South Shore Audubon Society
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Comments on Draft Environmental Impact Statement (DEIS) for the proposed Sands New York Integrated Resort

Submitted by South Shore Audubon Society to the Office of the Clerk of the Nassau County Legislature

January 21, 2025

Submitted via email to:
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January 21, 2025

SANDS COMMENTS
Nassau County Legislature
Theodore Roosevelt Executive and Legislative Building 1550 Franklin Avenue
Mineola, NY 11501

Honorable Members of the Nassau County Legislature,

South Shore Audubon Society is opposed to the Sands casino development as being too large and damaging to the natural resources around it. The Sands project should not go forward. Even if the suggested mitigation strategies outlined in the comments below are fully implemented, the scope of the development project would still engender significant negative environmental impacts.

Our assessment of the completed Draft Environmental Impact Statement (DEIS) finds it does not adequately protect the people or the environment of Nassau County from the impacts that this large-scale development would have on the quality of life, on the water resources and on adjacent open spaces such as the neighboring Purcell Preserve, Hempstead Plains Preserve, and the East Meadow Brook riparian corridor which are globally rare ecosystems, right here in Nassau County.

An unprecedented 28,000 pages were necessary to state the project's environmental impacts. Nevertheless, it misses the environmental mark on diverse aspects, as per South Shore Audubon comments on night lighting impacting bird migration, shadow and landscaping impacts on Purcell Preserve. Hempstead Plains Preserve and East Meadow Brook impacts, noise, electric substation expansion or new substation location, impacts on endangered, threatened, rare flora & fauna and breeding birds, stormwater management, water resources, supply, quality (hydrology), groundwater level, impacts of a new water well, traffic, air quality and more below.

In short, the DEIS does not seriously acknowledge the potential impacts of this project on the surrounding natural areas which are ecologically unique, globally rare and almost extinct with only 100 acres left.

A big concern for the environment from this project is the amount of water to be drawn from the aquifer which would not be recharged. Along with water runoff from the resort and roadways, this could pollute, lower the water level or dry up the protected wetlands of the Purcell Preserve and impact the East Meadow Brook riparian corridor from the grasslands to the bay.

As well, in part because of the concerns raised in the DEIS, there's a grassroots movement growing in Nassau County for nature preservation and bird conservation at the Hempstead Plains. The County should consider spearheading a perpetual preservation and habitat improvement stewardship project with the local communities and environmental groups that have the expertise to do this.

Thank you for the opportunity to provide input on this project. Please feel free to contact me if you desire additional information or clarification at Russ@SSAudubon.org.

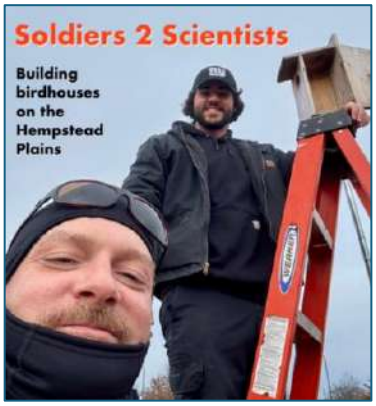
Russell Comeau
President, South Shore Audubon | Freeport, NY

Russ Comeau

Hempstead Plains, a globally rare grassland that used to be 40,000 acres, has dwindled in size due to development to only 100 acres. It sits next to the site of the Nassau Hub project for which this environmental review is underway – and we need to save it.

The Sands casino project would threaten the last of the tallgrass prairie ecosystem community and the wildlife that lives here including dozens of species of birds, and water impacts of the project threaten the survival of Nassau County's longest river, the East Meadow Brook and its wetlands.

We are asking the Nassau County Legislature as well as the Town of Hempstead to see that all the protections for this area as provided in these comments are included in the final draft of the project's environmental impact statement.



There's a grassroots movement growing in Nassau County now for nature preservation and bird conservation at the Hempstead Plains.

Other concerned organizations are a part of this too.

For additional comments and changes to the Environmental Impact Statement, please note these other organizations and environmentalists that have made submissions under their own separate cover: New York City Bird Alliance, Long Island Conservancy, Dropseed Native Landscapes, Seatuck Environmental Center, Dr. J Bret Bennington, Professor and Chair of the Department of Geology, Environment, and Sustainability at Hofstra University, and others.

Impacts on Purcell and Hempstead Plains Preserves

COMMENT 1: The text on p. 122 asserts that Purcell Preserve is not adjacent to the proposed entertainment complex. While that is technically true, that characterization is misleading. The Purcell Preserve is separated from the development by a tertiary street only. Consequently, there is little if any buffer zone between the development site and the protected natural area. The DEIS must clearly be revised to emphasize this reality and to include a buffer zone in the site plans. This state of denial that the

Purcell Preserve doesn't exist only a few feet away from the Nassau Hub and its environmental impacts, permeates many pages throughout the DEIS, which must be revised to reflect reality.

COMMENT 2: The text on p. 122 also asserts that most of the remaining extant acres of Hempstead Plains habitat adjoining the development site, described as 30 acres, are "severely degraded." This characterization is inaccurate in terms of both quantity and quality. According to the exhaustive botanical study (Edinger, G.J. and Young, S.M., "Hempstead Plains Grassland Ecological Community Mapping and Rare Plant Survey," New York Natural Heritage Program, Albany NY, 2018), 24.17 acres may be classified as Hempstead Plains Grassland; the survey's plot analysis does not characterize this acreage as "severely degraded." Indeed, the study describes a functioning, though threatened ecosystem with an array of characteristic native plants, many of which are rare. In addition, there is additional acreage in both the Purcell and Hempstead Plains Preserves which are healthy enough (and not "severely degraded") to be restored under wise management, yielding over 40 acres in total. There are additional acres beyond these, however, which may be termed "severely degraded" though these acres are entirely separate from the 30-acre "degraded" total cited, incorrectly, in the DEIS. Overall, with proper stewardship, up to 76 acres at Purcell are restorable to vibrant, globally rare and locally historical Hempstead Plains grassland ecological community.

COMMENT 3: The DEIS document fails to recognize the remarkable biodiversity of the Purcell Preserve, which not only includes native grassland, but such ecological communities as a red-maple hardwood swamp (Edinger and Young, 2018). The DEIS needs to recognize this red-maple hardwood swamp exists because water usage volume will adversely impact (reduce water level or dry up) this and other NYS-protected wetlands downstream along the East Meadow Brook riparian corridor.

Visual Impact and Aesthetic Impact

COMMENT 4: The DEIS does not acknowledge that the visibility of the casino site, tall towers and deadening shadows cast by casino towers will significantly detract from the public's enjoyment of Purcell Preserve, a globally rare natural resource. The DEIS must include a plan to mitigate "visual impact" and "aesthetic impact" of the Sands casino site from Purcell Preserve's perspective. Aesthetic impact occurs when there is a detrimental effect on the perceived beauty of a place. The towers can be shortened for instance, so they do not shadow the preserve.

Despoiling Primeval Long Island

COMMENT 5: The Hempstead Plains and Purcell preserves have been recently described as "Primeval Long Island" (*Newsday*, July 10, 2022, p. E1 ff.). That is, they provide a glimpse of a landscape largely unchanged since the end of the Ice Age. A walk through these preserves provides the visitor with a vista rarely experienced in urbanized central Nassau County; a vista which once extended uninterrupted from the New York City line to the vicinity of Bethpage. The proposed entertainment complex will further despoil that vista with a solid wall of buildings and two 300-foot skyscrapers whose visual presence will be inescapable in the immediate vicinity of the characteristically flat Plains landscape. Certainly, yet another element in this primeval Long Island vista will be lost as a result of this high-intensity

development plan. (Note: Comment 5 pertains more so to Purcell Preserve whereas comment 13 applies more to Hempstead Plains Preserve.)

Adverse Microclimate Creation

COMMENT 6: The proposed entertainment complex, which will parallel the Purcell Preserve to the west, and lie southwest of the Hempstead Plains Preserve, will constitute a structural mass of 3.75 million square feet (DEIS). The sprawling base is proposed to be 95 feet high (roughly the height of a nine-story building) with two skyscrapers rising to nearly three hundred feet. The size and arrangement of these structures, by their very nature, will impact the adjacent parcels of land in numerous ways. These adjacent lands, moreover, are environmentally sensitive and constitute rare, endangered habitats with globally rare species. The DEIS does not go far enough to acknowledge or to address this issue.

COMMENT 7: The location of the entertainment complex to the west of the Purcell Preserve and to the southwest of the Hempstead Plains Preserve will create a 95-foot mass which will act as a wall and windbreak, interrupting the natural flow of the prevailing winds (*The Human and Natural History of Hempstead Plains*, p. 121 ff.) which have been an integral part of the Plains environment since time immemorial. Until now, the adjacent structures have not formed a solidly built, tall block. This change will certainly impact the air and ground temperature of adjacent lands. In addition to the prevailing air flow, the sprawling bulk of the entertainment complex, with its new configuration of shadows, mechanical exhaust volume, and structural reflectivity/absorption of heat and sunlight, will create a variety of microclimate which will undoubtedly impact daytime and nighttime temperatures and air circulation. The possible cumulative effects of these environmental factors have not been calculated or properly addressed in the DEIS. When these factors are added to the already perceptible effects of present and future climate change, there is heightened concern for the macro and this project's micro climate impacts on the adjacent natural areas and the ecological communities present there.

COMMENT 8: P. 525 says a minimum of 8% of the proposed resort's electricity would be supplied by an on-site solar PV array installed on top of Parking Garages A, B, and C, on top of the meeting and conference spaces and entertainment venue, which seems wise to use off-grid renewable energy and reduce GHG emissions; although the vast array of solar panels may intensify the site's adverse microclimate.

Impacts of High Traffic on Air Quality and Water Quality

COMMENT 9: While provisions for accommodating thousands of additional automobiles daily, along with (and significantly) cargo trucks and bus vehicles of every description have been included in the site proposal, the impact of the drastically increased traffic load on the adjacent sensitive ecological sites has not been addressed by the DEIS. The addition of thousands of motor vehicles to the site and the adjacent access roads will, by its very nature, cause a deterioration of the air quality at the Purcell and Hempstead Plains Preserves as well. The impact of this increased air pollution on the various rare species has not been addressed with empirical data in the DEIS, which constitutes a serious omission.

