



## Dugong populations in Saudi Arabia: science and management



# Overview of National Center for Wildlife (NCW)

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# Overview of National Center for Wildlife

## VISION



*Flourishing and sustainable wildlife, biodiversity and terrestrial and marine ecosystems*

## MISSION



*Conserve and develop wildlife, biodiversity, and ecosystems through the promotion of community engagement in comprehensive and effective programs to achieve environmental sustainability and create social and economic value*

### Strategic Objectives

#### Protect & Develop

**Sustainably protect and develop** wildlife and biodiversity in terrestrial, coastal and marine environments

#### Manage & Restore

**Establish and manage protected areas** and threatened species reproductive centers and their restoration in their natural habitats

#### Wildlife Knowledge Base

**Build a knowledge base** on wildlife and biodiversity in the Kingdom through making field surveys, specialized studies, databases available to relevant stakeholder

#### Raising Awareness

**Raise awareness on wildlife** across communities through outreach, cultural and media programs

#### Ecotourism Sustainability

**Promote economic diversification** by contributing to the development of sustainable ecotourism and the utilization of genetic resources and ecosystem services

#### Research and Innovation

**Promote cutting edge research and innovation in wildlife conservation** by engaging with universities, and local and international research centers



# Studies and research Dugong in Saudi on Arabia

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# Dugong study using a questionnaire in 2018:

## Purpose of the study:

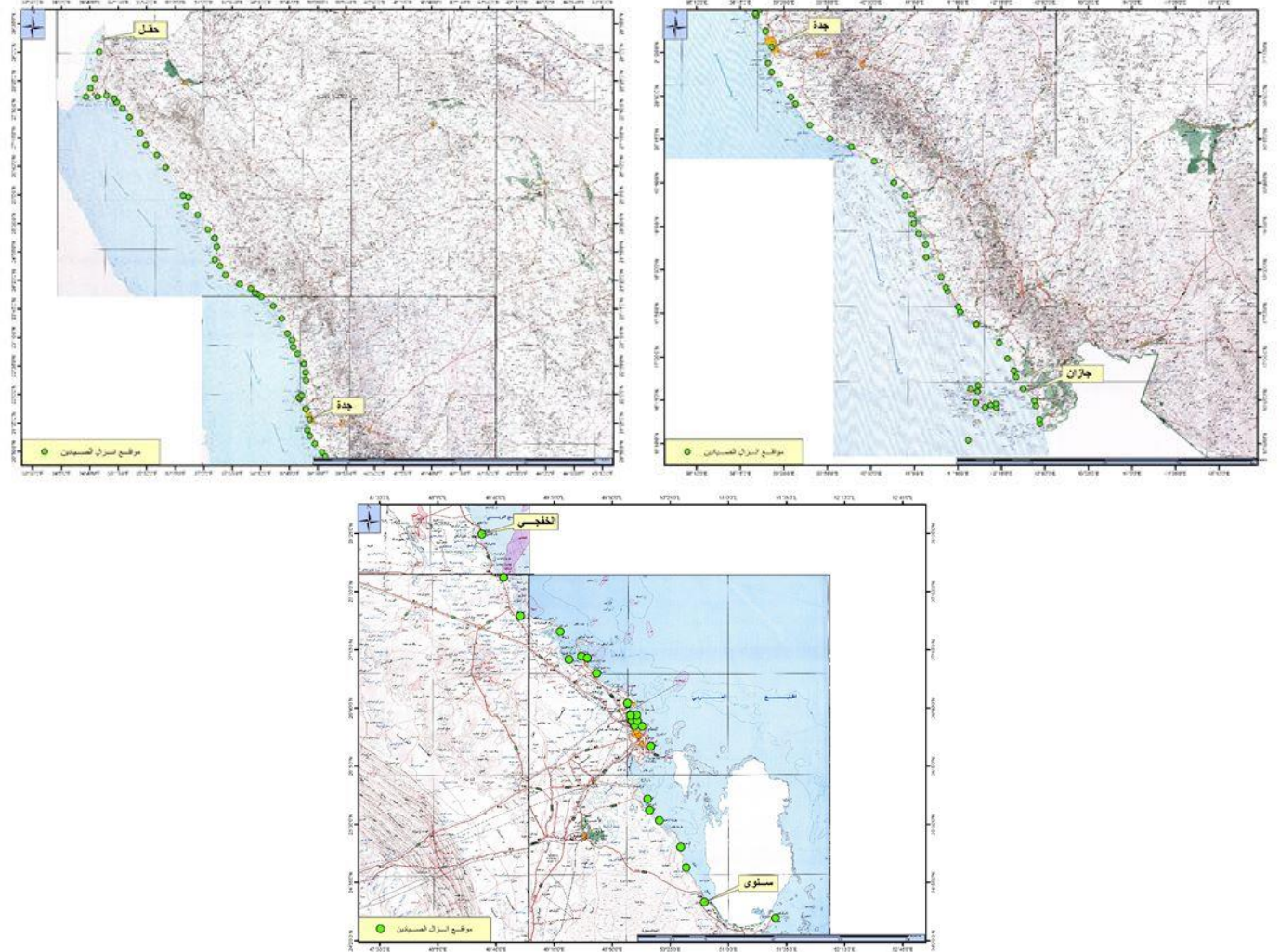
- Dugong numbers
- Knowing the areas of dugongs in the Red Sea and the Arabian Gulf.
- hazard identification.

