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Sites Reservoir Project - Draft EIR/EIS

State Clearinghouse #2001112009

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As a local property owner in the town of Maxwell, I have a few concerns regarding the Draft EIR/EIS (Report) for the proposed Sites Reservoir Project (Project). While these concerns are specifically directed to address potential significant impacts that the proposed Project may have on the residents and property owners of the community of Maxwell, I propose that the concepts be not limited solely to the confines of the Maxwell area. Furthermore, my comments typically focus on the evaluation of impacts associated with Alternative A on the Primary Study Area; however, they should be taken as inclusive of Alternatives B, C and D where their impacts are the same as for Alternative A.

Concerns:

1. Maintenance of existing public roads

In Section 26.3.4.2, a discussion of Impact Trans-3, “Substantially Increase Hazards Due to a Design Feature or Incompatible Uses”, concludes, “During construction, the use of construction equipment, such as oversize or overweight vehicles, on roadways near Project facility sites could result in unsafe conditions or damage to road surfaces. However, with the implementation of the Construction Equipment, Truck, and Traffic Management measures presented in Chapter 3 Description of the Sites Reservoir Project Alternatives, this impact would be reduced to **less than significant**, when compared to the Existing Conditions/No Project/No Action Condition.” I believe this conclusion to be unjustified.

Section 3.5.3.2 Construction Equipment, Truck, and Traffic Management states the referenced “measures”, which are proposed to be implemented as part of all applicable contractor specifications to minimize potential road and traffic impacts in and near the Project area, related to facility construction, access to all work sites, and hauling of necessary materials, as follows:

- Identifying specific haul and access routes with all contractors when multiple facility sites are under construction concurrently, so that Project-generated construction traffic is dispersed to the extent practicable and necessary.
- Installing traffic control devices, as specified in Caltrans’ Manual of Traffic Controls for Construction and Maintenance Work Zones, where needed to maintain safe driving conditions, including use of signage to alert motorists of construction activities, potential hazards, and traffic detours, as well as the use of flaggers when appropriate.
- Prior to construction, ensuring that the Authority or its contractors would survey and describe the pre-construction roadway conditions of all existing roads to be used for access to Project facilities. Within 30 days after construction is completed, the Authority would survey these same roadways to identify any damage that has occurred. Roads damaged by construction would be repaired to a structural condition equal to the condition that existed prior to construction activity.

The first two measures are fairly basic common sense construction practices, while the third inadequately attempts to protect the public from construction-related damage to the roadways. The shortcomings are as follows:

a. Independent Review

The proposed measure makes no provision for the Authority and contractor to agree on the pre-construction roadway conditions, should such a discrepancy occur. Since there is a potential for such, it would be best to have such evaluation performed by an independent, unbiased, professional, expert in accurately assessing such conditions, e.g. a registered Civil Engineer experienced in road design.

b. Existing roadway conditions

The evaluation of the pre-construction roadway conditions should consist of a thorough engineering analysis of the structural section of each proposed access road, not just a subjective opinion developed simply by a visual inspection, using vague and simplistic labels, as appears to be the case with the data indicated in Table 26-11. Such analysis should be supported by evidence obtained by a myriad of investigations.

To adequately assess the existing structural integrity of each road, their existing Traffic Index (T.I.) will need to be determined, the R-Value of the subgrade will need to be tested, and the thickness of each layer of the structural section will need to be obtained. In order to determine the T.I., axle classification traffic counts must be taken on each road, which must then be converted into Equivalent Single Axle Loads (ESALs). A Soils Engineer should be employed to test the subgrade R-Values, and to perform roadway corings to determine the thicknesses of the structural section layers. Using the Caltrans Highway Design Manual, an objective determination, based on solid evidence, could then be made by the Engineer as to the existing (pre-construction) roadway conditions. I recommend that the findings all be documented in a Roadway Evaluation Report.

