June 25, 2026

Via Email

John Wilson
Technical Program Manager
DC BLOX
john.wilson@dcblox.com

Re: Environmental Concerns With Respect to Proposed Grassmere Park Data Center

Mr. Wilson:

The Center for Biological Diversity ("Center") and Southern Environmental Law Center ("SELC") understand that DC BLOX proposes to construct a 50-megawatt data center campus at 648 Grassmere Park, adjacent to the Nashville Zoo, a conservation-focused non-profit that houses more than 3,700 animals representing more than 350 different species.[1] This letter notes some potential environmental and legal concerns of building such a data center in this location.

The explosive growth of data centers has put tremendous pressure on Tennessee's environment. Large-scale data centers require significant quantities of water and power to maintain their onsite operations to store, process, and distribute data.[2] They have disrupted communities by threatening water resources,[3] increasing air pollution and climate-warming

[1] *Our Animals,* Nashville Zoo, https://www.nashvillezoo.org/our-animals (last visited June 21, 2026).
[2] TERRY NGUYEN & BEN GREEN, UNIV. OF MICH., WHAT HAPPENS WHEN DATA CENTERS COME TO TOWN?, 5 (July 2025), https://stpp.fordschool.umich.edu/sites/stpp/files/2025-07/stpp-data-centers-2025.pdf; NEW ENG. STATES COMM. ON ELEC., DATA CENTERS AND THE POWER SYSTEM: A PRIMER (June 25, 2024), https://nescoe.com/resource-center/data-centers-primer/.
[3] *See* Nguyen & Green, *supra* note 2, at 5 ("Most [data center] facilities use over 10 million gallons (38 million liters) of water per year."); Yuelin Han et al., Small Bottle, Big Pipe: Quantifying and Addressing the Impact of Data Centers on Public Water Systems (Mar. 18, 2026) (unpublished manuscript), https://arxiv.org/abs/2603.02705; Christopher Tozzi, *4 Strategies for Eliminating Data Center Water Pollution*, DATA CENTER KNOWLEDGE (Nov. 11, 2025), https://www.datacenterknowledge.com/sustainability/4-strategies-for-eliminating-data-center-water-pollution.

emissions from burning fossil fuels,[4] and producing a constant, low-frequency noise that interrupts residents' lifestyles and sleep.[5]

Over half a million people have signed the Nashville Zoo's petition objecting to the DC BLOX data center, citing risks to the Zoo's animals and their environment.[6] Senator Blackburn and Nashville Mayor O'Connell have objected publicly, and Nashville's Metro Council has responded by considering a temporary moratorium and longer-term zoning reforms.[7] While the discussion below focuses on the legal implications of the unique risks of DC BLOX's proposal for the Nashville Zoo and the many endangered species on site, the proposal also highlights the broader need for Nashvillians to ensure that data center development does not degrade their quality of life and harm community resources.

I. Data Centers Must Comply with Federal Environmental Laws.

The wide-ranging environmental impacts of data centers can implicate multiple federal laws. In particular here, the Endangered Species Act (ESA) prohibits the unauthorized "take" of any endangered species.[8] Prohibited take includes, among other acts: (1) "harass," meaning "an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns," such as "breeding, feeding, or sheltering,"[9] and (2) "harm," which includes "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns."[10] The ESA's take prohibition extends to "incidental" takings, which are "incidental to, and not the purpose of, the carrying out of an otherwise lawful activity."[11] It covers animals in captivity[12] as well as free-roaming wildlife, and it applies to a range of actors, including private entities.[13] Pursuant to these provisions of the ESA and its implementing regulations, DC BLOX would be liable if its activities associated with the

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[4] Nguyen & Green, *supra* note 2, at 6; Shaolei Ren & Adam Wierman, *Mitigating the Public Health Impacts of AI Data Centers*, HARVARD BUS. REV. (Nov. 5, 2025), https://hbr.org/2025/11/mitigating-the-public-health-impacts-of-ai-data-centers; Emily Kwong et al., *By 2030, How Much Will Data Centers Contribute to Fossil Fuel Emissions? Scientists Mapped It*, NPR (Nov. 14, 2025), https://www.npr.org/2025/11/14/nx-s1-5608188/data-center-ai-space-lizards.

