



The fresh water of the Mayan Jungle flows slowly to the Caribbean Sea. This spectacular underground river system has gallons and gallons and gallons of water, fresh drinking water, and the most important natural resource the world can boast.

Adding to this, thanks to the effects of water level changes in the past, these fantastic flooded caverns are richly decorated with stalactites, stalagmites, and column forms.

Within, they contain archeological, biological, anthropological, and paleontological treasures. The fact is, nothing else exists like this on our planet. They are truly UNIQUE in the world.

A shadow of destruction has begun to take over our environment, wrecking havoc with the multi-faceted water ecosystems at play, including the Mesoamerican Coral Reef.

It is urgent that the Mexican Federal Government take action to prevent more destruction.

We have asked Mexican President Calderon to decree The Cenotes and the Underground River Systems of Quintana Roo as a federally protected zone. Our ultimate goal is to attain the status of World Heritage Site by UNESCO.

We demand legal protection of the cenotes and underground river systems. We will not allow the environmental predators to destroy more. To them, we send a message:



[Saverivieramayaa.org](http://Saverivieramayaa.org)



## ENGLISH TRANSLATION FOR LETTER TO PRESIDENT CALDERON:

NANCY ELLEN DEROSA, Mexican citizen, acting personally and also as legal representative of the Non-Governmental Organization called S.A.V.E., A.C. or Society of Akumal Vital Ecology, (Civil Association), as well as on the name of other concerned citizens, stating as our legal residence the third flat of the Villas de Rosa's Hotel, in Aventuras Akumal, Municipality of Tulum, State of Quintana Roo, C.P. 77760, Mexico, with due respect I present:

By means of this document, supported by the 4th, 8th and 27th articles of the Mexican Constitution, we come to request of you, as holder of the Federal Executive power with the attributes that the Law grants you, a Decree that states: The underground rivers systems and cenotes of the coastal strip of Quintana Roo from Puerto Morelos in the north, down to Tulum in the south, becomes integrated into the National System of NATURAL PROTECTED AREAS, under federal protection, based on the evidence of the accompanying documents.

### FACTS:

- I. All the rivers of Quintana Roo are underground. The geomorphologic characteristics of the coast of the Mexican Caribbean, especially between Puerto Morelos and Tulum, allow the exploration of the above mentioned underground fluvial systems. Due to exploration, we have learned much about these singular ecosystems. In this section of the coastal strip of Quintana Roo the longest underground rivers of the world are found: the system Ox Bel Ha with more than 172 kilometers (around 100 miles), the system Sac Aktún with more than 156 kilometers (around 90 miles) and the system Dos Ojos with 62 kilometers (45 miles), among many others.
  
- II. IT IS IMPOSSIBLE TO PROTECT WHAT IS NOT KNOWN. To prove that, one has only to consult the hydrological maps of the State of Quintana Roo that the Mexican Government has with the Instituto Nacional de Estadística, Geografía e Informática. The information that these official maps contain is so far from reality it is both surprising, and frightening. The fact is, through the end of November 2008, divers have explored, delineated and registered with the international association of speleological diving (Quintana Roo Speleological Survey) 750 kilometers (around 500 miles) of flooded caverns and caves along this coast up to a distance of 15 kilometers (10 miles) inland. These underground river systems are full of pure drinkable water flowing freely to the ocean. Almost no

where else in all of Mexico has uncontaminated drinking water. The conservative calculation of speleologists is this number might be 10 times larger in the next few years. To date, about 173 systems can be counted, although it is thought that all of them might be part of one big system of major dimensions: the longest and most complex fluvial system in the world.

- III. The ceiling of the underground rivers has a very thin layer of limestone karst measuring from a few inches in some places up to a few meters in others. This circumstance makes them extremely fragile and vulnerable to pollutants' filtration, as well as to the constant risk of collapsing, owing to the human activity on the surface. At present, most of these systems are healthy, clean and virtually intact. They are the basis of a delicate natural balance, providing the Mayan forest clean water year round, and also in periods of drought. Throughout the Yucatan Peninsula the natural collapses of the fluvial system ceilings create holes that are known as cenotes. They constitute the "oasis" of the jungle. In this region they are extremely important. Not only are they the source of water for the human, animal and vegetable inhabitants of the zone, but also the basis for sustenance for the owners of the surrounding grounds as they are used for tourism and recreation.
- IV. The shallowest fluvial systems were dry during the glacier era (the last one between 10 to 12 thousand years ago). During these periods much of the water of the planet was frozen in the poles and the levels of the seas and of the interior waters in the rest of the world descended considerably. During these ages the underground river beds were dry and the development of sedimentary formations known as speleothemes (stalactites, stalagmites and columns) occurred. Now, diving to these places reveals a dream world, an authentic trip in time to remote epochs. Intact are bonfires and human skeletons of the glacier age, bones of mastodons, giant sloths, and camels. Remains of human activity (long before the Mayan Culture) in the cenotes exist inside the caves preserved by the water, stopped in time. These are humanity's anthropological, archaeological, paleontological and geologic patrimony, extraordinarily important and worth being protected by all the force of the laws.
- V. A shadow of destruction has begun to cover these wonderful places. Danger crouches over the underground rivers of the Mexican Caribbean. Current laws related to water sources and the forms of development and urban infrastructure don't address the

