



## Airport Responsibility for Wildlife Management

### DETAILS

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## AIRPORT RESPONSIBILITY FOR WILDLIFE MANAGEMENT

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### I. BACKGROUND

Wildlife strikes with aircraft pose a significant threat to public safety and airport operations. The Federal Aviation Administration (FAA) recently identified the threat associated with wildlife strikes as “probably the most pressing issue we face in the airports world.”<sup>1</sup> Public awareness and concern about aviation safety have increased in recent years with widely publicized wildlife strike incidents such as the January 2009 “Miracle on the Hudson”—the emergency landing of a US Airways flight in the Hudson River resulting from multiple bird strikes to the aircraft engines shortly after takeoff. Examples of other aircraft wildlife strike incidents in recent years include:

- Two emergency aircraft landings at New York airports within a 1-week period, occurring when 1) Canada geese struck the windshield of a JetBlue Airways Embraer 190 departing from Westchester County Airport, and 2) after a bird strike to the right engine of a Delta Air Lines Boeing (B) 757 departing from John F. Kennedy International Airport (April 2012).

- A bird strike of Air Force Two, the B-757 aircraft carrying Vice President Joe Biden, while the aircraft was on approach to Santa Barbara Airport in California (April 2012).

- An engine shutdown during landing of a B-757 at Denver International Airport caused by ingestion of a red-tailed hawk, resulting in internal and external aircraft damage and an estimated repair cost of \$4.5 million (September 2011).

- A precautionary landing of a B-737-400 at Fort Lauderdale–Hollywood International Airport occurring after a turkey vulture strike that resulted in damage to the engine and generator (December 2010).

- An emergency landing of a B-737-800 at Washington Dulles International Airport after the aircraft struck birds flying in a “V” formation over the Potomac River, an incident resulting in \$794,000 in estimated engine damage (February 2011).

- A precautionary landing of an Airbus 300 at Tulsa International Airport occurring after the aircraft hit a flock of large birds, resulting in damage to the engine

and right wing and an estimated cost of \$5.8 million (March 2011).

- Ingestion of multiple birds into the left engine of a United Airlines B-757 after landing at Denver International Airport, which damaged the engines blades and resulted in impact marks to the fuselage (September 2011).

- Eight bird strikes to aircraft in 1 month at Burlington Airport in Vermont, including one gull strike and seven strikes related to small birds (e.g., sparrows and wood thrushes) (October 2011).

- Damage to a Cessna 550 at Warroad International Memorial Airport in Minnesota when the aircraft struck a white-tailed deer on the runway during landing (December 2011).<sup>2</sup>

The FAA Wildlife Strike Database, established through an interagency agreement between the FAA and the United States Department of Agriculture (USDA), includes 109,085 wildlife strike reports from January 1990 through December 2010, with 9,597 of those strikes in 2010.<sup>3</sup> This database, which is estimated to include reports of only 39 percent of actual strike incidents, includes an additional 23,773 reports for the period January 2011–February 2012.<sup>4</sup> Since 1988, aircraft wildlife strikes have resulted in the loss of at least 219 lives and more than 200 civil and military aircraft.<sup>5</sup> The annual direct (e.g., aircraft damage) and indirect (e.g., time out of service) expenses to civil aviation worldwide are estimated at more than \$1.2 billion annually.<sup>6</sup> The USDA reports the annual cost of reported U.S. wildlife strikes from 1990 to 2008 reached a maximum of \$603.7 million in direct and indirect losses.<sup>7</sup> According to a 2011 FAA report:

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<sup>2</sup> Sandra Wright (Manager, FAA Wildlife Strike Database), Some Significant Wildlife Strikes to Civil Aircraft in the United States, January 1990–December 2011, United States Department of Agriculture Animal and Plant Health Inspection Service (Jan. 11, 2012), available for download at <http://digitalcommons.unl.edu/birdstrikeoother/23/>. The database includes strikes of U.S. civil aircraft and foreign carrier aircraft operating in the United States.

<sup>3</sup> *Id.*

<sup>4</sup> Search the FAA Wildlife Strike Database at <http://wildlife-mitigation.tc.faa.gov/wildlife/database.aspx>.

<sup>5</sup> Wildlife Damage Management, United States Department of Agriculture Animal and Plant Health Inspection Service, [http://www.aphis.usda.gov/wildlife\\_damage/nwrc/research/aviation/index.shtml](http://www.aphis.usda.gov/wildlife_damage/nwrc/research/aviation/index.shtml).

<sup>6</sup> *Id.*

<sup>7</sup> *Id.*

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<sup>1</sup> James Williams, Splat—The Story of Snarge: “Accidental” Meetings between Aircraft and Wildlife, FAA Safety Briefing (Nov.–Dec. 2011), available on the FAA Web site at [http://www.faa.gov/news/safety\\_briefing/2011/media/NovDec2011Splat.pdf](http://www.faa.gov/news/safety_briefing/2011/media/NovDec2011Splat.pdf).

Experts put the total losses for wildlife strikes at \$625 million per year in direct damage and associated costs, and over 600,000 hours of aircraft downtime. In an industry that runs on razor thin margins at virtually every level, those losses could be crippling. Financial losses pale in comparison with the loss of life that occurs in some wildlife strikes.<sup>8</sup>

Although much of the wildlife hazard threat involves aircraft colliding with birds during operations (e.g., takeoff, flight, and landing), other species create aircraft wildlife hazards. The FAA's 2007 ranking of 25 species relative to aircraft hazard (damage and effect on airport operations) includes numerous bird species but also includes species such as deer and coyote (see Table 1).<sup>9</sup> Other nonavian species that may create hazards to aircraft include elk, alligators, and foxes.<sup>10</sup> According to the USDA, the threat associated with these species has been exacerbated by their increasing populations and by adaptation "to living in urban environments, including airports."<sup>11</sup>

Expanding flight operations, increasing wildlife populations, airport operational and management practices, and land uses on and near the airport property are all factors in assessing the wildlife hazard threat to airport operations. Increased attention to wildlife hazards on or near airport property has resulted in greater emphasis on identifying the causes of wildlife strikes and actions airport operators can take to eliminate or reduce the threat of wildlife hazards and decrease the potential for wildlife-aircraft collisions.

This digest addresses the federal and state legal framework for airport wildlife hazard reduction and management. Airport regulation and wildlife management responsibilities are largely matters of federal law, which governs classification, certification, federal grant funding, and operation of airports and which prescribes actions airport operators must take to evaluate and respond to wildlife hazards at airports. The digest identifies applicable laws, regulations, directives, grant assurances, agreements, and guidance concerning an airport operator's responsibilities to manage wildlife and respond to wildlife hazards on airport property and the legally acceptable means airports can use to remove or discourage wildlife from airport operations areas. The digest further describes airport wildlife management activities, including vegetation control and habitat management; observation and detection of wildlife behavior and movement; wildlife capture, dispersal, removal, and exclusion; and harassment and deterrent techniques to eliminate or deter wildlife from the air-

craft operations areas. In addition, the digest discusses the federal and state laws addressing compatibility of off-airport land uses with aircraft operations.

The digest also addresses federal and state wildlife and land-use laws and regulations affecting an airport operator's efforts to respond to airport wildlife hazards. Airport operators must comply with federal and state species protection laws, which include prohibitions, requirements, and permitting programs to which airport operational activities may be subject and which regulate activities on airport property affecting those species. In addition to protected species laws, state laws and regulations concerning acceptable methods for capture, relocation, and disposal of nuisance and nonprotected species may affect how airport operators respond to wildlife threats from the affected species. Further, state and federal environmental and land-use laws (e.g., wetlands) may affect the use of and restrictions on land within the airport property and the compatibility of land uses within the vicinity of the airport.

The digest does not address specific laws, regulations, and directives concerning wildlife management and wildlife hazard response at military airports other than in the context of interagency agreements with the FAA. The digest also does not discuss any local airport or wildlife management laws or regulations or any federal and state land-use or environmental laws and regulations pertaining to siting, development, or operation of airports that do not specifically relate to the topics described above. In addition, this digest does not discuss tort liability of airports related to wildlife hazard incidents, legal or regulatory obligations, or failure to comply with a Wildlife Hazard Management Plan.

<sup>8</sup> Williams, *supra* note 1.

<sup>9</sup> FAA Advisory Circular 150/5200-33B—Hazardous Wildlife Attractants On or near Airports (Aug. 28, 2007), [http://www.faa.gov/documentLibrary/media/advisory\\_circular/150-5200-33B/150\\_5200\\_33b.pdf](http://www.faa.gov/documentLibrary/media/advisory_circular/150-5200-33B/150_5200_33b.pdf).

<sup>10</sup> Richard A. Dolbeer & Edward C. Cleary, *Wildlife Hazard Management at Airports* 11, tbl. 2-5 (July 2005), available for download at [http://digitalcommons.unl.edu/icwdm\\_usdanwrc/133/](http://digitalcommons.unl.edu/icwdm_usdanwrc/133/).

<sup>11</sup> Williams, *supra* note 1.

Table 1. Ranking of 25 species groups as to relative hazard to aircraft (1 = most hazardous) based on three criteria (damage, major damage, and effect on flight); a composite ranking based on all three rankings; and a relative hazard score. Data were derived from the FAA National Wildlife Strike Database, January 1990–April 2003.<sup>1</sup>

Species group	Ranking by criteria			Composite ranking <sup>5</sup>	Relative hazard score <sup>6</sup>
	Damage <sup>2</sup>	Major damage <sup>3</sup>	Effect on flight <sup>4</sup>		
Deer	1	1	1	1	100
Vultures	2	2	2	2	64
Geese	3	3	6	3	55
Cormorants/pelicans	4	5	3	4	54
Cranes	7	6	4	5	47
Eagles	6	9	7	6	41
Ducks	5	8	10	7	39
Osprey	8	4	8	8	39
Turkey/pheasants	9	7	11	9	33
Hérons	11	14	9	10	27
Hawks (buteos)	10	12	12	11	25
Gulls	12	11	13	12	24
Rock pigeon	13	10	14	13	23
Owls	14	13	20	14	23
H. lark/S. bunting	18	15	15	15	17
Crows/ravens	15	16	16	16	16
Coyote	16	19	5	17	14
Mourning dove	17	17	17	18	14
Shorebirds	19	21	18	19	10
Blackbirds/starling	20	22	19	20	10
American kestrel	21	18	21	21	9
Meadowlarks	22	20	22	22	7
Swallows	24	23	24	23	4
Sparrows	25	24	23	24	4
Nighthawks	23	25	25	25	1

Source: FAA Advisory Circular 150/5200-33B–Hazardous Wildlife Attractants on or near Airports (Aug. 28, 2007).

1. Excerpted from the Special Report for the FAA, *Ranking the Hazard Level of Wildlife Species to Civil Aviation in the USA: Update #1, July 2, 2003*. Refer to this report for additional explanations of criteria and method of ranking.

2. Relative rank of each species group was compared with every other group for the three variables, placing the species group with the greatest hazard rank for  $\geq 2$  of the 3 variables above the next highest ranked group, then proceeding down the list.

3. Percentage values, from Tables 3 and 4 in Footnote 1 of the *Special Report*, for the three criteria were summed and scaled down from 100, with 100 as the score for the species group with the maximum summed values and the greatest potential hazard to aircraft.

4. Aircraft incurred at least some damage (destroyed, substantial, minor, or unknown) from strike.

5. Aircraft incurred damage or structural failure, which adversely affected the structure strength, performance, or flight characteristics, and which would normally require major repair or replacement of the affected component, or the damage sustained makes it inadvisable to restore aircraft to airworthy condition.

6. Aborted takeoff, engine shutdown, precautionary landing, or other.

## II. FEDERAL REGULATION OF AIRPORT OPERATIONS

The U.S. Department of Transportation (USDOT) is the federal agency authorized and required under federal law to regulate aviation and other modes of transportation in the United States. The USDOT mission is to “Serve the United States by ensuring a fast, safe, efficient, accessible and convenient transportation system that meets our vital national interests and enhances the quality of life of the American people, today and into the future.”<sup>12</sup> The FAA is the division within the USDOT that regulates the air transportation system, including regulation of aircraft, airmen, airports, and the national airspace system.<sup>13</sup> Among the FAA’s responsibilities is regulation of airport operations and issuance of Airport Operating Certificates.

The FAA has adopted regulations governing certification and operations of aircraft, airmen, airports, and the national airspace system. The Federal Aviation Regulations (FARs) described below address specific aspects of airport development, certification, construction, operations, and funding.

- *Certification of Airports* (14 C.F.R. Part 139): Establishes requirements for the certification and operation of land carriers that are conducted with an aircraft having a seating capacity of more than 30 passengers. Specifies requirements for preparation and maintenance of an Airport Certification Manual.

- *Objects Affecting Navigable Airspace* (14 C.F.R. Part 77): Includes requirements for notifying the FAA of proposed airport construction or modifications under certain circumstances. Specifies standards for determining obstructions in navigable airspace. Authorizes public hearings regarding potential hazardous effects of proposed construction or modification on air navigation. Provides for studies of air navigation obstructions to assure safe and efficient use of airspace.

- *Airport Noise Compatibility Planning* (14 C.F.R. Part 150): Lists procedures for developing and submitting airport noise compatibility planning programs.

- *Federal Aid to Airports* (14 C.F.R. Part 151): Governs FAA award of airport construction and development grants. Identifies the FAA Advisory Circulars incorporated into the FAA airport development standards. Requires FAA approval of an airport layout plan and changes to the plan. Specifies that airport development under the Federal-Aid Airport Program must be

done according to the FAA-approved airport layout plan.

- *Airport Aid Program* (14 C.F.R. Part 152): Specifies eligibility and application requirements for funding of airport planning and development under the Airport and Airway Development Act. Describes funding eligibility requirements and application procedures and provisions for funding, accounting, and reporting requirements; nondiscrimination in airport aid programs; suspension and termination of grants; and energy conservation programs.

- *Notice of Construction, Alteration, Activation, and Deactivation of Airports* (14 C.F.R. Part 157): Specifies requirements for an airport operator to notify the FAA when proposing to construct, alter, activate, or deactivate a civil or joint-use (civil/military) airport or to alter the status of such an airport.

- *Establishment and Discontinuance Criteria for Air Traffic Control Services and Navigational Facilities* (14 C.F.R. Part 170): Specifies the criteria for establishment of air traffic control services.

- *Non-Federal Navigation Facilities* (14 C.F.R. Part 171): Describes the requirements for approval of instrument flight rules (IFR) procedures and the requirements for approval, performance requirements, installation requirements, and maintenance and operations requirements for non-federal aids to navigation.

### Airport Certification

#### *Federal Aviation Act*

The FAA is the agency authorized to issue operational certificates, including airman certificates, airworthiness certificates, air carrier operating certificates, and Airport Operating Certificates.<sup>14</sup> The FAA is the agency directed to issue an Airport Operating Certificate to a person desiring to operate an airport that meets one of the following criteria: 1) serves an air carrier operating aircraft designed for at least 31 passenger seats; 2) is not located in Alaska and serves scheduled passenger operation of an air carrier with aircraft designed for 10 to 30 passenger seats; and 3) requires a certificate based upon the determination of the FAA Administrator.<sup>15</sup> Among other conditions, federal law directs that the Airport Operating Certificate contain terms required to ensure safety in air transportation.<sup>16</sup>

Federal law authorizes the FAA to reinspect certificated facilities and to reexamine issued operating certificates. The applicant for or holder of an Airport Operating Certificate must consent to inspections of the airport facility to ensure compliance with FAA certification requirements.<sup>17</sup> The FAA is authorized to amend, modify, suspend, or revoke an Airport Operating Certificate.<sup>18</sup> Reasons for FAA amendment, modification,

<sup>12</sup> See the mission statement at “About DOT—Who We Are” on the United States Department of Transportation (USDOT) Web site, <http://www.dot.gov>.

<sup>13</sup> The FAA was first established as an independent federal agency (Federal Aviation Agency) in 1958 by the Federal Aviation Act, Pub. L. No. 85-726, 72 Stat. 737 (1958). Through the federal agency reorganization implementing the 1966 Department of Transportation Act, the FAA became an administration within the USDOT, Pub. L. No. 89-670, 80 Stat. 931 (1966), codified at 49 U.S.C. § 106.

<sup>14</sup> 49 U.S.C. § 44701, *et seq.*

<sup>15</sup> 49 U.S.C. § 44706.

<sup>16</sup> 49 U.S.C. § 44706(b).

<sup>17</sup> 14 C.F.R. § 139.105.

<sup>18</sup> 49 U.S.C. § 44709.

suspension, or revocation of an Airport Operating Certificate include the agency's determination that "safety in air commerce or air transportation and the public interest" require this action.<sup>19</sup> The process for issuance and amendment, modification, suspension, or revocation of Airport Operating Certificates is specified in federal statutes and regulations.<sup>20</sup>

### *Airport Operating Certificates*

Airports are subject to a variety of federal regulations. The FAA-regulated airports are required to obtain FAA certification based on the criteria specified in the regulations.<sup>21</sup> Airport Operating Certificates are issued to Class I, II, III, and IV airports, as those categories are defined in FAA regulations.<sup>22</sup> FAA regulations specify the process and requirements for issuance of Airport Operating Certificates.<sup>23</sup> The FARs specify the requirements for application and issuance of an Airport Operating Certificate.<sup>24</sup> The airport operator applying for certification must allow the FAA to make scheduled or unannounced inspections to determine compliance with the Federal Aviation Act and FARs certification requirements.<sup>25</sup>

Airports receiving certification from the FAA under 14 C.F.R. Part 139 are required to take action to address wildlife hazards. The FARs specify the airport

<sup>19</sup> 49 U.S.C. § 44709(b)(1)(A).

<sup>20</sup> See 49 U.S.C. § 44709 and 14 C.F.R. Pt. 139.

<sup>21</sup> 14 C.F.R. § 139.101. FAA certification regulations do not apply to heliports, airports operated by the United States, airports serving scheduled air carrier service only based on designation as an alternate airport, and Alaska airports if the airport only serves scheduled operations of small air carrier aircraft and does not serve scheduled or unscheduled operations of large air carrier aircraft or during periods when other Alaska airports are not serving large air carrier aircraft operations 14 C.F.R. § 139.101(c).

<sup>22</sup> 14 C.F.R. Pt. 139.5. Class I airports serve scheduled operations of large air carrier aircraft that can also serve unscheduled passenger operations of large air carrier aircraft and/or scheduled operations of small air carrier aircraft. Class II airports serve only scheduled operations of small air carrier aircraft and the unscheduled passenger operations of large air carrier aircraft. Class III airports serve only scheduled operations of small air carrier aircraft. Class IV airports serve only unscheduled passenger operations of large air carrier aircraft.

<sup>23</sup> 14 C.F.R. Pt. 139.

<sup>24</sup> FAA will issue an airport operating certificate if the applicant demonstrates compliance with the regulatory requirements and satisfies the FAA conditions. Those conditions include FAA approval of the airport operator's airport certification manual. In addition, the FAA must conclude after investigation that the airport operator "is properly and adequately equipped and able to provide a safe airport operating environment" consistent with any safety limitations imposed by the FAA and the airport certification manual's requirements (14 C.F.R. § 139.107). When issued, the airport operating certificate remains effective until the certificate is surrendered by the airport operator or suspended or revoked by the FAA (14 C.F.R. § 139.109).

<sup>25</sup> 14 C.F.R. § 139.105.

operator "must take immediate action to alleviate wildlife hazards whenever they are detected."<sup>26</sup> "Wildlife hazard" is defined in the FAR as a "potential for a damaging aircraft collision with wildlife on or near an airport." Wildlife in this regulatory definition specifically includes feral animals and domestic animals not within the control of their owners.<sup>27</sup>

### *Airport Certification—FAA Regulations*

The Airport Certification Manual is approved by FAA as part of the Airport Operating Certificate application process, and must describe the information needed by the airport operations personnel to comply with the FARs' operations regulations,<sup>28</sup> including the airport's operating procedures, facilities and equipment, and responsibility assignments related to airport operations.<sup>29</sup> The FARs specify 29 required operations procedure "elements" to be incorporated into the Airport Certification Manual.<sup>30</sup> A description of the airport operator's procedures for wildlife hazard management also is a required element of the manual.<sup>31</sup>

A certificated airport operator must have trained personnel to implement the Airport Certification Manual's requirements. The airport operator's description of airport personnel operations training is one of the 29 required elements of the Airport Certification Manual.<sup>32</sup> The FARs also require an Airport Operating Certificate holder to provide and equip "sufficient and qualified trained personnel" to comply with the FAA's Airport Certification Manual requirements.<sup>33</sup> Personnel who access aircraft movement areas and safety areas and those whose duties relate to the airport operator's compliance with the Airport Certification Manual must receive initial and annual training concerning airport operations and manual compliance. Personnel also may be required to comply with training requirements concerning specifically enumerated operational elements, including wildlife hazard management.

<sup>26</sup> 14 C.F.R. § 139.337(a).

<sup>27</sup> 14 C.F.R. § 139.5.

<sup>28</sup> 14 C.F.R. § 139.201. The FAA revised the regulatory requirements for airport certification (14 C.F.R. Part 139) in Feb. 2004. In Nov. 2004, the FAA issued guidance addressing the requirements for airport operators to revise and submit airport certification manuals consistent with the rule revision and consistent with the specified deadlines (FAA CertAlert 04-14: Enforcement Policy—Submission of ACM to FAA in Accordance with Pt. 139.101 General Requirements (Nov. 4, 2004)).

<sup>29</sup> 14 C.F.R. § 139.203(a).

<sup>30</sup> The elements include the airport operator's emergency plan and procedures for satisfying aircraft rescue and fire-fighting requirements; reporting airport conditions; removing, marking, or lighting obstructions; maintaining paved, unpaved, and safety areas; controlling pedestrian and ground vehicles in movement and safety areas; and maintaining marking, sign, and lighting systems.

<sup>31</sup> 14 C.F.R. § 139.203(b).

<sup>32</sup> 14 C.F.R. § 139.203(a).

<sup>33</sup> 14 C.F.R. § 139.303.

## Safety

### *Federal Aviation Act*

Federal law directs the FAA to develop federal policy and plans for use of the Nation's navigable air space. The FAA is authorized to adopt regulations designed to ensure aircraft safety and efficient use of airspace. Federal law also directs that the FAA's air traffic regulations must address navigation, protection, and identification of aircraft; protection of individuals and property on the ground; efficient use of navigable airspace; and prevention of collisions between aircraft and other vehicles or airborne objects.<sup>34</sup>

The FAA Administrator is required by federal law to promote safety in civil aircraft by establishing minimum safety standards for aircraft design, construction, performance, operations, and inspection, and for air carriers and airport operators. The FAA is required by federal law to carry out its federal requirements "in a way that best tends to reduce or eliminate the possibility or recurrence of accidents" in air transportation.<sup>35</sup>

Federal law prescribes the process for challenging violations of federal aviation safety laws. Under federal law any person may file a written complaint with the FAA concerning violation by any person of the aviation safety duties prescribed by the statute. Federal law specifies the process for the FAA to investigate the complaint and to take action (e.g., issue an order) to compel compliance with the statutory requirements if warranted.<sup>36</sup> The FAA may issue emergency regulations or an emergency order, based on a complaint or on its own initiative, when the FAA determines an emergency exists concerning safety in air commerce. The agency order remains in effect for the duration specified in the order or until the order is superseded.<sup>37</sup> The FAA order may be appealed by a person "disclosing a substantial interest" in the order.<sup>38</sup>

The FAA or the Attorney General may file a civil action to enforce statutory aviation safety requirements, FAA regulatory requirements, or the requirements of any agency order, certificate, or permit.<sup>39</sup> In addition, a civil action may be filed by an "interested person" to enforce the statutory certification requirements.<sup>40</sup>

The U.S. Department of Transportation (USDOT) is required under federal law to submit an annual report to Congress concerning the FAA's safety enforcement activities.<sup>41</sup>

### *Air Commerce and Safety*

Federal policy concerning economic regulation of air commerce includes direction to the USDOT Secretary to consider "assigning and maintaining safety as the highest priority in air commerce" as a matter of the public interest.<sup>42</sup> In regulating air commerce the FAA must consider, among other safety considerations specified by federal law to be in the public interest, maintenance and enhancement of safety and security as the highest priority and must address the regulation of air commerce in a way that best promotes safety.<sup>43</sup> The FAA also must consider the interests of safety and efficiency of civil and military operations in controlling the use of the navigable airspace and regulating aircraft operations. In addition, federal law authorizes the FAA to contract or award grants for collection of airport safety data.<sup>44</sup>

### *Safety Regulation—General Requirements*

The FAA is required to promote safety in civil aircraft flight operations by prescribing minimum safety standards for aircraft operations. The FAA must adopt regulations "required in the interest of safety" for aircraft design, material, equipment, construction, performance, inspection, and servicing. These regulations also must address provisions for reserve supplies of aircraft, aircraft equipment, and fuel oil, and for maximum hours of service for airmen and other air carrier employees. The statute also authorizes the FAA to adopt additional regulations and minimum standards when the FAA determines other practices, methods, or procedures concerning other aspects of aircraft operations are necessary for safety in air commerce.<sup>45</sup> In adopting safety regulations, the FAA must consider an air carrier's duty to "provide service with the highest possible degree of safety in the public interest."<sup>46</sup>

### *Minimum Safety Requirements*

The FAA is authorized to adopt safety regulations for certificated airports and air carriers. The statute

<sup>34</sup> 49 U.S.C. § 40103.

<sup>35</sup> 49 U.S.C. § 44701.

<sup>36</sup> 49 U.S.C. § 46101.

<sup>37</sup> 49 U.S.C. § 46105.

<sup>38</sup> 49 U.S.C. § 46110.

<sup>39</sup> 49 U.S.C. §§ 46106 and 46107.

<sup>40</sup> 49 U.S.C. § 46108.

<sup>41</sup> The report must include a description of the specific operational measures of effectiveness used by the FAA to evaluate emerging safety problems; the agency's efforts to update agency guidance and regulations to address technological, management, and structural changes in the aviation industry; the aviation industry's compliance with aviation regulations and safety records during the fiscal year; and data on enforcement actions and civil penalty cases during the preceding 2 fiscal years (49 U.S.C. § 44723).

<sup>42</sup> 49 U.S.C. § 40101(a)(1).

<sup>43</sup> 49 U.S.C. § 40101(d).

<sup>44</sup> 49 U.S.C. § 47130.

<sup>45</sup> 49 U.S.C. § 44701(a).

<sup>46</sup> 49 U.S.C. § 44701(d).



allows the FAA to prescribe minimum safety standards for air carriers issued under an operating certificate by the FAA. The statutes also specify that the FAA may promulgate regulations imposing minimum safety standards on certificated airport operators.<sup>47</sup> The FAA Administrator may grant an exemption from a regulatory requirement prescribed by the FAA safety regulations when the exemption is determined to be in the public interest.<sup>48</sup>

### *Reducing and Eliminating Accidents*

The FAA must prioritize reduction or elimination of accidents when implementing its statutory safety requirements. The statute specifies that the FAA Administrator is obligated to fulfill its statutory obligations “in a way that best tends to reduce or eliminate the possibility or recurrence of accidents” concerning air transportation.<sup>49</sup>

### *Responsibility to Report Unsafe Conditions*

Airports issued Airport Operating Certificates by the FAA are required to address wildlife hazards. According to the FARs, a certificated airport operator “must take immediate action to alleviate wildlife hazards” when detected.<sup>50</sup> The regulations define “wildlife hazard” as a “potential for a damaging aircraft collision with wildlife on or near an airport.” Wildlife in this regulatory definition specifically includes feral animals and domestic animals not within the control of their owners.<sup>51</sup>

In addition to the regulatory requirements, the FAA has issued numerous orders, directives, guidance, and policy concerning the duty to take action to address wildlife hazards with the potential to affect aircraft operations and to ensure that airport personnel are properly trained and qualified to take action to address wildlife hazards when necessary.<sup>52</sup>

- *FAA Advisory Circular No. 150/5200-33B*—Hazardous Wildlife Attractants on or near Airports (August 28, 2007): Addresses location of land uses on or in the vicinity of public-use airports that have the potential to attract hazardous wildlife. Specifies separation criteria (5,000 ft and 10,000 ft, depending on the type of aircraft served) between an airport’s operations areas (e.g., aircraft movement, loading ramps, and aircraft parking) and uses that may be wildlife attractants. Identifies land uses that may be incompatible with airport operations if located within the specified separation criteria, including waste disposal operations,

wetland mitigation, artificial marshes, agricultural activities, wastewater treatment facilities, landscaping, wastewater discharge and sludge disposal, and golf courses. Describes methods to address wildlife hazard attractants associated with existing land uses within the specified separation criteria. Provides for notification to FAA of changes in land uses in the vicinity of public-use airports. Ranks species groups that are determined to be hazardous to aircraft operations.

- *FAA Order JO7110.65T*—Air Traffic Control, § 2-1-22: Bird Activity Information (February 11, 2010): Prescribes air traffic control procedures and terminology for air traffic control personnel. Requires personnel to issue periodic advisory information on pilot-reported, tower-observed, or radar-observed and pilot-verified bird activity, including location, species, and size of birds, and to relay information to adjacent facilities when bird activity may become a factor in those areas.

- *FAA Advisory Circular No. 150/5200-36*—Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports (June 28, 2006): Specifies the minimum requirements for the initial and recurring wildlife hazard management curriculum provided to airport personnel involved in implementing an FAA-approved Wildlife Hazard Management Plan. Identifies the qualifications for wildlife biologists conducting Wildlife Hazard Assessments for certificated airports.

- *FAA Advisory Circular No. 150/5200-32A*—Reporting Wildlife Aircraft Strikes (December 22, 2004): Explains the importance of reporting collisions between aircraft and wildlife, more commonly referred to as wildlife strikes. Also examines recent improvements in the FAA’s Bird/Other Wildlife Strike Reporting system, how to report a wildlife strike, what happens to the wildlife strike report data, how to access the FAA National Wildlife Aircraft Strike Database, and the FAA’s Feather Identification program.<sup>53</sup>

- *FAA CertAlert 09-10*—Wildlife Hazard Assessments in Accordance with Part 139 Requirements (June 11, 2009): Describes the requirements in 14 C.F.R. § 139.337(b) to conduct a Wildlife Hazard Assessment when a triggering event (as specified in the FAA regulations) occurs. Specifies the content of the assessment and qualifications for the person conducting the assessment and the required content of the assessment report. Identifies the FAA concern that airport operators that have had triggering events have not conducted a Wildlife Hazard Assessment as required by the FAA regulations.

- *FAA CertAlert 06-0*—Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State-Listed Threatened and Endangered Species and Species

<sup>47</sup> 49 U.S.C. § 44701(b).

<sup>48</sup> 49 U.S.C. § 44701(f).

<sup>49</sup> 49 U.S.C. § 40101(c).

<sup>50</sup> 14 C.F.R. § 139.337(a).

<sup>51</sup> 14 C.F.R. § 139.5.

<sup>52</sup> See FAA Order 5200.3D (Feb. 23, 1989)—Wildlife Hazard Detection and Control Procedures (Feb. 23, 1989): Cancelled effective Jan. 21, 2011. FAA CertAlert 01-01 Deer Aircraft Hazard: Cancelled by FAA CertAlert 04-16 Deer Hazard to Aircraft and Deer Fencing (Dec. 13, 2004).

<sup>53</sup> The form is on the FAA Web site at <http://www.faa.gov/documentLibrary/media/form/faa5200-7.pdf>. The wildlife strike report may be submitted electronically through the FAA Wildlife Strike Reporting Web site at <http://wildlife-mitigation.tc.faa.gov/wildlife/strikenew.aspx>.

of Special Concern on Airports (November 21, 2006): Describes the procedures for airport operators and FAA certification inspectors to respond to requests by state wildlife agencies to facilitate and encourage habitats for state-listed threatened and endangered species or species of special concern occurring on airports that may pose a threat to aviation safety. Discusses concerns regarding techniques that may increase wildlife hazards, be inconsistent with safe airport operations, and create a threat to aviation safety.

- *FAA CertAlert No. 02-06*—Access to the FAA National Wildlife Aircraft Strike Database (October 1, 2002): Describes information available in the FAA National Wildlife Aircraft Strike Database for airport operators, airline operators, and FAA airport certification safety inspectors and provides these operators and inspectors with instruction on obtaining access to the information in the database.

- *FAA CertAlert 04-16*—Deer Hazard to Aircraft and Deer Fencing (December 13, 2004): Provides recommendations concerning the types of fencing and requirements for fencing installation and maintenance to prevent deer from entering aircraft movement areas. Describes dangers associated with deer within aircraft movement areas.

- *FAA CertAlert 04-09*—Relationship between FAA and WS (August 30, 2004): Identifies the roles and responsibilities of the FAA and the USDA/Animal and Plant Health Inspection Service/Wildlife Services (WS) concerning wildlife hazards on or near airports. Describes the FAA's role in airport operator certification, the requirement for certificated airports to develop and implement a Wildlife Hazard Management Plan, and the WS role in conducting Wildlife Hazard Assessments. Describes the Memorandum of Understanding between the FAA and WS (No. 12-4-71-0003-MOU), which establishes a cooperative agency relationship for resolving wildlife hazards to aviation.

- *FAA CertAlert 03-03*—Guidelines for Submitting Bird Strike Feather Remains for Identification (August 29, 2003): Specifies guidelines for collection of feather and other bird/wildlife remains by aircraft operators, airport operating and maintenance inspectors, and foreign air carriers operating at U.S. airports. Describes the process for submission of remains to the feather identification lab at the Smithsonian Institution, Museum of Natural History. Explains the importance of identification research for understanding and prevention of bird-aircraft strike hazards and the role of operators and carriers in maintenance of a comprehensive database, accurate species identification, and for providing species identification information to the FAA.

- *FAA CertAlert 98-05*—Grasses Attractive to Hazardous Wildlife (September 21, 1998): Recommends that airport operators ensure that specified grass species and other varieties of plants attractive to hazardous wildlife are not used on airport property. Provides guidelines for avoiding use of these species for planting disturbed areas or areas in need of revegetation and for maintenance of areas already planted with these spe-

cies. Describes threats to aircraft safety associated with concerns about planting with grass seeds that are major attractants to doves and other seed-eating birds.

- *FAA CertAlert 97-09*—Wildlife Hazard Management Plan Outline (November 17, 1997): Describes the required content of a Wildlife Hazard Management Plan.

### Airport Funding—Airport Improvement Grants

*Airport Improvement Act.* The Federal Airport Improvement Act provides for FAA award of grants to public-use airports for planning, development, and noise compatibility projects.<sup>54</sup> Under the Airport Improvement Act, federal policy makes the safe operation of the airport and airway system the “highest aviation priority.”<sup>55</sup> Federal Airport Improvement Program (AIP) grants are available to “public-use airports,” which are defined in federal law<sup>56</sup> to include publicly owned airports and those privately owned airports that are used or intended for use for public purposes and are 1) designated by FAA as a reliever airport,<sup>57</sup> or 2) providing scheduled service and a minimum of 2,500 annual enplanements.

Federal law authorizes the FAA to award grants from the Airport and Airway Trust Fund for the purpose of maintaining a “safe and efficient nationwide system of public-use airports” meeting present and future needs of civil aviation.<sup>58</sup> The application and process for FAA award of AIP grants are specified in the statute.<sup>59</sup> According to the statute, the grant application may be approved if the FAA determines that the airport project is consistent with authorized airport plans and will contribute to implementing Federal Aviation Act provisions, and that the airport grant recipient (sponsor) has the legal authority and financial capability to implement the project as proposed.<sup>60</sup>

To be eligible for the AIP grants, the public-use airport must be included in the National Plan of Integrated Airport Systems (NPIAS). The NPIAS is a report that is prepared by FAA and published every 2 years.<sup>61</sup> The NPIAS identifies public-use airports and the type and estimated cost of eligible airport development at those airports during a 5-year period that the FAA determines necessary to “provide a safe, efficient, and integrated system of public-use airports adequate to anticipate and meet the needs” of civil aviation, national defense requirements, and identified needs of the

<sup>54</sup> 49 U.S.C. ch. 471.

<sup>55</sup> 49 U.S.C. § 47101.

<sup>56</sup> 49 U.S.C. § 47102(21).

<sup>57</sup> Federal law defines a “reliever airport” as an airport the FAA designates to relieve congestion at a commercial service airport and to provide more general aviation access to the overall community (49 U.S.C. § 47102(22)).

<sup>58</sup> 49 U.S.C. § 47104.

<sup>59</sup> 49 U.S.C. § 47105.

<sup>60</sup> 49 U.S.C. § 47106.

<sup>61</sup> See [http://www.faa.gov/airports/planning\\_capacity/npias/](http://www.faa.gov/airports/planning_capacity/npias/).

U.S. Postal Service.<sup>62</sup> The NPIAS for 2011–2015 identifies 3,380 existing and proposed public-use airports that the FAA has determined are significant to national air transportation and therefore eligible to receive AIP grants. Wildlife hazard mitigation is one of the elements addressed in the NPIAS. For the 2011–2015 period, the NPIAS identifies an estimated \$52.2 billion in AIP-eligible civil aviation infrastructure at public-use airports in the plan.

Federal law defines the types of activities that may be eligible for AIP grants. The statutory definition of “airport development” identifies numerous activities related to construction, repair, or improvement of a public-use airport, including but not limited to:

- Removing, lowering, relocating, marking, and lighting an airport hazard.
- Acquiring or installing safety or security equipment required by the FAA.
- Acquiring or installing firefighting, rescue, and aircraft deicing equipment.
- Acquiring or installing windshear detection equipment.
- Acquiring an interest in land or airspace needed to remove or mitigate an existing airport hazard or to limit the creation of a new airport hazard.<sup>63</sup>

The statute defines an “airport hazard” as a structure, natural growth, or land use on or near a public-use airport that “obstructs or otherwise is hazardous” to takeoff or landing of aircraft.<sup>64</sup> “Airport planning” is defined in the statute to include integrated airport system planning to provide information regarding the extent, kind, location, and timing of future airport development.<sup>65</sup>

AIP grants generally fund projects that enhance airport safety, capacity, and security and that respond to airport environmental concerns. AIP funds generally may be used on most airfield capital improvements or repairs as well as professional services (e.g., planning, design, and surveying) that are necessary for eligible projects. The FAA has identified types of projects that are eligible for AIP funding, including runway construction and rehabilitation, safety area improvements, airport layout plans, airfield drainage, land acquisition, and planning and environmental studies. Ineligible projects according to the FAA include office equipment, landscaping, industrial park development, marketing

plans, improvements for commercial enterprises, maintenance or repair of buildings, and operational costs (e.g., salaries and supplies). AIP grants may cover 75 percent of eligible costs for large and medium primary hub airports (80 percent for noise program implementation) and 95 percent of eligible costs for small primary, reliever, and general aviation airports.<sup>66</sup>

AIP grants are available for projects designed to mitigate or eliminate wildlife hazards. The FAA Airport Improvement Program Handbook describes the types of safety projects and wildlife hazard reduction projects for which the FAA may award a grant under the AIP.<sup>67</sup> Eligible safety projects include fencing to discourage wildlife access to the airfield or terminal building.<sup>68</sup> The AIP Handbook also specifies that an AIP grant may be awarded for airport capital improvement projects to reduce wildlife hazards that have been identified or anticipated because of planned construction or airport expansion, based on FAA directives concerning hazardous wildlife attractants.<sup>69</sup> To be eligible, these projects must be designed to produce long-term solutions to the identified wildlife hazards.<sup>70</sup> The Handbook describes two types of wildlife hazard reduction projects that may be eligible for AIP grant funding. The first is habitat modification, including removal of wildlife attractants through projects to improve drainage, eliminate or modify man-made structures used for bird nesting or roosting, acquisition of contiguous land interests (fee interests or easements), or modification of airport habitat. The second is acquisition of bird hazard reduction equipment related to bird patrols and actions to reduce wildlife hazards on or adjacent to an airport. The AIP Handbook specifies that AIP funds may not be used for airport expenses associated with airport operations vehicles used for wildlife control and with purchase of expendable items (e.g., pyrotechnic devices and shotgun shells) used for wildlife control.

Wetlands restoration, creation, enhancement, or exchange projects may provide a “separate justification related to wildlife hazards” for purposes of eligibility for AIP grant funding.<sup>71</sup> The AIP Handbook specifies that an airport sponsor may not implement wetland wildlife attractions related to a mitigation project unless the project is located at a site “remote from existing or

<sup>66</sup> See FAA Overview: What is AIP? Web site, [http://www.faa.gov/airports/aip/overview/#eligible\\_projects](http://www.faa.gov/airports/aip/overview/#eligible_projects).

<sup>67</sup> FAA Order 5100.38C–Airport Improvement Program Handbook (June 28, 2005) (AIPH), accessible at [http://www.faa.gov/airports/aip/aip\\_handbook/](http://www.faa.gov/airports/aip/aip_handbook/). See ch. 5, Airfield Construction and Equipment Projects, [http://www.faa.gov/airports/resources/publications/orders/media/aip\\_5100\\_38/aip\\_5100\\_38c\\_part2.pdf](http://www.faa.gov/airports/resources/publications/orders/media/aip_5100_38/aip_5100_38c_part2.pdf).

<sup>68</sup> AIPH ¶ 547.

<sup>69</sup> FAA Advisory Circular 150/5200-33B: Hazardous Wildlife Attractants on or Near Airports (Aug. 28, 2007), [http://www.faa.gov/documentLibrary/media/advisory\\_circular/150-5200-33B/150\\_5200\\_33b.pdf](http://www.faa.gov/documentLibrary/media/advisory_circular/150-5200-33B/150_5200_33b.pdf).

<sup>70</sup> AIPH ¶ 584.

<sup>71</sup> AIPH ¶ 586.

<sup>62</sup> 49 U.S.C. § 47103. National Plan of Integrated Airport Systems (2011–2015). Report of the Secretary of Transportation to the United States Congress Pursuant to Section 47103 of Title 49, United States Code, [http://www.faa.gov/airports/planning\\_capacity/npias/reports/media/2011/npias\\_2011\\_narrative.pdf](http://www.faa.gov/airports/planning_capacity/npias/reports/media/2011/npias_2011_narrative.pdf) (Sept. 27, 2010). The NPIAS is available on the FAA Web site at [http://www.faa.gov/airports/planning\\_capacity/npias/reports](http://www.faa.gov/airports/planning_capacity/npias/reports).

<sup>63</sup> 49 U.S.C. § 47102(3).

<sup>64</sup> 49 U.S.C. § 47102(4).

<sup>65</sup> 49 U.S.C. § 47102(5) and (8).

planned airport development” as defined in FAA Advisory Circular 150/5200-33B—Hazardous Wildlife Attractants on or near Airports (August 28, 2007).

*Airports Capital Improvement Plan.* The FAA has developed an internal policy document, the national Airports Capital Improvement Plan (ACIP),<sup>72</sup> as the primary agency planning tool to identify and prioritize critical airport development and capital needs and potential funding of development projects. The ACIP is used by the FAA as a basis for distribution of AIP grant funds. The ACIP is developed by the FAA’s AIP Branch based on nine regional capital improvement plans, which are developed with information provided by individual airports or state airport planning agencies on anticipated development needs. During the 2011 fiscal year, the FAA awarded 909 grants worth approximately \$1.3 billion. Of these grants, 17 grants were awarded (in whole or in part) for Wildlife Hazard Assessments at airports.

The FAA also has issued an order prescribing the FAA’s development of the ACIP-FAA Order 5100.39A—Airports Capital Improvement Plan Order (August 22, 2000) (ACIP Order).<sup>73</sup> The ACIP Order describes the National Priority System (NPS), a numerical system ranging between 0 and 100 that is used by the FAA as a tool for prioritizing funding of airport development. The NPS equation has several components, including a “Purpose” identifier incorporating safety and security items and airport hazard removal or marking. In addition to the numerical NPS evaluation, the ACIP Order provides for consideration of factors such as environmental issues and impact on airport safety and performance. The ACIP Order further describes a 10-step process for ACIP development.

### FAA Grant Assurances—Purpose: General Assurances

The FAA requires compliance regarding an airport sponsor’s performance in connection with grant agreements for airport development, planning, and noise compatibility program grants. The written grant assurances are obligations that may apply to funding available through the AIP and other programs, such as the Federal Aid to Airports Program and the Airport Development Aid Program.<sup>74</sup> Federal law provides that the FAA may approve a grant application for an airport development project only if the airport project grant recipient provides to the FAA the 21 general written assurances associated with airport operations specified in the statute.<sup>75</sup> The assurances are incorporated within an agreement submitted with the grant application and become part of the final grant offer when approved.<sup>76</sup>

<sup>72</sup> See <http://www.faa.gov/airports/aip/acip/>.

<sup>73</sup> [http://www.faa.gov/airports/resources/publications/orders/media/aip\\_5100\\_39a.pdf](http://www.faa.gov/airports/resources/publications/orders/media/aip_5100_39a.pdf).

<sup>74</sup> [http://www.faa.gov/airports/aip/grant\\_assurances/media/airport\\_sponsor\\_assurances\\_2012.pdf](http://www.faa.gov/airports/aip/grant_assurances/media/airport_sponsor_assurances_2012.pdf).

<sup>75</sup> 49 U.S.C. § 47107.

<sup>76</sup> 49 U.S.C. § 47105.

Federal law specifies that the application of an airport sponsor, or of a state applying for grant funding on behalf of one or more airports, must include the agreement ensuring compliance with the appropriate grant assurances.<sup>77</sup> The duration of the grant assurances may vary depending on the type of grant recipient or facility being developed with the grant funding.

The general statutory written assurances include assumption of obligations concerning airport access, operations, airport use charges and leasing, government use of airport facilities developed with federal funding, airport layout plan maintenance and approval, and airport operator financial and operational reporting. The general written assurances also include safety assurances, providing that the airport sponsor will take appropriate action to 1) ensure the airport terminal airspace will be cleared and protected by mitigating existing airport hazards and preventing future hazards; and 2) restrict, to the extent reasonable, the use of land next to or near the airport to uses that are compatible with normal airport operations.<sup>78</sup> Federal law also requires the airport sponsor to provide written assurances concerning airport revenue use, land acquisition, and maintaining opportunities for small business concerns.<sup>79</sup>

The FAA is required to determine that the written assurances will be satisfied before approving a project grant application. The FAA is directed by the statute to prescribe requirements for airport sponsors that the agency determines are necessary to ensure compliance with the written assurances requirements. The statute also provides the process for the FAA to modify written assurances applicable to an airport sponsor.<sup>80</sup> The written assurances incorporate compliance with uniform administrative requirements for issuance of grants and cooperative agreements to state and local governments.<sup>81</sup>

The FAA has issued the required general written assurances for performance of grant agreements that are required for performance of grant agreements for airport development, airport planning, and noise compatibility program grants. The FAA has outlined the written assurances that apply to airport sponsors, nonairport sponsors undertaking noise compatibility program projects, and planning agency sponsors. The following written assurances address wildlife hazards and land-use compatibility on or near airport property.

*Airport Sponsors.* The FAA requires airport sponsors to provide written assurances that the sponsor will comply with all applicable federal laws, regulations, executive orders, policies, guidelines, and requirements related to the application, acceptance, and use of federal funds. The federal laws identified regarding this writ-

<sup>77</sup> *Id.*

<sup>78</sup> 49 U.S.C. § 47107(a).

<sup>79</sup> 49 U.S.C. § 47107(b)-(e).

<sup>80</sup> 49 U.S.C. § 47107(g)-(h).

<sup>81</sup> 49 C.F.R. Pt. 18.

ten assurance include the National Environmental Policy Act, 42 U.S.C. 4321 *et seq.* (Sponsor Certification Section C(1)—General Federal Requirements).

The FAA also specifies general written assurances concerning mitigation of all airport hazards (including wildlife hazards) (Sponsor Certification Section C(21)):

**Hazard Removal and Mitigation.** It will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.

**Nonairport Sponsors (Noise Compatibility).** The FAA also requires assurances from non-airport sponsors, such as local governments, that are not airport owners or operators but are undertaking noise compatibility programs around airport property. Similar to the assurances required of airport sponsors, the FAA requires these nonairport sponsors to provide written assurances concerning compliance with all applicable federal laws, regulations, executive orders, policies, guidelines, and requirements related to the application, acceptance, and use of federal funds. The federal laws identified regarding this written assurance include the National Environmental Policy Act, 42 U.S.C. 4321 *et seq.* (Sponsor Certification Section C(1)—General Federal Requirements).

Similar to airport sponsors, the nonairport sponsors must provide the FAA with general written assurances concerning airport hazard mitigation (Sponsor Certification Sections C(14)):

**Hazard Prevention.** It will protect such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) by preventing the establishment or creation of future airport hazards on property owned or controlled by it or over which it has land use jurisdiction.

**Planning Agency Sponsors.** The FAA requires planning agency sponsors to provide written assurances concerning compliance with all applicable federal laws, regulations, executive orders, policies, guidelines, and requirements related to the application, acceptance, and use of federal funds for the project. The written assurances for planning agency sponsors do not include specific provisions concerning hazard mitigation or airport land-use compatibility.

### Assurances—Compatible Land Use

Federal law authorizes grants for land-use compatibility plans and projects. The federal statute authorizes the USDOT (FAA) to award grants for development and implementation of land-use compatibility plans and for implementation of the land-use compatibility projects identified in those plans. The purpose of land-use compatibility projects eligible for funding is specific to those projects intended to make land surrounding airports (large hub and medium hub)

compatible with aircraft operations.<sup>82</sup> The statute specifies that a land-use compatibility grant may be awarded only upon a determination that the land-use plan or project meets the statutory requirements and that the airport operator has not submitted a noise compatibility plan or plan update within the preceding 10 years. Eligible grant applicants include state and local government agencies that:

1. Have the authority to plan and adopt land-use control measures, including zoning, in the planning area in and around a large or medium hub airport;
2. Enter into an agreement with the airport owner or operator that the development of the land-use compatibility plan will be done cooperatively; and
3. Provide written assurance to the Secretary that it will achieve, to the maximum extent possible, compatible land uses consistent with federal land-use compatibility criteria...and that those compatible land uses will be maintained.<sup>83</sup>

Federal law requires the recipient of a land-use compatibility plan or project grant to provide written assurances that the plan is “reasonably consistent” with reduction of existing noncompatible land uses and prevention of introduction of noncompatible land uses. The statute also requires assurances that the plan addresses achievement and maintenance of compatible land uses through zoning, building codes, and other measures and that the plan has been approved by the airport owners and the state or local government. The FAA is required to adopt guidelines for award of land-use compatibility grants.

Sponsors must provide assurances to take appropriate action to the “extent reasonable” to restrict land use adjacent to or in vicinity of an airport to activities and purposes compatible with “normal airport operations.” Appropriate action for a local government sponsor may include assurance regarding adoption of zoning laws and, for noise compatibility projects, assurance not to cause or allow any land-use change within its jurisdiction that will reduce airport land-use compatibility.

**Airport Sponsors.** The FAA requires airport sponsors to provide written assurances that the sponsor will comply with all applicable federal laws, regulations, executive orders, policies, guidelines, and requirements related to the application, acceptance, and use of federal funds. The federal laws identified regarding this written assurance include the National Environmental Policy Act of 1969, Pub. L. No. 91-190, 42 U.S.C. 4321 *et seq.* (1970) (Sponsor Certification Section C(1)—General Federal Requirements). The FAA also specifies airport sponsors must provide general written assurances concerning airport land-use compatibility and planning (Sponsor Certification Section C(21)): “Compatible Land Use. It will take appropriate action, to the extent rea-

<sup>82</sup> 49 U.S.C. § 47141.

<sup>83</sup> 49 U.S.C. § 47141(b).

sonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft.”

*Non-Airport Sponsors (Noise Compatibility).* The FAA requires from the non-airport sponsor undertaking noise compatibility program projects general written assurances concerning land-use compatibility. As explained above, the assurance may include action such as adoption of appropriate zoning laws (Sponsor Certification Section C(15)): “Compatible Land Use. It will take appropriate action, including the adoption of zoning laws, to the extent reasonable, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft.”

### Assurances—Consistency with Local Plans

The FAA requires grant recipients to provide written assurances that the project (at time of application) is reasonably consistent with plans of public agencies in the planning area. The required assurance is the same for airport sponsors and nonairport sponsors conducting noise-compatibility projects: “Consistency with Local Plans. The project is reasonably consistent with plans (existing at the time of submission of this application) of public agencies that are authorized by the State in which the project is located to plan for the development of the area surrounding the airport.” (Airport Sponsors—Sponsor Certification Section C(21) and Non-Airport Sponsors (Noise Compatibility)—Sponsor Certification Section C(6)). The required assurance for planning agency sponsors is: “Consistency with Local Plans. The project is reasonably consistent with plans (existing at the time of submission of this application) of public agencies in the planning area” (Sponsor Certification Section C(6)).

### Assurances—Airport Layout Plan

The FAA specifies an airport sponsor must provide general written assurances concerning development and maintenance of an airport layout plan (Sponsor Certification Section C(29)). The required assurance for an airport sponsor specifies that the airport sponsor will keep up to date its airport layout plan, depicting the following:

- Boundaries of the airport and additions and boundaries of off-site areas owned or controlled by the airport sponsor for airport purposes.
- Location and nature of all existing and proposed facilities and structures, including proposed extensions and reductions.
- Location of existing and proposed nonaviation areas and existing improvements.

The required assurance also recognizes the requirement for FAA approval of initial and revised airport

layout plans and confirms that the airport operator will not make or permit any changes to the facilities that are inconsistent with the approved plan and that may adversely affect the airport’s safety, utility, or efficiency. The required assurance also recognizes the actions the FAA may prescribe if changes to the airport layout plan are determined to adversely affect the safety, utility, or efficiency of the airport:

If a change or alteration in the airport or the facilities is made which the Secretary determines adversely affects the safety, utility, or efficiency of any federally owned, leased, or funded property on or off the airport and which is not in conformity with the airport layout plan as approved by the Secretary, the owner or operator will, if requested, by the Secretary (1) eliminate such adverse effect in a manner approved by the Secretary; or (2) bear all costs of relocating such property (or replacement thereof) to a site acceptable to the Secretary and all costs of restoring such property (or replacement thereof) to the level of safety, utility, efficiency, and cost of operation existing before the unapproved change in the airport or its facilities.<sup>84</sup>

## III. WILDLIFE HAZARD ASSESSMENT

### Duty to Address Wildlife Hazards

#### *Responsible Agencies/Divisions*

*Federal Aviation Administration.* The FAA is directed by federal law to develop policy and plans for airspace use and to adopt regulations designed to ensure aircraft safety and efficient use of airspace. Among other elements, the FARs must provide measures to prevent collisions between aircraft and other vehicles or objects and for protection of individuals and property on the ground.<sup>85</sup> The FAA also is required by federal law to promote safety in civil aircraft by establishing minimum safety standards for airport operators, air carriers, and aircraft (e.g., design, performance, operations, and inspection).<sup>86</sup> Federal law specifies that the FAA must meet its federal requirements “in a way that best tends to reduce or eliminate the possibility or recurrence of accidents” in air transportation.<sup>87</sup>

Among other requirements, the FARs require airports issued operating certificates under 14 C.F.R. Part 139 with an identified wildlife hazard to develop and implement a Wildlife Hazard Management Plan. This plan is designed to address the public safety threat caused by aircraft-wildlife collisions by establishing methods and procedures to manage and control wildlife.

The FAA regulates certificated airports through its Airport Safety and Operations Division, which governs airport safety and certification; promotion of emergency operations, emergency management planning, and

<sup>84</sup> 49 U.S.C. § 47107(a)(16).

<sup>85</sup> 49 U.S.C. § 40103.

<sup>86</sup> 49 U.S.C. § 44701.

<sup>87</sup> 49 U.S.C. § 44701.

damage control at civil airports; and federal activities at airports and their restoration after attack or a natural disaster. The Airport Safety and Operations Division also is responsible for airport operations and safety practices, which include aircraft rescue, aircraft fire-fighting, and mitigation of wildlife hazards.

*U.S. Department of Agriculture.* Federal law directs the USDA to manage and control wildlife injurious to human health and safety, agricultural interests, or other wildlife. The USDA is authorized by federal law to work cooperatively with states, other public agencies, and private agencies and organizations to control nuisance mammals and birds. This authority includes controlling wildlife hazards to aviation.<sup>88</sup>

*Animal and Plant Health Inspection Service/Wildlife Services.* The USDA provides research and technical assistance to the FAA and airport operators to control wildlife hazards and reduce the threat of wildlife-aircraft collisions. The USDA's WS is the division within USDA that provides wildlife damage management assistance to reduce and respond to wildlife hazards at airports.<sup>89</sup> The WS provides assistance to airport operators by conducting Wildlife Hazard Assessments and assists the FAA in reviewing and evaluating airport operators' Wildlife Hazard Management Plans. The USDA reports that WS staff provide wildlife hazard assistance (technical and management) at 822 domestic and foreign airports annually.<sup>90</sup>

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<sup>88</sup> 7 U.S.C. § 426, *et seq.*

<sup>89</sup> See [http://www.aphis.usda.gov/wildlife\\_damage/airline\\_safety/airport\\_hazards.shtml](http://www.aphis.usda.gov/wildlife_damage/airline_safety/airport_hazards.shtml).

<sup>90</sup> USDA-APHIS-Wildlife Damage Management: Airport Wildlife Hazards Program—Number of Airports Assisted Annually, [http://www.aphis.usda.gov/wildlife\\_damage/airline\\_safety/airports\\_assisted.shtml](http://www.aphis.usda.gov/wildlife_damage/airline_safety/airports_assisted.shtml).

