FKMCD-Oxitec Public Educational Webinar #3

Developing Partnerships With Communities

4 August 2020

FLORIDA Mosquito Control DISTRICT KEYS

OXITEC

Introductions – Panelists With You Today

Andrea Leal
Executive Director
FKMCD

Chad Huff
Public Education & Information Officer
FKMCD

Kevin Gorman
Head of Field Operations
Oxitec

Meredith Fensom
Head of Public Affairs
Oxitec

FKMCD-Oxitec Public Educational Webinar Series

FKMCD and Oxitec are hosting a series of public educational webinars to share information with residents of the Florida Keys and provide forums to answer questions.

- All webinars are open to everyone
- All webinars are recorded and made available for everyone after the event
- All questions will be answered (some in batches if questions are similar)
- If time runs out, we will accept questions in writing via florida@oxitec.com
- Questions and answers will be published in writing after the event with external or related online resources/references

Upcoming Events:

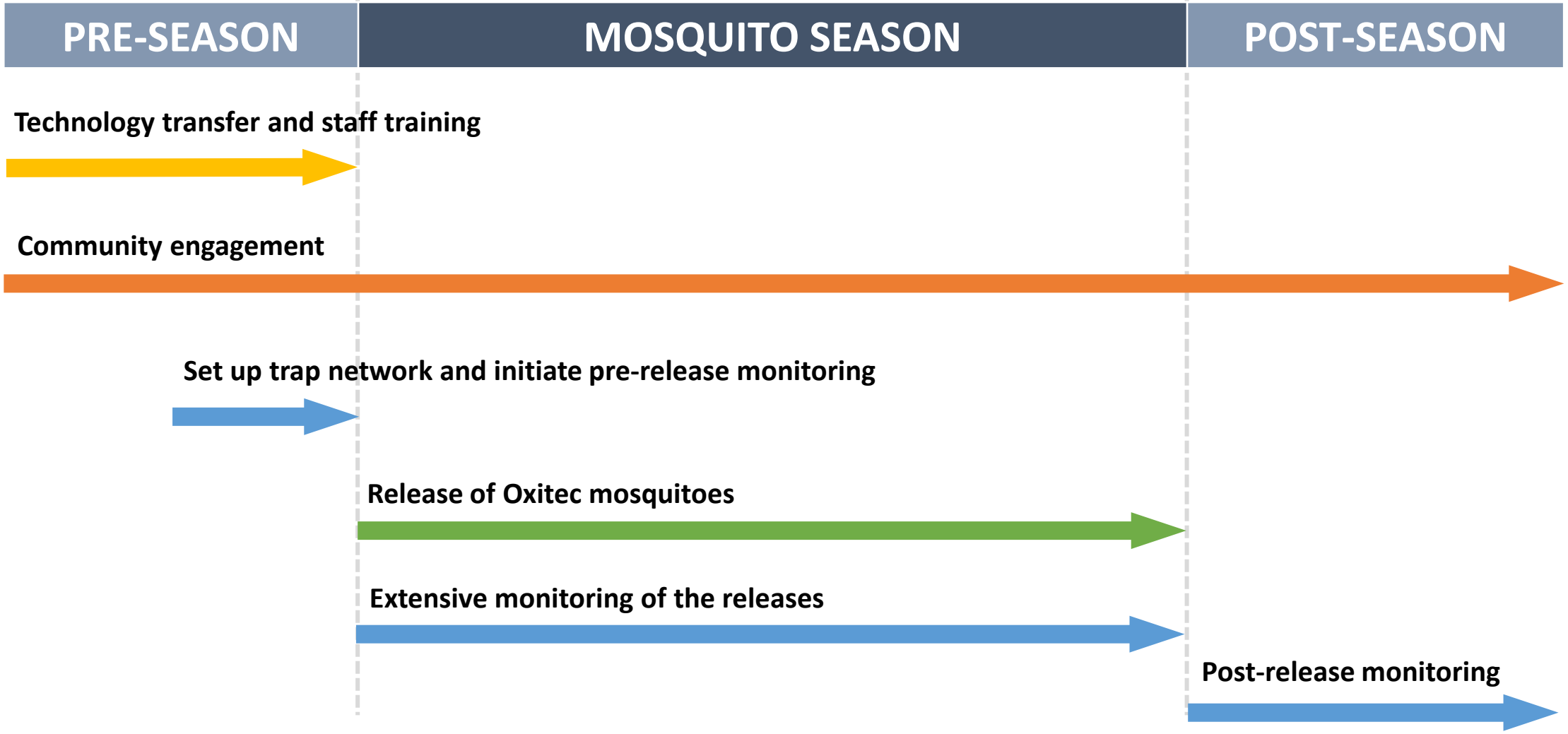
Webinar 4: Oxitec's Vector Control Performance	Tuesday, August 11th, 5:00 – 6:00 p.m. ET
Webinar 5: Assessment, Oversight, and Validation	Monday, August 17th, 5:00 – 6:00 p.m. ET

Welcome to Webinar #3 in this 5-part series!

