



## REPORT

# COMMUNITY BASED SURVEILLANCE & MONITORING

COMMUNITY SURVEILLANCE GROUP (POKMASWAS)  
KOTAWARINGIN BARAT REGENCY, KALIMANTAN TENGAH  
2018

This Project is executed by the Mohamed bin Zayed Species Conservation Fund, with financing from the GEF, implementation support by UNEP and technical support from the CMS Dugong MoU Secretariat.



## **PREFACE**

Praise and gratitude for God almighty who has given His grace so this “Community Based Surveillance and Monitoring of Kotawaringin Barat Regency, Kalimantan Tengah Province” could be accomplished well.

This report is part of report series from dugong and seagrass conservation activity in Kotawaringin Barat site. This report is expected to give activity review from Community Surveillance Group (Pokmaswas) in Kotawaringin Barat Regency. We hope that community’s participation in dugong and seagrass conservation in Kotawaringin Barat could undergo independently.

Kotawaringin Barat, June 2018

Author

## TABLE OF CONTENTS

|  |            |
|--|------------|
| <b>COVER .....</b>                         | <b>i</b>   |
| <b>PREFACE .....</b>                       | <b>ii</b>  |
| <b>TABLE OF CONTENTS .....</b>             | <b>iii</b> |
| <b>LIST OF FIGURES .....</b>               | <b>iv</b>  |
| <b>LIST OF TABLES .....</b>                | <b>v</b>   |
| <b>LIST OF ATTACHMENTS .....</b>           | <b>vi</b>  |
| <b>INTRODUCTION .....</b>                  | <b>1</b>   |
| 1. Background .....                        | 1          |
| 2. Objectives .....                        | 2          |
| 3. Time and Date .....                     | 2          |
| <b>COMMUNITY SURVEILLANCE GROUP .....</b>  | <b>3</b>   |
| 1. Number and Distribution of Groups ..... | 3          |
| 2. Group Member Participation .....        | 4          |
| <b>SUPERVISING .....</b>                   | <b>6</b>   |
| <b>MONITORING .....</b>                    | <b>8</b>   |
| <b>ATTACHMENTS .....</b>                   | <b>10</b>  |

## LIST OF FIGURES

|        |  |   |
|--------|--|---|
| Fig 1. | Number and distribution of community surveillance group in Kotawaringin Barat Regency .....                    | 3 |
| Fig 2. | Graph of number of community surveillance group member participation .....                                     | 5 |
| Fig 3. | Sighting distribution of protected species in Kotawaringin Barat marine area in December 2017 – May 2018 ..... | 8 |
| Fig 4. | Appearance of protected species in Kotawaringin Barat marine area .....  | 9 |

## LIST OF TABLES

|   |   |
|---|---|
| Table 1. Community surveillance group and Coastal Community Group within DSCP<br>implemented villages ..... | 4 |
|---|---|

## DAFTAR LAMPIRAN

|  |    |
|--|----|
| Attachment 1. Catching trawl boat activity .....   | 10 |
| Attachment 2. Destructing trawl boat .....   | 11 |
| Attachment 3. Protected species appearance in Kotawaringin Barat marine area from<br>December 2017– May 2018 ..... | 14 |

# INTRODUCTION

## 1. Background

Duyung (*Dugong dugon*) is a mammals herbivore that lives in shallow water, distributed from Papua to Vanatu in the southeast of Papua New Guinea. The distribution of dugong in Indonesia is spread to all area, and almost spread throughout the shallow seas of Indonesia. The existence of a mermaid can not be separated from the spread of seagrass ecosystem as the main food of mermaid. Seagrass is a flowering plant (Angiospermae) that lives submerged in the air column and develops well under shallow seas and estuaries.

Marsh (2002) predicted that at 1970, dugong population in Indonesia is approximately 10,000 but in 1994, dugong population in Indonesia has become 1,000. Nevertheless, the number is still argued and couldn't be the base to see decrease population rate in such particular time interval.

Based on the IUCN criteria, dugongs are one of the most vulnerable species to extinction. While through CITES, dugong included in Appendix 1 that means it should not be traded. Dugongs are relatively long-lived but have low population growth, so the Indonesian government is including dugong in protected animals criteria based on PP. No. 7 of 1999.

