

Mosquito Spraying

July 8, 2025

Village Council Meeting



Environmental Sustainability Plan

- **ESP Key Recommendations:**
 - Actively improve biodiversity and habitat restoration...
 - Enhancing green procurement practices...
 - Continue to invest in ongoing Village services that increase natural habitat, enhance community resilience, and reduce emissions
- **ESP Village Objective:**
 - Improve weed and pest management practices to protect wildlife and the quality of waterways
- **Ecology Vision Statement and Strategic Goal of Environmental Stewardship also align with Village's approach to Mosquito Spraying**



Why Spray?

- **WNV has become endemic to Illinois since first being documented in 2002**
 - The predominant species of mosquito in the area (Culex, “house mosquito”) transmits WNV between birds and humans
 - Mosquito abatement is a public health risk management program
- **The US EPA and IDPH both recommend an Integrated Pest Management (IPM) program that includes:**
 - Surveillance, reducing breeding habitat, larvicide, public awareness, and adulticide (when necessary)
- **Spraying targets adult mosquitoes that may be carrying WNV**
 - Temporary reduction in population but only strategy at reducing the population of currently-infected mosquitoes



Potential Impacts?

- **There is a well-documented decline in insect populations**
 - Pesticides are identified as a contributing factor
 - The current pesticide being used by the Village's contractor is a synthetic pyrethroid, which does impact non-targeted species
 - Loss of habitat for natural predators (dragonflies, bats, birds, frogs, etc.)
- **The Village has made investments into habitat restoration and actively supports pollinators and natural predators of mosquitoes**
 - ESP has multiple goals, key recommendations, and objectives that promote habitat restoration on public and private lands



Current Policies and Practices

- **There is no central agency for coordinating mosquito abatement – local governments have discretion in implementation**
- **Village contracts with Clarke to manage and implement elements of an IPM program:**
 - Surveillance: Clarke conducts their own surveillance and uses publicly available data
 - Larvicide: Two rounds of larvicide tablets (dunks) in stormwater inlets and catch basins
 - Adulticide: At discretion of Village, Clarke will utilize an Ultra Low Volume (ULV) spraying with a synthetic pyrethroid (broad spectrum pesticide)
- **Determination for ULV spraying done in consultation with Village staff, with Clarke recommending spraying when one of the following is present:**
 - Positive test in Downers Grove
 - Positive tests in surrounding communities
 - A human case of WNV in Downers Grove
 - Increasing overall positivity in the county/region



Council Direction & Discussion

- **Continue with current approach to IPM program**
- **Establish a threshold for ULV spraying:**
 - **Routine** preventative spraying (multiple sprays per year)
 - **One positive** WNV sample in Downers Grove
 - **Multiple positive** WNV samples in Downers Grove or surrounding communities
 - Ongoing positive WNV samples in Downers Grove for **three weeks**
 - Personal Protection Index raised to **Moderate** by DCHD
 - Personal Protection Index raised to **High** by DCHD
 - Do **NOT** conduct ULV spraying
- **Planned operational changes to IPM program**
 - Work with Clarke to install additional traps for localized surveillance data
 - Change chemicals to a botanical pesticide (additional cost)
 - Enhance list of “no spray zones” near ecologically sensitive areas

