Drinking water and sanitation
Iceland

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Ministry of welfare

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Ministry for Welfare is responsible for health and welfare matters in Iceland.

Ministry for the Environment is responsible for environmental matters.

Environmental Agency in Iceland is responsible for the protection and management of water.

The local health inspectorate in municipalities are responsible for the controlling and quality of the drinking water and sanitation.

The Icelandic Food and Veterinary Authority is the responsible authority in the field of food safety, animal health and welfare, control of feed, seed and fertilizers, plant health and water for human consumption.

All these parties above have regular consultation regarding health and environmental matters.
Iceland has two administrative levels of government: the State and the Local Authorities. The local authorities are one of the two sources of governmental executive power in Iceland.

The number of local authorities areas has fallen recently as they have been combined to form larger administrative units. In the year 2000 the number of municipalities in Iceland was 124 but after the Municipality election in 2011 the number was down to 75. The role of the local authorities has also changed, becoming more complex, now embracing primary schools and social services.

The municipalities provide their residents with general basic services. They provide part of the foundation of Icelanders’ welfare society. In addition, they provide their residents with technical basic services. This includes the responsibility for sewer and sewage in their areas, that it is in appropriate status.
### Facts about Iceland

<table>
<thead>
<tr>
<th>Object</th>
<th>Size km²</th>
</tr>
</thead>
<tbody>
<tr>
<td>The island (Iceland)</td>
<td>103.000</td>
</tr>
<tr>
<td>Protected Areas</td>
<td>14.879</td>
</tr>
<tr>
<td>Glaciers</td>
<td>11.922</td>
</tr>
<tr>
<td>Lakes and rivers</td>
<td>2.757</td>
</tr>
<tr>
<td>Agricultural land (2.4%)</td>
<td>2.472</td>
</tr>
<tr>
<td>Population</td>
<td>318.000</td>
</tr>
</tbody>
</table>
Environmental agency in Iceland

» **Areas of operation:**

» Information and advice for the public, businesses and regulatory authorities

» Monitoring of environmental quality

» Evaluation of environmental impact assessment and development plans

» Operation supervision, inspection, operating permits, etc.

» Water management and the implementation of the new legislation (the water framework directive was put in implementation in 2011).
Ten local health inspectorate areas and water regions
Water Framework Directive - Implementation

» New legislation - April 2011
  ▪ Act. No. 36/2011
    • One River Basin District
    • Water Council established
    • Four Sub-Districts (Water District Committees)
    • Consulting Groups (Agencies/Stakeholders)
  ▪ Regulation No. 535/2011 on classification, characterisation, pressure analysis and monitoring of water bodies

» Regulation No. 935/2011
  ▪ National Water Management
  ▪ Role of different state agencies, stake-holders and NGO´s in water management
  ▪ Contracts with research institutes on classification and characterisation of WB

» Groundwater Directive 2006/118/EB
  ▪ New articles and extended Annex III in existing regulation no. 535/2011

» Directive 2008/105/EB on EQS for Priority Substances
  ▪ New articles and Annex I in existing regulation no. 796/1999

» Directive 2009/90/EB
  ▪ New articles in existing regulation no. 535/2011
Environmental objectives

» Current regulations cover:
» – protection of surface water
» – protection of groundwater
» – drinking water
» – nitrates from agricultural activities
» – discharge into surface water
» – environmental assessment impact
Role of the local health inspectorates

» Under supervision of the Environment Agency:
  - Operational licenses for smaller activities
  - Pollution inspection, REACH, cosmetics...
  - General information on health and environmental health

» Under supervision of the Icelandic Food and Veterinary Authority:
  - Food inspection and food processing (incl. Drinking water)
The River basin district
River Basin District geographical information

- Surface area of the River Basin District: 141.162 km²
- Surface area of Iceland: 103.000 km²
- Surface area of the coastal area assigned to the RBD: 38.162 km²
- Highland area: 64.538 km²
- Coastline: 6.090 km

07.11.2012
Protected areas

Protected areas in Iceland

Legend

Areas protected according to the Nature Conservation Act:
- National Parks
- Nature Reserve
- Natural Monument
- Habitat Protection Area
- Country Park

Areas protected according to Special Acts:
- National Parks
- Water Catchment Areas
- Other Areas

ENVIRONMENT AGENCY OF ICELAND
UST-10069, Cartography IÖG
Drinking water and protected areas
Icelandic waters

ECONOMICAL ANALYSIS OF WATER USES
# Iceland vs. other countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Available Freshwater 1000 m³ pr. capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>2,3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2,9</td>
</tr>
<tr>
<td>Denmark</td>
<td>3,0</td>
</tr>
<tr>
<td>Ireland</td>
<td>10,7</td>
</tr>
<tr>
<td>Sweden</td>
<td>19,8</td>
</tr>
<tr>
<td>Finland</td>
<td>20,7</td>
</tr>
<tr>
<td>Norway</td>
<td>81,1</td>
</tr>
<tr>
<td>Iceland</td>
<td>532,3</td>
</tr>
</tbody>
</table>
Water use m³ pr. capita/year

Eurostat 2011

- Finnland
- Sverige
- Írland
- Danmark
- Bretland
- Ægillaland
- Ísland
- Noregur
## Summary of key figures - Values

<table>
<thead>
<tr>
<th>Object</th>
<th>Millions m³/year</th>
<th>Income ma IKK</th>
<th>Gwst</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold water</td>
<td>196</td>
<td>n.a.</td>
<td></td>
</tr>
<tr>
<td>Domestic Water</td>
<td>(82)</td>
<td>5.5</td>
<td></td>
</tr>
<tr>
<td>Geothermal</td>
<td>140</td>
<td>9.3</td>
<td></td>
</tr>
<tr>
<td>Waste water</td>
<td></td>
<td>5.0</td>
<td></td>
</tr>
<tr>
<td>Hydro-el*</td>
<td>42.300**</td>
<td>n.a.</td>
<td>12.500</td>
</tr>
<tr>
<td>Geo-el*</td>
<td>45.7</td>
<td>4.465</td>
<td></td>
</tr>
</tbody>
</table>

*2010
** Glacial water
Sanitation

» Generally Iceland is very rich regarding water. There is no shortage of water in Iceland. It is not much pressure on the quality of the water regarding pollution by chemicals or excrement bacteria.

» The capital area where 2/3 of the population lives has appropriate sanitation regarding water. In other parts of the country where 1/3 of the population lives the sanitation and sewer system is not in appropriate form and investment in these matters is needed, especially around the coastal line.

» All homes in Iceland and summer huts (obligation) have septic tanks installed.

» It must be stated that the water in Iceland is clean as it can be. The population has the luxury to have access to 100% pure water.

» The monitoring system regarding the quality of the water by environmental and health officers is very good and those parties communicate regularly regarding the quality of the water.

» Main challenges regarding sanitation is improving the sewer system outside the capital area.
Conclusion

» The governmental and local authorities structure regarding water and sanitation is shaping
» The implementation of WFD is ongoing
» Economical analysis performed
» Preliminary pressure analysis ongoing
» Classification and characteristic under development
» IT solutions under development
» More investment is needed in sewer system outside the capital area.
Thank you!

Hvannadalshnjúkur
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