[5] Kelly Richardson, *Understanding the Impact of Data Center Noise Pollution*, TECHTARGET (Dec. 3, 2024), https://www.techtarget.com/searchdatacenter/tip/Understanding-the-impact-of-data-center-noise-pollution.

[6] *Nashville Zoo Says No to Proposed Data Center,* CHANGE.ORG, https://www.change.org/p/nashville-zoo-says-no-to-proposed-data-center (last visited June 21, 2026).

[7] Cynthia Abrams, *Nashville Zoo's Data Center Pushback Captures Broad Political Support*, WPLN (June 15, 2026), https://wpln.org/post/nashville-zoos-data-center-pushback-captures-broad-political-support/.

[8] 16 U.S.C. § 1538(a)(1)(B) (endangered species). Pursuant to Section 4(d) of the ESA and the corresponding implementing regulations, take is also prohibited for most threatened species. *See id.* § 1533(d); 50 C.F.R. §§ 17.31, 17.40–17.48, 223.201–223.301.

[9] 16 U.S.C. § 1532(19); 50 C.F.R. § 17.3.

[10] 16 U.S.C. § 1532(19); 50 C.F.R. § 17.3.

[11] 16 U.S.C. § 1539(a)(1)(B).

[12] *See, e.g.*, 50 C.F.R. § 17.3 (including reference to captive wildlife in the definition of harassment); *Hill v. Coggins*, 867 F.3d 499, 508–11 (4th Cir. 2017) (applying the take prohibition to captive grizzly bears protected under the ESA).

[13] *See* 16 U.S.C. § 1532(13).

proposed data center campus annoy the endangered species nearby and/or harm them through habitat modification or degradation to such an extent that these activities significantly disrupt and/or impair the species' behavioral patterns.

II. DC BLOX Should Consider Whether the Proposed Data Center Campus Will Harm Federally Endangered Nashville Crayfish.

The Nashville crayfish (*Orconectes shoupi*) is a unique freshwater crustacean species found only in Tennessee, specifically in Mill Creek and its tributaries in Davidson and Williamson counties.[14] Because the Nashville crayfish occupies such a limited area, any threats to its habitat are disproportionately detrimental to the species' chance of survival.[15]

According to the U.S. Fish and Wildlife Service, "[t]he primary threat to the continued existence of the Nashville crayfish is . . . development in the Mill Creek drainage that results in destruction or alteration of the aquatic habitat."[16] Increased development "leads to increased impervious cover," which "often lead[s] to water quality deterioration."[17] "Siltation, stream alteration, and urban runoff, particularly phosphorus, resulting from development pressures . . . all have the potential to negatively impact Nashville crayfish."[18]

The proposed data center campus would be located just over a quarter mile from occupied habitat for the endangered Nashville crayfish, located in a tributary to Mill Creek known as Cathy Jo Branch. Cathy Jo Branch flows from Nashville Zoo property downstream to Sevenmile Creek. Both Cathy Jo Branch and Sevenmile Creek are currently deemed "Not Supporting" for water quality and fail to meet certain water quality criteria.[19] Cathy Jo Branch is impaired in particular by excessive channel alteration and sedimentation.[20] This habitat has

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[14] U.S. FISH & WILDLIFE SERV., SPECIES STATUS ASSESSMENT REPORT FOR THE NASHVILLE CRAYFISH (*ORCONECTES SHOUPI*) VERSION 1.0, 1 (2018), https://iris.fws.gov/APPS/ServCat/DownloadFile/171902 (hereinafter "Nashville Crayfish Species Status Assessment"). Although the Nashville crayfish has been proposed for delisting, the species currently retains all protections befitting a federally listed species. It remains vulnerable to several threats, including water quality degradation, and its limited range further underscores the need to carefully evaluate activities that risk degrading its habitat. *See* Letter from S. Env't L. Ctr. to U.S. Fish & Wildlife Serv. Re Proposal to Remove the Nashville Crayfish (*Faxonius shoupi* | *Orconectes shoupi*) from the Federal List of Endangered and Threatened Wildlife (Jan. 27, 2020), *available at* https://legacy.uploads.southernenvironment.org/words_docs/01-27-2020_SELC_and_partners_comment_to_express_opposition_to_delisting_.._.pdf.

