

Earth Day

Environment

Sea

By

Engr Pervez Sadiq

What I will be talking about?

- 1. Our coastline from Karachi to Astola Island**
- 2. The underwater flora and fauna**
- 3. The Pollution and its effects**
- 4. Some Mitigation Possibilities**

My Personal experience of over 35 yrs

- Have been Scuba Diving since 1978
all along the Karachi Coastline
- Have seen its degradation of our
Coast

Pollution of the SEA

Timeline!

- **1970s** Boys jumping off Native Jetty Bridge to retrieve coins thrown in water
- **1980s** Lobsters at Oyster Rocks
- **1990s** Harbor so polluted that we moved out to shipwrecks beyond the Harbour
- **2000** Diving now off the French Beach
- **2010** Diving around Charna area which is about 50 km from Karachi Harbor

Karachi harbour
To
Astola Island

Karachi to Astola



Pictures

- 1. Karachi Harbor and Ship Wrecks**
- 2. Charna Island**
- 3. South wreck**
- 4. Astola Island**

1- Karachi Harbor



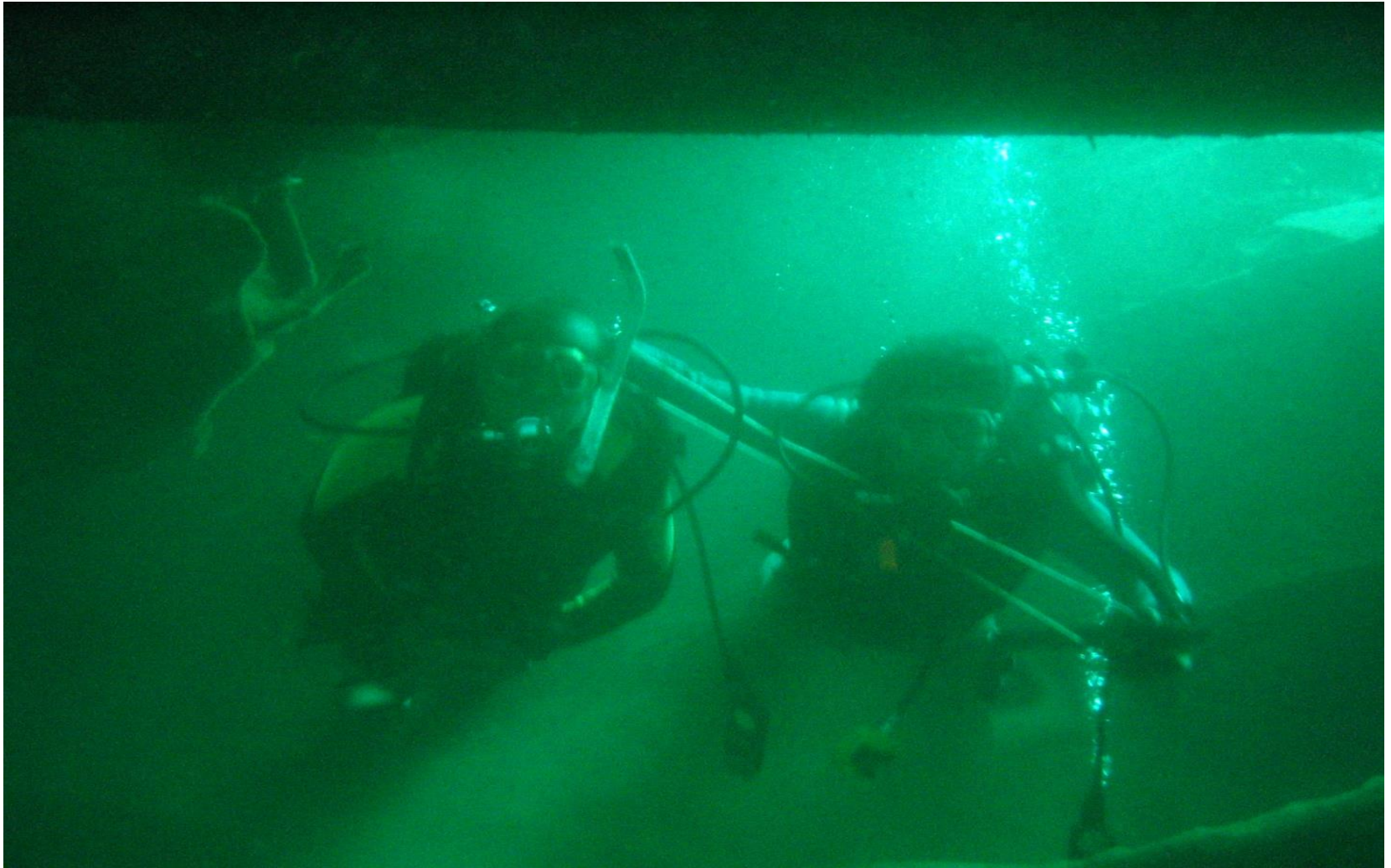
Harbour Area is now Degraded

- **These Photographs were taken about 15 years ago**
- **The shipwrecks have mostly been taken out**
- **Lots of Silt and Plastic Garbage**
- **Water smells like sewage**

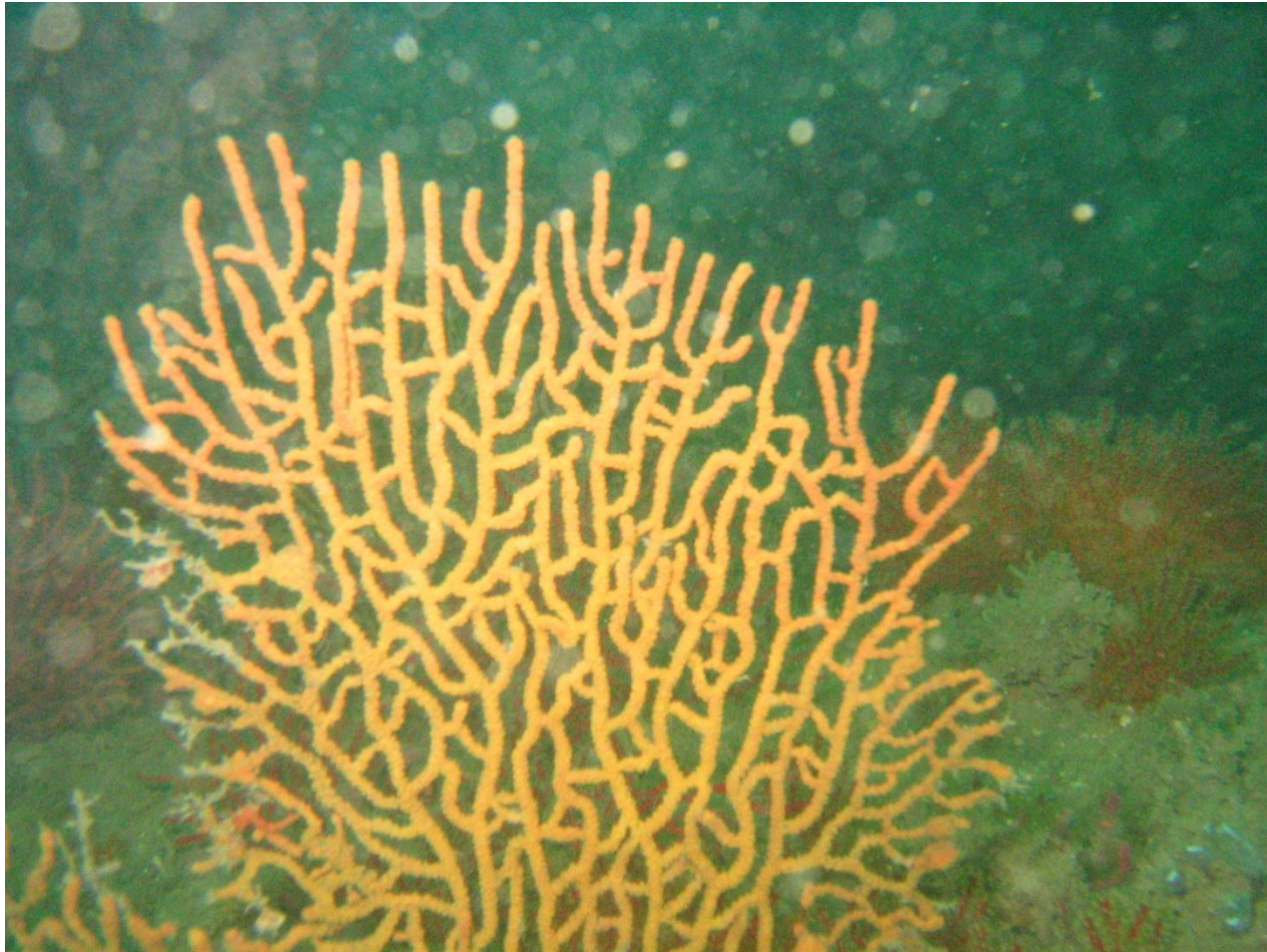
Ship wrecks

1. Regal Sun – **Partial salvaged**
2. Abasin - **salvaged**
3. Nanda Devi - **salvaged**
4. Aqua Marine - **salvaged**
5. Korean Trawler - **salvaged**
6. Issabani ?

