

National Indian Health Board



Zika Champions in Indian Country: Spotlight on Three Zika Projects Funded by the National Indian Health Board

HOST

NATIONAL INDIAN HEALTH BOARD (NIHB)

ANGELICA AL JANABI, MPH

PUBLIC HEALTH PROJECT COORDINATOR

National Indian Health Board



Mission Statement

Established by the Tribes to advocate as the united voice of federally recognized American Indian and Alaska Native Tribes, NIHB seeks to reinforce Tribal sovereignty, strengthen Tribal health systems, secure resources, and build capacity to achieve the highest level of health and well-being for our People.

Good *Housekeeping*

- Recorded and posted online
- Q&A and discussion at the end
 - Use the chat box
- Please keep phone lines muted
- Survey

Zika Project

- Newsletters
- Resources
- Webinars
- ...and more
- Funding!



ZIKA HUB

[NIHB Zika Webinars](#)

[Zika Fact Sheets and Resources](#)

[Zika Prevention Planning and Mitigation](#)

[Areas That May Be Affected](#)

[Zika FAQ](#)

[Zika News](#)

[Zika Newsletter](#)

[US Zika Pregnancy and Infant Registry](#)

[Congressional Action](#)

[« Back](#)

Zika Fact Sheets and Resources

- [NIHB Zika Fact Sheet \(DOC\)](#)
- [CDC Zika Resources](#)

Posters and Brochures

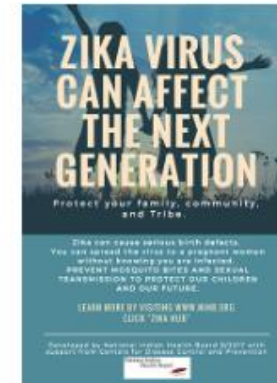
The National Indian Health Board has developed posters and brochures addressing Zika virus in Tribal communities. These materials are available below for you to print or download. Materials described as “fillable” have text boxes where you can enter your own contact information – for example, for your health facility. Materials with “web links” have clickable hyperlinks which work well if you plan to share the materials online with your community.



[NIHB Zika Brochure](#)

[NIHB Zika Brochure Fillable](#)

[NIHB Zika Brochure Web Links](#)



[NIHB Zika Kids Poster](#)



[NIHB Zika Poster](#)

[NIHB Zika Poster Fillable](#)

Meetings

- California
- New Mexico

National Indian
Health Board



ZIKA COLLABORATION MEETING: ENSURING HEALTHY TRIBES THROUGH STATE AND LOCAL PARTNERSHIP

San Diego and San Francisco, California

PURPOSE OF THE MEETING

Bring together Tribal, state, and local representatives to foster increased collaboration addressing Zika virus and other vector-borne diseases

MEETING INFORMATION

Date: Monday, June 4, 2018 from 10:00 am – 5:30 pm and
Tuesday, June 5, 2018 from 9:00 am – 12:00 pm

Location: Holiday Inn San Diego Bayside

Date: Wednesday, June 6, 2018 from 1:30 pm – 5:30 pm and
Thursday, June 7, 2018 from 9:00 am – 5:30 pm

Location: Parc 55 San Francisco

For your convenience, similar meetings will occur in two different locations. The San Francisco meeting is intended for Northern California attendees and San Diego is intended for Southern California attendees.

TO REGISTER (NO CHARGE) AND RESERVE ROOMS

San Diego: <http://www.cvent.com/d/sqqq72>

San Francisco: <http://www.cvent.com/d/ikqq7g>

CONTACT NIHB

For more information about this meeting or the Zika project at the National Indian Health Board (NIHB), contact Angelica Al Janabi at 202-507-4074 or A.Colagreco@nihb.org



Meeting is hosted by the National Indian Health Board (NIHB) and the California Rural Indian Health Board (CRIHB) with support from Centers for Disease Control and Prevention (CDC)

May 2018

National Indian Health Board



Indian Health Council

ANGELINA RENTERIA, MA (NAVAJO NATION)
PUBLIC HEALTH PROGRAMS DIRECTOR, PROJECT
COORDINATOR

ANSON BLACK CALF (NAVAJO, LAKOTA SIOUX)
ENVIRONMENTAL TECHNICIAN

RICK ROMERO (TOHONO O'ODHAM, MEXICAN)
ELDER FALL SPECIALIST, CERTIFIED CAR SEAT
TECHNICIAN



Indian Health Council Tribal Zika Action Plan (T-ZAP)

Presented by
Angelina Renteria, BS, MA
Public Health Programs Department Director

Indian Health Council
50100 Golsh Rd. Valley Center, CA 92591
“Empowering Native Wellness”

www.indianhealth.com

Who are we?



- Located in rural North San Diego County, Valley Center, CA
- Serve 9 Consortium Tribes:
 - Pala Band of Mission Indians
 - Pauma
 - Rincon Band of Luiseno Indians
 - San Pasqual Band of Kumeyaay Indians
 - La Jolla Band of Luiseno Indians
 - Mesa Grande Band of Mission Indians
 - Los Coyotes Band of Indians
 - Lipay Nation of Santa Ysabel
 - Inaja-Cosmit Band of Mission Indians
- Service area expands across a 1,800 square mile radius
- Over 15,000 tribal community members utilize an array of IHC services provided within 6 departments including: Medical, Dental, Behavioral Health, Public Health, Health Promotions, Tribal Family Services
- T-ZAP is housed within the Public Health Programs Department

IHC Identified Local Risk

What is Zika?

- Zika virus is spread to people primarily through the bite of an infected *Aedes* species mosquito (*Ae. aegypti* and *Ae. albopictus*).
- Many people infected with Zika virus won't have symptoms or will only have mild symptoms.
- Zika virus infection during pregnancy can cause microcephaly and other severe brain defects.



- Identified and evaluated the current capacity to inform and education the community
- Determined zika training and communication required further developmental training



Angelina Renteria, BS, MA
Public Health Programs
Director



Rick Romero,
Injury Prevention Coordinator
Interim Zika Lead



Anson Black Calf,
Environmental Technician
Zika Team Lead

The IHC T-ZAP TEAM

T-ZAP OVERVIEW

The T-ZAP Grant Goal

To Implement a risk communication plan designed to address 2 major components

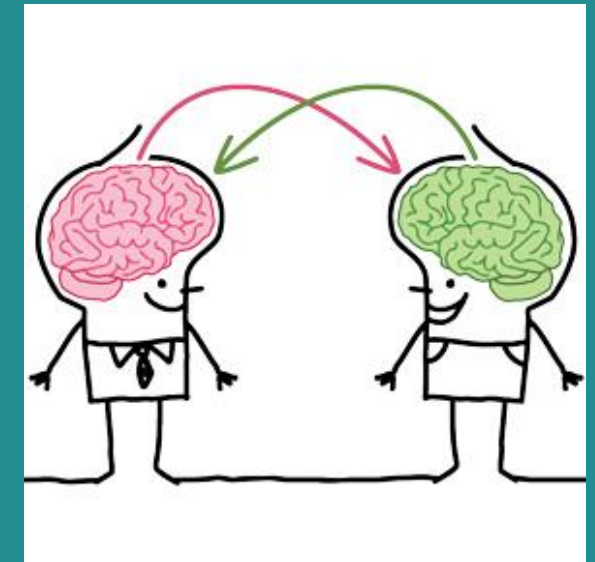
1. Zika communication training
2. A community-wide zika education campaign

Objective 1

To provide Zika Communication Training to a minimum of 2 providers within each IHC department during the first 2 months of the grant timeline.

Objective 2

To implement a community-wide Zika Education Campaign within the grant program period.



Objective 1 - Activity 1.1

To provide Zika Communication Training to a minimum of 2 providers within each IHC department during the first 2 months of the grant timeline.

Activity 1.1: Secure and schedule qualified trainer(s) to facilitate training session(s) to IHC department staff leads.

IHC secured and scheduled Dr. Jessie Hood, Medical Investigations Deputy Team Lead with the Center for Disease Control and Prevention to provide Zika Training to IHC Zika Leads on 2/28/18.

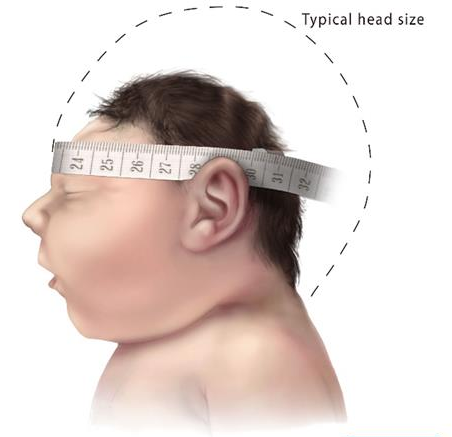


Dr. Jessie Hood, PhD
Medical Investigations Deputy Team Lead
CDC

CDC's Response to Zika

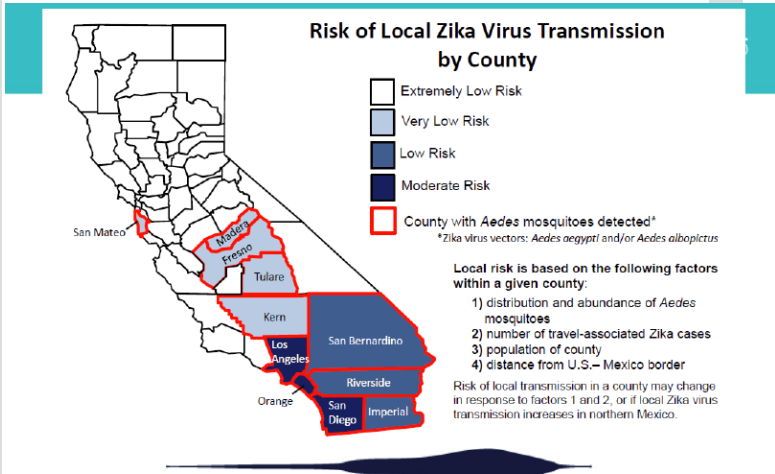
Building Capacity in Tribal Systems Training Objectives:

- Provide current information on the Zika Virus to support preparation of tribal communities
 - Understand the current state of Zika Virus
 - Unique aspect of Zika Virus
 - Understand the characteristics of Congenital Zika Syndrome
 - Understand the current clinical guidance for Zika Virus



Baby with Severe Microcephaly





Jan Feb Mar Apr May Jun July Aug Sept Oct Nov Dec

Seasonal Risk of Local Zika Virus Transmission in California

Source: CDPH. Downloaded 12/11/17 from:

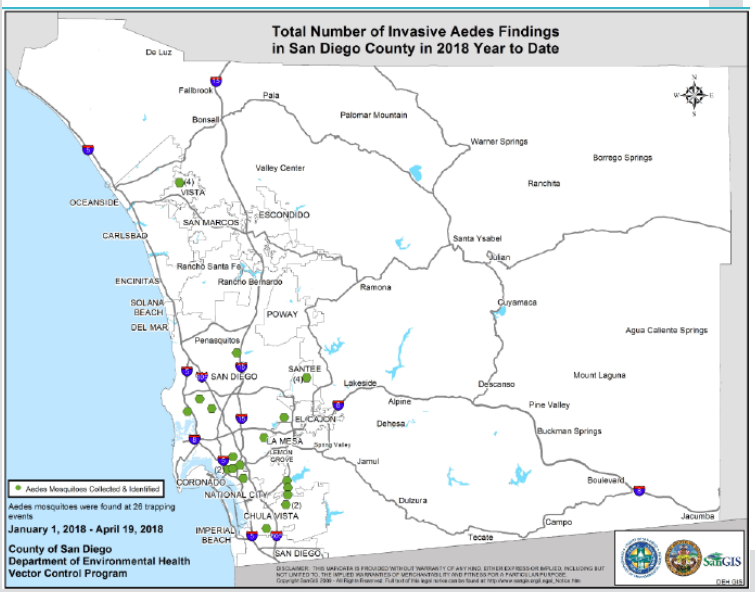
<https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/LocalZikaRiskMap.pdf>



County of San Diego, Vector Control Zika Training

Dr. Nikos Gurfield, PhD
Allison Bray, MS

Provide LOCAL information and training regarding the Zika Virus



Objective 1 - Activity 1.2

Coordinate with each Department Director to ensure objectives and activities are clear and that a staff lead(s) are identified from each department.