COMMENT 10: The proposed traffic mitigation for roadway modifications that include reducing the vegetated buffers of the parkways will harm the air quality especially in the CAM targeted underserved communities. As part of the NYS DEC statewide Community Air Monitoring (CAM) initiative, there is a recommendation to "properly designing and maintaining roadside vegetation to reduce exposure to pollution from roads with heavy traffic."

COMMENT 11: Section 5.0 Unavoidable Adverse Effects – Long Term Effects says, "Approximately 6.1 acres of existing…habitat located beyond the current roadway edges of the Meadowbrook State Parkway and Northern State Parkway would be cleared to accommodate traffic mitigation improvements along those roadways. This clearing would be limited to mowed/maintained turf grasses within the roadway shoulders and common trees, shrubs, and herbaceous plants within limited portions of the wooded parkway borders, including many non-native/invasive trees, shrubs, and herbaceous plants." and that "Those adverse long-term impacts…cannot be eliminated or fully mitigated." The DEIS needs to acknowledge that revegetating with native plants that alleviate air pollution as well as swales to filter rainwater and road runoff before it enters our waterways will help miotigate the impacts caised by the proposed development. Roadway edges, islands and medians are superb habitat for planting Common Milkweed to provide the above benefits. In addition, it's a host plant for the Monarch Butterfly which has declined so dangerously, it is now proposed for federal protection to save and restore the Monarch from threat of extinction.

COMMENT 12: The DEIS does not address that the projected increase of thousands of additional cars, buses, construction vehicles, delivery vehicles on roadways into and around the proposed site (especially along the vital Meadowbrook Parkway and Hempstead Turnpike arteries) will not only increase air pollution but also cause a commensurate increase in road runoff contamination of water bodies. This nonpoint source pollution occurs when runoff from rain and snowmelt carries pollutants into waterways such as the East Meadow Brook stream and wetlands. To preserve and protect these natural resources, consider minimizing such impacts by implementing roadside swales with native vegetation to help filter out contaminants in road runoff before it enters our waterways.

COMMENT 13: This photo is a huge pile of plastic bottles along the East Meadow Brook

near the Meadowbrook Parkway. Another goal of the development plan is proposed to be widening select lanes on some of the highways. If that is going to be done, it should be in conjunction with providing better catchments or deploy mechanical means to cull and keep this kind of trash out of the East Meadow Brook riparian corridor running along the Meadowbrook Parkway.

COMMENT 14: Given thousands of vehicles daily, the DEIS seems not to acknowledge Title 6 NYCRR Part 203, a regulation that applies to any indirect source of air contamination (i.e. parking lots).

Impact on an Endangered Species

COMMENT 15: The second-largest existing population (and with wide annual quantitative variation, arguably the largest) of *Agalinis decemloba*, a federally-protected endangered species, lies only yards from one of the major access roads to the entertainment complex, and in peak periods this road (now largely underused) will be heavily used, and possibly choked with traffic. The *Agalinis* is, moreover, acutely responsive to environmental conditions such as air pollution, resulting in wide fluctuations in number in the annual census. The effects of these environmental changes on *Agalinis* and other sensitive, rare species has not been addressed in the DEIS.

Boxing-In the Preserves

COMMENT 16: The proposed entertainment complex at the Nassau Colosseum site cannot be viewed in isolation as an entity unto itself. The construction of this massive complex must be seen as part of a decades-long continuum of intensive urbanization on the former Mitchel Field site and environs. This intensive development has drastically altered the geographical context of the Purcell and Hempstead Plains Preserves, cutting them off from land to which they were ecologically and physically linked. In so doing, development has boxed in and isolated the preserves, obliterating the adjacent habitats and creating an artificial "palisade" around them on the north, south, and west. The DEIS fails to recognize the proposed development's central role in what has been a cumulative and ongoing process. (Note: Comment 5 pertains more so to Purcell Preserve whereas comment 13 applies more so to Hempstead Plains Preserve.)

COMMENT 17: Construction of the proposed ($6 billion) new entertainment complex will accelerate the disturbing trend of high-intensity development adjacent to the preserves. When seen holistically and considered alongside the current proposal to construct a $3 billion project for a high-rise NYU Langone hospital facility immediately west of the Hempstead Plains Preserve, the "great wall" of surrounding high-intensity development will be nearly complete. Such development will further isolate and intrude upon habitats, which by their very nature must be connected to the larger natural world. Already, selected species such as the upland sandpiper and the grasshopper sparrow no longer visit the Hempstead Plains remnants as they did up until the start of this century, because there is no longer a "critical mass" of potential habitat (*The Natural and Human History of Hempstead Plains*, p. 146). This loss of biodiversity is likely to continue as the proposed high-intensity development process is implemented.

Impacts of Landscaping and Planting Plan

COMMENT 18: It is good the DEIS is recommending only native plants in all plantings around the new development, but the consultants need to do their homework on what is native and nonnative and make sure they don't introduce stock from outside the ecoregion.

COMMENT 19: The DEIS plan is to plant native plants and grasses in the new 15.7 acres of vegetation. This is a big red flag unless the plan is to gather seed from the Plains or the same ecoregion on LI, grow the plants locally, and revegetate with those plants or seeds. Otherwise, if the developer will bring in plants from outside NY or Long Island and plant them, that could cause problems with the native plants already there depending on what the developer plants.

COMMENT 20: The DEIS says it will introduce new ecological communities that do not currently exist and increase the diversity of native vegetation. This should not be a goal. The goal should be to reproduce what is there now with local sources. This has been seen over and over again where consultants plant so-called "native plants," but the plants are resourced from outside New York or the ecoregion usually because the consultant cannot find (or doesn't care to take time to locate) local stock. Here the DEIS even mentions planting purple coneflowers and other nonnatives which shows that the consultants were not planning on using only local plants.

COMMENT 21: Landscaping with plants that are not native to the US and/or specifically to Long Island could invade and alter the composition of an already fragile ecosystem in Purcell Preserve and the Hempstead Plains beyond. Nonnative species often rapidly outcompete and displace many of the endemic species that make the Hempstead Plains tallgrass prairie the unique resource it is today. The invasive impact of nonnatives can be overwhelming and even unstoppable. We not only risk losing endangered plant species but also losing already critically imperiled habitat for local and migrating insects, birds and other fauna dependent on (obligate to) the unique resources native plants provide. Native plants and the obligate insects, birds and other fauna have evolved together in some cases for millions of years of symbiotic relationship with mutual benefits to flora and fauna, that are absent given nonnatives.

COMMENT 22: It seems the consultant did not consult the NY Flora Atlas to see what is native to Long Island nor the comprehensive list of native plants provided by the NYNHP that have been found at the Plains. The consultants should do that now.

COMMENT 23: When the DEIS says, "Therefore, no significant adverse impacts to rare/protected species are anticipated due to implementation of the proposed action," the consultants are not thinking about pollen exchanging between plants not native to Long Island being planted mixing with the same species already there or the dispersal of their seeds or fruits from the new habitats into the Plains.

COMMENT 24: The DEIS does not state where the developer will obtain their plant stock from. The developer should take note that on p. 29 of these submitted comments that a founder's plot on Hempstead Plains Nature Study Area Parcel B is proposed to establish a supply source of native seeds and plants endemic to the Hempstead Plains grassland community. That is what should be used by the developer as one source of the plants required for the build site's new 15.7 acres of vegetation.

COMMENT 25: DEIS p. 124. The DEIS references a landscape plan (separate appendix) and include redbud and a hybrid Amelanchier that are not native. The developer should engage expert native landscapers and botanists to look over this plan and approve it. The DEIS mentions the nonnative *Liatris pycnostachya*, *Cornus sanguinea*, and *Echinacea pallida* that would be planted in the meadows. At the top of p.125 the DEIS continues to mention plants that would be planted that are not native to the Plains. The DEIS consultants seem to be familiar with generic meadows and grasslands but not all the native species of the Hempstead Plains. This list of species containing nonnatives continues at the top of p.126. These nonnatives should be retracted from the DEIS because they will create (not mitigate) adverse environmental impacts.

COMMENT 26: The planting plan includes the following list of plants that are not native to the Plains or that are not in the NYNHP guide. These all need to be rescinded from the plan:

Nonnative plants in the Hempstead Plains planting guide for Sands Resort

- Trees – conifers
    - *Chamaecyparis obtusa* 'Magnifica' Magnifica Hinoki Cypress (native to Japan)
    - *Juniperus chinensis* 'Torulosa' Hollywood Juniper (native to eastern Asia)
    - *Metasequoia glyptostroboides* Metasequoia (native to China)
    - *Pinus heldrechii* Bosnian Pine (native to Balkans, Italy, and Greece)
- Trees Canopy
    - *Magnolia grandiflora* Southern Magnolia (native to the southeast US)
- Trees Understory and Multistem
    - *Amelanchier* x *grandiflora* Service Berry (hybrid between two native NY species, neither have been found at the HP)
    - *Betula populifolia* 'Whitespire' (not the straight species and not known from the HP)
    - *Cercis canadensis* Eastern Redbud (native to New Jersey south and west)
- Meadow Mixes
    - *Cornus sanguinea* 'Midwinter Fire' (native to Europe and Western Asia)
    - *Echinacea pallida* pale purple coneflower (native from Indiana south and west)
    - *Liatris aspera* rough blazing star (native from Ohio south and west)
    - *Liatris pycnostachya* blazing star (native from Indiana south and west)
    - *Parthenocissus cordifolium* (should be *P. quinquefolia* if native Virginia creeper)
    - *Penstemon digitalis* beard tongue (native from Pennsylvania south and west)
    - *Sporobolus heterolepis* northern prairie dropseed (not native on Long Island and state threatened)
    - *Allium cernuum* nodding onion (not native to Long Island and state threatened)

- *Allium molly* golden garlic (spelled A. moly and native to the Mediterranean)
- *Rhus aromatica* 'Grow Low' (not the straight species and not in HP)
- No mow fescue mix – probably all nonnative fescues

COMMENT 27: The DEIS does not address the impact on the Hempstead Plains of exposing and therefore resuscitating the seed bank of metabolically inactive seeds trapped under the currently paved parking areas of the Nassau Hub site.

New Water Well

COMMENT 28: DEC Pumping Caps

Although the DEIS notes the pumping caps on p. 89, it fails to address the impact on the UWD cap limit nor what responsibility the project will take if the DEC decides to enforce the cap. Instead, it provided a misleading assessment that groups several adjacent water districts and their caps with the UWD cap.