Today's Agenda:

- Building partnerships with communities
  - Strong project partnership
  - Defining stakeholders
  - Listening and learning
  - Sharing and informing
  - Empowering and partnering
  - Continued feedback and dialogue
  - Evaluating and improving
- Building blocks for success
- FKMCD-Oxitec intentions for proposed Florida Keys project
- FAQs
- Your Questions

Florida Keys Pilot Project Timeline



Building Partnerships with Communities

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Our Goal:

Develop a genuine, trust-based partnership with the Keys community

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Context: Continuing 10+ Years of Public Engagement in the Keys

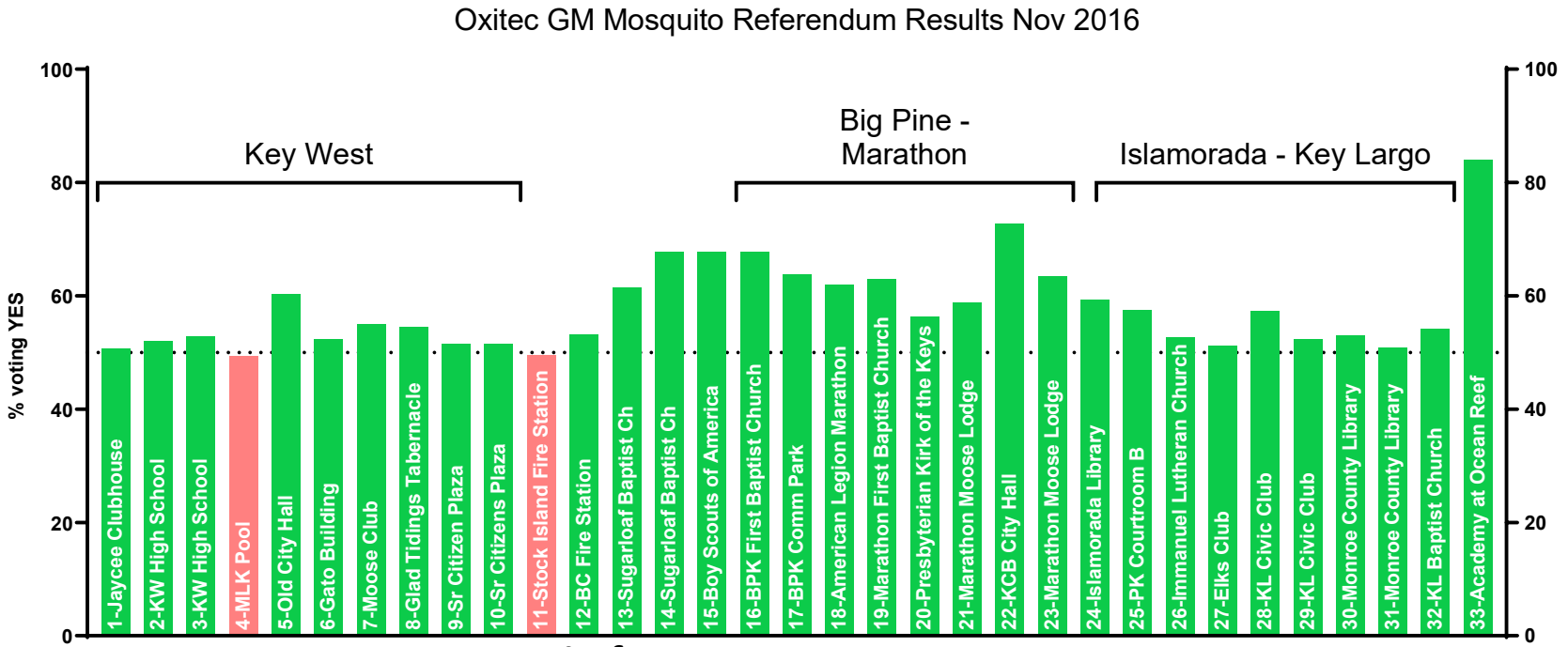
Working together, FKMCD and Oxitec will continue engaging, listening and sharing with communities in the Florida Keys.

Community Approach:

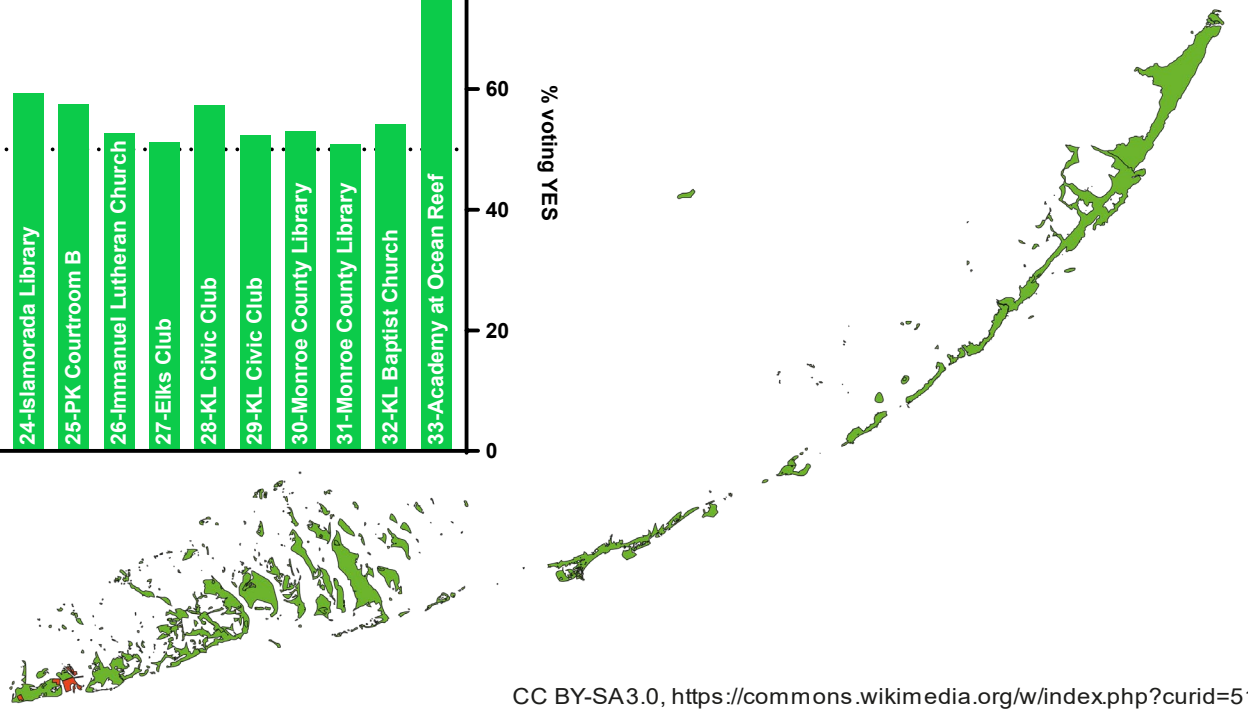
- Full coordination between FKMCD and Oxitec
- Transparency and robust information sharing
- Listening and learning from communities and stakeholders
- Inclusive engagement programs specific to community members and groups
- Broad view of stakeholders – citizens, communities, businesses, experts
- Multiple avenues for anyone to contact and engage

Context: Broad Base of Support in Keys

"Are you in favor of the Florida Keys Mosquito Control District conducting an effectiveness trial in Monroe County, Florida, using genetically modified mosquitoes to suppress an invasive mosquito that carries mosquito-borne diseases?"



40,544 votes cast: **23,422 in favor.**



Context: Decade of Pioneering Experience, Lessons & Proof-Points

- Published **peak suppression performance of wild-type *Aedes aegypti* ranging from 92% to 96%** as compared to control sites (see below)
- **1Bn+ Oxitec mosquitoes produced for release**
- Deployments ranged from small-scale to **coverage of 65K people**
- **Successful suppression** of target *Aedes aegypti* populations in range of deployments
- Demonstrated **safe with no lasting impact on the environment, humans or animals**
- **Multiple pilot approvals** from biosafety regulators

SELECTED DEPLOYMENT PROGRAMS, 2010 – 2021

***Aedes aegypti* peak suppression measured in each program compared to control sites**

1st GENERATION *AEDES AEGYPTI* DEPLOYMENT PROGRAMS

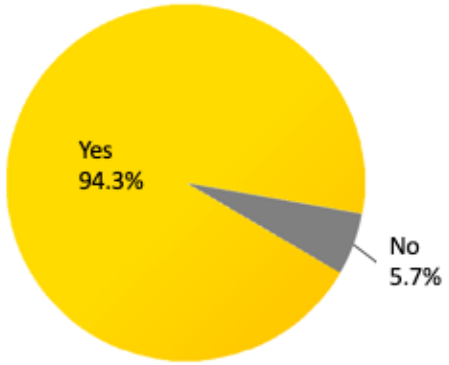
2nd GENERATION *AEDES AEGYPTI* DEPLOYMENT PROGRAMS

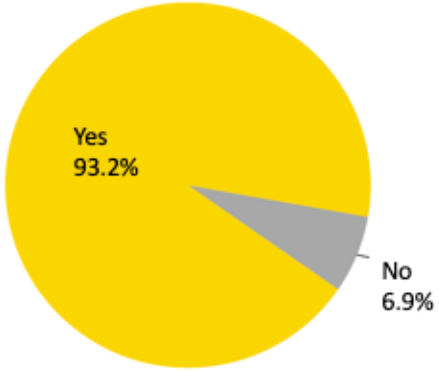
Context: Successful Track Record of Building Partnerships w/ Communities

Brazil Survey on Oxitec Mosquitoes (2019)

