Decision-support Platform & Toolbox for wetland restoration

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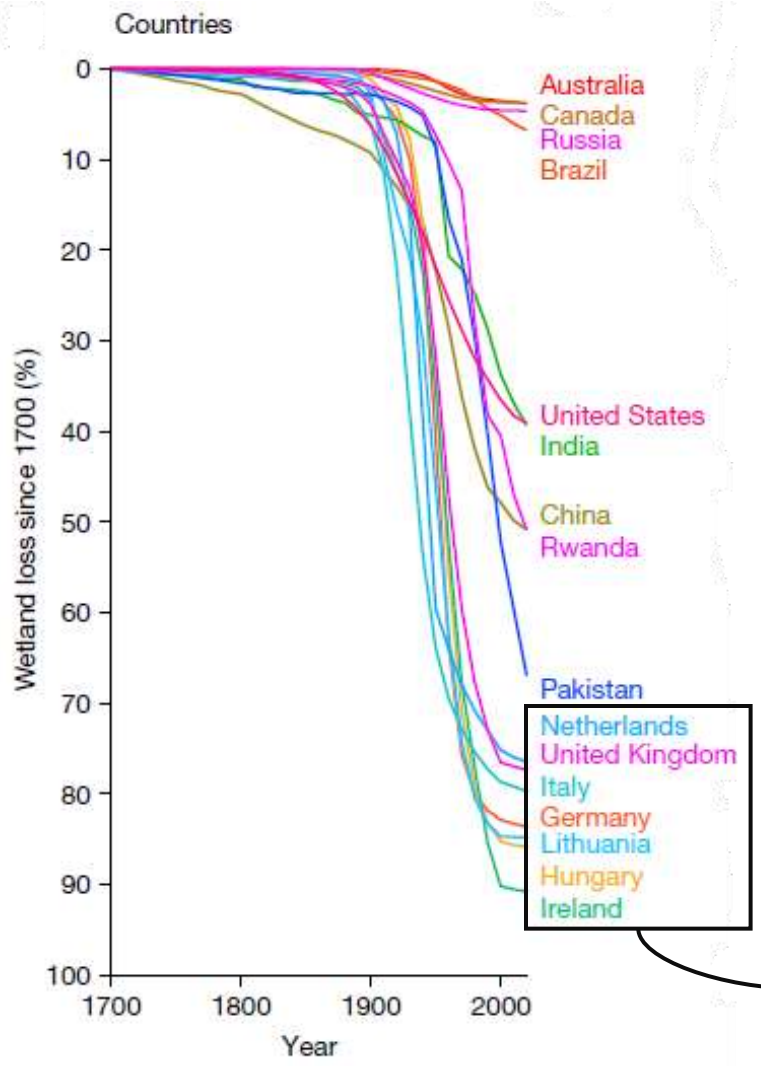
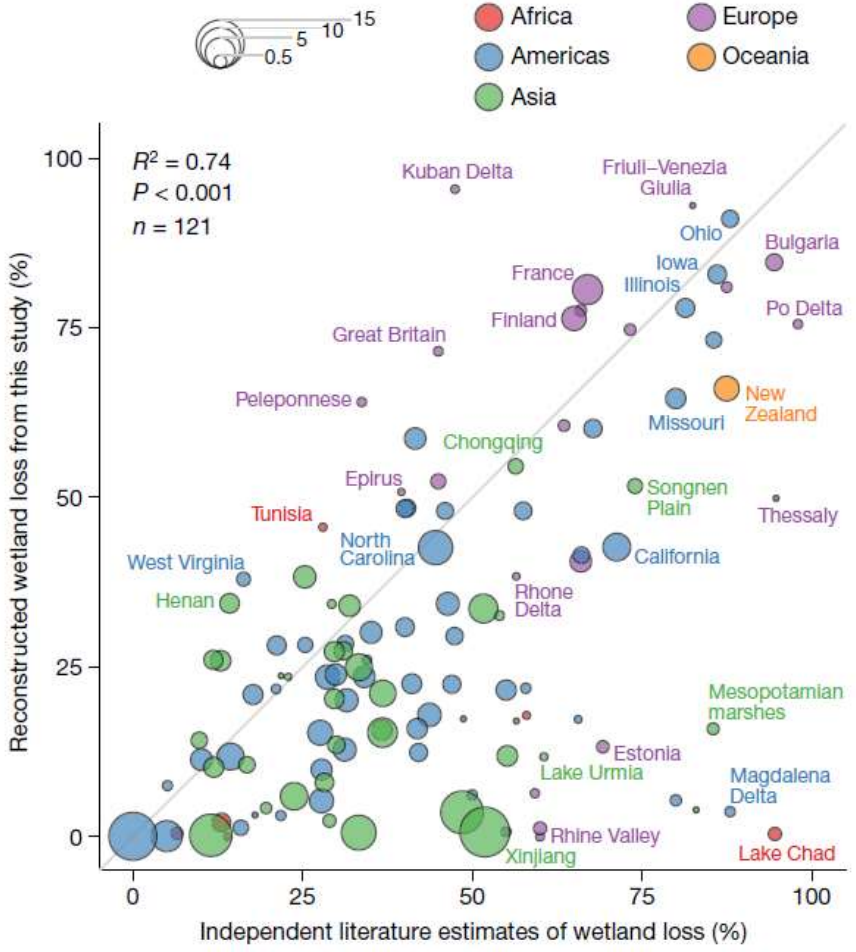
Estimated loss of natural wetlands in **Europe** over the last 300 years

-50%



European countries



Fluet-Chouinard et al. 2023

- **Wetland restoration under the spotlight**
- **Increasing social and political demand**
- **Nature Restoration Law**
  ➔ *Restore at least 20% of ecosystems in EU by 2030*
- **Increasing financial resources** available

So…

let’s massively restore wetlands?

