CLARK COUNTY MOSQUITO CONTROL DISTRICT

END-OF-THE-YEAR REPORT

TO: CCMCD Board of Trustees

FROM: Mario Boisvert, District Manager

DATE: December 18, 2025

Further to a request from the Board of Trustees, it has been proposed that an "End-of-the-Year" report must be produced by the District Manager at the end of each year.

The report will reflect the previous reports presented during the year.

A table showing Key Performance Indicators (KPIs) is provided at the end of the report to compare the main performance indicators over the last four years. This table will be updated every year with data for the current year.

The Columbia River went around twelve feet in early April 2025. This water level suggested that we might have several acres of flooded areas in May and June 2025. This level of flooding would require helicopter treatments and the use of hundreds of pounds of granular larvicides. Instead, the river barely reached 7-8 feet in May-June 2025. This resulted in another relatively quiet mosquito season.

Please find below the elements of our End-of-the-Year/Annual report on our different departments/activities.

- **Administration:**
    - **CCMCD future expansion / lease renewal**
        - **County**
            - Since we are renting our mosquito buildings from Public Works, we asked them permission to "refresh" one room in the old building to make an extra working area for the lab. The extra room was designed to perform our RAMP tests and our future PCR testing. The room was cleaned, repainted, and we installed a new floor. The money was from the Capital expenditures for the improvement of the building.
    - For the first time ever, we had a Budget Committee meeting on July 22nd to discuss the draft of the 2026 Budget to be presented at the August Board meeting. We took the time to go through the different ledgers, and I gave explanations of the numbers presented in the projected budget.

- Our State Auditor Office's audit that occurs every three years was performed during the months of November and December 2025. An Exit report was presented in December describing the different deficiencies encountered during the audit and also offering recommendations on how to address them.

- **Relationship with Clark County Public Health (CCPH)**
  - Nothing to report.
- **Contract with the County Treasurer**
  - Nothing to report.
- **Contract with TDJ**
  - Our Annual Report Certification was submitted pursuant to RCW 43.09.230 to the Washington State Auditor's Office on April 30th, 2025.
  - The Financial Committee met two times (April 13th & April 20th, 2025) and we were able to review and finalize 19 financial procedures and guidelines (mainly written by TDJ). After recommendations from the Financial Committee, the "reviewed and updated" guidelines were presented to the Board members at the June meeting.

- **Budget 2024:**
  - We finished the Year 2024 around $408K below budget. The main savings were:
    - Salaries $137K (Doug & Jessie's salaries)
    - Total supplies $35K (less pesticides purchased)
    - Professional Services $60K (no helicopter contract)
    - Capital Expenditures $120K (no purchases in 2024)
    - Extra revenues $60K (investment interests)
  - With the agreement of the Board, we used up some of the "extra money" ($300K) of the 2024 budget to reduce the money needed for our revenue budget for 2025.

- **Budget 2025:**
  - Based on a "forecast" scenario (approximation) for the end of 2025, our end of the year budget should be around $200K below budget. The main savings are:
    - Salaries $37K (some employees left early in July)
    - Total supplies $27K ($23K less pesticides purchased)
    - Professional Services $50K (no helicopter contract)
    - Extra revenues $80K (investment interests + revenues)

- **Operations**
  - Some changes in our personnel in 2025
    - Field Supervisor: Mark Newman replaced Doug Nelson.
    - Lab Supervisor: Wade Holbrook replaced Rick Westre.
    - Administrative Assistant: Emma Jarvis replaced Tarsis Jimenez.
    - Since many employees did not return this year, the hiring process has been quite challenging. We had to make 10 offers to finally get 8 new employees. Two employees who originally accepted an offer resigned before starting their job with the Mosquito District. With the two student technicians on board this year, we had a full crew of 17 employees for the season.
  - On January 21 - January 22, 2025, Abby and Madison attended a roundtable meeting in TriCity, WA regarding drone operations.
  - On January 22, 2025, Douglas and I attended a meeting in St. Helens, OR with the three other districts involved in the aerial larviciding treatments by helicopter. As a reminder, we got our Congested Areas Plan (CAP) from FAA last year, so the helicopter could have flown for us if it was needed.
  - We did not attend the AMCA Conference in Puerto Rico last spring. With the dengue outbreak occurring at the same time the meeting was held, I decided we would not attend to protect our employees' health and safety.
  - On March 19th, 2025, I met with Ms. Caitlin Harrington, the Southwest Washington Director working for Senator Murray. The main goal of the meeting was to talk about money appropriation in 2026 to secure money for the CDC for vector-borne diseases and to continue to operate the