94%

would like the *Friendly* project to continue





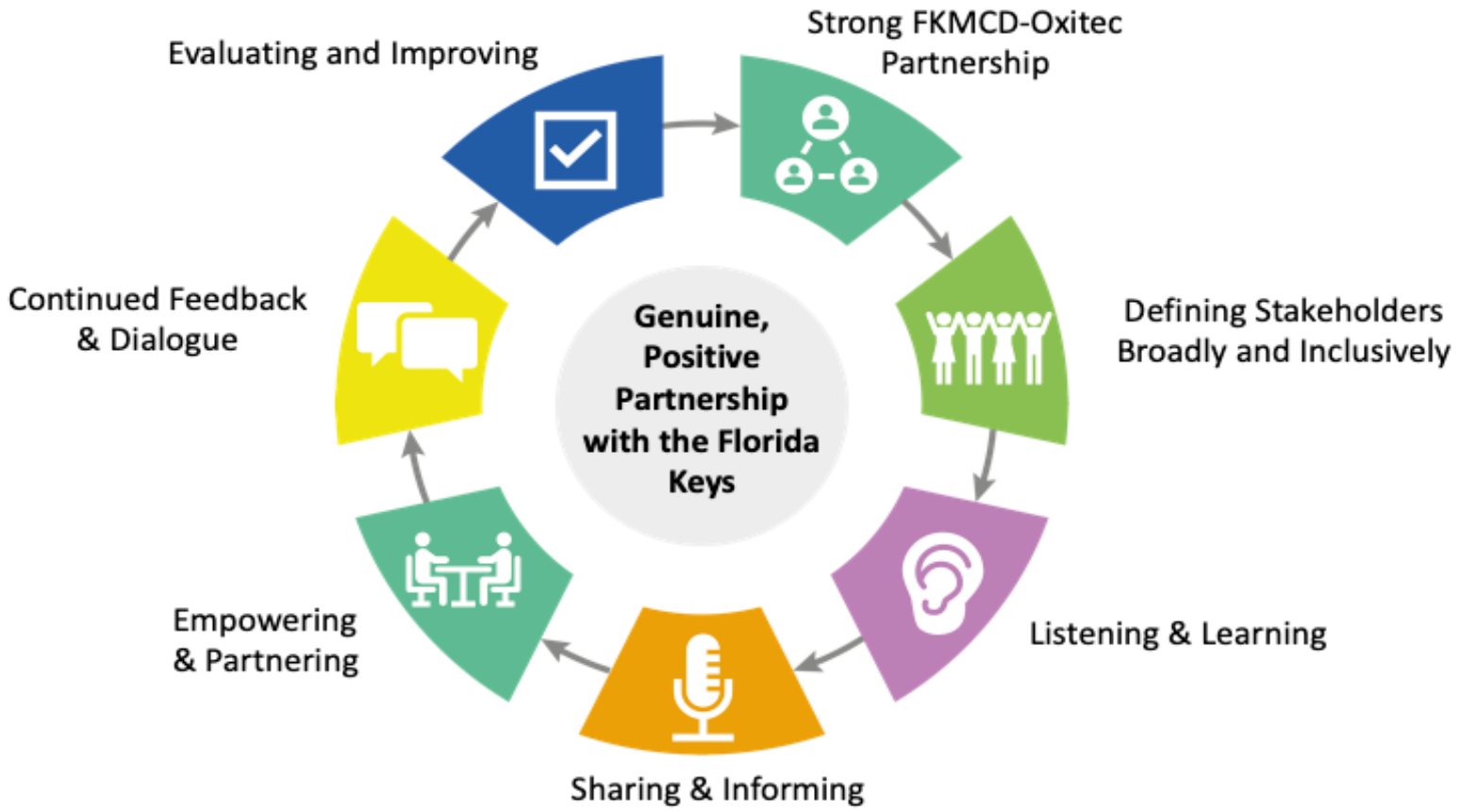
93%

would like to see the project expanded

A public survey of 1,000 people carried out in September 2019 in the city of Indaiatuba.

Our Approach to Public Engagement in the Keys

Our Process



Our Building Blocks

- Scientific Excellence
- Transparency
- Independent Validation

Define Stakeholders Broadly & Inclusively

Residents | Communities | Businesses | Non-profits | Educators | Local Governments | Media

Inclusive of age, gender, ethnicity, economic background

Listening & Learning

Public Meetings | House-to-house | Questionnaires | Q&As | Social Media

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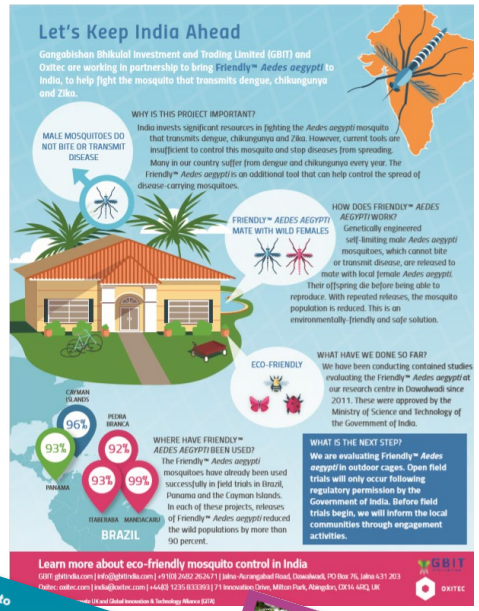
Sharing and Informing

Door-to-Door | Full Transparency | Virtual & In-person Engagement | Open House Days | Meet the Mosquitoes | Science Demonstrations | Seminars | Publications | Webinars

Sharing & Informing



Empowering & Partnering

Community Integration | Consultations on Operations | Timing Considerations

Continued Feedback & Dialogue

"Always Available“ | Routine Dialogue | Public Meetings | House-to-house Engagements | Radio | Social Media | Surveys | etc.

