



**Garden
Spot of
Colorado**

STUDY SESSION OF THE TOWN BOARD

**Town Board Room
807 Mountain Avenue
Town of Berthoud, Colorado
Tuesday, August 29, 2023, 6:30 p.m.**

This is an IN-PERSON meeting at the location and time noted above.
You may also join virtually using Zoom: Phone: 1-346-248-7799 or 301-715-8592
Web: www.zoom.us/join Use this Meeting ID: 210 035 9423

1. Study Session Called To Order - Mayor William Karspeck
2. Pledge Of Allegiance - Mayor William Karspeck
3. Roll Call - Mayor William Karspeck
4. Mosquito Policy Discussion
Introduction By: Chris Kirk

Documents:

[MEMO RE MOSQUITO SPRAY POLICY.PDF](#)
[BOARD INFORMATION MEMO FROM MEETING HELD IN JULY 2018.PDF](#)
[BOARD INFORMATION MEMO FROM AUGUST 30, 2022.PDF](#)
[BOARD INFORMATION MEMO FROM JULY 18, 2023.PDF](#)
[BOARD MEETING MINUTES JULY 18, 2023.PDF](#)
[BOARD INFORMATION MEMO FROM JULY 25, 2023.PDF](#)
[BOARD MEETING MINUTES JULY 25, 2023.PDF](#)
[BOARD RESPONSES - MOSQUITO SPRAY POLICY.PDF](#)

5. Adjourn

The order of agenda items listed above is approximate and intended as a guideline for the

Town Board. Individuals needing special accommodation may request assistance by contacting the Town Clerk 807 Mountain Avenue, Berthoud, Colorado 80513, 970-532-2643 at least 24 hours in advance.

BOARD OF TRUSTEES INFORMATION



ADMINISTRATION DEPARTMENT

Meeting Date:	August 29, 2023
Agenda Title/Subject:	Mosquito Policy Discussion
Type of Item:	Regular Item
Purpose:	To follow-up on the Board's recent decision to suspend adulticide applications for vector control until a new policy could be formed
Presented by:	Chris Kirk

BACKGROUND:

As the Board will recall, in August 2022 the Board voted to formally suspend the 2017 Mosquito Control Policy and to replace it with a practice of holding a special meeting of the Town Board whenever the Town's Vector Index reached .75 for two consecutive weeks. Test data from July 4, 2023, and July 11, 2023, indicated that the Town's Vector Index was over .75 for two consecutive weeks and a special meeting was held July 18, 2023, to consider the application of mosquito adulticide via truck spraying throughout Town. On July 18, 2023, a majority of the Trustees present voted to apply adulticide via truck spraying.

Following the July 18 meeting, staff worked with Vector Disease Control International (VDCI) to schedule the adulticide application. On July 25, 2023, Town Staff included an item on the agenda outlining the spray plan for adulticide application beginning on the night of July 28, 2023. At the same meeting, a majority of the Trustees present voted to suspend the spray application scheduled for July 28 until a new mosquito control policy could be established.

As a follow-up to that meeting, staff circulated a short list of questions to gather feedback from the Trustees about what might be helpful in developing this new policy. The written responses received to that list of questions is attached to this memo.

At the August 22, 2023 meeting, staff suggested that the Board finalize a date for a special meeting to discuss the mosquito spray policy. The Board directed Staff to schedule a study session on August 29, 2023, to discuss the development of a new policy.

In advance of the study session, staff is also including documents and meeting video links from previous Board meetings related to the same issue. These are provided for historical context and for research information for the Trustees. These documents and videos are as follows:

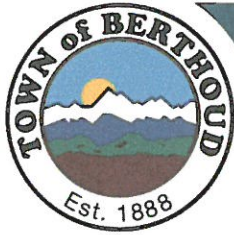
- Board Information Memo from July 24, 2018. Representatives from the City of

Boulder and Larimer County Department of Public Health and Environment (LCDPHE) presented at this meeting.

- Video Link from July 24, 2018: <https://berthoudco.swagit.com/play/07262018-1095>
- Board Information Memo from August 30, 2022
- Video Link from August 30, 2022:
- Board Information Memo from July 18, 2023. Representatives from LCDPHE and Colorado State University presented at this meeting.
- Video Link from July 18, 2023: https://www.youtube.com/watch?v=AP_ZnWVkpFs
- Board Information Memo from July 25, 2023.

RECOMMENDED ACTION(S):

Provide direction to staff regarding the Mosquito Spray Policy.



Approved: _____

Date: _____

**TOWN ADMINISTRATOR
CHRISTOPHER KIRK**

TOWN BOARD OF TRUSTEES INFORMATION SHEET

MEETING DATE: JULY 24, 2018

ITEM: TOWN OF BERTHOUD PEST MANAGEMENT POLICY

COMMENTS:

At meeting of the Board of Trustees held June 5, 2018, the Board directed staff to suspend any adult mosquito control practices until the Board could review the current policy. Since that time, the Town's pest management contractor, Vector Disease Control International, has continued to conduct larvicide operations in an effort to reduce the number of mosquito larva that emerge as adults.

In preparation of this discussion, a copy of the adopted resolution and mosquito control policy is attached to this memo. Additionally, information regarding previous discussions as contained in the minutes of prior Board meetings can be found on the Town's website at www.berthoud.org. Upon visiting the website, the minutes of these meetings can be found under the "Government" tab by following the link entitled Trustee Document Archive. Minutes of the meetings held on the following dates relate to prior discussions regarding the Town's current policy.

March 14, 2017

March 28, 2017

May 16, 2017

June 13, 2017

In addition to the written summaries of the discussions that are contained in the minutes, the video recordings of those meetings can also be viewed on the website under the Government tab by following the link entitled "Trustee Meeting Videos" and then following a second link on the left side of the page entitled "Archived Trustee Meeting Videos". There is no video recording available of the meeting held May 16, 2017.

For other information about the Town's mosquito spraying policy, links to test data, and links to information about West Nile Virus and mosquito spraying provided by other agencies, visit the Town's website, click on the "Residents" tab, and then follow the link entitled "West Nile and Mosquito Information".

In addition to the historical information regarding the current policy a representative from Larimer County Public Health Department is expected to attend the July 24 Board meeting to answer questions about Larimer County's pest management programs and approach. A representative from the City of Boulder will also be in attendance to share information about Boulder's pest management program.

For information purposes, the Town's Vector Index threshold of 0.5 has not been exceeded as of June 19, 2018 and as such, no mosquito spraying would have been conducted in 2018 pursuant to the adopted policy.

OPTIONS:

DIRECT STAFF TO EXECUTE THE PEST MANAGEMENT PLANS AND POLICIES PREVIOUSLY ADOPTED

or

DIRECT STAFF TO MODIFY THE PEST MANAGEMENT PLANS AND POLICIES PREVIOUSLY ADOPTED

**TOWN OF BERTHOUD
RESOLUTION NO. 6-17b**

**A RESOLUTION OF THE TOWN OF BERTHOUD, COLORADO
ESTABLISHING A POLICY FOR MOSQUITO CONTROL SPRAYING**

WHEREAS the Town of Berthoud is surrounded by agricultural lands and wetland areas which are prone to develop substantial mosquito populations in certain years and seasons; and

WHEREAS vector borne diseases from mosquitoes are a significant public health concern, as is environmental and ecological damage from excessive or unnecessary pesticide application; and

WHEREAS, the Larimer County Health Department regularly conducts evaluations of the intensity and types of mosquito infestations, including a determination of populations likely to carry West Nile virus and other diseases, and provides recommendations as to whether active spraying is warranted; and

WHEREAS, the Town of Berthoud will now maintain its own traps and evaluation data in addition to the data from the county; and

WHEREAS, Town staff has requested a fixed policy to determine when to rely on larval and bacterial control programs regularly employed by the Town and when to engage a contractor for active spraying

WHEREAS, The Town of Berthoud is committed to continuing our motto as "The Garden Spot of Colorado,"

NOW THEREFORE BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF BERTHOUD, COLORADO AS FOLLOWS:

1. The attached 'Emergency Adult Mosquito Control Policy Statement' is hereby adopted as the official policy of the Town for determining when adult mosquito control shall be implemented as a matter of public health and safety;
2. Town staff shall be responsible to promote the communications standards set out in the attached Policy; and
3. Town staff shall implement active mosquito control measures (spraying) only as set forth in the attached 'Emergency Adult Mosquito Control Policy Statement'.