Groundwater Impacts

COMMENT 29: Groundwater Contamination

The DEIS fails to address the changes in groundwater flow directions and its impact on plume migration that can result from adding a new well with a pumping capacity of up to 2MGD. At least 18 contamination plumes have been identified within the well head watershed for the proposed well. The surrounding wells have treatment for many of these harmful contaminants. The DEIS needs to use the identified USGS groundwater model to include the impact this well will have on current plume migration. Mitigation should be identified when the change in plume migration will result in other wells being contaminated.

COMMENT 30: Impacts on East Meadow Brook Base Flow

The proposed additional groundwater withdrawal capacity of up to 2MGD without recharge will significantly impact the base flow of East Meadow Brook stream. Since the entire groundwater withdrawal for the project will eventually be discharged into the Atlantic Ocean as treated sewage, there will be a further lowering of the local water table and base flow to the East Meadow Brook.

The DEIS acknowledges the linkage of East Meadow Brook with groundwater on p. 81.

The DEIS needs to address the impact of how the additional loss of recharge so close to the East Meadow Brook will reduce its base flow and how the reduced streamflow will impact the ecology of the stream.

Also, acknowledge how will the additional drop in the water table impact the flow augmentation measures put in place by Nassau County in the 1980s.

Stormwater Management

DEIS Table 15 shows the proposed 86.27± acre project site would have an impervious surface on 68.11 acres (79%), 2.51 acres (3%) green roof, and pervious (landscaped) surfaces of 15.65 acres (18%). As such, the amount of five-inch runoff volume of stormwater on-site would be 1,344,267 cf.

In the DEIS, plans are to install underground features to promote infiltration of stormwater on the site. An on-site infiltration network of 120 drywells, catch basins and leaching galleys underground (mainly around parking lots) would be used to manage stormwater runoff of approximately 1.34 million cubic feet for a five-inch storm event. These features slow down the rate of runoff and allow the water to infiltrate the ground or to be captured for reuse in the proposed development.

Table 15 Stormwater Generation Under the Proposed Action

Land Use	Area (sf/Acres)	Runoff Coefficient	Five-Inch Runoff Volume (cubic feet)
Building Coverage	1,122,067±/25.76±	1.0	467,528±
Parking Structures	267,193±/6.13±	1.0	111,330±
Rooftop Open Space	109,125±/2.51±	0.5	22,734±
Other Impervious Area	1,577,850±/36.22±	1.0	657,438±
Landscaped Area	681,892±/15.65±	0.3	85,237±
TOTAL	**3,758,127± sf/ 86.27±**	**Weight C = 0.8446**	**1,344,267± cf**

COMMENT 31: The DEIS does not acknowledge that the high use parking lots to be drained by the on-site infiltration network of 120 drywells are likely to be highly contaminated by vehicle oil and fluid leakage, exhaust emission, and rubber tire abrasion.

COMMENT 32: The DEIS does not acknowledge a potential environmental impact that drywells could contaminate groundwater by reducing the distance contaminated stormwater must travel to filter through sediment to reach groundwater.[1]

COMMENT 33: The DEIS does not acknowledge using landscaping for on-site retention and filtration of stormwater above ground within swales that can receive stormwater from adjacent parking lots as pre-treatment for drywells, with capacity overflow to the underground system, as this will help remove contaminants. Use appropriate native vegetation within swales.

In the DEIS, any overflow of stormwater from the on-site underground infiltration system would flow off-site to Nassau County recharge basin #537 which has an emergency overflow to East Meadow Brook.

1 *Edwards, Emily; Washburn, Barbara; Lock, Bennett; Mandler, Ben (18 June 2019).* "Dry wells for stormwater management". *American Geosciences Institute*

COMMENT 34: The DEIS is silent on whether consultants performed due diligence to inspect Nassau County Recharge Basin # 537 to assess its capacity to handle the stormwater recharge use proposed in the DEIS plans.

COMMENT 35: On an independent visit to Nassau County Recharge Basin # 537 on December 8, 2024, the basin appeared at or near "full pool" resembling a full pond - not like the expected typically empty sump. As to why recharge basin #537 has standing water, there are two possibilities. First, the water table in the area is high enough to intersect the bottom of the basin, which is not likely following a protracted drought. Second, there may be a buildup of silt and clay at the bottom of the basin, rendering it impermeable. If that's so, it may be repaired by digging out the bottom of the basin. Until then, the consultant should note in the DEIS that runoff conveyed to this recharge basin may not be recharging the aquifer. As such, much of the stormwater generated on the casino site will end up discharging directly into the East Meadow Brook pending further investigation.

COMMENT 36: Please address in the DEIS that due to climate change, a stormwater anomaly greater than the proposed 5 inches occurred on the night of August 18, 2024 when up to 10 inches of rainfall caused severe flooding to homes, businesses and institutions, damaged several state and local roads, and caused the failure of two local dams in Suffolk County, one in Stony Brook, the other in Smithtown. Of note, several recharge basins also failed, including one in Commack that failed and flooded a shopping mall, and caused water to rise to 4 feet inside the Vanderbilt Motor Parkway building.[2]

Wastewater Management

COMMENT 37: In the DEIS, kindly include, in the event that streams, such as the East Meadow Brook, should run dry because of impacts of the proposed site's wastewater discharge, the technology exists for augmenting their flow by tertiary treatment of sewage, followed by discharge into streambeds.

Shadow Impacts on Purcell Preserve

COMMENT 38: Please include the precedent-setting case of the Brooklyn Botanic Garden in the DEIS. It is relevant to the proposed building shadow impacts on the perpetually protected and globally rare grassland adjacent to the casino site.

In this precedent-setting case, a developer submitted multiple building height revisions over a 5-year period for a proposed new building that would cast shadows on the nearby Brooklyn Botanic Garden (BBG), and this shadowing of the Garden was twice the basis for the rejection of the plans by the NYC Department of City Planning.

The developer, Continuum Company's initial plans for a pair of 39-story apartment buildings at 970 Franklin Avenue in Crown Heights, Brooklyn, were rejected by the New York City Planning Commission in 2021 over concerns about the shadows they would cast across the adjacent Brooklyn Botanic Garden. In

[2] www.newsday.com/long-island/suffolk/flooding-road-collapse-suffolk-storm-xu7b6hea

2022, the same developer came back with a scaled down proposal – a 14-story tower which was also rejected for the same reason – shadows cast on BBG greenhouses and field plants.

Most recently in November 2024, after years of delays and negotiations, the two sides agreed to a 10-story building with a ten-degree sloping roof that would result in a "negligible shadow" while "allowing for necessary sunlight to reach the Garden's plant nursery and other crucial areas." [3]

COMMENT 39: There is avoidance within the DEIS so as to not acknowledge that sensitive and rare nature areas and preserves do adjoin, are close by and are within the scope of what will be impacted by environmental issues that will be caused by the proposed development, thereby requiring mitigations made in the project DEIS to protect them. Please be forthcoming to acknowledge that along the development's east property line, Francis T. Purcell Preserve exists as close as possible, right next door, across a very narrow road, James Doolittle Boulevard. That will be very helpful.

COMMENT 40: On pp. ES-28, 102, 120, 123, 125, 126, 127, 130, 138 and 451, etc., the DEIS seems to have coined a phrase, "Hempstead Plains South" This is not a generally recognized name for the area better known as Francis T. Purcell Preserve. Please use the well-recognized name, Francis T. Purcell Preserve or Purcell Preserve to be more transparent and familiar in the DEIS. Thank you.

COMMENT 41: As with comment 40 above, the DEIS seems to have coined a phrase, "Hempstead Plains North" to refer to the site better-known as Hempstead Plains Preserve. For transparency and clarity, please refer to Hempstead Plains Preserve in the DEIS instead of "Hempstead Plains North," such as on pp. ES-29, 122, 123, 125, etc.

COMMENT 42: The shadows of the south hotel tower would create an artificial and premature sunset-type effect in the shadow-impacted areas of the Purcell Preserve, which will affect not just plant growth but also animal and bird behavior and air and ground temperatures. Please acknowledge this in the DEIS.

COMMENT 43: The DEIS does not acknowledge that many birds, insects, other fauna, have evolved over eons, often millions of years, to be crepuscular or most active during the twilight period. Their activity peaks during these limited windows of gradually changing light – not just foraging for food peaks, but biological or instinctive activities such as courting, mating, hatching, emergence, and relocating – during the peachy blush of dawn and the "golden light" of late afternoon when the sun hangs low in the sky.

COMMENT 44: The DEIS does not detail how the daily, expected gradual onset of twilight will be confounded by the artificial sudden onset sunset impact of the building shadows on the Purcell Preserve. This needs to be included and addressed in the DEIS.

Matutinal animals such as songbirds (passerines) are most active from one hour before until one hour after sunrise, which is their major period of many biological activities for each day. Matutinal animals such

[3] https://www.curbed.com/article/brooklyn-botanic-garden-bruce-eichner-continuum-crown-heights-development.html

as songbirds also enjoy a minor period of daily activity during twilight at dusk. The dusk period is only minor compared to the major period at dawn. Excepting the morning major peak, the minor period at dusk entails much more activity than the rest of the day.

Vespertine animals are most active during twilight at dusk, such as flies, moths, some bats and owls. One good example of a vespertine is the aptly named Vesper Sparrow, a grassland obligate species that can be found at the Hempstead Plains and is of Special Conservation Concern in NY state.

Plants can be highly crepuscular as well. Their biological activities may also peak during the limited windows of gradually changing light, such as during the "golden light" of the late afternoon when the sun is slowly lowering in the sky.

COMMENT 45: The DEIS fails to recognize and has not studied how the sudden fall shadow effect of the south hotel tower impacts the Purcell Preserve and its flora and fauna, nor how it may alter or disrupt the biologically essential purpose of the evening twilight period, the last few hours of each day which are a major/minor peak period for all life activities, that will be suppressed by the sudden onset of the building shadows, like the flipping of a light switch the moment the sun drops behind the 300 foot tall, wide building, confounding what would normally be the gradual twilight period of gently fading sunlight during which wildlife, especially passerines (song birds) and many insects and other vespertines, usually perform a significant amount of their daily biological activities.

COMMENT 46: The DEIS fails to recognize the importance of natural twilight on the prairie ecosystem, its flora and fauna.

