

Annual Report 2018

Fact Sheet

Groundwater

- Groundwater resources contribute to about **63% out of the total water usage** in the emirate of Abu Dhabi
- The estimated present abstraction of the groundwater is about **2,070 million cubic metres**
- The emirate's first **Groundwater Wells Inventory** completed by EAD in 2018 has resulted in a comprehensive record of over **118,000 wells** that has been documented in a first-of-its-kind Groundwater Atlas
- EAD rehabilitated **200 unused water wells** in the Al Ain and al Dhafra regions
- The **Liwa Strategic Water Reserve** stores **25.5 million cubic metres of water**, which is equivalent to providing around **180 litres per day** for the population of Abu Dhabi Emirate for **90 days**

Air Quality

- EAD operates **20 fixed and 2 mobile air quality monitoring systems** in Abu Dhabi
- The launch of the **Abu Dhabi Air Emissions Inventory** produced over **50 high-definition sector- and pollutant- specific Air Emission Maps** for the very first time
- EAD set **emission standards for 3 industries** through our **Eltezam compliance campaign** – concrete, hot-mix asphalt and iron and steel – that were identified as significant contributors to increasing air pollutants in the atmosphere

Climate Change

- While Abu Dhabi's contribution to global GHG emissions is relatively small (**<0.3% in 2012**) in comparison to other developing communities, its per capita CO₂ emissions are among the **highest in the region**
- In collaboration with its partners, EAD updated the **Abu Dhabi Greenhouse Gas Inventory** and completed an **analysis of the inventory results for 5 target sectors**

Marine Water Quality

- The coastline of Abu Dhabi accounts for over **75% of the UAE's entire coastal territory**
- EAD covers **22 sites** under the **Marine Water Quality Monitoring Programme** that uses **39 parameters** to assess the status and quality of Abu Dhabi waters and sediment
- The MWQ in Abu Dhabi is generally **good** and its recreational waters **meet public health criteria** for swimming
- In 2018, the EAD team investigated **5 fish kills** and **23 harmful algae blooms** as emergency response incidents
- **A pilot study to measure fecal indicator bacteria in sand at recreational beaches** in Abu Dhabi used **42 beach sand samples** and **28 water samples** to find that they are safe for public health

Land and Soil

- Currently, **85% of soil in Abu Dhabi** is classified as 'naturally degraded' due to the emirate's harsh environment
- A **soil contamination monitoring programme** of **170 sites in Abu Dhabi** will be the basis of future soil management
- A **soil salinity survey** of **4,000 farms** found that over **33.3%, 25.63% and 15.3% of the farm area** in Abu Dhabi, Al Ain and Al Dhafra respectively has been poorly managed
- **9% of Abu Dhabi's farm areas have non-saline soil**, while another **9% are unsuitable for crop production**
- Over the last 8 years, **EAD's soil archiving facility** has collected **4,900 samples** from all over the emirate of Abu Dhabi

Waste Management

- According to 2017 statistics, an estimated **9.66 million tonnes** of total solid waste is generated in Abu Dhabi
- The emirate currently generates **1.29 kg/capita/day of municipal solid waste**; **30% of generated municipal solid waste** and **30.7% of generated non-hazardous solid waste** is diverted from landfill and either recycled or composted
- In 2018, EAD drafted a **regulation that sets the requirements for integrated waste management** and aims to maximise the utilisation of waste recycling, resource recovery, waste treatment and safe disposal

