EU Twinning Project on Water Quality Monitoring - Hydromorphological Monitoring

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EU Twinning Project on Water Quality Monitoring

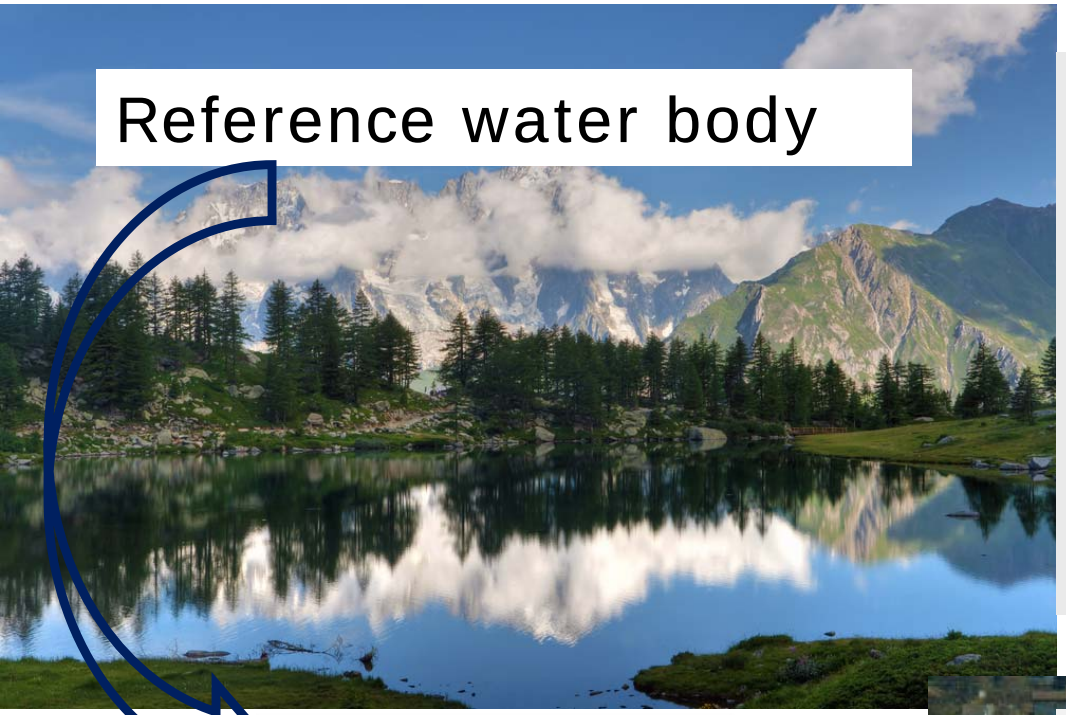
Aim: capacity building on monitoring

Turkey, Holland, France and Spain

EU Water Framework Directive

Monitoring plans for six river basins

National Turkish monitoring plan



Reference water body

- Fish
- Macro invertebrates
- Macrophytes
- Diatoms and phytoplanktons
- **Hydro morphology**
- Chemistry

