
This document was created from the closed caption transcript of the October 25, 2016 City Council Work Study and **has not been checked for completeness or accuracy of content.**

A copy of the agenda for this meeting, including a summary of the action taken on each agenda item, is available online at:

<http://www.scottsdaleaz.gov/Assets/ScottsdaleAZ/Council/current-agendas-minutes/2016-agendas/102516RegularAgenda.pdf>

An unedited digital video recording of the meeting, which can be used in conjunction with the transcript, is available online at:

<http://www.Scottsdaleaz.gov/Scottsdale-video-network/council-video-archives/2016>.

For ease of reference, included throughout the transcript are bracketed "time stamps" [Time: 00:00:00] that correspond to digital video recording time.

For more information about this transcript, please contact the City Clerk's Office at 480-312-2411.

CALL TO ORDER

[Time: 00:00:03]

Mayor Lane: Okay. We will call to order the October 25th, 2016, work study session and it's approximately 6:20. Since we took a little extra time, we will have to go a little quicker through that presentation. No. We will start with a roll call, please.

ROLL CALL

[Time: 00:00:24]

City Clerk Carolyn Jagger: Mayor Jim Lane.

Mayor Lane: Present.

City Clerk Carolyn Jagger: Vice Mayor Kathy Littlefield.

Vice Mayor Littlefield: Present.

City Clerk Carolyn Jagger: Councilmembers Suzanne Klapp.

Councilwoman Klapp: Here.

City Clerk Carolyn Jagger: Virginia Korte.

Councilmember Korte: Here.

City Clerk Carolyn Jagger: Linda Milhaven. Absent. Guy Phillips.

Councilman Phillips: Here.

City Clerk Carolyn Jagger: David Smith.

Councilman Smith: Present.

City Clerk Carolyn Jagger: Acting City Manager Brian Biesemeyer.

Acting City Manager Brian Biesemeyer: Here.

City Clerk Carolyn Jagger: City Attorney Bruce Washburn.

City Attorney Bruce Washburn: Here.

City Clerk Carolyn Jagger: City Treasurer Jeff Nichols.

City Treasurer Jeff Nichols: Here.

Carolyn Jagger: City Auditor Sharron Walker.

City Auditor Sharron Walker: Here.

City Clerk Carolyn Jagger: And the Clerk is present.

Mayor Lane: I thank you. This is of course a work study session which provides a less formal setting for the mayor and council to discuss specific topics at length with each other and with city staff. Work study sessions provide an opportunity for staff to receive direction from the council and for public to observe the discussions. We have no public comment cards on this at all. Well, then I will forgo that. That would have been the time for public comment, but we have no requests for comments.

ITEM 1 – ZIKA AND OTHER MOSQUITO-BORNE THREAT PREPAREDNESS

[Time: 00:01:23]

Mayor Lane: And so the one and only item in this special work study session is the Zika and other mosquito-borne threat preparedness and we have with us Mr. Brent Olson, our emergency manager

to give us a report.

Emergency Manager Brent Olson: Good evening Mayor Lane, members of the council, I was asked to come here to talk about the threat of the Zika in Arizona and particularly Scottsdale. On September 20th, Councilman Smith made a motion to have staff discuss this, along with what our solutions or our preventative measures are.

So like a good emergency manager, I assembled a team of subject matter experts to come in and discuss this. I have members of city staff, storm water manager, Ashley Couch, parks and rec director, Reed Pryor and from the office of the environmental initiatives I have Sam brown to discuss different aspects of the preparedness prevention and the response to Zika.

Airborne viruses are one of those things that have been around for a very, very long time. They infect the human population. They have a nasty tendency to bite. I heard a reference to it being the state bird in a couple of the states. In Arizona, we do have mosquitoes, and we do have the mosquitoes that can carry Zika virus.

So one of the subject matter experts was from the Maricopa County Department of Public Health -- I almost said public safety, but public health. And it is Craig Levy. He is an epizootologist with the Maricopa County Department of Public Health and I think it's important to discuss it what is the threat is. And not the 15 sound bite that is on the news but what the actual threat is and what the threat of Zika is in Arizona. I would like Mr. Levy to give his presentation.

[Time: 00:03:45]

Maricopa County Department of Health Epizootologist Craig Levy: Good evening, Mayor and Council. Pleasure to be here. What I wanted to do is really not just focus on Zika virus but there's three mosquito-borne virus threats that we are preparing for. The Zika virus is the disease due juror that everybody is focusing on.

So Zika virus, chikungunya, and dengue virus. All three have similar symptoms and all three viruses have been rapidly expanding in the Americas which increases the threat for us. We have been seeing imported cases of all three viruses showing up here in Arizona, including in Maricopa County, and all three viruses do have the potential of being started here if we are not careful.

So the mosquitoes that transmit it are aedes aegypti and infected people traveling from Zika areas are the reservoirs. They are the mechanism by which the virus is moved from point A to point B and then our own local mosquitoes, the aedes aegypti are the mechanism that could potentially get it started here. You will see there that it says aedes aegypti are thriving and pretty much most communities, including Verde Valley, Cottonwood. This is not a native mosquito. This is an invasive species but it's thriving here because we take our desert and tropicalize it and that's one of the main reasons we have a problem.

The mosquito bites mostly during the day time. We call them ankle bitters because they fly low and

they usually bite you around the feet and ankles and they are breeding probably 99% of the sources are coming out of backyard clutter and containers. This is the breeding sites, pretty much, you can probably find stuff like this in everybody's yard if you look for it. It doesn't take a lot of water. Out of one car tire, you can get over 1,000 mosquito larvae.

And it does not have to be a container with water in it to be part of problem because the eggs are not laid in the water. They are actually attached to the side of the container and they can survive dry for weeks or months until more water comes, either from a monsoon rain or from a sprinkler coming on. So dry containers are also part of the problem, because they are a source of viable eggs.

So this is the problem, 99% is coming from people's yards. These are not coming from the ditches or the drainages or retention basins. This is a container breeding mosquito.

The map that you are looking at is Maricopa County. These dots represent where mosquito traps that Maricopa County vector control is setting, not for aedes aegypti but for West Nile Virus surveillance where they are picking up aedes aegypti mosquitoes by accident. They are not set up for the aedes aegypti. But the fact that they are finding this many dots on the trap that is not designed for this purpose is not a good thing. It is wide spread.

A little bit of history on the virus, is the name Zika comes from the Zika forest. It was a cycle that was associated with other types of aedes mosquitoes and monkeys but like a lot of emerging diseases makes the jump from monkeys and whatnot to people. So now it's a human disease. Zika virus is related to some other viruses in a group they call flavivirus, it's related to dengue, yellow fever, west nil, St. Louis encephalitis and Japanese encephalitis. The reason that dengue is underlined, it is close enough to dengue. If they are tested for Zika and not tested for dengue, they may not have the Zika. They have may actually have dengue virus.

There's a lot of problems with the laboratory testing and the diagnosis can be a little bit confusing. So the virus is transmitted by mosquito bites, primarily. That picture you look there, that pretty looking -- it's actually a pretty looking mosquito, the aedes aegypti covered with silver white bands and spots but it's transmitted perinatally and that's where the big concern for this virus popped up.

