

## RESUME 2003

In 2003 the first designation of salmonid and cyprinid waters within the framework of Czech legislation was finished and data for an amendment were prepared based on the Government Decree No. 113 as of 29 November 2003. All data required for an EU report was prepared. Standard monitoring of water quality for indicators required by Government Decree No. 71/2003 Coll. and Directive 78/659/EEC was continuously coordinated and completed. The state of salmonid and cyprinid waters was evaluated for creation of action program to its improvement, which is being elaborated by state companies Povodí with guidance of Ministry of Agriculture and the activities were coordinated during the year by the investigator team.

The final report 2003 sums up the legislative designation of salmonid and cyprinid waters and adaptation of this topic in other legislative provisions. The implementation work on Directive 78/659/EEC from the beginnings in 1999 till 2003 has been the first opportunity to test some complex approaches to evaluation of running water on a smaller scale, which is dealt by Framework Directive 2000/60/ES within the EU.

The monitoring of salmonid and cyprinid waters proceeds in 2003 on 625 profiles of ČHMÚ net, nets of all 5 state companies Povodí, ZVHS and new profiles. New profiles were introduced in 2002 in locations where no monitoring had been executed and where it was not possible to evaluate the state of streams. The monitoring is also planned with minor corrections in 2004, so it will be possible to evaluate at least two years. The monitoring optimization of 2004 is mentioned in chapter 4.6 of the final report 2003.

Due to extreme fluctuations in temperatures in 2003 more measurements of diurnal oxygen has been carried out than it was planned. The report took over results of measurements of oxygen that were not resolved in other projects. The concentration of oxygen during diurnal fluctuation even fell below 5mg/l and values of 1mg/l were detected during measurements at Jevišovce.

There were fears that after the extensive floods in 2002 the division to cyprinid and salmonid waters might change due to this natural process. It was documented by the aggregated data this presumption has been fallible.

It was supposed the situation concerning the indicator of non-ionized chlorine would be solved last year. The investigator team of VÚV monitored 26 chosen streams on longitudinal profile which had a higher value in 2002. The measured data in 2003 indicated only inconsiderable values. The state companies Povodí measured this indicator within special purpose monitoring on 410 profiles. The methodology (prescribed by Directive 78/659/EEC) shows significant difficulties in measurements and in evaluation. We recommend to consider disturbances at  $\text{pH} > 6$  and to acknowledge the limit value of 0,05mg  $\text{Cl}_2/\text{l}$  based on both legislative regulations. After validation of data from the 12 measurements in 2003 we recommend to consolidate and correct the monitoring.

Part of the assignment was evaluation of 2001- 2002 monitoring on 625 profiles from 7 monitored nets of state companies Povodí on Vltava, Ohře, Morava, Labe, and Odra rivers. The situation has slightly improved compare to the last two years in evaluation of the required parameters.

The evaluation has become the basic foundation for selection of sectors, not fulfilling the acceptable limit values. 43 salmonid and 51 cyprinid waters were selected and their

improvement is treated in action programs elaborated by particular state companies Povodí. Coordination of this activity in connection with the implementation of Directive 78/659/EEC was one of the outputs of this years assignments.

Another major output is a map of size A0 comprising all stream designated by Government Decree No. 71/2003 Coll. The map was passed on the submitter in 1 copy together with electronic exemplar and calculation of costs for printing office. Layer and database editing of this map is described at the report. Access to maps interconnected with databases of fish waters is being finished parallel within the assignment Development of HEIS VUV. Maps and databases will be exhibited on VUV web pages- [www.vuv.cz](http://www.vuv.cz) and upon request available on CD.

A database containing 711 documents is available for Czech Republic's report to the European Commission about implementation of EU Directives. Particular documents will be supplemented by required data about a method of realization of provisions on improvement of water quality after completion of programs' set.