

## Best Practices on Major Projects Example from Woodrow Wilson Bridge Project

### 1. *Issue or Need Identified/Addressed.* Environmental Management Group

Large construction projects reputedly give short shrift to environmental sensitivity. The \$2.4 billion Woodrow Wilson Bridge Project is making this perception a thing of the past, while staying on schedule and on budget. From the planning of this 12-lane Interstate 95 drawbridge with four adjacent major interchanges, through design and during its first six years of construction, an ongoing key to the continuing success has been its environmental management group.

### 2. *Strategy or Best Practice developed/implemented to address the issue or need*

Throughout the planning phase, both the public and regulators warned of substantial environmental degradation stemming from construction. After all, the massive project would be built in the Potomac River, its tributaries and fragile wetlands along its corridor. To address these legitimate concerns, the Project's public sponsors (Federal Highway Administration, Virginia Department of Transportation, Maryland State Highway Administration, and District of Columbia Department of Transportation) called on the general engineering consultant to assemble an Environmental Management Group (EMG).

The EMG includes three integrated teams:

- a. A Leadership Team, responsible for agency coordination, environmental design, and permitting, and achieving success of the \$65M compensatory mitigation package.
- b. A Mitigation Team, which manages the environmental enhancement contractors responsible for building wetlands, planting trees and underwater grasses and restoring streambeds.
- c. An Environmental Inspection Team to address environment-related issues arising from construction of the drawbridge and interchanges.

### 3. *Results*

The EMG has provided continuity, initiative and flexibility. We know of no other mega-project environmental effort integrated to this degree. The cross-pollination among team members has produced a wide range of individual innovations.

The EMG swiftly and creatively overcame many challenges, some of which threatened the entire Project's viability. The EMG:

- Obtained all permits in about 12 months, as needed to maintain the critical-path schedule, by consolidating efforts and reducing redundancies.
- Quickly located and developed a disposal site to accept dredged material from the Potomac River bottom. Without this, the Project could not have started.
- Developed and deployed an innovative air bubble curtain system. The air bubble system eliminated fish kills during river pile driving.
- Took advance remedial actions to undercut several threatened environmental lawsuits.

The EMG is minimizing environmental impacts while keeping a critically important project on track. The flexible EMG model holds major promise for achieving positive environmental outcomes on virtually any infrastructure project – from the largest mega-project to projects of much smaller scale.

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