

Friday, February 27, 2009 (file cac198)

To: Dan Breedon

Fr: Ed Miller

Subj: Chemical /GMO constraints, wood/fiber volume potential, wilderness expansion effects, tar sand production constraints, secondary battery development status and cost/benefit validity examinaion.

Ref A: Will Allen, The War on Bugs, Chelsea Green Publishing, 2008

Ref B: Miles Drake (Weyerhaeuser), Power the Future, Research Channel (9400), 2/25/09, 9-10PM

Ref C: The Economist, Jan 17, 2009 (Wilderness expansion, tar sands & batteries)

Ref D: Bjorn Lomborg, Cool it, The Skeptical Environmentalist Guide to Global Warming, Alfred Knopf 2007

Comments on References:

Ref A covers a wide range of environmental/ political concerns that echo leading U.C. and federal /state concerns expressed by key individuals like Robert Reich and Michael Pollan. If you want to feed your paranoia, this is the book for you! The topics extend well beyond pesticides. An emphasis is put on long term effects that are rarely measured.

Ref B looks at the 3.4 billion cubic meters/yr of wood/fiber in contrast to the 4.6 billion cubic meters/yr of petro chemicals for energy production. The techniques for extraction of the 14-20% sugar component of wood associated with mobile vehicle fuel are examined in detail. Experiments with switchgrass interleaved with loblolly pine in relatively flat terrain are described.

Ref C looks at a variety of economic topics that could have an impact directly or indirectly on Butte County. The drive to create 2 million acres of new wilderness area primarily outside of California (Except San Bernardino and Riverside= 180,000 acres) may have the effect of pushing developments in the Ecotopia regions of the west including Butte County. Tar sand development in Alberta is on hold based on lack of funding (\$374 million required) and environmental concerns. This development could put additional pressure on development of cellulosic biofuels. Lithium ferrous phosphate batteries offer hope of achieving a 250 mile range, 3 hour charge time device to favor the development of electric vehicles.

Ref D continues his examination, similar to his other books, on a balanced view of overall risk management for the planet. His arguments are a counter weight to the more emotional/hyperbolic approach seen in Ref A.

Potential impact on Butte County and the general plan:

1. We can expect a demand for increased transparency for use of chemicals and GMO products in the future. Organic and niche farming in and around urban areas could affect zoning. Mitigation of long term contamination and work-arounds may become an outcome of future of research.
2. Firesafe special distribution of existing and future timber/fiber production areas needs to be monitored carefully by the county to assure we can reach our long term goals.
3. The drive to increase wilderness areas needs to be recognized. Access to existing wilderness areas will need to be examined (e.g. Ishi).
4. The projections for availability of petro-chemicals may need to be reexamined to determine the need for transition fuels like cellulosic biomass.
5. We need to examine the validity of the determination of the costs and benefits of various schemes for global warming and related issues based on the guidance provided by Ref D. Sensible dialog in a largely zero sum game is a worthy goal.