

Wednesday, January 21, 2009 (file cac188)

To: Dan Breedon

Fr: Ed Miller

Subj: Tapping post federal election enthusiasm

Background: Hope burns brightly that money printing plant in Washington will direct some of its largesse to Butte County based on needs enshrined within the general plan and related documents.

Ref A: Nova, California's high stakes gamble to achieve sustainable energy, PBS 11/20 8-9 Pm.

Ref B: Xiao-Feiteng, C. Porn & P.Bonato, Wearable medical systems, IEEE Reviews in biomedical Engineering pp62-74

Ref C: ER green page Jan 21 sec 4b, Biofuels, Electricity study, and Nevada Pacific BLM 500 Kv right of way.

Ref D: Richard Minnich, California's Fading Wildflowers-Lost Legacy and Biological Invasions, U.C. Press 2008.

Transition to renewable energy sources: Ref A sums up the goals and achievements in the renewable energy arena from the eyes of the man on the street to Steven Chui, the new federal energy secretary from California. I will not attempt to summarize the details that I have largely documented in other memos but one of the key elements in Ref A focused on the 12 million structure owners that cannot afford even the most modest upgrade in conserving energy. The key parameter is return on investment of less than 3 years and presumably the governmental support to tackle this low hanging fruit. A plea is made to hold back on aesthetic criticism of transmission line corridor expansion.

Reduction in the cost of medical care and associated transportation: Ref B notes that the post age 65 population in the world is expected to increase from .5 to 1 billion over the period 2006-2030. Tools are becoming available for non-invasive monitoring of a wide range of health parameters that offer the potential for reducing transport costs and predicting/avoiding expensive health care.

Utility Industry advances: Ref C summarizes major expenditures on biomass fuel production, electric plan efficiency enhancements and 200 foot wide corridors on BLM land in Nevada.

Basic reference for land/vegetation management: Ref D in pp 265-344 and accompanying text is a good jumping off point for researchers trying to get a handle on the environment and vegetation management history. E.g. the 1861-62 flood in the Central Valley was turned into a sea 250-300 miles long by 200-60 miles wide was followed by the drought until 1865. Muir and Bidwell describe the impact of the rainfall variation. Many of the Mediterranean exotics introduced to California are subject to severe diebacks presumably because of the substantial differences in our precipitation pattern as seen in [www.eurometreo.com](http://www.eurometreo.com) and [www.wrcc.dri.edu](http://www.wrcc.dri.edu). Bromes and Oats are not totally eliminated and rare

survivors will repopulate after a few years. Post fire, grazing and precipitation variability effects are not well documented. Grazing has selectively eliminated bunch grasses and aggravated fire management.

Candidates for objectives embodied in the general plan:

1. List in ascending order of pay back periods specific energy fixes and resulting GHG benefits by altitude regime in Butte County.
2. Establish zoning for future transmission line corridors starting with BLM Nevada specification for a 200 foot right of way as a model.
3. Encourage the State of California to create remote medical facilities modeled after Washington State and remote counties elsewhere.
4. Status the development of department of energy contractors such as K.L. Energy Corp and A.E. Biofuels and solicit interest in creating pilot/production plants in Butte County.
5. Encourage stakeholders to visit the U.S. Department of energy web site [www.energy.gov/](http://www.energy.gov/) in addition to previously reviewed Butte County Library 644S Instant Energy Savers book.
6. Publish constantly updated lists of power requirements for TV. e.g. Phillips features a "green" 42 inch flat TV with an operating demand of 67 watts and a standby power of .15 watts.
7. Encourage participation in the free classes and distribute media from such meetings. Note January 27 (4-8pm) Butte College meeting on "Water Smart and Fire Safe".
8. We need to develop well crafted land use and vegetation sampling while trying to sort out near Butte County data from the U.S. Department of war and USGS in the 19<sup>th</sup> century and evidence from old adobe bricks and dendrology.
9. Revegetation experiments need to be encouraged ranging from perennial seed feed to condensation traps.
10. Efficient thinning of vegetation with an emphasis on resprouting control needs to be recognized.
11. Encourage the state department of water resources to trend the performance of wells within Butte County and adjoining counties that share the same aquifer.