

SDG Indicator 6.6.1

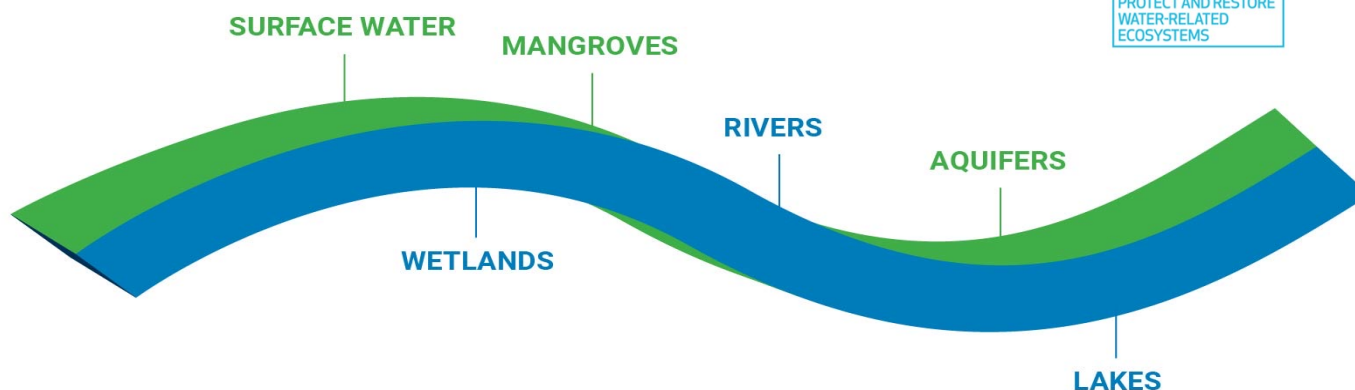
Change in extent of water-related ecosystems over time

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Changes to Water-related Ecosystems: **SDG indicator 6.6.1**

TARGET 6.6 encompasses a broad and ambitious goal of protecting and restoring various water-related ecosystems, including:



Indicator 6.6.1 ***change in the extent of water-related ecosystems over time***, measures functional properties to determine the state of ecosystems



Progress on Water-related Ecosystems

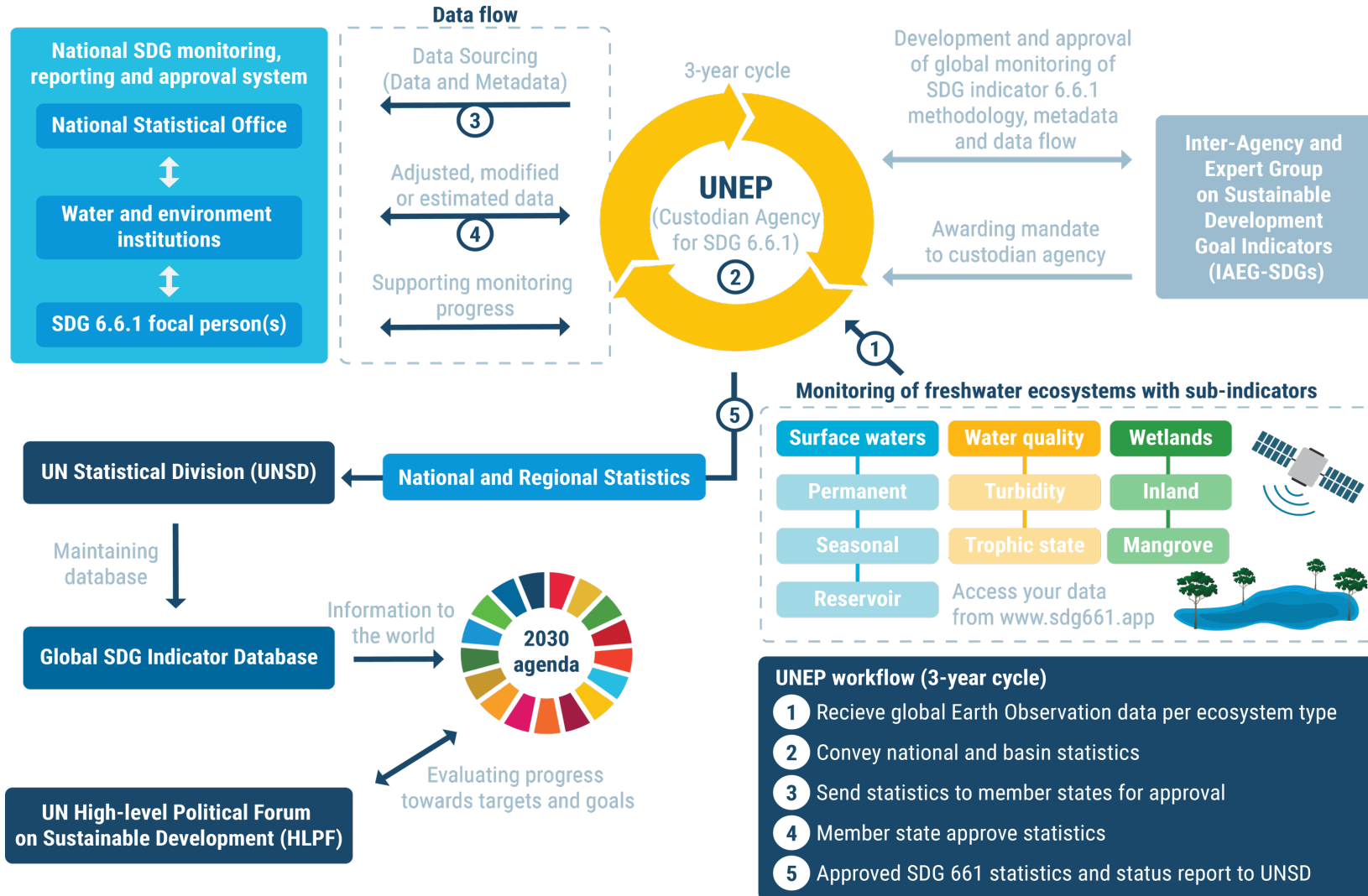
Mid-term status of SDG Indicator 6.6.1 and acceleration needs with a special focus on Biodiversity