singularity of these fantastic places. The laws that are applied at present were conceived without knowing or considering the unique characteristics of this region. The diverse applicable legislation with which development is regulated in this region known as Riviera Maya, is as general as it is ignorant of what is found in the subsoil. We cannot ask a legislator to protect what he knows nothing about. The limestone subsoil of the Riviera Maya has characteristics so unique that it needs very special protection. The zone of the largest underground rivers on the planet is very delicate and is the habitat of endemic animal species. It is also critical to the balance of the ecosystems above-ground which depend upon them. We have the privilege of possessing the most phenomenal underground fluvial systems in the world. The citizens and government of Mexico bear a huge responsibility to protect this fresh water resource for the planet and the whole of humanity.

- VI. This shadow of destruction has several names and it has already attacked part of this singular underground world. One of these names is contamination. Contamination is caused by the use of traditional methods of construction, as well as treatment of residual waters in an equally conventional ways. Contamination comes from the increasing number of golf courses and their consistent use of large quantities of chemical fertilizers that seep through the thin layer of calcareous rock. In these complex fluvial systems it has been discovered that water moves in diverse and irregular directions leading to an exit to the sea. Pollutants leak through the rock into the flow of the underground river, later to be deposited in the second largest coral reef system in the world, the Mesoamerican Reef. This situation makes the care of the drainages and the handling of the residual waters even more important. Additionally garbage deposits must be properly attended to since the pollutants can travel and invade entire systems. It is our indisputable international responsibility to protect this fragile ecosystem. Additionally, we are contaminating an important reserve of drinking water for Mexico in an alarming way.
- VII. The excessive and uncontrolled use of explosives and heavy machinery, the insufficient alertness of local and federal authorities, the indiscriminate granting of permission for construction, as well as misinformed criteria of analysis on environmental impact, are generating serious risks for major collapses in the roofs of the fluvial systems. These abuses are currently creating consistent destruction of the caves. It is urgent to stop the destruction. It is urgent to stop more irresponsible



projects. We should not, and must not, ignore the effects of the current practices of degradation in the medium and long terms. We need to protect and to preserve healthy ecosystems with clean water for the future generations.

We have come to the conclusion that we cannot be mute witnesses of the destruction of one of the most extraordinary ecosystems of the planet. We cannot avoid our responsibility. A mute witness is a witness accomplice. We will not be accomplices of irreversible damages. We assume the responsibility of defending the underground rivers and cenotes on the coast of the Mexican Caribbean. WE ASK for its protection to be Decreed; that it becomes integrated as soon as possible to the National System of Natural Areas as federally protected land. Our request has a name that bears a warning: the warning that with the destruction of the aquifer systems we will destroy our source of life, we will destroy ourselves. Our warning has a name that is a double meaning:

“AGUAS CON LOS CENOTES” or “WATCH OUT FOR THE CENOTES”

Mr. President, the members of SAVE and the community in our region who are in the struggle for conservation, only want that, the conservation of a precious water resource. We neither care for recognition nor look for gratitude. We want you to see us as providers of valuable information, of information that gives you the necessary conviction to decide the immediate protection of an important place for the region, for the country and for the whole of humanity. It is within your authority to protect the unique and unrepeatable underground river systems of the Yucatan Peninsula, for, once it is destroyed, it is gone forever.

WE PROCLAIM THE TRUTH OF THESE MATTERS ACCORDING TO MEXICAN LAW.

Akumal, Quintana Roo, Mexican Republic, to 22 days of January, 2009.

NANCY ELLEN DEROSA

Attachments:

1. Notary Document
2. Regional Map of the Superficial Water. INEGI.
3. Regional Map of the Subterannean Water. INEGI.
4. List of Subterannean Rivers. QRSS.
5. Map of Subterannean Rivers. S.A.V.E.
6. Book and/or images of diving in cenotes.



