CACHE MOSQUITO ABATEMENT DISTRICT
2015 ANNUAL REPORT

2015 presented a number of challenges due to the exceedingly wet May followed by numerous small showers and storms throughout the summer. The moisture, both natural and from irrigation of fields and lawns, provided a lot of breeding habitat for the mosquitoes in the district. Rain and wind prevented the foggers from getting out in the evenings to control adult mosquitoes. Abandoned buildings and ponds in several areas contributed to calls complaining about mosquito activity.

Larvicide is the primary abatement method used by CMAD. Because this is the last year one of main control chemicals (Abate) is being manufactured, in August the Board of Trustees approved the purchase of enough for use in the 2016 season. Richard Rigby, Field Operations Manager, continues to do trials with other products to find some as effective as Abate.

Adulticide (fogging) begins when adult mosquito numbers reach more than 50 in a trap or numerous complaints from a specific area are received. Kontrol 30-30, a non-organophosphate pesticide, is used.

Both larvicide and adulticide applications are tracked using GIS (geographical information system). Foggers are equipped with GPS to track the routes, pesticide flow, and adjust flow rate depending on the speed. Handheld units record the larvicide applications. Digital mapping software tracks application sites and requests for exemption from fogging.

Numerous interviews and outreach were given by District employees and trustees. The CMAD website continues to see an increase in number of visits to find out information such as the fogging schedule, view meeting minutes, or general information and education on mosquito abatement.

Table 1 contains information on our abatement program while Table 2 is the breakdown of employee hours. An intern from the Utah State University Environmental Health program participated in surveillance and data entry for the district. Additional employees were hired for larviciding during the summer and in August when most of our employees went back to teaching school.

Table 1. Abatement program statistics

	2013	2014	2015
Mosquitoes trapped and counted	16,411	13,670	10,331
Total inspections	2,007	1,451	1,975
Total treatments	1,244	1,558	1,974
Abate (lbs)	12,000	4,800	6,614
Natular (lbs)	1,200	1,160	856
Altosid briquettes	2,634	4,200	2,334
BVA oil (gallons)	506	214	635
FourStar SBG (lbs)		6,400	2,745
Kontrol 30-30 including diluent (gallons)	880	697	1,613
Truck miles	32,057	37,635	35,660
ATV miles	3,387	3,483	3,442

Kontrol 30-30 is the fogging pesticide; the others listed are larvicide pesticides

Table 2. Employee hours

	2013	2014	2015
Administration: payroll, district clerk, public liaison, state & federal reports, etc.	311	349	304
Field Operations management: supervisor, abatement & surveillance program, etc.	174	224	319
Training: pesticide application, safety, vehicle & equipment operation, mosquito identification	91	109	84
Speciation/surveillance: trapping & counting adult mosquitoes	271	273	207
Fogging: mix up pesticide, fill tanks, use truck-mounted foggers	813	1,180	963
Larvicide	1,746	1,988	2,175
Maintenance: vehicle and equipment maintenance	331	384	289

All employees are part-time or seasonal

The Board of Trustees continues to set policies, discuss the program, and seek a site for a permanent 'home' for the district. The board meets each month. The board adopted a capital improvements policy in 2011 that focused on upgrading/updating vehicles and equipment as well as planning for land and building purchases. Five of the six pickups are newer, fuel efficient models; a fifth ATV and trailer were purchased for use in the larvicide program by the additional employees.

For more information on District policies or mosquito abatement, please visit the website at www.cachemosquito.com or call (435) 764-6839. Financial records are available on the Accountability website (http://auditor.utah.gov/accountability/financial-reports-of-local-governments/). Select "Local and special service district" then Cache Mosquito Abatement District.