Evaluating & Improving

Feedback Sessions | Meetings | Independent Analysis

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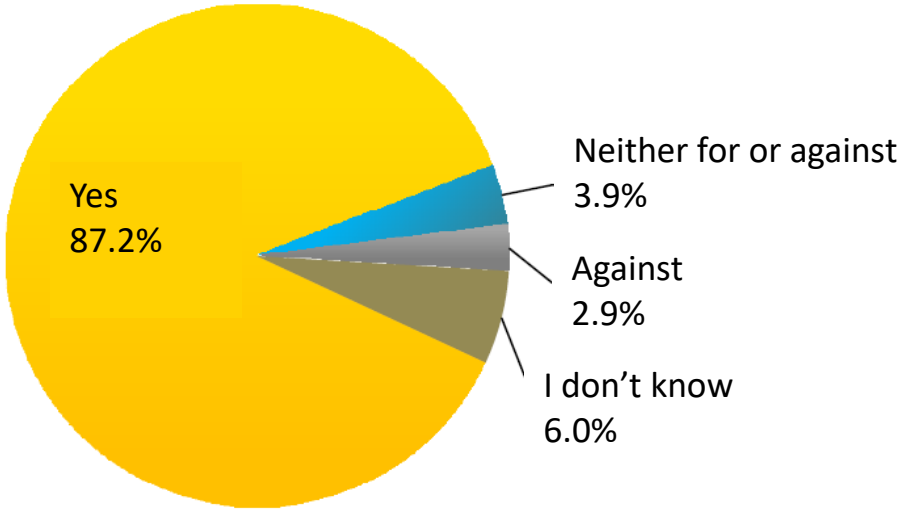
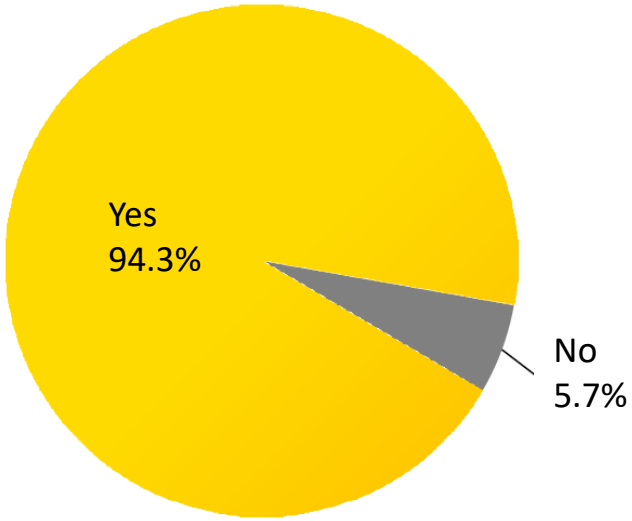
Oxitec's OX5034 Mosquito Receives High Levels of Support

A public survey carried out in September 2019 in the Brazilian city of Indaiatuba, where Oxitec's 2nd generation '*Aedes do Bem*' had been released for 1 year, showed exceptionally high levels of support for the technology.



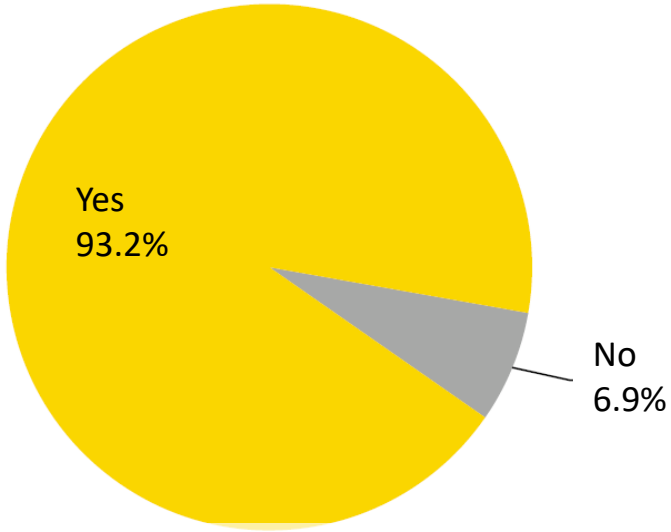
87%

fully support the *Aedes do Bem!™* project



94%

would like the *Aedes do Bem!™* project to continue



93%

would like to see the project extended to other neighbourhoods

METHOD: Interviews
WHO: >16 years old citizens of Indaiatuba, SP
HOW MANY: 1000 interviews
DISTRICTS: 17
WHEN: September 2019