# Cenotes of the Riviera Maya. Quintana Roo, México.

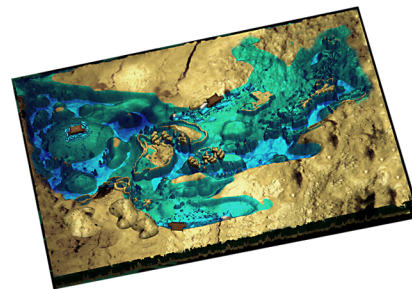
DOS OJOS SYSTEM - ONE OF THE 173 WATER FILLED SURVEYED CAVE SYSTEMS IN QUINTANA ROO



## DOS OJOS DOS OJOS SYSTEM



DOS OJOS SYSTEM  
62054 - METERS  
IN LENGTH  
119.1 25 - METERS  
IN DEPTH  
11/2008



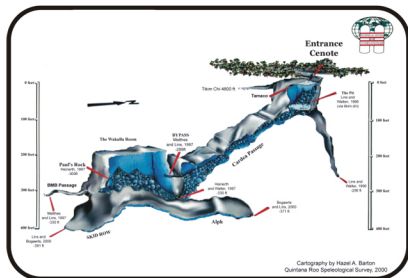
DOS OJOS CAVERN MAP

### BLIND FISH



ONE OF THE MANY ENDEMIC SPECIES

### THE PIT MAP



HUMAN BONES

## DOS OJOS SYSTEM **THE PIT**





[www.inegi.gob.mx](http://www.inegi.gob.mx)

