Main-Danube-Canal: Experiences after 20 Years of Operation

Controlling the Success of Landscape Conservation Planning Targets

RMD Wasserstraßen GmbH
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Content of Presentation - Main Points

1. Main-Danube-Canal (MDK)

2. Landscape framework plan/Landschaftsplan Altmühlthal

3. LBP section Kelheim and Riedenburg

4. Method of controlling the success of measures

5. Goal achievement section „Kelheim“ and „Riedenburg“

6. Summary
Main-Danube-Canal/European Transportation Route
Technical Concept
Contour Map

Höhenunterschied Rhein (Mainz) – Scheitelhaltung: 324,5 m

7 Stufen

27 Stufen

16 Stufen

6 Stufen

Höhenunterschied Scheitelhaltung – Bundesgrenze: 126,3 m

Mainz 81,5 km

Aschaffenburg 108,5 km

Würzburg 165,7 km

Bamberg 230,8 km

Nürnberg 312,5 km

Scheitelhaltung 406,0 km

Regensburg 327,3 km

Kelheim 338,2 km

Straubing 313,0 km

Vilshofen-Bundesgrenze 299,8 km

87 km

297 km

107 km

64 km

209 km

Main 297 km

Main-Donau-Kanal 171 km

Donau 209 km

677 km, 52 Stufen

Main km 0

Bamberg Main-km 384 MDK-km 0

Kelheim Donau-km 2411 MDK-km 171

Donau km 2202

RMD Wasserstrassen
Landscape Framework Plan

- MDK 30km in the valley of Altmühl
- Altmühltal was conservation area
- Voluntarily prepared by RMD AG in 1972
- Landscape framework plan modified
- Area boundaries
1) Aims:
   - Conservation of characteristic features and diversity of landscape
   - Nature-related construction of waterway
   - Development of typical river cross-section

2) Landscape survey

3) Measure plans

4) Impact mitigation regulation at MDK
Harmonious Involvement of Waterway

Photos: period 1978-2001
LBP Section Kelheim and Riedenburg

- accompanying landscape conservation plan Kelheim:
  landscape architect: Prof. Grebe, Nürnberg (TEAM 4)
  plan approval: September 1980 and August 1982

- accompanying landscape conservation plan Riedenburg:
  landscape architect: Prof. Grebe, Nürnberg (TEAM 4)
  plan approval: December 1986 and March 1988
Types of Success Control

Success control

Controlling implementation:
Control, if landscape conservation measures of the plan approval are implemented

Functional control:
Examining the level of achieved ecological effectiveness of landscape conservation measures
Approach of Functional Control

1. Targets of accompanying landscape conservation plan
2. Describing the method of quantitative and qualitative balancing
3. Analysis method of the vegetation/flora and fauna
4. Analysing actual state and assessment of vegetation (quantitative)
5. Analysing actual state and assessment of flora/fauna (qualitative)
6. Assessment of goal achievement
7. Balancing
Section Kelheim and Riedenburg

- Expert opinion control of success **Kelheim**:
  landscape architect: Prof. Grebe, Nürnberg (TEAM 4)
  present state: report June 1996
  - 61 ha ecological valuable habitat structures

- Expert opinion control of success **Riedenburg**:
  landscape architect: Prof. Grebe, Nürnberg (TEAM 4)
  present state: report November 1997
  - 151 ha ecological valuable habitat structures
Degree of Goal Achievement - Section Kelheim

Degree of goal achievement 97%

- Diversity of species increased
- Nature conservation importance of the section: „regional“
- 80 Species of Red data book mapped
- Degree of goal achievement 97 %
- Control of success in areas with measures compensated
Meander Altessing
Wetland west of Prunn
- Diversity of species increased
- Nature conservation importance: „regional to supraregional“
- 103 Species of Red date book mapped
- Degree of goal achievement 97,5 %
- Control of success in areas with measures compensated
Meander Gundlfing
Wetland Untereggersberg
Island Griesstetten
Summary of Success Control

- Measurement of success Kelheim and Riedenburg legal obligation of plan approval

- Nature conservation success control is a comparison of achieved goals with present state

- Indicators for effectiveness of compensation measures are the vegetation, flora and species

- balancing is carried out by standards of value

- **Overall result:** the success control is in both sections compensated
Main-Danube-Canal