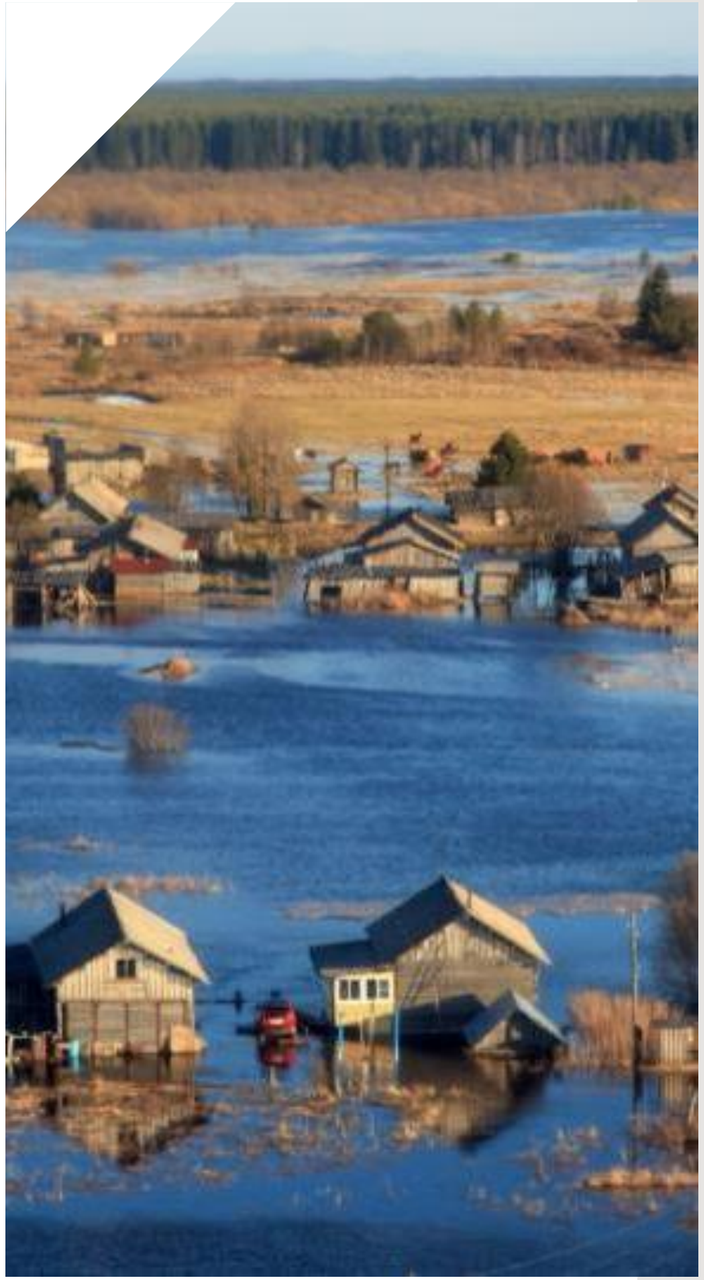

Environmental change and resilience planning in the Russian Arctic

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UArctic Thematic Networks: Graduate Seminar on Climate Change Impacts and Responses in the Arctic

Russian Arctic: Arctic zone

The territories located in within the Arctic Circle and defined by the Decree of the President of the Russian Federation (2014) “On the Land Territories of the Arctic Zone of the Russian Federation”.