A formal requests and grant overview was discussed during a Director's meeting requesting Directors to officially appoint a minimum of 2 staff leads to attend Zika Training and to coordinate outreach. All staff Leads were officially secured by 1/29/18 and oriented with the project.



Dr. Calac
Medical Dir/CMO



Carrie Lambert
Dental Director



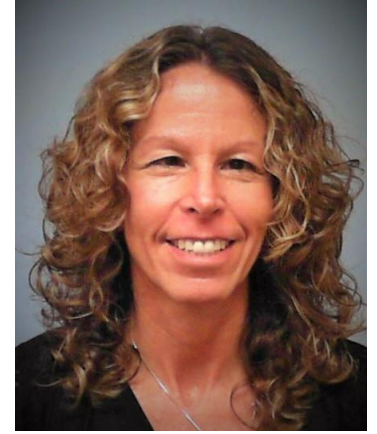
Dr. Pfent,
Behavioral Health
Director



Angelina Renteria
Public Health
Director



Karan Kolb
Tribal Family
Services Director



Beth Turner
Health
Promotions Dir.

OBJECTIVE 1 – ACTIVITY 1.3

A+

Provide training and post-exam to a minimum of 12 department leads within the organization

Training was completed on 2/28/18 by all 12 department leads.

100% of the leads demonstrate knowledge of Zika prevention, detection and response and were prepared to disseminate information.

SAMPLE POST EVAL QUESTIONS

- ✓ The Zika virus is primarily transmitted through the bite of an infected *Aedes* mosquito. (TRUE)
- ✓ The Zika virus can be passed from a pregnant woman to her fetus. (TRUE)
- ✓ Infection during pregnancy can cause a birth defect called microcephaly and other severe fetal brain defects. (TRUE)
- ✓ You cannot get Zika through sex without a condom with someone infected by Zika if they do not have symptoms of Zika. (FALSE)
- ✓ Pregnant women can prevent congenital Zika syndrome by obtaining the Zika vaccine early during pregnancy. (FALSE)



Objective 2 - Activity 2.1

OBJECTIVE 2: To implement a community-wide Zika Education Campaign within the grant program period.

Initiate community outreach/education planning meetings.

Team Lead Planning meetings were held monthly to discuss:

1. Resource needs (printing, poster boards, zika kits, tracking tools, etc.)
2. Department Updates – What's been done? What's working, what's not?



Objective 2 - Activity 2.1

Assign staff leads to target high risk populations via Medical, Public Health, Behavioral Health, Dental, Health Promotions, TFS during events, clinics and one-on-one visits.

Public Health Programs: one-on-one education during home visits to elders and pregnant moms, flyers in department lobby, hallway and gym area and education and outreach at community events

Behavioral Health: flyer distribution and posting in department lobby

Medical/Pharmacy: flyers posted in medical exam rooms and at the Pharmacy Bulletin Board. Discussed during medication consultation.

Dental: flyers posted in waiting area and education dissemination during Dental Department Mtg.

Health Promotions: flyer distribution, education to youth, adults and elders during community events

Tribal Family Services: flyer distribution, postings in department lobby



Objective 2 – Activity 2.3

Using teach back methods, CDC materials and Zika Tool Kit distribution, assess Tribal community Zika awareness

Education took place primarily as a one-on-one 10-minute overview highlighting Zika prevention, detection and response information. At the end of the 10-minute overview, participants were verbally surveyed for knowledge retention.

After answering 100% of the questions accurately, the participants received a Zika Kit and were challenged to be proactive by informing friends and family regarding how to prevent, detect and respond to Zika and to “tip and toss” potential Zika breeding sites near their homes.

Included in the Zika Kits: Zippered Reusable Bag, Large Mosquito Netting, Deet-Based Repellent, Permethrin-Based Repellent, Mosquito Larvicide Tablets)

HOW DO YOU GET ZIKA?

Zika can be passed from an infected mosquito to a person through a mosquito bite.

Zika can be passed from a pregnant woman to her unborn baby.

Zika can be passed through sexual activity from an infected person to a partner.

These are the most common ways to catch Zika.

LEARN MORE

- National Indian Health Board (NIHB) Zika hub: nihb.org
- Centers for Disease Control and Prevention (CDC) Zika: cdc.gov/zika/index.html?
- World Health Organization (WHO) Zika history: who.int/emergencies/zika-virus/history/en

CONTACT US

National Indian Health Board

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Washington, DC 20003
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Indian Health Council, Inc.
50100 Golish Rd.
Valley Center, Ca 92082

ENSURING YOUR TRIBE IS PROTECTED

NATIONAL INDIAN HEALTH BOARD
WITH SUPPORT FROM CENTERS
FOR DISEASE CONTROL AND
PREVENTION

FIGHT THE BITE!

To prevent invasive Aedes mosquitoes, remove standing water indoors and outdoors

Protect Your Home From Aedes Mosquitoes

1 Prevent Breeding

Drop Out Standing Water

- Mosquitoes lay their eggs in standing water.
- Larvae can see into pipes to avoid treatments.

Indoors

- Change water weekly in potted plants, flower vases, and pet bowls.
- Do not leave water out for longer than 2 weeks.

Outdoors

- Drain out water that collects in around trees, toys, storage containers, and buckets.
- Cover mulches and other wheelbarrows upright.
- Clean water in flowerpots and ponds, or if needed, add mosquito dunks.
- Drain water from plant pots and saucers, and flush out water accumulated in bottomless.

2 Protect Yourself

- Check for and repair holes in doors and window screens.
- Wear long-sleeved shirts, pants, socks and shoes when outside, even during the daytime.
- Apply insect repellents such as DEET, picaridin, oil of lemon eucalyptus, or IR3535 to skin and/or clothing (always use as directed on the product label).

3 Stay Informed!

Aedes mosquitoes

- Are black with white stripes
- Will bite during the day
- Breed indoors and outdoors

Can spread disease including Zika, dengue, chikungunya, yellow fever, and West Nile virus

- Will lay their eggs in small amounts of water
- Eggs can become adults in as little as 7 weeks!

Check STZ.org/Checklist for more information.

Contact

NIHB Zika 2016 - www.nihb.org/zika
www.CDC.gov/Zika

FIGHT THE BITE! | SDFIGHTTHEBITE.COM | (858) 694-2888



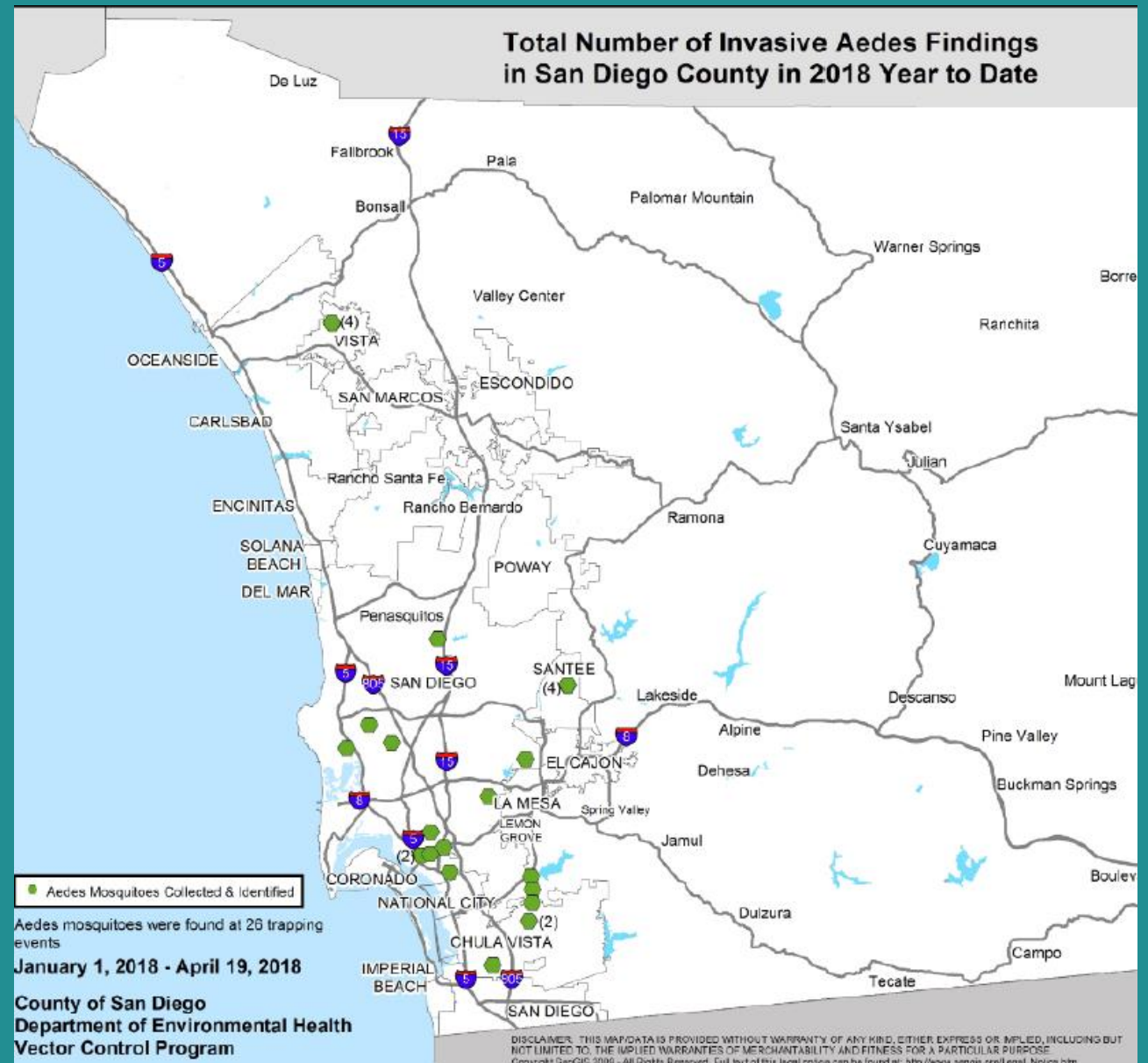
Challenges & Successes

Challenges

- Schedule conflicts between IHC and Tribal EPA
- No findings within Tribal borders – outside of county jurisdiction

Successes

- Increased clinic-wide awareness
- Increased sense of urgency to activate community-wide action days
- Increased awareness regarding county vs. tribal resources
- Departments have initiated planning for creative activities to begin Zika Action Days!
- Community members are self activating “tip and toss!”



