

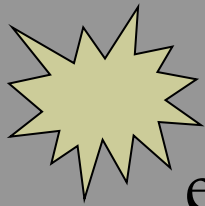
# Ecological situation in Chelyabinsk region



© Pavel Degtyaryov, 2011

# Myths

Chelyabinsk region is a  
radioactive  
dump,  
zone of  
environment  
disaster  
scrapyard



Chelyabinsk region  
is a region where  
ecological problems  
are no longer  
urgent ...

# Structure of land use

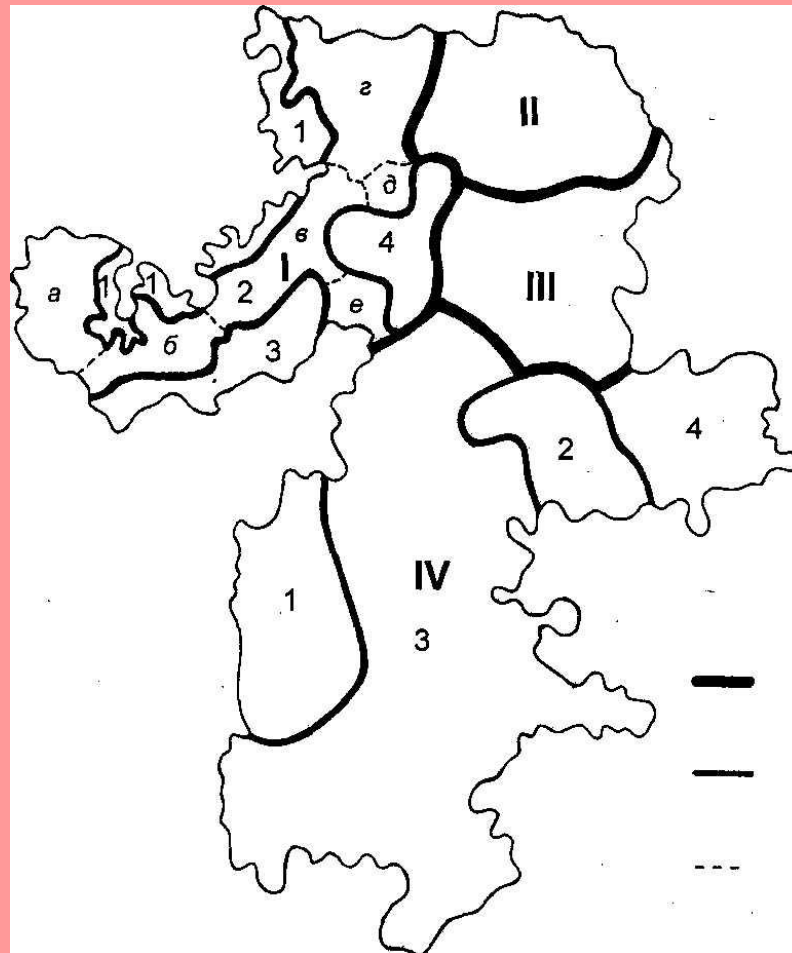
- *Agricultural lands– 60 %*
  - *Forest lands – 30 %*
- *Lands of settlements, industry and transport– 7 %*

# Areas of land use

- Protected areas
- Underdeveloped areas
- Agricultural areas
- Industrial and urban areas
- Special areas



# Eco-economic zoning



## Protected territories – 2 %

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# Underdeveloped territories— 20 %

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# Agricultural territories— 60 %

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# Industrial and urban territories— 5 %



