

# CREOCEAN

Marine environmental consultancy and oceanographic services

**Climate change in East Africa : Overview, perspectives and Business Opportunities**



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Environnement & océanographie

# CREOCEAN

A company part of an independent group



Contributing to the development and management of user- and environmentally friendly cities and regions



Marine environment, coastal development and oceanography



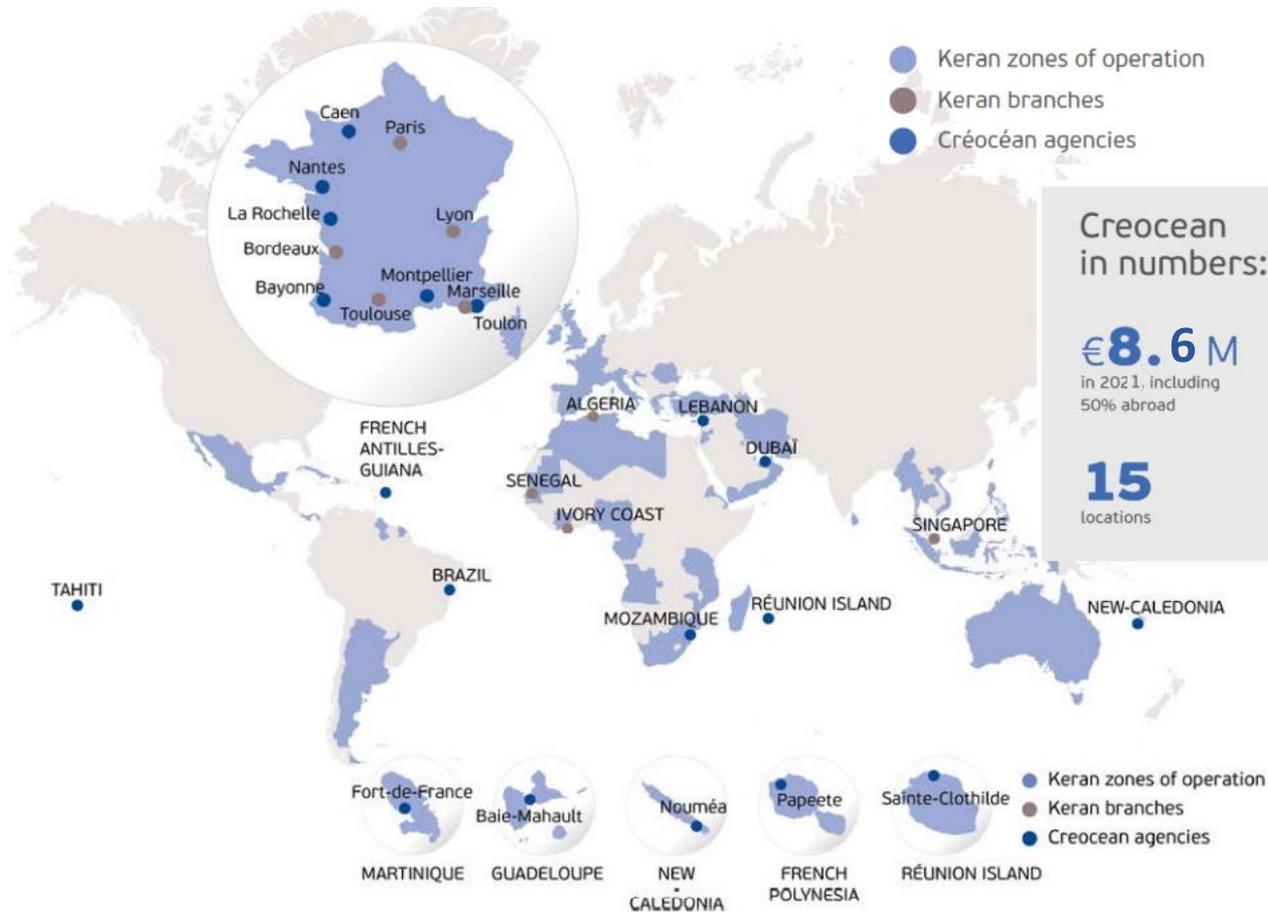
Make accessible and efficient the power of a responsible digital