2024

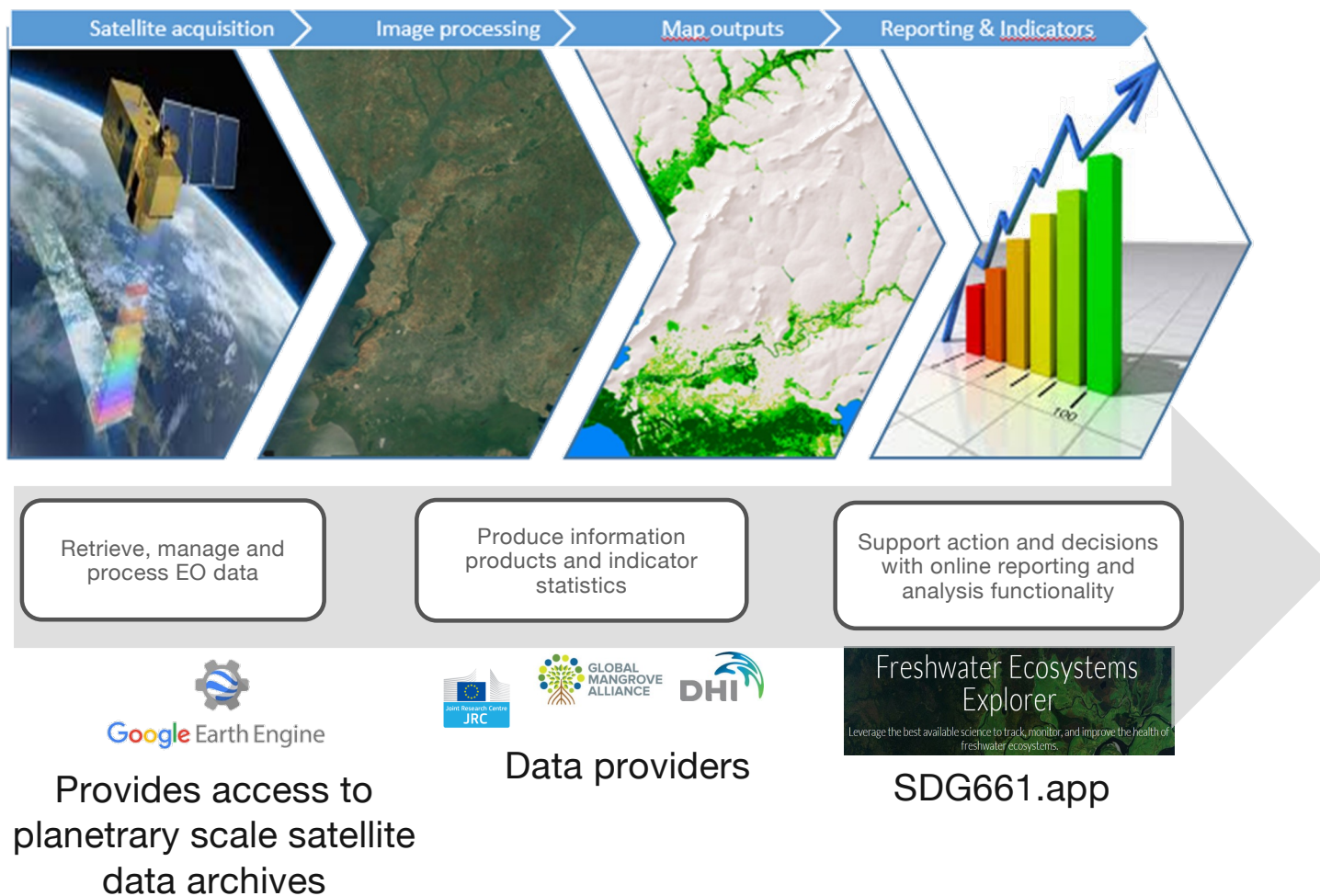
Evolution of the SDG661 method

- **2014-16:** development of methodology using expert group and country consultations
- **2016-17:** global piloting of methodology (Tier III); 19% of countries sent data; poor quality and coverage
- **2017-18:** methodology **revised to include Earth observations**; using initially only surface water extent data for all 193 UN member states
- **2018:** indicator reclassified by IAEG to Tier II status (April) and reclassified to Tier I status (Nov).

SDG 6.6.1 indicator: workflow for monitoring and reporting



Workflow: indicator 6.6.1

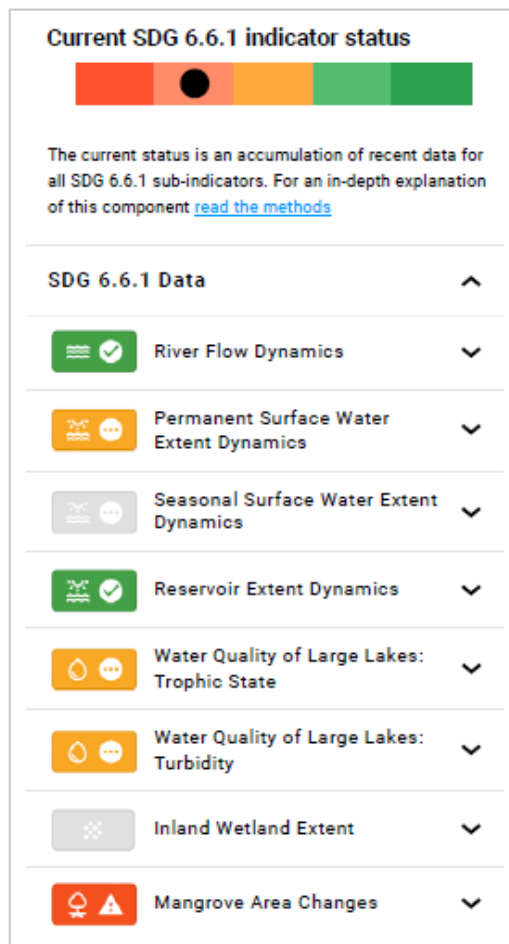


What's currently monitored?

- 7 sub-indicators (++)
- Earth observation and modelled data
- Long term statical trends (since 2000) at national, basin and ecosystem level
- Annual data updates with national validation every three years

Data validated by countries and reported to UNSD:

2018: 140 countries
2020: 185 countries
2023: 185 countries



SDG indicator 6.6.1: river flow dynamics, Saudi Arabia

Search for a country
Saudi Arabia

Select basin level
Hydro Basin Level 6

Current SDG 6.6.1 indicator status



The current status is an accumulation of recent data for all SDG 6.6.1 sub-indicators. For an in-depth explanation of this component [read the methods](#)

SDG 6.6.1 Data

River Flow Dynamics

The river flow sub-indicator measures the changes in the volume of water flowing... [Read Full Definition](#)

Progression of subindicator data:



Permanent Surface Water Extent Dynamics

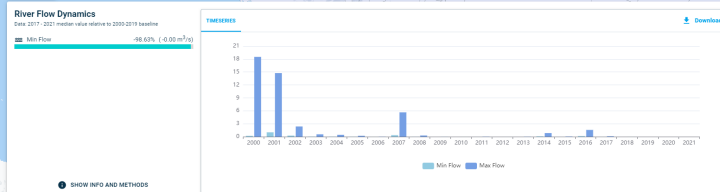
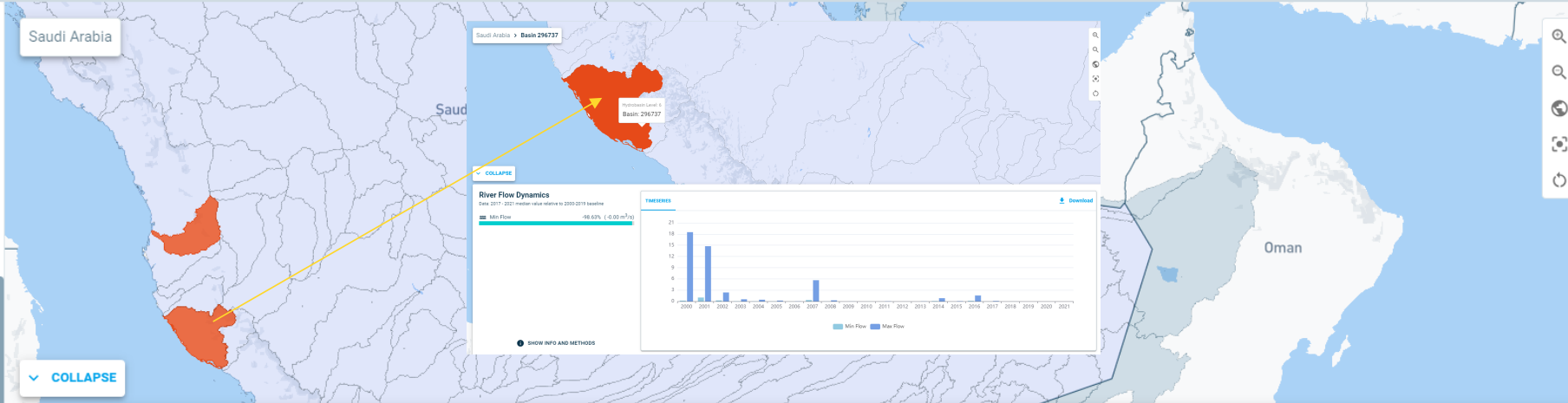
Seasonal Surface Water Extent Dynamics