VectorSurv software used by many districts across the US to manage our mosquito surveillance programs.

- We were present at the Vancouver Home and Graden show on April 26th & 27th, 2025. There was a projected attendance of around 40,000 people at the event this year. Our larvae display was a big hit, especially with the kids.

- The marketing company Celtic Chicago (www.celticchicago.com) was producing a monthly newsletter called *MAD Hacks* (MAD for Mosquito Abatement Districts). Our Lab Truck was part of a newsletter that was available to every mosquito district to see in the nation.

- On June 13th, 2025, the lab detected a positive pool of mosquitoes for West Nile Virus (WNV), using Rapid Analyte Measurement Platform (RAMP) technology. The pool originated from a trap located within the National Wildlife Refuge in Ridgefield. This was the first time that a positive pool of mosquitoes infected with WNV was found in Clark County, WA. Samples were sent to WA state Department of Health for PCR confirmation and results came back negative**, meaning there was no detection of West Nile Virus**.

- On July 8th, 2025, we received an email reporting a dead crow in the city of Vancouver. We picked up the crow and sent it to the Oregon Veterinary Diagnostic Lab to be tested for West Nile virus. We sent the crow on July 10th and the next day the Diagnostic lab communicated with us to let us know that the crow was completely desiccated and the lab was unable to collect any viable samples for testing the bird.

- Andrew Rivera from Clarke Mosquito Control was here from July 14th to July 17th to help Madison and Paige conduct bioassays in our lab on the product (Natular G30) that we are using in the catch basins. The bioassays are part of the follow-up we make on our different products to make sure they are working properly and that there is no resistance. Results of the bioassays showed that there was no resistance against our larvae, so we are expecting that the same product used in the catch basins would yield the same results.

- In July, we met with Eric Prileson (PhD student) and Seth Rudman (his supervisor) from Washington State University in Vancouver. We discussed various research projects that we could potentially collaborate on in the

future. They have newly established facilities in Vancouver where laboratory research could also be conducted.

- We had a meeting on July 22nd with the refuge administrators regarding their IMM program. It is a very slow process and after discussion, they agreed to send us their final draft for review (including information justifying why they made recent changes).

- On August 27th, we sent our comments to the refuge administrators regarding their IMM Draft. We still have not received any feedback on our comments. Their response has been delayed by the government shut down that affected both refuges' employees.

- We purchased a new vehicle on July 12, 2025 (2020 Nissan Frontier 4x4) to replace the vehicle that was declared "totaled" earlier this season after two of our employees were involved in a car accident on June 5, 2025. Neither employee was hurt in the accident, and the other driver involved was found at fault in the insurance claim.

- The students at Camas High School built us parts that go in our equipment (the mozzies) for catch basing larviciding. We really appreciate that collaboration with the school. We look forward to partnering with them on future projects.

- Three of our employees (Abby, Madison and Mark) attended the Northwest Mosquito and Vector Control Association in Idaho at the end of October. It is always a good opportunity to learn more about new products, new drone regulations, and meet with colleagues.

- We completed three full rounds of treatments in our catch basins and a partial one in September-October for a total of 195,000 catch basins treated this year.

