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MANAGING ENVIRONMENTAL COMPLIANCE FOR ODOT's OTIA III STATE BRIDGE DELIVERY PROGRAM: MANY REGULATIONS—ONE FRAMEWORK

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Abstract

The OTIA III State Bridge Delivery Program is part of the Oregon Department of Transportation's 10-year, $3 billion Oregon Transportation Investment Act (OTIA) program. In 2003, the Oregon Legislature enacted the third Oregon Transportation Investment Act, or OTIA III. The package includes $1.3 billion for bridges on the state highway system. During the next eight to 10 years, ODOT's OTIA III State Bridge Delivery Program will repair or replace hundreds of aging bridges on major corridors throughout Oregon.

Oregon Bridge Delivery Partners (OBDP) is a private-sector firm that has contracted with the Oregon Department of Transportation to manage the $1.3 billion state bridge program. OBDP, a joint venture formed by HDR Engineering Inc. and Fluor Enterprises Inc., will ensure quality projects at least cost and manage engineering, environmental, financial, safety, and other aspects of the state bridge program.

During the first 12 months of execution, OBDP has developed a framework to integrate the myriad of tools previously developed by ODOT for the Program, including environmental-performance standards, a joint batched-programmatic biological opinion, environmental and engineering baseline reports, a comprehensive mitigation and conservation strategy, and a web-based GIS. The purpose of this framework is to identify environmental concerns early in the project-development process and communicate these concerns to design teams and regulatory agencies to promote environmental stewardship through impact avoidance and minimization.

Innovative and creative use of technology has been a keystone to the framework. Environmental professionals input the relevant environmental data for a project in a comprehensive, online Pre-Construction Assessment (PCA) that links to a GIS database. The data are used to identify project challenges (e.g., archaeological sites or wetlands within the project footprint) and compile electronic reports to the regulatory agencies. Environmental metrics (such as exempted T and E species "take" and wetland mitigation debits/credits) are tracked using the GIS database. One system meets the needs of multiple stakeholders.

Three "levels" of the PCA have been developed that coincide with the stages of project development. The initial submittal (Level 1 PCA) identifies critical environmental concerns and permitting constraints. The second submittal (Level 2 PCA) outlines the solutions to the earlier concerns. The final submittal (Level 3 PCA) includes the project specifications necessary to comply with the Program-specific and standard environmental permits. Phasing the submittals in this way allows early and continuous communication between the design teams and the regulatory agencies, thereby promoting environmental stewardship through collaboration and coordination.

This electronic system allows the OBDP Environmental Team to verify that each environmental regulation is addressed, identify environmentally sensitive projects and project elements, track critical environmental metrics, and communicate with the regulatory community. The technological component of this framework has been a cornerstone of the Environmental Management System (EMS) developed for the Program. This system can be easily applied to other programs within ODOT and other DOTs.