# Special territories



# Karabash, 200 years of history

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1907



1980



# Karabash, granulation dumps



# Karabash, mine waste



# Karabash, Ryzhyi (red) brook

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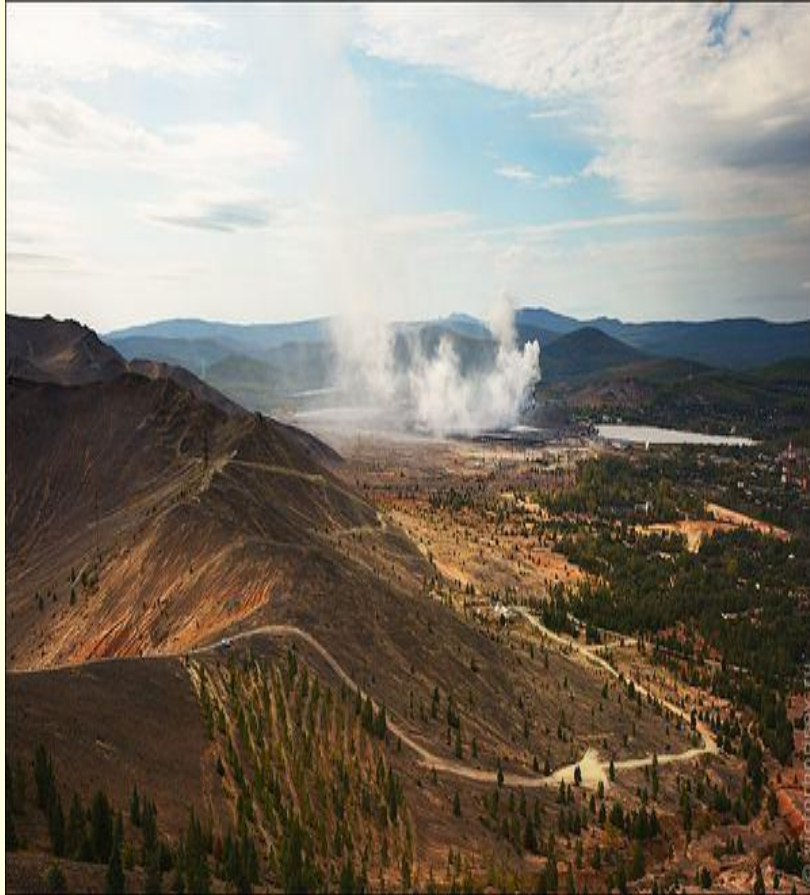