Also sexual transmission. This is where the virus surprised all the public health people, is it is first time a mosquito borne virus that it has been transmitted sexually, male to female, male to male, female to male, although that's much rarer but pretty much in all directions. Also by blood transfusions. So the blood supplies are now screened for Zika virus.

In terms of the incubation period from the time you are bitten is 2 to 12 days. 80% of infections have no symptoms. So that adds another problem to monitoring for this virus.

The symptoms for Zika are low grade fever, joint pain, swelling, receipt could ocular pain and conjunctivitis and a small number of cases Guillain-Barre, it attacks your nervous system and it can cause muscle weakness and paralysis. If it weren't for the birth defects with this virus, this disease would not be that big of a deal. And it's where the virus attacking the developing brain of the fetus,

instead of the brain cells multiplying in the brain expanding inside the cranium, the brain cells are dying and so the brain is not growing at all. And so microcephaly, intracranial calcifications, ventriculomegaly, miscarriage, stillbirth, eye defects hearing loss, impaired growth and development, and sometimes even when a baby on ultrasound looks perfectly fine they find out after birth, weeks and months later, that there's still some impairment.

This is the Zika world map. You see that Mexico, Central America, South America, you look all the way over to the left side of the screen, and you see the Papua New Guinea and those places actually over here and now the newer development is kind of showing up in Southeast Asia, as well in about 11 countries in Southeast Asia. And the Caribbean is where it's flaring up.

Now, this map is already out of date. Actually a lot of things are out of date already. What is new for Mexico is the state of Sonora now has Zika virus and the southern half of Baja has Zika virus. It's mainly the southern part of Mexico, the southern states that are seeing a lot more of it and all of this area that is not covered in Central America is all covered in. It all has Zika virus as well. So our neighbors to the south have Zika transmission going on and we now consider travel to and from Mexico to being a potential risk for Zika exposure as well.

So far there's been about 4,000 plus imported cases of Zika into the U.S. So these are travelers going to those Zika active countries that we just talked about, getting infected and then coming back and becoming either clinically ill or detecting the infection when pregnant females that were traveling are being tested to make sure they do or don't have Zika. Of the C.D.C. recommendations is if you have got a pregnant female, you should not be traveling to the Zika active area but a lot of people do anyway. When they come back being then we have to facilitate getting the testing done to see if they are exposed or not.

You can see the top states for imported cases New York and Florida, California being at the top of the list and we will focus a little bit here on Florida in a minute. Arizona, currently we have about 42 Zika cases now imported, all imported none locally acquired in Arizona at this time. Zika in Florida. Florida is the only state that so far has been reporting local transmission of Zika virus. No other states have had it reported yet, however, I will back up. All of the southern tier states have potential risk for it, because they have aedes aegypti and we have no exception with the aedes aegypti.

Back to Florida, the places where they currently have Zika active transmission is Miami beach area, and the community kind of inland here, that area that they called Wynwood is no longer Zika active. They were able to kind of knock it out there, but it's actually expanding now in the Miami beach area, where they now have about 137 locally acquired cases there, and it continues to occur.

Maricopa County, these numbers, again, are out of date, but the number of people that we have now triaged here in Maricopa County for possible Zika infection is over 600 now, however most of those have been ruled out and tested negative and so where we currently stand is we now have 27 imported cases of Zika virus from travelers again, all travel-related. None locally acquired and knock on wood, we want to keep it that way. And then they still have a whole bunch that are pending testing.

For treatment, there's no vaccine or specific treatment available at this time. So if you get Zika symptoms, it's supportive care, although you have to be careful if you might have dengue, you can't be taking things like aspirin, since dengue can have hemorrhagic symptoms and aspirin can make that worse.

Prevention for Zika is mosquito avoidance and particularly folks traveling and coming back it's so critical that they avoid mosquito bites for three weeks after they return from travel to Zika areas. If everybody does, that we won't have local transmission. We already mentioned that CDC said that pregnant mothers should not be traveling to Zika active areas. Also pregnant women should abstain from sex or if there is sex during pregnancy that it be safe sex with condom use for the entire duration of pregnancy. Now at this particular time, there's a lot we still don't know about Zika infection during pregnancy but it does appear that infection during first and second trimesters probably are more likely to have adverse outcomes than those late in pregnancy.

The last down there is already out of date as well. It used to be they were telling blood donors to defer blood donation for at least a month after they return. Now the blood is being screened. That point is now moot. If you donate blood, your blood is being screened for Zika virus.

For all returning travelers and suspected of Zika virus, or chikungunya or dengue, we want them to avoid mosquito bites for three weeks and we want them to notify us if they do develop those symptoms because the sooner we identify local transmission the sooner we can do something to stop it.

We very much need people, all residents across the county to be checking their own yards, policing their own yards and make sure they don't have the containers and clutter that is potentially breeding these mosquitoes. You need to remove it, throw it away, cover it or store it in a garage or shed so that it does not continually fill and dry and fill with water.

We do have a Zika, chikungunya and dengue response plan for Maricopa County. It has enhanced human case surveillance so that we can find cases and find them quickly. We ask physicians to report suspect cases, and not wait for a lab test but tell us now and so that way our vector control folks can do mosquito trapping in the immediate vicinity and find out if, first of all, there's aedes aegypti. And we have the vector control piece to this response and surveillance plan. But a really huge piece of this is prevention, education and community involvement since it's a problem with these mosquitoes originates from people's property, that is the source of the problem, and it's also going to be the solution. So that was kind of in a nut shell for the Zika.

I did want to say a couple of words about what we already do have here is of course, West Nile Virus, and also St. Louis encephalitis virus. Even though Zika is the disease due juror, we are still in the season as we speak. This is a bird, and the mosquitoes pick it up from the birds and it builds in the spring until we get into the -- especially June all the way through October, into the peak season for West Nile Virus. And this is a virus that definitely can be a major problem.

Breeding sites for the culex mosquitoes are the ditches and the culverts and the green and the nasty

unmaintained swimming pools as you see down here but also notice the same containers in people's yards is breeding the culex mosquitoes which transmit the West Nile Virus. So those containers we are talking about are a big problem for all of the mosquito-borne problems that we have in this county.

This is a map of the Maricopa County showing the blue squares are the human cases of West Nile Virus last year. The red squares are St. Louis encephalitis virus last year. And the squiggly things are the positive mosquito samples. So you can see this is last year, and this is a problem we have every single year, every season, during our peak mosquito season. And so it's something we will be dealing with forever in Maricopa County.

Zika virus, we are hoping is like a forest fire, right now it's in the forest fire phase down there in the Latin American countries and eventually it will sort of burn itself out to where it then just sort of is smoldering and pops up here and there. But this, West Nile Virus and St. Louis encephalitis are always going to be here year after year after year.

For mosquito prevention, people can stay indoors as much as they can during peak season. That would be great. Of course, having air conditioning windows screens, using mosquito repellants according to label, cover up with long sleeves, long pants, it's hard to do in July, obviously. Getting rid of the standing water in the containers in your yard is absolutely critical and it's not just a matter of dumping out water. They need to actually scrub the inside of the container if it will be out there like the plant pot. If they leave the plant pot out there, they need to scrub out the inside to dislodge the eggs that might be attached.