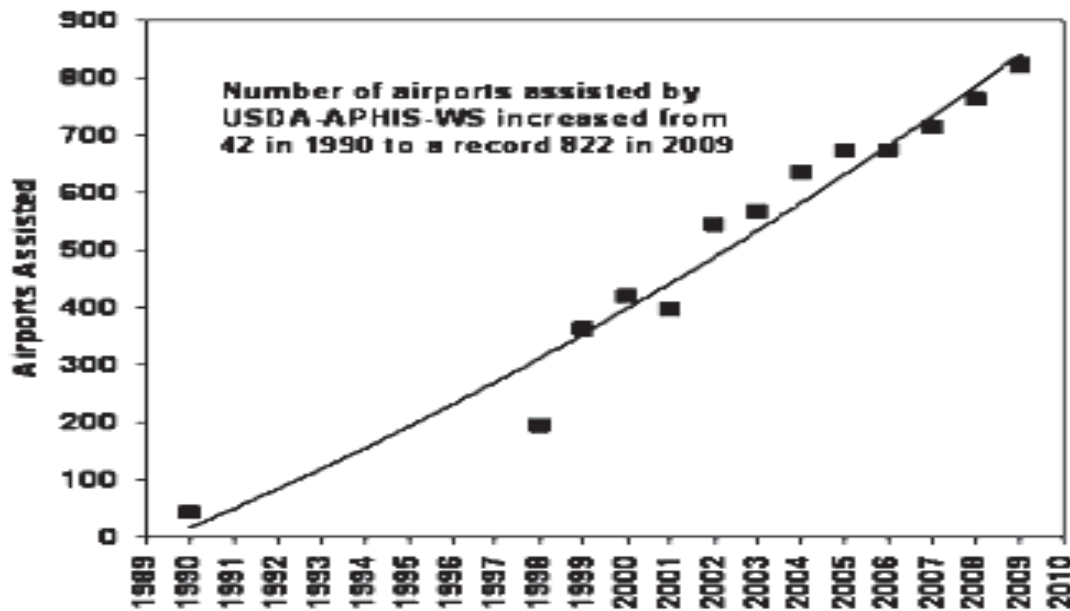


Figure 1. Reprinted from: USDA-APHIS–Wildlife Damage Management: Airport Wildlife Hazards Program–Number of Airports Assisted Annually, available on the USDA Web site at [http://www.aphis.usda.gov/wildlife\\_damage/airline\\_safety/airports\\_assisted.shtml](http://www.aphis.usda.gov/wildlife_damage/airline_safety/airports_assisted.shtml).

*National Wildlife Research Center.* The USDA’s National Wildlife Research Center (NWRC) provides research to the FAA and airport operators regarding wildlife hazard mitigation and strategies and management tools to reduce wildlife hazards at airports. NWRC research topics and studies include the following:

- Wildlife Habitat Management and Other Land-Use Studies—Vegetation types and vegetation management practices to reduce wildlife attractants on airport property; wildlife use of agricultural crops on or near airports; and management of stormwater runoff on and near airports.
- Bird Movements on and near Airports—Relationship of bird movements to aircraft flight patterns and airport locations and movement patterns of specific bird species (bald eagles, osprey, red-tailed hawks, and vultures) in the vicinity of commercial and military airports.
- Exploiting Wildlife Anti-Predation Behaviors and Visual Ecology to Reduce Hazards to Aviation—Factors that control wildlife responses to predation events and human activities, including aviation, and animal detection and avoidance behavior regarding vehicle approach.
- Evaluating Avian Radar—Effectiveness of avian radar systems at airports to detect birds at or near airports with evaluation of range, altitude, target size, and weather effects on radar systems’ accuracy and detection capabilities.<sup>91</sup>

<sup>91</sup> National Wildlife Research Center, *Reducing Wildlife Hazards to Aircraft*, Factsheet (FY 2010), available at

*Relationship Between FAA and Wildlife Services.* The FAA and WS work cooperatively to evaluate potential wildlife threats to airport operations and to assess data and information concerning aircraft–wildlife collisions. FAA guidance concerning this relationship describes the role of the FAA in regulating airport operator certification and in ensuring compliance with the requirement for certificated airports to develop and implement a Wildlife Hazard Management Plan.<sup>92</sup> This FAA guidance also explains the role of WS in conducting Wildlife Hazard Assessments for airport operators and in providing assistance to FAA in reviewing and contributing to Wildlife Hazard Management Plans being developed by airport operators.<sup>93</sup>

The FAA and WS have entered into a memorandum of understanding (FAA-WS MOU)<sup>94</sup> that establishes the agencies’ collaborative approach to resolving and deterring wildlife hazards to aviation. The FAA-WS MOU recognizes the expertise of WS in assessing wildlife

[http://www.aphis.usda.gov/wildlife\\_damage/nwrc/research/aviation/content/WS\\_Research\\_aviation-1.pdf](http://www.aphis.usda.gov/wildlife_damage/nwrc/research/aviation/content/WS_Research_aviation-1.pdf).

<sup>92</sup> FAA CertAlert 04-09–Relationship between FAA and WS (Aug. 30, 2004), available as a download at [www.faa.gov/airports/airport\\_safety/certalerts/media/cert0409.rtf](http://www.faa.gov/airports/airport_safety/certalerts/media/cert0409.rtf).

<sup>93</sup> *Id.*

<sup>94</sup> Memorandum of Understanding between the United States Department of Transportation Federal Aviation Administration and the United States Department of Agriculture Animal and Plant Health Inspection Service Wildlife Services–MOU Number 12-34-71-0003-MOU (June 27, 2005), available at <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1015&context=birdstrikeother>. (Last visited Feb. 15, 2013).



hazards to aviation on and near airports and in training airport personnel to reduce these hazards. The FAA-WS MOU also specifies either the FAA or a certificated airport operator may seek WS technical assistance regarding response to or reduction of wildlife hazards—assistance that may include site visits, wildlife hazards assessments, support for development of Wildlife Hazard Management Plans, wildlife species identification training, control device training, and assistance with management of hazardous wildlife and habitats. In addition, the FAA-WS MOU includes the agreement that WS personnel will advise certificated airport operators to secure any permits or licenses required to control wildlife.

The FAA has entered into wildlife hazard management agreements with other agencies and organizations. The FAA and the National Association of State Aviation Officials (NASAO) entered into an MOU to foster cooperation between WS and NASAO to reduce wildlife hazards at airports in every state. This FAA-NASAO MOU was first established in 1996<sup>95</sup> and has been supplemented in recent years to address issues such as land-use policy coordination, enhancement of state block grants to the AIP, navigational aids, and airport pavement management. The 2010 supplement to the FAA-NASAO MOU<sup>96</sup> specifically addresses cooperation to enhance reporting of wildlife strikes. The MOU amendment seeks to improve wildlife strike data gathering processes through NASAO's facilitation to disseminate FAA educational information and involve state aviation directors and others within the aviation community in this effort.

The FAA also has established interagency agreements to address wildlife hazards at certain military facilities. The FAA entered into a Memorandum of Agreement (MOA) to address aircraft–wildlife conflicts at military installations operated by the U.S. Air Force and U.S. Army.<sup>97</sup> Three federal resource agencies also are parties to this agreement: USDA, U.S. Fish and Wildlife Service (USFWS), and the U.S. Environmental Protection Agency (EPA). In addition, the FAA entered into a regional MOU with several federal military and

resource agencies to address aircraft–wildlife strikes in the southeastern United States.<sup>98</sup>

*Specific Responsibilities to Address Wildlife Hazards.* Certificated airports are obligated to address wildlife hazards. The FARs require airport operators issued an Airport Operating Certificate by the FAA to take “immediate action to alleviate wildlife hazards” that may affect airport operations when those hazards are detected.<sup>99</sup> The FARs define “wildlife hazard” as a “potential for a damaging aircraft collision with wildlife on or near an airport.” This term is defined to specifically include feral animals and domestic animals not within the control of their owners.<sup>100</sup>

The FARs identify actions a certificated airport operator must take to address wildlife hazards. Among these are obligations to:

- Conduct a Wildlife Hazard Assessment when specified events occur (see Section III(B)(1)).
- Prepare a Wildlife Hazard Assessment report with required components (see Section III(B)(2)).
- Obtain FAA approval of the wildlife hazard assessment (see Section III(B)(3)).
- Prepare a Wildlife Hazard Management Plan with specified required elements if the FAA determines the plan is necessary after review of the Wildlife Hazard Assessment (see Section IV).
- Obtain FAA approval of the Wildlife Hazard Management Plan (see Section IV).

The FARs also require airport operators to properly train and qualify the airport personnel responsible for actions to address wildlife hazards.<sup>101</sup>

*Hazardous Wildlife Attractants.* In addition to the regulatory requirements, the FAA has issued orders, directives, and guidance to describe and explain the threat to airport operations associated with wildlife hazard attractants. These orders, directives, and guidance also describe airport operators' obligations to address wildlife hazards and ensure that airport personnel are properly trained and qualified to take action to address wildlife hazards when necessary.<sup>102</sup> The FAA

<sup>95</sup> See NASAO/FAA Memorandum of Understanding, Cooperative Partnership Between the FAA and the State Agencies For Reducing Community Concerns Related To Aircraft Noise 1 (Feb. 2000), available at [http://www.faa.gov/about/office\\_org/headquarters\\_offices/apl/noise\\_emissions/planning\\_toolkit/media/V.F.pdf](http://www.faa.gov/about/office_org/headquarters_offices/apl/noise_emissions/planning_toolkit/media/V.F.pdf).

<sup>96</sup> Attachment to Memorandum of Understanding Between the Federal Aviation Administration and the National Association of State Aviation Officials: 2010 Initiative–Wildlife Hazards (August 24, 2011), <http://www.nasao.org/LinkClick.aspx?fileticket=0h0D9Oe24dA%3d&tabid=68>.

<sup>97</sup> Memorandum of Agreement Between the Federal Aviation Administration, the U.S. Air Force, the U.S. Army, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the U.S. Department of Agriculture to Address Aircraft–Wildlife Strikes (July 29, 2003).

<sup>98</sup> Regional Memorandum of Understanding (RMOU) between the Federal Aviation Administration, U.S. Air Force, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service (FWS), U.S. Department of Agriculture APHIS Wildlife Services to Address Aircraft–Wildlife Strikes in the Southern Region of the United States, [http://www.faa.gov/airports/southern/airport\\_safety/media/so\\_wildlife\\_strikes\\_mou.pdf](http://www.faa.gov/airports/southern/airport_safety/media/so_wildlife_strikes_mou.pdf).

<sup>99</sup> 14 C.F.R. § 139.337(a).

<sup>100</sup> 14 C.F.R. § 139.5.

<sup>101</sup> 14 C.F.R. §§ 139.337 and 139.303.

<sup>102</sup> Some of the FAA orders and directives referenced in FAA documents have been canceled or superseded. For example, the FAA Order 5200.3D–Wildlife Hazard Detection and Control Procedures (Feb. 23, 1989) was canceled effective Jan. 21, 2011. In addition, the FAA CertAlert 01-01–Deer Aircraft Hazard was canceled and superseded by FAA CertAlert 04-16–Deer Hazard to Aircraft and Deer Fencing (Dec. 13, 2004).

Advisory Circular Series 150, concerning airport operations, provides recommendations concerning a variety of operational considerations (e.g., construction standards and safety practices, aircraft rescue and fire fighting, and airport lighting), and includes an Advisory Circular that specifically addresses the need for distance between airport operational activities and land uses that may attract hazardous wildlife.<sup>103</sup>

This FAA Advisory Circular identifies land uses (e.g., wetlands, municipal solid waste landfills (MSWLFs), stormwater management facilities, golf courses, and agricultural activities) determined by the FAA to be incompatible with safe airport operations because of their potential to attract hazardous wildlife on or near airports.<sup>104</sup> The Advisory Circular specifies the minimum separation distance between these land uses and 1) the air operations area, or 2) new airport development projects planned to accommodate aircraft movement.<sup>105</sup> The minimum recommended separation criteria are as follows:

- 5,000 ft between the air operations area and the hazardous wildlife attractant for airports serving piston-powered aircraft.
- 10,000 ft between the air operations area and the hazardous wildlife attractant for airports serving turbine-powered aircraft.
- Five statute mi<sup>106</sup> between the air operations area and the hazardous wildlife attractant for all airports when the attractant could cause hazardous wildlife to move into or across the airport's approach or departure airspace.

This Advisory Circular states that the minimum separation criteria and other specified standards and practices may be used by certificated airport operators to comply with the FAA's regulatory wildlife management requirements and must be used by those airport operators who have received federal grant-in-aid assistance.

*Wildlife Strike Prevention.* The FAA has issued guidance concerning the danger to airport operations created by deer within the aircraft movement areas. This guidance provides recommendations regarding the fencing types, installation, and maintenance to prevent deer from entering aircraft movement areas.<sup>107</sup>

*Wildlife Hazard Assessments.* The major FAA directives and guidance concerning the airport operators' obligations to conduct Wildlife Hazard Assessments and

prepare Wildlife Hazard Assessment reports consistent with the FARs requirements are summarized below.

- *FAA Advisory Circular No. 150/5200-36A—Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports* (January 31, 2012).<sup>108</sup> Specifies the minimum requirements for the initial and recurring wildlife hazard management curriculum provided to airport personnel involved in implementing an FAA-approved Wildlife Hazard Management Plan. Identifies the qualifications for wildlife biologists conducting Wildlife Hazard Assessments for certificated airports.

- *FAA CertAlert 09-10—Wildlife Hazard Assessments in Accordance with Part 139 Requirements* (June 11, 2009).<sup>109</sup> Describes the requirements in 14 C.F.R. 139.337(b) to conduct a Wildlife Hazard Assessment when a triggering event (as specified in the FAA regulations) occurs. Specifies the content of the assessment and qualifications for the person conducting the assessment and the required content of the assessment report. Identifies the FAA concern that airport operators that have had triggering events have not conducted a Wildlife Hazard Assessment as required by the FAA regulations.

- *FAA CertAlert 04-09—Relationship Between FAA and WS* (August 30, 2004).<sup>110</sup> Identifies the roles and responsibilities of the FAA and WS concerning wildlife hazards on or near airports. Describes the FAA's role in airport operator certification, the requirement for certificated airports to develop and implement a Wildlife Hazard Management Plan, and the WS role in conducting Wildlife Hazard Assessments. Describes the MOU between the FAA and WS (No. 12-4-71-0003-MOU), which establishes a cooperative agency relationship for resolving wildlife hazards to aviation.

- *FAA CertAlert 97-09—Wildlife Hazard Management Plan Outline* (November 17, 1997).<sup>111</sup> Describes the Wildlife Hazard Assessment's purpose as the mechanism to provide an ecological study to provide the scientific basis for Wildlife Hazard Management Plan development, implementation, and revision. Explains the extent to which the Wildlife Hazard Assessment content may be used to develop the Wildlife Hazard Management Plan.

*Wildlife Hazard Response.* The FARs require certificated airport operators to take "immediate action to alleviate wildlife hazards" when they are detected.<sup>112</sup> The FARs define "wildlife hazard" based on the poten-

<sup>103</sup> FAA Advisory Circular No. 150/5200-33B—Hazardous Wildlife Attractants On or Near Airports (Aug. 28, 2007), [http://www.faa.gov/documentLibrary/media/advisory\\_circular/150-5200-33B/150\\_5200\\_33b.pdf](http://www.faa.gov/documentLibrary/media/advisory_circular/150-5200-33B/150_5200_33b.pdf).

<sup>104</sup> *Id.*

<sup>105</sup> *Id.*

<sup>106</sup> A statute mile constitutes 5,280 ft or 1,760 yds.

<sup>107</sup> FAA CertAlert 04-16—Deer Hazard to Aircraft and Deer Fencing (Dec. 13, 2004), [http://webcache.googleusercontent.com/search?q=cache:bR6qlrmu\\_vEJ:www.faa.gov/airp](http://webcache.googleusercontent.com/search?q=cache:bR6qlrmu_vEJ:www.faa.gov/airp).

<sup>108</sup> Available at [http://www.faa.gov/regulations\\_policies/advisory\\_circulars/index.cfm/go/document.information/documentID/1019776](http://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/1019776).

<sup>109</sup> [http://www.faa.gov/airports/airport\\_safety/certalerts/media/cert0910.pdf](http://www.faa.gov/airports/airport_safety/certalerts/media/cert0910.pdf).

<sup>110</sup> Available by locating number at [http://www.faa.gov/airports/airport\\_safety/certalerts/](http://www.faa.gov/airports/airport_safety/certalerts/).

<sup>111</sup> *Id.*

<sup>112</sup> 14 C.F.R. § 139.337(a).

tial for a damaging aircraft wildlife collision on or near an airport.<sup>113</sup> The FARs also require the actions taken by the airport operator to reduce wildlife hazards to be in accordance with the airport operator's FAA-approved Airport Certification Manual.<sup>114</sup>

*Wildlife Strike Reporting.* The FAA has established a program for data collection and research concerning the number and types of aircraft wildlife strikes and the species involved in collisions. FAA Advisory Circular No. 150/5200-32A—Reporting Wildlife Aircraft Strikes (December 22, 2004) describes the process for airport operators and others to report aircraft wildlife strikes to the FAA Bird/Other Wildlife Strike Reporting system.<sup>115</sup> This Advisory Circular and FAA CertAlert No. 02-06—Access to the National Wildlife Aircraft Strike Database (October 1, 2003) describe the process for reporting an aircraft wildlife strike and provide instructions for airport operators, airline operators, and FAA airport certification safety inspectors to access the information in the National Wildlife Strike Database and report a wildlife strike.<sup>116</sup>

FAA Advisory Circular No. 150/5200-32A emphasizes the importance of the information provided by aircraft wildlife collision reports that are submitted to the National Wildlife Aircraft Strike Database and describes the use of information submitted to the database. The FAA reported receiving 21,489 strike reports during the 2008 to 2010 period: 7,545 strikes in 2008; 9,484 in 2009; and 4,460 through July 2010. As of April 2009, the FAA has made all of the information in the National Wildlife Strike Database available to the public.<sup>117</sup>

*Wildlife Remains.* FAA has issued guidelines concerning submission of wildlife remains to provide information on the types of species involved in wildlife strikes. This FAA guidance specifies the process for aircraft operators, airport operating and maintenance inspectors, and foreign air carriers to collect and submit feather or other bird/wildlife remains to the feather identification lab at the Smithsonian Institution, Museum of Natural History.<sup>118</sup> The FAA guidance also describes the importance of identification research and the development of a comprehensive database through

<sup>113</sup> 14 C.F.R. § 139.5.

<sup>114</sup> 14 C.F.R. § 139.337(a).

<sup>115</sup> Available by number at [http://www.faa.gov/regulations\\_policies/advisory\\_circulars/index.cfm/go/document.list/parentTopicID/11/display/all/changeNumber/0/currentPage/7/sortResults/false/sortColumn/dateIssued/sortOrder/DESC](http://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.list/parentTopicID/11/display/all/changeNumber/0/currentPage/7/sortResults/false/sortColumn/dateIssued/sortOrder/DESC).

<sup>116</sup> The form is on the FAA Web site at <http://www.faa.gov/documentLibrary/media/form/faa5200-7.pdf>. The wildlife strike report may be submitted electronically through the FAA Wildlife Strike Reporting Web site at <http://wildlife-mitigation.tc.faa.gov/wildlife/strikenew.aspx>.

<sup>117</sup> See [http://www.faa.gov/news/fact\\_sheets/news\\_story.cfm?newsId=12478](http://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=12478).

<sup>118</sup> FAA CertAlert 03-03; Guidelines for Submitting Bird Strike Feather Remains for Identification (Aug. 29, 2003), available by number at [http://www.faa.gov/airports/airport\\_safety/certalerts/](http://www.faa.gov/airports/airport_safety/certalerts/).

wildlife remains submissions to improve understanding and prevention of bird-aircraft strike hazards.

### *Wildlife Hazard Assessment*

*Requirement to Conduct Wildlife Hazard Assessment.* The FAA prescribes the requirements for and content of a Wildlife Hazard Assessment. FAA guidance describes the Wildlife Hazard Assessment as an ecological study conducted by a qualified wildlife damage management biologist to evaluate potential wildlife threats to aircraft operations.<sup>119</sup> The FARs specify the circumstances in which an airport operator is required to conduct a Wildlife Hazard Assessment and the required content of the assessment. In addition, the FARs require the airport operator to submit the Wildlife Hazard Assessment for FAA review and approval.<sup>120</sup>

Based on its review of the Wildlife Hazard Assessment, the FAA may require the airport operator to take specific actions to address issues identified in the assessment. Among other actions, the FAA may direct the airport operator to formulate and implement a Wildlife Hazard Management Plan.<sup>121</sup> FAA CertAlert 97-09 specifies that the Wildlife Hazard Assessment serves as the scientific basis for an airport operator to develop, implement, and revise a Wildlife Hazard Management Plan. Preparation, approval, and implementation of the Wildlife Hazard Management Plan are described in Section IV of this digest.

The FAA has identified certain events indicating a potential wildlife hazard on airport property that will require the preparation of a Wildlife Hazard Assessment. When any of the four “triggering” events specified in the FARs occur, the airport operator is required to conduct a Wildlife Hazard Assessment in accordance with regulatory requirements. The required contents of the Wildlife Hazard Assessment are specified in FAA regulations.<sup>122</sup> A certificated airport operator is required to conduct a Wildlife Hazard Assessment when any of four events occur:

- An air carrier aircraft experiences multiple wildlife strikes.
- An air carrier aircraft experiences “substantial damage” from striking wildlife.
- An air carrier aircraft experiences an engine ingestion of wildlife.
- Wildlife of a size, or in numbers, capable of causing one of the three events above is observed to have access to any airport flight pattern or aircraft movement area.<sup>123</sup>

<sup>119</sup> FAA CertAlert 97-09—Wildlife Hazard Management Plan Outline (Nov. 17, 1997), available by number at [http://www.faa.gov/airports/airport\\_safety/certalerts/](http://www.faa.gov/airports/airport_safety/certalerts/).

<sup>120</sup> 14 C.F.R. § 139.337.

<sup>121</sup> *Id.*

<sup>122</sup> *Id.*

<sup>123</sup> 14 C.F.R. § 139.337(b)(1)-(4).

The term “substantial damage” is defined in the FARs as “damage or structural failure incurred by an aircraft that adversely affects the [aircraft’s] structural strength, performance, or flight characteristics and that would normally require major repair or replacement of the affected component.”

In 2009 the FAA issued an advisory concerning airport operator’s compliance with the Wildlife Hazard Assessment requirement. FAA CertAlert 09-10—Wildlife Hazard Assessments in Accordance with Part 139 Requirements (June 11, 2009)<sup>124</sup> cautioned airport operators about the risk of aircraft-wildlife strikes because of increased populations of the wildlife species commonly involved in aircraft strikes and increased commercial air traffic. The FAA advisory stated the FAA had reviewed the National Wildlife Strike Database and was concerned that airport operators that had experienced triggering events had not initiated a Wildlife Hazard Assessment as required by the FARs. The FAA advisory reminded these airport operators of the regulatory obligation to initiate a Wildlife Hazard Assessment under such circumstances and encouraged those operators who had not experienced a triggering event to conduct an assessment.<sup>125</sup>

*Preparation of Wildlife Hazard Assessment.* The FAA has specified by regulation the requirements for preparation of a Wildlife Hazard Assessment.<sup>126</sup> FAA (CertAlert 97-09) describes the ecological study reflected in the assessment as the “scientific basis” for an airport operator’s development of a Wildlife Hazard Management Plan if one is required. According to the FARs, the Wildlife Hazard Assessment must be conducted by a wildlife damage management biologist whose qualifications include professional training or experience in airport wildlife hazard management.<sup>127</sup>

*Qualifications.* In Advisory Circular 150/5200-36A—Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports (January 31, 2012), the FAA further prescribes the qualifications of a “qualified airport wildlife biologist” satisfying the FARs’ requirements. These requirements include academic coursework, specific and continuing training in airport wildlife hazard management, and wildlife hazard assessment experience. FAA CertAlert 97-09 states the biologist’s primary responsibilities in conducting the Wildlife Hazard Assessment are to:

- Provide information on the wildlife attractants that have been identified on or near the airport.
- Identify wildlife management techniques.
- Prioritize appropriate mitigation measures.
- Recommend necessary equipment and supplies.
- Identify training requirements for the airport personnel who will implement the Wildlife Hazard Management Plan.

*Components.* The FARs identify the required content of a Wildlife Hazard Assessment. The assessment must identify the reason (events or circumstances) for requiring the assessment. The numbers, locations, local movements, and occurrences (daily and seasonal) of the wildlife observed during the assessment also must be included. The assessment must report the identification and location of on-airport and off-airport features attracting wildlife and a description of wildlife hazards to air carrier operations that were identified. Further, the Wildlife Hazard Assessment must include recommendations to reduce the identified wildlife hazards.<sup>128</sup>

*FAA Approval.* The Wildlife Hazard Assessment must be approved by the FAA. The FARs require the airport operator to submit the completed assessment to the FAA for approval. The FAA review and approval of the assessment will include the agency’s determination whether the airport operator must develop a Wildlife Hazard Management Plan.<sup>129</sup> In addition to the Wildlife Hazard Assessment itself, the FAA must consider the following factors in making this determination:

- Recommended actions in the Wildlife Hazard Assessment to reduce wildlife hazards.
- Aeronautical activity at the airport, including aircraft frequency and size.
- Views of the Airport Operating Certificate holder.
- Views of the airport users.
- Any other known factors known by the FAA concerning the wildlife hazard.<sup>130</sup>

If the FAA determines that a Wildlife Hazard Management Plan is necessary, the airport operator is required to initiate development of the plan consistent with the FARs.<sup>131</sup>

#### IV. WILDLIFE HAZARD MANAGEMENT

This section and Sections V and VI describe federal and state law requirements and authorizations, including Wildlife Hazard Management Plans and protected species laws and regulations (e.g., Endangered Species Act, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act (MBTA), and state and federal laws regulating wildlife), relating to legally acceptable means airports can pursue to remove or discourage

<sup>124</sup> Available by number at [http://www.faa.gov/airports/airport\\_safety/certalerts/](http://www.faa.gov/airports/airport_safety/certalerts/).

<sup>125</sup> 14 C.F.R. § 139.377(b) requires that the certificate holder conduct a wildlife hazard assessment only where an air carrier aircraft experiences multiple wildlife strikes; substantial damage from striking wildlife; an engine ingestion of wildlife; or wildlife capable of causing such events are observed to have access to airport flight pattern or aircraft movement area.

<sup>126</sup> 14 C.F.R. § 139.337.

<sup>127</sup> 14 C.F.R. § 139.337(c) and f(7).

<sup>128</sup> 14 C.F.R. § 139.337(c).

<sup>129</sup> 14 C.F.R. § 139.337(d).

<sup>130</sup> *Id.*

<sup>131</sup> 14 C.F.R. § 139.337(e).

wildlife (including protected species) from runways, taxiways, and airspace necessary for takeoffs and landings. Section IV addresses Wildlife Hazard Management Plans.

### Duty to Prepare Wildlife Hazard Management Plan

The FAA may require an airport operator to develop or revise a Wildlife Hazard Management Plan. Section III of this digest describes the requirement for an airport operator to conduct a Wildlife Hazard Assessment when those events identified in the FARs that indicate a potential wildlife hazard occur on airport property. Section III also describes the specified content and the requirement for FAA approval of the Wildlife Hazard Assessment.<sup>132</sup> The FAA review of the Wildlife Hazard Assessment includes the agency's determination whether the airport operator will be required to develop a Wildlife Hazard Management Plan. In addition to the content of the Wildlife Hazard Assessment and its recommendations for wildlife hazard reduction, the FAA considers several factors in making this determination. These factors include the airport's aeronautical activity, views of both the certificated airport operator and the airport users, and other wildlife hazard factors known by the FAA. If the FAA determines a Wildlife Hazard Management Plan is necessary, the airport operator is required to initiate development of the plan consistent with the FARs.<sup>133</sup>

### Required Elements

The certificated airport operator is required to initiate development or revision of the airport's Wildlife Hazard Management Plan when the FAA determines this action is necessary. The FARs specify the airport operator must use the Wildlife Hazard Assessment approved by the FAA as the basis for development and implementation of the Wildlife Hazard Management Plan.<sup>134</sup> Portions of the assessment may be incorporated into the Wildlife Hazard Management Plan, and the biologist who conducted the Wildlife Hazard Assessment may be asked to review the final draft of the plan. However, the development of the Wildlife Hazard Management Plan is the responsibility of the airport operator and not the biologist.<sup>135</sup>

The airport operator is directed by the FARs to include "measures to alleviate or eliminate wildlife hazards" to aircraft operations in the plan.<sup>136</sup> The FARs also list the required Wildlife Hazard Management Plan elements, including:

- Individuals with authority and responsibility for implementing each aspect of the plan.
- Priority list and target dates for initiation and completion of wildlife population management, habitat modification, and land-use change actions identified in the Wildlife Hazard Assessment.
- Federal, state, and local wildlife control permits.
- Resources for plan implementation.
- Aircraft operations procedures to manage wildlife hazards, including responsible personnel, aircraft movement area inspection procedures, wildlife hazard control measures, and communication procedures for wildlife hazard observation and control.
- Procedures to review and evaluate the plan annually or after one of the specified events that trigger the requirement to conduct a Wildlife Hazard Assessment.
- Plan effectiveness in dealing with known wildlife hazards on and in the airport's vicinity;
- Wildlife hazard aspects that should be reevaluated.
- Training program to provide airport personnel with the knowledge and skills needed to successfully carry out the Wildlife Hazard Management Plan.

Each of these requirements will be described in this section. The Wildlife Hazard Management Plan must be submitted to the FAA for approval before it is implemented. Once approved, the plan may be incorporated into the airport operator's Airport Certification Manual.<sup>137</sup>

### Authorized/Responsible Individuals

The Wildlife Hazard Management Plan must identify the individuals who are authorized and responsible to implement each component of the plan.<sup>138</sup> FAA guidance describes the FARs' Wildlife Hazard Management Plan requirements and specifies how those requirements may be satisfied. Regarding responsibility for plan implementation, the FAA guidance specifies that aspects of the plan activities may be assigned to airport departments, including airport operations, maintenance, security, planning, finance, and wildlife coordination or wildlife hazards. The FAA guidance also notes that wildlife law enforcement responsibilities may be addressed by federal wildlife resource agencies (USFWS), state wildlife resource agencies, and local law enforcement agencies.<sup>139</sup>

### Priority Actions and Target Dates

The Wildlife Hazard Management Plan must include a prioritized list of actions concerning wildlife population management, habitat modification, and land-use changes that were identified in the Wildlife Hazard Assessment. The plan also must include target dates for both initiation and completion of these

<sup>132</sup> 14 C.F.R. § 139.337.

<sup>133</sup> 14 C.F.R. § 139.337(e).

<sup>134</sup> 14 C.F.R. § 139.337(e).

<sup>135</sup> CertAlert 97-09: Wildlife Hazard Management Plan Outline (Nov. 17, 1997), available at [http://www.faa.gov/airports/airport\\_safety/certalerts/](http://www.faa.gov/airports/airport_safety/certalerts/).

<sup>136</sup> 14 C.F.R. § 139.337(f).

<sup>137</sup> *Id.*

<sup>138</sup> 14 C.F.R. § 139.337(f)(1).

<sup>139</sup> FAA CertAlert 97-09, available at [http://www.faa.gov/airports/airport\\_safety/certalerts/](http://www.faa.gov/airports/airport_safety/certalerts/).

actions.<sup>140</sup> FAA guidance describes activities related to reducing wildlife aircraft strike potential associated with hazardous wildlife attractants identified in the Wildlife Hazard Assessment. The plan should include a history of work and the completed habitat modification and other projects addressing potential aircraft wildlife strikes. The FAA guidance identifies the area of concern for airport property as the aircraft operations area, airport structures, and the area within 2 and 5 mi of aircraft movement areas.<sup>141</sup>

According to the FAA guidance, priority habitat modification actions may include activities such as food/prey base management, trash and debris handling and storage, and species-specific management techniques (e.g., repelling, exclusion, and removal). Habitat modification actions also may include vegetation management (e.g., landscaping, agriculture); water management activities concerning areas such as wetlands, drainage, and detention ponds on airport property; buildings and structures; and airport construction.<sup>142</sup> The plan also may address resource protection through wildlife exclusion and deterrence actions.

#### Required Permits

The Wildlife Hazard Management Plan must identify and include copies of the required federal, state, and local wildlife control permits for airport operations.<sup>143</sup> FAA guidance notes that wildlife protection may be required under federal, state, and local laws and specifies that the Wildlife Hazard Management Plan should identify the types and legal status of protected species.<sup>144</sup> In addition to wildlife management permits, the Wildlife Hazard Management Plan should identify any required federal, state, and local permits for pesticide use on airport property. Federal depredation permits may be required for actions affecting migratory birds under the Migratory Bird Treaty Act of 1918,<sup>145</sup> and federal take permits may be required for actions affecting bald eagles under the Bald and Golden Eagle Protection Act of 1940.<sup>146</sup> In addition, Federal Endangered Species Act of 1973 authorization,<sup>147</sup> obtained through the Section 7 consultation process or Section 10 permitting process, may be required for actions that can result in the incidental take of federally listed species. Further, state permits may be required for actions that may result in take of state-protected species or that require removal of wildlife from airport property.

<sup>140</sup> 14 C.F.R. § 139.337(f)(2).

<sup>141</sup> FAA CertAlert 97-09.

<sup>142</sup> *Id.*

<sup>143</sup> 14 C.F.R. § 139.337(f)(3).

<sup>144</sup> FAA CertAlert 97-09.

<sup>145</sup> Codified at 16 U.S.C. §§ 703–712.

<sup>146</sup> 54 Stat. 250, codified at 16 U.S.C. § 668–668d.

<sup>147</sup> Pub. L. No. 93-205, 87 Stat. 884, codified at 16 U.S.C. § 1531.

#### Implementation Resources

The FARs specify that the Wildlife Hazard Management Plan must identify the resources the airport operator will provide for plan implementation.<sup>148</sup> FAA guidance describes the types of resources to be identified in the plan. The resources include wildlife patrol personnel, vehicles, equipment, and supplies; wildlife control equipment and supplies (e.g., radios, traps, shellcrackers); other personnel; and pesticides and pesticide application equipment.<sup>149</sup>

#### Operations Procedures

The Wildlife Hazard Management Plan must specify the wildlife hazard management procedures associated with aircraft operations. At a minimum, the plan must:

- Designate the personnel responsible for implementing the plan procedures.
- Provide for physical inspections of aircraft movement areas and other areas critical for wildlife hazard management before aircraft operations begin.
- Provide measures to control wildlife hazards.
- Specify communication methods between personnel conducting wildlife control activities and between personnel observing wildlife hazards and the air traffic control tower.<sup>150</sup>

FAA guidance specifies that the responsible airport personnel in the Wildlife Hazard Management Plan may include wildlife patrol and coordination, operations, maintenance, security, and air traffic control. The plan may provide for physical inspections of areas such as runways, taxiways, ramps, and unmitigated hazardous wildlife attractants. The plan also may identify control measures, including repelling, capturing, and killing birds and mammals that create wildlife hazards. In addition, the plan may specify communication procedures, equipment, and training for communication between wildlife control personnel and between these personnel and the air traffic control tower.<sup>151</sup>

#### Evaluation

The Wildlife Hazard Management Plan must include procedures for plan review and evaluation. The plan must provide for the airport operator to conduct an annual review. The plan also must provide for the airport operator to conduct a plan review when any of the four triggering events identified in the FAR Wildlife Hazard Assessment regulations occur.<sup>152</sup> These events are:

<sup>148</sup> 14 C.F.R. § 139.337(f)(4).

<sup>149</sup> FAA CertAlert 97-09.

<sup>150</sup> 14 C.F.R. § 139.337(f)(5).

<sup>151</sup> FAA CertAlert 97-09.

<sup>152</sup> 14 C.F.R. § 139.337(f)(6).

- An air carrier aircraft experiences multiple wildlife strikes.
- An air carrier aircraft experiences “substantial damage” from striking wildlife.
- An air carrier aircraft experiences an engine ingestion of wildlife.
- Wildlife of a size, or in numbers, capable of causing one of the three events above is observed to have access to any airport flight pattern or aircraft movement area.<sup>153</sup>

FAA guidance states that the annual or event-based plan review should include representatives from the airport’s departments involved in wildlife hazard management as well as the wildlife damage management biologist who did the ecological study reflected in the original Wildlife Hazard Assessment.<sup>154</sup>

### *Effectiveness and Reevaluation*

The Wildlife Hazard Management Plan review must include consideration of the effectiveness and relevance of the plan. First, the review evaluates the plan’s effectiveness in addressing known wildlife hazards on airport property and within the airport’s vicinity.<sup>155</sup> The evaluation of plan effectiveness should include review of airport records and information from all airport departments, air traffic control, and the wildlife biologist.<sup>156</sup> Second, the plan evaluation considers whether the wildlife hazards described in the Wildlife Hazard Assessment should be reevaluated.<sup>157</sup> FAA guidance provides that the review should consider records of wildlife seen on the airport operations area and records of requests for wildlife dispersal from the air traffic control tower, pilots, and others.<sup>158</sup>

### *Training*

The Wildlife Hazard Management Plan must include provisions for training for the airport personnel responsible for implementing the plan. The training program must be conducted by a wildlife damage management biologist with the qualifications required for biologists authorized to conduct Wildlife Hazard Assessments. The training program must be designed to provide airport personnel with the knowledge and skills required to conduct the activities specified in the plan.<sup>159</sup> The training should be provided to all relevant airport personnel and include, among other components, wildlife hazard awareness training and pesticide use training and certification.<sup>160</sup>

Advisory Circular No. 150/5200-36A—Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports (January 31, 2012)<sup>161</sup> prescribes requirements for the qualified wildlife damage management biologist and also specifies the requirements for airport personnel wildlife management training programs. This Advisory Circular describes the FARs’ airport operational training program requirements (e.g., airport marking and lighting, access and operation in movement areas, and communications) applicable to all airport personnel with access to aircraft movement areas and safety areas.<sup>162</sup> This Advisory Circular notes that the operational training program provisions incorporate wildlife management training.<sup>163</sup> Wildlife management training includes both initial and recurring training programs for all airport personnel actively involved in implementing the airport’s Wildlife Hazard Management Plan.

### **FAA Approval**

FAA approval of the airport operator’s Wildlife Hazard Management Plan is required. The FARs require the airport operator to develop a Wildlife Hazard Management Plan, or revise an existing plan, when determined necessary by the FAA. The FARs also require that the plan provide measures to “alleviate or eliminate wildlife hazards” to aircraft operations.<sup>164</sup> When the FAA requires plan development or revision, the FAA Regional Coordinator will request information from the USFWS concerning the presence of species and critical habitat that are either listed or designated (or proposed for listing or designation) under the Federal Endangered Species Act (ESA) on or near the airport property. According to FAA Program Policy and Guidance Policy No. 78—Section 7, Consultation on Endangered or Threatened Species (June 21, 2004), the FAA Regional Coordinator will provide information from the USFWS regarding federally listed species or critical habitat for compliance with the ESA’s interagency consultation requirements.<sup>165</sup>

The airport operator’s final Wildlife Hazard Management Plan must be submitted to FAA for approval before being implemented by the airport operator. The approved plan may be incorporated into the airport operator’s certification manual.<sup>166</sup>

<sup>153</sup> 14 C.F.R. § 139.337(b)(1)-(4).

<sup>154</sup> FAA CertAlert 97-09.

<sup>155</sup> 14 C.F.R. § 139.337(f)(6)(i).

<sup>156</sup> FAA CertAlert 97-09.

<sup>157</sup> 14 C.F.R. § 139.337(f)(6)(ii).

<sup>158</sup> FAA CertAlert 97-09.

<sup>159</sup> 14 C.F.R. § 139.337(f)(7).

<sup>160</sup> FAA CertAlert 97-09.

<sup>161</sup> Available at [http://www.faa.gov/regulations\\_policies/advisory\\_circulars/index.cfm/go/document.list/parentTopicID/11/display/all/changeNumber/0/currentPage/1/sortResults/false/sortColumn/dateIssued/sortOrder/DESC](http://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.list/parentTopicID/11/display/all/changeNumber/0/currentPage/1/sortResults/false/sortColumn/dateIssued/sortOrder/DESC).

<sup>162</sup> 14 C.F.R. § 139.303.

<sup>163</sup> 14 C.F.R. § 139.337.

<sup>164</sup> 14 C.F.R. § 139.337(e).

<sup>165</sup> 16 U.S.C. § 1536.

<sup>166</sup> 14 C.F.R. § 139.337(e).

## Wildlife Management Actions

The FAA has identified numerous actions airport operators can take to remove or discourage wildlife from aircraft operations areas (e.g., runways and taxiways) and from the airspace required for aircraft departures and landings. Strategies airport operators use to eliminate or reduce the potential for wildlife hazards affecting airport operations include activities falling within the following general categories.<sup>167</sup>

### Exclusion

Airport operators may use physical barriers to keep wildlife populations that create a risk to airport operations from areas on or near the airport property that could provide food, water, or shelter. Exclusion techniques may include fencing, culvert grids, pin wires on lights and signs, screening, netting, and grid wires. Airport operators also may cover retention ponds, place covers on drainage ditches, and install bird netting on hangars and buildings.

### Repellent and Harassment Actions

Airport operators may use repellent and harassment equipment and techniques to temporarily exclude hazardous wildlife from areas of concern.<sup>168</sup> These techniques include use of technical (e.g., audio and visual) and chemical repellents to affect the wildlife's senses and create discomfort or fear for the wildlife. Repellent and harassment techniques may be used to make the area of concern unattractive to hazardous wildlife. Examples include pyrotechnics, projectiles, lasers, human or animal (e.g., falcons and dogs) monitors and patrols, remote control planes, and effigies.

### Habitat Modification

Airport operators may modify habitat to eliminate or reduce attraction of hazardous wildlife on or near the airport property. Techniques involve changing the environment to reduce hazardous wildlife's access to food, water, and shelter on the airport property and in its vicinity. Examples include vegetation management, land-use changes, and elimination of wetlands on the airport property.

### Removal

Airport operators may physically remove wildlife creating a threat to airport operations from the aircraft operations area and airport property. Exclusion techniques may include live capture, relocation, toxicant

use, and lethal removal of wildlife. Airport operators also may destroy or remove nests and eggs from airport property.

### Maintenance

In addition to specific wildlife management techniques, airport operators may reduce the attraction of airport operational areas to hazardous wildlife through general maintenance activities. Examples include removing trash and litter, covering garbage cans and dumpsters, removing dead animals from the field, and prohibiting wildlife feeding.

### Evaluation and Response

Airport operators may establish procedures and personnel teams to develop and evaluate data and information related to the threats to aircraft operations associated with hazardous wildlife on and near the airport property. Actions airport operators may take include implementing monitoring and observation programs, maintaining wildlife logs, reviewing and encouraging submission of aircraft wildlife strike reports, and establishing wildlife hazard working groups. When warranted and/or required, airport operators also will initiate Wildlife Hazard Assessments and develop or revise Wildlife Hazard Management Plans.

In addition to these wildlife management techniques, airport operators may use aircraft operational safety procedures to reduce or eliminate threats associated with hazardous wildlife. These procedures include notices to aircraft operators of potential wildlife hazards, delay or change of aircraft departures and landings, and change or closure of runways.

The USDA has issued guidance concerning the assistance WS provides to airport operators and the FAA concerning wildlife hazards. The USDA guidance provides guidelines for WS technical and direct control assistance to airport managers, state aviation agencies, FAA, and the Department of Defense regarding hazards caused by wildlife to airport safety. The guidance also describes assistance to federal and state agencies, airport managers, and the aviation industry to reduce wildlife hazards according to the FAA-WS MOU. In addition, the USDA guidance explains that WS may conduct Wildlife Hazard Assessments, assist with Wildlife Hazard Management Plans, and provide technical assistance activities to minimize hazards caused by wildlife pursuant to cooperative agreements.<sup>169</sup>

The FARs direct airport operators to the FAA Advisory Circulars for wildlife hazard management methods and procedures determined acceptable by the FAA.<sup>170</sup> The following is a description of the FAA Advisory Circulars and other FAA guidance that include acceptable methods and procedures for hazardous wildlife management at airports.

<sup>167</sup> See EDWARD C. CLEARY & ARCHIE DICKEY, *GUIDEBOOK FOR ADDRESSING AIRCRAFT/WILDLIFE HAZARDS AT GENERAL AVIATION AIRPORTS* (Transportation Research Board, Airport Cooperative Research Program Report 32, 2010). See also EDWARD C. CLEARY & RICHARD A. DOLBEER, *FEDERAL AVIATION ADMINISTRATION, WILDLIFE HAZARD MANAGEMENT AT AIRPORTS: A MANUAL FOR AIRPORT PERSONNEL* (2d ed., July 2005).

<sup>168</sup> CLEARY & DOLBEER, *supra* note 167.

<sup>169</sup> USDA Directive 2.305 Wildlife Hazards to Aviation (Mar. 1, 2004), [http://www.aphis.usda.gov/wildlife\\_damage/directives/2.305\\_wildlife\\_hazards\\_to\\_aviation.pdf](http://www.aphis.usda.gov/wildlife_damage/directives/2.305_wildlife_hazards_to_aviation.pdf).

<sup>170</sup> 14 C.F.R. § 139.337(g).



*FAA Order 7400.2J—Procedures for Handling Airspace Matters* (February 9, 2012). This FAA Order describes the requirements for providing notice of proposed construction or alteration within specified distances of aircraft landing and departure areas. The FAA Order also describes the process for FAA review of notices of proposed construction received by the agency, including consideration of potential airport hazards that may not be above ground level but may create an environment that attracts birds and other wildlife.

*FAA Advisory Circular No. 150/5200-33B—Hazardous Wildlife Attractants on or near Airports* (August 28, 2007). This Advisory Circular ranks species that are determined to be hazardous to aircraft operations and identifies the land uses (e.g., wetland mitigation, waste disposal operations, and agricultural activities) that may attract hazardous wildlife. The Advisory Circular also specifies minimum separation criteria between airport operations areas and those land uses. In addition, the Advisory Circular includes recommendations for new airport development and methods to address hazardous wildlife attractants associated with existing land uses within the specified separation criteria. Recommendations include coordination with a qualified wildlife damage management biologist, development of Wildlife Hazard Assessments and Wildlife Hazard Management Plans, and local coordination to support airport operators' efforts to manage and control hazardous wildlife.

*FAA Advisory Circular 150/5200-34A—Construction or Establishment of Landfills near Public Airports* (January 26, 2006). This Advisory Circular describes the required separation distance prescribed by federal law between a new municipal solid waste landfill and a public airport. The Advisory Circular references the FAA direction to airport operators concerning minimum separation distances for specified land uses and the process for requesting that the FAA grant an exemption from the statutory distance limitations for a new municipal solid waste landfill in the vicinity of the airport.

*FAA Advisory Circular 150/5200-32A—Reporting Wildlife Aircraft Strikes* (December 22, 2004). This Advisory Circular describes the process for reporting a wildlife aircraft strike to the FAA and explains the procedure for obtaining access to the National Wildlife Strike Database.

*FAA Advisory Circular No. 70-01—Outdoor Laser Operations* (December 30, 2004). This Advisory Circular describes the requirement and process for airport operators to provide notice to the FAA of planned outdoor laser operations. The Advisory Circular also describes the actions the FAA will take in response to the notification.

*FAA CertAlert 06-07—Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State-Listed Threatened and Endangered Species and Species of Special Concern on Airports* (November 21, 2006). This FAA guidance describes the procedures for airport operators and FAA certification inspectors to respond to requests by state wildlife agencies to facilitate and

encourage habitats for state-listed threatened and endangered species or species of special concern occurring on airports that may pose a threat to aviation safety. The FAA guidance also discusses concerns regarding techniques that may increase wildlife hazards, be inconsistent with safe airport operations, and create a threat to aviation safety.

*FAA CertAlert No. 02-06—Access to the FAA National Wildlife Aircraft Strike Database* (October 1, 2002). This FAA guidance describes aircraft wildlife strike information available in the FAA National Wildlife Aircraft Strike Database for airport operators, airline operators, and FAA airport certification safety inspectors and provides instruction on obtaining access to the information in the database.

*FAA CertAlert 04-16—Deer Hazard to Aircraft and Deer Fencing* (December 13, 2004). This FAA guidance describes the dangers associated with deer in the aircraft movement areas and provides recommendations to airport operators regarding types of fencing to be used to exclude deer from these areas. The guidance also includes requirements for fencing installation and maintenance to prevent deer from entering aircraft movement areas.

*FAA CertAlert 04-09—Relationship between FAA and WS* (August 30, 2004). This FAA guidance describes the FAA's role in airport operator certification, the requirement for certificated airports to develop and implement a Wildlife Hazard Management Plan, and the WS role in conducting Wildlife Hazard Assessments. This guidance also describes the MOU between the FAA and WS (No. 12-4-71-0003-MOU), which establishes a cooperative agency relationship for resolving wildlife hazards to aviation.

*FAA CertAlert 98-05—Grasses Attractive to Hazardous Wildlife* (September 21, 1998). This FAA guidance includes recommendations for airport operators to eliminate or reduce the use of specified grass species and other varieties of plants attractive to hazardous wildlife on airport property. This guidance provides guidelines for avoiding use of these species for planting disturbed areas or areas in need of revegetation and for maintenance of areas already planted with these species.

*FAA CertAlert 97-09—Wildlife Hazard Management Plan Outline* (November 17, 1997). This FAA guidance describes the required content of a Wildlife Hazard Management Plan.

*FAA CertAlert 03-03—Guidelines for Submitting Bird Strike Feather Remains for Identification* (August 29, 2003). This FAA guidance describes the process for collecting and submitting feather or other bird and wildlife remains for species identification.

*FAA Program Policy and Guidance Policy No. 82—Waste Disposal Facility Coordination* (September 9, 2004). The policy identifies the applicable FAA Advisory Circulars for proposed landfill siting in the vicinity of the airport property (FAA Advisory Circular 150/5200-33B—Hazardous Wildlife Attractants on or near Airports (August 28, 2007) and FAA Advisory Circular

150/5200-34A—Construction or Establishment of Landfills near Public Airports (January 26, 2006)). This FAA policy specifies the procedures for FAA to evaluate proposals for new or expansion of existing waste disposal sites within 5 mi of a public-use airport and for documenting FAA determinations concerning this evaluation.

### Training and Implementation

The FAA has specified by regulation the requirements for preparation of a Wildlife Hazard Assessment.<sup>171</sup> FAA guidance describes the ecological study reflected in the Wildlife Hazard Assessment as the “scientific basis” for an airport operator’s development of a Wildlife Hazard Management Plan if one is required.<sup>172</sup> According to the FARs, the Wildlife Hazard Assessment must be conducted by a wildlife damage management biologist whose qualifications include professional training or experience in airport wildlife hazard management.<sup>173</sup>

#### Qualifications

The FAA further prescribes the qualifications of a “qualified airport wildlife biologist” satisfying the FARs’ requirements in Advisory Circular 150/5200-36A—Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports (January 31, 2012). The requirements include academic coursework, specific and continuing training in airport wildlife hazard management, and Wildlife Hazard Assessment experience.

FAA CertAlert 97-09 states the biologist’s primary responsibilities in conducting the Wildlife Hazard Assessment are to:

- Provide information on the wildlife attractants that have been identified on or near the airport.
- Identify wildlife management techniques.
- Prioritize appropriate mitigation measures.
- Recommend necessary equipment and supplies.
- Identify training requirements for the airport personnel who will implement the Wildlife Hazard Management Plan.

The Wildlife Hazard Management Plan must include provisions for training for the airport personnel responsible for implementing the plan. The training program must be conducted by a wildlife damage management biologist<sup>174</sup> with the qualifications

required for biologists authorized to conduct Wildlife Hazard Assessments. The training program must be designed to provide airport personnel with the knowledge and skills required to conduct the activities specified in the plan.<sup>175</sup> The training should be provided to all relevant airport personnel and include, among other components, wildlife hazard awareness training and pesticide use training and certification.<sup>176</sup>

Advisory Circular No. 150/5200-36A—Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports (January 31, 2012) also specifies the requirements for airport personnel wildlife management training programs. This Advisory Circular describes the FAR airport operational training program requirements (e.g., airport marking and lighting, access and operation in movement areas, and communications) applicable to all airport personnel with access to aircraft movement areas and safety areas.<sup>177</sup> This Advisory Circular notes the operational training program provisions incorporate wildlife management training.<sup>178</sup> Wildlife management training includes both initial and recurring training programs for all airport personnel actively involved in implementing the airport’s Wildlife Hazard Management Plan.

### Review of Airport Wildlife Hazard Management Plans

The FAA Office of Airport Safety and Standards has issued policies to address the responsibilities of FAA Airport Certification Safety Inspectors concerning initiation of a Wildlife Hazard Assessment or development of a Wildlife Hazard Management Plan. These policies specify FAA actions to ensure compliance with the airport operator’s wildlife hazard management obligations according to 14 C.F.R. § 139.337 when an incident occurs that would initiate a Wildlife Hazard Assessment.<sup>179</sup>

*FAA Policies and Program Guidance Policy No. 77—Initiation of Wildlife Hazard Assessment at Airports* (June 21, 2004). This policy establishes procedures for the FAA Airport Certification Safety Inspectors (ACSI) to follow when the FAA determines whether an airport needs to conduct a wildlife hazard assessment to address an airport wildlife hazard. The procedures include notice to the airport operator concerning the need to initiate the assessment and the ACSI’s review of the Airport Certification Manual to determine the sufficiency of the airport operator’s existing procedures and

<sup>171</sup> 14 C.F.R. § 139.337.

<sup>172</sup> CertAlert 97-09.

<sup>173</sup> 14 C.F.R. § 139.337(c) and f(7).

<sup>174</sup> Advisory Circular 150/5200-36A Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports (Jan. 31, 2012) provides that the term “wildlife damage management biologist” will be

referred to as a “qualified airport wildlife biologist” for purposes of 14 C.F.R. § 139.337(c) and (f)(7).

<sup>175</sup> 14 C.F.R. § 139.337(f)(7).

<sup>176</sup> FAA CertAlert 97-09.

<sup>177</sup> 14 C.F.R. § 139.303.

<sup>178</sup> 14 C.F.R. § 139.337.

<sup>179</sup> Policy Nos. 77 and 79 are no longer easily available on the FAA Web site and are included in Appendix F.

the operator's compliance with the regulatory certification requirements.

*FAA Policies and Program Guidance Policy No. 79—Review of Airport Wildlife Management Plans* (June 21, 2004). This policy establishes the procedures the FAA Airport Certification Safety Inspectors must follow when addressing a wildlife incident that requires an airport operator to initiate a Wildlife Hazard Assessment. This policy explains the procedures that address the Wildlife Hazard Assessment and the review of a previously approved Wildlife Hazard Management Plan. The policy provides for FAA review of all wildlife strike reports and prescribes the actions the FAA will take upon notice of a wildlife strike incident. These include evaluation of the Airport Certification Manual, previous Wildlife Hazard Assessment on the airport property, and direction to develop a Wildlife Hazard Management Plan.

FAA under its Wildlife Hazard Mitigation Program has issued the following Draft Advisory Circulars:

*Draft Advisory Circular 150/5200-32B—Reporting Wildlife Aircraft Strikes* (public comment period ended on January 31, 2013) will replace AC 150/5200-32A and includes recent improvements to the FAA Bird/Other Wildlife Strike Reporting system, the types of animal strikes that should be reported, how to report the strike incident, and what happens to and how to access the data.

*Draft Advisory Circular 150/5200-33C—Hazardous Wildlife Attractants on or near Airports* (public comment period ended on January 31, 2013) will replace AC 150/5200-33B and clarifies that Grant Assurance No. 19 requires airports to have a qualified airport wildlife biologist conduct a Wildlife Hazard Assessment or Wildlife Hazard Site Visit, and the requirements and expectations regarding Site Visits, Assessments, and Wildlife Hazard Management Plans for noncertificated airports.

*Draft Advisory Circular 150/5200-XX—Protocol for the Conduct and Review of Wildlife Hazard Site Visits, Wildlife Hazard Assessments, and Wildlife Hazard Management Plans*, a new Advisory Circular whose public comment period ended January 31, 2013, establishes the minimum standards for the conduct and preparation of Wildlife Hazard Site Visits, Assessments, and Management Plans.

### Supplemental Actions

The FAA has issued guidance concerning use of avian radar systems to supplement the measures specified in an airport operator's Wildlife Hazard Management Plan and reduce the potential avian threats to aircraft. FAA Advisory Circular No. 150/5220-25—*Airport Avian Radar Systems* (November 23, 2010) addresses the selection, procurement, deployment, and management of avian radar systems. This Advisory Circular provides guidance on the use of avian radar systems to supplement an airport's Wildlife Hazard Management Plan and reduce the potential avian threats to aircraft. The Advisory Circular describes the function of avian systems and system

equipment, radar coverage area, and data acquisition performance specifications in application of avian radar systems as part of the airport's wildlife hazard management activities.

## V. WILDLIFE AND WILDLIFE HAZARD MANAGEMENT—FEDERAL LAW

Sections IV, V, and VI of this digest discuss aspects of the federal components of wildlife hazard management and reduction at airports. Section IV describes the federal law requirements for development and implementation of Wildlife Hazard Management Plans. Section IV also identifies some of the legally-acceptable means airports can pursue under federal law to remove or discourage wildlife (including protected species) from airport operations areas, including runways, taxiways, and airspace necessary for takeoff and landing. Section VI concerns federal law provisions regarding land-use compatibility for airport operations. This section addresses federal law provisions other than those related to Wildlife Hazard Management Plans and land-use compatibility.

### Animal Damage Control

Federal law provides authority and direction to the USDA to manage and control wildlife hazards to aviation. The USDA exercises this authority through the agency's Animal and Plant Health Inspection Service, WS program. Federal law provides direction to the WS predecessor to protect the nation's agricultural and other resources from wildlife damage (The National Animal Damage Control Act of 1931).<sup>180</sup> Since that time this responsibility has been transferred between agencies, but it is now delegated under federal law to the USDA. The WS responsibilities under federal law specifically include management of wildlife hazards to aviation.<sup>181</sup>

### Wildlife Hazards to Aviation

The USDA has issued guidance concerning the assistance WS provides to airport operators and the FAA concerning wildlife hazards. USDA Directive 2.305—*Wildlife Hazards to Aviation* (March 1, 2004)<sup>182</sup> provides guidelines for WS technical and direct control assistance to airport operators, state aviation agencies, the FAA, and the Department of Defense regarding hazards caused by wildlife to airport safety. The guidance also describes assistance to federal and state agencies, airport managers, and the aviation industry to reduce wildlife hazards according to the FAA-WS MOU. In addition, the USDA guidance explains that WS may conduct Wildlife Hazard Assessments, assist with Wildlife Hazard Management Plans, and provide technical

<sup>180</sup> Animal Damage Control Act of Mar. 2, 1931, 46 Stat. 1468, codified at 7 U.S.C. §§ 426-426(d).