HIGH

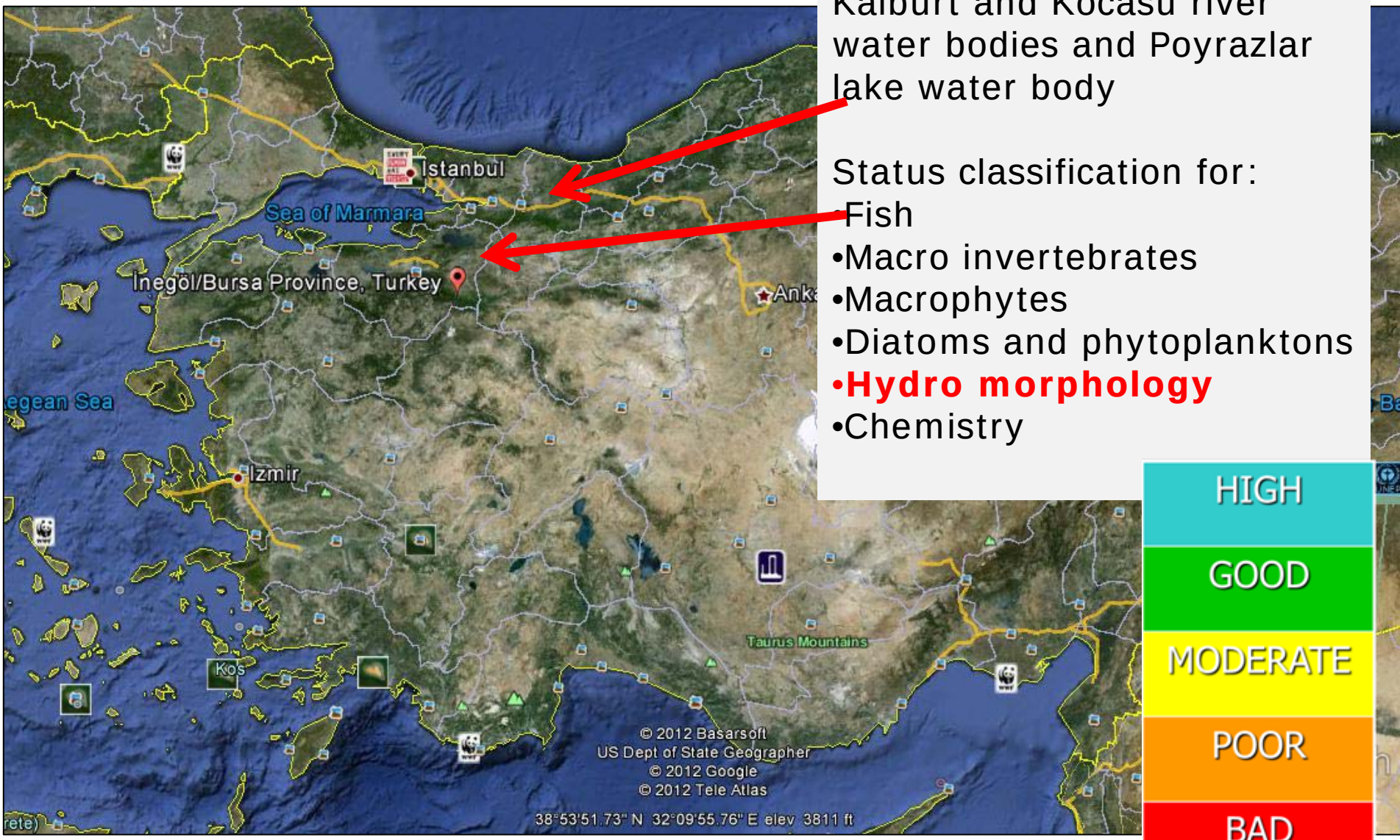
GOOD

MODERATE

POOR

BAD

Monitored water body



Kalburt and Kocasu river water bodies and Poyrazlar lake water body

Status classification for:

- Fish
- Macro invertebrates
- Macrophytes
- Diatoms and phytoplanktons
- **Hydro morphology**
- Chemistry