- Paige Frawley, one of our students hired for the summer, worked on the residual activity of two different briquets used in our head boxes (sand traps) for the control of mosquito larvae. One of the products (Altosid XR briquets) tested showed very good residual activity while the other product tested (Natular XT) did not show results as good as the Altosid briquets.

- **Lab**
    - We sent larvae of *Culex pipiens* to the Centers for Disease Control and Prevention (CDC) at their Division of Vector-borne Diseases based in Fort Collins, CO for DNA testing. This is our third year we are sending specimens for DNA testing. Results showed that there was **NO** mix of *Culex pipiens pipiens* and *Culex pipiens molestus* in our samples compared to previous years' results. They said they wanted to do more tests to confirm their results.
    - We built a new lab room in the old mosquito building. We also bought a small countertop-sized freezer for our West Nile virus samples.
    - We only had a few traps around Vancouver Lake that showed significant numbers of mosquitoes (+/- 500 mosquitoes) this year. Traps close to both refuges showed low numbers, which was good for the surrounding population.
    - In July, we were able to add a new treatment "route" with new trap locations. That route was specifically created to provide better coverage of our county. This is something we have been discussing over the last two years and now it has become a reality.
    - Lucas Pettersen, our second student hired for the summer, gathered results on his project focusing on the comparison of different traps. Based on conclusive results from Lucas' project this summer on traps' efficacy, new John Hock traps were ordered for next year's season.
    - As of October 30th, we have tested 985 pools of mosquitoes for WNV this year, which accounts for approximately 36% of all pools tested in Washington State (985/2719). All our samples tested NEGATIVE for West Nile virus.
    - As of October 30th (final weekly state report of the year), there were 48 pools of mosquitoes that have tested positive for WNV in Washington state, all in three counties east of the Cascades. There are also two positive horses (fatalities) out of four tested and two human cases (one fatality and one viremic blood donor).

Key Performance Indicator

		2022	2023	2024	2025
	Columbia River height in spring [1]	16'	13'	9'	7'
Budget	Budget	$1,047,778	$1,299,500	$1,692,492 [2]	$1,549,338 [3]
	Cost per parcel (including County's administration fees of $0.75)	$7.59	$9.15	$11.55	8.56 [4]
Employees	Number of employees	13	14	16	17
	Full-time	2	3	4	4
	Part-time	1	2	2	1
	Seasonal	10	9	10	12 [5]
Operations	Number of acres treated	2,086	1,228	293	700
	Acres by helicopter [6]	1,621	918	0	0
	Acres by drone	0	42	231	50
	Acres by other means (amphibious vehicles (argos), all-terrain vehicles (atvs), backpacks, etc.)	465	268	62	650
	Number of catch basins treated	130,000	175,000	197,000	195,000
	Number of fogging treatments (adulticide)	54	86	6	0
Surveillance	Number of mosquitoes caught	335,000	354,000	127,000	66144 [7]
	Number of "pools" of mosquitoes tested for West Nile virus (WNV) [8]	1,077	906	722	985
	# of positives for WNV	0	0	0	0
Service Requests	Number of Services requests	814	1192	160	117
	For nuisance	794	1172	91	75
	Other than nuisance	20	20	69	42

(1) The height of the Columbia River in spring has a very important impact on our operations
(2) In 2024, the budget includes an extra full-time employee with benefits and $182K for potential treatments at the two National Wildlife Refuges (Ridgefield and Steigerwald Lake)
(3) Decrease in our budget. Money for treating refuges was planned to be used from Emergency Funds if necessary
(4) $300,000 was used from 2024 end of year expenditures to fund the 2025 revenues - representing a saving of $1.87 per parcel ($300K/160340 parcels)
(5) That includes the hiring of two studentss for the first time
(6) The number of acres treated by helicopter is largely influenced by the number of acres flooded by the Columbia River (height)
(7) A lot less of *Aedes vexans* since the river only reached about seven feet (less flooded areas - no need of helicopter)
(8) Over the last 4 years, between 30% and 40% of all the mosquito pools tested annually in WA State were from Clark County