<sup>181</sup> 7 U.S.C. § 426, *et seq.*

<sup>182</sup> [http://www.aphis.usda.gov/wildlife\\_damage/directives/2.305\\_wildlife\\_hazards\\_to\\_aviation.pdf](http://www.aphis.usda.gov/wildlife_damage/directives/2.305_wildlife_hazards_to_aviation.pdf).

assistance activities to minimize hazards caused by wildlife pursuant to cooperative agreements.

## Wildlife Attractants

### *Hazardous Wildlife Attractants on or near Airports*

The FAA has issued guidance and direction to airport operators concerning the location of certain land uses on or in the vicinity of public airports that have the potential to attract hazardous wildlife. Advisory Circular No. 150/5200-33B<sup>183</sup> addresses hazardous wildlife in three ways. First, the Advisory Circular ranks species groups, including birds and mammals that may be found on or near airport property, that have been determined to be hazardous to aircraft operations. Second, the Advisory Circular identifies the types of land uses that may create wildlife hazards to aircraft operations. Third, the Advisory Circular includes provisions for managing the risks associated with existing land uses and with avoiding the risks in connection with new or expanded airport facilities.

*Land Uses.* Advisory Circular No. 150/5200-33B identifies land-use categories determined by the FAA to be incompatible with safe airport operations because of their potential to attract hazardous wildlife on or near airports, including the following:

- Wetlands, including existing wetlands on airport property and wetland mitigation associated with impacts from airport development projects.
- Waste disposal operations, such as MSWLFs, trash transfer stations, composting operations, recycling centers, and construction and demolition debris facilities.
- Water management facilities, including existing and new stormwater management facilities, wastewater treatment facilities, artificial marshes, and wastewater discharge and sludge disposal facilities.
- Dredge-spoil containment areas.
- Golf courses, landscaping, and landscape maintenance.
- Agricultural activities, such as agricultural crop production, livestock production, and aquaculture, and seasonal uses (e.g., hunting) of agricultural lands.

This Advisory Circular describes methods to address wildlife hazard attractants associated with existing land uses within the specified separation criteria. It also provides for notification to FAA of changes in land uses in the vicinity of public-use airports.

*Separation Criteria.* Advisory Circular No. 150/5200-33B specifies the minimum separation distance between the land uses determined to be incompatible with airport operations if located within the separation

criteria. The Advisory Circular identifies separation criteria between these land uses and 1) the air operations area (e.g., aircraft movement, loading ramps, and aircraft parking); or 2) new airport development projects planned to accommodate aircraft movement. The minimum recommended separation criteria are 5,000 ft between the air operations area and the hazardous wildlife attractant for airports serving piston-powered aircraft and 10,000 ft between the air operations area and the hazardous wildlife attractant for airports serving turbine-powered aircraft. The Advisory Circular also specifies a separation distance of 5 statute mi between the air operations area and the hazardous wildlife attractant for all airports when the attractant could cause hazardous wildlife to move into or across the airport's approach or departure airspace.

Advisory Circular No. 150/5200-33B states that the minimum separation criteria and other specified standards and practices may be used by certificated airport operators to comply with the FAA's regulatory wildlife management requirements and must be used by those airport operators who have received federal grant-in-aid assistance.

<sup>183</sup> FAA Advisory Circular No. 150/5200-33B—Hazardous Wildlife Attractants On or Near Airports (Aug. 28, 2007), available at [http://www.faa.gov/regulations\\_policies/advisory\\_circulars/index.cfm/go/document.list/parentTopicID/11/display/all/changeNumber/0/currentPage/1/sortResults/false/sortColumn/dateIssued/sortOrder/DESC](http://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.list/parentTopicID/11/display/all/changeNumber/0/currentPage/1/sortResults/false/sortColumn/dateIssued/sortOrder/DESC).

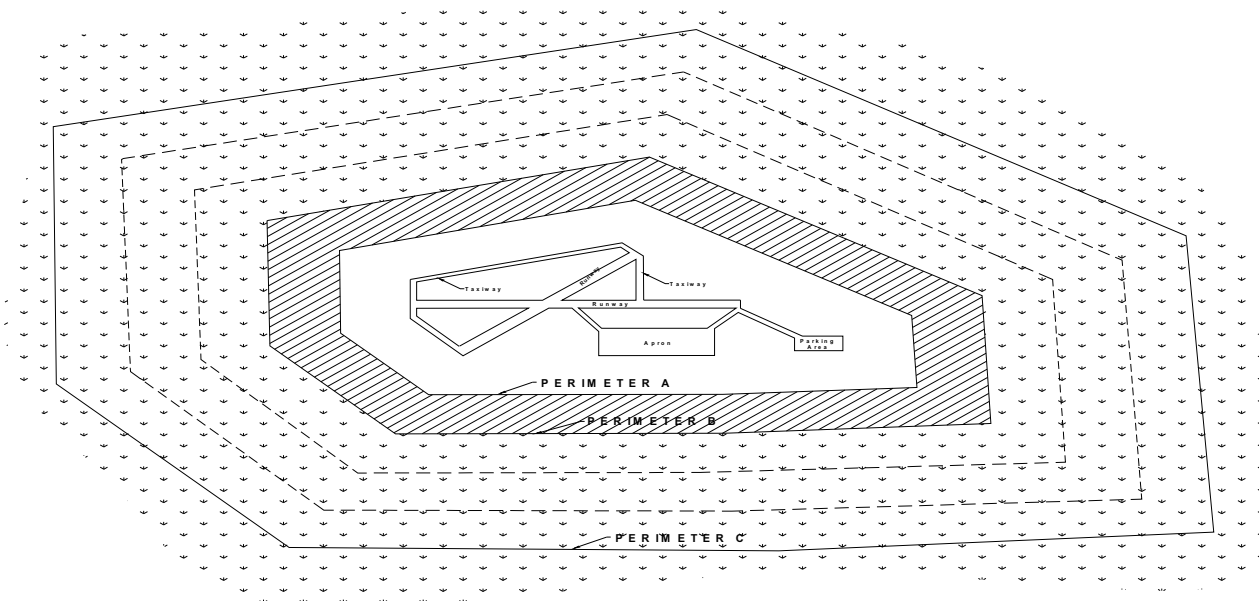


Figure 2. Separation distances within which hazardous wildlife attractants should be avoided, eliminated, or mitigated. Source: FAA Advisory Circular No. 150/5200-33B—Hazardous Wildlife Attractants on or near Airports 2, Fig. 1 (Aug. 28, 2007).

*Application in Other Regulations.* The separation criteria specified in Advisory Circular No. 150/5200-33B are included in federal regulations for siting of facilities with the potential to attract hazardous wildlife on or near airports. For example, the Federal EPA regulations establishing criteria for MSWLFs incorporate the separation criteria specified in the Advisory Circular.<sup>184</sup> The EPA regulations require MSWLF owners or operators to demonstrate that the facilities will not create a “bird hazard” when the facilities are located or planned within the FAA-specified separation criteria for a public-use airport. A “bird hazard” is defined in the EPA regulation to mean “an increase in the likelihood of bird/aircraft collisions that may cause damage to the aircraft or injury to its occupants.”<sup>185</sup> The EPA regulation states:

Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions that are located within 10,000 feet (3,048 meters) of any airport runway end used by turbojet aircraft or within 5,000 feet (1,524 meters) of any airport runway end used by only piston-type aircraft must demonstrate that the units are designed and operated so that the MSWLF unit does not pose a bird hazard to aircraft.<sup>186</sup>

The EPA regulations also require a facility owner or operator proposing to site a new MSWLF within the

FAA separation criteria to provide notice of the proposal to the FAA and the affected airport.<sup>187</sup> The written demonstration by the owner or operator that a new or existing or expanded facility will not create a bird hazard to aircraft must be included in the facility’s operating record.<sup>188</sup>

*Grasses Attractive to Hazardous Wildlife*

FAA CertAlert 98-05—Grasses Attractive to Hazardous Wildlife (September 21, 1998) cautions airport operators against using certain grasses and plants that are attractive to hazardous wildlife on airport property. This guidance describes the concern about using these grasses and plans for revegetation of construction sites or disturbed areas within the airport property. The FAA guidance describes threats to aircraft safety associated with concerns about planting with grass seeds that are major attractants to doves and other seed-eating birds. The guidance includes recommendations for airport operators to eliminate or reduce the use of specified grass species and other varieties of plants attractive to hazardous wildlife on airport property, and also provides guidelines for avoiding use of these species for planting disturbed areas or areas in need of revegetation and for maintenance of areas already planted with these species.

<sup>184</sup> 40 C.F.R. § 258.10.

<sup>185</sup> 40 C.F.R. § 258.10(d).

<sup>186</sup> 40 C.F.R. § 258.10(a).

<sup>187</sup> 40 C.F.R. § 258.10(b).

<sup>188</sup> 40 C.F.R. § 258.10(c).

Federal law governs the distribution, sale, and the use of pesticides. The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)<sup>189</sup> requires registration of all pesticides distributed or sold in the United States. Pesticides also may have to be registered with state regulatory agencies under state law. The FIFRA specifies that a pesticide may be registered when the Federal EPA determines that use of the pesticide generally will not cause unreasonable adverse environmental effects. The FIFRA also includes requirements for the application of pesticides and certification of pesticide applicators. The FIFRA requirements apply to airport operators using pesticides on airport property, which has an impact on the airport's wildlife hazard management activities. For example, the airport operator's application of pesticides for vegetation control and to deter wildlife on airport property must be consistent with FIFRA's requirements.

### *Deer Hazards to Aviation*

CertAlert No. 04-16—Deer Hazards to Aviation and Deer Fencing (December 13, 2004) addresses control of deer on and near airport operations areas. This FAA guidance describes the dangers to aircraft operations associated with deer in the aircraft movement areas. The guidance provides recommendations to airport operators regarding types of fencing to be used to exclude deer from these areas. The guidance also includes requirements for fencing installation and maintenance to prevent deer from entering aircraft movement areas.

## Protected Species

### *Endangered Species Act*

ESA<sup>190</sup> is a mechanism for conservation of species in danger of extinction. By enacting ESA in 1973, Congress recognized that various species of fish, wildlife, and plants either had become extinct or were threatened with extinction. The ESA's statutory purposes include providing a "means whereby the ecosystems upon which endangered species and threatened species depend may be conserved" and creating a "program for the conservation of such endangered and threatened species."<sup>191</sup> The ESA defines an "endangered species" in part as one that "is in danger of extinction throughout all or a significant portion of its range."<sup>192</sup> A "threatened species" is defined by the ESA as "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."<sup>193</sup>

<sup>189</sup> Pub. L. No. 80-104, 61, Stat. 163 (1947), codified at 7 U.S.C. § 136, *et seq.*

<sup>190</sup> Pub. L. No. 93-205, 87 Stat. 884 (1973), codified at 16 U.S.C. § 1531.

<sup>191</sup> 16 U.S.C. § 1531(b).

<sup>192</sup> 16 U.S.C. § 1532(6).

<sup>193</sup> 16 U.S.C. § 1532(20).

The ESA includes criteria to determine whether a species requires the special protection available under the ESA provisions. The ESA includes requirements and standards for listing animal and plant species and for designating critical habitat for listed species. The USFWS must by rule determine whether a species is either an endangered species or a threatened species based on the following factors:

- Present or threatened destruction, modification, or curtailment of the species' habitat or range.
- Species overutilization for commercial, recreational, scientific, or educational purposes.
- Disease or predation.
- Inadequacy of existing regulatory mechanisms.
- Other natural or manmade factors affecting the species' continued existence.<sup>194</sup>

The listing decision must be made "solely on the basis of the best scientific and commercial data available" after the USFWS conducts a review of the species' status and considers efforts of other governmental entities to protect the species.<sup>195</sup>

The ESA also prescribes an interagency consultation process that applies to federal agency actions that may impact listed species or designated critical habitat. Section 7 of the ESA requires federal agencies to consult with the federal resource agencies (USFWS or the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS)) to ensure that agency actions conducted, authorized, or funded by those agencies are not likely to jeopardize the continued existence of listed species or adversely modify designated critical habitats. The ESA includes provisions for agencies and others, including airport operators, to seek authorization of actions that may result in the "take" of listed species through a permitting process<sup>196</sup> or the incidental take statement process.<sup>197</sup> The USFWS and NMFS have enacted regulations governing the process for interagency consultation and authorization consistent with the ESA mandates.<sup>198</sup>

The FAA has issued guidance concerning the approach the agency will take in addressing its ESA consultation requirements. FAA Program Policy and Guidance Policy No. 78—Section 7 Consultation on Endangered or Threatened Species (June 21, 2004) specifies that when the FAA requires plan development or revision, the FAA Regional Coordinator will request information from the USFWS concerning the presence of species and critical habitat that are either listed or designated (or proposed for listing or designation) under the ESA on or near the airport property. According to this FAA policy, the FAA Regional Coordinator will

<sup>194</sup> 16 U.S.C. § 1533(a).

<sup>195</sup> 16 U.S.C. § 1533(b).

<sup>196</sup> Sec. 10 of the ESA.

<sup>197</sup> Sec. 7 of the ESA.

<sup>198</sup> 16 U.S.C. § 1531, *et seq.*, and 50 C.F.R. Pt. 17.

provide information from the USFWS regarding federally listed species or critical habitat for compliance with the ESA's interagency consultation requirements.<sup>199</sup> The airport operator will use that information in complying with the ESA requirements when seeking authorization for activities on airport property that may affect federally listed species.

### State-Protected Species

FAA has issued guidance concerning the process for evaluating issues concerning listed species use of habitat on airport property. CertAlert No. 06-07—Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State-Listed Threatened and Endangered Species and Species of Special Concern on Airports (November 21, 2006) describes the procedures for airport operators and FAA certification inspectors to respond to requests by state wildlife agencies to facilitate and encourage habitats for state-listed threatened and endangered species or species of special concern occurring on airports that may pose a threat to aviation safety. The FAA guidance also discusses concerns regarding techniques that may increase wildlife hazards, be inconsistent with safe airport operations, and create a threat to aviation safety.

### Migratory Birds

*Migratory Bird Treaty Act.* The Federal MBTA<sup>200</sup> establishes a program for the protection of migratory birds included in international conventions the United States has entered into with Great Britain, Mexico, Japan, and Russia. The MBTA prohibits actions to “pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase” or to transport or receive a migratory bird covered by the terms of the statute. The MBTA prohibition also applies to any part, nest, or egg of any covered migratory bird. The MBTA authorizes the adoption of regulations specifying the circumstances in which “take” of a migratory bird, nest, part, or egg may be authorized under the statute.<sup>201</sup> Violation of the statutory prohibition may result in criminal penalties, including imprisonment of up to 6 months and a fine of up to \$15,000.<sup>202</sup>

The USFWS has adopted permit regulations for authorizations issued pursuant to MBTA.<sup>203</sup> The actions prohibited under the MBTA are barred unless authorized by permit issued by the USFWS consistent with these regulations.<sup>204</sup> The regulations provide for specific types of permits, including permits for import and export, banding and marking, scientific collection,

special purpose, and falconry.<sup>205</sup> The MBTA regulations also provide for issuance of permits to state wildlife agencies for Canada geese management and control activities when the USFWS determines the permit “will contribute to human health and safety, protect personal property, or allow resolution or prevention of injury to people or property.”<sup>206</sup>

The MBTA regulations include specific take authorization for control and management of resident Canada geese at airports and military airfields.<sup>207</sup> The regulation specifies the permit will be issued to the airport “when necessary to resolve or prevent threats to public safety” from Canada geese. The regulations specify the permit requirements and the timing of the airport's permitted activities. The permit may authorize lethal and nonlethal control actions, including trapping, relocation, nest and egg destruction, shooting, egg oiling, and use of nets and pesticides or drugs. The regulations, however, specify that this permit does not authorize the airport operator to take actions that adversely affect other migratory birds or species listed as endangered or threatened under the ESA.<sup>208</sup>

*Bald and Golden Eagle Protection Act.* The Federal Bald and Golden Eagle Protection Act (BGEPA)<sup>209</sup> establishes a program for protection of bald eagles and golden eagles. With certain exceptions as authorized by FWS permit, BGEPA prohibits any take, possession, sale, purchase, barter, transport, export, or import of a bald eagle or any of its parts, nests, or eggs.<sup>210</sup> The term “take” is defined in statute to include pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.<sup>211</sup> Violations of the BGEPA prohibitions can result in significant criminal and civil penalties.<sup>212</sup>

The USFWS has adopted regulations to authorize actions that may result in take. The BGEPA regulations authorize take for actions consistent with the statute, including scientific collection or exhibition, Indian religious purposes, and depredation.<sup>213</sup> The regulations specify that the permit may be issued if the USFWS determines the take is “compatible with the preservation” of the eagle. This determination requires the USFWS to consider whether the eagles have “become seriously injurious” to wildlife or other interests in the locality. The USFWS also must determine that the injury related to the eagles is “substantial” or that the eagles “pose a significant risk to human or eagle health and safety.”<sup>214</sup>

<sup>199</sup> 16 U.S.C. § 1536.

<sup>200</sup> 40 Stat. 755 (1918), codified at 16 U.S.C. §§ 703–712.

<sup>201</sup> 16 U.S.C. § 704.

<sup>202</sup> 16 U.S.C. § 707.

<sup>203</sup> 50 C.F.R. Pt. 21.

<sup>204</sup> 50 C.F.R. § 21.11.

<sup>205</sup> 50 C.F.R. §§ 21.21–21.29.

<sup>206</sup> 50 C.F.R. § 21.26.

<sup>207</sup> 50 C.F.R. § 21.49.

<sup>208</sup> *Id.*

<sup>209</sup> Pub. L. No. 86079, 54 Stat. 250 (1940), *et al.*, codified at 16 U.S.C. § 668, *et seq.*

<sup>210</sup> 16 U.S.C. § 668(a).

<sup>211</sup> 16 U.S.C. § 668(d).

<sup>212</sup> 16 U.S.C. § 668(a).

<sup>213</sup> 50 C.F.R. § 22.23.

<sup>214</sup> 50 C.F.R. § 22.23.

After the delisting of the bald eagle under ESA, the USFWS adopted regulations to authorize take that previously had been or could be authorized under ESA.<sup>215</sup> The BGEPA regulations provided a process for permitting an ESA-authorized activity when the activity is conducted in “full compliance” with the terms and conditions of the ESA Section 7 incidental take statement.<sup>216</sup> The BGEPA regulations also authorize issuance of either individual or programmatic permits for take associated with but not the purpose of an activity.<sup>217</sup> A permit may be issued under BGEPA when the USFWS determines the take is compatible with eagle preservation, with consideration given to indirect and cumulative effects of other permitted take, and necessary to protect a legitimate interest in a particular locality. The BGEPA rules make permitting of take related to safety emergencies the highest priority and prioritize other types of take that may be associated with airport operations, including nonemergency activities required to ensure public health and safety and renewal of programmatic take permits. The BGEPA rules also require the USFWS to determine whether the permit applicant has provided avoidance and minimization measures to reduce take to “the maximum degree practicable”: for programmatic take, the permit applicant also must demonstrate the take is “unavoidable despite application of advanced conservation practices” developed with USFWS coordination.<sup>218</sup>

The Federal Lacey Act<sup>219</sup> also includes protections for wildlife that may occur on airport property. The Lacey Act makes the import, export, transport, sale, receipt, acquisition, or purchase of any fish or wildlife a federal offense if taken, possessed, transported, or sold in violation of any state, tribal, or federal law.<sup>220</sup> “Taken” is defined for purposes of the Lacey Act to include capture, killing, or collection.<sup>221</sup> The Lacey Act includes both criminal and civil penalties.<sup>222</sup> As with the BGEPA, the Lacey Act promotes enforcement by authorizing forfeitures and rewards for information leading to arrest and convictions.<sup>223</sup>

## Planning and Development

### *Hazardous Wildlife Attractants on or near Airports*

As described in Section IV of this digest, the FAA has issued an Advisory Circular to provide direction to airport operators concerning land uses on or in the vicinity of public airports that have the potential to attract hazardous wildlife. FAA Advisory Circular No.

150/5200-33B—Hazardous Wildlife Attractants on or near Airports (August 28, 2007) identifies land uses that may be incompatible with airport operations if located within the specified separation criteria, including waste disposal operations, wetland mitigation, artificial marshes, agricultural activities, wastewater treatment facilities, landscaping, wastewater discharge and sludge disposal, and golf courses. The Advisory Circular also specifies separation criteria (5,000 ft and 10,000 ft, depending on the type of aircraft served) between an airport’s operations areas (e.g., aircraft movement, loading ramps, and aircraft parking) and uses that may be wildlife attractants. In addition, the Advisory Circular describes methods airport operators can use to address wildlife hazard attractants associated with existing land uses within the specified separation criteria.

### *Construction or Establishment of Landfills near Public Airports*

Federal law recognizes the safety implications of siting or expanding landfill facilities within the vicinity of airports. Under federal law, the FAA can by rule or order require a facility owner or operator to submit notice to the agency of the actual or proposed construction, alteration, establishment, or expansion of a structure or sanitary landfill when notice will promote aircraft safety at public-use airports.<sup>224</sup> The federal law also specifies that an MSWLF may not be constructed or established within 6 mi of a public airport unless the FAA provides the applicable state aviation agency with an exemption from the statutory prohibition. The FAA will provide the exemption when the agency determines it will have no adverse impact on public safety.<sup>225</sup>

The FAA has issued an Advisory Circular addressing an airport operator’s compliance with the Federal MSWLF provisions. The FAA Advisory Circular No. 150/5200-34A—Construction or Establishment of Landfills Near Airports (January 26, 2006) states the FAA’s position that locating landfills in proximity to airports increases the risk of collisions between birds and aircraft. To address this concern, the Advisory Circular requires the proponent of a new MSWLF to determine whether the new facility would be located within 6 mi from the public airport. If the facility is within the specified distance, the Advisory Circular provides two options for the MSWLF proponent: 1) plan the facility for another location outside the 6-mi distance; or 2) request that the state aviation agency file a petition for exemption from the FAA.

The EPA has adopted regulations requiring an MSWLF owner or operator proposing a new or expanded MSWLF within the FAA-specified separation criteria to demonstrate that the facility will not create hazardous conditions for aircraft. The EPA regulations apply to siting of MSWLF facilities with the potential to

<sup>215</sup> 50 C.F.R. § 22.28.

<sup>216</sup> *Id.*

<sup>217</sup> 50 C.F.R. § 22.26.

<sup>218</sup> 50 C.F.R. § 22.28(e).

<sup>219</sup> 95 Stat. 1073 (1900), codified at 16 U.S.C. §§ 3371–3378.

<sup>220</sup> 16 U.S.C. § 3372.

<sup>221</sup> 16 U.S.C. § 3371.

<sup>222</sup> 16 U.S.C. § 3373.

<sup>223</sup> 16 U.S.C. § 3373–3378.

<sup>224</sup> 49 U.S.C. § 44718(a).

<sup>225</sup> 49 U.S.C. § 44718(d).



attract hazardous wildlife on or near public-use airports. The EPA regulations establishing the MSWLF criteria require MSWLF owners or operators to demonstrate the facilities will not create a “bird hazard” when facilities are located or planned within the FAA-specified separation criteria for public-use airports.<sup>226</sup> A “bird hazard” is defined in the EPA regulation to mean “an increase in the likelihood of bird/aircraft collisions that may cause damage to the aircraft or injury to its occupants.”<sup>227</sup> The EPA regulation states:

Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions that are located within 10,000 feet (3,048 meters) of any airport runway end used by turbojet aircraft or within 5,000 feet (1,524 meters) of any airport runway end used by only piston-type aircraft must demonstrate that the units are designed and operated so that the MSWLF unit does not pose a bird hazard to aircraft.<sup>228</sup>

The EPA regulations also require a facility owner or operator proposing to site a new MSWLF within the FAA separation criteria to provide notice of the proposal to the FAA and the affected airport.<sup>229</sup> The written demonstration by the owner or operator that a new or existing or expanded facility will not create a bird hazard to aircraft must be included in the facility’s operating record.<sup>230</sup>

### *Waste Disposal Facilities*

FAA has adopted a policy concerning the agency’s process for review of notices concerning proposed waste disposal facilities. The FAA Airport Certification Program—14 C.F.R. Part 139 Program Policy and Guidance Policy No. 82—Waste Disposal Facility Coordination (September 9, 2004) states that pressure to develop new waste disposal facilities or to expand existing sites requires the agency to coordinate responses to ensure consistency. The FAA policy provides for the responsible regional FAA personnel to determine whether the proposal is compatible with applicable FAA Advisory Circulars<sup>231</sup> and with safe airport operations. The policy also provides for the responsible FAA personnel to prepare a written compatibility determination and any recommended permitting conditions and requires the FAA Staff Wildlife Biologist to concur in the determination. The Letter of Determination transmitted to the state aviation agency or facility proponent must include all recommended permitting conditions.

<sup>226</sup> 40 C.F.R. § 258.10.

<sup>227</sup> 40 C.F.R. § 258.10(d).

<sup>228</sup> 40 C.F.R. § 258.10(a).

<sup>229</sup> 40 C.F.R. § 258.10(b).

<sup>230</sup> 40 C.F.R. § 258.10(c).

<sup>231</sup> FAA Advisory Circular 150/5200–33B, Hazardous Wildlife Attractants on or Near Airports (Aug. 28, 2007); FAA Advisory Circular 150/5200–34A, Construction or Establishment of Landfills Near Public Use Airports (Jan. 26, 2006).

### *Airport Design*

FAA has adopted guidance addressing numerous design and safety provisions for airport construction. FAA Advisory Circular No. 150/5300-13 (September 29, 1989, with changes through December 30, 2011) provides comprehensive airport design recommendations from the FAA and includes provisions for runway design, airport geometry, surface gradient and line of sight, and navigational aids. This Advisory Circular also specifies “declared distances,” or minimum distances related to runway safety areas. These provisions include “object free areas” in the vicinity of runways and preclude activities that could create a safety hazard in the runway safety areas. Appendix 17 of this Advisory Circular lists the minimum safe distances between specified airport facilities and on-airport agricultural operations.

### **Assessment and Reporting**

#### *Qualifications*

The FAA has specified by regulation the requirements for preparation of a Wildlife Hazard Assessment.<sup>232</sup> FAA guidance describes the ecological study reflected in the Wildlife Hazard Assessment as the “scientific basis” for an airport operator’s development of a Wildlife Hazard Management Plan if one is required.<sup>233</sup> According to the FAR, the Wildlife Hazard Assessment must be conducted by a wildlife damage management biologist whose qualifications include professional training or experience in airport wildlife hazard management.<sup>234</sup>

The FAA has issued FAA Advisory Circular 150/5200-36A—Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports (January 31, 2012), which concerns the qualifications of the wildlife biologist who conducts the Wildlife Hazard Assessment consistent with the FARs requirements. These qualifications include academic coursework, specific and continuing training in airport wildlife hazard management, and wildlife hazard assessment experience. FAA CertAlert 97-09 states the biologist’s primary responsibilities in conducting the Wildlife Hazard Assessment are to:

- Provide information on the wildlife attractants that have been identified on or near the airport.
- Identify wildlife management techniques.
- Prioritize appropriate mitigation measures.
- Recommend necessary equipment and supplies.
- Identify training requirements for the airport personnel who will implement the Wildlife Hazard Management Plan.

<sup>232</sup> 14 C.F.R. § 139.337.

<sup>233</sup> CertAlert 97-09.

<sup>234</sup> 14 C.F.R. § 139.337(c) and f(7).

The Wildlife Hazard Assessment must identify the reason (events or circumstances) for conducting the assessment and identify the numbers, locations, local movements, and occurrences (daily and seasonal) of the wildlife observed during the assessment. The Wildlife Hazard Assessment also must report the identification and location of on-airport and off-airport features attracting wildlife and include a description of wildlife hazards to air carrier operations that were identified. Further, the Wildlife Hazard Assessment must include recommendations to reduce the identified wildlife hazards.<sup>235</sup>

### Reporting

The FAA has issued guidance concerning reporting collisions between aircraft and wildlife. FAA Advisory Circular No. 150/5200-32A—Reporting Wildlife Aircraft Strikes (December 22, 2004) explains the importance of reporting collisions between aircraft and wildlife, more commonly referred to as wildlife strikes. The Advisory Circular also describes recent improvements in the FAA's Bird/Other Wildlife Strike Reporting system and explains the process for accessing the FAA National Wildlife Aircraft Strike Database and for reporting a wildlife strike. This Advisory Circular also explains the use of the information submitted through the wildlife strike report data for the FAA National Wildlife Aircraft Strike Database, and the FAA's Feather Identification program.<sup>236</sup>

### Agency Cooperation

#### FAA and USDA/WS

The FAA and WS work cooperatively to evaluate potential wildlife threats to airport operations and to assess data and information concerning aircraft wildlife collisions. FAA guidance concerning this relationship describes the role of the FAA in regulating airport operator certification and in ensuring compliance with the requirement for certificated airports to develop and implement a Wildlife Hazard Management Plan. The FAA guidance also explains the role of WS in conducting Wildlife Hazard Assessments for airport operators and in providing assistance to FAA in reviewing and contributing to Wildlife Hazard Management Plans being developed by airport operators.<sup>237</sup>

The FAA and WS have entered into an MOU (FAA-WS MOU)<sup>238</sup> that establishes the agencies' collaborative

<sup>235</sup> 14 C.F.R. § 139.337(c).

<sup>236</sup> The form is on the FAA Web site at <http://www.faa.gov/documentLibrary/media/form/faa5200-7.pdf>. The wildlife strike report may be submitted electronically through the FAA Wildlife Strike Reporting Web site at <http://wildlife-mitigation.tc.faa.gov/wildlife/strikenew.aspx>.

<sup>237</sup> FAA CertAlert 04-09 Relationship between FAA and WS (Aug. 30, 2004).

<sup>238</sup> Memorandum of Understanding between the United States Department of Transportation Federal Aviation Ad-

approach to resolving and deterring wildlife hazards to aviation. The FAA-WS MOU recognizes the expertise of WS in assessing wildlife hazards to aviation on and near airports and in training airport personnel to reduce these hazards. The FAA-WS MOU also specifies that either the FAA or a certificated airport operator may seek WS technical assistance regarding response to or reduction of wildlife hazards—assistance that may include site visits, Wildlife Hazard Assessments, support for development of Wildlife Hazard Management Plans, wildlife species identification training, control device training, and assistance with management of hazardous wildlife and habitats. In addition, the FAA-WS MOU includes the agreement that WS personnel will advise certificated airport operators to secure any permits or licenses required to control wildlife.

The FAA has entered into wildlife hazard management agreements with other agencies and organizations. The FAA and the NASAO<sup>239</sup> entered into an MOU to foster cooperation between WS and NASAO to reduce wildlife hazards at airports in every state. This FAA-NASAO MOU was first established in 1996 and has been supplemented in recent years to address issues such as land-use policy coordination, enhancement of state block grants to the AIP, navigational aids, and airport pavement management. The 2010 supplement to the FAA-NASAO MOU<sup>240</sup> specifically addresses cooperation to enhance reporting of wildlife strikes. The MOU amendment seeks to improve wildlife-strike data-gathering processes through NASAO's facilitation in disseminating FAA educational information and involving state aviation directors and others within the aviation community in this effort.

#### Interagency Memorandum of Agreement

The FAA has established interagency agreements to address wildlife hazards at certain military facilities. The FAA entered into an MOA to address aircraft-wildlife conflicts at military installations operated by the U.S. Air Force and U.S. Army.<sup>241</sup> Three federal re-

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ministration and the United States Department of Agriculture Animal and Plant Health Inspection Service Wildlife Services MOU No. 12-34-71-0003-MOU (June 27, 2005), available at <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1015&context=birdstrikeother> (last visited Feb. 17, 2013).

<sup>239</sup> Memorandum of Understanding Between the Federal Aviation Administration and the National Association of Aviation Officials (1996), available by clicking on "MOU library link" at <http://www.nasao.org/TEST/NASAOFAAMOU.aspx>.

<sup>240</sup> Attachment to Memorandum of Understanding Between the Federal Aviation Administration and the National Association of Aviation Officials: 2010 Initiative Wildlife Hazards (Aug. 24, 2011), available by clicking on "Wildlife Hazards" at <http://www.nasao.org/TEST/NASAOFAAMOU.aspx>.

<sup>241</sup> Memorandum of Agreement Between the Federal Aviation Administration, the U.S. Air Force, the U.S. Army, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the U.S. Department of Agriculture to

source agencies also are parties to this agreement: USDA, USFWS, and the EPA. This MOA describes the agencies' respective missions in protecting aviation from wildlife hazards. The MOA also identifies procedures to minimize risks to aviation and human safety through agency coordination to address existing and future environmental conditions contributing to wildlife strikes. In addition, the FAA has entered into a regional MOU with several federal military and resource agencies<sup>242</sup> to address aircraft wildlife strikes in the southeastern United States.

## VI. WILDLIFE AND WILDLIFE HAZARD MANAGEMENT—STATE LAW

Regulation of airport operations and wildlife management actions is governed to a great extent by federal law. The federal wildlife management laws and guidance described above provide a broad federal framework for regulation of airport actions in this regard. State laws commonly reflect recognition of the federal wildlife management regulatory program through incorporation of and references to federal law and to FAA requirements in state laws, regulations, and policy. State laws also supplement the federal regulatory framework by providing for 1) appropriate siting, licensing, and inspection of airports and air navigation facilities; 2) funding of airport construction, development, and improvement projects; 3) land-use compatibility of areas surrounding airports through land-use and height restrictions in areas surrounding airport operations; 4) acquisition of property and property interests (e.g., easements, air rights) necessary to ensure adequate aircraft approach and landing areas and to reduce, eliminate, or mitigate wildlife and other hazards within the vicinity of the airport property; and 5) wildlife management and protection programs that may affect the manner in which airport operators respond to and deter hazardous wildlife issues on airport property.

States have addressed general and specific issues concerning airport wildlife management through laws, regulations, and guidance. The issue of wildlife management includes general consideration of the state management and regulatory framework governing wildlife, including authorizations to hunt, harvest, and trap wildlife and restrictions or prohibitions against posses-

sion and take of wildlife. Similar to the Federal ESA,<sup>243</sup> state laws also establish regulatory programs concerning protection and management of protected species, which may impose prohibitions on or require state authorizations for airport actions that could result in take of a state-listed species. The state programs also may incorporate consideration of federally protected species and require documentation of necessary federal authorizations (e.g., federal depredation permit) for specified airport wildlife management actions.

In addition to the direct application to airport development and planning as described in this section, state hazard management (wildlife and other hazards) may be incorporated into federal considerations through the FAA grant funding process, which is described in greater detail in Section II of this digest. As discussed in Section II, an airport sponsor may apply for federal grant funding of an airport planning or development project through the Federal AIP and other grant programs, such as the Federal Aid to Airports Program and the Airport Development Aid Program. Under federal law, the FAA may approve a grant application for an airport development project only if the airport project grant recipient provides the 21 general written assurances associated with airport operations specified in the statute.<sup>244</sup> The FAA will require compliance regarding an airport sponsor's performance in connection with grant agreements for airport development, planning, and noise compatibility program grants.<sup>245</sup> The duration of the grant assurances may vary depending on the type of grant recipient or facility being developed with the grant funding.

Federal law specifies that the agreement incorporated within the application of an airport sponsor, or of a state applying for grant funding on behalf of one or more airports, must address safety considerations in conjunction with assurances regarding compliance with development standards.<sup>246</sup> The federal statute specifies the proposed development must comply with FAA-prescribed development standards, including "standard for site location, airport layout, site preparation, paving, lighting, and safety of approaches."<sup>247</sup> The required federal assurances are incorporated within an agreement submitted by the sponsor with the grant application and become part of the final grant offer when approved.<sup>248</sup> The federal assurances specifically require consideration of airport hazard mitigation. The FAA general written assurances concerning mitigation of all airport hazards (including wildlife hazards) that are required of airport sponsors state:

Hazard Removal and Mitigation. It will take appropriate action to assure that such terminal airspace as is re-

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Address Aircraft-Wildlife Strikes (July 29, 2003), [http://www.faa.gov/airports/environmental/media/wildlife\\_hazard\\_mou\\_2003.pdf](http://www.faa.gov/airports/environmental/media/wildlife_hazard_mou_2003.pdf).

<sup>242</sup> Regional Memorandum of Understanding (RMOU) between the Federal Aviation Administration (FAA), U.S. Air Force (USAF), U.S. Army Corps of Engineers (ACOE), U.S. Environmental Protection Agency (EPA), U.S. Fish and Wildlife Service (FWS), U.S. Department of Agriculture APHIS Wildlife Services (USDA) to Address Aircraft-Wildlife Strikes in the Southern Region of the United States, [http://www.faa.gov/airports/southern/airport\\_safety/media/so\\_wildlife\\_strikes\\_mou.pdf](http://www.faa.gov/airports/southern/airport_safety/media/so_wildlife_strikes_mou.pdf).

<sup>243</sup> Pub. L. No. 93, 205, 87 Stat. 884 (1973), codified at 16 U.S.C. § 1531.

<sup>244</sup> 49 U.S.C. § 47107.

<sup>245</sup> 49 U.S.C. § 47105.

<sup>246</sup> *Id.*

<sup>247</sup> 49 U.S.C. § 47105(b).

<sup>248</sup> 49 U.S.C. § 47105.

quired to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.<sup>249</sup>

Many states have responded to the airport hazard problem by establishing a system for development and enforcement of airport zoning regulations. These regulations generally are designed to target a specified area within the vicinity of the airport, commonly referred to as an “airport hazard area” or a similar designation. State laws may authorize or require local governments with airports and/or airport hazards areas within their jurisdictions to initiate development of airport zoning regulations to specifically address and respond to creation and establishment of airport hazards. The requirements and procedures concerning development and implementation of airport zoning regulations are described in more detail in Section VIII, and the individual state laws are summarized in Appendix D of this digest. Other state laws that may impact airport wildlife management actions include general wildlife (fish and game) laws, including hunting, fishing, and capture laws that prescribe seasons and methods for killing, taking, transporting, and possessing wildlife; protected wildlife laws, including permitting programs for state-listed species and other protected wildlife; and wildlife predation and nuisance wildlife laws, which provide for lethal and nonlethal actions property owners (including airport operators) may take to eliminate or reduce property damage resulting from wildlife.

A comprehensive discussion of states’ approaches to airport wildlife management considerations is beyond the scope of this digest. Instead, this section of the report will focus on the types of state laws that regulate or affect airport operators’ ability to manage wildlife on airport property and to eliminate or reduce the potential for incidents resulting from wildlife hazards on and near airport property. This section will not identify or address all state environmental, wildlife, game, land-use, or other laws that may affect wildlife management or wildlife protection and management considerations that may not be directly related to airport wildlife management or airport wildlife hazards. This section does not identify each applicable state law; rather, this section provides a description and some examples of common approaches to regulation of wildlife management at airports. Appendix D of this digest identifies the state laws related to wildlife management that are related to the discussion in this section. Appendix D also identifies the state laws concerning airport land-use compatibility laws that affect land use and the potential for airport hazards within the vicinity of airport operations. The summary of the laws identified in Appendix D and provided in this section of the digest are based on the versions of the state statutes and regulations avail-

able through the applicable state Web sites (as of March 2012) and may not reflect the most recent legislative changes to these laws.

### Airport Hazards—Recognition

Many states have recognized the scope of the airport hazard problem through statements of legislative intent and purpose in airport regulation statutes. Some state laws describe the nature and scope of the problems associated with wildlife hazards and identify the state interests served by elimination and reduction of these hazards. For example, Nebraska law specifically recognizes the public safety, property, and other impacts associated with airport hazards:

It is hereby found that an airport hazard endangers the lives and property of the users of an airport and occupants of land in its vicinity and also, if of the obstruction type, in effect reduces the size of the area available for the landing, taking off, and maneuvering of aircraft, thus tending to destroy or impair the utility of the airport and the public investment therein.<sup>250</sup>

These state statutes also may identify the public purposes served by elimination and reduction of airport hazards. The Nebraska law specifies that prevention, elimination, removal, alteration, and mitigation of airport hazards and marking and lighting of existing airport hazards are “public purposes for which political subdivisions may raise and expend public funds and acquire land or property interests.”<sup>251</sup>

In connection with this legislative recognition of the problems associated with airport hazards, some state laws declare airport hazards to be a public nuisance. A common approach is to declare the creation or establishment of an airport hazard to be a public nuisance and a public injury to the community served by an airport. For example, California law states:

It is hereby declared: (a) that the creation or establishment of an airport hazard is a public nuisance and an injury to the community served by the airport in question; and (b) that it is therefore necessary in the interest of the public health, public safety, and general welfare that the creation or establishment of airport hazards be prevented by appropriate exercise of the police power or the authority conferred by Article 2.6 (commencing with Section 21652) of Part 1 of Division 9 of the Public Utilities Code [airport hazards—property acquisition].<sup>252</sup>

As discussed in Section VIII of this digest, many states have responded to the airport hazard problem by establishing a system for development and enforcement of airport zoning regulations. These airport zoning regulations generally are designed to target a specified “airport hazard area” and to identify land uses and height restrictions appropriate for uses within this designated area. While not directly related to the issues of wildlife management, these airport zoning laws (described in Section VIII and identified in Appendix D of

<sup>249</sup> FAA Grant Assurances, Sponsor Certification Section C (21).

<sup>250</sup> NEB. REV. STAT. § 3-302.

<sup>251</sup> *Id.*

<sup>252</sup> CA. GOV’T CODE § 50485.2.

this digest) address issues associated with land uses and other features (e.g., trees and other vegetation) that may attract hazardous wildlife to or near airport property. These state laws also frequently provide mechanisms for enforcement of zoning regulations and specify penalties for violation of these regulations that may deter the establishment or maintenance of land uses and vegetation likely to attract hazardous wildlife.

### “Airport Hazard” Definition

Airport zoning laws define airport hazards for purposes of the regulatory structure established for the areas around airports. While state laws differ on the specific language incorporated into the definition, state definitions of “airport hazard” commonly focus on the effects of structures, objects of natural growth (trees and other vegetation), and land uses that may affect the navigable airspace and therefore impact aircraft operations. For example, North Carolina defines the term as follows: “Airport hazard” means any structure, object of natural growth, or use of land, which obstructs the airspace required for the flight of aircraft in landing or taking off at any airport or restricted landing area or is otherwise hazardous to such landing or taking off.”<sup>253</sup>

Under Alabama law, an airport hazard is defined to include structures, natural growth, and land use that obstruct “the defined approach and departure paths applicable to that airport.”<sup>254</sup> While this approach is common, other states more directly address the dangers associated with these impacts. For example, the New Jersey Air Safety and Zoning Act defines the term with specific reference to the resulting threat to human life and property:

“Airport hazard” means (1) any use of land or water, or both, which creates a dangerous condition for persons or property in or about an airport or aircraft during landing or taking-off at an airport, or (2) any structure or tree which obstructs the air space required for the flight of aircraft in landing or taking-off at an airport.<sup>255</sup>

State airport zoning laws also define the areas within the vicinity of the airport property that may affect aircraft operations when an airport hazard is present or established there. A common term that statutes use to define this area for purposes of the airport zoning laws is “airport hazard area.” Other states use “airport safety zone” or similar terms. These definitions generally incorporate the types of uses identified in the “airport hazard” and reference the need to prevent the establishment or creation of airport hazards. For example, the New Jersey definition of “airport safety zone” follows from the definition provided above in defining this term as “any area of land or water or both, upon which an airport hazard might be created or established, if not prevented.”<sup>256</sup> Alaska law defines “airport hazard area” to mean “an area in the vicinity of an

airport in which a hazard to the operation of aircraft might be situated,” as determined by the Alaska Department of Transportation and Public Facilities.<sup>257</sup>

### Wildlife Regulation

This section of the digest provides some examples of state law approaches to airport wildlife management and to general wildlife regulation that may affect wildlife management activities conducted by airport operators on airport property.

#### *Airport-Specific Regulation*

Florida has adopted laws and regulations to specifically address wildlife management activities at airports. The Florida legislature has recognized the need to conduct authorized airport wildlife management activities to “prevent jeopardy to human life or aircraft safety” and has provided that such actions will not be subject to penalties or restrictions under State law or superseded by State or local laws.<sup>258</sup> The Florida law specifies that an airport operator’s “authorized action taken for the purpose of protecting human life or aircraft safety from wildlife hazards” will not be subject to penalties or sanctions under State law, provided these actions were not conducted in a negligent manner.<sup>259</sup> Florida law defines the actions that fall within this statutory protection:

[A]n “authorized action taken for the purpose of protecting human life or aircraft safety from wildlife hazards” is an action authorized by or within the scope of any of the following:

1. The airport’s wildlife hazard management plan, as approved by the Federal Aviation Administration.
2. A depredation permit issued by the United States Fish and Wildlife Service.
3. A standing order of the United States Fish and Wildlife Service.
4. Rule 68A-9.010(4) or rule 68A-27.002, Florida Administrative Code, or a permit authorizing the harassment of wildlife issued by the Fish and Wildlife Conservation Commission.<sup>260</sup>

The State law further identifies the types of actions that do not qualify for the protection (e.g., trespass and dredge or fill of wetlands or alteration of a stormwater management system unless authorized under State law and with certain exceptions for emergency situations). This Florida law specifies that the statute governs if an authorized action, as described in this statute, conflicts with a development permit or other land-use or environmental permit, regulation, or authorization.<sup>261</sup>

The Florida Fish and Wildlife Conservation Commission, the State agency authorized and directed to man-

<sup>253</sup> N.C. GEN. STAT. § 63-1.

<sup>254</sup> ALA. ADMIN. CODE ch. 60-X.

<sup>255</sup> N.J. STAT. § 6:1-82.

<sup>256</sup> N.J. STAT. § 6:1-82.

<sup>257</sup> ALASKA STAT. § 2.25.

<sup>258</sup> FLA. STAT. § 379.223.

<sup>259</sup> FLA. STAT. § 379.223(2).

<sup>260</sup> FLA. STAT. § 379.223(3).

<sup>261</sup> FLA. STAT. § 379.223(4).

age wildlife in the state, has adopted specific regulations addressing the scope of authorized take of wildlife, and the acceptable methods for take, on airport property “for the purpose of ensuring aircraft and human safety.”<sup>262</sup> These regulations provide that State authorization is not required for take of federally protected species pursuant to a federal authorization. These regulations focus authorization for harassment and take of State-listed species and Florida black bears on actions specified in an FAA-approved Wildlife Hazard Management Plan and on imminent threat to aircraft and human safety:

(2) The following paragraphs control the take of black bears and species described in Chapter 68A-27, F.A.C., except species described in subsection (1):

(a) Any of these species may be harassed by persistent, non-injurious disturbance without physical capture or direct handling to disperse wildlife when the wildlife poses an imminent threat to aircraft and human safety.

(b) Any of these species may be otherwise taken when:

1. The wildlife poses an imminent threat to aircraft and human safety; and

2. A situation requires an emergency response which does not allow time for paragraph (2)(a); or

3. Attempts using paragraph (2)(a) have been documented as unsuccessful and when:

a. The airport is implementing a Federal Aviation Administration approved wildlife hazard management plan; and

b. The airport has made habitat management alteration that has eliminated or significantly reduced hazardous wildlife attractants on airport property.

(c) Wildlife burrows, including gopher tortoise burrows, within the safety area as defined in 14 C.F.R. § 139.5 may be destroyed after or while all existing gopher tortoise(s) within the burrows are live captured.<sup>263</sup>

This state regulation allows take of other (nonlisted) wildlife on airport property if its “presence poses a potential threat to aircraft and human safety.”<sup>264</sup>

The Florida airport regulation also specifically addresses the take methods that may be used on airport property. This regulation specifies that take methods other than those specifically prohibited by the rule (e.g., leg hold traps; poisons; and traps, nets, and snares, with specified exceptions for each method).<sup>265</sup> The Florida regulation also identifies methods for capture, release, transportation, and lethal removal of wildlife on airport property.<sup>266</sup>

Florida law also includes general provisions to authorize take of nuisance wildlife. The Florida law specifies that a property owner may take nuisance wildlife

with methods other than those prohibited by the regulations, including steel traps, poison other than registered pesticides, and live traps and snares with certain exceptions.<sup>267</sup> These regulations exempt certain species (e.g., deer and black bear) from the nuisance take provisions and include conditions for take of other species (e.g., bats and bobcats). The Florida law also specifies that birds protected under the Federal MBTA may not be taken without federal authorization.<sup>268</sup> Provisions for disposition (transportation, release, and euthanasia) of nuisance wildlife taken pursuant to this authorization also are specified.<sup>269</sup>

### *Application of General Wildlife Regulatory Program*

Some states have enacted general safety regulations for airport operation, which include provisions that directly or indirectly address wildlife hazards. For example, the Alabama law governing airport construction approvals and licensing provides for fencing and prohibits certain uses on airport property, including livestock grazing.<sup>270</sup> Other states incorporate property acquisitions to eliminate or reduce airport hazards in eligibility criteria for funding of aviation safety programs.<sup>271</sup>

California has established an extensive system of wildlife management. California law declares State policy to “actively encourage the safe and biologically sound management of wildlife resources” on State public-use airport property as regulated by the FAA.<sup>272</sup> California law recognizes that airport operations are governed by FAA regulations and policies and federal law protecting public health, safety, and welfare. This law also specifies the need for federally certificated airports to harass, harm, and remove species consistent with federal law and permits to protect public health, safety, and welfare.<sup>273</sup> In addition, California law specifies that take of birds by a FAA-certificated airport in compliance with a federal depredation permit authorizing this take does not violate State law if the take:

- Occurs on lands owned or leased by the airport.
- Does not occur on airport lands reserved for habitat mitigation or conservation purposes of the species being taken.
- Does not involve take of a fully protected, candidate, threatened, or endangered species.<sup>274</sup>

In other situations, California law authorizes take only to relieve or prevent injurious situations affecting public safety and only as part of an integrated wildlife

<sup>262</sup> FLA. ADMIN. CODE r. 68A-9.012.

<sup>263</sup> FLA. ADMIN. CODE r. 68A-9.012.

<sup>264</sup> FLA. ADMIN. CODE r. 68A-9.012(3).

<sup>265</sup> FLA. ADMIN. CODE r. 68A-9.012(4).

<sup>266</sup> FLA. ADMIN. CODE r. 68A-9.012(5)-(7).

<sup>267</sup> FLA. ADMIN. CODE r. 68A-9.010.

<sup>268</sup> FLA. ADMIN. CODE r. 68A-9.010(1).

<sup>269</sup> FLA. ADMIN. CODE r. 68A-9.010(3).

<sup>270</sup> ALA. ADMIN. CODE § 60-X-4.-01.

<sup>271</sup> See, e.g., N.J. ADMIN. CODE ch. 56.

<sup>272</sup> CAL. FISH & GAME CODE § 3471.

<sup>273</sup> *Id.*

<sup>274</sup> CAL. FISH & GAME CODE § 3472.

management program that emphasizes nonlethal management techniques.<sup>275</sup>

### *Nuisance Wildlife and Depredation*

State laws commonly include provisions for take of nuisance wildlife for wildlife causing damage to property or affecting public safety. Some states specifically provide for termination of wildlife for protection of human life from imminent danger.<sup>276</sup> Other states allow a property owner to trap or kill nuisance wildlife under specified conditions. For example, Washington law states:

Subject to limitations and conditions established by the commission, the owner, the owner's immediate family member, the owner's documented employee, or a tenant of real property may trap,...or kill wildlife that is threatening human safety or causing property damage on that property, without the licenses required under RCW 77.32.010 or authorization from the director under RCW 77.12.240.<sup>277</sup>

Washington law specifies that the conditions and limitations are to be established by rule and must include 1) “appropriate protection” for listed (threatened and endangered) species; 2) circumstances in which verbal or written permission is required to kill wildlife; 3) identification of nuisance species that may be killed; and 4) requirements for disposal of nuisance wildlife trapped or killed.<sup>278</sup>

State laws also often provide for issuance of state depredation permits for wildlife causing damage to property or affecting public safety. For example, Arizona law requires authorization from the State for actions that injure or kill game mammals, game birds, or federally protected wildlife.<sup>279</sup> The Arizona law includes procedures for submission of a wildlife damage report, donation of the edible portions of taken wildlife, and for State anti-depredation technical assistance for property owners.<sup>280</sup> In addition, Arizona law prohibits actions to harass, molest, chase, rally, concentrate, herd, intercept, torment, or drive wildlife with or from any aircraft or any motorized vehicle unless authorized by state law.<sup>281</sup>

## VII. AIRPORT LAND-USE COMPATIBILITY AND FEDERAL WILDLIFE MANAGEMENT CONSIDERATIONS

Land-use compatibility is a significant factor in determining the potential wildlife hazard threat to airport operations. Development of incompatible land uses near airport property may create issues for surrounding uses concerning aircraft noise, environmental impacts, and safety. Of particular relevance to this digest is the wildlife hazard impact to airports associated with incompatible land use. The FAA has determined that certain types of land uses, including residential, school, and church uses, are considered incompatible with airport operations and that others (e.g., industrial and commercial land uses) are more compatible for areas surrounding airports. The FAA also has specified that the objectives of airport land-use compatibility are to encourage incompatible land uses to locate away from airports and encourage land uses that are more compatible to locate around airports.<sup>282</sup>

Airport land-use compatibility in the context of wildlife hazards requires consideration of the need for distance between airport operational activities and land uses (on-airport and off-airport) that may attract hazardous wildlife. The assessment of wildlife hazards under federal law is addressed in Section III of this digest, and wildlife hazard management is discussed in Section V. The FAA has provided guidance identifying land uses (e.g., wetlands, MSWLF, stormwater management facilities, golf courses, and agricultural activities) the agency has determined to be incompatible with safe airport operations because of their potential to attract hazardous wildlife on or near airports (FAA Advisory Circular No. 150/5200-33B—Hazardous Wildlife Attractants On or Near Airports (August 28, 2007)), and specifies minimum separation distances between these land uses and aircraft operations areas or new airport development projects planned to accommodate aircraft movement. The minimum separation criteria are 1) 5,000 ft between the air operations area and the hazardous wildlife attractant for airports serving piston-powered aircraft; 2) 10,000 ft between the air operations area and the hazardous wildlife attractant for airports serving turbine-powered aircraft; and 3) 5 statute mi between the air operations area and the hazardous wildlife attractant for all airports when the attractant could cause hazardous wildlife to move into or across the airport’s approach or departure airspace.<sup>283</sup>

<sup>275</sup> CAL. FISH & GAME CODE § 3472.1.

<sup>276</sup> See, e.g., Pennsylvania Commonwealth Statutes Annotated § 2141—prohibits person from killing game or wildlife as a means of protection “unless it is clearly evident from all the facts that a human is endangered to a degree that the immediate destruction of the game or wildlife is necessary.”

<sup>277</sup> WASH. REV. CODE § 77.36.030.

<sup>278</sup> *Id.*

<sup>279</sup> ARIZ. REV. STAT. ch. 17.

<sup>280</sup> *Id.*

<sup>281</sup> ARIZ. ADMIN. CODE § R12-4-320.

<sup>282</sup> Federal Aviation Administration, *Land Use Compatibility and Airports*, available at [http://www.faa.gov/about/office\\_org/headquarters\\_offices/apl/noise\\_emissions/planning\\_toolkit/media/III.B.pdf](http://www.faa.gov/about/office_org/headquarters_offices/apl/noise_emissions/planning_toolkit/media/III.B.pdf).

<sup>283</sup> In addition as noted in § II, III, and IV, the FAA requires airport improvement grant sponsors to provide land-use compatibility assurances in grant agreements for airport development, planning, and noise compatibility programs awarded under the Federal Airport Improvement Act. Among other assurances, the airport sponsors must provide assurance that they will: “take appropriate action, to the extent reasonable,

Some aspects of airport land-use compatibility are addressed in federal law and in FAA regulations and guidance. In addition to FAA guidance and directives, federal law prescribes requirements for siting certain types of land uses within the vicinity of airports. Those provisions are described in this section of the digest. Regulation of non-airport land uses is not within the direct jurisdiction of the FAA. State and local governments generally have responsibility for consideration of airport land-use and compatibility issues through comprehensive planning, land use, capital improvement plans, building codes, and zoning laws and regulations. State laws concerning airport hazards and land-use compatibility are addressed in Section VIII of this digest.

Federal law addresses the concern that locating certain land uses, such as landfills, in the vicinity of airport operations may create a hazardous wildlife attractant. The safety implications of siting or expanding landfill facilities within the vicinity of airports are recognized under federal laws and regulations. The federal statute regulating structures interfering with air commerce authorizes the FAA to adopt regulations or issue orders requiring landfill facilities or other structures to submit a notice to the FAA of actual or proposed construction, alteration, establishment, or expansion of a structure or sanitary landfill when the FAA determines notice will promote “safety in air commerce” at public airports as well as efficiency and protection of airspace and airport traffic capacity at these airports.<sup>284</sup>

If construction or alteration may obstruct or interfere with navigable airspace or with navigation facilities and equipment, the FAA may conduct an aeronautical study to determine “the extent of any adverse impact on the safe and efficient use of the airspace, facilities, or equipment.”<sup>285</sup> The FAA study includes consideration of the structure or facility’s impact on existing and planned public airports and aeronautical facilities and on aircraft arrival, departure, and on-route procedures. The study also includes consideration of the cumulative impact of the proposed construction or alteration when combined with impacts associated with existing or proposed structures.<sup>286</sup> The FAA report on the study will identify the adverse impact of the construction or alteration on safe and efficient use of navigable airspace.<sup>287</sup>

### Landfill Siting

Federal law limits landfill siting near airport property without FAA approval. Federal law prohibits con-

struction or establishment of an MSWLF within 6 mi of a public airport that serves specified aircraft operations and that has received federal Airport Improvement Act grant funding<sup>288</sup> unless the FAA has granted an exemption from the statutory prohibition. The federal statute states:

No person shall construct or establish a municipal solid waste landfill...that receives putrescible waste...within 6 miles of a public airport that has received grants under chapter 471 and is primarily served by general aviation aircraft and regularly scheduled flights of aircraft designed for 60 passengers or less unless the State aviation agency of the State in which the airport is located requests that the Administrator of the Federal Aviation Administration exempt the landfill from the application of this subsection and the Administrator determines that such exemption would have no adverse impact on aviation safety.<sup>289</sup>

The statutory prohibition does not apply to MSWLF construction, establishment, modification, or expansion in Alaska or to activities for which FAA will provide an exemption when the agency determines they will have no adverse impact on public safety.<sup>290</sup> This statute also does not apply to MSWLF construction, establishment, expansion, or modification when the facility’s construction or establishment commenced prior to April 5, 2000.<sup>291</sup>

The EPA regulations prescribe requirements related to the statutory MSWLF siting restriction. The EPA regulations require a MSWLF owner or operator proposing a new or expanded MSWLF within the FAA-specified separation criteria<sup>292</sup> to demonstrate that the facility will not create hazardous conditions for aircraft. The EPA regulations apply to siting of MSWLF facilities with the potential to attract hazardous wildlife on or near public-use airports and require MSWLF owners or operators to demonstrate the facilities will not create a “bird hazard” when facilities are located or planned within the FAA-specified separation criteria for public-use airports.<sup>293</sup> The regulation states:

Owners or operators of new MSWLF units, existing MSWLF units, and lateral expansions that are located within 10,000 feet (3,048 meters) of any airport runway end used by turbojet aircraft or within 5,000 feet (1,524 meters) of any airport runway end used by only piston-type aircraft must demonstrate that the units are designed and operated so that the MSWLF unit does not pose a bird hazard to aircraft.<sup>294</sup>

A “bird hazard” is defined as “an increase in the likelihood of bird/aircraft collisions that may cause damage

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including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft.” (FAA Advisory Circular No. 150/5200-33B).

