

# World Wetlands Day 50th Anniversary of Ramsar Convention (1971 – 2021)

**I.R.IRAN - Tehran, Feb. 2021**



# Inseparable Water, Wetlands and Life

World   
Wetlands Day

2 February 2021

Wetlands and water





Wetlands are the miracles of God on the planet and the most important ecosystems to preserve the biodiversity, regulate the climate and provide the livelihood of people.



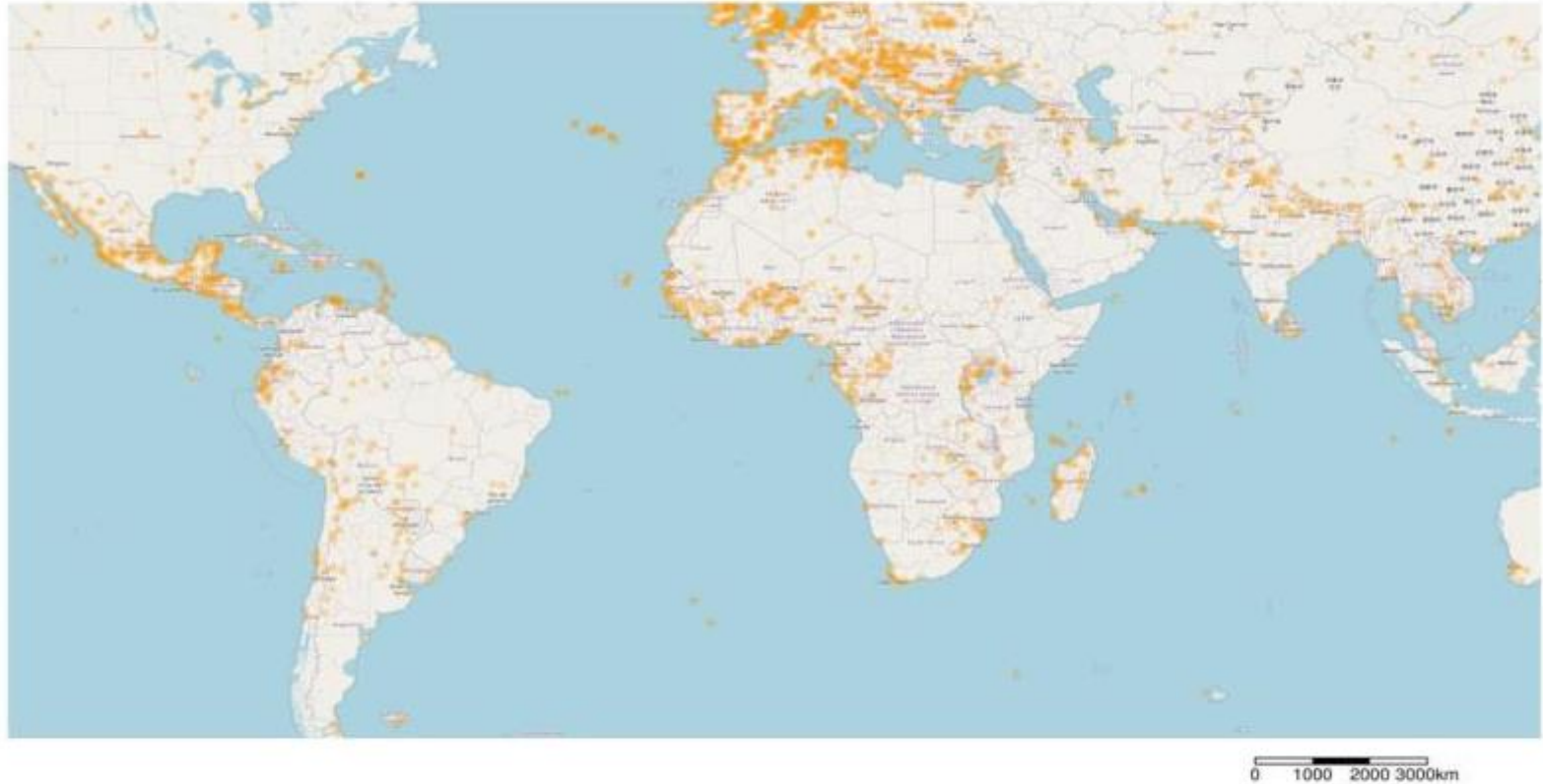


The world's first environmental treaty, the Wetlands Conservation Convention, was concluded in February 1971 in the beautiful city of Ramsar in Iran among 18 countries. Currently, 171 countries are members of this convention.