Inside the engine room Regal Sun



Sea Fan



White Coral



Coral



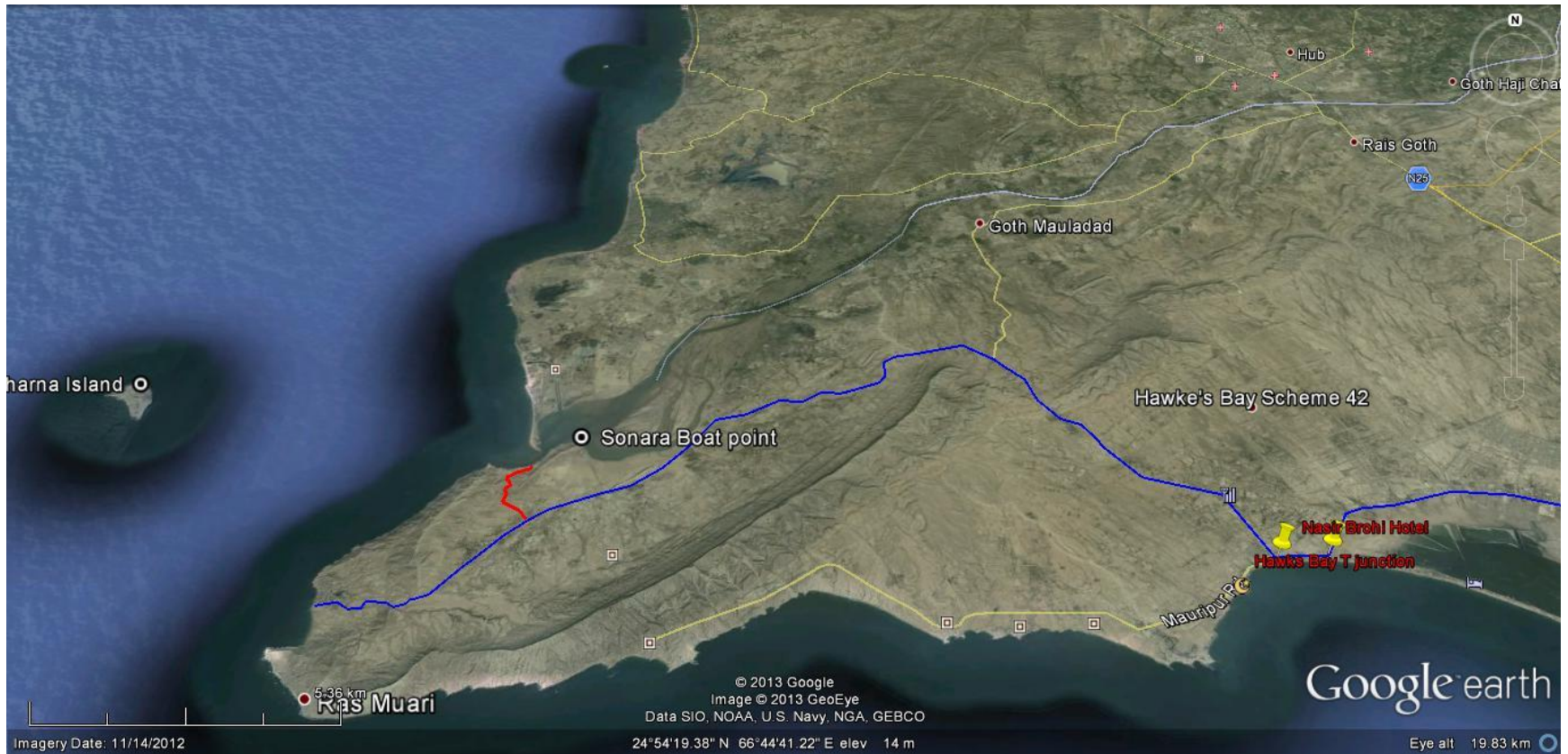
Lion Fish



Coral



2- Charna Island



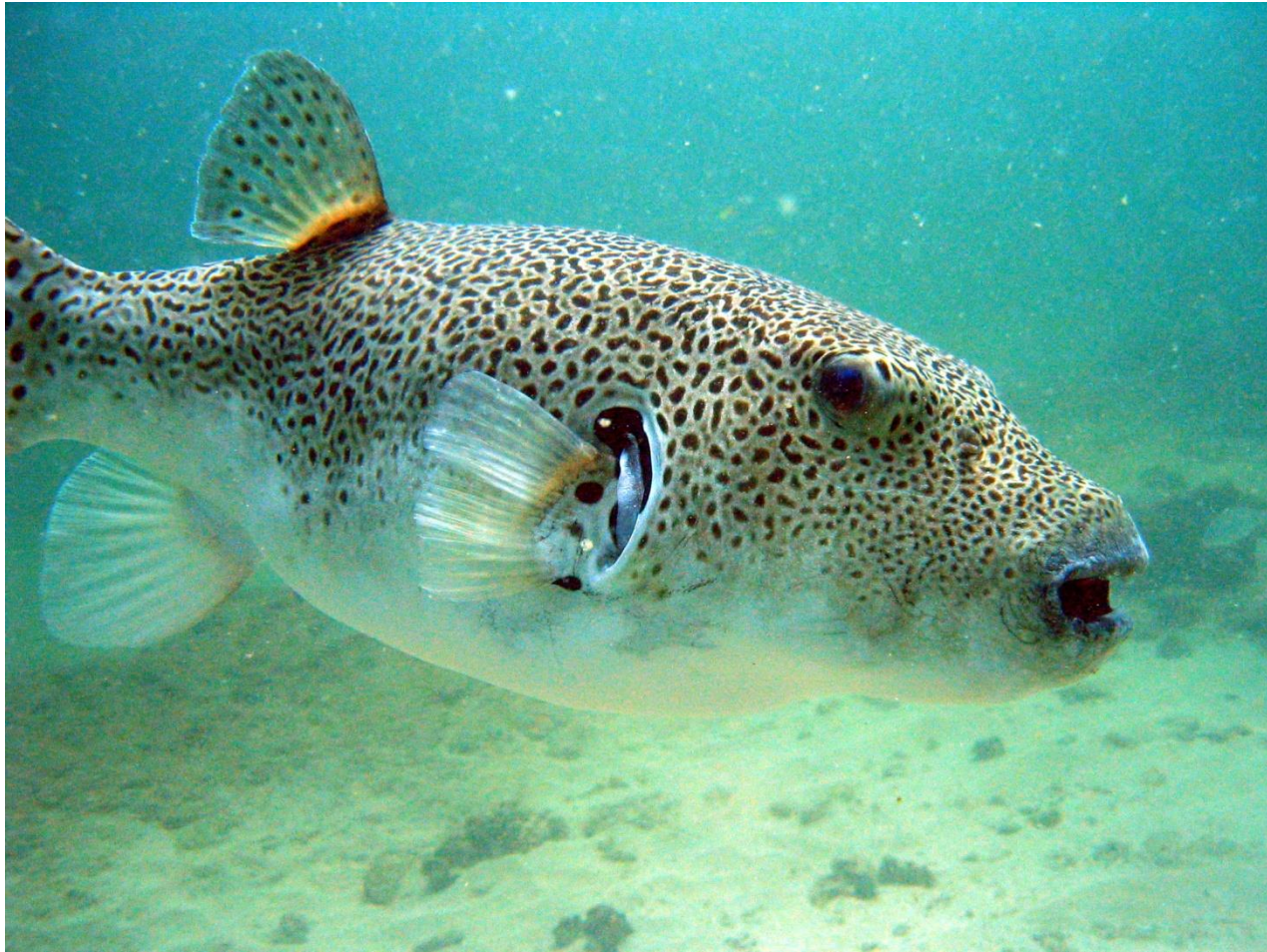
Charna Future

- 1. Charna area has the most coral and marine life**
- 2. However it is being severely impacted by over fishing and excessive trash**
- 3. The proposed coal jetty may severely affect this area**

