## **INFORMATION PAPER**



September 27, 2023 Planning, Building, and Development Eric Waggoner, Director

# **SUBJ: BIRD-FRIENDLY BUILDING DESIGN POLICY OPTIONS**

#### **Summary:**

Earlier this summer, staff presented the PBZE Committee with an introduction to bird-friendly building design. Following that discussion, staff has returned to present an overview of the previous PWPT Committee's direction, and policy options for moving forward with regulations in unincorporated Lake County that may be adjusted or refined based on additional feedback.

Birds face major threats to continued abundance, including building collisions. This paper considers solutions that address the threat posed by glass in the built environment in order to reduce the use of glass in new developments and incentivize bird-friendly building design practices.

#### **Background:**

- A reduction in the amount of glass in a façade is the best way to reduce fatal collisions. Nonglass facades have low or zero threat factors for birds. Screens and shutters can also provide a benefit as effective deterrents.
- Birds are most likely to strike glass within the tree line or first forty (40) feet of a building. Green roofs and interior planted areas (such as an atrium with trees) also have increased risk.
- Facades facing natural habitat or other attractants (even individual trees or bird feeders) can
  pose a greater risk. The farther trees are located from the window, the less likely a bird is to
  collide with it.
- Breaking up reflective or clear glass with treatments that contain bird friendly designs reduces the number of collisions for many birds.

## **Policy Options:**

## **County Operations**

County operations present an opportunity to introduce bird-friendly building design, including in high-impact facilities throughout the county. Many County facilities, such as the Central Permit Facility, are in or near sensitive bird habitat and would benefit from bird-friendly building design to reduce collisions. Incorporating bird-friendly building design into new facilities would not significantly increase capital costs and may reduce operational costs. Any bird-friendly design requirements on new buildings should include only treatments that last the lifespan of the glass, including glass reduction, UV-coatings, or fritted glass.

Furthermore, existing facilities would benefit from bird-friendly building design retrofits; there is anecdotal evidence from employees at the Central Permit Facility that bird strikes are frequent and

<sup>&</sup>lt;sup>1</sup> Buildings with less glass generally cost less to construct than buildings with more glass. These reduced construction costs can negate the increased materials cost of bird-friendly glass. Glass is also less insulative than solid (stick-built or masonry) walls, and costs more to heat and cool.

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often fatal. The application of bird-friendly films or tape over large glazing areas would reduce bird strikes and fatalities and can be used until the glass is replaced.

## **Unincorporated Regulations**

The County can require bird-friendly building design in new developments within unincorporated areas through building permits. As it may prove costly to builders and residents to incorporate bird-friendly design into every window, a tailored approach may be taken to apply the requirements to the more critical locations on a structure and take into account the structure's location/environmental context. Furthermore, economies of scale can make bird-friendly building design less burdensome for larger developments such as commercial, industrial, or new residential subdivisions. Bird-friendly building design requirements could include only treatments that last the lifespan of the glass, including glass reduction, UV-coatings, or fritted glass or include (in certain circumstances) a less permanent treatment (temporary applications like stickers and films).

#### **Staff Recommendation**

PB&D Staff recommends that: 1) the County Board both consider a policy requiring bird-friendly building design in new County buildings and evaluate the feasibility of retrofitting existing County facilities with bird-friendly treatments; and 2) the County Board consider regulations requiring bird-friendly building design in certain new residential development and non-residential development.

Recommended Bird-Friendly Building Design – Application

## Operations

- All new County facilities must incorporate bird-friendly building design.
- High-impact existing County facilities should be evaluated for possible retrofitting of birdfriendly design.

#### Permits

- Standards will apply to all new non-residential developments.
- Standards will apply to all new residential buildings over 1,800 square feet, with additional birdfriendly building design protections for Conservation Subdivisions and Planned Unit Development.

#### Recommended Bird-Friendly Building Design Criteria

- 1. Establish a Threat Factor Table consistent with the American Bird Conservancy's current methodology.
- 2. Develop a building and use category specific set of design requirements tied to such threat factor.

### **Next Steps:**

IL SB1997 has now passed which allows Lake County to pass bird-friendly building design amendments as a non-home rule county. PB&D Staff will present to PBZE and lead a discussion to finalize policy options and obtain direction to draft corresponding regulations for the Committee's review and action.