Oxitec & California MCDs

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OXITEC

With You Today

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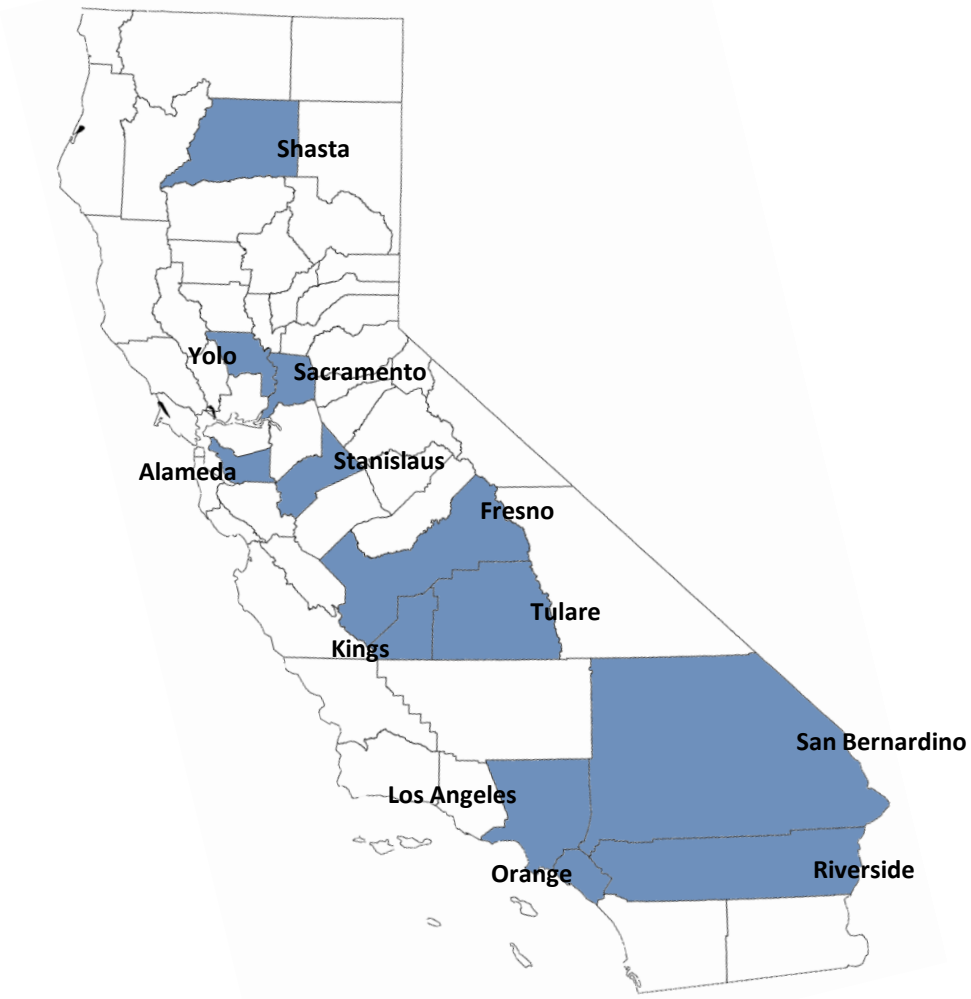
Additional Resources Available at: oxitec.com

Introduction

- Oxitec's Friendly™ *Aedes aegypti* technology was approved by the U.S. EPA for piloting in Florida and Texas; the EPA ruled that the technology is safe for humans, animals and the environment (information and resources are available here).
- Florida pilot project is going well – Project A underway, Project B launching soon.
- 10 mosquito control districts in California have signed onto the EUP amendment. The counties are listed in the EUP application not the MVCDs.
- The Southern Nevada Health District initially expressed interest but have decided not to pursue a project.
- Oxitec has yet to determine where it will carry out pilot projects, but will work closely with EPA, California regulators, MVCAC and the interested districts to do so.
- We want to be a resource for you – please let Oxitec or KP Public Affairs know if you have questions or need additional information at any time.



Blue shaded areas represent counties served by mosquito control districts that have registered their interest in hosting an Oxitec pilot project.

Update on CA EUP Amendment Application

- In March, Oxitec submitted an application to the US EPA to amend its Experimental Use Permit (EUP) to expand its technology to California.

- The statutory timeline for a federal decision is November 2021.

