



Rekreace a ochrana přírody - ruku v ruce? 4.- 6. 5. 2011, Brno

Using GIS to investigate forest functions balance

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Forest covers different economic, environmental and social functions.

Management targeted on specific functions enhancement might differ significantly

The knowledge of these differences is the basic precondition for finding suitable forest management. These differences must be:

- defined,
- located,
- taken into account.



Only in case that particular forest feature is useful it might be then considered as a function. The rate of usefulness reflects the importance of particular function for society. It depends on:

- **the need of the function for society**
- **the location of forest within landscape**
- **the state of forest infrastructure**
- **the potential of the stand, state and composition of the forest**





Forest function addressed for the first time after the WW II

New special surveys before forest management plans renewal

The emergence of GIS in the 80-ies of the 20th century

Privatization of forest management plans making after 1996

The emergence and development of OPRL 1998-2001





OPRL

- Transforming special surveys into a new shape
- Processing of particular natural forest areas
- The legal framework established by law and decree
- Issued as a book
- Issued in digital form

The need to publish and make data widely available to the public

- Establishment of Mapserver OPRL



Map server OPRL www.uhul.cz Mapy

Divided into two parts and several groups

Overview maps - vector data

- natural forest areas (PLO)
- administrative division
- map of the Czech republic
- the forth class watersheds according to state water management map
- map sheet of the basic state map



Raster data

- Shaded relief
- Digital terrain model
- the orthophotos
- the Land Registry documents
- Contour map of the FMP of the state forests



Special maps are divided:

- typology maps
- target management maps
- forest vegetation zones maps
- transport maps
- forest protection maps
- Territorial Systems of Ecological Stability maps
- functions potential maps
- declared forest functions maps
- soil pit maps



Oblastní plány rozvoje lesů (2011) - Windows Internet Explorer

http://geoportal2.uhul.cz/mapserv/jsp/mapserv3.php?project=oprl_2011&layers=PLO

Oblastní plány rozvoje lesů (2011)

Mapové měřítko: 824 430 -838303 -971594

Mapa přehledová

- Lesní stanoviště

Mapa typologická

- Lesní typ
- obrysy
- Biologická příravná půdy
- hranice mezi degradace půd
- Sonda lesního typu

Mapa cílového hospodaření

- Cílové hospodářský soubor
- obrysy

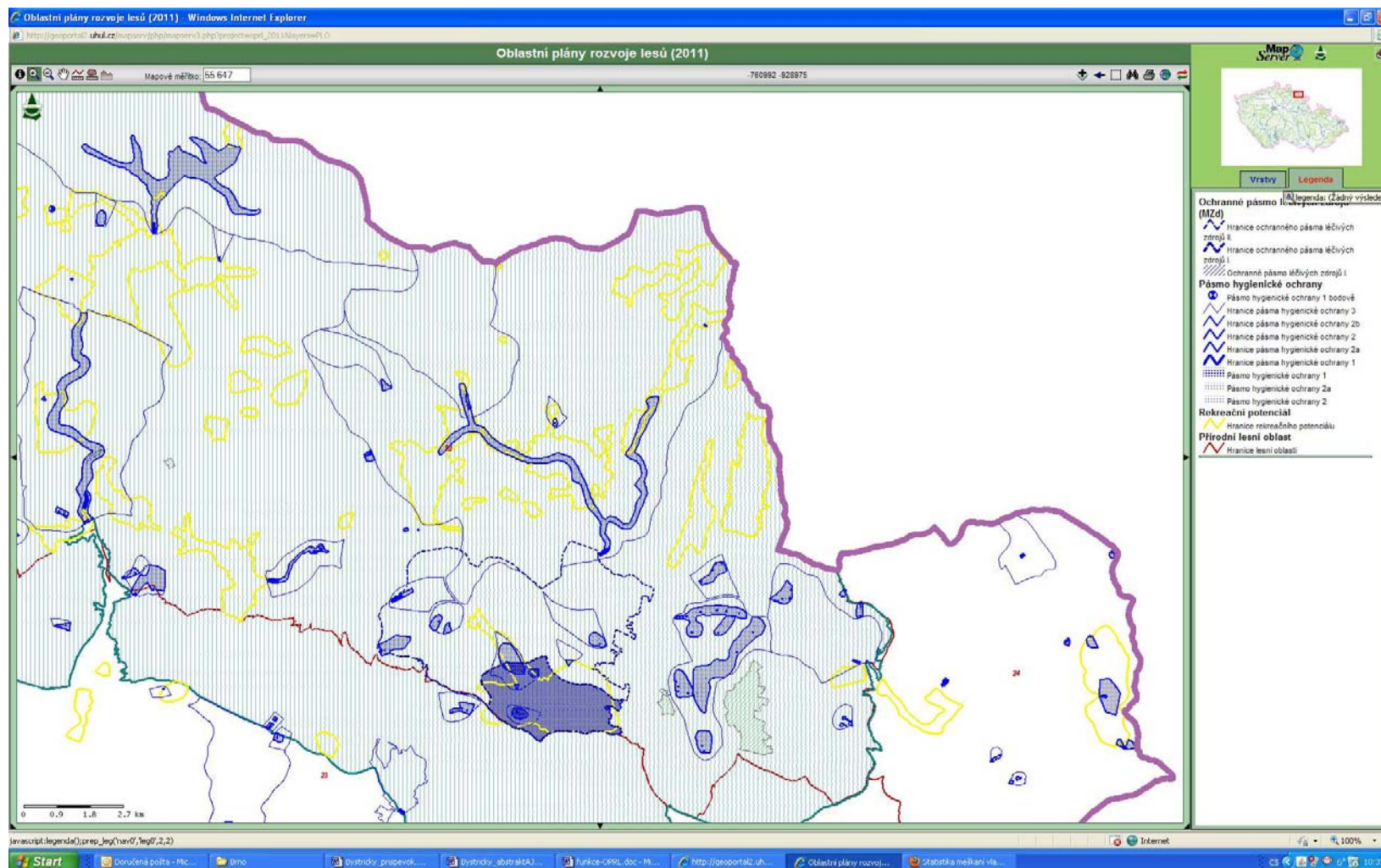
Vrstvy Rastry WMS

- Přírodní lesní oblast
- Správní rozdělení
- Mapa ČR WMS
- Výškoplo
- Povědi
- Klad SMO

0 14 28 42 km

Start | Doručená pošta - Mě... | Brno | Bystřický_příspěvek... | Bystřický_abstraktCZ... | Bystřický_abstraktA3... | funkce-OPRL.doc - M... | http://geoportal2.uh... | Oblastní plány rozvoj... | CS | 100% | 9:13







CONCLUSION

- Mapserver OPRL is living work, unique by:
 - Possibility of republic-wide imaging,
 - Undemanding and intuitive use,
 - Legislative anchorage of OPRL.





CONCLUSION

- The future of Mapserveru is open.
- Discussions on the OPRL II begun.
- Application itself will be modernized and probably extended by:
 - More detailed information on particular layers,
 - Different statistics,
 - possibility to make custom views and summaries.
- Also in future it will bring valuable information on landscape management with a view to nature protection.
- **What will be the public order like?**





Thanks for your attention

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