

Wetlands

- Why and how restore

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Why restore wetlands and how?

- Wetlands are disappearing three times faster than forests.
- Approximately 35% of the world's wetlands were lost between 1970-2015 and the loss rate is accelerating annually since 2000.
- Threats; water drainage, pollution, unsustainable use, invasive species, disrupted flows from dams and sediment dumping from deforestation and soil erosion upstream.

1. Biodiversity

Why: Wetlands are rich in biodiversity - Up to 40% of the world's species live and breed in wetlands

How: Mapping of species and spreading knowledge about nature to everyone





2. Water Quality Improvement

Why: Wetlands act like **natural filters**, trapping pollutants, excess nutrients (like nitrogen and phosphorus), and sediments.

Wetlands in Norway purify water equivalent to 4.000 NOK per hectare per year

How: Preserve key species such as river mussels, restore and expand riparian zones



I can purify
50 L of water
per day

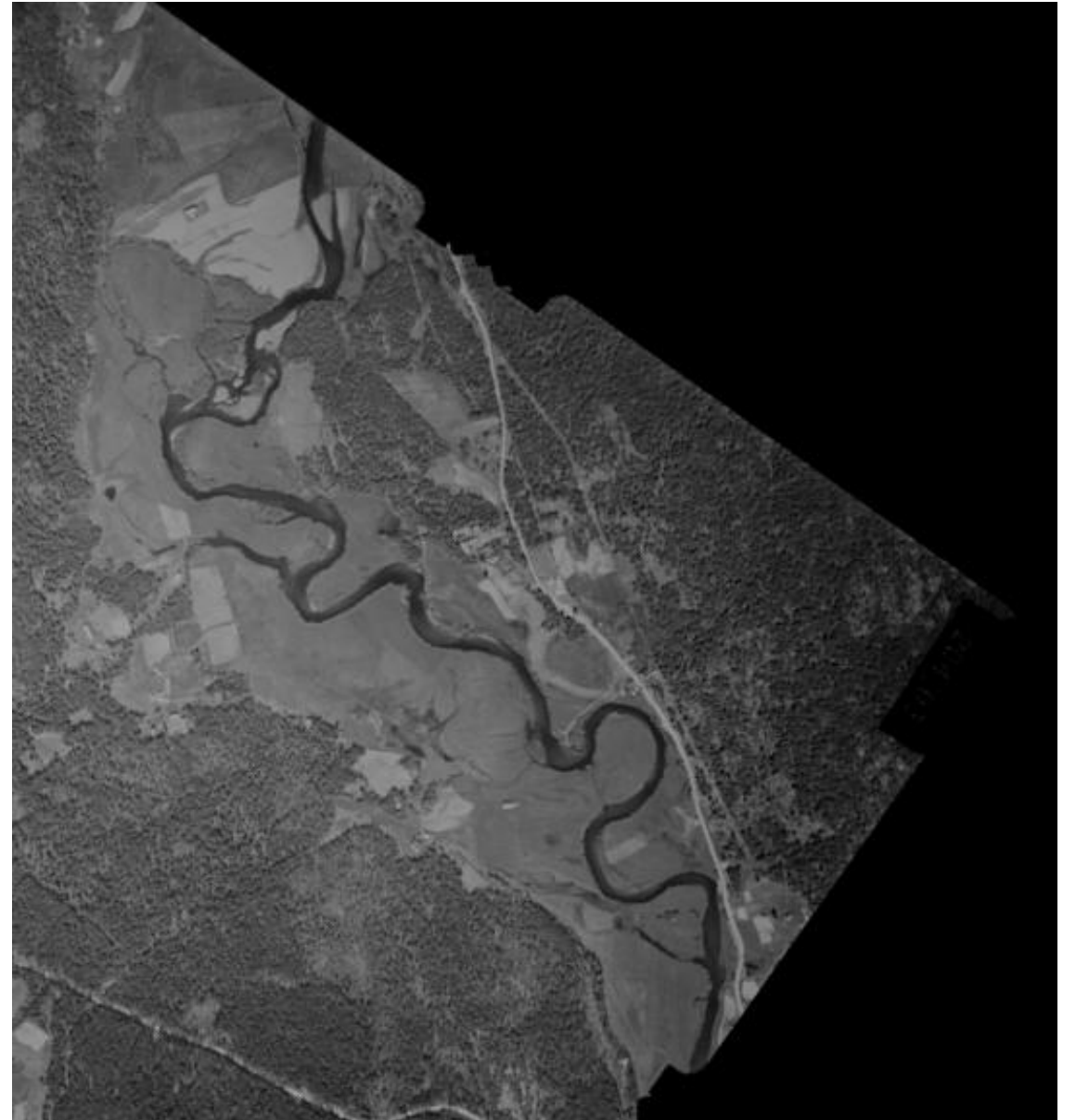
3. Flood Control

Why: Wetlands **absorb and store excess rainwater**, reducing the risk of flooding downstream. They slow down water flow and reduce peak flood levels during heavy rains.

How: Restore channelized rivers



Restoration of the river Etna



4. Climate Change Mitigation



Why: Wetlands are **carbon sinks**, meaning they store large amounts of carbon in plants and soil.

How: Restoring wetlands to **reduce greenhouse gases** in the atmosphere.



5. Economic Benefits

Why: Healthy wetlands support **fisheries, tourism, and agriculture**. They can reduce infrastructure damage costs by providing **natural flood protection**.

How: Restore agricultural ponds



6. Recreation and Culture

Why: Wetlands offer **recreational activities** and many wetlands have **cultural and spiritual significance** for Indigenous and local communities.

How: Conservation of wetlands – RAMSAR



*Restoring wetlands is not
just about protecting
nature—it's also about
protecting people,
preserving resources, and
ensuring a more **resilient**
future.*



Removal and demolition of the old mill dam in the river Vangselva, Jevnaker

- Reopened for fish migration upstream from the barrier, like Lake trout (*Salmo trutta lacustris*). Now 25 km of river course and side streams with good spawning opportunities!
- Important outcome:
 - reopening of natural sediment transport and supply of spawning gravel to lower parts of the river. The dam has accumulated waste, sediment and unnatural materials for the last 100 years.
 - The removal will contribute to improvement of habitat quality for other organisms connected to the river (amphibians, reptiles, birds and mammals)

Restoration of Vangselva - 2025

Demolition of Vang mill dam, Jevnaker municipality, Norway

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