

**We Advocate Thorough Environmental Review**  
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October 3, 2018

City of Weed  
Ron Stock, City Manager  
Planning Commissioners  
550 Main Street  
Weed, A 96094

Submitted via email:  
stock@ci.weed.ca.us

Dear Mr. Stock and Planning Commissioners:

We Advocate Thorough Environmental Review (W.A.T.E.R.) is a California 501(c)(3) non-profit corporation incorporated to promote quality local and regional planning, land use and development, as well as to preserve a healthy human and natural environment within the Siskiyou County area.

I submitted comments on the Draft Environmental Impact Report (DEIR) for The Love's Travel Stop Project prepared by Ascent Environmental, Inc., June 2018. I have accessed the Final EIR (FEIR) dated September 2018. Whereas some of my concerns about the DEIR were addressed in the FEIR, there are still deficiencies in the FEIR that must be fixed before approvals are granted. Here I will focus on protection of water quality.

**The FEIR fails to demonstrate that groundwater under the project and the surface waters that begin in the nearby wetlands will be protected from contamination due to the Proposed Project: There is a failure for full disclosure about the bioretention ponds.**

The project will have a substantial area of paved surface that will collect run-off from snow melt and rain, and will contain contaminants found on these surfaces (hydrocarbons, heavy metals, oils, etc). This run-off will be "treated" in bioretention ponds and allowed to percolate into the ground or overflow into a drainage ditch in a nearby wetland. The description of the bioretention ponds is still very scant:

"The paved and impervious surfaces of the travel stop would generate stormwater runoff or snowmelt that would carry with it the roadway and automotive contaminants found on the pavement surface. The project would include three bioretention basins which would collect surface runoff and snowmelt from the site (see Exhibit 2-3). Bioretention systems are designed to function in a similar manner as the physical, chemical, and biological processes in the natural environment. They capture runoff, promote infiltration and evapotranspiration, recharge groundwater, and remove up to 99 percent of the nutrients, sediment, and heavy metals carried in stormwater (Ahiablame et al. 2012)." ( page 3.10-11)

There is no mention of how accumulated toxins will be monitored and removed. Mitigation measures 3.10-3a and 3.10-3b describe studies that should be done and included in the FEIR to provide full disclosure in the FEIR to decision makers and the public. These mitigation measures do not (but must) require water quality monitoring of the groundwater under the retention ponds and of overflow released to the wetlands. Moreover, toxins can accumulate in the biomass in the retention ponds and must be removed and properly disposed of, however there is no mention of what would happen to the accumulated toxins. Because these bioretention ponds will be releasing potentially contaminated water both to groundwater and surface waters, it appears the North Coast Regional Water Quality Control Board must be permitting and overseeing monitoring programs for the bioretention ponds, yet they are not listed as one of the potential permitting agencies.

Bioretention ponds sound like a good idea, but perfect functioning is challenging to attain. The FEIR states that "up to 99 percent of the nutrients, sediments, and heavy metals carried in stormwater" can be removed by bioretention ponds and gives a reference, Ahiablame et al, 2012. The qualifier, "up to," 99% means the effectiveness can be much less. In fact, the Ahiablame et al paper states, "A large number of studies have credited bioretention as a best management practice capable of reducing 0 % to 99 % of sediment and nutrient losses." In other words, some of the reviewed studies showed bioretention can be **totally ineffective**. The Ahiablame paper goes on to say, "Average metal reduction in bioretention varies between 30 % and 99 %;" thus these bioretention systems can be very ineffective in removing toxic metals.

The bioretention ponds would need to be most active in the wet winter season, when run-off is an issue. However, biological activity is much slower in the colder months. What type of vegetation will be used in the pond to sequester pollutants in the winter? Will these organisms survive the hot dry summers? Climate can have a significant impact on bioretention and this must be considered in the designs.

Thus it is essential that the FEIR contain the details about the design of the bioretention ponds with substantial evidence that they will work and with thorough monitoring and maintenance protocols in place to protect the ground and surface waters from contamination.

My comments on the DEIR also pointed out that many drivers, including truck drivers, travel with pets. Yet the FEIR does not include a pet area and a mechanism for safe removal of pet feces. Without a designated area for pets and a mechanism for pet feces removal, contamination could end up in the wetlands and pose a threat to wildlife. Or it could end up in the groundwater and pose a threat to human health. At the very least, motorists walking their pets around the surrounding properties could represent a public nuisance. A pet area with poop bags and trash cans would be simple to add to the project design.

To summarize, the activities described in Mitigation Measures 3.10-3a and b should be completed and included in the FEIR before any approvals are given; the North Coast Regional Water Quality Control Board must be involved in permitting and monitoring of the bioretention ponds, and a pet area must be required.

We offer these comments with a genuine interest in the development of a healthy local community, economy, and environment.

Respectfully Submitted,

Geneva M. Omann, Ph.D. (Biochemistry)  
Board of Directors, We Advocate Thorough Environmental Review