NOT THAT SIMPLE

Multiple **challenges** in practice before achieving this result

Before having « **ready-to-restore** » wetland sites, we need to assess:

- ✓ Spatial identification / delimitation
- ✓ Reversibility of the transformation
- ✓ Ecological and conservation relevance
- ✓ Local governance (i.e. land ownership)
- ✓ Political support
- ✓ Social acceptability
- ✓ Technical feasibility and expertise
- ✓ …

Petit Badon re-created wetland (Camargue, France)

Need to better match funding opportunities with real needs

Decision-support Platform

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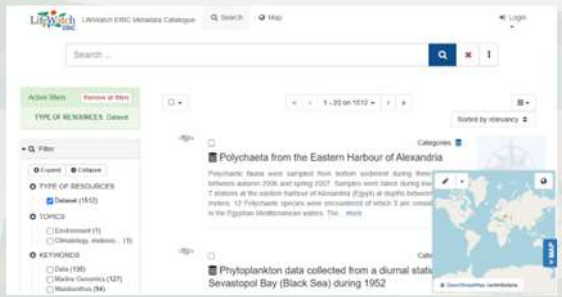
Coastal Wetlands Restoration Decision-support Platform

Toolbox

TdV

Map viewer / dashboard



Catalogue and metadata

UNILE / LW ERIC

Catalogue based on GeoNetwork

Map viewer

UMA

Visualise and access / download data

Who we are | Story maps | Library | Tools Catalogue | ...

Coastal Wetlands Restoration Priorisation Toolbox

Indicators

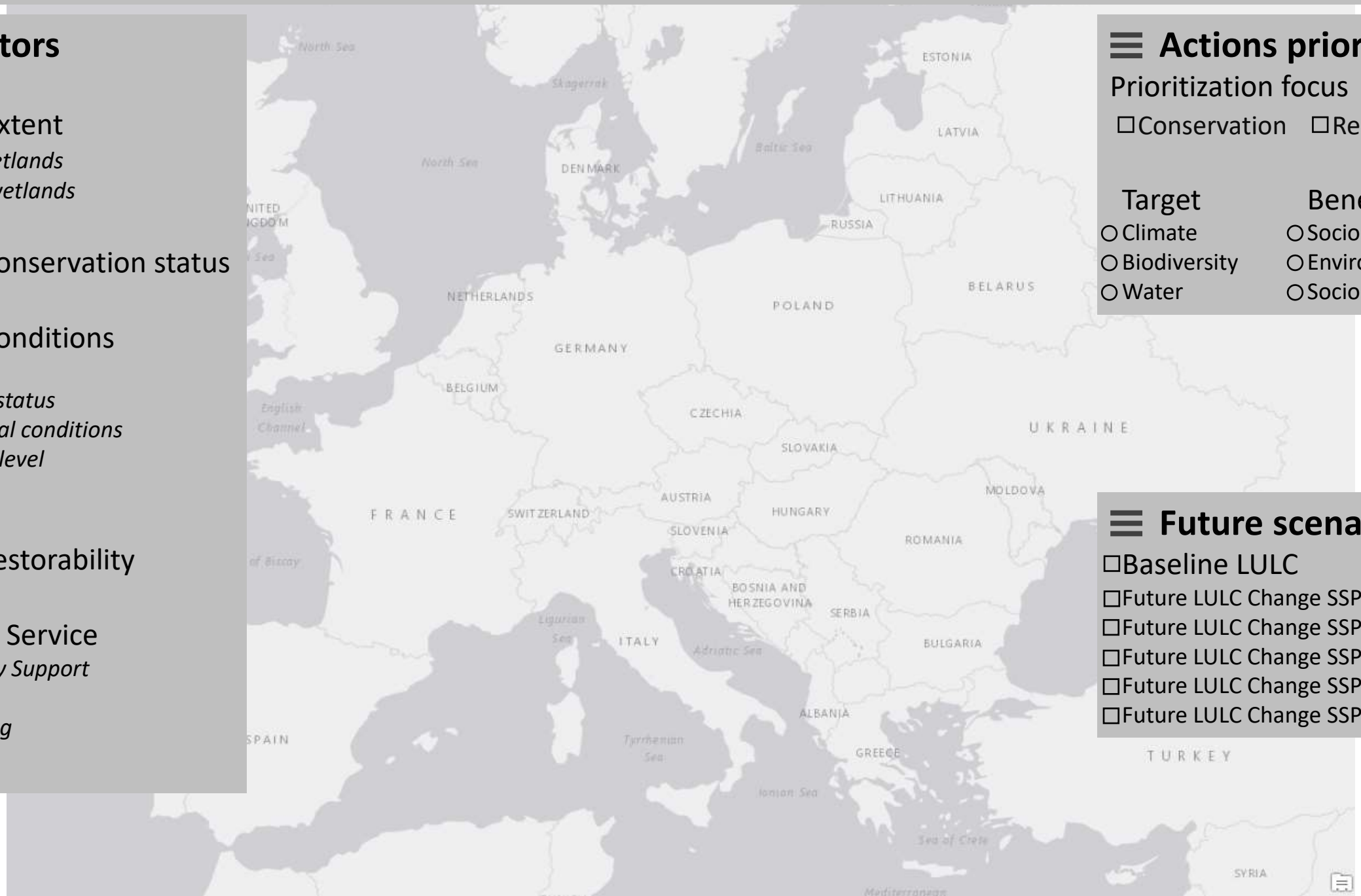
Wetland extent
Existing wetlands
Potential wetlands

