

STRATEGIC PLAN WORKSHOP

APRIL 26, 2022



2022 CALENDAR

January-2022						
SUN	MON	TUES	WED	THUR	FRI	SAT
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

March-2022						
SUN	MON	TUES	WED	THUR	FRI	SAT
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

May-2022						
SUN	MON	TUES	WED	THUR	FRI	SAT
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15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

July-2022						
SUN	MON	TUES	WED	THUR	FRI	SAT
					1	2
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10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

September-2022						
SUN	MON	TUES	WED	THUR	FRI	SAT
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18	19	20	21	22	23	24
25	26	27	28	29	30	

November-2022						
SUN	MON	TUES	WED	THUR	FRI	SAT
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20	21	22	23	24	25	26
27	28	29	30			

February-2022						
SUN	MON	TUES	WED	THUR	FRI	SAT
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13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

April-2022						
SUN	MON	TUES	WED	THUR	FRI	SAT
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24	25	26	27	28	29	30

June-2022						
SUN	MON	TUES	WED	THUR	FRI	SAT
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19	20	21	22	23	24	25
26	27	28	29	30		

August-2022						
SUN	MON	TUES	WED	THUR	FRI	SAT
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7	8	9	10	11	12	13
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21	22	23	24	25	26	27
28	29	30	31			

October-2022						
SUN	MON	TUES	WED	THUR	FRI	SAT
						1
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16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

December-2022						
SUN	MON	TUES	WED	THUR	FRI	SAT
				1	2	3
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18	19	20	21	22	23	24
25	26	27	28	29	30	31

Holidays
 Meetings
 Conferences

Strategic Plan Workshop

Florida Keys Mosquito Control District
Marathon Office
503 107th Street
Marathon, FL 33050

April 26, 2022
2:00 pm (approximate)

- 1. Call to Order**
- 2. Roll Call**
- 3. Approval of Agenda**
- 4. Purpose of the Workshop:** Chairman Goodman announces the purpose of this workshop is to review the 3-year Strategic Plan.
- 5. Good of the Order**
- 6. Meeting Adjourned**



Strategic Plan 2022-2025



Mission Statement

“To conduct all District operations with efficiency and environmental sensitivity while protecting the public from health threats and nuisance issues that impact the local economy.”



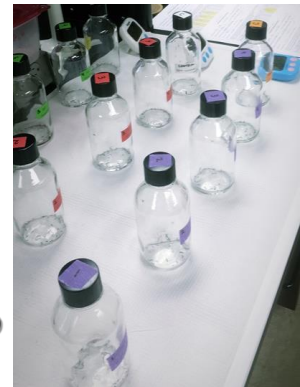
Priority Areas


- Pesticide Resistance
 - Domestic Mosquito Control Practices
 - Reduce Carbon Footprint
- Public Awareness of Mosquito Control Practices
 - Operational Safety Practices
 - Use of Technology to Maximize Resources
 - Employee Retention and Health Initiatives
 - Capital Projects



Pesticide Resistance

- Completed Goals:
 - ✓ Plan in place for testing adulticides and larvicides
 - ✓ Vendor contacts in place for new products
 - ✓ First maps of populations completed
- Goals:
 - Resistance testing of current adulticides in use at FKMCD
 - Compare resistant populations with known susceptibles
 - Bottle bioassays with new products
 - Cage studies for those showing potential resistance in bottle bioassays
 - Resistance testing of current larvicides in use at FKMCD



		Key West			Marathon			Key Largo		
		<i>Aedes aegypti</i>	<i>Culex quinqx</i>	<i>Aedes taenio</i>	<i>Aedes aegypti</i>	<i>Culex quinqx</i>	<i>Aedes taenio</i>	<i>Aedes aegypti</i>	<i>Culex quinqx</i>	<i>Aedes taenio</i>
	Permethrin	Resistant	Resistant	Susceptible	Resistant	Resistant	Susceptible	Becoming Resistant	Becoming Resistant	Susceptible
	Malathion	Susceptible	Resistant	Susceptible	Susceptible	Susceptible	Susceptible	Susceptible	Resistant	Susceptible
	Sumethrin	Becoming Resistant	Becoming Resistant	Susceptible	Resistant	Resistant	Susceptible	Susceptible	Becoming Resistant	Susceptible
	Naled	Susceptible	Susceptible	Susceptible	Susceptible	Susceptible	Susceptible	Susceptible	Susceptible	Susceptible
	BTI	Susceptible	Susceptible	Susceptible	Susceptible	Susceptible	Susceptible	Susceptible	Susceptible	Susceptible
	BS	Susceptible	Susceptible	Susceptible	Susceptible	Resistant	Susceptible	Susceptible	Susceptible	Susceptible
	Methoprene	Becoming Resistant	Susceptible	Susceptible	Becoming Resistant	Susceptible	Susceptible	Becoming Resistant	Susceptible	Susceptible
	Spinosad	Susceptible	Susceptible	Susceptible	Susceptible	Susceptible	Susceptible	Susceptible	Susceptible	Susceptible

