

APPROVED
MINUTES OF THE
ENVIRONMENTAL QUALITY CONTROL COMMISSION
VILLAGE OF NORTHBROOK
March 18, 2021

Chairman Reynolds called the EQC meeting to order at 7:02 p.m. in a remote meeting through WebEx virtual meeting platform.

The following Members were in attendance: Dale Duda, Michael Beefink, Sandra Weiss, and Chairman Reynolds. A full quorum was met.

Members absent: Brian Bruce, Rebecca Lee, and Scott Robson.

Also Present: Director of Development and Planning Services Michaela Kohlstedt, Greenest Region Corps Member Tessa Murray, Director of North Shore Mosquito Abatement District (NSMAD) Mark Clifton, and Communications Manager of NSMAD David Zazra.

Minutes

Chairman Reynolds moved for approval of the February minutes as amended with a second by Member Beefink.

Community Planning Report

The Board met on March 9 to review the draft budget, and Director Kohlstedt stated the balanced budget includes a full-time position in the Department of Development & Planning Services to oversee implementation of the Climate Action Plan and EQC items.

Northbrook Climate Action Plan Update

Director Kohlstedt explained the CAPT met twice in March to determine best entities to bear responsibility of each action item in the plan. With this information, the paleBLUe dot consultant is preparing a drafted final CAP that will be available for CAPT members to review on April 5 and discussed at the next meeting on April 12. Director Kohlstedt detailed that once the CAPT members finalize their product there will be a period of public review before the CAP could be formally adopted by the Village Board of Trustees.

Chairman Reynolds inquired on CAPT members' perspective of this process, to which Member Weiss replied that the team is having interesting discussions in relation to a particular screening criteria that asks to what extent each action will be supported by the greater Northbrook community.

Pesticide Discussion with the North Shore Mosquito Abatement District

Dr. Clifton thanked the EQC for providing him the opportunity to speak on behalf of NSMAD and its pesticide usage. He explained that the district is a public service and tax-collecting entity that serves 14 communities including Northbrook. The goal of NSMAD is to establish public health and safety through an integrated vector management approach, in which surveillance and data-driven decisions are made to suppress vector-borne diseases and improve quality of life. Dr. Clifton stated that with integrated management, elimination of mosquito breeding habitat is the first line of defense, followed by public outreach and education, then chemical treatment serves as a last resort when a data-driven threshold level of risk to human health is surpassed.

In terms of public outreach and education on preventing vector-borne disease, Dr. Clifton mentioned it is best to wear protective clothes like long sleeves and pants during high-risk times for exposure (after sunset in the summertime). Using bug spray or organic alternatives like oil of lemon eucalyptus are proven methods to prevent bug bites. He added that property owners can minimize mosquito reproduction by eliminating their breeding habitat (stagnant pools of water, especially those with lingering organic matter or trash that mosquito larvae feed on). Member Duda asked if an ordinance is in place to address stagnant pools of water and Director Kohlstedt confirmed this exists in a property maintenance code that is enforced on a complaint basis.

Dr. Clifton defined disease surveillance as monitoring weather and climate in our area, and Northbrook has a notably productive mosquito breeding habitat along the floodplain in the forest preserve. Dr. Clifton used the West Nile Virus epidemic of 2012 as an example of weather conditions that enable the prevalence and spread of this mosquito-borne disease: unusually hot temperatures in early spring and low precipitation levels throughout the summer created an outbreak in the Chicagoland area.

For mosquitoes, vector surveillance (in which traps are collected, identified, and tested) occurs daily from April to October with 6 trap locations in Northbrook and many more elsewhere on the North Shore. Cook County is a hotspot for West Nile Virus: according to Dr. Clifton, 31% of mosquito pools tested at NSMAD were positive for the disease in 2020. Nuisance mosquitoes are those that emerge in abundant broods all at once and are typically the species that people notice and submit complaints to NSMAD about. When complaints are called in to the district, this information is integrated with surveillance data. In 2020, the district received about 25 service requests from Northbrook.

Dr. Clifton added the district also monitors ticks. American dog ticks are tested for *Rickettsia* and Blacklegged ticks are tested for Lyme disease. He explained that due to climate change, the distribution of ticks is shifting: new species may be found in our area soon and Lyme disease is recently increasing in prevalence in Illinois.

Every week NSMAD releases a disease status report. Dr. Clifton explained that the risk threshold for human illness is usually around 4, and the 2012 epidemic risk reached 8 at its peak. He mentioned that Cook County experiences the 3rd highest incidence of West Nile Virus of every metropolitan area in the country.

Dr. Clifton explained that as a member of the American Mosquito Control Association, he sits on the Endangered Species Act subcommittee and monitors the status of the Rusty-patched Bumblebee, an endangered bee present in Northbrook's natural areas. He elaborated that the vast majority of treatments used to control mosquitoes at the district target the insect in its aquatic larval stages therefore would not come in contact with beneficial pollinators. This occurs by treating sewage basins with microbial pesticides highly specific to mosquitoes, such as bacteria *Bacillus thuringiensis israeliensis* or *Bacillus sphaericus*. Dr. Clifton said there are 40,000 basins treated this way in Northbrook and if left untreated, residents would see millions more mosquitoes that carry West Nile Virus each summer. He mentioned the district must rotate the active ingredient for treatment to avoid resistance, and these are OMRI listed products (meaning they are safe to use in USDA-certified organic production).