Wetland conservation status

Wetland conditions
Pressures
Ecological status
Hydrological conditions
Protection level
Ownership

Wetland restorability

Ecosystem Service
Biodiversity Support
Regulation
Provisioning
Cultural



Actions prioritization

Prioritization focus

☐Conservation ☐Restoration

Target	Benefits
○ Climate	○ Socio-economic
○ Biodiversity	○ Environmental
○ Water	○ Socio-cultural

Future scenarios

☐Baseline LULC
☐Future LULC Change SSP1
☐Future LULC Change SSP2
☐Future LULC Change SSP3
☐Future LULC Change SSP4
☐Future LULC Change SSP5

Indicators

Wetland extent

Existing wetlands

Potential wetlands

Wetland conservation status

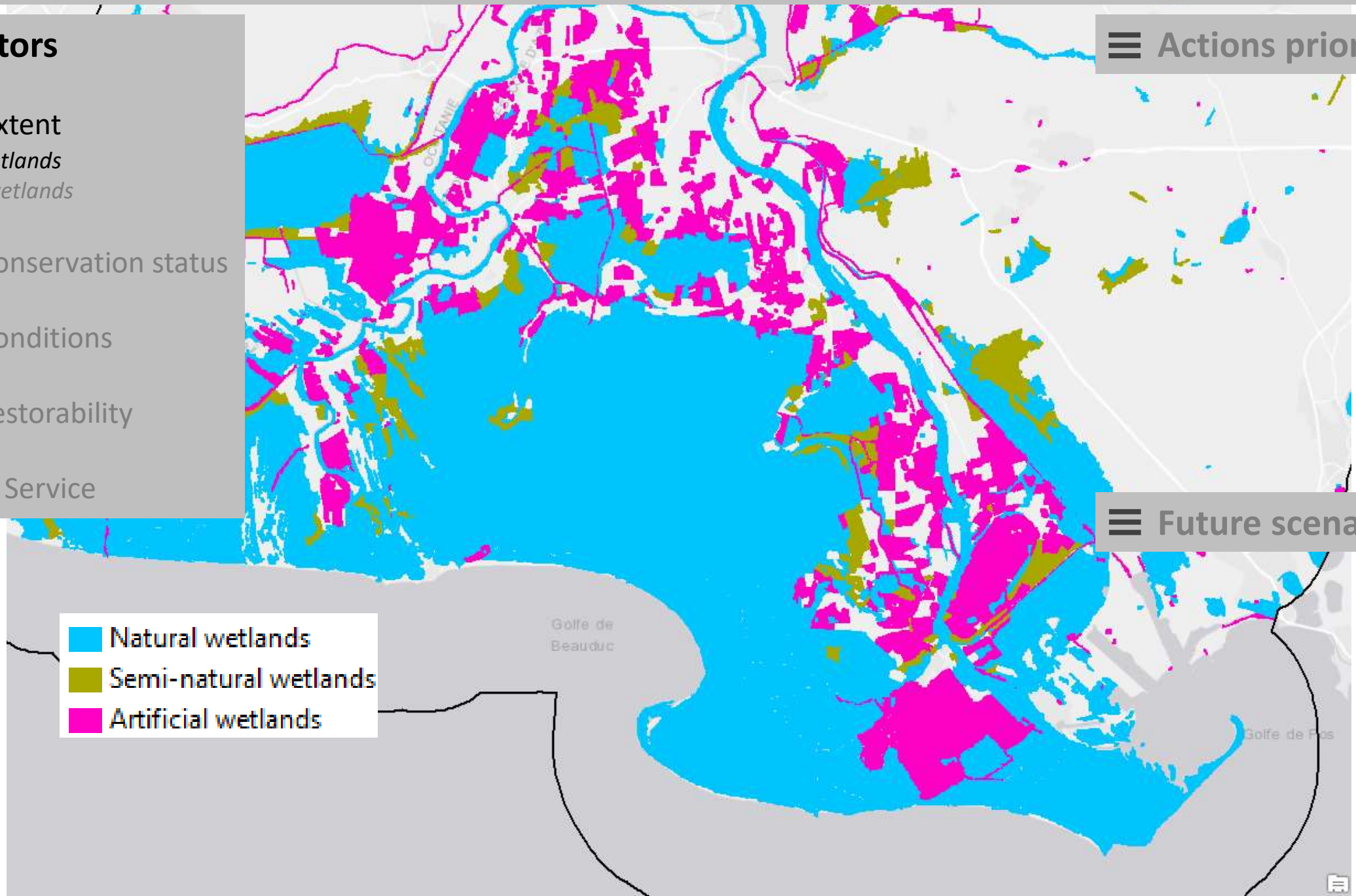
Wetland conditions

Wetland restorability

Ecosystem Service

Actions prioritization

Future scenarios



Indicators

Wetland extent

Wetland conservation status

Wetland conditions

Wetland restorability

Ecosystem Service

Actions prioritization

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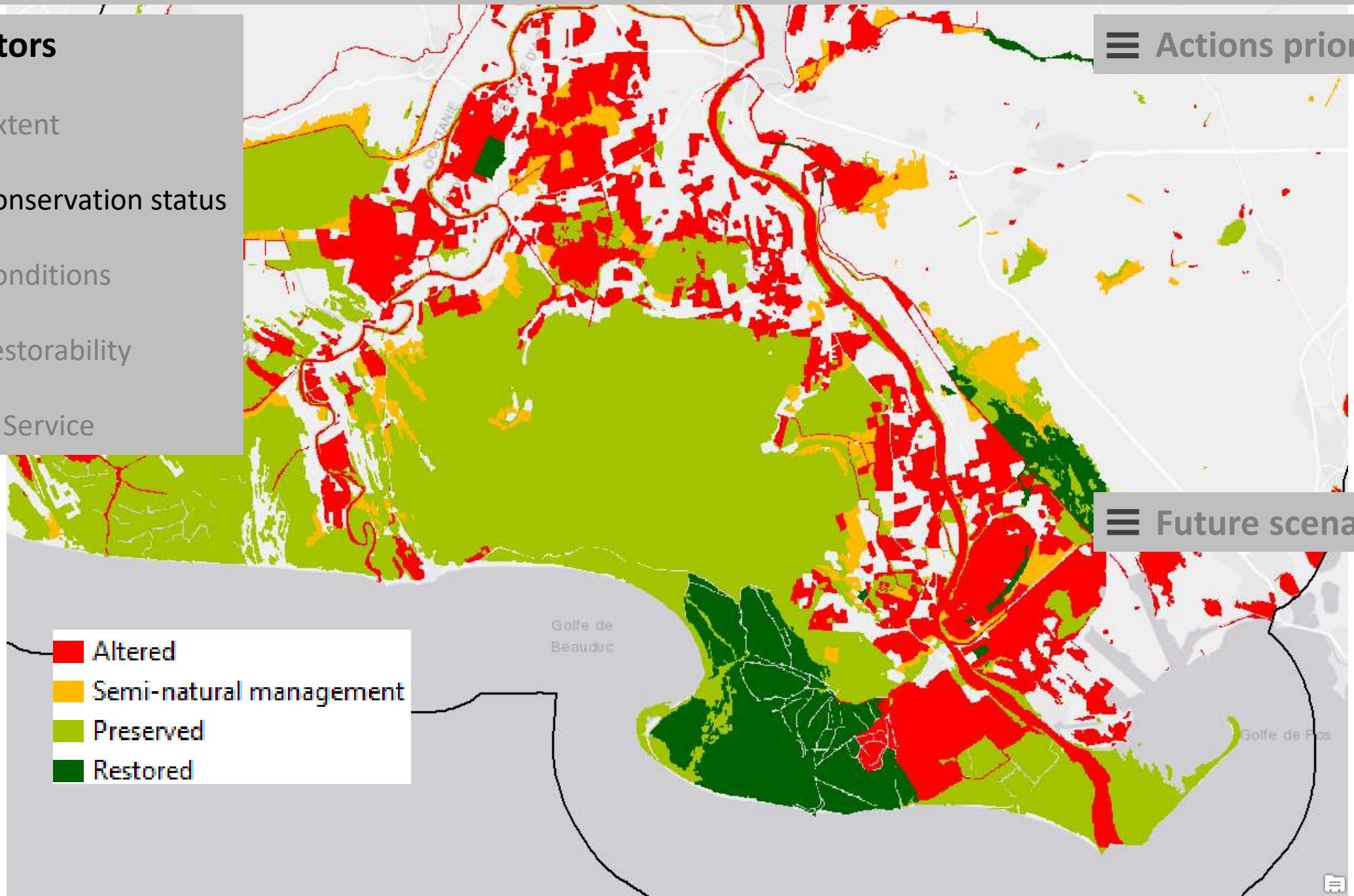


Coastal Wetlands Restoration Priorisation Toolbox

Indicators

Wetland extent

Wetland conservation status

Wetland conditions

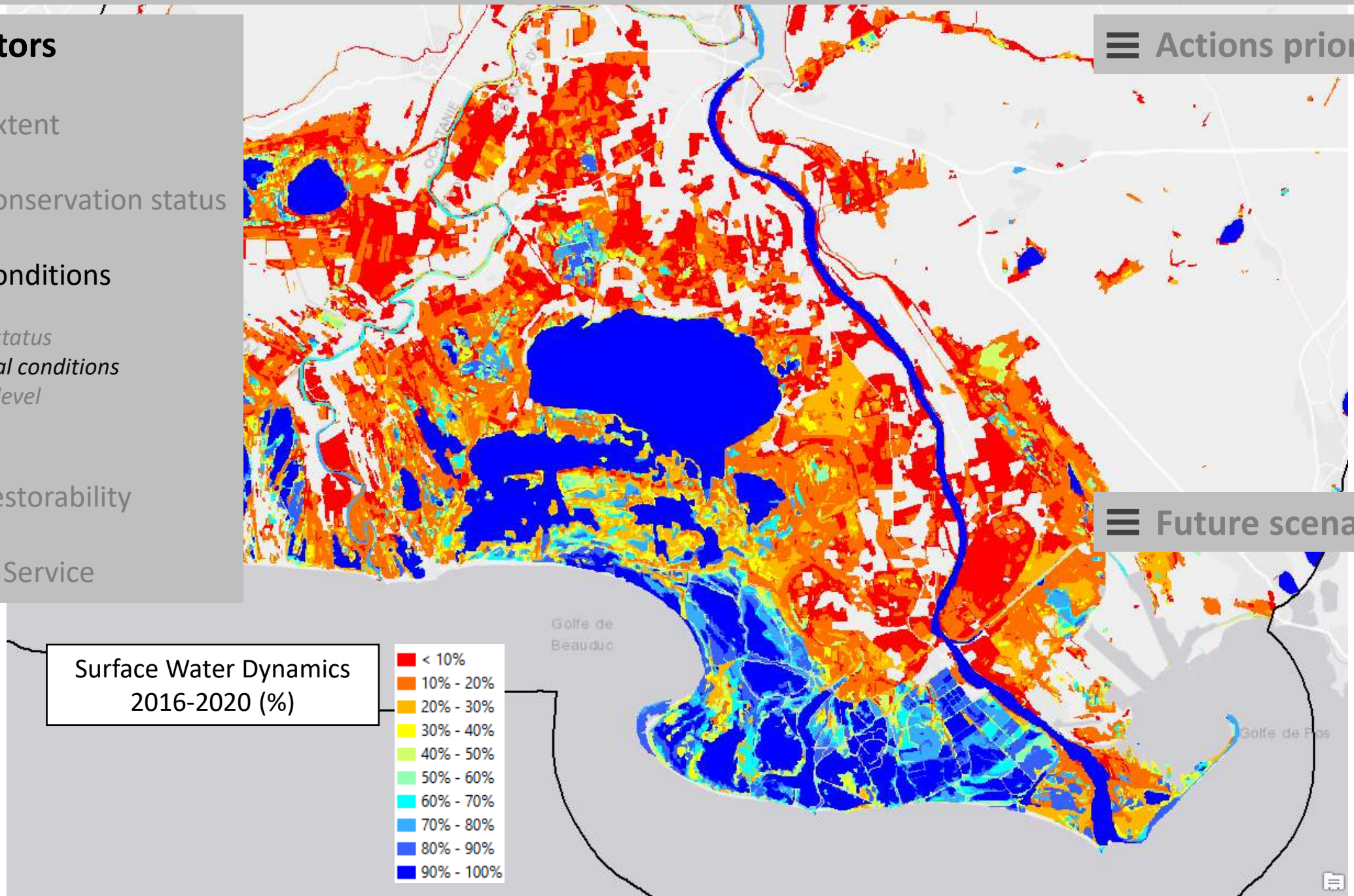
- *Pressures*
- *Ecological status*
- *Hydrological conditions*
- *Protection level*
- *Ownership*

