Martin Wenk & Helena Mühlmann
Federal Ministry of Agriculture and Forestry,
Climate and Environmental Protection,
Regions and Water Management
Directorate-General IV - Water Management

LIFE IRIS

QUANTITATIVE WATER MANAGEMENT

LIFE IP IRIS

INTEGRATED RIVER SOLUTIONS IN AUSTRIA

LIFE Platform Meeting
Focus on Water Resilience Strategy
14./15. October 2025, Brussels

Bundesministerium
Land- und Forstwirtschaft,
Klima- und Umweltschutz,
Regionen und Wasserwirtschaft

Land Burgenland
LAND OBERÖSTERREICH
LAND SALZBURG
Das Land Steiermark
LAND TIROL
umweltbundesamt
viadonau

LIFE IP IRIS

Integrated River Solutions in Austria

Budget

> € 16,5 Mio.

€ 9,9 Mio. EU-Mittel

Laufzeit

9 Jahre

(2019-2027)

Partner

9 Partner

BML, Länder, viadonau, UBA

PHASE 1

2019 - 2021

Implementation of River Development and Risk Management Concepts (GE-RMs)

PHASE 2 UND 3

2022 - 2025

Implementation of IRIS Pilot Measures and Monitoring

PHASE 4

2026 - 2027

Evaluation of project results, revision of GE-RM Guidelines

1 Donau
2 Untere Traun
3 Pielach
4 Leitha
5 Enns (Steiermark)
6 Enns (Salzburg)
7 Lafnitz
8 Isel / Drau

PILOTFLÜSSE **7 FLÜSSE**

STRECKE **595 KM**

LIFE INTEGRATED PROJECT IRIS

LIFE IP IRIS AUSTRIA

Integrated River Solutions in Austria

Water Framework Directive
National River Basin Managment Plan (RBMP)

Floods Directive
National Flood Risk Management Plan (FRMP)

Natura 2000
Management Plans (where appliccable)

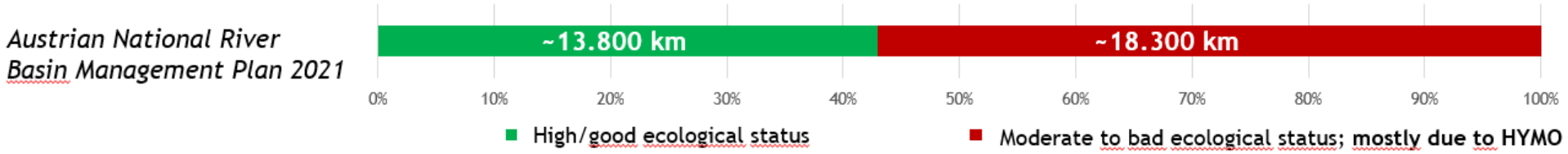
Other plans, strategies and uses
(e.g. AT Floodplain Strategy, AT and EU Biodiversity Strategy, NRR, Water Resilience Strategy, ...)

Strategic coordination of a harmonized implementation of RBMP and FRMP

with a new integrative planning approach

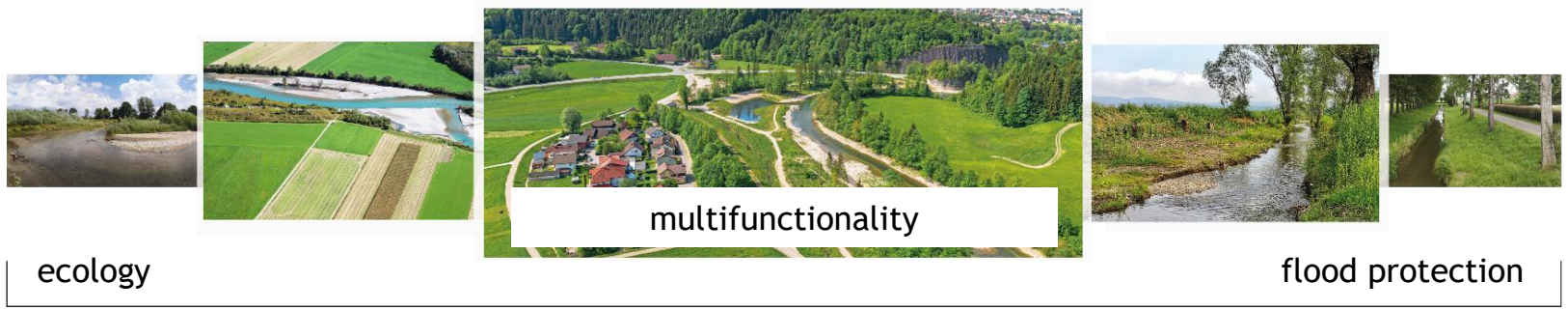
(GE-RM - Gewässerentwicklungs- und Risikomanagementkonzept
River Development and Risk Management Concept)

