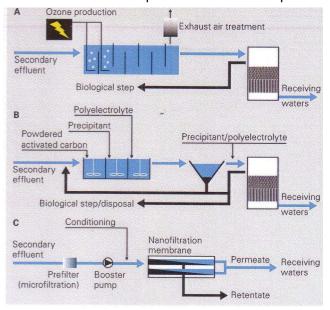


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Nanofiltration Powdered activated carbon Ozonation

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Diclofenac Clarithromycin
Carbamazepine
Benzotriazole
Atenolol
0% 20% 40% 60% 80% 100%

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Hazardous Substances

Pharma-Cocktails endanger our waterbodies

Hazardous substances

Existing national legislation prohibits any discharges of dangerous substances into waterbodies. That's a clear directive. Not so clear is what counts as a dangerous substance. The EU and its Member States have listed a fistful of known chemicals under the Hazardous Substances Directive, but there are far, far more.

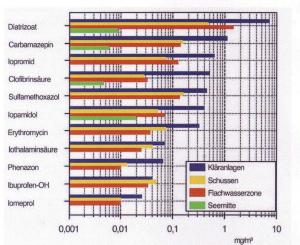


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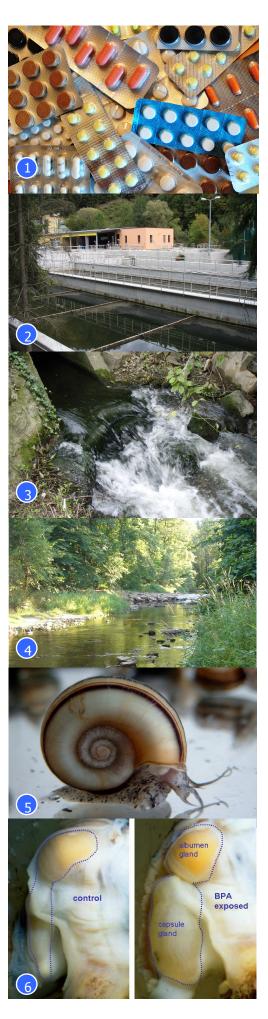
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Here you can see the average contents of pharmaceuticals in the underruns of two purification plants (blue), the river "Schussen" (yellow), in the shallow water zone of the Lake Constance nearby Eriskirch (red) and in the open water of the Lake Constance (green) It is obviously that the pollution is man-made and caused by purification plants.

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Effects on Humans and Fish

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For a long time nobody wanted to face these problems. Fishermen were the first to point this out. More and more aquatic animals have shown a decline of males, which means nothing other than continuous feminisation. In a lot of lakes Minnows have disappeared. With their short lifespan they were one of the first indicators of problems. Investigations on young men have shown everywhere a steady decline in male fertility. And also everywhere we are seeing an increasing number of cancers, especially breast cancers. More and more children are born ill. Meanwhile science has found out a lot more of the ill effects.

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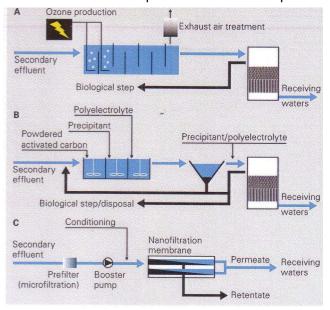
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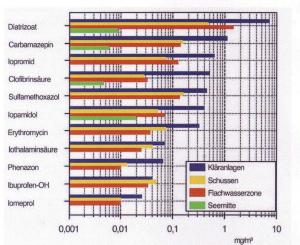


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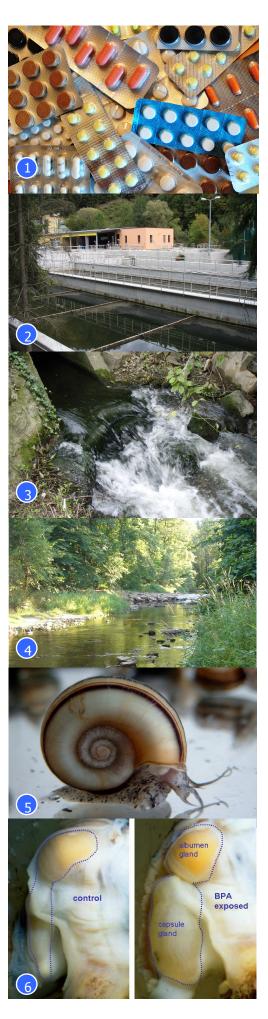
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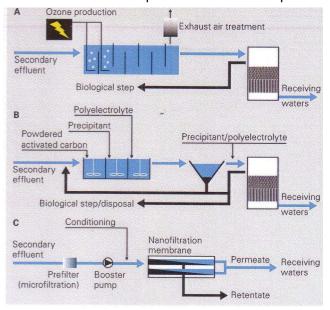
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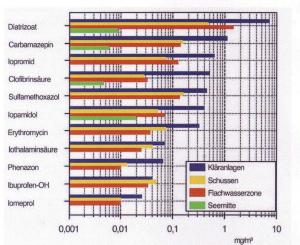


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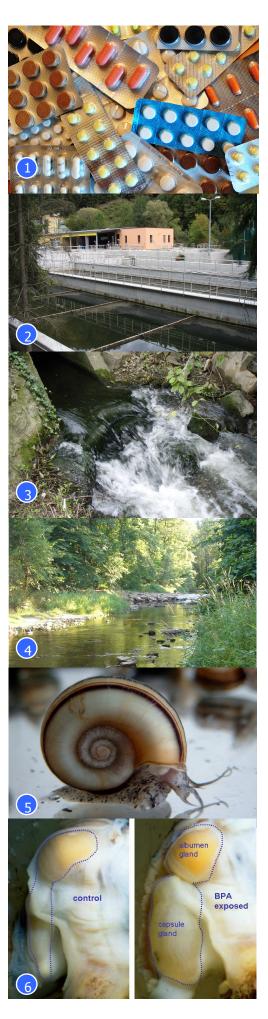
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