Pesticide resistance, in which the genetic traits that withstand pesticide exposure in mosquitoes sustain in the population's gene pool increasingly over time, is most exacerbated by the unfettered methods of private control companies according to Dr. Clifton. He explained that with little regulation these services and individual homeowners can use barrier treatments, spraying highly potent pesticides in backyards that persist from hours to weeks and kill any insect that lands on the treated vegetation. With this, Dr. Clifton described pyrethroid pesticides (a large class of chemicals originally derived from chrysanthemums) as ubiquitous throughout the North Shore. He said when mosquitoes are tested for resistance using CDC bottle bioassay tests, a controlled amount of pesticide exposure that is supposed to kill 100% of mosquitoes only succeeds with 30% of mosquitoes from our area.

Dr. Clifton reiterated that for NSMAD, spraying as a broad-spectrum adult mosquito control method is a last resort, only employed when public health is at risk and all aforementioned preventative measures have failed. Trucks are used to release the pyrethroid spray and are carefully tracked and recorded by GIS. Residents may request the truck to shutoff spraying past their homes if 1) a human health concern is cited by a doctor's note or 2) a USDA-registered beehive is on the property. Northbrook has not been sprayed this way in over 2 years and when NSMAD does spray they use the active ingredient at rates of one ounce per acre.

Member Duda asked if the district monitors the impacts on non-target insect species, to which Dr. Clifton responded that NSMAD operations have no impact on endangered species such as the Monarch butterfly and added that many peer-reviewed research papers affirm this. He explained that adult control methods occur after sunset when butterflies and bees are no longer active, and the active ingredient in this treatment does not persist in the environment long enough to harm anything come sunrise. Member Duda then inquired on the impact of private companies, and Dr. Clifton informed members of Illinois Representative Robyn Gabel's House Bill 3118. This bill would address barrier treatments, stating pyrethroid pesticides from private companies cannot use subscription-based services and may only be applied using an evidence-based model. HB3118 also puts restrictions on applications during high wind speed (no

treatments may occur during winds greater than 3 mph) and requires applicators to notify neighbors of the treatment at least 24 hours beforehand.

Chairman Reynolds asked Dr. Clifton if he has insight on the endangerment of the Rusty-patched Bumblebee. He responded that it is a serious issue, and according to a map drawn by the US Fish and Wildlife Service Northbrook is one of the only spots in the North Shore where the species is still found. Dr. Clifton added that their behavior includes foraging within a 3-mile range around Somme Woods Nature Preserve.

Member Weiss asked if there have been any studies on effects of pesticide materials accumulating in tissue of higher order species, i.e., birds that feed on mosquitoes. Dr. Clifton replied there is no evidence of bioaccumulation of these pesticides, even from barrier treatments.

Director Kohlstedt thanked Dr. Clifton for his time, and suggested Tessa could use an abbreviated version of the powerpoint presented by NSMAD today to share on Village social media platforms. She asserted the importance of educating residents on the science-based processes of the district compared to the barrier treatments from private companies. Dr. Clifton emphasized that the district has jurisdiction to service public spaces and take actions to prevent mosquitoes that private companies cannot. Member Duda mentioned this may be a potential topic for a Green Moment at a Board meeting, and echoed the importance of avoiding private companies. Dr. Clifton added that Representative Gabel would appreciate support and co-sponsors on HB 3118.

Green Awards

Tessa Murray asked if members accept nominations for Green Awards, to which Chairman Reynolds and Member Duda replied that these are allowed given assurance that the nominee will be willing to receive the award and associated accolades on social media. Tessa also asked if members would consider switching the physical award for recipients from a bamboo trophy to a tree planting. Chairman Reynolds vocalized support for this, and Member Duda agreed saying it should also include a paper certificate. Member Weiss added that whatever is planted must be watered and maintained.

Updates on Other Items

Tessa Murray presented on communication initiatives created for March, including a post on organic control methods for invasive Buckthorn. She asked members if there are any ideas for which invasive plant to tackle next, and Member Beeftink suggested Garlic mustard. Director Kohlstedt updated the Commission on Solar Permit Data. Tessa Murray provided updated data for Northbrook's waste collection in March.

Old Business

Member Duda asked if the Village has made strides with promoting alternatives to gas-powered leaf blowers, and Member Weiss replied that this is an action item moving forward in the Climate Action Plan.

New Business

Director Kohlstedt stated that she found the proof of the Monarch Waystation garden sign, and asked about the original purpose of the listed email address. Member Duda explained that she started this project before her membership on the EQC, and the email was created for residents who see the sign and would like to learn more about Monarch conservation. Director Kohlstedt suggested before ordering new signs, this email address may be modified to allow the emails to forward to Northbrook's Greenest Region Corps Member email account. Tessa asked Member Duda if she requires picture evidence of milkweeds and native plants before gardeners are awarded a sign, and she confirmed this adding that she has saved addresses of each Monarch Waystation. Director Kohlstedt proposed turning this information into a map of Northbrook's Monarch corridor with graphics included.

Next Meeting

The next regular meeting of the EQC is scheduled for April 15th, 2021.

Adjourn

Chairman Reynolds made a motion to adjourn the meeting and was seconded by Member Beeftink. The meeting adjourned at 8:30 p.m.

Respectfully submitted,

/s/ Tessa Murray
Recorder