Next Steps

1. Continue to reach Tribal EPA and Tribal Councils regarding future implementation of an official designated Zika Action Day
 - » Prevent Breeding. Tip and Toss potential mosquito breeding sites
 - » Throw away unused items around the home
2. Secure resources (funding and manpower) to initiate testing (mosquito traps) within the tribal borders.



Knowledge is Empowerment

“Empowering Native Wellness”

Thank You to NIHB
and to YOU for listening.

Questions?



National Indian Health Board



Kaw Nation

FRANCINE HACKETT (KAW NATION), MS, IT, BS,
DIRECTOR OF ENVIRONMENTAL PROGRAM

CODY WINGO, AAS
ENVIRONMENTAL SPECIALIST

The background features a gradient from dark green on the left to a lighter, teal-green on the right. Scattered across this background are numerous silhouettes of mosquitoes in various orientations and sizes, some appearing as dark black shapes and others as lighter, semi-transparent ones.

Kaw Nation's Zika Project
Help Fight the Bite!

Event Goals

- Engage community in helping to reduce mosquito population and protect against mosquito bites
- To increase knowledge, awareness, and engagement in protection against the transmission of Zika virus



Purpose of Our Community Event

To rally the tribal community to follow a Zika Prevention Plan such as:

- Wearing long-sleeved shirts and long pants when outdoors
- Using EPA-registered insect repellents on exposed skin
- Use condoms if pregnant
- Install or repair windows and door
- At least once a week dump standing water or treat standing water with larvicides



The background of the slide features a gradient from dark green on the left to a lighter, more yellowish-green on the right. Scattered across this background are numerous silhouettes of mosquitoes in various flying poses. Some are large and dark, while others are smaller and lighter, creating a sense of a mosquito swarm.

Planning Our Event Help Fight the Bite!

Planning “Help Fight the Bite!” Event

Step 1: Deciding on a Host Partner

- Local hardware and home improvement store
- Local supermarkets, pharmacies, or grocery stores
- Local hospitals, health clinics, or family planning places

Step 2: Deciding on a Venue

- Consider outdoors, area accommodate large groups, and high volume of regular traffic
- Permits or prior permission
- Local law enforcement or security staff

Step 3: Engaging Partners

- Other partners invited to participate in event

Planning “Help Fight the Bite!” Event

Step 4: Deciding and Planning for Event Activities

- Number of stations (workshops) with an event “punch card”
- Types of incentives
- Children’s Activities
- Developing a blueprint of the event space

Step 5: Promoting the Event

- Developing a promotion plan
- Media and advertizing the event
- Logo on materials

Planning “Help Fight the Bite!” Event

Step 6: Holding the Event

- Rope off event area
- Representative to talk with media
- Local health official to answer community questions
- Staff dedicated to welcome table

Step 7: Post-Event Wrap-Up

- Create and share event partner report
- Determine how many adults and children were in attendance
- Hold after event debrief with key event staff
- Conduct an event assessment

The background of the slide is a dark green gradient. It features several black silhouettes of mosquitoes. One large mosquito is in the bottom left corner, and several smaller ones are scattered across the upper and middle sections of the slide.

To learn more about Zika visit

U.S. Centers for Disease Control and Prevention (CDC)
<http://www.cdc.gov/zikz/index.html>

National Indian Health Board



Bishop Paiute Tribe

THOMAS GUSTIE (BISHOP PAIUTE)
NATURAL RESOURCES SPECIALIST
ENVIRONMENTAL MANAGEMENT OFFICE



WELCOME TO THE

BISHOP PAIUTE TRIBE



WELCOME TO THE

BISHOP PAIUTE TRIBE

THOMAS GUSTIE, NATURAL RESOURCE SPECIALIST
thomas.gustie@bishoppaiute.org
Office: 760-873-3584, Cell: 760-784-5763

2018 ZIKA PLANNING AND RESPONSE PRESENTATION



Summary

- History Of Mosquito Abatement Program
- Goals And Objectives
- Activities and Deliverables
- Lessons Learned
- Benefit of Project



The Goals

1. Educate the community about how to prevent mosquito bites
2. Educate on how to eliminate mosquito habitat in the back yard and the household.

Objective 1: Identify areas that are at high risk of mosquito activity

Activity 1.1: GPS homes

Activity 1.2: Perform house visits

Activity 1.3: Purchase supplies



The Goals

1. Educate the community about how to prevent mosquito bites
2. Educate on how to eliminate mosquito habitat in the back yard and the household.

Objective 2: Outreach and training

Activity 2.1: Education campaign for community

Activity 2.2: Attend Mosquito And Vector Control Association of California



BISHOP LOCATION MAP

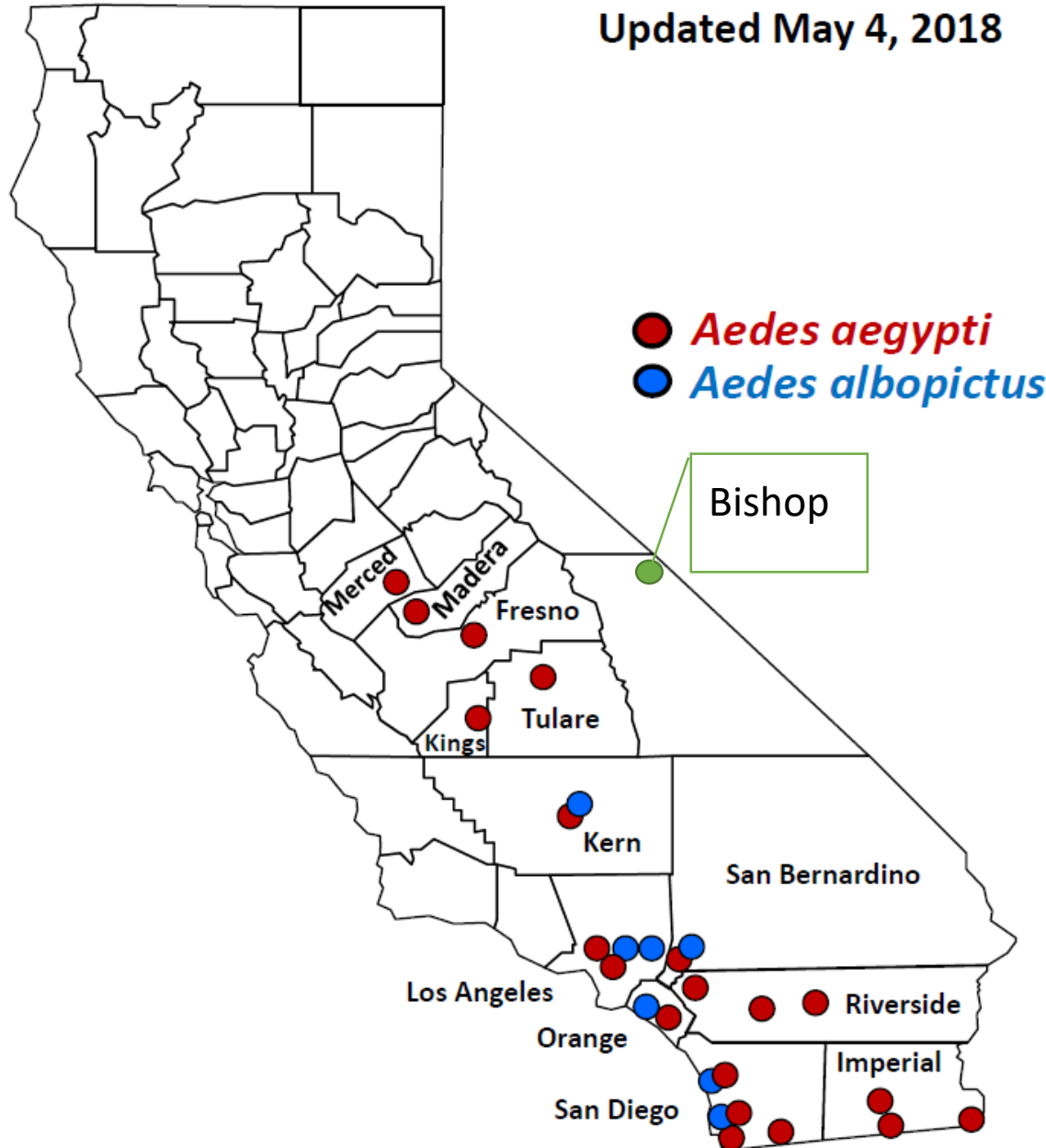




Aedes aegypti and *Aedes albopictus* Mosquitoes in California

Detection Sites by County/City

Updated May 4, 2018



Counties with *Aedes aegypti* only:
Fresno, Imperial, Kings, Madera, Riverside, Merced, Tulare