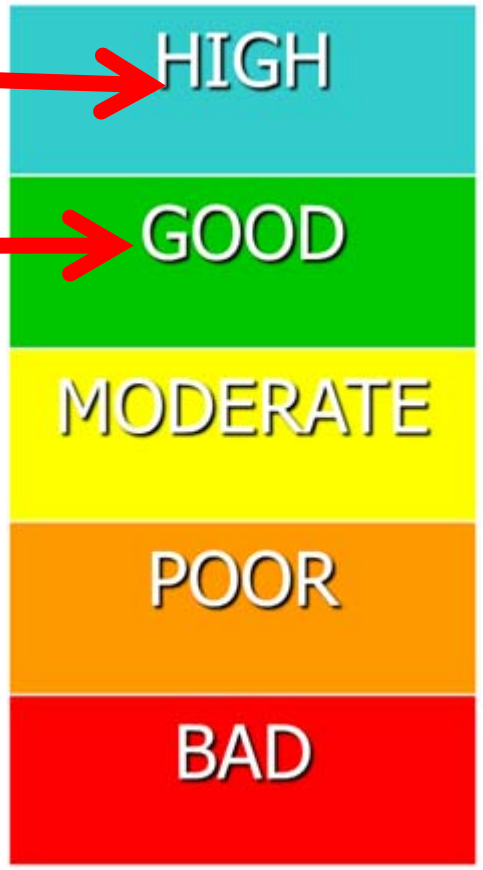
HIGH

GOOD

MODERATE

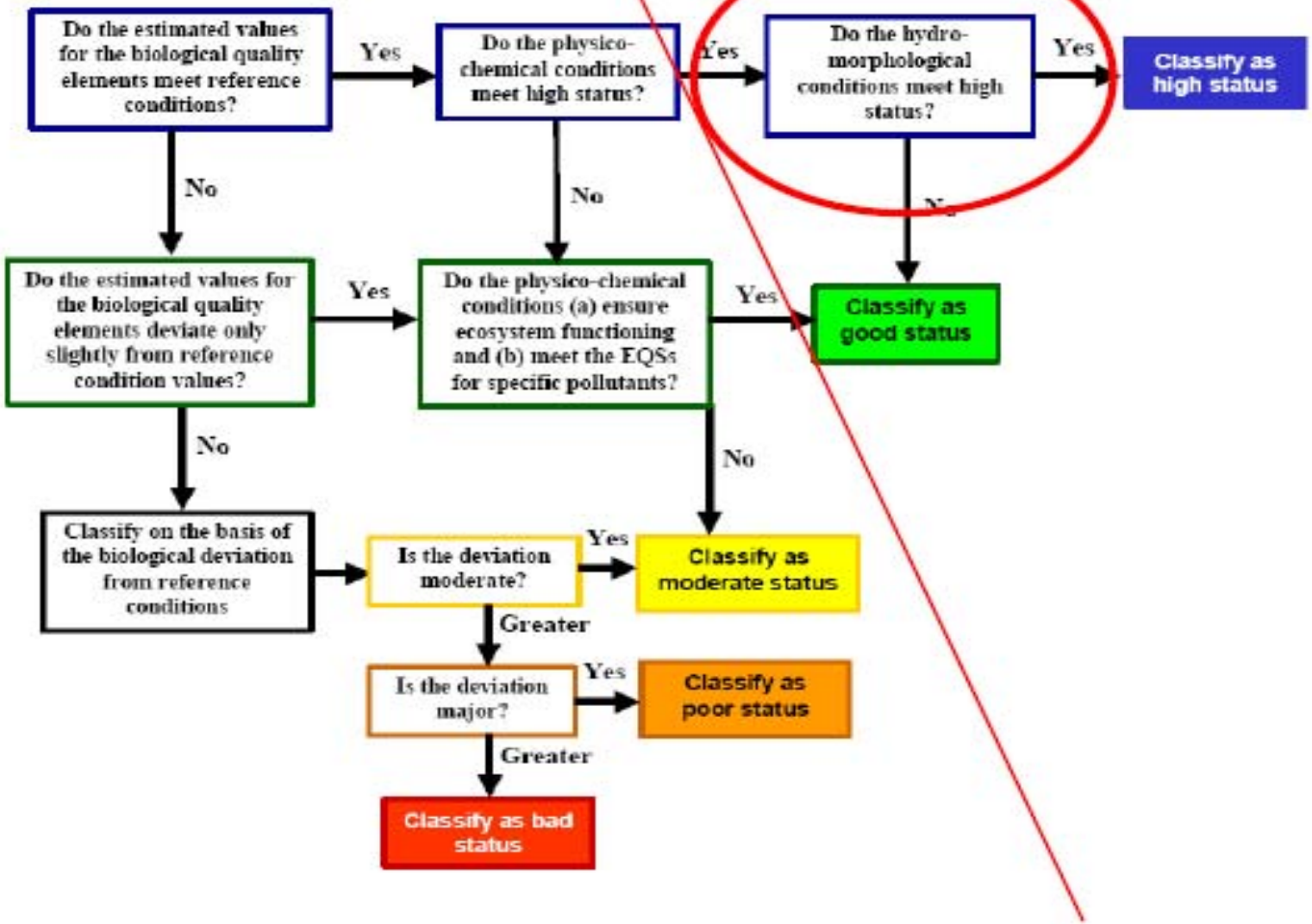
POOR

BAD



Hydro-morphological monitoring

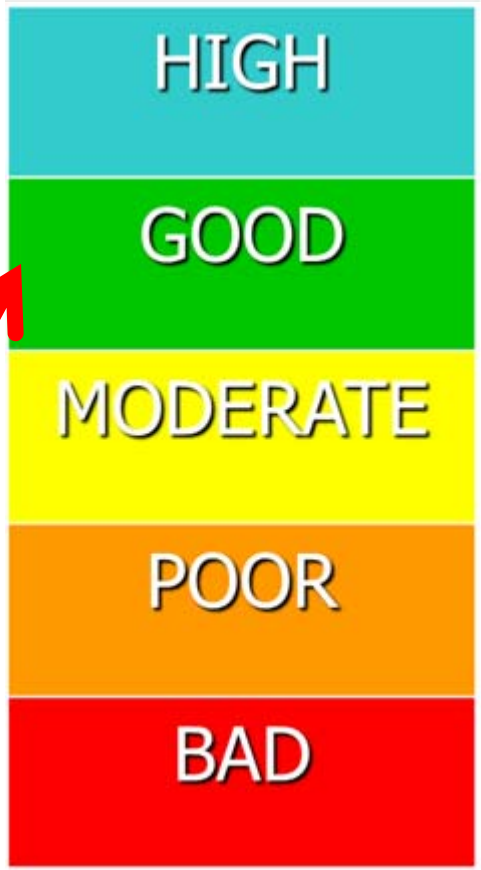
Ecological status



Quality element	Rivers	Lakes	Transitional	Coastal
Biological				
Phytoplankton	6 months	6 months	6 months	6 months
Other aquatic flora	3 years	3 years	3 years	3 years
Macro invertebrates	3 years	3 years	3 years	3 years
Fish	3 years	3 years	3 years	
Hydromorphological				
Continuity	6 years			
Hydrology	continuous	1 month		
Morphology	6 years	6 years	6 years	6 years
Physico-chemical				
Thermal conditions	3 months	3 months	3 months	3 months
Oxygenation	3 months	3 months	3 months	3 months
Salinity	3 months	3 months	3 months	
Nutrient status	3 months	3 months	3 months	3 months
Acidification status	3 months	3 months		
Other pollutants	3 months	3 months	3 months	3 months
Priority substances	1 month	1 month	1 month	1 month

- There are various indices that can be used for hydro-morphological monitoring.

