

Wednesday, November 26, 2008 (file cac175)

To: Dan Breedon

Subj: Herbicide benefits/Hazards in Butte County

Background: The use policies for herbicides in agriculture, Forestry and roadside environments have the potential to drive zoning and safety elements of the butte County general plan. Conformance to regulations, Ag-residential buffer dimensions and life costs of vegetation management are impacted by the use of herbicides as well as neurologic pesticides discussed in previous memos. In trying to cull out general plan items of interest, the amount of literature available is daunting. Google alone lists 1,600,000 references and Amazon.com provides long lists of expensive books of interest for herbicides. The Butte County library contains material to alert the general public to many of the safety issues. Commercial literature is freely available from local conferences on forest vegetation management and sustainability conferences. Users with deep pockets are paralyzed by liability issues, applicators are trying to make a living, owners of productive vegetation want to optimize their yields and citizens are trying to avoid health issues. The American Academy of sciences, American Chemical society, environmental organizations and governmental organization such as the Department of Transportation and EPA attempt to provide an unbiased overview of toxic materials. The following samples of literature can help develop a feel for the concerns of interest:

Ref A: <http://science.jrank.org/pages/3306/herbicides.html>

Ref B: http://www.uky.edu/Ag/Agronomy/weeds/corn_-_atrazine_precautions.;htm

Ref C: http://www.uky.edu/Ag/AGronomy/Weeds/water_quality_statements.htm

Ref D: <http://onlinemanuals.txdotmanuals/veg/toxicity.htm>

Ref E: N. Baker, The Body Toxic, North Point Press 2008, Butte Lib 615.9 B

Applications to Butte County:

1. The Butte County General plan may need to encourage/restrict/eliminate the use of herbicides in various sites within the county that go beyond state and federal regulations. Critical interface areas such as the Green Line, forest escape routes and special needs/constraints of organic and general agriculture pose potential unique problems.
2. The question of registry or unlicensed distribution of herbicides may need to be examined.
3. Methods for applications of herbicides ranging from hack and squirt to aerial broadcast may need to be examined.
4. Improved Ag/forest productivity and wildland fire management driven herbicide application policy may need to be examined with respect to impacts on the environment and human health.
5. High production volume (HPV) chemicals used in the environment under EPA control under the Toxic substances act of congress and the REACH program adopted by the E.U. need to be

examined with a special emphasis on Triazone class herbicides such as atrazine as opposed to the nominally more benign Organophosphorus class herbicides such as Roundup.

6. Routine testing of surface and ground water for toxic as well as pathogenic contamination needs to be enforced by the county, given wide media distribution and mitigation schemes developed.
7. The benefits of transgenic crops in terms of productivity and the dangers of hormone interrupters in terms of local public health statistics needs to be examined.