

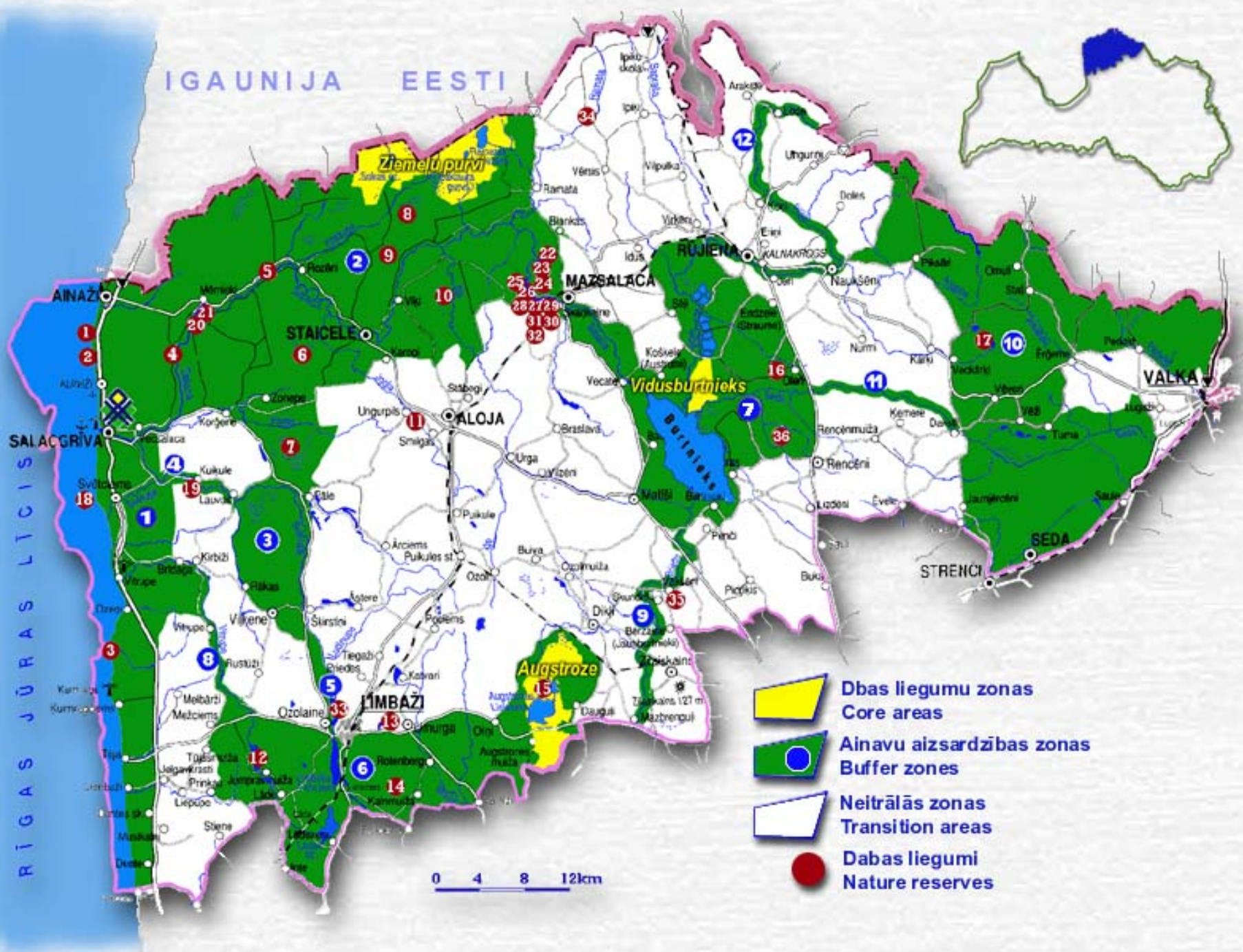
**Initiative “Place a Stone in a Stream” as a
Low Cost Method for Local Community
Practical Involvement in River maintenance
and “Saving the Baltic”**

**Andris Urtans ,
Laura Taube, Nature Conservation Agency,
Latvia.**

Kristianstad , 14.05.2018

North Vidzeme Biosphere Reserve as a Part of Joint Region, with Similar problems as seen through dominating Landcover





IGAUNIJA EESTI

RIGAS JŪRAS LICIS

0 4 8 12 km

-  Dbas liegumu zonas
Core areas
-  Ainavu aizsardzības zonas
Buffer zones
-  Neitrālās zonas
Transition areas
-  Dabas liegumi
Nature reserves

