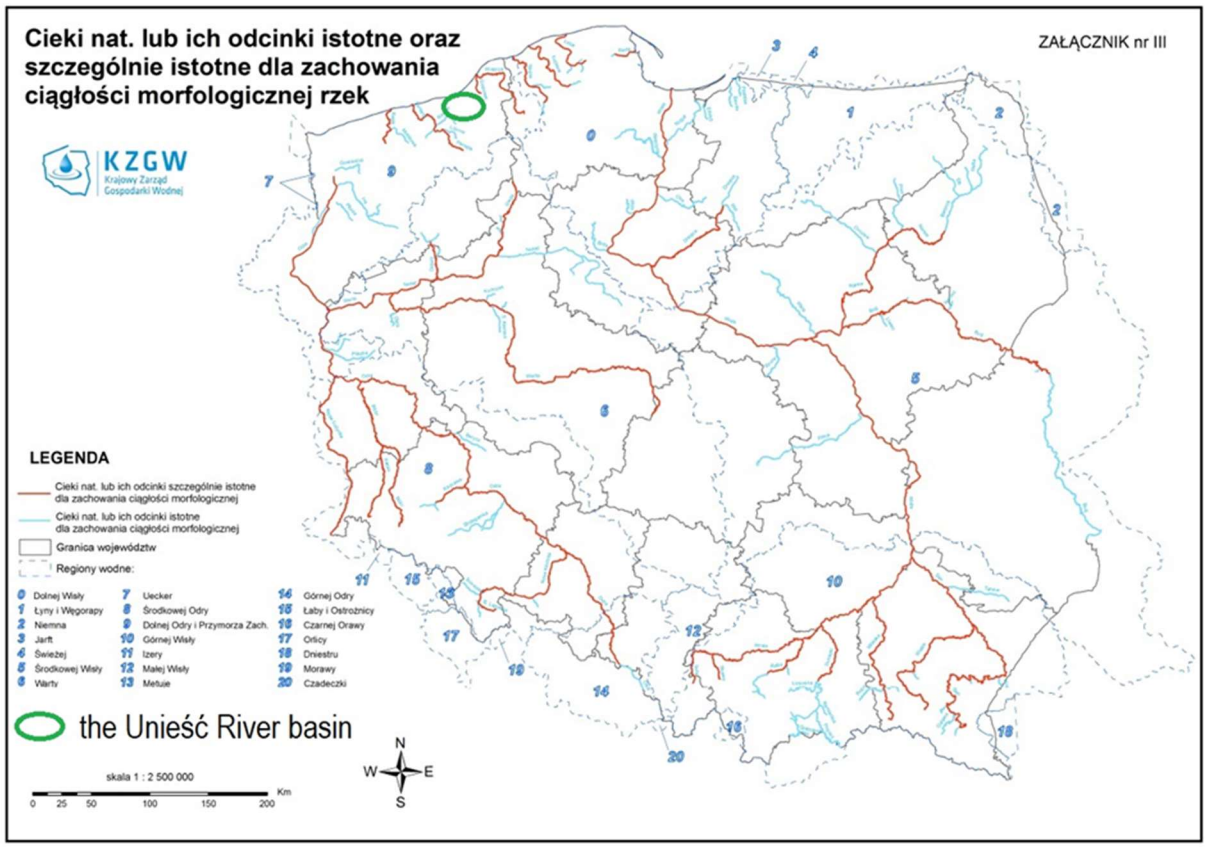
Summary of proposed barriers removal in Poland

Proposed dams/barriers for removal/mitigation to support salmonid populations in Polish rivers have been selected according to importance of the local salmonid populations, interest of various stakeholders, foreseen practical possibilities. Many other views can also be considered. A balance between these aspects/parameters is not always easy to make, but actions to mitigate salmonids in the following rivers would give a good contribution for fish biodiversity in Polish river basins.