<sup>284</sup> 49 U.S.C. § 44718(a).

<sup>285</sup> 49 U.S.C. § 44718(b).

<sup>286</sup> 49 U.S.C. § 44718(b)(1).

<sup>287</sup> 49 U.S.C. § 44718(b)(2).

<sup>288</sup> 49 U.S.C. § 47101, *et seq.*

<sup>289</sup> 49 U.S.C. § 44718(d)(1).

<sup>290</sup> 49 U.S.C. § 44718(d).

<sup>291</sup> Apr. 5, 2000, is the effective date of the relevant provision. See 49 U.S.C. § 44718(d)(2).

<sup>292</sup> FAA Advisory Circular 150/5200-33B.

<sup>293</sup> 40 C.F.R. § 258.10.

<sup>294</sup> 40 C.F.R. § 258.10(a).



to the aircraft or injury to its occupants.”<sup>295</sup> The written demonstration by the owner or operator that a new, existing, or expanded facility will not create a bird hazard to aircraft must be included in the facility’s operating record.<sup>296</sup> The facility owner or operator also must provide notice of the proposal to the FAA and the affected airport.<sup>297</sup>

The FAA has provided guidance to airport operators concerning compliance with the federal MSWLF provisions. FAA Advisory Circular No. 150/5200-34A—Construction or Establishment of Landfills Near Airports (January 26, 2006) states the FAA’s position that locating landfills in proximity to airports increases the risk of collisions between birds and aircraft. To address this concern, the Advisory Circular requires the proponent of a new MSWLF to determine whether the new facility would be located within 6 mi from the public airport. If the facility is within the specified distance, the Advisory Circular provides two options for the MSWLF proponent: 1) plan the facility for another location outside the 6-mi distance, or 2) request that the state aviation agency file a petition for exemption from the FAA requirement.

FAA policy describes the agency’s process for review of notices concerning proposed waste disposal facilities. FAA Airport Certification Program—14 C.F.R. Part 139 Program Policy and Guidance Policy No. 82—Waste Disposal Facility Coordination (September 9, 2004) states that pressure to develop new waste disposal facilities or to expand existing sites requires the agency to coordinate responses to ensure consistency. The FAA policy specifies that the responsible regional FAA personnel will determine whether the proposal is compatible with applicable FAA Advisory Circulars and with safe airport operations. The FAA policy also provides that the responsible FAA personnel will prepare a written compatibility determination and any recommended permitting conditions and that the FAA Staff Wildlife Biologist must concur in that determination. The Letter of Determination transmitted to the state aviation agency and/or facility proponent must include all recommended permitting conditions.

### Airport Planning and Development

As described above and in Section V of this digest, the FAA has addressed wildlife hazard planning and development issues concerning airport land-use compatibility through FAA Advisory Circular No. 150/5200-33B—Hazardous Wildlife Attractants On or Near Airports (August 28, 2007) and requirements for land-use compatibility grant assurances. The FAA Advisory Circular provides direction to airport operators concerning avoidance of incompatible land uses within the vicinity of public airports by identifying land uses that may be incompatible with airport operations if located within the specified separation

criteria (5,000 ft and 10,000 ft, depending on the type of aircraft served). The Advisory Circular identifies uses such as waste disposal operations, wetland mitigation, artificial marshes, agricultural activities, wastewater treatment facilities, landscaping, wastewater discharge and sludge disposal, and golf courses. The FAA Advisory Circular provisions, which apply to airport development projects (e.g., airport construction, expansion, and renovation) affecting aircraft movement near hazardous wildlife attractants, specify that the provisions are considered mandatory for airports that have received federal grant funding and as guidance for other airports.

As described in Section II of this digest, the FAA also has addressed wildlife hazard planning and development issues concerning airport land-use compatibility requirements for grant assurances concerning land-use compatibility. A grant recipient (airport sponsor or non-airport sponsor) must provide the FAA assurances that “appropriate action, including the adoption of zoning laws, to the extent reasonable, to restrict the use of land” in the airport vicinity to “activities and purposes compatible with normal airport operations.”<sup>298</sup> These assurances must be included in the FAA grant agreement.

This section discusses other aspects of FAA environmental review of airport planning and development projects from the context of consideration of wildlife hazard management and the environmental review of other federal agencies concerning wildlife hazard management.

### FAA—Environmental Review and Development Approval

The Federal National Environmental Policy Act (NEPA) requires federal agencies to assess the environmental impacts of federal agency action. NEPA specifies that federal agencies must “[U]tilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision making which may have an impact on man’s environment.”<sup>299</sup>

The Council on Environmental Quality (CEQ) regulations implementing NEPA specify that federal agencies are to interpret the NEPA statutory provisions as both a “supplement” to existing agency authority and “a mandate to view traditional policies and missions in the light of NEPA’s “national environmental objectives.”<sup>300</sup> NEPA further requires federal agencies to

<sup>295</sup> 40 C.F.R. § 258.10(d).

<sup>296</sup> 40 C.F.R. § 258.10(c).

<sup>297</sup> 40 C.F.R. § 258.10(b).

<sup>298</sup> FAA Grant Assurances, Airport Sponsor Certification Section C(21), [http://www.faa.gov/airports/aip/grant\\_assurances/media/airport\\_sponsor\\_assurances\\_2012.pdf](http://www.faa.gov/airports/aip/grant_assurances/media/airport_sponsor_assurances_2012.pdf), and Non-Airport Sponsors Undertaking Noise Compatibility Program Project Certification C(15), [http://www.faa.gov/airports/aip/grant\\_assurances/media/nonairport\\_sponsor\\_assurances.pdf](http://www.faa.gov/airports/aip/grant_assurances/media/nonairport_sponsor_assurances.pdf).

<sup>299</sup> 42 U.S.C. § 4332(2)(A).

<sup>300</sup> 40 C.F.R. § 1500.6.

“consult with and obtain the comments of” any other federal agencies with “special expertise” concerning the particular environmental impact.<sup>301</sup>

The CEQ regulations require federal agencies to integrate and apply NEPA procedures into agency planning. The regulations specify that agencies must “integrate the NEPA process with other planning at the earliest possible time,” including the study and development of alternatives to proposed action.<sup>302</sup> Among other requirements, NEPA requires federal agencies to issue a “detailed statement” (environmental impact statement or EIS) identifying the environmental impacts for any “major” federal action “significantly affecting the quality of the human environment.”<sup>303</sup> “Affecting” is defined in the CEQ regulations to mean “will or may have an effect on” and includes consideration of direct effects and indirect effects.<sup>304</sup> “Direct effects” are defined as those caused by the action and occurring at the same time and place, while “indirect effects” are those caused by the action but occurring either later in time or farther in the distance, but are still reasonably foreseeable.<sup>305</sup>

The FAA issued two Orders related to NEPA review of federal actions within its jurisdiction. FAA Order 1050.1E CHG 1, Environmental Impacts: Policies and Procedures (March 20, 2006)<sup>306</sup> addresses agency-wide policies and procedures concerning NEPA implementation for all FAA offices and programs. This Agency Order specifies that FAA must comply with both the CEQ regulations and these directives for purposes of NEPA compliance:

RELATION TO CEQ REGULATIONS. This order implements the mandate of NEPA, as defined and discussed in the CEQ regulations, within the programs of the FAA. This order is not a substitute for the regulations promulgated by CEQ, rather it supplements the CEQ regulations by applying them to FAA programs. Therefore, all program offices and administration offices shall comply with both the CEQ regulations and the provisions of this order.<sup>307</sup>

FAA Order 5050.4B, National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions (April 28, 2006),<sup>308</sup> contains the NEPA instructions for implementing airport planning and development projects issued by the FAA’s Office of Airport Planning and Programming. The Airports Order addresses NEPA requirements specifically for agency actions concerning airports and supplements the

Agency Order for NEPA review of “proposed Federal actions to support airport development projects.”<sup>309</sup> Therefore, the provisions of the CEQ regulations and the two FAA Orders apply to NEPA review conducted by FAA, which includes airport planning and development projects as well as grants, loans, contracts, leases, certifications, licensing, construction, research, and rulemaking and regulatory actions.<sup>310</sup>

The FAA may use an Environmental Assessment in a NEPA review to determine the significance of the impact of a proposed action on the human environment.<sup>311</sup> The CEQ regulations state that the Environmental Assessment is a “concise statement” that includes, among other information, a brief discussion of alternatives and the environmental impacts of the proposed action and alternatives.<sup>312</sup> If the Environmental Assessment concludes that the action will not have significant impacts, a Finding of No Significant Impact (FONSI) is issued with the Environmental Assessment.<sup>313</sup> If the responsible official determines after the Environmental Assessment review that the impact will be significant, and that mitigation will not reduce impacts below applicable significance thresholds, an EIS must be prepared.<sup>314</sup>

The NEPA process applies to FAA review and approval of Wildlife Hazard Management Plans and actions required to implement those plans. FAA Order 5050.4B § 209 specifies that an FAA grant to fund preparation of a Wildlife Hazard Management Plan and the FAA plan may qualify for a categorical exemption from NEPA review. However, the FAA approval of the airport layout plan implementing provisions of the Wildlife Hazard Management Plan and federal grant approval to implement plan provisions may require preparation of an Environmental Assessment or EIS under NEPA.

### Development Approvals

*Federal and State Wildlife Resource Agencies.* If an airport development project subject to FAA approval may impact federally listed endangered and threatened species or their critical habitat, the project will be subject to review under the Federal ESA.<sup>315</sup> Through the interagency consultation process established by the ESA, the FAA and USFWS or the NMFS will consider whether the proposed action may result in the incidental take of federally listed endangered and

<sup>301</sup> 42 U.S.C. § 4332(2)(C).

<sup>302</sup> 40 C.F.R. § 1501.2.

<sup>303</sup> 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1508.11.

<sup>304</sup> 40 C.F.R. § 1508.3.

<sup>305</sup> 40 C.F.R. § 1508.8.

<sup>306</sup> [http://www.faa.gov/documentLibrary/media/order/energy\\_orders/1050-1E.pdf](http://www.faa.gov/documentLibrary/media/order/energy_orders/1050-1E.pdf).

<sup>307</sup> FAA Order 1050.1E § 9.

<sup>308</sup> Link available at [http://www.faa.gov/regulations\\_policies/orders\\_notices/index.cfm/go/document/information/documentID/14836](http://www.faa.gov/regulations_policies/orders_notices/index.cfm/go/document/information/documentID/14836).

<sup>309</sup> FAA Order 5050.4B ch. 1, § 5(b), and ch. 2, § 200(a).

<sup>310</sup> FAA Order 1050.1E § 200e.

<sup>311</sup> 40 C.F.R. § 1508.9.

<sup>312</sup> 40 C.F.R. § 1508.9.

<sup>313</sup> 40 C.F.R. § 1508.13; FAA Order 5050.4B, ch. 8, § 800(a).

<sup>314</sup> 40 C.F.R. § 1501.4; FAA Order 5050.4B, ch. 8, § 800(b).

<sup>315</sup> 16 U.S.C. § 1531, *et seq.* See U.S. Fish and Wildlife Service, “Endangered Species Program,” <http://www.fws.gov/endangered/laws-policies/esa.html>, and 50 C.F.R. pt. 17, available at [http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=b544b9e8e41033451dd28b75b2538912&tpl=/ecfrbrowse/Title50/50cfr17a\\_main\\_02.tpl](http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=b544b9e8e41033451dd28b75b2538912&tpl=/ecfrbrowse/Title50/50cfr17a_main_02.tpl).

threatened species or adversely modify listed species' critical habitat. Section 7 of the ESA requires federal agencies to consult with the federal resource agencies to ensure that agency actions conducted, authorized, or funded by those agencies are not likely to jeopardize the continued existence of listed species or adversely modify designated critical habitats. The ESA includes provisions for agencies and others, including airport operators, to seek authorization of actions that may result in the take of listed species through a permitting process<sup>316</sup> or the incidental take statement process.<sup>317</sup> The USFWS and NMFS have enacted regulations governing the process for interagency consultation and authorization consistent with the ESA mandates.<sup>318</sup>

The FAA has issued guidance concerning the approach the agency will take in addressing its ESA consultation requirements. When the FAA requires plan development or revision, the FAA Regional Coordinator will request information from the USFWS concerning the presence of species and critical habitat that are either listed or designated (or proposed for listing or designation) under the ESA on or near the airport property.<sup>319</sup> According to this FAA policy, the FAA Regional Coordinator will provide information from the USFWS regarding federally listed species or critical habitat for compliance with the ESA's interagency consultation requirements.<sup>320</sup> The airport operator will use that information in complying with the ESA requirements when seeking authorization for activities on airport property that may affect federally listed species.

FAA also has issued guidance concerning the process for evaluating issues associated with state-listed species' use of habitat on airport property. This FAA guidance describes the procedures for airport operators and FAA certification inspectors to respond to requests by state wildlife agencies to facilitate and encourage habitats for state-listed threatened and endangered species or species of special concern occurring on airports that may pose a threat to aviation safety.<sup>321</sup> The FAA guidance also discusses concerns regarding techniques that may increase wildlife hazards, be inconsistent with safe airport operations, and create a threat to aviation safety.

*Department of the Army Corps of Engineers.* An airport operator whose development projects or activities are required to implement a federally

approved Wildlife Hazard Management Plan that may affect wetlands areas must determine whether a U.S. Army Corps of Engineers (Corps) authorization is required. A Corps permit is required generally for work in or the discharge of dredged or fill material in navigable waters, or waters of the United States, respectively. The Corps issues such permits under Section 404 of the Federal Clean Water Act,<sup>322</sup> which regulates the discharge of dredged or fill material into waters of the United States, and Section 10 of the Federal Rivers and Harbors Appropriation Act,<sup>323</sup> which prohibits obstruction or alteration of navigable waters without a Corps permit. Adverse impacts to the aquatic environment identified during the Corps' environmental review are offset by mitigation measures. For a Section 404 permit, the proposed activity may be denied or restricted when the Corps determines discharge will have "an unacceptable adverse effect" on wildlife or other resources.<sup>324</sup>

Among other requirements, the Corps permit application review will include an alternatives analysis with respect to the proposed discharge to "waters of the United States."<sup>325</sup> This review will consider whether there is a "practicable alternative" to the proposed discharge, which is defined as one that has less adverse impact on the aquatic ecosystem and does not have other significant adverse environmental consequences.<sup>326</sup> The impacts considered in this evaluation include impacts to wildlife, including federally listed species and the resident and transient wildlife (mammal, birds, reptiles, and amphibians) associated with aquatic ecosystems.<sup>327</sup>

*Migratory Bird Treaty Act.* The airport operator may require federal approvals for development projects and/or Wildlife Hazard Management Plan implementing measures when these activities may result in take of federally protected migratory birds. The Federal MBTA<sup>328</sup> establishes a program for the protection of migratory birds included in international conventions the United States has entered into with Great Britain, Mexico, Japan, and Russia. The MBTA prohibits actions to "pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase," or to transport or receive a migratory bird covered by the terms of the statute. The MBTA prohibition also applies to any part, nest, or egg of any covered migratory bird. The MBTA authorizes the adoption of regulations specifying the circumstances in which "take" of a migratory bird, nest, part, or egg may be authorized by permit or other means under the

<sup>316</sup> Sec. 10 of the ESA.

<sup>317</sup> Sec. 7 of the ESA.

<sup>318</sup> 16 U.S.C. § 1531, *et seq.*, and 50 C.F.R. pt. 17.

<sup>319</sup> FAA Program Policy and Guidance Policy No. 78 Section 7 Consultation on Endangered or Threatened Species (June 21, 2004).

<sup>320</sup> 16 U.S.C. § 1536.

<sup>321</sup> FAA CertAlert No. 06-07 Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State-Listed Threatened and Endangered Species and Species of Special Concern on Airports (Nov. 21, 2006), [http://www.faa.gov/airports/airport\\_safety/certalerts/](http://www.faa.gov/airports/airport_safety/certalerts/).

<sup>322</sup> Pub. L. No. 92-500, 86 Stat. 816 (1972), codified at 33 U.S.C. § 1344.

<sup>323</sup> 30 Stat. 1151 (1899), codified at 3 U.S.C. § 403.

<sup>324</sup> 33 U.S.C. § 1344.

<sup>325</sup> 40 C.F.R. § 230.10(a).

<sup>326</sup> *Id.*

<sup>327</sup> 40 C.F.R. §§ 230.30–230.32.

<sup>328</sup> Codified at 16 U.S.C. §§ 701–712.

statute.<sup>329</sup> Unpermitted actions that result in take, and other violation of the statutory prohibition, may result in criminal penalties, including imprisonment of up to 6 months and a fine of up to \$15,000.<sup>330</sup>

The USFWS has adopted permit regulations for authorizations issued pursuant to MBTA.<sup>331</sup> The actions prohibited under the MBTA are barred unless authorized by permit issued by the USFWS consistent with these regulations.<sup>332</sup> The regulations provide for specific types of permits, including permits for import and export, banding and marking, scientific collection, special purpose, and falconry.<sup>333</sup> The MBTA regulations also provide for issuance of permits to state wildlife agencies for Canada geese management and control activities when the USFWS determines the permit “will contribute to human health and safety, protect personal property, or allow resolution or prevention of injury to people or property.”<sup>334</sup>

The MBTA regulations include specific take authorization for control and management of resident Canada geese at airports and military airfields.<sup>335</sup> The regulation specifies that the permit will be issued to the airport “when necessary to resolve or prevent threats to public safety” from Canada geese. The regulations specify the permit requirements and the timing of the airport’s permitted activities. The permit may authorize lethal and nonlethal control actions, including trapping, relocation, nest and egg destruction, shooting, egg oiling, and use of nets and pesticides or drugs. The regulations, however, specify that this permit does not authorize the airport operator to take actions that adversely affect other migratory birds or species listed as endangered or threatened under the Federal ESA.<sup>336</sup>

*Bald and Golden Eagle Protection Act.* The Federal BGEPA establishes a program for protection of bald eagles and golden eagles.<sup>337</sup> With certain exceptions as authorized by a USFWS permit, BGEPA prohibits any take, possession, sale, purchase, barter, transport, export, or import of a bald eagle or any of its parts, nests, or eggs.<sup>338</sup> The term “take” is defined in the statute to include “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.”<sup>339</sup> Violations of the BGEPA prohibitions can result in significant criminal and civil penalties.<sup>340</sup>

The USFWS has adopted regulations to authorize actions that may result in take. The BGEPA regulations authorize take for actions consistent with the statute, including scientific collection or exhibition, Indian religious purposes, and depredation.<sup>341</sup> The regulations specify that the permit may be issued if the USFWS determines the take is “compatible with the preservation” of the eagle. This determination requires the USFWS to consider whether the eagles have “become seriously injurious” to wildlife or other interests in the locality. The USFWS also must determine that the injury related to the eagles is “substantial” or that the eagles “pose a significant risk to human or eagle health and safety.”<sup>342</sup>

After the delisting of the bald eagle under the Federal ESA, the USFWS adopted regulations to authorize take that previously had been or could be authorized under the ESA.<sup>343</sup> The BGEPA regulations provided a process for permitting an ESA-authorized activity when the activity is conducted in “full compliance” with the terms and conditions of the ESA Section 7 incidental take statement.<sup>344</sup> The BGEPA regulations also authorize issuance of either individual or programmatic permits for take associated with but not the purpose of an activity.<sup>345</sup> A permit may be issued under BGEPA when the USFWS determines the take is compatible with eagle preservation, with consideration given to indirect and cumulative effects of other permitted take, and necessary to protect a legitimate interest in a particular locality. The BGEPA rules make permitting of take related to safety emergencies the highest priority and prioritize other types of take that may be associated with airport operations, including nonemergency activities required to ensure public health and safety and renewal of programmatic take permits. The BGEPA rules also require the USFWS to determine whether the permit applicant has provided avoidance and minimization measures to reduce take to “the maximum degree practicable”; for programmatic take, the permit applicant also must demonstrate the take is “unavoidable despite application of advanced conservation practices” developed with USFWS coordination.<sup>346</sup>

## VIII. AIRPORT LAND-USE COMPATIBILITY AND STATE WILDLIFE MANAGEMENT CONSIDERATIONS

States have addressed general and specific issues concerning airport land-use compatibility through laws, regulations, and guidance. The issue of land-use compatibility includes general consideration of the compatibility of surrounding land uses with airport operations and an evaluation of the variety of potential

<sup>329</sup> 16 U.S.C. § 704.

<sup>330</sup> 16 U.S.C. § 707.

<sup>331</sup> 50 C.F.R. pt. 21.

<sup>332</sup> 50 C.F.R. § 21.11.

<sup>333</sup> 50 C.F.R. §§ 21.21–21.29.

<sup>334</sup> 50 C.F.R. § 21.26.

<sup>335</sup> 50 C.F.R. § 21.49.

<sup>336</sup> *Id.*

<sup>337</sup> Pub. L. No. 86-70, et al., 54 Stat. 250, et al. (1940), codified at 16 U.S.C. § 668, *et seq.*

<sup>338</sup> 16 U.S.C. § 668(a).

<sup>339</sup> 16 U.S.C. § 668(d).

<sup>340</sup> 16 U.S.C. § 668(a).

<sup>341</sup> 50 C.F.R. § 22.23.

<sup>342</sup> *Id.*

<sup>343</sup> 50 C.F.R. § 22.28.

<sup>344</sup> *Id.*

<sup>345</sup> 50 C.F.R. § 22.26.

<sup>346</sup> 50 C.F.R. § 22.28(e).

impacts of those airport operations that may affect land uses in the airport vicinity. Some relevant considerations include the development's design and construction standards, noise, air quality, water quality, traffic impacts, environmental issues, and the broad concept of environmental justice.

In addition to the direct application to airport development and planning as described in this section, state land use development and compatibility standards may be incorporated into federal considerations through the FAA grant funding process. This process is described in Section II of this digest. As discussed in Section II, an airport sponsor may apply for federal grant funding of an airport planning or development project through the Federal AIP and other grant programs, such as the Federal Aid to Airports Program and the Airport Development Aid Program. Under federal law, the FAA may approve a grant application for an airport development project only if the airport project grant recipient provides the 21 general written assurances associated with airport operations specified in the statute.<sup>347</sup> The assurances are incorporated within an agreement submitted with the grant application and become part of the final grant offer when approved. The FAA will require compliance regarding an airport sponsor's performance in connection with grant agreements for airport development, planning, and noise compatibility program grants.<sup>348</sup> The duration of the grant assurances may vary depending on the type of grant recipient or facility being developed with the grant funding.

Federal law specifies that the agreement incorporated within the application of an airport sponsor, or of a state applying for grant funding on behalf of one or more airports, must include assurances concerning compliance with development standards.<sup>349</sup> The federal statute specifies that the proposed development must comply with FAA-prescribed development standards, including "standard for site location, airport layout, site preparation, paving, lighting, and safety of approaches."<sup>350</sup> Federal law allows the FAA to apply state development standards for purposes of the required assurances under certain circumstances:

State Standards for Airport Development.—The Secretary may approve standards (except standards for safety of approaches) that a State prescribes for airport development at nonprimary public-use airports in the State. On approval under this subsection, a State's standards apply to the nonprimary public-use airports in the State instead of the comparable standards prescribed by the Secretary under subsection (b)(3) of this section. The Secretary, or the State with the approval of the Secretary, may revise standards approved under this subsection.<sup>351</sup>

The required federal assurances are incorporated within an agreement submitted by the sponsor with the grant application and become part of the final grant offer when approved.<sup>352</sup>

Many states have responded to the airport hazard problem by establishing a system for development and enforcement of airport zoning regulations. The FAA issued guidance concerning development of airport zoning regulations to address airport hazards in areas surrounding airports, and state laws commonly reflect the considerations provided by the model ordinance incorporated within that guidance.<sup>353</sup> State airport zoning laws, and the state or local regulations implementing those laws, generally are designed to target a specified area within the vicinity of the airport, commonly referred to as an "airport hazard area" or similar designation. State laws may authorize or require local governments with airports or airport hazards areas within their jurisdictions to initiate development of airport zoning regulations to specifically address and respond to creation and establishment of airport hazards. These state laws frequently provide for appointment of an airport zoning commission or similar body to develop recommendations for the initial airport zoning regulatory program and to specify procedures for the local government to adopt and amend these regulations. State laws also commonly prescribe a process for creation of a joint airport zoning board or joint airport authority to develop regulations when airport or airport hazard areas are located within different jurisdictions.

Other common provisions in airport zoning regulations include identification of permitted and prohibited land uses within airport hazard areas and height restrictions of structures and objects of natural growth (commonly defined as "tree" in state airport zoning laws) within these areas and establishment of a permitting system to authorize uses within these designated areas. In addition, state statutes generally provide for local regulations to recognize and not interfere with nonconforming uses existing at the time the regulations were adopted, provided those uses are not replaced or substantially repaired or altered after the regulations are enacted. Further, the airport zoning statutes frequently address the standards and requirements for approving variances for uses that cannot comply with the regulations, and replacement or significant changes to existing nonconforming uses.

A comprehensive discussion of states' approach to airport land-use compatibility considerations is beyond the scope of this digest. Instead, this section of the digest will focus on state laws promoting compatible land use in the vicinity of

<sup>352</sup> 49 U.S.C. § 47105.

<sup>353</sup> FAA Advisory Circular 150/5190-4A—A Model Zoning Ordinance to Limit Height of Objects Around Airports (Dec. 14, 1987), accessible at [http://www.faa.gov/regulations\\_policies/advisory\\_circulars/index.cfm/go/document.list/parentTopicID/11/display/all/changeNumber/0/currentPage/11/sortResults/false/sortColumn/dateIssued/sortOrder/DESC](http://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.list/parentTopicID/11/display/all/changeNumber/0/currentPage/11/sortResults/false/sortColumn/dateIssued/sortOrder/DESC).

<sup>347</sup> 49 U.S.C. § 47107.

<sup>348</sup> 49 U.S.C. § 47105.

<sup>349</sup> *Id.*

<sup>350</sup> 49 U.S.C. § 47105(b).

<sup>351</sup> 49 U.S.C. § 47105(c).

airports that directly relate to safety considerations associated with wildlife hazards and wildlife management. This section will not identify or address all state environmental land use or other laws that may affect wildlife management (e.g., wetlands) through the establishment and operation of airports or any airport land-use compatibility considerations that are not directly related to wildlife management or wildlife hazards.

This section of the digest briefly summarizes the categories of state laws that may promote airport land-use compatibility, including specifically airport zoning, land use, and response to airport hazards in the vicinity of airport operations. This section does not identify each applicable state law; rather, the section provides a description and some examples of the common approaches states take to regulate and respond to airport hazards within their jurisdictions. Appendix D of this digest identifies the state laws concerning airport land-use compatibility laws that fall within these categories. The summary of the laws identified in Appendix D and provided in this section are based on the versions of the state statutes and regulations available through the applicable state Web sites (as of March 2012) and may not reflect the most recent legislative changes to these laws.

### Airport Hazards

As discussed in Section VI, many states have recognized the scope of the airport hazard problem through statements of legislative intent and purpose in airport regulation statutes. Some state laws describe the nature and scope of the problems associated with wildlife hazards and identify the state interests served by elimination and reduction of these hazards. A common approach by states is to declare the creation or establishment of an airport hazard a public nuisance and a public injury to the community served by an airport. As discussed below in more detail, many states have responded to the airport hazard problem by establishing a system for development and enforcement of airport zoning regulations generally designed to target a specified “airport hazard area” and to identify land uses and height restrictions appropriate for uses within this designated area. While not directly related to the issues of wildlife management, these airport zoning laws (described in this section and identified in Appendix D) address issues associated with land uses and other features (e.g., trees and other vegetation) that may attract hazardous wildlife to or near airport property and frequently provide mechanisms to enforce zoning regulations with penalties to deter the establishment or maintenance of land uses and vegetation likely to attract hazardous wildlife.

As discussed in Section VI, airport zoning laws define airport hazards for purposes of the regulatory structure established for the areas around airports. Generally, state definitions of “airport hazard” commonly focus on the effects of structures, objects of natural growth (trees and other vegetation), and land

uses that may affect the navigable airspace, and, therefore, impact aircraft operations. Other states more directly address the dangers associated with these impacts (e.g., creates a dangerous condition for life or property). Finally, other states use zoning laws to define areas that may affect aircraft operations when an airport hazard is present or established there (e.g., airport hazard area, airport safety zone).

### Airport Zoning Regulations

Many states address airport land-use compatibility through zoning. A main focus of these types of regulations is identification and prevention of airport hazards within a designated airport hazard area. Common state definitions of those terms are provided above and in Section V and Appendix F of this digest.

#### *Development of Regulations*

State law may authorize or require local governments in which an airport hazard area is located (in whole or in part) to adopt, administer, and enforce airport zoning regulations for that area. A common state law approach is to provide for the airport hazard area to be divided into zones. The state law may then specify that the local airport zoning regulations will prescribe permitted and prohibited land uses within the specified zones and height limitations or restrictions for structures or objects of natural growth within the airport hazard area and within the specific zones.<sup>354</sup> For example, Montana law includes specific direction for designation of the area surrounding the airport subject to the airport zoning regulations and for establishment of permitted and compatible uses within the area. The Montana statute states in relevant part:

(2) Airport affected area regulations may:

(a) designate the airport or airports that are subject to the regulations, with a description of existing and future runways and approaches;

...

(c) describe the airport affected area by referencing maps and describing existing airport hazards and natural terrain that intrude into the airport affected area;

(d) designate and describe zones within the airport affected area, along with the height limitations for structures and trees within each zone, considering local conditions and needs, as well as the notice requirements and obstructions standards provided in 14 CFR, part 77;

(e) show the contours for decibel levels of 65 YDNL or greater on the maps that designate an airport affected area, if a study has been conducted pursuant to 14 CFR, part 150, and require that information to be considered by anyone who builds within the airport affected area;

(f) specify permitted and conditional uses within each zone of the airport affected area by addressing:

<sup>354</sup> MONT. CODE ANN. § 67-7:203 (2011).

(i) incompatible land uses, such as uses for residences, schools, hospitals, day-care centers, or other concentrations of people indoors or outdoors;

(ii) the land uses that are considered incompatible with certain noise levels, as provided in 14 CFR, part 150;

(iii) bird attractants such as solid waste disposal sites and lagoons;

(iv) sources of electromagnetic radiation that may interfere with electronic navigational aids;

(v) lights other than navigational aids that glare upward or shine on or in the direction of the airport; and

(vi) the national transportation safety board's accident investigation data in the vicinity of airports and specific accident data for a particular airport, if that information is available;

....

(h) provide for an inventory of existing land uses, structures, and trees within the airport affected area;<sup>355</sup>

State laws frequently identify considerations for local government development and adoption of airport zoning regulations. These may include the character of expected flying operations, the nature of the terrain within the designated airport hazard area and surrounding the airport, the character of the neighborhood in the airport vicinity, and existing and future land uses within the airport hazard area.<sup>356</sup>

### Regulatory Authority

States differ in the scope of state involvement in and direction regarding the development and enforcement of airport zoning regulations. New Jersey law provides for an active state role, directing the department of transportation to adopt regulations establishing the methodology for delineating airport safety zones for all affected airports in the state. The New Jersey law also provides for the department of transportation to specify standards for permitted and prohibited land uses within airport safety zones. Local airport safety zones and regulations in New Jersey must conform to this state agency's standards.<sup>357</sup> Rhode Island law takes a similar approach in directing the Rhode Island Airport Corporation to adopt an airport airspace plan that, among other items, must specify circumstances in which structures or trees could constitute airport hazards and identify the area for which airspace protection measures must be taken.<sup>358</sup>

Other states direct local governments to adopt airport zoning regulations consistent with the general statutory directive. For example, South Dakota law states local governments are to adopt the regulations implementing the state plan for protec-

tion of airport approaches:

Local zoning enforcement of approach plan. Each municipality, county, or other political subdivision having within or without its territorial limits an area within which, according to an airport approach plan adopted by the commission, measures should be taken for the protection of airport approaches, shall adopt, administer, and enforce, under the police power and in the manner and upon the conditions prescribed by this chapter, airport zoning regulations applicable to the area.<sup>359</sup>

Other states direct the affected local governments to develop local regulations to prevent the creation or establishment of airport hazards within designated areas. For example, Tennessee law provides:

In order to prevent the creation or establishment of airport hazards, every municipality or county having an airport hazard area within its territorial limits shall adopt, administer and enforce, under the police power and in the manner and upon the conditions prescribed in this chapter, airport zoning regulations for such airport hazard area, which regulations may divide such area into zones, and, within such zones, specify the land uses permitted and prohibited and regulated and restrict the height to which structures and trees may be erected or allowed to grow; provided, that these regulations are solely for the purposes of preventing airport hazards.<sup>360</sup>

This local regulatory authority may be exercised by the county or city in which the airport or airport hazard area is located. Alternatively, the local government may establish a joint zoning board or authority with an affected local government when the airport hazard area for an airport owned or controlled by a local government is wholly or partially outside the jurisdiction of the local government.<sup>361</sup>

State laws specify the requirements and procedures for initial development of airport zoning regulations. State law may require a local government to appoint an airport zoning commission, or to designate an existing governmental body to serve as the commission, for the purpose of making recommendations on the contents of the airport zoning regulations.<sup>362</sup> State laws also prescribe the procedures for adoption, amendment, and enforcement of airport zoning regulations.<sup>363</sup>

### Permits, Nonconforming Uses, and Variances

State airport zoning laws may require state or local permits for establishment of new structures or uses within an airport hazard area. These laws also may require a permit to authorize changes in existing uses or the grant of a variance if new uses or changes to existing uses will result in a conflict with the airport

<sup>355</sup> MONT. CODE ANN. § 67-7:203 (2011).

<sup>356</sup> See, e.g., ARIZ. REV. STAT. ch. 28 (Airport Zoning).

<sup>357</sup> N.J. STAT. §§ 6:1-80 through 6:1-88.

<sup>358</sup> R.I. GEN. LAWS ch. 1-3.

<sup>359</sup> S.D. CODIFIED LAWS § 50-10-5.

<sup>360</sup> TENN. CODE ANN. § 42-6-103 (2012).

<sup>361</sup> See, e.g., WASH. REV. CODE § 14.12.030.

<sup>362</sup> See, e.g., CAL. GOV'T CODE § 50485.6—airport zoning commission to recommend zone boundaries and regulatory provisions.

<sup>363</sup> See, e.g., ARIZ. REV. STAT. ch. 28, Airport Zoning.

zoning regulations. State laws also may address the status of nonconforming uses within the airport hazard area and the effect of significant changes to these uses.

North Carolina law provides an example of the treatment of these issues. The North Carolina Model Airport Zoning Act provides for a local permit system to authorize establishment or construction of new structures or uses, including substantial changes to or replacement of nonconforming structures:

(a) Permits. Where advisable to facilitate the enforcement of zoning regulations adopted pursuant to this Article, a system may be established by any political subdivision for the granting of permits to establish or construct new structures and other uses and to replace existing structures and other uses or make substantial changes therein or substantial repairs thereof. In any event, before any nonconforming structure or tree may be replaced, substantially altered or repaired, rebuilt, allowed to grow higher, or replanted, a permit must be secured from the administrative agency authorized to administer and enforce the regulations, authorizing such replacement, change or repair.<sup>364</sup>

North Carolina law prohibits issuance of a permit for the nonconforming use if the permit “would allow the structure or tree in question to be made higher or become a greater hazard to air navigation than it was when the applicable regulation was adopted.” Further, the North Carolina law imposes restrictions or requires removal when a nonconforming use has been determined to be abandoned or substantially destroyed or deteriorated:

Whenever the administrative agency determines that a nonconforming structure or tree has been abandoned or more than eighty percent (80%) torn down, destroyed, deteriorated, or decayed: (i) no permit shall be granted that would allow said structure or tree to exceed the applicable height limit or otherwise deviate from the zoning regulations; and (ii) whether application is made for a permit under this paragraph or not, the said agency may by appropriate action compel the owner of the nonconforming structure or tree, at his own expense, to lower, remove, reconstruct, or equip such object as may be necessary to conform to the regulations or, if the owner of the nonconforming structure or tree shall neglect or refuse to comply with such order for 10 days after notice thereof, the said agency may proceed to have the object so lowered, removed, reconstructed, or equipped.<sup>365</sup>

Arkansas law establishes the percentage for destruction or deterioration of a nonconforming use at 50 percent.<sup>366</sup> North Carolina law specifies that in circumstances other than those described above, the permit will be granted. North Carolina law also specifies that airport zoning regulations may not require removal, lowering, or other change of any nonconforming structure or natural growth or otherwise interfere

with the continuation of the use.<sup>367</sup>

Some state statutes specify that a variance may be conditioned on installation and maintenance of markers and lights to identify the presence of airport hazards. For example, Nebraska law specifies that the variance may be conditioned on the property owner consenting to the installation and maintenance of this equipment:

In granting any permit or variance..., the administrative agency or board of adjustment may, if it deems such action advisable to effectuate the purpose of [the airport zoning laws]...and reasonable in the circumstances, so condition such permit or variance as to require the owner of the structure or tree in question to permit the political subdivision, at its own expense, to install, operate and maintain thereon such markers and lights as may be necessary to indicate to flyers the presence of an airport hazard.<sup>368</sup>

The Nebraska law specifies that the markers and lights will be installed, operated, and maintained at government expense; some other states incorporate this approach, while others impose this expense on the property owner as a condition of the variance.

#### *Relationship to Other Laws*

State laws providing for adoption of airport zoning laws commonly address the relationship of these airport-specific zoning regulations with comprehensive zoning and other regulations. Alabama law specifies that the airport zoning regulations may be incorporated into the comprehensive zoning ordinance:

Incorporation.—In the event that a political subdivision has adopted, or hereafter adopts, a comprehensive zoning ordinance regulating, among other things, the height of buildings, any airport zoning regulations applicable to the same area or portion thereof may be incorporated in and made a part of such comprehensive zoning regulations and may be administered and enforced in connection therewith.<sup>369</sup>

Alabama law also specifies that the more stringent limitation or requirement will govern in the event of a conflict between an airport zoning regulation and another regulation applicable to the airport hazard area:

Conflict.—In the event of conflict between any airport zoning regulations adopted under this chapter and any other regulations applicable to the same area, whether the conflict be with respect to the height of structures of trees, the use of land or any other matter, and whether such regulations were adopted before or after the airport zoning regulations or by some other political subdivision, the more stringent limitation or requirement shall govern and prevail.<sup>370</sup>

Arizona law includes similar provisions to the

<sup>364</sup> N.C. GEN. STAT. § 63-32.

<sup>365</sup> N.C. GEN. STAT. § 63-32.

<sup>366</sup> ARK. CODE 14-363-206.

<sup>367</sup> N.C. GEN. STAT. § 63-31.

<sup>368</sup> NEB. REV. STAT. § 3-313 (citations omitted).

<sup>369</sup> ALA. STAT. § 4-16-15.

<sup>370</sup> *Id.*



Alabama law.<sup>371</sup>

### Acquisition of Property

State laws may provide for the state or for affected local governments to acquire property and property interests (e.g., easements) for the purposes of promoting airport land-use compatibility and of eliminating or reducing airport hazards. Under California law, state and local governments have the authority to acquire property by condemnation or other means for such purposes:

Any person authorized to exercise the power of eminent domain for airport purposes may provide, by purchase, gift, devise, lease, condemnation, or otherwise, for the removal or relocation of any airport hazard or the removal or relocation of all facilities, structures, and equipment that may interfere with the location, expansion, development, or improvement of the airport and other air navigation facilities or with the safe approach thereto and takeoff therefrom by aircraft. Any person acting under authority of this section shall pay the cost of such removal or relocation.<sup>372</sup>

Hawaii law includes a specific provision for the state transportation agency to acquire air rights in order to protect an airport approach or remove or lower a nonconforming use:

Acquisition of air rights. When (1) it is desired to remove, lower, or otherwise terminate a nonconforming structure or use; or (2) the approach protection necessary cannot, because of constitutional limitations, be provided by airport zoning regulations under this chapter; or (3) it appears advisable that the necessary approach protection be provided by acquisition of property rights rather than by airport zoning regulations, the director of transportation on behalf of the State may acquire, by purchase, grant, or condemnation...such air right, aviation easement, or other estate or interest in the property or nonconforming structure or use in question as may be necessary or proper to effectuate the purposes of this chapter, including acquisition of a fee simple estate.<sup>373</sup>

Other states authorize local government acquisition of property interests, specifically including air rights, for similar purposes.<sup>374</sup>

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<sup>371</sup> See, e.g., ARIZ. REV. STAT. § 28-8466 (more stringent limitation or requirement governs in the event of conflict between the airport zoning regulation and other regulations (even those adopted by a government other than the one enacting the airport zoning regulation) concerning the height of structures or trees, land uses, or other matters).

<sup>372</sup> CAL. PUB. UTIL. CODE § 21653.

<sup>373</sup> HAW. REV. STAT. § 262-11.

<sup>374</sup> See, e.g., NEB. REV. STAT. § 3-203 through 3-205.

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**Table A-2  
Animal and Plant Health Inspection Service  
United States Department of Agriculture**

<u><b>Agency</b></u>	<u><b>Contact Information</b></u>
<b>Federal Aviation Administration (United States Department of Transportation)</b>	Michael P. Huerta, FAA Administrator 800 Independence Avenue, SW Washington, DC 20591 1-866-TELL-FAA (1-866-835-5322) <a href="http://www.faa.gov">http://www.faa.gov</a>
FAA Office of the Associate Administrator for Airports	Christa Fornarotto, Associate Administrator Office of the Associate Administrator for Airports 800 Independence Avenue, SW Washington, DC 20591 Phone: (202) 267-8738 Fax: (202) 267-5301 <a href="http://www.faa.gov/about/office_org/headquarters_offices/arp/offices/">http://www.faa.gov/about/office_org/headquarters_offices/arp/offices/</a>
FAA Office of Airport Safety and Standards	Michael J. O'Donnell, Director Office of Airport Safety and Standards 800 Independence Avenue, SW Washington, DC 20591 Phone: (202) 267-3053 Fax: (202) 267-8821 <a href="http://www.faa.gov/about/office_org/headquarters_offices/arp/offices/aas/">http://www.faa.gov/about/office_org/headquarters_offices/arp/offices/aas/</a>
FAA Office of Airport Planning and Programming	Benito De Leon, Director Office of Airport Planning and Programming (APP) 800 Independence Avenue, SW Washington, DC 20591 Phone: (202) 267-8775 Fax: (202) 267-5302 <a href="http://www.faa.gov/about/office_org/headquarters_offices/arp/offices/app/">http://www.faa.gov/about/office_org/headquarters_offices/arp/offices/app/</a>
<b>Federal Aviation Administration—Regions</b>	
FAA Alaskan Region	Bryon K. Huffman, Division Manager AAL-600 222 W. 7th Ave

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Animal and Plant Health Inspection Service  
United States Department of Agriculture**

<u>Agency</u>	<u>Contact Information</u>
	M/S #14 Anchorage, AK 99513 Phone: (907) 271-5438 Fax: (907) 271-2851 <a href="http://www.faa.gov/airports/alaskan/about_airports/">http://www.faa.gov/airports/alaskan/about_airports/</a>
FAA Central Region	Jim Johnson, Division Manager ACE-600 Airports Division Room 364 901 Locust Kansas City, MO 64106-2325 Phone: (816) 329-2600 Fax: (816) 329-2610 or 2611 <a href="http://www.faa.gov/airports/central/about_airports/ce_roster/">http://www.faa.gov/airports/central/about_airports/ce_roster/</a>
FAA Eastern Region	William J. Flanagan, Division Manager AEA-600 1 Aviation Plaza Jamaica, NY 11434 Phone: (718) 553-3330 Fax: (718) 995-5694 <a href="http://www.faa.gov/airports/eastern/about_airports/">http://www.faa.gov/airports/eastern/about_airports/</a>
FAA Great Lakes Region	Susan Schalk, Division Manager AGL-600 2300 East Devon Avenue Des Plaines, IL 60018 Phone: (847) 294-7272 Fax: (847) 294-7036 <a href="http://www.faa.gov/airports/great_lakes/about_airports/">http://www.faa.gov/airports/great_lakes/about_airports/</a>
FAA New England Region	Mary T. Walsh, Division Manager ANE-600 12 New England Executive Park Burlington, MA 01803 Phone: (781) 238-7600 Fax: (781) 238-7608 <a href="http://www.faa.gov/airports/new_england/about_airports/">http://www.faa.gov/airports/new_england/about_airports/</a>
FAA	Division Manager - Vacant

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Animal and Plant Health Inspection Service  
United States Department of Agriculture**

<u><b>Agency</b></u>	<u><b>Contact Information</b></u>
Northwest Mountain Region	Carolyn Reed (425) 227-2608 Planning, Environmental and Financial Programs Branch 1601 Lind Avenue, S.W. Suite 315 Renton, WA 98057-3356 Phone: (425) 227-2600 Fax: (425) 227-1600 <a href="http://www.faa.gov/airports/northwest_mountain/about_airports/contact_information/">http://www.faa.gov/airports/northwest_mountain/about_airports/contact_information/</a>
FAA Southern Region	Winsome A. Lenfert, Division Manager ASO-600 P.O. Box 20636 Atlanta, GA 30320-0631 Phone: (404) 305-6700 Fax: (404) 305-6730 <a href="http://www.faa.gov/airports/southern/about_airports/">http://www.faa.gov/airports/southern/about_airports/</a>
FAA Southwest Region	Kelvin Solco, Division Manager 2601 Meacham Boulevard Fort Worth, TX 76137-4298 Phone: (817) 222-5600 Fax: (817) 222-5984 <a href="http://www.faa.gov/airports/southwest/about_airports/">http://www.faa.gov/airports/southwest/about_airports/</a>
FAA Western Pacific Region	Mark McClardy, Division Manager 15000 Aviation Boulevard Room 3012 Lawndale, CA 90261 Phone: (310) 725-3600 Fax: (310) 725-6847 <a href="http://www.faa.gov/airports/western_pacific/about_airports/">http://www.faa.gov/airports/western_pacific/about_airports/</a>
<b>United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS)</b>	Dr. Gregory Parham, Administrator USDA APHIS 1400 Independence Avenue, SW Washington, DC 20250-3402 Phone: (202) 720-2054 Fax: (202) 690-0053 <a href="http://www.aphis.usda.gov/">http://www.aphis.usda.gov/</a>

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**Table A-2  
Animal and Plant Health Inspection Service  
United States Department of Agriculture**

<u><b>Agency</b></u>	<u><b>Contact Information</b></u>
USDA APHIS Wildlife Services Division	William H. Clay, Deputy Administrator USDA APHIS Wildlife Services Division 1400 Independence Avenue, SW Washington, DC 20250-3402 Phone: (202) 720-2054 Fax: (202) 690-0053 <a href="http://www.aphis.usda.gov/about_aphis/programs_offices/wildlife_services/">http://www.aphis.usda.gov/about_aphis/programs_offices/wildlife_services/</a>

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**Table A-3  
Environmental Protection Agency**

<u>Agency</u>	<u>Contact Information</u>
<b>United States Environmental Protection Agency (EPA)</b>	Lisa P. Jackson, Administrator United States Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington, DC 20460 Phone: (202) 272-0167 <a href="http://www.epa.gov/">http://www.epa.gov/</a>
EPA Office of Chemical Safety and Pollution Prevention (OCSPP)	Jim Jones, Acting Assistant Administrator Office of Chemical Safety and Pollution Prevention United States Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, NW Mail Code 7010M Washington, DC 20460 Phone: (202) 564-2902 <a href="http://www.epa.gov/aboutepa/ocsppaa.html">http://www.epa.gov/aboutepa/ocsppaa.html</a>
EPA Office of Chemical Safety and Pollution Prevention (OCSPP) • Office of Pesticide Programs (OPP)	Steven Bradbury, Director United States Environmental Protection Agency Office of Chemical Safety Office of Pesticide Programs Mail Code 7510P Potomac Yard 2777 Crystal Drive Arlington, VA 22202 Phone: (703) 305-7090 <a href="http://www.epa.gov/aboutepa/ocspp.html">http://www.epa.gov/aboutepa/ocspp.html</a>
EPA Office of Chemical Safety and Pollution Prevention (OCSPP) • Office of Pollution Prevention and Toxics (OPPT)	Wendy Cleland-Hamnett, Director United States Environmental Protection Agency Office of Chemical Safety and Pollution Prevention Office of Pollution Prevention and Toxics (OPPT) Ariel Rios Building 1200 Pennsylvania Avenue, NW Mail Code 7401M Washington, DC 20004 Phone: (202) 564-3810 <a href="http://www.epa.gov/aboutepa/ocspp.html">http://www.epa.gov/aboutepa/ocspp.html</a>

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**Table A-3  
Environmental Protection Agency**

<u>Agency</u>	<u>Contact Information</u>
EPA Office of Enforcement and Compliance Assurance (OECA)	Cynthia Giles, Assistant Administrator United States Environmental Protection Agency Office of Enforcement and Compliance Assurance Ariel Rios Building 1200 Pennsylvania Avenue, NW Mail Code 2201A Washington, DC 20460 Phone: (202) 564-2440 Email: giles-aa.cynthia@epa.gov <a href="http://www.epa.gov/aboutepa/oeca.html">http://www.epa.gov/aboutepa/oeca.html</a>
EPA Office of Enforcement and Compliance Assurance (OECA) • Office of Compliance (OC)	Lisa C. Lund, Director United States Environmental Protection Agency Office of Enforcement and Compliance Assurance Office of Compliance Ariel Rios Building 1200 Pennsylvania Avenue, NW Mail Code 2221A Washington, DC 20460 Phone: (202) 564-2280 Email: lund.lisa@epa.gov <a href="http://www.epa.gov/aboutepa/oeca.html">http://www.epa.gov/aboutepa/oeca.html</a>
EPA Office of Enforcement and Compliance Assurance (OECA) • Office of Site Remediation Enforcement (OSRE)	Elliott Gilberg, Director United States Environmental Protection Agency Office of Enforcement and Compliance Assurance Office of Site Remediation Enforcement Ariel Rios Building 1200 Pennsylvania Avenue, NW Mail Code 2271A Washington, DC 20460 Phone: (202) 564-5110 Email: gilberg.elliott@epa.gov <a href="http://www.epa.gov/aboutepa/oeca.html">http://www.epa.gov/aboutepa/oeca.html</a>

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**Table A-3  
Environmental Protection Agency**

<u>Agency</u>	<u>Contact Information</u>
<b>United States Environmental Protection Agency (EPA) Regional Offices</b>	
EPA Region 1	Region 1 (CT, MA, ME, NH, RI, VT) Environmental Protection Agency 5 Post Office Square - Suite 100 Boston, MA 02109-3912 Phone: (617) 918-1111 Fax: (617) 918-1809 Toll free within Region 1: (888) 372-7341 Curt Spalding, Regional Administrator (617) 918-1010
EPA Region 2	Region 2 (NJ, NY, PR, VI) Environmental Protection Agency 290 Broadway New York, NY 10007-1866 Phone: (212) 637-3000 Fax: (212) 637-3526 Judith A. Enck, Regional Administrator (212) 637-5000
EPA Region 4	Region 4 (AL, FL, GA, KY, MS, NC, SC, TN) Environmental Protection Agency Atlanta Federal Center 61 Forsyth Street, SW Atlanta, GA 30303-3104 Phone: (404) 562-9900 Fax: (404) 562-8174 Toll free: (800) 241-1754 Gwendolyn Keyes Fleming, Regional Administrator (404) 562-8357
EPA Region 5	Region 5 (IL, IN, MI, MN, OH, WI) Environmental Protection Agency 77 West Jackson Boulevard Chicago, IL 60604-3507 Phone: (312) 353-2000 Fax: (312) 353-4135



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**Table A-3  
Environmental Protection Agency**

<u>Agency</u>	<u>Contact Information</u>
	Toll free within Region 5: (800) 621-8431 Susan Hedman, Regional Administrator (312) 886-3000
EPA Region 6	Region 6 (AR, LA, NM, OK, TX) Environmental Protection Agency Fountain Place 12th Floor, Suite 1200 1445 Ross Avenue Dallas, TX 75202-2733 Phone: (214) 665-2200 Toll free within Region 6: (800) 887-6063 Al Armendariz, Regional Administrator (214) 665-2200
EPA Region 7	Region 7 (IA, KS, MO, NE) Environmental Protection Agency 901 North 5th Street Kansas City, KS 66101 Phone: (913) 551-7003 Toll free: (800) 223-0425 Karl Brooks, Regional Administrator (913) 551-7006
EPA Region 8	Region 8 (CO, MT, ND, SD, UT, WY) Environmental Protection Agency 1595 Wynkoop Street Denver, CO 80202-1129 Phone: (303) 312-6312 Fax: (303) 312-6339 Toll free: (800) 227-8917 Email: r8eisc@epa.gov James B. Martin, Regional Administrator (303) 312-6308
EPA Region 9	Region 9 (AZ, CA, HI, NV) Environmental Protection Agency 75 Hawthorne Street San Francisco, CA 94105 Phone: (415) 947-8000, (866) EPA-WEST (toll free in Region 9) Fax: (415) 947-3553

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**Table A-3  
Environmental Protection Agency**

<b><u>Agency</u></b>	<b><u>Contact Information</u></b>
	Email: r9.info@epa.gov Jared Blumenfeld, Regional Administrator (415) 947-8702
EPA Region 10	Region 10 (AK, ID, OR, WA) Environmental Protection Agency 1200 Sixth Avenue, Suite 900 Seattle, WA 98101 Phone: (206) 553-1200 Fax: (206) 553-2955 Toll free: (800) 424-4372 Dennis McLerran, Regional Administrator (206) 553-1234

**APPENDIX A—FEDERAL AGENCIES REGULATING AIRPORT  
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**Table A-4  
United States Fish and Wildlife Service (Department of Interior)**

<u>Agency</u>	<u>Contact Information</u>
<b>United States Department of the Interior—United States Fish and Wildlife Service (FWS)</b>	Daniel M. Ashe, Director United States Department of the Interior United States Fish and Wildlife Service 1849 C Street, NW Washington, DC 20240 Phone: (202) 208-3100 <a href="http://www.fws.gov">http://www.fws.gov</a>
<b>FWS Endangered Species Program—Headquarters</b>	Headquarters—Washington, DC, Office Endangered Species Program 4401 N. Fairfax Drive, Room 420 Arlington, VA 22203 <a href="http://www.fws.gov/endangered/">http://www.fws.gov/endangered/</a>  Nicole Alt, Chief of Division of Conservation and Classification Phone: (703) 358-2171  Rick Sayers, Chief of Division of Consultation, HCPs, Recovery, and State Grants Phone: (703) 358-2171  Jim Serfis, Chief of Office of Communication and Candidate Conservation Phone: (703) 358-2171
<b>FWS Endangered Species Program—Regional Offices</b>	
FWS Endangered Species Program—Region 1, Pacific	Region 1—Pacific Eastside Federal Complex 911 N.E. 11th Avenue Portland, OR 97232-4181 <a href="http://www.fws.gov/pacific/ecoservices/">http://www.fws.gov/pacific/ecoservices/</a> Marilet Zablan, Chief, Division of Endangered Species Phone: (503) 231-6158
FWS Endangered Species Program—Region 3, Great Lakes, Big Rivers	Region 3—Great Lakes, Big Rivers 5600 American Boulevard West, Suite 990 Bloomington, MN 55437-1458 <a href="http://www.fws.gov/midwest/endangered/">http://www.fws.gov/midwest/endangered/</a> T.J. Miller, Chief of Division of Endangered Species Phone: (612) 713-5334

**APPENDIX A—FEDERAL AGENCIES REGULATING AIRPORT  
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**Table A-4  
United States Fish and Wildlife Service (Department of Interior)**

<u>Agency</u>	<u>Contact Information</u>
FWS Endangered Species Program— Region 4, Southeast	Region 4—Southeast 1875 Century Boulevard Atlanta, GA 30345 <a href="http://www.fws.gov/southeast/es/">http://www.fws.gov/southeast/es/</a> Patrick Leonard, Assistant Regional Director for Ecological Services Phone: (404) 679-7085
FWS Endangered Species Program— Region 5, Northeast	Region 5—Northeast 300 Westgate Center Drive Hadley, MA 01035-9589 <a href="http://www.fws.gov/northeast/endangered/">http://www.fws.gov/northeast/endangered/</a> Marty Miller, Chief of Division of Endangered Species Phone: (413) 253-8615
FWS Endangered Species Program— Region 6, Mountain Prairie	Region 6—Mountain Prairie 134 Union Boulevard, Suite 650 Lakewood, CO 80228 <a href="http://www.fws.gov/mountain-prairie/endspp">http://www.fws.gov/mountain-prairie/endspp</a> Bridget Fahey, Chief of Division of Endangered Species Phone: (303) 236-4258
FWS Endangered Species Program— Region 7, Alaska	Region 7—Alaska 1011 E. Tudor Road Anchorage, AK 99503-6199 <a href="http://alaska.fws.gov/fisheries/endangered/">http://alaska.fws.gov/fisheries/endangered/</a> Sonja Jahrsdoerfer, Regional Endangered Species Coordinator Phone: (907) 786-3323
FWS Endangered Species Program— Region 8, Pacific Southwest	Region 8—Pacific Southwest 2800 Cottage Way, Suite W2606 Sacramento, CA 95825 <a href="http://www.fws.gov/cno/">http://www.fws.gov/cno/</a> Mike Fris, Assistant Regional Director for Ecological Services Phone: (916) 414-6464
<b>FWS Migratory Birds Program— Headquarters</b>	Brad Bortner, Chief Division of Migratory Bird Management Arlington Square, MS MBSP-4107 4401 N. Fairfax Drive Arlington, VA 22203 Phone: (703) 358-1714

