



Norwegian
Environment
Agency

Multiple benefits of reopening rivers in Oslo

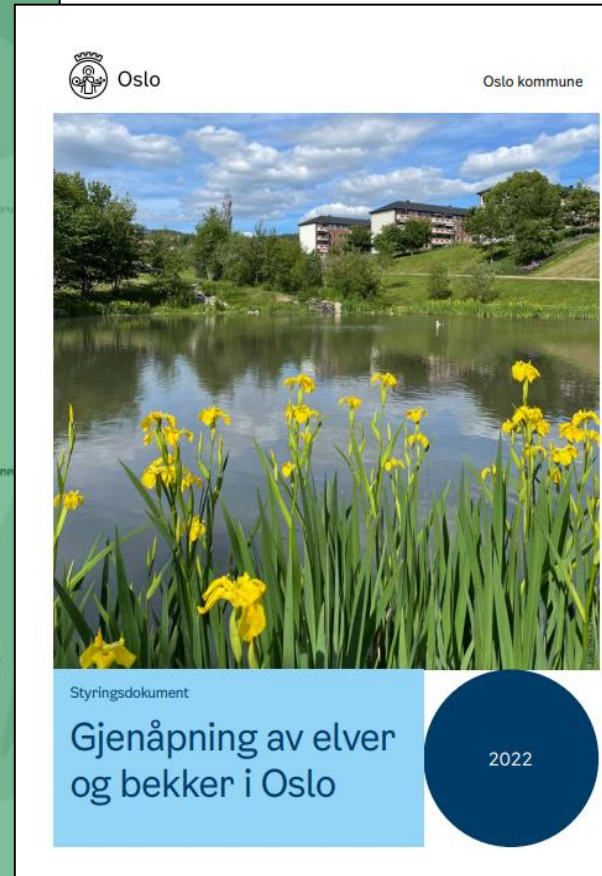
Anders Iversen, National Water Coordinator

Europe-INBO 17th October 2023: Workshop - River management in a climate change context

Oslo: 8 main rivers, and a policy to reopen *where possible*



Source: Oslo Municipality



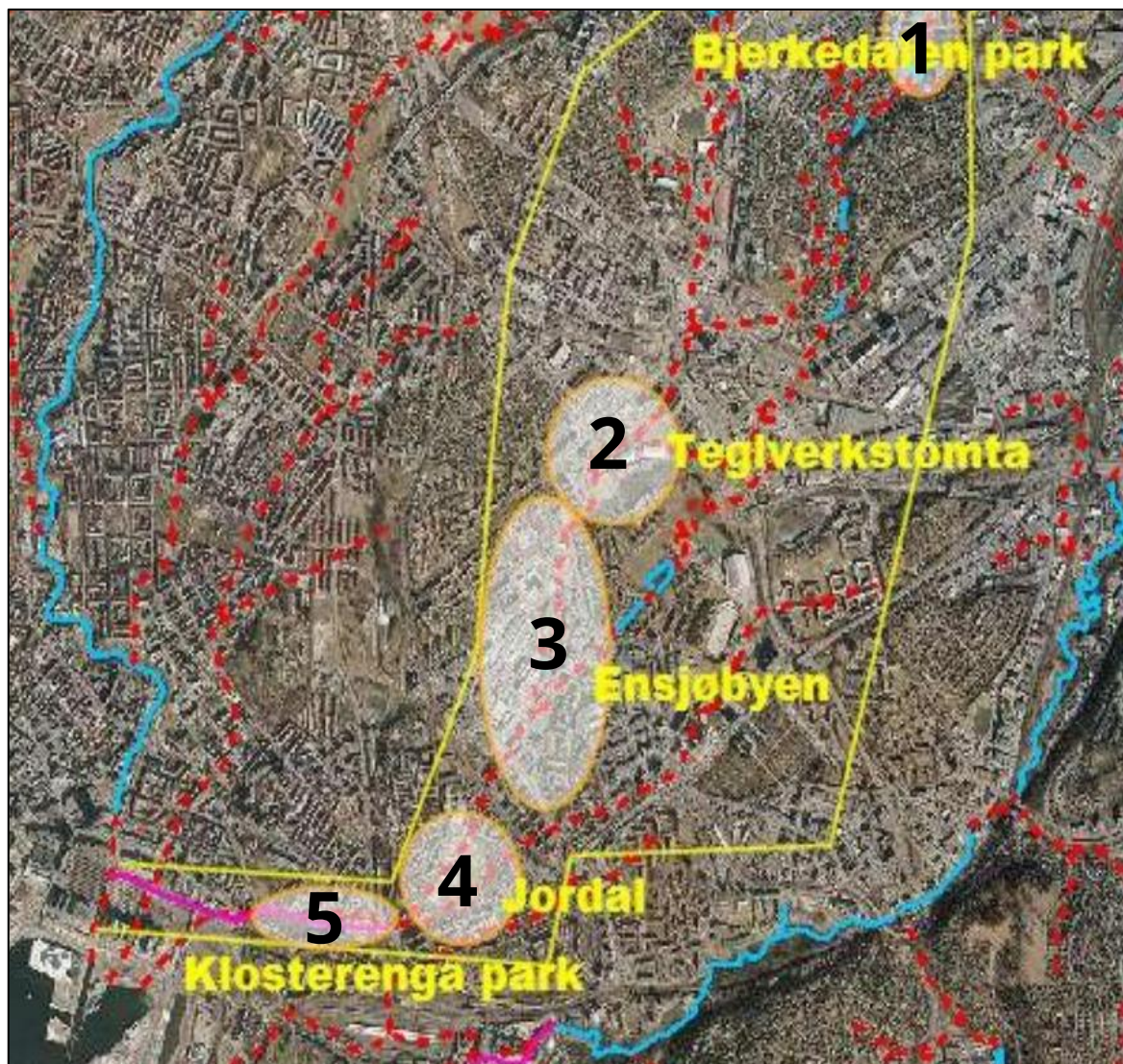
Policy Document since 2015, updated 2022.

