Airport Stormwater Guidance Manual
Briefing Paper

Why Care About Wildlife Attractants Near Airports?

Stormwater and other hazardous wildlife attractants near airports pose a significant safety risk to airport operations in our state and around the nation.

- Aircraft wildlife strikes are one of the leading causes of aviation incidents and accidents.
- About 75% of all civil aviation air strikes occur near airports.
- Waterfowl, gulls and raptors represent 77% of reported bird strikes causing damage to aircraft in the U.S. between 1990-2002.

Legislature Directs WSDOT to Take Action

In 2004 Senators Haugen, Mulliken, Horn, Morton, Plug and Kastama drafted Senate Bill 6173. The bill required stormwater and wetland mitigation for the state’s public use airports to promote safety. Later amended as Substitute Senate Bill 6173 the bill moved from the House to the Senate but was unable to move out of the House Resource and Agriculture Lands Committee. As a result Senator Haugen directed WSDOT to gather interested parties to explore solutions to stormwater and other wildlife attractants near airports.

WSDOT formed the Hazardous Wildlife Attractants Task Force in 2004. The Task Force is a 28 member committee. The committee is represented by legislative staff, airport sponsors, environmental and community interests, public ports, WA Department of Fish & Wildlife, WA Department of Ecology, WA Department of Transportation, US Department of Agriculture, US Fish & Wildlife Service, and Federal Aviation Administration.

In April 2004, the task force recommended the following actions:

⇒ WSDOT Aviation taking the lead on a draft memorandum of understanding with the FAA and other agencies to work together on aviation-related stormwater issues.
⇒ Developing an agency technical review committee to address short and long-term solutions that meet both state and federal regulations and best management practices.
⇒ Pursuing funding options to develop an aviation stormwater manual, technical committee and research on best management practices.

Stormwater Guidance for Airports

WSDOT Aviation is in the process of developing an Airport Stormwater Guidance Manual. The manual is intended to provide guidance on dealing with hazardous wildlife attractants associated with stormwater facilities. The final product will be an addendum to the WSDOT Highway Run-off Manual, modifying the existing stormwater guidance as necessary to address hazardous wildlife attractants that are inconsistent with safe airport operations.
Key Milestones

- In early 2006, WSDOT received a grant from the Federal Aviation Administration to develop an aviation stormwater manual that would address hazardous wildlife attractants associated with stormwater facilities near airports. The project began in August of 2006. The project included the original 28 member Hazardous Wildlife Attractant Task Force formed in 2004.

- In December of 2006, the Task Force met to discuss stormwater best management practices and ways to reduce potential hazardous wildlife surrounding public use airports. The primary focus of the meeting was the review of the Stormwater/Hazardous Wildlife Technical Memo prepared by Herrera Environmental Consultants, Inc. and Parametrix, Inc. The technical memo included information and research on current state and federal regulations, FAA stormwater guidance, wildlife attractants at airports, and stormwater design considerations.

- February through August 2007, the consultant team coordinated with WSDOT Environmental Services Office and the Task Force technical subcommittee on proposed draft stormwater BMP design guidance.

- Several stakeholder briefings were held with stakeholders on the progress of the project between April and September of 2007.

- In September many of the proposed BMP’s were sent to the Task Force for discussion during the September 26, 2007 Task Force meeting. The Task Force also reviewed the proposed public review schedule.

- In November of 2007, the WSDOT Environmental Services Office completed their review for consistency with the Washington State Department of Transportation (WSDOT) Highway Runoff Manual (HRM) (WSDOT 2006a).

- On December 10, 2007 a referral memo and the proposed draft was sent to Resource Agencies for review and comment. The proposed draft was also sent to the Task Force and technical subcommittee for their review and consideration. WSDOT is requesting a 45-day comment period, with comments due by January 25, 2008.

- February – March 2008: Review comments and propose recommended actions to the preliminary draft guidelines to address issues raised by the resource agencies, Task Force members and the technical subcommittee.

- April 2008: Work with resource agencies and WSDOT Environmental Services on recommended changes to the guidance document for submittal to the Task Force for their consideration. Develop draft public out reach strategy for Task Force Review.


- August 12, 2008: Public Notice request for written comments from resource agencies, airports, local jurisdictions and the public. Comment period ends September 12, 2008

- August 14, 2008: Public meeting to introduce the Airport Stormwater project and take public comments

Next Steps

September 2008: Revise draft document as necessary to address comments received.

September – October 2008: Proposed Final Adoption, subject to WSDOT and DOE approval.
Project objectives and key issues for the project are as follows:

**Project Objectives:**

- Reduce wildlife conflicts near airports to increase safety for people in the air and on the ground.
- Meet all applicable Department of Ecology and federal policy and regulatory requirements.
- Satisfy both water quality and safety requirements through Best Management Practices (BMPs).
- Consider general airport operations, environmental and community concerns.
- Provide predictability for airports, local jurisdictions and state and federal agencies in developing stormwater facilities to address wildlife conflicts.
- Integrate BMPs that address hazardous wildlife attractants with the WSDOT Highway Runoff Manual.
- Obtain approval from the Department of Ecology and WSDOT on the final guidance manual.

**Key Issues**

- Minimizing hazardous wildlife attractants near airports is a top priority of the FAA and WSDOT.
- Current Federal Aviation Administration guidance provides general information on avoiding hazardous wildlife attractants, but does not provide detailed information on how to design stormwater facilities to address attractants.
- Current Department of Ecology and WSDOT stormwater guidance does not address wildlife conflicts associated with airport operations and, in fact, often encourages features that attract wildlife.
- The approved guidance manual will assist airports, local jurisdictions and state and federal agencies in developing stormwater facilities that comply with current regulations, detour wildlife conflicts and increase safety to people in the air and on the ground.