- Oxitec has been working with the EPA and a Notice of Receipt appears ‘almost ready’ to be published in the Federal Register.

- We don’t have a definitive date on when the public comment period will open but expect it could be soon
  - EPA will likely give Oxitec 24-48 hours notice (hopefully longer)
  - Oxitec will immediately inform MVCAC
  - Public comment period will last for 30 days / could be extended

Regulatory Approvals for Oxitec Mosquito Deployment: Western States

Federal EUP:

7 months statutory (PRIA) timeline

- Oxitec applied to EPA for EUP extension/ amendment (PRIA category B621).
- PRIA deadline for approval is Nov 2021.
- EUP extension/amendment application includes:
  - Field Trial Protocol (‘Section G’)
  - Updated deployment protocols
  - Location-specific updates to environmental analysis conducted as part of first EUP.

California State Approvals:

- Research authorization route possible.
- Research authorization route should take only a few weeks from submission.
- State decision would likely happen after the federal decision.

Timeline for Western States EUP

7 months statutory

Anticipated Project Window

Mar 2021

Submission of EUP amendment to include CA

Estimated August 2021

EUP publishes in Federal Register, 30 days public comment period opens

Nov 2021

PRIA deadline for federal EUP approval

Dec 2021 (Estimated)

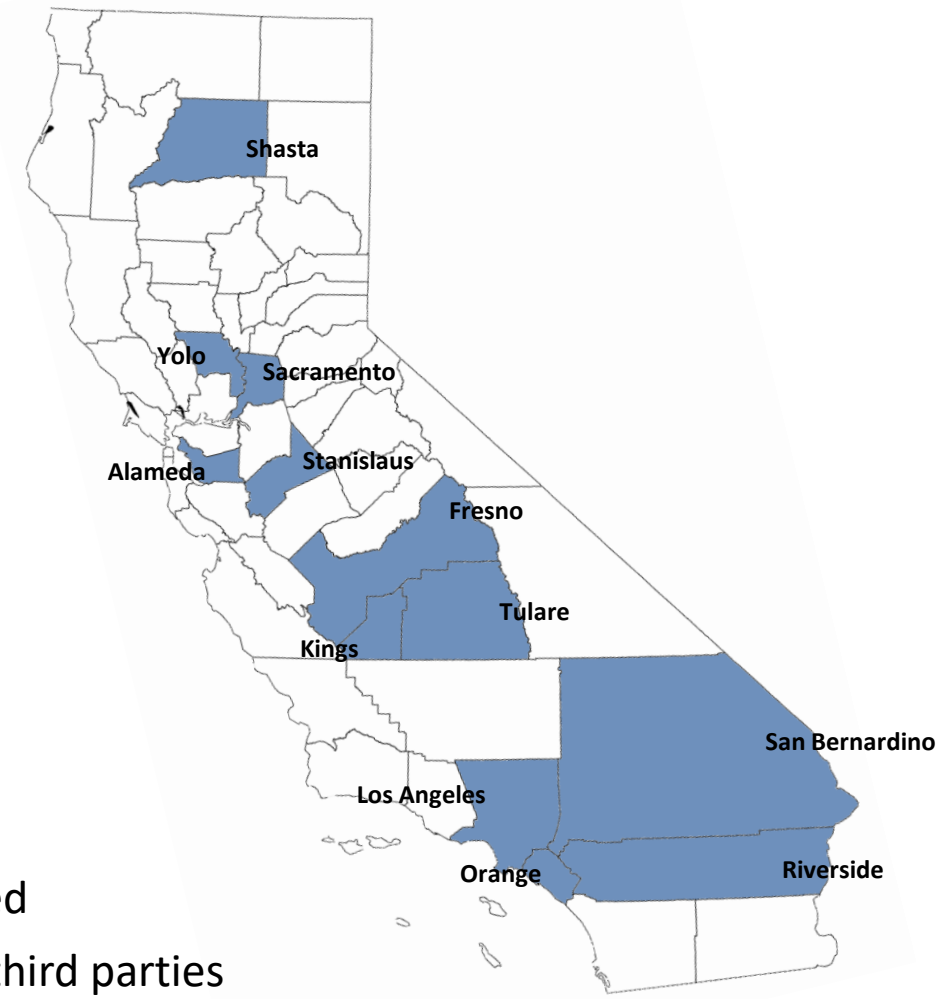
DPR make decision on project application

