

Malaria Situation in Belize



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RCM Meeting
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Belize

Population Estimate: 377,968

Surface Area:

8,867 sq. miles/ 22,966 sq. km

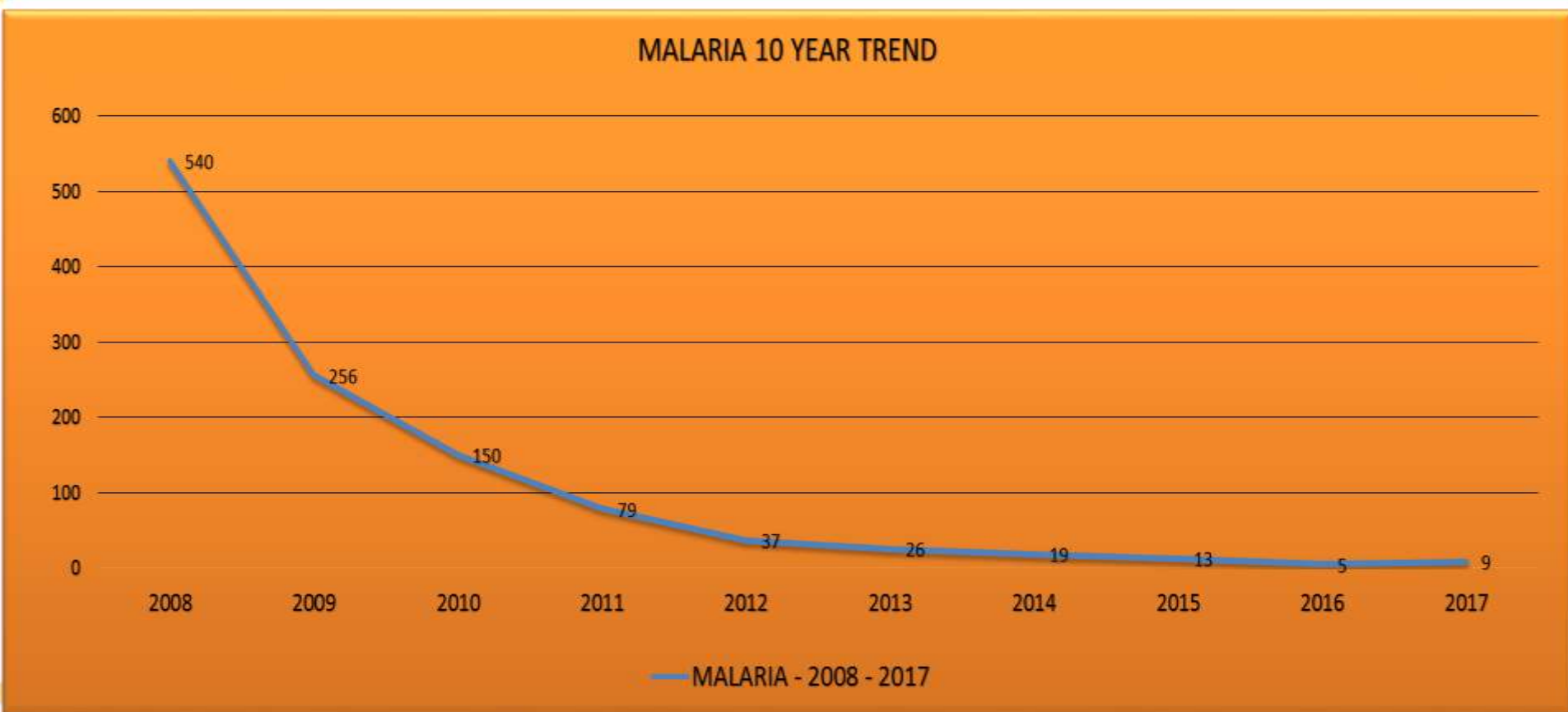
6 administrative divisions
(districts)

Vector Control

- Dengue, Zika, Chikungunya, Chagas, Malaria
- 62 personnel



Malaria 10 Year Trend



2017 Local Cases

Stann Creek District –

- Trio Village – 4 cases
- Silk Grass Village – 2 cases

Cayo District –

- Benque Viejo del Carmen Town – 1 case

2017 Imported Cases

Belize District - Belize City

- 1 case from Gabon - Africa
- 1 case from Puerto Cabezas – Nicaragua



2017 Malaria

2017 Malaria by District and Species				
District	SPECIES			
	FALCIP	VIVAX	MIXED	Total
Corozal	0	0	0	0
Orange Walk	0	0	0	0
Belize	1	1	0	2
Cayo	0	1	0	1
Stann Creek	0	4	2	6
Toledo	0	0	0	0
Total	1	6	2	9



