Plan must have long-term planning as a primary goal, but also be implemented incrementally with Board and public oversight and re-evaluations.

Before implementation of the year-one pilot program under the Plan is approved, the Department of Agriculture must develop a case study for review and analysis by the Board of Supervisors, other County agencies, landowners and the public.

- a. The case study would use the first proposed 300-acre test site as a representative

area; and such area would be identified and mapped.

b. The site chosen should be representative of the weed issues the County is dealing with and also be an area with high risk for spreading, so it is not only beneficial to Marin's agricultural community but also can serve as a model for future sites.

c. The case study should have at least two written plans that may be compared; one plan controls the weeds without herbicides; the other plan may use herbicides for a limited period.

d. Costs, methodologies, goals must be clearly set forth in the case study (e.g., goal for the initial pilot program may not be 100% eradication; but may be to remove certain outlying weed populations and control other areas to minimize spreading of the weeds).

e. The 300-acre test case should encompass the "seed shed."

f. The case study site should be placed on land that, if managed properly, could be used productively as organic farmland or pastureland and/or is beneficial for bees, other beneficial insects, and/or contains sensitive habitat, and as stated above, is at high risk for weeds' spreading.

2. Develop site plans for all sites under consideration in the Plan

In all cases proposed for approval under the Plan at any time, site-specific plans must be developed as described above.

3. Place restrictions on money provided to landowners & also incentivize landowners to participate in and comply with the Plan

Landowners who receive money from the cost-share program under the Plan must use best practices and have appropriate restrictions placed on receipt of such money yet also must be incentivized to participate in the program. The cost-share program is also an opportunity to develop and implement a robust education program.

If a landowner receives money under the Plan, then the landowner must agree in writing to work with the county to devise and implement as many pesticide free solutions as possible for managing non-native weeds, and also to receive education and training. Incentivizing landowners could include assistance in addition to cost-sharing, such as assistance with conversion of the property once weeds are controlled to organic land, so property becomes economically viable.

If it is determined that pesticides will be used in some areas under the Plan, then the Plan must provide that the landowner implement and/or agree to (in writing):

a. Utilization of best management practices under a robust IPM program (as detailed in #8 below);

b. Success criteria must be established and clearly outlined, based on a defined goal or goals; the site plan must be tailored to meet the success criteria, and this must be

- monitored and re-evaluated. If success criteria is not met within the specified time-frame, plans should be revised accordingly and herbicides must be discontinued;
- c. Water quality monitoring;
 - d. Soil monitoring (how are pesticides impacting the soil and where are they traveling; how are native plants impacted; how are soil microorganisms impacted; etc.);
 - e. Setbacks from streams and creeks and establishment of buffer zones;
 - f. Endangered species/habitat protection & monitoring including consideration of timing of herbicides and impacts on wildlife during sensitive times;
 - g. Stringent controls on organic labeling (e.g., be clear that no non-organic herbicides are used on or near organic land; and that this is monitored and verified)
 - h. Biomonitoring for impacts on human health;
 - i. Education and training, and monitoring of the property by the county, to ensure control of weeds for a minimum of 10-years without pesticides (after the potential short-term use of herbicides).

Monitoring of the pesticides as described above could be an aspect of the cost-sharing program to dec-incentivize the use of pesticides, and also to assist the County and other communities with measurable evidence of the impacts from pesticides on the health of residents, wildlife, pollinators, waterways and regeneration of native plants. The costs from the use of pesticides on private lands are shared by our entire community and ecosystem and should be recognized, shared and measured by landowners who have not managed their lands.

4. Create an independent advisory board

- a. Charged initially with developing recommendations for first-year pilot program and then with longer-range plans;
- b. Suggested composition of the advisory board: (i) weed expert(s); (ii) soil expert(s); (iii) toxicologist(s), (iv) wildlife and endangered species expert(s), (v) a water district representative(s), (vi) environmental and health representative(s), (vii) beekeeper representative(s); (viii) dairy and agricultural representative(s); (ix) ranchers/landowners; (ix) other science-related field representative(s) with an understanding of the complex issues facing West Marin.