COMMENT 47: Building shadow impacts change atmospheric light suddenly, unlike the gradual natural light gradations of sunrise and sunset, which along with other atmospheric changes (like temperature) brough on by twilight, triggers biological life cycle processes in plants and animals at specific measurable degrees and durations of light or dark before, during and after twilight. The DEIS consultants need to study and to acknowledge this.

COMMENT 48: The DEIS does not acknowledge that late spring through summer, when days are longest, baby birds are being born and abound, often depending entirely on their parents to take turns throughout summer's extended daylight hours to continuously forage and return with insectivorous baby food to nourish their growth. It is a critical time of year when baby birds on the Hempstead Plains must develop rapidly (in just a few weeks) to become strong enough to leave their nests and to fly south on their first fall migration. If they are not sufficiently fed as babies, they will not make it.

COMMENT 49: As per Table 20, a reduction of 3.5 hours of sunlight per day on June 21 during the period of parental feeding of baby birds, equals a 23% reduction in what would normally be an essentially required 15 hours per day feeding period.

Table 20 Shadow Impact Duration on Hempstead Plains

Analysis Day	Shadow Period	Maximum Length of Impact (Hours per Day)
December 21 (Winter Solstice)	Start: 2:00 – 3:00 p.m. End: 4:30 p.m.	2.5± hours
June 21 (Summer Solstice)	Start: 5:00 – 6:00 p.m. End: 8:28 p.m.	3.5± hours
March 21/September 21 (Vernal/Autumnal Equinox)	Start: 5:00 – 6:00 p.m. March 21 End: 7:07 p.m. September 21 End: 6:53 p.m.	2± hours
May 6/August 6 (Halfway Between Summer Solstice and the Equinoxes)	Start: 6:00 – 7:00 p.m. May 6 End: 7:55 p.m. August 6 End: 8:04 p.m.	2± hours

COMMENT 50: As per Table 20, a reduction of 2.5 hours of sunlight on December 21 equals an even greater deprivation of sunlight, a 27% reduction in what is a critical need for sunlight by birds in winter. Majority

of birds are only active in light, retiring in dark. Many birds in winter have a low energy budget that can barely get them through each night. They must forage for enough food each day for fuel to generate just enough heat to survive overnight and live another day. A 27% reduction in sunlight and commensurate 27% increase in dark would make the Purcell Preserve inhospitable to birds in winter.

COMMENT 51: On p. 132, in the conclusions of the Shadow section, the DEIS states not once but three times, "No significant negative effects to the existing flora of the Purcell Preserve are anticipated."

(Note: The DEIS does not acknowledge the significant negative effects to the existing fauna, like life-threatening impacts to baby birds and winter birds especially.

In no other circumstance or scenario would a reduction of 23%–27% of an "essential service" (which sunlight is to wildlife and ecology) be said *to not result* in significant negative effects to the population dependent on the service.

COMMENT 52: The height of the South Hotel Tower must be reduced. On p. 492 of the DEIS, the following formula is offered, "The longest shadow that a given structure can cast at the latitude of the Town of Hempstead occurs on the morning of the winter solstice and is approximately 4.1 times the height of the structure."

Based on this formula, and the importance of natural sun cycles to the ecosystem and denizens of the Hempstead Plains, the DEIS should be changed to reduce the height of the 300 foot tall South Hotel Tower by approximately a reduction of 23%–27%.

COMMENT 53: Include renderings in the DEIS of the project with the south tower at a height that would not have any shadow impacts on the Purcell Preserve.

COMMENT 54: The DEIS does not acknowledge or address that tall towers and shadows cause aesthetic impact because the imposing casino site will clearly interfere with or reduce the public's enjoyment and/or appreciation of the appearance of Purcell Preserve.

COMMENT 55: In Appendix 3.3-2: Shadow Assessment, renderings are provided to illustrate the projected shadows from proposed development.

Date	Illustration Time	Actual Sunset
June 21	6:58 pm	8:30 pm
December 21	3:00 pm	4:30 pm

However, the above illustration times are well before the actual time of sunset on the respective days. Therefore, kindly include illustrations in the DEIS of the projected shadow impacts for each time of year at civil dusk – the legal term for the time when the sun is 6 degrees below the horizon in the evening, which is when vehicles are required to turn on their lights.

COMMENT 56: P. ES-29 says, "Impacts from shadows on…the Purcell Preserve under proposed conditions would be similar to those that currently occur to…the Purcell Preserve from the Marriott Hotel building."

This is a misstatement. The Shadow Illustrations in Appendix 3.3-2: Shadow Assessment clearly show that the shadow impacts from the proposed development would be significantly larger than those from the Marriott. The DEIS should be changed to address this.

COMMENT 57: On p. 132, it says, "In all analysis days…the affected areas would receive six hours or more of direct sunlight, which would meet or exceed the minimum sunlight requirements for most resident grassland plant species that occur within the Hempstead Plains."[4] Footnote #4 (being DEIS footnote #173) and the conclusion drawn from it, being that 6 hours daily would meet or exceed the minimum sunlight requirements, is from a web blog, not peer reviewed science, and is unsupportable.

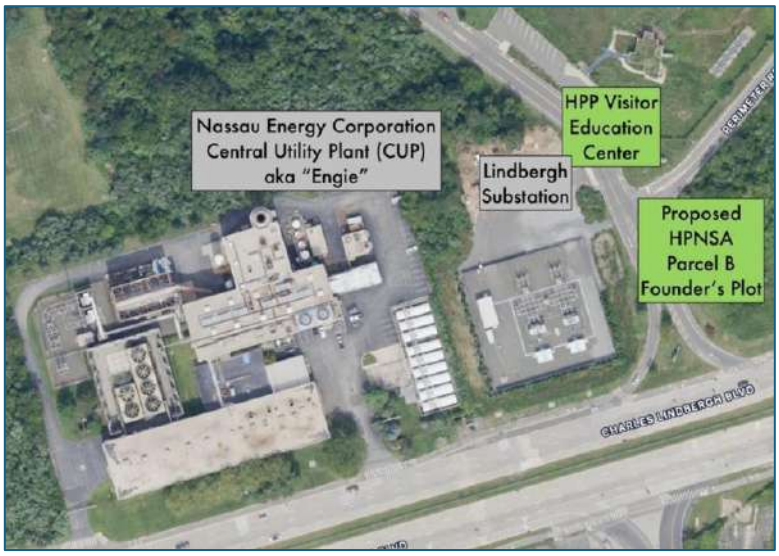
Impacts of Utility Plants and Substations

COMMENT 58: Pp. 183 & 188 say the Nassau Energy cogeneration plant aka in the DEIS as, "The Engie facility is listed in the RCRA generator databases for generation of corrosive-, silver- and halogenated-hazardous wastes and houses multiple aboveground storage tanks (ASTs) containing solvents, acids and waste oil. Undocumented spills or releases of solvents, chemicals, or other hazardous substances associated with these current and historical operations may have adversely affected groundwater, and/or soil vapor on the subject property." For due diligence in the DEIS, it is desirable to test the Nassau Energy cogeneration plant and grounds for the above environmental impacts.

COMMENT 59: Pp. ES-7, ES-14, ES-65. Wherever the Nassau Energy cogeneration plant is referenced throughout the DEIS, please include that it is adjacent to and encroaches on a sensitive site, the Hempstead Plains Preserve Visitor Education Center and parking lot (see photo here).

[4] Sands DEIS Footnote #173: Boston College Dyck Arboretum of the Plains. Defining Sun Requirements for Native Plants. Available at: https://dyckarboretum.org/defining-sun-requirements-for-native-plants/#! Accessed January 2024.

COMMENT 60: The Lindbergh Substation, established in 2019 to support the development of the Nassau Hub[5], is adjacent to the Nassau Energy cogeneration plant. Please include in the DEIS that the Lindbergh substation is immediately across Perimeter Road from, and encroaches upon a sensitive site, the Hempstead Plains Visitor Education Center and parking lot.[6] (see photo here)



COMMENT 61: Please include in the DEIS that the noise that has been generated by the Nassau Energy cogeneration plant and/or the Lindbergh Substation when operational is excessively loud and disrupts meetings, lectures, school field trips and conversations when heard from the Hempstead Plains Preserve Visitor Education Center and parking lot only a short distance away during environmental group meetings, classroom trips, visitor hours and other events.

COMMENT 62: For due diligence in the DEIS, it is desirable to test the Nassau Energy cogeneration plant standalone when operating at capacity. Include in the DEIS the date, max noise level, and max pollutant levels of Particulate Matter (PM), Particulate Matter< 10µ in diameter (PM10), Sulfur Dioxide (SO2), Ozone, Volatile Organic Compounds (VOC), Oxides of Nitrogen (NOx), Carbon Monoxide (CO). Test the gas-powered turbine and the three boilers, ideally running concurrently if possible. Second, test the Lindbergh Substation for max noise, max electromagnet field (EMF) radiation and other hazardous emissions from the substation standalone alone when operating at peak capacity. Third, test the combined max noise, max pollutants (listed above), max EMF, and any other federal or state regulated emissions from the Nassau Energy cogeneration plant and Lindbergh Substation when both are running concurrently at peak operating capacity.

COMMENT 63: Pp. ES-66, 524, 663 say, "Sands requires a total electrical service capacity of 47 megavolt ampere (MVA)…from a combination of existing capacity at the 69kV Lindbergh Substation, as well as the construction of an additional substation/expanded substation in the general vicinity of this existing substation (alternative locations are currently being explored). For the initial phase of the proposed Integrated Resort, it is projected that four (4) 10MVA, 13.2kV feeders would be provided from the existing Lindbergh Substation to provide 20MVA of capacity in a 2N configuration. Sands DEIS does mnot acknowledge what the impact would be, starting in and continuing from the initial phase by adding four (4) 10MVA, 13.2kV feeders to the existing Lindbergh Substation to provide 20MVA of capacity

[5] PSEG Lindbergh Full Environmental Assessment Form (FEAF), 2019. https://www.psegliny.com/reliability/lindbergh, https://www.psegliny.com/reliability/-/media/A5783C0959B649C58DFAC586A64C660A.ashx

[6]PSEG Lindbergh FEAF 2019, Figure 1 – Site Location Map https://www.psegliny.com/reliability/-/media/898C8E98C1594E1D8223B8B74413E7B6.ashx

encroaching upon and just across a narrow street from two sensitive sites. First, the Hempstead Plains Preserve Visitor Education Center and parking lot. The second sensitive site is the proposed Hempstead Plains Nature Study Area Parcel B where a 4-5 acre founder's plot is planned for establishing an endemic native seed supply and for public educational purposes (see p. 28 of this report).