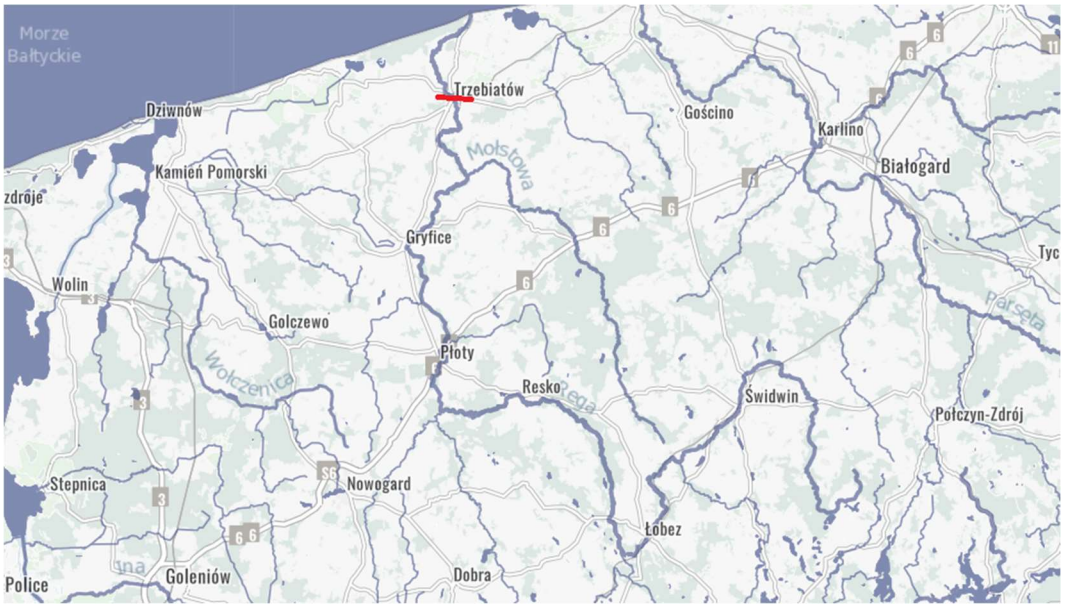
Map of rivers with 1 priority fopr salmonids in Poland marked red, and 2 priority marked blue.

Very first should be removed Włocławek Dam, which close 2/3 of Vistula basin, one of the biggest river flowing to the Baltic Sea. This barrier have fish passage working after modification not to bed, but it is still huge resowir up from a dam turning riverine habitat in to lake. Such change reduce possibilities of down stream migration of smolts to near 0. So, Włocławek removal should be first action.

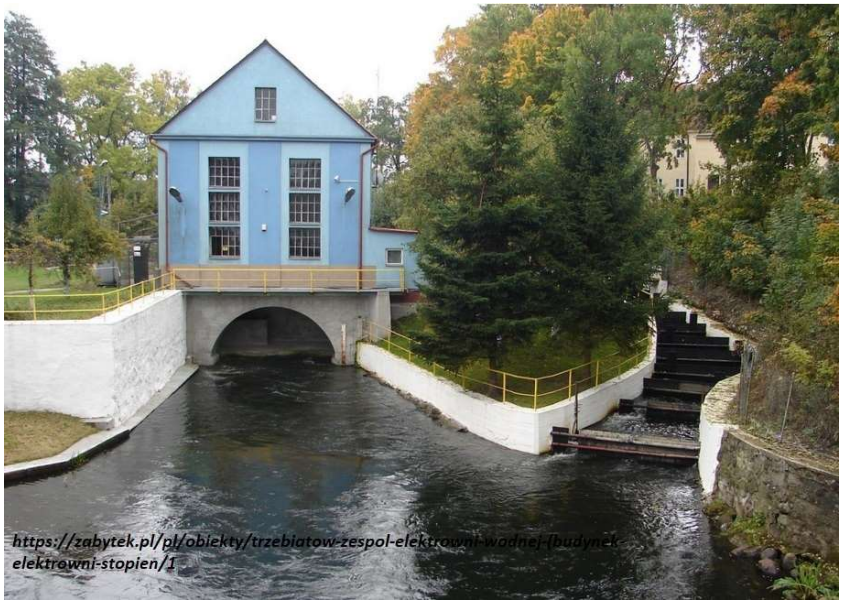
Proposals for barriers removal Poland:

Name of barrier/dam object: HPP Trzebiatów, Rega river

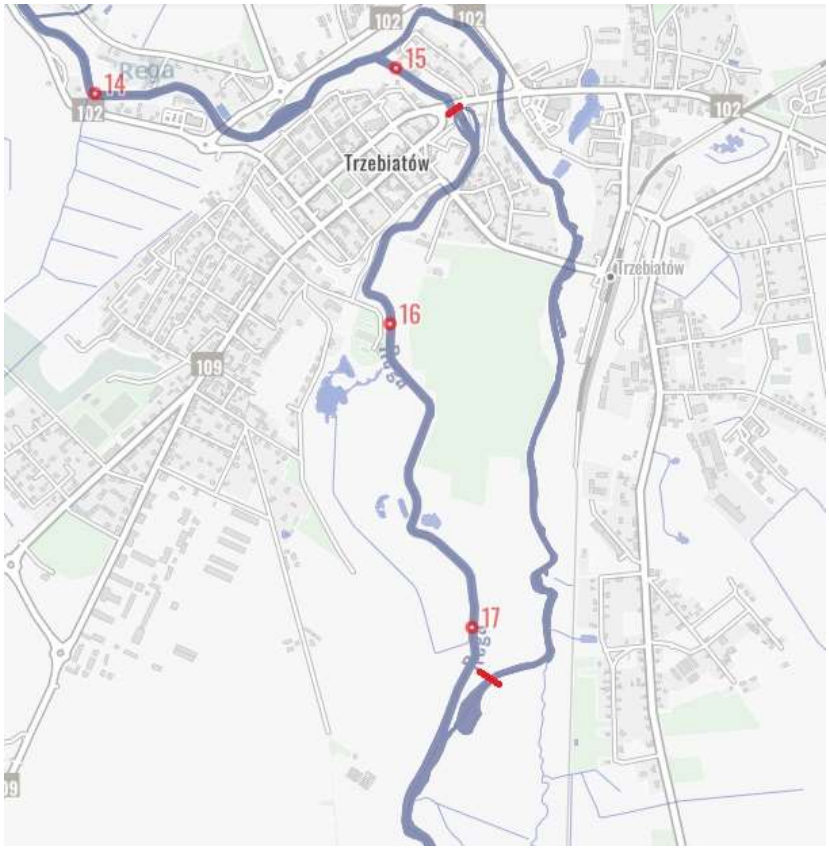
Localisation/place: Trzebiatów manucipality, Rega basin – 3rd straight flowing to Baltic river in Poland, West Pomerania. Water Region – Odra and straight Baltic Sea tributaries



Hydraulic head/height of dam: 1,6 m, old HPP from 1926-1927 placed at 16th km of river from its mouth to Baltic Sea



Fish passage presented at the pictire is very old and work very bad. It need to be changed into better working,a s a minumum action.



Next wire with next HPP close access for migration. Fish passage work good, but it is a place where spawners where fishing for spawners takes place and only small part of them could pass the barrier

Suitable spawning conditions down and upstream the the dam:

The removal/ restoration of good connectivity or modification on the dam would open 180 km migration route for salmon in the Rega river and additional 70 km in its main tributory (Mołstowa). Additional 60 km km could be open for sea trout migration in upstream sections of smaller tributaries (Stara Rega, Brzeźniacka Węgorza). There are more doms at Rega, but all of them was reconnect thanks to LIFE project. The main barrier is first dam, whichThis would increase the accesible for salmonids waterflows by few hudreds %.

C*onnectivity (length to upstream barrier; downstream connectivity, length to Baltic Sea):*

The dam in Rega river is situated 15,2 km from mouth to the Baltic Sea.