## Number of sites:

220 sites were visited on both the Red Sea and the Arabian Gulf.

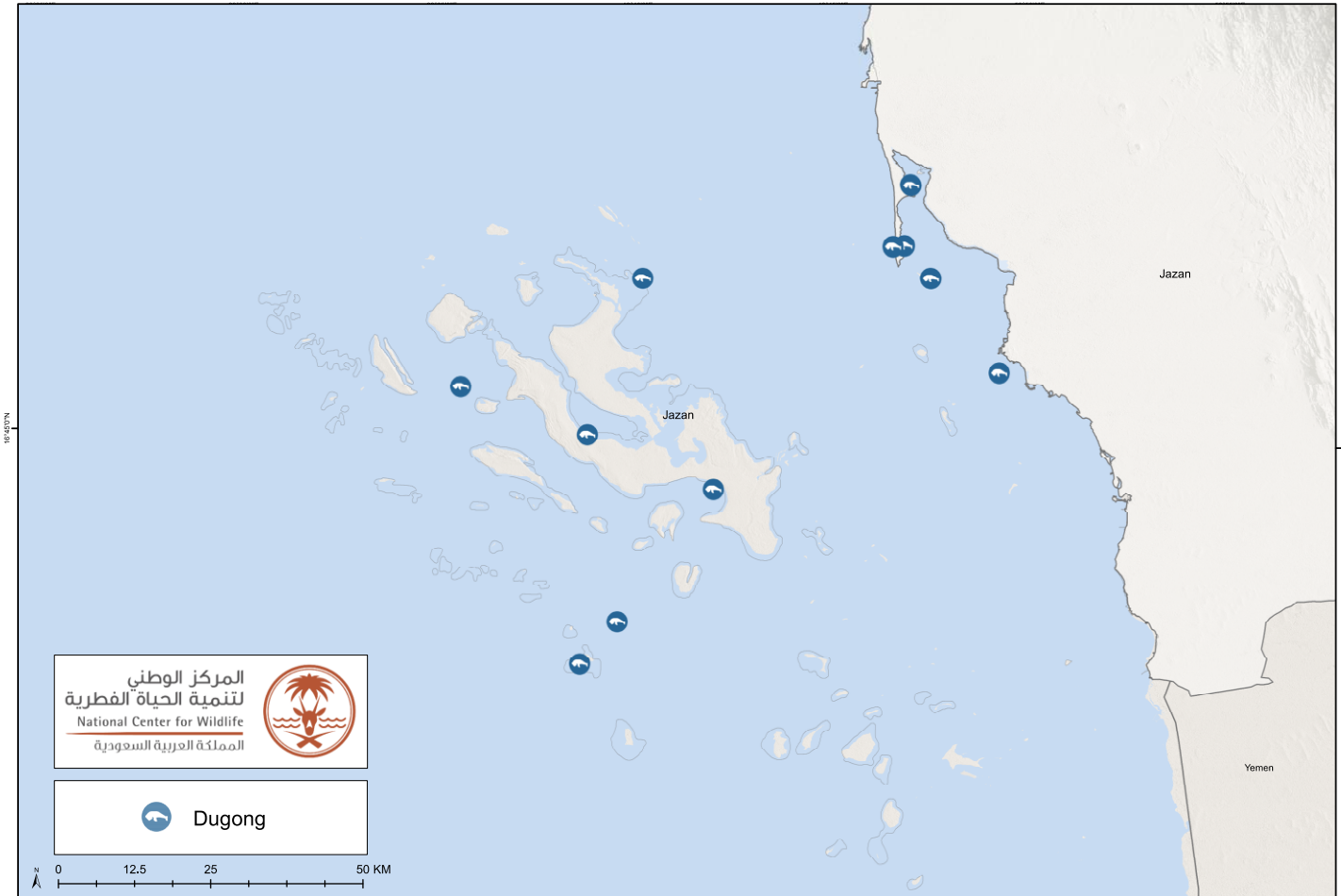
## The number of questionnaire recorded:

94 questionnaires were collected in the Red Sea and 39 in the Arabian Gulf



# Dugong study using a questionnaire in 2018:

	Arabian Gulf	Red Sea
Number of dugong sightings	33	121
Number of deaths	1	27
The number of calf dugong	0	4
Important sites	3 (Jubail - Uqair - Salwa )	7 (Jazan - Thuwal - Mastoura - Yanbu -Umluj - Al-Wajh - Sheikh Hamid )
The most important risks	Bycatch	



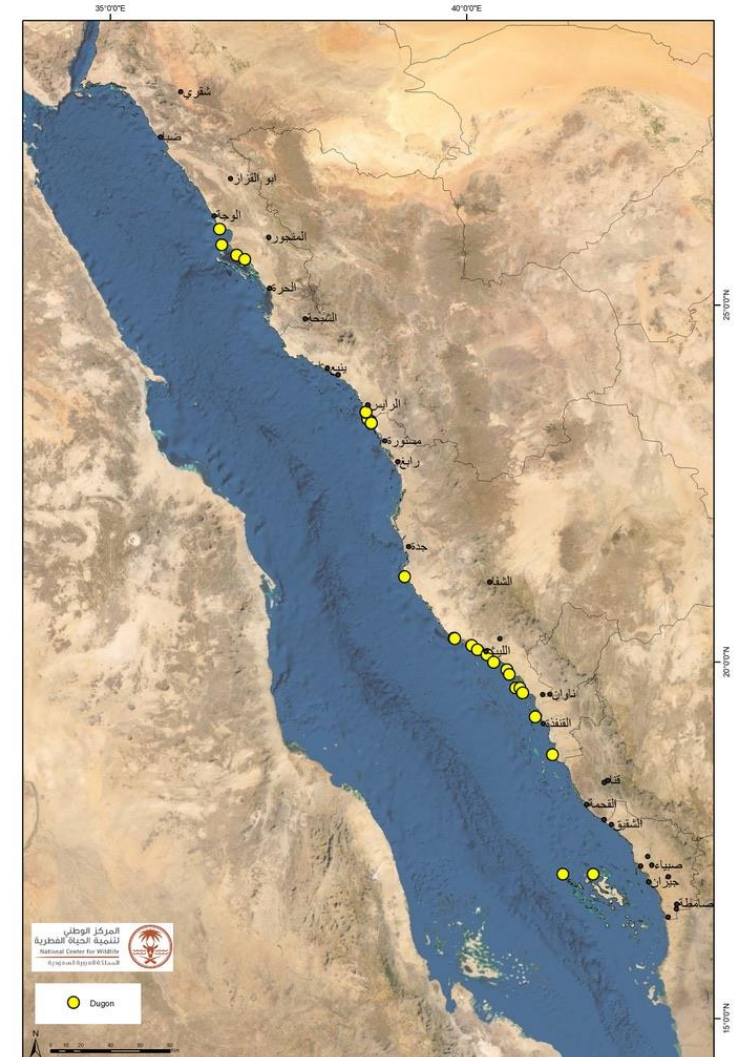
# Megafauna Surveys aboard the OceanX 2022:

teams of NCW specialists rotated through the various deployments of the OceanX and Al Azizi expeditions, collecting data on marine megafauna – the large charismatic species that include sea turtles, whales, dolphins, dugongs, whale sharks, oceanic manta rays, and a wide array of other ray and shark species. This would be the first time in over thirty years that a comprehensive survey of marine fauna had been carried out in the Saudi Arabian Red Sea.



# Megafauna Surveys aboard the OceanX 2022:

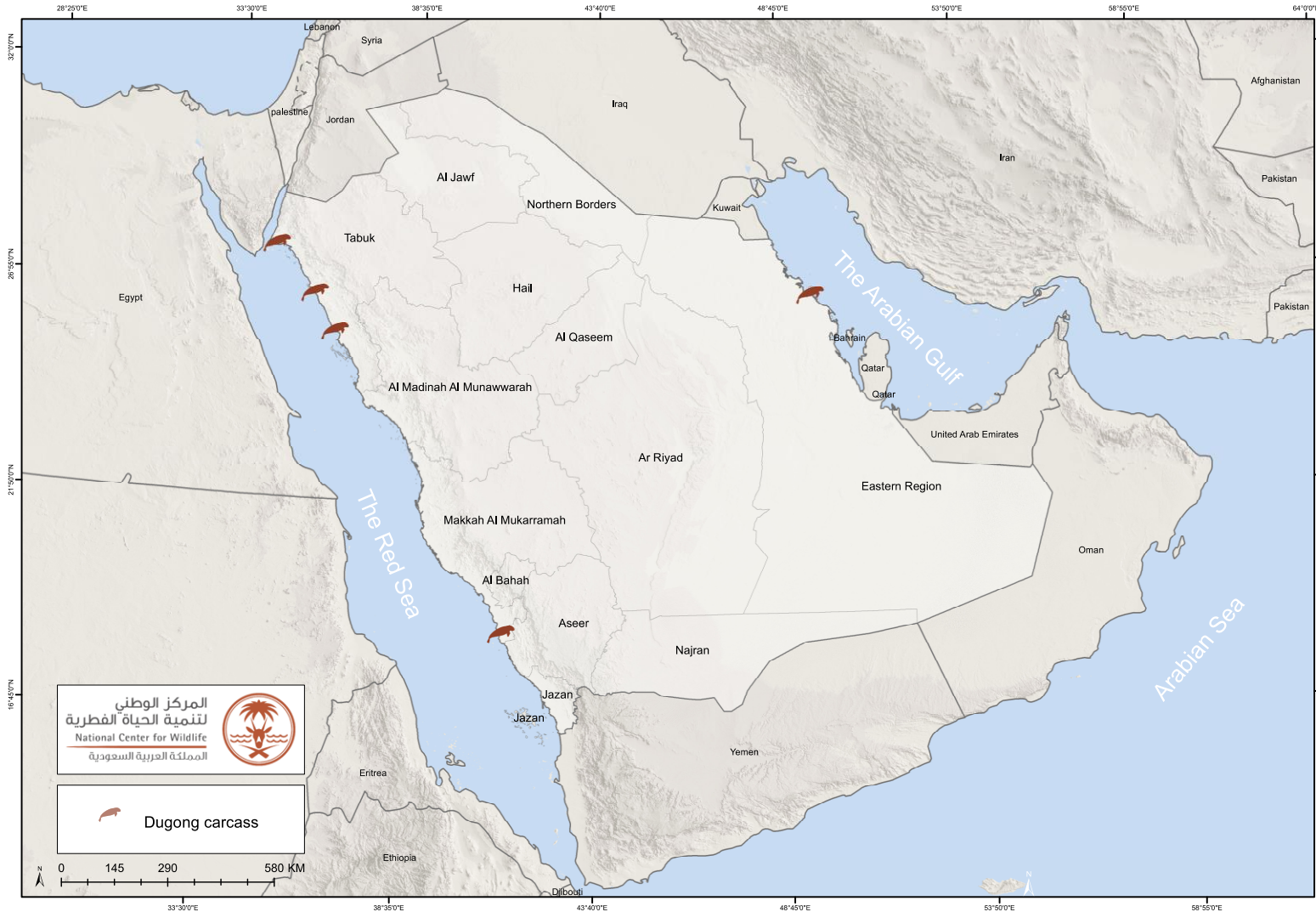
40 dugongs were recorded during the surveys, reproduction in dugongs (5 mother/calve pairs seen) which is a sign that reproduction is ongoing, and that so long as we can eliminate the threats to dugongs, we likely still have a chance to save the species in the Red Sea.