c. Road repairs

The Report lists the anticipated haul routes to be utilized during construction, and indicates that most of the County roads currently have very low traffic volumes; however, the Project estimates that the Project will generate a total of 124,675 heavy truck trips for Alternative A, and 235,240 heavy truck trips for Alternatives B, C and D. Unless these roads have been built to withstand this volume of heavy truck traffic, and it is doubtful that they have, then these roads will most likely be severely damaged, possibly even destroyed, long before the Project is completed. Yet, the measure proposes only to identify and repair any damage to the roads after construction is completed. A provision should be made to mitigate this anticipated impact below a level of significance throughout the life of the Project.

Using the projected heavy truck volumes from the Report, future (Existing + Project) T.I.s can be calculated for each of these roads. Then, using procedures from the Caltrans Highway Design Manual, an Engineer could then determine if the existing

structural sections on these roads could sustain the future T.I.s, or if they would need improvements prior to beginning the Project, e.g. an asphalt concrete (AC) overlay.

d. Road Maintenance Agreement

To document the responsibility of the contractor to both adequately prepare the access roads for the anticipated Project truck loads, and his responsibility to adequately maintain those roads as necessary throughout the construction period, a Road Maintenance Agreement should be secured by the Authority with the Project contractor, with penalties prescribed for noncompliance.

2. Congestion on existing public roads

In Section 26.3.4.2, Impact Trans-1, “Conflict with an Applicable Plan, Ordinance, or Policy Establishing Measures of Effectiveness for the Performance of the Circulation System, Considering all Modes of Transportation”, and Impact Trans-2, “Conflict with an Applicable Congestion Management Plan, Including, but not Limited to, Level of Service Standards and Travel Demand Measures, or Other Standards Established by the County Congestion Management Agency for Designated Roads or Highways”, both relate to the performance of the circulation system, and the conclusion stated for the latter is similar to that of the former: “All of the roadways anticipated to be used to access Project facilities would continue to operate at an acceptable LOS during Project construction and operation of the reservoir. Therefore, impacts would be **less than significant**, when compared to the Existing Conditions/No Project/No Action Condition.” I believe this conclusion to also be unjustified for the following reasons:

a. Functional Classification of roadways

No reference is made as to whether Colusa County has an adopted Congestion Management Plan, or whether their General Plan even officially categorizes their primary roadways by functional classification. It appears that the Report preparers chose to apply the functional description criteria adopted by Glenn County’s Regional Transportation Plan (RTP), presented in Table 26-2, for classifying Colusa County roadways as well. Thirteen (13) distinct Colusa County primary road segments were determined to be used to access the Project site, and are presented in Table 26-12, along with their estimated ADT and calculated LOS values.

I disagree with the assumed classification of Maxwell Sites Road. While the opening paragraph of Section 26.2.4.2 states, “All Colusa County roadways (within the Primary Study Area) are considered minor collectors”, Table 26-12 proceeds to categorize all three segments of Maxwell Sites Road as being Rural Minor Arterials, Maxwell Road as a Rural Minor Collector, and all remaining County roads as Rural Local Roads. The classifications are supposedly derived from the descriptions indicated on Table 26-2, but said source does not even indicate a category or description for Rural Minor Arterial. In actuality, Maxwell Sites Road functions more accurately as an Urban Major Collector, within the unincorporated community of Maxwell, and as a Rural Minor Collector beyond said limits.

b. LOS Methodology

In Section 26.2.1.2, the statement is made that Colusa County uses the Level of Service (LOS) criteria as defined by the 2010 Highway Capacity Manual (Transportation Research Board, 2010) to assess the performance of its street and highway system and the capacity of roadways. It also indicates that the Colusa County General Plan, 2012, identifies LOS C as the acceptable mobility criteria.