Policy Objectives:

1. Successful adaptation to climate change
2. Better water environment and improved urban ecology (pollution + nature)
3. Increased opportunities for outdoor recreation and better public health



Five stops along Hovin Creek – from source to sea



Source: Kjetil Lønborg Jensen, Oslo Municipality.

- Reopening is a lengthy and stepwise process.
- There is a window of opportunity for reopening when other projects are planned and executed along the river, for instance urban regeneration or infrastructure developments (road, rail).
- Urban reopening is not ecological restoration:
 - insufficient space for re-meandering, floodplains and riparian vegetation
 - often no contact with the groundwater
- Different stretches have different compromises, balancing the rivers needs with the needs for:
 - housing, transport, business
 - parks, sport-fields and sport-halls
 - art installations etc.
- Almost 3 km reopened 2014-2023.



Status of Hovin Creek in the year 1959



Photo: Erik Næss. Source: Oslo City Archive



Source: Arbeiderbevegelsens arkiv

- Recipient of sewage and industrial wastewater.
- Stinking, and considered a health risk.
- Solution: hide it underground.

1 . Bjerkedalen Park (400 m restored 2013)



Aerial photo 2010.
Source: Oslo Municipality.



Plans for reopening in 2013.
Source: Oslo Municipality.



Construction Phase in 2013.
Source: Oslo Municipality.



1 . Bjerkedalen Park (pictures 2023)



2. Tegilverkstomta (450 m restored 2015)



Aerial photo 2010.
Source: Oslo Municipality.

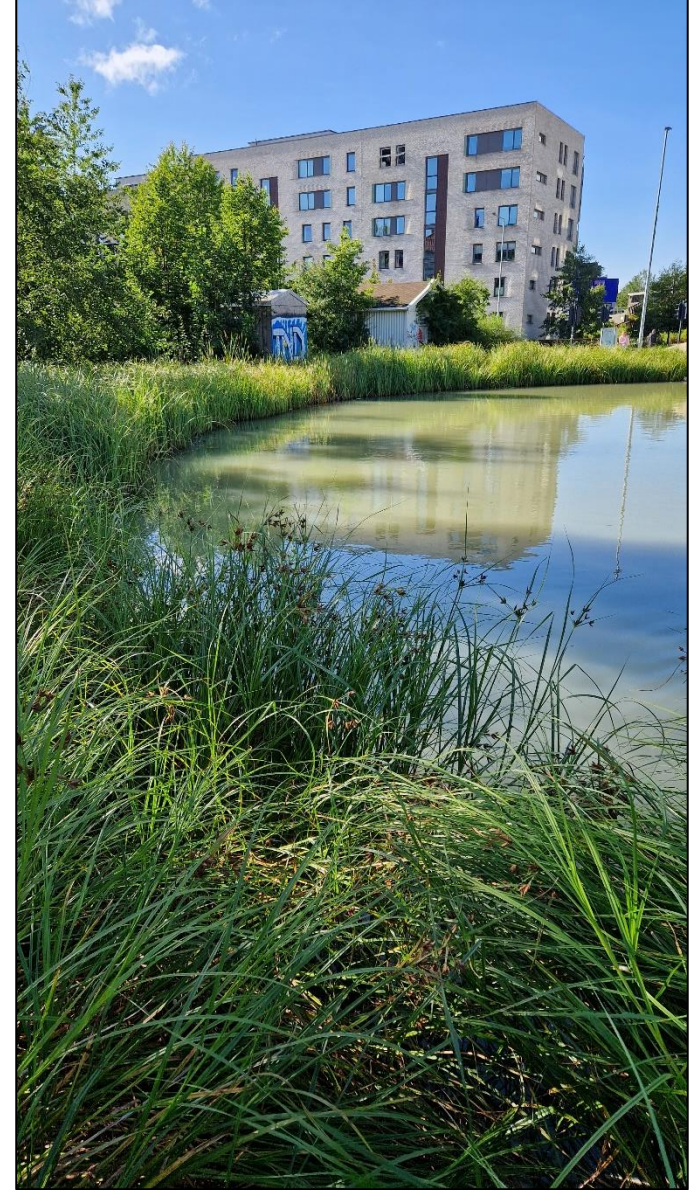


Plans for reopening in 2014.
Source: Oslo Municipality.