Planning and Implementing urban development projects in developing and emerging countries

# CREOCEAN

## Worldwide consultancy services



### Creocean in numbers:

€8.6 M

in 2021, including 50% abroad

15

locations

a company part of the independent Keran group: 555 employees, turnover of €50M in 2020, including 20% abroad

70

employees in 2020

13

professions

8

OPQIBI certifications

Certifications:  
HSE (OHSAS 18001)  
In development:  
QUALITY/PMS (ISO 9001)  
HSE (ISO 45001)

# OUR CLIENTS & EXPERTISES

We support public and private clients **wishing to integrate environmental requirements** in their approach

From feasibility....

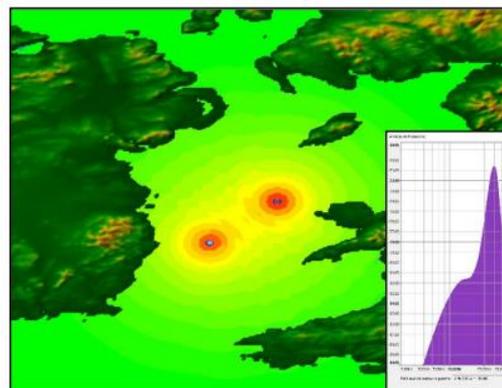
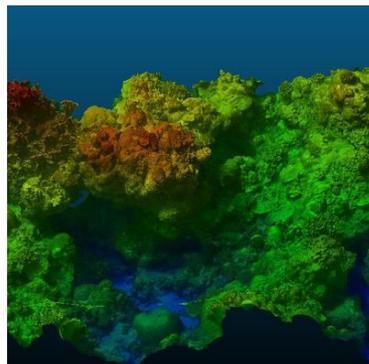
Bibliography

Surveys and Modelling

Expertises

Monitoring and mitigation measures

...To realization



# CREOCEAN IN EAST AFRICA

## CREOCEAN DEVELOPMENT IN EAST AFRICA

- Protection of Kenyan marine environment
- Coastal sustainable development
- Blue economy development



60% of the  
Kenyan  
coastline

# CLIMATE CHANGE impacts on coastal areas & ocean

## HOW CREOCEAN SUPPORTS ITS CLIENTS REGARDING CLIMATE CHANGE THREATS ?

- Assessing the physical/biological/ecological impacts of climate change on the environment
- Providing decision making tools (sensitivity & vulnerability mapping)
- Proposing coherent adaptation strategies & nature based solutions



# CREOCEAN Capability statement



Marine renewable energy



Coastal engineering



Environmental studies



Industrial project



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CLIMATE CHANGE



Hydrodynamics and hydro sedimentary



Environmental management,  
protection & restoration



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# CREOCEAN Capability statement



Environmental studies



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CLIMATE CHANGE



Environmental management,  
protection & restoration

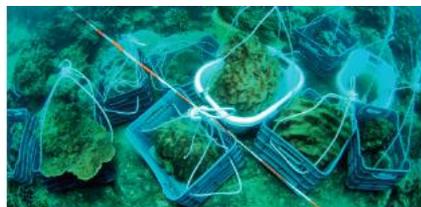


## Preparation of guidelines and coral reef enhancement plan for PSEPA

|              |                     |
|--------------|---------------------|
| CLIENT(S)    | MINISTRY OF FINANCE |
| STAKEHOLDERS | CRÉOCÉAN            |
| DATE         | 2018 - 2020         |