# Ramsar Sites information service



10/02/2021 This map shows all published Ramsar Sites

**Ramsar Sites (Wetlands registered in the Ramsar Convention) are the largest network of protected areas in the world.**

**In the world, 2400 wetlands in 171 countries with an area of 250 million hectares are registered in the Ramsar Convention.**

**In terms of the number of registered wetlands, the United Kingdom with 175 wetlands and then Mexico with 142 wetlands, have the highest number of Ramsar sites.**

**In terms of the area of registered wetlands, Bolivia has 8.14 million hectares, followed by Canada, Russia, Chad and Congo with more than 10 million hectares.**

**تالاب هشیلان**

**Hashilan Wetland**



# IRANIAN RAMSAR SITES

## رامسر سایت های ایران



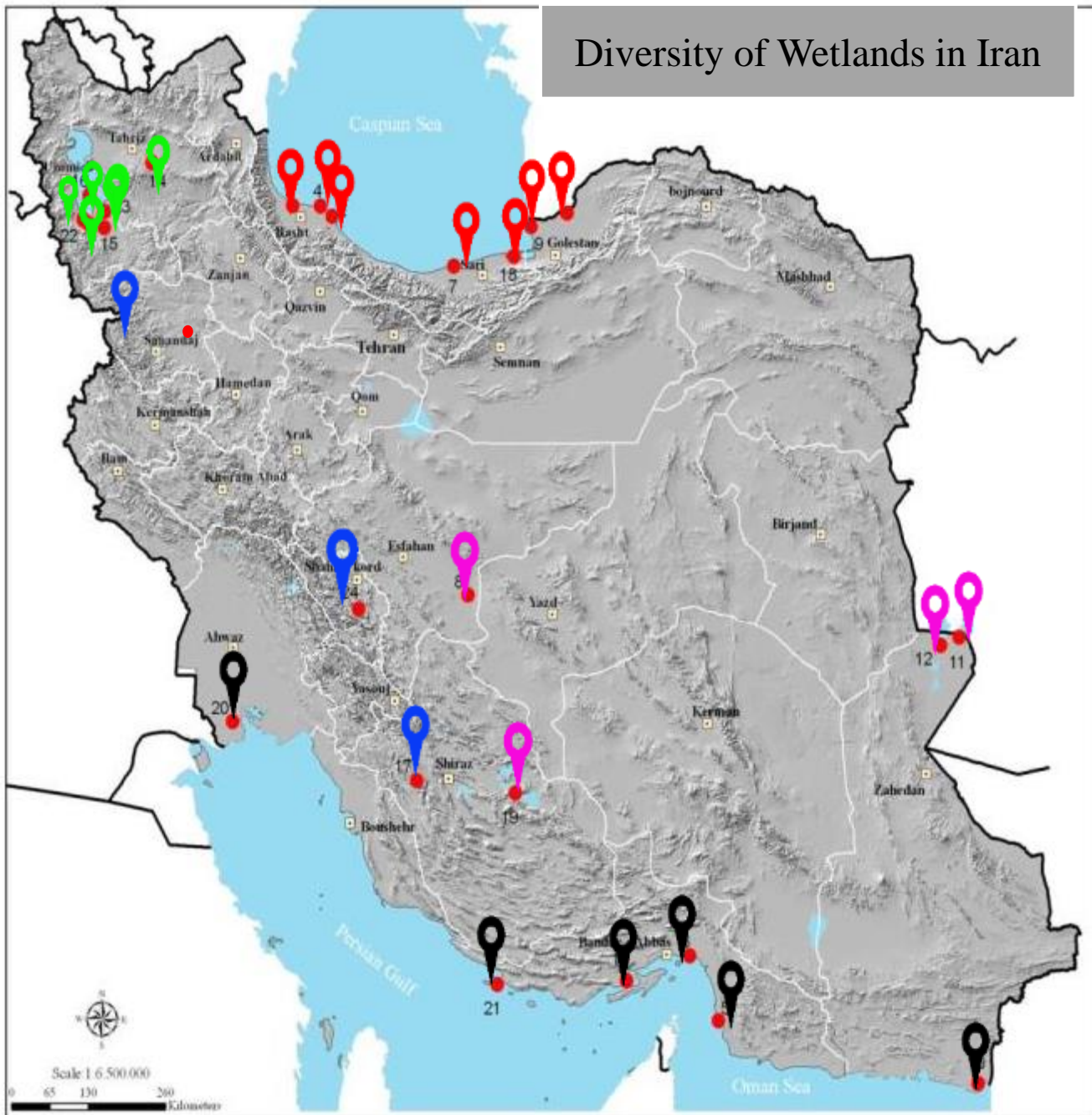
In Iran, 25 wetlands with an area of 1,413,000 hectares have been registered in the Ramsar Convention as wetlands with international importance and 8 other wetlands are undergoing administrative steps to be registered in this convention.