[15] In delisting materials, the Service asserts that there may be a separate population of Nashville crayfish in the Pickwick Dam area, an entirely different watershed. SELC and other groups raised a number of concerns about this assertion in the delisting process. *See* Letter from S. Env't L. Ctr. to U.S. Fish & Wildlife Serv. Re Proposal to Remove the Nashville Crayfish (*Faxonius shoupi* | *Orconectes shoupi*) from the Federal List of Endangered and Threatened Wildlife (October 23, 2020), *available at* https://www.regulations.gov/docket/FWS-R4-ES-2018-0062.

[16] Nashville Crayfish Species Status Assessment, *supra* note 14, at 42.

[17] *Id.*; *see also* J. F. COLES ET AL., U.S. GEOLOGICAL SURV., EFFECTS OF URBAN DEVELOPMENT ON STREAM ECOSYSTEMS IN NINE METROPOLITAN STUDY AREAS ACROSS THE UNITED STATES (2012), https://pubs.usgs.gov/circ/1373/pdf/Circular1373.pdf.

[18] Nashville Crayfish Species Status Assessment, *supra* note 14, at 42.

[19] *See* Tenn. Dep't of Env't & Conservation (TDEC), Div. of Water Res., Public Data Viewer, https://tdeconline.tn.gov/dwr/ (last visited June 21, 2026).

[20] *See id.*

already faced challenges with stormwater runoff from the adjacent office park in the past,[21] raising concerns that additional construction activities would further exacerbate runoff issues and degrade water quality in the species' habitat.

The Tennessee Department of Environment and Conservation (TDEC) recently granted a National Pollutant Discharge Elimination System permit for stormwater discharges associated with construction activities at the site, authorizing a 12.4-acre disturbance area and identifying Cathy Jo Branch as the receiving waterbody.[22] In its Notice of Coverage, TDEC noted that Cathy Jo Branch is impaired for siltation and acknowledged the likely presence of threatened or endangered species within a one-mile radius and downstream from the site.[23] Given the Nashville crayfish's extremely limited distribution, a failure of erosion and sediment control measures or stormwater infrastructure so close to its occupied habitat could pose an outsized risk of harm.[24]

In addition to construction-related stormwater impacts, any discharges to the Mill Creek watershed from DC BLOX's water-cooling—whether through contamination or elevated temperature—could further degrade Nashville crayfish habitat. Elevated water temperatures may reduce the amount of dissolved oxygen levels needed for crayfish survival.[25]

Given the proximity of occupied Nashville crayfish habitat and the species' sensitivity to water quality impairment, DC BLOX should thoroughly evaluate whether development of the proposed data center campus would violate the ESA by degrading the endangered Nashville crayfish's habitat and harming the species.

III. DC BLOX Should Consider Whether the Proposed Data Center Campus Will Harass Endangered Species in the Nashville Zoo.

The Nashville Zoo is home to multiple federally endangered species. The Zoo's conservation programs support an array of imperiled Southeastern species, such as the endangered Nashville crayfish, the proposed threatened alligator snapping turtle, and the proposed endangered eastern hellbender, as well as rare species from around the globe.[26] Based on its industrial nature and proximity to the Zoo, the proposed data center campus may threaten to adversely impact a number of these species and raises concerns regarding liability under the ESA.

