



*Department of Transportation (MCDOT)*

**Director's Report – January 24, 2012**

- **California Department of Resources Recycling and Recovery (CalRecycle) Appropriates Funding for three Mendocino County Landslide Retrofit Projects on Mountain House Road, CR 111, MP 7.47, 4.75, and 4.53:** The Department of Resources Recycling and Recovery (CalRecycle) - formerly California Integrated Waste Management Board/CIWMB - approved MCDOT's recent grant request in the amount of \$347,969 for use of Tire-Derived Aggregate (TDA) to address chronic slipouts on a road linking Hopland and Yorkville. Mendocino County was on the cutting edge for TDA technology in California when MCDOT entered into an MOU with CIWMB in 2007 to repair Marina Drive, M.P. 0.63 as a "model project" to publicize the application of TDA as lightweight embankment fill for a road repair project. Our 2007 Marina Drive storm damage repair project was (reportedly) the first such application in the State of California, although TDA has been used elsewhere in the nation for road embankment repairs. Now we are hopeful to use the same technology on Mountain House Road, CR 111, at M.P. 7.47, 4.75 and 4.53 to repair other chronic slipouts.

Marina Drive, CR 226, MP 0.63 was damaged during the 2006 winter storms. This project involved the design and construction of storm damage repair to the County Maintained Road fill prism. In this case surface water flowed across the road saturating the already wet fill bank (wet from subsurface water which saturated the soil) and a slip occurred. The CIWMB consultant proposed the possible use of tire derived aggregate (TDA) as a lightweight fill solution repair options to MCDOT. In short, MCDOT looked at range of repair options including simply refilling the slide; such a repair is only destined to fail in future extreme wet weather events. Thus, we are willing to try this experimental repair option based on the geology and reasonable economics. The project permanently shored up a 160-foot long section of roadway with hundreds of thousands of spongy, waste tire shreds. But by the time contractors finish the work CIWMB's \$740,000 (less than \$50,000 in local MCDOT match funds) tire derived aggregate (TDA) project will have compacted the equivalent of 165,000 passenger tires—representing about 2.5 years of Mendocino County's waste tire flow diverted from landfill—into a carefully engineered design more than 30 feet deep to bolster the slope and repair the landslide-prone section once and for all.

California presently recycles 75 percent of the 41 million waste tires it generates annually. TDA projects, and other uses, represent a way to reduce the remaining 10 million scrap tires not currently diverted from disposal. The California Integrated Waste Management Board is the state's leading authority on recycling and waste reduction. It promotes reducing waste whenever possible, managing all materials to their highest and best use and protecting public health and safety and the environment.

*The California Integrated Waste Management Board member Wes Chesbro visited the Marina Drive Project in 2007. (Picture after project completion – during construction)*