PASSED, ADOPTED AND APPROVED THIS 13th day of June, 2017.

TOWN OF BERTHOUD

BY: _____

Steve Mulvihill, Mayor

ATTEST:

Acting Town Clerk



EMERGENCY ADULT MOSQUITO CONTROL POLICY STATEMENT

1. In order to effectively combat West Nile virus through the season, the Town has contracted to conduct a mosquito surveillance program and sets traps weekly within the Town of Berthoud to monitor changes in the mosquito population over time and to evaluate effective management of its larvicide program. (The Town of Berthoud is also conducting a comprehensive larvae control program to kill mosquito larvae before they emerge from breeding areas. The contract is to apply a biological larvicide to breeding sites per the attached map. The larvicide is a natural non-toxic biological product that affects only mosquitoes and is not harmful to fish and animals).

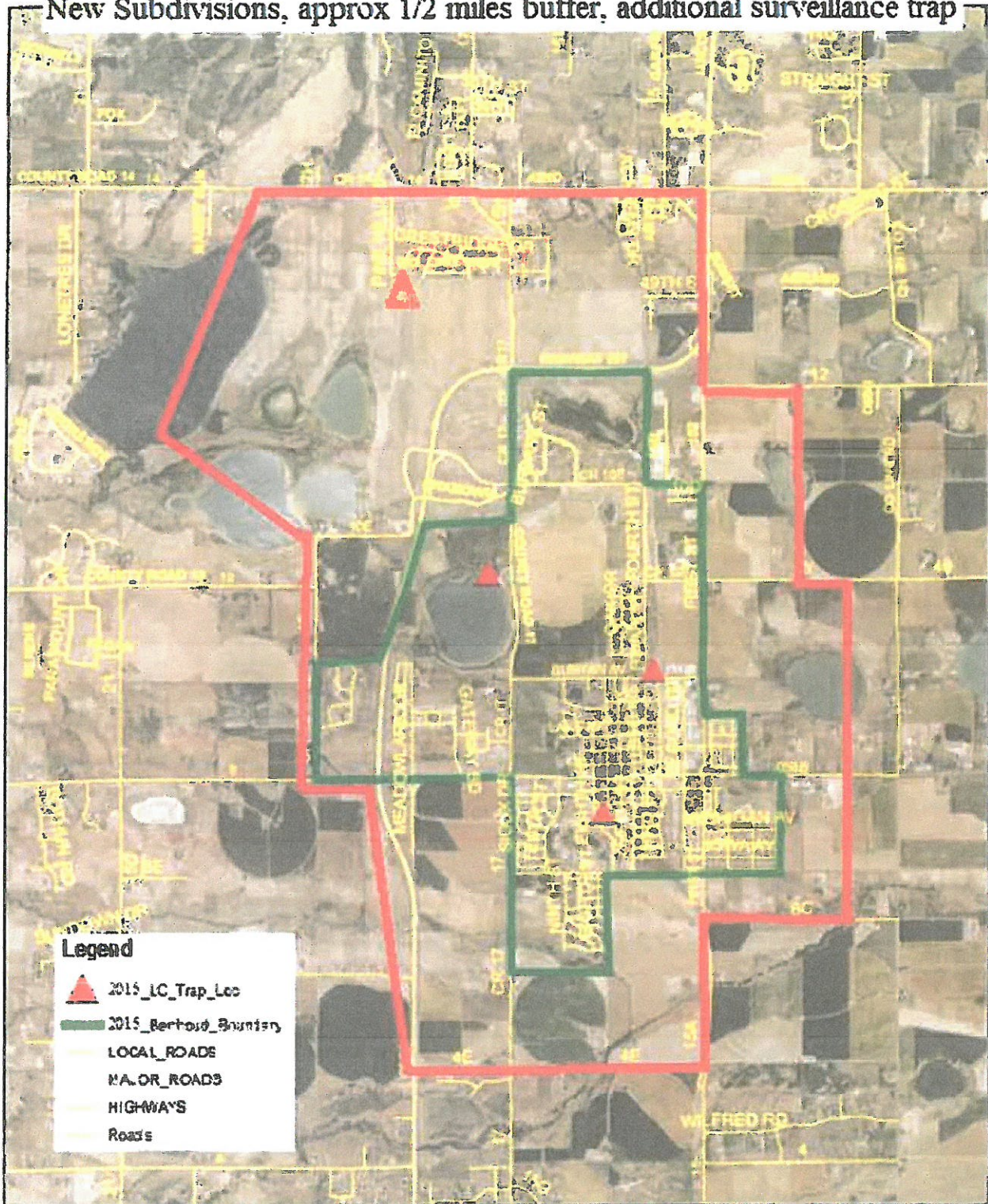
2. At any time that any mosquito-borne disease becomes a real or imminent public health threat, adult mosquito control measures for adult insects will become a priority issue for the Town of Berthoud. A real or imminent public health threat will be established by a Vector Index (VI) of .5 or higher which is calculated for the Town from data obtained as an average of the Town's trap network, per the attached map. Such data shall be published on a weekly basis on the Town web site.

3. The Vector Index (VI), which measures the level of West Nile Virus (WNV) infected mosquitoes in an area, is accepted as the best available predictor of human risk from that disease. The VI is a number calculated by combining measures of the abundance of Culex mosquitoes (the species which carries WNV) and the rate of infection in those mosquitoes. Published investigations of large WNV outbreaks have shown that once a vector index is over 0.5, the risk of human infection increases substantially. The Larimer County Department of Health has adopted the 0.5 VI as the threshold indicator of a health risk to the community.

4. Upon notice of a Vector Index of .5 or higher, as an average of the Town trap network, adult control measures will be implemented town-wide on two consecutive evenings on or after 10 PM (weather permitting) and spray exclusion zones will not be recognized. Such adult control measures shall occur at the direction of the Town staff without further Board action. Notice to residents of the intended application date will be made via the Town website, VDCI website, press release, and social media updates. Community members may also sign up to receive email alerts from VDCI. The Town of Berthoud will give a minimum of 48 hours' notice through these channels before commencing spray operations. The Town of Berthoud will implement all recognized means to reduce the adult mosquito population within the area where disease transmission to humans is a concern. In 2017, the Town has contracted with Colorado State University to test Town traps and provide a weekly data report which will include the Vector Index for the Town. The Town will generally receive those reports on a Monday, meaning that adult control events may occur as early as Wednesday or Thursday of the same week.

Expansion Option 2

New Subdivisions, approx 1/2 miles buffer, additional surveillance trap



Berthoud Mosquito Control Program

0 0.35 0.7 1.4 Miles



This map is the property of
Colorado Mosquito Control, LLC



BOARD OF TRUSTEES INFORMATION



ADMINISTRATION DEPARTMENT

Meeting Date:	August 30, 2022
Agenda Title/Subject:	Mosquito Control Policy
Type of Item:	Regular Item
Purpose:	Discuss the Town's adopted Mosquito Control Policy and Vector Control Practices
Presented by:	Town Board and Staff with support from Larimer County Public Health Department

ATTACHMENTS:

- Resolution No. 6-17b (the Town's currently adopted policy)

BACKGROUND:

On August 19, 2022, Town staff initiated adult mosquito control practices utilizing EPA-approved pesticides applied by the Town's vector control contractor, Vector Disease Control International (VDCI). The decision to spray was made based upon the Town's adopted Mosquito Control Policy (attached) and at the recommendation of the Larimer County Public Health Department. In accordance with the Town's policy, spraying is to occur when the Vector Index in Berthoud rises above 0.5.

Vector Index (VI) is a measure of the average number of mosquitos infected with West Nile Virus (WNV) per trap in a given area. The VI indicates the relative risk of West Nile Transmission and a VI over 1.0 is considered to be very high. Spraying is targeted in the areas surrounding the traps where mosquitos infected with WNV were found.

The spray operation conducted on August 19 was the first time in approximately 6 years that the Town has had to implement adult mosquito control measures. As a result, the decision to spray received varied responses including both significant concern and support. At the August 23, 2022, Town Board meeting, the Board requested more information about the Town's vector control practices and to hold a special meeting to consider the appropriateness of the current Policy.

UPDATE/NEXT STEPS:

This special meeting is an opportunity to review the current policy and determine any appropriate next steps.

