

I Mina'trentai Singko Na Liheslaturan Guåhan
BILL STATUS

BILL NO.	SPONSOR	TITLE	DATE INTRODUCED	DATE REFERRED	CMTE REFERRED	PUBLIC HEARING DATE	DATE COMMITTEE REPORT FILED	FISCAL NOTES	NOTES
372-35 (COR) As amended by the Committee on Environment, Revenue and Taxation, and Procurement; and further amended on the Floor	Régine Biscoe Lee Telena Cruz Nelson Amanda L. Shelton Tina Rose Muña Barnes Sabina Flores Perez Clynton E. Ridgell Joe S. San Agustin Louise B. Muña Kelly Marsh (Taitano), PhD	AN ACT RELATIVE TO ESTABLISHING A TASK FORCE TO EXPLORE THE FEASIBILITY OF OBTAINING PARAMETRIC INSURANCE FOR THE REEF AND BEACH OF TUMON BAY AND TO FURTHER EXPLORE A PUBLIC-PRIVATE PARTNERSHIP TO EFFECTUATE THE SAME.	6/29/20 11:34 a.m.	7/10/20	Committee on Environment, Revenue and Taxation, and Procurement	8/4/20 9:00 a.m.	10/13/20 7:54 p.m. As amended by the Committee on Environment, Revenue and Taxation, and Procurement	Waiver: 7/13/20	
	SESSION DATE	TITLE	DATE PASSED	TRANSMITTED	DUE DATE	PUBLIC LAW NO.	DATE SIGNED	NOTES	
	10/12/20	AN ACT TO ESTABLISH A <i>TUMON</i> BAY INSURANCE TASK FORCE TO EXPLORE THE FEASIBILITY OF OBTAINING PARAMETRIC INSURANCE FOR THE REEF AND BEACH OF <i>TUMON</i> BAY AND TO FURTHER EXPLORE A PUBLIC-PRIVATE PARTNERSHIP TO EFFECTUATE THE SAME.	10/19/20	10/19/20	10/30/20	35-107	10/30/20	Received: 10/30/20 Mess and Comm. Doc. No. 35GL-20-2394.	

LOURDES A. LEON GUERRERO
MAGA'HAGA • GOVERNOR



JOSHUA F. TENORIO
SIGUNDO MAGA'LÄHI • LIEUTENANT GOVERNOR

October 30, 2020

35GL-20-2394
Speaker Tina Rose Muña Barnes

HONORABLE TINA ROSE MUÑA BARNES

Speaker

I Mina'trentai Singko Na Liheslaturan Guåhan

35th Guam Legislature

Guam Congress Building

163 Chalan Santo Papa

Hagåtña, Guam 96910

OCT 30 2020
Time 6:41 (AM) (P) (S)
Received By: *EBhoywa*

Re: Bill No. 372-35 (COR) - An Act to Establish a Tumon Bay Insurance Task Force to Explore the Feasibility of Obtaining Parametric Insurance for the Reef and Beach of Tumon Bay and to Further Explore A Public-Private Partnership to Effectuate the Same

Dear Madame Speaker:

This Administration supports efforts to preserve and protect our natural resources, and among the most important of these is the coral reef that protects our seashores. As Lt. Governor Joshua F. Tenorio indicated in his written support, he is ready and willing to lead the task force called for in Bill No. 372-35. Just as we have supported efforts toward island beautification, the Guam Green Growth Initiative, and addressing climate change, we will dedicate the necessary time and resources to assessing the feasibility and benefits of parametric insurance. For these reasons, I have signed this bill into law as **Public Law No. 35-107**.