Coral removal



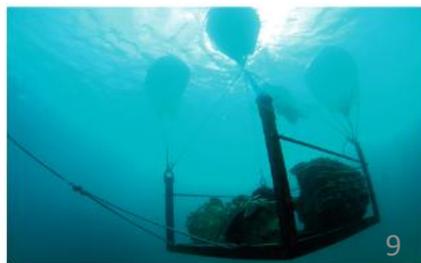
Large corals in plastic baskets



Coral sticking



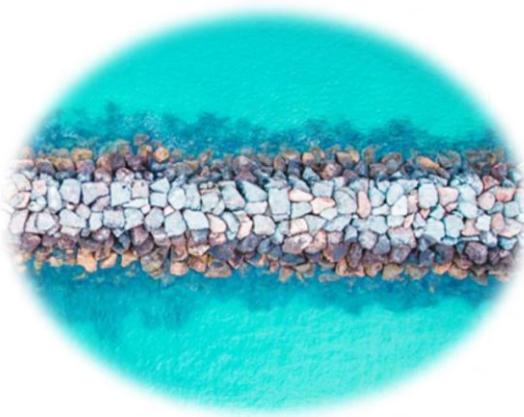
**Larger corals** are transported in a steel cage lifted by lift bags and towed by boat.



9

**Largest colonies** can be placed on the substrate in calm areas and/or attached to heavy cement bases.





Coastal engineering



Marine renewable energy



Hydrodynamics and hydro sedimentary



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CLIMATE CHANGE



## Sea plaza hotel protection dike: dimensioning and hydrosediment impact assessment

|              |                    |
|--------------|--------------------|
| CLIENT(S)    | SEAMAR ENGINEERING |
| STAKEHOLDERS | CRÉOCÉAN           |
| DATE         | 2003 - 2020        |



- ✓ The approval of the offshore design waves to be considered for the **dimensioning of the protection works**
- ✓ The definition, at the draft level, of the **dimensioning of a rubble-mound breakwater to protect the location**
- ✓ The analysis of the **hydro-sedimentary impact** of the works



## Vulnerability studies of coastal cities and proposal of adequate adaptation measures

|              |  |
|--------------|--|
| CLIENT(S)    | CELLULE DE PREVENTION ET<br>GESTION DES URGENCES |
| STAKEHOLDERS | <b>CRÉOCÉAN</b>                                  |
| DATE         | 2020   |