Ziemeļupurvi

Vidusburtnieks

Augstroze

AINAŽI

STAICELE

ALOJA

LIMBAŽI

MAZSALACA

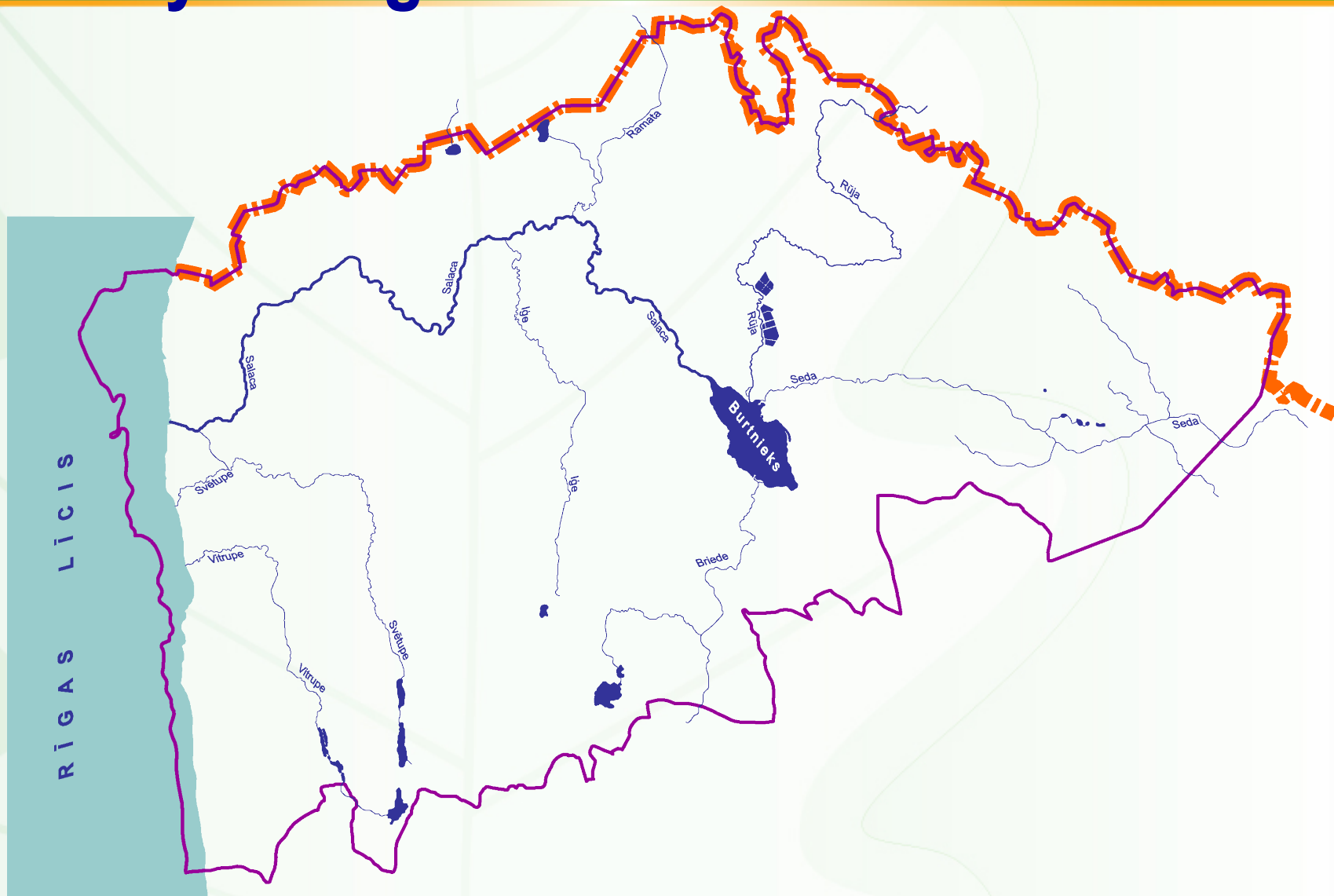
RŪJIENA

VALKA

SEDA

STRENCI

Why so big area?