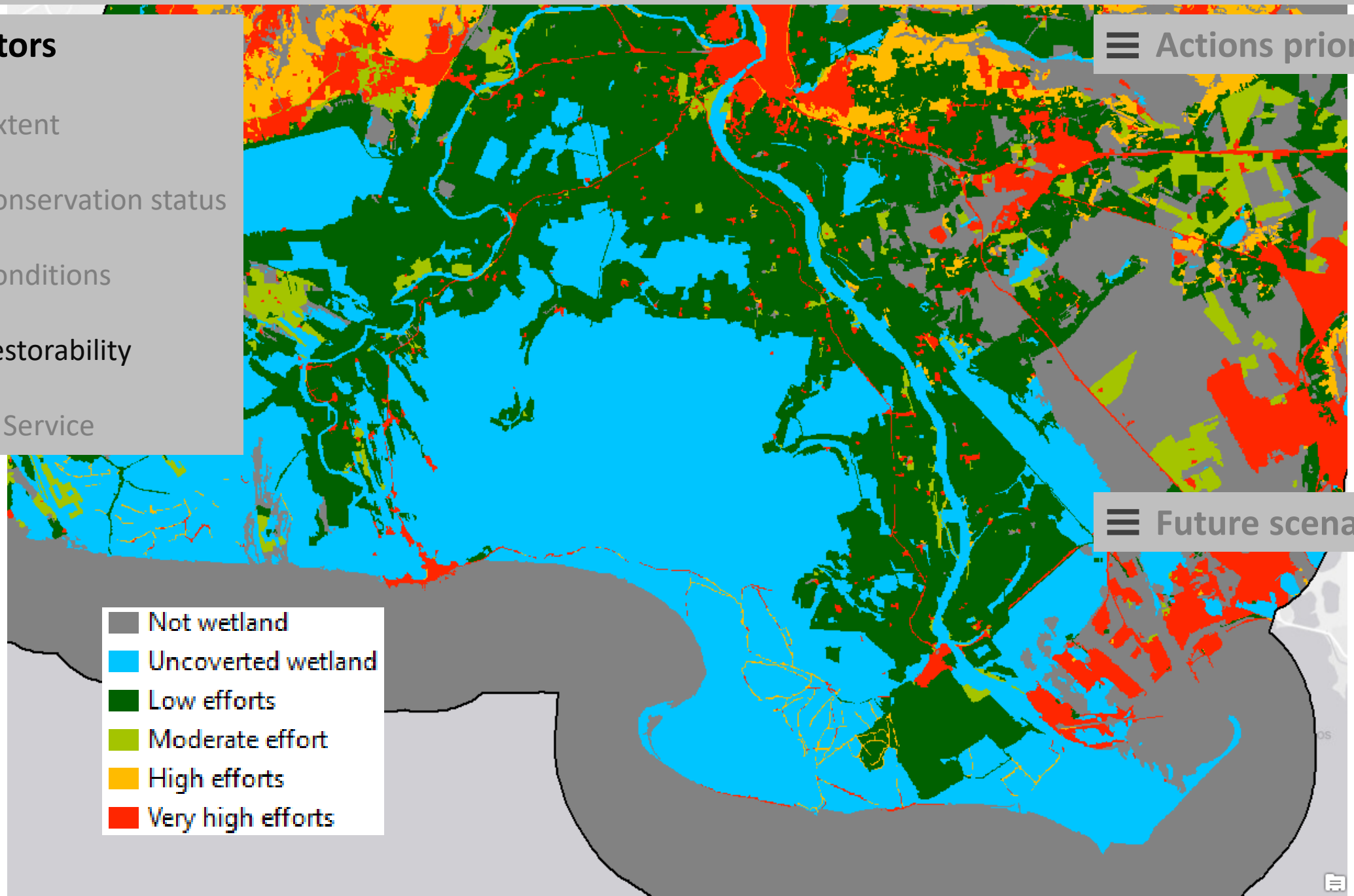
Wetland restorability

Ecosystem Service

Actions prioritization

Future scenarios




Indicators
Wetland extent
Wetland conservation status
Wetland conditions
Wetland restorability
Ecosystem Service
Actions prioritization
Future scenarios
Not wetland
Uncoverted wetland
Low efforts
Moderate effort
High efforts
Very high efforts