More than 140 wetlands with an area of 3 million hectares have been registered in the list of wetlands in the country (approved by the Honorable Cabinet).


Iran has the highest wetland diversity due to its climatic diversity (mountainous areas, long rivers, deserts and thousands of kilometers of sea coasts in the north and south of the country).




# Diversity of Wetlands in Iran




 Ramsar Sites of Caspian Sea Basin

 Ramsar Sites of Urmia Lake Basin

 Desert Ramsar Sites of Iran

 Mountainous Ramsar Sites of Iran

 Ramsar Sites of Persian Gulf & Oman Sea Basin





## **Wetlands main threat :**

**Lack of recognition of the wetlands importance and the role they play at national level and in the economy of local communities**

## **Degradations and threats to wetlands in the world**

- Climate change
- Increasing pressure of human on nature
- Eutrophication

## **Processes affecting the wetlands**

- Wetland land use change
- Changes in the quantity of water
- Changes in water quality
- Excessive exploitation of wetland resources
- Invasive non-native species



## Major actions of the country for the conservation and rehabilitation of wetlands

- ❖ Formation of Urmia Lake Rescue Restoration Program at the Beginning of the Eleventh Government (2013)
- ❖ Approval of government bylaw on how to conserve, rehabilitate and manage the country's wetlands (2015)
- ❖ Approval of the Law on Conservation, Rehabilitation and Management of Wetlands by the Parliament of Iran (2017) and its executive regulations (2018)
- ❖ Establishment of National Wetlands Coordination and Management Headquarters to (2018)





- ❖ **Cooperation with the United Nations Development Programme through Conservation of Iranian Wetlands Project**
- ❖ **Cooperation with the European Union and the United Nations Development Program on the Hamoon project**
- ❖ **Cooperation with Japan Government in different projects related to the wetlands and coastal areas;**
- ❖ **Cooperation with the Ramsar Regional Center in West and Central Asia;**





## Monitoring of Wetlands in IRAN

- ❖ Wetland water quality monitoring with special focus on Caspian and Persian Gulf wetlands and Lake Urmia;
- ❖ Monitoring the fluctuations in surface, water level and depth and land use changes in wetlands using remote sensing techniques;
- ❖ Online monitoring on some of the country's wetlands,
- ❖ Establishing the database and Geoportal of Iranian wetlands;

