

**MINUTES OF THE
SALT LAKE CITY MOSQUITO ABATEMENT DISTRICT
18 August 2022
BOARD MEETING**

Presiding: Van Turner, Board Chair 2022

Time: 12:30 p.m.

Place: 2215 North 2200 West, Salt Lake City, UT 84116

Trustees Present: Van Turner, Chair
Carlton Christensen, Vice-Chair (Arrived at 1:09 p.m. during item 5)
Amanda Barth
Dr. Shireen Mooers
Neil Vickers, Ph.D.

Others Present: Ary Faraji, Ph.D., Executive Director
Aleta Fairbanks, CPA, CFO

1. Roll Call:

Trustee Turner called the meeting to order at 12:30 p.m. It was confirmed that the meeting was being recorded, and no conflicts of interest were declared.

2. Approval of the 14 July 2022 Minutes of the Board of Trustees Meeting:

The Board Members were provided an opportunity to review the pending minutes of July's regular Board Meeting prior to this meeting, and one modification had been made. Trustee Mooers made a motion to approve the 14 July 2022 Board Meeting Minutes, as corrected with the beginning time changed from 12:01 p.m. to 12:31 p.m. Trustee Vickers seconded the motion, and it carried with all in favor.

3. Presentation of the July 2022 Financial Statements and Approval of Bills for Payment:

July's Financial Statements had also been distributed to the Trustees earlier in the week. CFO Fairbanks reviewed the Financial Statements with the Board and noted that

the District had received \$117.91 from Zions Bank for credit card purchases made on the old credit cards, and these cards have now been closed. All expenditures were presented, with special attention being paid to items over \$1,000. Documentation for all payments had been closely reviewed when the checks were signed, and the Trustees were encouraged to scrutinize the credit card receipts. The Balance Sheets and a folder containing all of the supporting invoices was passed around. Trustee Vickers made a motion to approve the July 2022 Financial Statements and the bills for payment; his motion passed unanimously after being seconded by Trustee Barth.

4. Update on RFP for Auditor Services:

Child Richards CPAs has been providing auditing services to the District for the past several years. Their current contract has now been completed, and the District is requesting proposals from other CPA firms. The procurement shall be conducted subject to the provisions of Utah Code 63G-6a 701-711, R33-5-108 Small Purchase of Professional Service Providers and Consultants, and the auditing firms that were invited to submit proposals were selected from the State Contractor Approved Vendor List. The audit contract will be a five-year agreement and will cover the annual audits for the calendar years ending 31 December 2022 through 31 December 2026. Proposals are due 26 August 2022; Executive Director Faraji, Assistant Director White, and CFO Fairbanks will review the proposals and interviews with the submitting companies will be scheduled between 29 August 2022 and 2 September 2022. Trustee Barth agreed to participate in these interviews; Trustee Christensen also agreed to assist with the auditor selection when he arrived later in the meeting.

5. Update on Utah State Prison and Mosquito Control Activities:

Multiple persons have expressed displeasure with the abundance of mosquitoes at the Utah State Prison via emails, in-person visits, and phone calls. Some of the incarcerated prisoners are refusing to go outside because the pestiferous mosquitoes are so copious. Executive Director Faraji explained the District's Integrated Mosquito Management activities with these persons and helped them understand that they had been given inaccurate information when they heard the District was not conducting mosquito control. The Warden, the Deputy Warden, the Administrative Services, and some of the maintenance personnel visited our facility to learn about our operations, and a follow-up visit was made to the Prison. There are a lot of mosquito larval sources at the Prison, including a moat with stagnant water surrounding the perimeter and numerous catch basins. A lot of improvements can be made on the property that will help reduce the number of mosquitoes, such as not overwatering the lawn late at night, cutting the grass to a shorter length, modifying various native landscaping with gravel and xeriscape methods, and capturing some of the mosquitoes that are coming indoors by placing traps inside the foyer areas. The Prison plans to have two individuals trained and licensed so they can assist with pesticide applications on location. The Prison has indicated there are problems with deer and horse flies as well, and we anticipate the Prison will also find biting midges to be problematic in the spring. Education Specialist Rehbein is working with an advocacy group

(Utah Prisoner Advocate Network) dedicated to the needs of the prisoners; she will do a presentation familiarizing them with general entomology as well as mosquito biology and control. We plan to increase trapping in the area, conducting ultra-low volume adult mosquito control applications around the perimeter of the Prison, making barrier and residual applications as needed, and coordinating aerial applications with the Prison. A financial agreement also needs to be established for the work above and beyond our regular operations. Additionally, we have also made recommendations on personal protective measures that the inmates and guards can undertake themselves, such as use of repellents, long-sleeve clothing to cover exposed areas of skin, avoiding peak mosquito activity times, and avoiding areas where mosquitoes may congregate or rest. However, such measures need to be approved to ensure that they cannot be used for nefarious means by the inmates (flammability, alcohol content, etc.)