RECOMMENDED ACTION(S):

Provide direction to Town Staff

**TOWN OF BERTHOUD
RESOLUTION NO. 6-17b**

**A RESOLUTION OF THE TOWN OF BERTHOUD, COLORADO
ESTABLISHING A POLICY FOR MOSQUITO CONTROL SPRAYING**

WHEREAS the Town of Berthoud is surrounded by agricultural lands and wetland areas which are prone to develop substantial mosquito populations in certain years and seasons; and

WHEREAS vector borne diseases from mosquitoes are a significant public health concern, as is environmental and ecological damage from excessive or unnecessary pesticide application; and

WHEREAS, the Larimer County Health Department regularly conducts evaluations of the intensity and types of mosquito infestations, including a determination of populations likely to carry West Nile virus and other diseases, and provides recommendations as to whether active spraying is warranted; and

WHEREAS, the Town of Berthoud will now maintain its own traps and evaluation data in addition to the data from the county; and

WHEREAS, Town staff has requested a fixed policy to determine when to rely on larval and bacterial control programs regularly employed by the Town and when to engage a contractor for active spraying

WHEREAS, The Town of Berthoud is committed to continuing our motto as "The Garden Spot of Colorado,"

**NOW THEREFORE BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN
OF BERTHOUD, COLORADO AS FOLLOWS:**

1. The attached 'Emergency Adult Mosquito Control Policy Statement' is hereby adopted as the official policy of the Town for determining when adult mosquito control shall be implemented as a matter of public health and safety;
2. Town staff shall be responsible to promote the communications standards set out in the attached Policy; and
3. Town staff shall implement active mosquito control measures (spraying) only as set forth in the attached 'Emergency Adult Mosquito Control Policy Statement'.

PASSED, ADOPTED AND APPROVED THIS 13th day of June, 2017.

TOWN OF BERTHOUD

BY: _____

Steve Mulvihill, Mayor

ATTEST:

Acting Town Clerk



EMERGENCY ADULT MOSQUITO CONTROL POLICY STATEMENT

1. In order to effectively combat West Nile virus through the season, the Town has contracted to conduct a mosquito surveillance program and sets traps weekly within the Town of Berthoud to monitor changes in the mosquito population over time and to evaluate effective management of its larvicide program. (The Town of Berthoud is also conducting a comprehensive larvae control program to kill mosquito larvae before they emerge from breeding areas. The contract is to apply a biological larvicide to breeding sites per the attached map. The larvicide is a natural non-toxic biological product that affects only mosquitoes and is not harmful to fish and animals).

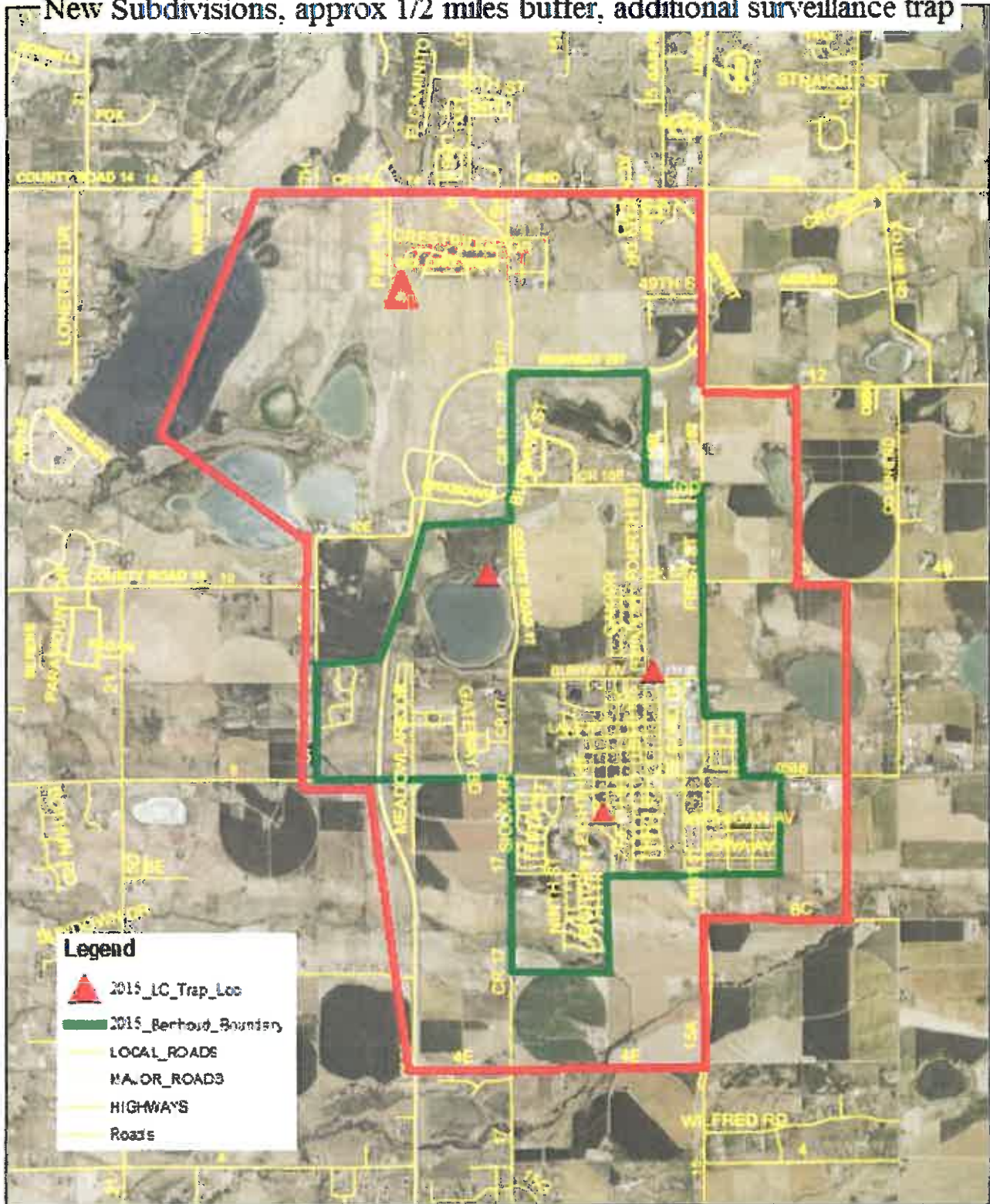
2. At any time that any mosquito-borne disease becomes a real or imminent public health threat, adult mosquito control measures for adult insects will become a priority issue for the Town of Berthoud. A real or imminent public health threat will be established by a Vector Index (VI) of .5 or higher which is calculated for the Town from data obtained as an average of the Town's trap network, per the attached map. Such data shall be published on a weekly basis on the Town web site.

3. The Vector Index (VI), which measures the level of West Nile Virus (WNV) infected mosquitoes in an area, is accepted as the best available predictor of human risk from that disease. The VI is a number calculated by combining measures of the abundance of Culex mosquitoes (the species which carries WNV) and the rate of infection in those mosquitoes. Published investigations of large WNV outbreaks have shown that once a vector index is over 0.5, the risk of human infection increases substantially. The Larimer County Department of Health has adopted the 0.5 VI as the threshold indicator of a health risk to the community.

4. Upon notice of a Vector Index of .5 or higher, as an average of the Town trap network, adult control measures will be implemented town-wide on two consecutive evenings on or after 10 PM (weather permitting) and spray exclusion zones will not be recognized. Such adult control measures shall occur at the direction of the Town staff without further Board action. Notice to residents of the intended application date will be made via the Town website, VDCI website, press release, and social media updates. Community members may also sign up to receive email alerts from VDCI. The Town of Berthoud will give a minimum of 48 hours' notice through these channels before commencing spray operations. The Town of Berthoud will implement all recognized means to reduce the adult mosquito population within the area where disease transmission to humans is a concern. In 2017, the Town has contracted with Colorado State University to test Town traps and provide a weekly data report which will include the Vector Index for the Town. The Town will generally receive those reports on a Monday, meaning that adult control events may occur as early as Wednesday or Thursday of the same week.