Construction Phase in 2014.
Photo: Anders Iversen.

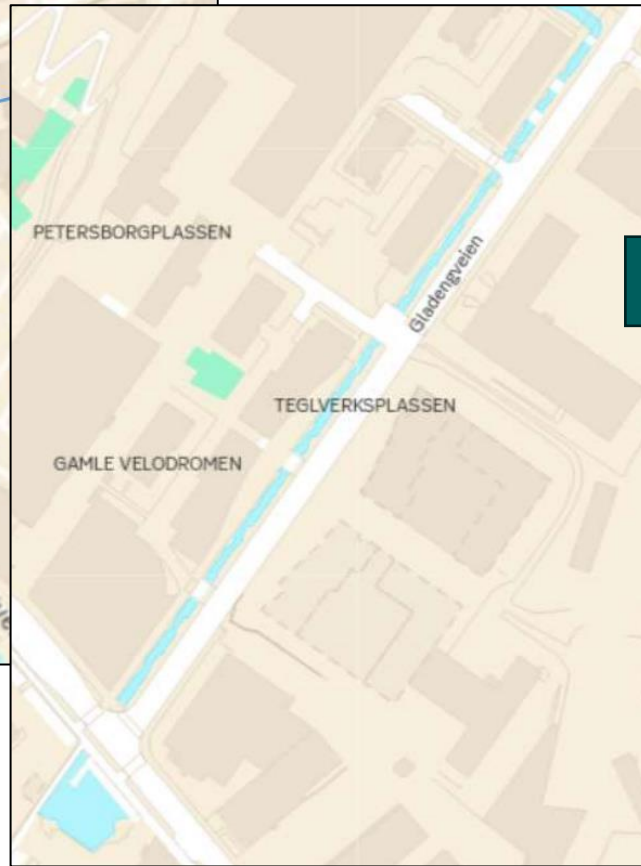
2. Tegelverkstomta (pictures 2023)



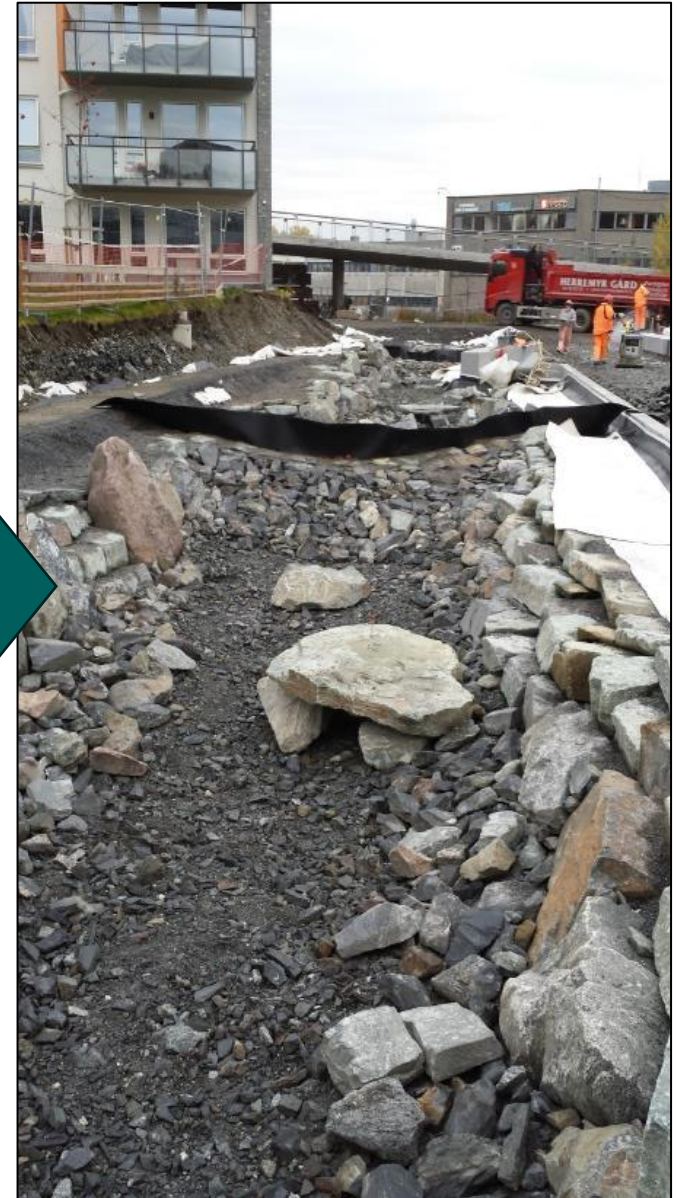
3. Ensjøbyen (1075 m restored 2016-2021)



Aerial photo 2015 .
Source: Wikipedia.