Indicators

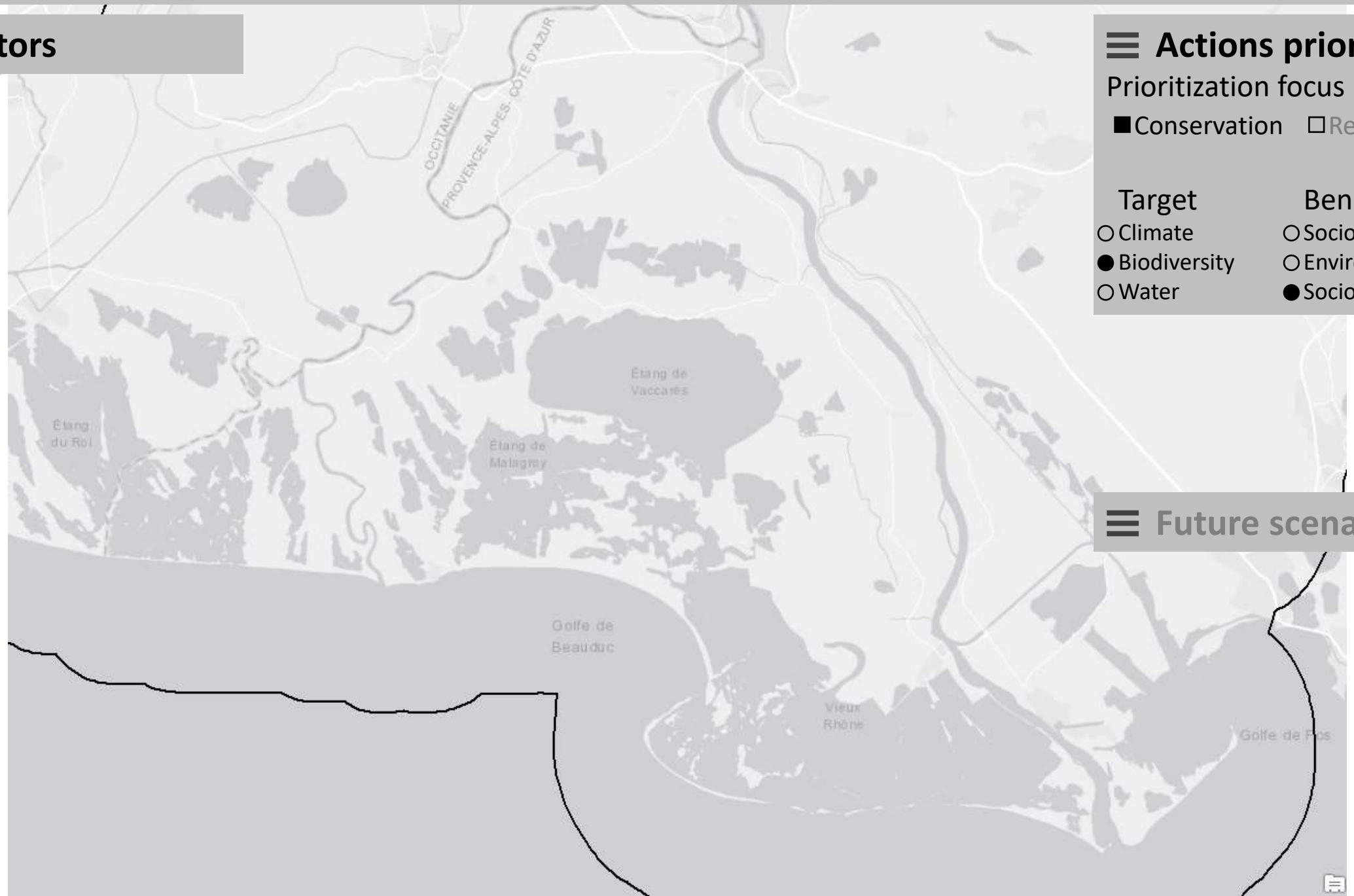
Actions prioritization

Prioritization focus

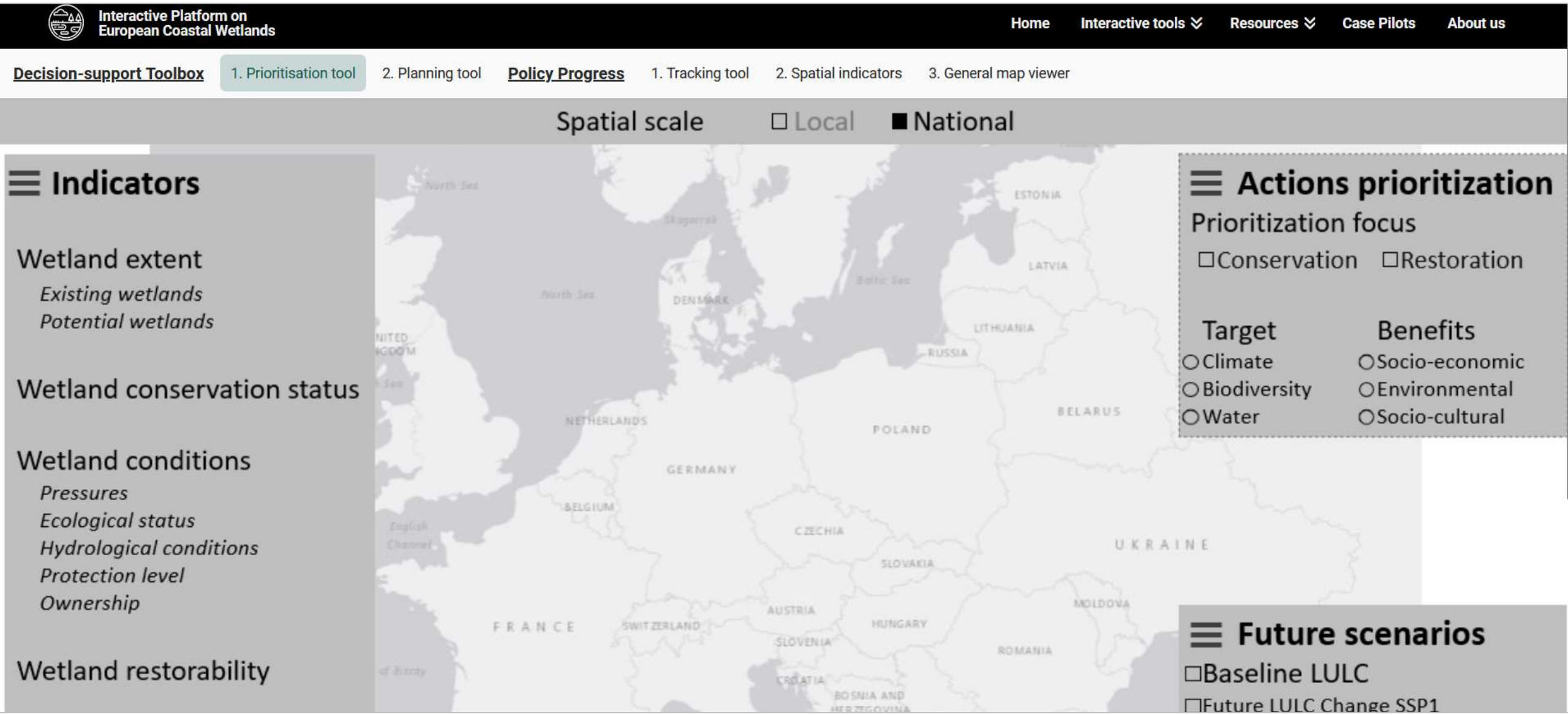
■ Conservation ☐ Restoration

Target	Benefits
○ Climate	○ Socio-economic
● Biodiversity	○ Environmental
○ Water	● Socio-cultural

Future scenarios



Decision-support Platform