Next, pp. ES-5, ES-86-87, ES-91, 41, 54, 524, 537, 594-595, 609 cite "an expanded or new substation" would be required to serve the proposed Integrated Resort beyond Phase 1 and that "PSEG Long Island is in the process of identifying locations for this new/expanded substation."

Pp. ES-14, and 54 say, "The proposed expanded or new PSEG LI substation may require review by the Nassau County Open Space & Parks Advisory Committee and the Nassau County Planning Commission, and approval by the Nassau County Legislature, if it is constructed on land owned by Nassau County," which means green space whenever OSPAC review is required.

COMMENT 64: Open space (green space) should not be used for any utility service, plant or substation, etc., to be constructed or expanded for use at/by the Nassau Hub build site.

COMMENT 65: Any new or expanded substation should be constructed on and reuse previously developed land (ideally, of no current or little use) on or adjacent to the Nassau Hub, provided the location is not within 200 yards of any part of the proposed Hempstead Plains Nature Study Area (see p. 22 of this report).

Pp. ES-14, and 54 say, "If the substation is constructed/expanded on property under the control of Nassau Community College, approvals would also be required from the Board of Trustees of Nassau Community College and the Board of Trustees of the State University of New York."

COMMENT 66: Strike from the DEIS that a substation can be constructed/expanded on or near existing substation already encroaching onto the sensitive site of the Hempstead Plains Preserve Visitor Education Center and parking lot. For obvious reasons, this is a bad idea.

COMMENT 67: In the DEIS, please include the photo here that illustrates that both the Nassau Energy cogeneration plant and the Lindbergh Substation noise, pollutants, and any other hazardous emissions encroach upon a historical, rare and precious ecosystem, the Hempstead Plains, which provides habitat for many rare, threatened and endangered species. Although the Nassau Energy cogeneration plant and the Lindbergh Substation serve the proposed casino site, they are purposely distanced from there for obvious reasons, instead being located near two sensitive sites. First, the Hempstead Plains Preserve Visitor Education Center and parking lot. The second sensitive site is the proposed Hempstead Plains Nature Study Area Parcel B where a 4-5 acre founder's plot is planned for establishing an endemic native seed supply and for public educational purposes (see p. 28 of this report).

P. 524 says, "…power would be provided from a combination of existing capacity at the 69kV Lindbergh Substation, as well as the construction of an additional substation/expanded substation in the general vicinity of this existing substation (alternative locations are currently being explored)."

COMMENT 68: Strike from p. 524 and anywhere in the DEIS that an additional/expanded substation can be constructed/expanded in the general vicinity of the Lindbergh substation which encroaches on the

sensitive site of the HPP Visitor Education Center and parking lot. Add that an additional/expanded substation cannot be constructed/expanded on green space. Any new or expanded substation should be constructed on and reuse previously developed land (ideally, of no current or little use) on or adjacent to the Nassau Hub, provided the location is not within 200 yards of any part of the proposed Hempstead Plains Nature Study Area (see p. 22 of this report).

COMMENT 69: Please add all scientific research below on substation impacts on sensitive site to the DEIS. That will be very helpful.

Permanent Substation Impacts:[7] The permanent impacts related to construction and operation of a new substation (or expansion of an existing substation) may be substantial depending on the location of the new site and its proximity to residences and other sensitive sites such as the Hempstead Plains Nature Study Area. Among the more important and long-lasting impacts are land use changes and habitat loss, changes to local aesthetics and viewsheds, noise, and lighting.

Noise and Lighting Impacts: The noise produced by an operating substation can be quite loud to adjacent property owners and wildlife at other sensitive sites such as the Hempstead Plains Nature Study Area. A constant humming or buzzing noise may be audible several hundred feet from the substation fence.

Threatened, Endangered, or Rare Species: Construction and operation of a substation could have direct impacts on rare species or their habitat if the substation is sited in an area with high-quality habitat suitable for protected species such as the Hempstead Plains Nature Study Area. Applicants are required to consult with the New York State Department of Environmental Conservation to determine if protected species or high-quality habitat are present on the site. In some cases, field surveys may be necessary. When these resources might be present, the utility is required to avoid or reduce possible impacts. Methods to avoid or minimize impacts may include choosing an alternative site.

Substation construction can also result in the direct loss of grassland or woodland habitat for other non-listed birds, mammals, reptiles and other wildlife, of which many hundreds of species of federally-protected migratory birds stop over during spring and fall migration to rest and refuel on native forage. At least 50 species are found year-round on the Hempstead Plains Nature Study Area, and a breeding set of at least 50 bird species raise their families here (see p. 26 of this report).

Vegetation Management: Buried beneath the gravel in a substation yard is a grid of wires that functions as the grounding for the high voltage equipment. To ensure safety for utility employees and the public, it is important to prevent this ground grid from being compromised by vegetation growth. For this reason, substation yards are regularly maintained by using a variety of herbicides.[8] This is not desirable in the proximity of the resident and breeding bird populations and federally-protected migratory birds present in the Hempstead Plains Nature Study Area, and it's a nonpoint source of potentially toxic water pollution runoff contamination into our waterways.

[7] https://psc.wi.gov/Documents/Brochures/Impacts%20of%20Substations.pdf
[8] Ibid.

Light Pollution Impacts on Migratory Birds

COMMENT 70: Over 340 wild and resplendent bird species (not counting vagrants) will visit, vacation and 146 will stay to raise families on Long Island annually, coming from our southern states, Mexico, Caribbean, Central and South America. The DEIS does not acknowledge that, as Nassau County is only 23 miles wide at its widest point, many of the 7,824,900 and 28,175,400 federally protected migratory birds that cross Nassau County at night in spring and fall respectively, will be impacted by night light pollution from the proposed casino site. The DEIS must develop a mitigation plan for this impact that will cause harm to federally protected migratory birds.

(https://dashboard.birdcast.info/region/US-NY-059?night=2024-06-14, https://dashboard.birdcast.info/region/US-NY-059?night=2024-11-14)

The sizable disparity in numbers between spring and fall migration is that certain species, namely shorebirds (but also others) take the fastest flyway with the stiffest tailwinds which is in central USA to race up from Central and South America to reach their nursery grounds to raise families in northern Canada's Boreal Forest, Alaska and the Arctic. In the fall, they take the Atlantic Flyway back, at a more leisurely pace, crossing Long Island on their way home to Central and South America for the winter.

COMMENT 71: For more information on light pollution impacts on migratory birds, see comments submitted separately under their own cover by the NYC Bird Alliance organization.

Local Research on Light Pollution Impacts on Breeding Birds

COMMENT 72: A local Long Island high school student researching the impact of light pollution on birds is among the semifinalists announced in the national Regeneron Science Talent on January 8, 2025.[9] The student scholar, Shannon Hong of Herricks High School in New Hyde Park, told News12, "My study suggests that light pollution could hinder bird reproduction, therefore could lead to the decline of bird populations."[10] Please have the DEIS acknowledge that this student research study is both local and timely, given the impact of light pollution from the proposed casino on breeding bird populations at Purcell Preserve across the street, and across the Hempstead Plains overall.

[9] News12, Dozens of LI students named semifinalists in Regeneron Science Talent Search, Jan. 28, 2025, https://longisland.news12.com/dozens-of-li-students-named-semifinalists-in-regeneron-science-talent-search

[10] Newsday, Regeneron Science Talent Search Scholars, Jan. 8, 2025, https://www.newsday.com/long-island/education/regeneron-scholars-long-island-pvsqzn9r

Science on Noise Impacts on Birds

COMMENT 73: The DEIS should acknowledge that sound is an integral component in bird survival. Ornithologists have identified thousands of sounds made by birds, including calls, chirps, rattles, whistles, trills, croaks, drumming, each with its own purpose. Birds use sound to attract mates, signal the singer's health and vigor, defend territories, signal alarms about predators, and share the location of food.[11] Sound is a 360 degree communication tool (unlike visual communication which relies on line of sight) and bird sounds and therefore communication can traverse vision-blocking tall grass and foliage, through tree groves, wrap around corners, often carrying long distances, unless impacted by noise.

COMMENT 74: The DEIS should acknowledge that negative impacts of anthropogenic (human-generated) noise on wildlife are well documented. "Fitness in birds has been shown to be negatively associated with anthropogenic noise… environmental noise can reduce fitness in juvenile passerine (perching) birds by acoustically masking parent–offspring communication… More importantly, birds breeding in a noisy environment and their offspring experience significant fitness costs."[12]

COMMENT 75: The DEIS should acknowledge that studies have shown negative effects of persistent noise on wildlife neuroendocrine systems, reproduction and development, metabolism, cardiovascular health, cognition, sleep, audition, the immune system, and DNA integrity and gene expression.[13]

COMMENT 76: The DEIS should acknowledge that the impact of noise is particularly notable on songbirds. Studies have shown altered vocal behavior, reduced abundance in noisy habitats, changes in vigilance and foraging behavior, and impacts on individual fitness and the structure of ecological communities. The literature shows that terrestrial wildlife negative biological responses begin to manifest at noise levels of approximately 40 dBA.[14]

COMMENT 77: The DEIS should acknowledge that a study published in the Journal of Applied Ecology reported that "traffic noise [in March, when bird territories are formed] had a negative effect on reproductive success with females laying smaller clutches in noisier areas. Additionally, noise levels recorded in April [when eggs are laid and incubated] had a negative effect on the number of hatchlings, independent of clutch size."[15]

[11] Current Biology: Ecology and evolution of bird sounds, Volume 32, Issue 20,2022, https://www.sciencedirect.com/science/article/pii/S0960982222012258
[12] Passerine [Perching] Birds Breeding under Chronic Noise Experience Reduced Fitness https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0039200
[13] Journal of Ecology Letters: How and why environmental noise impacts animals https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1461-0248.2011.01664.x
[14] Cambridge Biological Reviews: A synthesis of two decades of research documenting the effects of noise on wildlife https://onlinelibrary.wiley.com/doi/abs/10.1111/brv.12207
[15] Journal of Applied Ecology: Negative impact of traffic noise on avian reproductive success https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/j.1365-2664.2010.01914.x

COMMENT 78: The DEIS should acknowledge a study in the National Center for Biotechnology Information library that many bird species are less abundant in terms of species diversity, breeding and density near noisy highways.[16]

Noise Impacts on Birds

COMMENT 79: Apparent in the noise impact sections, the DEIS cannot continue to be silent on the globally rare grassland preserves that the proposed site will have negative impacts upon. The DEIS has been called out in other comments (1, 2, 3, 82 for instance) for this recurring pattern of unprofessional denial that there are no grasslands, no flowing brook, no wetlands, no declining bird species, wildlife or flora worth protecting from the significant adverse impacts of the proposed project. Such denials need to come clean out of the DEIS.