Reservoir Extent Dynamics

Water Quality of Large Lakes: Trophic State

Water Quality of Large Lakes: Trophic State

NATIONAL SDG DATA

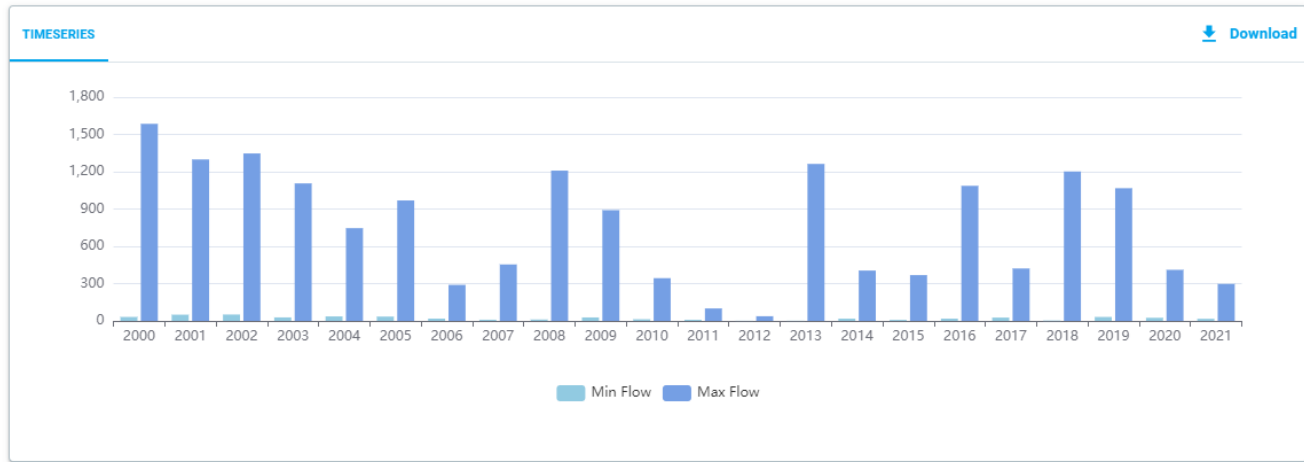


River Flow Dynamics

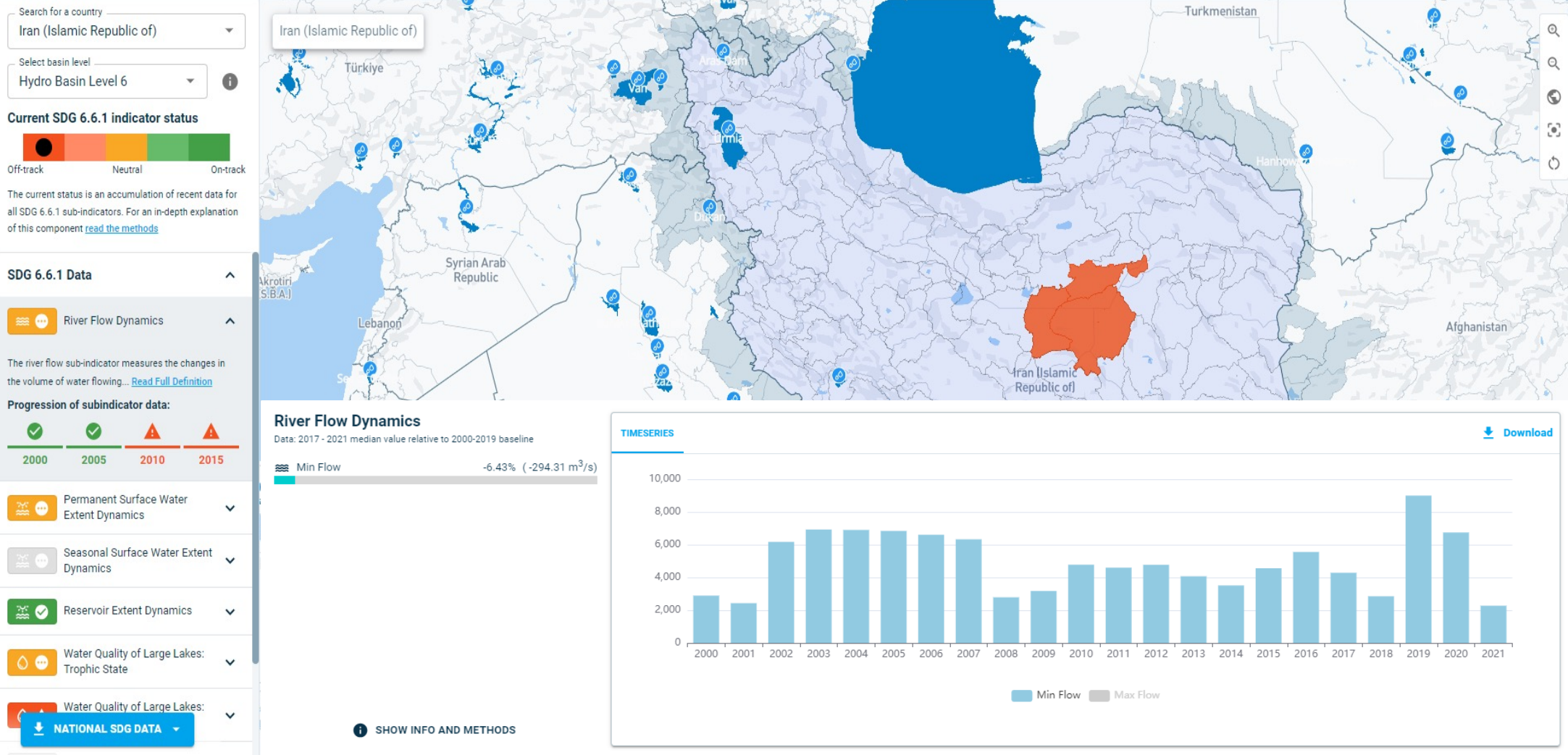
Data: 2017 - 2021 median value relative to 2000-2019 baseline

Min Flow +39.00% (+7.08 m³/s)

SHOW INFO AND METHODS



Example of SDG 6.6.1 country data and trends: river flow, Iran



Example of SDG 6.6.1 country data and trends: lake turbidity, Jordan

Search for a country
Jordan

Select basin level
Hydro Basin Level 6

Current SDG 6.6.1 indicator status

Off-track Neutral On-track

The current status is an accumulation of recent data for all SDG 6.6.1 sub-indicators. For an in-depth explanation of this component [read the methods](#)

Seasonal Surface Water Extent Dynamics

Reservoir Extent Dynamics

Water Quality of Large Lakes: Trophic State

Water Quality of Large Lakes: Turbidity

The data show the total percentage deviation, from a baseline, for turbidity and... [Read Full Definition](#)

Progression of subindicator data:

2017 2018 2019 2020

Inland Wetland Extent

Mangrove Area Changes

Contextual data
NATIONAL SDG DATA

Policy links
Coming soon

Water Quality of Large Lakes: Turbidity
Data: Year 2021 relative to a five-year baseline (2006-2010)

Trophic State: 0 out of 1 lakes affected 0.00%

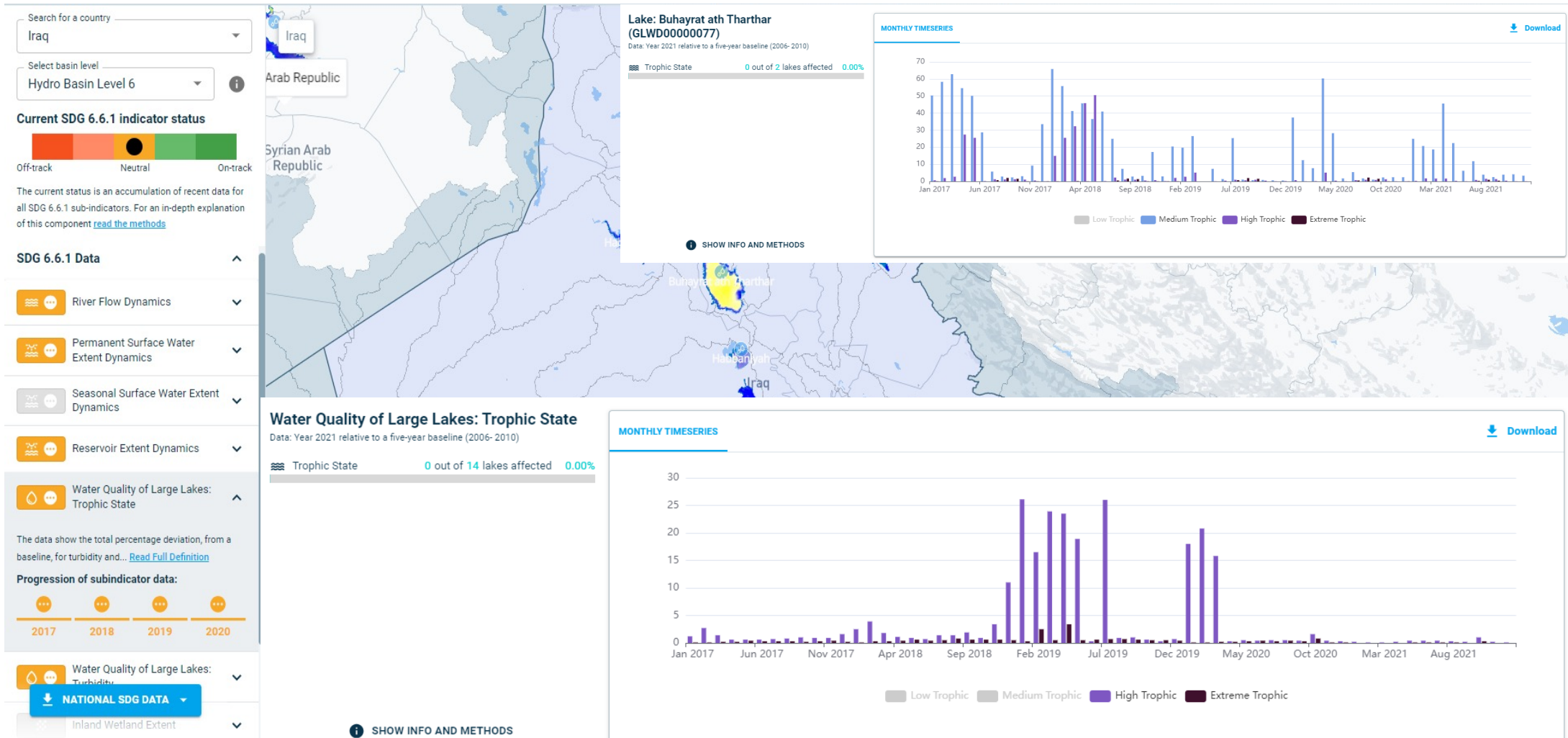
MONTHLY TIMESERIES YEARLY TIMESERIES

Download

Legend: Low Turbidity (light grey), Medium Turbidity (medium grey), High Turbidity (purple), Extreme Turbidity (dark purple)