Terrestrial Biodiversity

- In 2018, EAD discovered the **Spider Hunting Wasp** – a species new to science – at Al Wathba Wetland Reserve
- EAD reported sightings of the **Indian Crested Porcupine**, the **Rüppell's Fox** and the **Arabian Sand Cat** in Abu Dhabi
- A total of **15 new distribution records for invertebrate species** were collected in Abu Dhabi's Al Dhafra Region
- **Biodiversity surveys of 13 terrestrial protected areas** recorded **193 species**: over **108 invertebrates**, **11 reptiles**, **25 birds**, **14 mammals** and **35 plants**
- EAD recorded the highest number of **55,000 Socotra Cormorant breeding pairs** and **1,432 Crab Plover breeding pairs** in Abu Dhabi in 2018, as well as a record **601 Greater Flamingo chicks** at Al Wathba Wetland Reserve
- The EAD Herbarium now holds **3,860 specimens** of **435 native and naturalised species**
- Al Wathba Wetland Reserve in Abu Dhabi was the **first site in the region** to be placed on the **IUCN Green List of Protected and Conserved Areas**
- EAD worked to get the **Abu Dhabi Sabkha** added to the tentative list of **World Heritage Sites**
- The **Scimitar-horned Oryx Reintroduction Programme** saw a further **3 shipments of oryx** from Abu Dhabi to the reserve in Chad that is now home to **146 oryx**, including **45 calves** born in 2018
- Over the last year, EAD propagated **70 Dwarf Palms** and over **700 Carallumas** at a specialised native plant nursery within the Houbara Protected Area that has an **annual production capacity of 250,000 plants**
- In 2018, the General Secretariat for the Conservation of the Arabian Oryx (GSCAO), a regional initiative hosted by EAD, published the first **Housing and Husbandry Guidelines for the Arabian Oryx**
- Abu Dhabi has **432 terrestrial** and **4 marine plant species**, with **18 classified as threatened or near threatened**
- The Sheikh Zayed Protected Areas Network now includes **19 sites**: **13 terrestrial** and **6 marine protected areas**

Marine Biodiversity

- The completion of the **UAE Sustainable Fisheries Programme** has increased the UAE's understanding of its overexploited fish stocks and identified the measures required to support the **recovery of the fisheries by 2030**
- The **Fisheries Resources Assessment Survey** revealed that key indicator species such as **Hamour, Shaari and Farsh** are severely overexploited due to being **fished at three to five times their sustainable limit**
- **Socioeconomic and traditional knowledge surveys** found that **80% of local fishermen** agree that there has been a major decline in the UAE's fish stocks
- Abu Dhabi is home to **3,000 dugongs** – the world's second largest population – found in its protected areas
- EAD documented a record number of **37 Finless Porpoise**, **92 Indian Ocean Humpback Dolphins** and **268 Indo-Pacific Bottlenose Dolphins** in 2018
- There were **23 incidents of dugong mortality** in 2018 - the biggest single die-off
- During 2018, EAD rescued **52 sea turtles** - **31 Hawksbill Turtles** and **21 Green Turtles**

Environmental Policy and Regulation

- Responsible for over 2,000 projects and facilities, EAD prioritised **1,366 inspections** in 2018
- EAD reviewed **197 environmental studies** and processed **1,007 environmental permit applications** last year
- We successfully managed **110 emergency cases in Abu Dhabi**
- We hosted the **Green Business Summit** with The Economist Group and DED
- EAD signed a partnership agreement to launch the **Technology Innovation Pioneers Awards** with DED
- EAD launched the **Future of the Environment Initiative** that defines a new vision for Abu Dhabi
- As part of our Holistic Compliance Environmental Programme, we escalated **32 cases of violation** to the courts

Environmental Information and Community Engagement

- In 2018, EAD conducted **waste minimisation workshops** for **80 public and private entities**, as well as **40 restaurants**

- The **Rethink Plastic campaign** saw **20,000 plastic bags** collected over 4 days last year
- The **Al Wathba Photo Exhibition** displayed **70 photos of 500 submitted** to the Al Wathba Photography Competition
- The latest cycle of the **Sustainable Schools Initiative** engaged **135 schools** in Abu Dhabi
- The **Sustainable Campus Initiative** organised **3 roadshows**, enabling the participation of over **450 students and faculty**
- EAD published **30 environmental reports** focusing on Abu Dhabi's state of the environment and its contributing drivers

Other Achievements

- The Abu Dhabi Falcon Hospital received the Middle East Responsible Tourism Award for the **6th consecutive time**
- The Abu Dhabi Global Environmental Data Initiative hosted the **Eye on Earth Symposium** in October last year
- The Abu Dhabi Sustainability Group launched the **Natural Capital Flagship Programme**