VIA EMAIL: reply@gbci.org and info@usgbc.org

October 28, 2024

US Green Building Council, Inc. 2101 L. St. NW Ste 600 Washington DC 20037

Dear LEED Accreditation Committee.

Subject: Drafts relating to Bird Friendly measures - critical community feedback

We are grateful for the opportunity to comment on the current draft version (v.5) of the Leadership in Energy and Environmental Design (LEED) certification criteria.

Following significant research by numerous ornithologists and biologists and the work of a growing number of building collision monitoring organizations, it is well known that hazardous glass and reflective surfaces on buildings are the second greatest contributor to the loss of North American bird populations today.

With losses in the billions of individual birds every year in North America continuing largely unabated, we find that LEED v.5 has a critical gap in adequately safeguarding bird populations at and around green buildings. With needed changes, the US Green Building Council has a powerful opportunity to make a difference for bird populations and biodiversity conservation in North America.

There are currently two proposed draft credits in v.5 that provide standards for bird collision deterrence:

- 1. **Light Pollution and Bird Collision Reduction** O&M Existing Buildings (Sustainable Sites) https://www.usgbc.org/credits/existing-buildings/v5-public-comment-2-9
- 2. **Biodiverse Habitat** New Construction (Sustainable Sites)

 https://www.usgbc.org/credits/new-construction/v5-public-comment-2-9/?return=%2Fcredits%2FNew%20Construction%2Fv5%20-%20Public%20Comment%202

Critical context:

- 1. 1 billion to 5.6 billion birds die annually due to building collisions in North America (Loss et al. 2014, Klem et al. 2024).
- 2. Due to habitat loss and direct mortality, nearly 3 billion birds have permanently disappeared from the North American landscape since the 1970s (Rosenberg et al. 2019). This includes many species highly susceptible to building collisions, such as the Black-capped Chickadee and White-throated Sparrow.
- Building collisions are the second leading cause of direct bird mortality in North America.

- 4. Mitigating the risk of bird building collisions deserves high priority when defining and ranking "sustainable building practices," because of the very real risk of extinction for several birds susceptible to collisions, such as Bicknell's Thrush and Grasshopper Sparrow.
- 5. Unfortunately, some buildings with the highest number of documented collisions are LEED certified. This affects the reputation of LEED and gives a false impression of what constitutes an environmentally responsible building.

Given this, we submit the following feedback on the proposed language for the two credits, **Light Pollution and Bird Collision Reduction** and **Biodiverse Habitat**:

- 1. We commend USGBC for moving the Bird Collision Deterrence credit from the innovation credit section to the New Construction and Existing Buildings sections.
- 2. We highly recommend that LEED's Bird Collision Deterrence credits should each be worth at least 3 points because of the significant and direct bird mortalities that could potentially be caused by "green buildings" and the associated risk of extinction for some affected bird species.
 - a. There must be sufficient motivation for clients and designers to pursue these credits, given that effective window strike mitigation requires a significant investment of time, design expertise, and resources.
 - b. The biodiversity and ecological well-being supported by these credits greatly exceed those of other credits worth fewer points.
- Any credit intended to reduce bird collisions at existing and new buildings must include the use of bird-friendly design and materials, specifically, materials with a Threat Factor (TF) of 30 or less.
 - a. The mitigation of building materials (glass or reflective metal) should never be optional to earn a "bird collision reduction" or "biodiverse habitat" credit.
- 4. The subsections within these two credits should be reversed, so that Building Material mitigation is always listed *before* lighting requirements and other standards, to recognize that glass and reflective materials are the direct cause of mortality in building collisions and that mitigation of these materials is a critical priority for saving bird life.
- 5. The height measurement wording includes typos. It should read: **50 feet ABOVE grade**; and **From the first 20 feet ABOVE a green roof or terrace.**
- 6. Add *glass railings, sky bridges/pedestrian overpasses and other glass architectural structures* to the requirements for building strike mitigation.
- 7. We commend the new proposed credits for including native plants on building sites and green roofs and plazas, but with a serious and urgent caution. Because birds will be highly attracted to such habitat features, they risk becoming fatal "ecological traps" if collision hazards at these building sites are not simultaneously mitigated. Therefore:
 - a. We strongly recommend that one of LEED's new Bird Collisions Deterrence credits be a mandatory prerequisite to earning points for greening and soilrelated credits, in both the new and existing criteria.

We are confident that developers and designers would never intentionally seek to cause harm to birds or wildlife through their building design choices; however, this is unfortunately what is happening in the absence of robust LEED bird-strike standards. The US Green Building Council has an opportunity with v.5 to correct this, as the global definitions of "Sustainability" and "Green Building" have now expanded to rightly account for not just energy-efficiency and better natural resource management but also the co-occurring ecological crisis of biodiversity loss.

We believe that no building should be LEED certified as Gold or Platinum without earning a bird collision deterrence credit, because a sustainable building should not reduce the population of endangered or at-risk birds.

For future LEED revisions, we request that additional respective subject-matter-experts (for building strikes, light pollution and other matters regarding wildlife) be deliberately and fully consulted to provide true collaborative feedback for material change to the LEED structure. This will help ensure that harm is not inadvertently caused by well-intended yet ultimately harmful "bird-friendly" standards.

Thank you for considering our feedback. Except for organizational signatures, affiliations are provided for identification purposes only.

Sincerely,

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Rosenberg, K. V., A. M. Dokter, P. J. Blancher, J. R. Sauer, A. C. Smith, P. A. Smith, J. C. Stanton, A. Panjabi, L. Helft, M. Parr, and P. P. Marra. 2019. Decline of the North American avifauna. *Science* 366:120–124.

Further Reading

Risks of green architecture -

When green buildings are deadly to birds

As 'green' architecture advances, glass buildings pose hazard to birds - The Boston Globe

<u>Fatal Light Awareness Program</u> (FLAP Canada) - note that every one of these collisions is related to a building, and many of these buildings are LEED certified as a "green building": https://www.birdmapper.org/pages/explore-the-map