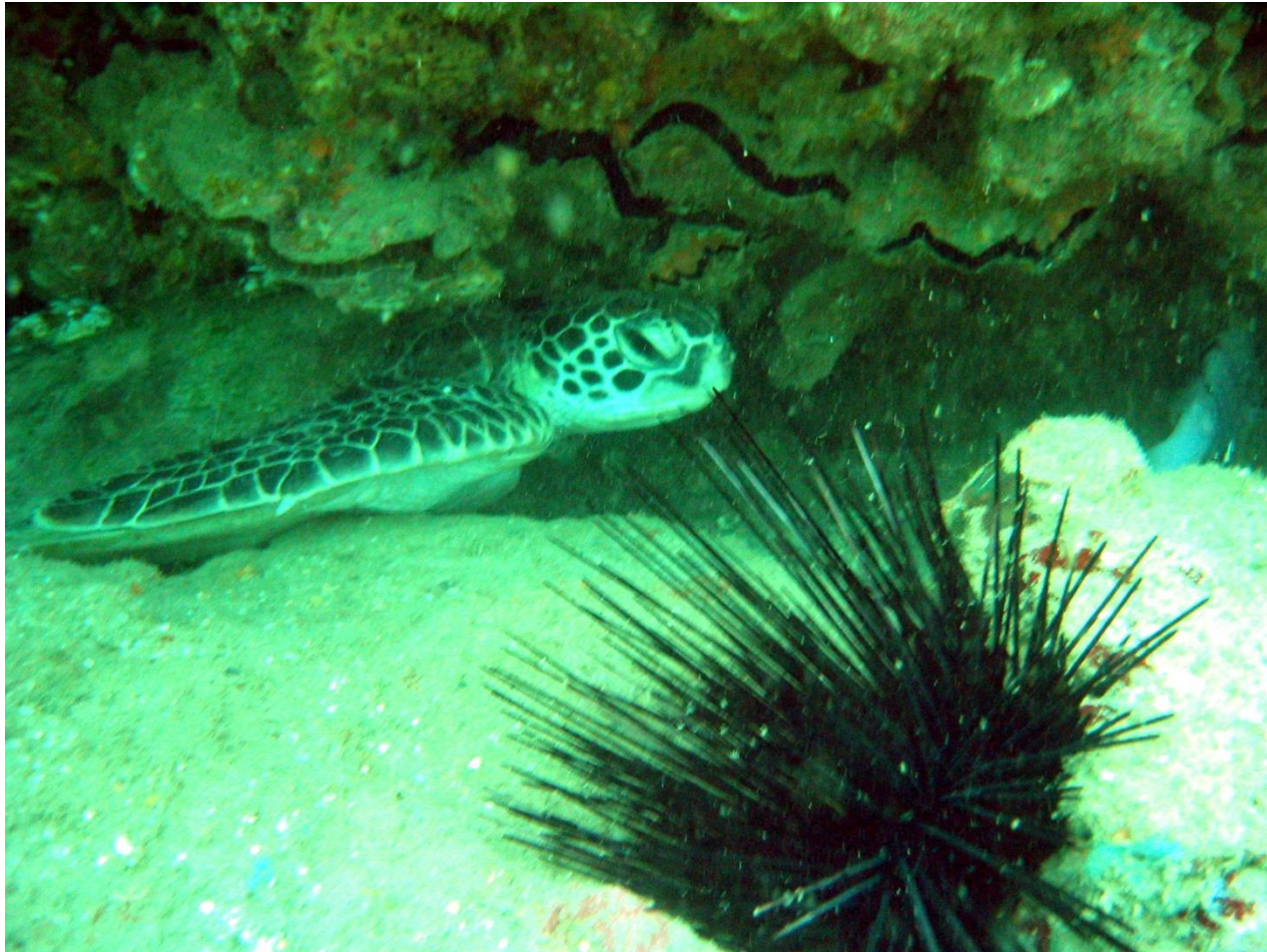
Charna Island



Puffer Fish



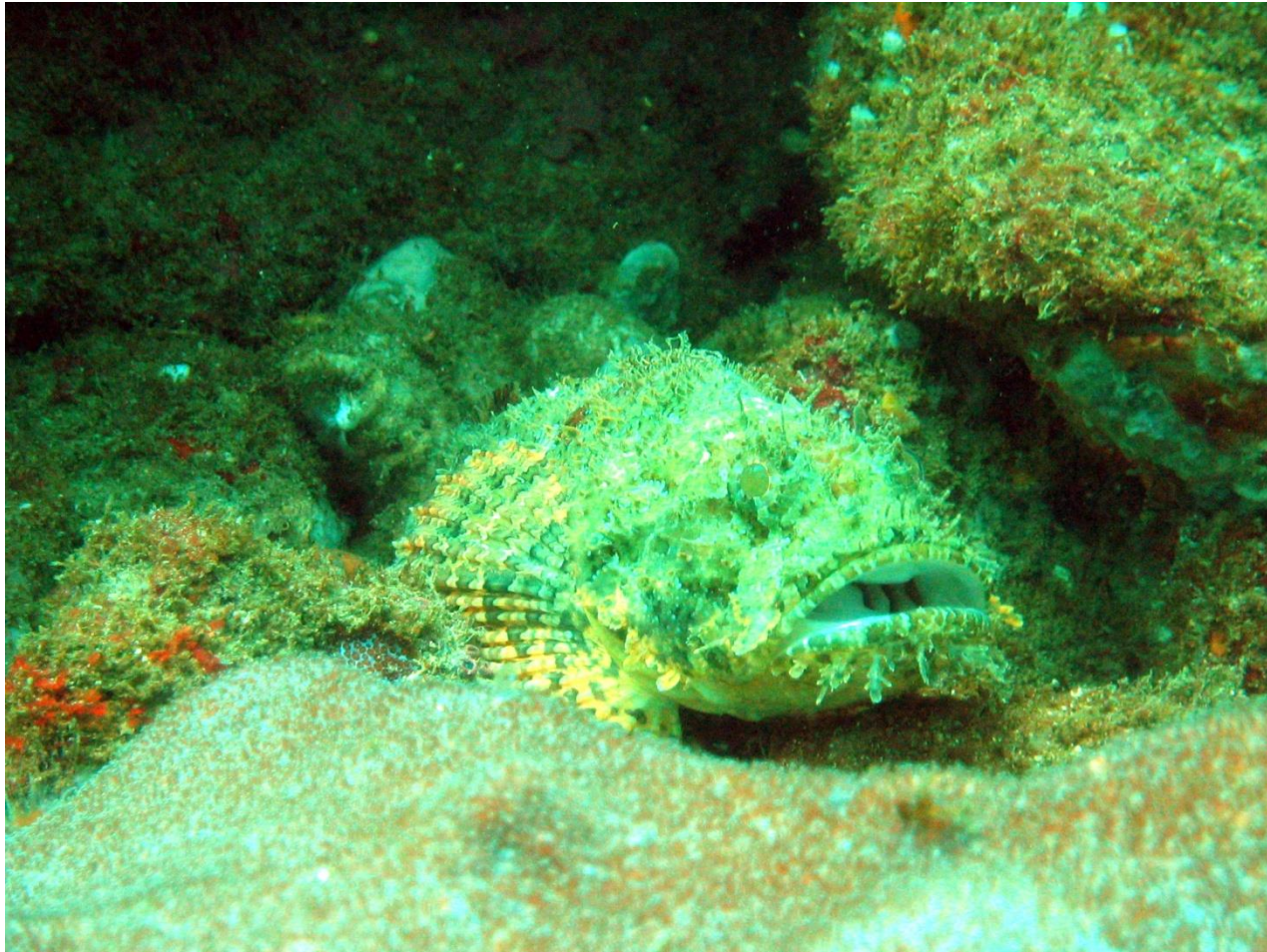
Turtle



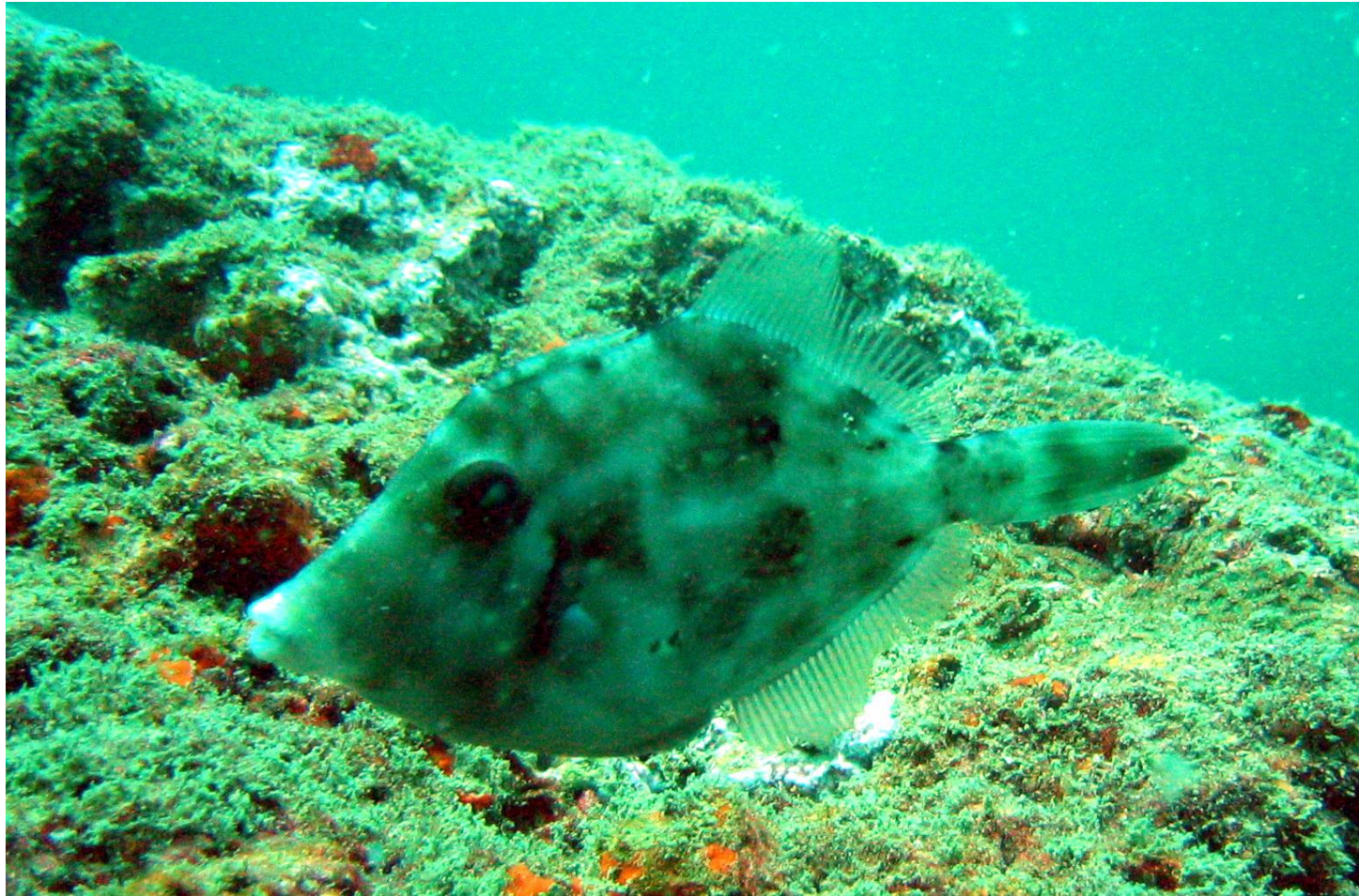
Moray Eel



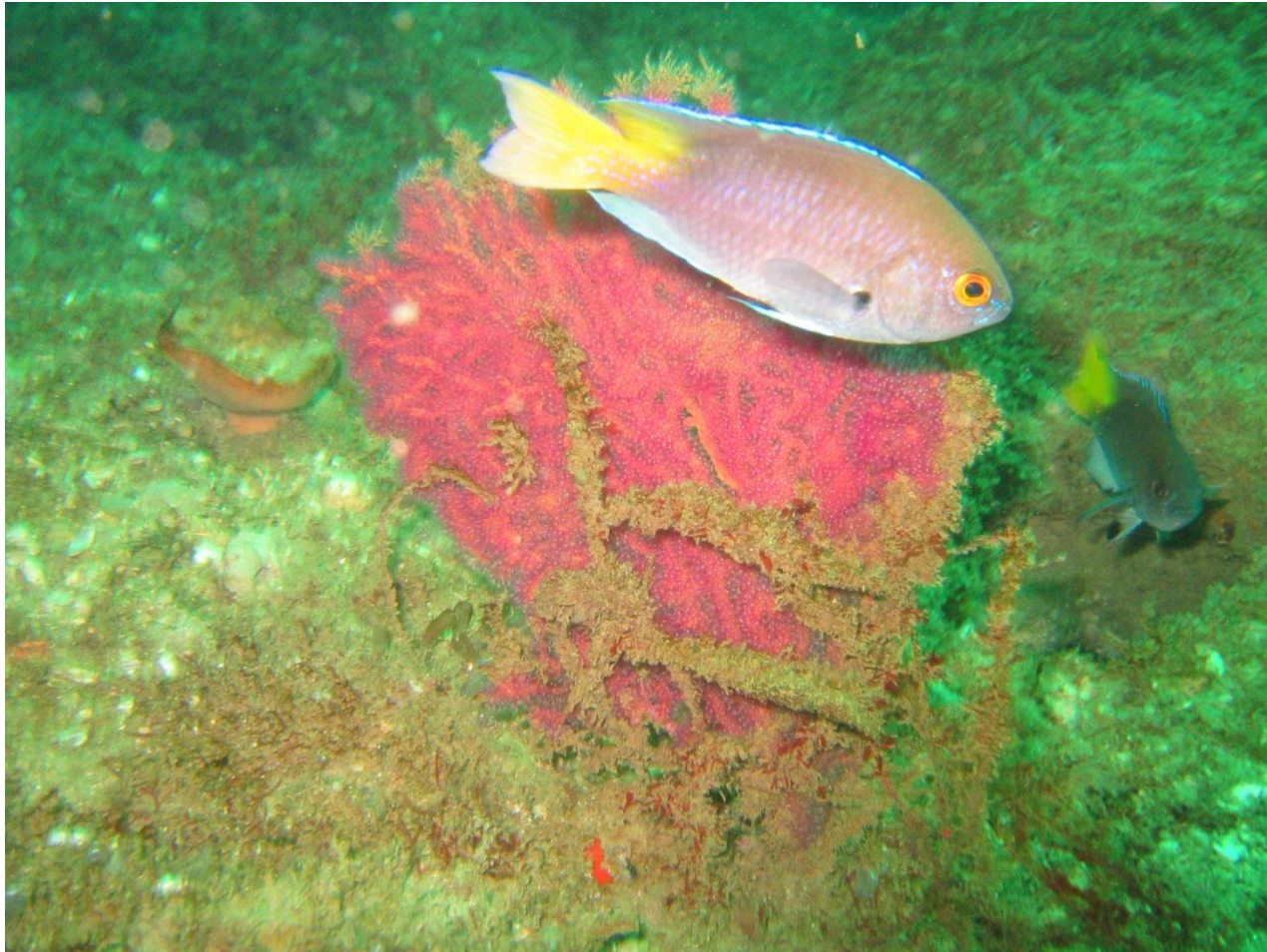
Stone fish



Box fish

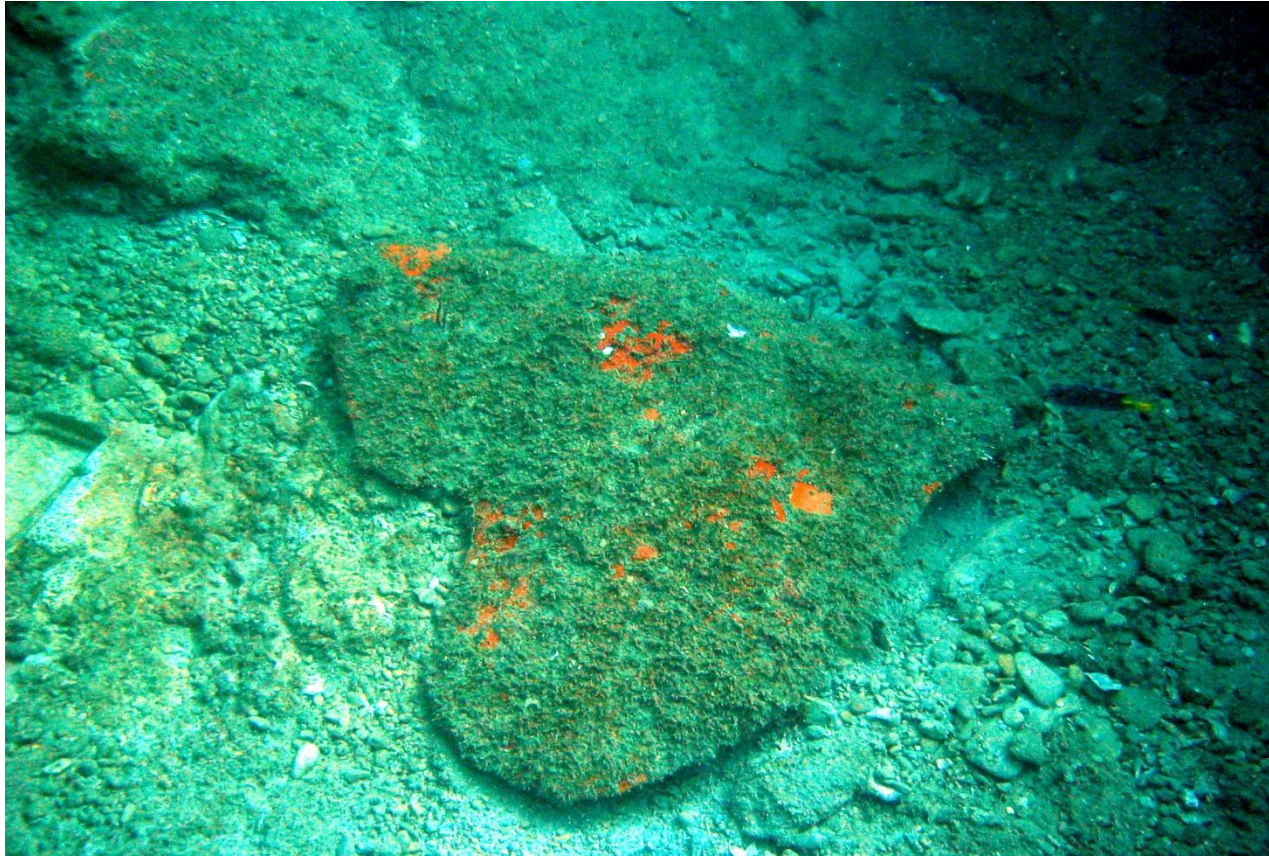