# Recording dugong mortality from 2019 to 2023

	Arabian Gulf	Red Sea
2019	1	0
2022	0	3
2023	0	1



# Desktop-based distribution of dugongs in the Red Sea & Arabian Gulf





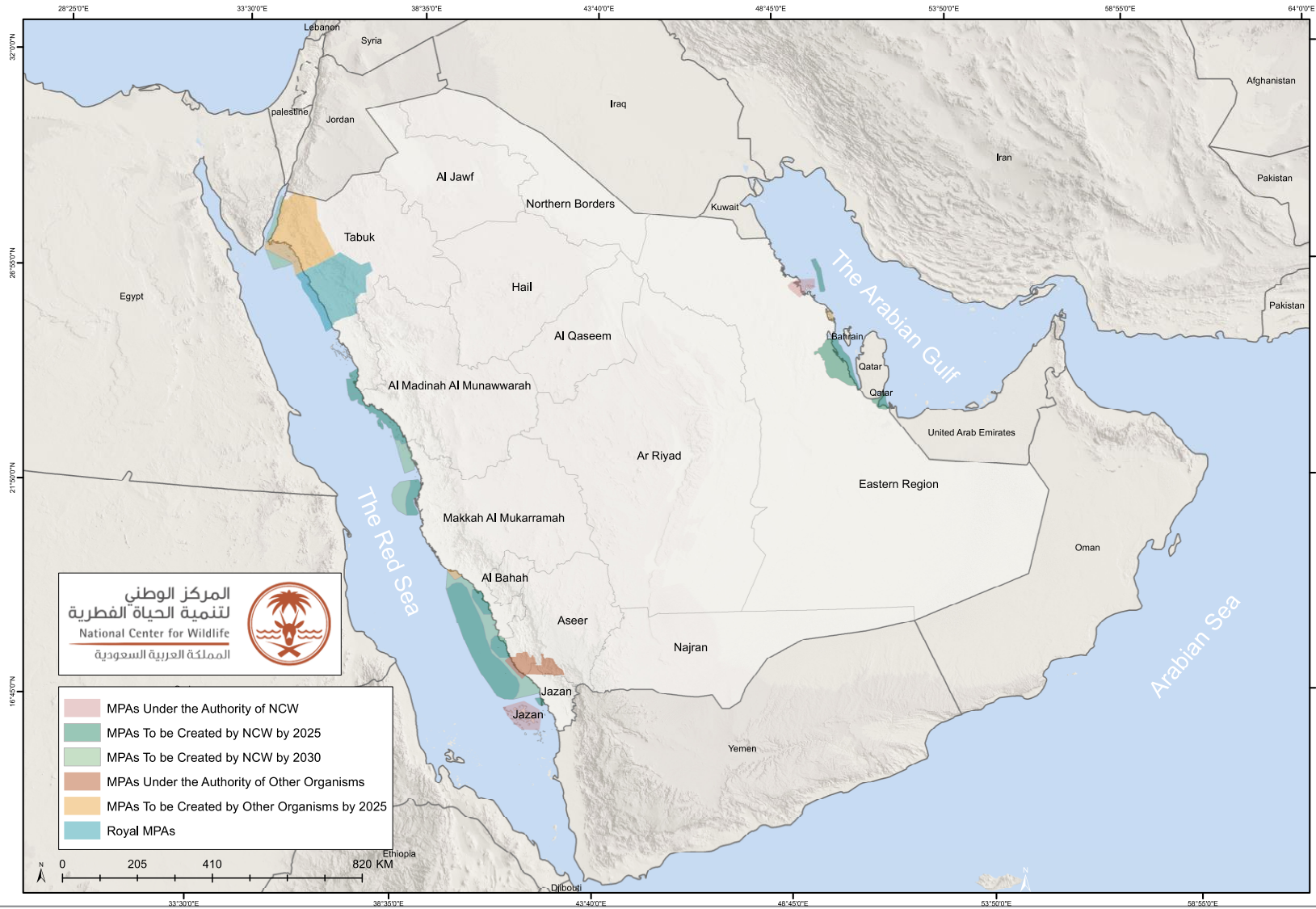
# Future plans and projects for dugong conservation