COMMENT 80: Pp. ES-52, ES-76, ES-79, 339, etc. The DEIS needs to acknowledge and address that birds and wildlife of/on rare grassland preserves may be harmed by noise impacts from the proposed site. The DEIS needs to acknowledge that such harm can manifest itself in a decline in diversity, density, brood size, vigor, and health, particularly of young birds.

COMMENT 81: Please change p. 130. "There are residential and commercial land uses and rare grassland preserves near the proposed development. According to NYSDEC noise policy, these land uses are all typically considered to be sensitive to noise."

COMMENT 82: Change pp. ES-52, ES-76, ES-79, 339, 343, 571, 581, etc. "To minimize impacts to the surrounding neighborhoods and rare grassland preserves (including noise), during the construction period, construction vehicles would be routed through primary streets and highways, and would not traverse secondary, local neighborhood or rare grassland preserves streets, including James Doolittle Blvd which will be closed to traffic."

COMMENT 83: Change pp. ES-79, 339, 343, 581, etc. "Where possible, construction equipment will be sited on the subject property as far from noise-sensitive receptors and rare grassland preserves as possible."

COMMENT 84: Change DEIS p. 571. "Contingent upon maintaining sufficient ~~Based on the~~ distance between the construction activities and the nearest receptors or rare grassland preserves, and with implementation of the proposed mitigation measures, and as per Table 72, construction equipment is maintained at 300 feet from the preserve whenever possible, no significant adverse noise impacts are expected during the construction period."

COMMENT 85: Change p. 130. "A noise monitoring program was conducted to collect existing sound level data. The noise receptor sites are illustrated in Figure 46, and these monitoring locations are

[16] Journal of Molecular Ecology: Birdsong and anthropogenic noise: implications and applications for conservation https://pubmed.ncbi.nlm.nih.gov/17784917/

representative of the nearest sensitive receptors. For rare grassland preserves, noise receptors 4 and 5 may serve for Purcell Preserve – Northwest Quadrant and Purcell Preserve – Midsection respectively."

COMMENT 86: Change p. 322. "Location 4 is the Marriott Hotel property (a residential-type property [where people sleep] within the subject property, which would continue to operate), and for the northwest quadrant of Purcell Preserve. Location 5 is representative of the midsection of Purcell Preserve to the east."

COMMENT 87: P. 342 says, "…based on the analysis of vibration, construction of the Integrated Resort would not be disruptive to adjacent properties." Please acknowledge and address in the DEIS that vibration, construction would have a significant adverse impact on the globally rare grassland ecology at Purcell Preserve if not mitigated.

COMMENT 88: Change p. 334. "Also, to mitigate potential noise impacts to the rare grassland preserves or the residential community to the south, a vegetated berm is proposed to be constructed on the subject sites along the boundary with Purcell Preserve ~~Hempstead Turnpike~~, as shown by the red dashed lines on Figure 51 between the Integrated Resort and the rare grassland preserves or the neighborhood to the south. According to the NYSDOT, earthen berms are a type of noise barrier that can lower noise levels at receptor locations.[17] Therefore, such vegetated berm would provide additional noise attenuation."

Impacts along James Dolittle Boulevard

COMMENT 89: Nassau County should act now to engage with local communities and environmental groups that have the expertise to help design, renew and, when it's ready, to open Purcell Preserve for public nature-viewing access, which is currently prohibited.

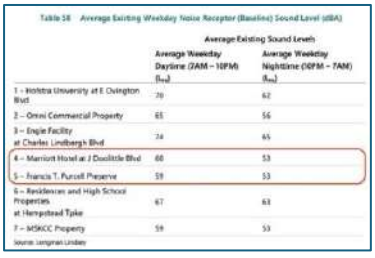
[17] New York State Department of Transportation – *The Transportation Environmental Manual § 4.4.18 Noise Analysis Policy and Procedures* at https://www.dot.ny.gov/divisions/engineering/environmental-analysis/manuals-and-guidance/epm/repository/4_4_18_Noise.pdf (p. 39).

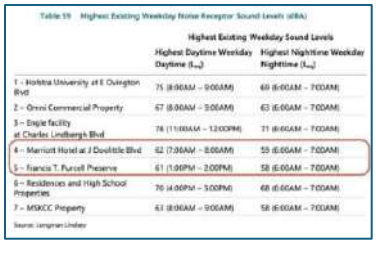
COMMENT 90: The DEIS should acknowledge there's no need for casino traffic on James Doolittle Boulevard because site plans call for a new, more convenient 4-lane express road called Sands Boulevard, in and out of the casino to be built paralleling James Doolittle Boulevard, superseding a need for casino traffic to use James Doolittle Boulevard. The DEIS should include closing off all traffic flow on this narrow, non-strategic Nassau County roadway in the site plans.

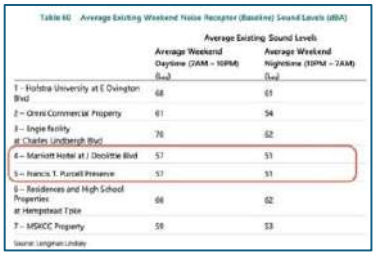
The DEIS should acknowledge that access for vehicles to enter or exit the Marriott hotel property will continue to be provided at the intersection of Charles Lindbergh and James Doolittle boulevards, but the balance of James Doolittle Boulevard below that will be closed off. See Figure 51.

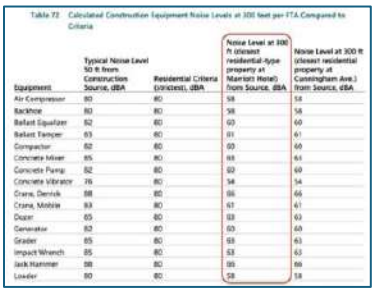
COMMENT 91: Please delete from p. 130 that, "The roadway would continue to allow only right-turns in and out at both its north and south ends and only provide access to two surface parking fields (that are also accessed primarily from the main site entry points and would be the least used parking areas at the subject property) and the existing Marriott Hotel, similar to existing conditions. As such, any increases in traffic volumes on the roadway and associated noise due to the Integrated Resort would be minor. No intrusion into the Hempstead Plains Preserve to improve the roadway beyond its current alignment are proposed."

COMMENT 92: Again, the DEIS fails to acknowledge that a globally rare, historic grassland exists within a few feet of the proposed site. In Figure 51, the north, south and east sides of the proposed site have more than ample, overly wide buffers between the development and the surrounding areas. Except on the east side, where an environmental buffer is needed most, it's missing. This seems to be a site design plan oversight. There is nothing to help to reduce noise and visual impact, and to help keep windblown landscaping plant pollen, seeds and fruit on the proposed site instead of causing a biological impact on the preserve. The DEIS needs to provide a mitigation plan for an effective environmental buffer along the Nassau Hub site's shared border, to insulate Purcell Preserve from any aesthetic or visual impact, light or noise pollution, wind-borne pollen, seeds and fruit blowing off the casino site landscaping or any other environmental encroachment on globally rare Purcell Preserve ecology, flora and fauna.









COMMENT 93: Change p. 126. "The existing noise environment for…Purcell Preserve ~~the Hempstead Plains South~~, includes sound levels from vehicular traffic on the Meadowbrook State Parkway, Hempstead Turnpike, Earle Ovington Boulevard, Charles Lindbergh Boulevard, and other local roadways, ~~as well as noise from the surrounding commercial, institutional activities, and residential development~~…" "…As such, the current wildlife fauna of Purcell Preserve ~~the Hempstead Plains~~ exists within an environment with ~~high~~ low ambient noise levels from surrounding roadways ~~and dense development~~."

COMMENT 94: Change p. 126. "Implementation of the proposed project would result in temporary increases in sound levels to nearby… Purcell Preserve ~~the Hempstead Plains South~~…" "Where possible, construction equipment would be sited on the subject property as far from noise-sensitive receptors as possible, including Purcell Preserve ~~the Hempstead Plains South~~…" "…and taking into account that the existing wildlife fauna of Purcell Preserve ~~the Hempstead Plains~~ is adapted to ~~high~~ low ambient noise levels from surrounding roadways ~~and dense development~~, no significant adverse impacts to wildlife due to temporary construction-related noise levels are anticipated provided that as per NYSDOT procedures[18], earthen berms, a type of noise barrier that can lower noise levels are used as shown by the red dash lines in Figure 51, and as per Table 72, construction equipment is maintained at 300 feet from the preserve whenever possible."

COMMENT 95: Change pp. 126 and 127 to "the existing wildlife fauna of Purcell Preserve ~~the Hempstead Plains~~ is adapted to ~~high~~ low ambient noise levels." As a persistent theme throughout the DEIS, both pages are misleading the value of protecting the nearby rare and historical preserves, flora and fauna from impacts of the casino development. In this instance, pp. 126 and 127 fail to acknowledge Tables 55, 58, 59, 60 which categorize globally rare and perpetually protected Francis T. Purcell Preserve with low noise levels to the extent of being Federal Highway Administration Class A: "Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purposes."[19]

[18] New York State Department of Transportation – *The Transportation Environmental Manual § 4.4.18 Noise Analysis Policy and Procedures* at https://www.dot.ny.gov/divisions/engineering/environmental-analysis/manuals-and-guidance/epm/repository/4_4_18_Noise.pdf (p. 39).

