Integrated River Engineering Project
Danube East of Vienna

Zagreb, March 9th, 2010

www.via-donau.org
Integrated River Engineering Project on the Danube East of Vienna

• is a project of via donau, realized on behalf of the Austrian Ministry of Transport, Innovation and Technology.
• is a priority project of the European Commission (Trans-European Transport Network, Corridor VII).
• With this project via donau is fulfilling the statutory mandate to provide for better environmental and navigation conditions.

Project area: river-km 1.921,0 - 1.872,7 from the Freudenau Power Plant to the Austrian-Slovak border
Integrative Planning - Structure

BMVIT / via donau

Steering group
Experts in river engineering, navigation, ecology, spatial planning and economics, representatives of ministry, National Park

Planning team
Interdisciplinary team (river engineering, navigation, ecology, spatial planning and economics)

Moderation process
moderated workshops: ministries, public authorities, communities, NGOs, navigation, National Park
Aims and Measures

- River bed stability
- Improvement of ecological functions
- Improvement of fairway conditions
- Low water regulation
- River bank restoration
- Side arm reconnection and „Hinterrinner“
- Granulometric river bed improvement
Granulometric River Bed Improvement

Reduce river bed erosion by adding larger gravel sizes (approx. 40 – 70 mm) within the natural grain size spectrum.

Reducing bed load transport capacity from 300,000 to 400,000 m$^3$/a to 30,000 to 50,000 m$^3$/a.

Foto: Austrian Hydro Power, Dipl.Ing. Schimpf
Reconstruction of Groynes
Pilot Project Witzelsdorf

- River bank restoration and removal of the existing groyne field
- By-pass route for young fish and for reducing sedimentation in the groyne field
- Smaller scour at the groyne head
- New downstream-facing groynes lead to higher dynamics along the river bank

Innovative groyne shapes – advantages for ecology and navigation by interdisciplinary planning

- Orange: Removal of old groynes and river bank restoration
- Red: Construction of new groynes
Reconstruction of Groynes
Pilot Project Witzelsdorf
River Bank Restoration
Pilot Project Thurnhaufen

BEST LIFE Nature Project 2007-2008
Reconnection of Side Arms

- Restoration of river banks, construction of in-flows
- Construction of out-flows
- Reconstruction of traverses, if necessary replacement with bridges
- Higher, stabilized water level
Status

• 6 Pilot Projects realized in Lower Austria (river bank restoration, side-arm reconnection)

• Last Pilot Project, the “Pilot Test near Bad Deutsch-Altenburg” is in preparation and shall start in autumn 2010

• Environmental Impact Assessment (EIA): Summary Assessment of the experts of the authorities was published in 2009
Synopsis

The Integrated River Engineering Project …

… improves the ecological and nautical situation of the Danube east of Vienna

… by means of river engineering

… meeting the requirements of the sensitive area of the National Park Donau-Auen.