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[21] *See* Nashville Crayfish Species Status Assessment, *supra* note 14, at 59.
[22] *See* TDEC, Div. of Water Res., Notice of Coverage (NOC) Under the General NPDES Permit for Stormwater Discharges Associated with Construction Activities (CGP), Tracking No. TNR249029, *available at* https://dataviewers.tdec.tn.gov/dataviewers/apex_util.count_click?p_url=BGWPC.GET_WPC_DOCUMENTS?p_file=186028246560318831 8&p_cat=DOCS&p_id=186028246560318831 8&p_user=GUEST&p_workspace=19833722515258996.
[23] *See id*.
[24] *See* Nashville Crayfish Species Status Assessment, *supra* note 14, at 42.
[25] *See id.* at 24.
[26] *See Conservation*, NASHVILLE ZOO, https://www.nashvillezoo.org/conservation (last visited June 21, 2026).

Due to their continually operating cooling systems and generators, data centers can cause significant noise pollution in the form of "an industrial-scale 'drone' or 'hum.'"[27] Studies have shown that noise pollution adversely affects a variety of species in myriad ways, including by elevating their stress levels and altering their core behaviors.[28] Industrial noise in particular has been found to reduce reproductive efficiency and increase physiological stress in mammals, among other effects.[29]

In this case, noise pollution could be especially concerning for the endangered clouded leopards at the Nashville Zoo. Clouded leopards (*Neofelis nebulosa*) are secretive, highly sensitive animals that are considered "notoriously difficult to manage under human care."[30] In captivity, they have been known to experience significant stress and poor reproductive performance when subjected to high levels of human disturbance or kept in unsuitable enclosures.[31]

Despite these challenges, the Nashville Zoo has established itself as a leader in the successful captive breeding and rearing of clouded leopards, part of the species' global conservation.[32] Its techniques have been adopted into the Association of Zoos and Aquariums' "Species Survival Plan" for the clouded leopard, used as a model for other zoos.[33] The relatively quiet clouded leopard enclosure is an important part of that success.[34]

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[27] Neha Gour et al., *Health Implications of the Rapid Rise of Data Centers in Virginia: An Exploratory Assessment*, FRONTIERS IN CLIMATE, Feb. 5, 2026, at 4, https://www.frontiersin.org/journals/climate/articles/10.3389/fclim.2026.1648912/full; *see* VA. JOINT LEGIS. AUDIT & REV. COMM'N, DATA CENTERS IN VIRGINIA, 75–76 (2024), https://jlarc.virginia.gov/pdfs/reports/Rpt598.pdf; Adeel Hassan, *The Cloud Has Sound: The Unrelenting and Unseen Cost of A.I. Data Centers*, THE NEW YORK TIMES (June 17, 2026), https://www.nytimes.com/2026/06/17/us/data-centers-noise-pollution.html.

[28] *See* Graeme Shannon et al., *A Synthesis of Two Decades of Research Documenting the Effects of Noise on Wildlife*, 91 BIOLOGICAL REV. 982, 985 (2016), https://angelonilab.colostate.edu/Site/Publications_files/ShannonEtal2016BiolRev.pdf; Giulio Arcangeli et al., *Neurobehavioral Alterations from Noise Exposure in Animals: A Systematic Review*, INT'L J. OF ENV'T RSCH. & PUB. HEALTH, Dec. 29, 2022, https://pmc.ncbi.nlm.nih.gov/articles/PMC9819367/.

[29] Shannon et al., *supra* note 28, at 996.

[30] Laura E. Shipp et al., *Positive Correlation Between Fecal Estrogen and Glucocorticoid Metabolites in a Female Clouded Leopard*, 44 ZOO BIOLOGY 98 (2024), https://onlinelibrary.wiley.com/doi/10.1002/zoo.21877.

[31] Marilyn Scallan Epstein, *Clouded Leopards, From Crisis to Success: Q&A with Janine Brown*, SMITHSONIAN INSIDER (Mar. 31, 2015), https://insider.si.edu/2015/03/clouded-leopards/.

[32] Dr. Heather Schwartz, *Nashville Zoo Achieves Clouded Leopard Conservation Milestone with 50th Cub*, ASS'N OF ZOOS & AQUARIUMS (June 20, 2026), https://www.aza.org/connect-stories/stories/nashville-zoo-achieves-clouded-leopard-conservation-milestone-with-50th-cub.

