

MINUTES
CITY OF FORT COLLINS
AIR QUALITY ADVISORY BOARD

Date: Monday, April 16, 2018

Location: Colorado River Room, 222 Laporte Ave.

Time: 5:30–8:00pm

For Reference

Mark Houdashelt, Chair

Ross Cunniff, Council Liaison 970-420-7398

Cassie Archuleta, Staff Liaison 970-416-2648

Board Members Present

Greg Clark

Chris Wood

Arsineh Hecobian

Mark Houdashelt, Chair

Karen Artell

Harry Edwards

Vara Vissa, Vice-Chair

Jim Dennison

Board Members Absent

Matt Tribby

Staff Present

Cassie Archuleta, Staff Liaison

Matt Parker, Natural Areas Crew Chief

Rebecca Everette, Senior Environmental Planner

Lucinda Smith, Environmental Services Department Director

Guests

Tom Moore, Citizen

Hugh Mackay, Citizen

Call to order: 5:32 pm

Public Comments

Tom Moore referred to an editorial concerning the obstacles related to adult mosquito spraying. He stated that he would like more information regarding measurements on how to effectively control spray. He also expressed interest in improved metrics to determine the benefits of spraying and, more specifically, would like to see the quantitative rate of change in West Nile virus cases in areas that have been sprayed.

Matt Parker noted that City Staff would like such metrics as well, but they are not available at this point.

Approval of Minutes

Harry moved, and Arsineh seconded a motion to approve the March minutes as presented with edits.

Motion passed, 7-0-1.

AGENDA ITEM 1: West Nile Virus - Management Policy Updates

Matt Parker, Natural Areas Crew Chief, provided an overview regarding potential updates to thresholds for adult mosquito management actions. This item is scheduled to go before Council on May 15, 2018.

Current Management and Monitoring Program

- Fort Collins' management program is based on the CDC model for Integrated Mosquito Management. It integrates public education, larval management, surveillance, adult mosquito control and continual improvement assessment.
- Current public outreach includes the use of print materials (bus benches, banners, newspapers), social media (Nextdoor, Facebook, Twitter), trailhead indicators (Skeeter Meters and insecticide wipes) and the City of Fort Collins website. Focus populations include softball/baseball players, runners, homeless, non-English speaking citizens and river recreators.
- The current monitoring plan consists of 53 traps that are set and collected weekly during mid-June through mid-September. CSU tests the collected mosquitos for West Nile virus (WNV) and calculates the vector index on a weekly basis. The vector index represents the infection rate of Culex mosquito species in tested traps.

West Nile Virus Amplification

- WNV is housed in avian populations and spreads when a mosquito bites an infected bird then lays eggs and bites another bird or human. When birds congregate the rate of infection can increase significantly.

Current Adult Mosquito Control

- Spraying for mosquitos is the last tool used to combat WNV (decreased exposure through education and larval management is preferred). It is performed based on a recommendation from the Larimer County Department of Health and Environment.
- Currently, spraying for adult Culex mosquitoes is prompted by a vector index value of 0.75 or greater *and* either confirmation of more than one human case of WNV per week *or* more than one WNV positive blood donor reported during the season.

Proposed Changes and Rationale

- City Staff would like to decrease the vector index to 0.50 and remove the human case requirement(s). They believe this will enable them to initiate spraying sooner so that they can target smaller areas to get ahead of amplification and reduce the likelihood of City-wide or quadrant-wide spraying.
- Recent studies suggest that WNV-related deaths/complications may be under-represented due to significant long-term effects (neurological, chronic kidney disease) that weren't previously linked to the virus. These studies prompted the Technical Advisory Committee to reevaluate the vector index threshold; however, the Committee has not identified a precise threshold, nor has consensus been reached regarding an appropriate human case consideration.

A recommendation from the AQAB was requested regarding the threshold changes proposed by City staff.

Discussion

- Jim asked if the CDC has calculated a recommended vector index for a climate like Fort Collins'.
 - Matt replied that the CDC does not provide climate-specific recommendations. Technical Advisory Committee recommendations range from 0.33 to 1.0.
- Vara inquired about real-time monitoring (maps) and seasonal predictions for WNV cases.
 - Matt responded that the CDC has a program dedicated to monitoring the WNV; they track 40-50 species of mosquito populations that fluctuate with climate change. With these fluctuations, the

distribution of mosquito-borne diseases has also changed, but not at a rate that warrants real-time tracking.

