WATER MANAGEMENT PLAN
RB – DRINI BARDH
REPUBLIC OF KOSOVO

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GENERAL INFORMATION

It is traversed by four river basins that run off into three seas

- Drini i Bardhë river basin – Adriatic Sea
- Ibri river basin – Black Sea
- Morava e Binçës river basin – Black Sea
- Lepenci river basin – Aegean Sea
CURRENT SITUATION

Kosovo faces serious problems when it comes to the quality of water.

- Discharge sewage waters - directly to the rivers
- Economic development of the country increased the level of pollution (sewage waters, industrial remains and garbage)
Legislation

- Water Law 04/L-147
- Water Framework Directive 2000/60EC
- Drinking Water Directive 98/89 EC
- Integrated pollution prevention and control 96/61EC
- Directive of protection of groundwater against pollution and deterioration 2006/118
- Directive the protection of waters against pollution caused by nitrates from agricultural sources 91/676 EC
Water Management Plan

EU’s WFD

- Article 5:
  - characteristics of river basin district, review of environmental impact of human activity
- Article 8:
  - establishment of monitoring program of the surface water and underground water status.

Water Law

- Article 35:
  - Water Monitoring Program.
- Annex 1:
  - surface water status (ecological and chemical)
  - underground water (chemical and quantity)
Objective

- The fundamental objective of the design, approval and implementation of this document "Water Monitoring Program" is to establish a political base and the sustainable management on long-term quality and quantity of water which in future will serve to determine the status better ecological, chemical and drafting of policies for economic development of Kosovo.
Implementation new water law NB.04/L-147 for Kosovo water

- Administrative Instruction NB.40/07 Criteria for Protection Zone Drinking Water Source;
- Decision of Prime Minister of Kosovo for forbiddance of the sand and gravel exploitation in the river;
- Start Drafting of the Strategy for Water
- Drafting the Plan for River Basin Management Plan
- Starting with contraction of Plant for waste Water Treatment – Prizren PE 50.000
- Wastewater Treatment Plant in the Skenderai municipality in function with a capacity PE 10.000;
- Strategy and Action Plan for Biodiversity 2011-2020;
- The designed of Surface and ground Water Monitoring Plan;
- Feasibility of west water Treatment Plant of the Gjakova, Peja and Klina city.
Existing Monitoring

- **Monitoring of surface water**
  - *Physico–chemical*
  - 76 points
  - 45 physical - chemical parameters
  - *Biological elements* (will start this year)
    - Benthic invertebrate fauna and
    - Fish fauna

- **Monitoring of Underground waters**
  - *Physico-chemical monitoring*
    - 69 points
    - 42 physical - chemical parameters
Criteria of Identification Monitoring Point

- characterization of river basin
- river typology
- identification of pressures
Underground Water Monitoring Points

Frequency of groundwater monitoring

<table>
<thead>
<tr>
<th>Tipet</th>
<th>Intergranulare flow</th>
<th>Fracturale flow</th>
<th>Carstice Wells</th>
</tr>
</thead>
<tbody>
<tr>
<td>No significant impact</td>
<td>Annual</td>
<td>Annual</td>
<td>Twice a year</td>
</tr>
<tr>
<td>Visible contamination</td>
<td>Twice a year</td>
<td>Twice a year</td>
<td>Twice a year</td>
</tr>
</tbody>
</table>
Water Body Status

- Ecological state
  - 5 levels:
    - Very good state
    - Good state
    - Medium state
    - Poor state
    - Bad state

- Chemical state
  - 2 levels:
    - Good state
    - « not a good » state
Ecological Status

- Under the WFD
  - Biological quality elements:
    - Macrophyte and fitobentozat
    - Fauna benthic invertebrate (macro invertebrate)
    - Ihtiofauna
    - Phytoplankton (rivers/slowly rivers)

- Monitoring program of Kosovo
  - Biological quality elements:
    - Composition and Diversity of Fauna of Invertebror
    - Composition, Diversity and Age Structure of Fish Fauna
Chemical status – How to access this?

1. Identify significant pressures (pollution sources)
   - Land use (farms, towns, forests, grassland).
   - Industry, mines and landfills.

2. Environmental monitoring:
   - Collect threshold chemical values
   - Collect hydrogeological data (e.g. depth to water table, groundwater velocity, residence times)

3. Data analysis and characterisation:
   Confirm chemical status
   - Determine type, amount and chemical composition of pollutants.
   - Determine GWB susceptibility to pollutants.
   - Trend analysis

Decide on the likely effects of human activities on groundwater
Initial steps in the WFD - Assessment of Current Status

I. GWB Identification
   Identify and delineate groundwater bodies

II. Review of the Impact of Human Activity
   Identify potential pressures and vulnerabilities (risks) on the quantitative and chemical status of the GWB.

III. Environmental Monitoring
   Developing monitoring networks to monitor water levels and chemical parameters

IV. Data Analysis and Characterisation
   Confirm quantitative and chemical status and identify any significant trends

Ongoing iterative refinement
THANK YOU FOR YOUR ATTENTION