- ✓ Decision-making tool



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Industrial project

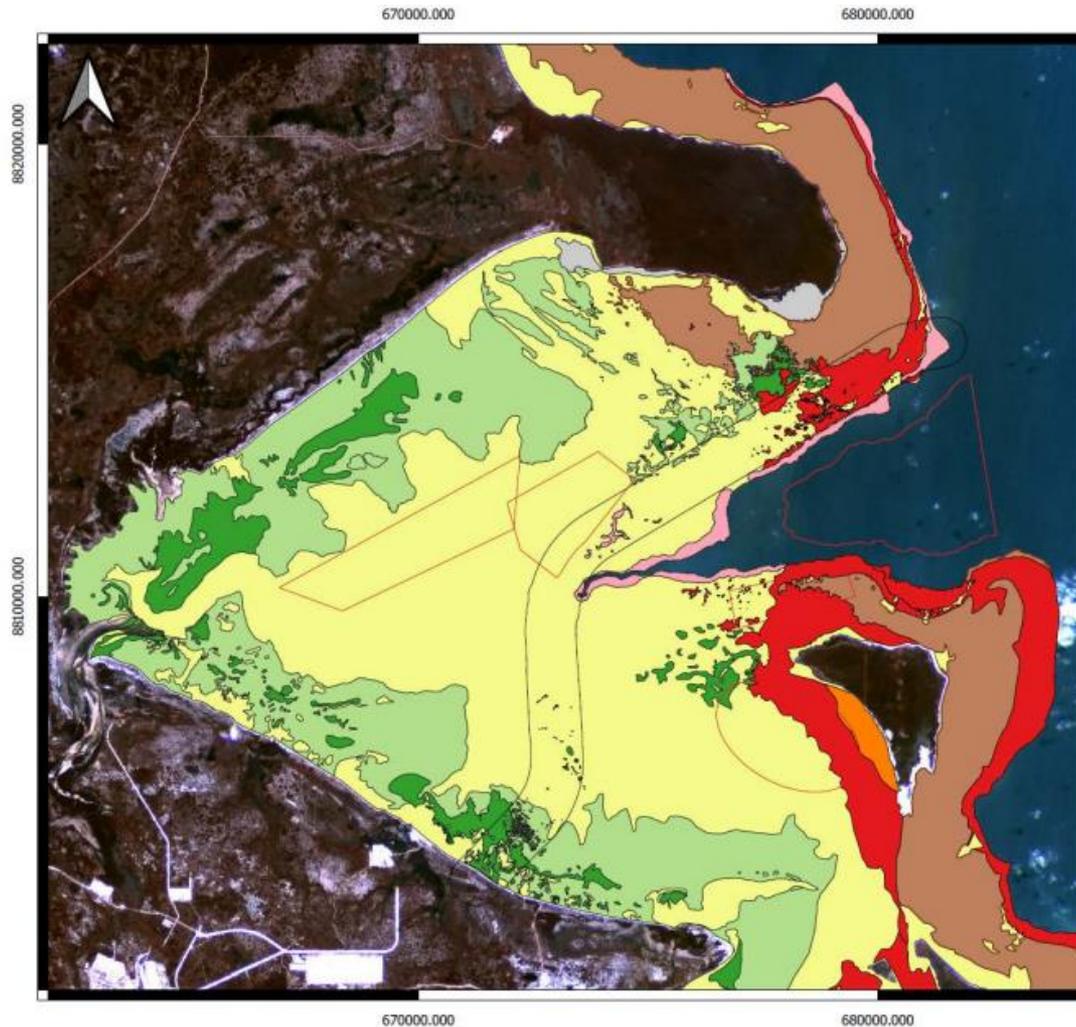


