

Friedek

## One year after the Oder catastrophe: What is Poland doing to protect the river?

*Exactly one year ago, hundreds of tons of dead fish drifted down the Oder river. Poland was criticized for not doing enough to counter the environmental catastrophe. Has anything changed since then?*

*Author: Patricia Friedek, Editor: Johanna Romberg, Translator: Gretchen Vogel*



*The Międzyodrze region is already relatively wild, but environmentalists want to make it a national park in order to protect it even better.*

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The broth stings your nose. Synthetic, chemical, a bit like gasoline. Like a raging waterfall, it gushes out of an open pipe into a small canal. Anna Meres squats next to the pipe and scoops out a mugful of the liquid. She measures its electrical conductivity to determine its salt content: 18,250 microsiemens per centimeter — saltier than the Baltic Sea. The temperature is also far higher than many freshwater fish could withstand: 30.8 degrees. "Nothing has changed," Meres says with a shrug. The wastewater comes from the Halemba coal mine in Silesia. The canal it flows into leads to the Kłodnica river, and from there it has a direct path to the Oder, called the Odra in Polish.

Soon after the first tons of dead fish floated down the Oder at the end of July 2022, environmental organizations began taking regular samples of wastewater from mines along the river.

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*Anna Meres taking samples of the wastewater © Maciej Krüger / Onet.pl*

Anna Meres is Climate and Energy Campaign Coordinator at Greenpeace Poland. On that Tuesday in June, she and her colleagues once again found that at Halemba the wastewater salinity and temperature levels have remained the same since the fish died. "The worst thing is that they are legal," says Meres' colleague Marta Gregorczyk. "The government has done nothing to reduce salinity. It still acts in the interests of the mines."

In many places on the Oder, the water temperature and electrical conductivity are still too high. But at least such data are now being collected. After the fish die-off, the Polish government introduced regular monitoring on large stretches of the Oder, and the results are publicly available on their website.

The invasive and toxic algae *Prymnesium parvum*, also known as golden alga, thrives in brackish water, so a saline and nutrient-rich river offers optimal conditions for reproduction. Golden alga toxins in the Oder killed 1,000 tons of fish last year, as well as countless numbers of mussels, snails and other algae.



*Fish killed by the alga toxins  
© picture alliance/dpa | Patrick Pleul*

The government and environmental organizations agree that it was the golden algae that triggered the environmental catastrophe. But they disagree about who is responsible for the fact that this alga was able to spread so widely in one of the largest rivers in Europe.

For Greenpeace Poland, the matter is clear. The NGO published a report this year in which it named two Polish mining companies as responsible for the salinization and thus for the fish kill in the Oder. An analysis by the EU Commission comes to a similar conclusion. According to the report, "A key factor enabling the proliferation of this species was the high salinity of the river during this time, probably in part resulting from discharges of saline industrial wastewater e.g. from mining." The authors cite drought and low water levels as further factors, which led to less dilution and slower water flow. High nutrient concentrations, especially phosphorus and nitrogen, also contributed to the algal bloom.

The Polish Ministry of the Environment, on the other hand, downplays the responsibility of mining companies for the fish kills. In response to a query by RiffReporter, a spokesman noted that municipal sewage contributes more nutrient-rich wastewater to the Oder watershed than the mines do.

Environment Minister Anna Moskwa even questioned the importance of salinity for the deadly algal bloom. In a radio interview with "Polskie Radio 24" she said: "It is a simple story that people are told. If salinity were solely responsible for the algal bloom, golden algae would take over any salty sea and no life would be possible there. There would be no fish." But the environment minister left out a key fact: Golden algae bloom in so-called brackish water, a mixture of fresh and salt water. They can't survive in normal sea water, which is much saltier. And in the Oder, they couldn't have multiplied to such an extent if the salt discharge had not provided them with ideal living conditions.



*Wastewater from the mining companies*

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Meres and her team make their way through tall grass to a different discharge point, where the wastewater from the Halemba mine rushes straight into the Kłodnica – hot, salty

and unfiltered. Sometimes, the activists say, the police come here to check ID cards. This time, it's only the local residents who take notice of the sampling team. One of them is Janek, who wants to be identified only by his first name. He says that he often walks along the Kłodnica with his dogs and has observed that the mines have sometimes temporarily stopped the discharges now that NGOs and scientists have been taking samples more frequently.

