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Wildlife Impacts Mammals

BRIDGES AND WILDLIFE: ISSUES AND SOLUTIONS

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Problem Statement

The Washington State Department of Transportation (WSDOT) owns over 3,000 steel and concrete bridges, many of which are occupied by wildlife. Species documented occupying bridges range from birds of prey, such as ospreys, peregrines and owls, to mammals such as raccoons, bats and bushy tailed wood rats. While the bridges are playing an important role in providing habitat for wildlife, their presence can also lead to costly project delays.

Project Objective

The project objective is to develop a comprehensive approach to managing wildlife issues on bridges that will allow WSDOT to manage the bridges for wildlife where appropriate, and to address the regulatory issues that must be addressed for projects to proceed smoothly

Methods

WSDOT has developed a comprehensive approach to addressing wildlife and bridge issues. The approach includes: (1) education of bridge inspectors and maintenance workers on the species frequently seen on bridges, and the regulations that protect them; (2) maintenance of a database, which documents, by species, which bridges are inhabited by wildlife; (3) the development of guidelines for projects on how to avoid or minimize impacts to birds nesting on bridges; (4) coordination with regulatory agencies [e.g., the US Fish and Wildlife Service (USFWS) and the Washington Department of Fish and Wildlife (WDFW)] to obtain statewide permits for when eggs or young need to be removed due to a project.

Results

The first step was to educate the bridge inspectors and maintenance folks about the species residing on the bridges, their identifying characteristics, life histories, and the applicable laws and regulations that applied to each species. In addition to the talks, species fact sheets were developed along with a *Species on Bridges* brochure. The species fact sheets were designed to fit into the bridge inspectors' notebooks, and each sheet includes information on a species, its identifying characteristics, its life history, and the laws that protect it.

WSDOT also added several fields to its existing bridge inspection report and bridge database, allowing inspectors to record information about the wildlife species observed on the bridge. This information is used by the bridge inspection office to schedule bridge inspections outside the nesting season for sensitive species like peregrines and ospreys, and to provide warnings to the inspectors about what they may encounter on the bridge, such as irate great horned owls. The regional project offices also use this information when planning and permitting projects involving the bridge as painting projects.

Guidelines were developed which explained the applicable regulations (Migratory Bird Treaty Act, and state regulations) that must be met in regards to birds and other protected species. The Guidelines focus on methods that can be used to avoid impacts to nesting birds through the use of timing windows, exclusion methods, work avoidance zones, etc. Also included is a discussion of when and how to arrange for the removal of eggs or chicks for rearing at approved facilities if avoidance is not possible.

Since removal of eggs or young requires both federal and state permits, WSDOT is in the process of negotiating permits with the regulatory agencies that would allow for the removal of young or eggs when necessary. These permits will address how the removal will occur and the disposition of the eggs or young.

Application

Currently, WSDOT is using all of the tools that have been developed to help manage wildlife species residing on the bridges. Bridge inspectors and bridge maintenance personnel have been very enthusiastic about

the training and about reporting wildlife that they encounter on the bridges. Project personnel are using the database tracking system to identify any Migratory Bird Treaty Act issues that may arise during a project.

Implications

WSDOT biologists would like to develop additional opportunities for wildlife species on bridges through the use of wildlife structures. However, WSDOT is also concerned about maintaining the ability to inspect and repair the bridges as needed without violating any laws relating to wildlife. While the various tools that have been developed to date have helped address a number of these concerns, additional in-house coordination will be necessary to develop a working solution that will where appropriate, encourage wildlife on bridges, while maintaining maximum flexibility for inspection and repair work.