

August 14, 2013

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Manager, Energy, Ocean Resources
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California Coastal Commission
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Re: Expert Review of the Caltrans Eureka - Arcata Route 101 Corridor Improvement Project

Dear Mr. Delaplaine,

Enclosed is a review of the Caltrans Eureka - Arcata Route 101 Corridor Improvement Project conducted by Michael Moule, PE and TE, and Magnus Barber of Nelson\Nygaard Consulting Associates, Inc. Mr. Moule has over 17 years of progressive traffic and transportation engineering experience. He specializes in improving conditions for non-motorized users without degrading motor vehicle capacity and balancing the needs of all users within the public right of way.

Key points of interest for the Coastal Commission's analysis are highlighted below.

- Increased capacity: Caltrans states that the interchange is not capacity increasing, but according to Moule and Barber, "an interchange absolutely increases the capacity for the minor streets." [p. 5] Caltrans' assertion that construction of an intersection does not increase capacity of a highway segment "could arguably be true for through movements, but absolutely not for turning movements. The capacity of the proposed interchange is undoubtedly higher than the capacity of the existing stop-controlled intersection. This is evidenced by the LOS F ratings shown for left turning movements in the traffic studies for the project." [p. 6]
- Increased speed: Caltrans' statement that "the geometric changes will not cause an increase in vehicle speeds is likely inaccurate... CVC and CA-MUTCD standards require speed limits to be set in response to higher measured speeds on the corridor, which is the likely result of reducing friction through the project's proposed improvements... This is evidenced by the LOS F

- ratings shown for left turning movements in the traffic studies for the project." [p. 6]
- **Signalized Boulevard Alternative:** "Many of the minor streets or driveways where signals are proposed have traffic volumes well below the thresholds typically necessary to meet the signal warrants in the California Manual on Uniform Traffic Control Devices (CA- MUTCD). It is highly unlikely that Caltrans would install a series of unwarranted signals...It is recommended that Caltrans consider a signalized boulevard concept with two to four signalized intersections." p. 9]
- **Number of Travel Lanes:** "As described in the traffic analysis section at the end of this document, our analysis indicates that two northbound lanes and two southbound lanes would be sufficient." [p. 10]
- Wetland Encroachment: "Based on our analysis, the existing traffic can be handled with two through lanes northbound, two through lanes southbound, one southbound left turn lane, one northbound right turn lane, two westbound approach lanes (one for right turns and one for left turns, and one eastbound departure lane. This is a total of 13 approach and departure lanes at the intersection, compared to the total of 23 approach and departure lanes shown in the drawing from Caltrans. This is a significant reduction in the highway's footprint." [p. 11]
- Other alternatives: In addition to a Signalized Boulevard with 2-4 signals, the consultants recommend that Caltrans fully evaluate other alternatives, including Continuous Green T intersections [p. 14] and roundabouts [p. 17]. A roundabout would provide the lowest overall delays, with an LOS A at Indianola Cutoff using peak P.M. traffic data. [p. 21]

We believe that this expert review supports our view that Caltrans inappropriately narrowed the range of feasible alternatives to meet project objectives. We support the experts' recommendation that Caltrans fully evaluate access, additional alternatives, and their impacts to bicycle/pedestrian access. Furthermore, Caltrans did not fully evaluate alternatives proposed by local municipalities and transportation advocates.

Humboldt Baykeeper hopes that this expert review will be useful in the Coastal Commission's analysis of the proposed project's Federal Consistency Determination.

Sincerely,	
/s/	/s/
Jessica Hall, Executive Director	Jen Kalt, Policy Director

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