And then finally the new slogan of the day is fight the bite day and night. So that's my presentation. Any questions?

[Time: 00:19:59]

Mayor Lane: Thank you Mr. Levy. Very informative. It's just there may be some other questions but one of the things that you were talking about is people traveling to some of the infected areas, maybe that are more infected or certainly have a greater propensity to have Zika virus than we may have either in our northern Mexico nonetheless. Is there any purpose if you were to travel to those countries and take precautions but nevertheless when you come back to have your blood screened, can it be determined whether you have been infected and then if you have been infected, is this something that can be taken to dislodge or to eliminate the threat?

Epizooligist Craig Levy: At this point, first the testing that is done at the Arizona State lab is we will test all pregnant females who have traveled whether they have symptoms or not. We will test all males if they have symptoms. Females also if they have unprotected sex with a male who has. The main concern we have is Zika virus infection during pregnancy. To test all returning travelers, there's no capacity to do that. So we would not be able to do that. Now if people did want to be tested, they can donate blood and if they have Zika, they will be notified.

Mayor Lane: But you don't want to be telling people that.

Epizooligist Craig Levy: We don't. That's not an official recommendation. Actually, you are doing the community a service by doing so, by donating blood.

Mayor Lane: Yes.

Epizooligist Craig Levy: But that's one way if somebody really wanted to do it, they could do a community service and find out at the same time. One of the things, though, is the testing of the blood for the blood screening, they are really looking for RNA in the blood to see if you have any detectable RNA in the blood. One detects an RNA that will only pick up Zika soon after you have been exposed to it. So that goes away. There's a test for antibodies that lasts longer that you would be tested afterwards.

The problem that we do have with a lot of doctors. There's confusions as to which test to order and which specimen and if we don't get the right test and right timing, the negative Zika test doesn't mean negative anything. So part of the education of we're trying to get out to the clinicians if they are ordering their own testing through commercial labs that they do the right test, the right time. So that it actually means something.

Mayor Lane: When you say they do test pregnant females coming back into country, they do test each and every one of those.

Epizooligist Craig Levy: Yes.

Mayor Lane: I presume at their own request or their own notification.

Epizooligist Craig Levy: Yes, most of the calls that we are getting and we are getting lots of them are from ob-gyn doctors that are asking for the testing because they have a pregnant female who returned from Costa Rica or Guatemala.

Mayor Lane: If they are tested, no matter who it is and under whatever circumstances is there something that can be done?

Epizooligist Craig Levy: As far as -- yes, as far as, say it's a pregnant female who tests positive, first of all, tests positive for Zika virus, we also have to test for dengue virus to make sure it's not that virus as well. Usually if she tests positive we have to do an additional test to see which virus it actually is. It turns out it's usually Zika virus, and then the ob-gyn will do serial ultrasounds to monitor the pregnancy to see if there's any adverse effects going on. What is lacking at this time is really good data to know how many of those Zika infections during pregnancies have a verse outcomes. We don't know that yet. It could be a small percentage or a large percentage. And there's Zika pregnancy registries going on across country, including here in Arizona where the positive pregnant women are being monitored all the way through birth or after birth to try to get better picture as to what the risk really is with Zika during pregnancy.

Mayor Lane: Thank you. Yes, Councilmember Korte?

[Time: 00:24:19]

Councilmember Korte: Thank you, Mayor. The West Nile Virus is -- it can be fatal in horses from what I understand. What are the symptoms in humans which is fairly new occurrence from West Nile Virus being around for almost a decade now, and the concern for horses.

Epizootologist Craig Levy: Here in Arizona, West Nile Virus arrived in 2003 in this state, and yes, for horse infections, it's got a fatality rate of about 33% approximately. For humans, it's about 20% of people infected with west Nile will have clinical symptoms, 80% will have no symptoms at all. Now of those 20%, some of those will be what they call west Nile fever which is a self-limiting flu-like illness or it can be a life changing illness where people never quite are the way they used to be. They can have kind of a cognitive disabilities and fatigue and so forth.

It's about 1% or less that have what we call neuro invasive infections and so that's central nervous system infection and includes the meningitis and encephalitis, you are looking at stiff neck and disorientation, coma and in those particular cases, especially the encephalitis cases, usually do not have good outcomes.

Only about 20% of encephalitis cases from west Nile can a person actually go back without assistive care, go back home without assisted care. But that's about -- that's less than 1% of the infections.

Councilmember Korte: Thank you.

Mayor Lane: Thank you, Councilwoman. Well thank you very much, Mr. Levy. I think that's the extent of our questions.

[Time: 00:26:19]

Emergency Manager Brent Olson: Mayor and Council, continuing with the presentation, I wanted to discuss what we're doing right now to stem this. Zika is a concern. As you have heard, we don't have any locally transmitted cases in Arizona, in fact, there's only one state that does have a locally transmitted illnesses and that's in Florida. In fact, I have read some articles today on the Wynwood neighborhood, and I saw the video by the CDC director today, we are going to be looking at some of the things they did in Wynwood to see where they were successful and possibly incorporating those into the response here. Different neighborhood, different conditions, but it's worth noting what worked in one area to say what we can put in here.

Now, fortunately, for us, we are winding down the mosquito season, typically we start seeing a decline in mosquitoes when it starts getting cooler. I'm hoping that will happen very soon, and I have been reminded hope is not a plan but I can't plan for the weather too hard. We will start seeing it pick up again when we start getting warm. And we have had heat waves in January and a little bit of moisture can activate again. We have a little breathing room to get ready but we will not sit on our

hands and wait for something to occur.

As far as the city's actions, the city has taken several steps to stem the standing water and the mosquito breeding areas. The city staff is very concerned about that, as is all of our residents. They have taken certain steps.

One of the areas that has been of great concern has been the WestWorld east basin, and left untreated that basin would be a very good breeding ground for mosquitoes. Not necessarily the aedes aegypti but the culex could certainly be a breeding grounds there. If it were untreated. It is treated very, very well and you are going to hear from our environmental initiatives office the trap counts in that area, versus trap counts other places in the city, and the treatments that go on there and go on there very regularly.

As you know, the west basin was built to protect several of the structures in that area. It is a retention area where storm water goes but it's also designed to protect the C.A.P. canal, which actually interrupted the flow from the Reata wash. So the basin was created for that. It's treated very aggressively to prevent mosquitoes and the nearest traps have caught very few.

Looking for ways to accelerate the flow on that or accelerate the dissipation of that water is what we are working on at this point. There are three dry wells in that basin that facilitate that infiltration of the water back into the ground. There needs to be an assessment and they are actually looking at how we can better facilitate that. One way would be to sink additional dry wells in there and I will talk about that in a little bit.

We have also run a recent pilot program to pump the water out of the basin into the sanitary sewer system. It was successful, as long as we did it on a very slow rate, but that sanitary sewer system was not designed for inorganic materials. But we did a pilot test over the course of about five days to see if it was able to be done if it needed to be done.