Senseramente,

LOURDES A. LEON GUERRERO

I Maga'hågan Guåhan

Governor of Guam

Enclosure: Bill No. 372-35 (COR) *nka P.L. 35-107*

cc via email: *Sigundo Maga'låhen Guåhan*
Compiler of Laws

I MINA'TRENTAI SINGKO NA LIHESLATURAN GUÁHAN
2020 (SECOND) Regular Session

CERTIFICATION OF PASSAGE OF AN ACT TO *I MAGA'HÁGAN GUÁHAN*

This is to certify that **Bill No. 372-35 (COR)**, “AN ACT TO ESTABLISH A *TUMON BAY* INSURANCE TASK FORCE TO EXPLORE THE FEASIBILITY OF OBTAINING PARAMETRIC INSURANCE FOR THE REEF AND BEACH OF *TUMON BAY* AND TO FURTHER EXPLORE A PUBLIC-PRIVATE PARTNERSHIP TO EFFECTUATE THE SAME,” was on the 19th day of October 2020, duly and regularly passed.




Tina Rose Muña Barnes
Speaker

Attested:



Amanda L. Shelton
Legislative Secretary

This Act was received by *I Maga'hågan Guåhan* this 19th day of October, 2020, at 5:43 o'clock P.M.



Assistant Staff Officer
Maga'håga's Office

APPROVED:



Lourdes A. Leon Guerrero
I Maga'hågan Guåhan

Date: 10/30/2020

Public Law No. 35-107

I MINA'TRENTAI SINGKO NA LIHESLATURAN GUÅHAN
2020 (SECOND) Regular Session

Bill No. 372-35 (COR)

As amended by the Committee on Environment,
Revenue and Taxation, and Procurement; and
further amended on the Floor.

Introduced by:

Régine Biscoe Lee
Telena Cruz Nelson
Amanda L. Shelton
Tina Rose Muña Barnes
Sabina Flores Perez
Clynton E. Ridgell
Joe S. San Agustin
Louise B. Muña
Kelly Marsh (Taitano), PhD
William M. Castro
James C. Moylan
Telo T. Taitague
Jose "Pedo" Terlaje
Therese M. Terlaje
Mary Camacho Torres

**AN ACT TO ESTABLISH A *TUMON* BAY INSURANCE
TASK FORCE TO EXPLORE THE FEASIBILITY OF
OBTAINING PARAMETRIC INSURANCE FOR THE
REEF AND BEACH OF *TUMON* BAY AND TO FURTHER
EXPLORE A PUBLIC-PRIVATE PARTNERSHIP TO
EFFECTUATE THE SAME.**

1 **BE IT ENACTED BY THE PEOPLE OF GUAM:**

2 **Section 1. Legislative Findings and Intent.** *I Liheslaturan Guåhan* finds
3 that coral reefs provide a wide range of critical ecosystem services, including
4 provisioning services such as food production; regulating services such as storm

1 protection; economic services beneficial for fishing and tourism; cultural services
2 for recreational, traditional, and spiritual enjoyment; and supporting services that
3 include nutrient cycling and biological diversity. Together, these ecosystem services
4 provide the constituents of environmental and human well-being, including
5 livelihoods, health, safety, and security.

6 Coral reefs, which serve as natural breakwaters that provide flood reduction
7 benefits through wave breaking and wave energy attenuation, have experienced
8 significant damage around the world from coastal development, deforestation, sand
9 and coral mining, overfishing and destructive fishing, as well as bleaching events
10 and severe storms, both of which have become more frequent and severe as a result
11 of climate change. The international scientific community, through the
12 Intergovernmental Panel on Climate Change and other international bodies, has
13 expressed grave concern about the current and future condition of coral reefs
14 worldwide, and the loss of ecosystem services they provide.

