October 28, 2015

Dear ALWWH subcommittee members,

At your last meeting, I mentioned a couple ideas for new policies that I thought deserved consideration, and I said that I'd document those ideas so you could discuss them.

Wildlife Advisory Committee

Multnomah County has found that the Bike and Pedestrian Citizen Advisory Committee is a valuable resource.

I suggest that the County establish a Wildlife Advisory Committee. The committee would be made up of wildlife experts (who could be recruited from ODFW, our SWCDs, Metro, PSU, etc.) and informed citizens who can advise about local issues and conditions and provide citizen input. It could be modeled on the Bike/Ped advisory committee and administered by the county. It would meet between 2 and 12 times a year, as needed.

The committee would advise the Board of County Commissioners, Transportation Division, and Planning Division on matters that affect wildlife within the County's jurisdiction, including but not limited to:

- Evaluate transportation project effects (positive and negative) on wildlife for Capital Improvement Project prioritization
- Advise development of Road Design and Construction options and Road Maintenance Program standards to protect and improve wildlife habitat and wildlife crossings
- Help identify fish passage barriers and deficient wildlife crossings, and define projects to address these problems
- Participate in updates to the County's Climate Action Plan
- Help develop Green Building Policies for the County
- Review and advise the county about proposed changes to development and transportation policies and code that can affect wildlife
- Review and recommend innovative policies that the County should consider implementing that would improve conditions for wildlife

Proposed policy language:

Policy 1: Establish a Wildlife Advisory Committee to advise the County about matters affecting wildlife that are within the County's jurisdiction.

Reducing bird strikes

According to Portland's bird-friendly building design and management practices checksheet, between about 500 million to 900 million birds die each year from window strikes in the US. Multnomah County could implement parts of Portland's April 2015 Green Building Policy that is intended to help reduce the number of birds killed by collisions with buildings and other man-made structures. See the bird-friendly design Checksheet below for more background.

A building's design determines the level of risk it presents to birds.

Portland's current Green Building Policy has several sections, including environmental performance requirements, ecoroofs, bird-friendly design, and space allocation standards. The policy is available here (see pages 17-21 for the bird-friendly design Checksheet, also included below for easy reference): https://www.portlandoregon.gov/bps/article/529212

The city's Green Building Policy complements the joint city/county Climate Action Plan.

Portland's Green Building policies apply only to city facilities, and explicitly exclude homes. But some policies appear to be applicable to residential and industrial development, and the others could be included in educational material such as a brochure that could be made available at the County planning office.

Of the policies in the Checksheet, "Reducing Light Attractants" (similar to proposed County "Dark Skies" policies) and "Additional Measures" sections, these seem the most applicable.

For residential and commercial/industrial buildings, these requirements seem reasonable:

- Minimize exterior lighting.
- No up-lighting or light beams.
- Install full cut off, shielded, or directional lighting to minimize light spillage, glare, or light trespass.
- Mirrored glass, exterior mirrors or mirroring materials are not allowed in building design.
- Wind generators must appear solid when in motion.
- Tower structures must not include guy wires.
- Install exterior screens on windows that open in residential projects.

The following policies seem applicable for commercial/industrial buildings:

- Install time switch control devices, occupancy sensors, or non-emergency interior light that can be programmed to turn off during non-work hours or otherwise designated hours.
- Minimize the number and co-locate rooftop antennas and other rooftop structures.
- Bird attractants (exterior/interior landscaped areas, vegetated roofs, water features) may not be placed where they could be reflected in, or be viewed through, exterior glass unless the glass incorporates bird-friendly treatments (see Section A in the Checklist).

Proposed policy language:

Policy 1: Develop and implement a bird-friendly building policy for residential and industrial buildings.

Strategy A: Review Portland's Green Building Guidelines and other sources for appropriate building requirements.

Policy 2: Encourage and promote bird-friendly building practices.

Strategy B: Develop or procure educational materials about bird-friendly building design, construction, and management, and make those materials available to development applicants.

If the County Comprehensive Plan can include policies that apply to design, construction, operation, and management of County facilities, include the following policy:

Policy 3: Develop Green Building Guidelines for design, construction, operation, and management of County facilities.

Thanks for your consideration,

Carol Chesarek

Portland's Bird-Friendly building design and management Checksheet

Note: I've included most of the Checksheet here for you, except the parts that are directions for using the Checksheet. You can see the full Checksheet (see pages 17-21) and the rest of Portland's Green Building Policies here: https://www.portlandoregon.gov/bps/article/529212

Background

Portland sits on the Pacific Flyway, a major north-south flight route extending from Alaska to South America. The City is home or a critical stopping point for more than 200 species of birds. Many of these bird species are in decline due to multiple risk factors. Structural hazards are a primary threat to both resident and migratory birds, ranked second as a mortality factor after habitat destruction. It is estimated that between about 500 million to 900 million birds die each year from window strikes in the United States alone. The Audubon Society of Portland has conducted studies documenting that bird collisions kill a diverse array of bird species in the city, including species in decline.