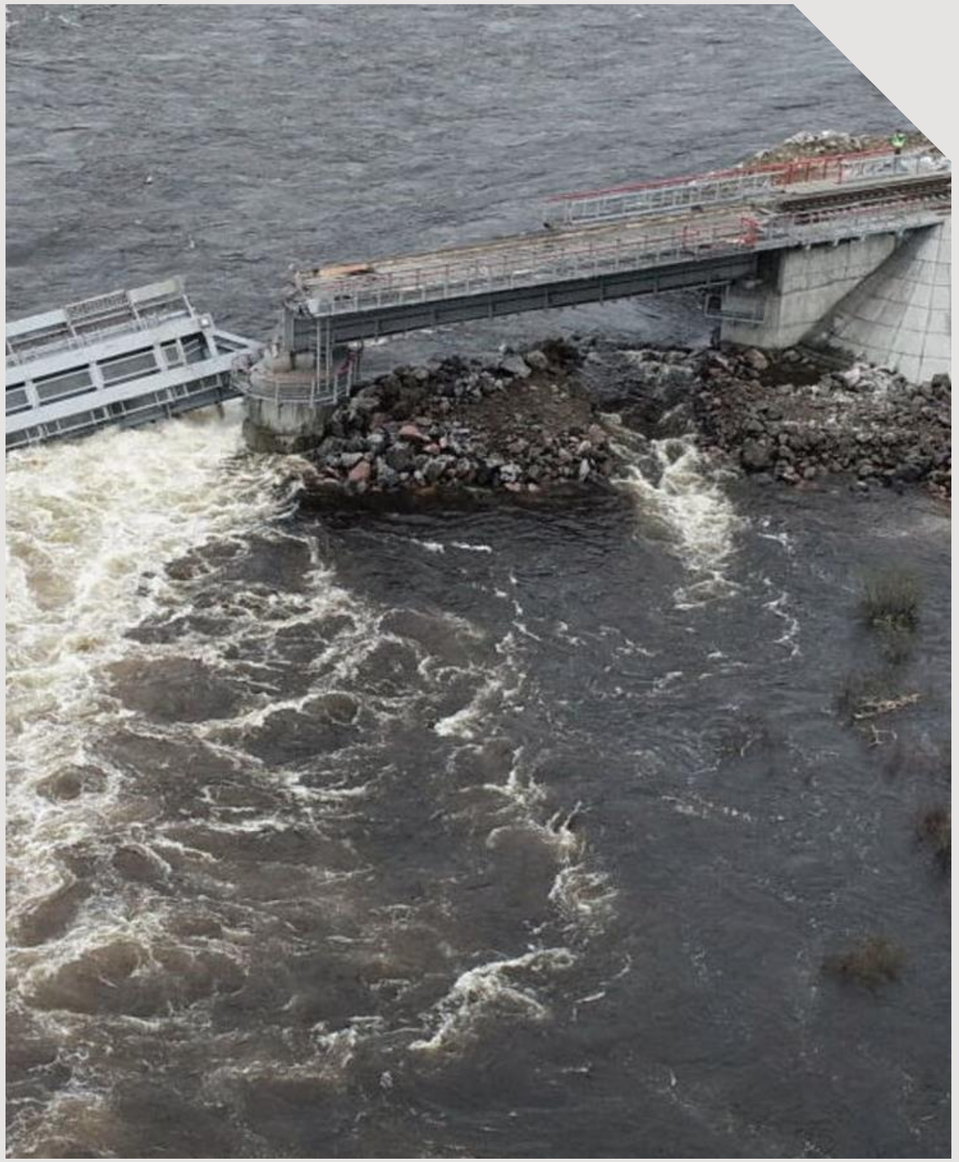
National legislation

Climate Doctrine (2009)

National Plan of adaptation to the climate change until 2023

Climate change consequences

- Human health risks
- Drought / water-logged soil
- Wildfires
- Permofrost retreat
- Changing animal migration patterns
- Infectious and parasitic disease dissemination
- Increasing average annual and seasonal temperature variations
- Increasing snowless and iceless seasons
- Precipitation enhancement / changing precipitation events
- Wind velocity
- Extreme climate conditions
- Increase in electricity consumption due to air conditioning

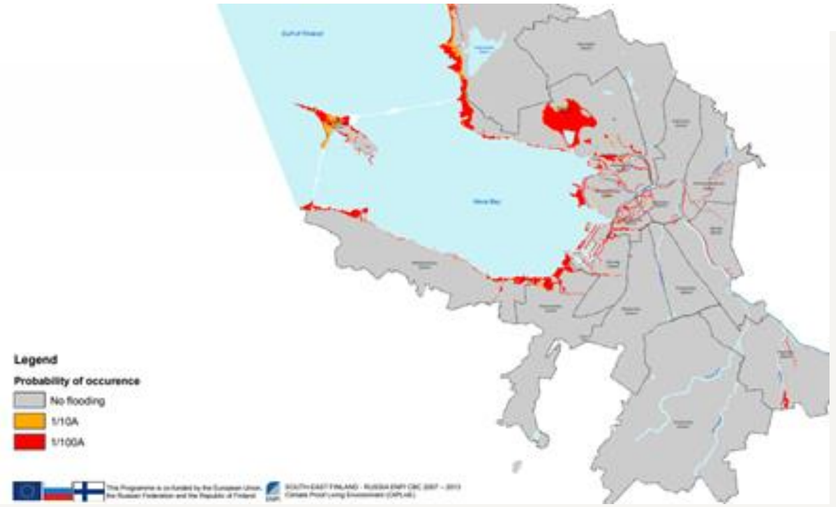


Challenges: regional level

- Limited financial resources
- Lack of legal documents and proceedings
- Lack of coordination between state organisations and structures
- Climate change skepticism

Best regional practices: Saint Petersburg

- Climate change analysis (increasing seasonal temperature variation; large percentage of hazardous events, increasing fallout of precipitation, flooding)
- Scenarios / climate modelling
- International projects: CliPlivE
- Environmental policy until 2030 (climate strategy; adaptation measures; risks prevention system; structural actions)



Local communities

- Subject to a limited tax base
- Limited authorities and legal power
- Dependence from regional and federal resources

Case study: Arkhangelsk

- Population: 348,000 (2018)
- Located in the north of the European part of Russia at the mouth of the Northern Dvina River, about 30-35 km from its confluence with the White Sea
- Dominated by residential land and the agricultural land reserve

Case: Arkhangelsk

- Adaptation strategy of climate impacts on the health of the population (2012)
- Climate change adaptation not mentioned in the Strategy of the City Development
- No separate documents on climate change adaptation but emergency response plans

Current approaches

- Vertical: assistance on the regional level due to limited local resources
- Reactive vs. proactive: access to resources
- Structural: prohibited construction on the hazard-prone zones

Conclusions

- Need for the development of the strategies, plans and planning tools
- Need for collaborative approaches and actions
- Need for tailor-made educational programmes

Thank you for attention!

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