



# Slovak – Hungarian Water Quality Working Group Joint Transboundary Water Commission, JTWC

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# WQWG

- Background
- Legal aspects
- Regular WQ monitoring and assessment
- Emissions
- Impact of transboundary water scheme
- Emergency plans
- Early warning stations
- Perspectives



# Background

- First agreement 1963
- Agreement including WQ – ratified 1976
  - Transboundary streams in clean conditions
  - Regular monitoring and assessment
  - Accidental pollution control – joint effort



# Legal aspects

- All activities on transboundary streams – agreed by JTWC before national permits
  - Working Groups – WQWG one of them
  - Specific programmes, results, recommendations of WGs
    - Protocols of WGs in both languages
    - Specific item of yearly protocol of JTWC
    - Selected problems – third language - English
  - After approval by plenipotentiaries – obligatory for both parties



# Regular WQ monitoring and assessment



## ■ Development

### ■ 1963 – 1975

- 1 – 4 samples/year, 11 parameters, verbal

### ■ 1977 – 1990

- 12 samples/year, 4 classes, 17 parameters, verbal

### ■ Since 1991

- Statistical, 6 classes, last 2 years (24 data), 34 parameters



# Regular WQ monitoring and assessment



## ■ Trends

- pH – slightly towards the alkaline range, save for the Bodva, Szartos, Bodrog and Ronyva streams
- Ammonium – considerable improvement at all stations
- Majority of other parameters – also improvement
- Improvement attributable
  - hydro-meteorological conditions (suspended solids, total iron, manganese)
  - economic recession and/or progress in wastewater treatment



# Emissions – “clean water”

- Constructions
  - Maria Valeria bridge – oil pollution
- Waste Water Treatment Plants
  - Sturovo pulp industrial complex
  - Richter-Gedeon pharmaceutical facility in Dorog
  - Municipal waste water treatment plants
    - Permission process – first step – approval by WQWG



# Impact of transboundary water scheme

- Water scheme influencing water regime
  - Transboundary impact
  - Specific joint commission
    - Acceptable operational regime
- Extended monitoring
  - 12 years period
  - Trends, conclusions
  - Assessment report – broadly available after approval of plenipotentiaries





# Emergency plans

- Harmonized emergency plans
  - Crossing the borders
    - Harmonized individual plans
    - Propagation time period
    - Early warning – sufficient time span for preventive actions, if possible
    - Content of harmonized plan
  - Bodrog River - ready
  - Hornád/Hernád River – under preparation



# Emergency plans

- Joint emergency plan
  - Identical with state border
    - Specific plan for upstream river stretch
    - Single joint plan for the common stretch
    - Preliminary content
  - Ipel/Ipoly River



# Early warning stations

- Early warning of accidental pollution
  - Reasons:
    - Warning for groundwater drinking supply system
    - Basic information for remedial measures
    - Information for Danube Early Warning System
    - Supplementary information on water quality regime
    - Supporting system for state administration and local governments



# Early warning stations

## ■ Uh – Slovakian territory

- First impetus: Oil spills from Ukraine
- Parameters: Oil substances,  $O_2$ ,  $NNH_4$ ,  $NNO_3$ , pH
- [Location, photos](#)

## ■ Hernad – Hungarian territory

- First impetus: Accidental spills in Slovakia
  - ◆ Failure of WWTP in Kosice
- [Location](#)



# Early warning stations

- Financial support – USAID
- Integral part of Danubian Early Warning System
  - Interconnected with
    - National PIACs
    - State administration
    - Institutes



# Perspectives

- Agreement in force – boundary streams
- Agreement change
  - Water Framework Directive
    - Avoid formal transposition
      - ◆ Helpful for implementation – national, international
      - ◆ Harmonization of national implementations
- Agreement finalization and phased implementation
  - Starting in 2003
  - Real co-operation earlier