Observation of Salmonids down- and upstreams barrier today

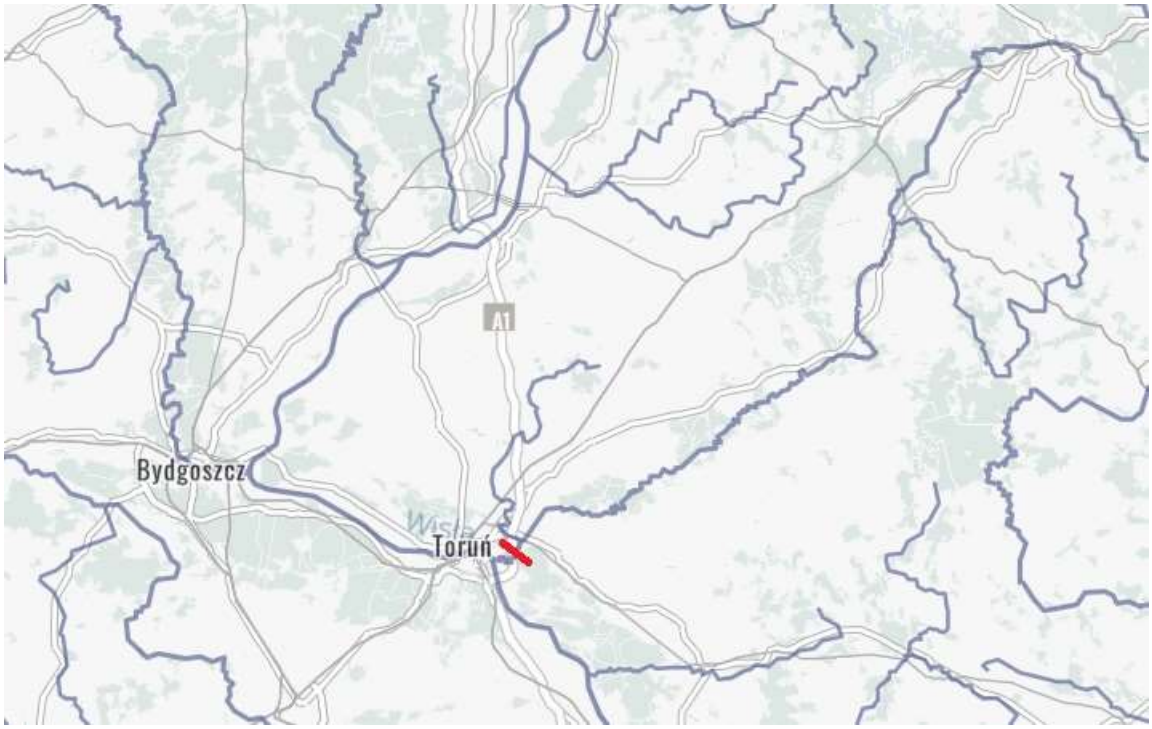
Salmon spawing was observed but some indyviduals, mainly at spawning ground down from the dam.