2018 Malaria Cases

2018 Imported Cases

Stann Creek District –

- 1 case – Peten, Guatemala
- 1 case – Managua, Nicaragua

Belize District –

- 1 case – Puerto Cabezas, Nicaragua
- 1 case – Paramaribo, Suriname

2018 Local Cases

- NONE



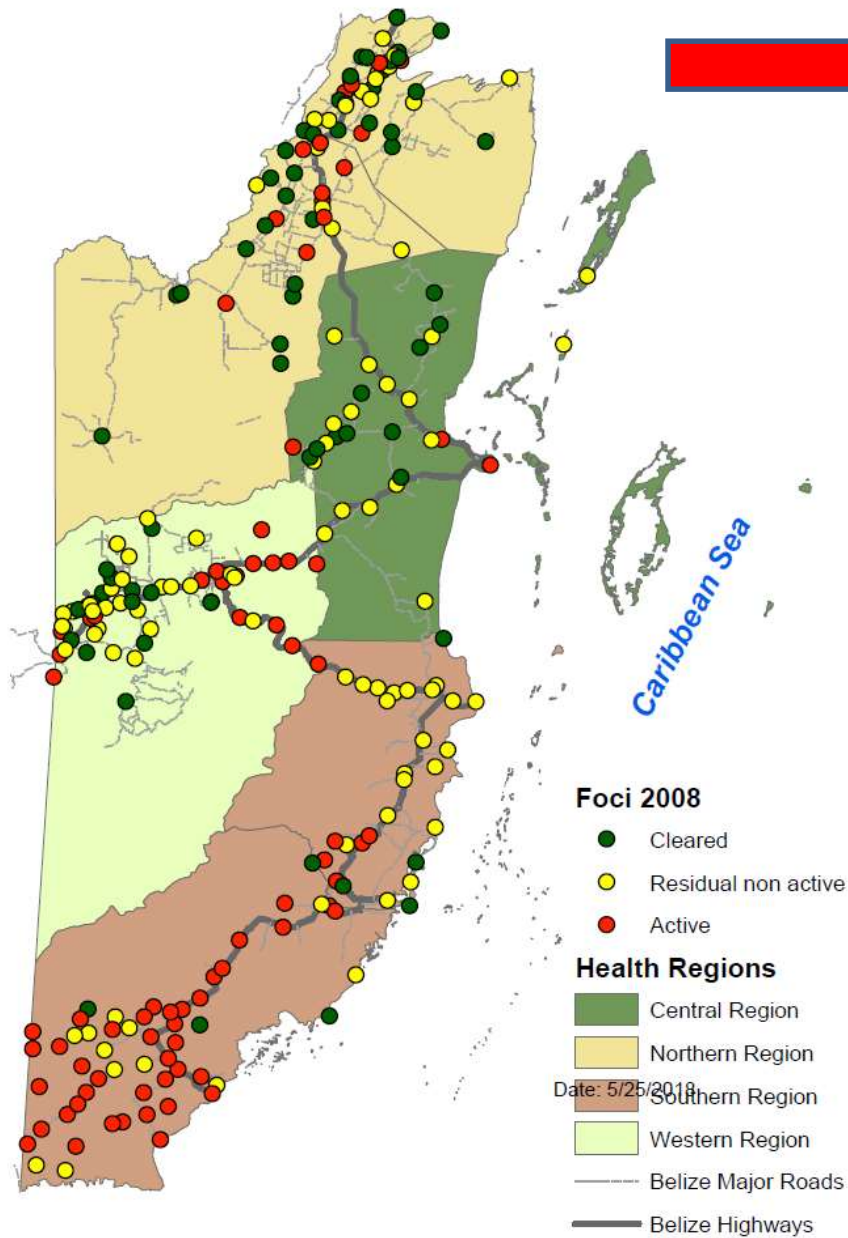
Current Malaria Situation

Priority Locations (2018) Active and Residual Non-Active Foci	District	Population	Status
Benque Viejo Del Carmen Town	Cayo District	6780	Active
Corozal Town	Corozal District	12334	Residual Non-Active
Patchakan Village	Corozal District	1506	Residual Non-Active
San Pedro Vilage	Corozal District	596	Residual Non-Active
San Victor Village	Corozal District	938	Residual Non-Active
San Estevan Village	Orange Walk District	1821	Residual Non-Active
San Jose Orange Village	Orange Walk District	2800	Residual Non-Active
Silk Grass Village	Stann Creek District	1096	Active
Conejo Village	Toledo District	161	Residual Non-Active
Trio Village	Toledo District	1521	Active