In terms of the efforts to conserve dugong and its habitat in Indonesia, the Ministry of Marine Affairs and Fisheries (KKP) in collaboration with the Indonesian Institute of Sciences (LIPI), Bogor Agricultural Intitution (IPB) and WWF-Indonesia supported by United Nation Environment Program-Conservation Migratory Species (UNEP-CMS) and Muhammed bin Zayed Consevation (MbZ) in a Dugong and Seagrass Conservation Project (DSCP). The program runs in Indonesia (DSCP-Indonesia) since 2016 and is planned to be finished by the end of 2018, consisting of three main activities, as follows:

1. Proposal 1 (ID1) *Strengthen and Operationalize National Policy Strategy and Action Plan for Dugongs and Seagrass Conservation,*
2. Proposal 2 (ID2) *Improving National Awareness and Research of Dugong and Seagrass in Indonesia,* and

3. Proposal 3 (ID3) *Community Based Conservation and Management of Dugong and Seagrass Habitat in Bintan, Kotawaringin Barat, Alor and Tolitoli.*

One of the activities in DSCP-Indonesia which becomes the responsibility of WWF-Indonesia is the implementation of ID3 proposal in Kotawaringin Barat-Central Kalimantan, which is the community-based management and conservation of dugong and seagrass. The ID3 program consists of enhancing the capacity of local communities as an effort to suppress the threats to dugongs and seagrasses, as well as increased active participation of local communities in safeguarding and conserving dugongs and seagrasses.

Community involvement through Community Surveillance Group (Pokmaswas) with fishery monitoring and protected species monitoring especially dugong in marine area of Teluk Kumai. With community's involvement directly, hopefully it could increase people's care toward dugong and its habitat preservation, along with sustainable fishery.

## 2. Objective

The objective from this activity is for local community could participate in ensuring sustainable fishery, helping fishery supervisor in monitoring directly at the field, and participation in dugong and seagrass habitat effort in Kotawaringin Barat.

## 3. Time and Place

Monitoring and supervising time at second period was conducted starting in December 2017 until May 2018, and monitoring location limited within the marine area of Teluk Kumai.



# COMMUNITY SURVEILLANCE GROUP (POKMASWAS)

## 1. Pokmaswas Number and Distribution

Community Surveillance Group (Pokmaswas) in Kotawaringin Barat Regency is located through all coastal villages. Pokmaswas listed in Marine and Fishery Agency of Kotawaringin Barat is 20 groups distributed through all coastal villages that have river area. Pokmaswas was built since 2009, distributed in four districts as followed (Fig 1).