- Arsineh asked for more detail regarding the vector index, including how the number of infected traps are chosen, how the index is calculated and if the CDC recommends a specific sample area for such calculations.
 - Matt stated that the vector index represents the average number of infected mosquitoes collected per trap night. While the City is divided into quadrants for basic vector index calculations, the calculation is based on the number of traps that mosquitos were collected from and can therefore be scaled to more refined zones by decreasing the number of traps used in the calculation. A minimum of five traps will always be used as this represents the minimum to produce a statistically valid index calculation. Matt is unaware of any specifications from the CDC regarding the size of sample areas, but Chet Moore has advised that adhering to the five-trap minimum will produce a valid index.
- Greg and Karen asked who performs the pesticide applications and what the County's threshold for spraying is.
 - Matt responded that a contractor is hired either by the City or County and noted that the Larimer County Department of Health and Environment has jurisdiction with regards to the initiation of spraying (The City will not spray without a recommendation from the County). The County's threshold is based on a vector index of 0.5, and they do not make considerations for human cases. He also noted the complicated nature of determining exactly when to spray; for example, if the City's threshold for spraying has been met, there are several other environmental factors (i.e. weather, etc.) to consider before determining when the best time to treat will be.
- Harry asked if the City has taken a position on consumer products (i.e. backyard foggers, UV lights etc.) and their effectiveness.
 - Matt stated that such solutions operate on a micro-scale and vary significantly in effectiveness; however, his office would advocate any solution that can reduce mosquito populations in an environmentally sensitive way.
- Arsineh, Mark and Jim asked for more information regarding the pesticide used for spraying and its application rates.
 - Matt stated that the pesticide permethrin is used, which is very effective in small amounts. According to EPA standards, 24 -25 applications can be safely made within a season at the rate that it's applied in Fort Collins; however, to date, applications have ranged from 1 to 3 per year. It can be used as a topical cream to address human ailments and has been deemed safe for use during pregnancy and on children over the age of two months. It is dangerous to cats at rates of 100mg/kg. Fort Collins use of permethrin is somewhat mosquito-specific in the sense that it is strategically applied to areas with high concentrations of mosquitos at times when they are most active and other insects, such as pollinators, are not active. The application rate used for mosquito spraying is also low enough that larger insects and pollinators should be able to process it without negative effects. In addition, there is an opt-out for businesses (e.g. organic farms) to avoid application to their property during spraying.
- Mark and Matt discussed Council's current position on spraying. In general, Council would like to gain a better understanding of the relationship between vector index, human infection and the effectiveness of adult mosquito treatment; however, this is a complicated issue, as there are numerous environmental variables affecting both mosquito populations and pesticide application.

Arsineh moved, and Chris seconded a motion to remove the human case thresholds from the spraying criteria.

Motion passed, 7-0-1.

Karen moved and Jim seconded a motion to support the reduction of the vector index to 0.5.
Motion failed, 3-4-1.

- The motion failed due to the Board expressing concern over a lack of data. The Board would like quantifiable data regarding the potential reduction of pesticide use or in human cases associated with the proposed reduced threshold.

Mark moved and Vara seconded a motion to maintain an index threshold of 0.75 with the expectation that this year be used as a pilot study to provide more substantial evidence for a decrease in the threshold.
Motion passed, 7-1-0.

Jim moved to add amendment below to above motion:

Jim stated that this issue can be revisited if AQAB members are provided rationale for the reduction in vector index based on EPA risk assessment, CDC guidance, local epidemiology, or vector index and incidence data and other quantitative inputs to decision-making and ecotoxicology impacts.

AGENDA ITEM 2: Oil and Gas - Land Use Code Updates

The Board continued its discussion regarding a recommendation for proposed updates to the Land Use Code associated with development near oil and gas operations. Mark presented a draft recommendation based on the Board's previous discussion. Two options within the recommendation required further specification by the Board:

Option #1: implement setbacks consistent with those designated in COGCC setbacks (500 ft) between existing development and new oil and gas operations.

Option #2: take into consideration the documented health impacts of producing oil and gas operations and, following the leads of some other cities, implement setbacks of 750/1000/1500/2000/2500 feet for new residential development around existing oil and gas ops and 750/1000/1500/2000/2500 for High Occupancy Building Units around existing oil and gas facilities.

Mark moved, and Chris seconded a motion to implement setbacks consistent with those recommended by City staff for new oil and gas operations [Option #1 above]
Motion passed, 6-2-0.

The Board reiterated the reservations that they previously discussed regarding the implementation of setbacks for new residential development around existing oil and gas operations. The primary concerns discussed included the lack of data available to justify setback distances and the specifications associated with alternative compliance options. The consensus is that it will be easier to make a recommendation once the CDPHE health risk assessment on emissions from oil and gas operations has been released in summer of 2018.