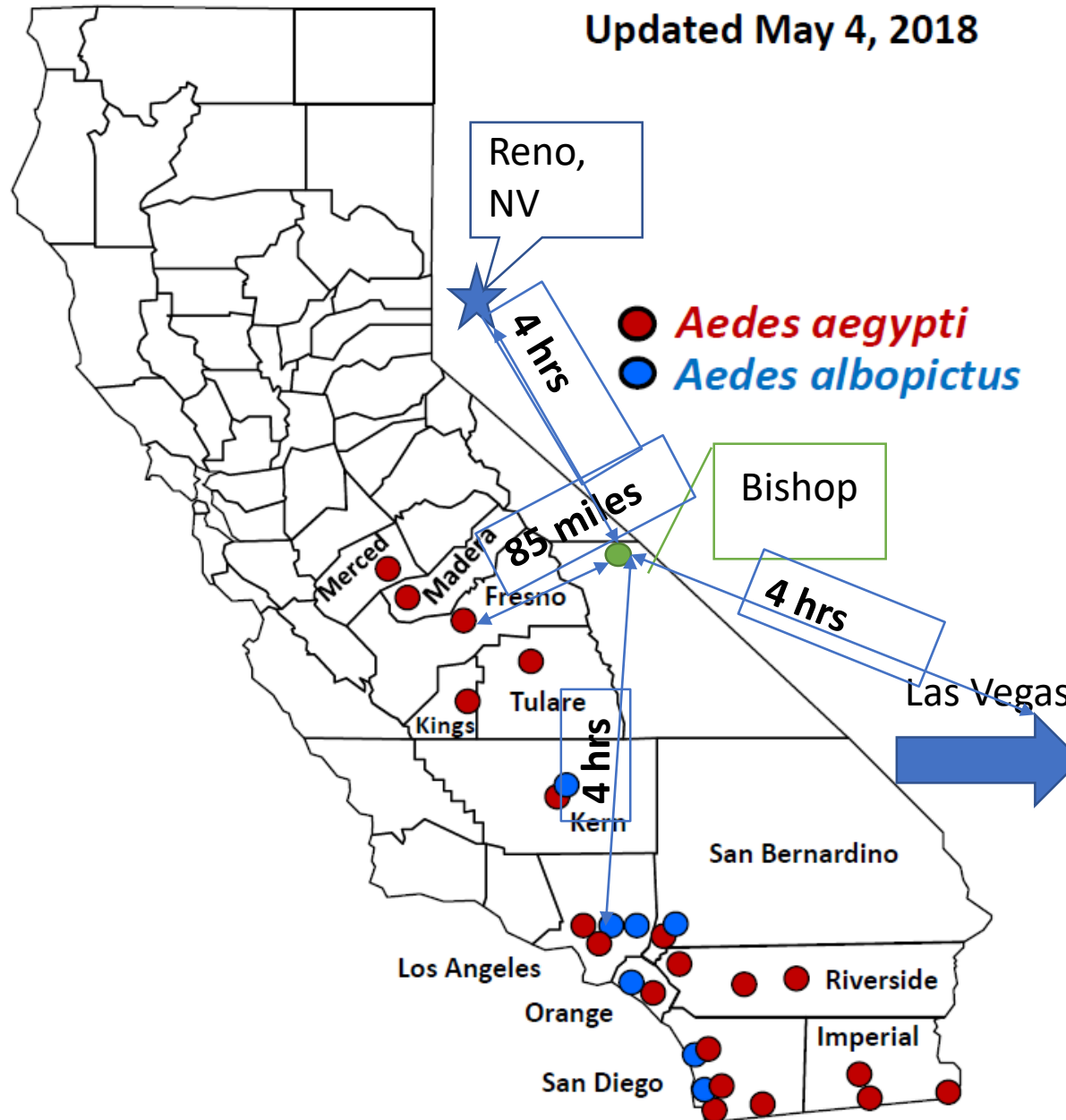
Both *Aedes aegypti* and *Aedes albopictus*:
Kern, Los Angeles, Orange, San Bernardino, San Diego

See pages 2 and 3 for *Aedes* detections by city or census-designated place in each county.

Aedes aegypti and *Aedes albopictus* Mosquitoes in California

Detection Sites by County/City

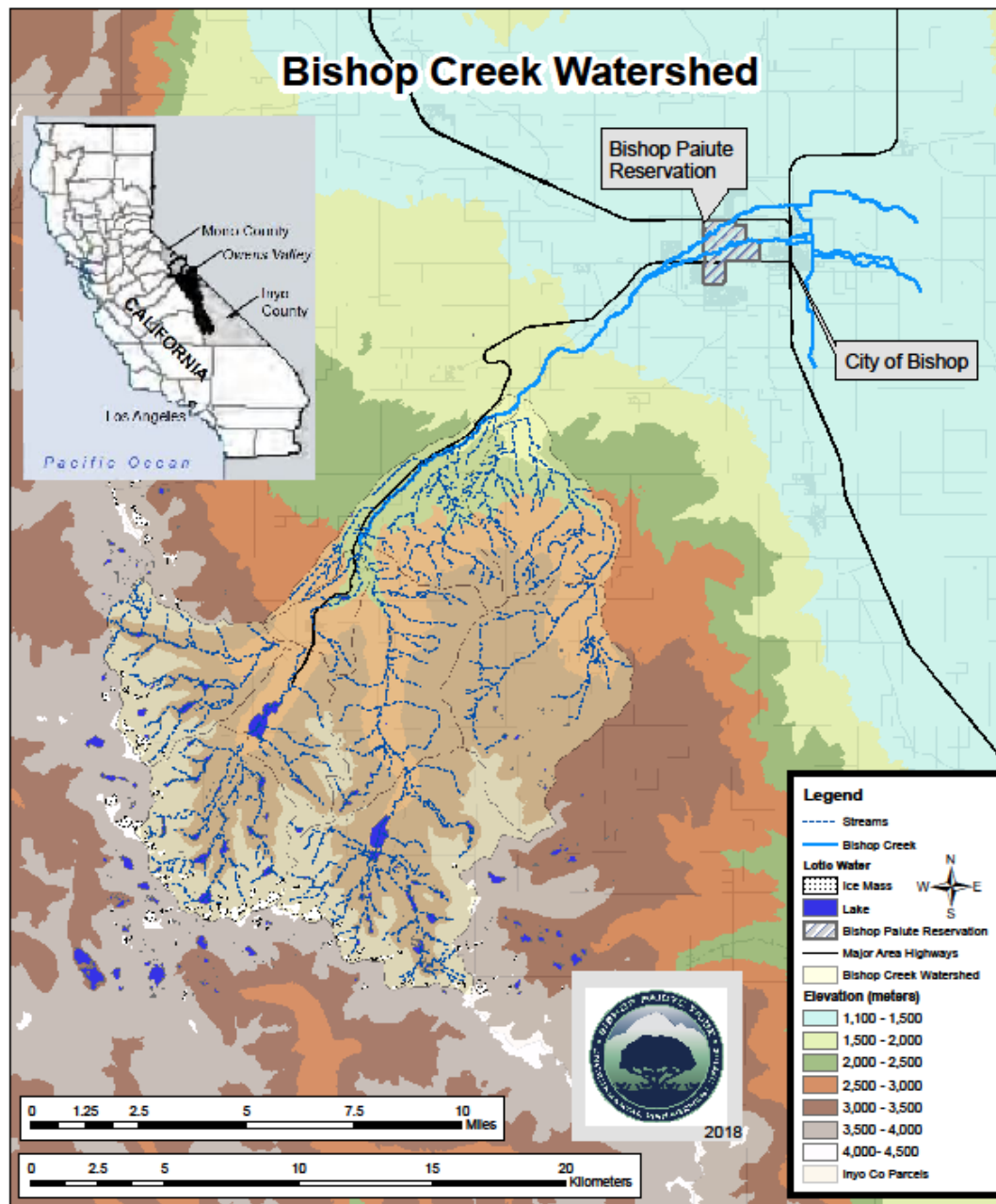
Updated May 4, 2018



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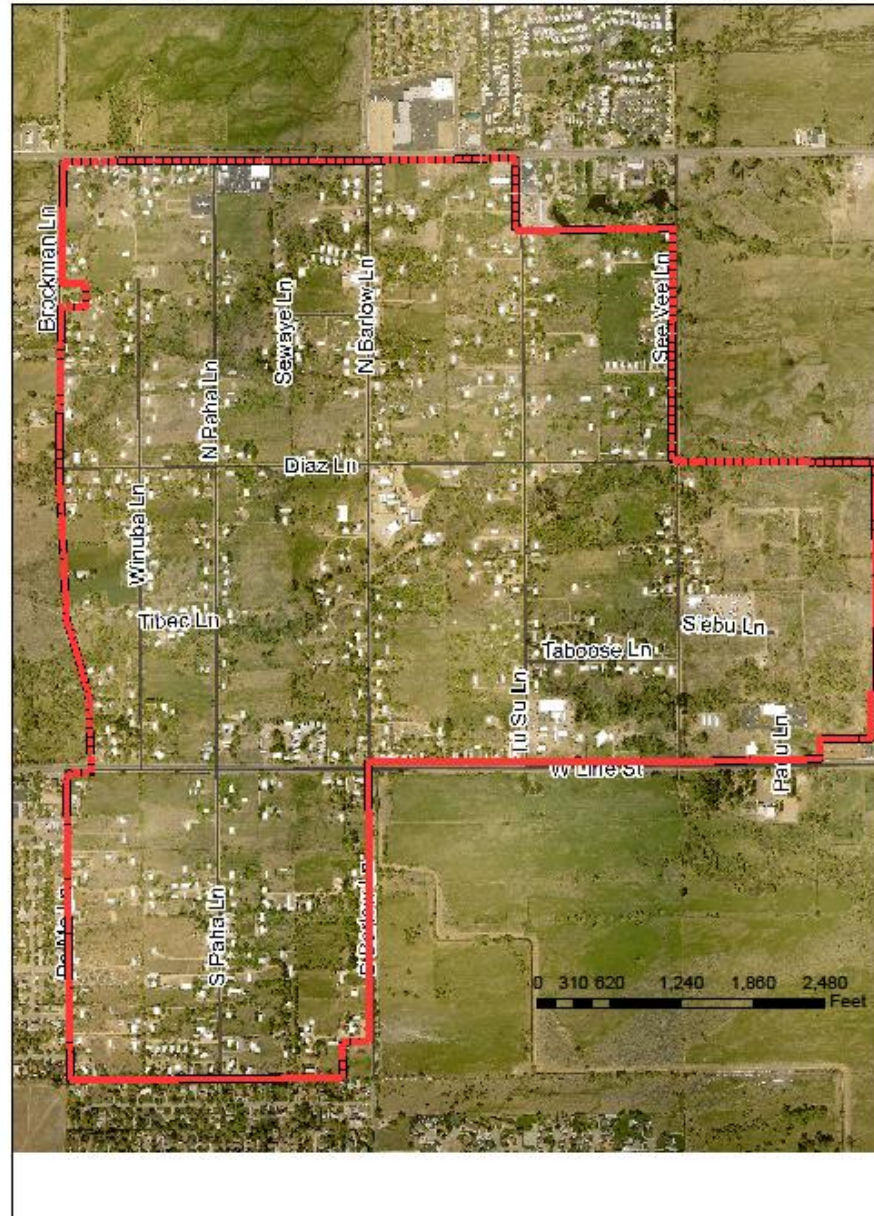
See pages 2 and 3 for *Aedes* detections by city or census-designated place in each county.



A1. Map of the Bishop Creek Watershed flowing onto and beyond the Bishop Paiute Reservation. The upper watershed has a drainage area of approximately 76,762 acres. The Reservation is located adjacent to and west of the City Of Bishop, California in Inyo County.