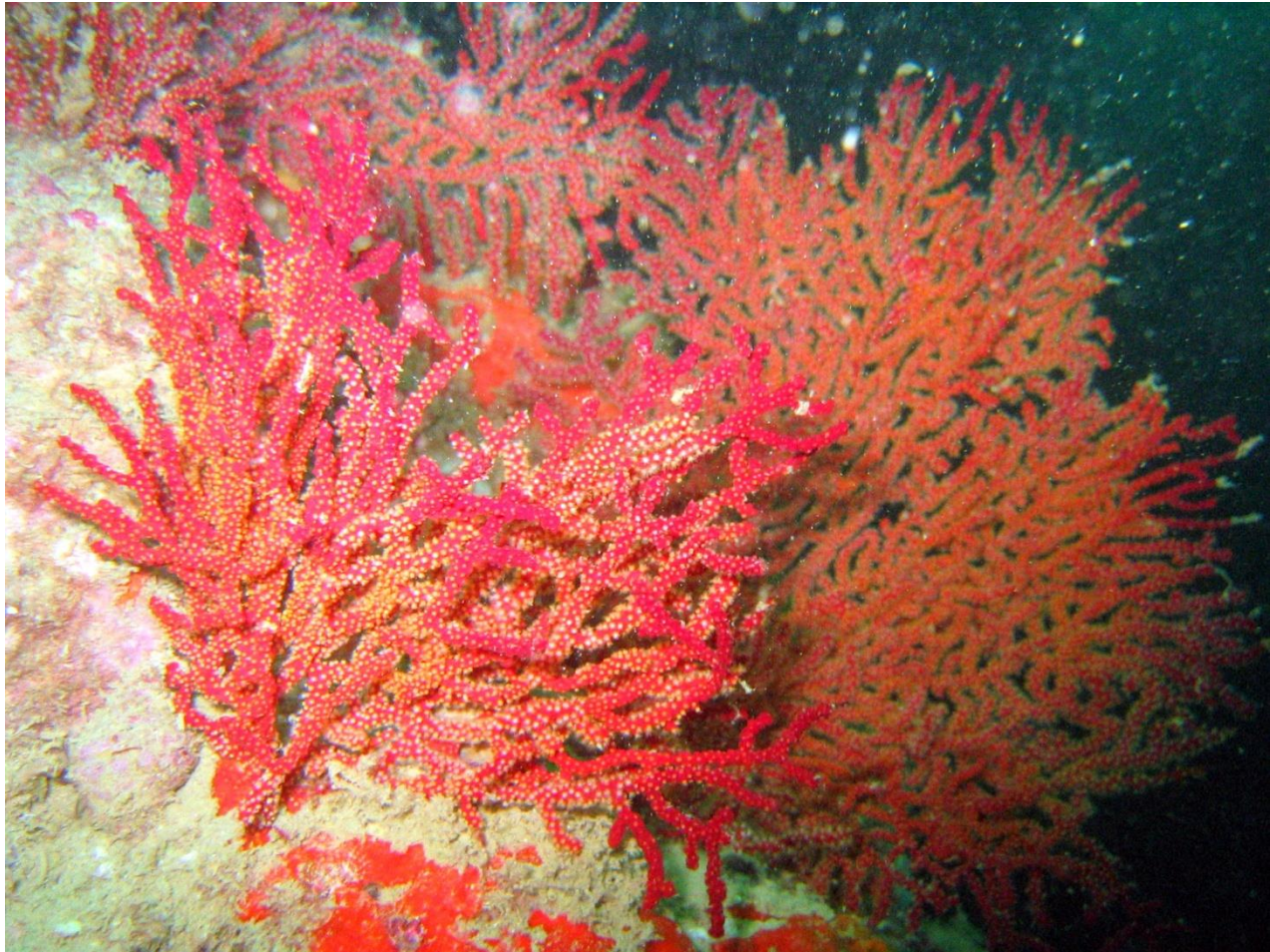
Sea Fan



Heart Shaped Rock

3ft x 3ft





Blue Coral and Neon



Healthy Reef



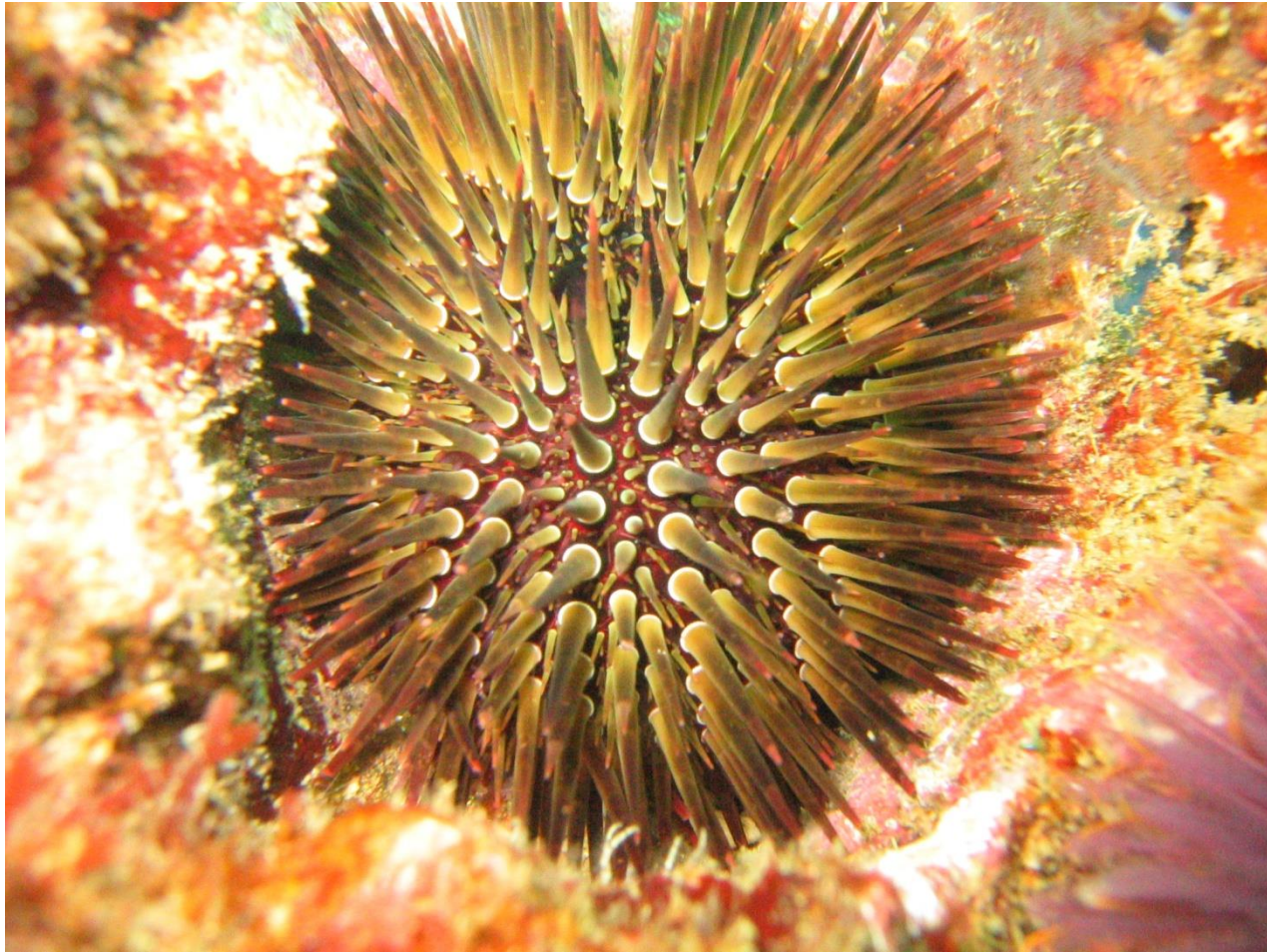
Sea Fern



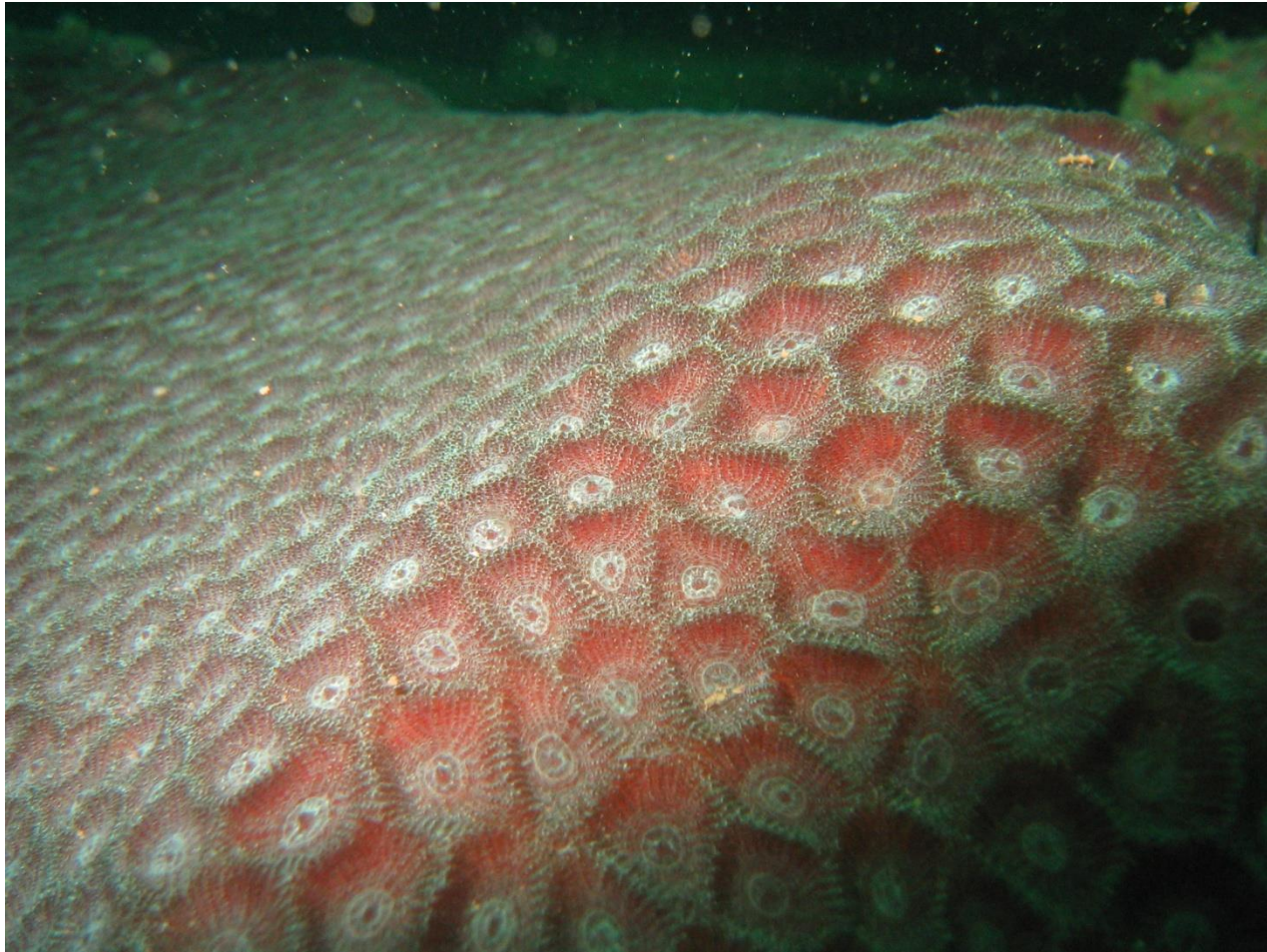
Tube Worm



Sea Urchin



Coral



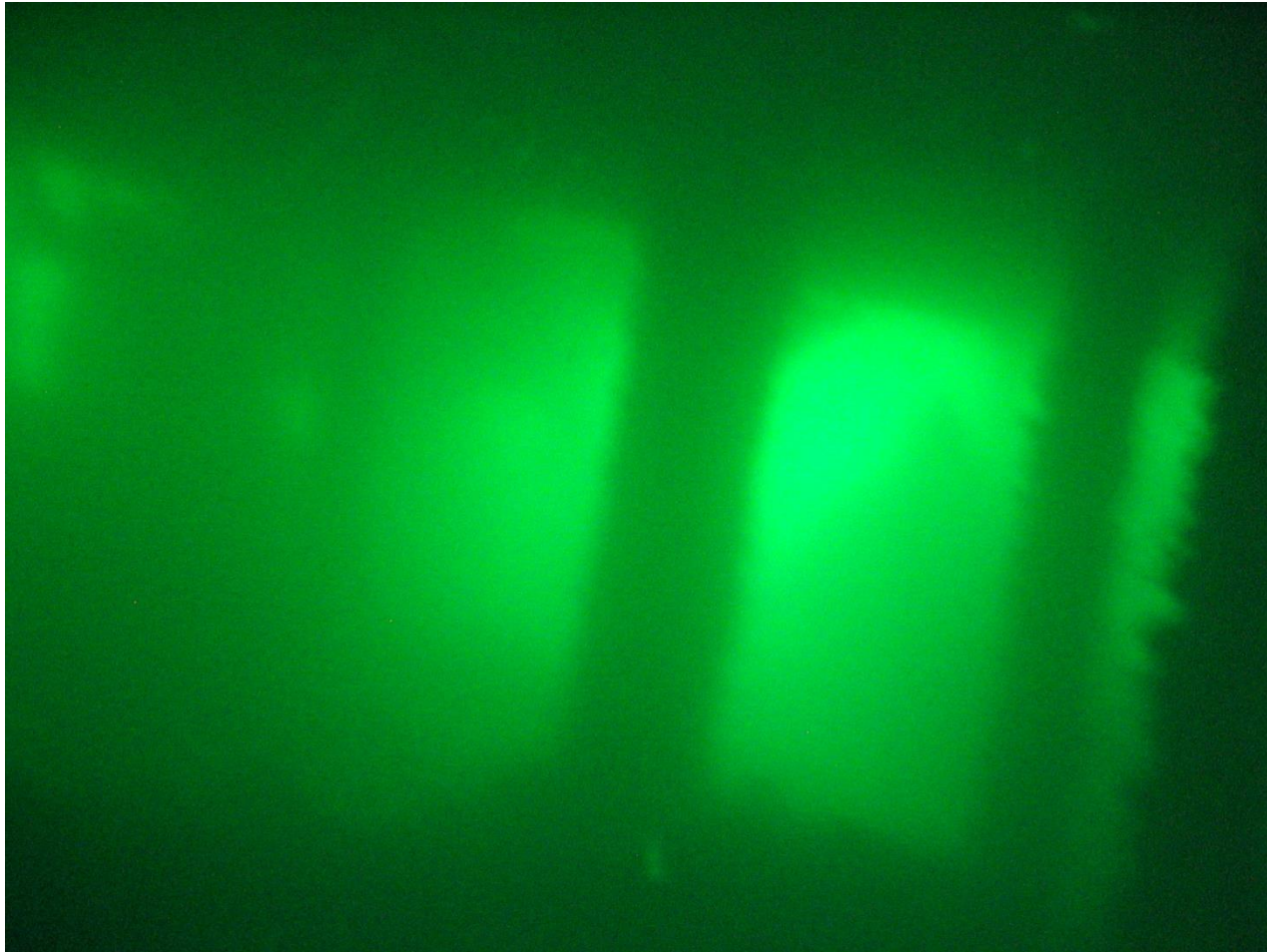
Nudibranch



3- South Wreck

- 1. It is about 54 km south of Karachi harbour**
- 2. Is home to giant groupers of over 200kg**
- 3. Still has large shoals of fish like barracudda and red snappers**
- 4. But is completely covered by snagged nets**
- 5. Marine life is flourishing because it is not easy to find by most fishermen**