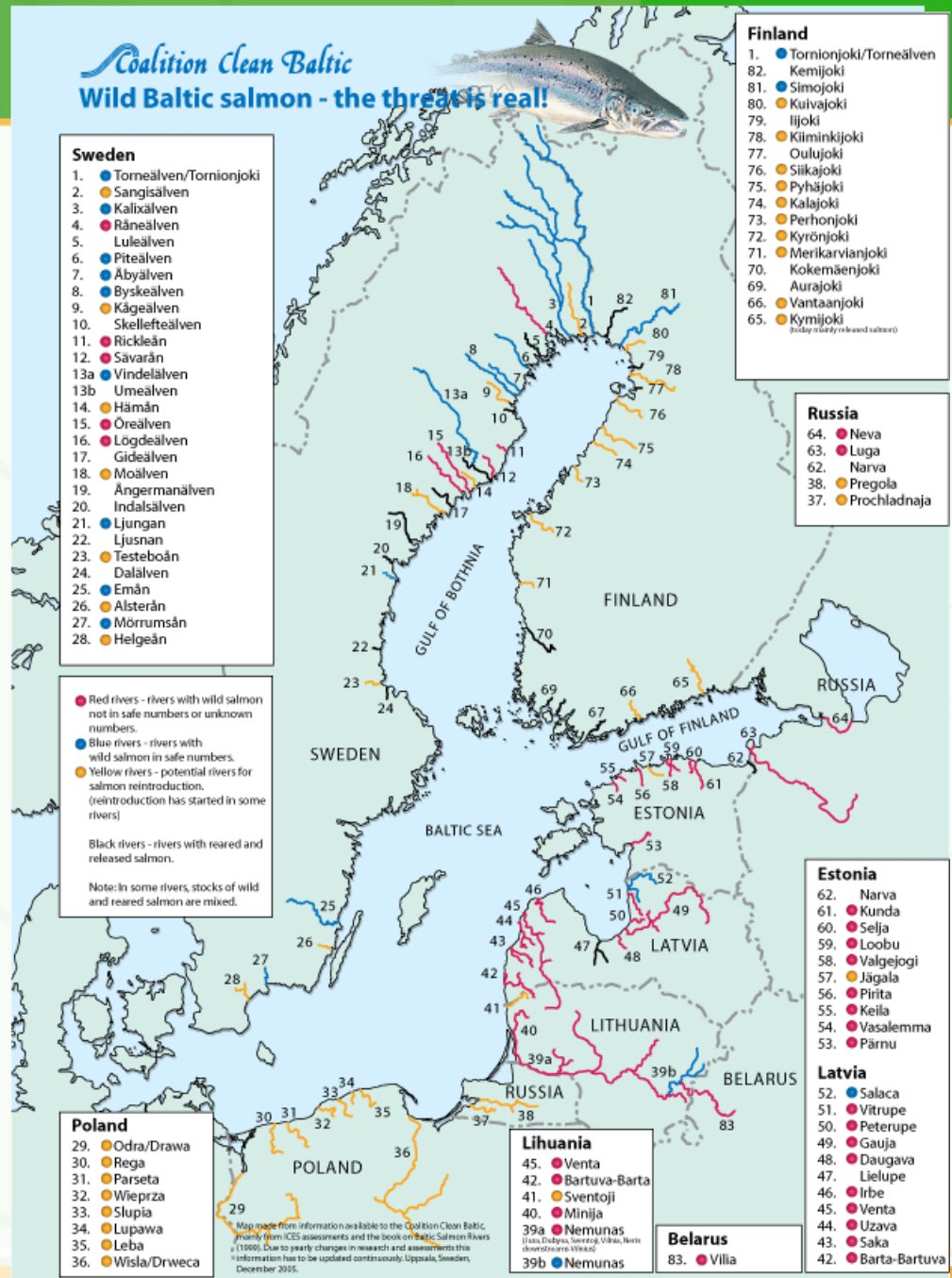


Baltic coast of Latvia. Salacgrīva



Coalition Clean Baltic

Wild Baltic salmon - the threat is real!



- Sweden**
1. ● Torneälven/Tornionjoki
 2. ● Sangisälven
 3. ● Kalixälven
 4. ● Råneälven
 5. ● Luleälven
 6. ● Piteälven
 7. ● Äbyälven
 8. ● Byskeälven
 9. ● Kägeälven
 10. ● Skellefteälven
 11. ● Rickleån
 12. ● Sävarån
 - 13a ● Vindelälven
 - 13b ● Urmeälven
 14. ● Hämån
 15. ● Öreälven
 16. ● Logdeälven
 17. ● Gideälven
 18. ● Moälven
 19. ● Ängermanälven
 20. ● Indalsälven
 21. ● Ljungan
 22. ● Ljusnan
 23. ● Testeboån
 24. ● Dalälven
 25. ● Emån
 26. ● Alsterån
 27. ● Mörrumsån
 28. ● Helgeån

● Red rivers - rivers with wild salmon not in safe numbers or unknown numbers.

● Blue rivers - rivers with wild salmon in safe numbers.

● Yellow rivers - potential rivers for salmon reintroduction. (reintroduction has started in some rivers)

● Black rivers - rivers with reared and released salmon.

Note: In some rivers, stocks of wild and reared salmon are mixed.