But we are going to talk about some other solutions and some C.I.P. projects that will hopefully better solve that problem. I would like to bring Sam brown up to talk about the east basin and how it's treated and some of the surrounding area to give an example of what Mr. Levy talked about with this being a container mosquito, pretty much limited to backyards. So Mr. Brown?

[Time: 00:30:52]

Environment Planner Sam Brown: Thank you, Brent and thank you Mayor and City Council for this opportunity to present. My name is Sam Brown. I work in the environmental office within the city for five years now. And a very pointed thank you for -- to our acting city manager for his ventriculomegaly engaged support for this and for the opportunity for me to receive, research, and respond to our citizens' questions, their concerns and their constructive criticisms on the standing water in the east basin. It's been quite an experience for me in learning more about the mosquitoes.

I'm going to present two slides that graphically display in the context of the Zika -- the threat of Zika

that the east basin at WestWorld, data will show it as not represent a threat for Zika to the surrounding neighborhoods. This first slide, the most prominent feature is the red circle around the blue east basin, just a representation. That red circle is pretty much the undisputed range of the aedes aegypti mosquito, the spreader of the Zika virus and you can see by just the very subjective representation that doesn't even reach the edge of the surrounding neighborhoods. A lot of citizen input came about the concern of the east basin being the source for mosquitoes for miles out there, and the threat of Zika.

This shows that the Zika virus as was presented earlier likes to stay close to home, and that close to home is typically in the backyard patios, anywhere with containers, and you can see around the east basin the density of the residential urban area all around there. The other feature on that slide -- I will stay here just a second is the trap. It's got a specific number, Maricopa County vector control has gridded out the entire valley in one square mile sections and one mosquito trap in each of those grids. The specialist has the latitude to move that trap around. In fact this trap our rt379 due to citizen complaints directly to the county, he moved it over closer to the playing fields over there where they were getting just horrendous reports of mosquito bites and mosquito infestations. So that trap is the closest trap to the east basin.

Those traps are co2 baited. They will tend to draw a mosquito towards them. And those traps represent a very valuable tool to Maricopa County and their environmental services department in the sense of the data tells them the types of mosquitoes, whether it's culex, flood water, nuisance or potential vector carrying thing. And those traps also provide thresholds for a county response and that would be based on simply the numbers of a trap in a one day 24-hour period has 50 aedes aegypti, the county will three days later after they post on their website, will come in and fog that entire one square mile grid, based on just that number count.

The other trigger for fogging would be if any female mosquito tested positive for Zika or West Nile Virus, they would come in and fog that entire square mile. I have got a graphic that represents where they have fogged and there is nothing -- no grid in that immediate area around WestWorld. Outside of that, they have had hot spots. But like I say, they use that trap information as a very faceted tool for the response efforts.

My last slide, this represents in the very center -- center upper left is the east basin and the key here is down towards the bottom where the numbers in blue represent the total trap count. Those are the traps nearest to the east basin, the mosquito traps. Topically they are tested once a week for 24 hour period. These numbers represent year-to-date numbers. So in the upper left, you will see way up in the center of a residential area, lots of backyards, lots of patios.

A count of 36 mosquitoes. And that's 36 for the entire year and of those 36, 26 of those mosquitoes were aedes aegypti females. When you come down to the trap closest to the east basin, 18 mosquitoes. So very low count. 18 mosquitoes for the entire year, and which fits the protocol and the information provided by Craig levy no aedes aegypti close, at least as registered by that trap and that makes sense.

The basin is not a good habitat for that one mosquito, and as present mentioned, the city very aggressively treats that east basin and the surrounding bodies of water and has entered an agreement with the golf course to consistently treat that -- those standing waters with a -- a registered pesticide, but a relatively nontoxic hormone that interrupts the mosquito-like cycle.

[Time: 00:38:08]

Mayor Lane: Excuse me, Mr. Brown, we do have a -- the mayor, this direction.

Environment Planner Sam Brown: I'm sorry.

Mayor Lane: No problem. But in any case, we have a question or a comment from Councilman Smith.

Councilman Smith: Actually, mayor, I will let him finish. Or maybe you are done, I don't know.

Environment Planner Sam Brown: I am finished.

Councilman Smith: Then I will ask my question. Go back to your previous slide, if you would. And I think if I understood you correctly, the typical behavior of the aedes aegypti mosquito is to travel within that red circle of 100 meters; is that correct? I mean, that's their --

Environment Planner Sam Smith: That represents an outside boundary, say, just subjectively 100 meters out from the edge of the water. And just as I understand it, that's the characteristics. It has a very limited range. Other mosquitoes will go two miles. Not this one, typically.

Councilman Smith: So I did understand you correctly. And I obviously observed, as does everybody else that there are no homes inside that red circle, are there also no people, no one walking their dog or riding a bike?

Environment Planner Sam Brown: In dry conditions, it's relatively active. That's where a lot of concern and the complaints come from, joggers and bikers. They may go, skirt up around the canal, but on a permanent basis, that's devoid -- that's unoccupied.

Councilman Smith: I know it's not occupied. I'm asking a somewhat different question. No one ever is allowed inside that circle?

Environment Planner Sam Brown: Maintenance people. There's no restrictions within that circle.

Councilman Smith: So someone could be, even though they don't live inside the circle, they could nevertheless be inside your circle?

Environment Planner Sam Brown: Yes. It's completely without boundaries or restrictions or postings.

Councilman Smith: Second question, you have trap number rt379, which you stipulated on the following slide, pretty well demonstrated that the east basin is not a source of the aegypti mosquito. Can you explain how you would reach that conclusion if the trap is, perhaps 100 meters I don't know the travel range of the aegypti mosquito?

Environment Planner Sam Brown: Well two, points on that. I've got to say and I'm not a mosquito expert, but it's -- I think it's a relatively subjective measure. It's not absolute. It captures what it captures. And I -- I represented that as being in response to the avalanche of complaints and concerns from the neighborhood, in that immediate area, that that trap represents the closest representation of the east basin as a source of mosquitoes. And it does capture the mosquitoes. But this slide I specifically wanted to say -- show the limited range of that one mosquito with a threat of Zika.

I think you have effectively showed the limited range, the fact that the trap that demonstrates no breeding occurs in the basin is located outside the range I think is less than conclusive. Could you have located the trap in California and drawn the same conclusion. This is how I had it explained to me, within that one square mile grid that trap was placed there, particularly in response to public comment to the county vector control, meaning they wanted to know what was biting their children on those playing fields, in effect. And that -- in my opinion, that is a good representation of the proximal area to the east basin.

Emergency Manager Brent Olson: If I can add in Mayor and Councilman Smith, this area of the east basin has been inspected by our consultant that has been hired to treat that basin and they have found no larvae there. So in addition to very aggressive treatment which they do treat every two to three weeks to make sure that there are no mosquitoes while there's water there, they have done inspections there and haven't been able to find any.

Environment Planner Sam Brown: And that -- excuse me, but that was a visual inspections of the water. The shallow shorelines are just the ideal area to -- for the breeding and to see the larvae and part of their report to us was they saw no larvae which I understand it are fairly visible, detectable. In their walk of the existing shore line of that.