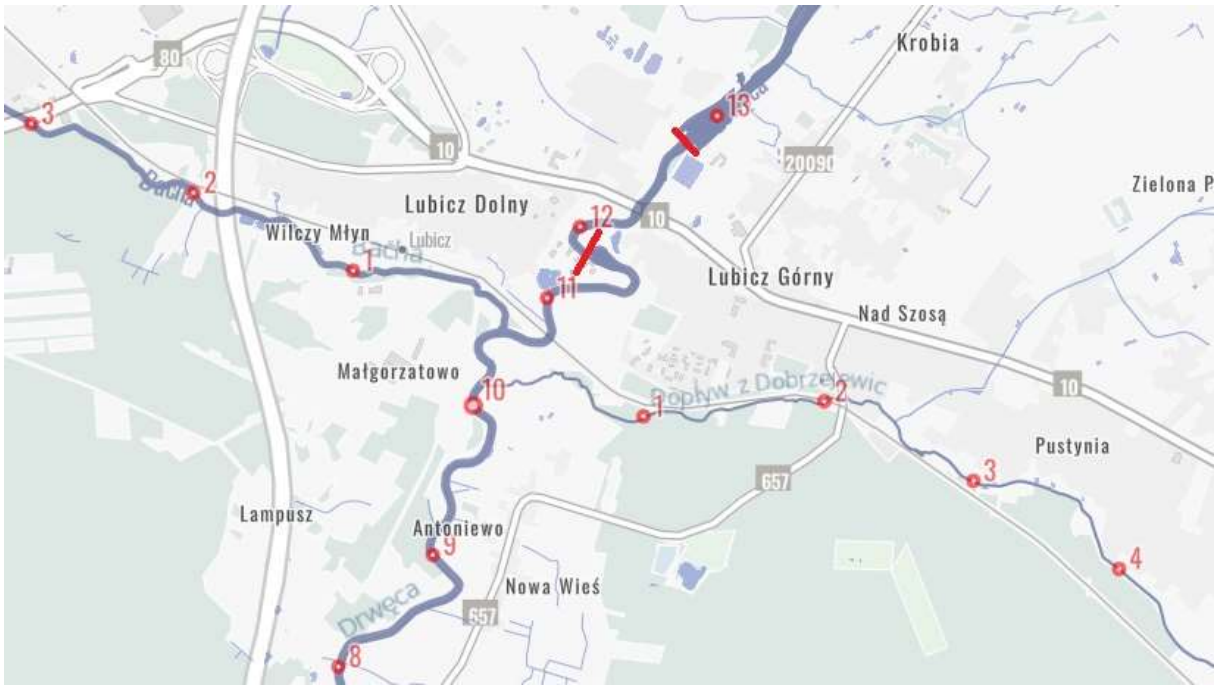
Other info:

The recent Ecological water quality assessment according to River Basin Management Plans identified high water good status in The Rega river and tributaries above it either good or high quality. All basin with part of Rega's Valley in Nature 2000 area and water crowfoot river site- 3260.

Name of barrier/dam object: Lubicz dams , Drwęca river basin

Localisation/place: Vistula basin, Drwęca sub-basin. Lubicz manucipality





Hydraulic head/height of dam: Dam head near 3,2 m both. State owned, handed over to Lubicz municipality**.** There are 3 HPP and 2 weirs, for fish farm.

Suitable spawning conditions down and upstream the the dam

At big part of Drwęca river catchment was established ichtiophauna reserve. Last years was plan to modify existing fish passages but it looks, it is not done enough good. Spawning grounds up from the Lubicz are placed at near 200 km of main river and next 200 km at a lot of tributaries. Potential for natural spawn in this basis iv very big. Second, Drwęca river mouth is down from Włocławek dam, the biggest barrier for migration at Vistula river.

Connectivity (length to upstream barrier; downstream connectivity, length to Baltic Sea)

Wiers are placed closely to the mouth, 226 km from the Baltic Sea. The removing/ connectivity restoration/ of dam will support restoration of salmon, sea trout, and many others migratory species in both, Vistula and Drwęca rivers.