Expansion Option 2

New Subdivisions, approx 1/2 miles buffer, additional surveillance trap



Berthoud Mosquito Control Program

0 0.35 0.7 1.4 Miles



This map is the property of
Colorado Mosquito Control, LLC



BOARD OF TRUSTEES INFORMATION



ADMINISTRATION DEPARTMENT

Meeting Date:	July 18, 2023
Agenda Title/Subject:	Mosquito Spray Policy
Type of Item:	Regular Item
Purpose:	To consider application of mosquito adulticide (spray) per the Town's previously adopted policy
Presented by:	Chris Kirk

ATTACHMENTS:

- Map Berthoud Mosquito Test Trap Locations
- Test Report Week 27 (Trap Date – July 4, 2023)
- Test Report Week 28 (Trap Date – July 11, 2023)
- Week 27 Data Input (Berthoud Only)
- Week 28 Data Input (Berthoud Only)
- Board Meeting Minutes - August 30, 2022

BACKGROUND:

As the Board is aware, the Town of Berthoud works with Larimer County, Colorado State University, and Vector Disease Control International (VDCI), to trap mosquitos and to test those mosquitos for the prevalence of West Nile Virus (WNV). According to the Center for Disease Control (CDC), WNV is the leading cause of mosquito borne illnesses in the U.S. There are currently no vaccines for WNV and no medications to treat WNV in people. About 1 in 5 people who are infected develop a fever and other symptoms. About 1 out of 150 infected people develop a serious, sometimes fatal, illness. (<https://www.cdc.gov/westnile/index.html>)

The Town's current approach to reducing the overall number of mosquitos is to utilize larvicide to kill mosquito larvae in areas of standing water as commonly used treatments before mosquitos get airborne. This is done under contract with VDCI. In August 2022, the Town Board voted to approve a general policy outlining the Town's approach to using adulticide, which is typically applied by a spray rig attached to a truck. Truck spraying of adulticide is intended to reduce the number of adult airborne mosquitos that could possibly spread WNV.

More specifically, the Town's adopted policy from August 2022 directs staff not to spray adulticide unless the vector index exceeds .75 for two consecutive weeks of testing, and only after being addressed by a special public meeting of the Town Board, called by Town Staff on whether to spray based on the current factors and conditions around current testing. For information, Vector Index is an estimate of the abundance of infected

mosquitos in an area based on WNV infections rates in individual species of mosquitos.

Based upon test data received from the Colorado State laboratory analyzing mosquito traps collected on July 4 and July 11, 2023, the Vector Index was 1.229 and 3.029 respectively. As such, Town Staff have called for a special meeting on July 18, 2023, for the Board to consider utilizing truck spraying of adulticide, per the adopted policy.

UPDATE/NEXT STEPS:

Should the Board vote to not to apply adulticide, Town Staff will continue to apply larvicide treatments per the Town's regular management procedures.

Should the Board vote to apply adulticide via truck spraying, Town Staff will work with VDCI to schedule said spray application and will use all available communication outlets to notify the Town residents of the same.

RECOMMENDED ACTION(S):

VOTE TO DIRECT STAFF TO CONTINUE LARVICIDE PROGRAM ONLY

OR

VOTE TO DIRECT STAFF TO APPLY ADULTICIDE VIA TRUCK SPRAYING AFTER A MINIMUM OF 24 HOURS NOTICE TO TOWN RESIDENTS VIA AVAILABLE COMMUNICATION OUTLETS



MEETING MINUTES OF THE TOWN BOARD

**Town Board Room
807 Mountain Avenue
Town of Berthoud, Colorado
Tuesday, July 18, 2023, 6:30 p.m.**

7/18/2023 - Minutes

1. Meeting Called To Order - Mayor William Karspeck

Mayor Karspeck called the meeting to order at 6:38 pm.

2. Pledge Of Allegiance - Mayor William Karspeck

Mayor Karspeck led the pledge of allegiance.

3. Roll Call - Mayor William Karspeck

The following Board members were present:

Tim Hardy, Trustee

Jeff Butler, Trustee

Will Karspeck, Mayor

Mike Grace, Mayor Pro-Tem

Sean Murphy, Trustee

The following Board members were absent:

May Albrecht, Trustee

Karl Ayers, Trustee

The following Staff members were present:

Chris Kirk, Town Administrator

Christian Samora, Town Clerk

Lexi Weissman, Deputy Town Clerk

4. Mosquito Spray Policy

Town Administrator, Chris Kirk, gave an introduction.

Kim Meyer-Lee gave an overview of how the vector index is calculated.

Tom Gonzales with Larimer County, Chris Manley, Gregory Ebel, and Erika Cathey answered Board member questions.

Mayor Karspeck opened the meeting up to Public Comment.

Richard Rupp, Sheena Chand and Brian Laak spoke during public participation.

Mayor Karspeck closed Public Comment.

Administrator Kirk referenced a letter from citizen Jeff Hindman.

Trustee Murphy moved to apply aduicide via truck after 24 hour notice. Mayor Karspeck seconded the motion. In a 2-3 roll call vote, THE MOTION FAILED.

Mayor Pro-Tem moved to apply aduicide via truck after 24 hour notice if vector index results read higher than 0.75, spraying to occur Monday evening or as soon as possible thereafter. Trustee Butler seconded the motion. In a 3-2 roll call vote, THE MOTION CARRIED.

5. Adjourn

The meeting was adjourned at 8:25 pm.

Town Clerk or Deputy Town Clerk

William Karspeck, Mayor

BOARD OF TRUSTEES INFORMATION



ADMINISTRATION DEPARTMENT

Meeting Date:	July 25, 2023
Agenda Title/Subject:	Mosquito Spray Plan for July 28-29
Type of Item:	Consent Agenda
Purpose:	To inform the board and the public of the mosquito adulticide application scheduled for July 28-29
Presented by:	Chris Kirk

ATTACHMENTS:

- Test Report Week 29 (Trap Date – July 19, 2023)

BACKGROUND:

As the Board is aware, the Vector Index (VI) for Berthoud, as tested by the Colorado State Laboratory, has been over .75 for multiple consecutive weeks. At the last meeting of the Town Board held July 18, 2023, the Board directed Staff to apply mosquito adulticide via truck spraying on July 24, if the VI remained over .75 when test results were received on July 24. Based on the test results received on July 24, the VI for Berthoud was 2.282.

After the July 18 meeting, staff contacted Vector Disease Control International (VDCI) with the goal of scheduling a spray to occur on Monday, July 24, should the VI continue above .75. Unfortunately, given the high abundance of mosquitos in the region and growing West Nile Virus concerns, VDCI has already made commitments to other jurisdictions and the earliest that the Town of Berthoud could be scheduled to be sprayed was July 28.

Staff has scheduled an application of adulticide, via truck spraying, for the Town limits of the Town of Berthoud beginning in the late evening hours of Friday, July 28. Public information will begin to be distributed on Wednesday, July 26 through print, online, and other communications outlets. Staff has already given direction to VDCI to remain on the public streets and not to enter public or private alleyways.

RECOMMENDED ACTION(S):

RECEIVE UPDATE AS PART OF CONSENT AGENDA



Adult Trap Data - Detail

Start Date: 07/18/2023 End Date: 07/19/2023

Berthoud

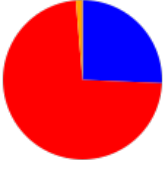
Trap #		Date	Species	Count	Percent		
LC-001	CDC Light Trap	Larimer	Berthoud Park				
		07/18/2023	<i>Aedes dorsalis</i>	16	1.7%		■ <i>Aedes-Oc</i> ■ <i>Anopheles</i> ■ <i>Culex</i> ■ <i>Culiseta</i> ■ <i>Other</i>
		07/18/2023	<i>Aedes vexans</i>	256	28.0%		
		07/18/2023	<i>Culex pipiens</i>	3	0.3%		
		07/18/2023	<i>Culex tarsalis</i>	640	69.9%		
			Total	915			

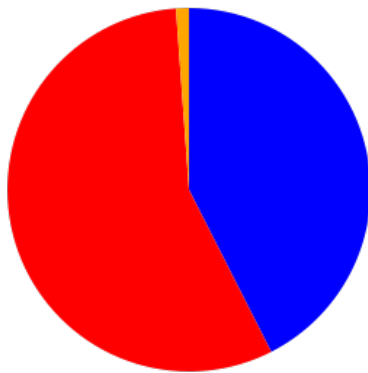
LC-049	CDC Light Trap	Larimer	Berthoud North				
		07/18/2023	<i>Aedes dorsalis</i>	44	19.1%		■ <i>Aedes-Oc</i> ■ <i>Anopheles</i> ■ <i>Culex</i> ■ <i>Culiseta</i> ■ <i>Other</i>
		07/18/2023	<i>Aedes melanimon</i>	13	5.7%		
		07/18/2023	<i>Aedes vexans</i>	50	21.7%		
		07/18/2023	<i>Culex tarsalis</i>	122	53.0%		
		07/18/2023	<i>Culiseta inornata</i>	1	0.4%		
			Total	230			