[Time: 00:43:59]

Councilman Smith: Brent, you and Sam have both talked about how the intent for the east basin is that it will eventually drain into the -- whatever you call these groundwater, these wells. There's some wells drilled on the site and the water is supposed to go down into the -- into groundwater.

Emergency Manager Brent Olson: That's correct.

Councilman Smith: A couple of questions, the first of which, is that not working?

Emergency Manager Brent Olson: It is working. But based on the complaints and the concerns, it's

not working as fast as many would like.

Councilman Smith: How fast should it work?

Emergency Manager Brent Olson: It depends on the amount of water in the basin and that's where, you know, we had a lot of rain in September, we had a lot of flow into that basin. There was water standing for quite a while. Once that ground gets charged pretty well -- and this is from other research that I have done, once that ground gets charged, it slowed down on how fast it will percolate in. Which is a problem valley wide here with our hard ground and why we get the flooding we get.

Councilman Smith: But eventually it goes down the wells, I guess or evaporates. I don't know what happens to them. And it goes down in the wells with the groundwater and eventually it may be pulled out for drinking water. Can you explain when you say that you are aggressively treating the basin? And I think Sam said with a relatively nontoxic -- I'm not sure what a relatively nontoxic something seems like it should be either toxic or nontoxic. I don't know the word relative.

Environment Planner Sam Brown: And this is the basis of my research, Brian Biesemeyer asked me to look into this because of the concern about applying a larvicide on a water that was recharging the groundwater.

Councilman Smith: It's a legitimate concern.

Environment Planner Sam Brown: When the product came out the algaecide, it's a chemical family that for lack of a better word got glowing remarks from EPA for its ability to dissipate and to not reach groundwater. Meaning it's a hormone versus a -- a -- I can't remember term for something that kills an adult outright. It's not that. It interrupts the -- the life cycle, prevents the larvae from going to the pupa, and when I say relatively nontoxic, that's as well as I can put it, but even the larvae eating fish, the gambusia survive with that in the water so it's not like putting something that kills all organism. It targets that reproductive stage in the mosquito.

Councilman Smith: I think in terms of communicating to the public, they would be more reassured if you said that it was nontoxic rather than relatively nontoxic. That's an adjective that causes great concern among people.

Environment Planner Sam Brown: I got a lot of feedback on our citizens from that. Wanting to street for mosquitoes but not wanting -- wanting to treat for mosquitoes but not wanting to affect their dogs that they are walking along there. But I -- I believe that was a -- an appropriate detractor of that, relative to its toxicity. I'm not a licensed applicator but I recognized it as something that isn't indiscriminate in its ability to kill things, it targets that -- that mosquito in that life cycle versus all living things and that's where I use the word relatively nontoxic.

Councilman Smith: One final question, back to you, Brent, when you said we are working on the dry well problem or working on solving it, what exactly does that mean? What are we doing?

Emergency Manager Brent Olson: Well, what we are -- we are working at identifying if there are any issues with -- and this is the way it was explained to me, is making sure that the current dry wells are working efficiently but also looking at the potential for adding additional dry wells to that basin, to assist that percolation much better.

Councilman Smith: It would seem that they are not working conclusively, if it worked there for three and a half months.

Emergency Manager Brent Olson: They are working. I don't know to what level yet and that has to be assessed. But it was recently until last week there was water in that basin that had been pumped out in the pilot program. So until that was able to be pumped out they couldn't do an assessment on the dry wells. That will move forward is my understanding.

Councilman Smith: So you pumped out water? You did that last week.

Emergency Manager Brent Olson: Yes, water resources did that. I believe it finished on the -- and I had the date. I believe it finish on the 12th of October. And they were able to pump it down to nothing but small puddled.

Councilman Smith: But there's some reason why that was not done three months ago?

Emergency Manager Brent Olson: When this was done, it was done very carefully, and it was done under very watchful eyes to make sure that it wasn't having any adverse impact on the sewer system. If there -- I'm sorry?

Acting City Manager Brian Biesemeyer: Mayor and councilman Smith, if I might.

Councilman Smith: You have to put on your water resources hat.

Acting City Manager Brian Biesemeyer: I will put on my water resources hat. It's reluctant that we want to take this into the sewer system. It's silt and sediment and not -- silt and sediment and it's non-carbon. It is not typical materials we treat for. We don't treat for sediments. We have some ability, but as you will note from when the fires occurred, and we had problems with our Chaparral treatment facilities due to sediments coming down in the SRP canals, the same way our wastewater treatment plants do not accept large sediment flows and so it was very reluctantly that we actually tried this and at a very slow rate, and at a rate of about 200,000 gallons per day, we were successful in pumping that out, about 1 million to 1.5 million gallons. That was tried as a mechanism to say is it possible?

If you go above that rate and you upset the treatment facility, I ensure that the health problems are very small to what could occur if the treatment facility plant quits operating.

Councilman Smith: Thank you. Thank you Mr. Mayor.

[Time: 00:51:39]

Mayor Lane: Thank you, Councilman. Just so that we are clear as far as indicating a request for any question, when you do indicate by hitting the button, my member of council, that you want to speak, I will be asking the question as soon as I can make a reasonable opportunity to interject. If you want to hold it until somebody is complaint, don't hit the button until they are completed then because otherwise then I will go to the Vice Mayor right now. Would you like to wait until they are completed or would you like to --

[Inaudible]

Mayor Lane: All right. So in any case, I -- I just have a couple of questions myself. And Brent, I don't know who gave us this information. At some point in time, it was a given, an indication of the percentage of mosquito -- mosquito larvae that is produced in areas outside of our water retention areas behind the dams that protect the C.A.P. and those areas of any of the retention areas and we do have a program specifically for ours. There's a specific program to disinfect or eliminate the sources of breeding grounds for this mosquito in neighborhoods is much higher and I was looking at obviously the small illustration of the number of aegypti mosquitoes that are in the surrounding areas and there are certainly more mosquitoes and I know this is outside of the 100-meter zone on the one that we looked at on the blue basin. That is a source given the same criteria of distance from neighborhood breeding grounds.

Emergency Manager Brent Olson: And I think I may be able to clarify.

Mayor Lane: Was it 98%, or some high percentage that was coming from neighborhoods rather than treated facilities.

Emergency Manager Brent Olson: And the red circle basically depicts the 100-meter if things were breeding in that, that 100 meters isn't going to affect the neighborhood, based on the flight path of the aedes aegypti. It has a lifetime range of about 100 meters is all it has. So that red circle would show even if we did have and we have inspections and we don't have anything growing in there as far as aedes mosquitoes it wouldn't get outside into neighborhoods and yet we are showing high counts in through those neighborhoods which reinforces what Mr. Levy said about this being a container mosquito.

The CDC presentation I saw today from the CDC director said it can breed in a bottle cap in that small of a circle. And so that obviously shows what problems can be presented by this mosquito. So, yes, 99% of them are breeding in backyards because they are -- their primary feeding grounds are humans. So they are not in the areas that are devoid of humans, not primarily anyway.

