



**CALIFORNIA STATE SCIENCE FAIR
2004 PROJECT SUMMARY**

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| Name(s) Christopher Alford; Krisette Mosqueda; Jose Tapia | Project Number J0901 |
| Project Title Marsh Contamination | |
| Abstract Objectives/Goals Our project was to determine if the amount of contaminants in Madrona Marsh soil increased as we sampled away from Madrona Avenue. Using soil samples; we tested to see if the contaminants altered the amount of nitrogen, potassium and phosphorous levels. Methods/Materials Twenty soil samples were collected along four transects for a total of ten dry samples and ten wet samples. Each sample was color metrically tested for pH, nitrogen, potassium and phosphorous levels. Results After conducting the laboratory experiments on our soil samples, we noted that the data reflected insufficient levels of nutrients to be explained by pollution coming off of Madrona Avenue. Conclusions/Discussion We still have not disproved the possibility of contaminants existing in the soil. Broad-spectrum chemical testing would be necessary to do this; even though no significant nutrient levels were found. | |
| Summary Statement We expected, but our hypothesis was proven incorrect, that because a very busy street is adjacent to a sensitive vernal marsh habitat, road contamination would have a detectable effect on soil nutrients. | |
| Help Received Mr. Robert Carr; Madrona Marsh Biologist; helped with soil sampling. Ms. Tracy Drake; Madrona Marsh Manager; Naturalist; assisted with research design an methods and editing. | |