FLOOD RISK MANAGEMENT AND ECOLOGY



formerly

today



Integrative River Basin Management

Integration of different goals/strategies

Measures with multiple benefits (esp. quantitaive water management)

RIVER DEVELOPEMENT AND RISK MANAGEMENT CONCEPT (GE-RM)

GE-RM RESULT - PROGRAM OF MEASURES

Flood protection

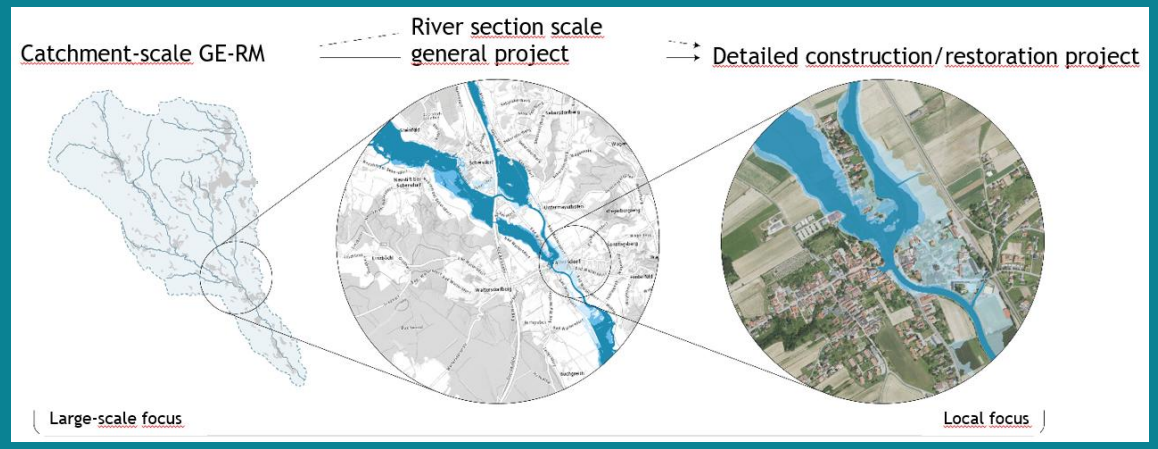
Morphology

Continuity

Hydrology

Sediments

Climate change



- Coordinated measures for achieving WFD and FD objectives for whole river/catchment
- Joint planning of different administrative units with different responsibilities
- Upstream and downstream effects of measures considered
- Strategic search for synergies and the best ecological option under the given conditions
- Stakeholder involvement in whole planning process
- Common agreement and wide acceptance of results with other sectors
- Catchment-based planning as basis for detailed restoration projects

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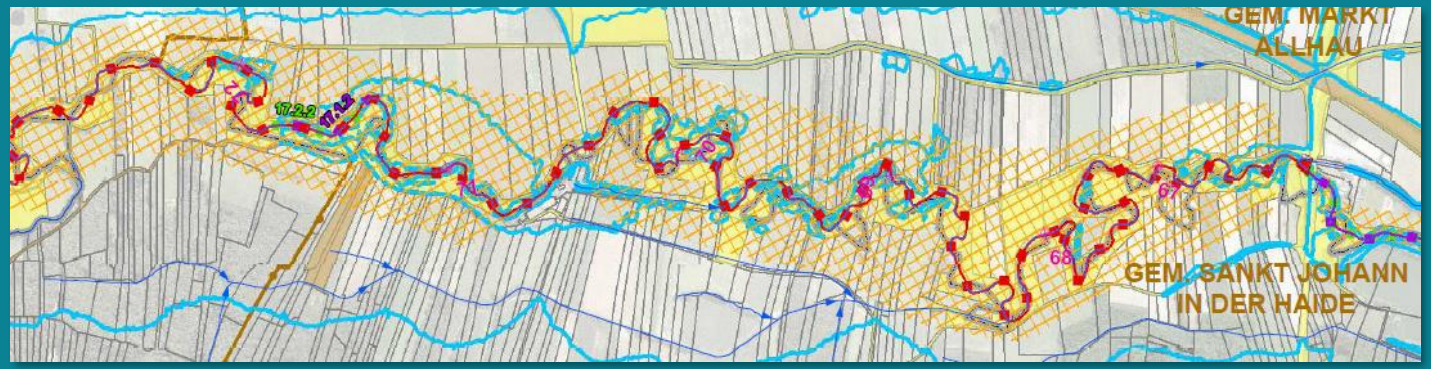
GE-RM RESULT - RIVER DEVELOPMENT CORRIDOR