The Board also discussed the opportunity for changes in setback distances by variance. Rebecca noted that there is currently a process to apply for a variance, stating that all standards in that section of the code are modifiable by the decision-maker based on the criteria that changes cannot be detrimental to the public good, they must be equal or better than the current plan or are nominal or non-consequential. Rebecca cited a recent variance granted (for Waters Edge), which was based on the condition that they plug and abandon the well. Variance compliance and alternative compliance are different mechanisms.

Jim moved, and Arsineh seconded the motion to incorporate language into the Board's recommendation that setbacks from active wells are not eligible for variances.

Motion passed, 6-2-0

Mark moved, and Greg seconded the motion to implement the same default setbacks for plugged and abandoned wells as for operating wells [500 feet]

Motion passed, 7-1-0

Vara moved, and Mark seconded the motion to prohibit alternative compliance until risks associated with plugged and abandoned wells can be characterized

Motion withdrawn

- Jim and Cassie discussed the previous motion (which was subsequently withdrawn) to prohibit alternative compliance. Cassie noted that the downside to removing alternative compliance is that there's no longer an incentive to plug and abandon active wells. It also eliminates the opportunity to obtain test results.
- Mark asked for clarification on the rules of plugging and abandoning wells and what the benefits of a developer doing so would be.
 - Cassie stated that if an operator is done producing from an active well, then they need to plug and abandon the well according to COGCC rules. If a developer encounters a previously plugged and abandoned well, then the testing must be performed for the reduced setback. For a previous development, the developer at Waters Edge initiated a process to plug and abandon active wells on the property for reduced setback. The benefit to the community is that they remove an active, operating well.
- Greg and Arsineh discussed the time between plugging and testing, noting that this time frame may have significant effects on the results depending on what's being tested. For example, ground water moves very slowly, but soil gases move relatively quickly so timing may prove to be significant.
- Jim noted that dramatic reductions in setbacks will create a potential for reduced property values in the future; however, the risk incurred at various setback distances was still not clear.
 - Cassie replied that the well failures documented in literature are not for the same kind of wells present in Fort Collins, so it is difficult to predict changes in property value. We currently have development that preceded the current land use code requirements, with building right up to these old wells.
- Greg asked where City Council stands on this issue.
 - Cassie stated that during the last code change, Council chose to match COGCC specifications. The current proposal would update code to match recent COGCC updates.
- The Board discussed concerns with contamination and the involvement of COGCC. Cassie noted that the COGCC has a program to react to orphan well issues, including remediation. Fort Collins has dead oil which must be actively pumped to the surface, so a well failure would not be expected to include spurting oil, etc. It is not clear the exact liability that COGCC would take on with regards to property values, etc.

Staff follow up: Cassie will send a revised version of recommendation to Board based on the changes agreed upon at this meeting.

Board members should review the recommendation and come back with a clear idea of what they would like to include.

AGENDA ITEM 3: City Council Future Committee Meeting on Boards and Commissions

The Board planned to discuss responses to two questions:

(1) What works well under the current Boards & Commissions structure and process?

(2) What would make Boards & Commissions more effective?

This topic was not discussed due to time constraints. Mark has a draft that he will send to the Economic Advisory commission and report back to the AQAB.

Board Updates

- Mark attended the March Natural Resource Advisory Board meeting; they did not reach a resolution regarding the proposed changes to oil and gas land use codes. They will confer on the issue again at the April meeting. In addition, they discussed the whitewater park.
- Mark attended the most recent Bicycle Advisory committee meeting at which limitations on e-bike use on City trails, including in natural areas, was discussed.
- Mark had a conversation with someone who recently relocated to Fort Collins regarding forced radon mitigation in Denver.
- Matt attended the most recent Transportation Board meeting at which a project to create dedicated bike lanes on West Mulberry was discussed.
- Mark and Vara met and discussed the details of the newly-formed Climate Change Subcommittee. Greg has also expressed interest.
- Vara reviewed notes from the Planning and Zoning Board; projects for schools were approved, but there's no change in how the City is approving developments to account for the number of cars at schools. There has been no progress on transportation issues.
- Chris informed the Board that Matt Tribby recently accepted a position with Platte River Power Authority, working directly with Chris. He wants to ensure that there are no concerns amongst other Board members about two people serving from PRPA. He's sensitive to the issue and offered to step down if there is a perceived issue. (Neither City staff nor other Board members expressed concern at this time.)
- Mark noted that periodic review forms need to be sent to Christine Macrina to set up a board review.

Staff Updates

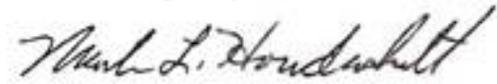
None

Future Actions and Agenda Items

- 5/15/18 – Council meeting on West Nile Virus Program Revisions
 - 6/5/18 – Council meeting on Oil and Gas Land Use Code Updates
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Meeting Adjourned: 9:01 pm

Next Meeting: May 21, 2018



Signed by Chair