- Poland**
29. ● Odra/Drawa
 30. ● Rega
 31. ● Parsęta
 32. ● Wieprza
 33. ● Slupia
 34. ● Lupawa
 35. ● Leba
 36. ● Wisła/Drweca

- Lithuania**
45. ● Venta
 42. ● Bartuva-Barta
 41. ● Sventoji
 40. ● Minija
 - 39a ● Nemunas
 - 39b ● Nemunas

- Finland**
1. ● Tornionjoki/Torneälven
 82. ● Kemijoki
 81. ● Simojoki
 80. ● Kuivajoki
 79. ● Iijoki
 78. ● Kilminkijoki
 77. ● Oulujoki
 76. ● Siikajoki
 75. ● Pyhäjoki
 74. ● Kalajoki
 73. ● Perhonjoki
 72. ● Kyrönjoki
 71. ● Merikarvianjoki
 70. ● Kokemäenjoki
 69. ● Aurajoki
 66. ● Vantaanjoki
 65. ● Kymijoki

- Russia**
64. ● Neva
 63. ● Luga
 62. ● Narva
 38. ● Pregola
 37. ● Prochladnaja

- Estonia**
62. ● Narva
 61. ● Kunda
 60. ● Selja
 59. ● Loobu
 58. ● Valgejogi
 57. ● Jägala
 56. ● Pirta
 55. ● Keila
 54. ● Vasalemma
 53. ● Pärnu

- Latvia**
52. ● Salaca
 51. ● Vitrupe
 50. ● Peterupe
 49. ● Gauja
 48. ● Daugava
 47. ● Lielupe
 46. ● Irbe
 45. ● Venta
 44. ● Uzava
 43. ● Saka
 42. ● Barta-Bartuva

- Belarus**
83. ● Villa

Map based on information available to the Coalition Clean Baltic, primarily from ICES assessments and the book on Baltic Salmon Rivers (1999). Due to yearly changes in research and assessments this information has to be updated continuously. Uppsala, Sweden, December 2015.





Lampetra fluviatilis

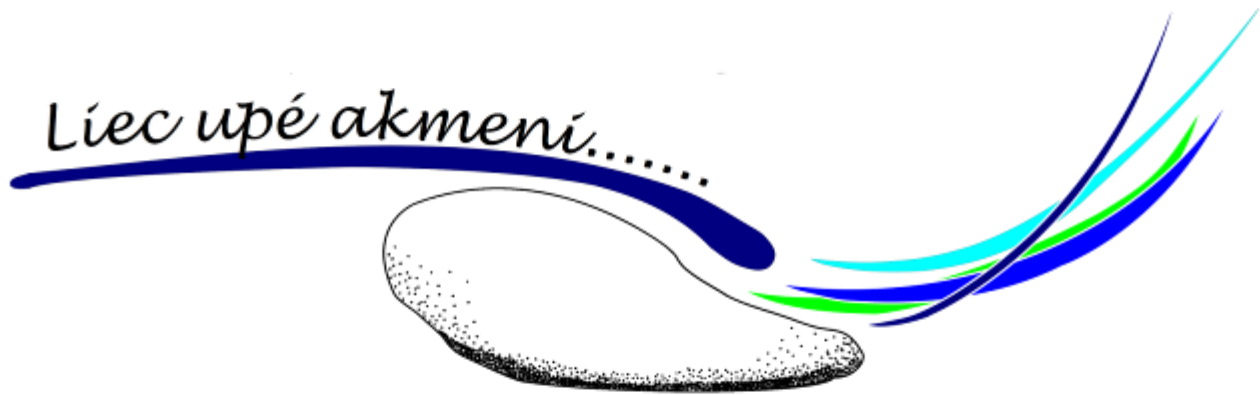


Eutrophication, Sedimentation, Tunnelling, Beaver



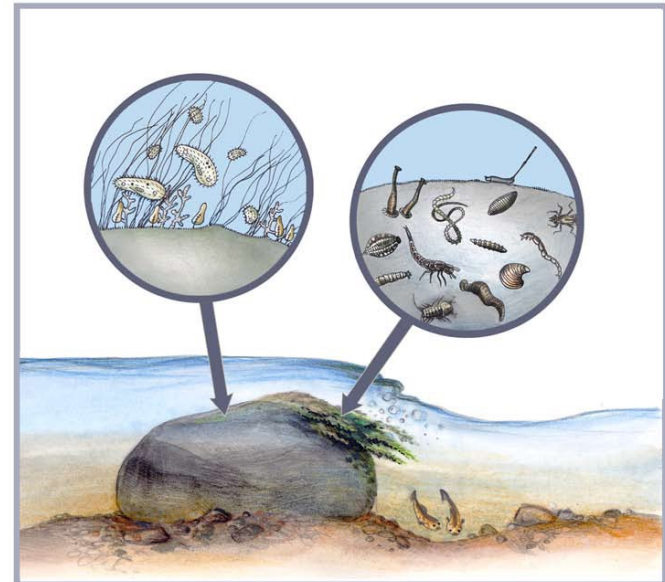
Initiative “Place a Stone in a Stream”

Liec upé akmeni.....