Decision-support Platform

Interactive Platform on European Coastal Wetlands

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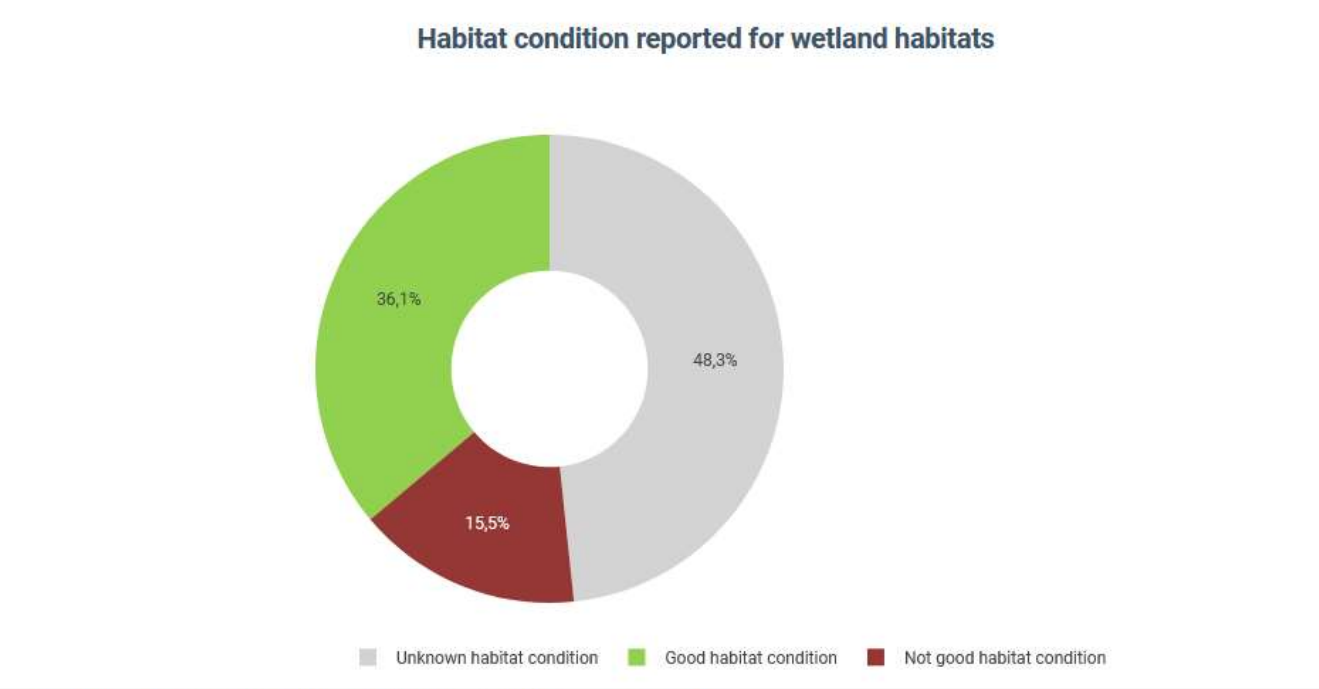
Decision-support Toolbox | 1. Prioritisation tool | 2. Planning tool | Policy Progress | 1. Tracking tool | 2. Spatial indicators | 3. General map viewer