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**Table A-4  
United States Fish and Wildlife Service (Department of Interior)**

<u>Agency</u>	<u>Contact Information</u>
	703-358-2026 Email: Brad_Bortner@fws.gov <a href="http://www.fws.gov/migratorybirds/ContactUs.html">http://www.fws.gov/migratorybirds/ContactUs.html</a>
<b>Migratory Birds Program—Regional Offices</b>	
FWS Migratory Birds Program, Alaska Region	<u><b>Alaska Region</b></u> Russell M. Oates, Chief 1011 East Tudor Road Anchorage, AK 99503 Phone: (907) 786-3443, 1 (800) 368-8890 Fax: (907) 786-3641 Email: ak_mbm@fws.gov
FWS Migratory Birds Program, Great Lakes—Big Rivers Region (Midwest Region)	<u><b>Great Lakes—Big Rivers Region (Midwest Region)</b></u> 500 American Boulevard West, Suite 990 Bloomington, MN 55437-1458 Denise Blomker, Secretary Phone: (612) 713-5432 Email: denise_blomker@fws.gov
FWS Migratory Birds Program, Northeast Region	<u><b>Northeast Region</b></u> 300 Westgate Center Drive Hadley, MA 01035 Phone: (413) 253-8200 Fax: (413) 253-8308  Wendi Weber, Regional Director Phone: (413) 253-8300
FWS Migratory Birds Program, Pacific Region	<u><b>Pacific Region</b></u> 911 NE 11th Avenue Portland, OR 97232 Phone: (503) 231-6120 Robyn Thorson, Regional Director Phone: (503) 231-6118
FWS Migratory Birds Program, Southeast Region	<u><b>Southeast Region</b></u> 1875 Century Boulevard Atlanta, GA 30345 Phone: (404) 679-4000 Fax: (404) 679-4006

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WILDLIFE MANAGEMENT**

**Table A-4  
United States Fish and Wildlife Service (Department of Interior)**

<u><b>Agency</b></u>	<u><b>Contact Information</b></u>
	Cindy Dohner, Regional Director
FWS Migratory Birds Program, Southwest Region	<p><b><u>Southwest Region</u></b>                      500 Gold Avenue, SW                      Albuquerque, NM 87102                      External Affairs: (505) 248-6911                      Dr. Benjamin Tuggle, Regional Director                      Email: RDTuggle@fws.gov</p>

**APPENDIX A—FEDERAL AGENCIES REGULATING AIRPORT  
WILDLIFE MANAGEMENT**

**Table A-5  
National Oceanic and Atmospheric Administration  
(Department of Commerce)**

<u>Agency</u>	<u>Contact Information</u>
<b>NOAA Fisheries Service, National Oceanic and Atmospheric Administration (Department of Commerce)</b>	1401 Constitution Avenue, NW Room 5128 Washington, DC 20230
<b>NOAA Regional Offices</b>	
NOAA Alaska Region	<b><u>Alaska Region</u></b> P.O. Box 21668 709 W. 9th Street, Rm 420 Juneau, AK 99802-1668 Phone: (907) 586-7221 Alaskafisheries.noaa.gov James W. Balsiger, Ph.D., Regional Administrator Phone: (907) 586-7221 Email: Jim.balsiger@noaa.gov
NOAA Northwest Region	<b><u>Northwest Region</u></b> 7600 Sand Point Way, NE Seattle, WA 98115-0070 Phone: (503) 230-5400 William W. Stelle, Jr., Regional Administrator
NOAA Pacific Islands Region	<b><u>Pacific Islands Region</u></b> 1601 Kapiolani Boulevard, Suite 1110 Honolulu, HI 96814 Phone: (808) 944-2200 Fax: (808) 973-2941 Michael Tosatto, Regional Administrator
NOAA Southwest Region	<b><u>Southwest Region</u></b> 501 West Ocean Boulevard Long Beach, CA 90802-4213 Phone: (562) 980-4000 Rodney McInnis, Regional Administrator Phone: (562) 980-4005

**APPENDIX A—FEDERAL AGENCIES REGULATING AIRPORT  
WILDLIFE MANAGEMENT**

**Table A-5  
National Oceanic and Atmospheric Administration  
(Department of Commerce)**

<u>Agency</u>	<u>Contact Information</u>
NOAA Southeast and Caribbean Region	<p><b><u>Southeast and Caribbean Region</u></b>                      263 13th Avenue South                      St. Petersburg, FL 33701                      Phone: (727) 824-5301                      Dr. Roy Crabtree, Regional Administrator</p>
NOAA Northeast Region	<p><b><u>Northeast Region</u></b>                      55 Great Republic Drive                      Gloucester, MA 01930-2276                      Phone: (978) 281-9200                      Fax: (978) 281-9333                      Daniel Morris, Regional Administrator</p>
NOAA Fisheries Service National Oceanic and Atmospheric Administration (Department of Commerce) • Office of Protected Resources	<p>1315 East-West Highway                      Silver Spring, MD 20910                      Phone: (301) 427-8400                      Fax: (301) 713-0376                      Helen Golde, Acting Director                      Email: Helen.golde@noaa.gov</p>
NOAA Fisheries Service National Oceanic and Atmospheric Administration (Department of Commerce) • Office of Habitat Conservation	<p>1315 East-West Highway                      SSMC3, 14th Floor F/HC                      Silver Spring, MD 20910                      Phone: (301) 427-8400                      Fax: (301) 713-1043                      Email: habitat.conservation@noaa.gov                      Brian T. Pawlak, Acting Director                      Phone: (301) 427-8621                      Email: brian.t.pawlak@noaa.gov</p>



**APPENDIX A—FEDERAL AGENCIES REGULATING AIRPORT  
WILDLIFE MANAGEMENT**

**Table A-6  
United States Department of Army Corps of Engineers**

<u>Agency</u>	<u>Contact Information</u>
<p><b>Corps of Engineers (United States Department of the Army)</b></p>	<p>Headquarters 441 G Street, NW Washington, DC 20314-1000 Email: <a href="mailto:hq.publicaffairs@usace.army.mil">hq.publicaffairs@usace.army.mil</a> Phone: (202) 761-0011</p>
<p><b>CORPS Division Offices</b></p>	
<p>CORPS North Atlantic Division</p>	<p><b><u>North Atlantic Division</u></b> 302 General Lee Avenue Brooklyn, NY 11252 Phone: (347) 370-4550 Justin Ward</p>
<p>CORPS Great Lakes &amp; Ohio River Division</p>	<p><b><u>Great Lakes &amp; Ohio River Division</u></b> 550 Main Street, Room 10032 Cincinnati, OH 45202-3222 Phone: (513) 684-3010 Brigadier General Margaret W. Burcham, Commander</p>
<p>CORPS South Atlantic Division</p>	<p><b><u>South Atlantic Division</u></b> Room 9M15, 60 Forsyth Street, S.W. Atlanta, GA 30303-8801 Rob Holland, Chief, Public Affairs Phone: (404) 562-5011</p>
<p>CORPS Mississippi Valley Division</p>	<p><b><u>Mississippi Valley Division</u></b> ATTN: CEMVD-PA P.O. Box 80 Vicksburg, MS 39181-0080 Phone: (601) 634-5760 Fax: (601) 634-7110 Michael J. Walsh, Major General, U.S. Army Commanding</p>
<p>CORPS Southwestern Division</p>	<p><b><u>Southwestern Division</u></b> 1100 Commerce Street, Suite 831</p>

**APPENDIX A—FEDERAL AGENCIES REGULATING AIRPORT  
WILDLIFE MANAGEMENT**

**Table A-6  
United States Department of Army Corps of Engineers**

<u><b>Agency</b></u>	<u><b>Contact Information</b></u>
	Dallas, TX 75242-1317 Phone: (469) 487-7007 Brigadier General Thomas W. Kula, Commander Phone: (469) 787-7005
CORPS Northwestern Division	<u><b>Northwestern Division</b></u> P.O. Box 2870 Portland, OR 97208-2870 or 1616 Capitol Avenue, Suite 365 Omaha, NE 68102-4901 Phone: (503) 808-3705
CORPS South Pacific Division	<u><b>South Pacific Division</b></u> 1455 Market Street San Francisco, CA 94103-1398 Phone: (413) 503-6503 Brigadier General Michael C. Wehr, Commander
CORPS Pacific Ocean Division	<u><b>Pacific Ocean Division</b></u> Bldg. 525 Fort Shafter, HI 96858-5440 Phone: (808) 438-1500 Richard L. Stevens, Brigadier General

**APPENDIX B—STATE AGENCIES REGULATING AIRPORT WILDLIFE MANAGEMENT**

**Table B-1  
State Department of Transportation Agencies**

<b>State</b>	<b>Agency</b>	<b>Contact</b>
Alabama	Aeronautics Bureau Alabama Department of Transportation 1409 Coliseum Boulevard Montgomery, AL 36130 <a href="http://www.dot.state.al.us/aerweb/index.htm">http://www.dot.state.al.us/aerweb/index.htm</a>	John C. Eagerton, IV, D.P.A. Bureau Chief (334) 242-6820
Alaska	Division of Statewide Aviation Alaska Department of Transportation PO Box 112500 3132 Channel Drive Juneau, AK 99811-2500 <a href="http://dot.alaska.gov/stwdav/index.shtml">http://dot.alaska.gov/stwdav/index.shtml</a>	Steven Hatter, Deputy Commissioner of Aviation (907) 269-0730
Arizona	Multi Modal Planning Division – Aeronautics Group Arizona Department of Transportation 206 S. 17th Avenue Mail Drop 426M Phoenix, AZ 85007-3213 <a href="http://www.azdot.gov/mpd/airport_development/">http://www.azdot.gov/mpd/airport_development/</a>	Michael Klein, A.A.E., Aeronautics Group Manager (602) 712-7647
Arkansas	Department of Aeronautics Arkansas Department of Transportation 2315 Crisp Drive, Hangar 8 Little Rock, AR 72202 <a href="http://www.fly.arkansas.gov">http://www.fly.arkansas.gov</a>	John Knight, Director (501) 376-6781
California	Division of Aeronautics California Department of Transportation P.O. Box 942874 Sacramento, CA <a href="http://www.dot.ca.gov/hq/planning/aeronaut">http://www.dot.ca.gov/hq/planning/aeronaut</a>	Gary Cathey, Division Chief (916) 654-5470
Colorado	Division of Aeronautics Colorado Department of Transportation 5126 Front Range Parkway Watkins, CO 80137 <a href="http://www.coloradodot.info/programs/aeronautics">http://www.coloradodot.info/programs/aeronautics</a>	David C. Gordon, A.A.E., Director (303) 261-4418
Connecticut	Bureau of Aviation and Ports Connecticut Department of Transportation 2800 Berlin Turnpike Newington, CT 06131-7546 <a href="http://www.ct.gov/dot/cwp">http://www.ct.gov/dot/cwp</a>	VACANT, Bureau Chief MUST contact James Redeker, Commissioner (860) 594-3000 or  Stephen Korta, State Aviation Administrator (860) 594-5280

<b><u>State</u></b>	<b><u>Agency</u></b>	<b><u>Contact</u></b>
Delaware	Office of Aeronautics Delaware Department of Transportation P.O. Box 778 Dover, DE 19903 <a href="http://deldot.gov/information/community_programs_and_services/aviation_svcs/index.shtml">http://deldot.gov/information/community_programs_and_services/aviation_svcs/index.shtml</a>	Roberta Geier, Assistant Director of Planning (302) 760-2119
Florida	Aviation Office Florida Department of Transportation 605 Suwannee Street, M.S. 46 Tallahassee, FL 32399-0450 <a href="http://www.dot.state.fl.us/aviation/">http://www.dot.state.fl.us/aviation/</a>	Aaron N. Smith, State Aviation Manager (850) 414-4505
Georgia	Division of Intermodal Georgia Department of Transportation 4005 Fulton Industrial Boulevard Atlanta, GA 30336 <a href="http://www.dot.ga.gov/localgovernment/intermodalprograms/aviation/Pages/default.aspx">http://www.dot.ga.gov/localgovernment/intermodalprograms/aviation/Pages/default.aspx</a>	Amanda Hill, Aviation Planner (404) 505-4864
Hawaii	Airport Division Department of Transportation Honolulu International Airport 400 Rodgers Boulevard, Suite 700 Honolulu, HI 96819-1880 <a href="http://hawaii.gov/dot/airports/">http://hawaii.gov/dot/airports/</a>	Ford Fuchigami, Deputy Director (808) 838-8602
Idaho	Division of Aeronautics Idaho Department of Transportation P.O. Box 7129 Boise, ID 83707-1129 <a href="http://itd.idaho.gov/aero/">http://itd.idaho.gov/aero/</a>	John DeThomas, Division Administrator (208) 334-8788
Illinois	Division of Aeronautics Illinois Department of Transportation 1 Langhorne Bond Drive Abraham Lincoln Capital Airport Springfield, IL 62707-8415 <a href="http://www.dot.il.gov/aero/index.html">http://www.dot.il.gov/aero/index.html</a>	Susan Shea, Director (217) 785-8515
Indiana	Aviation Division Indiana Department of Transportation 100 N. Senate Avenue, Room N955 Indianapolis, IN 46204-2217 <a href="http://www.in.gov/indot/2395.htm">http://www.in.gov/indot/2395.htm</a>	Kevin Rector, Manager (317) 323-1477
Louisiana	Aviation Division Louisiana Department of Transportation P.O. Box 94245 Baton Rouge, LA 70804-9245 <a href="http://www.dotd.la.gov/intermodal/aviation/">http://www.dotd.la.gov/intermodal/aviation/</a>	Brad Brandt, Director (225) 379-3040

<b>State</b>	<b>Agency</b>	<b>Contact</b>
Maine	Bureau of Transportation System Planning Maine Department of Transportation 16 State House Station Augusta, ME 04333-0016 <a href="http://www.maine.gov/mdot/aviation/index.htm">http://www.maine.gov/mdot/aviation/index.htm</a>	Herb Thomson, Director (207) 624-3249
Maryland	Office of Regional Aviation Assistance Maryland Department of Transportation P.O. Box 8766 BWI Airport, MD 21240-0766 <a href="http://www.marylandregionalaviation.aero/">http://www.marylandregionalaviation.aero/</a>	Ashish J. Solanki, A.A.E., Director (410) 859-7064
Massachusetts	Aeronautics Division Massachusetts Department of Transportation One Harborside Drive, Suite 204N East Boston, MA 02128-2909 <a href="http://www.massdot.state.ma.us/Aeronautics/">http://www.massdot.state.ma.us/Aeronautics/</a>	Christopher J. Willenborg, Administrator (617) 412-3686
Michigan	Office of Aeronautics Michigan Department of Transportation 2700 Port Lansing Road Lansing, MI 48906-2160 <a href="http://www.michigan.gov/aero">http://www.michigan.gov/aero</a>	Mike Trout, Director (517) 335-9568
Minnesota	Aeronautics and Aviation Division Minnesota Department of Transportation 222 East Plato Boulevard St. Paul, MO 55107-1618 <a href="http://www.dot.state.mn.us/aero/">http://www.dot.state.mn.us/aero/</a>	Christopher Roy, Director (651) 234-7200
Mississippi	Aeronautics Division, Office of Intermodal Planning Mississippi Department of Transportation P.O. Box 1850 Jackson, MS 39215-1850 <a href="http://gomdot.com/Divisions/IntermodalPlanning/Aeronautics/Home.aspx">http://gomdot.com/Divisions/IntermodalPlanning/Aeronautics/Home.aspx</a>	Thomas Booth, Jr., P.E., Director (601) 359-7850
Missouri	Aviation Section Missouri Department of Transportation P.O. Box 270 Jefferson City, MO 65102 <a href="http://www.modot.org/othertransportation/aviation/aviationgeneralinformation.htm">http://www.modot.org/othertransportation/aviation/aviationgeneralinformation.htm</a>	Amy Ludwig, Administrator of Aviation (573) 526-7912
Montana	Aeronautics Division Montana Department of Transportation P.O. Box 200507 Helena, MT 59620-0507 <a href="http://www.mdt.mt.gov/aviation/">http://www.mdt.mt.gov/aviation/</a>	Debbie Alke, Administrator (406) 444-2506

<b><u>State</u></b>	<b><u>Agency</u></b>	<b><u>Contact</u></b>
Nebraska	Department of Aeronautics Nebraska Department of Transportation P.O. Box 82088 Lincoln, NE 68501 <a href="http://www.aero.state.ne.us/">http://www.aero.state.ne.us/</a>	Ronnie Mitchell, Director (402) 471-7922
Nevada	Aviation Planning Nevada Department of Transportation 1263 South Stewart Street Carson City, NV 89712 <a href="http://www.nevadadot.com/About_NDOT/NDOT_Divisions/Planning/Aviation/Aviation_Information.aspx">http://www.nevadadot.com/About_NDOT/NDOT_Divisions/Planning/Aviation/Aviation_Information.aspx</a>	Eric Glick, State Aviation Manager (775) 888-7464
New Hampshire	Bureau of Aeronautics New Hampshire Department of Transportation John Morton Building 7 Haxen Drive Concord, NH 03302-0483 <a href="http://www.nh.gov/dot/org/aerorailtransit/aeronautics/index.htm">http://www.nh.gov/dot/org/aerorailtransit/aeronautics/index.htm</a>	Tricia Lambert, Administrator (603) 271-2551
New Jersey	Division of Aeronautics New Jersey Department of Transportation P.O. Box 600 Trenton, NJ 08625-0610 <a href="http://www.state.nj.us/transportation/airwater/aviation/">http://www.state.nj.us/transportation/airwater/aviation/</a>	Ashwin "Max" Patel, Acting Manager (609) 530-2900
New Mexico	Aviation Division New Mexico Department of Transportation P.O. Box 9830 Albuquerque, NM 87119 <a href="http://nmshtd.state.nm.us/main.asp?secid=10871">http://nmshtd.state.nm.us/main.asp?secid=10871</a>	Steve Summers, Director (505) 244-1788 ext. 111
New York	Aviation Bureau New York Department of Transportation 50 Wolf Road Albany, NY 12232 <a href="https://www.dot.ny.gov/divisions/operating/opdm/aviation/contacts">https://www.dot.ny.gov/divisions/operating/opdm/aviation/contacts</a>	Gerardo Mendoza, Acting Bureau Director (518) 485-7691
North Carolina	Division of Aviation North Carolina Department of Transportation 1560 Mail Service Center Raleigh, NC 27699-1560 <a href="http://www.ncdot.gov/aviation/">http://www.ncdot.gov/aviation/</a>	Richard J. Walls, P.E., Aviation Director (919) 840-0112
North Dakota	Aeronautics Commission Box 5020 Bismarck, ND 58502 <a href="http://www.nd.gov/ndaero/">http://www.nd.gov/ndaero/</a>	Larry Taborsky, Director (701) 328-9655

<b>State</b>	<b>Agency</b>	<b>Contact</b>
Ohio	Office of Aviation Ohio Department of Transportation 2829 West Dublin – Granville Road Columbus, OH 43235-2786 <a href="http://www.dot.state.oh.us/Divisions/Operations/Aviation/Pages/default.aspx">http://www.dot.state.oh.us/Divisions/Operations/Aviation/Pages/default.aspx</a>	James Bryant, Aviation Administrator (614) 387-2341
Oklahoma	Aeronautics Commission Oklahoma Department of Transportation 120 N. Robinson Avenue – Suite 1244W Oklahoma City, OK 73102 <a href="http://www.ok.gov/OAC/">http://www.ok.gov/OAC/</a>	Victor N. Bird, Director (405) 604-6900
Oregon	Department of Aviation Oregon Department of Transportation 3040 25th Street, SE Salem, OR 97302-1125 <a href="http://www.aviation.state.or.us/">http://www.aviation.state.or.us/</a>	Mitch Swecker, Director (503) 378-2340
Pennsylvania	Bureau of Aviation Pennsylvania Department of Transportation P.O. Box 3457 Harrisburg, PA 17105-3457 <a href="http://www.dot.state.pa.us/Internet/Bureaus/pdBOA.nsf/AviationHomepage?openframeset">http://www.dot.state.pa.us/Internet/Bureaus/pdBOA.nsf/AviationHomepage?openframeset</a>	Brian Gearhart, Director (717) 705-1200
South Carolina	Aeronautics Commission South Carolina Department of Transportation State Budget and Control Columbia Metropolitan Airport 2553 Airport Boulevard West Columbia, SC 29170 <a href="http://www.scaeronautics.com/">http://www.scaeronautics.com/</a>	Paul G. Werts, Executive Director (803) 896-6273
South Dakota	Office of Aeronautics South Dakota Department of Transportation Becker-Hansen Building 700 East Broadway Avenue Pierre, SD 57501-2586 <a href="http://www.sddot.com/fpa/aeronautics/">http://www.sddot.com/fpa/aeronautics/</a>	Bruce Lindholm, Program Manager (605) 773-7045
Tennessee	Aeronautics Division Tennessee Department of Transportation P.O. Box 17326 Nashville, TN 37217 <a href="http://www.tdot.state.tn.us/aeronautics/">http://www.tdot.state.tn.us/aeronautics/</a>	William B. Orellana, Director of Aeronautics (615) 741-3208
Utah	Division of Aeronautics Utah Department of Transportation 135 North 2400 West Salt Lake City, UT 84116 <a href="http://www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:190">http://www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:190</a>	Patrick (Pat) Morley, Director of Aeronautics (801) 715-2260

<u>State</u>	<u>Agency</u>	<u>Contact</u>
Vermont	Aviation Program Vermont Department of Transportation National Life Building, Drawer 33 Montpelier, VT 05633 <a href="http://airports.vermont.gov/">http://airports.vermont.gov/</a>	Guy Rouelle, Program Administrator (802) 828-2833
Virginia	Department of Aviation Virginia Department of Transportation 5702 Gulfstream Road Richmond, VA 23250-2422 <a href="http://www.doav.virginia.gov/">http://www.doav.virginia.gov/</a>	Randall P Burdette, Director of Aviation (804) 236-3625, ext. 108
Washington	Aviation Washington Department of Transportation 18204 59th Drive NE, Suite B Arlington, WA 98223 <a href="http://www.wsdot.wa.gov/aviation">http://www.wsdot.wa.gov/aviation</a>	Tristan Atkins, Director of Aviation (360) 651-6301
West Virginia	Aeronautics Commission West Virginia Department of Transportation 1900 Kanawha Boulevard East Building Five, Room A-129 Charleston, WV 25305 <a href="http://www.transportation.wv.gov/aeronautics/Pages/AirportDirectory.aspx">http://www.transportation.wv.gov/aeronautics/Pages/AirportDirectory.aspx</a>	Susan V. Chernenko (304) 558-3436
Wisconsin	Bureau of Aeronautics Wisconsin Department of Transportation P.O. Box 7914 Madison, WI 53707-7914 <a href="http://www.dot.wisconsin.gov/localgov/aid/airport.htm">http://www.dot.wisconsin.gov/localgov/aid/airport.htm</a>	David M. Greene, Director (608) 266-2480
Wyoming	Aeronautics Division Wyoming Department of Transportation 200 E. 8th Avenue Cheyenne, WY 82009 <a href="http://www.dot.state.wy.us/wydot/aeronautics">http://www.dot.state.wy.us/wydot/aeronautics</a>	Dennis Byrne, Administrator (307) 777-3952

**Table B-2. State Wildlife Resource Agencies**

<u>State</u>	<u>Agency</u>	<u>Contact</u>
Alabama	<b>Alabama Department of Conservation and Natural Resources</b> 64 N. Union Street Montgomery, AL 36130 <a href="http://www.dcnr.state.al.us/">http://www.dcnr.state.al.us/</a>	N. Gunter Guy, Jr., Commissioner of Conservation (334) 242-3486



	<p><b>Wildlife and Freshwater Fisheries Division</b>          64 North Union Street, Suite 584          P.O. Box 301457          Montgomery, AL 36130-1457  <a href="http://www.outdooralabama.com/about/awff/">http://www.outdooralabama.com/about/awff/</a></p>	<p>Fred Harders, Acting          Director          (334) 242-3465</p>
Alaska	<p><b>Department of Environmental Conservation</b>          410 Willoughby Avenue, Ste. 303          P.O. Box 111800          Juneau, AK 99811  <a href="http://dec.alaska.gov/">http://dec.alaska.gov/</a></p> <p><b>Alaska Department of Fish and Game</b>          P.O. Box 115526          1255 W. 8th Street          Juneau, AK 99811-5526  <a href="http://www.adfg.alaska.gov/index.cfm?adfg=home.main">http://www.adfg.alaska.gov/index.cfm?adfg=home.main</a></p>	<p>Larry Hartig,          Commissioner          (907) 465-5066</p> <p>Bruce Tomley,          Commissioner          (907) 465-4100</p>
Arizona	<p><b>Department of Environmental Quality</b>          1110 West Washington Street          Phoenix, AZ 85007  <a href="http://www.azdeq.gov/">http://www.azdeq.gov/</a></p> <p><b>Game and Fish Department</b>          5000 W. Carefree Highway          Phoenix, AZ 85086-5000  <a href="http://www.gf.state.az.us/">http://www.gf.state.az.us/</a></p> <p><b>State Land Department, Natural Resources Division</b>          1616 W. Adams Street          Phoenix, AZ 85007  <a href="http://www.land.state.az.us/divisions/natural.htm">http://www.land.state.az.us/divisions/natural.htm</a></p>	<p>Henry Darwin, Director          (602) 771-2204</p> <p>Larry D. Voyles, Director          (602) 942-3000</p> <p>Stephen Williams,          Director          (602) 542-2693</p>
Arkansas	<p><b>Department of Environmental Quality</b>          5301 Northshore Drive          North Little Rock, AR 72118-5317  <a href="http://www.adeq.state.ar.us/">http://www.adeq.state.ar.us/</a></p> <p><b>Game and Fish Commission</b>          2 Natural Resources Drive          Little Rock, AR 72205  <a href="http://www.agfc.com/Pages/default.aspx">http://www.agfc.com/Pages/default.aspx</a></p>	<p>Teresa Marks, Director          (501) 682-0744</p> <p>Director's Office          (501) 223-6305</p>
California	<p><b>Department of Fish and Game</b>          1416 9th Street, 12th Floor          Sacramento, CA 95814  <a href="http://www.dfg.ca.gov/">http://www.dfg.ca.gov/</a></p>	<p>Charlton H. Bonham,          Director          (916) 653-7667</p>

	<p><b>California Natural Resources Agency</b>                  1416 Ninth Street, Suite 1311                  Sacramento, CA 95814  <a href="http://resources.ca.gov/index.html">http://resources.ca.gov/index.html</a></p>	<p>John Laird, Secretary                  (916) 653-5656</p>
Colorado	<p><b>Department of Natural Resources</b>                  Executive Director's Office                  1313 Sherman Street, Room 718                  Denver, CO 80203  <a href="http://dnr.state.co.us/Pages/DNRDefault.aspx">http://dnr.state.co.us/Pages/DNRDefault.aspx</a></p> <p><b>Division of Wildlife</b>                  6060 Broadway                  Denver, CO 80216  <a href="http://wildlife.state.co.us/Pages/Home.aspx">http://wildlife.state.co.us/Pages/Home.aspx</a></p>	<p>(303) 866-3311</p> <p>303) 297-1192</p>
Connecticut	<p><b>Department of Energy and Environmental Protection</b>                  79 Elm Street                  Hartford, CT 06106-5127  <a href="http://www.ct.gov/dep/site/default.asp">http://www.ct.gov/dep/site/default.asp</a></p> <p><b>Division of Wildlife</b>                  Same contact information as Dept. of Energy and Environmental Protection  <a href="http://www.ct.gov/dep/cwp/view.asp?a=2723&amp;q=325726&amp;depNav_GID=1655">http://www.ct.gov/dep/cwp/view.asp?a=2723&amp;q=325726&amp;depNav_GID=1655</a></p> <p><b>Fisheries Division</b>                  Same contact information as Dept. of Energy and Environmental Protection  <a href="http://www.ct.gov/dep/cwp/view.asp?a=2696&amp;q=322708&amp;depNav_GID=1630&amp;depNav=">http://www.ct.gov/dep/cwp/view.asp?a=2696&amp;q=322708&amp;depNav= </a></p>	<p>Daniel C. Esty, Commissioner                  (860) 424-3000</p>
Delaware	<p><b>Department of Natural Resources and Environmental Control</b>                  Richardson &amp; Robbins Building                  89 Kings Highway                  Dover, DE 19901  <a href="http://www.dnrec.delaware.gov/Pages/Portal.aspx">http://www.dnrec.delaware.gov/Pages/Portal.aspx</a></p> <p><b>Division of Fish and Wildlife</b>                  89 Kings Highway                  Dover, DE 19901  <a href="http://www.dnrec.delaware.gov/fw/Pages/FWPportal.aspx">http://www.dnrec.delaware.gov/fw/Pages/FWPportal.aspx</a></p>	<p>Collin O'Mara, Secretary                  (302) 739-9000</p> <p>David Saveikis, Director                  (302) 739-9910</p>
Florida	<p><b>Department of Environmental Protection</b>                  3900 Commonwealth Boulevard M.S. 49                  Tallahassee, FL 32399  <a href="http://www.dep.state.fl.us/">http://www.dep.state.fl.us/</a></p>	<p>Herschel Vinyard, Secretary                  (850) 245-2011</p>

	<p><b>Fish and Wildlife Conservation Commission</b>                  Farris Bryant Building                  620 S. Meridian Street                  Tallahassee, FL 32399-1600  <a href="http://myfwc.com/">http://myfwc.com/</a></p>	<p>Nick Wiley, Executive Director                  (850) 487-3796</p>
Georgia	<p><b>Department of Natural Resources</b>                  2 Martin Luther King Jr. Drive SE, Suite 1252                  Atlanta, GA 30334  <a href="http://www.gadnr.org/">http://www.gadnr.org/</a></p> <p><b>Wildlife Resources</b>                  2070 U.S. Hwy. 278, SE                  Social Circle, GA 30025  <a href="http://www.georgiawildlife.com/">http://www.georgiawildlife.com/</a></p>	<p>Randy Tate, Program Manager                  (404) 656-6539</p> <p>(770) 918-6400</p>
Hawaii	<p><b>Department of Land and Natural Resources</b>                  Kalanimoku Building                  1151 Punchbowl Street                  Honolulu, HI 96813  <a href="http://hawaii.gov/dlnr">http://hawaii.gov/dlnr</a></p> <p><b>Division of Aquatic Resources</b>                  1151 Punchbowl Street, Room 330                  Honolulu, HI 96813  <a href="http://hawaii.gov/dlnr/dar/index.html">http://hawaii.gov/dlnr/dar/index.html</a></p> <p><b>Division of Forestry and Wildlife</b>                  1151 Punchbowl Street, Room 325                  Honolulu, HI 96813  <a href="http://hawaii.gov/dlnr/dofaw">http://hawaii.gov/dlnr/dofaw</a></p>	<p>William J. Aila Jr., Chairperson                  (808) 587-0400</p> <p>Robert Nishimoto, Program Manager                  (808) 587-0100</p> <p>Paul Conry, Administrator                  (808) 587-0166</p>
Idaho	<p><b>Department of Fish and Game</b>                  P.O. Box 25                  Boise, ID 83707  <a href="http://fishandgame.idaho.gov/">http://fishandgame.idaho.gov/</a></p> <p><b>Division of Environmental Quality</b>                  1410 N. Hilton                  Boise, ID 83706  <a href="http://www.deq.idaho.gov/">http://www.deq.idaho.gov/</a></p>	<p>(208) 334-3700</p> <p>Toni Hardesty, Director                  (208) 373-0204</p>
Illinois	<p><b>Department of Natural Resources</b>                  One Natural Resources Way                  Springfield, IL 62702-1271  <a href="http://www.dnr.illinois.gov/Pages/default.aspx">http://www.dnr.illinois.gov/Pages/default.aspx</a></p> <p><b>Environmental Protection Agency</b>                  1021 North Grand Avenue East                  P.O. Box 19276                  Springfield, IL 62794-9276  <a href="http://www.epa.state.il.us/">http://www.epa.state.il.us/</a></p>	<p>Marc Miller, Director                  (217) 785-0075</p> <p>(217) 782-3397</p>

<p>Indiana</p>	<p><b>Department of Natural Resources</b>                  402 West Washington Street, Room W256                  Indianapolis, IN 46204  <a href="http://www.state.in.us/dnr/4571.htm">http://www.state.in.us/dnr/4571.htm</a></p> <p><b>Division of Fish and Wildlife</b>                  402 W. Washington St., Room W273                  Indianapolis, IN 46204  <a href="http://www.state.in.us/dnr/fishwild/index.htm">http://www.state.in.us/dnr/fishwild/index.htm</a></p>	<p>Robert E. Carter, Jr.,                  Director                  (317) 232-4020</p> <p>Mark Reiter, Director                  (317) 232-4080</p>
<p>Iowa</p>	<p><b>Department of Natural Resources</b>                  Wallace State Office Building                  502 E. 9th Street                  Des Moines, IA 50319-0034  <a href="http://www.iowadnr.gov/">http://www.iowadnr.gov/</a></p>	<p>Roger L. Lande, Director                  (515) 281-5918</p>
<p>Kansas</p>	<p><b>Department of Health and Environment</b>                  Curtis State Office Building, 1000 SW Jackson                  Topeka, KS 66612  <a href="http://www.kdheks.gov/">http://www.kdheks.gov/</a></p> <p><b>Department of Wildlife and Parks</b>                  1020 S. KS, Room 200                  Topeka, KS 66612-1327  <a href="http://www.kdwpt.state.ks.us/">http://www.kdwpt.state.ks.us/</a></p>	<p>Robert Moser, Secretary                  (785) 296-0461</p> <p>Office of Secretary                  (785) 296-2281</p>
<p>Kentucky</p>	<p><b>Department of Environmental Protection</b>                  300 Fair Oaks Lane                  Frankfort, KY 40601  <a href="http://dep.ky.gov/Pages/default.aspx">http://dep.ky.gov/Pages/default.aspx</a></p> <p><b>Department of Fish and Wildlife Resources</b>                  1 Sportsman's Lane                  Frankfort, KY 40601  <a href="http://fw.ky.gov/">http://fw.ky.gov/</a></p>	<p>(502) 564-0323</p> <p>(800) 858-1549</p>
<p>Louisiana</p>	<p><b>Department of Environmental Quality</b>                  P.O. Box 4301                  Baton Rouge, LA 70821  <a href="http://www.deq.louisiana.gov/portal/">http://www.deq.louisiana.gov/portal/</a></p> <p><b>Department of Natural Resources</b>                  617 North Third Street                  P.O. Box 94396                  Baton Rouge, LA 70804-9396  <a href="http://dnr.louisiana.gov/">http://dnr.louisiana.gov/</a></p>	<p>Peggy M. Hatch, Secretary                  (225) 219-3953</p> <p>Scott Angelle, Secretary                  (225) 342-2710</p>

	<p><b>Department of Wildlife and Fisheries</b>                  P.O. Box 98000                  200 Quail Drive                  Baton Rouge, LA 70898  <a href="http://www.wlf.louisiana.gov/">http://www.wlf.louisiana.gov/</a></p>	(225) 765-2800
Maine	<p><b>Department of Conservation</b>                  22 State House Station                  Augusta, ME 04333-0022  <a href="http://www.maine.gov/doc/">http://www.maine.gov/doc/</a></p> <p><b>Department of Environmental Protection</b>                  17 State House Station                  28 Tyson Drive                  Augusta, ME 04333-0017  <a href="http://www.maine.gov/dep/index.html">http://www.maine.gov/dep/index.html</a></p> <p><b>Department of Inland Fisheries and Wildlife</b>                  41 State House Station                  Augusta, ME 04333-0041  <a href="http://www.state.me.us/ifw/">http://www.state.me.us/ifw/</a></p>	<p>Bill Beardsley,                  Commissioner                  (207) 287-4900</p> <p>Patricia Aho,                  Commissioner                  (207) 287-2812</p> <p>Chandler E. Woodcock,                  Commissioner                  (207) 287-8000</p>
Maryland	<p><b>Department of the Environment</b>                  1800 Washington Boulevard                  Baltimore, MD 21230  <a href="http://www.mde.state.md.us/Pages/Home.aspx">http://www.mde.state.md.us/Pages/Home.aspx</a></p> <p><b>Department of Natural Resources</b>                  Tawes State Office Building C4                  50 Taylor Avenue                  Annapolis, MD 24101-2397  <a href="http://www.dnr.state.md.us/">http://www.dnr.state.md.us/</a></p>	<p>(410) 537-3000</p> <p>John R. Griffin, Secretary                  (410) 260-8101</p>
Massachusetts	<p><b>Department of Conservation and Recreation</b>                  251 Causeway Street, Suite 900                  Boston, MA 02114-2104  <a href="http://www.mass.gov/dcr/">http://www.mass.gov/dcr/</a></p> <p><b>Department of Environmental Protection</b>                  One Winter Street                  Boston, MA 02108  <a href="http://www.mass.gov/dep/index.htm">http://www.mass.gov/dep/index.htm</a></p> <p><b>Department of Fish and Game</b>                  251 Causeway St. #400                  Boston, MA 02114  <a href="http://www.mass.gov/dfwele/index.htm">http://www.mass.gov/dfwele/index.htm</a></p>	<p>Edward M. Lambert, Jr.,                  Commissioner                  (617) 626-1250</p> <p>Kenneth Kimmell,                  Commissioner                  (617) 292-5856</p> <p>Mary B. Griffin,                  Commissioner                  617-626-1500</p>
Michigan	<p><b>Department of Environmental Quality</b>                  525 West Allegan Street                  P.O. Box 30473                  Lansing, MI 48909-7973  <a href="http://www.michigan.gov/deq">http://www.michigan.gov/deq</a></p>	<p>Brad Wurfel, Director                  (517) 230-8006</p>

	<p><b>Department of Natural Resources</b>                  Executive Office                  P.O. Box 30028                  Lansing, MI 48909  <a href="http://www.michigan.gov/dnr/">http://www.michigan.gov/dnr/</a></p>	<p>Rodney A. Stokes,                  Director                  (517) 373-2329</p>
Minnesota	<p><b>Department of Natural Resources</b>                  500 Lafayette Road                  St. Paul, MN 55155-4040  <a href="http://www.dnr.state.mn.us/index.html">http://www.dnr.state.mn.us/index.html</a></p> <p><b>Division of Fish and Wildlife</b>                  1200 Warner Road                  St. Paul, MN 55106  <a href="http://www.dnr.state.mn.us/fishwildlife/index.html">http://www.dnr.state.mn.us/fishwildlife/index.html</a></p> <p><b>Pollution Control Agency</b>                  520 Lafayette Road N.                  St. Paul, MN 55155-4194  <a href="http://www.pca.state.mn.us/">http://www.pca.state.mn.us/</a></p>	<p>(651) 296-6157</p> <p>(651) 259-5800</p> <p>Paul Aasen,                  Commissioner                  (651) 757-2016</p>
Mississippi	<p><b>Department of Environmental Quality</b>                  P.O. Box 2261                  Jackson, MS 39225  <a href="http://www.deq.state.ms.us/">http://www.deq.state.ms.us/</a></p> <p><b>Department of Wildlife, Fisheries and Parks</b>                  1505 Eastover Drive                  Jackson, MS 39211  <a href="http://www.mdwfp.com/">http://www.mdwfp.com/</a></p>	<p>Trudy Fisher, Executive                  Director                  (601) 961-5000</p> <p>Dr. Sam Polles, Executive                  Director                  (601) 432-2400</p>
Missouri	<p><b>Department of Conservation</b>                  Conservation Headquarters                  2901 W. Truman Blvd.                  Jefferson City, MO, 65109  <a href="http://mdc.mo.gov/">http://mdc.mo.gov/</a></p> <p><b>Department of Natural Resources</b>                  P.O. Box 176                  Jefferson City, MO 65102  <a href="http://www.dnr.mo.gov">www.dnr.mo.gov</a></p>	<p>(573) 751-4115</p> <p>Sara Parker Pauley,                  Director                  (800) 361-4827</p>
Montana	<p><b>Department of Environmental Quality</b>                  Lee Metcalf Building                  1520 E. Sixth Avenue                  P.O. Box 200901                  Helena, MT 59620-0901  <a href="http://www.deq.mt.gov/default.mcp">http://www.deq.mt.gov/default.mcp</a></p>	<p>Richard Opper, Director                  (406) 444-2544</p>

	<p><b>Fish, Wildlife and Parks</b>                  1420 East Sixth Avenue                  P.O. Box 200701                  Helena, MT, 59620-0701  <a href="http://fwp.mt.gov/doingBusiness/contactUs/">http://fwp.mt.gov/doingBusiness/contactUs/</a></p> <p><b>Department of Natural Resources and Conservation</b>                  1625 Eleventh Avenue                  Helena, MT 59620  <a href="http://dnrc.mt.gov/">http://dnrc.mt.gov/</a></p>	<p>Joe Maurier, Director                  (406) 444-3186</p> <p>Mary Sexton, Director                  (406) 444-2074</p>
Nebraska	<p><b>Department of Environmental Quality</b>                  1200 "N" Street, Suite 400                  P.O. Box 98922                  Lincoln, NE 68509  <a href="http://www.deq.state.ne.us/">http://www.deq.state.ne.us/</a></p> <p><b>Game and Parks Commission</b>                  2200 N. 33rd Street                  Lincoln, NE 68503  <a href="http://outdoornebraska.ne.gov/">http://outdoornebraska.ne.gov/</a></p> <p><b>Department of Natural Resources</b>                  301 Centennial Mall South                  Lincoln, NE 68509-4676  <a href="http://dnr.ne.gov/website/MainPage.aspx">http://dnr.ne.gov/website/MainPage.aspx</a></p>	<p>Director                  (402) 471-2186</p> <p>(402) 471-0641</p> <p>Brian Dunnigan, P.E.,                  Director                  (402) 471-2366</p>
Nevada	<p><b>Department of Conservation and Natural Resources</b>                  901 S. Stewart Street, Ste. 1003                  Carson City, NV 89701  <a href="http://dcnr.nv.gov/">http://dcnr.nv.gov/</a></p> <p><b>Division of Environmental Protection</b>                  901 South Stewart Street, Suite 4001                  Carson City, NV 89701-5249  <a href="http://ndep.nv.gov/">http://ndep.nv.gov/</a></p> <p><b>Division of Wildlife</b>                  1100 Valley Road                  Reno, NV 89512  <a href="http://www.ndow.org/">http://www.ndow.org/</a></p>	<p>Leo Drozdoff, Director                  (775) 684-2700</p> <p>Colleen Cripps,                  Administrator                  (775) 687-9301</p> <p>Kenneth Mayer, Director                  (775) 688-1500</p>
New Hampshire	<p><b>Department of Environmental Services</b>                  29 Hazen Drive                  P.O. Box 95                  Concord, NH 03302-0095  <a href="http://www.des.state.nh.us/">http://www.des.state.nh.us/</a></p> <p><b>Department of Resources and Economic Development</b>                  172 Pembroke Road                  P.O. Box 1856                  Concord, NH 03302-1856</p>	<p>Thomas Burack,                  Commissioner                  (603) 271-4974</p> <p>George Bald,                  Commissioner                  (603) 271-2411</p>

	<p><a href="http://www.dred.state.nh.us/">http://www.dred.state.nh.us/</a></p> <p><b>Fish and Game Department</b>                  11 Hazen Drive                  Concord, NH 03301  <a href="http://www.wildlife.state.nh.us/">http://www.wildlife.state.nh.us/</a></p>	(603) 271-3211
New Jersey	<p><b>Department of Environmental Protection</b>                  401 E. State Street                  7th Floor, East Wing                  P.O. Box 402                  Trenton, NJ 08625-0402  <a href="http://www.state.nj.us/dep/">http://www.state.nj.us/dep/</a></p> <p><b>Division of Fish, Game and Wildlife</b>                  Mail Code 501-03                  P.O. Box 420                  Trenton, NJ 08625-0420  <a href="http://www.state.nj.us/dep/fgw/">http://www.state.nj.us/dep/fgw/</a></p>	<p>Bob Martin,                  Commissioner                  (609) 292-2885</p> <p>David Chanda, Director                  (609) 292-2965</p>
New Mexico	<p><b>Energy, Minerals, and Natural Resources Department</b>                  1220 South Street Francis Drive                  Santa Fe, NM 87505  <a href="http://www.emnrd.state.nm.us/main/index.htm">http://www.emnrd.state.nm.us/main/index.htm</a></p> <p><b>Environment Department</b>                  Harold L. Runnels Building                  1190 St. Francis Drive                  Suite N4050                  Santa Fe, NM 87505  <a href="http://www.nmenv.state.nm.us/">http://www.nmenv.state.nm.us/</a></p> <p><b>Game and Fish Department</b>                  P.O. Box 25112                  Santa Fe, NM 87504  <a href="http://www.wildlife.state.nm.us/">http://www.wildlife.state.nm.us/</a></p>	<p>John H. Bernis, Cabinet Secretary                  (505) 476-3200</p> <p>F. David Martin,                  Secretary                  (505) 827-2855</p> <p>Jim Lane, Director                  (505) 476-8008</p>
New York	<p><b>Department of Environmental Conservation</b>                  625 Broadway                  Albany, NY 12233-0001  <a href="http://www.dec.ny.gov/">http://www.dec.ny.gov/</a></p> <p><b>Division of Fish, Wildlife, and Marine Resources</b>                  625 Broadway, 5th Floor                  Albany, NY 12233-4750  <a href="http://www.dec.ny.gov/about/634.html">http://www.dec.ny.gov/about/634.html</a></p>	<p>Joe Martens,                  Commissioner                  (518) 402-8545</p> <p>Patricia Riexinger,                  Director                  (518) 402-8924</p>
North Dakota	<p><b>Game and Fish Department</b>                  100 N. Bismarck Expressway                  Bismarck, ND 58501-5095  <a href="http://gf.nd.gov/">http://gf.nd.gov/</a></p>	Terry Steinwand, Director (701) 328-6305



<p>Ohio</p>	<p><b>Department of Natural Resources</b>                  2045 Morse Road                  Columbus, OH 43229-6693  <a href="http://www.dnr.state.oh.us/">http://www.dnr.state.oh.us/</a></p> <p><b>Division of Natural Areas and Preserves</b>                  2045 Morse Road,                  Building C-3                  Columbus, OH 43229-6693  <a href="http://www.dnr.state.oh.us/Default.aspx?alias=www.dnr.state.oh.us/dnap">http://www.dnr.state.oh.us/Default.aspx?alias=www.dnr.state.oh.us/dnap</a></p> <p><b>Division of Wildlife</b>                  2045 Morse Rd., Bldg. G                  Columbus, OH 43229-6693  <a href="http://www.dnr.state.oh.us/Default.aspx?alias=www.dnr.state.oh.us/wildlife">http://www.dnr.state.oh.us/Default.aspx?alias=www.dnr.state.oh.us/wildlife</a></p>	<p>Jim Zehringer, Director                  (614) 265-6565</p> <p>(614) 265-6561</p> <p>Scott Zody, Chief                  (800) WILDLIFE</p>
<p>Oklahoma</p>	<p><b>Department of Environmental Quality</b>                  P.O. Box 1677                  Oklahoma City, OK 73101-1677  <a href="http://www.deq.state.ok.us/">http://www.deq.state.ok.us/</a></p> <p><b>Department of Wildlife Conservation</b>                  P.O. Box 53465                  Oklahoma City, OK 73152  <a href="http://www.wildlifedepartment.com/">http://www.wildlifedepartment.com/</a></p>	<p>(405) 702-0100</p> <p>(405) 521-3851</p>
<p>Oregon</p>	<p><b>Department of Environmental Quality</b>                  811 SW 6th Avenue                  Portland, OR 97204-1390  <a href="http://www.oregon.gov/DEQ/">http://www.oregon.gov/DEQ/</a></p> <p><b>Department of Fish and Wildlife</b>                  3406 Cherry Avenue N.E.                  Salem, OR 97303  <a href="http://www.dfw.state.or.us/">http://www.dfw.state.or.us/</a></p>	<p>Dick Pederson, Director                  (503) 229-5300</p> <p>Director                  (503) 947-6044</p>

<p>Pennsylvania</p>	<p><b>Department of Conservation and Natural Resources</b>                  400 Market Street, #7                  Harrisburg, PA 17120-0001  <a href="http://www.dcnr.state.pa.us/index.aspx">http://www.dcnr.state.pa.us/index.aspx</a></p> <p><b>Department of Environmental Protection</b>                  Rachel Carson State Office Building                  400 Market Street                  Harrisburg, PA 17101  <a href="http://www.depweb.state.pa.us/portal/server.pt/community/dep_home/5968">http://www.depweb.state.pa.us/portal/server.pt/community/dep_home/5968</a></p> <p><b>Fish and Boat Commission</b>                  1601 Elmerton Avenue                  PO Box 67000                  Harrisburg, PA 17106-7000  <a href="http://www.fish.state.pa.us/">http://www.fish.state.pa.us/</a></p> <p><b>Game Commission</b>                  2001 Elmerton Avenue                  Harrisburg, PA 17110-9797  <a href="http://www.pgc.state.pa.us/portal/server.pt/community/pgc/9106">http://www.pgc.state.pa.us/portal/server.pt/community/pgc/9106</a></p>	<p>Richard J. Allan, Secretary</p> <p>Michael Krancer, Secretary (717) 783-2300</p> <p>Executive Director (717) 705-7801</p> <p>Carl Roe, Executive Director (717) 797-4250</p>
<p>Rhode Island</p>	<p><b>Bureau of Environmental Protection</b>                  235 Promenade Street                  Providence, RI 02908-5767  <a href="http://www.dem.ri.gov/programs/benviron/index.htm">http://www.dem.ri.gov/programs/benviron/index.htm</a></p> <p><b>Division of Fish and Wildlife</b>                  277 Great Neck Road                  West Kingston, RI 02892  <a href="http://www.dem.ri.gov/programs/bnatres/fishwild/">http://www.dem.ri.gov/programs/bnatres/fishwild/</a></p>	<p>Janet Coit, Director (401) 222-4700, ext. 2409</p> <p>Robert Ballou, Acting Chief (401) 222-4700 ,ext. 4420</p>
<p>South Dakota</p>	<p><b>Department of Environment and Natural Resources</b>                  PMB 2020                  SD DENR                  Joe Foss Building                  523 E. Capitol                  Pierre, SD 57501  <a href="http://denr.sd.gov/">http://denr.sd.gov/</a></p> <p><b>Department of Game, Fish and Parks</b>                  Department of Secretary's Office                  523 East Capitol Avenue                  Pierre, SD 57501  <a href="http://gfp.sd.gov/">http://gfp.sd.gov/</a></p>	<p>Steven M. Pirner, P.E., Department Secretary (605) 773-3151</p> <p>Jeffrey Vonk, Secretary (605) 773-3718</p>
<p>Tennessee</p>	<p><b>Department of Environment and Conservation</b>                  401 Church Street                  L&amp;C Tower, 1st Floor                  Nashville, TN 37243</p>	<p>Robert J. Martineau, Jr., Commissioner (615) 532-0109</p>

	<p><a href="http://www.state.tn.us/environment/">http://www.state.tn.us/environment/</a></p> <p><b>Wildlife Resources Agency</b>                  Ellington Agricultural Center                  440 Hogan Road                  Nashville, TN 37220  <a href="http://www.tn.gov/twra/">http://www.tn.gov/twra/</a></p>	<p>Ed Carter, Executive Director                  (615) 781-6552</p>
Texas	<p><b>Commission on Environmental Quality</b>                  MC109                  P.O. Box 13087                  Austin, TX 78711-3087  <a href="http://www.tceq.state.tx.us/">http://www.tceq.state.tx.us/</a></p> <p><b>Parks and Wildlife</b>                  4200 Smith School Road                  Austin, TX 78744  <a href="http://www.tpwd.state.tx.us/">http://www.tpwd.state.tx.us/</a></p> <p><b>Wildlife Damage Management Service</b>                  Texas Wildlife Services State Director                  P.O. Box 690170                  San Antonio, TX 78269  <a href="http://www.aphis.usda.gov/wildlife_damage/">www.aphis.usda.gov/wildlife_damage/</a></p>	<p>Mark R. Vickery, P.G., Executive Director                  (519) 239-3900</p> <p>Carter Smith, Executive Director                  (512) 389-4802</p> <p>Michael J. Bodenchuk, State Director                  (210) 472-5451</p>
Vermont	<p><b>Agency of Natural Resources</b>                  103 South Main Street                  Center Building                  Waterbury, VT 05671-0301  <a href="http://www.anr.state.vt.us/">http://www.anr.state.vt.us/</a></p> <p><b>Department of Fish and Wildlife</b>                  10 South                  103 South Main Street                  Waterbury, VT 05671-0501  <a href="http://www.vtfishandwildlife.com/">http://www.vtfishandwildlife.com/</a></p> <p><b>Department of Environmental Conservation</b>                  Commissioner's Office                  One South Building                  103 South Main Street                  Waterbury, VT 05671-0401  <a href="http://www.anr.state.vt.us/dec/dec.htm">http://www.anr.state.vt.us/dec/dec.htm</a></p>	<p>Deb Markowitz, Secretary                  (802) 241-3600</p> <p>Patrick Berry, Commissioner                  (802) 241-3730</p> <p>David Mears, Commissioner                  (802) 241-3808</p>
Virginia	<p><b>Department of Conservation and Recreation</b>                  203 Governor Street                  Richmond, VA 23219-2094  <a href="http://www.dcr.virginia.gov/">http://www.dcr.virginia.gov/</a></p>	<p>(804) 786-1712</p>

	<p><b>Department of Environmental Quality</b>          629 East Main Street          P.O. Box 1105          Richmond, VA 23218  <a href="http://www.deq.state.va.us/">http://www.deq.state.va.us/</a></p> <p><b>Department of Game and Inland Fisheries</b>          4010 West Broad Street          P.O. Box 11104          Richmond, VA 23230  <a href="http://www.dgif.virginia.gov/">http://www.dgif.virginia.gov/</a></p> <p><b>Marine Resources Commission</b>          29600 Washington Avenue, 3rd Floor          Newport News, VA 23607  <a href="http://www.mrc.state.va.us/index.shtm">http://www.mrc.state.va.us/index.shtm</a></p>	<p>David K. Paylor, Director          (804) 698-4020</p> <p>Robert "Bob" W. Duncan,          Executive Director          (804) 367-9231</p> <p>John Bull          (757) 247-2269</p>
<p>Wisconsin</p>	<p><b>Department of Natural Resources</b>          101 S. Webster Street          P.O. Box 7921          Madison, WI 53707-7921  <a href="http://dnr.wi.gov/">http://dnr.wi.gov/</a></p>	<p>(608) 266-2621</p>
<p>Wyoming</p>	<p><b>Department of Environmental Quality</b>          Herschlet Building, 122 West 25th Street          Cheyenne, WY 82002  <a href="http://deq.state.wy.us/">http://deq.state.wy.us/</a></p> <p><b>Game and Fish Department</b>          5400 Bishop Blvd.          Cheyenne, WY 82006  <a href="http://wgfd.wyo.gov/web2011/home.aspx">http://wgfd.wyo.gov/web2011/home.aspx</a></p>	<p>John V. Corra, Director          (307) 777-7937</p> <p>(307) 777-4600</p>

**APPENDIX C—FEDERAL AUTHORITIES**

**Table C-1. Statutes**

<b><u>Citation</u></b>	<b><u>Subject</u></b>	<b><u>Content Summary</u></b>
National Environmental Policy Act	42 U.S.C. § 4321	Federal law that establishes requirements and procedures for environmental review of federal agency actions.
49 U.S.C. § 47101	Airport Funding—Airport Improvement Grants	Makes the safe operation of the airport and airway system the “highest aviation priority” and provides for aviation facilities to be constructed and operated to minimize noise impact (current and projected) on nearby communities.
49 U.S.C. § 40101(a)(1)	Air Commerce and Safety	Federal policy concerning economic regulation of air commerce includes direction to the USDOT Secretary to consider “assigning and maintaining safety as the highest priority in air commerce” as a matter of the public interest.
49 U.S.C. § 40101(c)	Reducing and Eliminating Accidents	FAA must prioritize reduction or elimination of accidents when implementing its statutory safety requirements. The statute specifies that the FAA Administrator is obligated to fulfill its statutory obligations “in a way that best tends to reduce or eliminate the possibility or recurrence of accidents” concerning air transportation.
49 U.S.C. § 40101(d)	Air Commerce and Safety	In regulating air commerce the FAA must consider, among other safety considerations specified by federal law to be in the public interest, maintenance and enhancement of safety and security as the highest priority and must address the regulation of air commerce in a way that best promotes safety.
49 U.S.C. § 40103	Federal Aviation Act Safety	Federal law also directs that the FAA’s air traffic regulations must address navigation, protection, and identification of aircraft; protection of individuals and property on the ground; efficient use of navigable airspace; and prevention of collisions between aircraft and other vehicles or airborne objects.
49 U.S.C. § 44701 <i>et seq.</i>	Airport Certification	FAA is the agency authorized to issue operational certificates, including airman certificates, airworthiness certificates, air carrier operating certificates, and airport

<b>Citation</b>	<b>Subject</b>	<b>Content Summary</b>
		operating certificates. The FAA is required to carry out its federal requirements “in a way that best tends to reduce or eliminate the possibility or recurrence of accidents” in air transportation.
49 U.S.C. § 44701(a)	Safety Regulation—General Requirements	FAA is required to promote safety in civil aircraft flight operations by prescribing minimum safety standards for aircraft operations. The FAA must adopt regulations “required in the interest of safety” for aircraft design, material, equipment, construction, performance, inspection, and servicing. These regulations also must address provisions for reserve supplies of aircraft, aircraft equipment, and fuel oil, and for maximum hours of service for airmen and other air carrier employees. The statute also authorizes the FAA to adopt additional regulations and minimum standards when the FAA determines other practices, methods, or procedures concerning other aspects of aircraft operations are necessary for safety in air commerce.
49 U.S.C. § 44701(b)	Minimum Safety Requirements	The FAA is authorized to adopt safety regulations for certificated airports and air carriers. The statute allows the FAA to prescribe minimum safety standards for air carriers issued under an operating certificate by the FAA. The statute also specifies that the FAA may promulgate regulations imposing minimum safety standards on certificated airport operators.
49 U.S.C. § 44701(d)	Safety Regulation—General Requirements	In adopting safety regulations, the FAA must consider an air carrier’s duty to “provide service with the highest possible degree of safety in the public interest.”
49 U.S.C. § 44701(f)	Minimum Safety Requirements	FAA Administrator may grant an exemption from a regulatory requirement prescribed by the FAA safety regulations when the exemption is determined to be in the public interest.
49 U.S.C. § 44706	Airport Certification	The FAA is the agency directed to issue an airport operating certificate to a person desiring to operate an airport that meets one of the following criteria: 1) serves an air carrier operating aircraft designed for at least 31 passenger seats; 2) is not located in Alaska and serves scheduled passenger operation of an air carrier with aircraft designed for 10–30 passenger seats; and 3) requires a certificate

<b>Citation</b>	<b>Subject</b>	<b>Content Summary</b>
		based upon the determination of the FAA Administrator.
49 U.S.C. § 44706(b)	Airport Certification	Federal law directs that the airport operating certificate contain terms required to ensure safety in air transportation.
14 C.F.R. § 139.105	Airport Certification	Federal law authorizes the FAA to reinspect certificated facilities and to reexamine issued operating certificates. The applicant for or holder of an airport operating certificate must consent to inspections of the airport facility to ensure compliance with FAA certification requirements.
49 U.S.C. § 44709	Airport Certification	FAA is authorized to amend, modify, suspend, or revoke an airport operating certificate. The process for issuance and amendment, modification, suspension, or revocation of airport operating certificates is specified in federal statutes and regulations.
49 U.S.C. § 44709(b)(1)(A)(49)		FAA amendment, modification, suspension, or revocation of an airport operating certificate include the agency’s determination that “safety in air commerce or air transportation and the public interest” require this action.
49 U.S.C. § 44723	Federal Aviation Act Safety	Requires the USDOT to submit an annual report to Congress concerning the FAA’s safety enforcement activities. Specifies report include description of FAA operational measures of effectiveness to evaluate emerging safety problems and the agency’s efforts to update agency guidance and regulations to address technological, management, and structural changes in the aviation industry. The annual report also must include a description of the aviation industry’s compliance with aviation regulations and safety record during fiscal year.
49 U.S.C. § 46101	Federal Aviation Act Safety	Federal law specifies the process for the FAA to investigate the complaint and to take action (e.g., issue an order) to compel compliance with the statutory requirements if warranted.
49 U.S.C. § 46105	Federal Aviation Act Safety	FAA may issue emergency regulations or an emergency order, based on a complaint or on its own initiative, when the FAA determines an emergency exists concerning safety in air commerce. The agency order remains in effect for the duration specified in the order or until the order is superseded.