- Identification of river development corridors as a mandatory component in each GE-RM
- Type-specific space requirements for near-natural development and natural water retention
- Existing higher-value infrastructure or spatial obstacles (settlement areas, railway, road, flood protection, etc.) taken into account
- A standardized method was developed within IRIS
- Facilitation of funding for land purchase within corridor

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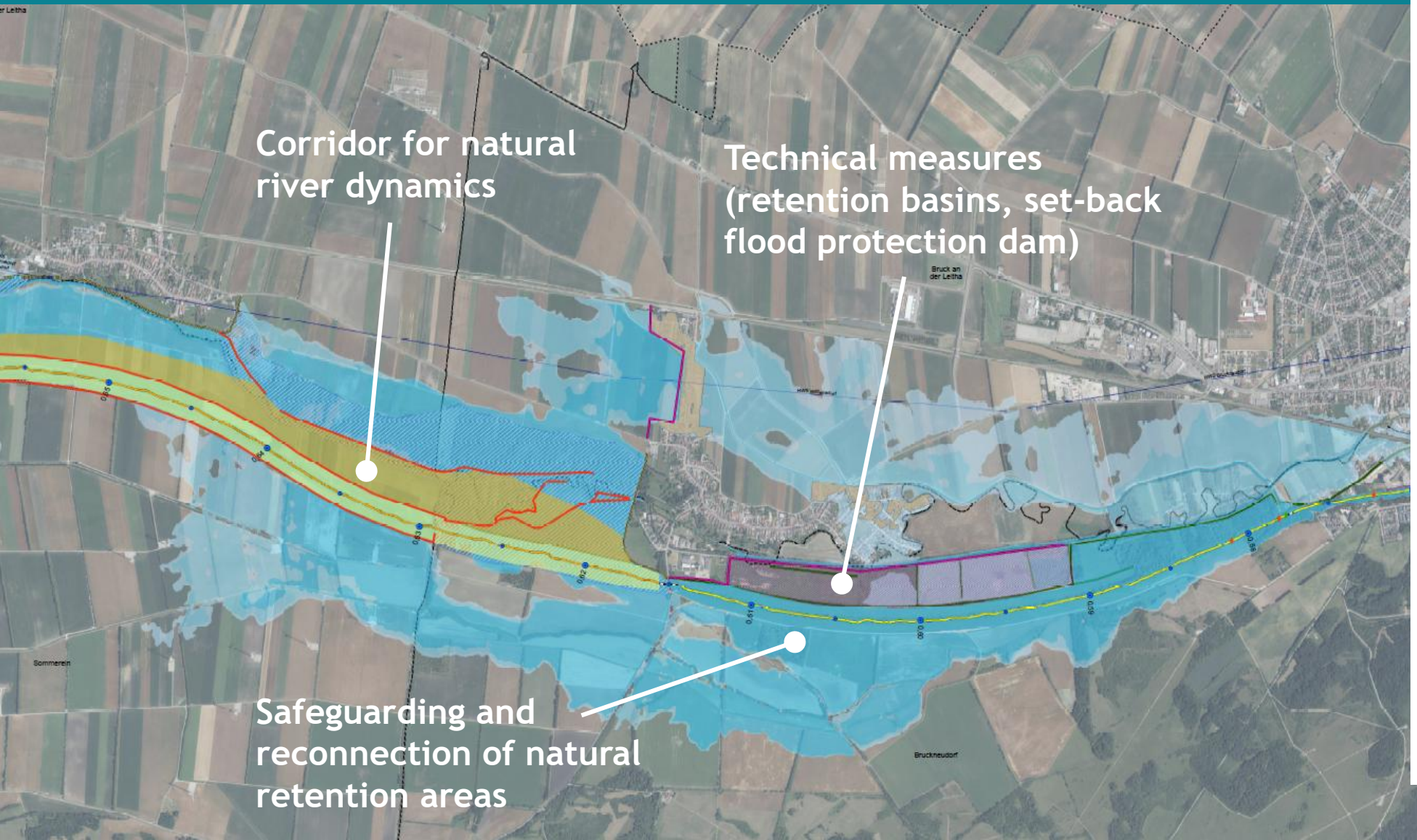
EXAMPLE FOR GE-RM POM