[33] *Id.*

[34] *See* Scallan Epstein, *supra* note 31 (discussing the importance of proper enclosures to leopard health and reproduction); Schwartz, *supra* note 32 (noting that clouded leopards "are sensitive to auditory and visual disturbances, which heighten stress during managed breeding programs").

The proposed data center campus threatens to upend that carefully crafted environment by introducing a constant, mechanical drone. Significant disruptions of normal clouded leopard behavior could qualify as prohibited harassment under the ESA.[35]

Other endangered species at the Nashville Zoo that could experience behavioral disruptions due to noise pollution include white-cheeked gibbons (*Nomascus leucogenys*), siamangs (*Symphalangus syndactylus*), red ruffed lemurs (*Varecia rubra*), black and white ruffed lemurs (*Varecia variegata*), and ring-tailed lemurs (*Lemur catta*).[36]

In light of the aforementioned noise pollution risks of data centers and the potential impacts on nearby species, DC BLOX should carefully assess whether its proposed data center campus would violate the ESA by harassing endangered species at the Nashville Zoo.

IV. Environmental Impacts Are Most Effectively Addressed in the Early Siting and Design Phases of Data Center Projects.

Obtaining environmental approvals, including any ESA permits, typically involves mitigation measures that are best evaluated in the early siting and design phases of a project. The ESA in particular provides for incidental take permits under Section 10, pursuant to which projects conducted by non-Federal parties that are likely to cause incidental take may be authorized to proceed.[37] The permit application process requires applicants to develop a conservation plan that minimizes and mitigates the impacts of incidental take on the endangered and/or threatened species at issue "to the maximum extent practicable."[38]

DC BLOX would need to take measures to minimize any incidental take of endangered species. An early evaluation of potential species impacts might identify feasible siting alternatives and design changes, among other measures. Because wise siting choices and thoughtful design are often more effective and less costly than later retrofits, endangered species impacts should be evaluated before the proposed data center campus proceeds any further, so that appropriate minimization and mitigation measures consistent with ESA requirements may be identified and implemented.

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[35] 50 C.F.R. § 17.3; *see, e.g.*, *National Parks Conservation Ass'n v. U.S. Dep't of Interior*, 46 F.Supp.3d 1254, 1335 (M.D. Fla. 2014) (discussing U.S. Fish and Wildlife Service analysis that recognized harassment of Florida panthers due to noise and other impacts of off-road vehicle use); *Protect Our Waters v. Flowers*, 377 F.Supp.2d 844, 852–53 (E.D. Cal. 2004) (discussing the U.S. Fish and Wildlife Service's assessment of harassment of San Joaquin kit foxes in the form of noise vibrations).

[36] *See* Sarah J. McGrath et al., *Effects of Chainsaw Noise on the Activity Budgets and Calling Behaviour of the Northern Yellow-Cheeked Crested Gibbon* (Nomascus annamensis), WILDLIFE BIOLOGY, Apr. 2024, at 2, https://nsojournals.onlinelibrary.wiley.com/doi/full/10.1002/wlb3.01196 ("Studies have shown that anthropogenic noise influences the behaviour of captive and wild non-human primates[.]"); Marina H.L. Duarte et al., *Noisy Human Neighbours Affect Where Urban Monkeys Live*, 7 BIOLOGY LETTERS 840 (2011), https://pmc.ncbi.nlm.nih.gov/articles/PMC3210685/.

[37] *See* 16 U.S.C. § 1539(a); 50 C.F.R. §§ 17.32, 222.307.

[38] 16 U.S.C. § 1539(a); 50 C.F.R. §§ 17.32, 222.307.

CONCLUSION

Based on the above, we respectfully urge DC BLOX to assess the direct, indirect, and cumulative environmental impacts of its proposed Grassmere Park data center, including impacts to any endangered species. DC BLOX should complete any required ESA reviews and obtain any necessary ESA-related permits before proceeding with project activities, including contracting, site preparation, or construction.