Observation of Salmonids down- and upstreams barrier today

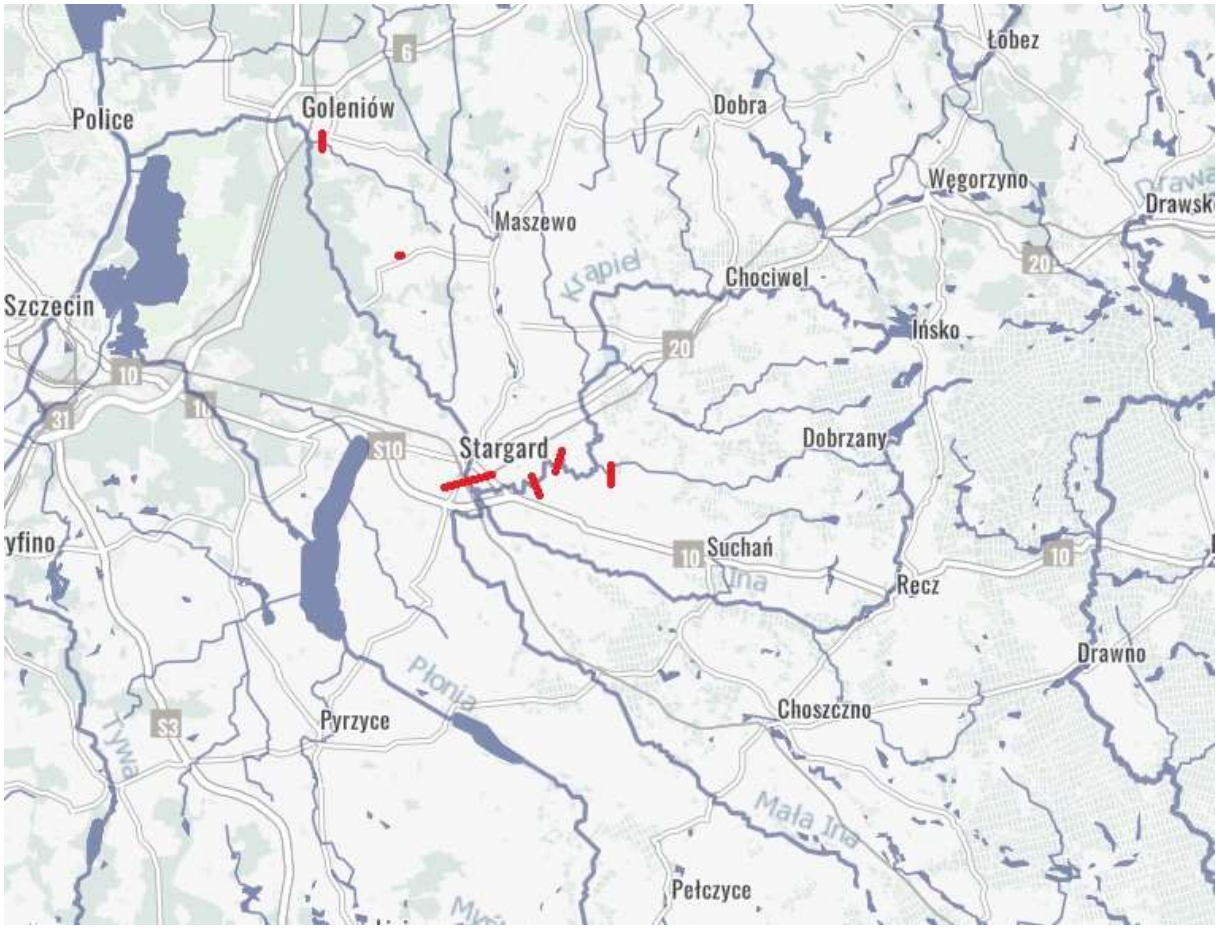
The salmonids populations above Lubicz is poor, but both Atlantic salmon and sea trout every apear in down stretch of Drwęca river.

Other info:

The recent Ecological water quality assessment according to River Basin Management Plans identified moderate in all basin, but one of negative indicator is poor connectivity. Upper stretches of tributaries are very goodfor salmonids.

Name of barrier/dam object: Weir in Stargard, and smaller weir ruing in tributaries of the Ina river

Localisation/place: Odra basin, Szczecin Lagoon sub-basin. From administration perspective: Stargard manucipality. Weir is owned by state. Weir supply small HPP at bypass channell. It is near 100 years old what could be a difficult to remove, but it is possible to remove water part, leaving bridge.



Ina river with barriers to remove.

Hydraulic head/height of dam: 1,5 m

Purpose of the dam: built to supply formed watermill, currently HPP. Ruins were supplying watermills. Not used currently.

Suitable spawning conditions down and upstream the the dam

Removal of the weir in Stargard will open 70 km of upper Ina with very important for spawn tributaries. Weirs cut access to good status gravel bottom streams.

Connectivity (length to upstream barrier; downstream connectivity, length to Baltic Sea)

The weir in Stargard is placed at 58th km of Ina. Smaller weir were placed closely to main river, and cut all tributaries.