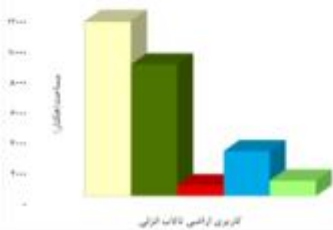


**راهنما**

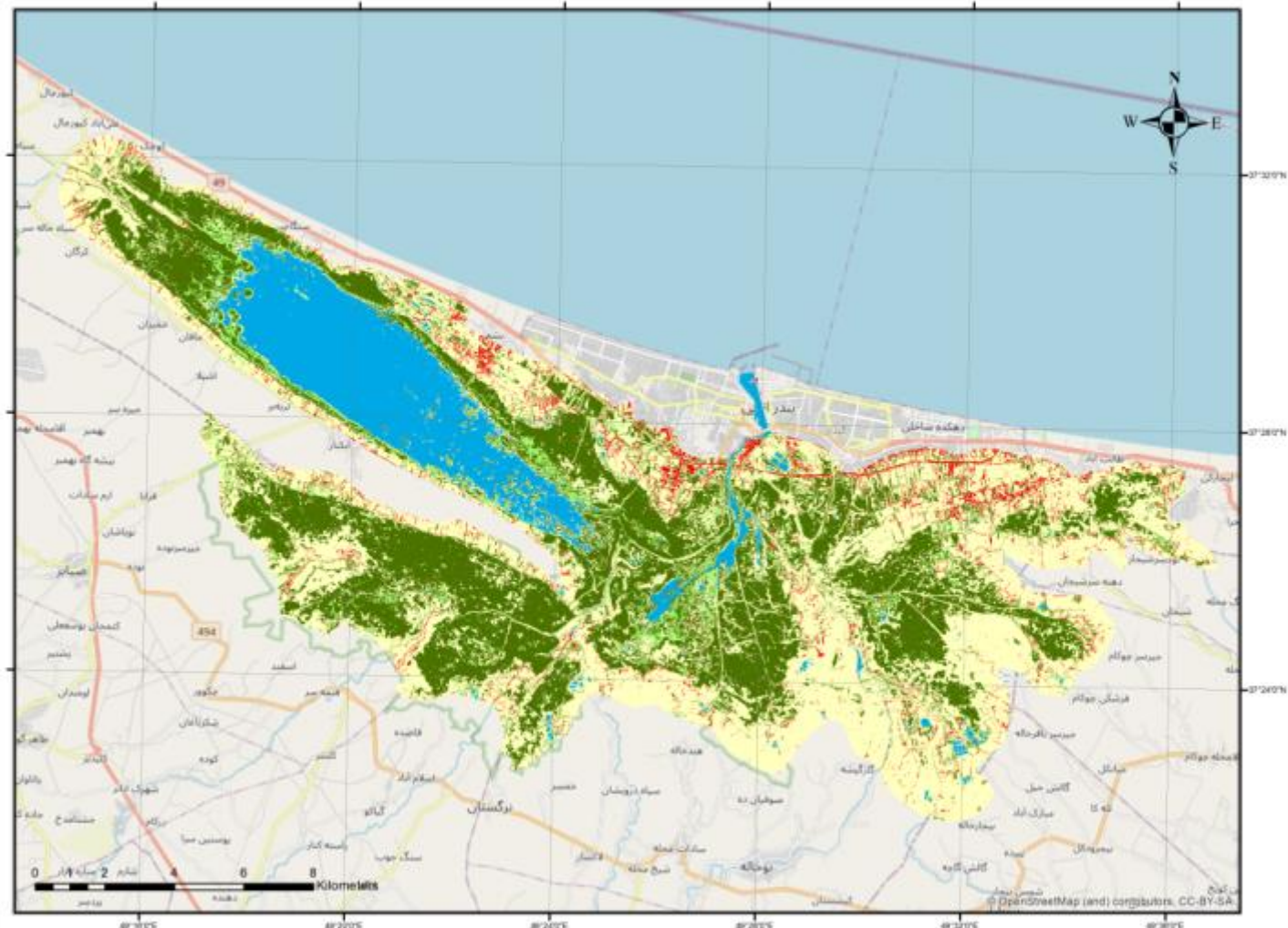
- اراضی کشاورزی (زراعت، باغ) و مرتعی
- اراضی ساخته شده
- پهنه آبی تالاب
- مناطق گسترش سنبله آبی
- پوشش گیاهی تالابی (پشتلور و بن در آب)

Coordinate System: WGS 1984 UTM Zone 39N  
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 Units: Meter