SHOW INFO AND METHODS

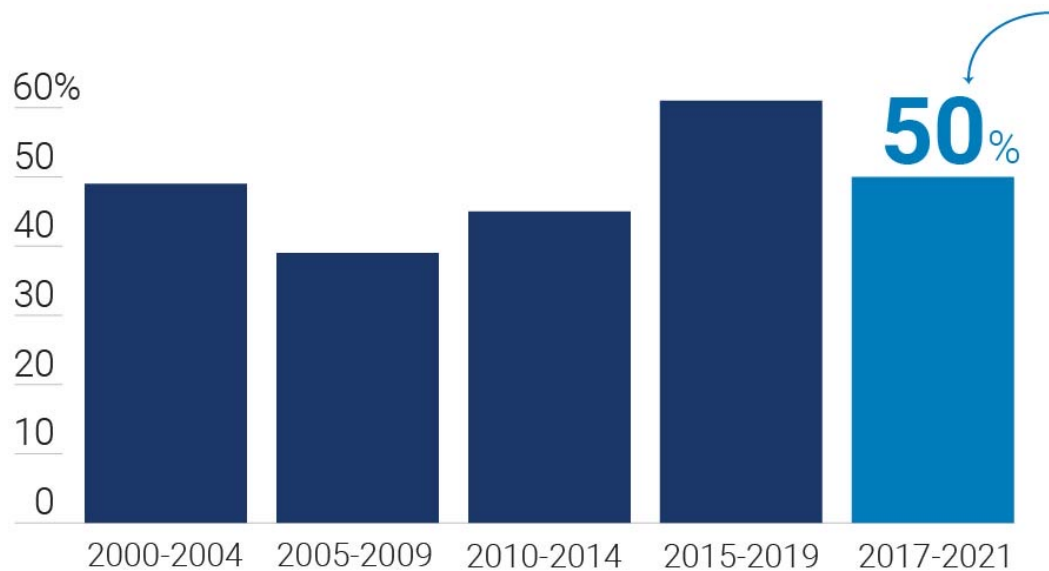
Example of SDG 6.6.1 country data and trends: lake trophic state, Iraq



SDG indicator 6.6.1 - Key Findings and Messages

Key Findings from aggregated freshwater ecosystem data

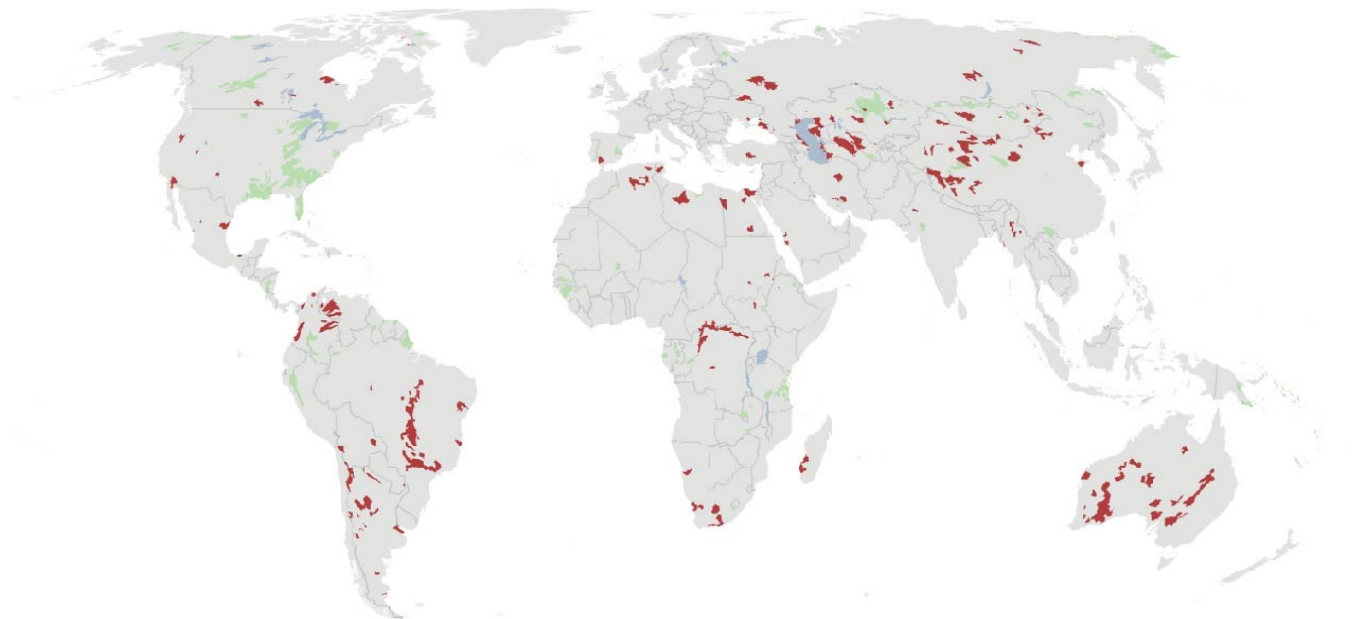
FIGURE 1: PERCENTAGE OF COUNTRIES EVERY FIVE YEARS WITH DEGRADED WATER-RELATED ECOSYSTEMS



A global aggregated analysis of water-related ecosystem data shows that **50% of countries, currently, have one or more water-related ecosystem type in a state of degradation¹**. This equates to more than **90 countries** of the 185 countries reporting on SDG indicator 6.6.1.

