

ENVIRONMENTAL REGIONALISATION

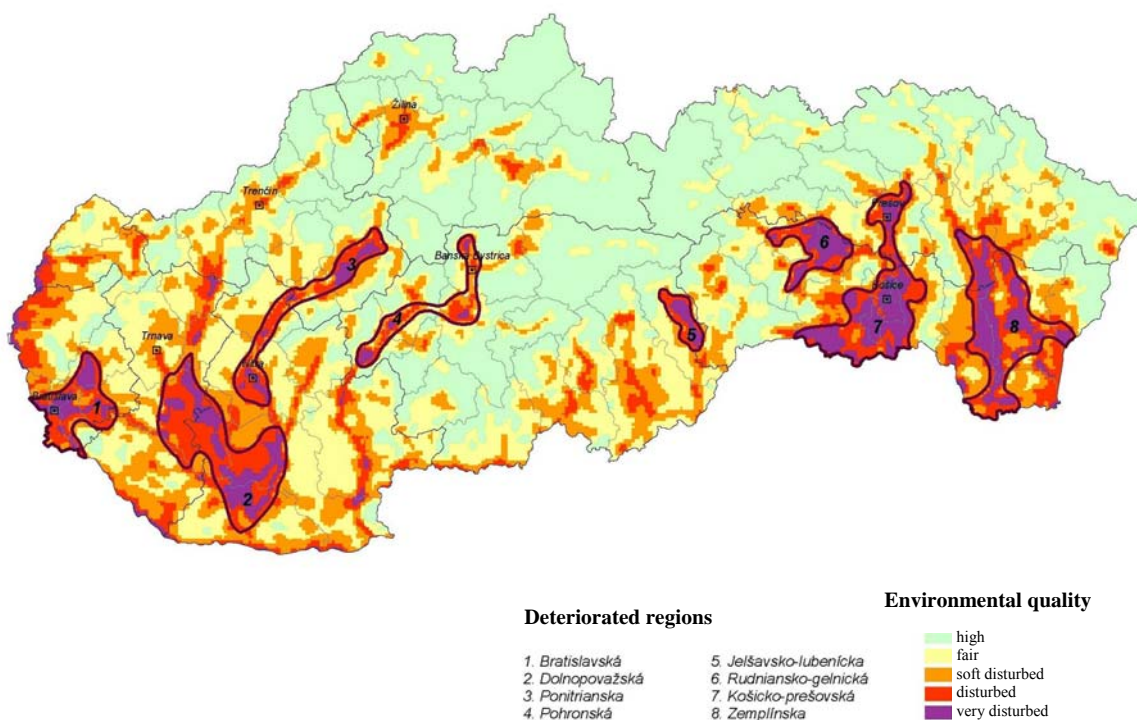
• ENVIRONMENTAL REGIONALISATION OF SLOVAKIA

Environmental regionalisation of Slovakia represents a cross-sectional source of information on the state of environment and reflects differentiated state of environment in different parts of the country. Regions show varying degree of individual environmental loads and also show different risk factors. These impacts, loads, or hazards show (along with a variety of natural conditions) mainly anthropogenic characteristics.

The process of environmental regional classification marks regions of certain quality or level of endangerment of the environment through analyses of individual components (including the risk factors) of environment as well as partial syntheses within the very component of environment or inter-component syntheses, respectively.

One of the final outputs is a map that evaluates the Slovak territory in 5 degrees of quality of environment, which is the basis for identification of areas with the greatest **environmental load**.

Quality of the environment (updated in 2008-2009) and the loaded areas



Source: SEA

A number of new trends existing in the Slovak territory may be identified from the updated map showing the original loaded areas (LA):

- territory of some loaded areas has been reduced (e.g. Pohronská LA, Košice-Prešov LA in its northern

- extension in the direction to Prešov),
- size of the core territories within the top 5th environmental quality category was decreased to the minimum level (e.g. Rudňany-Gelnica LA),
 - it will be appropriate to review the size of some LA in the time to come (e.g. Zemplín LA, Dolnopovažská LA),
 - there is a territory located especially in the area of the middle Považie region, which is to be shortly identified and classified as a LA.

