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Micki Weimerskirch - SDEIS comments

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Subject: SDEIS comments

Red River Water Supply Project
Bureau of Reclamation
Bismarck, ND

Re: Comments on the Supplemental Draft Environmental Impact Statement (SDEIS) for the Red River Valley Water Supply Project

The focus of the following comments centers on what this writer believes may be a serious underestimation of the potential impacts of future droughts and land-use changes on the availability and quality of water within the Missouri and Mississippi River basins, as well as in the northern Gulf of Mexico. In addition to future effects of reduced flow caused by the proposed increased water diversion, continued urbanization and looming agrarian land use-changes such as major increases in corn production for ethanol will exacerbate water-quality degradation in all these downstream water bodies.

With regard to drought contingency, the SDEIS uses a 1930's type drought to project maximum future water demand; however, it is now well known that there have been recurrent multi-decadal "megadroughts" in the Great Plains about once every 500 years (Woodhouse and Overpeck 1998). Accordingly, it is recommended that a drought at least 2-3 times as severe as a 1930's type drought be used in the drought-contingency planning process. It is further recommended that a conditional probabilities similar to those used in estimating earthquake hazards be derived for both a 1930's drought and a much more severe multidecadal megadrought.

The wisdom of the above suggested approach is partly reflected in the Bureau of Reclamation's gross miscalculations for water needs supplied by the Colorado River in the Desert Southwest region. Water allocations from the Colorado River were based on water availability during a period of wetter climate. Today, however, the region finds itself facing very depleted water supplies (Lake Powell, etc) during a major drought period which most computer models indicate will be typical during most of the 21st Century. Considering that the latest 2007 IPCC projections are for increased warming and drought in much of the central and western U.S. this century, a far more conservative approach is appropriate to use in drought-contingency planning for the Red River Water Supply Project.

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