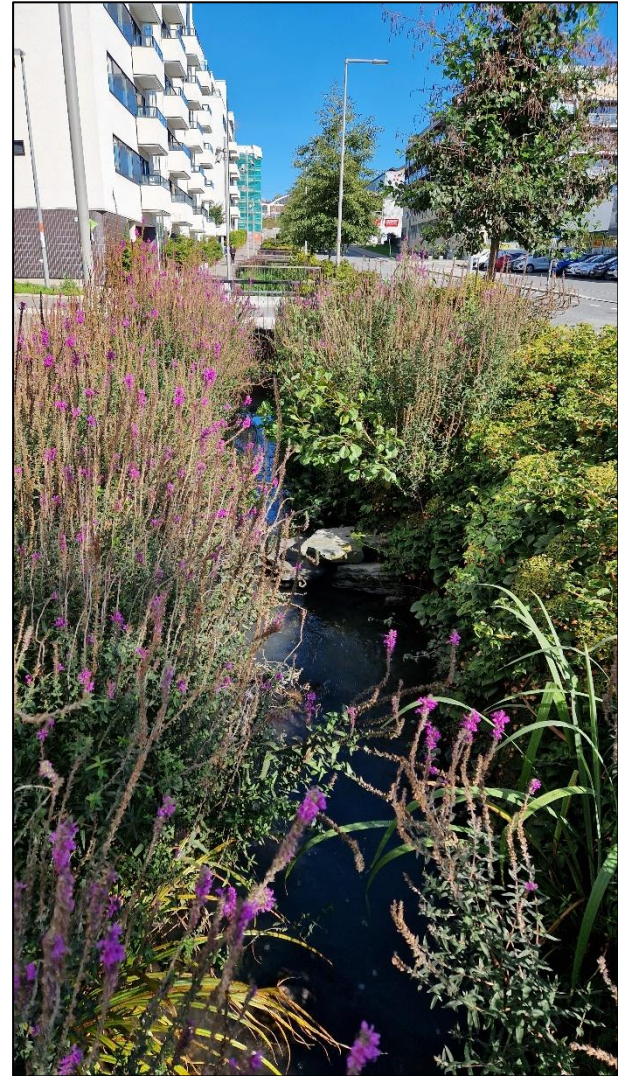
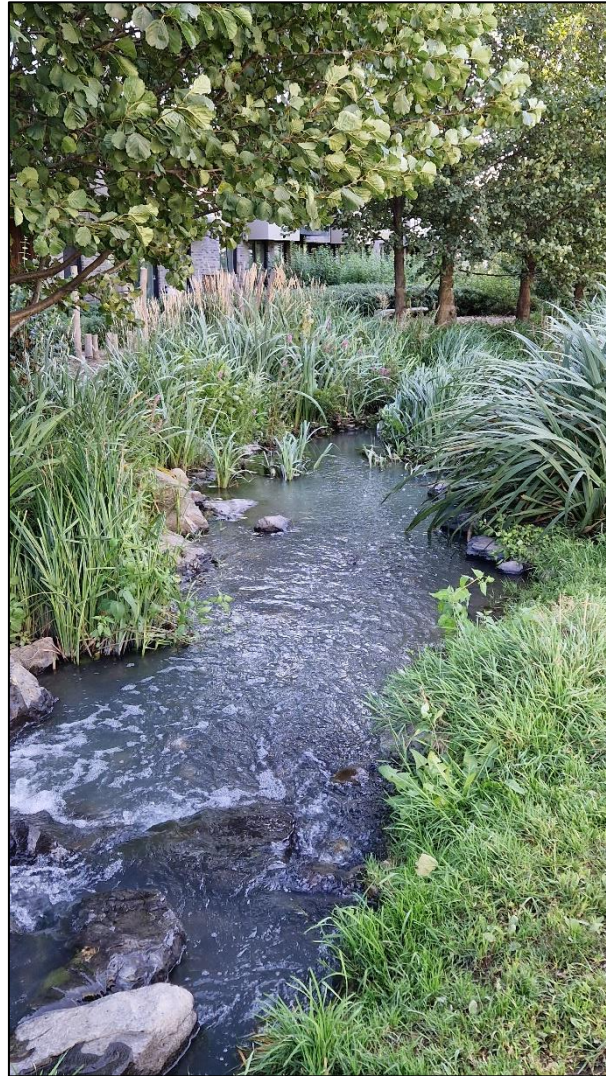