Stone Phenomenon

- **Stones as an mechanical aerators (especially during summer periods with low natural oxygen saturation)**
- **Stones as a diverse microhabitats**
- **Stone surface covered with “biofilm” acting as wastewater treatment unit.**
- **Possible/innovative Climate Change adaptation tool.**



5 – 10 sq.m riffle area transforms wastes generated by one person



The Aim of the Initiative is Broader than the Title:

- **Support and increase Biodiversity in Rivers (Life below water - SDG);**
- **Improve River functionality and selfpurification capacities (EP Strategy on Green Infrastructures, 2013);**
- **Improve functionality of River Coastal zone and maintain river landscape;**
- **Adapt possible Climate Change impacts on to the river ecosystem;**
- **Raise citizen awareness and motivation through practical involvement**

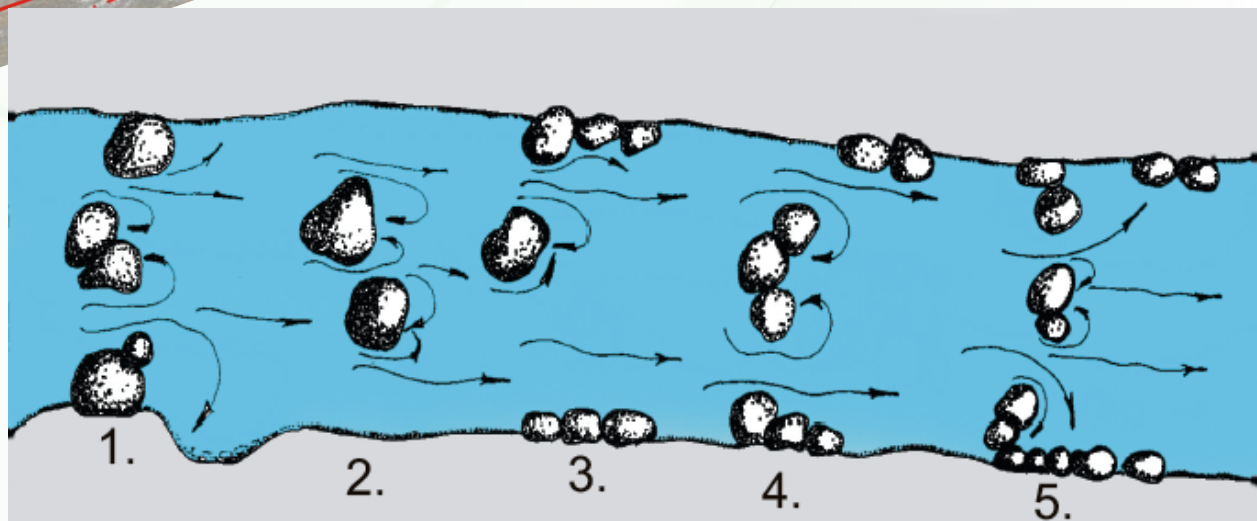
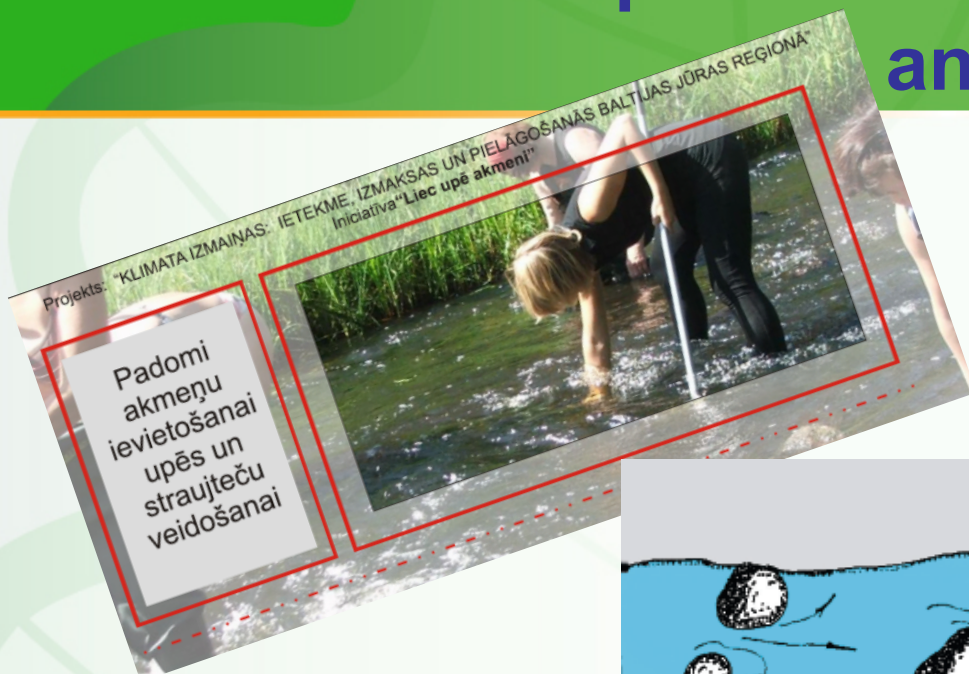
Actors