<b>Citation</b>	<b>Subject</b>	<b>Content Summary</b>
49 U.S.C. § 46106	Federal Aviation Act Safety	Federal law also authorizes the FAA or the Attorney General to file a civil action to enforce statutory aviation safety requirements, FAA regulatory requirements, or the requirements of any agency order, certificate or permit.
49 U.S.C. § 46107	Federal Aviation Act Safety	Federal law also authorizes the FAA or the Attorney General to file a civil action to enforce statutory aviation safety requirements, FAA regulatory requirements, or the requirements of any agency order, certificate, or permit.
49 U.S.C. § 46108	Federal Aviation Act Safety	A civil action may be filed by an “interested person” to enforce the statutory certification requirements.
49 U.S.C. § 46110	Federal Aviation Act Safety	FAA order may be appealed by a person “disclosing a substantial interest” in the order.
49 U.S.C. § 47102(3)	Airport Funding	Federal law defines the types of activities that may be eligible for AIP grants. The statutory definition of “airport development” identifies numerous activities related to construction, repair, or improvement of a public use airport.
49 U.S.C. § 47102(4)	Airport Funding	The statute defines an “airport hazard” as a structure, natural growth, or land use on or near a public use airport that “obstructs or otherwise is hazardous” to take off or landing of aircraft.
49 U.S.C. § 47102(5)	Airport Funding	“Airport planning” is defined in the statute to include integrated airport system planning to provide information regarding the extent, kind, location, and timing of future airport development.
49 U.S.C. § 47102(8)	Airport Funding	“Airport planning” defined to include integrated airport system planning with extent, kind, location, and timing of future development.
49 U.S.C. § 47104	Airport Funding	Federal law authorizes the FAA to award grants from the Airport and Airway Trust Fund for the purpose of maintaining a “safe and efficient nationwide system of public-use airports” meeting present and future needs of civil aviation.
49 U.S.C. § 47105	Airport Funding	The application and process for FAA award of AIP grants are specified in the statute.
49 U.S.C. § 47106	Airport Funding	The grant application may be approved if the FAA determines the airport project is consistent with authorized airport plans, will contribute to implementing Federal Aviation Act provisions, and the airport grant recipient (sponsor) has the



<b>Citation</b>	<b>Subject</b>	<b>Content Summary</b>
		legal authority and financial capability to implement the project as proposed.
49 U.S.C. § 47107	FAA Grant Assurances	Federal law provides that the FAA may approve a grant application for an airport development project only if the airport project grant recipient provides to the FAA the 21 general written assurances associated with airport operations specified in the statute.
49 U.S.C. § 47107(a))	FAA Grant Assurances	The general written assurances also include safety assurances, providing that the airport sponsor will take appropriate action to: 1) ensure the airport terminal airspace will be cleared and protected by mitigating existing airport hazards and preventing future hazards; and 2) restrict, to the extent reasonable, the use of land next to or near the airport to uses that are compatible with normal airport operations.
49 U.S.C. § 47107(b)-(e)	FAA Grant Assurances	Federal law also requires the airport sponsor to provide written assurances concerning airport revenue use, land acquisition, and opportunities for small business concerns.
49 U.S.C. § 47107(g)-(h)	FAA Grant Assurances	The statute also provides the process for the FAA to modify written assurances applicable to an airport sponsor.
49 U.S.C. § 47130	Air Commerce and Safety	FAA also must consider the interests of safety and efficiency of civil and military operations in controlling the use of the navigable airspace and regulating aircraft operations. In addition, federal law authorizes the FAA to contract or award grants for collection of airport safety data.
49 U.S.C. § 47141	Assurances: Compatible Land Use	The purpose of land-use compatibility projects eligible for funding is specified to be making land surrounding airports (large hub and medium hub) compatible with aircraft operations.
49 U.S.C. § 47141(b)	Assurances: Compatible Land Use	The statute specifies that a land-use compatibility grant may be awarded only upon a determination that the land-use plan or project meets the statutory requirements and that the airport operator has not submitted a noise compatibility plan or plan update within the preceding 10 years.

**Table C-2. Regulations**

<b>Citation</b>	<b>Subject</b>	<b>Content Summary</b>
49 C.F.R. Part 18	FAA Grant Assurances	Incorporates compliance with uniform administrative requirements for issuance of grants and cooperative agreements to state and local governments.
14 C.F.R. Part 77	Objects Affecting Navigable Airspace	Establishes standards for determining obstructions in navigable airspace; outlines the requirements for notifying the FAA of certain proposed construction or alteration; provides for aeronautical studies of obstructions to air navigation in order to determine their effect on the safe and efficient use of airspace; and provides for public hearings on the hazardous effect of proposed construction or alteration on air navigation.
14 C.F.R. Part 139	Certification of Airports	Prescribes rules governing the certification and operation of land carriers that are conducted with an aircraft having a seating capacity of more than 30 passengers. It includes provisions describing the contents, preparation, and maintenance of an airport certification manual.
14 C.F.R. § 139.101	Airport Operating Certificates	Provides for regulations of airports required to obtain FAA certification based on the criteria specified in the regulations.
14 C.F.R. § 139.101(c)	Airport Operating Certificates	Specifies FAA certification regulations also do not apply to Alaska airports: 1) at any time if the airport only serves scheduled operations of small air carrier aircraft and does not serve scheduled or unscheduled operations of large air carrier aircraft; or 2) during periods when other Alaska airports are not serving large air carrier aircraft operations.
14 C.F.R. § 139.103	Airport Operating Certificates	Specifies the requirements for application and issuance of an airport operating certificate. Requires the airport operator to submit a certification application and a proposed airport certification manual satisfying the FAA requirements.
14 C.F.R. § 139.105	Airport Operating Certificates	Requires airport operator applying for certification to allow the FAA to make scheduled or unannounced inspections to determine compliance with Federal Aviation Act and the FAR certification requirements.
14 C.F.R. § 139.107	Airport Operating Certificates	Specifies FAA will issue the airport operating certificate if the applicant demonstrates

<b>Citation</b>	<b>Subject</b>	<b>Content Summary</b>
		<p>compliance with the regulatory requirements and satisfies the FAA conditions. Those conditions include FAA approval of the airport operator’s airport certification manual. In addition, the FAA must conclude after investigation that the airport operator “is properly and adequately equipped and able to provide a safe airport operating environment” consistent with any safety limitations imposed by the FAA and the airport certification manual’s requirements.</p>
<p>14 C.F.R. § 139.201</p>	<p>Airport Operating Certificates —FAA Regulations</p>	<p>Specifies the requirements for application and issuance of an airport operating certificate. The airport operator must submit a certification application and a proposed airport certification manual satisfying the FAA requirements.</p>
<p>14 C.F.R. § 139.203(a)</p>	<p>Airport Operating Certificates —FAA Regulations</p>	<p>Includes the airport’s operating procedures, facilities and equipment, and responsibility assignments related to airport operations.</p>
<p>14 C.F.R. § 139.203(b)</p>	<p>Airport Operating Certificates —FAA Regulations</p>	<p>Provides description of airport operator’s procedures for wildlife hazard management (required for airport certification manual).</p>
<p>14 C.F.R. § 139.303</p>	<p>Airport Operating Certificates —FAA Regulations</p>	<p>Requires an airport operating certificate holder to provide and equip “sufficient and qualified trained personnel” to comply with the FAA’s airport certification manual requirements.</p>
<p>14 C.F.R. § 139.337(a)</p>	<p>Airport Operating Certificates</p>	<p>Requires airports receiving certification from the FAA under 14 C.F.R. Part 139 to take action to address wildlife hazards. The FAR specify the airport operator “must take immediate action to alleviate wildlife hazards whenever they are detected.” Airports issued airport operating certificates from the FAA are required to address wildlife hazards. According to the FAR, a certificated airport operator “must take immediate action to alleviate wildlife hazards” when detected.</p>
<p>14 C.F.R. Part 139.5</p>	<p>Airport Operating Certificates</p>	<p>Specifies FAA certification regulations do not apply to heliports, airports operated by the United States, or airports serving scheduled air carrier service only based on designation as an alternate airport. Defines “wildlife hazard” as a “potential for a damaging aircraft collision with wildlife on or near an airport.” Wildlife in this regulatory definition specifically includes feral animals and domestic animals not within the control of their owners.</p>

<b>Citation</b>	<b>Subject</b>	<b>Content Summary</b>
14 C.F.R. Part 150	Airport Noise Compatibility Planning	Applies to the airport noise compatibility planning activities of public-use airports, including heliports. Outlines the procedures for developing and submitting airport noise compatibility programs.
14 C.F.R. Part 151	Federal Aid to Airports	Provides detailed information regarding FAA airport construction and development grants. It also specifies that all airport development under the federal-aid airport program must be done in accordance with an approved airport layout plan. Provides airport layout plan and any changes to the layout are subject to FAA approval. Lists the advisory circulars that are incorporated in the airport development standards.
14 C.F.R. Part 152	Airport Aid Program	Governs funding for airport planning and development under the Airport and Airway Development Act of 1970, as amended. It outlines eligibility requirements and application procedures; funding, accounting, and reporting requirements; nondiscrimination in airport aid programs; suspension and termination of grants; and energy conservation programs.
14 C.F.R. Part 157	Notice of Construction, Alteration, Activation, and Deactivation of Airports	Defines the requirements for notifying the FAA when proposing to construct, alter, activate, or deactivate a civil or joint-use (civil/military) airport or to alter the status of such an airport.
14 C.F.R. Part 170	Establishment and Discontinuance Criteria for Air Traffic Control Services and Navigational Facilities	Specifies criteria for establishment of air traffic control services.
14 C.F.R. Part 171	Non-Federal Navigation Facilities	Specifies procedures for requests for instrument flight rules (IFR) procedures, minimum requirements for approval, performance requirements, installation requirements, and maintenance and operations requirements for non-federal aids to navigation. This could include VHF omnidirectional range (VOR) facilities, nondirectional radio beacons, instrument landing system (ILS) facilities, microwave landing system (MLS) facilities, and others.

**Table C-3. Federal Aviation Administration—Directives, Policy, and Guidance**

<b>Citation</b>	<b>Subject</b>	<b>Content Summary</b>
CIRCULAR		
FAA Advisory Circular No. 150/5200-33B August 28, 2007	Hazardous Wildlife Attractants On or Near Airports	Addresses location of land uses on or in the vicinity of public use airports that have the potential to attract hazardous wildlife. Specifies separation criteria (5,000 ft and 10,000 ft, depending on the type of aircraft served) between an airport’s operations areas (e.g., aircraft movement, loading ramps, and aircraft parking) and uses that may be wildlife attractants.
FAA Order JO7110.65T February 11, 2010	Air Traffic Control	Prescribes air traffic control procedures and terminology for air traffic control personnel. Requires personnel to issue periodic advisory information on pilot-reported, tower-observed, or radar-observed and pilot-verified bird activity, including location, species, and size of birds, and to relay information to adjacent facilities when bird activity may become a factor in those areas (2-1-22: Bird Activity Information).
FAA Advisory Circular No. 150/5200-36 June 28, 2006	Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports	Specifies the minimum requirements for the initial and recurring wildlife hazard management curriculum provided to airport personnel involved in implementing an FAA-approved Wildlife Hazard Management Plan. Identifies the qualifications for wildlife biologists conducting Wildlife Hazard Assessments for certificated airports.
FAA Advisory Circular No. 150/5200-32A December 22, 2004	Reporting Wildlife Aircraft Strikes	(December 22, 2004): Explains the importance of reporting collisions between aircraft and wildlife, more commonly referred to as wildlife strikes. Also examines recent improvements in the FAA's Bird/Other Wildlife Strike Reporting system, how to report a wildlife strike, what happens to the wildlife strike report data, how to access the FAA National Wildlife Aircraft Strike Database, and the FAA’s Feather Identification program.

<b>Citation</b>	<b>Subject</b>	<b>Content Summary</b>
<p>FAA CertAlert 09-10 June 11, 2009</p>	<p>Wildlife Hazard Assessments in Accordance with Part 139 Requirements</p>	<p>Describes the requirements in 14 C.F.R. § 139.337(b) to conduct a wildlife hazard assessment when a triggering event (as specified in the FAA regulations) occurs. Specifies the content of the assessment and qualifications for the person conducting the assessment and the required content of the assessment report. Identifies the FAA concern that airport operators that have had triggering events have not conducted a wildlife hazard assessment as required by the FAA regulations.</p>
<p>FAA CertAlert 06-0 November 21, 2006</p>	<p>Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State-Listed Threatened and Endangered Species and Species of Special Concern on Airports</p>	<p>Describes the procedures for airport operators and FAA certification inspectors to respond to requests by state wildlife agencies to facilitate and encourage habitats for state-listed threatened and endangered species or species of special concern occurring on airports that may pose a threat to aviation safety. Discusses concerns regarding techniques that may increase wildlife hazards, be inconsistent with safe airport operations, and create a threat to aviation safety.</p>
<p>FAA CertAlert No. 02-06 October 1, 2002</p>	<p>Access to the FAA National Wildlife Aircraft Strike Database</p>	<p>Describes information available in the FAA National Wildlife Aircraft Strike Database for airport operators, airline operators, and FAA airport certification safety inspectors, and provides these operators and inspectors with instruction on obtaining access to the information in the National Wildlife Aircraft Strike Database.</p>
<p>FAA CertAlert 04-16 December 13, 2004</p>	<p>Deer Hazard to Aircraft and Deer Fencing</p>	<p>Provides recommendations concerning the types of fencing and requirements for fencing installation and maintenance to prevent deer from entering aircraft movement areas. Describes dangers associated with deer within aircraft movement areas.</p>

<b><u>Citation</u></b>	<b><u>Subject</u></b>	<b><u>Content Summary</u></b>
<p>FAA CertAlert 04-09 August 30, 2004</p>	<p>Relationship between FAA and WS</p>	<p>Identifies the roles and responsibilities of the FAA and the United States Department of Agriculture/Animal and Plant Health Inspection Service/Wildlife Services (WS) concerning wildlife hazards on or near airports. Describes the FAA's role in airport operator certification, the requirement for certificated airports to develop and implement a wildlife hazard management plan, and the WS role in conducting wildlife hazard assessments. Describes the Memorandum of Understanding between the FAA and WS (No. 12-4-71-0003-MOU), which establishes a cooperative agency relationship for resolving wildlife hazards to aviation.</p>
<p>FAA CertAlert 03-03 August 29, 2003</p>	<p>Guidelines for Submitting Bird Strike Feather Remains for Identification</p>	<p>Specifies guidelines for collection of feather and other bird/wildlife remains by aircraft operators, airport operating and maintenance inspectors, and foreign air carriers operating at United States airports. Describes the process for submission of remains to the feather identification lab at the Smithsonian Institution, Museum of Natural History. Explains the importance of identification research for understanding and preventing bird-aircraft strike hazards, and the role of operators and carriers for maintenance of a comprehensive database, accuracy of species identification, and for providing species identification information to the FAA.</p>
<p>FAA CertAlert 98-05 September 21, 1998</p>	<p>Grasses Attractive to Hazardous Wildlife</p>	<p>Recommends that airport operators ensure that specified grass species and other varieties of plants attractive to hazardous wildlife are not used on airport property. Provides guidelines for avoiding use of these species for planting disturbed areas or areas in need of revegetation and for maintenance of areas already planted with these species. Describes threats to aircraft safety associated with concerns about planting with grass seeds that are major attractants to doves and other seed-eating birds.</p>
<p>FAA CertAlert 97-09 November 17, 1997</p>	<p>Wildlife Hazard Management Plan Outline</p>	<p>Describes the required content of a wildlife hazard management plan.</p>

<b><u>Citation</u></b>	<b><u>Subject</u></b>	<b><u>Content Summary</u></b>
NEPA Order 1050.1E June 8, 2004	Policies and Procedures for Considering Environmental Impacts	Establishes the FAA agency-wide policies and procedures for compliance with NEPA and implements regulations issued by the Council on Environmental Quality.
NEPA Order 5050.4B April 2006	Implementing Instructions for Airport Projects	Provides instructions to FAA personnel for satisfaction of NEPA requirements for airport actions under FAA authority.

**Table C-4. Other Federal Agency Directives, Policy, and Guidance**

<b><u>Citation</u></b>	<b><u>Subject</u></b>	<b><u>Content Summary</u></b>
USDA Directive 2.305 (April 15, 1998)	Wildlife Hazards to Aviation	Provides guidelines for Wildlife Services (WS) technical and/or direct control assistance to airport managers, State aviation agencies, aviation industry, FAA, and Department of Defense regarding hazards caused by wildlife to airport safety. Describes assistance to federal and state agencies, airport managers, and the aviation industry to reduce wildlife hazards according to the FAA-WS Memorandum of Understanding. Explains that WS may conduct wildlife hazard assessments and management plans or provide technical assistance activities to minimize hazards caused by wildlife pursuant to cooperative agreements. Specifies WS will provide recommendations and assistance to airport managers to obtain necessary federal and state permits required to take protected wildlife species at airports.



**APPENDIX D—STATE AUTHORITIES CONCERNING AIRPORT WILDLIFE  
MANAGEMENT AND AIRPORT LAND-USE COMPATIBILITY**

**ALABAMA**

<u>Section</u>	<u>Subject</u>	<u>Summary</u>
		<b><u>The Code of Alabama 1975</u></b>
Chapter 4-6	Airport hazards	States legislative finding that airport hazards endanger lives and property on and within the vicinity the airport and that hazardous obstructions impair the airport’s utility by reducing the area available for aircraft operations. Identifies an airport hazard creation or establishment as an injury to the community and specifies prevention of airport hazards to be in the public interest. Specifies prevention, elimination, removal, alteration, or mitigation of airport hazards to be public purposes.
Chapter 4-6	Airport zoning	Allows a county (with specified population exception) or city with an airport hazard area within its zoning jurisdiction to adopt airport zoning regulations to specify land uses and restrict height of structures and trees within the airport hazard area. Specifies the zoning jurisdiction may include areas within two miles of the airport boundary unless limited by local law. Allows county or city to appoint an airport zoning commission with specified composition and duties. Provides for issuance of permits for new construction or use or for substantial changes to an existing structure or use and allows regulations to address discontinuance or removal of nonconforming uses. Provides for grant of variances under specified conditions. Addresses relationship of airport zoning regulations to other regulations.
		<b><u>Alabama Administrative Code</u></b>
Chapter 60-X	Department of Aeronautics	Establishes regulations for the inspection, licensing and closure of airports by the Alabama Department of Aeronautics. Incorporates FAA guidance concerning design standards for airport construction and addressing objects affecting navigable airspace into the state regulations. Includes maintenance of obstruction-free approach and departure paths and runway safety areas as a minimum condition for the state’s airport operating license renewal.
	Airport hazard	Defines “airport hazard” in relevant part as “any structure, object of natural growth, or use of land which obstructs the defined approach and departure paths applicable to that particular airport.”
60-X-4-.01	Municipal airports	Allows municipal airport owner to control the entrance and access to the airport through fencing and other means. Provides that the municipality should prohibit certain activities on airport property, including cattle grazing.
60-X-5-.01	Aviation safety	Requires general use airport construction site approvals from the Alabama Department of Aeronautics. Requires general public use airports to obtain operating licenses. Prohibits certain uses on airport property, including livestock grazing.
220-2-.27	Department of Conservation and Natural Resources	Requires a Department permit for take of protected wildlife causing crop damage, property damage, or a reasonable concern for human safety. Specifies demonstration of specific damage is not required for a take permit for feral swine and coyotes. Specifies exemptions from permit requirement and conditions for permit issuance. Prohibits issuance of a permit to take, capture or kill protected wildlife causing damage to crops planted for wildlife management with certain exceptions. Requires wildlife damage control agents to be permitted by the Department.

\*Information current as of November 2011.

**ALASKA**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b><u>Alaska Statutes</u></b>
Chapter 2.10	Aeronautics	Authorizes the Department of Transportation and Public Facilities to supervise aeronautics and communications and to make recommendations for establishment, location, maintenance, operation, and use of airports,, landing fields, air markings and beacons, and other navigation facilities. Provides for Department regulations to adopt regulations prescribing minimum safety and operational standards consistent with federal regulations. Allows the Department to establish, operate, and regulate airports and air navigation facilities.
Chapter 2.15	Airport hazard	Defines “airport hazard” in relevant part as “a structure, object of natural growth, or use of land that obstructs the airspace required for the flight of aircraft in landing or taking off at an airport or is otherwise hazardous to the landing or taking off.”
Chapter 2.25	Airport zoning	Authorizes the Department to adopt airport zoning regulations for any airport to divide areas surrounding the airport into zones and to specify permitted land uses within these zones. Provides for regulations to regulate and restrict the height of structures and trees and to require abatement of lights or electronic signals or emissions that may create a hazard to aircraft operations. Identifies considerations related to adoption or revision of zoning regulations, including the character of flying operations, terrain, height of existing structures and trees above the airport level, potential to reduce or remove existing obstructions, and FAA view regarding the airport approaches needed for safe aircraft operations. Prohibits the Department from requiring removal or change in a nonconforming structure or tree or prohibiting the continuation of this type of use with certain exceptions. Provides for issuance of permits for new structures or uses and for repair or alteration of existing nonconforming uses. Allows the Department to acquire property or interests in property needed to remove, eliminate, or prevent the establishment of airport hazards or to mark or light obstructions.
2.25.110	Definitions	Defines “airport hazard” in relevant part as “anything that may obstruct or interfere with the navigation or operation of aircraft on or in the vicinity of an airport.” Includes man-made structures, trees and other natural growths, lights or beacons, and electrical or electronic devices emitting signals capable of disrupting radio communication within this definition. Defines “airport hazard area” in relevant part as “an area in the vicinity of an airport in which a hazard to the operation of aircraft might be situated” as designated by the Department.
Chapter 16.20	Endangered species	Prohibits harvest, capture, or propagation of a state-listed endangered species except as authorized by a permit issued by the Commissioner of Fish and Game. Specifies the unpermitted harvest or capture of an endangered species is a misdemeanor.
		<b><u>Alaska Administrative Code</u></b>
5 AAC 95.720	Fish and Game Permits	Specifies conditions for issuance of permit, including permit duration, use restrictions, mitigation to wildlife and wildlife habitat damage, monitoring, and financial assurance. Requires compliance with permit conditions.

**ARIZONA**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b><u>Arizona Revised Statutes</u></b>
Chapter 28	Airport zoning	Declares that the creation or establishment of an airport hazard is a public nuisance and a public injury to the community served by an airport. Specifies that prevention, elimination, removal, alteration, and mitigation of airport hazards are public purposes and in the interest of the public health, safety, and general welfare. Authorizes local governments with an airport hazard area within its jurisdiction to adopt, administer, and enforce airport zoning regulations for that area. Requires appointment of airport zoning commission for initial zoning and provides for establishment of a joint airport zoning board when an airport hazard area is outside the territorial limits of a local government owning or controlling the airport. Provides for the airport zoning regulations to divide the airport hazard area into zones, specify permitted land uses in these zones, and regulate and restrict the heights of structures or trees in these zones. Identifies considerations for adoption of airport zoning regulations, including the character of expected flying operations, terrain, neighborhood character, and land uses. Provides for the issuance of permits and variances and specifies the regulations may not (with certain exceptions) prohibit the continuation of a nonconforming use or require reduction, or change in nonconforming structures or trees. Makes violation of a regulation a misdemeanor. Addresses the relationship of airport zoning regulations to other regulations.
28-8461	Definitions	Defines "airport hazard" as "a structure, tree or use of land that obstructs the air space required for flight of aircraft in taking off or landing at an airport or that is otherwise hazardous to aircraft taking off or landing." Defines "airport hazard area" in relevant part as "an area of land or water on which an airport hazard might be established if not prevented."
Chapter 28 28-8272	Airport operations	Requires aircraft operations to comply with federal regulations and federal standards for aircraft design, construction, and airworthiness.
Chapter 28 28-8281	Killing Birds or Animals	Authorizes Arizona Game and Fish Department employees and authorized federal agency employees may take coyotes by shooting from aircraft for wildlife and livestock management purposes. Specifies other intentional killing of birds or animals by an aeronaut or passenger while in flight is a class 1 misdemeanor.
Chapter 17	Wildlife Depredation	Allows a person suffering property damage from wildlife to take reasonable measures to alleviate the damage. Requires authorization by the Game and Fish Department for actions that injure or kill game mammals, game birds or wildlife protected by federal law. Allows the property owner to file a wildlife property damage report and for the Commission to investigate and provide technical assistance concerning anti-depredation measures, including trapping, capture, and relocation. Allows the Commission to establish special seasons or bag limits and to issue take permits when necessary to relieve property damage. Requires the permittee to deliver the edible portions of taken wildlife to the Commission for donation to a public institution or charitable organization.
		<b><u>Arizona Administrative Code</u></b>
R12-4-320	Harassment of Wildlife	Prohibits a person from taking action to harass, molest, chase, rally, concentrate, herd, intercept, torment, or drive wildlife with or from any aircraft or any motorized terrestrial or aquatic vehicle unless otherwise authorized by state law. Exempts actions by a state or federal employee

		within the scope of official duties to protect land, water, wildlife, livestock, domesticated animals, human life, or crops from this prohibition.
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**ARKANSAS**

<u>Citation</u>	<u>Subject</u>	<u>Summary</u>
		<b><u>Arkansas Code</u></b>
Title 14, Subtitle 22, Chapter 363	Airport Zoning	Authorizes local governments to adopt airport zoning regulations to protect airport approaches from obstruction, protect life and property on and near the airport, and to promote airport use and the public health, safety, and general welfare. Specifies the airport zoning regulations may divide the area surrounding airports (no greater than five miles from the airport) into zones. Allows the regulations to limit the height of existing and future structures and objects of natural growth in these zones as needed to protect airport approaches and provide sufficient turning space for flying operations, consistent with FAA standards. Authorizes the Commission to control and administer an airport serving more than one city. Identifies terrain in the vicinity of the airport, the height of existing structures and natural growth above the level of the airport, and potential to lower or remove existing obstructions as considerations for adoption of regulations. Specifies a city may adopt airport zoning regulations even when all or part of the airport or the area to be zoned is outside the city's jurisdiction and provides for conflict with other city's regulations. Recognizes the prevention of the creation or establishment of airport hazards is necessary in the interest of public health, public safety, and general welfare.
14-363-205 14-363-304	Nonconforming uses	Allows counties, cities, and towns to acquire property or property interests by purchase, grant, or condemnation for the purpose of eliminating or mitigating airport hazards associated with existing structures or natural growth that do not conform to the specified height limitations. Authorizes the local government to take immediate steps needed to remove an imminent danger to public health, safety, and general welfare associated with a structure or natural growth but requires the city to conduct a hearing to determine the compensation (if any) to the owner of the structure or growth.
14-363-206	Permits and variances	Provides for issuance of permits to owners of existing structures or natural growth objects that do not conform to the airport zoning regulations when adopted. Specifies requirements for permit application and reduction or removal of unpermitted nonconforming structures or natural growth. Specifies requirements for issuance of permits to change or repair nonconforming uses and provides that these permits will not be issued when the change or repair would cause the structure or growth to become a greater hazard to air navigation. Requires compliance with height restrictions in the airport zoning regulations when the nonconforming structure or natural growth has been more than 50% torn down or destroyed. Allows variances to be granted to construct a structure, increase the height of a structure, increase natural growth that will exceed applicable height limitations when the applicant shows a practical difficulty or unnecessary hardship and demonstrates the structure or natural growth will not constitute an undue hazard to aircraft operations. Specifies the grant of the variance may be conditioned on installation and maintenance of obstruction markers or lighting.
14-363-303 14-359-112	Zoning regulations	Prescribes the scope of authority for counties, cities, and towns to adopt airport zoning regulations. Specifies all counties and cities of any class and

14-361-112		towns may adopt airport zoning regulations dividing the area surrounding the airports into zones and limiting the height of all existing and future structures and objects of natural growth therein. Allows cities and towns within 50,000' of an airport to promulgate and enforce zoning regulations within their respective city limits and authorizes counties within 50,000' of an airport in an unincorporated area to adopt these regulations. Specifies the general zoning regulations provisions must not be construed to limit a municipality's authority to regulate airport hazards by zoning. Allows counties, cities, and towns to delegate airport zoning regulation authority to a zoning board or planning commission.
Chapter 27-115	Aeronautics	Authorizes the Arkansas Department of Aeronautics to plan, inspect, and license state airports, landing fields, and air navigation facilities and to close landing fields determined to be unsafe. Provides for the Department to issue licensing regulations; establish air space regulations supervise and regulate airport facility and operational safety; investigate and report the cause of aircraft accidents. Provides for consistent with federal regulations.
<b>Citation</b>	<b>Subject</b>	<b>Summary</b>
14-357-106	Regulations	Requires county airport commissions to adopt such regulations as needed for the proper operation and management of the airport and its related properties and facilities. Requires commission compliance with all federal and state civil air regulations as to air worthiness, certification, and operation of aircraft. Requires commission to protect all the aerial approaches to the airport within their jurisdiction.
14-361-102	Airport hazard	Defines "airport hazard" as "any structure, object of natural growth, or use of land which obstructs the airspace required for the flight of aircraft in landing or taking off at an airport or is otherwise hazardous to the landing or taking off of aircraft."
14-361-104	Airport facilities and property acquisition	Authorizes municipalities to plan, establish, develop, construct, enlarge, improve, maintain, equip, operate, regulate, protect, and police airports and air navigation facilities, either within or without the territorial limits of the municipality and within or without the territorial boundaries of this state. Allows the municipality to acquire property by purchase, gift, devise, lease, eminent domain proceedings, or otherwise, acquire real or personal property or any interest therein, including easements in airport hazards or land outside the boundaries of an airport or airport site, as are necessary to permit safe and efficient operation of the airport or to permit the removal, elimination, obstruction-marking of obstructions, lighting of airport hazards, or to prevent the establishment of airport hazards.
Chapter 15-45	Wildlife preservation	Declares the promotion of sound management, conservation, and public awareness of Arkansas' rich diversity of native plants and nongame animals and conservation of species that are rare, threatened, endangered or of special significance to the state to be in the state's best interest. Declares protection of natural areas significant to native plans and animals is also in the state's best interest. Provides for financing of programs to protect nongame species through a voluntary designation on state income tax return forms.
Chapter 15-46	Wildlife Resources	Control of Predators and Pests Chapter (repealed).

**CALIFORNIA**

<b>Citation</b>	<b>Subject</b>	<b>Summary</b>
		<b>California Codes</b>
Government Code 50485.1	Airport hazard	Defines “airport hazard” as “any structure or tree or use of land which obstructs the airspace required for the flight of aircraft in landing or taking off at an airport or is otherwise hazardous to such landing or taking off of aircraft.” Defines “airport hazard area” in relevant part as “any area of land or water upon which an airport hazard might be established if not prevented.”
Government Code 50485.2	Airport hazard–public nuisance	Declares the creation or establishment of an airport hazard is a public nuisance and an injury to the community served by the airport and specifies a need to prevent creation or establishment of airport hazards in the interest of public health, safety, and general welfare. Specifies local governments may use funds and acquire property or property interests to prevent creation or establishment of airport hazards and to eliminate, remove, alter, mitigation, or mark and light existing airport hazards.
Government Code 26027 26028	Airport zoning	Requires counties and cities to provide for suitable areas for location of airports as conforming uses in zoning ordinances or to make a finding (after notice and public hearing) specifying there is no site in the zoned area that is suitable for an airport.
50485.6	Airport zoning commission	Requires the establishment of an airport zoning commission before adoption of airport zoning regulations to recommend the zone boundaries and regulatory provisions. Specifies procedures for commission to issue its report and for the county or city to consider the recommendations. Specifies an established county or city planning commission will serve as the airport zoning commission.
Government Code 50485.8 50485.10	Nonconforming uses	Prohibits the county or city from requiring removal, lowering, or change of an existing use that does not conform to the airport zoning regulations when adopted or from interfering with the continuance of that use. Requires issuance of a permit to authorize replacement, substantial alteration or repair, or replacement or a nonconforming structure or replanting or increase in the height of a nonconforming tree. Specifies the permit will not be granted if it would result in a greater hazard to air navigation.
Government Code 50485.10	Variances	Provides for grant of a variance from the airport zoning regulations for establishment of a structure or natural growth, or a change in an existing structure or growth, which would not conform to the regulations. Specifies that a variance will be granted when practical difficulty or unnecessary hardship would result from literal application or enforcement of the regulations and the variance will not be contrary to the public interest. Allows the county or city to condition the variance on the applicant’s consent to the county or city (at government expense) to install, operate, and maintain markers and lights to identify the presence of an airport hazard.
Government Code 50474	Airports	Allows a local agency to regulate use of the airport and facilities and other property within or over the airport and exercise powers necessary or convenient for promotion of aeronautics and air commerce and navigation.
Fish and Game Code 3470	Fish and Game Code–Airport	Declares state policy to “actively encourage the safe and biologically sound management of wildlife resources” on state public use airport

3471	Wildlife Management	property as regulated by the FAA. Recognizes that airport operations are governed by FAA regulations and policies and federal law protecting public health, safety, and welfare. Recognizes need for federally certificated airports to harass, harm and remove species consistent with federal law and permits to protect public health, safety, and welfare.
Fish and Game Code 3472 3472.2	Depredation– Airport Property	Specifies that take of birds by a FAA-certificated public use airport in compliance with a federal depredation permit authorizing this take does not violate state law if the take: occurs on lands owned or leased by the airport; does not occur on airport lands reserved for habitat mitigation or conservation purposes of the species being taken; and does not involve take of a fully protected, candidate, threatened, or endangered species. Requires the airport operator to submit the federal depredation permit and/or wildlife hazard management plan to the state and provide reasonable access for ensuring compliance with state requirements.
<b>Citation</b>	<b>Subject</b>	<b>Summary</b>
Fish and Game Code 3472.1	Take	Authorizes take under state law only to relieve or prevent injurious situations affecting public safety and only as part of an integrated wildlife management program that emphasizes nonlethal management techniques.
Public Utilities Code 21670 21670.1 21670.2 21674.5	Airport Land Use Commission	Declares the state’s public interest in providing for the orderly development of public use airports and the area surrounding these airports. Specifies a purpose to protect public health, safety, and welfare by ensuring orderly airport expansion and land use measures to minimize safety hazards and noise exposure within areas around airports to the extent these areas do not already have established incompatible uses. Requires every county in which an airport is located (with specified exceptions) to establish a land use commission. Specifies composition of commission and procedure for appointment. Provides that if city and county officials may collectively determine that another designated body will assume the commission’s planning responsibilities. Prescribes requirements and process for development of airport land use compatibility plans and mediation of disputes associated with the plans. Specifies the plan provisions can rely on height, use, noise, safety, and density criteria in the state Airport Land Use Planning Handbook and FAA regulations. Exempts the Los Angeles and San Diego Counties from these provisions. Provides for the state Department of Transportation to develop training programs for commission staff.
Public Utilities 21674.7 21675 21679	Airport land use compatibility plan	Specifies state intent to discourage incompatible land uses near existing airports and to have local governments be guided by height, use, noise, safety, and density criteria compatible with airport operations, as provided in the Airport Land Use Planning Handbook published by the Division of Aeronautics of the Department of Transportation and in FAA regulations. Requires local commission to develop an airport land use compatibility plan for the long-term growth of the public airport and surrounding area to protect the general welfare of neighboring residents and the public. Specifies the plan may include building height restrictions, land uses, and buildings standards within the airport influence area as established by the commission. Requires local commission to submit plan to the Division of Aeronautics. Specifies process for action to compel development of an airport land use compatibility plan.

Public Utilities 21652 21653	Property Acquisition	Authorizes local government to acquire property or property interests (including air rights) by purchase, donation, or condemnation needed to permit safe and efficient airport operations; permit the removal, elimination, obstruction-marking, or obstruction-lighting of airport hazards; or prevent the establishment of airport hazards. Specifies authority to provide for removal or relocation of any airport hazard, structures, and equipment interfering with airport and air navigation facilities location, expansion, development, or improvement.
Public Utilities 21702	Aviation System Plan	Specifies components of the California Aviation System Plan, including requirements to address aviation safety and airport land use compatibility.
		<b><u>California Code of Regulations (California Administrative Code)</u></b>
	Airport Design Standards	Specifies minimum standards for a permitted airport.
Title 14 § 671.1	Permits for Restricted Species	Prohibits person from importing, exporting, transporting, maintaining, disposing of, or using for any species restricted under state law except as authorized by Department permit. Specifies requirements for permit application and issuance. Authorizes permits to be issued with conditions and restrictions the Department determines necessary to protect native wildlife, agriculture interests, animal welfare, and/or human health and safety for animal care, aquaculture, breeding, and other purposes. Allows issuance of permit for nuisance bird abatement through harassment. Prohibits permit for use for species for abatement purposes or intentional take of any bird protected by federal or state law. Requires the permittee to provide a copy of USFWS permits to the Department and maintain a written Emergency Action Plan. Requires permittee to report incidents involving a restricted species resulting in injury or death to a person. Provides for term of permit authorization. Specifies process and basis for denial and appeal of permit.

**COLORADO**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b><u>Colorado Statutes Annotated</u></b>
41-4-108	Airport hazards	Where necessary, in order to provide unobstructed airspace for the landing and taking off of aircraft utilizing airports or landing fields acquired or operated under the provisions of this part 1, any such county, city and county, city, or town, either singly or jointly, is authorized to contract or otherwise provide, by condemnation if necessary, for the removal of any airport hazard or the removal or the relocation of all private structures, railways, mains, pipes, conduits, wires, cables, poles, and other facilities and equipment which may interfere with the location, expansion, development, or improvement of such airports, restricted landing areas, and other air navigation facilities or with the safe approach thereto or takeoff by aircraft and to pay the cost of removal or relocation. A county, city and county, city, or town may acquire, in the same manner as is provided for the acquisition of property for airport purposes, easements through or other interests in airspaces over land or water, interests in airport hazards outside the boundaries of the airports or landing fields, and such other airport protection privileges as are necessary to ensure safe approaches to the landing areas of said airports or landing fields and the safe and efficient operation thereof. It is also hereby authorized to acquire, in the same manner, the right or easement, for a term of years or



		perpetually, to place or maintain suitable marks for the daytime markings and suitable lights for the nighttime markings of airport hazards, and including the right of ingress and egress to or from such airport hazards, for the purpose of maintaining and repairing such lights and marks. This authority shall not be so construed as to limit any right, power, or authority to zone property adjacent to airports and landing fields, under the provisions of any law of this state.
41-4-109	Encroachment	Prohibits constructions, reconstruction, or creation of any object or plant or allowing any tree or other vegetation to grow to a height that will encroach upon any airport protection privileges. Includes provisions for maintenance and replacement of existing structures which do not enlarge or increase the height of an existing structure. Declares encroachment to be a public nuisance and specifies abatement may be abated in the manner prescribed by law for the abatement of public nuisances. Provides for removal of encroachment on land for which airport protection privileges have been acquired.
33-1	Wildlife regulation	Directs the state Department of Natural Resources Division of Parks and Wildlife to manage and regulate wildlife. Prescribes the powers and duties of the Division and provides for the Division to adopt regulations. Authorizes the Division to determine under what circumstances, when, in which localities, by what means, and in what types and amounts wildlife may be taken. Provides for the Division to establish seasons for wildlife hunting. Restricts regulations concerning the taking of black bears.
33-3	Wildlife damage	Authorizes issuance of permits for lethal removal of wildlife by a property owner or other person when wildlife is causing excessive damage to property. Specifies requirements and conditions concerning permits.
		<b><u>Code of Colorado Regulations</u></b>
2 CCR 406	Wildlife regulation	Establishes the Division's regulatory program for management and protection of wildlife. Includes provisions for licensing and permitting and prescribes manner of taking and disposition of wildlife. Includes provisions related to migratory birds and nongame and game wildlife. Establishes regulations for take of wildlife causing damage to property.

**CONNECTICUT**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b><u>Connecticut Statutes</u></b>
Chapter 266 266-15-88 through 266-15-97	Airport zoning	Declares the prevention of the creation or establishment of airport hazards is necessary in the interest of public health, public safety, and general welfare. Directs the Commissioner of Transportation adopt an airport approach plan for each publicly-owned airport in the state. Specifies the airport approach such plan must indicate the circumstances in which structures or trees are or would be airport hazards, the area within which measures for the protection of the airport's aerial approaches should be taken, and what the height limits and other objectives of such measures should be. Specifies the Commissioner must consider the character of the flying operations expected to be conducted at the airport, the nature of the terrain, the height of existing structures and trees above the level of the airport, the practicability of lowering or removing existing obstructions and all other material matters in adopting the plan. Requires local governments to adopt airport zoning regulations when determined necessary to protect airport approaches. Provides for establishment of a joint airport zoning board when the airport and airport hazard area are wholly or partially located in more than one jurisdiction.

		Establishes permit requirements for new structures or uses, changes to existing uses, and replacement or substantial alteration of a nonconforming uses in airport hazard areas. Provides for local governments to grant variances to airport zoning regulations and provides for variances to be conditioned to require the property owner to allow (at government expense) the installation, operation, and maintenance of markers and lights to indicate the presence of an airport hazard.
266-15-88	Airport hazard	Defines "airport hazard" as "any structure or tree which obstructs or may hereafter obstruct the aerial approaches of a publicly-owned airport."
266-15-34	Airport protection privileges	Defines "airport hazard" as "any structure, object of natural growth or use of land which obstructs the air space required for the flight of aircraft in landing or taking off at any airport, heliport or restricted landing area or is otherwise hazardous to such landing or taking-off." Defines "airport protection privileges" as "easements through or other interests in air space over land or water, interests in airport hazards outside the boundaries of airports, heliports or restricted landing areas and other protection privileges the acquisition or control of which is necessary to insure safe approaches to the landing areas of airports, heliports and restricted landing areas and the safe and efficient operation thereof."
Chapters 490 and 495	Wildlife	Establishes requirements for the Department of Environmental Protection regulation, protection, and management of wildlife. Includes provisions for hunting, trapping, possession, and transportation of wildlife and requirements for wildlife permits and licenses. Establishes requirements for and restrictions on take of wildlife and includes provisions for certain wildlife species. Includes requirements for designation and protection of endangered species.
<b><u>Connecticut Administrative Rules</u></b>		
13b-46	Airport licensing	Establishes regulations for Department of Transportation licensing of airports. Provides for consideration of compliance with minimum standard of safety in determination regarding issuance of certificate of approval.
Title 26	Wildlife regulations	Establishes Department of Environmental Protection regulatory program for regulation, protection, and management of wildlife. Includes provisions for protection of endangered species, requirements concerning certain wildlife species, and permitting of hunting, trapping, possession, and take of wildlife, migratory birds, and nuisance wildlife control.

**DELAWARE**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
<b><u>Delaware Code</u></b>		
2 § 602 2 § 603	Obstructions in airport approach areas	Requires a building permit issued by the local government for the construction, erection, placement or alteration of any smokestack, tree, silo, flagpole, elevated tank, power line, radio or television tower, antenna, building, structure or other improvement to real property which: (1) is greater than 200 feet in height above ground level; (2) is greater in height than an imaginary trapezoidal shape, beginning at the end of a runway of a public use airport, at an initial width of 50 feet, and extending outward and upward at a slope of 100:1 for a distance of 20,000 feet, to a width of 3,000 feet at its ending point; (3) is located within the runway approach area of each public use airport in the State; or (4) otherwise constitutes an obstruction as defined in under state law or FAA regulations. Requires Department of Transportation approval of the permit application. Establishes provisions for

		Department review and permit issuance. Authorizes the Department to enter upon land within airport approach areas and remove obstructions to aviation. Provides for compensation to owners of obstructions erected prior to the enactment of the statutory provisions and for condemnation of property interests for these purposes in the manner accorded by general law. Prohibits new structures or changes to existing structures greater than 200 feet above ground level without approval from the Department. Provides for penalties for violations of the building permit requirements.
2 § 310	Hunting from aircraft	Prohibits intentional killing or attempts to kill birds or animals while in flight.
Title 2 Chapter 9	Airports	Authorizes local governments to acquire property interests (including easements and air space rights) in airport hazards as needed to ensure safe approaches to landing areas and safe airport operations.
Title 7 Chapters 1 through 7	Wildlife regulation	Directs the Department of Natural Resources to manage and conserve protected wildlife, issue license and permits, and adopt rules concerning wildlife protection and management. Provides for regulations and prohibitions for game animals, game birds, migratory birds, and other wildlife. Prescribes requirements and methods for possession, hunting and trapping wildlife. Includes provisions for protection and permitting concerning endangered species.
7 § 114	Wildlife damage	Establishes procedures and requirements for the Department to permit a property owner to kill or capture protected wildlife when wildlife are damaging crops, property, or other interests on land.
Title 9	Zoning	Establishes general zoning requirements for specified counties.
		<b><u>Delaware Administrative Code</u></b>
2151	Airport licensing	Establishes regulations for criteria and procedures for airport licensing.
2152	Airport obstructions	Establishes regulations implementing statutory airport obstruction provisions. Includes procedures and requirements for building permits, temporary obstructions, standards for determining obstructions, and removal of obstructions.
3900	Wildlife	Establishes regulatory program implementing statutory wildlife provisions prescribing permitting, take methods, nuisance game animals, federally listed and state protected species, and other requirements concerning management and protection of wildlife.

**FLORIDA**

<b><u>Section</u></b>	<b><u>Subject</u></b>	<b><u>Summary</u></b>
		<b><u>Florida Statutes</u></b>
333.065	Airport zoning	Declares airport hazards and the incompatible use of land in the vicinity of airports to be public nuisances and specifies that prevention of the creation or establishment of airport hazards and incompatible land uses is necessary in the interest of public health, public safety, and general welfare. Requires permit from the Department of Transportation for structures that would exceed federal height obstruction standards. Requires local governments within which an airport hazard is located to adopt airport zoning regulations. Provides for establishment of a joint airport zoning board when the airport and airport hazard area are wholly or partially located in more than one jurisdiction. Provides for incorporation of airport zoning regulations in to a comprehensive zoning ordinance. Specifies the more stringent limitation controls in the event of a conflict between airport zoning regulations and other

		regulations. Includes provisions for adoption of airport zoning regulations. Establishes requirements for new structures or uses or substantial changes to existing uses in airport hazard areas. Includes provisions for permits to authorize replacement or substantial alteration of a nonconforming structure or natural growth when the permit will not result in a greater hazard to air navigation. Restricts permits for nonconforming uses determined to be abandoned or 80% destroyed. Provides for local governments to grant variances to allow structures or uses that would not conform to the airport zoning regulations. Provides that variances may be conditioned to require the property owner to install, operate, and maintain markers and lights to indicate the presence of an airport hazard. Requires the Department of Transportation to adopt guidelines regarding compatible land uses in the vicinity of airports.
333.01	Airport hazard	Defines “airport hazard” as “any structure or tree or use of land which would exceed the federal obstruction standards as contained in 14 C.F.R. ss. 77.21, 77.23, 77.25, 77.28, and 77.29 and which obstructs the airspace required for the flight of aircraft in taking off, maneuvering, or landing or is otherwise hazardous to such taking off, maneuvering, or landing of aircraft and for which no person has previously obtained a permit or variance pursuant to s. 333.025 or s. 333.07.” Defines “airport hazard area” as “any area of land or water upon which an airport hazard might be established if not prevented.” Defines “airport land use compatibility zoning” as “airport zoning regulations restricting the use of land adjacent to or in the immediate vicinity of airports...to activities and purposes compatible with the continuation of normal airport operations including landing and takeoff of aircraft in order to promote public health, safety, and general welfare.”
Chapter 379	Wild animal life	Includes provisions for wildlife management, including hunting, capture, and trapping of wildlife and species-specific (e.g., alligator) management provisions Provides for penalties for permit violations and specified actions related to wildlife.
Florida Statutes § 379.223	Airport wildlife management	Recognizes the need to conduct authorized airport wildlife management activities to “prevent jeopardy to human life or aircraft safety” and provides that such actions will not be subject to penalties or restrictions under state law or superseded by state or local laws. Specifies that an airport operator’s “authorized action taken for the purpose of protecting human life or aircraft safety from wildlife hazards” will not be subject to penalties or sanctions under state law, provided these actions were not conducted in a negligent manner. Defines the actions that fall within this statutory protection to include action within the scope of any of the following: (1) airport’s wildlife hazard management plan, as approved by the Federal Aviation Administration; (2) depredation permit issued by the United States Fish and Wildlife Service; (3) standing order of the United States Fish and Wildlife Service; or (4) Rule 68A-9.010(4) or Rule 68A-27.002, Florida Administrative Code, or a permit authorizing the harassment of wildlife issued by the Fish and wildlife Conservation Commission. Identifies types of actions that do not qualify for the protection. Specifies the statute governs if an authorized action conflicts with a development permit or other land use or environmental permit, regulation, or authorization.
<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b>Florida Administrative Code</b>
Chapter 14-60	Airport regulation	Establishes Department of Transportation regulations for elimination of airport hazards, providing airfield standards for airports, and specifying

		standards for airport marking and lighting. Provides for licensing and registration of airports and includes provisions for airspace protection.
Rule 68A-9.012	Take of wildlife on airport property	Adopts regulations of the Florida Fish and Wildlife Conservation Commission for the scope of authorized take of wildlife, and the acceptable methods for take, on airport property “for the purpose of ensuring aircraft and human safety”. Provides that state authorization is not required for take of federally protected species pursuant to a federal authorization. Authorizes under specified circumstances the harassment and take of state-listed species and Florida black bears related to actions specified in an FAA-approved wildlife hazard management plan and on imminent threat to aircraft and human safety. Specifies permitted and prohibited methods of harassment, capture, take, and disposition of wildlife. Allows take of other (non-listed) wildlife on airport property if its “presence poses a potential threat to aircraft and human safety” (Rule 68A-9.012(3), Florida Administrative Code).
Rule 68A-9.010	Nuisance wildlife	Specifies provisions to authorize take of nuisance wildlife by a property owner. Identifies prohibited methods of take for nuisance wildlife and authorizes take by other methods Exempts certain species (e.g., deer and black bear) from the nuisance take provisions and include conditions for take of other species (e.g., bats and bobcats). Specifies that birds protected under the federal Migratory Bird Treaty Act may not be taken without federal authorization (Rule 68A-9.010(1), Florida Administrative Code). Includes provisions for disposition (transportation, release, and euthanasia) of nuisance wildlife taken pursuant to this authorization also are specified (Rule 68A-9.010(3), Florida Administrative Code).
68A-27	Listed Species	Establishes a regulatory program for recognition of federal protection and authorizations for federally listed species and state management, regulation, and permitting concerning state-designated species.
Chapters 68A–68C	Wildlife regulations	Establishes the Commission’s regulatory program for wildlife in the state. Includes provisions for management of specific wildlife species and includes provisions and prohibitions for protection and management of wildlife.

**GEORGIA**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b>Official Code of Georgia Annotated</b>
Title 6 and 6-3-26	Aviation	Establishes powers and duties of the Department of Transportation and local governments concerning aviation facilities. Provides powers and duties of airport authorities. Authorizes local government to acquire rights or easements to place markers and maintain equipment on buildings and other structures or obstructions for the safe operation of aircraft using airports and landing fields. Specifies rights and property interests may be acquired by purchase, grant, or condemnation and includes provisions for a period of years or perpetually.
32-9-8	Airport licensing	Establishes requirements for Department of Transportation approval and licensing of airports and includes provisions for initial licensing and renewal, including minimum standards for airport layout, navigational aids, lighting, approach surfaces, landing surfaces, runway markings, and separation between airport sites.
Title 27 Chapter 1	Wildlife regulation	Authorizes the Department of Natural Resources to regulate and manage wildlife and to establish programs for wild animal licenses and permits and for wildlife restoration, management, and preservation. Authorizes the Department to take wildlife under specified conditions and includes

		procedures and requirements for authorization of take, capture, possession, and transport of wildlife by others in the state. Includes prohibitions and conditions for take, hunt, possession, or transport of specified wildlife species and for nongame species. Prohibits destruction of or damage to wildlife habitats unless authorized. Specifies requirements for protected species.
Title 36 Chapter 66	Zoning	Establishes general zoning requirements and procedures for local governments.
		<b>Georgia Rules and Regulations</b>
672-9	Airport licensing	Establishes regulations for airport licensing. Specifies the intent of the Department regulations is to provide a safer environment for the operation of aircraft.
672-9.-05	Landfill siting	Establishes regulations concerning construction or establishment of a solid waste landfill within six miles of a public airport unless approved by the Department. Includes procedures and requirements for notice and approval of landfill construction or establishment. Specifies criteria for Department evaluation of request, including adverse impact on aviation safety.
391-4	Wildlife regulations	Establishes regulatory program for the Department of Natural Resources regulation and management of wildlife. Includes provisions for hunting, wildlife habitats, and protection of endangered and threatened species.

**HAWAII**

<u>Section</u>	<u>Subject</u>	<u>Summary</u>
		<b><u>Hawaii Revised Statutes</u></b>
Title 15 Chapter 262	Airport zoning	Declares an airport hazard to be a public nuisance and specifies that the prevention of the creation or establishment of airport hazards is a public purpose. Specifies that prevention of the creation, maintenance, or establishment of airport hazards should be accomplished, to the extent legally possible, by exercise of the police power, without compensation. Authorizes the Department of Transportation to adopt airport zoning regulations to divide airport hazard areas into zones and to establish land uses and height restrictions for these zones. Specifies the more stringent limitation controls in the event of a conflict between airport zoning regulations and other regulations. Includes procedures for adoption of airport zoning regulations and for enforcement. Establishes permits requirements for new structures or uses, changes to existing uses, and replacement or substantial alteration of a nonconforming structure in airport hazard areas. Provides that permits may be conditioned to require the property owner to allow (at state expense) the installation, operation, and maintenance of markers and lights to indicate the presence of an airport hazard.
262-1	Airport hazard	Defines "airport hazard" as "any structure or tree which obstructs the air space required for the flight of aircraft in landing or taking-off at an airport, or any use of land which creates a dangerous condition, including the placement of strong lights which blind pilots during such operations." Defines "airport hazard area" as "any area of land or water upon which an airport hazard might be established if not prevented." Defines "airport protection" as "protection against an airport hazard."
263-10	Hunting from aircraft	Prohibits intentional killing of animals or attempts to do so from aircraft while in flight.
Chapter 195-D	Wildlife conservation	Establishes requirements for conservation of wildlife. Includes provisions for designation and protection of endangered and threatened species and for

		penalties and enforcement.
		<b>Hawaii Administrative Rules</b>
Chapter 19-11	Airport licensing	Establishes the Department of Transportation regulations for airport site approval and airport licensing. Includes provisions for safety considerations in airport site evaluation.
Chapter 19-12	Airport zoning	Establishes the Department of Transportation airport zoning regulations to implement the statutory requirements. Includes provisions for height limitations, use restrictions, nonconforming uses, permits, exceptions, and enforcement.
Chapters 121-124	Wildlife regulations	Establishes wildlife regulatory program of the Division of Forestry and Wildlife to implement the statutory provisions. Includes provisions for designation and protection of threatened and endangered species. Specifies requirements for game bird and game mammal hunting.