Sincerely,

s/ Laurel Jobe

Laurel Jobe
Associate Attorney
Center for Biological Diversity
ljobe@biologicaldiversity.org

s/ Trey Bussey

Trey Bussey
Senior Attorney
Southern Environmental Law Center
tbussey@selc.org

CC:

Freddie O'Connell, Mayor, Mayor@nashville.gov

Angie Henderson, Vice Mayor, Angie.Henderson@nashville.gov

Zulfat Suara, Council Member At-Large, Zulfat.Suara@nashville.gov

Delishia Porterfield, Council Member At-Large, Delishia.Porterfield@nashville.gov

Quin Evans Segall, Council Member At-Large, Quin.EvansSegall@nashville.gov

Burkley Allen, Council Member At-Large, Burkley.Allen@nashville.gov

Olivia Hill, Council Member At-Large, Olivia.Hill@nashville.gov

Joy Kimbrough, District 1 Council Member, Joy.Kimbrough@nashville.gov

Kyonzté Toombs, District 2 Council Member, Kyonzte.Toombs@nashville.gov

Jennifer Gamble, District 3 Council Member, Jennifer.Gamble@nashville.gov

Mike Cortese, District 4 Council Member, Mike.Cortese@nashville.gov

Sean Parker, District 5 Council Member, Sean.Parker@nashville.gov

Clay Capp, District 6 Council Member, Clay.Capp@nashville.gov

Emily Benedict District 7 Council Member, Emily.Benedict@nashville.gov

Deonté Harrell, District 8 Council Member, Deonte.Harrell@nashville.gov

Tonya Hancock, District 9 Council Member, Tonya.Hancock@nashville.gov

Jennifer Frensley Webb, District 10 Council Member, Jennifer.Webb@nashville.gov

Jeff Eslick, District 11 Council Member, Jeff.Eslick@nashville.gov

Erin Evans, District 12 Council Member, Erin.Evans@nashville.gov

Russ Bradford, District 13 Council Member, Russ.Bradford@nashville.gov

Jordan Huffman, District 14 Council Member, Jordan.Huffman@nashville.gov

Jeff Gregg, District 15 Council Member, Jeff.Gregg@nashville.gov

Ginny Welsch, District 16 Council Member, Ginny.Welsch@nashville.gov

Terry Vo, District 17 Council Member, Terry.Vo@nashville.gov

Tom Cash, District 18 Council Member, Thomas.Cash@Nashville.gov

Jacob Kupin, District 19 Council Member, Jacob.Kupin@nashville.gov

Rollin Horton, District 20 Council Member, Rollin.Horton@nashville.gov

Brandon Taylor, District 21 Council Member, Brandon.Taylor@nashville.gov

Sheri Weiner, District 22 Council Member, Sheri.Weiner@nashville.gov

Thom Druffel, District 23 Council Member, Thom.Druffel@nashville.gov

Brenda Gadd, District 24 Council Member, Brenda.Gadd@nashville.gov

Jeff Preptit, District 25 Council Member, Jeff.Preptit@nashville.gov

Courtney Johnston, District 26 Council Member, Courtney.Johnston@nashville.gov

Robert Nash, District 27 Council Member, Bob.Nash@nashville.gov

David Benton, District 28 Council Member, David.Benton@nashville.gov

Tasha Ellis, District 29 Council Member, Tasha.Ellis@nashville.gov

Sandra Sepulveda, District 30 Council Member, Sandra.Sepulveda@nashville.gov

John Rutherford, District 31 Council Member, John.Rutherford@nashville.gov

Joy Styles, District 32 Council Member, Joy.Styles@nashville.gov

Antoinette Lee, District 33 Council Member, Antoinette.Lee@nashville.gov

Sandy Ewing, District 34 Council Member, Sandy.Ewing@nashville.gov

Jason Spain, District 35 Council Member, Jason.Spain@nashville.gov