- Fishermen Associations
- Local landowners
- NGOs
- Water tourism activists and developers
- Local Municipalities
- Student groups

Pragmatic interest of Water Tourists to join (photo from www.laivas.lv)



Leaflet produced on processes in rivers and how to install stones



1. Upē ievietota akmeņu rinda veicina nostiprināta krasta izskalošanu - eroziju.
2. Atsevišķus akmeņus (diametrs > 30 cm) izvieto upes centrālajā daļā tā, lai tie nekļūtu par upes nestā materiāla „ķērājiem” un nenosprostotu vairāk kā 1/3 upes platumu.
3. Leļpus akmeņu veidojumiem krastā ir jāizvieto palielus akmeņus (diametrs > 30 cm), lai novērstu krasta izskalošanos - eroziju.
4. Lokveida akmeņu salikums - iespējamā zivju nārsta vieta.
5. Spārņveida akmeņu salikums, kurš novirza galvenās straumes virzienu tā pasargājot pretējā krasta izskalošanos.

Involvement of Local people and their knowledge

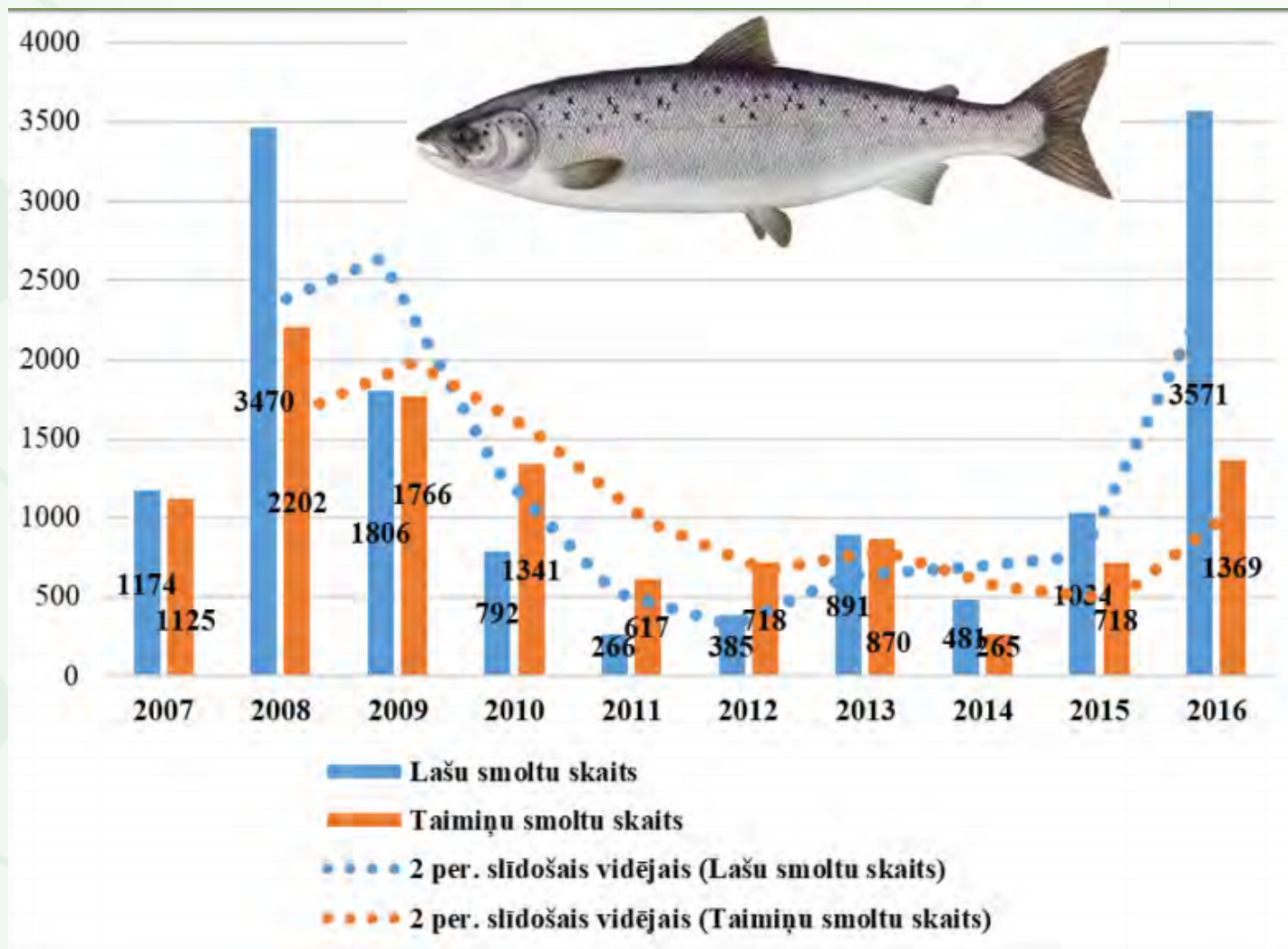


Involvement of NGOs in Restoration Activities (R.Jaunupe)