LC-053	CDC Light Trap	Larimer	Berthoud West				
		07/18/2023	<i>Aedes dorsalis</i>	80	2.6%		■ <i>Aedes-Oc</i> ■ <i>Anopheles</i> ■ <i>Culex</i> ■ <i>Culiseta</i> ■ <i>Other</i>
		07/18/2023	<i>Aedes increpitus</i>	64	2.1%		
		07/18/2023	<i>Aedes melanimon</i>	192	6.4%		
		07/18/2023	<i>Aedes vexans</i>	1,072	35.5%		
		07/18/2023	<i>Culex pipiens</i>	28	0.9%		
		07/18/2023	<i>Culex tarsalis</i>	1,568	51.9%		
		07/18/2023	<i>Culiseta inornata</i>	16	0.5%		
			Total	3,020			

LC-054	CDC Light Trap	Larimer	Berthoud Point				
--------	----------------	---------	----------------	--	--	--	--

Trap #	Date	Species	Count	Percent	 - Aedes-Oc - Anopheles - Culex - Culiseta - Other
	07/18/2023	<i>Aedes dorsalis</i>	80	4.6%	
	07/18/2023	<i>Aedes melanimon</i>	16	0.9%	
	07/18/2023	<i>Aedes vexans</i>	832	47.7%	
	07/18/2023	<i>Culex tarsalis</i>	768	44.0%	
	07/18/2023	<i>Culiseta inornata</i>	48	2.8%	
		Total	1,744		

WC-055	CDC Light Trap	Weld	Berthoud East			
		07/18/2023	<i>Aedes dorsalis</i>	228	19.0%	 - Aedes-Oc - Anopheles - Culex - Culiseta - Other
		07/18/2023	<i>Aedes melanimon</i>	12	1.0%	
		07/18/2023	<i>Aedes vexans</i>	68	5.7%	
		07/18/2023	<i>Culex tarsalis</i>	876	73.0%	
		07/18/2023	<i>Culiseta inornata</i>	16	1.3%	
			Total	1,200		



		TOTAL	%
	<i>Aedes-Oc</i>	3,023	42.5%
	<i>Anopheles</i>	0	0.0%
	<i>Culex</i>	4,005	56.3%
	<i>Culiseta</i>	81	1.1%
	<i>Other</i>	0	0.0%

D. Reporting templates

Based on the need to now report data not only for FC citywide but also separately for each of the four zones (NW, NE, SE, SW; broken down using College and Drake) the city has been divided into for the purpose of WNV surveillance and mosquito control, CSU had to generate a new reporting template. This new reporting template is tailored to provide data relevant to the Level III and IV entomological triggers (see below) for control measures in the “City of Fort Collins Program Response Guidelines to Mosquito Borne Arboviral Activity (July 2008 edition)”.

Level III

- Vector index > 0.5 and increasing
- *Culex* mosquito populations increasing and at or above historical average for that time period
- Mosquito infection rates of > 3.0 per thousand (0.3%) and increasing

Level IV

- Vector index > 0.75.
- *Culex* mosquito population above historical average for that time period
- Sustained mosquito infection rates of > 5.0 per thousand (0.5%)

The new reporting format comprises a set of 6 tables to address the current week (1a, 2a, 3a) and to provide seasonal and historical context (1b, 2b, 3b) (see full table formats on following pages)

- Table 1a. Vector Index for current week
- Table 1b. Vector Index for All *Culex* by week from June-August
- Table 2a. Vector abundance for current week
- Table 2b. Vector abundance for All *Culex* by week from June-August
- Table 3a. WNV infection rate per 1,000 females for current week
- Table 3b. WNV infection rate per 1,000 females for All *Culex* by week from June-August

Table 1a. Vector Index for current week

Week: 29	Mean abundance of females per trap night ¹		Estimate for proportion of females infected with WNV ²		Vector Index		
	<i>Cx. pipiens</i>	<i>Cx. tarsalis</i>	<i>Cx. pipiens</i>	<i>Cx. tarsalis</i>	<i>Cx. pipiens</i> ³	<i>Cx. tarsalis</i> ⁴	All <i>Culex</i> ⁵
FC – Zone NW	13.11	215.22	0.0128	0.0010	0.168	0.224	0.392
FC – Zone NE	26.50	446.90	0.0082	0.0023	0.216	1.027	1.243
FC – Zone SE	8.93	451.60	0.0194	0.0015	0.173	0.688	0.862
FC – Zone SW	19.67	266.44	0.0049	0.0026	0.096	0.696	0.792
FC – Citywide	16.14	362.28	0.0117	0.0019	0.189	0.673	0.862
LV	16.1	695.2	0.0000	0.0011	0.000	0.772	0.772
BE	6.2	794.8	0.0000	0.0029	0.000	2.282	2.282
BC	8.2	40.8	0.0000	0.0156	0.000	0.636	0.636

¹From Table 2a (CDC light trap catches only).

²Derived from the data presented in Table 3a for estimated infection rate per 1,000 females (CDC light trap and gravid trap catches combined).

³Vector Index for *Cx. pipiens* = (Mean abundance of *Cx. pipiens* females per trap night) x (Estimate for proportion of all *Cx. pipiens* females infected with WNV).

⁴Vector Index for *Cx. tarsalis* = (Mean abundance of *Cx. tarsalis* females per trap night) x (Estimate for proportion of all *Cx. tarsalis* females infected with WNV).

⁵Vector Index for All *Culex* = (Vector Index for *Cx. pipiens*) + (Vector Index for *Cx. tarsalis*).

Table 1b. Vector Index for All *Culex* by week from June-August

Week	FC – Zone NW		FC – Zone NE		FC – Zone SE		FC – Zone SW		FC – Citywide		LV	BE	BC
	Current year	Historical average ¹	Current year	Historical average ¹	Current year	Historical average ¹	Current year	Historical average ¹	Current year	Historical average ¹			
23	0.00	0.01	0.00	0.02	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.00	N/A
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
25	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.01	0.07	0.01	0.00	0.01	0.02	0.01	0.00	0.00	0.00
27	0.00	0.00	0.00	0.02	0.27	0.01	0.00	0.00	0.09	0.01	0.24	1.23	0.00
28	0.09	0.00	0.10	0.03	0.73	0.10	0.27	0.01	0.36	0.04	0.23	3.03	0.00
29	0.39	0.08	1.24	0.09	0.86	0.24	0.79	0.03	0.86	0.12	0.77	2.28	0.64
30		0.08		0.14		0.26		0.07		0.15			
31		0.14		0.17		0.23		0.08		0.18			
32		0.16		0.26		0.32		0.14		0.23			
33		0.14		0.41		0.26		0.10		0.24			
34		0.13		0.20		0.28		0.07		0.19			
35		0.06		0.19		0.25		0.11		0.17			
36		0.03		0.08		0.05		0.02		0.05			
37		0.03		0.11		0.03		0.00		0.04			

¹ The historical average for Week 23 is calculated from 2006-2014 data. The historical average for Week 24 uses 2006-2020 historical data. The historical average for Week 25-35 uses 2006-2022 historical data. Week 36 historical average is calculated from 2015-2022 data (2015 is the first year to have surveillance data collected into weeks 36 & 37). Week 37 historical average is calculated from 2015-2016 and 2018-2019 data. 2003-2005 surveillance data were excluded due to changes in trap locations from 2006 onwards.