15 According to the 2018 Guam Coral Reef Resiliency Strategy, Guam's coral
16 reefs also face a bevy of threats from both local stressors and the global phenomena
17 of climate change and ocean acidification. No less than one-fifth ($\frac{1}{5}$) of the island's
18 reefs have already been lost, while over one quarter ($\frac{1}{4}$) of surviving reefs are in
19 danger of imminent decline, as evidenced by downward trends in coral cover, coral
20 recruitment rates, and fish biomass. In fact, both federal and local studies indicate
21 that coral cover on Guam's seaward slopes has decreased by approximately eighty
22 percent (80%) in the last half century, with mean coral cover declining from about
23 fifty percent (50%) in the 1960s to ten percent (10%) since 2009. Several factors,
24 including population growth, tourism, poor water quality, sedimentation, runoff,
25 recreational activities and increased coastal development, have placed a great
26 combined strain on the island's reefs in recent years. While our reefs have
27 experienced degradation, certain chronic local stressors such as sedimentation

1 threaten the overall health of our reefs, impeding their ability to recover from events
2 like coral bleaching and severe storms.

3 Catastrophic events such as hurricanes, cyclones, and typhoons can cause
4 severe damages to reefs, resulting in the loss of anywhere between seventeen percent
5 (17%) to sixty percent (60%) of live coral cover in a matter of hours. Therefore, in
6 addition to reducing threats to reefs by improving water quality, it is critical to
7 prepare to address these types of climate change-exacerbated catastrophes.
8 Specifically, evaluations are currently underway in several countries (as well as
9 multiple jurisdictions within the United States) for the feasibility of obtaining
10 insurance for coral reefs and for building the capacity of governments to respond
11 after a catastrophic event to repair and/or mitigate damage caused. Given the
12 growing scientific consensus that climate change is exacerbating extreme weather
13 events (e.g., by increasing the frequency and severity of storms), such jurisdictions
14 are looking for new and innovative forms of insurance both to minimize the risk of
15 loss caused by such events and to protect their natural assets in the long term.

16 *I Liheslaturan Guåhan* finds that an increasing number of jurisdictions are
17 looking to parametric insurance, which is a form of insurance designed to pay a pre-
18 determined amount of money when a specific condition (or parameter) is met.
19 Parametric insurance has three (3) components: (1) a parameter or threshold
20 condition that will trigger the insurance; (2) a polygon that defines the limits where
21 the parameter should occur; and (3) an amount that will be paid out. In short, an
22 insurance payout is triggered when a selected parameter (e.g., wind speed) surpasses
23 an agreed threshold (e.g., 100 knots) in a specified location (e.g., *Tumon Bay*).

24 The first jurisdiction in the world to have successfully established a system of
25 parametric insurance to protect its coral reef was the State Government of Quintana
26 Roo, Mexico. With the support of The Nature Conservancy (TNC), a global
27 environmental organization with expertise in coastal risk and resilience as well as

1 natural infrastructure financing, the government obtained insurance to protect the
2 \$12 billion dollar per year tourism industry that thrives along the beaches of
3 Quintana Roo. The insurance covers over one hundred (100) miles of coastline,
4 including several municipalities and their towns, namely, Cancún, Puerto Morelos,
5 Playa del Carmen, Tulum, and Cozumel. Substantiated by both the sound economic
6 valuation of the Mesoamerican Reef and the rigorous scientific evidence of the
7 ecosystem services it provides, the state government, together with local hotel
8 associations and other third parties, established the Quintana Roo Trust for Coastal
9 Zone Management, Social Development and Security. As of 2019, the Trust
10 purchased an insurance policy to cover coral reefs and beaches in the Quintana Roo
11 area against hurricanes above one hundred (100) knots (i.e., Category 3+
12 hurricanes). Under the policy, payouts for severe storms vary according to the
13 registered wind speed of any given storm, with a maximum payout (over a twelve
14 (12)-month period) of \$3.8 million dollars. Moreover, payouts will support
15 immediate reef repair efforts, which will be conducted by teams of specially trained
16 and equipped volunteers known as “reef brigades” that will be activated in the wake
17 of any catastrophic event.