BISHOP PAIUTE TRIBE RESERVATION

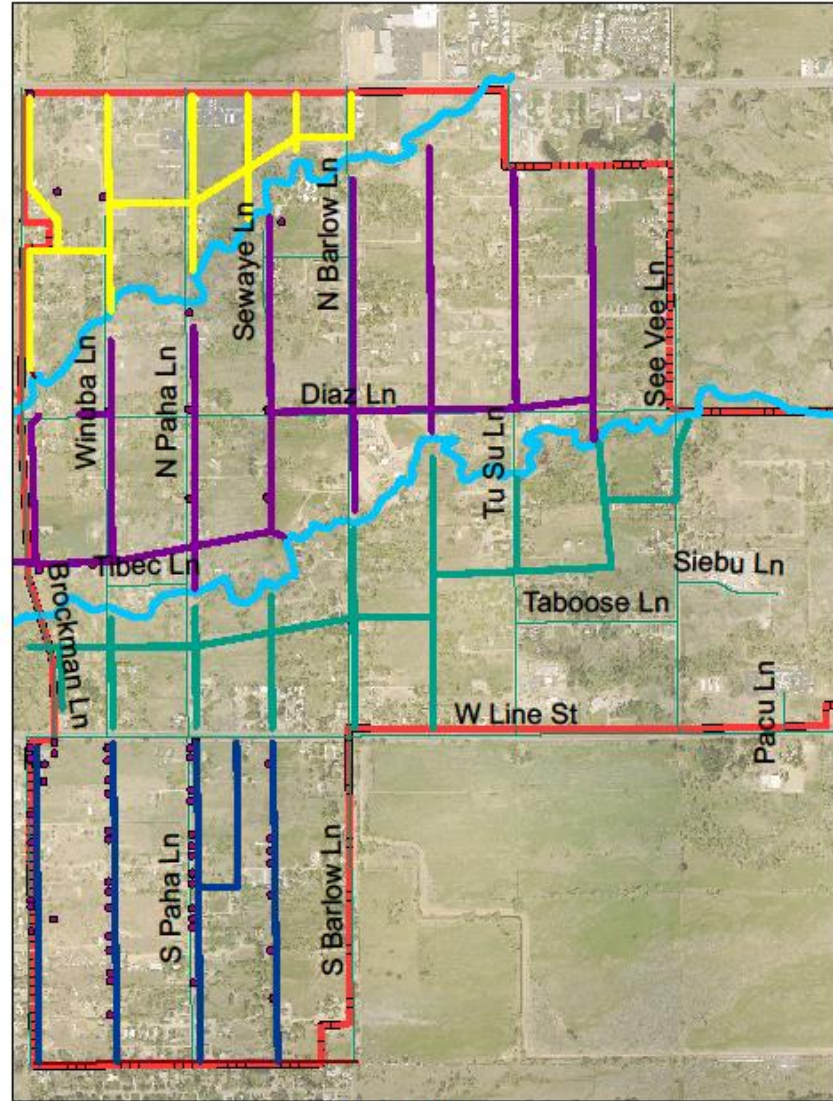


Bishop Paiute Tribe
50 Tu Su Ln
Bishop Ca, 93514

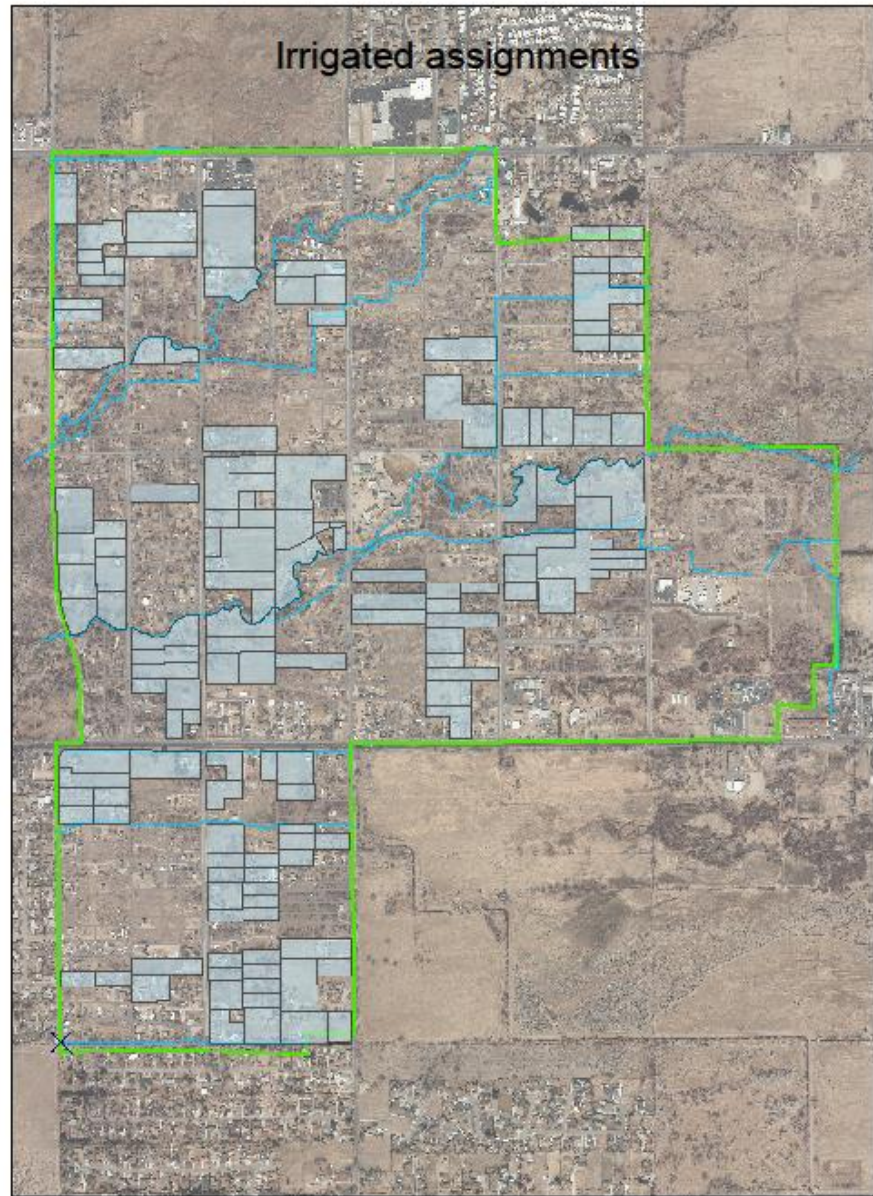
 Bishop Paiute Boundary



2017 Bishop Paiute Tribe Irrigation

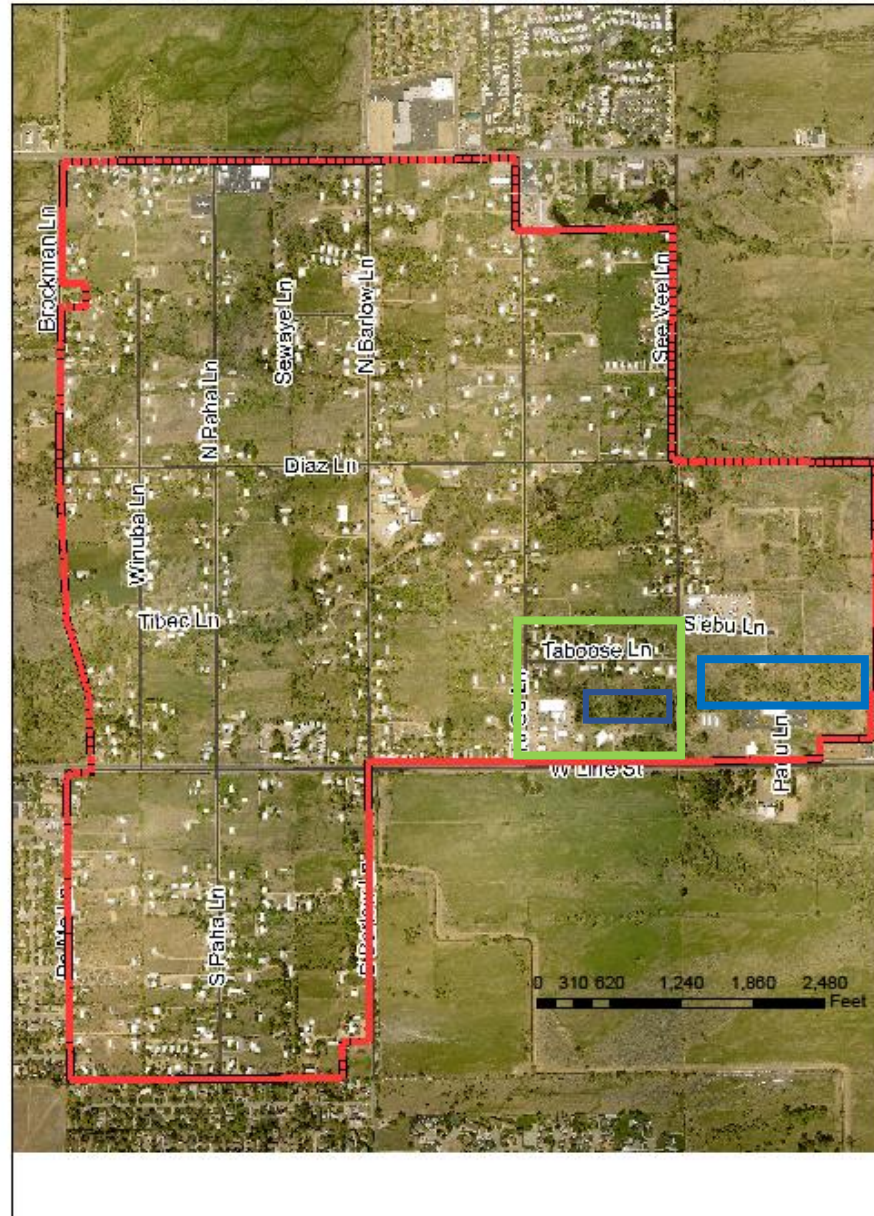


- IRRIGATION**
- Line-A • Irrigation_Valve
 - Line-B — Irrigation
 - Line-C — BishopPaiuteCreeks
 - Line-D — BishopPaiuteReservationBoundary