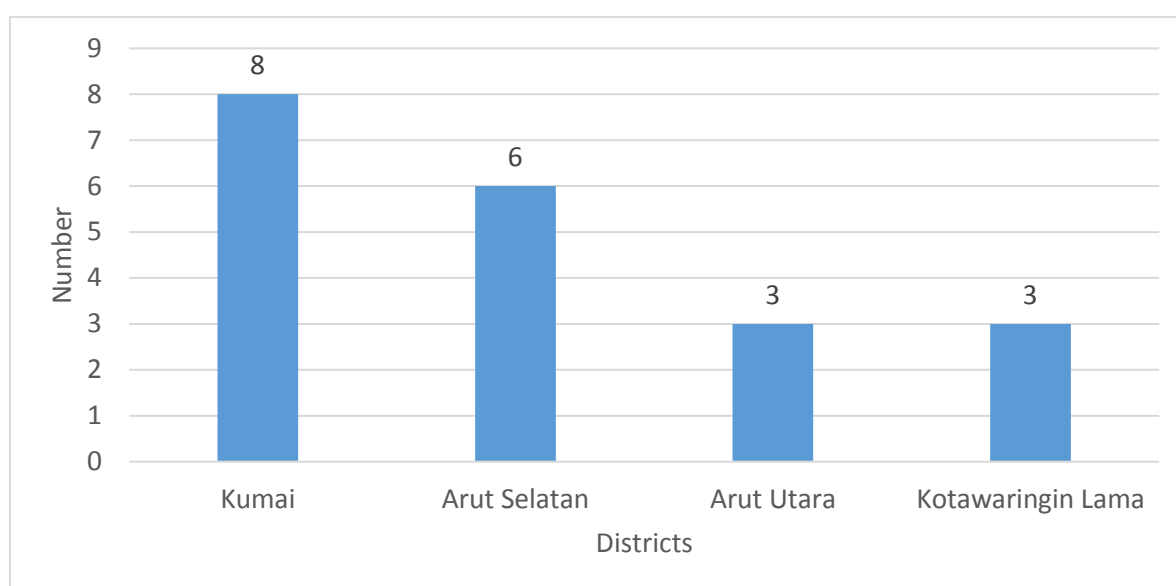


Fig 1. Number and Distribution of Pokmaswas in Kotawaringin Barat Regency

According to the graph above, most numerous groups are within Kumai District, with eight groups. Geographically, only Kumai and Arut Selatan that are located within coastal area, consisted of Kumai Hilir Village, Sungai Cabang, Teluk Pulai, Kubu, Sungai Bakau, Teluk Bogam, Keraya, Sebuai and Tanjung Putri. The rest are some part of Arut Selatan, Arut Utara, and Kotawaringin Lama that are not in coastal area, but monitoring DAS (River Flow Area).

Dugong and Seagrass Conservation Project (DSCP) Indonesia implementation is within four villages, they are Kubu Village, Sungai Bakau, Teluk Bogam and Keraya. Pokmaswas group involved in DSCP implementation are four groups, added one coastal community group that focus on preserving coral reef area in Gosong Senggora and Sepagar. Community/ fishermen joining those five groups could be seen at the table below:

Table 1. Community surveillance group and coastal community group in DSCP implementation areas

| No | Pokmaswas Name  | Committee  | Number of Members |
|----|---|--|-------------------|
| 1  | "Pantai Kubu" Pokmaswas<br>Kubu Village<br>Kumai District                       | Chairman : Basri<br>Secretary : Mulyadi<br>Treasurer : Samsul Hardi    | 135 people        |
| 2  | Coastal Community Group (KMP)<br>"Camar Laut"<br>Kubu Village<br>Kumai District | Chairman : Ali Hanafiah<br>Secretary : Suriadi<br>Treasurer : Sahrun   | 10 people         |
| 3  | "Bakau Bersatu" Pokmaswas<br>Sungai Bakau Village<br>Kumai District             | Chairman : Ruslan M.<br>Secretary : Asmuri<br>Treasurer : Adenan       | 43 people         |
| 4  | "Laut Indah" Pokmaswas<br>Teluk Bogam Village<br>Kumai District                 | Chairman : Muliadi<br>Secretary : Hairusalam<br>Treasurer : Hatri      | 43 people         |
| 5  | "Putra Bahari Perkasa" Pokmaswas<br>Keraya Village<br>Kumai District            | Chairman : Ahmadi<br>Secretary : Alimansyah<br>Treasurer : Mardiansyah | 102 people        |

Pokmaswas group in two villages, Bakau Bersatu Pokmaswas- Sungai Bakau Village and Laut Indah Pokmaswas- Teluk Bogam Village, have changed and regenerated its members at 2017. Prior member in both pokmaswas are numerous, but then slimmed by choosing member that participate actively.

## 2. Pokmaswas Group Participation

In measuring member group's participation, it could be seen from the ones who join an activity, have roles to monitor community-based fishery, and conducting social activity and conservative activity at their own villages. According to that criteria, there needs activity data of each member from every group like graph at Fig 2. From that graph, Laut Indah Pokmaswas has the most active members: 32 people. Second numerous group is Bakau Bersatu Pokmaswas with active members: 20 people. While the other three groups are 10 people each.

