

Minutes
Contra Costa County IPM Advisory Committee
Subcommittee on IPM Decision-Making
May 10, 2018

Members present: Andrew Sutherland (chair), Susan Captain, Larry Yost, Jim Cartan

Members absent: Jim Donnelly

Staff present: Jill Ray, Supervisor Andersen's office; Tanya Drlik, IPM Coordinator

Members of the public present: Dave Shoemaker, Parents for a Safer Environment

1. Introductions

2. Public comment on items not on the agenda

There was none.

3. Approve minutes from April 5, 2018

A motion was made and seconded to approve the April 5, 2018 minutes as written (AS/SC).

The motion carried unanimously.

4. Review the flood control decision document

5. Review the roadside decision document

These two items were taken together.

The IPM Coordinator reported on her research on pesticides and groundwater:

- Law requires the Department of Pesticide Regulation to
 - collect environmental fate data on pesticides in order to identify those that have the potential to leach into groundwater—these pesticides are included on the Ground Water Protection List (GWPL)
 - collect well water samples from around the state and analyze for pesticides on the GWPL to determine if they are migrating to groundwater
 - Using various data, DPR developed a sophisticated vulnerability analysis to indicate areas of the state where detections are most likely. These are designated as Groundwater Protection Areas (GWPA's)
 - DPR developed mitigation measures that are tailored to the specific pathway for contamination. With the development of mitigation measures, prohibition of use of a particular pesticide was no longer the only regulatory option.
 - maintain a database for pesticide monitoring and provide an annual summary of well monitoring results
 - In the past year, Contra Costa wells were sampled for 54 pesticides but no pesticides were detected. Glyphosate and dicamba were among those sampled for.
 - Counties where there were multiple detections are large agricultural counties like Fresno and Kern, and to a lesser degree, Tulare.
 - formally review any pesticides found in groundwater due to legal agricultural use (agricultural use in this context includes roadside applications) to determine if continued use can be allowed.
 - adopt regulations to modify pesticide use, if necessary, to protect groundwater
- Groundwater Protection Areas (GWPA's)
 - DPR identifies these 1 sq mile areas based on pesticide detections or on specific soil types and depth to groundwater that is 70 ft or shallower.
 - There are 2 kinds of GWPA's: leaching and run-off.

- Contra Costa has 3 run-off GWPA's and no leaching GWPA's. Run-off GWPA's have an estimated depth to ground water of 70 feet or less and the soil contains a hardpan layer.
 - In the County, two of the GWPA's are near the intersection of Hwy 242 and Hwy 4. The other is near Camino Diablo and Byron Hwy in far East County.
 - An operator must obtain a permit from County Ag to use pesticides on list (a) of the GWPL, i.e., those found in groundwater. The operator must also use specified management practices.
 - The County does not use any pesticides on list (a).
- Monitoring for effectiveness of regulations
 - Since 1999, DPR has been monitoring 64 shallow domestic wells in Fresno and Tulare counties to determine the effectiveness of the regulations and mitigation measures.
 - Regulations have resulted in measurable decreases in both detection frequencies and well water concentrations of many regulated pesticides.
- Evaluating new products or uses
 - DPR uses their computer models to estimate leaching potential in vulnerable California soils.
 - If the product or use is found to present a potential leaching hazard, DPR can require more data or mitigation measures.
- In 2012, the IPM Coordinator communicated with Dr. Murray Clayton at DPR's Environmental Monitoring Branch. He was not sure that Contra Costa's average rainfall of 22 inches per year is enough to send pesticides residues into groundwater in soils that are vulnerable to leaching. Irrigated agriculture applies at least twice that much water on top of rainfall. On rights-of-way, the issue is not leaching but run-off. In much of the Central Valley, run-off is directed to infiltration basins (an area where the water sits and eventually soaks into the soil. The County does not maintain any infiltration basins. The County does have detention basins where, during rains, excess water can collect and be let out through a pipe into a creek to help prevent flooding. These detention basins are grazed using goats.