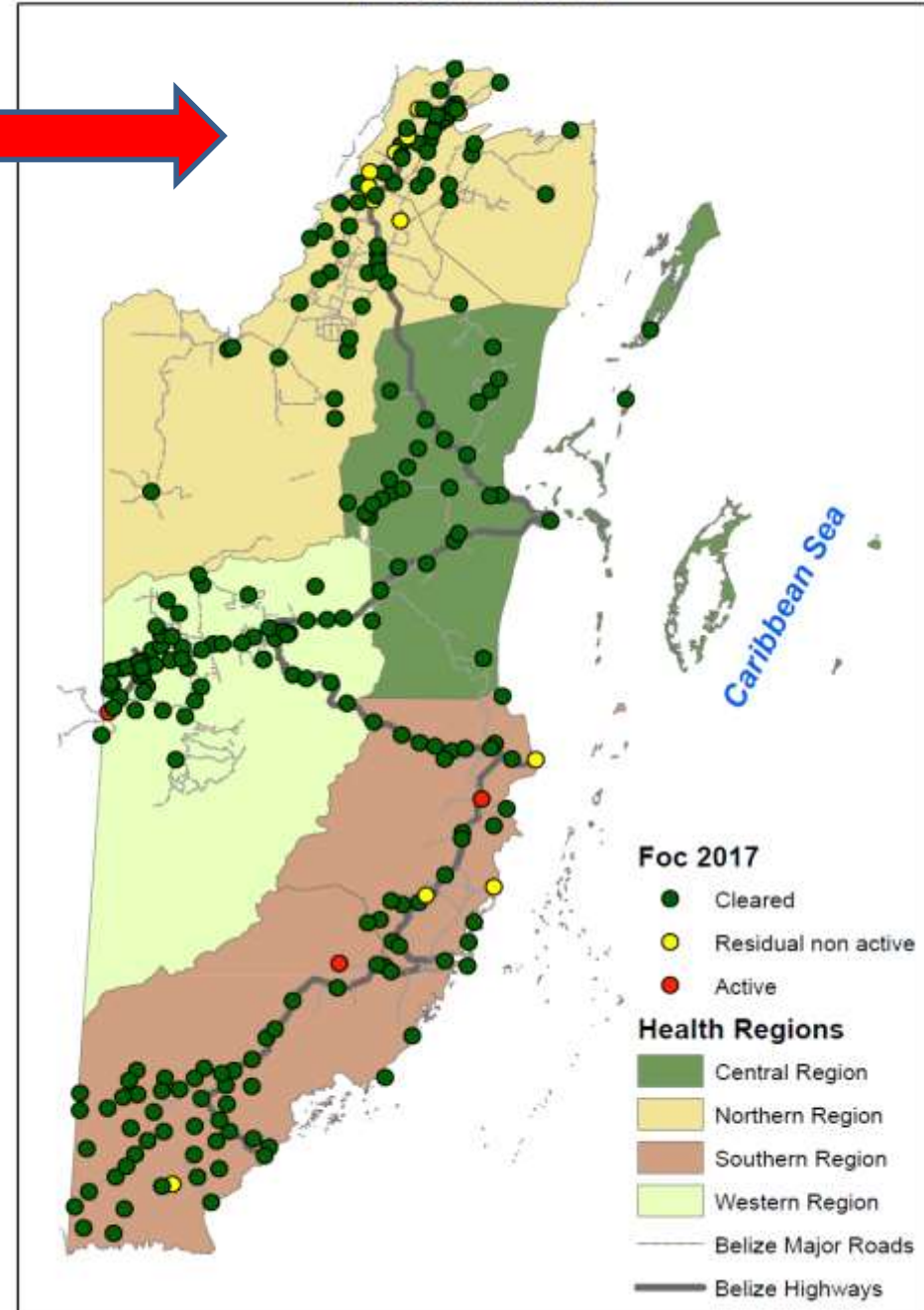
- **Active Foci – 3**
- **Residual Non-Active - 7**