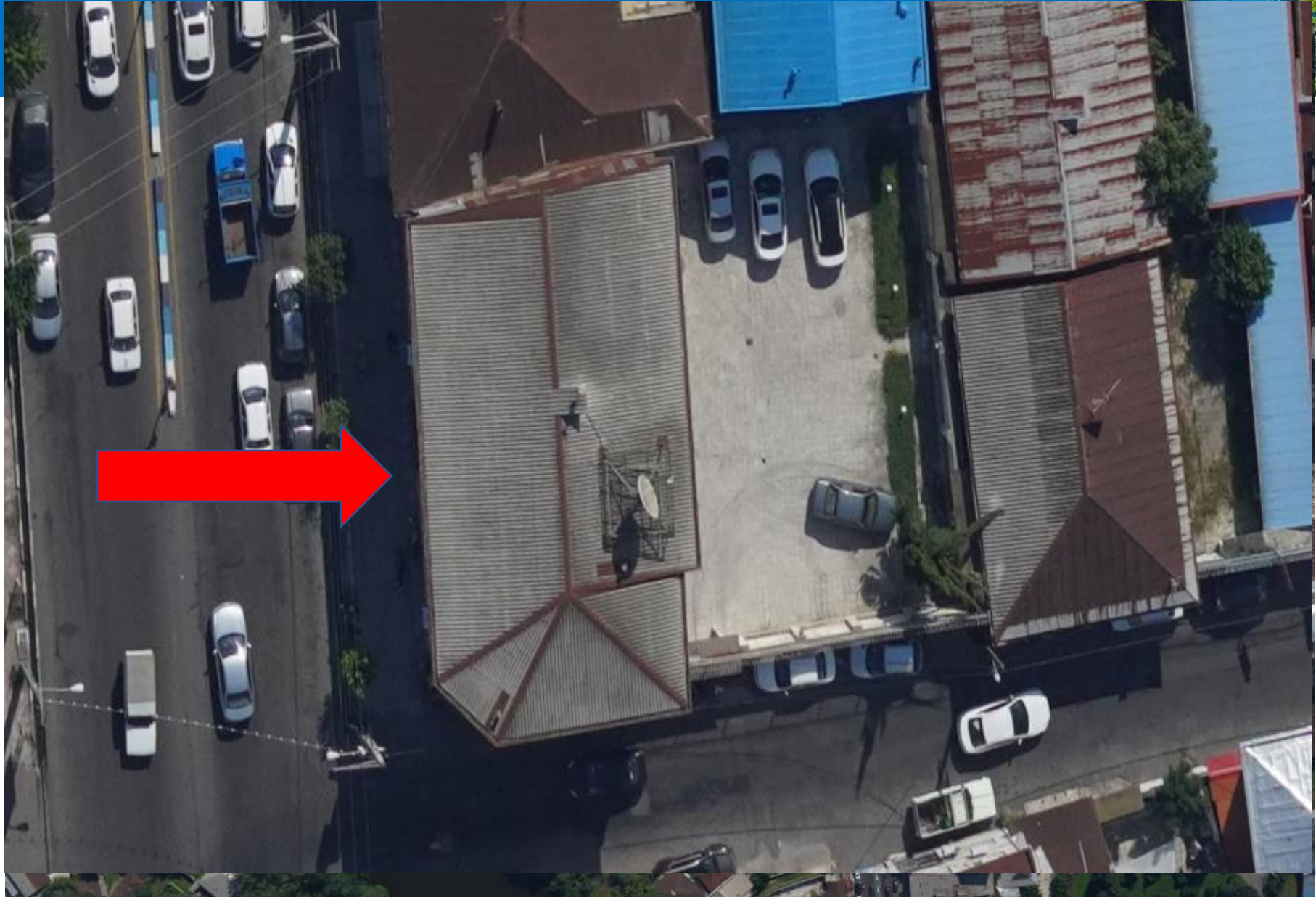
تلفیق تصویر هوایی با پیکسل سایز زمینی ۵ سانتی متر  
 و تصویر ماهواره ای سنسینل ۲ با رزولوشن ۱۰ متر  
 توسط روش طبقه بندی نظارت شده



نقشه پهنه بندی تالاب انزلی - شهريور ۱۳۹۹



# High resolution aerial photos- Anzali





## The annual water volume in Gorgan Bay and Miankale wetland

به ترتیب تاریخ



تاریخ	مساحت (ha)	حجم آب (mm <sup>3</sup> )
اسفند ۱۳۹۵	۳۱۵۳۲	۶۵۷
شهریور ۱۳۹۶	۳۴۹۰۶	۸۹۹
اسفند ۱۳۹۶	۳۷۸۷۰	۸۹۶
شهریور ۱۳۹۷	۳۰۴۱۴	۶۹۱
اسفند ۱۳۹۷	۳۳۱۵۷	۷۳۷
شهریور ۱۳۹۸	۳۲۰۲۱	۶۴۹
بهار ۱۳۹۹	۳۴۰۰۱	۷۴۲