[19] Federal Highway Administration - *23 CFR Part 772: PROCEDURES FOR ABATEMENT OF HIGHWAY TRAFFIC NOISE AND CONSTRUCTION NOISE* https://www.ecfr.gov/current/title-23/part-772

For additional comments and changes to the Environmental Impact Statement, please note these other organizations and environmentalists that made submissions under their own separate cover:

New York City Bird Alliance	• Bird-building collisions • Night lighting impacts on migratory birds
Long Island Conservancy	• East Meadow Brook waterway and wetlands • Meadowbrook Parkway and roadways expansion
Dropseed Native Landscapes	• Native landscaping impacts
Seatuck Environmental Center	• Bird-building collisions
Dr. J Bret Bennington, Professor and Chair of the Department of Geology, Environment, and Sustainability, Hofstra University	• Water resources, supply, quality (hydrology) • Groundwater level impacts • Proposed new water well impacts

30 Endangered, Threatened, Rare Grassland Obligate Species

Existing remnant patches of Hempstead Plains grassland are surrounded by urban development and illegal garbage dumping has been common. It is extremely vulnerable to further development and associated disturbances. It has been colonized by invasive exotic species, and successional shrublands or successional southern hardwoods.

However, adequate protection, restoration, proper management, and no further development in and around the sites, should allow the Hempstead grassland's viability to improve.[20]

LI Grassland Specialist Birds Endangered: 1, Threatened: 3, Special Concern: 3, High Priority: 2

#	Common Name	*Scientific Name*	Species Status
1.	Short-eared Owl	*Asio flammeus*	NY/LI Endangered[1]
2.	Northern Harrier	*Circus hudsonius*	NY/LI Threatened[2]
3.	Upland Sandpiper	*Bartramia longicauda*	NY/LI Threatened[2]
4.	Henslow's Sparrow	*Centronyx henslowii*	NY/LI Threatened[2]
5.	Horned Lark	*Eremophila alpestris*	NY/LI Special Concern[3]
6.	Vesper Sparrow	*Pooecetes gramineus*	NY/LI Special Concern[3]
7.	Grasshopper Sparrow	*Ammodramus savannarum*	NY/LI Special Concern[3]
8.	Bobolink	*Dolichonyx oryzivorus*	NY/LI High Priority[4]
9.	Eastern Meadowlark	*Sturnella magna*	NY/LI High Priority[4]

[1]: Endangered native species in imminent danger of extirpation or extinction in NYS.
[2]: Threatened native species likely to become an NYS endangered species within the foreseeable future.
[3]: Native species for which a welfare concern or risk of endangerment has been documented in NYS.
[4]: High Priority Species of Greatest Conservation Need
Source: NYS DEC

Pollinators of the Hempstead Plains Preserves Threatened: 1, Critically Imperiled: 1

#	Common Name	*Scientific Name*	Species Status
10.	Frosted Elfin	*Callophrys irus*	NY/LI Threatened[7]
11.	Hand-maid Moth	*Datana ranaeceps*	NY/LI Critically Imperiled

Plants of the Hempstead Plains Preserves Endangered: 4, Threatened: 14, Rare:1

#	Common Name	*Scientific Name*	Species Status
12.	Sandplain Gerardia	*Agalinis decemloba*	Fed & NY Endangered[5,6]
13.	Soapwort Gentian	*Gentiana saponaria*	NY/LI Endangered[6,9]
14.	Eastern Silvery Aster	*Symphyotrichum concolor*	NY/LI Endangered[6,9]
15.	Britton's Coast Violet	*Viola brittoniana*	NY/LI Endangered[6]
16.	Stargrass	*Aletris farinosa*	NY/LI Threatened[7]
17.	Purple Milkweed	*Asclepias purpurascens*	NY/LI Threatened[7]
18.	Green Milkweed	*Asclepias viridiflora*	NY/LI Threatened[7]
19.	Midland Sedge	*Carex mesochorea*	NY/LI Threatened[7]
20.	Bushy Rock Rose	*Crocanthemum dumosum*	NY/LI Threatened[7]
21.	Low Rock Rose	*Crocanthemum propinquum*	NY/LI Threatened[7]
22.	Small-leaved Trefoil	*Desmodium ciliare*	NY/LI Threatened[7]
23.	Narrowleaf Bush Clover	*Lespedeza angustifolia*	NY/LI Threatened[7]
24.	Nuttall's Milkwort	*Polygala nuttallii*	NY/LI Threatened[7]
25.	Blunt Mountain Mint	*Pycnanthemum muticum*	NY/LI Threatened[7]
26.	Few-flowered Nutrush	*Scleria pauciflora*	NY/LI Threatened[7]
27.	Narrowleaf Whitetop Aster	*Sricocarpus linifolius*	NY/LI Threatened[7]
28.	Hyssopleaf Hedge Nettle	*Stachys hyssopifolia*	NY/LI Threatened[7]
29.	Northern Gama Grass	*Tripsacum dactyloides*	NY/LI Threatened[7]
30.	Birds-foot Violet	*Viola pedata*	NY/LI Rare[8]

[5]: Listed as Endangered under the Federal Endangered Species Act.
[6]: Listed as Endangered by NYS: In imminent danger of extirpation in NY.
[7]: Listed as Threatened by NYS: Likely to become Endangered in the foreseeable future.
[8]: Listed as Rare by NYS: Likely to become Threatened in the near future.
[9]: Considered extirpated. Conservation translocation/reintroduction candidate.
Source: New York Natural Heritage Program

[20] Source: guides.nynhp.org/hempstead-plains-grassland/

New York State Wildlife Action Plan for 2025-2035

The US Endangered Species Act of 1973: Designed by Congress to protect critically imperiled species and to halt and reverse the trend toward species extinction caused by unscrupulous economic growth and development untempered by adequate concern and conservation. The purpose of the ESA is:

1) to prevent extinction, and
2) to recover species to the point where the law's protections are no longer needed, and
3) to get there, the ESA also protects ecosystems upon which listed species depend.

State Wildlife Action Plans (SWAPs) are updated with USFWS every 10 years. SWAPs serve to prevent species from becoming federally endangered. To be eligible for federal wildlife conservation funding, a SWAP must identify Species of Greatest Conservation Need, identify the habitats they require, and prescribe recommended actions to address the threats to ensure the conservation of SGCN, before they become too rare or costly to restore.

Of 79 birds on NY's 2025-35 SWAP, **34 imperiled species below require habitat found within the 100-acre HPNSA** and can benefit from conservation action and habitat improvement here so as not to become endangered species in NY.

Conservation action to establish a 100-acre Hempstead Plains Nature Study Area will also benefit several hundred other native birds, other wildlife species and native plants whose populations in Nassau County have been declining sharply, but not sharp enough yet to be listed as the highest state priorities on NY's SWAP plan such as these birds are:

Endangered Imminent danger of extirpation or extinction in NYS.	**Legend: G: Grassland; F: Forest; W: Wetland**
1. Loggerhead Shrike	G
2. Short-eared Owl	G
Threatened Likely to become a NYS endangered species within the foreseeable future.	
3. Common Nighthawk	G
4. Yellow-breasted Chat	F
5. Kentucky Warbler	F
6. Least Bittern	W
7. Upland Sandpiper	G
8. Sedge Wren	G
9. Henslow's Sparrow	G
Special Concern A welfare concern or risk of endangerment has been documented in NYS.	
10. Peregrine Falcon	
11. Bald Eagle	F, W
12. Northern Harrier	G, W
13. Barn Owl	G, W
14. American Bittern	W
15. Red-shouldered Hawk	W
16. Red-headed Woodpecker	F
17. Horned Lark	G
18. Vesper Sparrow	G
19. Grasshopper Sparrow	G
High Priority Species of Greatest Conservation Need	
20. American Black Duck	W
21. Bay-breasted Warbler	F
22. Bobolink	G
23. Brown Thrasher	F
24. Canada Warbler	F
25. Cape May Warbler	F
26. Eastern Meadowlark	G
27. Northern Bobwhite	G
28. Olive-sided Flycatcher	W
29. Prothonotary Warbler	W
30. Rusty Blackbird	W
Proposed New SGCN for 2025-35	
31. American Kestrel	G
32. Greater Yellowlegs	W
33. Long-eared Owl	F
34. Tennessee Warbler	F

Learn more: https://dec.ny.gov/nature/animals-fish-plants/biodiversity-species-conservation/state-wildlife-action-plan

National Audubon Flight Plan for 2023-2028

The Audubon Flight Plan for 2023-28 will "bend the bird curve" from a 50-year steep decline into an upward curve by 2028 for bird populations that migrate throughout the Western Hemisphere. Birds have no borders. Depending on species, migrants travel en masse from Antarctica, South America, Central America, the Caribbean, North America, up to the Arctic Circle and Alaska to raise their families – and back again each year.

Across the Western Hemisphere, 188 "Indicator Species" have been identified by Audubon. As any Indicator Species population curve bends upward due to priority habitat improvement across the Americas, that bird also "indicates" that multiple other bird and wildlife species that use the same ecosystems are improving as well.

Of the total 188, **40 declining species listed below require habitat found in the 100-acre HPNSA** and can benefit from conservation action and habitat improvement that will bend the bird curve up for their populations here in Nassau County.

To improve the HPNSA for the indicator species below, will also mean that many other bird, flora and fauna species that share the HPNSA will improve, as well as the overall ecosystem and water quality.

	Audubon Indicator Species	Legend: G: grassland, F: forest, W: wetland, U: Urban
1.	American Bittern	W
2.	American Black Duck	W
3.	American Kestrel	G, F
4.	American Woodcock	F
5.	Bald Eagle	F, W
6.	Bay-breasted Warbler	F
7.	Black-billed Cuckoo	F
8.	Blackpoll Warbler	F
9.	Bobolink	G
10.	Canada Warbler	F
11.	Chimney Swift	F, U
12.	Dickcissel	G
13.	Eastern Meadowlark	G
14.	Grasshopper Sparrow	G
15.	Henslow's Sparrow	G
16.	Kentucky Warbler	F
17.	Lark Bunting	G
18.	Least Bittern	W
19.	Loggerhead Shrike	G
20.	Long-billed Dowitcher	W
21.	Mourning Warbler	F
22.	Northern Bobwhite	G
23.	Northern Harrier	G, W
24.	Northern Pintail	W
25.	Olive-sided Flycatcher	F
26.	Painted Bunting	F
27.	Prairie Warbler	F
28.	Prothonotary Warbler	F
29.	Purple Martin	G, W
30.	Red-headed Woodpecker	F
31.	Rose-breasted Grosbeak	F
32.	Rufous Hummingbird	F
33.	Rusty Blackbird	W
34.	Scarlet Tanager	F
35.	Short-eared Owl	G
36.	Upland Sandpiper	G
37.	Wood Thrush	F
38.	Yellow Warbler	F
39.	Yellow-billed Cuckoo	F
40.	Yellow-breasted Chat	F

View the National Audubon Flight Plan for 2023–28: https://media.audubon.org/2024-01/WEB_Strat%20Plan%20Overview_Jan04.pdf

Breeding Birds of the Hempstead Plains

How many bird species raise their families on Long Island? Most people guess way too low.