Foci 2008



Foci 2017



Current Malaria Situation

- The primary target areas are villages in the “Banana Belt” in the South and villages in the North along the border with Mexico
- Target areas with highly mobile populations crossing and several illegal points for commerce, and work (mainly banana, citrus and sugar cane farming)
- In the South great results were produced using:
 - 14 day supervised treatment
 - Bi-annual Indoor Residual Spraying
 - Distribution of LLIN’s (bed nets)
 - Active surveillance

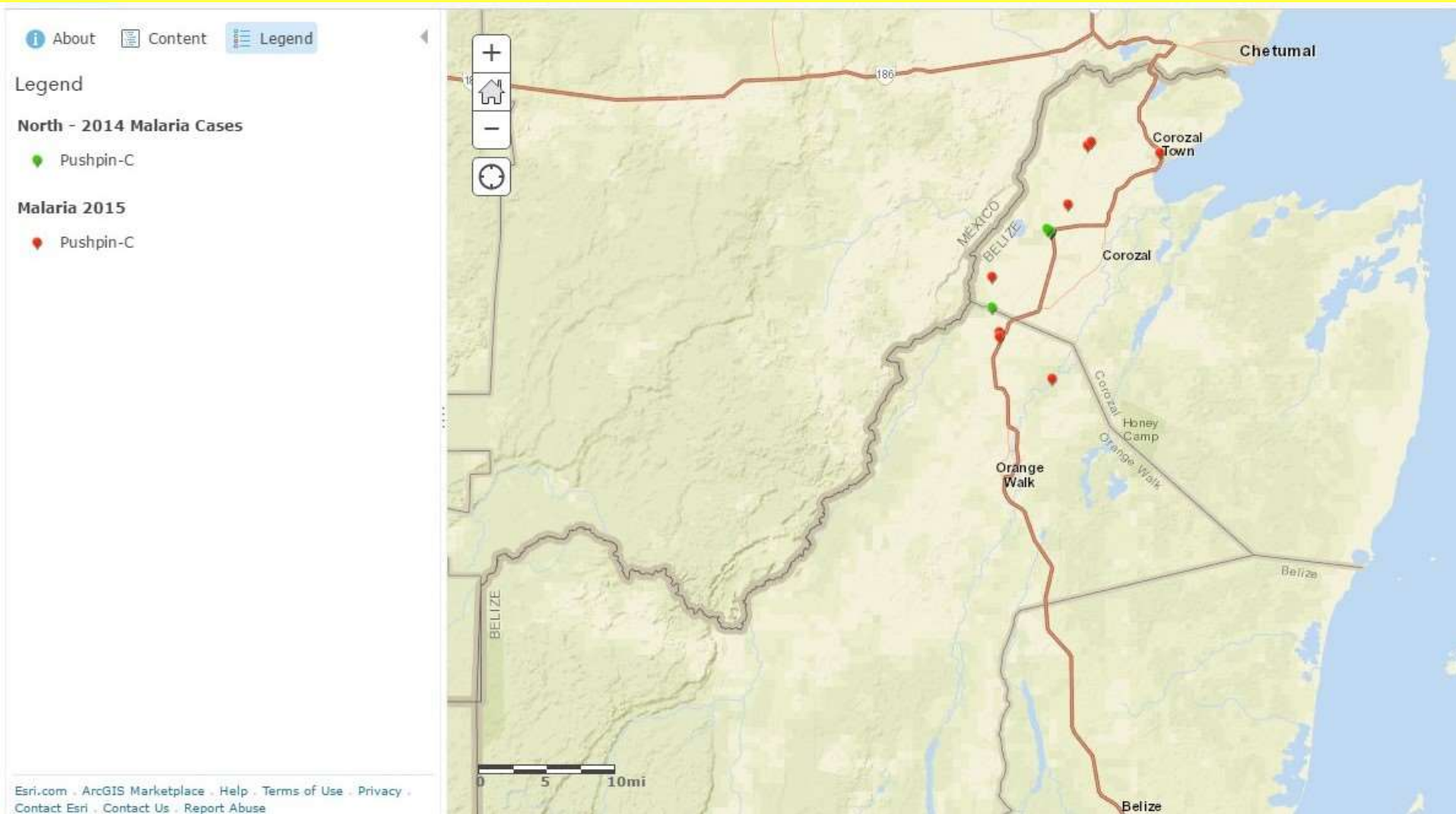


Urgent Actions Needed

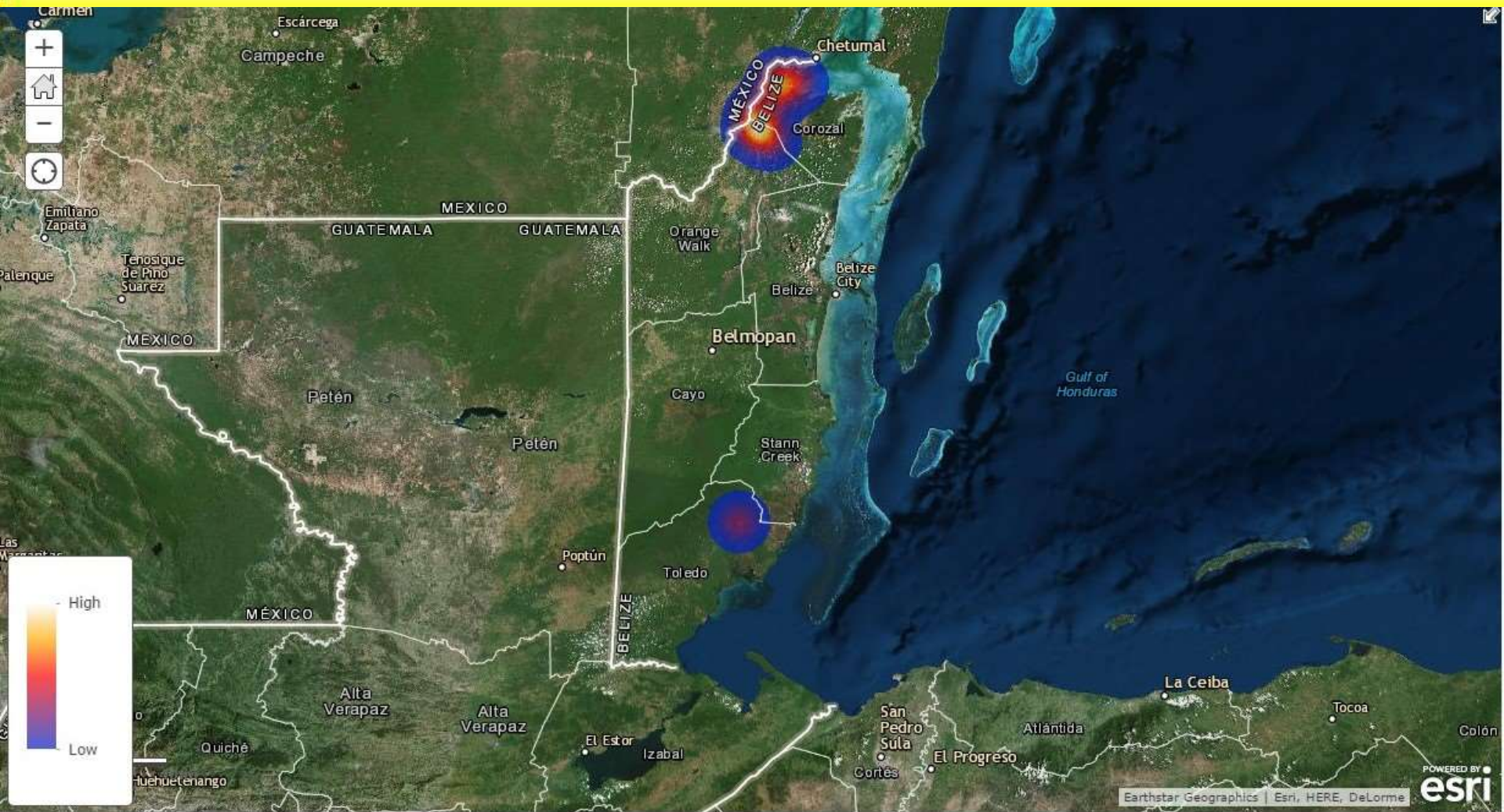
- **Weakness** – achievement will only be sustained with greatly improved passive surveillance at public health facilities
- Belize shares a border to the west with Guatemala and in the north with Mexico Bi-national cooperation for health exists with Mexico but over recent years malaria has not been prioritized
- An established mechanism for sharing of data to health authorities in neighboring departments does not exist
- Improved cross border surveillance is being prioritized in national strategic plan being finalized
- Cross border collaboration – surveillance, planning for simultaneous interventions – treating border regions as a foci