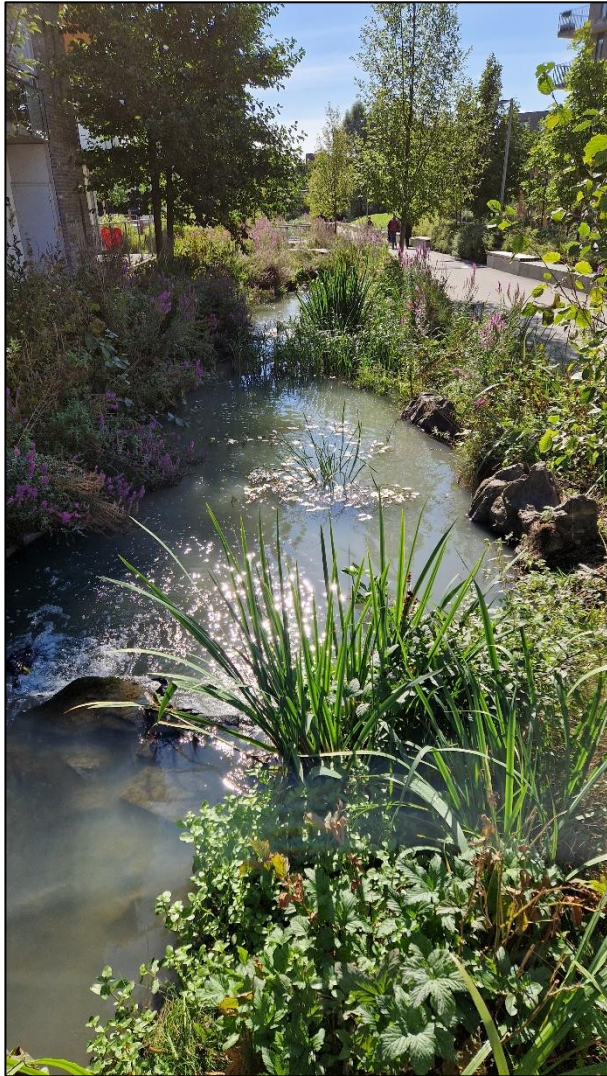
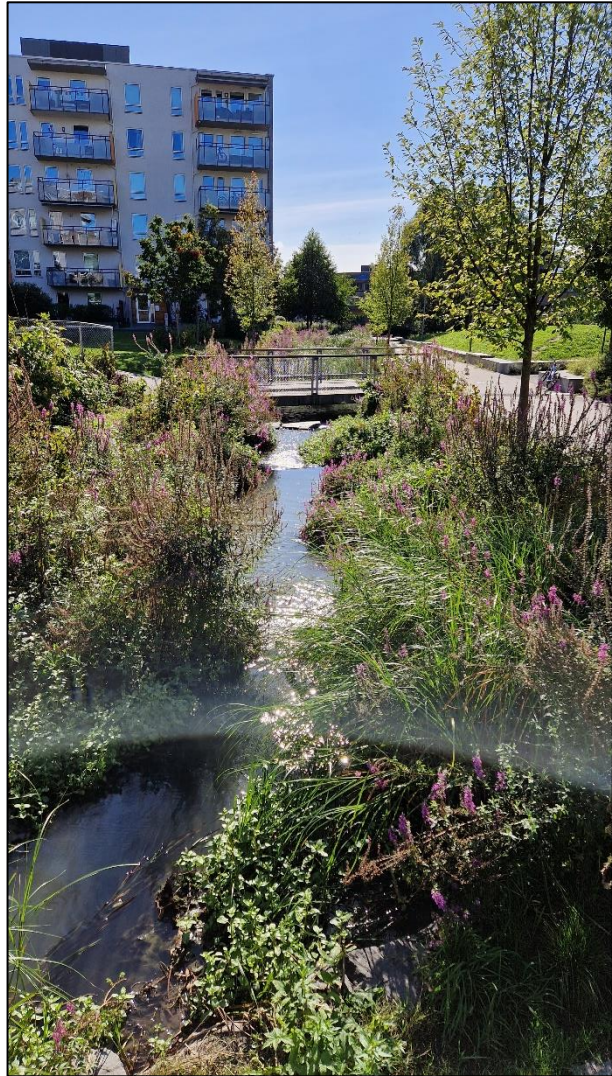