You may be surprised to learn, 146 bird species reunite on Long Island after a long winter apart, fall in love all over again (many species are monogamous) in spring, and raise their families here during the productive months of May, June, July, into August.[21]

Of the146 Long Island breeding birds, **at least 50 nest and raise young in the 100-acre HPNSA.**

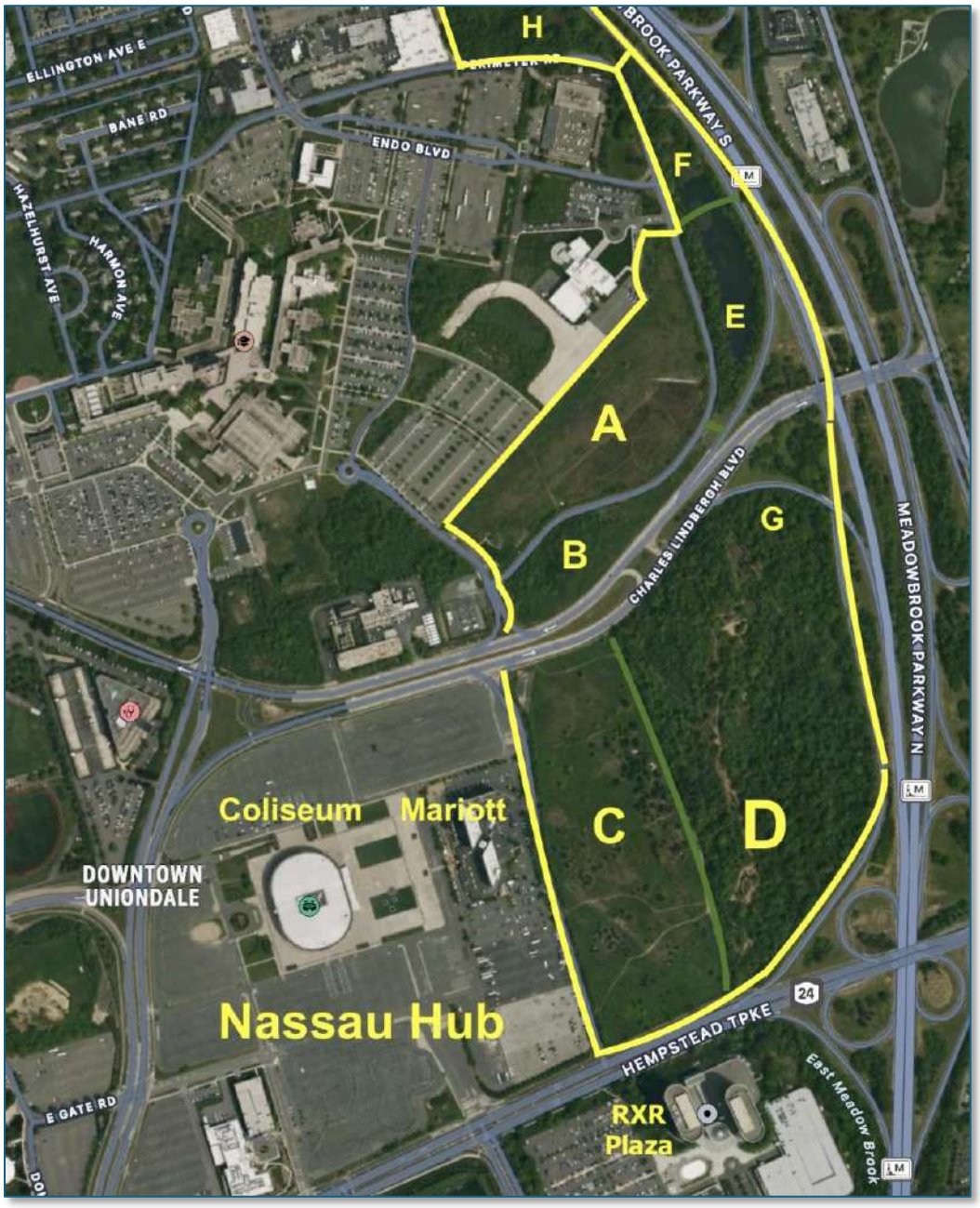
Breeding Birds of the Hempstead Plains		
1. Mallard	18. Common Raven	35. American Goldfinch
2. Rock Pigeon	19. Black-capped Chickadee	36. Chipping Sparrow
3. Mourning Dove	20. Tufted Titmouse	37. Field Sparrow
4. Chimney Swift	21. Tree Swallow	38. Savannah Sparrow
5. Ruby-throated Hummingbird	22. White-breasted Nuthatch	39. Song Sparrow
6. Killdeer	23. Blue-gray Gnatcatcher	40. Swamp Sparrow
7. Red-bellied Woodpecker	24. House Wren	41. Eastern Towhee
8. Downy Woodpecker	25. Carolina Wren	42. Eastern Meadowlark
9. Hairy Woodpecker	26. European Starling	43. Baltimore Oriole
10. Northern Flicker	27. Gray Catbird	44. Red-winged Blackbird
11. American Kestrel	28. Brown Thrasher	45. Brown-headed Cowbird
12. Eastern Kingbird	29. Northern Mockingbird	46. Common Grackle
13. White-eyed Vireo	30. Wood Thrush	47. Common Yellowthroat
14. Warbling Vireo	31. American Robin	48. American Redstart
15. Red-eyed Vireo	32. Cedar Waxwing	49. Yellow Warbler
16. Blue Jay	33. House Sparrow	50. Northern Cardinal
17. American Crow	34. House Finch	51. Indigo Bunting

Most likely, a dozen more species including raptors and owls nest here too, keeping their nests hidden in hard-to-find spots. This raises an important point to understand about many wild species of birds that still nest on Long Island – they cannot easily adapt to human encroachment. That's why we must preserve more natural and somewhat undisturbed areas (like the HPNSA) that provide privacy and respectful boundaries so they will feel equally at home in Nassau County, as much as we do raising our own families here.

[21] New York State Department of Environmental Conservation (NYSDEC). *New York State Breeding Bird Atlas III*. More info: https://www.dec.ny.gov/animals/7312.html and https://ebird.org/atlasny/home.

Proposed 100-acre Hempstead Plains Nature Study Area

A larger, more contiguous, and resilient Hempstead Plains Nature Study Area can better diffuse environmental impacts from the Nassau Hub. Simply, more grassland with wooded edge, forest, brook and wetland combined to approx. 100 acres, will be more attractive to grassland specialist birds and wildlife, being conducive to restoring a lush biodiversity of NY native flora and fauna. There aren't many preservable 100-acre tracts left in this part of Nassau County, making this proposal critical.



Parcels A, C, D (but currently not B) have substantial intact acreage of Hempstead Plains grassland. Nevertheless, sections of all 4 parcels (A, B, C, D) should be prioritized to be restored back to Hempstead Plains grassland habitat by selectively replacing invasive plant tracts, successional old field, scrubland and hardwoods with appropriate Hempstead Plains grassland plant species.

There's much to consider for preserving and restoring the following 8 different mini-ecosystems which are adjacent to yet distinctly demarcated from each other. Their proximity makes it possible for us to protect and preserve them as an exemplary series of Nassau County native habitats that reflect our natural heritage as well as our environmental legacy for future generations.

Now, that's not saying these parcels aren't disturbed by man, they all have been. Yet they all retain their own essence of what such diverse ecosystems should each provide in being able to host and harbor obligate flora and fauna ecotypes specific to each parcel - and they all can be carefully cultivated to increasingly restore them into their more natural states incrementally over the years they're under new management by concerned LI environmentalists. Envision them as a natural environmental college campus with distinct habitat classrooms next door to each other, where one can study, learn and marvel at exemplary and authentic ecologies of Long Island nature and wild species specific to each classroom/parcel, all next to each other, one after another.

These 8 discrete areas (marked A to H) exist here, each representing different ecological examples of Nassau County natural habitat variations, all coexisting in the same relatively compact and contiguous geographic area where these varied habitats such as meadows, forests, swamps, and stream provide ecological niches for obligate species of plants, birds, invertebrates, and other LI endemic wildlife.

These 8 different Long Island ecological niches are:

1. **Parcel A: Hempstead Plains Preserve:** Approx. 19 acres of managed grassland with Visitor Center.
2. **Parcel B: Successional Woodland Plot:** Approx. 7 acres of successional Southern hardwoods tapering off into grassland. Hardwoods to be converted to 4-5 acres of Founders Plots for establishing a Nassau County ecotype native seed supply, and for public education.
3. **Parcel C: Purcell Preserve:** Approx 27 acres of unmanaged Hempstead Plains grassland succeeding to scrubland and wooded areas.
4. **Parcel D: East Meadow Brook:** Approx 42 acres. Includes Nassau County's longest stream, the East Meadow Brook, with forest and wetland ecosystems running alongside the Meadowbrook Parkway. This adds valuable biodiversity including LI native woodland and wetland plants, pollinators, and bird species. Parcel D also includes substantial acreage of Hempstead Plains globally rare grassland bisected by dirt bike trails running through a NYS protected wetland.
5. **Parcel E: The Pond and Ravine:** Retention basin and apparent headwaters of the East Meadow Brook.
6. **Parcel F: Woodland Swamp:** Ecologically rich, tangled obligate hydrophytic flora with slow sluices of open water.
7. **Parcel G: Tall Pine-Oak Grove:** Slightly higher land with tallest, presumably oldest and most distinct stand of majestic pines and oaks within view - a bountiful ecosystem for obligate wildlife species.
8. **Parcel H: Sunken Forest:** Stand at eye level with birds foraging in the crowns and upper canopies of numerous trees that grow no taller than the ridge encircling them. In the flood basin below lies an ephemeral waterhole that's part of the hydrology of the East Meadow Brook headwaters.


Parcel D: East Meadow Brook, April 2024

As different as the 8 ecosystems are, yet they are all here and woven tightly into this tapestry of the Nassau County environments that need the surrounding municipalities and communities to join together to preserve, nurture and protect these special places for the benefit of wildlife and people, to conserve a remembrance of Nassau County's natural heritage and a lasting legacy for generations to come. If we don't, who will?