Differentiation of the Slovak territory by environmental quality

Quality of environment	Size (km ²) by 2007	% of the SR size by 2007	Size (km ²) after 2008	% of the SR size after 2008	Difference in size (km ²)	Difference %
1 - high quality environment	19 661	40.0	27 714	56.5	+ 8 053	+ 16.5
2 - sufficient environment	12 580	25.7	11 243	22.9	- 1 337	- 2.8
3 - slightly impacted environment	9 055	18.5	4 256	8.7	- 4 799	- 9.8
4 - impacted environment	5 296	10.8	5 060	10.3	- 236	- 0.5
5 - significantly impacted environment	2 442	5.0	760	1.6	- 1 682	- 3.5

Source: SEA

Basic parameters of the loaded areas (LA)

LA	Area* (km ²)	Number of inhabitants	Location of LA in the region – proportion in %
Bratislavská	488	432 000	Bratislavský 93 %, Trnavský 7 %
Dolnopovažská	1 261	247 000	Nitriansky 66 %, Trnavský 34 %
Ponitrianska	450	272 000	Nitriansky 51 %, Trenčiansky 49 %
Pohronská	203	186 000	Banskobystrický 100 %
Jelšavsko-lubenická	137	21 000	Banskobystrický 100 %
Rudniansko-gelnická	357	52 000	Košický 95 %, Prešovský 5 %
Košicko-prešovská	1 044	425 000	Košický 81 %, Prešovský 19 %
Zemplínska	1 040	173 000	Košický 83 %, Prešovský 17 %
Total	4 980	1 808 000	

* The territory includes areas in the 5th and 4th degrees of environmental quality.

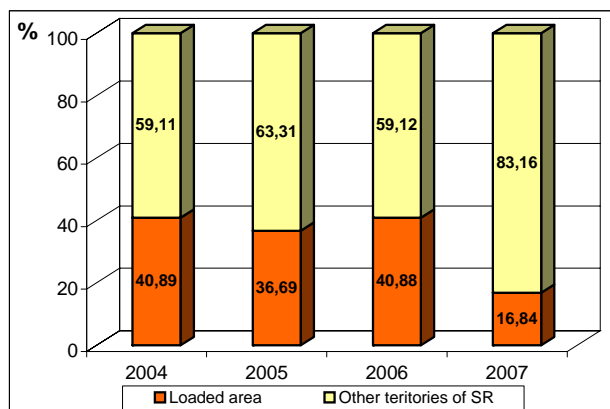
Source: SEA

In the years 2008-2009, SEA worked on updating a map called "Quality of Environment" based on more recent data for individual components of environment with reference to new legislative requirements relating also to the accession of Slovakia into the European Union, especially in the water chapter:

Loaded areas represent approximately 10-11 % of the SR territory. The charts show the fact that in the area of air pollution, water contamination, and waste generation that have significantly contributed to the state of environment in the territory; and most indicators show that the loaded areas bear 50-90 % of environmental load in Slovakia documented by individual indicators.