MINUS YAKOVLEV I RG-UAM.RU © 2005

# Karabash, pyrite deposit

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# Karabash, slope erosion



MINUS VAKOULEV I AG-JANUARI 8 2006

# Karabash, secondary pollution



# Karabash, lack of sanitary zones

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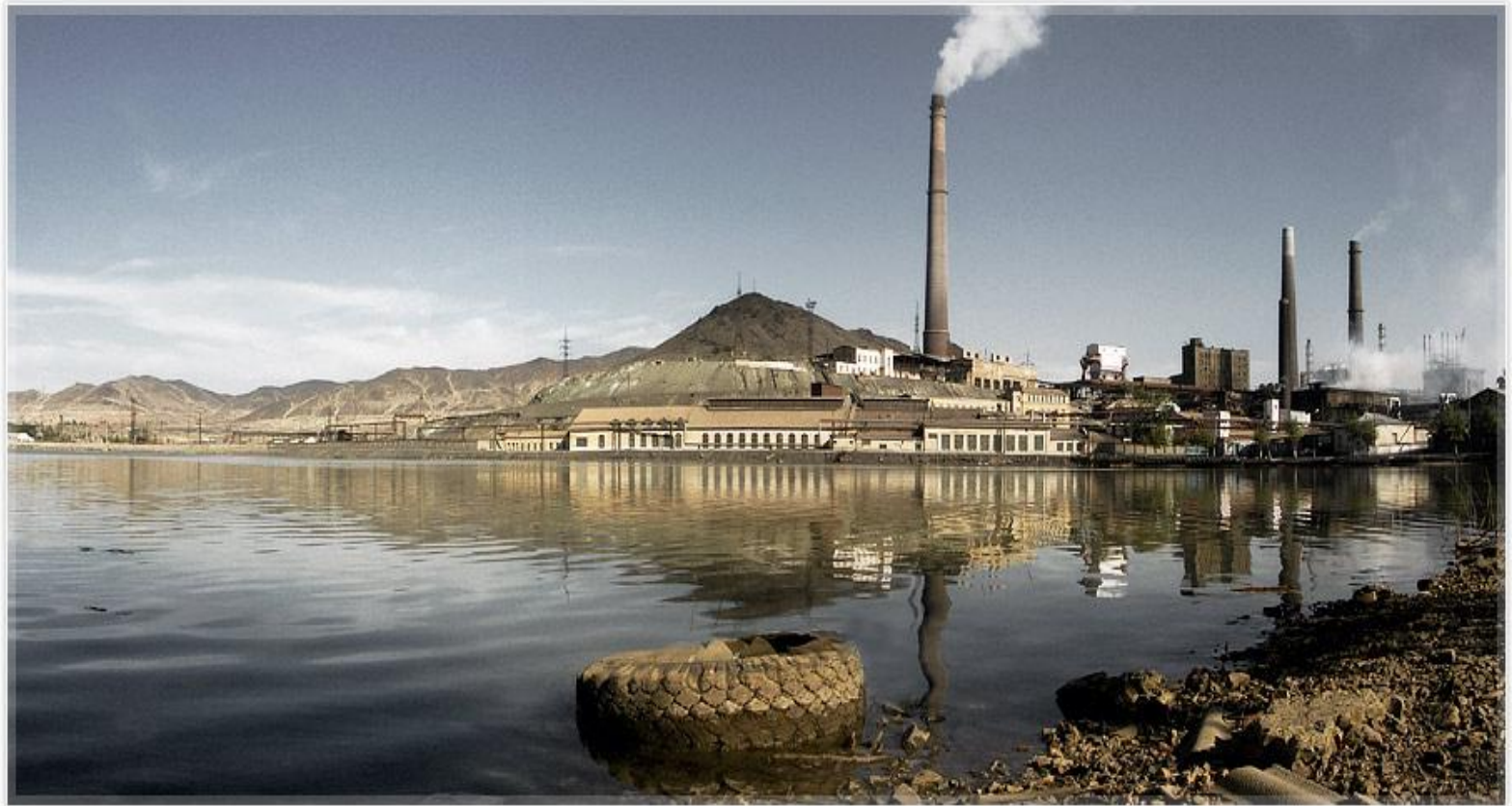