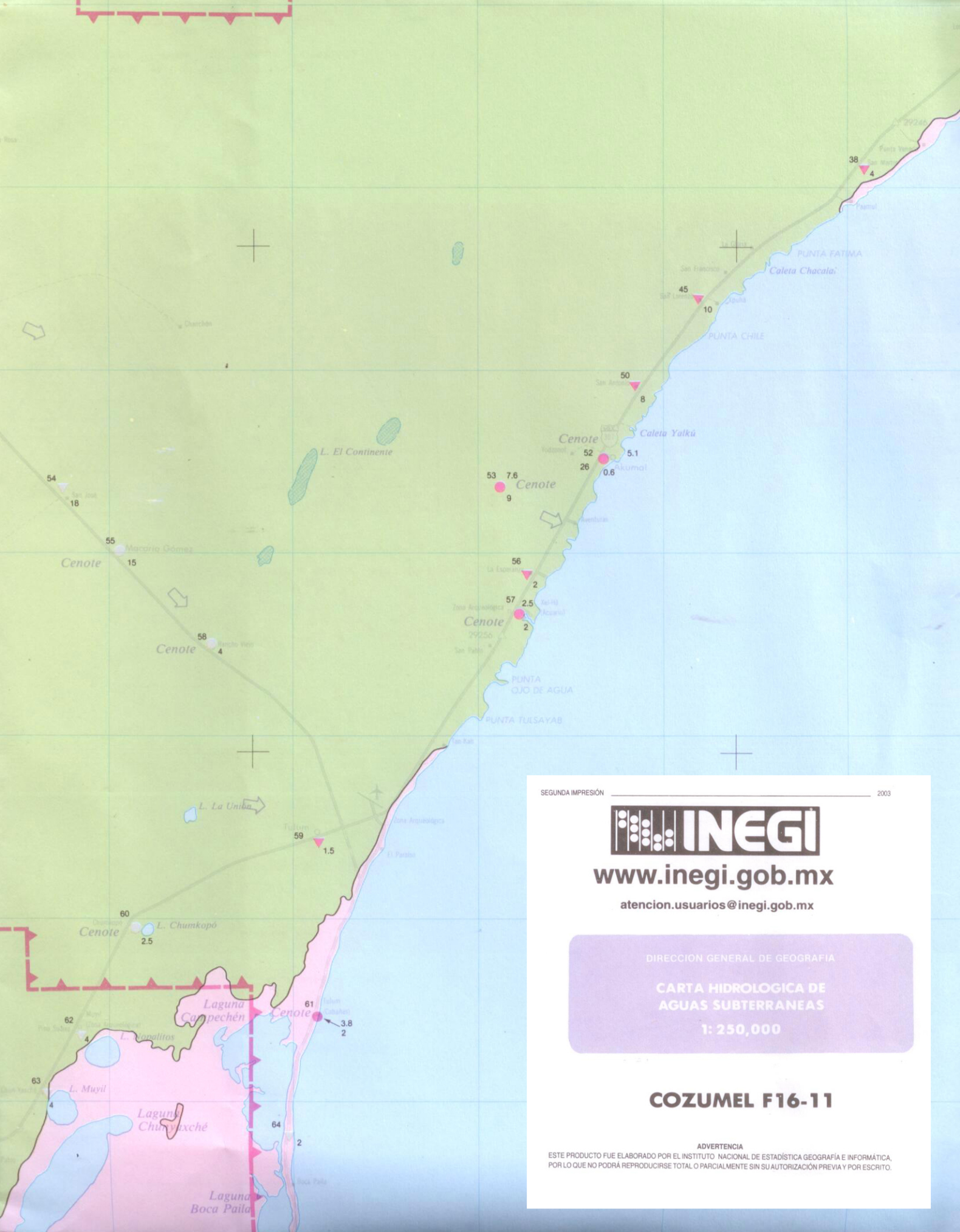
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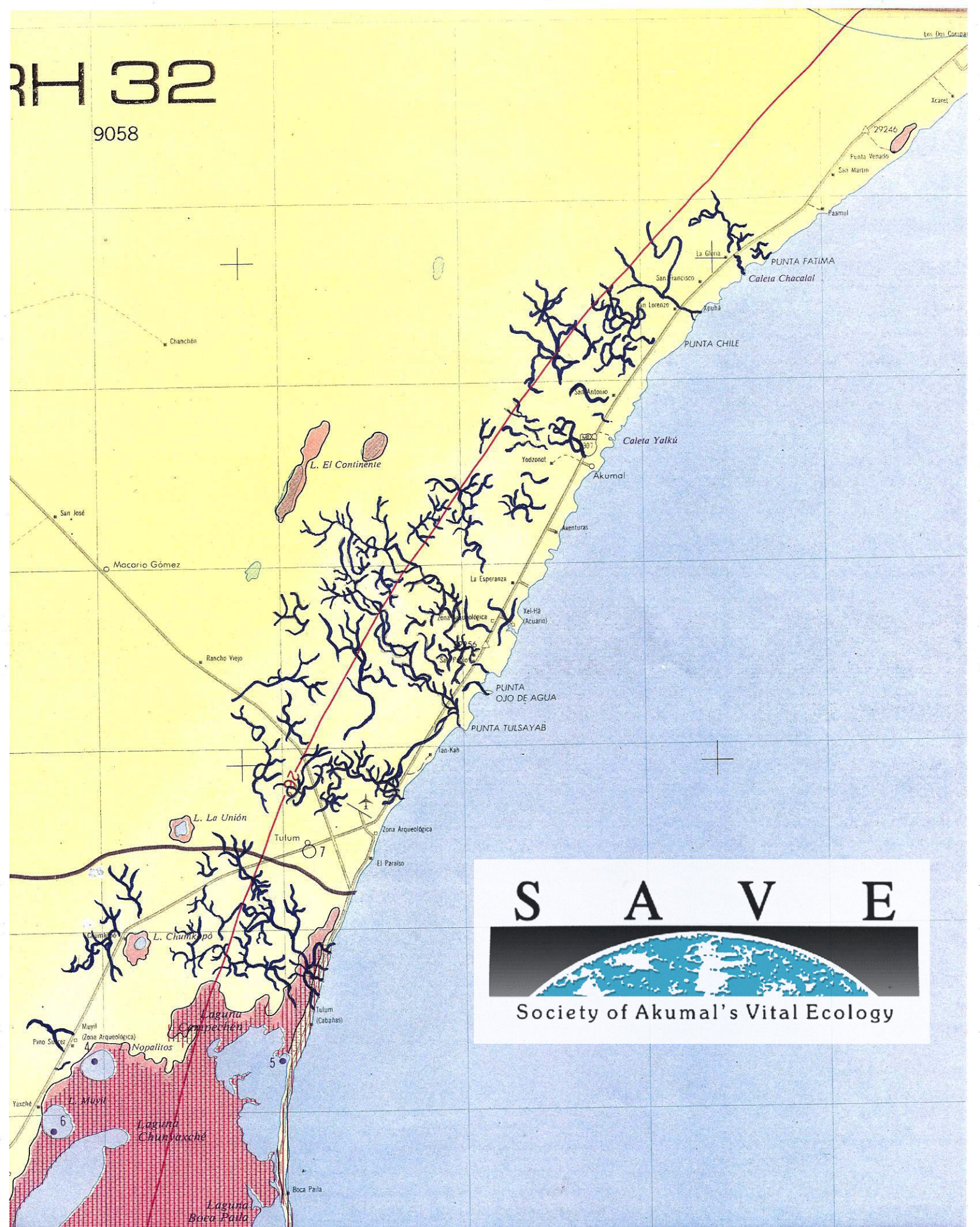
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Society of Akumal's Vital Ecology