Environmental studies



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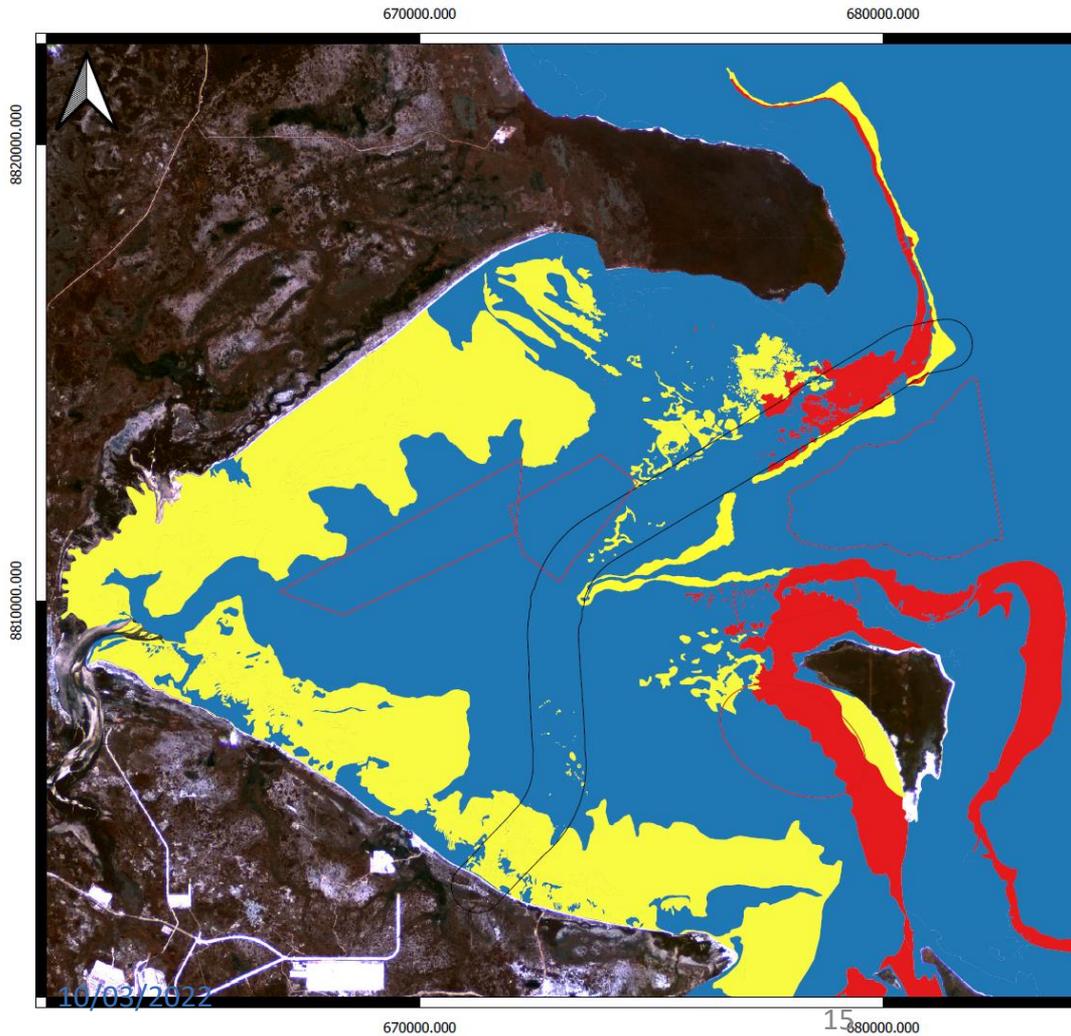
# HABITAT MAPPING