**IDAHO**

<u>Section</u>	<u>Subject</u>	<u>Summary</u>
		<b>Idaho Code</b>
Title 21 – Chapter 5	Airport zoning	Declares an airport hazard is a public nuisance and an injury to the community served by the airport. Specifies public interest and necessity for preventing the creation or establishment of airport hazards. Specifies prevention of airport hazards should be accomplished through the police power, without compensation, to the extent legally possible. Identifies elimination, removal, mitigation, marking, and lighting of existing public hazards as public purposes for which public funds and property acquisition are authorized.
21-501	Aviation hazard	Defines “aviation hazard” as “any new or existing structure, object of natural growth, use of land, or modification thereto, which endangers the lives and property of users of an airport, or of occupants of land in its vicinity, and that reduces the size of the area available for landing, taking off and maneuvering of aircraft, or extends up into the airspace between airports to cause disastrous and needless loss of life and property.” Defines “aviation hazard area” as “any area of land or water upon which an aviation hazard might be established if not prevented.” Directs the Department to adopt airport zoning regulations for aviation hazard areas within the state. Specifies procedure for zoning an aviation hazard area and the components of the regulations, including provisions for permits and variances and conditions for marking and lighting airport hazards.
21-515	Marking hazards	Requires any structure, when determined by the Idaho Transportation Department to be a hazard or potential hazard to the safe flight of aircraft, to be plainly marked, illuminated, painted, lighted or designated in a manner to be approved by the Department.
Title 36 – Chapter 11	Wildlife regulation	Includes provisions for take of wildlife and permitted and prohibited methods of take. Includes provisions for captive wildlife and restrictions on possession, sale, transportation, and use of wildlife. Specifies measures for protection of migratory birds. Authorizes control, trapping, and removal of wild animals or birds and destruction of their houses, dams, or structures for the purpose of protecting property from depredation under specified conditions.
Title 36 – Chapter 24	Species conservation	Establishes provisions concerning state action regarding a request to delist federally listed endangered and threatened species and development of state delisting management plan.

		<b><u>Idaho Administrative Rules</u></b>
39.04.01	Conformity with federal regulations	Specifies state regulations regarding aircraft navigation within airspace will be kept in conformance with the current FAA regulations. Incorporates FAA regulations where not inconsistent with existing state regulations.

**ILLINOIS**

<b><u>Section</u></b>	<b><u>Subject</u></b>	<b><u>Summary</u></b>
		<b><u>Illinois Compiled Statutes</u></b>
620 ILCS 25	Airport zoning	Requires the Department to formulate, adopt and revise, when necessary, an airport approach plan for each publicly-owned airport in the state. Specifies the plan must indicate the circumstances in which structures and trees are or would be airport hazards, the area within which measures for the protection of the airport's aerial approaches should be taken, and what the height limits and other objectives of such measures should be. Specifies considerations for Department in adopting the plan, including the character of the flying operations expected to be conducted at the airport, the traffic pattern and regulations affecting flying operations at the airport, the nature of the terrain, the height of existing structures and trees above the level of the airport, and the possibility of lowering or removing existing obstructions. Authorizes local governments having an airport hazard area wholly or partly within its territorial limits to adopt, administer, and enforce airport zoning regulations for that part of such airport hazard area within its territorial limits or which extends not more than two miles beyond its territorial limits. Specifies the regulations may divide such area into zones, and, within such zones, specify the land uses permitted and regulate and restrict the height to which structures and trees may be erected or allowed to grow. Provides for joint airport zoning boards and for incorporation of airport zoning regulations into comprehensive zoning regulations. Establishes procedure for adoption of airport zoning regulations.
620 ILCS 25/11	Airport hazard	Defines "airport hazard" as "any structure or tree or use of land which obstructs the airspace required for the flight of aircraft in landing or taking-off at an airport or is otherwise hazardous to such landing or taking-off of aircraft." Defines "airport hazard area" as "any area of land or water, or both, upon which an airport hazard might be established if not prevented . . ., including any such area which has been declared to be an "airport hazard area" by the Department in connection with any airport approach plan adopted by the Department."
620 ILCS 25/30	Height restrictions	Requires a Department permit to erect, add to the height of, or replace any structure contravening the provisions of subpart (c) of Part 77 of the Federal Aviation Regulations. Provides for marking and lighting conditions on the permit for the structure. Specifies procedures for issuance of permits and Department adoption of regulations.
520 ILCS 5	Wildlife code	Authorizes the Department to have the authority to manage wildlife and regulate the taking of wildlife for the purposes of providing public recreation and controlling wildlife populations. Requires the Department to take all measures necessary for the conservation, distribution, introduction and restoration of birds and mammals. Makes a hunting or trapping device, vehicle or conveyance, when used or operated illegally, or attempted to be used or operated illegally by any person in taking, transporting, holding, or conveying any wild bird or wild mammal, a public nuisance. Specifies all wildlife is the property of the state and identifies the wildlife protected by the



		Department. Includes provisions and restrictions for specified wildlife species. Provides conditions for methods of take and disposition of wildlife. Prohibits take or possession of a bird of prey (raptor) without first obtaining a license or appropriate permit from the Department.
520 ILCS 10	Endangered and threatened species	Includes provisions for designation, protection, and permitting of state-listed endangered and threatened species.
		<b><u>Illinois Administrative Code</u></b>
Title 92 – Part 14	Aviation safety	Establishes provisions for classification and approval of airports. Specifies requirements concerning obstruction and airport marking. Establishes design and layout standards for airports and restrictions on use. Specifies an airport must initially and continually be free of obstructions (e.g., buildings, trees, and power poles) to be eligible for a certificate of approval.
14.105	Airport hazard	Defines “airport hazard” as “any structure, object of natural growth, or use of land that obstructs the airspace required for the flight of aircraft in landing or takeoff at any airport or restricted landing area or is otherwise hazardous to such landing or takeoff of aircraft.”
<b><u>Section</u></b>	<b><u>Subject</u></b>	<b><u>Summary</u></b>
Title 92 – Part 16	Airport hazard zoning	Declares an airport hazard is a public nuisance and an injury to the community served by the airport. Specifies public interest and necessity for preventing the creation or establishment of airport hazards. Specifies prevention of airport hazards should be accomplished through the police power, without compensation, to the extent legally possible. Identifies elimination, removal, mitigation, marking, and lighting of existing public hazards as public purposes for which public funds and property acquisition are authorized. Specifies height restrictions for certain airports for any growth, construction, or maintenance of any vegetation or structure and includes provisions for establishment of height limitations for specified surfaces. Establishes use restrictions with the specified areas. Includes procedures for adoption of airport zoning regulations. Requires issuance of permits for any use, change in use (e.g., constructing or altering a structure, planting vegetation, erecting vehicles or cranes) within the specified area when the use may create an airport hazard. Includes provisions for variances from airport zoning regulations, required considerations for grant of a variance, and imposition of variance conditions regarding installation, operation, and markers and lights to indicate the presence of an airport hazard.
16.30	Airport hazard	Defines “airport hazard” as “any structure, object of natural growth, or use of land that obstructs the airspace required for, or is otherwise hazardous to, the flight of aircraft in landing, takeoff, or maneuvering at or near an airport.”
Title 17 – Part 525	Nuisance wildlife control	Includes procedures for issuance of nuisance wildlife control permit and conditions concerning authorization of permits for protected species which are causing damage to property or a risk to human health or safety on the land of another.

**INDIANA**

<b><u>Section</u></b>	<b><u>Subject</u></b>	<b><u>Summary</u></b>
		<b><u>Indiana Code</u></b>
IC 8-22	Airport	Establishes requirements and procedures for designation of airport

	development	development zone area. Includes provisions for application of airport development zone requirements. Provides for establishment of airport authorities and specifies requirements related to authority operations.
IC 8-22-3-14	Restricted zones	Authorizes establishment of a restricted zone to provide free air space for the safe descent and ascent of aircraft and for the proper and safe use of an airport or landing field. Authorizes acquisition by condemnation or purchase of the right to prevent the erection of, and to require the removal of, structures and trees within the restricted zone. Includes considerations for adoption of the regulations, including the neighborhood character, uses to which the property is to be zoned, nature of the terrain within the airport hazard area, and expected flying operations.
IC 14-22-11	Wildlife licenses and permits	Establishes requirements for permits and licenses regarding wildlife actions;
<b><u>Indiana Administrative Code</u></b>		
105 IAC 3-3	Airport site approvals	Specifies purpose to provide for the protection and promotion of safety in aeronautics. Provides for classification of airports and requirements for approval of airport site.
312 IAC 9-1	Wildlife regulation	Establishes restrictions and standards applicable to wild animals. Includes provisions for capture and trapping of wildlife and specifications for permitted and prohibited methods of take. Specifies restrictions for regulation and take of certain wildlife species and conditions related to these species. Identifies and includes provisions for specified actions and particular species.

**IOWA**

<b><u>Section</u></b>	<b><u>Subject</u></b>	<b><u>Summary</u></b>
Chapter 239	Airport zoning	Declares an airport hazard to be a public nuisance and specifies that the prevention of the creation or establishment of airport hazards is necessary in the interest of public health, public safety, and general welfare. Authorizes local governments within which an airport hazard is located to adopt airport zoning regulations. Provides for a local government to adopt airport zoning regulations for an airport hazard area outside its jurisdiction and to seek judicial action on another local government's failure to adopt regulations or join in joint regulations for that area. Provides for incorporation of airport zoning regulations in to a comprehensive zoning ordinance. Specifies the more stringent limitation controls in the event of a conflict between airport zoning regulations and other regulations. Requires appointment of airport zoning commission and includes procedures for adoption of airport zoning regulations. Establishes requirements for new structures or uses, changes to existing uses, nonconforming uses, and variances. Provides for local governments to, at government expense, require the removal or reduction of airport hazards or condition approvals on installation and operation of markers and lights to indicate the presence of an airport hazard.
329.1	Airport hazard	Defines "airport hazard" as "any structure or tree or use of land which would exceed the federal obstruction standards as contained in 14 C.F.R. § 77.21, 77.23 and 77.25 as revised March 4, 1972, and which obstruct the air space required for the flight of aircraft and landing or take-off at an airport or is otherwise hazardous to such landing or taking off of aircraft." Defines "airport hazard area" as "any area of land or water upon which an airport hazard might be established if not prevented."

Chapter 481A – 481C	Wildlife	Provides for state ownership, management, and regulation of wildlife. Includes requirements and conditions for hunting, trapping, possession, and take of wildlife. Specifies provisions for protection of endangered wildlife. Includes requirements for removal, capture, and destruction of wildlife causing damage to property or for protection of human health. Specifies requirements for issuance of permits for take of wildlife causing crop, horticultural product, tree, or nursery damage. Includes provisions concerning migratory game birds.
		<b><u>Iowa Administrative Code</u></b>
761-720	Airport licensing	Specifies regulations for site approval, registration and registration renewal requirements for public airports. Provides minimum safety standards for airports.
571-76 through 571-115 and 561-12	Wildlife regulations	Establishes regulatory program for management and protection of wildlife. Identifies and specifies requirements for wildlife species not protected under state law and species designated as endangered or threatened. Includes provisions for hunting, trapping, and capture of specified wildlife. Provides for control of nuisance wildlife

**KANSAS**

<b><u>Section</u></b>	<b><u>Subject</u></b>	<b><u>Summary</u></b>
		<b><u>Kansas Statutes</u></b>
3-301 through 3-708	Airport zoning	Declares airport hazards to be a public nuisance. Authorizes local governments meeting specified conditions to adopt airport zoning regulations and establishes procedures for development and approval of regulations. Specifies the local government regulations may divide the area into zones and, within the zones, specify the land uses permitted and regulate and restrict the height to which structures may be erected or objects of natural growth may be allowed to grow. Requires the appointment of an airport zoning planning agency for initial adopt of the airport zoning regulations. Provides for incorporation of airport zoning regulations in to a comprehensive zoning ordinance. Specifies the more stringent limitation controls in the event of a conflict between airport zoning regulations and other regulations. Includes procedures for adoption of airport zoning regulations. Establishes requirements for new structures or uses or substantial changes to existing uses in airport hazard areas. Includes provisions for permits to authorize replacement or substantial alteration of a nonconforming structure or natural growth when the permit will not result in a greater hazard to air navigation. Provides for local governments to grant variances to allow structures or uses that would not conform to the airport zoning regulations. Provides that variances may be conditioned to require the property owner to allow (at government expense) the installation, operation, and maintenance of markers and lights to indicate the presence of an airport hazard.
3-701	Airport hazard	Defines “airport hazard” as “any structure or tree or use of land which obstructs the airspace required for the flight of aircraft in landing or taking-off at an airport or is otherwise hazardous to such landing or taking off of aircraft.” Defines “airport hazard area” in relevant part as “any area or land or water upon which an airport hazard might be established if not prevented.”
3-711	Acquisition of property	Provides for acquisition of property interests (including air rights and aviation easements) through purchase, grant, or condemnation when necessary to

		protect airport approaches or remove, lower, or terminate a nonconforming use.
32-955	Wildlife damage	Specifies wildlife damage control permits may be required for wildlife damage control by use of poison, poisonous gas, smoke or ferrets or by use of any smoke gun or other device for forcing smoke or any other asphyxiating or deadly gas or liquid into the holes, dens, runways or houses of wildlife.
32-901 through 32-999	Wildlife regulation	Includes provisions for regulation and permitting of wildlife by the Kansas Fish and Wildlife and Parks Commission. Specifies state ownership of wildlife. Establishes programs for conservation and deer management.
32-957 and 32-960	Protected species	Includes provisions for state designation of endangered and threatened species and nongame species in need of conservation.
		<b><u>Kansas Administrative Code</u></b>
115-7	Wildlife regulation	Includes provisions for regulation, management, and permitting of game and other wildlife.
115-15	Protected species	Identifies state-designated endangered and threatened species and nongame species in need of conservation.

**KENTUCKY**

<b><u>Section</u></b>	<b><u>Subject</u></b>	<b><u>Summary</u></b>
		<b><u>Kentucky Revised Statutes</u></b>
Chapter 150	Wildlife regulations	Establishes provisions for state regulation, management, and permitting of actions related to wildlife. Authorizes destruction or control any wild animal, fish or wild birds, protected or unprotected, which are causing damage to persons, property or other animals, fish or birds or spreading diseases and which should be eliminated or controlled to prevent further damage. Provides for depredation permits for take of hunting wild elk, deer, wild turkey, or bear. Prohibits take of migratory fowl unless authorized by federal permit. Includes restrictions on take, disturbance, or destruction of bird nests or eggs.
Chapter 183	Airport zoning	Establishes the Kentucky Airport Zoning Commission to adopt rules concerning airport zoning regulations and exercise jurisdiction over specified facilities. Specifies the Commission will identify areas around airports needed for safe maneuvering, approach, and landing of aircraft. Specifies factors for Commission consideration regarding airport zoning regulations, including the character of flying operations conducted at the airport, the nature of the terrain, the height of existing structures and trees above the level of the airport, the views of officials of the Federal Aviation Administration as to the safe approaches required for operations at the airport, the future development of the airport including extensions to runways that may be required, the density of dwellings that may safely be permitted in the area, protection of the public investment in the airport and its facilities, the interest of the public in developing a sound public air transportation system within the state and the views and opinions of those owning land in such area. Includes provisions for grant of variances for uses not conforming to the airport zoning regulations. Provides for acquisition of property interests (including air rights and aviation easements) through purchase, grant, or condemnation when necessary to protect airport approaches or remove, lower, or terminate a nonconforming use.

<b><u>Kentucky Administrative Regulations</u></b>		
600 KAR 50:030 50:040 50:050	Kentucky Airport Zoning Commission	Establishes jurisdiction of the Kentucky Airport Zoning Commission (airspace and land). Specifies standards for basic facilities for all airports. Specifies uses allowed within the airport and uses the Commission may authorize as not constituting airport hazards (e.g., bank and financial institutions, retail and wholesale stores). Provides for application and review of a land use permit. Establishes provisions for adoption and revisions of airport zoning maps. Specifies standards for determining obstructions to air navigation.

**LOUISIANA**

<b><u>Section</u></b>	<b><u>Subject</u></b>	<b><u>Summary</u></b>
<b><u>Louisiana Revised Statutes</u></b>		
2:1	Airport hazard	(10) "Airport hazard" means any structure, object of natural growth, or use of land, which obstructs the air space required for the flight of aircraft in landing or taking off at any airport or restricted landing area or is otherwise hazardous to such landing or taking off.
2:137 2:389	Property acquisitions	Authorizes local governments to acquire by grant, purchase, or lease certain rights (perpetual or a term of years) to place and maintain markers and lights for buildings or other structures or obstruction for the safe operation of aircraft utilizing airports and landing fields. Authorizes local governments to acquire by purchase, grant, or condemnation property interests to remove, lower, or terminate a nonconforming use or provide necessary protection for an airport approach.
2:382 through 2:390	Airport zoning	Declares the prevention of the creation or establishment of airport hazards is necessary in the interest of public health, public safety, and general welfare. Authorizes local governments to adopt airport zoning regulations to divide areas surrounding airport into zones and specify land uses and restrict heights of structures and uses within these areas.
<b><u>Section</u></b>	<b><u>Subject</u></b>	<b><u>Summary</u></b>
2:382 through 2:390	Airport zoning	Provides for establishment of a joint zoning board and for incorporation of airport zoning regulations in to a comprehensive zoning ordinance. Establishes requirements for new structures or uses, changes to existing uses, nonconforming uses, and variances. Provides for local governments to, at government expense, condition permit and variance approvals on installation and operation of markers and lights to identify an airport hazard.
Title 56	Wildlife	Authorizes the Wildlife and Fisheries Commission to manage, regulate, and protect wildlife. Includes requirements and permitting, licensing, and other conditions for hunting, trapping, possession, sale and take of wildlife and provisions for actions concerning birds, game animals, protected wildlife, and certain wildlife species (e.g., deer). Provides for enforcement of and penalties for violations of wildlife requirements. Includes prohibitions for harassment or disturbance of wildlife and for interference with lawful taking of wildlife.
<b><u>Louisiana Administrative Code</u></b>		
Title 70 Part IX	Aeronautics	Includes regulations concerning identification and development of airport projects and procedures for funding of airport projects.
Title 76	Wildlife regulation	Establishes Wildlife and Fisheries Commission regulatory program for management, protection, and regulation of wildlife to implement the statutory provisions.

**MAINE**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b><u>Maine Revised Statutes</u></b>
Title 6 Chapter 13	Airport zoning	Declares an airport hazard to be a public nuisance and specifies that the prevention of the creation or establishment of airport hazards is necessary in the interest of public health, public safety, and general welfare. Authorizes local governments within which an airport hazard is located to adopt airport zoning regulations to divide areas surrounding the airport into zones and to specify the land uses and restrict the heights of structures and uses within these areas. Includes factors for consideration in adopting or revising airport zoning regulations, including the character of the flying operations expected to be conducted at the airport, nature of the terrain, height of existing structures and trees above the level of the airport, possibility of lowering or removing existing obstructions, and views of the FAA. Provides for establishment of a joint zoning board and incorporation of airport zoning regulations in to a comprehensive zoning ordinance. Establishes requirements for new structures or uses, changes to existing uses, nonconforming uses, and variances. Restricts permits for nonconforming uses determined to be abandoned or 80% destroyed. Provides for local governments to condition permit or variance approvals on installation and operation of markers and lights to indicate the presence of an airport hazard. Authorizes acquisition by purchase, grant or condemnation of an air right, easement to protect airport approaches.
Title 12 Chapters 913 through 327	Wildlife	Specifies authority for the Department of Inland Fisheries and Wildlife to manage, regulate, and protect wildlife. Includes procedures for issuance and suspension or revocation of licenses and permits. Establishes provisions for hunting and trapping seasons, requirements, and restrictions. Authorizes killing of wildlife observed causing damage to property and includes provisions applicable to specified wildlife (e.g., bears). Includes requirements and conditions for harvest and transport of wildlife.
		<b><u>Code of Maine Rules</u></b>
229-400	Airport use (Augusta Airport)	Specifies conditions for administration, operation, and use of Augusta Airport. Requires aircraft operations to conform with regulations and directives of Federal Aviation Administration, Civil Aeronautics Board, and Maine Department of Transportation.
09-137	Wildlife regulations	Establishes regulatory program of the Department of Inland Fisheries and Wildlife for management, protection, and regulation of wildlife to implement the statutory authority and provisions. Includes requirements and conditions for hunting and trapping activities, wildlife in captivity, and endangered species. Includes specific requirements for significant wildlife habitat.

**MARYLAND**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b><u>Maryland General Statutes (Annotated Code of Maryland)</u></b>
5-4A-01	Airport districts	Defines “airport district” to include designated “land on which a privately owned commercial or public use airport is situated” and designated “private land proximate to a commercial or public use airport.” Establishes state purpose to preserve airport districts for the purpose of conserving land that is available for the future development of airports, ensuring access to commercial and recreational aviation in the State; and protecting airports and land proximate to airports as open space land. Authorizes local governments

		to establish airport districts and to acquire easements for development rights in airport districts. Prescribes land use restrictions on property subject to easement.
5-501 through 5-511	Airport zoning by state	Authorizes the Maryland Aviation Administration to adopt airport zoning regulations to protect the aerial approaches of any airport owned by the state. Includes requirements and conditions for state regulations. Specifies the more stringent limitation prevails in the event of conflict between the airport zoning regulations and other regulations. Includes list of specific uses (e.g., transmission lines, manufacturing facilities emitting smoke that might interfere with safe airport operations, or rifle ranges) that are prohibited in areas subject to airport zoning regulations unless otherwise authorized. Requires a permit for substantially alteration of a nonconforming structure or use or for any activity otherwise prohibited by the statute.
5-604 through 5-617	Airport zoning by local governments	Authorizes local governments to adopt airport zoning regulations to protect airport approaches. Provides for local governments to establish a joint zoning board. Includes factors adopting or revising airport zoning regulations, including the character of the flying operations expected to be conducted at the airport, nature of the terrain, height of existing structures and trees above the level of the airport, possibility of lowering or removing existing obstructions, aerial traffic risks, and views of the FAA. Provides procedures for adopting and amending regulations. Establishes permit requirements and conditions for new structures or uses, changes to existing uses, and nonconforming uses, and variances. Allows local governments to condition approvals on installation and operation of markers and lights to indicate the presence of an airport hazard.
5-701 through 5-707	Obstructions	Provides for the Administration to adopt regulations concerning erection and maintenance of obstructions to air navigation with provisions for incorporation of FAA standards. Provides for obstruction marking and lights, nonconforming uses, and variances.
Title 10	Wildlife	Establishes authority and requirements for the Department of Natural Resources to manage, regulate, and protect wildlife. Includes requirements and restrictions provisions for hunting licenses and permits for wildlife and specific provisions for certain types of wildlife (e.g., waterfowl). Specifies requirements and permitting conditions for nongame and endangered species and includes provisions for captive wildlife.
		<b><u>Code of Maryland Administrative Regulations</u></b>
11.03.05	Obstructions to navigation	Establishes regulations governing the erection and maintenance of any obstruction to air navigation that interferes with the public right of freedom of transit in air commerce, endangers the lives and property of those using the air space for transportation, or endangers lives and property. Includes provisions for determining obstructions to air navigation and notice of construction of alteration. Establishes requirements for nonconforming uses and variances. Provides for enforcement and penalties.
11.03.06	Airport zoning	Establishes regulations regarding airport zoning regulations to implement the statutory provisions. Provides for establishment of airport zoning districts, height restrictions, variances, nonconforming uses, and permitting requirements and conditions.
8.03	Wildlife regulations	Establishes Department of Natural Resources regulations to manage, protect, and regulate wildlife. Provides for take of wildlife, with specific provisions for specified species and permits to possess protected species of wildlife birds. Includes provisions for general wildlife hunting regulations, upland game birds and mammals, and reptile and amphibian possession permits. Includes

		provisions concerning threatened and endangered species and provides for issuance of wildlife damage control permits.
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**MASSACHUSETTS**

<u>Section</u>	<u>Subject</u>	<u>Summary</u>
		<b><u>Massachusetts General Laws</u></b>
Title 14 Chapter 90 Section 40A – 40I	Airport zoning	Authorizes cities (except Boston) and towns to adopt airport approach regulations to divide affected areas into sections and regulate and restrict the height to which structures and trees may be erected or allowed to grow within each section. Includes procedures for adoption of airport approach regulations, state approval of regulations, and recognition of existing nonconforming uses. Includes provisions for issuance of permits and variances and provides for conditions on permits or variances to require owner of structure or tree to permit the local government (at government expense) to install, operate, and maintain suitable obstruction markers and obstruction lights. Provides for requirement to remove structures erected in violation of the regulations. Authorizes local governments to acquire easements, air rights, or other property interests for protection of airport approaches.
Title XIX Chapter 131	Wildlife	Establishes authority and requirements for the Department of Fisheries, Wildlife and Environmental Law Enforcement to manage, protect, and regulate wildlife. Specifies requirements and conditions for issuance of sporting, hunting, fishing, and trapping licenses. Specifies requirements for import, transport, and sale of wildlife and includes specific provisions for certain types of wildlife. Authorizes property owners to hunt, kill, or take wildlife damaging property under specified conditions. Includes provisions for Department technical assistance for control or elimination of damage by moose or deer to property actively devoted to agricultural or horticultural use.
		<b><u>Code of Massachusetts Regulations</u></b>
702 CMR 5.0	Airports	Specifies minimum requirements for airports concerning operations. Prohibits actions to alter, destroy, remove, carry away, or change the position of any object pertinent to the proper functioning or marking and lighting of airports or restricted landing areas or other aeronautical facilities unless authorized. Requires Massachusetts Aeronautics Commission approval of private airport safety regulations.
321 CMR 1.0–11.0		Specifies requirements and conditions for hunting of wildlife, with specific provisions for certain types of wildlife. Includes provisions for take, possession, and sale of wildlife and methods for capture, trapping, and disposition of wildlife. Establishes regulations concerning listing and taking of endangered and threatened species and species of special concern.

**MICHIGAN**

<u>Section</u>	<u>Subject</u>	<u>Summary</u>
		<b><u>Michigan Compiled Laws</u></b>
259.431 – 259.465	Airport zoning	Declares an airport hazard to be a public nuisance and specifies the prevention of creation or establishment of airport hazards, and elimination, reduction, abatement, and marking or lighting of existing airport hazards, are public purposes for which public funds may be used. Directs state Aeronautics Commission to adopt and revise an airport approach plan for each public airport. Specifies airport approach plan must determine circumstances in which structures and trees are or would be airport hazards, airport hazard



		area within which measures for protection of airport's aerial approaches should be taken, and what height limits and other objectives of measures should be. Authorizes local governments after determining that an area is in an airport hazard area to adopt airport zoning regulations. Provides for establishment of joint airport zoning board and for incorporation of airport zoning regulations into a comprehensive zoning ordinance. Includes provisions for adoption of regulations and appeals of decisions. Establishes permit requirements and restrictions for new structures or uses, changes to existing uses, and nonconforming uses and provides for grant of variances. Provides permits and variances may be conditioned to require property owner to allow (at government expense) installation, operation, and maintenance of markers and lights to identify an airport hazard.
<b>Section</b>	<b>Subject</b>	<b>Summary</b>
259.481 – 259.493	Tall structures	Requires permits from the Commission for establishment of structures meeting certain criteria, including structures that: increase the height of an existing structure, are higher than 200 feet above the ground elevation at the structure's site, or are higher than an imaginary plane extending outward and upward at specified slopes. Includes procedures for application and decisions on permits and includes provisions for enforcement and penalties.
259.433 259.434	Airport hazard	Defines “airport hazard” as “any structure or tree or use of land or of appurtenances thereof which obstructs the air space required for the safe flight of aircraft in landing or taking off at an airport or is otherwise hazardous or creates hazards to such safe landing or taking off of aircraft.” Defines “airport hazard area” as “any area of land or water, or both, upon which an airport hazard might be established if not prevented . . . including any such area which has been declared to be an “airport hazard area” by the Michigan aeronautics commission in connection with any airport approach plan adopted by said commission.”
Chapter 324	Wildlife	Establishes regulations for take, possession, sale, transportation, and regulation of wildlife. Includes provisions for permitting of take of wildlife and prohibitions and restrictions on killing, trapping, and injuring certain types of wildlife unless authorized.
		<b><u>Michigan Administrative Code</u></b>
R 259.291 through 259.254	Airport hazards and tall structures	Establishes regulations concerning airport hazards and tall structures to implement the statutory provisions. Includes provisions for development of airport zoning regulations, nonconforming uses, and approval of structures meeting specified criteria. Declares that an encroachment upon an airport protection area arising out of the erection, rebuilding, alteration, growth, or maintenance of a structure, vegetation, or other object constitutes a public nuisance and may be abated.
R 299.1021 through R 229.1028	Endangered and threatened species	Specifies lists of endangered and threatened species.

**MINNESOTA**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b><u>Minnesota Statutes</u></b>
360.062 through 360.074	Airport zoning	Declares an airport hazard to be a public nuisance and specifies that the prevention of the creation or establishment of airport hazards, and the elimination, removal, alteration, or mitigation are public purposes for which public funds may be used. Authorizes local governments within which an airport hazard is located to adopt airport zoning regulations. Provides for establishment of a joint airport zoning board when the airport and airport hazard area are wholly or partially located in more than one jurisdiction. Specifies the Department of Transportation may recommend an airport approach plan for each public airport, which is to include the circumstances in which structures or trees are or would be airport hazards, the airport hazard area, and what measures should be taken to eliminate airport hazards. Specifies local government regulations must conform to the Department-prescribed airport approach and turning standards for airports. Requires state zoning boards for state-owned airports. Provides for incorporation of airport zoning regulations in to a comprehensive zoning ordinance. Specifies the more stringent limitation controls in the event of a conflict between airport zoning regulations and other regulations. Includes provisions for adoption and appeals of airport zoning regulations and requires state approval of regulations. Establishes requirements for new structures or uses, changes to existing uses, nonconforming uses, and variances.. Provides that permits and variances may be conditioned to require the property owner to allow (at government expense) the installation, operation, and maintenance of markers and lights to indicate the presence of an airport hazard.
		<b><u>Minnesota Statutes</u></b>
360.074	Property acquisition	Authorizes local governments to acquire property interests (including easements and air rights) to remove, lower, or otherwise terminate a nonconforming structure or use or protect an airport approach.
Chapter 97A – 97B	Wildlife	Provides for state ownership of wildlife and specifies authority and requirements for the Department of Natural Resources to manage, protect, and regulate, permit, and license actions related to wildlife. Includes provisions for hunting, trapping, and fishing, possession and sale of wildlife, and for regulation of migratory birds. Specifies wildlife requirements for take of wildlife and their structures when the wildlife is damaging property. Includes requirements and conditions for licenses to authorize actions to take, buy, sell, transport, or possess protected wild animals and provisions for licensing related to specified wildlife species. Specifies enforcement provisions and penalties.
		<b><u>Minnesota Rules</u></b>
8800	Airport regulations	Establishes regulations concerning height restrictions and determination of air obstructions to navigation. Includes provisions concerning airport licensing. Provides regulations concerning airport zoning regulations to implement the statutory provisions.
6212	Wildlife regulations	Establishes Department of Natural Resources regulatory program to implement the statutory provisions. Includes requirements and conditions for licenses and permits and provisions for regulation and protection of endangered and threatened species. Specifies requirements and conditions for hunting and for take and possession of wildlife permits.

**MISSISSIPPI**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
61-7	Airport zoning	Declares an airport hazard to be a public nuisance and specifies that the prevention of the creation or establishment of airport hazards is necessary in the interest of public health, public safety, and general welfare and should be accomplished to the extent legally possible without compensation. Authorizes local governments within which an airport hazard is located to adopt airport zoning regulations. Provides for establishment of a joint airport zoning board when the airport and airport hazard area are wholly or partially located in more than one jurisdiction. Provides for incorporation of airport zoning regulations into a comprehensive zoning ordinance. Specifies the more stringent limitation controls in the event of a conflict between airport zoning regulations and other regulations. Requires appointment of an airport zoning commission before initial adoption. Includes provisions for adoption of airport zoning regulations. Establishes permit requirements for new structures or uses, changes to existing uses, and nonconforming uses in airport hazard areas and provides for grant of variances. Provides that permits variances may be conditioned to require the property owner to allow (at government expense) the installation, operation, and maintenance of markers and lights to indicate the presence of an airport hazard.
61-7-3	Airport hazard	Defines "airport hazard" as "any structure or tree or use of land which obstructs the airspace required for the flight of aircraft in landing or taking-off at any airport or is otherwise hazardous to such landing or taking-off of aircraft." Defines "airport hazard area" means any area of land or water upon which an airport hazard might be established if not prevented as provided in this chapter."
49-04 49-05 49-08	Wildlife	Provides authority and direction to the Department of Wildlife, Fisheries and Parks for management, regulation, and protection of wildlife. Includes prohibitions and provisions for protection on birds and game and fish management. Establishes requirements for designation and protection of nongame wildlife in need of management and of endangered species. Specifies prohibitions and requirements for actions to import, transfer, sell, purchase or possess wild animals.
<b><u>Mississippi Administrative Code</u></b>		
37-1-5101	Airports	Establishes regulations for funding of airport construction and improvement projects.

**MISSOURI**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
<b><u>Missouri Revised Statutes</u></b>		
Chapter 305	Airport zoning	Declares an airport hazard to be a public nuisance. Declares the prevention of the creation or establishment of airport hazards and elimination, removal, alteration, or marking and lighting of airport hazards to be public purposes for which public funds may be used and to be necessary in the interest of public health, safety, and general welfare. Provides for adoption of airport zoning regulations for areas within two miles of the airport boundary. Includes specific zoning requirements for Greene County. Provides for recognition of nonconforming uses existing at the time the zoning regulations are adopted. Provides for establishment of an airport zoning committee before initial adoption. Includes provisions for adoption of airport zoning regulations. Establishes requirements for new structures or uses or substantial changes to

		existing uses, and for replacement of or changes to nonconforming uses. Provides for local governments to grant variances to allow structures or uses that would not conform to the airport zoning regulations and to condition variance to require the property owner to install, operate, and maintain markers and lights to indicate the presence of an airport hazard.
Chapter 252	Wildlife	Declares ownership of wildlife to be in the state. Prohibits take, pursuit, killing, possession or disposal of wildlife except in the manner, at the time, and to the extent authorized by state regulations. Provides penalties for violations. Includes provisions and establishes prohibitions for endangered species.
		<b>Code of State Regulations</b>
Title 3 Division 10	Wildlife regulations	Establishes the Department of Conservation regulatory program for management and protection of wildlife. Includes provisions for hunting and fishing seasons, methods, and limits. Provides for issuance of permits and establishes standards and methods for take, trapping and confinement. Includes provisions concerning specified wildlife (e.g. migratory birds, deer).

**MONTANA**

<u>Section</u>	<u>Subject</u>	<u>Summary</u>
		<b>Montana Code Annotated</b>
Chapter 67-7	Airport zoning	Declares tall trees and structures and certain types of development in the vicinity of an airport endanger lives and property and specifies that the prevention of the creation or establishment of airport hazards are public purposes for which public funding may be used. Provides for designation of airport affected areas and adoption of zoning regulation to regulate land uses in airport affected areas. Provides for establishment of a joint airport affected area regulation board when the airport and airport affected area are wholly or partially located in more than one jurisdiction. Provides for incorporation of airport zoning regulations in to a comprehensive zoning ordinance. Specifies the more stringent limitation controls in the event of a conflict between airport zoning regulations and other regulations. Includes provisions for adoption and appeals of airport zoning regulations. Establishes permit requirements for new structures, new uses, changes to existing uses, and replacement or alteration of nonconforming uses in airport affected areas. Restricts permits for nonconforming uses determined to be abandoned or 80% destroyed.
67-7-103	Airport affected area	Defines “airport affected area” as “the land as space above the ground surface of an airport in the proximity of the airport, the use of which may be affected by the airport’s existence” including areas described in federal regulations.
Title 87 Chapter 5	Wildlife protection	Authorizes the Department of Fish, Wildlife and Parks to adopt regulations concerning protection of nongame and endangered species. Includes prohibitions regarding protected species and procedures for regulation, permitting, and authorization of take of wildlife and methods for take, possession, and capture of wildlife. Includes provisions concerning migratory birds and for protection of birds and their nest and eggs.
<u>Section</u>	<u>Subject</u>	<u>Summary</u>
		<b>Montana Rules</b>
Chapter 18.13	Aeronautics	Establishes procedures and requirements for aeronautical grants and loans.
Chapter 12.9	Wildlife regulation	Establishes Department regulations concerning wildlife management and includes provisions for management and regulation of specified wildlife (e.g.,

		black bear, gray wolf, elk). Includes provisions for game damage hunts and licenses. Includes procedures and requirements for wildlife permits, including permits for wild birds and migratory birds.
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**NEBRASKA**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b>Nebraska Revised Statutes</b>
Chapter 3	Aeronautics	Provides that the Department of Aeronautics will cooperate with the federal government and with local governments to coordinate and promote aeronautical activities. Authorizes the Department to adopt regulations and standards to address safety of persons or property in aircraft or on land and to recommend airport and restricted landing area sites. Specifies the Department will license airports, restricting landing areas, and air navigation facilities.
3-101 3-302	Airport hazard	Declares the creation or establishment of an airport hazard to be a public nuisance. Defines "airport hazard" as "any structure, object of natural growth, or use of land which obstructs the air space required for the flight of aircraft in landing or taking off at any airport or restricted landing area or is otherwise hazardous to such landing or taking off." Declares the prevention of airport hazard creation or establishment to be a public purpose
3-203 3-204 3-205	Property acquisition	Authorizes municipalities to acquire property by purchase, donation, or condemnation for airport expansion or other purposes. Allows municipalities to acquire property, property interests, or air space interests when needed to provide unobstructed air space for the landing and taking off of aircraft or for restricted landing areas. Prohibits construction or establishment of an object or planting or growth vegetation that encroaches upon these airport protection privileges and declares the encroachment a public nuisance.
3-303 through 3-311	Zoning regulations	Requires local governments with an airport hazard area to adopt and enforce airport zoning regulations meeting minimum requirements prescribed by the Department. Specifies regulations may divide the airport hazard area into zones and restrict height of uses (structures and trees). Provides for establishment of a joint zoning board when an airport and airport hazard area(s) are within different jurisdictions. Establishes procedures for adoption or airport zoning regulations. Requires a permit for construction or establishment of new structure or substantial alteration or repair of an existing structure.
3-305 3-306	Relationship to other regulations	Provides that airport zoning regulations may be incorporated into the local government's comprehensive zoning regulations. Specifies the most stringent limitation or requirement governs in event of conflict between any airport zoning regulations and other regulations.
3-311 3-312 3-313	Nonconforming uses and variances	Requires a permit for replacement or substantial alteration of a nonconforming structure or natural growth. Prohibits issuance of permit that would allow a greater hazard to air navigation. Allows grant of variance for structures or natural growth that would not conform to the airport zoning regulations based on practical difficulty or unnecessary hardship from application or enforcement and when the variance would not be contrary to the public interest. Specifies the variance may be conditioned on a requirement for the property owner to allow the local government (at government expense) to install, operate, and maintain markers and lights needed to indicate the presence of an airport hazard.
3-401	Obstructions to	Declares public right of freedom of transit in air space and specifies any

through 3-406	air navigation	obstruction to air navigation interferes with this right. Specifies that regulation and control of erection and maintenance of obstructions to air navigation to be necessary for public health, safety, and welfare. Establishes height limitations and includes procedures for Department approval of structures meeting specified height.
<b><u>Section</u></b>	<b><u>Subject</u></b>	<b><u>Summary</u></b>
Chapter 37	Wildlife	Authorizes the Game and Parks Commission to adopt regulations concerning take of wildlife. Defines “take” to mean “harass, wound, hunt, trap, fish, or harvest fur” or attempt to do any of these actions. Provides for issuance of permits for take and possession of wildlife, including take of raptors for falconry and killing of deer, antelope, and elk. Prohibits use of an aircraft, vessel, or conveyance to molest, chase, drive, or harass any game animal or bird or to cause a game animal or bird to depart from its habitat. Specifies prohibited methods of take, including explosive traps or device operated by poison gas or gunpowder or setting traps unless authorized by the Department. Prohibits possession or take of any protected bird or its nest or eggs.
<b><u>Section</u></b>	<b><u>Subject</u></b>	<b><u>Summary</u></b>
37-563	Nuisance birds	Authorizes the Commission to adopt regulations for control of nuisance bird individuals or populations to reduce or avert depredation on crops, livestock, or trees or when they are concentrated in numbers and in a manner to constitute a health hazard or other nuisance. Provides the regulations may specify control methods and species to be controlled.
337-806	Endangered or threatened species	Identifies any federally listed species to be a state-listed species with the same designation as under federal law. Prohibits take of listed species except as authorized by Commission regulations.

**NEVADA**

<b><u>Citation</u></b>	<b><u>Subject</u></b>	<b><u>Summary</u></b>
		<b><u>Nevada Revised Statutes</u></b>
Chapter 494	State Airports	Authorizes the state to plan, establish, construct, maintain, and operate airports and air navigation facilities. Allows the state to acquire property interests in airport hazards or lands outside the airport boundaries as needed to permit safe and efficient airport operations or permit the removal, elimination, obstruction, marking, and lighting of airport hazards or prevent the establishment of airport hazards. Declares the acquisition of property interests for these purposes to be a public purpose and matter of public necessity.
494.020	Airport hazard	Defines “airport hazard” as “any structure, object of natural growth, or use of land which obstructs the airspace required for the flight of aircraft in landing or taking off at an airport or is otherwise hazardous to such landing or taking off of aircraft.”
Chapter 496	Municipal airports	Authorizes municipalities to plan, establish, construct, maintain, operate, and regulate airports and air navigation facilities in their jurisdictions. Allows the state to acquire property interests in airport hazards or lands outside the airport boundaries as needed to permit safe and efficient airport operations or permit the removal, elimination, obstruction, marking, and lighting of airport hazards or prevent the establishment of airport hazards. Declares the acquisition of property interests for these purposes to be a public purpose and matter of public necessity

496.020	Airport hazard	Defines “airport hazard” as “any structure, object of natural growth, or use of land which obstructs the airspace required for the flight of aircraft in landing or taking off at an airport or is otherwise hazardous to such landing or taking off of aircraft.”
496.120 496.210	Airport regulations	Authorizes municipality with an airport to adopt regulations for airport management and use. Provides for public agencies to establish agreements for joint action concerning airport management and regulation. Specifies airport statutory provisions should not be construed to limit authority of municipality to regulate airport hazards by zoning.
Chapter 497	Airport zoning	Authorizes a local government with an airport hazard area(s) within its jurisdiction to adopt airport zoning regulations to prevent creation or establishment of airport hazards. Allows the establishment of an airport zoning commission before initial adoption of the airport zoning regulations. Requires Allows for establishment of a joint airport zoning board by the airport authority and affected local governments with power to adopt airport zoning regulations. Specifies process for adoption and appeal of airport zoning regulations and for establishment of the joint airport zoning board.
497.020	Airport hazard	Defines “airport hazard” as “any structure, object of natural growth, or use of land which obstructs the airspace required for the flight of aircraft in landing or taking off at an airport or is otherwise hazardous to such landing or taking off of aircraft.” Defines “airport hazard area” as “any area of land or water upon which an airport hazard might be established if not prevented.”
497.060	Relationship with other laws	Specifies airport zoning regulations may be incorporated into a local government’s comprehensive zoning ordinance. Provides that the most stringent regulation governs in the event of a conflict between the airport zoning regulations and other regulations.
497.110 through 497.140	Permits, variances and nonconforming uses	Requires issuance of a permit for establishment or construction of a new structure or use or for substantial change of an existing use. Provides for grant of a variance for a use that would not conform to the airport zoning regulations when practical difficulty or unnecessary hardship would result from application or enforcement and when the variance would not be contrary to the public interest. Allows conditioning of the variance on the installation, operation, and maintenance of markers and lights to identify the presence of an airport hazard. Prohibits airport zoning regulations from requiring the removal, lowering, or other change in any structure or tree not conforming to the regulations when adopted. Requires a permit for substantial alteration or replacement of a nonconforming structure or use. Prohibits issuance of permit if it would result in a greater airport hazard.
Chapter 45	Wildlife	Requires the Department of Wildlife to adopt regulations and policies to preserve, protect, manage, and restore wildlife and wildlife habitat. Includes specific prohibitions for killing of specified wildlife (e.g., elk, deer, and black bear) and imposes penalties for violations.

**NEW HAMPSHIRE**

<u>Section</u>	<u>Subject</u>	<u>Summary</u>
		<b><u>New Hampshire Statutes</u></b>
Title 39 Chapter 424	Airport zoning	Declares that the prevention of the creation or establishment of airport hazards is necessary in the interest of public health, public safety, and general welfare. Directs the Department of Transportation to prepare an airport approach plan for every public airports. Requires local governments within which an airport is located to adopt airport zoning regulations to divide

		the area surrounding the airport into zones and establish land uses and height restrictions in these areas. Provides for incorporation of airport zoning regulations in to a comprehensive zoning ordinance. Establishes permit requirements for new structures or uses, changes to existing uses, and nonconforming uses, and provides for grant of variances. Provides that permits and variances may be conditioned to require the property owner to allow (at government expense) the installation, operation, and maintenance of markers and lights to indicate the presence of an airport hazard.
424:1	Airport hazard	Defines "airport hazard" as "any structure, tree, smoke, steam, dust or other substance which obstructs the aerial approaches of a publicly owned airport or impairs the reasonable visibility in the vicinity thereof, electrical impulses and disturbances which interfere with radio aids or communications and lights which might result in glare in the vision of pilots of aircraft or be confused with airport lights."
424:10	Property acquisition	Authorizes local governments to acquire air rights, easements, or other property interests by purchase, grant, or condemnation when the acquisition: (1) is desired to remove, lower, or otherwise terminate a nonconforming use; (2) the approach protection necessary cannot, because of constitutional limitations, be provided by airport zoning regulations; or (3) appears advisable for protection by acquisition rather than by airport zoning regulations.
Title 28 Chapter 207–214	Wildlife regulations and methods of take	Includes requirements and prohibitions concerning take of wildlife, including the manner, number, or quantity of fish, game, fur-bearing animals, or protected birds. Specifies requirements for actions to buy, sell, transport, and possess wildlife whenever taken or killed. Specifies prohibited and lawful methods of taking and includes provisions for hunting methods, equipment, and limitations. Establishes prohibitions and requirements for importation, possession, transportation, and release of wildlife and permits related to these actions. Includes requirements and conditions for specified wildlife and game animals (e.g., moose, caribou, elk, mountain lion). Includes provisions for licenses and permits. Provides definitions, prohibitions, and provisions concerning endangered and threatened species and nongame species.
		<b><u>New Hampshire Administrative Rules</u></b>
FIS 300 – FIS 310	Wildlife regulation	Establishes Fish and Game Department regulations concerning management and regulation of wildlife to implement the statutory provisions. Establish requirements, permit provisions, and conditions for game birds and game and furbearing animals. Includes provisions for wildlife depredation permits, permits for wildlife causing property damage, and wildlife damage control operators. Establishes provisions for control of nuisance black bears.

**NEW JERSEY**

<b><u>Section</u></b>	<b><u>Subject</u></b>	<b><u>Summary</u></b>
		<b><u>New Jersey Statutes</u></b>
Title 6	Aviation	Provides for state regulation of aircraft and establishes requirements for airport licensing and for conformance with federal design, construction, and airworthiness standards for aircraft navigation.
6:1-80 through 6:1-88	Air Safety and Zoning Act	Declares the creation of an airport hazard is a public nuisance and an injury to the community served by the airport. Specifies need to prevent the creation or establishment of an airport hazard in the interest of public health, public safety, and the general welfare. Provides for municipalities to notify owners within a delineated airport safety zone and for sellers of property within the



		delineated zone to provide notice to buyers. Provides for the Department of Transportation to adopt regulations delineating airport safety zones for all affected airports and specifying standards for permitted and prohibited land uses within airport safety zones. Requires municipalities containing any part of an airport safety zone to adopt an ordinance conforming to the Department standards.
6:1-82	Airport hazard	Defines “airport hazard” as any “use of land or water, or both, which creates a dangerous condition for persons or property in or about an airport or aircraft during landing or taking-off at an airport.” Includes within the “airport hazard” definition any “structure or tree which obstructs the airspace required for the flight of aircraft in landing or taking-off at an airport.” Defines “airport safety zone” as “any area of land or water or both, upon which an airport hazard might be created or established, if not prevented.”
6:1-86 6:1-88	Nonconforming uses	Authorizes the Department of Transportation to acquire by purchase, grant, or condemnation property interests (including air rights) to remove or lower a nonconforming use or eliminate or reduce airport hazards. Requires the Department to adopt regulations for permit issuance for creation or establishment of nonconforming uses.
Title 23	Fish and Game	Includes provisions for management, protection, and regulation of wild birds and animals and state-listed endangered species.
		<b><u>New Jersey Administrative Code</u></b>
Title 16 Chapter 54	Airport licensing	Requires licensing by the State of Transportation for specified aeronautical facilities, including airports. Specifies the procedures and requirements for application and approval of airport licenses and establishes the minimum acceptable design standards for airport facilities. Specifies operational standards for airport facilities.
16:54-1.3	Safety zone area	Defines “safety zone area” as “any area of land or water or both, upon which an aeronautical hazard might be created or established.”
Title 16 Chapter 56	Airport Safety Fund Program	Governs funding from the Airport Safety Fund Program to promote aviation safety and other purposes. Includes eligibility for funding of aviation safety programs and acquisition of property interests for clear zones and clear areas.
Title 16 Chapter 62	Air safety and zoning	Establishes minimum standards for control of airport and aeronautical hazards and land uses adjacent to airports. Allows the Department of Transportation to adopt a special or amended standard when required by local conditions. Prescribes method for delineating airport safety zones. Prescribes minimum land uses standards for local regulations, including lists of specifically permitted and prohibited land uses around airports. Specifies process for municipal and Department approval of a prohibited land use or vertical development and requires Department permit before construction of these uses.
16:62-1.1	Airport hazard	Defines “airport hazard” as any “use of land or water, or both, which creates a dangerous condition for persons or property in or about an airport or aircraft during landing or taking-off at an airport.” Includes within the “airport hazard” definition any “structure or tree which obstructs the airspace required for the flight of aircraft in landing or taking-off at an airport.” Defines “airport safety zone” as “any area of land or water or both, upon which an airport hazard might be created or established, if not prevented.”
16:62-1.2 16:62-6.1	Nonconforming uses	Prohibits regulations from requiring removal of change in a structure or tree (natural growth) not conforming to the regulations when adopted. Requires municipalities which include within their boundaries any part of the airport safety zone to adopt an ordinance incorporating the minimum standards specified by Department regulations. Includes provisions for and conditions on

		Department issuance of permits for creation or establishment of a nonconforming use or vertical height development within an airport safety zone.
16:62-2.1	Variations	Prohibits a municipality from granting a variance from the minimum standards specified by the Department regulations except when conditioned upon issuance of a Department permit allowing the variance.
Title 7 Chapter 25	Fish and Wildlife	Authorizes regulation of fish and game, including endangered wildlife, by the Department of Environmental Protection, Division of Fish and Wildlife. Requires a Department permit for possession of any nongame or exotic species of any mammal, bird, reptile, or amphibian. Includes procedures for permit application and review. Requires a Department permit for possession of an endangered species under limited specified circumstances and provides for proof of federal authorization for federally listed species. Provides for a Department permit to be issued for possession of a “potentially dangerous species,” defined to include birds, mammals, reptiles, or amphibians determined by the Division to be capable of “inflicting series or fatal injuries or which has the potential to become an agricultural pest or a menace to the public health or indigenous wildlife populations.” Specifies the Department may issue this permit after a clear showing that the regulatory criteria have been satisfied.

**NEW MEXICO**

<u>Section</u>	<u>Subject</u>	<u>Summary</u>
		<b><u>New Mexico Statutes Annotated</u></b>
Chapter 3-39	Airport zoning	Declares an airport hazard to not be in the public interest. Authorizes local governments to require removal and elimination of structures or natural growth determined to constitute a hazard to the efficient and safe use of the airport and to acquire the property interest(s) necessary to effectuate this action. Authorizes local governments to prepare and adopt airport approach plans to identify airport hazards, protection measures, height limits and other actions. Requires local governments including areas an airport approach plan determines requires measures to protect airport approaches to adopt airport zoning regulations. Includes procedures for adoption of zoning regulations and enforcement and remedies for violations. Establishes permit requirements for new structures or uses or substantial changes to existing uses in airport hazard areas and for grant of variances to requirements of airport zoning regulations.
3-39-17	Airport hazard	Defines “airport hazard” to include any overhead power line interfering with radio communications between a public airport and aircraft as well as a structure or tree which obstructs the aerial approaches of an airport or is otherwise hazardous to landing or taking-off of aircraft.
Chapter 64-2-2	Joint zoning board	Authorizes joint zoning board to exercise powers and duties of legislative bodies authorized under the Municipal Airport Zoning Law to adopt regulations for land use compatibility around airports.
Chapter 17-2	Wildlife	Establishes a program for management, permitting and regulation of game, wildlife and endangered species.
Chapter 17-3	Wildlife Damage	Provides for permit to be issued to property owners to capture or destroy protected game doing damage to crops or property based on specified conditions.

**NEW YORK**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b><u>New York Codes, Rules and Regulations</u></b>
Article 15	Airport commissions	Specifies provisions for actions of airport commissions for specified airports and for development and operation of air transportation facilities at these airports.
Section 11-0110	Interference with lawful wildlife taking	Prohibits actions that interfere with lawful taking of wild game and other animal life.
11-0521 11-0523	Destructive wildlife	Authorizes an environmental conservation officer to take wildlife that has become a nuisance. Provides for issuance of permits to landowners for take of nuisance wildlife. Provides for take of destructive or menacing wildlife without a permit under specified conditions.
78.46 79.46	Animal entry on airport	Prohibits entry of animals in or upon the airport property of specified airports with certain exceptions (e.g., seeing-eye dogs and shipped animals).
Part 182	Listed species	Establishes provision for state classifications of endangered and threatened species and species of special concern and protection and permitting provisions for listed species. Includes provisions for issuance of incidental take permits for transport, sell, import, and possess listed species, exemptions from permitting, and required findings for permit issuance. Prohibits activities likely to result in take of listed species unless authorized.
180.1	Dangerous wildlife	Identifies species of wildlife determined to be dangerous to human health and welfare, individual residents, or indigenous wildlife populations. Includes provisions to capture these species to protect the public, residents, and wildlife populations.

**NORTH CAROLINA**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b><u>North Carolina General Statutes</u></b>
63-1	Airport hazard	Defines “airport hazard” as “any structure or tree or use of land which obstructs the airspace required for the flight of aircraft in landing or taking-off at an airport or is otherwise hazardous to such landing or taking-off of aircraft.” Defines “airport hazard area” in relevant part as “any area or land or water upon which an airport hazard might be established if not prevented.”
63-1	Airport protection privileges	Defines “airport protection privileges to include easements or other interests in land, water, or air or interests in airport hazards outside the local government’s jurisdiction for which the control or acquisition is needed to insure safe airport and landing area approaches and operation.
63-30 through 63-37.1	Airport zoning	Declares an airport hazard to not be in the public interest. Authorizes local governments to adopt airport zoning regulations. Provides for establishment of a joint zoning board with other local governments. Includes procedures for adoption of zoning regulations and enforcement and remedies for violations. Establishes permit requirements for new structures or uses or substantial changes to existing uses in airport hazard areas and for grant of variances to requirements of airport zoning regulations. Provides requirements for permits to replace or substantially alter nonconforming uses when the permit would not create a greater hazard to air navigation. Includes permit restrictions for nonconforming uses determined to be abandoned or at least 80% destroyed or decayed. Provides for local governments to acquire property interests (including air rights to protect airport approach areas.

113-270.1	Wildlife licenses and permits	Specifies requirements and procedures for issuance of wildlife licenses and permits by the Wildlife Resources Commission. Includes provisions for authorization of hunting, capture, and transport activities.
113-274	Wildlife permits	Authorizes the Wildlife Resources Commission to issue: (1) depredation permits for the take, destruction, transfer, removal, transplant, or driving away of undesirable, harmful, predatory, excess, or surplus wildlife.; (2) captivity permit to possess live wildlife; (3) transportation permit to transport wildlife resources within the state; (4) exportation or importation permit for export or import of wildlife resources from or into the state; (5) trophy wildlife sale permit; and (6) other permits.
113-276.1	Regulatory authority	Establishes Commission's regulatory authority concerning licensing.
113-291.1	Take	Specifies permitted and prohibited methods of take of game, wild animals, and wild birds.
113-291.3	Possession, sale, and transport	Includes provisions for authorization of take, possession, sale, or transport of wild birds and their eggs or nests.
113-291.6	Trapping	Specifies permitted and prohibited methods of trapping wildlife.
113-3331	Listed species	Includes definitions, procedures for listing, and prohibitions concerning state-listed endangered and threatened species and wildlife species of special concern.
<b>North Carolina Administrative Code</b>		
15 NCAC 10B.0105	Migratory birds	Specifies requirements and restrictions for take of migratory game birds.
15 NCAC 10B.0106	Depredation	Specifies requirements and process for issuance of depredation permits for take of wildlife causing property damage. Specifies manner of take and disposition of depredating wildlife. Prohibits issuance of depredation permit for take any state-listed species and for any federally listed species without federal authorization.
15A NCAC 10B.0201	Manner of Take	Specifies prohibitions on take and manner of take of identified species of wildlife (e.g., bear, deer, foxes and bird species) and with specified exemptions and conditions.