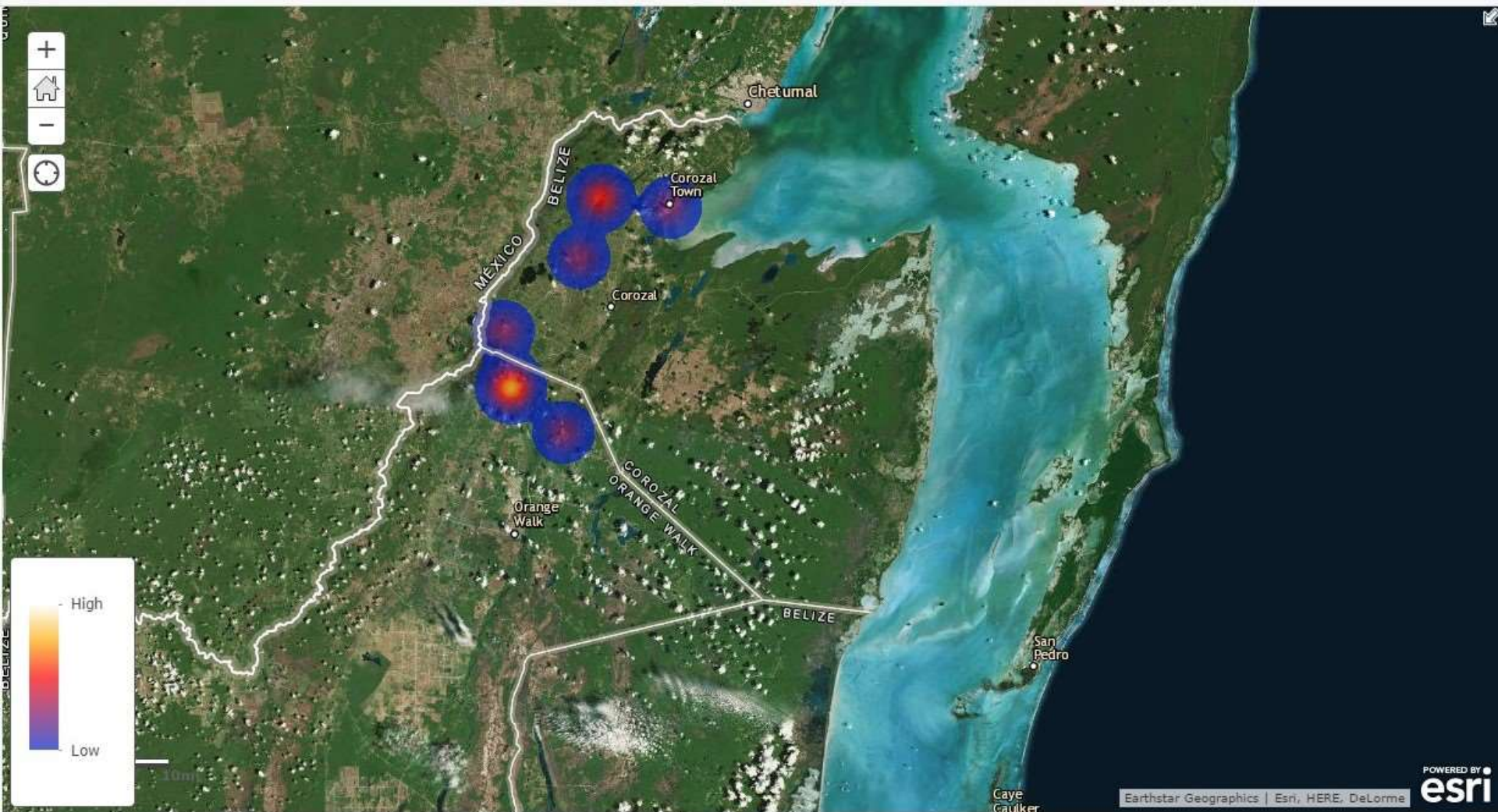
Areas of Concern Along Belize – Mexico Border



Areas of Concern Along Belize – Mexico Border



Areas of Concern Along Belize – Mexico Border



I.R.E.M. Advancements

- Receipt of EMMIE cash reward
- Malaria elimination workshops completed with technical and management teams throughout the country
- Vulnerability mapping exercise completed
- Working with Clinton Health Access Initiative (CHAI) and PAHO to revise and cost malaria national strategic plan for elimination – draft completed
- Inter-American Development Bank schedule to conduct technical mission 4 – 8 June and financing/budgeting mission 18 – 22 June