MINUS YAKOVLEV | RG-JAM.RU | 2005

# Karabash, badland



# Future of Karabash



MINUS YAKOVLEV | RG-JAM.RU | 2005

# “Mayak”, 60 years of history

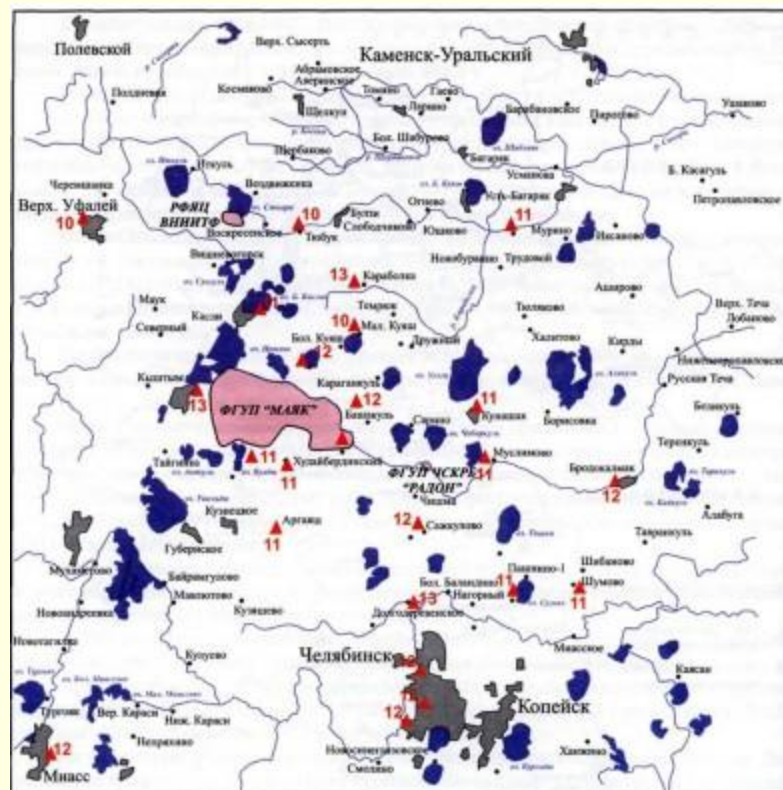
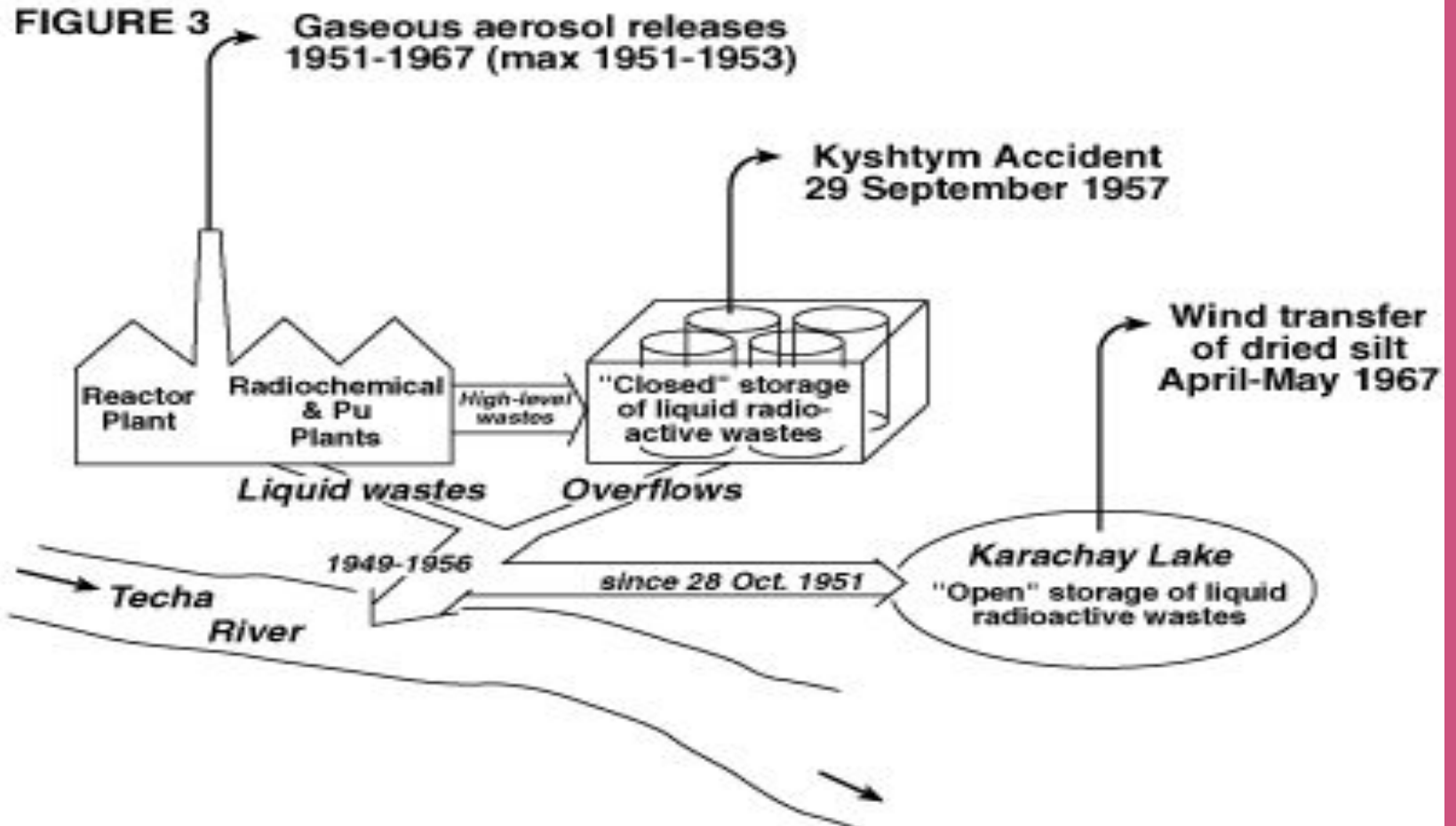


Рис. 2. Среднегодовые значения МЭД гамма-излучения в контрольных пунктах, расположенных в зоне наблюдения радиационноопасных объектов Челябинской области за 2005 год

- ▲ - пост дозиметрического контроля ГУ «Челябинской ЦГМС»
- 11 - среднесеasonные значения МЭД гамма-излучения
- санитарно-защитная зона ФГУП «ПО «МАЯК»



