

## **Ft. Bragg Municipal Improvement District No. 1 Wastewater Treatment Facility Study** *Fort Bragg, California*

In 2007 Nute Engineering completed a comprehensive evaluation of the existing wastewater treatment and pumping facilities in the City of Fort Bragg. The objective of the study was to evaluate existing and aging treatment processes and equipment in terms of current discharge standards as well as anticipated future waste discharge requirements. The Ft. Bragg treatment plant is a trickling filter plant with an ocean discharge. The issues addressed included compliance with secondary treatment requirements including 85% removal, disinfection, minimization of wet well flow blending as well as reliability and redundancy and storm water containment.



This study analyzed each treatment process and developed alternatives for their upgrade and improvement. These process alternatives were combined into six overall plant improvement alternatives. One alternative involved constructing a totally new treatment plant out of town away from the ocean bluff, which was being considered for development. Capital, operation and maintenance costs were developed for the process alternatives. Relocation of the treatment plant turned out to be the most expensive alternative. The most cost effective alternative involved upgrading the existing treatment plant and adding sand filters and UV disinfection after the trickling filters, very similar to the MVSD plant.

Included in this study were analyses of the existing biologic treatment system, disinfection system, plant control system, electrical equipment, and sludge dewatering and solids disposal. Detailed evaluations of the various process alternatives were made as an input to the evaluation of the overall project alternatives.

Client: *Ft. Bragg Municipal Improvement District No. 1*

Contact: *Dave Goble, Director of Public Works, City of Fort. Bragg, 707-961-1592*