Core Team Revising Malaria NSP



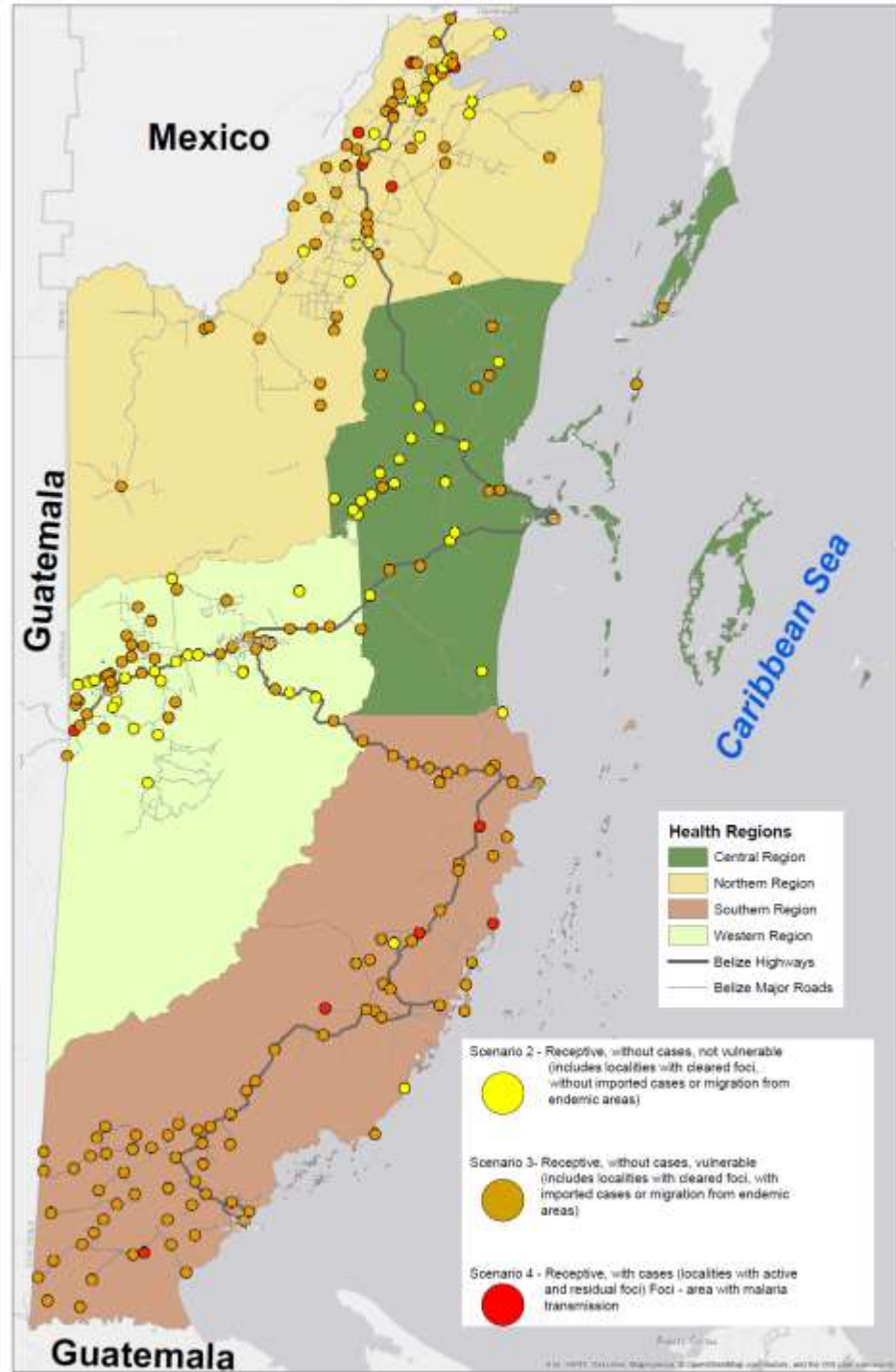
Scenario 2 - Receptive, without cases, not vulnerable
(includes localities with cleared foci,
without imported cases or migration from
endemic areas)



Scenario 3- Receptive, without cases, vulnerable
(includes localities with cleared foci, with
imported cases or migration from endemic
areas)



Scenario 4 - Receptive, with cases (localities with active
and residual foci) Foci - area with malaria
transmission