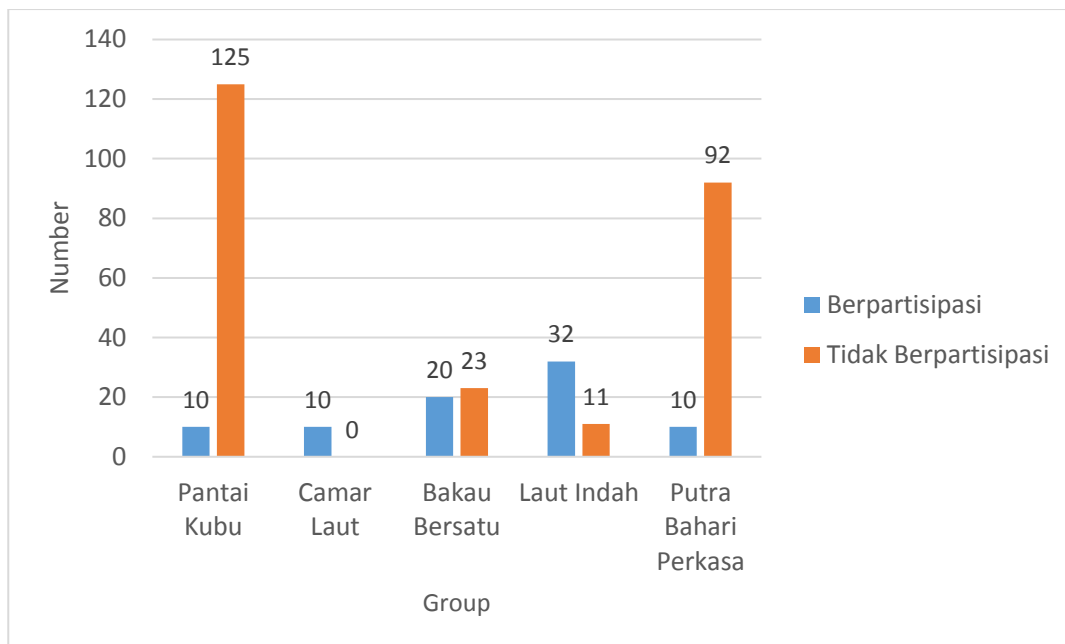


Fig 2. Graph of pokmaswas member participator  
(translation → berpartisipasi: participate; tidak berpartisipasi: non participate)

According to Fig 2, the imbalance number of pokmaswas member in Pantai Kubu and Putra Bahari Perkasa who participated and not participated. There was only 7,4% Pantai Kubu members who participated and 9,8% Putra Bahari Perkasa members who participated from total members. Low member's participation from Pantai Kubu could be because tight sailing weekly schedule, so to participate in an activity of giving report, that could not be done anymore. Even coming to socialization of functions and assignments of pokmaswas have not been known by them. In Putra Bahari Perkasa pokmaswas, it was cause of jobs, most of them are not fishermen. The most active group for reporting violation is Laut Indah Pokmaswas of Teluk Bogam Village, even the ones who are not pokmaswas member also participated in disciplining fishing tools violation that are harmful for environment around Gosong Beras Basah area.

# MONITORING

Patrol is a routine activity that should be conducted by all of community surveillance groups. This activity would monitor all activities within Teluk Kumai marine area, from boat activity, capture, until protected animals mainly dugong. At first period, there was a patrol in group by each pokmaswas on every village. But that could not be conducted routinely because of budget availability. Monitoring finally conducted incidentally by fishermen/ pokmaswas.

Monitoring result is violation information within Kotawaringin Barat marine area, like harmful fishing tools. Less response from government toward community's reports impacted unreported violations toward authorities.

At this second period, started with Laut Indah Pokmaswas, Teluk Bogam Village, who saw many trawl using at western of Gosong Senggora near boat route. This information since January 22th 2018 said that the activity had lasted for one week. Generally they operate from 6 to 7 in the morning. Community started to report to authorities because of announcement from Marine and Fishery Agency of Kalimantan Tengan Province about shutting down harmful fishing tools at Kotawaringin Barat marine area. But there's no follow up in the field by authorities.

The next was one of Bogam Pokmaswas member, Mr. Indra, reported harmful fishing tool usage. At Wednesday, April 18<sup>th</sup> at 7.30 AM, Mr. Indra who was taking his net yield which he put one day before, at the location which located less than 2 km in southeast of Karang Batu Babi, the first buoy nets was lifted and then cut until  $\pm 1000\text{m}$  of nets. Mr. Indra approached three trawl boats that were suspected had destructed his net. Mr. Indra asked for compensation for his lost  $\pm 1600\text{m}$  net. During that, the fishermen threatened Mr. Indra to throw woods at him.

That occasion was reported to authorities, but there's no follow up in capture or dealing with his lost net. At Sunday, April 29<sup>th</sup> 2018, community-based pokmaswas did patrol at northern of Gosong Beras Basah using four boats where there were harmful fishing tool usage activity happened. At  $2^{\circ}58.990'$  latitude and  $111^{\circ}28.738'$  longitude was found 12 boats did that and three of the boats finally caught. Because they had less number, Bogam fishermen asked for

help from coastal, two boats made it to the sea, but the other nine boats ran away. The boat was directed to the shore and given to Head of Teluk Bogam Village (Attachment 1).