Mayor Lane: Thank you. So the percentage is high and comes from other areas that are untreated, number one. And what's our maintenance schedule on the dry wells? You know they obviously get silted and clogged and there's other things that do happen to them. We have some routine to either redrill and/or to clear those particular dry wells.

Emergency Manager Brent Olson: And I don't have the information on what the maintenance schedule is on that but I will find out.

Mayor Lane: But we do have a maintenance schedule on that? Yes, Brian, did you want to address that?

Emergency Manager Brent Olson: I was hoping he might.

WestWorld General Manager Brian Dygert: Yes, good evening. Mayor, members of Council, there hasn't been a formal maintenance schedule. I will tell you historically what's happened. They were installed in 2005. They were formally treated and serviced in September of last fall. And then we have ordered them to be inspected and tested and analyzed again now that the water has receded so that we can put in place if it's got to be annual or every other year or what does that look like.

Mayor Lane: If I might, just on an historical or informal policy, as far as looking at these things, we have had other periods of time, since 2005 of heavy rainfall and significant water retained in the area.

WestWorld General Manager Brian Dygert: Yes, that's correct.

Mayor Lane: And so either those dry wells operated sufficiently or we just weren't necessarily as concerned or as far as the -- and we were treating the water being I'm presuming throughout that period of time. So this is not necessary historically a new occurrence. It's just with the heightened awareness certainly, we want to make sure that the dry wells are operating properly, because it is a retention area. The intention is to retain water in the area, until it can percolate into the aquifer. We are not treating that water specifically because the ground treats that water from the standpoint of the sediments and some of things that Mr. Biesemeyer was talking about. So the maintenance is an important factor, no doubt about it.

What I would like to do is reassure our citizenry that we are on top of, as far as whatever means we can affect, to assist a higher rate of percolation of this water into the ground where we are working on that as well as in treating it.

So, yeah, I'm trying to think, the dam itself has been there before 2005, was it not? The dam that protects the C.A.P. canal and, of course the entire area and all we need to do is talk to Craig Jackson and he will tell you that area has been flooded for a number of times and for an extended period of time through the years. Not this area necessarily but the entire area behind the dam.

WestWorld General Manager Brian Dygert: Mayor, you are absolutely correct. I can't tell you that the date that the C.A.P. canal was installed, it's way before my time. It's been there for a lot of years. Yes, the amount of rain that happens and the amount of water that goes into the east retention basin has been normal, generally twice a year.

I will tell you two years ago, that we did notice that the percolation rate to the east retention was then

happening slower and that's why we ordered the dry wells to get serviced because we were just susceptible of the fact that they probably had some silt buildup. Now that we had this amount of rain and the thing I can tell you that's a little bit different, not scientifically, I didn't measure it, I didn't any of those things other than daily observations and the photos and notes that we took. This fall and I don't know this if we received more rainfall during August and September of this year that was more than normal but what I can tell you is the east retention basin took on more water than what we normally did in one of the two times of the year. So the mere volume of water that was in the retention basin was more.

Mayor Lane: So if there's a message here, if I were to refrain this, we are obviously watching the percolation rate when we do have standing water and we have water in there and, of course, we are treating it for any period of time when it's there when it will be causing any type of difficulty as far as breeding grounds. That's a principal message here to the public. Beyond that, we may be doing further work, as far as our dry wells are concerned. I'm thinking in that east basin, because the extent of debris and silt versus maybe whatever dry wells under the Polo fields probably are not quite contaminated as they would be in that east basin, but just an option, I guess in looking at it. But thank you, Brian, I appreciate that.

I'm sorry, Brent if you want to continue.

[Time: 01:00:09]

Emergency Manager Brent Olson: Let me catch back up with my program. This is the pumps that we're running for six days out there, basically that pump and that hose went about 600 feet to a manhole cover, to pump that basin out over the six day period. They were watching it. They were only running the pumps during the day and they were watching to make sure that it did not adversely impact. They were prepared to shut it down very quickly if it started impacting the sanitary sewer system. So as far as the standing water and the citizen complaint, I will turn it over to your storm water manager Ashley Couch to talk about this particular section.

[Time: 01:00:51]

Stormwater Project Manager Ashley Couch: Honorable Mayor, members of the City Council, good evening, my name is Ashley Couch, I'm the city's flood plain administrator, I will discuss city strategies to discuss standing water on city owned and city maintained property. Typically storm water management is the recipient of complaints of standing water, and we conduct an initiative investigation and sometimes we address the matter ourselves. Other times where appropriate, we will refer it to the proper city department and it is -- it is really a multifaceted, multiple department effort in order to deal with this.

Our treatment operations and park departments do regrading work to promote positive drainage by gravity, where that is feasible, wherever standing water occurs. Also our parks in the WestWorld departments treat any standing water with larvicide or pump the water out until it's dry within 36 hours and then the larvicide is applied every 30 days until the water dissipates. Our street operations

removes sediment and debris that may be obstructing the water course that may causing ponding water to occur.

Our water resources division works to detect and illicit discharges and illicit connections to our storm water system. These illicit discharges become apparent during dry weather discharge and so if it's not raining and we see water emanating from one of our storm drains we understand that that's an illicit discharge or an illicit connection which is a code violation. At that point, an investigation will commence and it could be due to over water and if it's found to be due to over watering the water conservation department will work with the offending property owners to cease that practice. If it's an illicit discharge or illicit connection to the storm drain system then our water quality department will work with the property owners to make sure that they are aware that that's a code violation and to end that practice. So I went through all of these things.

Next is -- I wanted to give a couple of examples among several in the city, where we have a standing water problem. The city is proactively managing it. We are aware of it and we are always on the lookout for these areas because we are certainly concerns about the Zika virus threat, but also mosquitoes just in general are a nuisance. In addition we have the St. Louis encephalitis and possible dengue that's on the move. So we are proactively managing it. It's again a multifaceted approach and multidisciplinary approach.

So this is a photo of Indian Bend watch near Camelback and Hayden and we have a significant amount of standing water there and recently our street operations department has done some regrading work to promote positive drainage by gravity and right here is a grater and here is a loader and you can see that they are regrading a channel so that we have positive flow to drain this area by gravity, which does not currently exist. And they are nearing completion as we speak. They say they will finish up, I think this Friday.

In addition, our water conservation department has worked with upstream property owners to cease the practice of overwatering, which was a problem during over seeding of the winter rye grass but they worked with the property owner to let them know that they don't need to over water their turf. And more over the water quality department noticed consistent discharge emanating from a storm drain that flows east along Camelback Road and they traced it back and noticed a car wash from a car dealership that was illegally pumping the run off into our storm drain. So some of that discharge continues and we are doing the -- water quality department is doing ongoing investigations to identify those -- the source of that illicit discharge and if they are able to find it, which sometimes requires popping manhole covers and other times it involves running a closed circuit television camera up the line and we work with the property owners to make sure that they are not discharging anything. Only rain in the storm drain and anything else is a code violation.

And last before I move on, the parks department treats this area regularly with larvicide and so that also is -- and they are -- there again, I identified gambusia fish, mosquito fish in this area last week.