5. Do not authorize aerial spraying

Aerial spraying is prone to accidents, creates drift, is imprecise, and is simply too risky. Aerial spraying will expose the public, wildlife, our waterways, organic farmland and pastureland to these widespread, highly persistent herbicides, with many risks to humans, animals, organic farming and plants as described in detail above. In light of risks to public health and safety and risks to wildlife, the risk from aerial spraying outweighs the risks from the non-native weeds, especially when there are non-chemical alternatives available for combating these weeds and the effects of aerial spraying would be temporary.

6. Prioritize and Outline Plan for Prevention

The Plan must outline a strategy for carefully monitoring uninfested areas, particularly in spaces close to inaccessible areas. The Plan must include specific action to address and eliminate the root cause of the weed problem and seek out ways to incentivize a market & suppliers for organic weed-free feed.

7. The Plan should include untreated areas

The Plan should be carefully crafted to include as many sites as possible where no herbicides whatsoever are used (i.e., where the infested sites are handled manually by digging/grubbing, mowing or burning PLUS a commitment to maintenance to ensure eradication over successive years). The selection of these sites should prioritize exposure issues (e.g., are they near schools, organic farms, sensitive habitat, or waterways?) and consider site conditions such as accessibility and size.

The Plan should also include areas where weeds are not treated in any way, but the weeds remain in a controlled space and their spread is prevented.

8. Best management practices and restrictions around herbicide use

If herbicides are used at any time under the Plan, then best management practices must be utilized to monitor and ensure success, and clear restrictions must be placed on the use of herbicides.

- **Establish publicly available, clear success criteria and reasons for herbicide use for each site:** If herbicides are proposed for use in any site specific plan, then for each plot of land, there must be a specified scientifically-based reason why non-herbicide methods are not available and the site must not be left untreated. Cost alone is not a justification or basis for resorting to the use of herbicides. Once that case is established, then clear and measurable treatment goals must be described, monitored and available on the Department of Agriculture's website for a reasonable time for public review for each site to be treated.
- **Place limits on amounts of herbicides allowed per acre and time-frame for herbicide use:** If herbicides are used, limits must be placed on the amount of herbicides allowed per acre on an annual basis; and the length of time that herbicides are allowed for use under this approval process (no more than 2-years per site).
- **Limit areas to be sprayed:** If any case where spraying is to take place, crews should manually remove plants beyond the primary infestation first – essentially working from the outside toward the infestation. This will eliminate the outliers and reduce the area to be sprayed to only the primary infestation.
- **Buffer zones:** If herbicides are to be used, then buffer zones must be designated around homes, schools, sensitive habitats, waterways, organic farms and organic pastureland.
- **Discontinue use if goals not met:** The Department of Agriculture must discontinue

herbicide use if incremental success criteria are not met.

9. Seek out and replicate models of success when developing site plans

For example, Stafford Lake County Park in Marin County. According to sources, this park was infested with a very large thistle infestation; herbicides were used for 2 years; but since then, the land is herbicide free and weeds have been successfully managed with hand pulling for approximately the past 10 years.

10. Yearly independent audit & approval by Board of Supervisors

The Plan should include an audit by an independent licensed professional with expertise in Integrated Pest Management to determine whether the limitations set forth in the Plan are followed, and whether others are necessary. In particular, the auditor should evaluate the amount of herbicides used, locations used, and whether best management practices are followed properly including whether the Department of Agriculture is on track to meet success criteria or whether herbicide use, if any, should be discontinued.

MOMAS appreciates that this is a complex problem impacting our entire community. We ask that the Plan be refined and implemented with integrity, solid planning, transparency, and the most current science, using a process that can be replicated in other communities; and a clear intention and plan for how we can prevent, control and manage the weeds for the long-term without herbicides.

We appreciate the County's dedication and commitment to this important issue.

Respectfully Submitted,
MOMS Advocating Sustainability