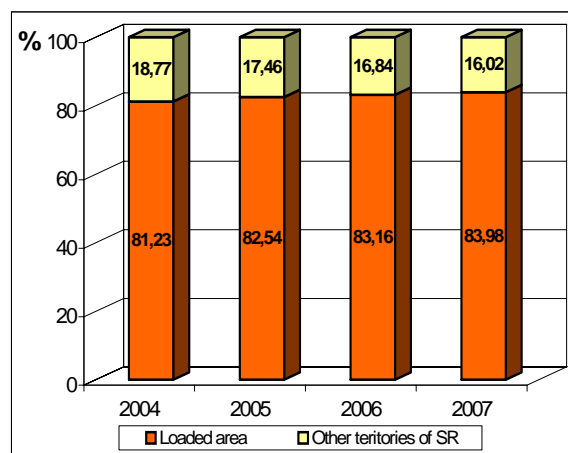
Air

PM emissions from stationary sources in LA



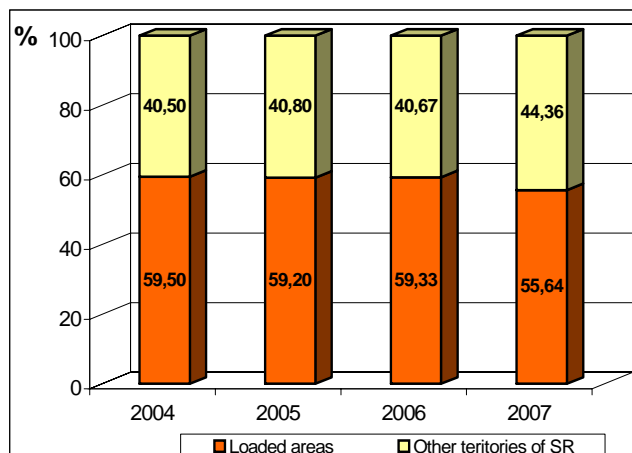
Source: SHMI

SO₂ emissions from stationary sources in LA



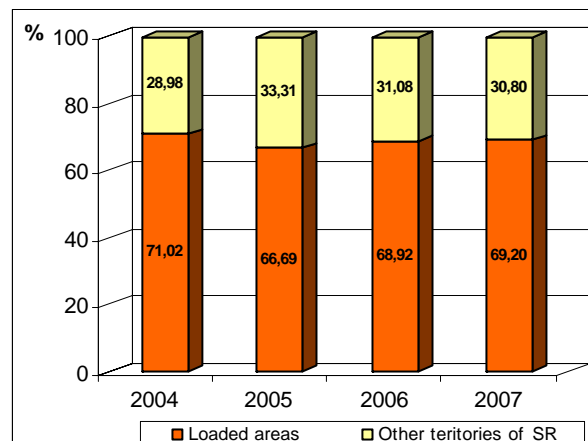
Source: SHMI

NO_x emissions from stationary sources in LA



Source: SHMI

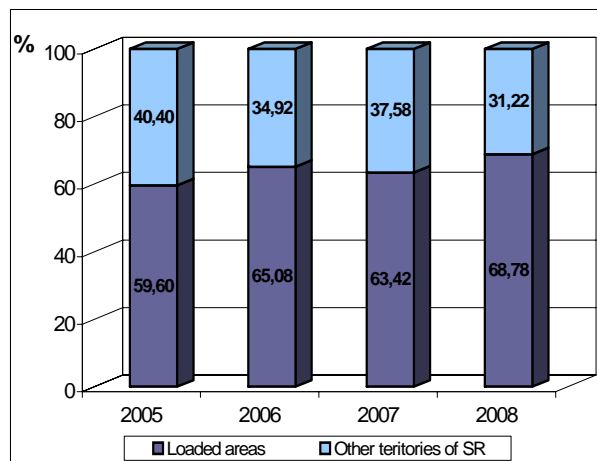
CO emissions from stationary sources in LA