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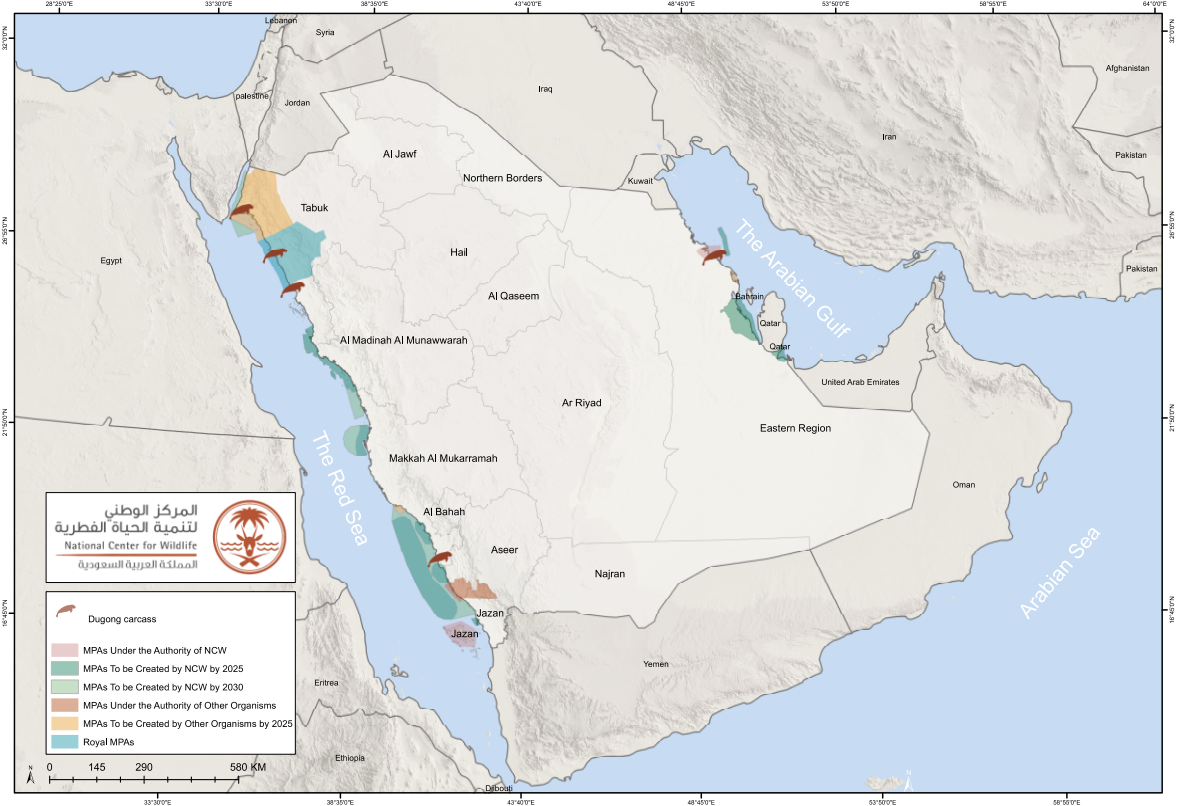
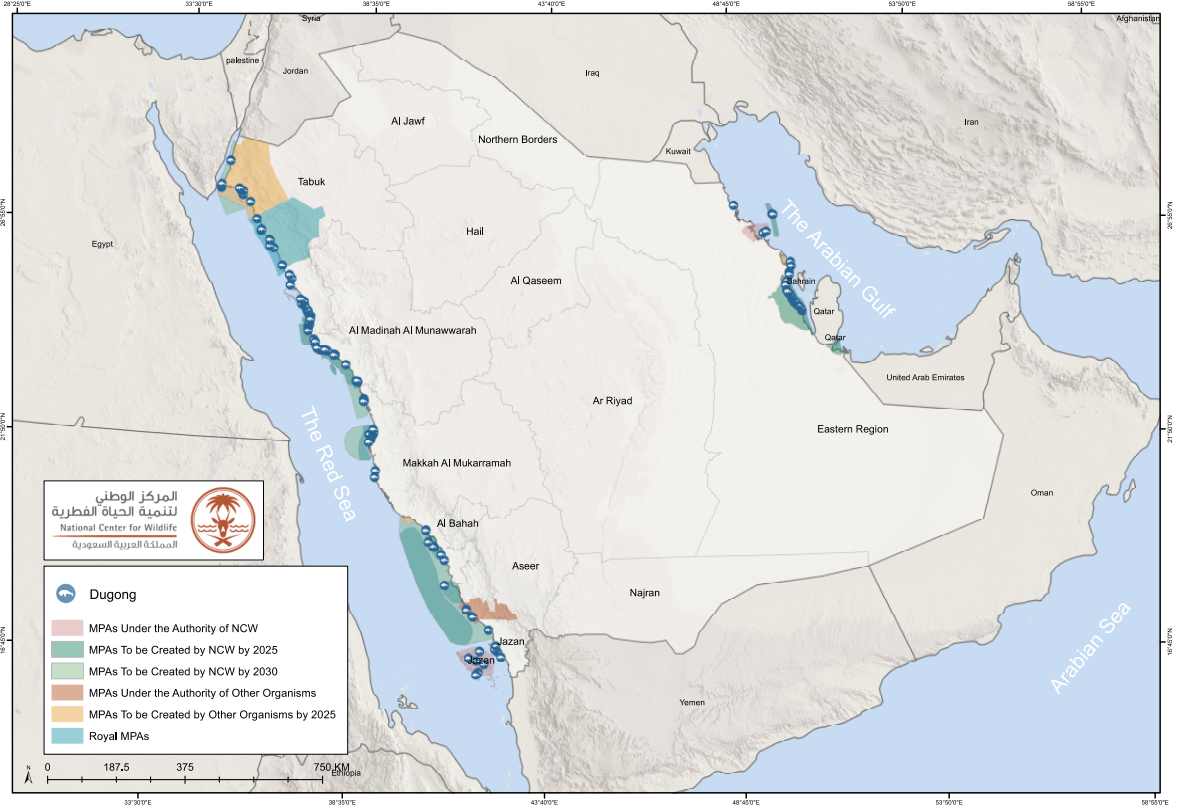
# plans and projects

- The center plans to study megafauna, especially the dugong, at least for the next 3 years through aerial surveys
- Developing the regulations in Saudi Arabia to reduce risks on the dugong and seagrass habitat
- Looking forward to cooperation between the countries surrounding Saudi Arabia in the study and preservation of the dugong
- In 2030, 30% of the Red Sea and the Arabian Gulf will be marine protected areas within these areas are varies of habitats and one of them is seagrass

# Proposed protected areas in 2030



# Overlap between the proposed protected areas and Dugong sightings





# Questions

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شكراً لكم. Thank you

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