Key Findings from sub-indicator data assessment

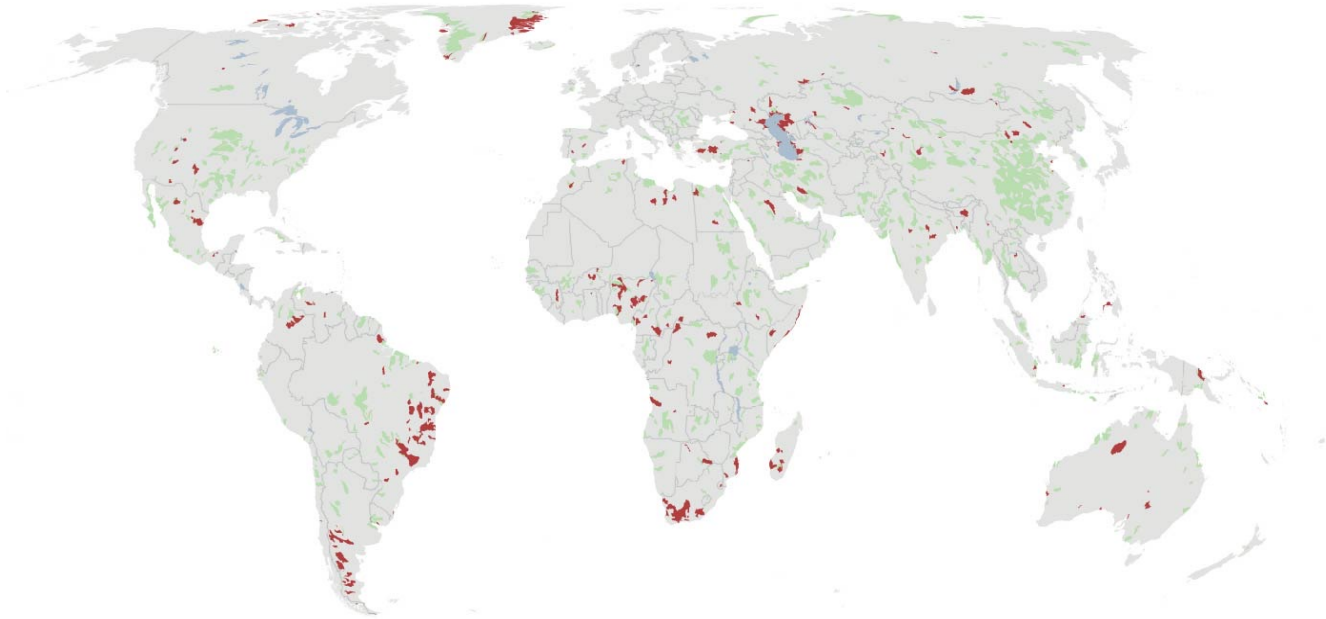
RIVER BASINS EXPERIENCING A LOSS OR GAIN IN MINIMUM RIVER FLOW IN THE CURRENT OBSERVATION PERIOD (2017-2021)
COMPARED TO THE BASELINE REFERENCE (2000-2019)



River flow has decreased in 402 river basins worldwide.
This is a fivefold increase from 15 years ago.

Key Findings from sub-indicator data assessment

RIVER BASINS EXPERIENCING A **LOSS** OR **GAIN** IN PERMANENTLY OBSERVED WATER IN THE CURRENT OBSERVATION PERIOD (2017-2021)
COMPARED TO THE BASELINE REFERENCE (2000-2019)



Surface water bodies, such as lakes,
are shrinking or being lost entirely in 364 basins worldwide

For detailed information and resources on freshwater ecosystem changes please visit the Freshwater Ecosystem Explorer. Go to www.sdg661.app

Thank you

6 CLEAN WATER
AND SANITATION



TARGET 6-6



PROTECT AND RESTORE
WATER-RELATED
ECOSYSTEMS