Plans for reopening in 2016 - 2021.
Source: Oslo Municipality.



Work ongoing 2016 - 2021.
Source: Oslo Municipality.

3. Ensjøbyen (pictures 2023)



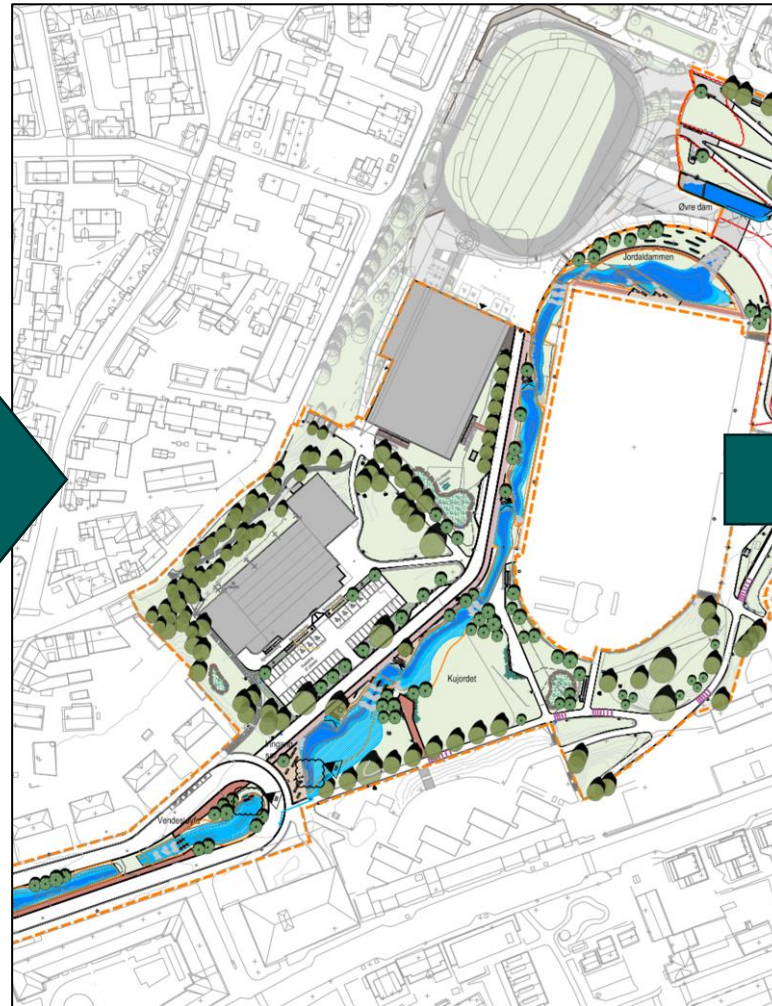
All photos: Anders Iversen, 2023.



4. Jordal Park (500 m restored 2020)



Aerial photo 2013.
Source: Oslo Municipality.

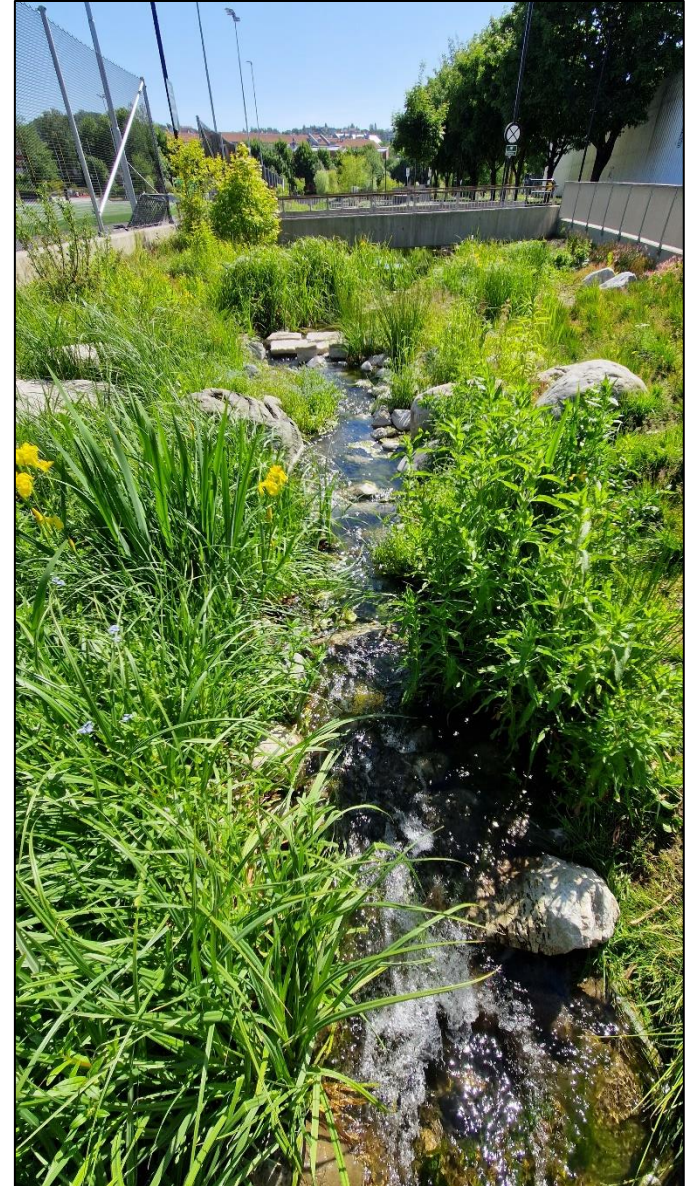


Plans for reopening in 2020.
Source: Oslo Municipality.