Catching those three boats ended with agreement of fishing tool destruction and agreement if those fishermen would do the same in the future, there would be law applied (Attachment 2).

At Thursday, May 10<sup>th</sup> 2018, there was a report of trawl usage at northern of Gosong Beras Basah. That activity was done by the same person who was caught at April 29<sup>th</sup>, 2018. Fishermen from Teluk Bogam who found that just got angry and reported this occasion. After being reported, Head of Marine and Fishery Agency of Kalimantan Tengah Province, Mr. Akhmad Husain followed this up by visiting Teluk Bogam Village to have a talk with fishermen regarding all information and fishery violation within Kotawaringin Barat marine area. Mr Akhmad said that he would finish harmful fishing tool usage problems within Kotawaringin Barat marine area.

# SUPERVISING

Community-based supervision is an activity agreed by Pokmaswas member. In this activity, pokmaswas member or fishermen would give information gained from their fishing activity. Information collected are info about protected species sightings during sailing.

Period started from December 2017 through May 2018, information regarding protected animals sighting are considered less. Species seen from this period were only three: dugong, turtle, and dolphins (Fig 3).

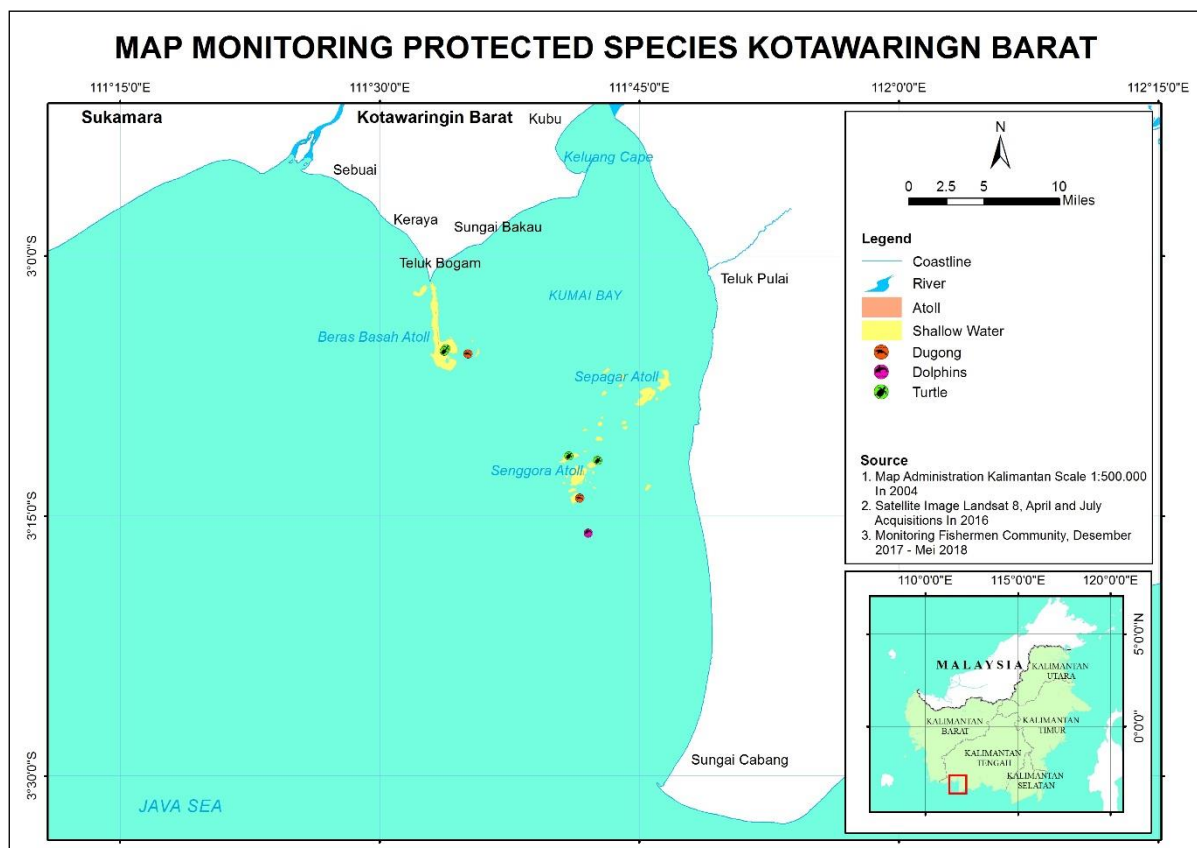


Fig 3. Protected species sighting distribution in Kotawaringin Barat marine area from December 2017 – May 2018