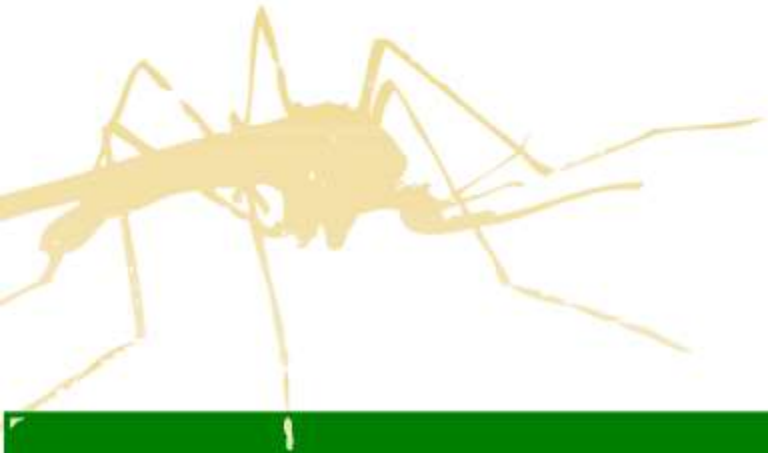
Actions to Incorporate the Issue of Human Rights and Gender Affected Population

- Country is unaware of specific request – may be addressed through IDB visit in June
- Interventions - IRS, LLIN'S to approximately 40 vulnerable localities countrywide
- All pregnant women currently tested for malaria
- Countrywide initiative whereby pregnant women are offered bednets and insect repellent free of cost at public health facilities – as a result of Zika
- Improving passive surveillance and increase to testing services is priority in revised NSP
- Improving turn around time from taking of blood smear, diagnosis and treatment is priority in revised NSP



LOCAL STAKEHOLDER INVOLVEMENT

- Malaria elimination primarily a ministry of health led initiative
- Limited input from private sector – e.g Banana, Citrus and Sugar Cane industry who employs mostly immigrant workers
- Belize Vector and Ecology Center – entomology and monitoring of insecticide resistance
- Need for greater involvement from civil society



AVAILABILITY OF MEDICATION AND TESTING

- Diagnosis done using only microscopy
- Of 8 microscopists, 3 have received certification from PAHO as validators but 1 in retiring in 2018
- Of 8 microscopists 3 are young and fairly inexperienced – they have less than 3 years and are located in areas with no local transmission
- 1 refresher training with 5 malaria microscopists and 5 laboratory technicians – 16 – 20 April 2018
- Currently developing malaria testing guidelines with a focus on quality control with support from PAHO – May – June 2018



EQAP – External Quality Assurance Program



- Participation in EQAP since 2012
- Performance have improved with each passing year with the best performance coming in 2018



EQAP – 2012 vs 2018 Results

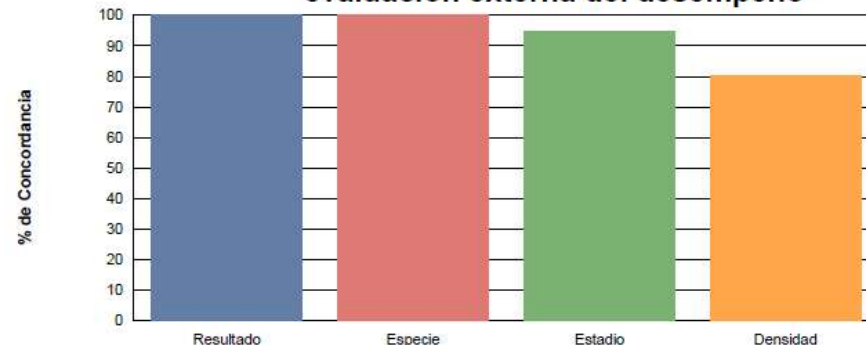


Concordancia obtenida en el programa de evaluación externa del desempeño



Parámetros evaluados	Porcentaje
Concordancia de Resultado	95.00 %
Concordancia de Especie	78.57 %
Concordancia de Estado	79.76 %
Concordancia de Densidad	38.10 %

Concordancia obtenida en el programa de evaluación externa del desempeño



Parámetros evaluados	Porcentaje
Concordancia de Resultado	100.00 %
Concordancia de Especie	100.00 %
Concordancia de Estado	94.64 %
Concordancia de Densidad	80.36 %



THANK YOU