Inside the Winch room



Amber Jacks



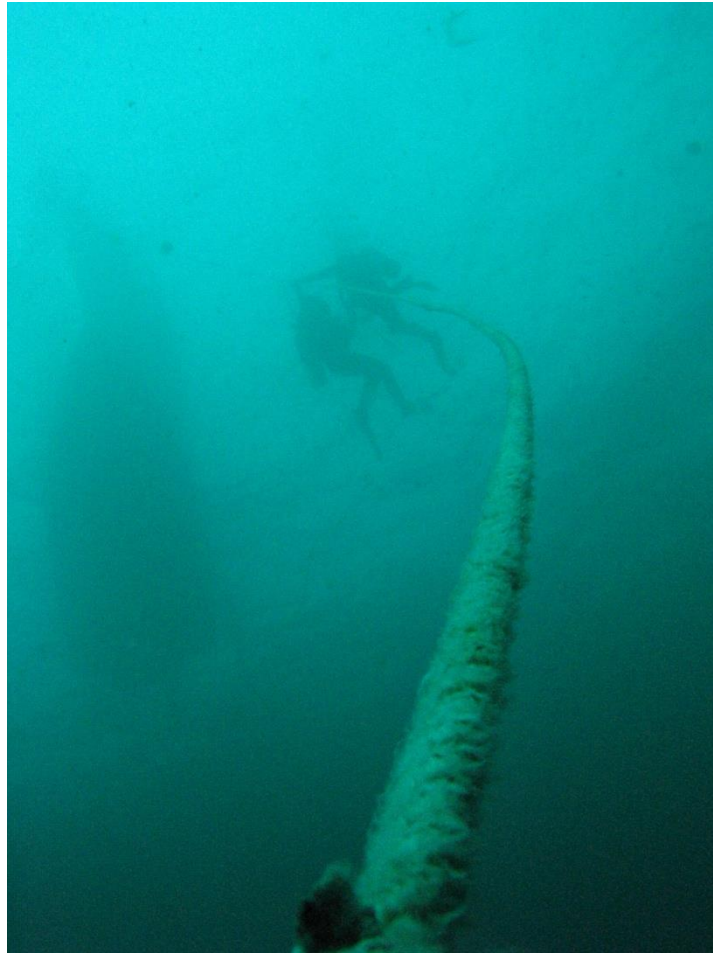
Giant Grouper



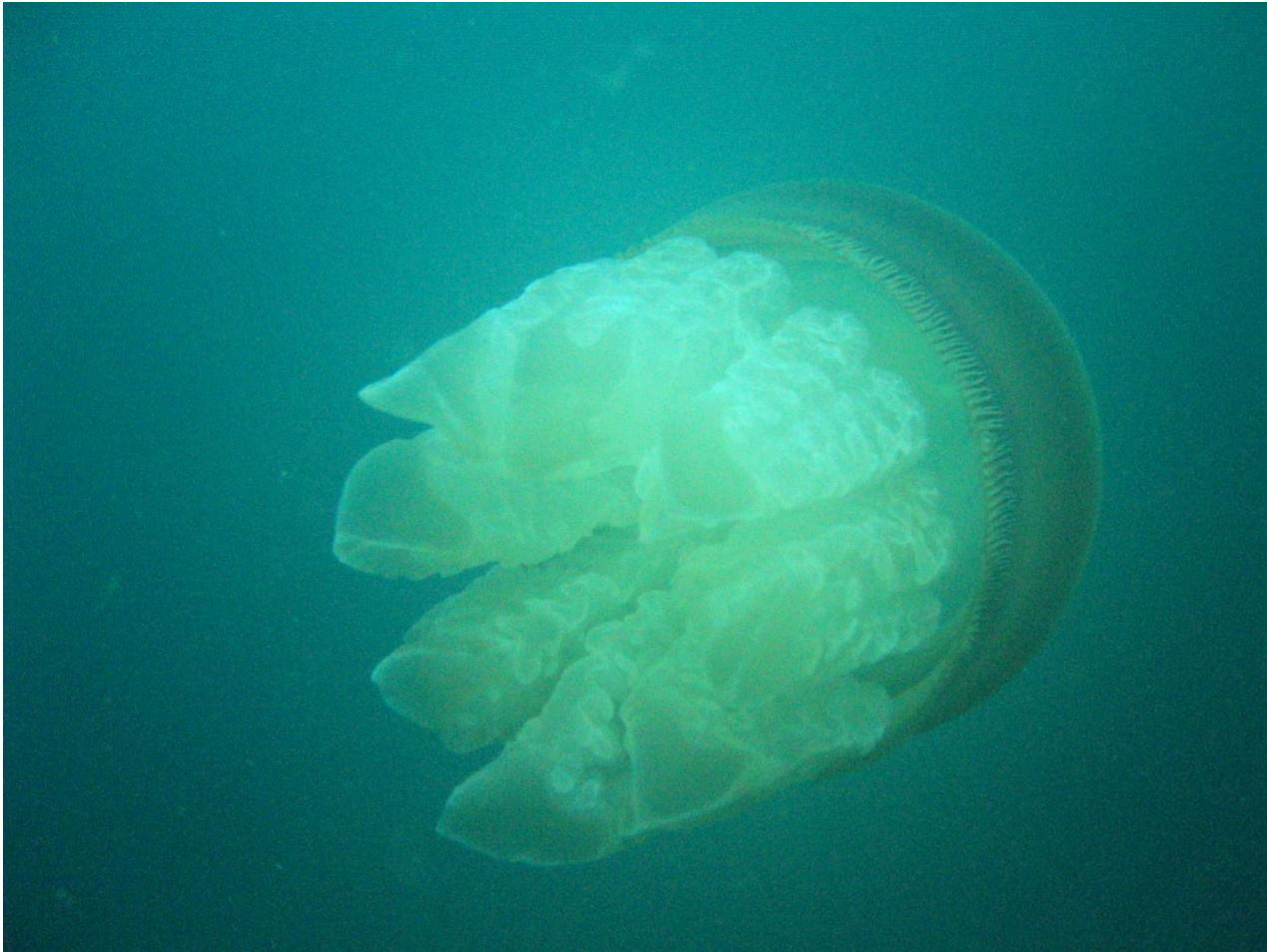
Barra



Divers on Anchor line



Jelly fish



4- Astola Island



Astola status

- 1. Is uninhabited**
- 2. It is 4 km x 1 km in size**
- 3. Relatively unpolluted**
- 4. Over fished**
- 5. Good marine life but no large fish**