The Report correctly explains that “LOS is a qualitative assessment of the quantitative effects of such factors as traffic volume, roadway geometrics, speed, delay, and maneuverability on roadway and intersection operations”, The 2010 Highway Capacity Manual (HCM) provides two distinct methodologies for assessing the LOS: the Planning-level analysis and the Operational analysis. The former method uses only volume-to-capacity (V/C) ratios as its sole criteria for determining LOS values, and is therefore typically used for just “ballpark” projections; while the latter method uses the multitude of factors previously referenced above (traffic volume, roadway geometrics, speed, delay, and maneuverability, etc.), resulting in significantly more accurate analyses. Furthermore, the V/C methodology is limited to only considering daily volumes on the roadway. Whereas problems which may not be predictable when considering the volume of traffic spread over an entire day, may very well develop at peak traffic flow periods.

There is no indication as to whether Colusa County has officially adopted either method for determining LOS of its roads; but, the Report uses only the more rudimentary Planning-level method for analyzing roadway LOS (Table 26-3).

c. Roadway Capacity values

Without explaining how, maximum capacity values (LOS E/F) are presented in Table 26-4 for the various road classifications. There is no indication that said capacity values were derive in consideration of their existing design, i.e. how many lanes, how wide the lanes, whether it has a paved, gravel or dirt surface, the amount of passing areas, the shoulder widths, the posted speed limit, or any other roadway conditions, some of which are listed in Table 26-11, all of which have an integral impact on road capacity. Using the V/C ratios indicated in Table 26-3, Table 26-4 then proceeds to develop limiting ranges of Average Daily Traffic (ADT) volumes for each LOS.

d. Intersection Analyses

Most importantly, the Report limits itself to only analyzing road segments. Typically, congestion is first evident at intersections; they are the bottle-necks. Whereas poor LOS for roadways is distinguished by long travel time between destinations, the symptoms occurring at intersections is long delay time while queueing.

To substantiate my opinion that the data and methodologies used to assess future roadway congestion is highly inaccurate, consider its finding for Maxwell Sites Road. Within the unincorporated community of Maxwell, this is an urban two-lane roadway running through the heart of town, adjacent to a variety of commercial uses, residences, and the local high school, and

restricted to a posted speed limit of 25 MPH. The Project is anticipated to generate 2,450 construction-related vehicle trips per day (Table 26-13), resulting in as much as 1,149 additional trips per day on Maxwell Sites Road, for a total ADT of 2,961 at Peak Construction. Yet, Table 26-14 indicates that it is predicted to operate at LOS B, a “stable” condition, with “minimal delays”, according to the definition in Table 26-3. I think not.

(Incidentally, Table 26-14 failed to include the segment of Maxwell Sites Road, between Sutton Road and GCID Main Canal.)

3. Traffic and Pedestrian Safety

Another aspect of Impact Trans-3, is supposed to be whether a design feature of the Project may substantially increase hazards. Again, the significant increase in traffic generated by the Project construction, especially that of dump trucks, bottom-dump trucks, concrete trucks, water trucks, and flat-bed trucks driving right through the town of Maxwell, from 7:00 a.m. to 10:00 p.m., with kids walking to and from school, seems indeed to be a hazardous scenario. It would be better to exclude at least the urban portion of Maxwell Sites Road from being an access road.

4. Flood Insurance

Section 9.3.4.3, Primary Study Area, Impact Flood-3, “Expose People or Structures to a Significant Risk of Loss, Injury, or Death from Flooding, Including Flooding as a Result of the Failure of a Levee or Dam”, states that a potential dam break would inundate the community of Maxwell: “The estimated flow velocity at Maxwell and I-5 would be 4.5 feet per second and the maximum depth would be 10 feet.” Although the Report predicts that the probability of it occurring is very small, the impact would be extremely significant. I could find no discussion regarding the potential requirement for homeowners in Maxwell to purchase Flood Insurance because of the Project. If indeed this becomes mandated by FEMA because of the Project, what provision will be made to compensate the property owners for the cost of purchasing this insurance?

Sincerely, *Stephen E. Lyon*

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