Work ongoing 2017.
Photo: Kultur- og idrettsbygg Oslo KF

4. Jordal Park (pictures 2023)



5. Klosterenga (400 m restored 2023)



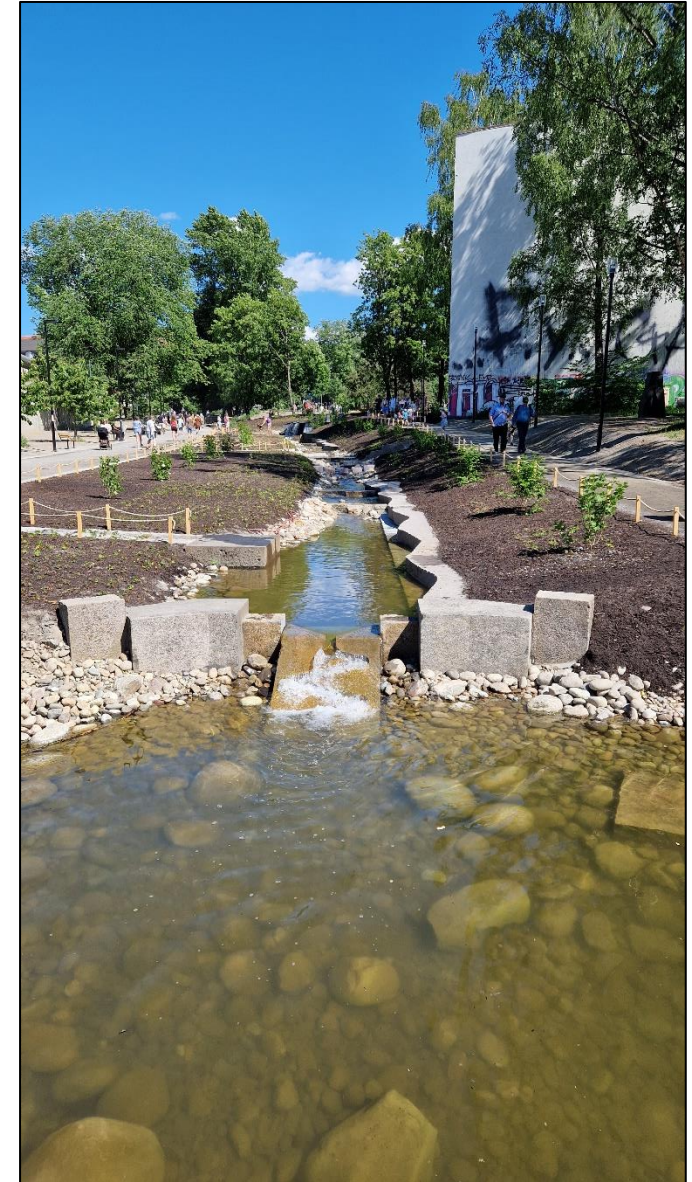
Photo: private.
Source: Dagsavisen 22.11.2018.



Plans for reopening in 2023.
Source: Oslo Municipality.



5. Klosterenga (pictures 2023)



Reopening rivers in Oslo: Challenges experienced

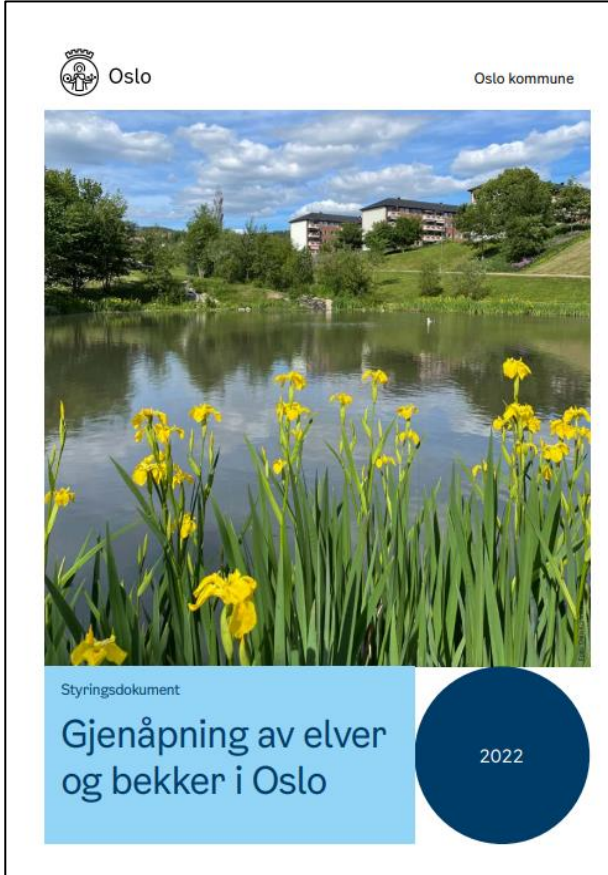


- Algae bloom will occur in the beginning but disappear after some years.



- Bathing water quality will probably not be reached until upstream stretches are remediated.