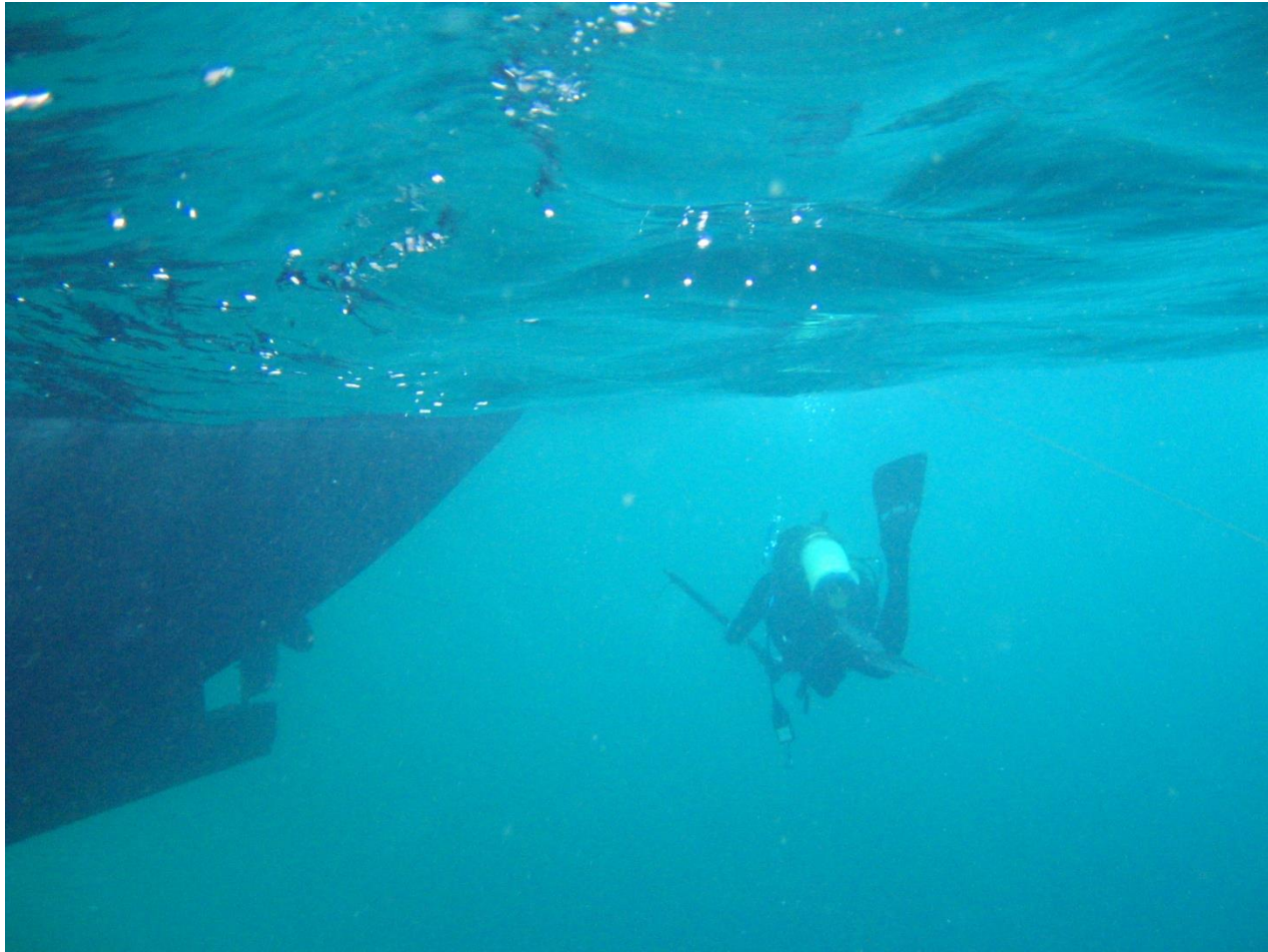
Largest Island of Pakistan



Anda Rock

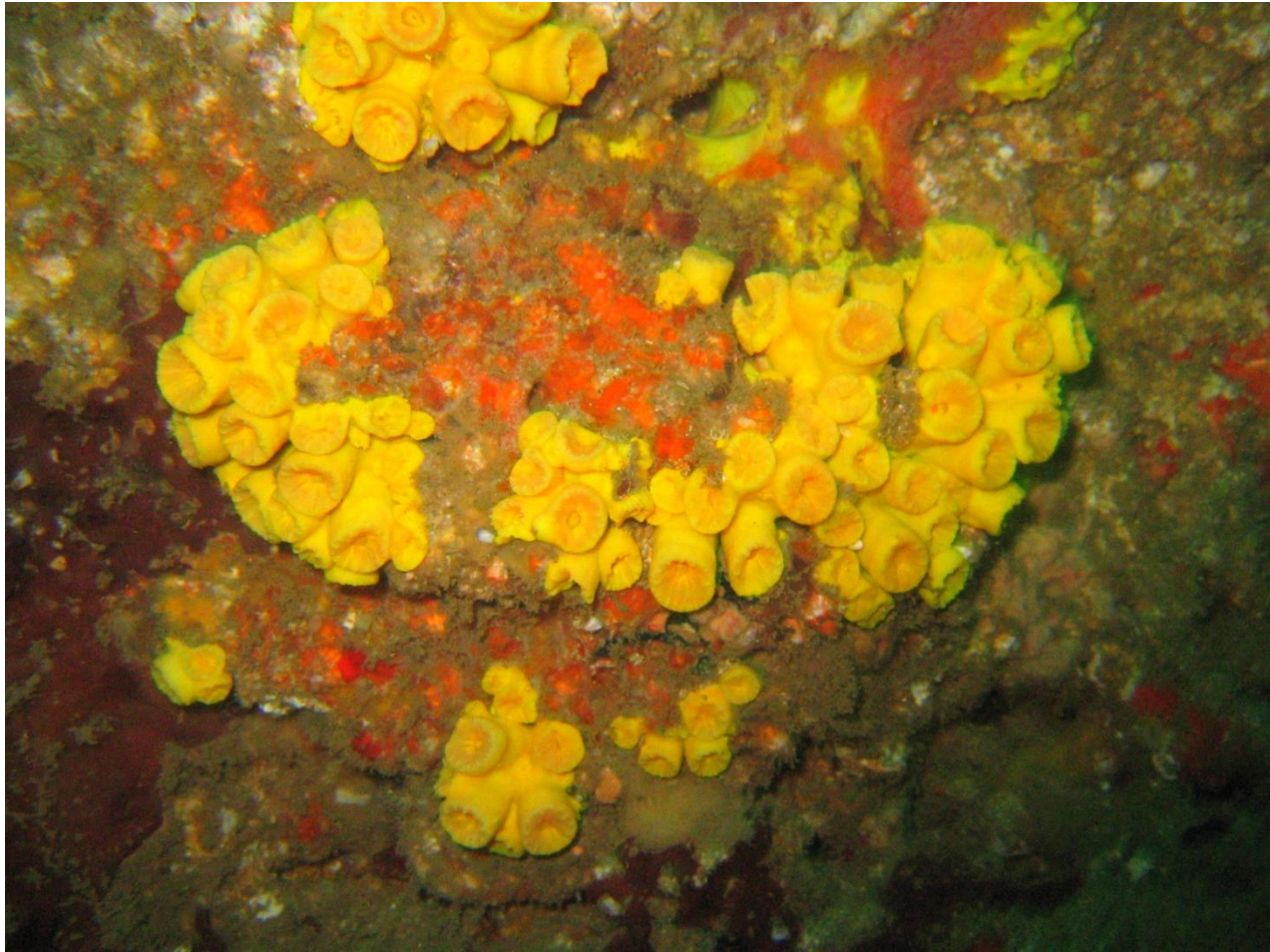


Diver

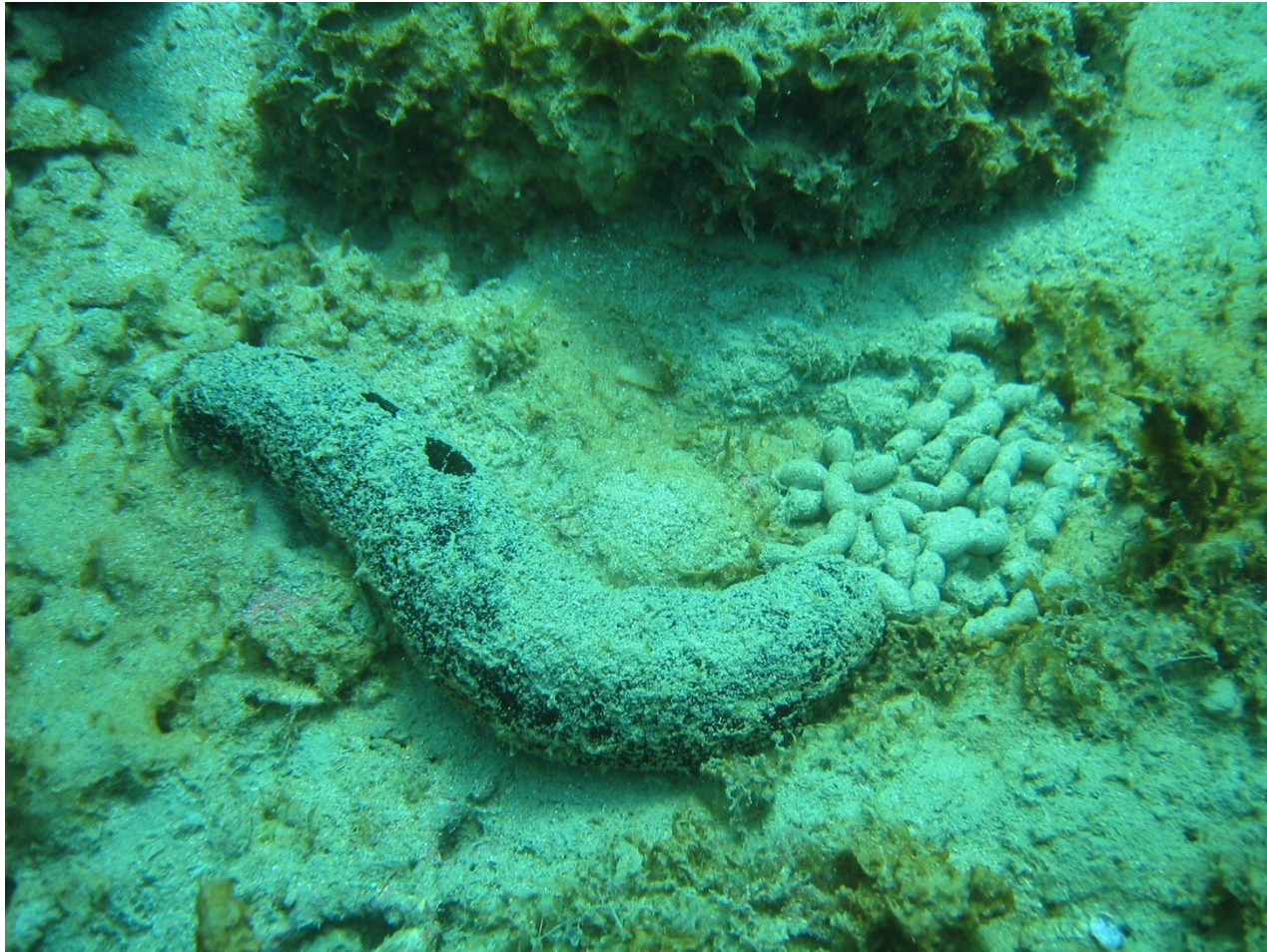


Coral

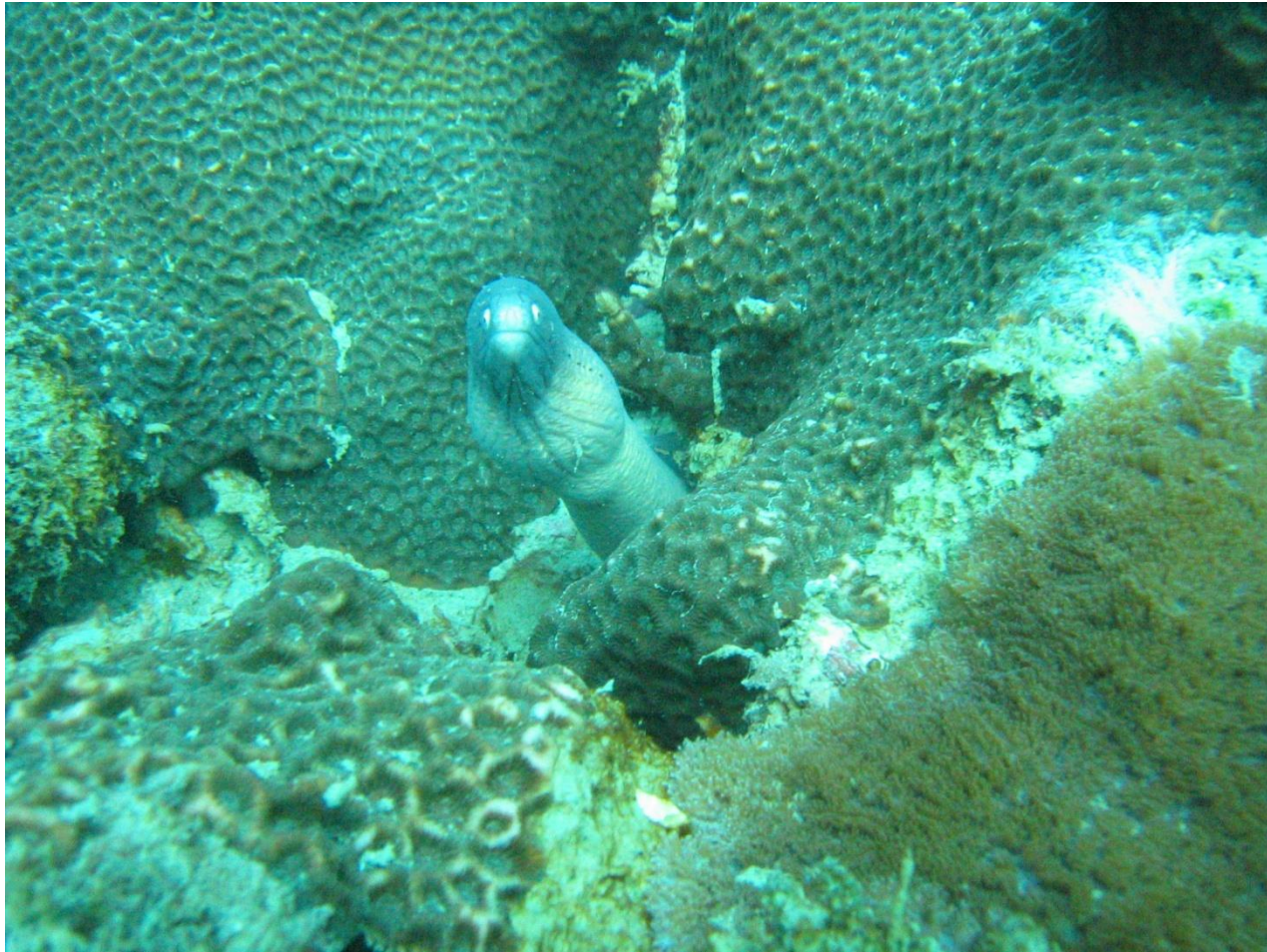


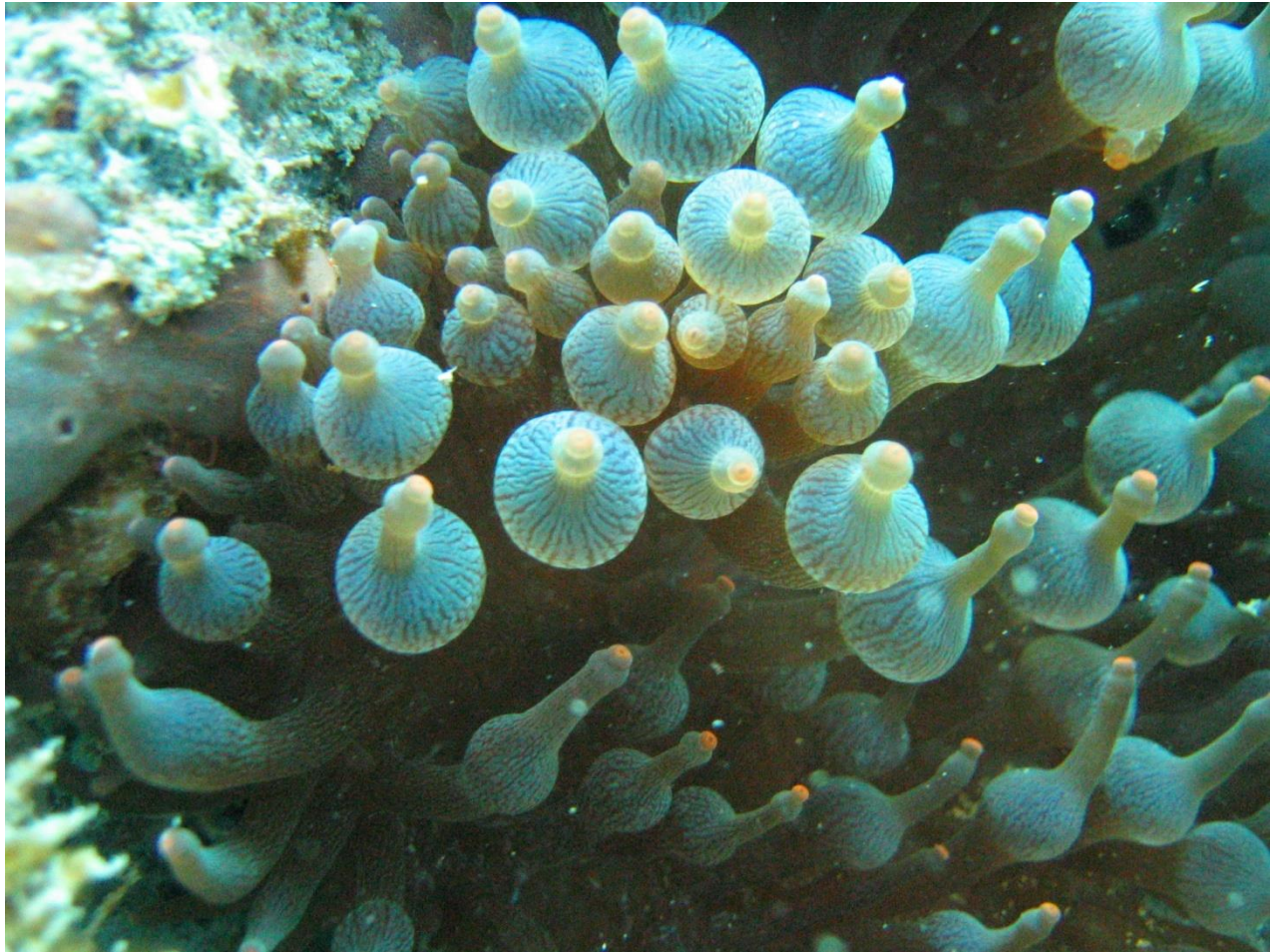


Sea Cucumber



Moray Eel





Pink Sea Urchin



200 feet high cliff



Mother ship and inflatable



Mother Ship



Sunrise



Mekran Coast off Buzi Pass



POLLUTION

Karachi Waste

- Most of liquid waste is dumped into the Sea
- Most of it is untreated
- Includes non biodegradable plastic items
- Which is extremely harmful for marine life
- Includes Industrial effluents which contain toxic chemicals and heavy metals
- Most of our sewage plants are closed or working under capacity

Sewage Treatment Plants

1. TP-1 51MGD Manghopir rd
2. TP-2 46MGD Mehmoodabad
encroached - just a pumping station
3. TP-3 54MGD Mauripur
4. TP-4 100MGD Ibrahim Hyderi
under development
5. Some small aeration ponds etc-not functioning

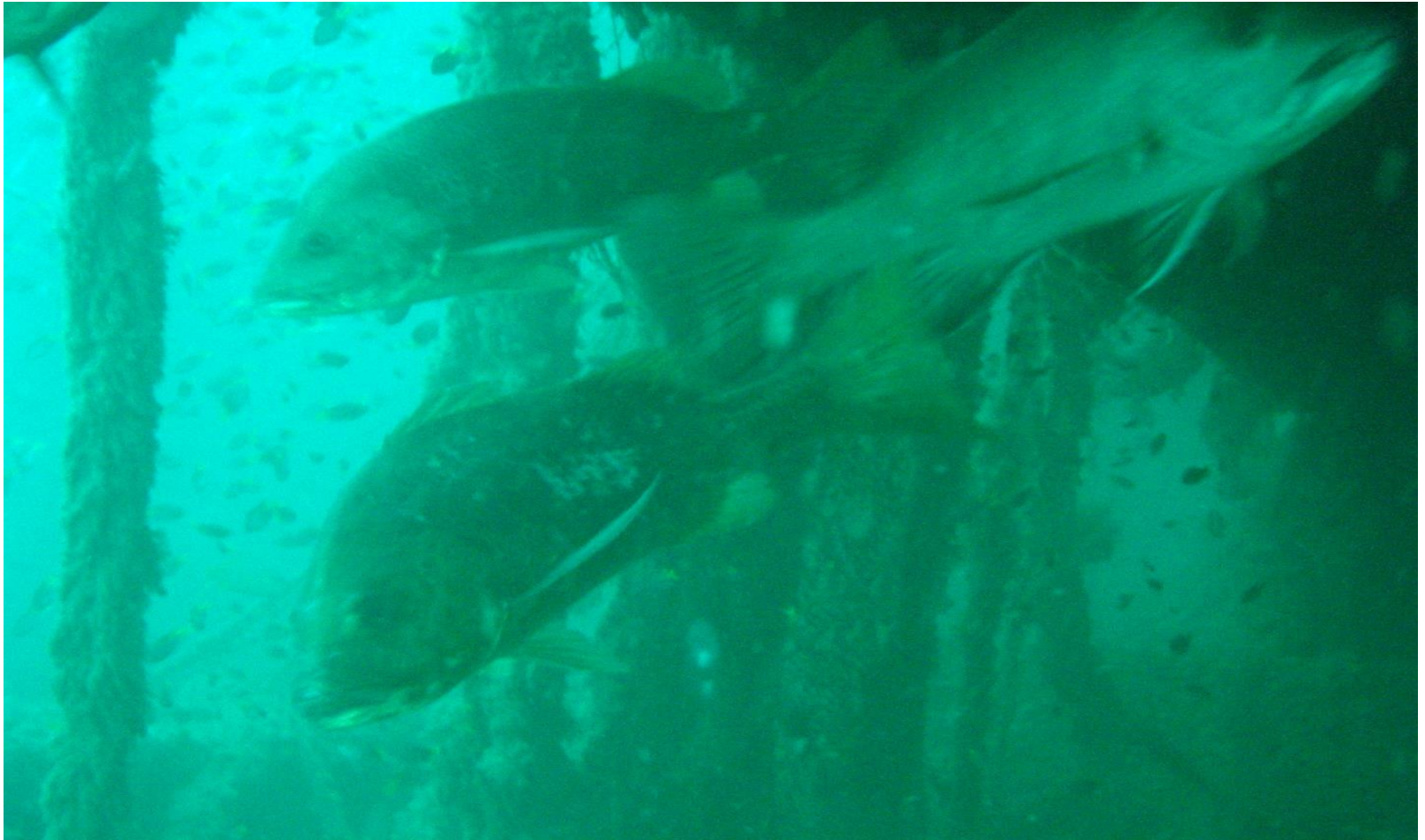
Water -> Sewage balance sheet