/ INDICATORS

Tools for tracking policy progress indicators and visualising spatial indicators



Access the Policy Progress Tracking tool

Access the Spatial Indicators tool

Resources and information

Learn how to use the interactive tool

Explore the data and metadata

Policy briefs, technical reports, guidelines and protocols

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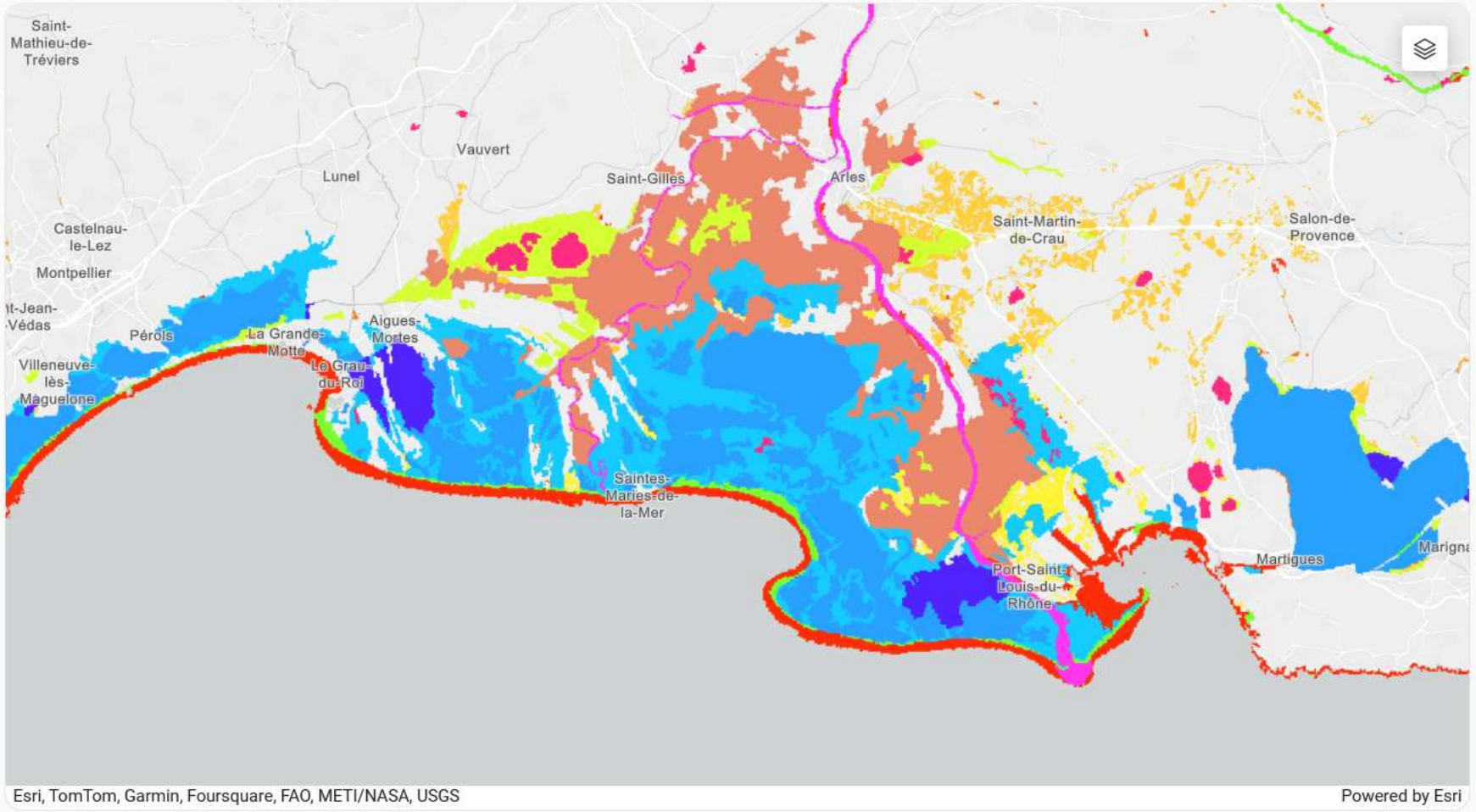
Coastal Wetland Restoration Rate

	AAA	BBB	CCC
111	...	...	...
222	...	...	...

Extension of Coastal Wetlands Protected and Strictly Protected



Open issues and next steps

- **Prioritization Toolbox:** Additional layers and data are needed for a better prioritization of wetlands to restore
  - Biodiversity relevance (KBAs, PAs, wetland conditions…)
  - Improvement of ecological corridors
  - Wetland GHG profiles
  - Urban and regional planning tools / priority uses
  - Land status and ownership

- **Online Platform:** A few technical development issues still need to be solved
  - Integration of different tools and modules (Toolbox, Map Viewer, Metadata catalogues…)

- **Next steps:**
  - Final data gathering for at the EU scale
  - Integration of all indicators
  - Finalizing the integration of all tools and modules into the Platform

Thank you