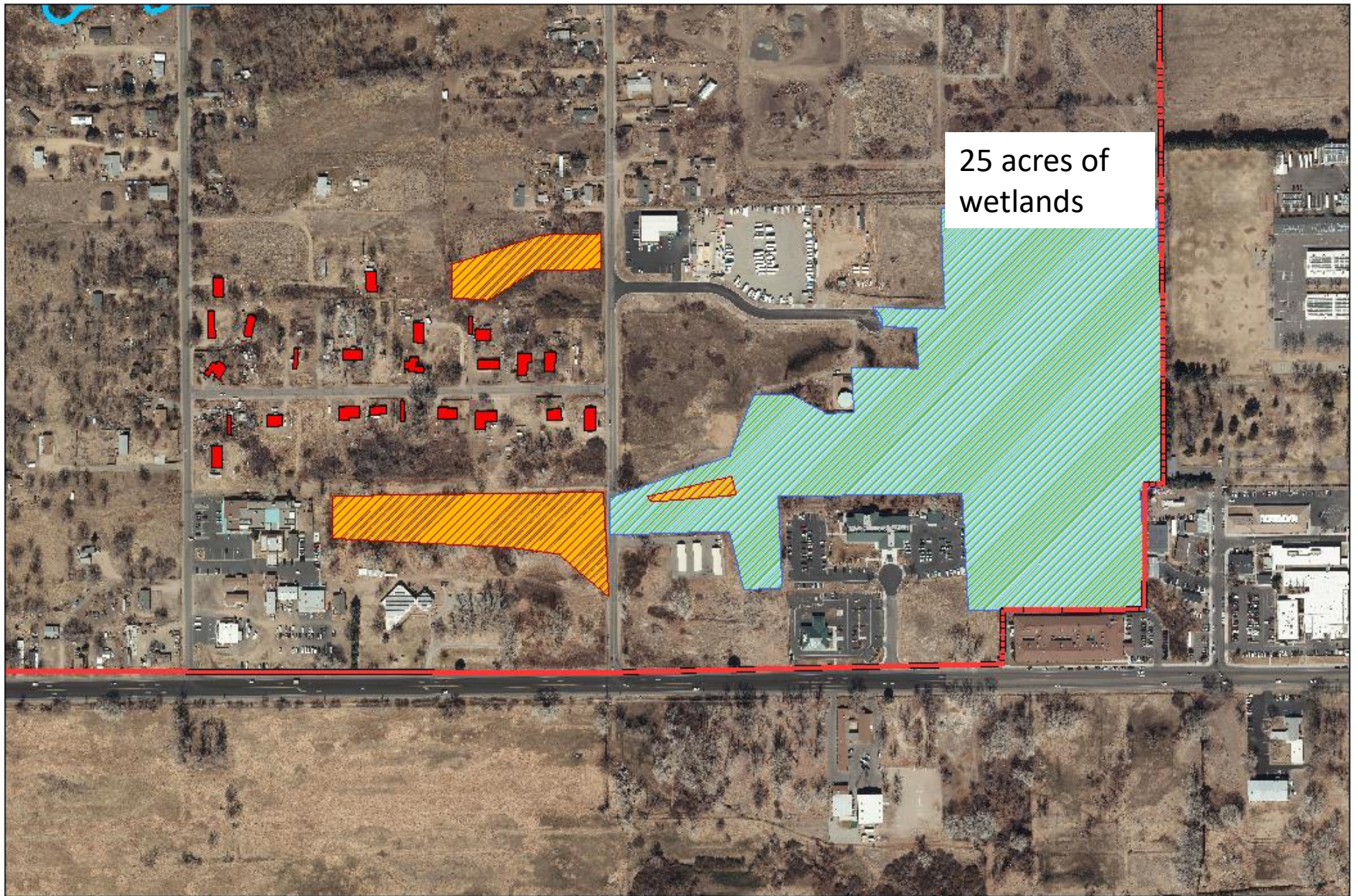


BISHOP PAIUTE TRIBE RESERVATION



Bishop Paiute Tribe
50 Tu Su Ln
Bishop Ca, 93514

 Bishop Paiute Boundary



25 acres of wetlands

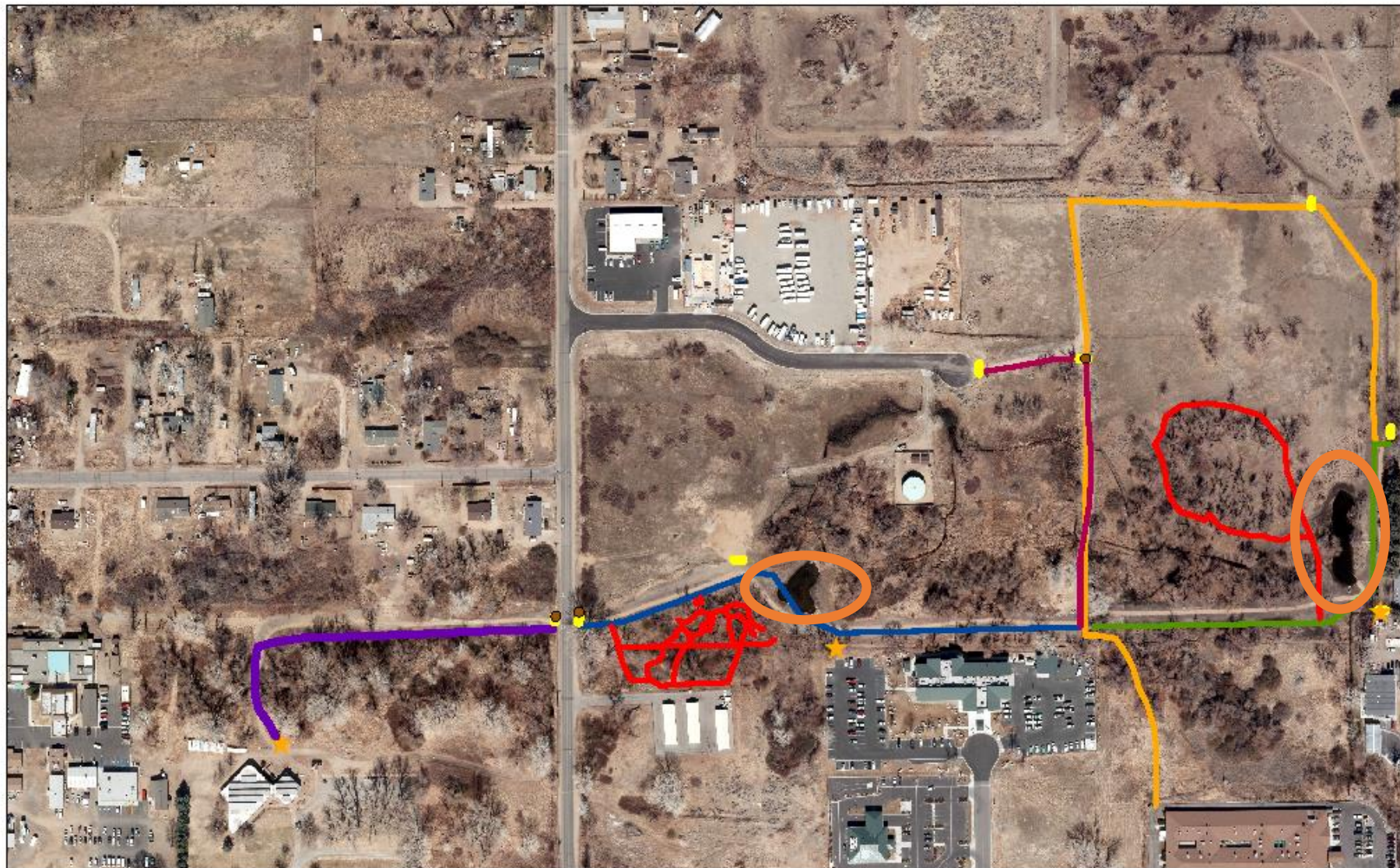
2018 Homes Monitored and Informed of ZIKA

- High Risk Mosquito Areas
- Possible High Risk Homes
- Mosquito Hazards





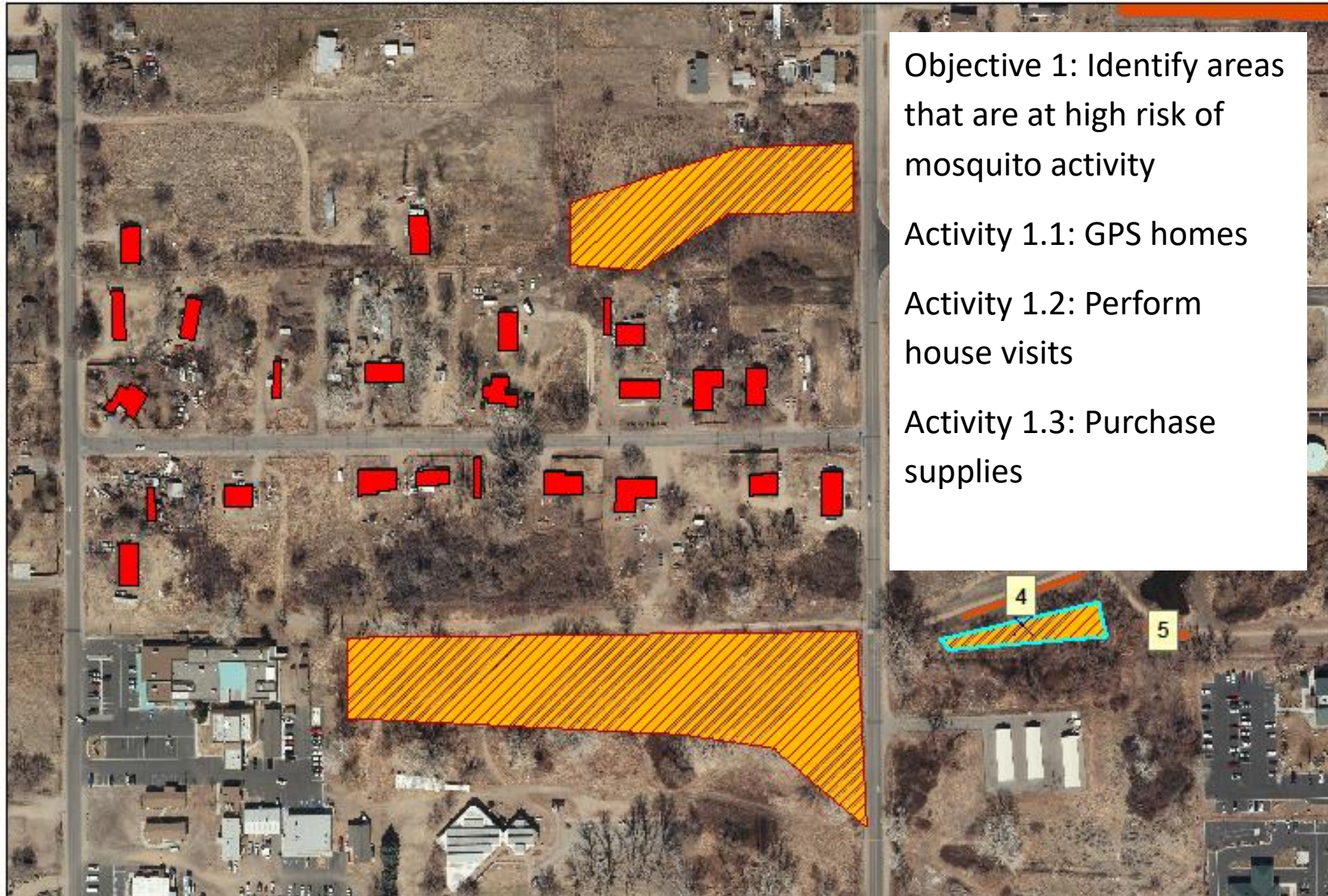




Bishop Paiute Tribes Conservation Open Space Area

Legend

- Locks
- ★ Entrance to trails
- Gates
- Footpaths
- Trail Section 4
- Trail Section 3
- Trail Section 2
- Trail Section 1
- Future Trails