Table 2a. Vector abundance for current week (CDC light trap catches only)

	Total number females collected			Number CDC light trap nights	Mean abundance of females per CDC light trap night		
	Cx. <i>pipiens</i>	Cx. <i>tarsalis</i>	All <i>Culex</i>		Cx. <i>pipiens</i> ¹	Cx. <i>tarsalis</i> ²	All <i>Culex</i> ³
Week: 29							
FC – Zone NW	118	1937	2055	9	13.11	215.22	228.33
FC – Zone NE	265	4469	4734	10	26.50	446.90	473.40
FC – Zone SE	134	6774	6908	15	8.93	451.60	460.53
FC – Zone SW	177	2398	2575	9	19.67	266.44	286.11
FC – Citywide	694	15578	16272	43	16.14	362.28	378.42
LV	596	25723	26319	37	16.11	695.22	711.32
BE	31	3974	4005	5	6.20	794.80	801.00
BC	49	245	294	6	8.17	40.83	49.00

¹Mean abundance of Cx. *pipiens* females per CDC light trap night = (Total number Cx. *pipiens* females collected) / (Number CDC light trap nights).

²Mean abundance of Cx. *tarsalis* females per CDC light trap night = (Total number Cx. *tarsalis* females collected) / (Number CDC light trap nights).

³Mean abundance of All *Culex* females per CDC light trap night = (Total number All *Culex* females collected) / (Number CDC light trap nights).

Table 2b. Vector abundance for All *Culex* by week from June-August

Week	FC – Zone NW		FC – Zone NE		FC – Zone SE		FC – Zone SW		FC – Citywide		LV	BE	BC
	Current year	Historical average ¹	Current year	Historical average ¹	Current year	Historical average ¹	Current year	Historical average ¹	Current year	Historical average ¹			
23	6.11	2.81	1.00	5.48	5.67	8.04	7.11	0.78	4.98	5.67	8.57	12.80	N/A
24	4.33	2.90	2.70	7.22	9.00	9.00	6.56	1.83	6.05	5.80	11.65	11.60	N/A
25	18.00	6.07	14.70	17.18	29.20	21.45	7.00	3.95	18.84	13.49	41.51	98.00	6.32
26	126.67	12.78	128.50	30.90	222.87	33.19	96.56	8.07	154.35	23.08	237.59	848.80	45.00
27	28.56	26.20	204.30	59.47	361.27	46.37	25.89	11.86	184.93	39.49	392.95	712.40	49.00
28	169.78	41.14	128.30	85.39	439.00	87.64	265.00	17.70	273.98	62.95	196.65	1056.00	49.00
29	228.33	47.89	473.40	86.69	460.53	74.04	286.11	22.52	378.42	61.74	711.3	801.00	49.00
30		47.92		107.84		80.94		22.16		68.37			
31		55.08		96.93		63.68		19.93		63.02			
32		39.85		78.44		52.73		20.69		49.71			
33		28.80		68.09		42.43		14.21		40.70			
34		21.58		53.67		27.74		10.35		29.68			
35		10.83		27.34		17.94		6.39		16.36			
36		11.18		36.44		13.82		4.94		16.63			
37		8.13		34.33		11.08		3.12		14.29			

¹ The historical average for Week 23 is calculated from 2006-2014 data. The historical average for Week 24 uses 2006-2020 historical data. The historical average for Week 25-35 uses 2006-2022 historical data. Week 36 historical average is calculated from 2015-2022 data (2015 is the first year to have surveillance data collected into weeks 36 & 37). Week 37 historical average is calculated from 2015-2016 and 2018-2019 data. 2003-2005 surveillance data were excluded due to changes in trap locations from 2006 onwards

Table 3a. WNV infection rate per 1,000 females for current week (CDC light trap and gravid trap catches combined)

Week: 29	Total number individuals examined			Total number pools examined			Total number WNV-infected pools			Estimate for WNV infection rate per 1,000 females ¹		
	Cx. <i>pipiens</i>	Cx. <i>tarsalis</i>	All <i>Culex</i>	Cx. <i>pipiens</i>	Cx. <i>tarsalis</i>	All <i>Culex</i>	Cx. <i>pipiens</i>	Cx. <i>tarsalis</i>	All <i>Culex</i>	Cx. <i>pipiens</i>	Cx. <i>tarsalis</i>	All <i>Culex</i>
FC – Zone NW	485	1941	2426	16	45	61	5	2	7	12.82	1.04	3.04
FC – Zone NE	395	4575	4970	15	97	112	3	10	13	8.17	2.30	2.77
FC – Zone SE	238	6785	7023	13	143	156	4	10	14	19.39	1.52	2.07
FC – Zone SW	193	2398	2591	9	52	61	1	6	7	4.88	2.61	2.82
FC – Citywide	1311	15699	17010	53	337	390	13	28	41	11.71	1.86	2.54
LV	20	900	920	2	18	20	0	1	1	0.00	1.11	1.09
BE	31	722	753	2	15	17	0	2	2	0.00	2.87	2.75
BC	49	245	294	1	5	6	0	3	3	0.00	15.58	12.40

¹Maximum likelihood estimate (MLE) for WNV infection rate per 1,000 females calculated using the CDC PooledInfRate 4.0 plug-in for Excel.

Table 3b. WNV infection rate per 1,000 females for All *Culex* by week from June-August

Week	FC – Zone NW		FC – Zone NE		FC – Zone SE		FC – Zone SW		FC – Citywide		LV	BE	BC
	Current year	Historical average ¹	Current year	Historical average ¹	Current year	Historical average ¹	Current year	Historical average ¹	Current year	Historical average ¹			
23	0.00	0.00	0.00	0.00	0.00	1.60	0.00	0.00	0.00	0.52	0.00	0.00	N/A
24	0.00	0.00	0.00	0.00	0.00	0.86	0.00	0.00	0.00	0.33	0.00	0.00	N/A
25	0.00	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00
26	0.00	0.00	0.00	0.06	0.29	0.28	0.00	0.28	0.15	0.17	0.00	0.00	0.00
27	0.00	0.00	0.00	0.14	0.74	0.28	0.00	0.00	0.50	0.20	0.60	2.83	0.00
28	0.64	0.00	0.74	0.42	1.69	0.76	1.23	0.59	1.36	0.51	1.18	2.73	0.00
29	3.04	1.37	2.77	0.86	2.07	2.10	2.82	0.84	2.54	1.38	1.09	2.75	12.40
30		1.97		1.62		3.47		2.06		2.40			
31		2.94		1.82		4.77		3.38		3.28			
32		4.31		4.54		6.86		9.22		5.23			
33		6.40		6.51		9.37		6.67		7.50			
34		7.89		4.05		10.38		9.88		7.39			
35		9.39		5.81		14.70		35.98		10.13			
36		6.94		1.98		3.55		6.45		2.76			
37		3.53		3.04		3.56		0.00		3.97			

¹ The historical average for Week 23 is calculated from 2006-2014 data. The historical average for Week 24 uses 2006-2020 historical data. The historical average for Week 25-35 uses 2006-2022 historical data. Week 36 historical average is calculated from 2015-2022 data (2015 is the first year to have surveillance data collected into weeks 36 & 37). Week 37 historical average is calculated from 2015-2016 and 2018-2019 data. 2003-2005 surveillance data were excluded due to changes in trap locations from 2006 onwards.

GRAPH 1A

Week: 29	Mean abundance of females per trap night ¹		Estimate for proportion of females infected with WNV ²		Vector Index		
	<i>Cx. pipiens</i>	<i>Cx. tarsalis</i>	<i>Cx. pipiens</i> ³	<i>Cx. tarsalis</i> ⁴	<i>Cx. pipiens</i> ³	<i>Cx. tarsalis</i> ⁴	All <i>Culex</i> ⁵
FC – Zone NW	13.11	215.22	0.0128	0.0010	0.168	0.224	0.392
FC – Zone NE	26.50	446.90	0.0082	0.0023	0.216	1.027	1.243
FC – Zone SE	8.93	451.60	0.0194	0.0015	0.173	0.688	0.862
FC – Zone SW	19.67	266.44	0.0049	0.0026	0.096	0.696	0.792
FC – Citywide	16.14	362.28	0.0117	0.0019	0.189	0.673	0.862
LV	16.1	695.2	0.0000	0.0011	0.000	0.772	0.772
BE	6.2	794.8	0.0000	0.0029	0.000	2.282	2.282
BC	8.2	40.8	0.0000	0.0156	0.000	0.636	0.636