In 2003 the U.S. Fish and Wildlife Service selected the City of Portland as a pilot project city for the Urban Conservation Treaty for Migratory Birds Program, which included a focus on reducing hazards to migratory birds. Portland has since developed a Bird Agenda that recommends mitigation efforts, including bird-friendly building guidelines. In partnership with Audubon, the U.S. Fish and Wildlife Service and the American Bird Conservancy, the City has sponsored the development of Resource Guide for Bird-Friendly Building Design for Portland. The Resource Guide includes extensive recommendations to reduce the risk of bird mortality from collisions with buildings and fatal light attraction. It also notes that there are opportunities to increase energy efficiency and help meet LEED certification requirements by incorporating bird-friendly design approaches. And the Resource Guide provides information about other cities, including Chicago, San Francisco, Toronto and New York, which have adopted regulatory and/or voluntary bird-friendly building guidelines and Lights Out programs.

In October 2013 the City Council adopted Resolution 37034 directing City bureaus and offices to explore opportunities to integrate Bird-Friendly Building Design into the City policies, plans, and programs, including updates to Portland's Comprehensive Plan, Central City Plan, and the City's Green Building Policy.

Goals of the policy include:

- Reduce bird collisions with buildings and other structures, and avoid construction-related impacts on nesting birds.
- Carry out City Council direction to advance bird-friendly building design and building management practices through City plans and policies, including the Green Building Policy (Resolution 37034, October 2, 2013).
- Demonstrate leadership and join other progressive cities in adopting bird-friendly design guidelines.
- Apply the principles and tools of the Resource Guide for Bird-friendly Building Design, Portland Oregon, First Edition, July 2012, and Guidance: Avoiding Impacts on Nesting Birds during Construction and Revegetation Projects, Version 2 October 2010, to City sponsored projects.
- Build awareness of bird collision risks and options to reduce them, as well as ways to avoid liability under the Migratory Bird Treaty Act.
- Support market development for bird-friendly building and lighting materials.

The Bird-friendly Building Design Checksheet is intended to:

- Reflect accepted tools and practices to reduce risks of bird collision.
- Be clear and simple to implement.
- Be relevant and applicable to the project scale, design, location and feature-specific hazards.
- Provide opportunities to meet multiple project-related requirements and design/performance objectives (e.g., energy efficiency).
- Support other City goals.

A. Window Treatments (check at least one box as instructed below)

This section applies to projects with at least 10 percent exterior glass, sky-bridges or atriums with exterior glazing, or glass railings.

To reduce reflectivity and make exterior glass visible to birds, apply at least one of the following treatments to at least 90 percent of new windows or other exterior glass i) between the ground and 60 feet above the ground, and ii) for one story above a vegetated roof. This section is not required for single family residential homes. For non-single family residential projects with less than 50 percent exterior glass this section applies only to exterior glass on the ground floor and to the first story above a vegetated roof.

- Non reflective, opaque or translucent glass D Glass that reflects ultraviolet light (which birds can see), such as Ornilux.
- Glass that has photovoltaic cells embedded, such as IQ Glass or Voltalux.
- Application of patterns (e.g., dots, stripes, images, abstract patterns) to exterior (first outside facing) glass surfaces. Patterns may be etched, fritted or in films. Spaces between pattern elements must be no more than two inches horizontally and four inches vertically, or both, i.e. patterns must conform to the "two by four" rule.
- External screens, decorative grills, screens, netting, louvers, shutters or exterior shades placed as close to the outside glass surfaces as possible, with openings that meet the "two by four" rule.

B. Reducing Light Attractants (all measures apply unless not applicable - check each box or write NA on the box)

- Minimize exterior lighting.
- No up-lighting or light beams.
- Install full cut off, shielded, or directional lighting to minimize light spillage, glare, or light trespass.
- Install time switch control devices, occupancy sensors, or non-emergency interior light that can be programmed to turn off during non-work hours or otherwise designated hours.

C. Use best available science to select light intensity, color, and flash frequencies that reduce bird hazard if complying with federal aviation safety requirements.

If applicable, describe:

Additions or exterior alterations to existing development, may comply with section A. or B. above by retrofitting existing windows or light fixtures if to do so will more effectively reduce hazards to birds. If retrofit is selected, describe proposal and rationale here:

D. Additional measures (check the box on each line or write NA on the box)

- Mirrored glass, exterior mirrors or mirroring materials are not allowed in building or landscape design.
- Minimize the number and co-locate rooftop antennas and other rooftop structures.
- Wind generators must appear solid when in motion.
- Tower structures must not include guy wires.
- Bird attractants (exterior/interior landscaped areas, vegetated roofs, water features) may not be placed where they could be reflected in, or be viewed through, exterior glass unless the glass incorporates bird-friendly treatments (see Section A above).

E. Avoid adversely affecting nesting birds (required per federal Migratory Bird Treaty Act)

- Schedule timing construction-related activities (e.g., vegetation removal, site preparation, demolition) and other steps as suggested in the BES Terrestrial Ecology Enhancement Strategy Guidance.

Best Management Practices (optional and encouraged - check all that apply)

The following BMPs are intended to promote bird safety through construction practices and building operation/site and management.

- Extinguish nighttime non-security architectural illumination treatments during the spring (February 15 to May 31) and fall (August 15 to November 30) bird migration periods.
- Distribute educational materials on bird-friendly practices to building managers and occupants.
- Install interior blinds, shades or other window coverings in windows with clear glass on the ground floor, visible from the exterior, as part of the construction project contract, lease agreement or CC&Rs.
- Install exterior screens on windows that open in residential projects.
- Request employees to turn off task lighting at work stations and draw office window coverings at end of the day.
- Schedule maintenance activities to occur during the day, or conclude before 11 p.m. if possible, and avoid maintenance activities that could cause disturbance during nesting seasons.