Trustee Vickers mentioned that the District might gain some insight by contacting the University of Utah about its large program educating the prisoners on a variety of subjects. The Prison population has been very receptive to learning and developing more expertise in several areas. Executive Director Faraji has also discussed involving the prisoners in rearing mosquito fish and possibly providing them with a life skill involving pest control, such as a pesticide applicator. Also, because inmates come and go, it may be helpful to provide a poster, pamphlet, or flier educating them about mosquitoes, mosquito-borne pathogens, pesticide safety, the wetlands, ecology, teaching them the ways they can protect themselves, and letting them know what the District is doing to help reduce the mosquito population at the Prison.

Executive Director Faraji also spent an entire day with Ella Sorensen, the manager of Audubon's Gillmor Sanctuary in Utah, canvassing the Audubon's region. The Audubon is far west and is the closest habitat to the Prison. We have sheltered this area in the past and have reduced mosquito control operations because of the possibility that the western mosquitoes produced on this habitat may not necessarily disperse into the eastern region of our District where human habitation is at its peak. However, because of the close vicinity of the Prison to this wetland habitat, mosquito control operations need to be increased. Fortunately, Ms. Sorensen understands this need and has indicated that she is willing to work with us; she said we can conduct aerial adulticide and larvicide applications as needed through our Integrated Mosquito Management program. However, she recently gave our field personnel trouble when they attempted to work on the Audubon property. Once again, this morning our staff met with her and Jack Ray (an attorney who is also a member of the Rudy Duck Club) in an effort to find some common ground for reducing the mosquito population at the Gillmor Sanctuary. Rather than using eminent domain to control the mosquitoes, we prefer to find a compromise that works for everyone. This morning, the miscommunication was clarified and she agreed to increasing mosquito control applications, as needed. Executive Director Faraji will follow up with an email summarizing the meeting.

Dr. Brian Moench has also been concerned about the mosquito infestation at the Prison, and he actually phoned and asked if there was anything he could do to help support our abatement efforts to ensure that proper Integrated Mosquito Management was

continuing. Dr. Moench is concerned about excessive adult mosquito control applications and would like to verify that these are not being increased as a result of political or other pressure. Executive Director Faraji assured him that we only conduct adult mosquito control operations as dictated by our vector surveillance methods and never based on a "schedule" or undue pressures. Executive Director Faraji once again invited Dr. Moench to visit the facility and observe our scientific operations, but he replied that he is still immunocompromised and will take us up on this offer at a later date.

6. Report on Attended and Reminder/Approval of Upcoming Training/Meetings:

- **International Congress of Entomology, 17-22 July 2022, Helsinki, Finland**

The International Congress of Entomology meetings was not well-attended this year, and Executive Director Faraji's symposium, entitled "Nature's Revenge: Enduring Challenges of Vector-borne Diseases, Research, and Control Strategies in the United States", was disrupted by a fire alarm and an inability to access the facility early to upload the presentations before the symposium began. Four out of eight speakers had cancelled at the last minute; but fortunately, replacements were found through the general abstract category and a full line up was presented. Despite the lower attendance than previous congress meetings, good networks and collaborations were conducted and we were able to introduce the various projects and methods of control utilized in the United States for the European audience.

- **DSLASA, 8 September 2022, Ogden Hangar**

The Davis Salt Lake Aerial Spray Authority board meeting will be held at the Ogden hangar this quarter. All of the Trustees were invited to attend the 5:00 p.m. meeting and see the hangar on 8 September 2022. La Vone Liddle has been serving on the DSLASA Board of Trustees with Trustee Vickers, and her official term as a Trustee for the District ended last month. She had indicated that if no one else from the Board would like to serve as a Trustee on the DSLASA Board at this time, she will agree to continue to represent the District for the time being. Other than Trustee Vickers, none of the current Trustees indicated a desire to serve on the DSLASA Board of Trustees this year. As a result, Ms. Liddle will continue to represent the District on the DSLASA Board until further notice.

- **Society for Vector Ecology, 19-23 September 2022, Honolulu, Hawaii**

Assistant Director White will be attending the Society for Vector Ecology (SOVE) International Congress conference this year, and he will be conducting a symposium on innovations within mosquito control districts. Trustee Mooers' father (Dr. Mir Mulla), a retired professor at the University of California, Riverside, was one of the founding fathers of the Society for Vector Ecology. The family has put in place an endowment that provides funding for a guest lecturer at the annual meetings, and Trustee Mooers has been invited to attend the 2022 conference and to introduce this year's lecturer.

This will be the inaugural lecture, and we are proud to have two attendees from the District at this meeting.

- **Pan-African Mosquito Control Association, 26-28 September 2022, Rwanda, Africa**

Executive Director Faraji will be presenting at this conference. When he was the President of the American Mosquito Control Association, he set up a Memorandum of Understanding between the AMCA and Pan-African Mosquito Control Association (PAMCA). This MOU led to over 60 participants from PAMCA to attend the AMCA meetings last year. Part of the agreement to increase innovation exchanges was that AMCA members would also present and share their expertise at the PAMCA meetings.