Building Blocks for Supporting Strong Partnerships with Communities

Scientific Excellence | Transparency | Independent Validation

Building Blocks: Scientific Excellence

Extensive academic review | 100+ scientific publications

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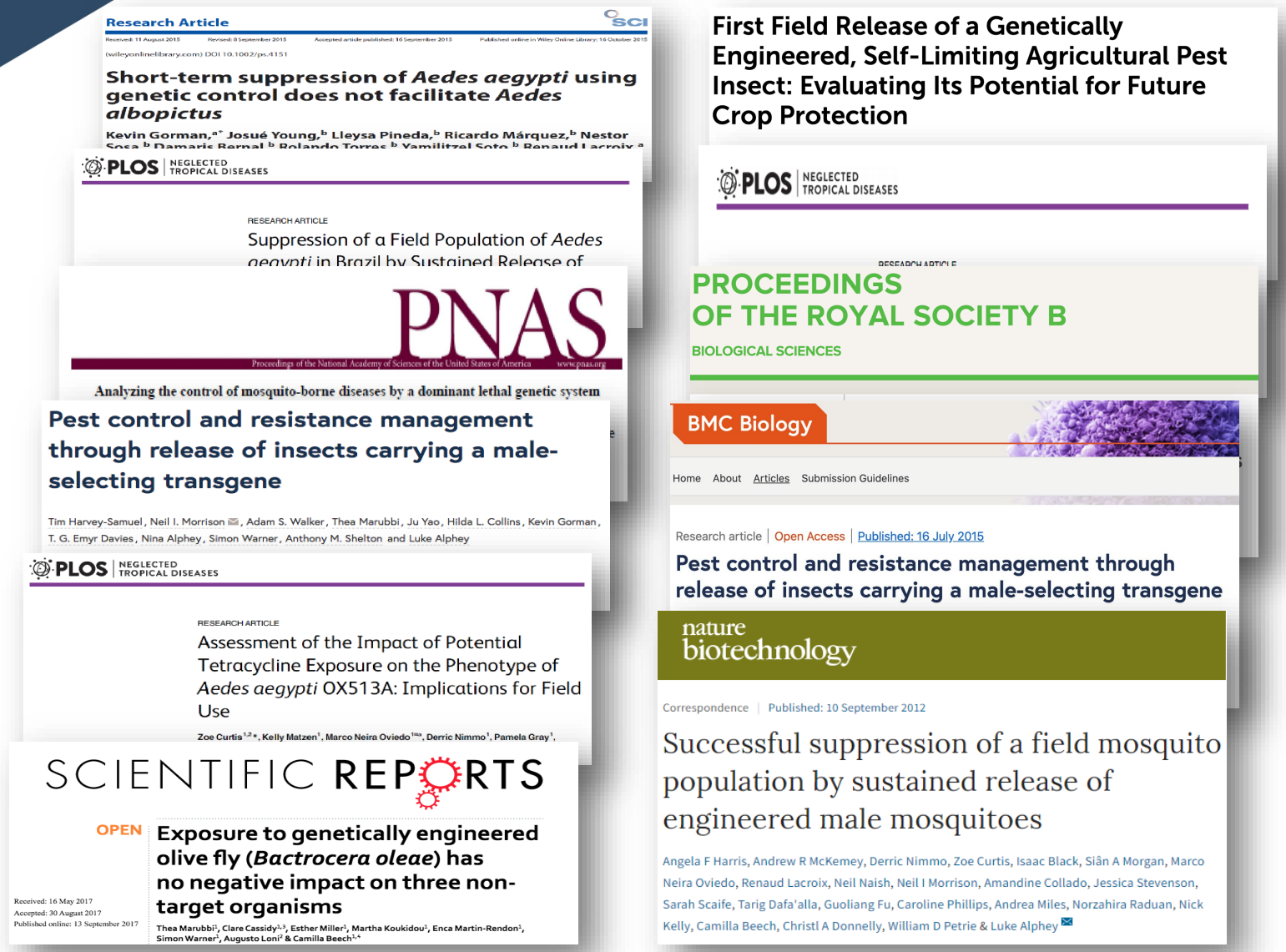
Building Blocks: Scientific Excellence



100+ scientific publications peer-reviewed by independent experts:

- ✓ Effective performance
- ✓ No impact on non-target organisms
- ✓ Full safety
- ✓ No long-term persistence
- ✓ No evidence for species niche replacement
- ✓ Potential to dilute insecticide resistance

Building Blocks: Transparency

Unprecedented information sharing | Accessible Publications | Available to community 24/7

Building Blocks: External Validation

Regulatory oversight | Independent Advisory Board | Independent scientific validation