The mining company Polska Grupa Górnicza, which owns the Halemba mine, did not respond to queries from RiffReporter. A spokesman for the second mining company accused by Greenpeace, Jastrzębska Spółka Węglowa (JSW), says that the water discharges from its mines have been approved. The wastewater from one of the mines is sent to a desalination plant, which uses it to produce table salt. The effluents from most of JSW's mines are fed into a dosing system. "The retention and dosing functions make it possible to reduce the maximum salt concentrations in the Oder by 60% below the permissible values," the spokesman wrote in an email. The basins in the system can hold back the flow of wastewater when the water level of the Oder falls.

There is not yet a dosing system at the Knurów-Szczygłowice mine. But there, writes the spokesman for JSW, the company is considering building either a retention basin or a desalination plant. The spokesman did not answer a question about the costs. He only pointed out that the water from the other mines is discharged into the tributaries of the Oder in an environmentally friendly manner.

So far, these "environmentally friendly" discharges are still officially permitted. But the Polish government, headed by the right-wing PiS party, has taken some steps since the environmental disaster to mitigate some of the symptoms of the catastrophe. For example, it has authorized the use of chemical treatments to inhibit the growth of golden algae.

In addition, in mid-July the Polish parliament passed a special law on the "revitalization of the Oder after the disaster," which the Polish government is funding with the equivalent of around 267 million euros. Among other things, the law provides for investments in sewage treatment plants. The government also wants to set up a water authority to document and reduce illegal discharges of sewage. And



*Environmental organizations accuse two Polish mining companies of being partly responsible for the scale of the 2022 summer disaster.*

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companies could face fines of up to one million zlotys (roughly 250,000 euros) if salt discharges into the river are not adapted to drought conditions.

Most environmental organizations welcome these measures. But they are largely critical of the overall law — and not only because the government didn't include them in the deliberations.

The law "is rubbish," the Polish environmental foundation Greenmind said in a statement. "It doesn't improve the situation of the Oder, it makes it worse," agrees Greenpeace's Gregorczyk.



**"The law doesn't improve the situation of the Oder, it makes it worse"**

Marta Gregorczyk,  
Greenpeace Poland

The NGOs' main criticism: On the Oder and in the watershed, the Polish government is planning further interventions that would encourage a repetition of the disaster. The already controversial development of the Oder would be accelerated. Among other things, the construction of several diversion dams is planned, which would transform the Oder river into a chain of lakes. That would leave the river even more vulnerable to drought, and biological diversity would decrease. The dams are designed to aid river navigation, but they are being authorized under the guise of revitalizing the river.

For many years, Poland's government has been trying to turn the Oder into an efficient waterway for industry, despite warnings from environmental organizations, scientists and the EU Commission. Among other things, it wants to deepen the river to make it navigable for larger freight ships. Both environmental organizations and Brandenburg's environment minister have already complained. "The Oder expansion will further homogenize the river and make it less resilient. The more tributaries a river has, the greater the variety of habitats — including those into which wildlife can escape in the event of a toxic wave," explains water expert Sascha Maier from the German environmental organization BUND. He has been following the development of the Oder for decades; he also participated in the lawsuit against its expansion. In order to

prevent another catastrophe, says Maier, not only does the expansion need to stop, but movement in the opposite direction is needed: the river needs targeted renaturation. However, right now that seems a distant goal. Although the Supreme Administrative Court in Warsaw ruled in March that the Oder expansion had to be stopped, construction work has continued.

For Robert Suligowski, all of this is nothing less than a symptom of a national crisis. The catastrophe showed how incapable the Polish state was in dealing with an environmental event of this magnitude, he says. Suligowski is an ecologist and Green party politician in Wrocław, where the Oder flows through the middle of the city. There, too, he says, the residents remained ignorant for a long time about what was happening in the river. However, "since the catastrophe there has been a greater awareness of the Oder and the environment as a whole." That's perhaps one positive effect of the fish kill.

This awareness is also apparent in Międzyodrze, directly on the German border and almost 600 kilometers downstream from the Silesian Halemba mine.

In the Międzyodrze the effects of the catastrophe are still clearly visible. The Oder has washed masses of empty snail shells and mussel shells onto its banks. The mussels are an important part of the ecosystem in the river. They are food and cleaning crew at the same time: fish and other creatures eat the mussels, and the bivalves also filter plankton and small organic particles from the water. Experts estimate that more than 80% of the mussel and snail stocks in the Oder were lost as a result of last summer's disaster.



