# Guidelines of Stormwater Management Facilities within 10,000' of Appleton International Airport (ATW) to Deter Wildlife Hazardous to Aviation[a]

The following guidelines are developed to reduce the risk of wildlife hazardous to avaition (*i.e.,* large and/or flocking bird species reportedly struck by aircraft) striking aircraft using ATW.

Design Guidance for Stormwater Detention Basins which Drain within 48-hours of a Rain Event

- All stormwater detention ponds be designed to drain within 48-hours of a rain event or constructed below ground and not accessible by birds. Monitoring for bird use will not be necessary if there is no standing water available for use by waterfowl and other birds hazardous to aviation.

- If the upland area around the ponds are vegetated, vegetation should be either native prairie plantings or endophyte-infected tall fescue. Mowing should be done no more than twice during the growing season and then only to control invasive and unwanted species.

Design Guidance for Stormwater Basins which Hold Water for more than 48-hours after a Rain Event

- It will be necessary to monitor stormwater management ponds which will hold water more than 48 hours after a rain event for bird use once pond construction is completed until one-year post construction (of the entire land-use project, not only the pond) by a Qualified Airport Wildlife Biologist, as defined by the FAA in Advisory Circular 150/5200-36A. Monitoring would begin immediately upon completion of the pond(s) construction and continue through construction of the entire land-use project and one year post-construction of the entire land-use project. Monitoring would consist of two morning and two evening observations per month during construction and post construction periods. A final report, of the observations, will be provided, including recommendations to alleviate any wildlife hazardous to aviation that may be present. USDA-Wildlife Services[b] (WS) will review the recommendations from the report and either concur and/or provide additional recommendations.

- If the upland area around the ponds are vegetated, vegetation should be either native prairie plantings or endophyte-infected tall fescue. Mowing should be done no more than twice during the growing season and then only to control invasive and unwanted species.

- Should hazardous birds be observed at the moderate or severe level[c] during any monitoring period, WS will be consulted and will provide recommendations to alleviate the hazard. These recommendations will integrate the best knowledge and science available to reduce the wildlife hazard threat while considering costs to incorporate the recommendations.

- After the one-year post-construction monitoring, additional monitoring may be necessary and will be determined based on findings from the final report.

- If the wildlife hazard threat to aircraft is determined to be severe at any time after the pond(s) construction, recommendations by WS will need to be implemented immediately (within 24

hours). These implemented methods and any recommended from the initial or annual monitoring reports would need to be implemented and kept operational, in perpetuity, to ensure wildlife hazardous to aviation are not using this site.

- In addition to monitoring, an FAA Qualified Airport Wildlife Biologist will conduct weekly waterfowl nest surveys each spring (April 15 – May 30). If a waterfowl nest is located, the property owner/manager will apply for the necessary State and/or Federal Permits within two days of notification that a nest has been located on the property. Nest/eggs will be removed within two days of permit issuance. If a permit is already in place for the property and species, nest and eggs will be removed within two days of discovery. Any permit fees will be paid for by the property owner/manager.

- An annual, January through December, monitoring report will be provided to the Outagamie County Zoning Department at the end of each calendar year.

If needed, the Outagamie County Zoning Department can provide a list of individuals who meet the FAA Qualified Airport Wildlife Biologist guidelines.

[a] A Qualified Airport Wildlife Biologist is trained to identify which wildlife species are hazardous to aviation. However, the FAA defines hazardous birds in AC 150/5200-33B: "Species of wildlife (birds, mammals, reptiles), including feral animals and domesticated animals not under control, that are associated with aircraft strike problems, are capable of causing structural damage to airport facilities, or act as attractants to other wildlife that pose a strike hazard."

[b] In a Memorandum of Understanding with the FAA, WS is acknowledged to have the expertise to provide technical and operational assistance needed to reduce wildlife hazards to aviation on and near airports.

[c] **Wildlife Hazard Level Based On Presence of Large and/or Flocking Bird Species:**

**Low** – no or infrequent use by wildlife hazardous to aviation.

**Moderate** – wildlife hazardous to aviation use is regular, but presence is limited to a few birds. A moderate number (<50, during a single observation) of wildlife which typically are not hazardous to aviation.

**Severe** – frequent use by wildlife hazardous to aviation, even in low numbers. A large number (>10) of wildlife hazardous to aviation, during any single observation. A large number (>50) of wildlife which typically are not hazardous to aviation, during any single observation.