Susceptible
 Becoming Resistant
 Resistant


Domestic Mosquito Control Practices

- **Completed Goals:**
 - ✓ Initial testing of *Wolbachia*
 - ✓ Hire and train new field staff
 - ✓ Ground WDG trials
 - ✓ Implement operational ground WDG treatments
 - ✓ Barrier treatment study
 - ✓ Initial testing of Oxitec genetically-modified male mosquitoes



Domestic Mosquito Control Practices

- **Goals:**
 - **Develop plan for future *Wolbachia* trials**
 - Awaiting regulatory approval; timeframe unknown
 - Included \$100,000 in FY2021-2022 budget
 - **Complete continuing testing of 2nd Generation Oxitec mosquitoes**
 - Releases to occur no sooner than April 2022
 - No cost to FKMCD for current project
 - Goal: Suppression trial
 - **Re-evaluate inspector field areas for efficiency**
 - Ongoing; Increase in inspector house visits/week
 - No cost to FKMCD
 - **Identify potential transmission areas using larval density and population**
 - No initial costs, but potential chemical use increases
 - **Hotspot-Focused Control**
 - 3 Identified: 2 source reduction, 1 acoustic larvicide traps



Reduce Carbon Footprint

- **Completed Goals:**
 - ✓ Vehicle replacement plan
 - ✓ Begin replacement of gas-powered fog machines
 - ✓ Carbon footprint calculator
 - ✓ Paperless administration where possible
- **Goals:**
 - Increase use of electric fog machines
 - Renewable energy at facilities



Public Awareness of Mosquito Control Practices

• Goals Completed:

- ✓ Smart Phone app
- ✓ Quarterly sweeps
- ✓ Update Homeowner's Guide DVD
- ✓ Develop guest lecture centered around *Aedes aegypti* control



Public Awareness of Mosquito Control Practices

• Goals:

- Increase overall awareness
 - Increase social media circulation w/ video and compelling content
 - Better leverage FKMCD branding: 'fight the bite, dump the water'
 - More frequent, targeted public speaking engagements
 - Establish FKMCD 'Open House' at Marathon Airport
- Increase traffic on FKMCD website
 - Begin hosting website internally (reliability/tracking)
 - Revise content and improve navigation and notification subscription
 - Install interactive educational section



Public Awareness of Mosquito Control Practices

• Goals (cont.)

- **Research incentive-based program for homeowners**
 - To begin in next 3 years
 - Estimated costs: \$5,000
- **New curriculum for K – High School**
- **Keys-wide survey**
 - To be conducted in FY2022-2023; estimated \$15,000



Operational Safety Practices

• Completed Goals:

- ✓ Focus safety groups
- ✓ Monthly safety message
- ✓ Near-miss reporting program
- ✓ Building and vehicle inspection program
- ✓ Finalize all SOPs and train staff accordingly



Operational Safety Practices

- **Goals:**
 - **Develop and implement safety assessment tools**
 - **Reduce work-related injuries through safety training**
 - **Increase safety culture based on employee input**
 - **Develop remote learning methods for safety training**
 - **Conduct aircraft maintenance safety audit**
 - **To be completed in FY2021-2022; Estimated cost: \$8,000**
 - **Conduct aircraft flight safety audit**
 - **To be completed in FY2022-2023; Estimated cost: \$5,000**



Use of Technology to Maximize Resources

- **Goals Completed:**
 - ✓ **Use of trail cameras to gain efficiency**
 - ✓ **Use of GPS points in the field for targeted treatments**
 - ✓ **COA for UAV operations**
 - ✓ **Inspector training for UAV operations**
 - ✓ **BG Auto Counter cost/benefit analysis and purchasing plan completed**



Use of Technology to Maximize Resources

- **Goals:**

- Research remote tidal indicators
- **Gather information on efficiency of UAV program**
 - FY21-22: Contract work with Leading Edge (awaiting estimate)
 - FY22-23: Drone Equipment \$60,000, personnel \$200,000, support vehicle \$60,000
 - Watching current regulatory restrictions
- **Determine utilization of the BG Auto Counter**
 - Comparison underway between collections/landing rate counts
- **Develop mapping system w/alerts for inspectors and fog trucks**
 - FY2022-2023; cost TBD



Employee Retention and Health Initiatives

- **Completed Goals:**

- ✓ Evaluate benefits plan annually
- ✓ Coordinate the ITN for benefits package
- ✓ Revise District Policy Manual
- ✓ Salary range evaluation and policy

- **Goals:**

- Analyze annual evaluation process
- Review and assess benefits plan
- Salary evaluations completed every 3 years



Capital Projects

• Completed Goals:

- ✓ Fleet replacement plan completed
- ✓ Future funding of aircraft underway



Capital Projects

• Goals:

- Complete use analysis of H125 aircraft
- Surplus plan and implementation for aircraft
 - Jet Rangers: sale FY2021-2022 \$700,000
 - One airplane sale FY2021-2022 estimated \$500,000
 - Helicopter H125 acquired FY2023-2024 estimated \$4M
- Research night vision goggle usage possibilities
 - Estimated \$25,000/aircraft
- Replacement of aviation fuel farm
 - Cost TBD; FY2022-2023
 - Could give potential savings on cost due to bulk buying
- Research diesel fuel farm for support vehicles and generator
- Research potential database systems
- Hangar Roof replacement (FY23-24)

