

## Agriculture and Water Quality

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# Editorial

## Water Protection and Agricultural Policy Sitting in the Same Boat



Stephan Müller, Head of the Water Protection Department, FOEFL (till April 2004 head of EAWAG's Water and Agriculture Department).

When we think about summer, we think about bathing in our lakes and rivers, swimming from one bank to the other, or navigating gently down the Rhine in a rubber dinghy. From Stein am Rhein to Schaffhausen, for instance – one of the most beautiful river landscapes in Europe. We pass railway bridges, dense forests, camping places and everywhere open, rural areas. Agriculture is one of the dominant uses of land in Switzerland – and its role in water protection is decisive.

Important measures in the agricultural field influencing the improvement of the water conditions were the linking of the direct payment schemes to the Proof for Ecological Performance (PEP), and the introduction of Article 62a in the Water Protection Ordinance, which created the basis for financing the remediation of contaminated water bodies. Although the European Union is currently developing its agricultural policies in a similar direction, these laws place Switzerland in the vanguard of water protection in Europe.

Now, after more than a decade, how is the agricultural policy faring? Most of the contributions in this edition of EAWAG news are in answer to this question. Good results have been achieved in the reduction of nitrate levels in groundwater. Since the mid-90s, impacts have been significantly reduced in two-thirds of the tested sites. Progress has also been made in an other classical problem area – the phosphate emissions to Swiss lakes. Some large lakes are still too heavily contaminated. In addition, the accumulation of phosphorus in soil due to excessive fertilization is a reality and will lead to increasing impacts in the lakes.

The management of the approximately 400 pesticides approved for use in Switzerland leaves much to be desired. The pesticide concentrations measured in small and medium-sized watercourses in many places exceed the legal limit of 0.1 µg/l, laid down by the Water Protection Ordinance, as well as scientifically determined quality values. Furthermore, the BUWAL groundwater monitoring program has detected traces of pesticides in 60% of the ground water. A more consistent protection of surface waters and ground water is therefore absolutely essential.

In order to reduce the impacts on water bodies from agriculture further, the Direct Payments Ordinance and/or the provisions of the PEP must be adapted accordingly. The implementation of the WTO agreement means that market support funding will be replaced by direct payments, which provide the best mechanism for water quality protection. Recent evaluations developed on the basis of site-specific features demonstrate that this is possible without raising the economic burden.

Meanwhile, we arrive with our boat at the city of Schaffhausen. Does our water protection and agricultural policy journey end here? Or can we pass the Rhine Falls overland and use the time for effective and constructive discussion of the new Agricultural Policy 2011? Refreshed with new ideas on board, we can take to the water again below the Falls and swiftly solve the pressing problems.