18 The Quintana Roo Trust is an example of a successful public-private
19 partnership that demonstrates how jurisdictions can insure coastal reefs that support
20 tourism and provide critical ecosystem services for coastal communities and build
21 the response capacity needed to address damages caused by catastrophic events,
22 while also transferring the financial risk of damages from storms and providing long-
23 term reef management and protection. It is, therefore, the intent of *I Liheslaturan*
24 *Guåhan* to establish a task force to explore the feasibility of obtaining parametric
25 insurance for the reef and beach of *Tumon* Bay, and to further explore a public-
26 private partnership to effectuate the same.

27 **Section 2. *Tumon* Bay Insurance Task Force.**

1 (a) The Lieutenant Governor of Guam shall appoint a *Tumon Bay*
2 Insurance Task Force (Task Force) consisting of:

3 (1) the Administrator of the Guam Environmental Protection
4 Agency or his/her designee;

5 (2) the Administrator of the Guam Economic Development
6 Authority or his/her designee;

7 (3) the Director of the Bureau of Statistics and Plans or his/her
8 designee;

9 (4) the Director of the Department of Agriculture or his/her
10 designee;

11 (5) the President/Chief Executive Officer of the Guam Visitors
12 Bureau or his/her designee;

13 (6) the Executive Director of the University of Guam Sea Grant
14 Program or his/her designee;

15 (7) the Director of the University of Guam Marine Laboratory or
16 his/her designee;

17 (8) the Commissioner of Banking and Insurance of the Department
18 of Revenue and Taxation or his/her designee; and

19 (9) the Chairperson of the Legislative Committee with jurisdiction
20 on environmental matters or his/her designee.

21 The Lieutenant Governor shall invite members from the private sector to
22 participate in the Task Force, consisting of:

23 (10) the Chairperson of the Board of the Guam Chamber of
24 Commerce or his/her designee;

25 (11) the President of the Guam Hotel & Restaurant Association or
26 his/her designee; and

27 (12) the Director of The Nature Conservancy's Pacific Division.

1 (b) The Task Force shall be under the direction of the Office of the
2 Lieutenant Governor, who shall serve as its Chairperson.

3 (c) The Lieutenant Governor may extend participation in the Task Force to
4 members of the Guam Council on Climate Change Preparedness and Resiliency. The
5 Lieutenant Governor may further extend participation in the Task Force to additional
6 government agencies and private individuals and organizations to assist it in its
7 exploration of the feasibility of obtaining parametric insurance for the reef and beach
8 of *Tumon* Bay, and the further exploration of a public-private partnership to
9 effectuate the same.

10 (d) The Task Force shall produce a feasibility study in the form of a written
11 report that includes, at a minimum, an assessment of the following:

12 (1) does the natural asset provide valuable ecosystem services; and
13 if so, are they tangible and quantifiable with economic data;

14 (2) is the natural asset at risk from a catastrophic event; and if so, do
15 damages caused by the event diminish its value and services;

16 (3) is the risk of the event insurable, and do catastrophe risk
17 modelers have information to estimate its probability;

18 (4) is it possible to repair or mitigate the damages to the natural asset
19 so that the services it provides can remain functional or be improved or
20 recovered;

21 (5) is the cost of repairing the asset lower than the avoided losses;

22 (6) are there stakeholders interested in repairing the damages after
23 an event;

24 (7) would those stakeholders be interested in transferring the risk
25 and not bear the cost of repair;

1 (8) do those stakeholders have the capacity to pay an insurance
2 premium; and if so, is there an appropriate institutional or financial
3 arrangement that convenes beneficiaries to buy the insurance;

4 (9) are those stakeholders legally entitled to buy the insurance for
5 the asset; and

6 (10) other factors that the Task Force deems reasonably appropriate
7 to consider in its discretion.

8 (e) The Task Force shall submit the report identified in Subsection (d) of
9 this Section to the Speaker of *I Liheslaturan Guåhan* no later than midnight on June
10 30, 2021.

11 **Section 3. Effective Date.** This Act shall be effective upon enactment.