

Saturday, September 12, 2009 (file cac236)

To: Dan Breedon

Fr: Ed Miller

Subj: Review of General Plan dated September 09, climate change and fossil fuel transitions

Ref A: General plan Sept 4, 09

Ref B: R. Hopkins, The transition handbook, Green Books 2008 (Butte Lib 333.79 H)

Highlights and commentary:

1. I have been spending most of my time looking at the water element within Ref A. The statement that the rainfall in Butte County is 3.77 MAF is not defined in statistical terms or its derivation. I am tacitly assuming that this value is based on the overall California average precipitation value of 200 MAF scaled to Butte County on the basis of relative area. The 2 MAF of captured and used value is not derived. Perhaps these numbers need to be placed in an appendix with appropriate reliable references. Worst case drought numbers need to be examined. The analogy is in the flood plain discussion in which the 100 year flood plain maps or 1% probability in a given year are derived. A 1% probability of not satisfying projected water demand is based on regressed historic data and is primarily helpful in comparing different catchments/situations. The nominal 27,500 AF/yr of surface water allocated by the state is ultimately part of the future mix since Chico is not using any of the allocated surface water. Statistics on drought level defined fallback procedure effects need to be discussed. The MOU with Colusa, Glenn, Tehama and Sutter Counties on valley aquifers is not well defined. As we look up to 2030, perhaps the General Plan should recommend some form of allocation to minimize future conflict. In the Forest Ranch area within the East Side Basin, the claim is made that the aquifer is not declining. Local users may question this statement in the absence of a serious measurement program. Perhaps the basin should map interflow or perched water table moderate depth well areas call for separate treatment. The question of arsenic contamination near alluvial fans appears to be at variance with the Trends report that showed that places like Gridley did not meet the EPA standard for arsenic no less the 5 times more rigorous EU standard that is broadly recognized as valid based on Bangladesh statistics. A discussion of the goals and benefits of the major measurement/analysis study of the county aquifers by U.C. Davis needs to be discussed in detail to give assurance that we have the future of aquifers under reasonable scientific supervision in lieu of anecdotal observations from water users. Normalized observations of well water levels recognizing demand and precipitation variables may not provide the guidance that we need for future water allocation planning.
2. Ref B provides a good overview of the simultaneous mitigation of climate change associated with GHG and minimization of fossil fuels dependency/falling production. The burden of solving /modeling this class of wicked problems falls on Butte and similar counties in the Ecotopia regions of the West Coast. Perhaps in a separate section of the General Plan we could pull

together the approaches to developing tools for solving this problem set as part of a more altruistic/holistic approach to issues of U.S. economic health and quality of life maintenance/ enhancement.

3. Please send me a hard copy of the general plan as soon as it is convenient.