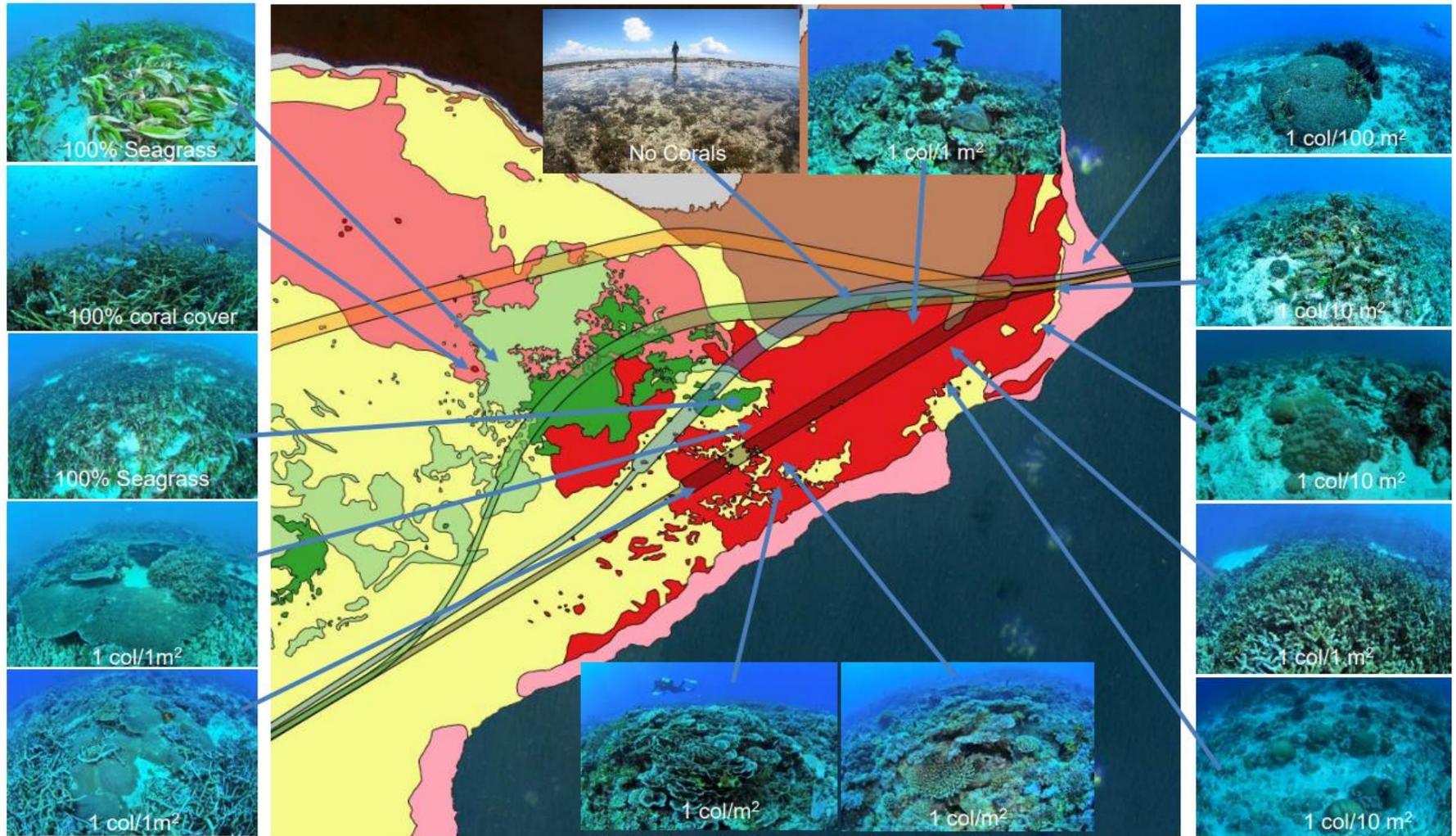
# SENSITIVITY MAPPING



✓ A decision making tool



# CREOCEAN RECOMMENDATIONS



# CREOCEAN Capability statement



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## Betty ETEVE

Business Developer – East Africa

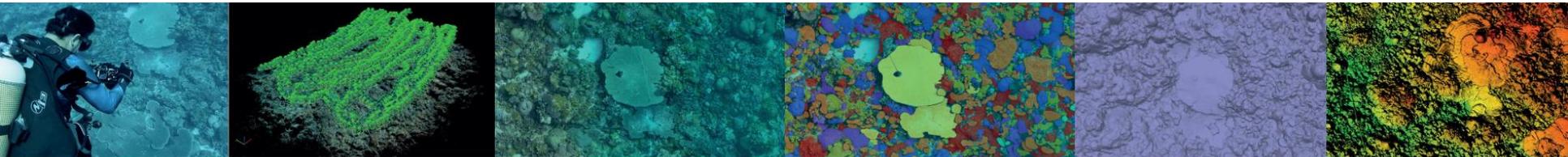
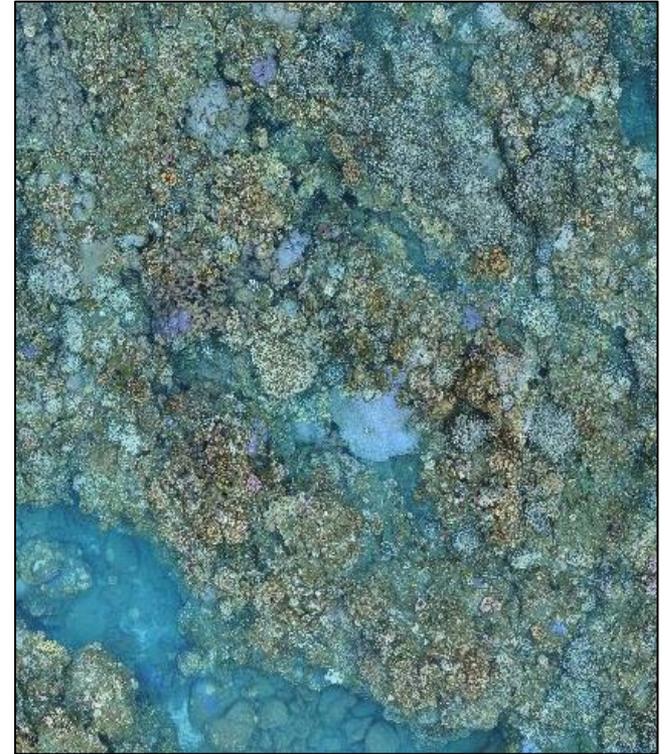
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