We Continue to Invite Comprehensive Independent Reviews: Local Stakeholders

Independent Advisory Board Members

Bob Eadie

Administrator and Health Officer

Monroe County Department of Health

Member, Project Independent Advisory Board

Dr Douglas Mader

Veterinary Specialist

Marathon Veterinary Hospital

Fellow, Royal Society of Medicine

Member, Project Independent Advisory Board

Dr Jorge Rey

Director and Professor

University of Florida – IFAS Florida Medical Entomology Laboratory

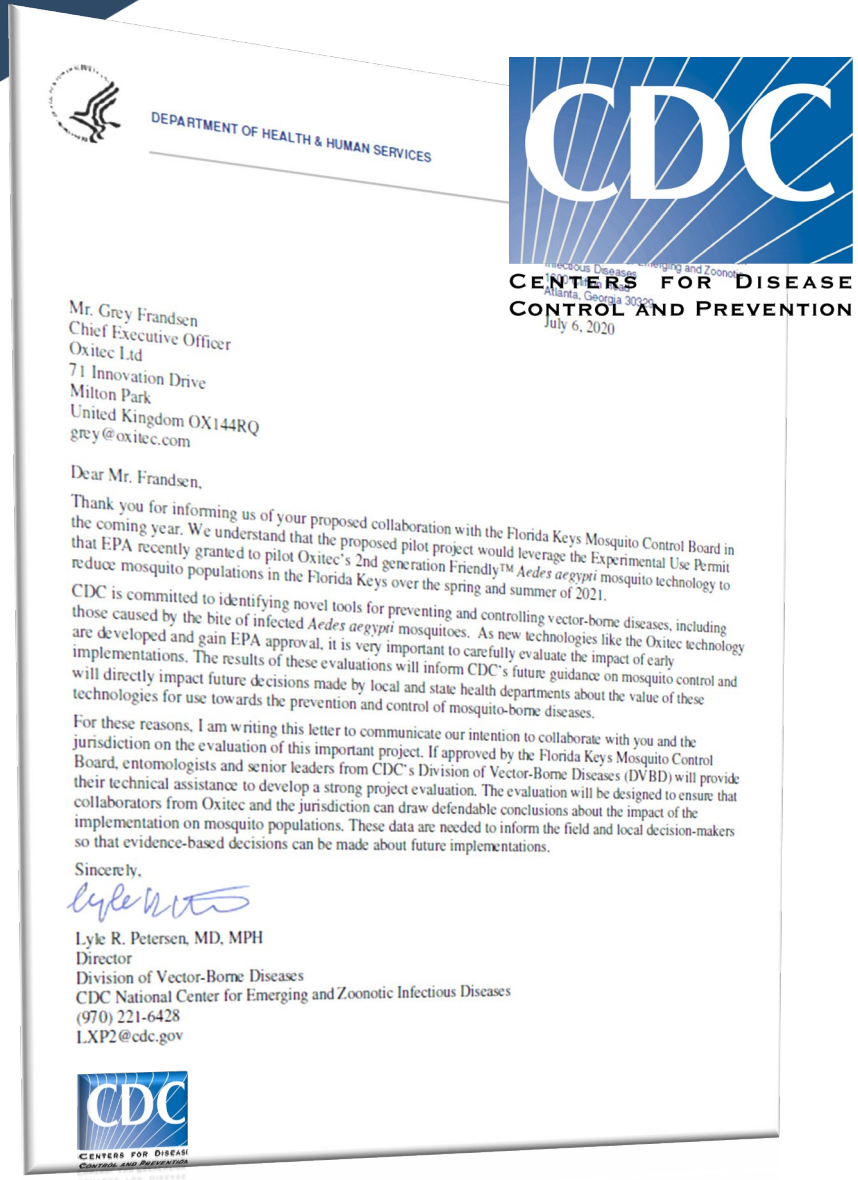
Member, Project Independent Advisory Board

External Validation and Independent Oversight of this Project

EUP also approved by:

- ✓ Bureau of Inspection and Incident Response (BIIR)
- ✓ Bureau of Agricultural Environmental Laboratories (BAEL)
- ✓ Bureau of Chemical Residue Laboratories (BCRL)
- ✓ Bureau of Scientific Evaluation and Technical Assistance, Scientific Evaluation Section (SES)

We Continue to Invite Comprehensive Independent Reviews



DEPARTMENT OF HEALTH & HUMAN SERVICES

CENTERS FOR DISEASE CONTROL AND PREVENTION

Mr. Grey Frandsen
Chief Executive Officer
Oxitec Ltd
71 Innovation Drive
Milton Park
United Kingdom OX144RQ
grey@oxitec.com

July 6, 2020

Dear Mr. Frandsen,

Thank you for informing us of your proposed collaboration with the Florida Keys Mosquito Control Board in the coming year. We understand that the proposed pilot project would leverage the Experimental Use Permit that EPA recently granted to pilot Oxitec's 2nd generation Friendly™ *Aedes aegypti* mosquito technology to reduce mosquito populations in the Florida Keys over the spring and summer of 2021.

CDC is committed to identifying novel tools for preventing and controlling vector-borne diseases, including those caused by the bite of infected *Aedes aegypti* mosquitoes. As new technologies like the Oxitec technology are developed and gain EPA approval, it is very important to carefully evaluate the impact of early implementations. The results of these evaluations will inform CDC's future guidance on mosquito control and will directly impact future decisions made by local and state health departments about the value of these technologies for use towards the prevention and control of mosquito-borne diseases.

For these reasons, I am writing this letter to communicate our intention to collaborate with you and the jurisdiction on the evaluation of this important project. If approved by the Florida Keys Mosquito Control Board, entomologists and senior leaders from CDC's Division of Vector-Borne Diseases (DVBD) will provide their technical assistance to develop a strong project evaluation. The evaluation will be designed to ensure that collaborators from Oxitec and the jurisdiction can draw defendable conclusions about the impact of the implementation on mosquito populations. These data are needed to inform the field and local decision-makers so that evidence-based decisions can be made about future implementations.