[Time: 01:06:13]

Mayor Lane: Ashley, if I might, if you went back two slides now, just -- and I'm not trying to pick on this picture but this looks like a drainage ditch that should have a certain extent of drop that would allow for minimal, if any standing water, but it looks like you have potentially treatable standing water here. I don't know whether that's part of the program or not. I'm not trying to pick on this. It doesn't look like it's draining. There's no running water in this.

Stormwater Project Manager Ashley Couch: This is a perpetually problematic area that occurred with the -- when the loop 101 freeway built. This is at 88th place and Sutton Drive. And when the loop 101 freeway was built, ADOT went in and did some grating work that kind of blocked this historic flow and so this channel does not have much slope so it. And so we recognize it as a perpetual problem and there's not much we can do to change the slope because of the existing drainage on the east side loop of 101 freeway.

We noticed that the source of water is over watering. There are lawns in this neighborhood and some of the property owners just water their grass too long or too often and it goes down the curb and gutter and ultimately ends up here and so the water conservation department works with the offending property owners to cease that practice. It's an ongoing activity that we have been working on for years frankly, and, you know, we need to work on public outreach as well as issuing those violations when we observe the over water practice. If there was no water source here, it doesn't rain that often here and so the problem would be minimized if we were to eliminate the over watering problem.

Mayor Lane: Does this kind of thing, if it occurs elsewhere and frankly this one itself, do they become part of the treated kinds of standing water that we have?

Stormwater Project Manager Ashley Couch: When we see an issue like this, then we notify our parks department and they have -- how many licensed? 20 licensed applicators of the larvicide. And you have to have a license to apply it and there are 20 licensed applicators in the city and so --

Mayor Lane: So we monitor it.

Stormwater Manager Ashley Couch: We monitor it and treat as necessary.

Mayor Lane: Thank you.

[Time: 01:08:37]

Stormwater Project Manager Ashley Couch: Okay. Going on. Again, this is an example of several areas in the city. This is Northsight park. There are three large bubble up structures in the park. And basically what happens is we have a large diameter storm drain or storm drains that come into each of the bubble up structures, the water builds up and fills the retention basin in the park and they are designed to drain into dry walls and over time, the city has noticed that due to sediment and debris accumulating in the dry wall chambers, they were not functioning as designed and so they were holding water more than -- longer than they should.

And so we -- we attack it two ways. First is we'll try to pump it out until it's dry within 36 hours. That's the optimal approach but it takes 48 hours to set up a pump at each location and sometimes we can't get to everywhere in the city that needs to be pumped out within 36 hours and so in that case, these areas are treated with larvicide within 36 hours and then this larvicide is reapplied as necessary until the water dissipates.

Now our parks department embarked on a capital project. They spent \$46,000 and to install two new dry wells and as a result these areas drain much faster. I wouldn't say it's draining perfectly but it's draining much better than before. And so those are the things that the city is doing to try to address the standing water problem here.

But moreover, we noticed a lot of influent water coming into basin, even during dry periods. We tried to run closed circuit television cameras up these storm drains to see where the source of the illicit discharge was occurring and we were not able to do in some cases because of excessive sediment and debris. We have vectored some of these out or cleaned them out and then we ran closed circuit TV lines up the line and we actually identified two facilities that were discharging illegally into the storm drain on a consistent basis. They were issued noticed of violation and we continue to monitor and if we continue to observe illicit discharges or illicit connections to the storm drain that we will continue to work with the offending property owners and up to -- we can issue not only notices of violation but civil citations and egregious cases we can even go criminal. And so -- so, you know, we have ways to step up enforcement for perpetual offending property owners and so this is one where if you eliminate the source of water flowing into the basin, that certainly helps a lot.

But for when it does rain, we do have methods in place to deal with that. So that concludes my portion of the presentation. There are other areas in the city that we are monitoring if have you any questions about standing water, I will be happy to answer those or later at the conclusion. I can do that now and I will turn the time over to Reed Pryor our parks and recreation and he will go over what we are doing in our parks.

[Time: 01:12:09]

Mayor Lane: Actually we have a request for or a question now from Councilman Smith and it may be for you. So hold on.

Councilman Smith: It is for you, Ashley. Thank you, Mayor. Somewhere in your discussion you mentioned the 36 hour rule, what is the ordinance or whatever. What is that?

Stormwater Project Manager Ashley Couch: So our storm water enforcement ordinance there's a regulation that applies to new development, where if somebody is building a new residential subdivision, or commercial strip mall or whatever development, the act of subdividing land triggers the need to build storm water storage basins. Those basins must drain down in 36 hours.

The reason for that requirement is it's -- you cannot have a mosquito hatch within 36 hours and so if

the water is evacuated within 36 hours, there will be no mosquito hatch if it take longer than that, it could be. Then depending on the species of mosquito, some have a faster breeding cycle and others have a longer breeding cycle but none in this area breed within 36 hours that I'm aware of, so hence the requirement. It applies to new development and we require that they demonstrate through engineering analysis that indeed the new basins will drain down within 36 hours and it prevents it from becoming a muddy quagmire which is unsightly to the public.

Councilman Smith: So as you say that applies only to new developments. Do we have a rule that applies generally in the city to spots like here on the screen, and the other areas, is there --

Stormwater Project Manager Reed Pryor: Certainly the WestWorld east basin was designed as a retention basin and it was never intended to drain in 36 hours. First of all, the federal government built it, the Bureau of Reclamation, it doesn't matter what the city ordinance is, they will decide what they decide to do and in this case we have the second largest wash in the city of Scottsdale we have a wash that flows south. They have a need to build a canal at some elevation, 25, possibly even 30 feet above the surrounding ground to keep the slope of the canal flowing in the southeastern direction. They needed to do that and they recognized that that would bifurcate or dam up Reata wash and they designed these as very large retention basins.

The engineering design was to have the water infiltrate into ground or evaporate over a period -- a long period of time, potentially months, because those are very large basins. They hold a large volume of water. And back in 2005, the city had a designer to accelerate that infiltration into the groundwater table and so we installed three dry wells in the east basin and three in the Polo fields which accelerated it but comes nowhere close to installing it. We would have to install many dry wells at a cost of 20 to \$40,000 a piece to get that thing to drain and if it were to fill in a 100 year flood, it would take an inordinate amount of dry wells to get that to drain, and we don't see that as cost feasible. We are seeing that as a drainage and flood control and or capital improvement project to accelerate the drawdown of the basin which minimizes the amount of time that we have to treat it aggressively with larvicide to keep the vectors under control.

Councilman Smith: Thank you, Ashley. Thank you, mayor.

Mayor Lane: Thank you, Councilman. Any other questions of Ashley? Seeing none, I guess then we would make that shift.

[Time: 01:16:02]

Parks and Recreation Director Reed Pryor: Good evening Mayor and Council. I'm Reed Pryor with the parks and recreation. I will share what we are doing with parks and recreation, similar how we work with other city departments to help alleviate standing water. This picture here shows one of the lakes we have in our parks and sometimes we get calls about are we breeding mosquitoes in our park lakes. Well, we don't. We have all of our lakes are aerated and those aerators are serviced and inspected regularly to keep the water moving so we don't have stagnant water conditions in any of our park lakes.