May 2022

March 2023

Federal Register Notice of Receipt ("Public Comment Period")

- Name of the pesticide (incl active ingredient)
- Name of the submitter
- Purpose of the EUP (incl use patterns)
- Maximum application rate and use site
- Maximum number of treated acres requested
- Duration of EUP
- Location (county) of sites
- Statement soliciting comments from any interested persons regarding the application



30-day Public Comment Period

- Oxitec has no input into comment responses that EPA generates
- Messaging from Districts or responses to inbounds can be standardized
- Comments are appreciated by EPA and can be actively solicited from third parties
- Public comment period can be extended by 30 days subject to an EPA decision

Oxitec's EUP Pilot Projects – Designed Hand-in-Hand with EPA, Collaborators

Project Design Elements

1. Single-point releases (households)
2. Multi-point releases (neighborhoods)
3. Mark-Release-Recapture
4. Trapping offspring to evaluate efficacy
5. Replicated and compared to untreated areas
6. Anticipated duration - single mosquito season

Evaluation Elements

1. Male flight range and longevity
2. % kill of female mosquitoes
3. % of the wild population treated
4. Duration of effect (residual activity)
5. Evaluation of natural breeding sites

Scale and Locations still TBD

- The proposed EUP is flexible enough to permit projects of small to larger deployments (up to 100 acre plots)
- Pilots will not be possible in all districts, but we will endeavour to work closely with all to generate a robust evaluation program.

Delivering Positive Impact

Oxitec Media Plan

- Offering exclusive story to top-tier news outlet
- Likely week of August 9
  - Distribute Oxitec press release broadly – will share with MVCAC
  - Post on social media
  - Launch CA webpage on Oxitec website

- The 10 MVCDs that signed onto the EUP are not listed by name in the press release, but they might receive media inquiries or questions from community members/stakeholders
  - MVCAC provided talking points, FAQ, outreach template, and support letters on MVCAC website (Member Resources section)
  - Oxitec factsheet, FAQ, and Powerpoints are also on the MVCAC website
  - If you need additional information/media support, please contact Lisa Yarbrough at lyarbrough@ka-pow.com

- If you receive media inquiries that you would like to refer to Oxitec, please ask the reporter to call 202-792-3080 or email press@oxitec.com

Update on Oxitec's Stakeholder Outreach

- We have been reaching out to key stakeholders/ will increase when public comment period opens.
  - Legislators
  - Environmental groups, beekeepers, butterfly conservationists
  - Public health groups
  - Mosquito control associations
  - Academics/researchers
  - Veterinarians

- Leveraging support from Florida project.
  - Letter of support from Key West Butterfly & Nature Conservatory
  - Local beekeepers
  - Veterinary Specialist & Fellow at the Royal Society of Medicine

- Please let us know if there are groups/individuals you think we should talk to.

- Please reach out to stakeholders in your community to let them know about the public comment period and encourage them to submit a letter.
  - Having support letters is helpful.
  - Opposition will likely be loud / significant number of form letters.

Communications and Outreach for California EUP

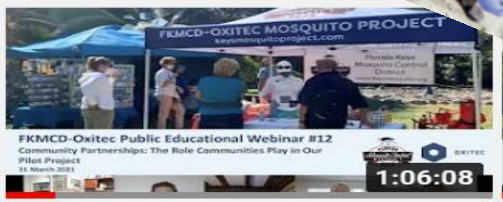
Communications, Public Outreach, and Resources

We invite you to visit our website dedicated to the Florida Keys project keysmosquitoproject.com

Project to Control Disease-Carrying Mosquitoes Kicks...
53 views • 3 days ago

FKMCD - #Oxitec Mosquito Project Update: Emergenc...
2.1K views • 1 week ago

FKMCD - #Oxitec Public Educational Webinar #13
64 views • 3 weeks ago



FKMCD - #Oxitec Public Educational Webinar #12
48 views • 1 month ago

FKMCD - #Oxitec Public Educational Webinar #11
82 views • 2 months ago

FAQ About Oxitec's Mosquitoes

What are the risks if a female Oxitec mosquito bites someone?

0%.

There will be no Oxitec female mosquitoes and thus no risk.

We release only male mosquitoes because the self-limiting gene prevents females from surviving in the pre-release production stage.

Oxitec male mosquitoes are safe and non-toxic.

Are self-limiting mosquitoes an environmentally sustainable control tool?