Observation of Salmonids down- and upstreams barrier today

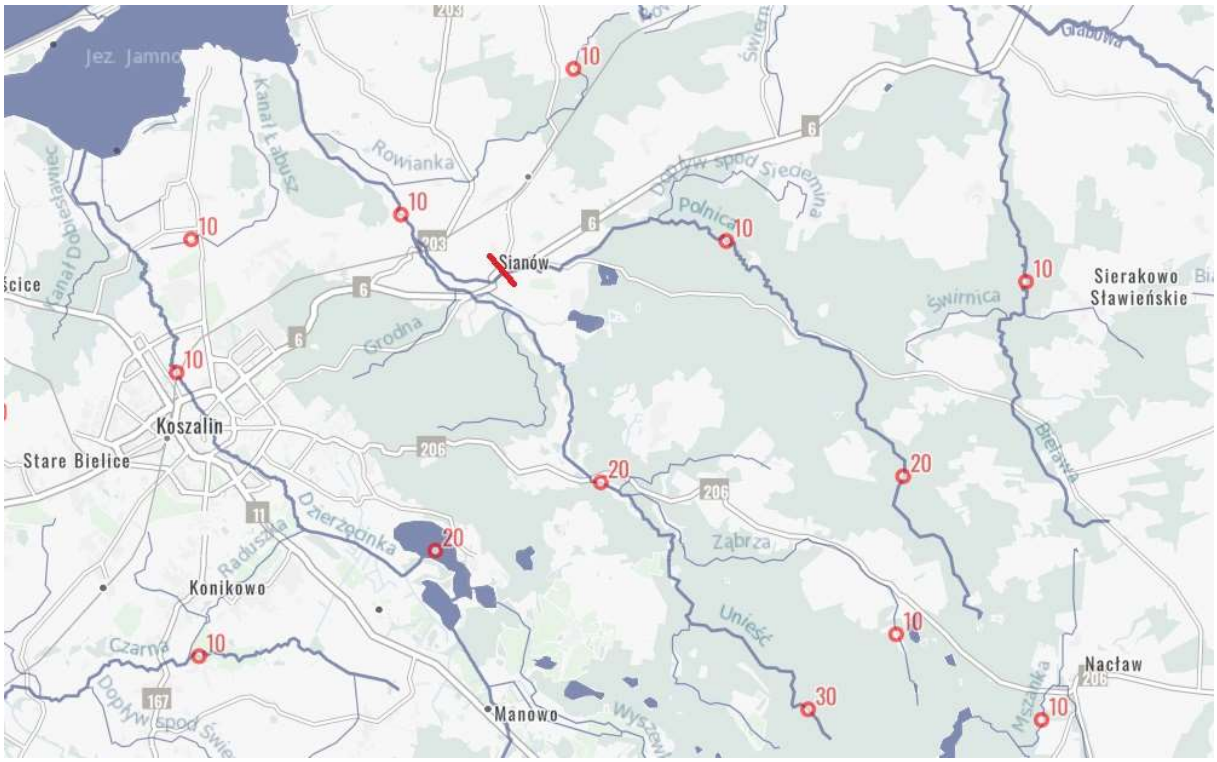
Ina is one of the best sea trout river in Poland from 30 years. Main problem is weak quality of water after strong rains – pollution from intensive agriculture and bad working sewage plants/ especially Stargard/ At the same time it is still water crowfoots river with huge potential. Every season some Atlantic salmon are observed.

Other info: next year Ina will be Nature 2000 area.

Name of barrier/dam object: Sianów weir ruins , Unieść basin, Polnica river

Localisation/place: Sianów municipality, West Pomerania

Hydraulic head/height of dam: 2 m. Not used



Suitable spawning conditions down and upstream the the dam

The suitable spawning conditions are observed at upper 15 km of the river.

Connectivity (length to upstream barrier; downstream connectivity, length to Baltic Sea)

The Polnica is second level Baltic Sea tributary, accesable for all migratoiry species..

Observation of Salmonids down- and upstreams barrier today

Down from weir every year some sea trout are observed.

Other info:

The removal of the dam would open the way for sea trout migration to the habitats with the high potential for sea trout.