*Empty snail shells and mussel shells*  
© Patricia Friedek

In Międzyodrze, Dominik Marchowski fights for the recovery of the German-Polish river. He is a biologist specializing in ornithology. With a team of experts, community workers, artists, residents and media representatives, he is working toward an ambitious goal: to set up a national park in the Lower Oder Valley on the Polish side. There is already a Lower Oder Valley National Park on the German side, but on the Polish side it has so far remained a so-called landscape park. Marchowski calls this "nature conservation light."

The idea of a national park that includes the entire Lower Oder Valley has existed for more than 30 years. But since the Oder disaster, calls for a national park have also become

louder on the Polish side. A petition for a national park was initiated by Greenpeace and the newspaper Gazeta Wyborcza, which is critical of the government, shortly after the crisis began.



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**"I have the feeling that the fish kill has created a critical social mass that wants to make a difference"**

Dominik Marchowski,  
biologist

"I have the feeling that the fish kill has created a critical social mass that wants to make a difference," says Marchowski, as he peers through his binoculars, trying to spy a kingfisher, the mascot of the landscape park. A heron strides through the river water, and a furry head glides through the water with a branch in its mouth. A beaver? More likely a muskrat. Nature in Międzyodrze still seems untouched.



*The kingfisher is the symbolic animal of the Lower Oder Valley Landscape Park in Poland.*

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Is a national park really needed when the landscape park is already so rich in nature? "Yes, absolutely," Marchowski says. Establishing a national park would also create a park management, an institution that would take care of restoring the river to its natural state. Protection is currently limited. It

would be difficult to prevent construction projects, and hunting migratory birds is still allowed. Both would be strictly forbidden in a national park. Fishing would be allowed in the national park, but with restrictions — and fishermen could be involved in conservation. That would be good for the fish population in the Oder, because Międzyodrze, with its many shallow channels, is an important spawning area.



*In the Lower Oder Valley Landscape Park, the river can spread far into the countryside – in oxbow lakes that meander between meadows.*

*©Piotr Fisher Rosiński*

Another argument in favor of the national park: Scientists would observe the Międzyodrze more closely and develop strategies for better protection of the entire river system. As an example, Marchowski cites the careful management of meadows on the bank, which would reopen habitats for both shorebirds and meadow birds. This is already being practiced in the Lower Oder Valley National Park on the German side.

Marchowski and his team have already had their first successes. Two out of four neighboring municipalities support the project. In addition, the government has just designated a new nature reserve south of the Międzyodrze. This is much smaller than the hoped-for national park, but Marchowski sees the move as a significant concession from a government that generally doesn't care much about conservation.

Marchowski and his group will probably not get their national park project through before the parliamentary elections this fall. Prime Minister Morawiecki has promised to build new national parks during the current legislative period. So far, however, not one has emerged. When asked, the Polish Ministry of the Environment stated that it was not currently working on establishing a national park in Poland's Lower Oder Valley. Nevertheless, the environmentalists are still sticking to their plans — and they will continue to do so even



if PiS continues to govern after the autumn elections, Marchowski says.

As desirable as a national park in Międzyodrze would be, it would not be enough to protect the entire Oder from a disaster, says Maier from BUND. If water quality regulations are weakened to favor shipping, areas within the German park will inevitably suffer ecological damage. That makes a near-term solution for the salt discharges all the more urgent.

Germany's federal environment minister, Steffi Lemke of the Green party, is also committed to this. Most recently, at the beginning of June, she appealed to the Polish government to do more to reduce the salt discharges. And she has repeatedly spoken out in favor of stopping the development of the Oder, which Germany has officially supported for a long time.

Consistently protecting the Oder will have economic costs, says Robert Suligowski, the Polish Green party politician. "It involves dozens of industrial plants and different types of effluent and contaminants. The desalination plants are not exactly cheap, and many of the mines are in financial distress." But there are other sectors of the economy that could benefit from a revitalization of the Oder, including nature-focused tourism, which could also create more awareness of ecological issues. There is also a need for better cooperation between the countries through which the river runs. In addition to Germany and Poland, this also includes the Czech Republic.

Good ideas and hopeful projects are plentiful, but so far real, effective steps are few. That means there's a high risk that the last summer's catastrophe will repeat itself. Already in June, 450 kilograms of dead fish were found in the Gliwice Canal in Silesia. Since then, golden alga has spread in many areas, even if it is currently declining according to measurements by the Polish Ministry of the Environment. Environmentalists, meanwhile, continue to fight. In early July, Greenpeace submitted an application to the Polish water authority, Wody Polskie, to restrict wastewater permits for mines. A few days ago, activists protested against the new Oder Law. They poured piles of salt in front of the water authority in Wrocław, shaped into the letters "ODRA."

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