- **Utah Mosquito Abatement Association Annual Conference, 23-25 October 2022, Park City, Utah**

The Utah Mosquito Abatement Association meeting provides an opportunity for trustees to receive the training that the State requires each year, in addition to providing valuable information on the activities and research programs of the mosquito abatement districts. The District will provide mileage, per diem, and cover hotel costs. Trustees Barth, Mooers, and Vickers will be in attendance; Trustees Christensen and Turner will check their schedules and let CFO Fairbanks know their plans.

- **Utah Association of Special Districts Annual Conference, 2-4 November 2022, Layton, Utah**

The Board Trustees were invited to attend the UASD Meetings that will be held at the Davis Conference Center in Layton. This meeting covers the required board training, legislative issues, and other matters that affect special and local districts. If interested in attending this conference, please inform CFO Fairbanks so she can make your hotel reservation and take care of registration.

- **Entomological Society of America, 13-16 November 2022, Vancouver, British Columbia, Canada**

Executive Director Faraji will be attending this meeting. He is currently a subject editor for the Journal of Medical Entomology, and last month he was nominated to run (unopposed) as Vice President of their Medical, Urban, and Veterinary Entomology Section. Trustee Barth will also be attending this conference.

7. Executive Director's Report:

The Board Members were given a few updates, which included the following: 1) We believe our HVAC system is finally fixed. 2) Our seasonal employees are leaving us to return to school; we still have three full-time seasonal workers with us and one summer

employee who would like to work a few hours around her school schedule. Our regular staff now has a challenge to keep up with the demand caused by the high temperatures we have been experiencing. 3) Last year we treated about 350 acres with the unmanned aerial systems (UAS). This year we have increased our UAS larvicide applications and have treated around 1,400 acres so far. 4) We had a visit from Amanda Hoepfner, who is a professor at the University of Utah and in charge of the Community Engaged Learning program. She would like to further increase collaborations between the University and our District and would like to place interns within our program. The goal is to have students receive 20 hours per semester of local training in different fields. She is interested in having students train with us throughout the year, and the lab welcomes any additional help it can obtain. 5) We conducted three aerial trials with Heavy Duet from Clarke Mosquito Control. Although we documented great penetration and deposition of the material, the overall results were disappointing, as it appears there is insecticide resistance to pyrethroids resulting from residential/agricultural pesticide use. The susceptibility to pyrethroids seems to decrease the closer the mosquito populations are to farms within our jurisdiction. Fortunately, resistance has not been documented to organophosphates, such as naled. The trials were very labor-intensive, and the dormitory has proven to be very beneficial for out-of-town participants. 6) Dr. Jay Gan and his PhD student out of the University of California, Riverside plan to begin the deposition studies with naled very soon. Active sampling before, during, and after aerial adulticide applications will be performed to gauge deposition and quantification of this product within our spray blocks. They will also look at water samples, soil samples, and vegetation samples (leaves) in order to provide some actual empirical evidence concerning product residue levels, if any. 7) Dr. Mark Clifton, the Executive Director of North Shore Mosquito Abatement District, and Dr. Justin Harbison, a professor at Loyola University, stayed in our dormitories and spent two days at the District to evaluate an insect regulator called pyriproxyfen. Pyriproxyfen affects mostly young insects by mimicking their natural hormone and disrupting their growth. It may have a useful life up to 90 days in our catch basins, which is much greater than the 30 days we currently experience with the *Bacillus sphaericus* (Bsp) we have been using. 8) Jenna Crowder from the Department of Agriculture is continuing her studies on honeybees. There are three beehive locations within the wetland habitats, and the bees that are in the area where we do the most of our aerial applications are thriving the best. Her studies last year also displayed that our operations do not pose a negative impact on honeybees. She will be providing a more detailed report to the Board in September. 9) Central Life Sciences has reached out to see if we will help them with evaluating a new adulticide formulation that may bypass some of the pesticide resistance issues. One of their representatives will be visiting and staying in our dormitories during September. 10) So far, virus activity has been at a minimum, both in our jurisdiction and also the State. 11) Representatives from Zions Public Finance toured the facility and met with Trustee Christensen, Executive Director Faraji, CFO Fairbanks, and Urban Field Supervisor Sorensen to discuss possible financial avenues to fund the development of the back seven acres. Rather than tackling the entire plan at once, we are thinking about dividing the development into phases and developing the highest priorities first. A lease purchase agreement is a viable option for obtaining a helicopter, and we can use capital reserves for the other construction projects. 12) The Director's Report includes an article that Trustee Vickers provided on how human diseases caused by pathogens have been aggravated by hazards associated with climate change.

8. Probable Agenda Items for 15 September 2022 Board Meeting:

- Executive Director's Report
- Surveillance/Control Updates
- Research Projects Updates
- Report on Virus Activity
- Auditor RFP Results
- DSLASA Aerial Spray Contract
- Bylaw Changes
- Policies

9. Public Comment:

There were no public comments.

10. Adjournment:

Trustees Barth and Christensen made and seconded a motion to adjourn the meeting at 2:22 p.m., which passed unanimously. A box lunch will be available before the 12:30 p.m. Monthly Board Meeting on 15 September 2022.



Ary Faraji, Executive Director

15 SEPT 2022
Date



Van Turner, Chair 2022

9-15-2022
Date