**NORTH DAKOTA**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
<b>North Dakota Century Code</b>		
Chapter 2-04	Airport zoning	Declares an airport hazard to be a public nuisance and specifies that the prevention of the creation or establishment of airport hazards is necessary in the interest of public health, public safety, and general welfare. Authorizes local governments within which an airport hazard area is located to adopt airport zoning regulations. Provides for establishment of a joint airport zoning board when the airport and airport hazard area are wholly or partially located in more than one jurisdiction. Requires adoption of an airport zoning commission before initial adoption. Provides for incorporation of airport zoning regulations in to a comprehensive zoning ordinance. Specifies the more stringent limitation controls in the event of a conflict between airport zoning regulations and other regulations. Includes procedures for adoption of airport zoning regulations and appeals of airport zoning decisions. Establishes permit requirements and conditions for new structures or uses, changes to existing uses, and nonconforming uses in airport hazard areas and provides for grant of variances. Allows permits and variances to be conditioned to require the

		property owner to allow (at government expense) the installation, operation, and maintenance of markers and lights to indicate the presence of an airport hazard.
2-04-01	Airport hazard	Defines "airport hazard" as "any structure or tree or use of land which obstructs the airspace required for the flight of aircraft in landing or taking off at any airport or is otherwise hazardous to such landing or taking off of aircraft." Defines "airport hazard area" means any area of land or water upon which an airport hazard might be established if not prevented as provided in this chapter."
20.1	Wildlife	Specifies authority and duties of the Game and Fish Department to manage, regulate, and permit wildlife. Establishes requirements and conditions for licenses to hunt, trap, and transport wildlife and specifies exemptions and provisions related to specified wildlife. Specifies protection measures for protected birds, nests, and eggs and big game animals and establishes conditions and restrictions for take of game birds and animals.
<b><u>North Dakota Administrative Code</u></b>		
6-02	Airport runway approach hazards	Specifies criteria, requirements, and minimum standards governing the construction or maintenance of hazards or obstructions near runway approaches to any airport, landing area, or landing strip. Establishes procedures for determining obstructions. Specifies procedure for determining limiting heights above ground for obstructions.
30-02 30-04	Wildlife regulations	Includes general licensing and permitting requirements and conditions and provisions concerning regulation of specified wildlife (elk, moose, deer). Prohibits using an aircraft to hunt or harass any wildlife without a permit, based on the Game and Fish Department determination that a permit is necessary for the protection of livestock, domesticated animals, wildlife, or human life, and that aircraft hunting is the preferred method of predatory animal control. Specifies requirements and conditions for holding, domesticating, propagating, or releasing game birds or game animals.

**OHIO**

<b><u>Section</u></b>	<b><u>Subject</u></b>	<b><u>Summary</u></b>
<b><u>Ohio Revised Code</u></b>		
Chapter 4561	Aeronautics	Authorizes the Department of Transportation to adopt aeronautics regulations, specifies the Department's power and duties, includes licensing and registration provisions, and establishes the Office of Aviation within the Department.
4561.01	Air navigation hazard	Defines "air navigation hazard" as "any structure, object of natural growth, or use of land that obstructs the air space required for the flight of aircraft in landing or taking off at an airport or landing field, or that otherwise hazardous to such landing or taking off."
4561.03 4561.33	Structures affecting airport operations	Requires (with specified exceptions) a permit for installation of a structure or object of natural growth that is expected to penetrate into the airport's clear zone surface, horizontal surface, conical surface, primary surface, approach surface, or transitional surface. Includes provisions for replacement of an existing structure without a permit within specified height parameters. Provides for issuance of the permit from an airport zoning board or by the Department under specified conditions.
4563	Airport zoning	Declares an airport hazard to be a public nuisance. Provides for establishment of airport zoning boards and for boards to adopt airport zoning regulations

		under specified conditions. Requires appointment of airport zoning commission for initial adoption of airport zoning regulations. Specifies the regulation best calculated to insure safety controls in the event of a conflict between airport zoning regulations and other regulations. Includes provisions for adoption, administration, and enforcement of airport zoning regulations. Establishes requirements for new structures or uses or substantial changes to existing uses in airport hazard areas. Includes provisions for permits to authorize replacement or substantial alteration of a nonconforming structure or natural growth when the permit will not result in a greater hazard to air navigation. Provides for grant variances to allow structures or uses that would not conform to the airport zoning regulations. Provides that permit may be conditioned to require the property owner to allow (at government expense) the installation, operation, and maintenance of markers and lights to indicate the presence of an airport hazard.
4563.01	Airport hazard	Defines “airport hazard” as “any structure or object of natural growth or use of land within an airport hazard area that obstructs the air space required for the flight of aircraft in landing or taking off at an airport or is otherwise hazardous to such landing or taking off of aircraft.” Defines “airport hazard area” in relevant part as “any area or land adjacent to an airport that has been designated” by the Office of Aviation or water upon which an airport hazard might be established if not prevented.”
5501	Airport protection	Establishes requirements and procedures for the Department’s Office of Aviation to issue of permits for structures that will penetrate into navigable airspace. Specifies standards for determining obstructions and navigable airspace. Includes provisions for marking and lighting abandoned structures and for maintaining objects of natural growth. Provides for enforcement and penalties for violations.
Chapters 1501 and 1531	Wildlife regulation	Includes authority for Division of Wildlife to regulate and manage wildlife and to enforce wildlife law and rules. Specifies prohibited methods of take for migratory game birds. Includes provisions for seasons, limits, and possession of particular species and general hunting and trapping requirements. Authorizes trapping of nuisance wildlife under specified conditions. Provides for protection of species threatened with extinction and for regulation of specified wildlife and damage resulting from such wildlife (e.g., deer). Identifies and establishes requirements for listing and protection endangered animals and plants.

**OKLAHOMA**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b><u>Oklahoma Statutes</u></b>
29-1	Wildlife conservation	Includes provisions for regulation by the Oklahoma Wildlife Conservation Commission to regulate hunting, trapping, and taking of game and nongame birds and wildlife and for protection of state-listed endangered and threatened species. Establishes provisions for protected wildlife. Includes provisions for regulation of specified wildlife species and identified nuisance species.
		<b><u>Oklahoma Administrative Rules</u></b>
25:10	Airport zoning	Airport zoning regulations (revoked).
25:30	Aircraft pilot and protection	Establishes procedures for construction of structures in the vicinity of public airports. Requires a permit from the Oklahoma Aeronautics Commission for construction or initiation of a structure for an “incompatible purpose” in the

		primary surface or runway protection zone; structures within three statute miles from a public use airport with height greater than 150 feet above the airport elevation, and structures with height exceeding specified conditions. Establishes obstruction standards for structures with incompatible purposes or tall structures. Includes exemptions from permit requirement, procedures for review and decisions on permit applications, and penalties for violations of regulations.
800:25	Wildlife regulation	Establishes criteria for listing species as threatened or endangered. Establishes regulations for permitting of nuisance wildlife control operators and for agents to control of Canada geese and relocate their nests and eggs. Includes permit requirements and procedures for issuance of nuisance wildlife and depredation permits.

**OREGON**

<u>Section</u>	<u>Subject</u>	<u>Summary</u>
		<b><u>Oregon Revised Statutes</u></b>
Chapters 835 and 836	Aviation and airports	Authorizes the State Aviation Board to establish a plan for development of airports and to cooperate with federal and local agencies in development of aviation activities. Requires the Board to adopt rules governing seaplane safety and operations. Incorporates safety considerations into airport site approval. Specifies requirements for establishment and regulation of airports. Provides that regulations do not limit the power of local governments to regulate airport hazards by zoning. Prohibits construction of structures constituting a physical hazard to air navigation. Requires local governments to amend comprehensive land use plans to incorporate airport regulations.
836.005	Airport hazard	Defines "airport hazard" as "any structure, object of natural growth, or use of land that obstructs the airspace required for the flight of aircraft in landing or taking off at an airport, or is otherwise hazardous to such landing or taking off of aircraft."
Chapter 498	Wildlife	Declares wildlife is state property and prohibits taking, hunting, possession, or trapping of wildlife in violation of state wildlife laws or regulations. Authorizes take by a property of wildlife that is causing damage to property, is a public nuisance, or that poses a health risk but requires a permit from the Oregon Fish and Wildlife Conservation Commission for this take when the wildlife is a game mammal or game bird, fur-bearing mammal or nongame wildlife species. Specifies a state take permit is not required for take authorized by a federal permit. Includes prohibitions on and provisions regarding methods of take for specified wildlife. Specifies restrictions for hunting or trapping in specified areas. Authorizes take of bears or cougars posing a threat to human safety under specified conditions.
		<b><u>Oregon Administrative Rules</u></b>
660-013	Airport Planning	Establishes Department of Land Conservation and Development regulations for airport planning to reduce risks to airport operations and nearby land uses. Provides for preparation and coordination of aviation plans and local government adoption of airport safety overlay zones in local regulations to prohibit structures and uses from penetrating airport imaginary surfaces. Requires local governments to incorporate airport compatible land use provisions in comprehensive plans and land use regulations. Specifies land use compatibility requirements for public airports. Provides a "safe harbor" for existing or allowed airport related uses and existing and acknowledge comprehensive plans and development regulations.

635-002 635-043 635-044	Wildlife permits	Specifies requirements for permits to take or harass wildlife and for holding or capturing wildlife. Includes provisions for protected species and provisions concerning methods of hunting and trapping wildlife. Specifies requirements for disposition of wildlife taken for damage, bear and cougar taken as a threat to human safety, and wildlife or wildlife parts.
635-435	Wildlife control operations	Establishes requirements for permitting of wildlife control operators.

**PENNSYLVANIA**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b><u>Pennsylvania Statutes and Consolidated Statutes</u></b>
Chapter 51	Airport hazard	Defines "airport hazard" as any "structure or object, natural or manmade, or use of land which obstructs the airspace required for flight of aircraft in landing or taking off at an airport or is otherwise hazardous to the landing or taking off of aircraft." Defines "airport hazard area" as any "area of land or water upon which an airport hazard might be established if not prevented."
Chapter 59 §§ 5911-5920	Airport zoning	Requires local governments within which an airport hazard is located to adopt airport zoning regulations and establishes procedures for development and approval of regulations. Specifies the local government regulations may divide the area into zones and, within the zones, specify the land uses permitted and regulate and restrict the height to which structures may be erected or objects of natural growth may be allowed to grow. Requires the appointment of an airport zoning planning agency for initial adopt of the airport zoning regulations. Provides for establishment of a joint airport zoning board when the airport and airport hazard area are wholly or partially located in more than one jurisdiction. Provides for incorporation of airport zoning regulations in to a comprehensive zoning ordinance. Specifies the more stringent limitation controls in the event of a conflict between airport zoning regulations and other regulations. Includes provisions for adoption and appeals of airport zoning regulations. Establishes requirements for new structures or uses or substantial changes to existing uses in airport hazard areas. Includes provisions for permits to authorize replacement or substantial alteration of a nonconforming structure or natural growth when the permit will not result in a greater hazard to air navigation. Provides for local governments to grant variances to allow structures or uses that would not conform to the airport zoning regulations. Provides that variances may be conditioned to require the property owner to allow (at government expense) the installation, operation, and maintenance of markers and lights to indicate the presence of an airport hazard. Provides for acquisition of property interests (including air rights and aviation easements) through purchase, grant, or condemnation when necessary to protect airport approaches or remove, lower, or terminate a nonconforming use.
Title 34 – Chapter 1	Wildlife	Authorizes the Pennsylvania Game Commission to control, manage, and regulate wildlife.
Title 34 – Chapters 21 – 25	Wildlife regulation	Authorizes killing game or wildlife to protect agricultural crops and livestock from in connection with actual destruction or just cause to determine reasonable apprehension of imminent destruction. Requires a property owner to make every reasonable effort to live trap protected wildlife species. Prohibits killing of game or wildlife to protect a person unless a human is endangered to a degree that the immediate destruction of the game or wildlife is necessary. Prohibits disturbance of game or wildlife and prohibits specified



		activities to lure or bait wildlife onto property. Prohibits take or possession of protected birds or their nest or eggs unless authorized. Establishes provisions for designation and protect of state endangered and threatened species. Includes provisions regarding prohibited and permitted methods of taking and pursuing game and wildlife.
		<b>Pennsylvania Code</b>
67 § 471.7	Airport licensing	Specifies criteria and requirements for airport licensing. Requires airports to be operated in a safe manner and provides for safety inspections of airports.
67 § 479.1	Obstruction to aircraft	Requires Department of Transportation approval for construction or maintenance of a smoke stack, flag pole, elevated tank, radio station tower, antenna, building, structure, object or natural growth or other obstruction to the operation of aircraft within an approach area that extends above an inclined plan. Requires Department approval of a new structure or changes to an existing structure that would require notice to the FAA and determination of obstruction to air navigation under federal regulations.
17 § 11.215	Weapons and hunting	Specifies restrictions and conditions for hunting, pursuing, or intentionally disturbing specified wildlife.

**RHODE ISLAND**

<u>Citation</u>	<u>Subject</u>	<u>Summary</u>
		<b>State of Rhode Island General Laws</b>
Chapter 1-4	Uniform Aeronautical Regulatory Act	Authorizes the Rhode Island Airport Corporation to adopt rules establishing minimum standards for air navigation facilities and to adopt rules to safeguard from accident and protect the human safety. Specifies state rules do not apply to airports and other facilities owned by the federal government. Requires the Corporation rules to conform to applicable federal law, rules, and orders.
Chapter 1-2	Airports and landing fields	Specifies the Corporation has jurisdiction over state airports and airport facilities. Declares the safe and efficient operation of the airports and airport facilities is of paramount importance to state.
Chapter 1-3	Airport airspace plan	Requires the airport corporation to adopt an airport airspace plan for each publicly owned airport in the state. Specifies the plan must include circumstances in which structures and trees are or would be airport hazards, identify the area for which measures are required to protect the airport's navigable airspace, and describes the height restrictions and other objectives of those protection measures. Requires the airport corporation when adopting or revising the plan to consider the character of expected flying operations, traffic pattern and regulations affecting flying operations, nature of the terrain, height of existing structures and trees above the level of the airport, and the potential to lower or remove existing obstructions. Requires local governments to consider airspace plans in zoning.
§ 1-3-2	Definitions	Defines "airport hazard" as "any electronic transmission device which, as determined by the federal aviation administration, interferes with radio communication between airport and aircraft approaching or leaving the airport, or any structure or tree or use of land which obstructs the airspace required for the flight of aircraft in landing or taking off at any airport or is otherwise hazardous to the landing or taking off of aircraft." Defines "airport hazard area" in relevant part as "any area of land or water upon which an airport hazard might be established if not prevented."
§ 1-3-3	Airport hazard—public	Declares the creation or establishment of an airport hazard is a public nuisance and that prevention of airport hazards is in the public interest.

	nuisance	Declares that an airport hazards destroy an airport's utility and the public investment in the airport with hazards that endanger the lives and property of airport users and residents in the airport vicinity and with hazardous obstructions that reduce the size of available areas for aircraft landing, take off, and maneuvering. Specifies the prevention of the creation or establishment of airport hazards, and the elimination, removal, alteration, mitigation, or marking and lighting of existing airport hazards are public purposes. Specifies the state may use public funds for acquisition and land or property interests.
§ 1-3-5 § 1-3-6 § 1-3-8 § 1-3-11 § 1-3-13	Zoning regulations	Requires a local government with an airport wholly or partly within its jurisdiction to adopt airport zoning regulations to prevent the creation and establishment of airport hazards to apply to the airport hazard area within its territorial limits. Specifies the airport zoning regulations will divide the airport hazard area into zones, specify the permitted land uses within the zones, and regulate and restrict the height to which structures and trees may be erected or allowed to grow. Provides for adoption of specific zoning ordinances if the existing comprehensive ordinance does not include these provisions. Requires the local government to adopt in full or by reference the applicable FAA regulations concerning objects affecting navigable airspace. The local government must consider the FAA regulations and standards concerning land use and zoning. Specifies the procedure for adoption and appeals of airport zoning regulations.
§ 1-3-6	Joint zoning boards	Provides for establishment of a joint zoning board to adopt airport zoning regulations for an airport owned or controlled by a local government or for an airport located in on more jurisdictions. Specifies the composition of the joint zoning board and provides this board will have the same power to adopt, administer, and enforce airport zoning regulations applicable to the airport hazard area(s) as a single local government.
§ 1-3-9 § 1-3-14	Permits and nonconforming uses	Prohibits airport zoning regulations from requiring removal, lowering or change of any structure or tree not conforming to the regulations when adopted. Requires the regulations to provide for issuance of permits to establish or construct new structures and other uses and replace existing structures and other uses or to make substantial changes or substantial repairs. Specifies process for application, review, and issuance of permits. Requires a permit to be issued for any nonconforming structure or tree to be replaced, substantially altered or repaired, rebuilt, allowed to grow higher, or replanted. Prohibits issuance of a permit for a nonconforming use if it would cause a greater obstruction and/or hazard to air navigation. Prohibits issuance of a permit for a nonconforming use has been abandoned or more than 80% destroyed.
§ 1-3-15 § 1-3-16	Variances	Requires grant of a variance to erect any structures, increase the height of a structure, permit tree growth of any tree, or allow another use that would not conform to the airport zoning regulations. Specifies the variance will be granted when practical difficulty or unnecessary hardship would result and the relief granted would not be contrary to the public interest. Provides for conditioning of the variance to require the owner of the structure or tree to allow the local government (at government expense) to install, operate, and maintain obstruction markers and lights on the structure or trees.
§ 1-3-10	Property Acquisition	Authorizes purchase or condemnation of property, property interests, and air rights to remove, lower, or otherwise terminate a nonconforming use or provide adequate protect for airport approaches.
§ 1-3-12 § 1-3-13	Relationship with other	Specifies airport zoning regulations may be incorporated in general zoning regulations, and be administered and enforced in connection with those

	regulations	general regulations. Provides that the more stringent limitation or requirement will govern in the event of conflict between any airport zoning regulations and any other applicable regulations.
Chapter 20-1 § 20-1-24	Wildlife Damage	Authorizes the Department of Environmental Management to provide financial assistance to establish preventive practices to protect crops from wildlife damage by wildlife, including deer indigenous Canadian geese, mute swans, cormorants, wild turkeys, crows, coyotes, and furbearers..
Chapter 20-14	Fish and Wildlife – Permits	Provides for the Department to issue a depredation permit/order or control permit/order for the taking of birds found committing depredations on agricultural crops, livestock, or wildlife or when concentrated in such numbers and manner as to constitute a health or public safety hazard or other nuisance. Prohibits any person from pursuing, hunting with intent to kill, taking, destroying, or possessing any wild bird or birds at any season of the year (except for English or European house sparrows and European starlings) unless harvested or taken in accordance with Department regulations. Specifies prohibition does not apply to species for which a federal or state depredation permit/order or a federal control permit/order has been issued. Prohibits destruction of nest or eggs (except for English or European house sparrows and European starlings) except as authorized by the Department and consistent with a federal depredation permit.
§ 20-14-7	Prohibited take methods	Identifies prohibited methods of taking upland or migratory birds, including take in areas that have been baited; by the use or aid of live birds as decoys; with the use of an electronically amplified recording of bird calls or sounds (not applicable to crows); with any trap, snare, net, spring, crossbow, rifle, pistol, fishhook, poison, drug, explosive, or stupefying substance; or through the construction, setting, maintaining, or repairing of any of these devices for the purpose of taking, killing, or destroying wild birds. Prohibits shooting migratory game birds by means other than a shotgun of size ten (10) gauge or smaller, capable of holding three (3) or fewer shells, or a long bow (straight limb, reflex, recurve, and compound bow) and arrow.
<b>Section</b>	<b>Subject</b>	<b>Summary</b>
§ 20-15-1 § 20-15-2 § 20-15-3	Deer Permits	Prohibits hunting, pursuing, or shooting deer unless authorized by deer permit (tag) and consistent with Department regulations. Allows a landowner or occupant to kill any deer found destroying any crops, vegetables, or fruit trees, or otherwise causing damage to that property consistent with a Department permit. Specifies permit will be issued if no practicable alternative is available.
Chapter 20-37	Endangered Species	Specifies no person shall buy, sell, offer for sale, store, transport, import, export, or traffic in any part of any endangered animal or plant. Authorizes permits for scientific research or educational display. Provides for enforcement and imposition of penalties for violations.
		<b><u>Aeronautics Regulations</u></b>
	Rhode Island Airport Corporation	Establishes procedures for Corporation issuance of approval of airports and landing fields Includes provisions requiring airport operations to comply with FAA regulations. Defines “hazards to navigation” as “penetration of, or obstruction(s) into, an Airspace Restricted Area without authorization from the controlling agency.
	Department of Environmental Management	Establishes requirements and standards for permitting “nuisance wildlife control specialists” to conduct the capture, handling, disposition, exclusion and other activities related to state-protected wildlife. Identifies authorized methods of take of nuisance animals, with specific provisions for mammals,

		birds, and snapping turtles. Establishes requirements for issuance of Department permits to authorize importation and possession of native wildlife.
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**SOUTH CAROLINA**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b>South Carolina Code of Laws</b>
55-9	Airport zoning	Authorizes local governments with an interest in airports or landing fields to promulgate, amend and enforce police regulations for such airports or landing fields. Requires all land surrounding public airports, which are funded partially or wholly by the state, to be zoned by appropriate county, municipal or regional authorities to conform with application Federal Aviation Administration regulations.
55-3-110	Hunting from aircraft	Prohibits an aeronaut or passenger from intentionally killing or attempt to kill any birds or animals while in flight.
55-9-080 55-9-090	Air rights	Authorizes the state and local governments to acquire air rights when necessary to ensure safe approaches to the landing areas of the airports and landing fields. Specifies air rights may be acquired by grant, purchase, lease, or condemnation. Specifies the rights may be acquired for a term of years, or perpetually, to place and maintain suitable markers and lights for the safe operation of aircraft.
55-13-10	Regulations (military bases)	Authorizes a county in which there is a United States Air Force base or airfield to adopt regulations prohibiting, within a reasonable distance from the base or airfield: (a) erection of any building, tower or other structure or allowing of natural growth or other hazard to aircraft, above certain maximum heights and (b) use of land in a manner which will create electrical interference with radio communication between aircraft and the base, confuse or impair visibility in the vicinity of the base or otherwise endanger the landing, taking-off, or maneuvering of aircraft using the base.
50-9 through 50-15	Wildlife regulations	Prohibits hunting, fishing, or taking fish or wildlife without a license or permit or other authorization. Establishes enforcement and penalties. Specifies requirements and conditions for hunting and fishing licenses, permits, stamps, and tags. Establishes requirements for management of nongame and endangered wildlife. Provides for removal, capture, or destruction of wildlife and permits concerning specified wildlife actions (e.g., alligator removal). Includes prohibitions on specified activities related to migratory birds and requirements concerning management of migratory birds. Incorporates the federal Migratory Bird Treaty Act and regulations into state law.

**SOUTH DAKOTA**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b>South Dakota Codified Laws</b>
50-9	Air navigation hazards	Requires South Dakota Aeronautics Commission approval of construction or alteration of a structure within two miles of a public airport that has a specified height above the airport elevation unless the structure is within an incorporated area and adjacent to other permanent structures of equal or greater height. Specifies the tall structures requirements do not apply to airports for which local airport zoning regulations have been adopted. Establishes penalties for construction of specified structures without a permit.

		Prohibits construction of a building, structure, or tower more than 200 feet in height above the terrain without obtaining a permit from the Commission. Provides for the Commission to adopt regulations specifying minimum standards and criteria to ensure safe aircraft operation and public safety, including lighting, painting, and marking structures, towers, and airport hazards. Provides for establishment of temporary structures not within five miles of an airport on notice to the Commission and under specified conditions. Specifies Commission jurisdiction governs in the event of conflict with local governments.
50-10	Airport zoning	Provides for Commission adoption of airport approach plans and for local governments to incorporate into airport zoning regulations those measures for protection of airport approaches identified in the Commission plans. Specifies local airport zoning regulations must provide for dividing the affected area into zones, identifying permitted land uses, and imposing restrictions on height of uses within these zones. Requires the local airport zoning regulations to be consistent with the Commission plan. Declares airport hazards to be a danger to life and property and specifies their removal to be a public purpose for which public funds may be used. Specifies the airport zoning regulations may be incorporated into the general zoning regulations. Provides procedures and requirements for issuance of permits for new structures and uses and changes to existing structures or uses and for replacement or substantial alteration of nonconforming structures or uses. Authorizes grant of variance from airport zoning regulations under specified conditions. Declares the creation or establishment of an airport hazard to be a public nuisance and specifies it is in the public interest to prevent airport hazards.
50-10-1	Airport hazard	Defines “airport hazard” as “any structure, or tree, or use of land, which obstructs the aerial approaches of such an airport or is otherwise hazardous to its use for landing or taking off.”
41-06	Wildlife permits and licenses	Establishes requirements and conditions for issuance of depredation permits by the Game, Fish and Parks Commission authorizing lethal take of game animals. Requires a Commission permit to hunt, take, or kill raccoons, badgers, and any species identified as a predator/varmint.
		<b>South Dakota Administrative Rules</b>
70:02	Structures affecting navigation	Specifies procedures for application and approval of tall structures. Provides for Commission approval upon written determination by the FAA that the structure does not pose a hazard to air navigation.

**TENNESSEE**

<u>Citation</u>	<u>Subject</u>	<u>Summary</u>
		<b>Tennessee Code Annotated</b>
Chapter 42-6	Airport zoning	Declares an airport hazard to be a public nuisance and specifies that the prevention of the creation or establishment of airport hazards is necessary in the interest of public health, public safety, and general welfare. Requires local governments within which an airport hazard is located to adopt airport zoning regulations. Provides for establishment of a joint airport zoning board when the airport and airport hazard area are wholly or partially located in more than one jurisdiction. Provides for incorporation of airport zoning regulations in to a comprehensive zoning ordinance. Specifies the more stringent limitation controls in the event of a conflict between

		airport zoning regulations and other regulations. Includes provisions for adoption and appeals of airport zoning regulations
Chapter 70-2 Chapter 70-8	Wildlife	Prohibits actions to hunt, chase, trap, kill, or take wildlife without a license or authorization. Includes provisions for regulation and restrictions on take of nongame species. Provides for listing and management of endangered or threatened species
		<b>Rules of Tennessee</b>
Chapter 1680-01	Licensing and regulation of airports	Establishes Department of Transportation regulation of licensing and registration of airports and aircraft. Specifies Department purpose to promote aviation safety by eliminating hazards, prescribing standards for airport sites, and providing minimum airport standard
1680-1-2.-02	Airport hazard	Defines "airport hazard" as any structure, object of natural growth, or use of land, which obstructs the airspace required for the flight of aircraft in landing or taking off at an airport or is otherwise hazardous to such landing or taking off."
Chapter 1660-01	Wildlife	Establishes regulations for management of birds, game wildlife, and nongame species and for issuance of permits for actions concerning wildlife. Includes requirements for permits for wildlife capture, transport, and release and for response to nuisance animal damage control.

**TEXAS**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b><u>Texas Transportation Code</u></b>
Chapter 21	Aeronautics regulation	Authorizes the Department of Transportation to encourage and assist the development of aeronautics. Specifies safe aircraft operations are those conducted in compliance with federal laws and regulations.
21.070	Wireless communication	Requires an owner constructing a wireless facility at least 100 feet but not more than 200 feet in height above ground level to mark the highest guy wires on the facility, if any, with two warning spheres each.
21.113	Airport hazard zoning	Specifies the Department may not pay the final 10 percent of its share of project costs under a grant until the sponsor has enacted an airport hazard zoning ordinance or order.
Chapter 22	County and municipal airports	Specifies intent to create a uniform system for state airport regulation. Authorizes local governments to adopt ordinances, resolutions, rules, and orders necessary to manage, govern, and use an airport or air navigation facility under its control or an airport hazard area relating to the airport. Provides for zoning regulations pursuant to local zoning laws (Chapter 231).
22.001	Airport hazard	Defines "airport hazard" as a structure, object of natural growth, or use of land that: (1) "obstructs the airspace required for the flight of aircraft in landing at or taking off from an airport"; or (2) "is hazardous to the landing or takeoff of aircraft at an airport." Defines "airport hazard area" as an area on which an airport hazard could exist."
		<b><u>Section</u></b>
22.011	Property acquisition	Authorizes a local government to acquire an interest in property, including an easement in an airport hazard or land outside the boundaries of an airport or

		airport site by condemnation or other means to “permit the safe and efficient operation of the airport or to prevent, eliminate, or mark an airport hazard.”
22.077	Activities near airports	Requires specified facilities (e.g., sewer and wastewater treatment plant, aboveground aviation fuel storage facility, sanitary landfill site) proposed to be located within specified distances from an airport property to be approved by the municipality in which the facility or site is to be located:
		<b><u>Texas Parks and Wildlife Code</u></b>
Chapters 41-43	Wildlife licenses and permits	Includes provisions for protection of wildlife and establishment of permitting to possess, transport, or take protected wildlife. Prohibits take permits for federally protected wildlife and includes provisions for disposition of wildlife. Specifies prohibited actions related to wildlife, including using aircraft to harass or manage wildlife. Specifies hunting requirements related to wildlife, including migratory and game birds.
Chapters 63-67	Bird and wildlife regulation	Includes provisions for management and permitting of actions regarding game and nongame animals, endangered species, and birds.
		<b><u>Local Government Code</u></b>
Chapter 241	Airport zoning	Authorizes local governments to adopt airport hazard area zoning regulations to divide an airport hazard area into zones. Provides that the regulations must: (1) specify the land uses permitted; (2) regulate the type of structures; and (3) restrict the height of structures and objects of natural growth to prevent the creation of an obstruction to flight operations or air navigation. Provides for extraterritorial regulation by a local government and establishment of a joint airport zoning board with other local governments under specified conditions. Provides for incorporation of airport zoning regulations in to a comprehensive zoning ordinance. Requires adoption of an airport zoning commission before initial adoption of regulations. Establishes requirements for permitting new and expanded uses and for authorization of replacement or substantial changes to nonconforming uses.
241.003	Airport hazard	Defines “airport hazard” as “a structure or object of natural growth that obstructs the air space required for the taking off, landing, and flight of aircraft or that interferes with visual, radar, radio, or other systems for tracking, acquiring data relating to, monitoring, or controlling aircraft.” Defines “airport hazard area” as “an area of land or water on which an airport hazard could exist.”
		<b><u>Texas Administrative Code</u></b>
30.215	Airport zoning	Requires an airport grant sponsor to adopt and enforce airport hazard zoning regulations to restrict the use of land, adjacent to or in the immediate vicinity of the airport, to activities compatible with normal airport operations. Requires the sponsor to acquire and retain easements or other interests in or rights to the use of land or airspace unless acquisition and retention of the interest will be impractical or will result in undue hardship to the sponsor. Provides for the state to provide assistance with respect to airport hazard zoning, including preparation of a zoning map, a model zoning ordinance/order, and procedures for adoption of the ordinance/order. Specifies the sponsor cannot obtain the final 10% of funding until the sponsor has adopted an airport hazard ordinance/order that is approved by the Division.
Chapter 65	Wildlife regulation	Establishes regulations for regulation and protection of wildlife and for permitting of actions concerning wildlife. Provides for permits related to trap, transport, and transplant game birds and game animals. Specifies prohibited mechanisms for capture and possession of wildlife. Includes provisions for designation and permitting of threatened and endangered species. Specifies

		requirements and procedures for issuance of depredation permits for protected wildlife that present a threat to public safety.
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**UTAH**

<u>Section</u>	<u>Subject</u>	<u>Summary</u>
		<b><u>Utah Code</u></b>
Transportation Code Chapter 10 – Sections 403 through 413	Airport zoning	Authorizes local governments within which an airport hazard is located to adopt airport zoning regulations. Provides for establishment of a joint airport zoning board when the airport and airport hazard area are wholly or partially located in more than one jurisdiction. Requires appointment of airport zoning commission for initial adoption of airport zoning regulations. Provides for incorporation of airport zoning regulations in to a comprehensive zoning ordinance. Specifies the more stringent limitation controls in the event of a conflict between airport zoning regulations and other regulations. Includes provisions for adoption and appeals of airport zoning regulations.
72-10-407	Permits and variances	Establishes requirements for new structures or uses or substantial changes to existing uses in airport hazard areas. Includes provisions for permits to authorize replacement or substantial alteration of a nonconforming structure or natural growth when the permit will not result in a greater hazard to air navigation. Provides for local governments to grant variances to allow structures or uses that would not conform to the airport zoning regulations. Provides that variances may be conditioned to require the property owner to allow (at government expense) the installation, operation, and maintenance of markers and lights to indicate the presence of an airport hazard.
72-10-413	Property acquisition	Authorizes a local government to acquire property and property interests (including air rights) through purchase, grant, or condemnation when: (1) the acquisition is desired to remove, lower, or otherwise terminate a nonconforming structure or use; (2) the approach protection necessary cannot, because of constitutional limitations, be provided by airport zoning regulations; or (3) it appears advisable that the necessary approach protection be provided by acquisition of property rights rather than by airport zoning regulations.
Wildlife Resources Code Chapters 16-20 and 24	Wildlife	Includes requirements and procedures for issuance of licenses, permits, and tags for taking, hunting, trapping, fishing, or seining protected wildlife. Establishes procedures for seeking compensation for wildlife damage to property by bear, mountain lion, wolf, or eagle. Includes provisions for wildlife damage to crops.
		<b><u>Utah Administrative Code</u></b>
Chapter R914-1	Airport safety	Establishes regulations concerning the use, licensing and supervision of airports, establishment, location and use of air navigational aids: and establishment of minimum standards for operational safety. Requires marking, lighting, or removal of an obstacle or structure that obstructs the airspace above the ground or water level which is determined to be a hazard to the safe flight of aircraft.
Title R657	Wildlife	Establishes regulations for management of wildlife, including game and nongame birds and wildlife and for take, transportation, or collection of wildlife. Includes provisions for designation and protection of wildlife species of concern.



**VERMONT**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b><u>Vermont Statutes</u></b>
Chapter 17	Airport zoning	Provides for local governments within which an airport hazard is located to adopt airport zoning regulations. Requires appointment of an airport zoning commission to make recommendations concerning initial airport zoning regulations. Provides for establishment of a joint airport zoning board when the airport and airport hazard area are wholly or partially located in more than one jurisdiction. Provides for incorporation of airport zoning regulations in to a comprehensive zoning ordinance. Specifies the more stringent limitation controls in the event of a conflict between airport zoning regulations and other regulations. Includes provisions for adoption and appeals of airport zoning regulations.
Chapter 17	Airport zoning—permits and variances	Prohibits local governments from requiring the removal, lowering, or other change or alteration or prohibit the repair or replacement of any airport hazard not conforming to the airport zoning regulations when adopted or amended. Establishes requirements for new structures or uses or substantial changes to existing uses in airport hazard areas. Includes provisions for permits to authorize replacement or substantial alteration of a nonconforming structure or natural growth when the permit will not result in a greater hazard to air navigation. Provides for local governments to grant variances to allow structures or uses that would not conform to the airport zoning regulations. Provides that variances may be conditioned to require the property owner to allow (at government expense) the installation, operation, and maintenance of markers and lights to indicate the presence of an airport hazard.
Chapter 103	Wildlife regulations	Authorizes the Department of Fish and Wildlife to regulate fish and wild game and adopt rules for taking of fish and wildlife. Specifies the wildlife rules must be designed to maintain the best health, population and utilization levels of the regulated species and of other necessary or desirable species which are ecologically related to the regulated species. Provides for Department adoption of rules relating to management of migrating game birds. Allows the Department to take, permit, or cause to be taken wild animals which are doing damage. Specifies removal or taking and the possession and disposition of fish or wild animals must be consistent with Department regulations.
		<b><u>Code of Vermont Rules</u></b>
14-010	Airport regulation	Specifies the state Transportation Board requirements and procedures for approval of airports and restricted landing areas. Establishes standards, policies, and requirements for commercial aviation operators and airports.
14-010-001	Airport hazard	Defines “airport hazard” as a “structure, object of natural growth, or use of land, which obstructs the air space required for the flight of aircraft in landing or taking off at an airport or restricted landing area or is otherwise hazardous to such landing or taking off.”
12-010-012	Endangered or threatened species	Establishes requirements for state listing and protection of endangered and threatened species. Provides for permits to authorize take of endangered and threatened species to prevent or mitigate economic hardship, for special purpose consistent with the purpose of the Federal Endangered Species Act, and for other purposes.

12-010-022	Migratory birds	Specifies methods for take, possession, and transport of migratory birds.
12-010-060	Deer management	Includes provisions for management of white-tailed deer population, including seasons, method of take, and provisions concerning baiting.

**VIRGINIA**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b><u>Code of Virginia</u></b>
5.1-25.1	Tall structures	Prohibits any person for any person to erect any structure that penetrates into a public or military airport’s clear zone, approach zone, imaginary surface, obstruction clearance surface, obstruction clearance zone, or surface or zone as described in Federal Aviation Administration regulations without a state permit. Specifies this requirement does not apply to a structure in a jurisdiction that has an ordinance regulating the height of such structures to prevent the penetration of zones and surfaces provided for in Federal Aviation Regulation Part 77 and Rule 19 of the Department of Aviation. Defines “structure” as “any object, including a mobile object, constructed or erected by man, including but not limited to buildings, towers, cranes, smokestacks, earth formations, overhead transmission lines, flag poles, and ship masts.”
29.1	Wildlife regulations	Prohibits actions to hunt, trap or fish in or on lands or inland waters without a license. Includes requirements for licensing of actions concerning certain wildlife (e.g., bear, deer, turkey). Establishes permit requirements for capturing, holding, propagating, and disposing of wildlife and includes requirements and conditions for certain types of wildlife. Includes requirements and conditions for migratory birds and special provisions for take or holding of certain birds (e.g., falcons, hawks) and hunt of wild game.
29.1-529	Airport wildlife hazard	Authorizes the Department Director to authorize killing wildlife that is determined to create a hazard to aircraft. Requires the person responsible for safe aircraft operations to report the hazard to aircraft operations to the Department. Provides for the Department to investigate and make a determination regarding the hazard. Specifies authorization does not apply to federally protected species.
		<b><u>Virginia Administrative Code</u></b>
24 VAC 5	Airports	Establishes regulatory program for licensing and operation of airports and includes provisions for determination of airport hazards and criteria for evaluating obstructions to airspace. Requires airport operators to notify the Federal Aviation Administration and the Department of Aviation of known hazards to aircraft. Includes model airport safety ordinance.

**WASHINGTON**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b><u>Revised Code of Washington</u></b>
Chapter 14.12	Airport zoning	Declares an airport hazard to be a public nuisance and specifies that the prevention of the creation or establishment of airport hazards is necessary in the interest of public health, public safety, and general welfare. Authorizes local governments within which an airport hazard is located to adopt airport zoning regulations. Provides for establishment of a joint airport zoning board when the airport and airport hazard area are wholly or partially located in more than one jurisdiction. Provides for incorporation of airport zoning regulations in to a comprehensive zoning ordinance. Specifies the more

		stringent limitation controls in the event of a conflict between airport zoning regulations and other regulations. Includes provisions for adoption and appeals of airport zoning regulations.
14.12.010	Airport hazard	Defines “airport hazard” as “any structure or tree or use of land which obstructs the airspace required for the flight of aircraft in landing or taking-off at an airport or is otherwise hazardous to such landing or taking-off of aircraft.” Defines “airport hazard area” in relevant part as “any area or land or water upon which an airport hazard might be established if not prevented.”
14.12.110	Permits and variances	Establishes requirements for new structures or uses or substantial changes to existing uses in airport hazard areas. Includes provisions for permits to authorize replacement or substantial alteration of a nonconforming structure or natural growth when the permit will not result in a greater hazard to air navigation. Provides for local governments to grant variances to allow structures or uses that would not conform to the airport zoning regulations. Provides that variances may be conditioned to require the property owner to allow (at government expense) the installation, operation, and maintenance of markers and lights to indicate the presence of an airport hazard.
14.12.220	Acquisition of air rights	Authorizes a local government to acquire real property or property interests (including air rights) by condemnation, purchase, or grant in order to remove, lower, or terminate a nonconforming structure or use or protect the airport approach.
36.70.547	Incompatible uses	Requires local governments to discourage the siting of incompatible uses adjacent to general aviation airports through comprehensive plans and development regulations.
Chapter 77.36	Wildlife damage	Authorizes property owners to trap or kill wildlife that is threatening human safety or causing property damage on that property consistent with Department of Fish and Wildlife. Requires the Department rules to identify the species that may be taken or killed and include provisions for appropriate protection for threatened or endangered species, circumstances when verbal or written permission is required to kill wildlife, and requirements for the disposal of wildlife trapped or killed pursuant to this authority. Includes provisions for compensation related to property damage.
Chapter 77.12	Species regulation	Authorizes the Department of Fish and Wildlife to regulate and classify wildlife, including state listing of endangered species and protections for certain species.
Chapter 77.15	Capture methods	Prohibits use of specified capture methods (e.g., steel-jawed leghold trap, neck snare, or other body-gripping trap) with certain conditions.
		<b><u>Washington Administrative Code</u></b>
Title 12	Aeronautics Commission	Repealed.
Chapter 232-28	Wildlife seasons and hunts	Includes provisions for damage prevention permit hunts. Establishes provisions for trapping seasons.
Chapter 232-36	Wildlife interactions	Includes provisions for killing of wildlife in circumstances involving personal safety (physical attack, imminent threat) and property damage. Authorizes classification of wildlife as game, endangered species, or protected species and adoption of regulations for these classifications.

**WEST VIRGINIA**

<b>Section</b>	<b>Subject</b>	<b>Summary</b>
		<b><u>West Virginia Code</u></b>
8A-7-2	Zoning	Requires a general zoning ordinance to include designating of an airport area and establishment of land-use regulations within a specific distance from the boundaries of the airport.
29-2A-8	Airport property	Authorizes the Aeronautics Commission to acquire property by purchase, gift, devise, lease, condemnation or otherwise, as is necessary to permit safe and efficient operation of the airports and air navigation facilities.
Chapter 20	Wildlife	Provides authority and direction to the Department of Natural Resources to protect, manage, and regulate wildlife. Specifies state ownership of wildlife and establishes as state policy that the state's wildlife resources be protected for use and enjoyment of all citizens, including: (1) hunting, fishing and other diversified recreational uses; (2) economic contributions in the best interests of the people of this state; and (3) scientific and educational uses. Prohibits certain methods of hunting and fishing and includes requirements for hunting, catching, taking, killing, capturing, pursuing, transporting, possessing or using any migratory game or nongame birds. Includes specific provisions for protection of bald eagles and golden eagles. Provides for permits to kill deer causing damage to agricultural crops. Establishes requirements and exemptions for permits and licenses concerning actions related to wildlife.
		<b><u>Code of State Rules</u></b>
Title 171	Airport licensing	Includes procedures and requirements for licensing of airports.
Title 58	Wildlife regulation	Establishes Department of Natural Resources regulatory program to implement the statutory provisions. Includes requirements and conditions for issuance of permits and licensing of hunting and fishing and for take, killing, capture, pursuit, trapping, transport, and possession of wildlife.

**WISCONSIN**

<b>Citation</b>	<b>Subject</b>	<b>Summary</b>
		<b><u>Wisconsin Statutes</u></b>
29.104	Wildlife regulation	Authorizes the Department of Natural Resources to establish and maintain open and closed seasons for fish and game, bag and size limits, and conditions governing the taking of fish and game that will conserve the populations.
29.08	Local regulation	Provides limited authority for local governments to adopt regulations or restriction for hunting, fishing, trapping or management of wild animals, when the regulation has an incidental effect on hunting, fishing or trapping and its primary purpose is to further public health or safety.
29.039	Nongame species	Allows the Department to develop conservation programs to ensure the perpetuation of nongame species and to regulate taking, possession, transportation, processing and sale or offer for sale, of nongame species.
29.088 29.331	Methods of take	Prohibits certain methods (e.g., poisons, explosives, pole traps) for take, capture, or killing of wildlife. Includes provisions for methods of trapping.
29.354	Game birds and animals	Includes provisions for permitting and licensing of possession of game birds and animals. Prohibits take, possession, or destruction of bird nests and eggs unless authorized.
29.604	Endangered and	Establishes program for protection of state-listed endangered and threatened

	threatened species	species and for permitting of take of listed species.
29.885	Wildlife damage	Authorizes the Department to remove or permit the removal of a wild animal that is causing damage or that is causing a nuisance. Includes authority to remove or cause the removal of a structure of a wild animal that is causing damage or that is causing a nuisance.
		<b><u>Wisconsin Administrative Code</u></b>
Chapter NR-12	Wildlife damage	Specifies procedures for authorization of removal of wild animals and their associated structures causing damage or constituting a nuisance and prescribes methods for take or removal of nuisance species. Specifies federal and state permit are not required to shoot or trap specified birds when found committing or about to commit depredations upon agricultural crops, livestock, ornamental or shade trees or when constituting a health hazard or other nuisance provided certain conditions are satisfied. Includes permit provisions for deer removal.
Chapter NR-16	Captive wildlife	Designates certain animals (e.g., cougars, bears) as harmful wild animals. Includes provisions for authorization of take and possession of reptiles and amphibians.
Chapter NR-27	Endangered and threatened species	Includes list of state endangered and threatened species and provisions for permit authorizations concerning take of listed species.

**WYOMING**

<b>Citation</b>	<b>Subject</b>	<b>Summary</b>
		<b><u>Wyoming Statutes</u></b>
10-5-301	Airport zoning	Allows municipalities and counties to regulate and restrict by ordinance the number of stories and size of buildings and the height of other structures constructed within one-half (1/2) mile of the boundaries of public airports. Allows local governments to provide zoning for airspace beyond one-half (1/2) mile of the airport boundaries and within the county, to assure aircraft reasonable safety for visual and instrument approach and departure. Limits the right to zone to the geographical limits of the applicable approach zone established by FAA for the specified airport. Limits right to six nautical miles along the approach path from the end of the instrument runway.
10-5-302	Airport zoning regulations	Provides for adoption and appeals of zoning regulations to be established by counties and municipalities consistent with procedures for other laws.
Chapter 23	Bird and animal regulations	Establishes general regulatory provisions for bird and animal regulation. Prohibits take of eagles and prohibits take of specified animals (e.g., deer, elk, grizzly bears) without a license. Prohibits intentional take or destruction of the nest or eggs of a nonpredacious bird. Authorizes take of specified animals (e.g., black bear, mountain lion, badger) causing damage to private property. Prohibits interference with the lawful taking of wildlife. Prohibits take of game animals by certain methods (e.g., any pit, pitfall, net, trap, deadfall, poison, or other similar device) unless authorized.
		<b><u>Wyoming Rules</u></b>
Chapter 3	Aerial obstructions	Establishes requirements for the reporting of aerial obstructions to the Department of Transportation.
Chapter 10	Wildlife possession, confinement, disposition	Establishes requirements for issuance of permits by the Game and Fish Commission before importation, possession, confinement, or transportation of any living wildlife. Exempts specified birds, mammals, and predatory animals (e.g., coyote, red fox, skunk) from permit requirements. Includes provisions for

	and transportation	permit application, permit term, and disposition of wildlife.
Chapter 34	Depredation hunting	Specifies requirements and hunting seasons for hunting seasons for big game animals causing damage to land, growing cultivated crops, stored crops, seed crops, improvements or causing extraordinary damage to grass; hunting seasons for trophy game animals causing damage to livestock, and bees and/or honey and hives; or, hunting seasons for big game animals for the purpose of disease management.
Chapter 52	Nongame wildlife	Establishes permit program and requirements for take of nongame wildlife.
Chapter 56	Lethal take	Establishes provisions for lethal take of wildlife under specified circumstances, including a threat to human life, health, or safety and when damage is being done to private property.

## APPENDIX E—AIRPORT WILDLIFE MANAGEMENT AND WILDLIFE HAZARD RESPONSE: ADDITIONAL RESOURCES FOR DATA AND INFORMATION

FAA Wildlife Strike Database and Reporting System and wildlife management information (Jan. 22, 2010). <http://wildlife-mitigation.tc.faa.gov/wildlife/default.aspx>.

Florida Department of Transportation, Aviation Office. *Airport Compatible Land Use Guidebook* (Aug. 2010), 232 pp.

National Association of State Aviation Officials and U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services. *Memorandum of Understanding* (Oct. 4, 2006), 4 pp.

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U.S. Department of Agriculture, Animal and Plant Health Inspection Service. *Factsheet—Safer Skies: For Birds and People* (Sept. 2010), 4 pp.

U.S. Department of Transportation, Federal Aviation Administration. *Environmental Desk Reference for Airports Action*, Chapter 8 (Oct. 2007), 1-8 pp. [www.faa.gov/airports/environmental/environmental\\_desk\\_ref/](http://www.faa.gov/airports/environmental/environmental_desk_ref/).

U.S. Department of Transportation, Federal Aviation Administration. *FAA Land Use Compatibility and Airports* (n.d.), 141 pp. [http://www.faa.gov/airports/environmental/land\\_use/](http://www.faa.gov/airports/environmental/land_use/).

U.S. Department of Transportation, Federal Aviation Administration; and National Association of State Aviation Officials. *Attachment to the 2001 Memorandum of Understanding—Land-Use Policy Coordination—Phase II*, Initiative 2005 (Mar. 8, 2005), 2 pp.

U.S. Department of Transportation, Federal Aviation Administration; and National Association of State Aviation Officials. *Attachment to the 2001 Memorandum of Understanding—Land-Use Policy Coordination—Phase III*, Initiative 2006 (Mar. 28, 2006), 3 pp.

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U.S. Department of Transportation, Federal Aviation Administration; U.S. Air Force; U.S. Army; U.S. Environmental Protection Agency; U.S. Fish and Wildlife Service; and U.S. Department of Agriculture. *Memorandum of Agreement to Address Aircraft-Wildlife Strikes* (July 2003), 14 pp.

U.S. Department of Transportation, Federal Aviation Administration; and U.S. Department of Agriculture. *Wildlife Hazard Management at Airports—Manual for Airport Personnel* (July 2005), 362 pp.

U.S. Department of Transportation, Federal Aviation Administration; and U.S. Department of Agriculture, Animal and Plant Health Inspection Service. *Wildlife Strikes to Civil Aircraft in the United States*, Serial Report Number 16 (1990–2009), 95 pp.

U.S. Department of Transportation, Federal Aviation Administration; Transportation Research Board and Airport Cooperative Research Program. *Guidebook for Addressing Aircraft/Wildlife Hazards at General Aviation Airports*, ACRP Report 32 (2010), 148 pp.

U.S. Department of Transportation, Federal Aviation Administration; Transportation Research Board and Airport Cooperative Research Program. *Guidebook of Practices for Improving Environmental Performance at Small Airports*, ACRP Report 43 (2011), 367 pp.



**Airport Certification Program – 14 CFR 139  
Program Policy And Guidance**

**Policy No. 77: Initiation of Wildlife Hazard Assessments at Airports**

14 CFR 139.337	June 21, 2004
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**SUBJECT :**

Initiation of Wildlife Hazard Assessments at Airports.

**CANCELLATION:**

Program Policy and Guidance Policy Number 53, Initiation of Wildlife Hazard Assessments at Airports, Issued April 25, 1997 is cancelled.

**PURPOSE:**

This policy establishes the procedures Federal Aviation Administration (FAA) Airport Certification Safety Inspectors (ACSI) should follow when it is determined that an airport needs to conduct a wildlife hazard assessment to address an airport wildlife hazard.

**BACKGROUND:**

Populations of wildlife species commonly associated with wildlife/aircraft strikes are increasing at a marked rate in the United States. For example, the resident Canada goose population quadrupled between 1986 and 2002; white-tailed deer populations increased from 350,000 in 1900 to over 26 million in 2000; and ring-billed gull populations increased 4-fold between 1966 and 1999. The presence of wildlife on and near airports creates a hazard to operating aircraft.

Wildlife/aircraft strikes cause severe damage to operating aircraft, human injuries and loss of life. It is estimated that between 1990 and 2002, wildlife strikes cost U. S. civil aviation over \$500 million annually.

Title 14, Code of Federal Regulations, part 139.337 requires the certificate holder to conduct a wildlife hazard assessment, acceptable to the FAA, when a wildlife hazard exist on the airport. This study is used by the FAA to determine if a wildlife hazard management plan is needed for the airport. A Memorandum of Understanding (MOU) between the FAA and USDA Wildlife Services (No. 12-34-71-0003-MOU) establishes a cooperative relationship between these agencies for resolving wildlife hazards to aviation. The FAA relies heavily on the assistance of Wildlife Services to conduct, review, or contribute to, airport wildlife hazard assessments and airport wildlife hazard management plans.

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Policy No. 77  
Initiation of Wildlife Hazard Assessments at Airports**PROCEDURES:**

When the FAA determines that a wildlife hazard assessment is needed for a particular airport, the ACSI should:

Contact the appropriate airport official and inform them of the need for the study.

The certificate holder may look to ADC or to a private party to conduct the required wildlife hazard assessment. The certificate holder is responsible for consultant selection and initial contact. Because the wildlife hazard assessment is used by the FAA to determine if a wildlife hazard management plan is needed for the airport, it should be conducted by persons having the education, training, and experience necessary to adequately assess any wildlife hazards.

Give the airport sufficient time (normally no more than 30 days) to make the initial contact and set a date when the study will begin.

Review the airport's certification manual (ACM) to determine what procedures are already in place to meet section 139.337 requirements and the degree of compliance on the part of the airport. Failure of the certificate holder to fully comply with all part 139 requirements is a violation of the regulation.

Take follow-up actions as needed to insure timely initiation and completion of the study, as well as submission of the study results and recommendations.

Review the study and recommendations to determine if an airport wildlife hazard management plan is needed. Upon completion of the review process, convey the determination to the certificate holder.

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OSB

Ben Castellano, Manager  
Airport Safety & Operations Division

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June 21, 2004

Date

**Airport Certification Program - 14 CFR 139  
Program Policy And Guidance**

**Policy No. 79: Review of Airport Wildlife Hazard Management Plans**

14 CFR 139.337	June 21, 2004
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**SUBJECT:**

Review of Airport Wildlife Hazard Management Plans.

**CANCELLATION:**

Program Policy and Guidance Policy Number 64, Review of Airport Wildlife Hazard Management Plans, Issued October 4, 1999 is cancelled.

**PURPOSE:**

This policy establishes procedures Airport Certification Safety Inspectors must follow when an incident occurs that requires an operator of a certificated airport to initiate a Wildlife Hazard Assessment, as mandated under Title 14, Code of Federal Regulations, §139.337(b)(1-4).

**BACKGROUND:**

Part 139.337 prescribes action that a certificate holder must take in response to certain wildlife events. As a reminder, the requirements states:

(b) In a manner authorized by the Administrator, each certificate holder shall ensure that a Wildlife Hazard Assessment is conducted when any of the following events occurs on or near the airport:

- (1) An air carrier aircraft experiences multiple wildlife strikes;
- (2) An air carrier aircraft experiences substantial damage from striking wildlife. As used in this paragraph, substantial damage means damage or structural failure incurred by an aircraft that adversely affects the structural strength, performance, or flight characteristics of the aircraft and that would normally require major repair or replacement of the affected component;
- (3) An air carrier aircraft experiences an engine ingestion of wildlife; or
- (4) Wildlife of a size, or in numbers, capable of causing an event described in paragraphs (b)(1), (b)(2), or (b)(3) of this section is observed to have access to any airport flight pattern or aircraft movement area.

Recent strike reports received by the Airport Safety and Certification Branch (AAS-310) have raised questions regarding compliance with the standards of §139.337. To

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## Policy No. 79 Review of Airport Wildlife Management Plans

resolve this matter, Airport Certification Safety Inspectors shall implement the following procedures when notified of any of the events listed in §139.337 (b)(1-4). These procedures are intended to ensure that certificate holders take appropriate action in response to wildlife strikes/incidents and that the FAA consistently maintains records of actions taken.

**PROCEDURES:**

AAS-310 will review all reports of aircraft wildlife strikes. When a strike is reported that would initiate a Wildlife Hazard Assessment under §139.337(b)(1-4), a copy of the report, together with the strike history of the airport in question, will be forwarded to the Regional Coordinator, usually the Airport Certification Safety Inspector responsible for that region's wildlife hazard management issues.

When notification is received from AAS-310, the Regional Coordinator will review the specific airport's Airport Certification Manual to determine if a Wildlife Hazard Assessment has ever been conducted at the airport, and if the results of that study led to the development and implementation of an FAA approved Wildlife Hazard Management Plan.

If a Wildlife Hazard Assessment has never been conducted, the Regional Coordinator will instruct the certificate holder to undertake the required Wildlife Hazard Assessment. Procedures found in Program Policy and Guidance Policy # 53, Initiation of Wildlife Hazard Assessments at Airports should be followed. The results of this study, together with other pertinent factors, will be used to determine if a Wildlife Hazard Management Plan is needed.

If a Wildlife Hazard Assessment was conducted within the last 12 months, but development and implementation of a Wildlife Hazard Management Plan was not required, Regional Coordinator will review the Wildlife Hazard Assessment and the decision not to require development and implementation of a Wildlife Hazard Management Plan. In most cases, the certificate holder should be instructed to develop and submit for FAA approval, a Wildlife Hazard Management Plan, based on the results of the Wildlife Hazard Assessment.

If the Wildlife Hazard Assessment is more than 12 months old, and no Wildlife Hazard Management Plan was developed, the Regional Coordinator will instruct the certificate holder to begin a new Wildlife Hazard Assessment. The results of this study, together with other pertinent factors, will be used to determine if a Wildlife Hazard Management Plan is needed.

If a FAA approved Wildlife Hazard Management Plan is in place; the Plan should be reviewed to insure that it meets all requirements of §139.337(f). Certalert 97-09, Wildlife Hazard Management Plan Outline provides guidance on what should be in an airport's Wildlife Hazard Management Plan.

If the Wildlife Hazard Management Plan does not meet all requirements of §139.337(f), the Regional Coordinator will instruct the certificate holder to bring the Plan into compliance with §139.337(f). In some cases, it may be necessary for the certificate holder to under take a new Wildlife Hazard Assessment.

If the Wildlife Hazard Management Plan does meet all requirements of §139.337(f), the

## APPENDIX F

## Policy No. 79 Review of Airport Wildlife Management Plans

Regional Coordinator will instruct the certificate holder to review the Plan and determine if it needs revision. This review is best conducted with the assistance of a Wildlife Damage Management Biologist.

Following the review, the certificate holder must notify the FAA of the results of their review and any proposed corrective actions or changes to their Wildlife Hazard Management Plan. When approved, amendments shall be incorporated in the Airport Certification Manual.

As a reminder, Airport Certification Safety Inspectors will, as part of the initial or periodic inspection, review an airport's Wildlife Hazard Management Plan to ensure that it meets all requirements of §139.337(f)

Further, Airport Certification Safety Inspectors will also review remarks on wildlife hazards in the Airport Facility Directory (AFD), Notice to Airmen (NOTAM) system, or the Automatic Terminal Information Service (ATIS). If these remarks warn of wildlife hazards at or around the airport, the Airport Certification Safety Inspector will consider such remarks to have met the criteria of §139.337(b)(4), and therefore will require the certificate holder to conduct a Wildlife Hazard Assessment, if such a study has not been previously conducted. The results of the Wildlife Hazard Assessment will be used to determine if a Wildlife Hazard Management Plan is needed.

OSB

June 21, 2004

\_\_\_\_\_  
Ben Castellano, Manager  
Airport Safety & Operations Division

\_\_\_\_\_  
Date



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