Herbicides used by CCC that are on the Groundwater Protection Lists

- As mentioned above, the County does not use any pesticides on list (a), i.e., those currently found in groundwater.
- On roadsides, the following list (b) herbicides are used. These are pesticides that have the potential to contaminate groundwater.
 - Aminopyralid (Milestone and Milestone VM)
 - Chlorsulfuron (Telar), which is used in spot treatments for hard-to-control weeds like perennial pepperweed
 - From Dr. Clayton: field dissipation ½ life is very short indicating low persistence in the environment
 - Dicamba (Vanquish), which was used in spot treatments for hard-to-control broadleaf weeds, mainly yellow starthistle. It has not been used for 3 years.
 - From Dr. Clayton: the field dissipation ½ life is very short indicating low persistence in the environment
 - Indaziflam (Esplanade), which is used as a pre-emergent
 - Isoxaben (Gallery), which is used as a pre-emergent
 - Sulfometuron-methyl (Oust), which is rarely used on roadsides
 - Triclopyr (Garlon 3A), which is used in spot treatments for woody vegetation
 - From Dr. Clayton: has a short aerobic ½ life of less than 20 days which indicates to him that it is unlikely to persist in soil long enough to be of leaching concern
- On flood control channels and access roads, the following list (b) herbicides are used:
 - Chlorsulfuron (Telar), which is used in spot treatments for hard-to-control weeds like perennial pepperweed
 - From Dr. Clayton: field dissipation ½ life is very short indicating low persistence in the environment
 - Imazamox (Clearcast), which is only used for spot treating cattails in highly sensitive sites

- Indaziflam (Esplanade), which is used as a pre-emergent
- Imazapyr (Habitat), which is used for spot treatment of Arundo, pampas grass, ivy growing on fences and in creeks, and as a cut stump treatment for unwanted trees
- Triclopyr (Garlon 3A), which is used in spot treatments for woody vegetation on flood control access roads and Renovate 3, which can be used in and near water
 - From Dr. Clayton: has a short aerobic ½ life of less than 20 days which indicates to him that it is unlikely to persist in soil long enough to be of leaching concern

The committee discussed both the flood control channel and the roadside documents and made a few changes. The committee asked the IPM Coordinator to harmonize the two documents where appropriate.

A motion was made and seconded to approve both the flood control and roadside vegetation management documents with the updates as discussed. (AS/JC)

The motion carried unanimously.

6. Review the ground squirrel decision document

The committee discussed the ground squirrel decision document. Below are some of the comments.

- Is there monitoring other than just before or just after the Ag Department treats for grounds squirrels? (AS)
 - There is no year around monitoring by the Ag Department. (LY)
 - When Ag Department staff do go out to look for ground squirrels, they go during the day and it is easy to see where there is a lot of activity. (LY)
 - The airports monitor their property, but they may not call about ground squirrels until the problem is serious. Getting access is not simple at the airports. The runways have to be shut down, and people must be escorted out onto the property. (LY)
 - The Public Works road crew is looking for problems on County roads throughout the year. (TD)
 - Staff at the West County Detention Center and at the Byron Boys Ranch look for ground squirrels and notify Pestec and the Ag Department, but as with the airports, staff may not notice until the squirrels are causing serious problems. (LY, TD)
 - The most recent case at the West County Detention facility was ground squirrels setting off the newly installed perimeter alert system. This constituted an emergency, and Ag Department staff went out immediately to bait the squirrels. (LY)
 - Pestec is regularly monitoring the West County Detention Facility and periodically checking the Byron Boys Ranch, but the County could ask them to do more monitoring specifically for ground squirrels. (TD)
- Have tolerance levels been established? (SC)
 - As noted in the decision document, any activity within the buffer zone (approximately 100 linear ft) around critical infrastructure may warrant treatment. (LY)
 - The decision document doesn't capture thresholds from other entities. (AS)
 - Los Vaqueros Reservoir does not want any poison bait applied there because ground squirrels are a keystone species. (LY)
- As described in the decision document, the Ag Department baits for ground squirrels beginning in July or August when grasses have dried up. The procedure for baiting grounds squirrels is to first spread clean, untreated oat groats in areas where ground squirrels are seen or have historically been a problem. This prebaiting focuses foraging activity so the least amount of poison bait can be used. A few days later, staff return to look for ground squirrels actively taking the prebait. Poison bait is applied in those areas. Staff work to put out only the amount of bait that the squirrels will take in one day. A few days later a 2nd application is made. Baiting for ground squirrels is more an art than a science, and the more experience a person has the more skillful that person will be. (LY)
- Could physical methods be used to control ground squirrels at the Byron Boys Ranch? (SC)
 - The County doesn't want to use kill traps where children might have access to them. (LY)

- The Ag Department cannot use gas cartridges there (or anywhere in the County) because the cartridges must be used when the soil is moist (to prevent gas escaping), and all Department staff are busy working on the noxious weed program in the spring. (LY)
- Pestec has used gas cartridges at the Byron Boys Ranch. They have also experimented with live trapping and with the Good Nature trap that Carlos Agurto modified to capture ground squirrels. (TD)
- Perhaps Pestec could officially be tasked with the non-emergency ground squirrel work at the West County Detention Facility and the Byron Boys Ranch. (TD)

6. Plan next agenda

The next meeting will be June 14, 2018, 1:00 to 2:30 pm

- Continue the review of the ground squirrel decision document (60 minutes)
- Discuss whether ground squirrel management at the West County Detention Facility, Byron Boys Ranch, and airports should have separate decision documents (10 minutes)
- Other business (20 minutes)