1. Karachi gets about 600MGD
2. Wastage about 30%
3. Therefore input to Sewage plants should be 400 MGD
4. Actual operating capacity about 100MGD
5. Therefore we are dumping 300MGD raw sewage into the sea!

Pollution Photos

- 1. Diseased fish with sores**
- 2. Coral dying out**
- 3. Siltation**
- 4. Nets**
- 5. Trash and plastic**

Diseased Fish



Diseased?



Native Jetty Bridge



Harbor



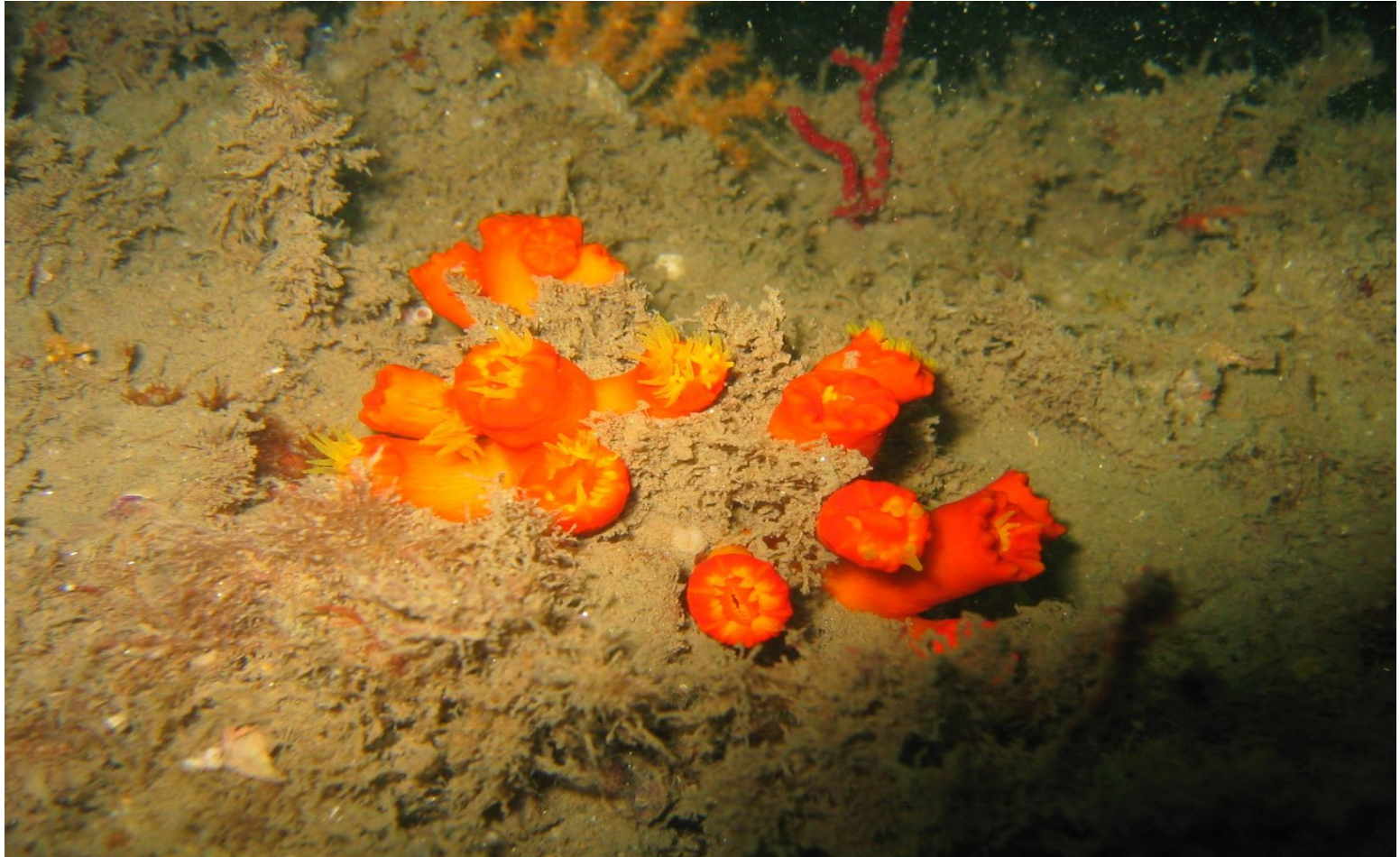
Dead Fish



Drains Choked with garbage



Silt



Trash



Nets



Hubco ?



Mitigation

1. Make our **existing** sewage plants **operational**
- 2. Set up Marine Parks around Charna and Astola of 4 x 4 km and 10km x 5 km exclusion zone**
3. Within 2 yrs the marine growth spill over from these areas will increase the fish catch for the local population
4. Trash screening near the Native jetty

Charna Island



Astola exclusion zone



Way Forward

- These can be implemented with not too much cost and quickly
- What a beautiful country we have
- **But**
- **ARE WE GOING TO LEAVE NOTHING FOR OUR FUTURE GENERATIONS??**