Dugong sighting reported was only twice at March and April at Gosong Senggora and Gosong Beras Basah. The time dugong seen was at midnight between 00.00 until 1.30 AM. In Gosong Senggora, there was a couple of dugong with 1,5-2 meter size that swam through northwest. In Gosong Beras Basah, there was only one dugong that swam with 2 meters size (Attachment 3).

Turtle sighting in Kotawaringin Barat marine area could be said that every time fishermen sail, because of many sightings, fishermen were no longer writing because of too many occasion. So, the turtle sighting report was only available from January to February 2018 with four times sightings (Fig 4). Turtle are commonly seen in Gosong Senggora and Gosong Beras Basah with time appeared from 8 AM until 11 AM. The numbers are vary from one to ten at the same time. The activity mainly were swimming, meanwhile in Gosong Beras Basah the turtle was seen feeding (Attachment 3).

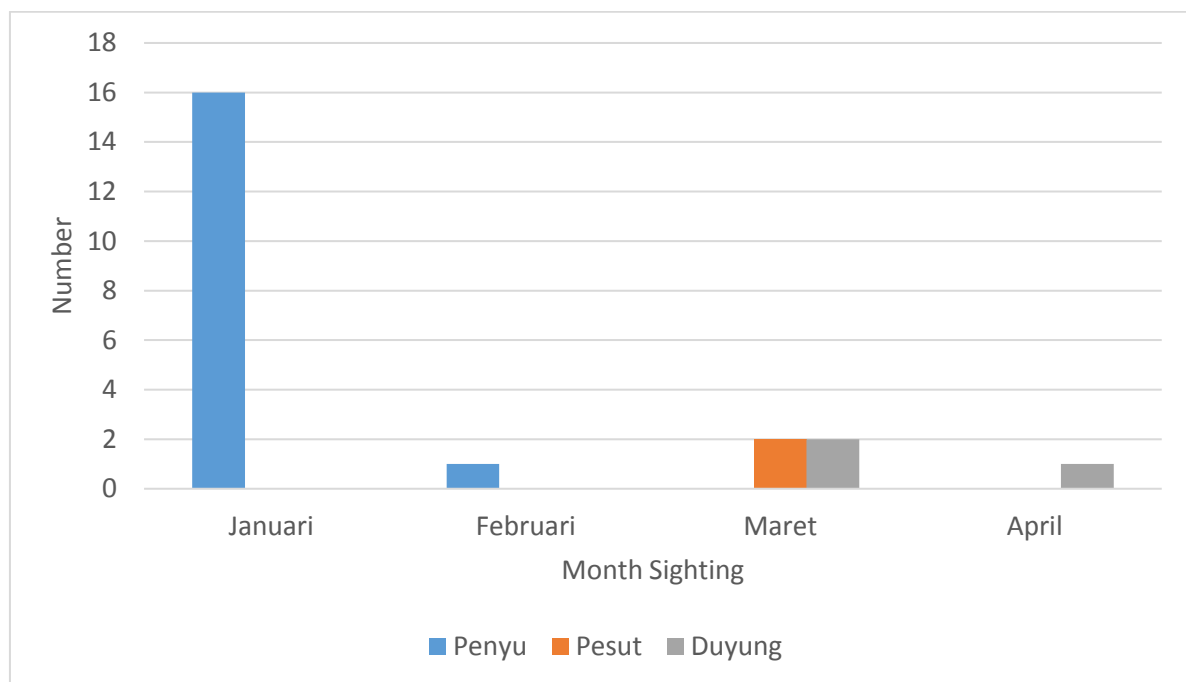


Fig 4. Protected species sighting in Kotawaringin Barat marine area

(Translation → Januari: January; Februari: February, Maret: March; April: April; Penyu: Turtle; Pesut: Dolhpin, Duyung: Dugong)

At northern of Gosong Senggora, there was also two dolphins swam to the east. Fishermen saw this dolphin appearance at 9 AM. The length of it was about 2.3 with weight of 130 kg (Attachment 3).