Graph 1B

Week	FC – Zone NW		FC – Zone NE		FC – Zone SE		FC – Zone SW		FC – Citywide		LV	BE	BC
	Current year	Historical average ¹	Current year	Historical average ¹	Current year	Historical average ¹	Current year	Historical average ¹	Current year	Historical average ¹			
23	0.00	0.01	0.00	0.02	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.00	N/A
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
25	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.01	0.07	0.01	0.00	0.01	0.02	0.01	0.00	0.00	0.00
27	0.00	0.00	0.00	0.02	0.27	0.01	0.00	0.00	0.09	0.01	0.24	1.23	0.00
28	0.09	0.00	0.10	0.03	0.73	0.10	0.27	0.01	0.36	0.04	0.23	3.03	0.00
29	0.39	0.08	1.24	0.09	0.86	0.24	0.79	0.03	0.86	0.12	0.77	2.28	0.64
30		0.08		0.14		0.26		0.07		0.15			
31		0.14		0.17		0.23		0.08		0.18			
32		0.16		0.26		0.32		0.14		0.23			
33		0.14		0.41		0.26		0.10		0.24			
34		0.13		0.20		0.28		0.07		0.19			
35		0.06		0.19		0.25		0.11		0.17			
36		0.03		0.08		0.05		0.02		0.05			
37		0.03		0.11		0.03		0.00		0.04			

Graph 2a

Week: 29	Total number females collected			Number CDC light trap nights	Mean abundance of females per CDC light trap night		
	<i>Cx. pipiens</i>	<i>Cx. tarsalis</i>	All <i>Culex</i>		<i>Cx. pipiens</i> ¹	<i>Cx. tarsalis</i> ²	All <i>Culex</i> ³
FC – Zone NW	118	1937	2055	9	13.11	215.22	228.33
FC – Zone NE	265	4469	4734	10	26.50	446.90	473.40
FC – Zone SE	134	6774	6908	15	8.93	451.60	460.53
FC – Zone SW	177	2398	2575	9	19.67	266.44	286.11
FC – Citywide	694	15578	16272	43	16.14	362.28	378.42
LV	596	25723	26319	37	16.11	695.22	711.32
BE	31	3974	4005	5	6.20	794.80	801.00
BC	49	245	294	6	8.17	40.83	49.00

Graph 2b

Week	FC – Zone NW		FC – Zone NE		FC – Zone SE		FC – Zone SW		FC – Citywide		LV	BE	BC
	Current year	Historical average ¹	Current year	Historical average ¹	Current year	Historical average ¹	Current year	Historical average ¹	Current year	Historical average ¹			
23	6.11	2.81	1.00	5.48	5.67	8.04	7.11	0.78	4.98	5.67	8.57	12.80	N/A
24	4.33	2.90	2.70	7.22	9.00	9.00	6.56	1.83	6.05	5.80	11.65	11.60	N/A
25	18.00	6.07	14.70	17.18	29.20	21.45	7.00	3.95	18.84	13.49	41.51	98.00	6.32
26	126.67	12.78	128.50	30.90	222.87	33.19	96.56	8.07	154.35	23.08	237.59	848.80	45.00
27	28.56	26.20	204.30	59.47	361.27	46.37	25.89	11.86	184.93	39.49	392.95	712.40	49.00
28	169.78	41.14	128.30	85.39	439.00	87.64	265.00	17.70	273.98	62.95	196.65	1056.00	49.00
29	228.33	47.89	473.40	86.69	460.53	74.04	286.11	22.52	378.42	61.74	711.32	801.00	49.00
30		47.92		107.84		80.94		22.16		68.37			
31		55.08		96.93		63.68		19.93		63.02			
32		39.85		78.44		52.73		20.69		49.71			
33		28.80		68.09		42.43		14.21		40.70			
34		21.58		53.67		27.74		10.35		29.68			
35		10.83		27.34		17.94		6.39		16.36			
36		11.18		36.44		13.82		4.94		16.63			
37		8.13		34.33		11.08		3.12		14.29			

Graph 3a

Week: 29	Total number individuals examined			Total number pools examined			Total number WNV-infected pools			Estimate for WNV infection rate per 1,000 females ¹		
	<i>Cx. pipiens</i>	<i>Cx. tarsalis</i>	All <i>Culex</i>	<i>Cx. pipiens</i>	<i>Cx. tarsalis</i>	All <i>Culex</i>	<i>Cx. pipiens</i>	<i>Cx. tarsalis</i>	All <i>Culex</i>	<i>Cx. pipiens</i>	<i>Cx. tarsalis</i>	All <i>Culex</i>

FC – Zone NW	485	1941	2426	16	45	61	5	2	7	12.82	1.04	3.04
FC – Zone NE	395	4575	4970	15	97	112	3	10	13	8.17	2.30	2.77
FC – Zone SE	238	6785	7023	13	143	156	4	10	14	19.39	1.52	2.07
FC – Zone SW	193	2398	2591	9	52	61	1	6	7	4.88	2.61	2.82
FC – Citywide	1311	15699	17010	53	337	390	13	28	41	11.71	1.86	2.54
LV	20	900	920	2	18	20	0	1	1	0.00	1.11	1.09
BE	31	722	753	2	15	17	0	2	2	0.00	2.87	2.75
BC	49	245	294	1	5	6	0	3	3	0.00	15.58	12.40

Graph 3b

Week	FC – Zone NW		FC – Zone NE		FC – Zone SE		FC – Zone SW		FC – Citywide		LV	BE	BC
	Current year	Historical average ¹	Current year	Historical average ¹	Current year	Historical average ¹	Current year	Historical average ¹	Current year	Historical average ¹			
23	0.00	0.00	0.00	0.00	0.00	1.60	0.00	0.00	0.00	0.52	0.00	0.00	N/A
24	0.00	0.00	0.00	0.00	0.00	0.86	0.00	0.00	0.00	0.33	0.00	0.00	N/A
25	0.00	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00
26	0.00	0.00	0.00	0.06	0.29	0.28	0.00	0.28	0.15	0.17	0.00	0.00	0.00
27	0.00	0.00	0.00	0.14	0.74	0.28	0.00	0.00	0.50	0.20	0.60	2.83	0.00
28	0.64	0.00	0.74	0.42	1.69	0.76	1.23	0.59	1.36	0.51	1.18	2.73	0.00
29	3.04	1.37	2.77	0.86	2.07	2.10	2.82	0.84	2.54	1.38	1.09	2.75	12.40
30		1.97		1.62		3.47		2.06		2.40			
31		2.94		1.82		4.77		3.38		3.28			
32		4.31		4.54		6.86		9.22		5.23			
33		6.40		6.51		9.37		6.67		7.50			
34		7.89		4.05		10.38		9.88		7.39			
35		9.39		5.81		14.70		35.98		10.13			
36		6.94		1.98		3.55		6.45		2.76			
37		3.53		3.04		3.56		0.00		3.97			



MEETING MINUTES OF THE TOWN BOARD

**Town Board Room
807 Mountain Avenue
Town of Berthoud, Colorado
Tuesday, July 25, 2023, 6:30 p.m.**

7/25/2023 - Minutes

1. Meeting Called To Order - Mayor William Karspeck

Mayor Karspeck called the meeting to order at 6:30 P.M.

2. Pledge Of Allegiance - Mayor William Karspeck

Mayor Karspeck led the Pledge of Allegiance.

3. Roll Call - Mayor William Karspeck

The following Board Members were present:

Will Karspeck, Mayor
Mike Grace, Mayor Pro-Tem
Tim Hardy, Trustee
May Albrecht, Trustee
Jeff Butler, Trustee

The following Board Members were absent:

Sean Murphy, Trustee
Karl Ayers, Trustee

The following staff members were present:

Chris Kirk, Town Administrator
Christian Samora, Town Clerk
Tawn Hillenbrand, Planner

4. Citizen Participation

Linda Wilson of Berthoud spoke regarding artwork at a storage facility and property maintenance.

5. Scheduled Items And Estimated Time For Discussion

5.1. Consent Agenda

Mayor Pro-Tem Grace moved to combine and approve the items on the Consent Agenda, except for item "f" and item "g". Trustee Albrecht seconded the motion. In a 5-0 roll call vote, THE MOTION CARRIED.

f. Sidewalk Cost Share Update

Trustee Hardy moved to approve the Sidewalk Cost Share Update. Trustee Albrecht seconded the motion. In a 5-0 roll call vote, THE MOTION CARRIED.

g. Mosquito Spray Plan for July 28-29

Trustee Albrecht moved to suspend mosquito spraying. Trustee Hardy seconded the motion. In a 3-2 roll call vote, THE MOTION CARRIED. Mayor Karspeck and Trustee Butler had the dissenting votes.

