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BATS AND BRIDGES: PROMOTING SPECIES CONSERVATION THROUGH EARLY MULTI-AGENCY PLANNING

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Abstract

The purpose of this process is to promote species conservation and environmental enhancements for the OTIA III State Bridge Delivery Program. Bat habitat enhancements applied in the field throughout the state will be presented as an example of these efforts.

The OTIA III State Bridge Delivery Program is part of the Oregon Department of Transportation's 10-year, \$3 billion Oregon Transportation Investment Act program. OTIA funds will repair or replace hundreds of bridges, pave and maintain city and county roads, improve and expand interchanges, add new capacity to Oregon's highway system, and remove freight bottlenecks statewide. About 17 family-wage jobs are sustained for every \$1 million spent on transportation construction in Oregon. Each year during the OTIA program, construction projects will sustain about 5,000 family-wage jobs.

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.

OBDP has developed a framework to integrate the myriad of tools developed for the Program, including environmental performance standards, a joint batched-programmatic biological opinion, environmental and engineering baseline reports, 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, on-line Pre-Construction Assessment (PCA). 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&E species take and wetland fill quantities, are tracked using the GIS database. One framework meets the needs of many stakeholders.

Now with over two and a half years of execution, we have some great successes and lessons learned to share. The focus of this presentation will be on our species conservation and environmental enhancement identification process with bat habitat presented as a case study. Through early planning and coordination with our regulatory and resource agency partners, OBDP has integrated enhancement opportunities into project design. This enhancement request process has been developed to work with both of the dominant project delivery methods: design-bid-build and design-build.

Through this process, regulatory and resource agency liaisons are sent a pre-field information packet so they can solicit input from their agency cohorts. A group field visit is then facilitated by an OBDP environmental coordinator. All comments collected from the field and the inquiries are uploaded into a tracking database. The enhancement requests are screened and classified for future actions, such as accept without change to scope, schedule, or budget or request additional scope, schedule, or budget. Those requests that are approved are integrated into the project contract, whereas those that are denied are passed on to alternative groups, such as the ODOT region, maintenance district, or headquarters for future potential action.

To date, all requests have been collected, entered into the database, and classified. This presentation will focus on the bat habitat elements integrated into the bridge design. More than a half-dozen bridges have had various bat habitat elements incorporated into their designs. None of the 15 bats in Oregon are listed as threatened or endangered these efforts are strictly enhancements with the hope of avoiding the need for future listing. Many bats, including the Townsends big-eared bat (*Corynorhinus townsendii*; endangered in Washington, sensitive in Oregon), have been known to use ODOT bridges for both day and night roosts as well as maternal colonies. We will present the process we have developed, the environmental performance standard that directs the designers, and the final product integrated into actual bridges.