Number of Salmons in R.Salaca

(Note: river cleaning in 2006., 2015., 2016)



Involvement of local people in small activities for flood mitigation and biodiversity maintenance



Halting Bank erosion, removing EXCESS wooden debris and renewing balanced stony river stretches



Changing previous Concept of «Doing nothing»

05.06.2014.



Local landowner undertakes 17 km river cleanup to develop canoeing tourism in R.Svetupe, 2014



Children like to be needed and evaluated



Outdoor Fitness Club and Team building area.

NVBR. Vitrupe, 29.07.2014.



Support of Initiative outside NVBR. Jelgava Region as a pioneer



Improving morphology of lowland stream.

R.Vircava



Spread of Initiative . Mineral Water company “Mangali” supports 5 clean-ups in different parts of Latvia, 2012



Everybody is invited. R.Gauja, Jaunpiebalga, «Balta daba», 2014.



**May I help You or do I
better stay aside and
don't trouble You ?**

People in National Folk dresses in River Balda



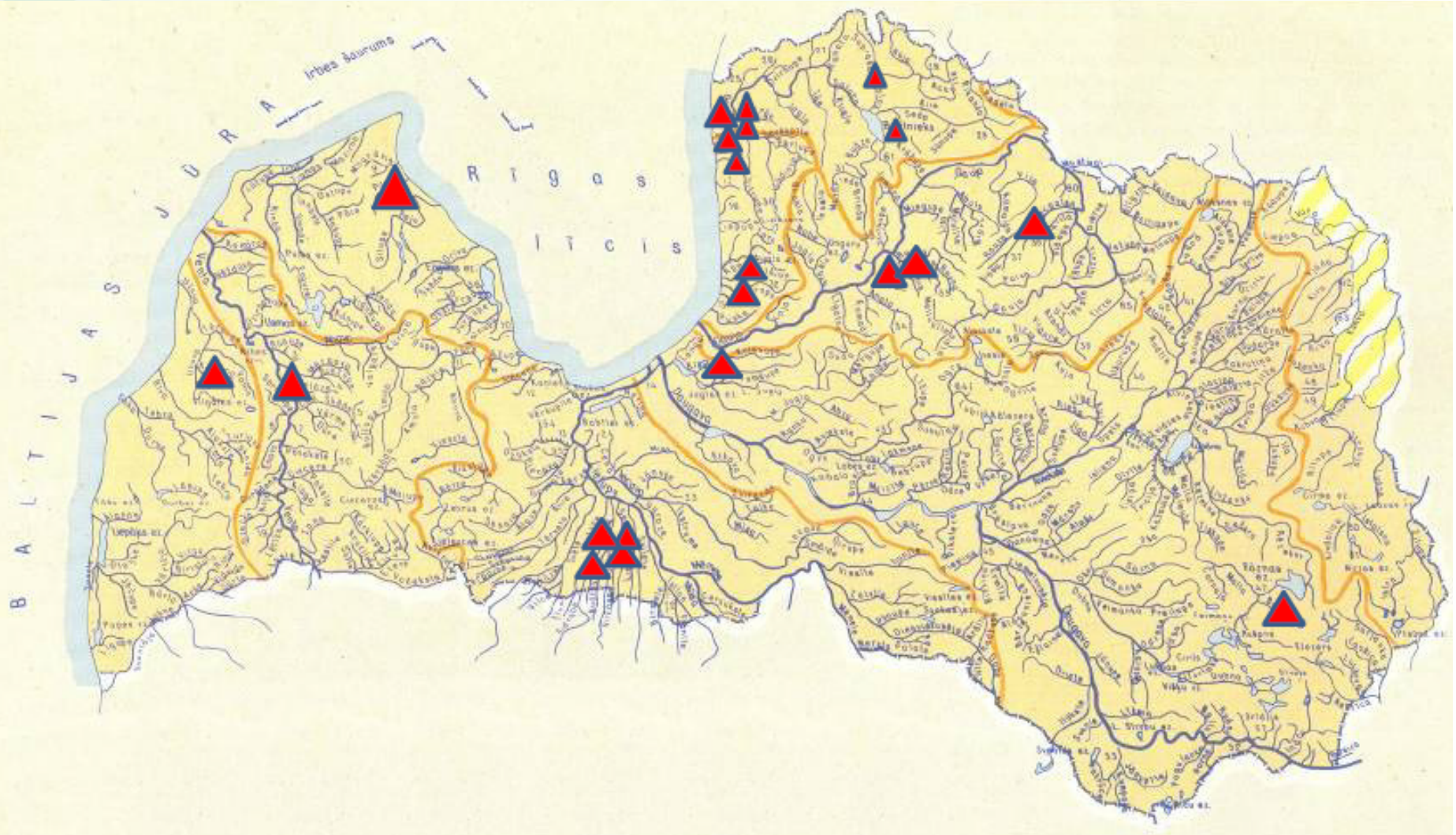
Local Restoration Activity becomes an Event