Source: SHMI

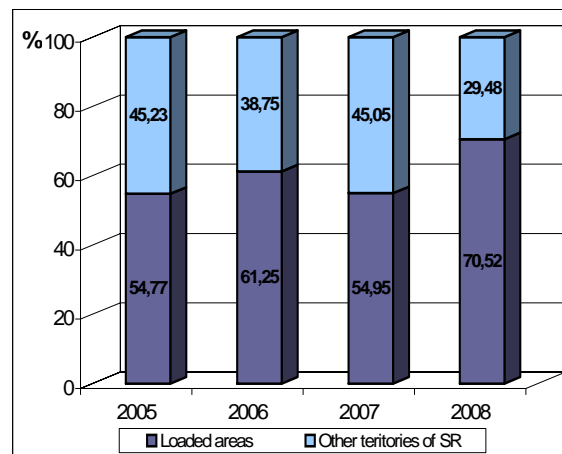
Water

Discharged BOD₅ contamination in LA



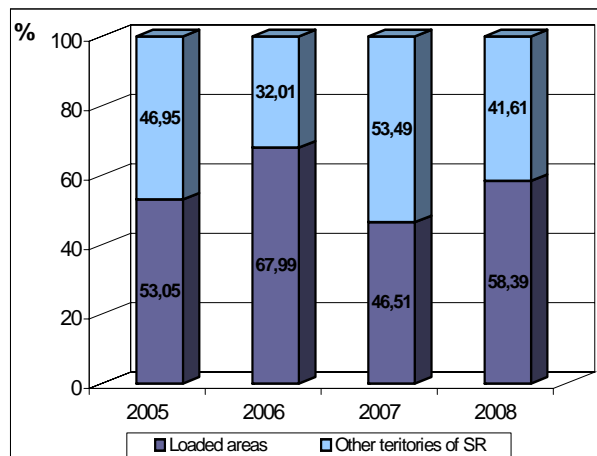
Source: SHMI

Discharged COD_{Cr} contamination in LA



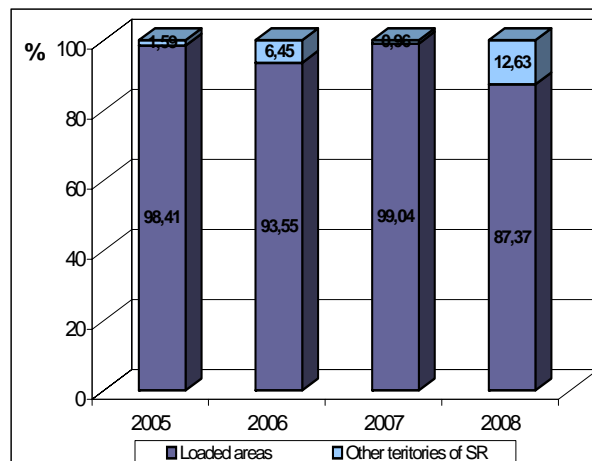
Source: SHMI

Discharged IS contamination in LA



Source: SHMI

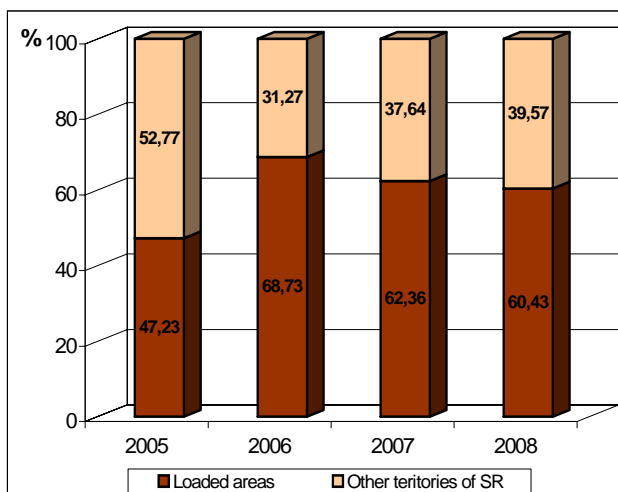
Discharged NES_{UV} contamination in LA



Source: SHMI

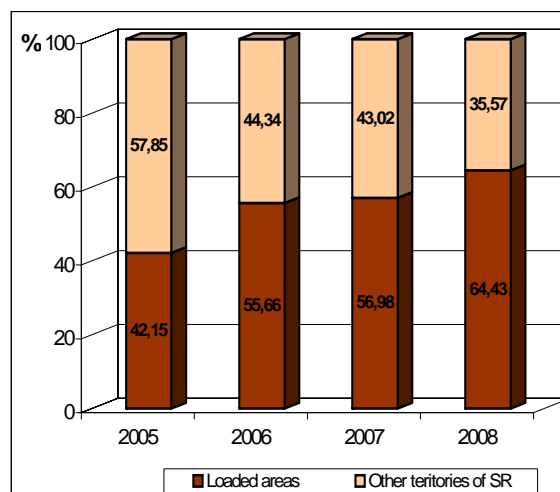
Waste

Other industrial waste generated in LA



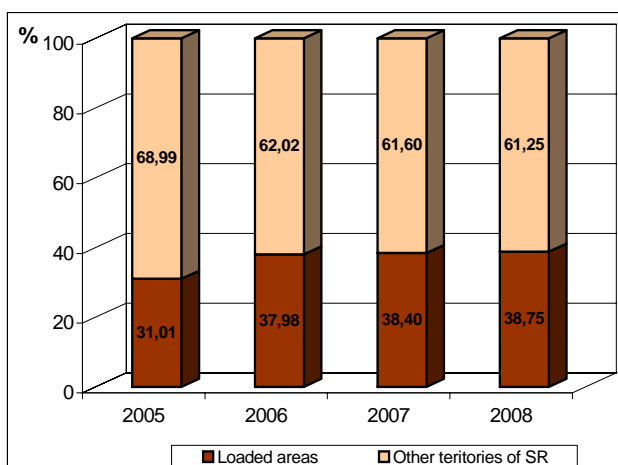
Source: SEA

Hazardous industrial waste generated in LA



Source: SEA

Municipal waste generated in LA



Source: SEA