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A WEB-BASED APPROACH TO COMPLIANCE REPORTING FOR CALTRANS

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Abstract

Meeting compliance reporting requirements may be relatively easy for a smaller construction project, but as the projects gets larger and longer to complete the requirements get more extensive and complicated. Following traditional techniques such as mailing hard copies of reports can become labor intensive and expensive. The following describes a web-based approach that has been successfully used for over four years by the California Department of Transportation (Caltrans) during construction of the San Francisco–Oakland Bay Bridge (SFOBB) East Span Seismic Safety Project.

The purpose of the East Span Project is to provide a seismically upgraded crossing for current and future users between Yerba Buena Island and Oakland. The construction period is approximately twelve years for construction of the new East Span and two years to remove the existing structure. Construction activities take place on land as well as in San Francisco Bay and include activities such as dredging, excavation, pile driving, construction of temporary and permanent structures, and removal of the existing bridge.

Caltrans has incorporated numerous measures to avoid, minimize and compensate for potential environmental impacts. Caltrans is performing construction monitoring for biological resources which may be affected by construction of the bridge, including birds, fish, marine mammals, eelgrass, and water quality. Additionally, Caltrans is working with multiple resource agencies to develop on-site and off-site mitigation opportunities for creation and restoration of habitat. The off-site mitigation projects are among the largest Caltrans has ever funded and are the result of many agencies and environmental interest groups working together to improve the ecosystem of the Bay.

Construction of the East Span Project began in 2002. After the biological mitigation and monitoring program had been underway for several months, Caltrans began to contemplate ways to disseminate reports and information to the permitting agencies and the public in a timelier and easier manner. While the primary objective was to meet permit compliance requirements in a cost-effective manner, it was also important to provide easy public access to the information.

In order to develop such a tool, a better understanding of the users and the functional requirements of the tool was necessary. Interviews with stakeholders were conducted to evaluate the data collection process and existing reporting mechanisms as well as to determine what functions the stakeholders would like the tool to have.

It was determined that the best approach would be to have a user-friendly website that provided information in general terms for members of the public who simply had an interest in the project as well as more specifics about the biological mitigation and monitoring program (e.g., monitoring protocols, workplans, and technical reports) for those who were interested. Distribution lists of interested parties were created for the various topics. When a report or plan related to that topic is posted to the website, the members of the distribution list are emailed along with a direct link to the report.

A website prototype was developed and an implementation planning session was conducted in which selected Caltrans and consultant staff used the prototype and provided feedback on the various components. The website was then presented to regulatory agencies staff during an interagency coordination meeting. Feedback from the permitting agencies was very favorable. Many of the staff mentioned that the website is easy to use. They also liked the fact that all documents are readily available. When needing to check on a piece of information, they don't have to search their office for a hard copy of a report, permit, or protocol.

Members of the public were first introduced to the site as a link from the overall Caltrans Bay Bridge website and a website developed by an organization representing construction workers. Use of the website started out slowly and averaged about 170 visitors per week during the first year of operation. As the website became more known, the number of visitors increased. During 2006, the website averaged about 450 visitors a week. Visitors are located in numerous countries and downloads of the permits, protocols, and weekly bird and marine mammal memos are very popular.

After four years of operation, Caltrans has determined that use of the website has been very successful. While the use of websites has been limited on other mitigation and monitoring projects, Caltrans has found this tool to be simple, user-friendly, and cost-effective. It also demonstrates Caltrans' commitment to the environment. Proponents of other projects may want to consider using a website for compliance reporting or other environmental documents, particularly as the issue of sustainability and going "paperless" becomes more prevalent.

Biographical Sketch: Ivy Edmonds-Hess is a Lead Environmental Planner and Professional Associate with PB. She has over 18 years of experience in environmental consulting and project management for a wide variety of projects. In her current position, she has been assisting the California Department of Transportation with environmental and permitting issues with the East Span Project for over nine years.