## Logframe Matrix

**Project Title:**
**Prienai Regional Water Supply and Sewerage Network Expansion and Renovation**

<table>
<thead>
<tr>
<th>Wider Objective</th>
<th>Indicators of Achievement</th>
<th>Sources of Information</th>
<th>Assumptions and Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Prevention from eutrophication of the biggest Lithuanian river Nemunas and restoration of its biodiversity.</td>
<td>• Reduced water pollution in the basin of Nemunas River in terms of suspended solids, P and N.</td>
<td>• pollution and ecological monitoring</td>
<td>• State government follows the Approximation Strategy in Environmental in the wastewater sector</td>
</tr>
<tr>
<td>• Contribution to the achievement of the EU requirements for drinking water and wastewater treatment.</td>
<td>• Reduced groundwater and soil pollution</td>
<td>• sectoral and general government statistics</td>
<td>wastewater discharged by the Prienai s WWTP to Nemunas river makes significant and measurable impact on river’s aquatic ecosystem</td>
</tr>
<tr>
<td>• Addition to Lithuania’s implementation of the environmental requirement set out in the NPAA.</td>
<td>• Meeting of the environmental EU requirements for drinking water and wastewater in Prienai town</td>
<td>• reports of the Ministry of Environment, Alytus Regional Environment Protection agency, Prienai Branch</td>
<td>• IFI’s loan and municipal co-funding is available</td>
</tr>
<tr>
<td>• Contribution to the regional development</td>
<td>• Compliance with HELCOM standards</td>
<td>• economic and financial appraisals</td>
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<td></td>
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<td>• NPAA</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Immediate Objectives</th>
<th>Indicators of Achievement</th>
<th>Sources of Information</th>
<th>Assumptions and Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>• To prevent a leakage of untreated sewage water to the soil and groundwater.</td>
<td>• Reduction of the pollution of the Nemunas basin from the present level - BDS7 154 mgO₂/l to 15,3 mgO₂/l (ie. reduction of pollution by 103 tons/year)</td>
<td>• Laboratory tests and surveys</td>
<td>• Proper testing and surveying techniques</td>
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<tr>
<td>• To reduce the discharge of toxic and other dangerous substance into the environment.</td>
<td>• Laying of 11 km of water supply and 8 km of sewage collection pipelines</td>
<td>• HELCOM reports</td>
<td>• Expansion of the water-supply and sewerage system is in accordance with the General Plan of Prienai City</td>
</tr>
<tr>
<td>• To expand town’s water supply and sewage collection system.</td>
<td>• Supply of high-standard quality water in addition to 4,500 inhabitants and connected to the new system</td>
<td>• Reports of the Ministry of Environment and Alytus Regional Environment Protection agency, Prienai Branch</td>
<td></td>
</tr>
<tr>
<td>• To improve the quality of water services in Prienai town and surroundings and to reduce water looses.</td>
<td>• Reduction of the number of accidents in the Prienai Water-Supply System by 50%</td>
<td>• Project records</td>
<td></td>
</tr>
<tr>
<td>• To improve the quality of drinking water</td>
<td></td>
<td>• General statistics</td>
<td></td>
</tr>
<tr>
<td>• To increase the reliability and efficiency of the water supply and sewage removal systems.</td>
<td></td>
<td>• Prienai Water Company’s reports, balance sheets and other financial documents</td>
<td></td>
</tr>
</tbody>
</table>
### Outputs Indicators of Achievement Sources of Information Assumptions and Risks

- Expansion and renovation of the water supply – sewerage networks in the central part of Prienai.
- Connection of the total of 71% of town’s population to the centralised water supply and sewage collection system
- 953 thousands cu.m/year of wastewater turned to the Birštonas WWTP for mechanical and biological treatment
- Reduction of water loses by 50%
- Reduction of the content of iron in the drinking water to from 1.8 to 0.2 mg/l
- Decrease of health risks and improvement of living conditions in the Prienai town and surroundings.

- Laying and renovation of water-main line - 11 kilometers of 80-300 mm. diameter polyethylene pipes.
- Laying of sewerage main line - 8 kilometers of 150-200 mm. diameter pipes.
- Laying the underwater duiker through the Nemunas river for the pressure pipeline of 300 mm diameter, 400 m – length
- Building of 3 sewerage pumping stations in the town of Prienai
- Building of 2 water pressure rise stations
- Establishing of 2 depth artesian well of 150 mm diameter in Prienai watering-place
- Expansion of iron-removal equipment through installing 2 filters TFB
- Operation and maintenance costs saving annually

- Contractor’s work schedules and programmes
- Site and project records
- Engineer’s certificates and reports
- Site inspections and visits
- CBC monthly reports

- Appropriate materials and construction techniques will be adopted
- Construction works will be monitored and supervised properly
- Prienai Water Company has sufficient administrative capacities to manage the implementation of the project
- A legislative basis is sufficient to ensure a proper functioning of revenues generating and fine systems

### Inputs Indicators of Achievement Sources of Information Assumptions and Risks

- Phare contribution: 2 MEUR
- Local co-funding: 1.67 MEUR
- Detailed design and tender documents prepared
- EIA carried out
- Supervision and monitoring
- Phases I and II carried out from local sources

- Engineering design and technical specifications prepared
- Tenders launched and funds committed and disbursed
- Supervision structure established in accordance with FIDIC requirements
- Monitoring structures is place

- CFCU database
- Project reports
- Contracts signed
- EC Delegation evaluation missions
- Water Company records

- Tender documents and EIA prepared by the end of 2001
- Proper functioning of structures of committing and disbursing of funds
- Adequate staffing in the institutions involved
- Proper co-ordination of work of all the institutions involved