## Attachment 1. Catching trawl users boat



Trawl lifting process from beneath the sea



Directing trawl boat to the shore process



## Attachment 2. Destructing trawl boat



Mediation of trawl users by Kumai District Secreatry, Head of Village, and authorities



Collecting trawl



Destructing trawl

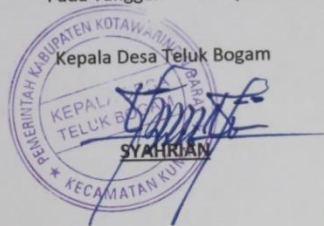
BERITA ACARA PEMBAKARAN ALAT TANGKAP TRWOLL  
( BARANG BUKTI )

Pada hari tanggal Tiga Puluh April Tahun Dua Ribu Delapan Belas ( 30-04-2018) Telah dilaksanakan Pemusnahan Alat Tangkap Trwoll yang mana dalam hal ini telah disepakati kedua belah pihak Desa Teluk Bogam dan Desa Sei Bakau bahwa barang bukti tersebut dimusnahkan, adapun jumlah yang dimusnahkan sebanyak tiga (3) Set Alat Tangkap trwoll.


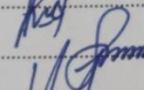

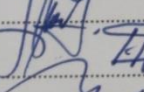
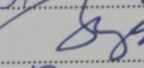
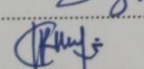
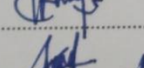
Demikian berita acara ini dibuat dan apabila dikemudian hari terjadi penuntutan terhadap barang bukti yang dimusnahkan maka berita acara ini dapat dipergunakan sebagai pengganti barang bukti yang telah dimusnahkan yang berkekuatan hukum.

Dibuat di : Teluk Bogam  
Pada Tanggal : 30 April 2018

Kepala Desa Sungai Bakau  
  
AHMAD YANI

Kepala Desa Teluk Bogam  
  
SYAHRIAN

Saksi-saksi :

1.  HADRI
2.  Muhammad Samri
3.  NDI
4.  INDRIZ
5.  N. Sakin
6.  ARPIN
7.  HANSARI
8. ....
9. ....

News event of trawl destruction, agreed by Head of Sungai Bakau Village and Teluk Bogam  
Head of Village

**Attachment 3. Protected species sighting in Kotawaringin Barat area from December 2017- May 2018**

| No | Date       | Time     | Location              | Sort of Species | Species Identification    | Numbers | Direction | Activity | Information  |
|----|------------|----------|-----------------------|-----------------|---------------------------|---------|-----------|----------|--|
| 1  | Jan 19-18  | 08.00 AM | Northeast Senggora    | Turtle          | Green turtle              | 2       | Southwest | Swimming | Turtle calf with 20 kg weight                      |
| 2  | Jan 20 -18 | 07.00 AM | Southeast Beras Basah | Turtle          | Green turtle              | 10      | North     | Feeding  | Turtle calf and mother                             |
| 3  | Jan 28-18  | 11.00 AM | Southeast Beras Basah | Turtle          | Green turtle              | 4       | Southeast | Swimming | Adult turtle                                       |
| 4  | Feb 17-18  | 11.00 AM | Northwest Senggora    | Turtle          | Green turtle              | 1       | Southwest | Swimming | Adult turtle with 50 kg weight and 0.75 m length   |
| 5  | Mar 6-18   | 09.06 AM | Southern Senggora     | Doplhin         | Grey color with small fin | 2       | East      | Swimming | Length of 2,3 meter with approximate weight 130 kg |
| 6  | Mar 12-18  | 00.05 AM | Southern Senggora     | Dugong          | Grey skin                 | 2       | Southwest | Swimming | Adult with weight of 250 kg and length of 1.5 m    |
| 7  | Apr 17-18  | 01:30 AM | Eastern Beras Basah   | Dugong          | <i>Dugong dugon</i>       | 1       | East      | Swimming | Length of 2 meter                                  |