Objective 1: Identify areas that are at high risk of mosquito activity

Activity 1.1: GPS homes

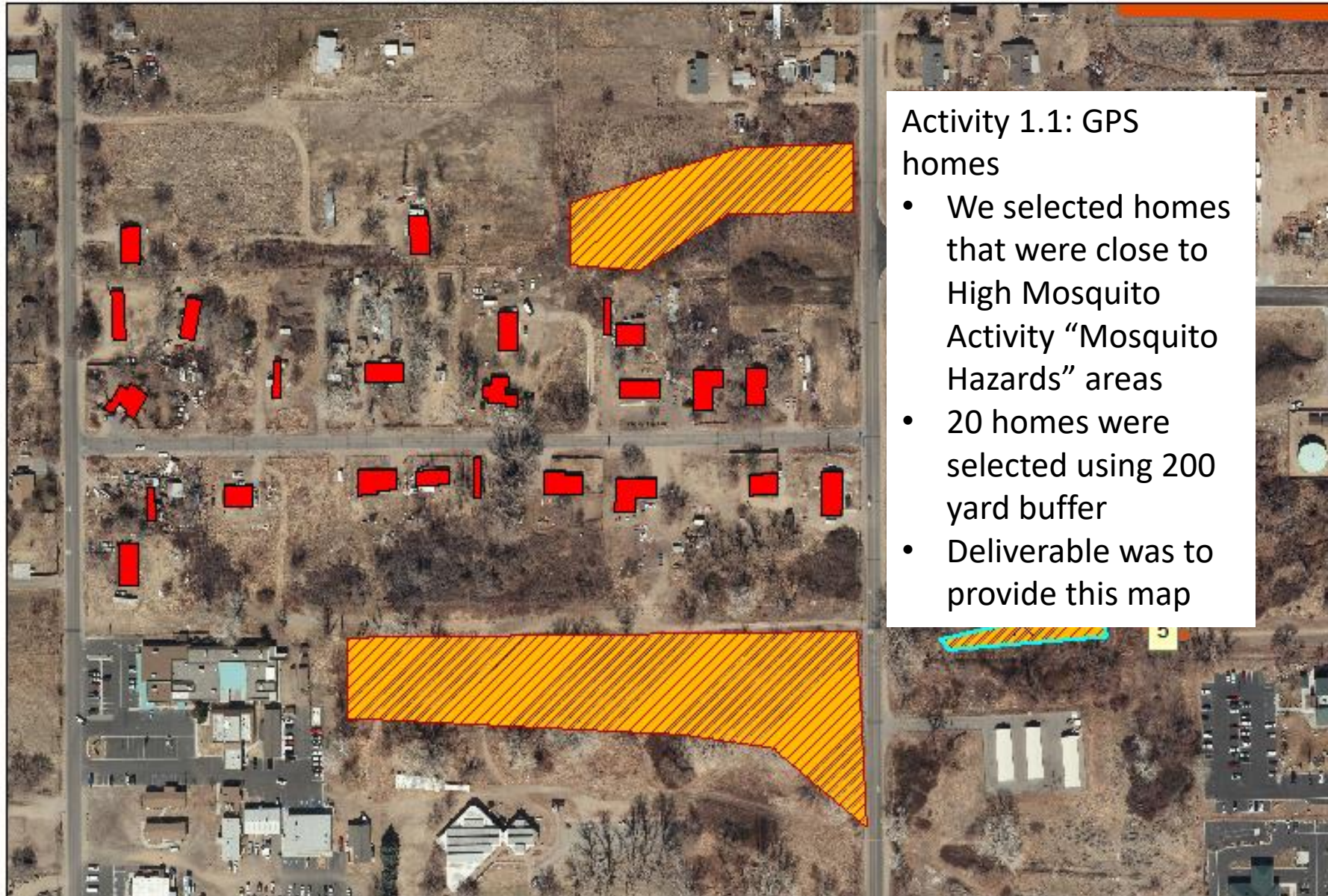
Activity 1.2: Perform house visits

Activity 1.3: Purchase supplies

2018 Homes Monitored and Informed of ZIKA

High Risk Mosquito Areas
■ Possible High Risk Homes
■ Mosquito Hazards





2018 Homes Monitored
and Informed of ZIKA

High Risk Mosquito Areas
■ Possible High Risk Homes
■ Mosquito Hazards



HOW DO YOU GET ZIKA?

Zika can be passed from an infected mosquito to a person through a mosquito bite.

Zika can be passed from a pregnant woman to her unborn baby.

Zika can be passed through sexual activity from an infected person to a partner.

These are the most common ways to catch Zika.

LEARN MORE

- National Indian Health Board (NIHB) Zika hub: nihb.org
- Centers for Disease Control and Prevention (CDC) Zika: cdc.gov/zika/index.html
- World Health Organization (WHO) Zika history: who.int/emergencies/zika-virus/history/en

CONTACT US

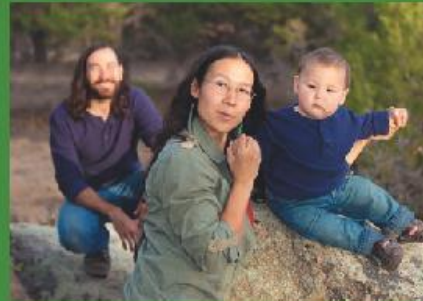
National Indian Health Board
910 Pennsylvania Ave, SE
Washington, DC 20003
202-507-4070
www.nihb.org

Brochure developed 2/2018

National Indian Health Board



ZIKA VIRUS



ENSURING YOUR TRIBE IS PROTECTED

NATIONAL INDIAN HEALTH BOARD
WITH SUPPORT FROM CENTERS
FOR DISEASE CONTROL AND
PREVENTION

Activity 1.2: Perform house visits on half of the households we provided this brochure and we then revisited the houses and ask 5 question questionnaires and see if they learned anything about the ZIKA Virus

WHAT IS THE ZIKA VIRUS?

Zika is a virus carried by *Aedes aegypti* and *Aedes albopictus* mosquitoes.



Zika was first discovered in Uganda, East Africa in 1947. Now, Zika has spread to many countries around the world.

The mosquitoes that carry Zika can bite day and night.

Zika is a special concern for women who are pregnant or may become pregnant. However, the entire community needs to come together to prevent Zika and protect the next generation.

There is currently no cure or vaccine for Zika.

WHAT HAPPENS IF YOU GET ZIKA?



Most people experience no symptoms or mild symptoms including fever, rash, joint and muscle pain, headache, and red eyes.

Zika can cause *very serious* birth defects, including microcephaly and brain damage.

Zika is also associated with a nervous system disease called Guillain-Barré Syndrome.

HOW DO YOU PREVENT ZIKA?

- Use an insect repellent registered with the Environmental Protection Agency (EPA).
- Wear long sleeved shirts and pants when possible. Treat clothes with permethrin.
- Using condoms or refraining from sexual activity can reduce the risk of transmitting Zika. Talk to your doctor to understand your risk and get specific recommendations.
- Use mosquito netting over strollers, cribs, and beds when exposed to mosquitoes.
- Empty standing water around your home. Use water treatment tablets in water you cannot empty.





Learned What the Zika Virus Is	Learned that you Zika Virus can passed from a pregnant woman to an Unborn Baby	Learned that most people experience no symptoms or mild symptoms.	Learned that mosquitoes can Bite in the day time too	learned that they could be the cause of mosquito habitat by leaving water in small containers around or in house.
5	9	7	1	4



Assessments





Assessments







Objective 2: Outreach and Training

Activity 2.1: Monthly articles in Tribal newsletter

Activity 2.2: Attend Mosquito And Vector Control Association of California



Objective 2: Outreach and Training

Activity 2.1: Education campaign for community

Activity 2.2: Attend Mosquito And Vector Control Association of California



Objective 2: 2.1: Education campaign for community

- Attend at least two community events and distribute at least 50 Zika brochures
- Post at least 4 Zika articles on the website, and at least 2 of these will also be in the community newsletter



Objective 2: 2.1: Education campaign for community



Bishop Paiute Tribe Environmental Department Receives Funding to Support Tribal Zika Response and Planning Activities

The Bishop Paiute Tribe Environmental Management Office has been awarded \$5000 to support Tribal Zika response and planning activities. The Bishop Paiute Tribe is one of three Tribes to receive funding in this cycle through the Tribal Zika Response and Planning Project administered by the National Indian Health Board (NIHB). Funding for the Tribal Zika Response and Planning is provided by the Centers for Disease Control and Prevention (CDC).

The Bishop Paiute Tribe Environmental Management Office will use the grant to participate in Zika response and prevention activities including treating and monitoring mosquito sites

For more information about the local Tribal program, please contact Thomas Gustie, Natural Resource Specialist at thomas.gustie@bishoppaiute.org or 760-873-3584



WHAT IS THE ZIKA VIRUS?

Zika virus is a mosquito-borne virus that prior to 2015 occurred in Africa, Southeast Asia, and the Pacific Islands. Zika virus has been identified in several countries throughout South America, Central America, and the Caribbean, as well as states in Mexico. In the U.S., limited local transmission has been reported in Florida and Texas. Most Zika cases reported in California have been travelers returning from Zika-affected areas; this includes several sexually-transmitted cases and pregnancies reported to the U.S. Zika Pregnancy Registry.

The mosquitoes that carry Zika can bite day and night.

Zika is a special concern for women who are pregnant or may become pregnant. However, the entire community needs to come together to prevent Zika and protect the next generation. There is currently no cure or vaccine for Zika.

WHAT HAPPENS IF YOU GET ZIKA?

- Most people experience no symptoms or mild symptoms including fever, rash, joint and muscle pain, headache, and red eyes.
- Zika can cause *very serious* birth defects, including microcephaly and brain damage.
- Zika is also associated with a nervous system disease called Guillain-Barré Syndrome.

HOW DO YOU PREVENT ZIKA

- Use an insect repellent registered with the Environmental Protection Agency (EPA).
- Wear long sleeved shirts and pants when possible. Treat clothes with permethrin.
- Using condoms or refraining from sexual activity can reduce the risk of transmitting Zika. Talk to your doctor to understand your risk and get specific recommendations.
- Use mosquito netting over strollers, cribs, and beds when exposed to mosquitoes.
- Empty standing water around your home. Use water treatment tablets in water.

For more information about the program please call

Tom Gustie, Natural Resource Specialist

Phone # (760) 873-3584 ext 2130



Objective 2: 2.1: Education campaign for community

Mosquito Season is coming are you prepared??

Eliminate stagnant water around your home so mosquitoes can't breed.

Examples of mosquito breeding sources include:

- Flower saucers
- Rain barrels
- Clogged rain gutters
- Bird baths
- Backyard ponds
- Tires
- Pet bowls
- Green swimming pools



Prevent Mosquito Bites



Use Insect Repellent

Use [Environmental Protection Agency \(EPA\)-registered insect repellents](#) with one of the active ingredients below. When used as directed, EPA-registered insect repellents are proven safe and effective, even for pregnant and breastfeeding women.

- DEET
- Picaridin (known as KBR 3023 and icaridin outside the US)
- IR3535
- Oil of lemon eucalyptus (OLE) or para-menthane-diol (PMD)
- 2-undecanone

Find the insect repellent that's right for you by using [EPA's search tool](#).

Tips for Everyone

- Always follow the product label instructions.
 - Reapply insect repellent as directed.
- Do not spray repellent on the skin under clothing.
- If you are also using sunscreen, apply sunscreen first and insect repellent second.