# Radiation accidents



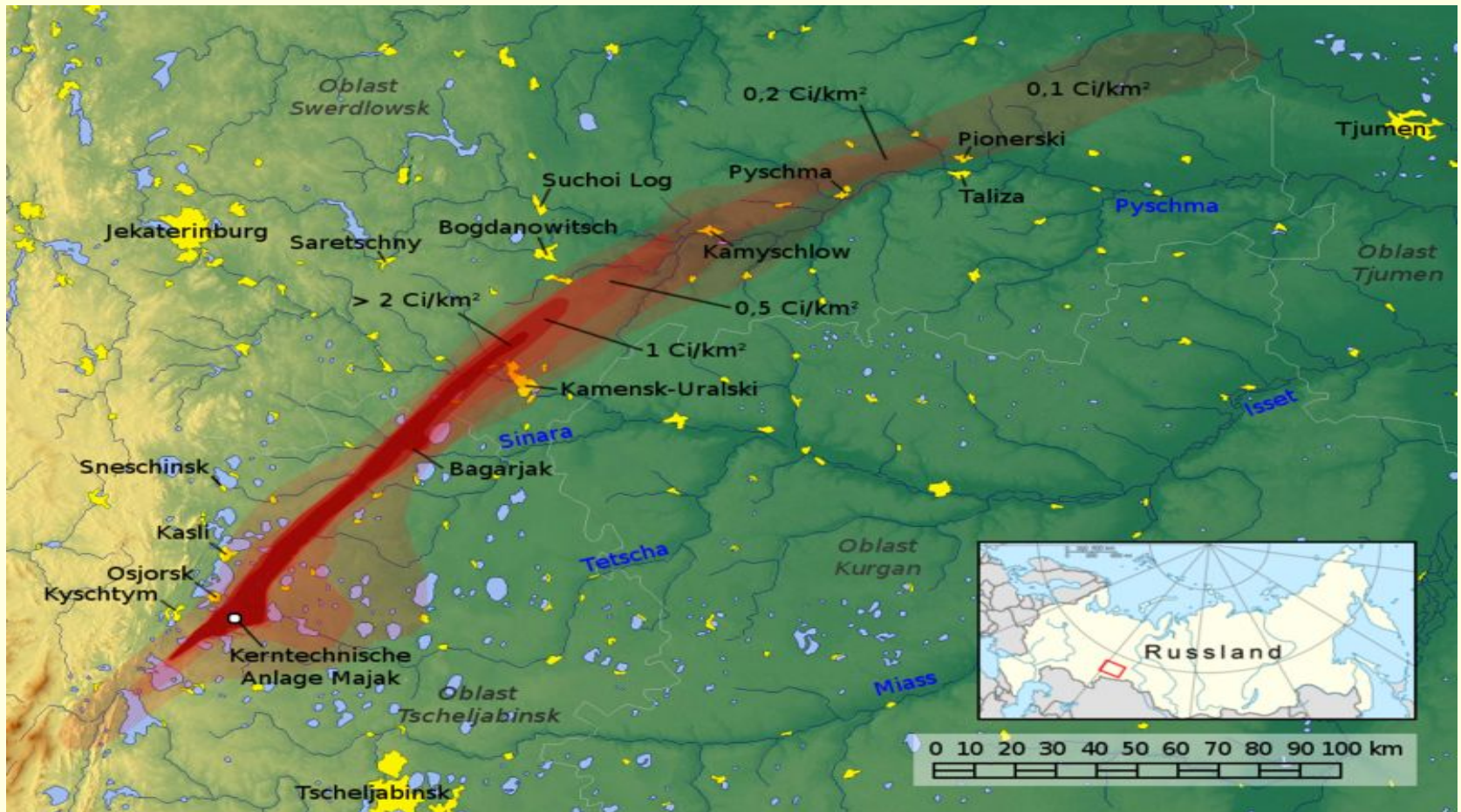
# The Techa River



# Karachai Lake

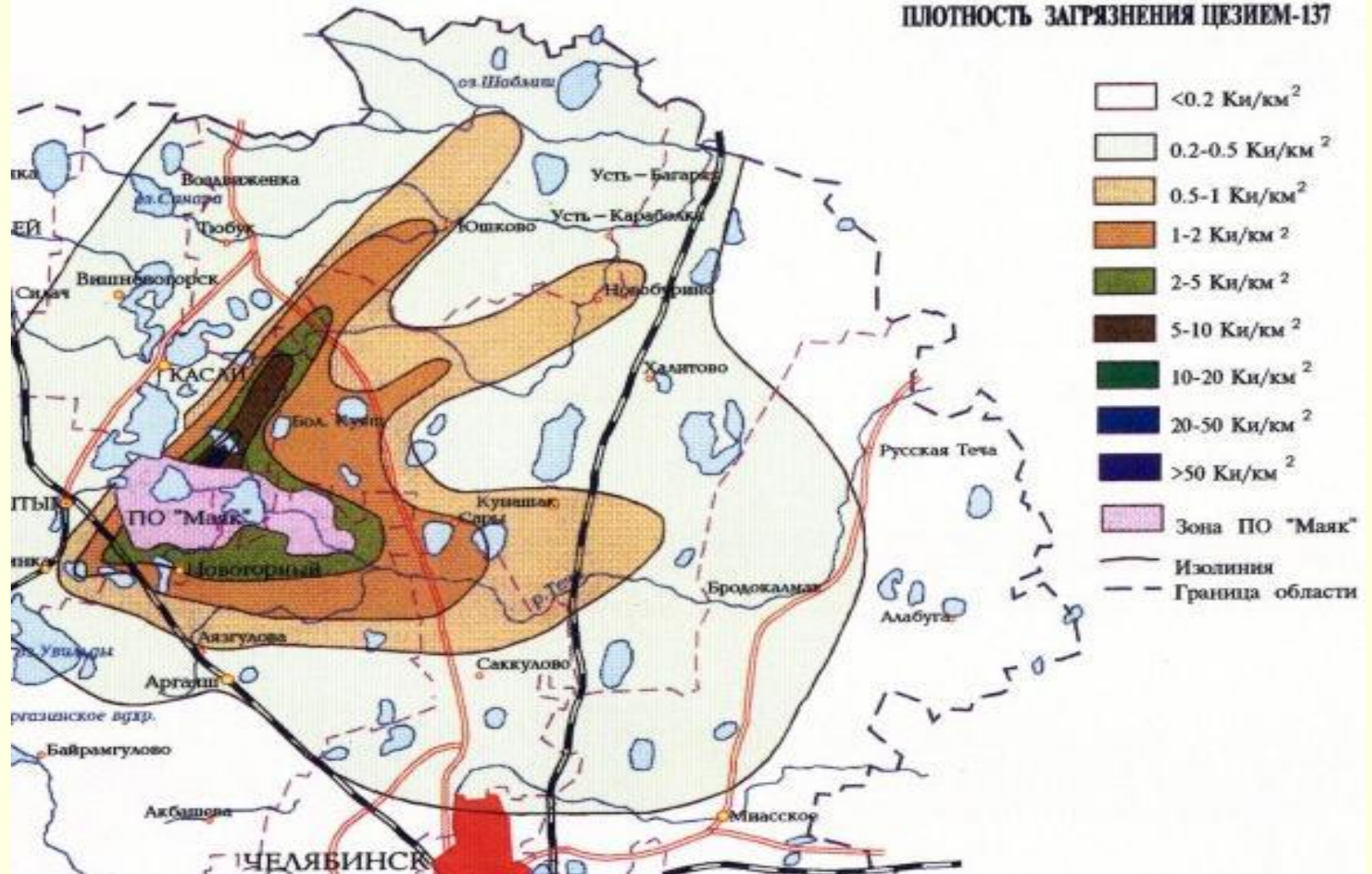


# EASTERN URALS RADIOACTIVE TRAIL - 57



# ALWP-67

## ПЛОТНОСТЬ ЗАГРЯЗНЕНИЯ ЦЕЗИЕМ-137



# Activities aimed at minimizing environmental problems

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## Activities

```
graph TD; A[Activities] --- B[Structural and branch]; A --- C[Technical and technological]; A --- D[District-planning]; A --- E[Environment-oriented]; A --- F[Institutional];
```

Structural and branch

Technical and technological

District-planning

Environment-oriented

Institutional