LEGENDE

Bestandserhebung

Überflutungsraum
- HQ30
- HQ100
- HQ300

HWS-Maßnahmen
- Hochwasserschutzdamm
- Hochwasserschutzmauer
- Rückhaltebecken Leitha

Allgemein
- Leitha
- natürliche Gewässer
- künstliche Gewässer
- Gemeindegrenzen

Maßnahmen Gewässerentwicklung

Entwicklungskorridor
- Stufe 2
- Stufe 1

Gewässermorphologische Maßnahmen
- Strukturverbesserung (Ufer- und Sohlstrukturierung)
- Revitalisierung/ Annäherung an ursprünglichen Flusstyp
- Prüfung von Standorten zur Anlage von Fischrettungspools
- Abflusserhöhung durch Zu- bzw. Einleitungen
- Anbindung Zubringer/Seitengewässer
- Potentieller Standort Fischrettungspool
- Um-/Rückbau, Absenkung von Querbauwerken
- Untersuchung Notwendigkeit Dammsystem
- Wiederanbindung Au
- Maßnahmen Leitha +

Maßnahmen Hochwasserrisikomanagement

Rückhaltemaßnahmen
- Hochwasserretentionsanlage
- Hochwasserretentionsanlage
- Feststoffrückhalteanlagen

Lineare Hochwasserschutzanlagen
- Siedlungsraum überflutet, HWS erforderlich

Planungen, Organisatorische Maßnahmen
- Geotechnische Überprüfung
- Katastrophenschutzplan

IRIS RESTORATION MEASURES - EXAMPLES

Leitha near Gattendorf
Connecting a currently unilateral old arm, preservation of the old course as a flood channel

Leitha Haidmühlarm
Restoration of an old side arm of the river Leitha

Lafnitz near Rudersdorf
Re-location of flood protection dam, removal of bank protection, improvement of flow conditions

Danube near Ottensheim
Widening of river bed, creation of island and side channel

Enns near Mandling
Restoration of old meander and improvement of hydrology of protected wetland

Pielach (various locations)
Creation of river-typical structures and key habitats through initial measures

INTEGRATIVE CATCHMENT BASED PLANNING AS KEY TO QUANTITATIVE WATER MANAGEMENT

- GE-RM considers water balance and connectivity across entire catchment areas
- Reconnection of floodplains to restore natural water retention capacity
- Prevention of droughts and drought-related ecological impacts

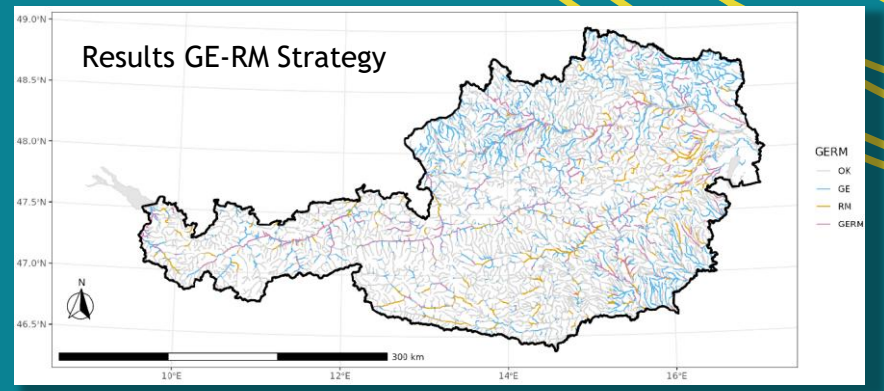
- Lateral connectivity improvements (floodplain and side channel reconnection) increase natural water storage
- Vertical and lateral connectivity improvements (removal of riverbed fixations) increase groundwater recharge rate
- Prioritization of passive over active flood protection measures