به ترتیب کاهش حجم آب

تاریخ	مساحت (ha)	حجم آب (mm <sup>3</sup> )
شهریور ۱۳۹۶	۳۴۹۰۶	۸۹۹
اسفند ۱۳۹۶	۳۷۸۷۰	۸۹۶
بهار ۱۳۹۹	۳۴۰۰۱	۷۴۲
اسفند ۱۳۹۷	۳۳۱۵۷	۷۳۷
شهریور ۱۳۹۷	۳۰۴۱۴	۶۹۱
اسفند ۱۳۹۵	۳۱۵۳۲	۶۵۷
شهریور ۱۳۹۸	۳۲۰۲۱	۶۴۹



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# Studies and plans of Iranian wetlands



- ❖ Water requirement studies were completed for 23 wetlands and is being conducted for 21 other wetlands.
- ❖ The Integrated Management Plan have been developed and approved for 19 wetlands and is being developed for 15 other wetlands.
- ❖ Zarivar wetland was registered as the 25<sup>th</sup> Iranian Ramsar site in the convention.
- ❖ The studies on preparation of a guideline for river's monitoring are being completed.
- ❖ Wetlands delineation and mapping were completed for 35 wetlands and is being conducted for more 38 wetlands (in cooperation with MoE).



# Important projects implemented in wetlands



## Important wetland projects during the 11<sup>th</sup> Government

### Projects implemented in Urmia Lake Basin





## Important wetland projects during the 11<sup>th</sup> Government

- ❖ Water transfer project from Karoon river to Shadegan international wetland (150 MQM per year)





## Important wetland projects during the 11<sup>th</sup> Government

- ❖ Installation of regulating gates for water exchanges with the surrounding environment





## Important wetland projects during the 11<sup>th</sup> Government

- ❖ Construction of 230 underpasses (culvert) on roads and other obstacles to water exchange in Hur al-Azim wetland



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## Important wetland projects during the 11<sup>th</sup> Government

- Construction of over 100 monitoring centers, firefighting base and





## Important wetland projects during the 11<sup>th</sup> Government

- ❖ Protection and grazing management in an area of 281 thousand hectares of wetlands pastures





## Important wetland projects during the 11<sup>th</sup> Government

- ❖ Allocation of € 370 million from the National Development Fund of Islamic Republic of Iran over the past 4 years
- ❖ Implementation of various executive projects in more than 2 million hectares of dust centers
- ❖ Implementation 5 million and 600 thousand cubic meters of dredging rivers and improving canals for water transfer and distribution in wetlands and plains are the origin of dust in Iran
- ❖ Out of the total 3 million and 400 thousand hectares of wetlands in the country, 1 million and 463 thousand hectares, equivalent to 44% of the total area of wetlands in the country, have the potential for dust production.







## Important wetland projects during the 11<sup>th</sup> Government

- ❖ Implementation of dredging operations of entrances and streams leading to wetlands and digging water supply canals to critical dust centers





## Important wetland projects during the 11<sup>th</sup> Government

- ❖ Planting 1000 hectares of lands of critical dust centers to stabilize and control the main centers of dust in the Sistan area and North of the province of Sistan and Baluchestan





## Important wetland projects during the 11<sup>th</sup> Government

- ❖ Reopening of border dykes in Sistan and Baluchestan province with the cooperation of the province's border guards and removing 1300 hectares of critical dust sources in Hamoon Puzak by water entering





## Important wetland projects during the 11<sup>th</sup> Government

- ❖ Completion of earthen dam in Gandoman wetland with a length of 2350 meters
- ❖ Increasing the height of the road between Gandoman wetland and agricultural fields in order to increase the dewatering capacity of the wetland with a length of 340



# Important projects implemented in wetlands



## Important wetland projects during the 11<sup>th</sup> Government

- ❖ Implementation of Communication, Education, Participation and Awareness (CEPA) programs in wetlands in 27 provinces of the country



Thanks for your attention.



Shadegan wetland- Sarakhie village