5.II. Ludlow Annexation Substantial Compliance

Hillenbrand gave an introduction and provided background information.

Mayor Pro-Tem Grace moved to approve Resolution 2023-16, a resolution regarding a petition for annexation filed by Ludlow Farms, LLC and setting the matter for a public hearing. Trustee Hardy seconded the motion. In a 5-0 roll call vote, THE MOTION CARRIED.

5.III. I-25 Interchange Improvements Project

Kirk gave an introduction and provided background information.

Mayor Pro-Tem Grace moved to award the I-25 Roundabout Improvements Project to Integrated Site Solutions in the amount of \$1,356,670 and authorize the Town Administrator to authorize any necessary change orders and direct the Town Administrator to include this expense in the 2023 mid-year budget update to increase total budgeted funds to \$1,745,000. Trustee Albrecht seconded the motion. In a 5-0 roll call vote, THE MOTION CARRIED.

5.IV. Business Licensing - Public Hearing

Samora gave an introduction and provided background information.

Mayor Karspeck opened the Public Hearing.

There was not any testimony.

Mayor Karspeck closed the Public Hearing

Trustee Albrecht moved to approve Ordinance 1320, an ordinance of the Town of Berthoud to repeal Local Sales Tax License requirement and require general licensing of businesses. Trustee Hardy seconded the motion. In a 5-0 roll call vote, THE MOTION CARRIED.

6. Elected Official Reports

Trustee Albrecht Reported:

Albrecht asked about the replacement of the welcome signage on 287. Kirk indicated that the replacement of the sign is a current project and is in progress.

Trustee Hardy Reported:

Hardy provided an update regarding Berthoud Mainstreet. Hardy asked about the timing at the Hwy 287/Hwy 56 intersection. Kirk indicated that staff can reach out to CDOT regarding the timing and the placement of an arrow on the pole.

Trustee Butler Reported:

Butler requested efforts to enhance the appearance of the entry corridors into Berthoud.

Butler indicated that he had sent a resignation notification to the Board and that it would be his last meeting. Butler stated that he would be relocating to Loveland and would no longer be able to serve on the Town Board.

Mayor Pro-Tem Grace Reported:

Grace is working with the Youth Advisory Commission, who will be presenting an update and follow up to the Board regarding Scorch Fest. Grace asked about the steel plate on 10E near Berthoud Parkway. Kirk indicated that the contractor has had delays and that the repair should be completed soon.

Mayor Karspeck Reported:

Karspeck referenced the upcoming MPO deadline. Karspeck asked for clarification regarding how the Board would fill the vacancy created by the resignation of Trustee Butler. Samora explained that statute requires the governing body to fill the vacancy within 60 day of such vacancy occurring. The vacancy will exist on August 1st, and the Board will have 60 days from that date to fill the vacancy. If not filled, there would need to be an election to fill the vacancy.

7. Executive Session

Trustee Butler moved to enter into Executive Session C.R.S. § 24-6-402(4)(e)(I) to determine positions relative to matters that may be subject to negotiations, developing a strategy for negotiations, and instructing negotiators. And the following details are provided: Potential Water Purchase. Mayor Pro-Tem Grace seconded the motion. In a 5-0 roll call vote, THE MOTION CARRIED.

8. Adjourn

The Meeting adjourned at 8:40 P.M.

	What are your most important questions that you feel like you still need answers to, as it relates to developing a new policy?	What would you say is your number one priority in developing a new mosquito control policy?	What is the biggest flaw you've seen in our current policy/practices?	What do you think is working in our current policy/practices?	How much community involvement do you think there should be in developing the policy and in what ways?	Who are the public or private entities/individuals you believe would be important to have involved in the conversation?	Are there any other counties or municipalities you are aware of that we should study or consider modeling a policy after?
Trustee Grace	Are there any recent statistics or studies that correlate spraying for mosquitos and a reduction in WNV infections?	One that gives us timely information that will allow us to act with effect	Its design was to put the board was in more control to handle this situation, but it seems to have become a point of contention regarding week old numbers. Likewise, a week-long delay in report puts ANY policy of being too slow to intervene either direction. The flaw is the inconsistency of when we know about the problem and when an action can be taken.	It does force a conversation and willingness to understand the effects of spraying, so it's less likely to be "rubber stamped". More often than not, this "lets wait and see" has ended up being beneficial as the mosquito count has naturally declined over time.	I think community feedback and sentiment should be heard, but without a true public poll we won't be able to fairly honor EVERY perspective (from never spray to weekly spraying).	None that we haven't already heard from	I'd like to know what our neighbors (similar in size and commercial/industrial/Agricultural mix) have in terms of spraying rules
Trustee Hardy	I don't believe I have any questions on how to develop a new policy. Just one that holds well and also with future boards who may fall into the pressures of Tom Gonzales and spraying. We need to set a clear message as to why we set the policy so going forward there is no question as to why we developed the policy.	I don't feel we need to develop a new policy. I believe it did exactly as it was written to do. meaning we have a board meeting to discuss why the vector index is where it is at. take into considerations the extra amount of rain we have had, are there extra bodies of water not being treated with larvicide due to all the excess rain etc. these all play a role in why the numbers would increase and decrease as quickly as they have.	The biggest flaw in the current policy is the misunderstanding as to what it is and what it was meant to do. some thought it would trigger an automatic spraying, while others understood it was to create a meeting to discuss the why and why not we should spray. If trustees and staff do not want to have this discussion when levels are high, then maybe we should just adopt a flat out no spray policy.	Our current policy worked just as it was written. it began a discussion to determine why our numbers are so high. if this had been any other summer, we probably would not have had any special meetings to discuss based on previous data. we have just had an unusual amount of moisture.	I do not believe community involvement would be needed because they have not had the extensive conversations with the LC health dept, VDCI and other experts as we have. even some of our own board members have missed this conversations. Most in the community I believe think we should be spraying due to the nuisance of mosquitos and don't view our spraying policy as a health decision, but rather a convenience or nuisance control. I also felt that when the town sprays, it creates a false sense of security that they should not protect themselves with bug spray, wearing appropriate clothing, remove/report standing water etc.	I believe other experts who work with even more experts should be present. one local expert in my opinion would be Beth Conrey. she is part of an organization called PPAN. she could bring appropriate information and maybe other experts to the table.	Boulder, Co; Sherman, TX; Roundrock, TX; Others...
Trustee Murphy	None aside from how the majority of the board would like to proceed.	I thought we had a decent policy in 2017. It found consensus with the prior board and followed the science. I saw that it had room for improvement on communication and implementation. I would like to see a policy that automatically triggers adulticide application when scientifically backed thresholds are crossed and would be administered by the Town Administrator without board involvement. I believe further communication and mitigation measures could be added as time goes by. I have attached my full policy proposal that amends the 2017 policy and also proposes supplemental measures.	The current policy fails to communicate the board's intentions or reasoning. It wastes everyone's time having the same discussions and arguments. Residents are unable to plan for an application. It neglects our responsibilities to work with and protect public health. With delayed action, it minimizes the effect of any applications that do happen while contributing to mosquito resistance to the adulticide applied.	I do believe staff has done an excellent job communicating to the public. Testing, larvicide, education, and other preliminary measures are effective. I believe the current adulticide policy fails by every metric.	I believe we have heard sufficient public comment on the issue.	I'm satisfied with what I have heard in the discussions over the past two years. Larimer County Health has been a great asset in these discussions. Any entomologists from CSU could be beneficial on the education side.	I appreciate Fort Collins' policy, particularly in their communication efforts.
Trustee Ayers		More intensive/widespread larvicide; creating habitat for mosquito predators in public & private property.	(This is not a comment on you or town staff) Following reactive instead of proactive protocols, i.e., not spraying alleys, et al.	More proactive education and notification: alerting citizens about rising numbers; reminding people to dump standing water and to self protect.	This is a tough one in that the most vocal supporters of each side are the minority and they are the ones to comment. However, I think getting informed comments from members of the public and more outreach would be helpful.	Toxicologists, entomologists, public officials that have had successful programs of not spraying. Anyone who has long-term information about the benefits/negatives of spraying.	I think Boulder's opinion might be useful. If possible, I think communities further abroad: Georgia/Florida, Africa, Europe – anywhere that has mosquito borne illnesses that are in check (or not).