- GE-RM addresses sediment continuity disrupted by artificial structures
- Prevention of riverbed incision and groundwater table decline through morphological improvements

GE-RM IN DIFFERENT POLICIES

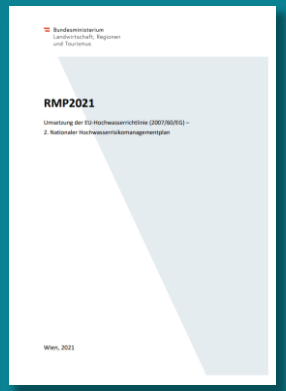
Incorporation of GE-RM in FRMP

- GE-RM is defined as a measure in FRMP
- Obligatory in defined catchments (result of IRIS Action “GE-RM Strategy”)
- GE-RM is a requirement for funding of flood protection measures



Incorporation of GE-RM in RBMP

- Integration of GE-RM measures with ecological benefits (Nature Based Solutions) in WFD-list of measures
- GE-RM as basis for identifying feasible, cost-efficient and effective hydromorphological measures for WFD program of measures



Basis for Art. 9 Nature Restoration Regulation

- Data collection and pressure assessment of GE-RM used as basis for defining existing and potential FFR
- River development corridor and facilitated funding of land purchase enables FFR restoration

KEYS TO SUCESS

Establish cooperation and regional networks

- coordination across sectors, municipalities and regions through early-on public participation and transparency
- establish sense of ownership with different stakeholders

Acknowledge the key role of land owners (solutions need land)

- without willingness of land owners measures become impossible
- define specific communication channels
- new approaches for compensation; using servitudes or/and rural development funding instead of land acquisition

Standards/guidelines for data and procedures

- Reliable hydrological, hydrodynamic and ecological data/models are crucial for program of measures
- Standardized procedures ensure reproducibility and sound basis for legal instruments

Governance and Legal Integration

- Catchment-based plans as binding basis (e.g. for spatial planning,…)
- Steering through financial incentives (funding of land purchase within corridor)

FROM VISION TO IMPLEMENTATION – 3 „FOLLOW-UP“ PROJECTS

HORIZON Land4Climate – Austrian Case

based on *GE-RM Lafnitz*

- working with farmers to increase water retention and decrease erosion in agricultural areas through structural measures like agroforestry, greening of flow paths or restructured landscapes
- balancing drought and flood at the source of rainfall

Land4Climate
A step closer to climate resilience

LIFE WeNatureEnns

based on *GE-RM Enns*

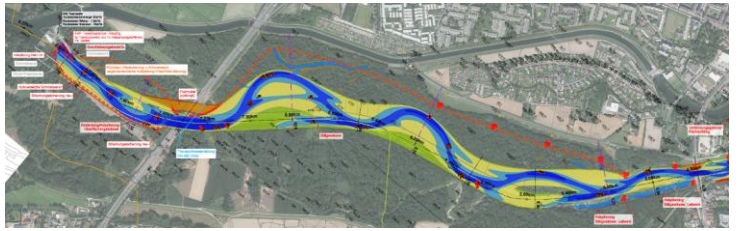
- providing around 35 hectares of newly designated, legally protected area for natural river development
- removing artificial bank protection to enable natural river widening
- Improvement of flow conditions

LIFE
WeNatureEnns

Full implementation

of *GE-RM Traun*

- Restoring a near-natural river course over 8 km; approx. 15 Mio. €
- combining the LIFE measures with additional national co-funding and partnership with the local hydropower company



THANK YOU FOR YOUR ATTENTION!

https://life-iris.at

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FLÜSSE BEWEGEN · RIVERS MOVE ·

Contact

Helena Mühlmann
Dep. IV/2 National and International Water Management
helena.muehlmann@bmluk.gv.at

Martin Wenk
Dep. IV/6 Flood Risk Management
martin.wenk@bmluk.gv.at

Federal Ministry of Agriculture and Forestry, Climate and Environmental Protection, Regions and Water Management

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Land Burgenland

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Das Land Steiermark

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umweltbundesamt

viadonau