Environmental Risks

Constructing a new gas station near Lemont poses serious environmental threats to local ecosystems. Gas stations are recognized sources of pollution from multiple vectors: underground storage tank (UST) leaks, stormwater runoff carrying oil and heavy metals, and emissions of volatile organic compounds. One of the gravest risks is contamination of groundwater. Once petroleum compounds or heavy metals infiltrate aquifers, they not only jeopardize drinking water supplies but also enable pollutants to travel well beyond the site, affecting downstream communities and ecosystems. Cleanup of contaminated groundwater is expensive, often incomplete, and residual pollutants can pose long-term health risks for decades. (US EPA)

This threat is especially acute in light of proximity to the Waterfall Glen Forest Preserve, home to sensitive and protected species such as the state-threatened Blanding's turtle and the federally endangered Hine's emerald dragonfly. These species depend on clean, groundwater-fed wetlands and aquatic habitats. Even relatively small shifts in water quality—such as minor contamination from runoff or leaks—can disrupt breeding cycles, reduce available food sources (e.g. aquatic invertebrates), and push these already vulnerable populations further toward decline or local extinction. The Hine's emerald dragonfly, for example, requires wetlands with shallow, slowly flowing, groundwater-fed water over calcareous bedrock, along with specific vegetation and even crayfish burrows for larvae survival. (U.S. Fish and Wildlife Service)

In summary, a gas station in this location would not only pose environmental and human health risks through groundwater contamination and polluted runoff, but would also represent a direct ecological threat to one of Illinois' most biodiverse and ecologically sensitive natural areas. Safeguarding groundwater quality and habitat integrity is essential for protecting the community and preserving species that rely on these rare wetland ecosystems.

References

- 1. U.S. Environmental Protection Agency. *Learn About Underground Storage Tanks*. Describes how UST leaks can contaminate soil and groundwater, posing risk to drinking water. (US EPA)
- 2. Illinois EPA. *Leaking Underground Storage Tanks (LUSTs)*. Discusses threats including soil and groundwater contamination and drinking water suppression. (<u>Illinois EPA</u>)
- 3. Ground Water Protection Council. *Underground Storage Tanks*. Details the widespread presence of USTs, their risks, and their impact on groundwater quality. (<u>Ground Water Protection Council</u>)
- 4. U.S. Fish & Wildlife Service. *Hine's Emerald Dragonfly (Somatochlora hineana) Habitat description*. Details the specific habitat needs of the endangered dragonfly: groundwater-fed wetlands with slow flowing water, over calcareous bedrock, etc. (U.S. Fish and Wildlife Service)
- 5. DuPage Forest Preserve District & collaborators. *Crayfish / streamlet restoration in Waterfall Glen*. Shows ecological restoration efforts, crayfish burrow dependence, and importance of habitat connectivity. (DuPage Forest)

6.	Illinois State Museum. <i>Hine's Emerald Dragonfly – Threats and habitat loss</i> . Describes threats from contamination of surface and ground water, industrial encroachment etc. (Illinois State Museum)