Local Wildlife Representatives Check the Result



Initiative realised during 2012.-2013.



Educational “side” Activities



Observing Brook lamprey *Lampetra planeri* spawning, R.Vedze 21.05.2017



Local inhabitants, even Member of the Parliament (without trousers), as well as the Head of one of four Planning Regions of Latvia (in Yellow with saw) are joining caring for our Waters



Head of Jelgava parish (one of biggest Latvian parishes) Z.Caune steps into river and even President of Latvia Dr.V.Zatlers listens to river improvement possibilities. 30.05.2010.

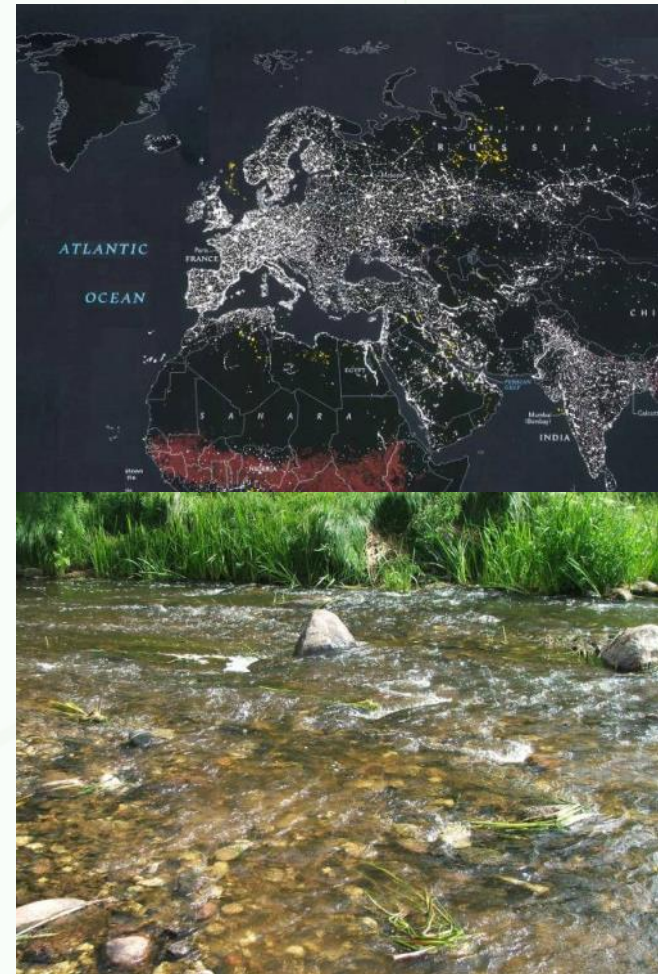
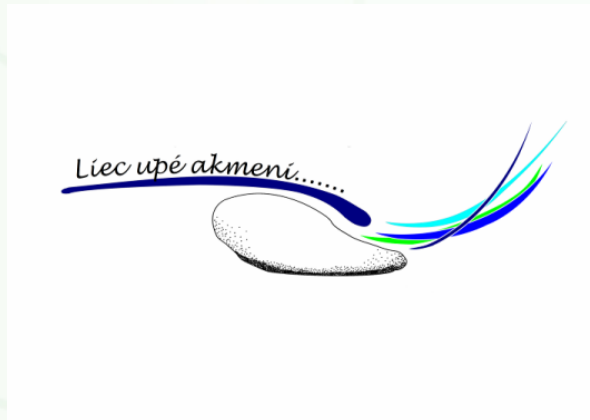


All are Winners. Result is Visible



Our prospects

- Equipped with knowledge and right motivation we ourselves can improve biodiversity and landscape of our surroundings, doing better for the Baltic.
- Even adapting our rivers to the Climate change impact.
- And we are not anonymous screws in the big World. There is sense in what we are doing. We are needed here.



COOL!

R. Vitrupe, North Vidzeme BR, 29.07.2014.