- Within the scope of the Twinning Project, a Spanish index has been used.

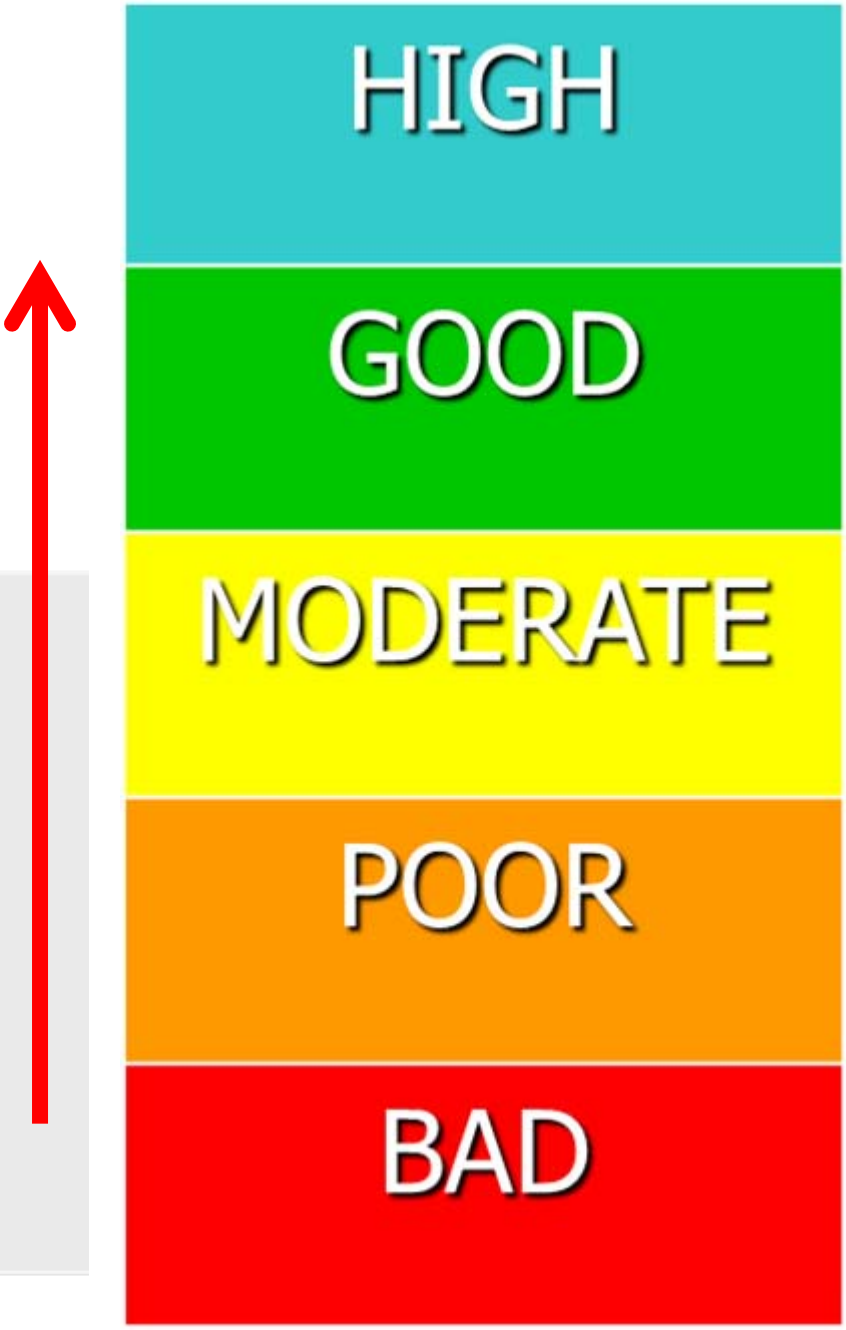


Status classification for hydro-morphology in Poyrazlar

- Hydromorphological features can only discriminate between high and good status.
- These stati are very close and it is complicated to discriminate.
- High status is quite close to reference conditions. If we suspect that there are some pressures, then the hydromorphological status will be good.

Objective: To achieve at least good status in all water bodies

- Fish
- Macro invertebrates
- Macrophytes
- Diatoms and phytoplanktons
- Hydro morphology
- Chemistry



Next steps in the project

Monitoring plans for six river basins

National Turkish monitoring plan

Thank you