Reopening rivers in Oslo: Success criteria



Policy Document since 2015, updated 2022.

- Cross-sectoral coordination within the municipality, across Water Services, Urban Planning, Environment, Property Management etc.
- Clearly distinguished roles and responsibilities.
- Planning and acquisition of sufficient space for the river.
- Coordinated financing of the project, as part of municipal investment plan.
- Early involvement and participation from the local community and affected residents.
- Coordination with other projects in the same area (urban regeneration, infrastructure etc.).
- Professional assessment and planning, design and implementation, maintenance and operation.

Multiple benefits of reopening rivers in Oslo

- More space for water retention
- Safe drainage of stormwater
- Less stormwater in sewage system

Climate
Adaptation

- Fish and benthic migrated in
- Several bird species returned
- Green corridor for terrestrial species and pollinators

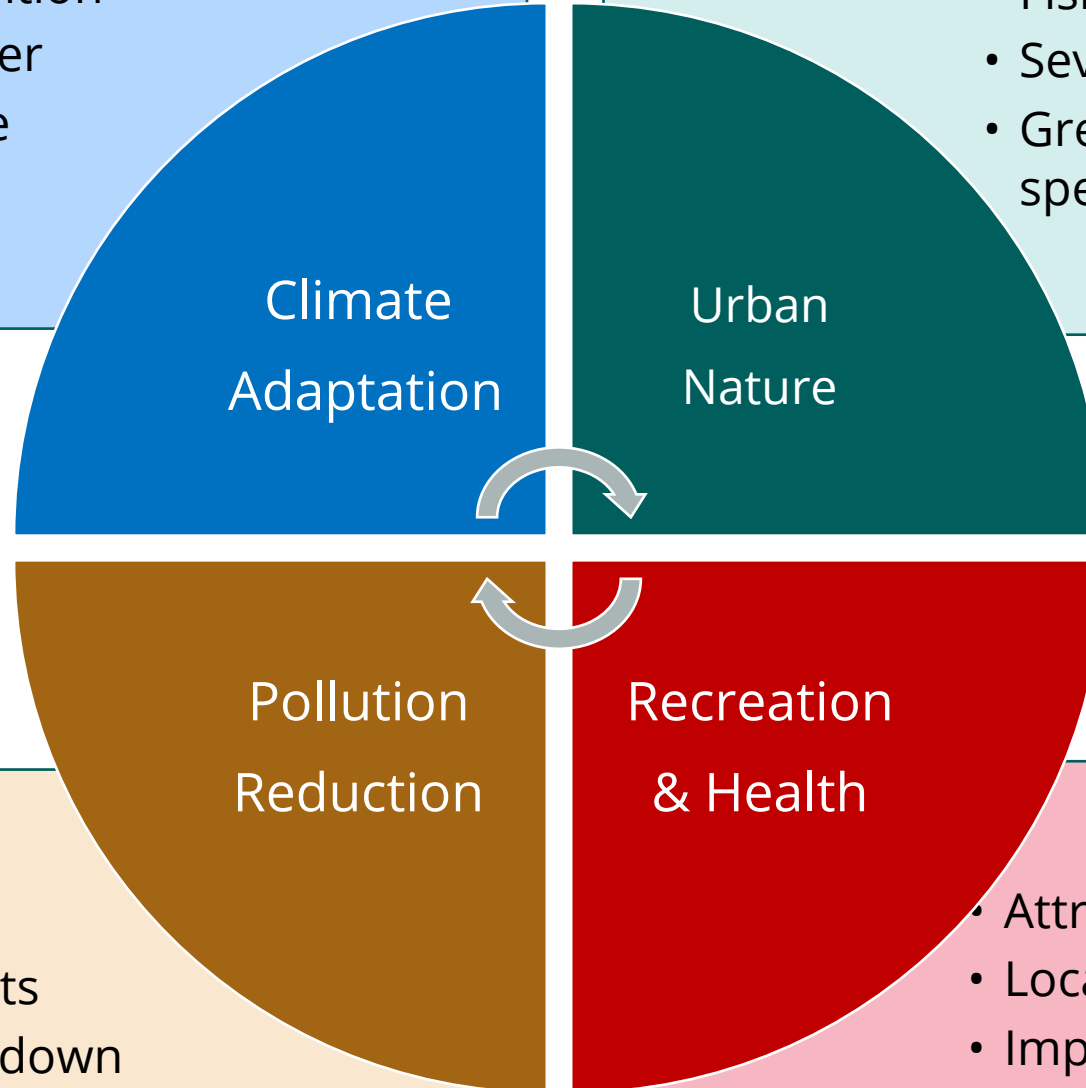
Urban
Nature

Pollution
Reduction

- Sedimentation in ponds
- Vegetation absorbs nutrients
- Sunlight and oxygen break down unwanted bacteria

Recreation
& Health

- Attractive urban areas
- Local recreation possibilities
- Improved health/well-being





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