One of the things that we do, we inspect our parks on a daily basis. We have park maintenance workers that go out and they do route work and they any time we do see standing water, it's brought to the attention of the supervisor and if there's need to pump out any water or do anything, any kind of a treatment with the larvicide then the supervisor takes the steps to get the product and deal with it. And we do stay up on that. I think our folks did a really good job with that. I went too far.

One thing that we are doing, we have identified about 16 locations where we feel we have some threats and we prepared a C.I.P. project request where we have worked with our street operations to get an idea of costs and some area quantity of dirt that we feel we need to move to get positive drainage in some of these areas and we will submit that, if will be submitted as part of consideration for next fiscal year. We are estimating it should be in the neighborhood of \$350,000 to address these areas and the picture that Ashley showed over off of Hayden, we -- the guys were able to really do a wonderful job for us to alleviate that job and actually breakthrough and get water moving down the new and created channel there. The area is draining very well. And so as they finish up the work over there this week, we should really see a great improvement in that area.

If anybody has any questions about what we are doing if parks, I would be happy to answer that.

Mayor Lane: Thank you, actually there are none. So thank you very much.

[Time: 01:18:21]

Emergency Manager Brent Olson: It comes back to me to wrap it up. The biggest issue we see in this, as you can see, the city is proactively trying to deal with this threat. They are actively treating water. They are actively trying to make sure it drains. They are actively trying to get the word out to people but we need to increase that. We need residents to treat their yards as well.

This is a container mosquito that we are concerned about with Zika but it's the bigger aspect of the west Nile virus, the culex mosquito as well that can breed in these larger areas and that's why we need no make sure that we take care of them. We are doing that but we need the residents to do what they can do too. This can literally -- this mosquito, the aedes aegypti can breed in any small spot of water, in a rotted out hole and tree and something that's collected in a grill, something that's collected in the parent.

Apparently from my research, tires are one of the biggest offend hers junk tires sitting on property that collect rain water and sit there and sit there and sit there and that's one of the biggest offenders. One the things we need to do we need to go on a public information campaign, the county already does this. The state does this. The CDC does this. It's a recognized concern.

We are going to be throwing every -- the whole array of communications tools at this, between now and when the next mosquito season starts. I already talked to Kelly Corsette and he agrees that we need to start working on these strategies now and not wait until we actually have a locally acquired case and that's our strategy at this point.

At this time, my presentation is done as is everybody else's. I would be happy to answer questions or draw out my subject matter experts back into the mix if there are any questions. That's all we have at this time.

Mayor Lane: All right thank you, Brent. Vice Mayor Littlefield.

[Time: 01:20:26]

Vice Mayor Littlefield: A lot of what I have in my notes and concerns that I have already been addressed by councilman Smith and Mayor Lane. I did have a couple of things I would like to say, and you actually said some of what I was going to suggest if -- if some of this problem is caused by neighbors and residents, then we need to have some communications with next, open and complete and flyers not only on what the problems are, why they are there, and what they can do, what the -- what the quick and dirty answers are, and how they can help us to contain this problem. But I don't really believe that's all of the problem, because the water has been standing there for months. And while it may not breed the Zika virus, there are huge number of mosquitoes out there and the neighbors and the people who live in that area are being infected and the bitten, the kids are being bitten that play in the fields.

I think that we need to address what we can do with those basins to have them drain more appropriately, clean them out on a regular basis. I think this is proven that we do need a maintenance schedule to work in there, and make sure that these basins are draining, make sure we have enough of them for all of the basins that are in there. If we need more of them, we will put more in. I think that's something that should be addressed, you know.

I'm really not so much concerned with the Zika virus. I accept what you have told us and the problems that are there. They are coming -- those viruses are coming, obviously, that's what you have all said. They are here. And they won't go away. We need to make sure that we don't aid and abet them to make them worse.

I would be very interested to keep in contact with you, Brent on what we are doing, what our research on the water basin shows. I'm not interested in destroying our wastewater treatment plans, canals or anything like that, but there has to be a way to get the waters drained out through the wells and the underground systems. I think that's what we need to concern ourselves with. I would like to know what you find when you do the study now that the water has been pumped out and we can see them and get in there and look at them and see what we can do to clean them out and make them more effective. And more active in letting this water drain away at a much faster pace. Thank you.

Emergency Manager Brent Olson: Yes, ma'am. As you can see, this is not a one office threat. Mosquitoes are a very tough adversary. They have been around for a very long time and nobody has come up with a way to completely eradicate them yet. I will keep you informed as we move forward. This is my work group at this point I anticipate that we will continue to meet and discuss this threat.

Vice Mayor Littlefield: I would like to say we took our dogs out at Northsight Park, and the water truck was pumping away. I know that we are trying to work on the issues.

[Time: 01:24:03]

Mayor Lane: Thank you, Vice Mayor. Thank you, Brent, I think you have given us a good bit of information but I think more importantly, we have given a great deal of information publicly to our constituents, to our taxpayers as to how we are handling the city issue. The next point of issue is how we might be able to assist them in eliminating any conditions that they may be creating that might be lending itself to the problem. I don't know exactly by means of education, maybe other processes, but I too am anxious to find out how we are looking at that closely too. Thank you very much, Brent.

I'm sorry. We do have another question or comment from Councilman Smith.

Councilman Smith: Thank you, mayor and Brent, I was going to thank you and your whole team of people for coming together and making this presentation. The reason that I and others wanted this is because there's a heightened concern today. Ironically from the presentation, particularly from Craig Levy, who thank you for joining us tonight, by the way, the concern perhaps should have been here long before the Zika virus was known about, the concerns from the West Nile Virus or the St. Louis encephalitis exposures. And these may very well be exposures that arise in a large body of water like the east basin reserve. So whether we are dealing with Zika or any of the other older exposures, I think the public is very sensitized to this now, and it's important to do what we did, let them know what we are doing on their behalf hasn't what we can do for themselves.

I think like others up here I would like periodically to see how you are progressing on these programs because I'm hearing words like aggressively attack it and proactively deal with it and get right on it, and this has a bureaucratic ring to it. People like to see action and I think the Vice Mayor mentioned the water was sitting there in the east basin for a long time. Just tell us that the water is intended to sit in the east basin for a long time is not reassuring to people. They need to know that their safety is being protected. That's the responsibility here.

I think you have done a good job of addressing the question, and I urge you to stay on top of it. Keep your group intact and report back to us from time to time, but thank you very much for your presentation.

Emergency Manager Brent Olson: Certainly. Thank you, Councilman Smith.

Mayor Lane: Thank you, councilman and, again, thank you Brent and the entire team, everybody, for their contributions to this. Thank you.

Emergency Manager Brent Olson: Thank you.

ADJOURNMENT

[Time: 01:27:06]

Mayor Lane: And with, that I think we have completed our objective for -- we have completed those too. Nevertheless, for the evening and for the work study. So I think at this point in time, I would accept a motion to adjourn.

Councilmembers: So moved.

Councilmembers: Seconded.

Mayor Lane: All those in favor, aye. We are adjourned.