ZIKA VIRUS INFO

What we know

- Zika is spread mostly by the bite of an infected *Aedes* species mosquito (*Ae. aegypti* and *Ae. albopictus*). These mosquitoes bite during the day and night.
- ZIKA can be passed through sexual activity from an infected partner
- Zika can be passed from a [pregnant woman](#) to her fetus. Infection during pregnancy can cause certain birth defects.
- There is no vaccine or medicine for Zika.

Local mosquito-borne Zika virus transmission has been reported in the continental United States

West Nile Virus

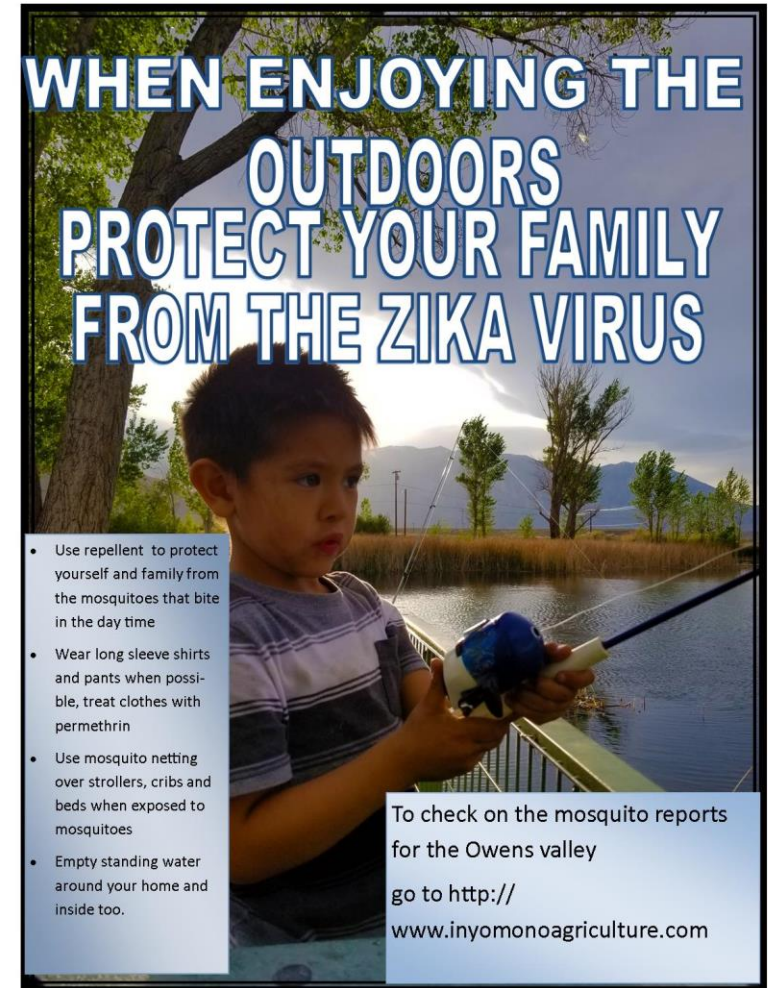
FOR DEAD BIRD SUBMISSIONS PLEASE SEE THE CDPH SITE AT: http://www.westnile.ca.gov/report_wnv.php
OR CALL: 1-877-WNV-BIRD

THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH WEST NILE VIRUS PAGE CAN BE FOUND AT: <http://www.westnile.ca.gov/>

WHEN ENJOYING THE OUTDOORS PROTECT YOUR FAMILY FROM THE ZIKA VIRUS

- Use repellent to protect yourself and family from the mosquitoes that bite in the day time
- Wear long sleeve shirts and pants when possible, treat clothes with permethrin
- Use mosquito netting over strollers, cribs and beds when exposed to mosquitoes
- Empty standing water around your home and inside too.

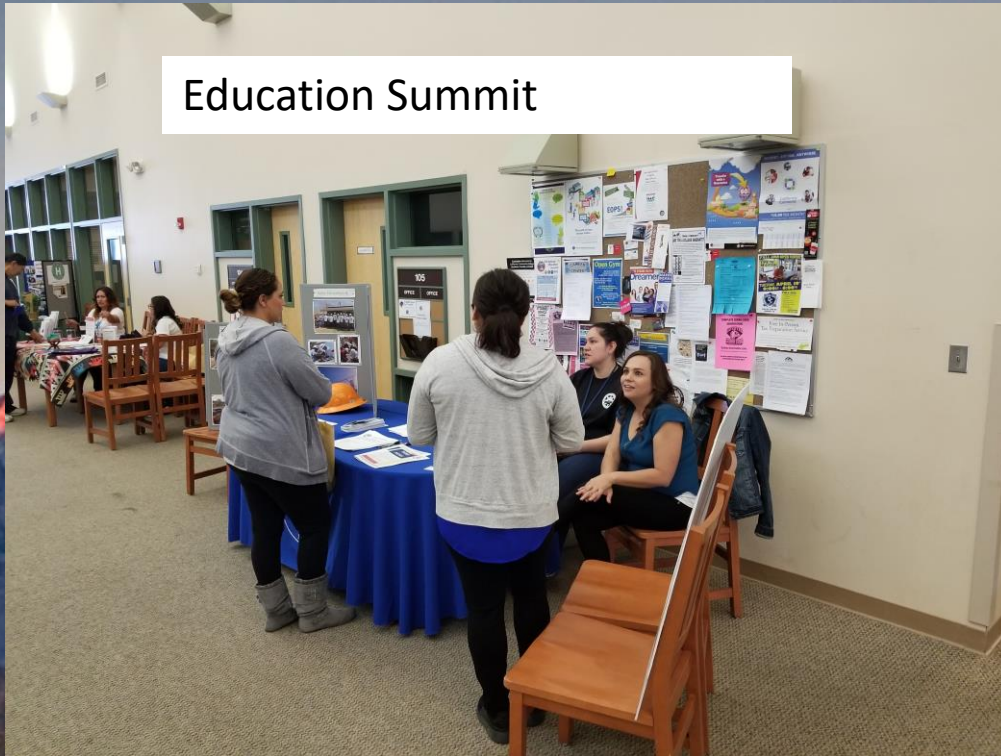
To check on the mosquito reports for the Owens valley go to <http://www.inyomonoagriculture.com>





Objective 2: 2.1: Education campaign for community

Education Summit



Tribal Earth Day Event





Objective 2:

Activity 2.2: Attend Mosquito And Vector Control Association of California

CONCLUSION

- The number of Zika cases being reported across the Americas has decreased substantially since the peak of the outbreak in 2016
- Travel-related Zika cases have also decreased across the U.S. and in California
- Many countries, including Mexico are still reporting moderate levels of active Zika transmission, continuing to pose a risk to travelers, especially pregnant women
- Viremic travelers continue to return to California creating ongoing risk for local transmission in Southern California and the Central Valley where *Aedes aegypti* and/or *albopictus* are well established
- We need to apply lessons learned during the Zika outbreak to prepare for future outbreaks of other arboviruses

Real-Time Data Collection

Advantages

- No data entry!
- Decreases workload & extends staff
- Prevents paper survey problems
- Results available more quickly
- Future benefits with technology improvements?
- Fun/interesting to volunteers?

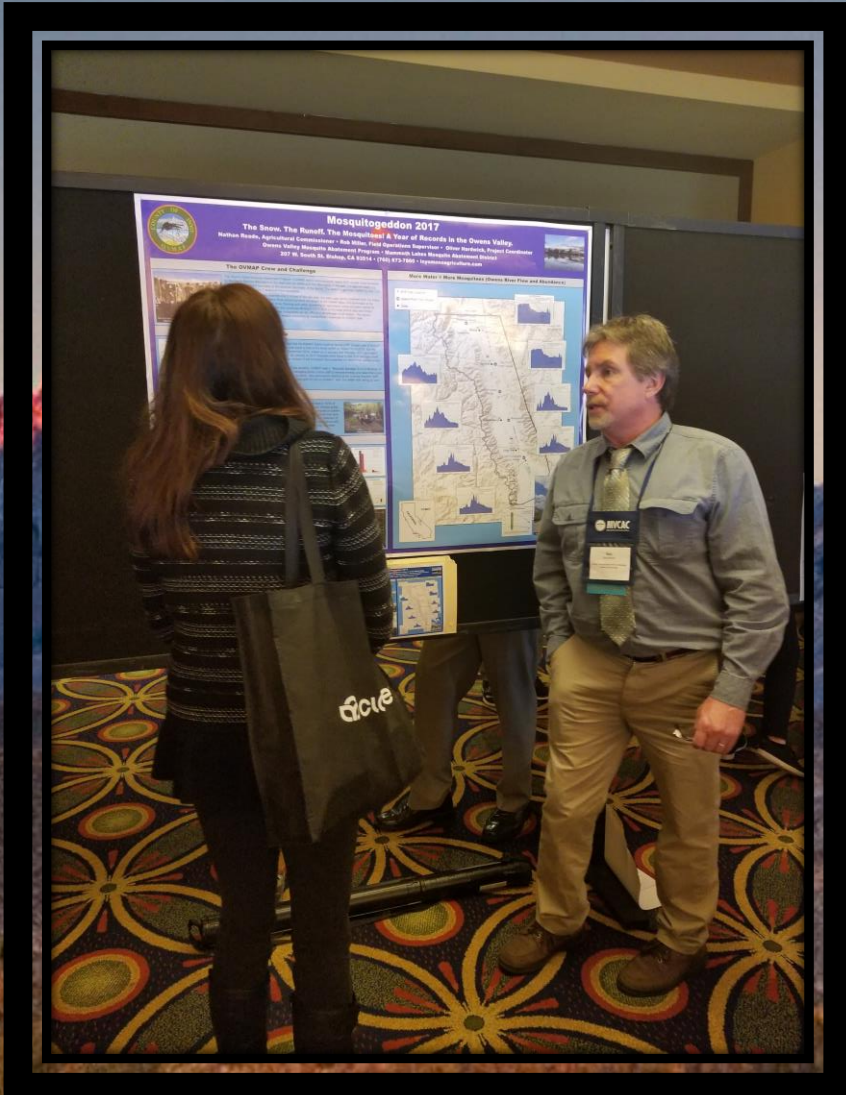
Anticipated Problems

- Data quality issues
- Technical difficulties
- Acceptability to volunteers
- Privacy & property access challenges
- Can volunteers recognize mosquito sources?



Objective 2:

Activity 2.2: Attend Mosquito And Vector Control Association of California





Lessons Learned

- Newsletter Article helped get the information out to the community.
- We had individuals call in to ask about what else the tribe does to help protect against Mosquitos.
- We did learn that going to the houses that we wanted to monitor were we needed to focus more on educating them more about what they were allowing to happen in their back yard was a big contribution to mosquito habitat.
- We spent more time talking to the individual's then performing a walkthrough to check for Mosquito Habitat



Benefit of Project

- This project has not only helped the community members get educated about the ZIKA Virus but also it helped our program perform more outreach and seek out ways how people can prevent mosquito bites in general.
- This program concentrated on the lands that were flooded with water or wetlands we did not think about adding information to give out about how inside the house can also create a mosquito habitat.



Thank You

Questions????

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Thank you to our
presenters!



Q&A and Discussion





Thank you!