Yes.

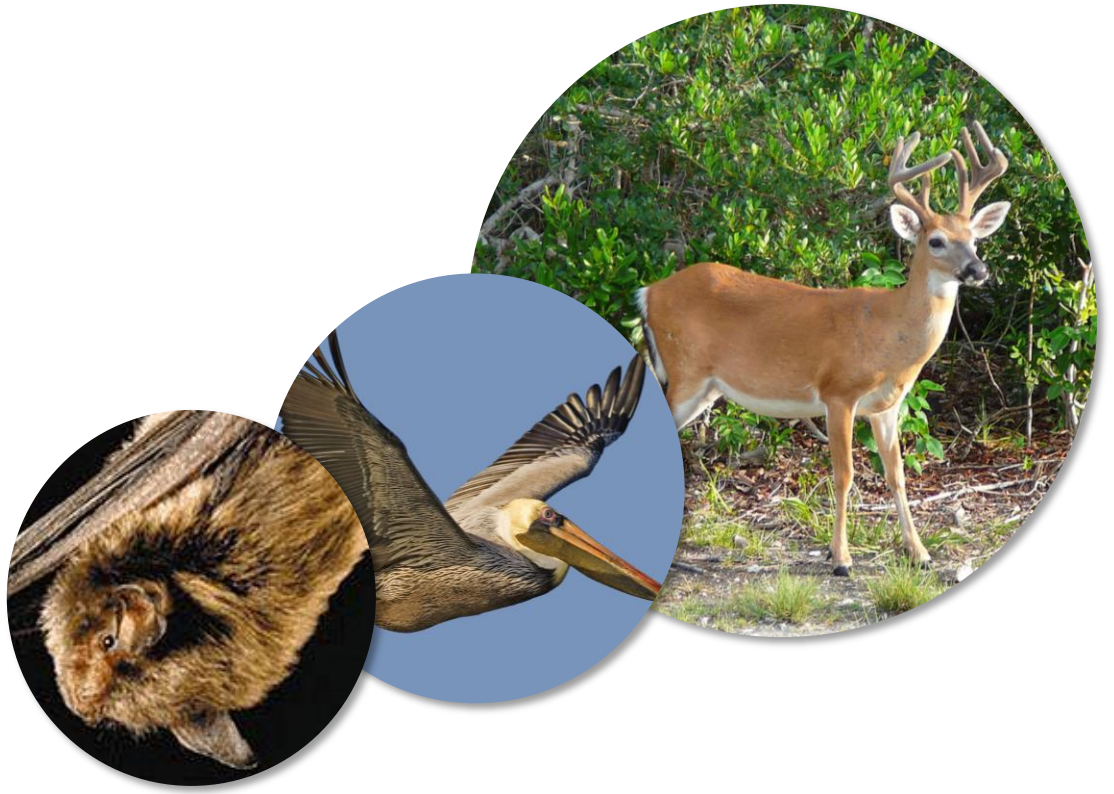
Self-limiting mosquitoes work by finding and mating with invasive pest *Aedes aegypti* females and the suppression effect is specifically targeted to this species of mosquito. This specificity leaves non-target species, such as bees and butterflies, unharmed.

FAQ About Oxitec's Mosquitoes

Will Oxitec mosquitoes harm birds, bees, bats, fish, turtles, or other wildlife?

No.

The EPA and State of Florida confirmed this, and Oxitec has carried out exhaustive research (part of submissions made available to the EPA) on this topic.



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Is Oxitec going to be using tetracycline for US deployments?

No.

Tetracycline is only used in our facilities in the UK. The *total* amount used to produce the eggs in the UK is less than three normal therapeutic doses in humans – *for the entire 2-year Florida project*. This is roughly equivalent to the contents of a single sugar packet.

Will Oxitec's mosquitoes replace insecticides and other control measures?

No.

Insecticides are a valuable option available to mosquito control authorities but they have limitations. Over-reliance has led to the development of resistance.

Integrated pest management approaches rely on a suite of technologies. Oxitec mosquitoes are intended to be one of these valuable tools and can offer the potential to reverse insecticide resistance.

Will this technology be expensive compared to others?

No.

The benefits of egg-releases and in-built sexing offer dramatic reductions in production and delivery costs. This will ensure affordability and in conjunction with the benefits of improved and sustainable mosquito management at cost-effective levels.