Sincerely,

Lyle R. Petersen, MD, MPH
Director
Division of Vector-Borne Diseases
CDC National Center for Emerging and Zoonotic Infectious Diseases
(970) 221-6428
LXP2@cdc.gov

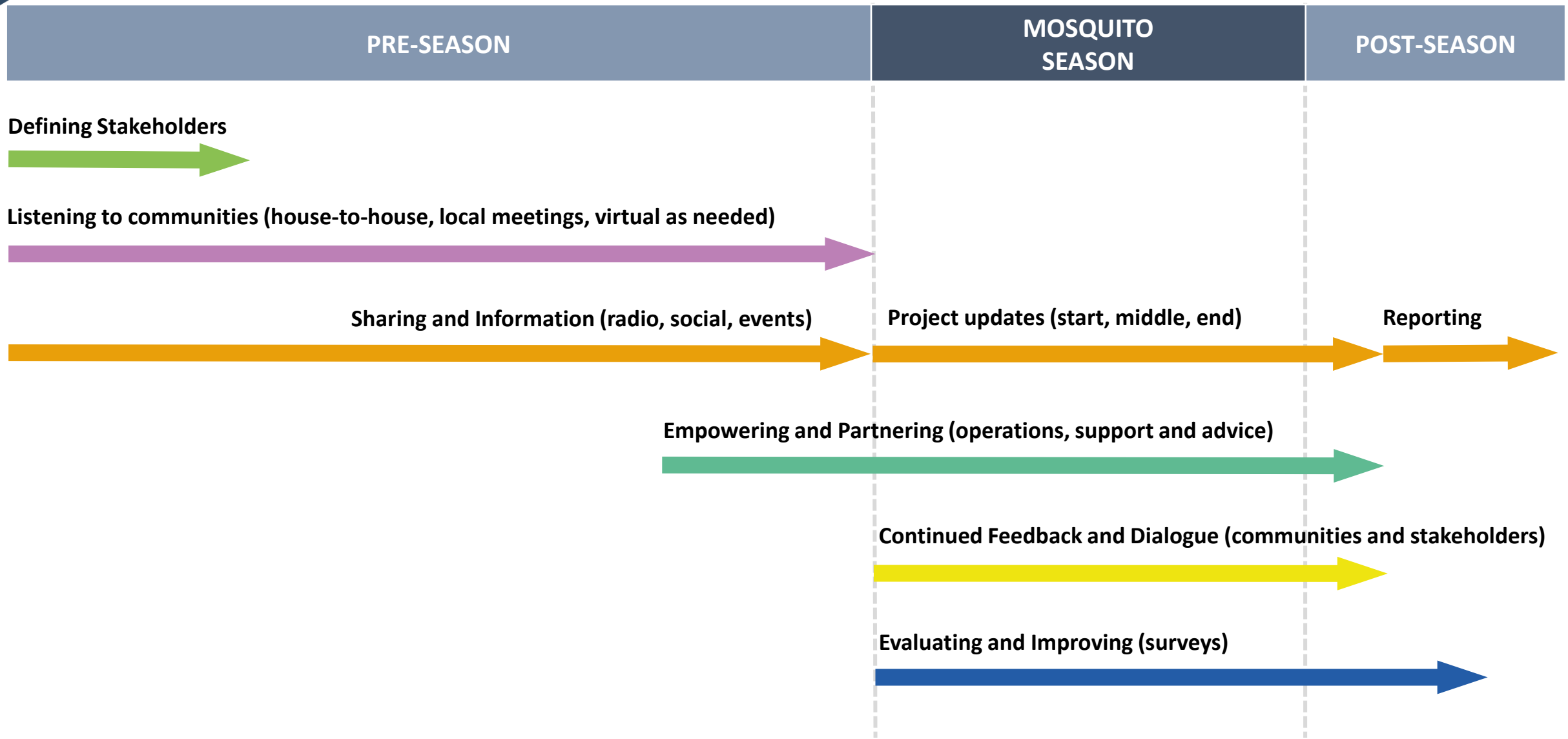
CDC confirms participation:

"…I am writing this letter to communicate our intention to collaborate with you and the jurisdiction on the evaluation of this important project.

*…**entomologists and senior leaders from CDC's Division of Vector-Borne Diseases (DVBD) will provide their technical assistance to develop a strong project evaluation."***

Lyle Petersen, MD, MPH
Director of Division of Vector-Borne Diseases
Centers for Disease Control and Prevention

Florida Keys Community Engagement Timeline



Question and Answers

Any and all questions on this evening's topics are welcome!

(If we run out of time tonight, email florida@oxitec.com and we will attempt to answer your question if it isn't included in the growing FAQ or post-event summary we publish online)

Conclusion

THANK YOU!

A summary of this event, as well as more Q&As, resources, facts, and background materials are available at oxitec.com/florida.