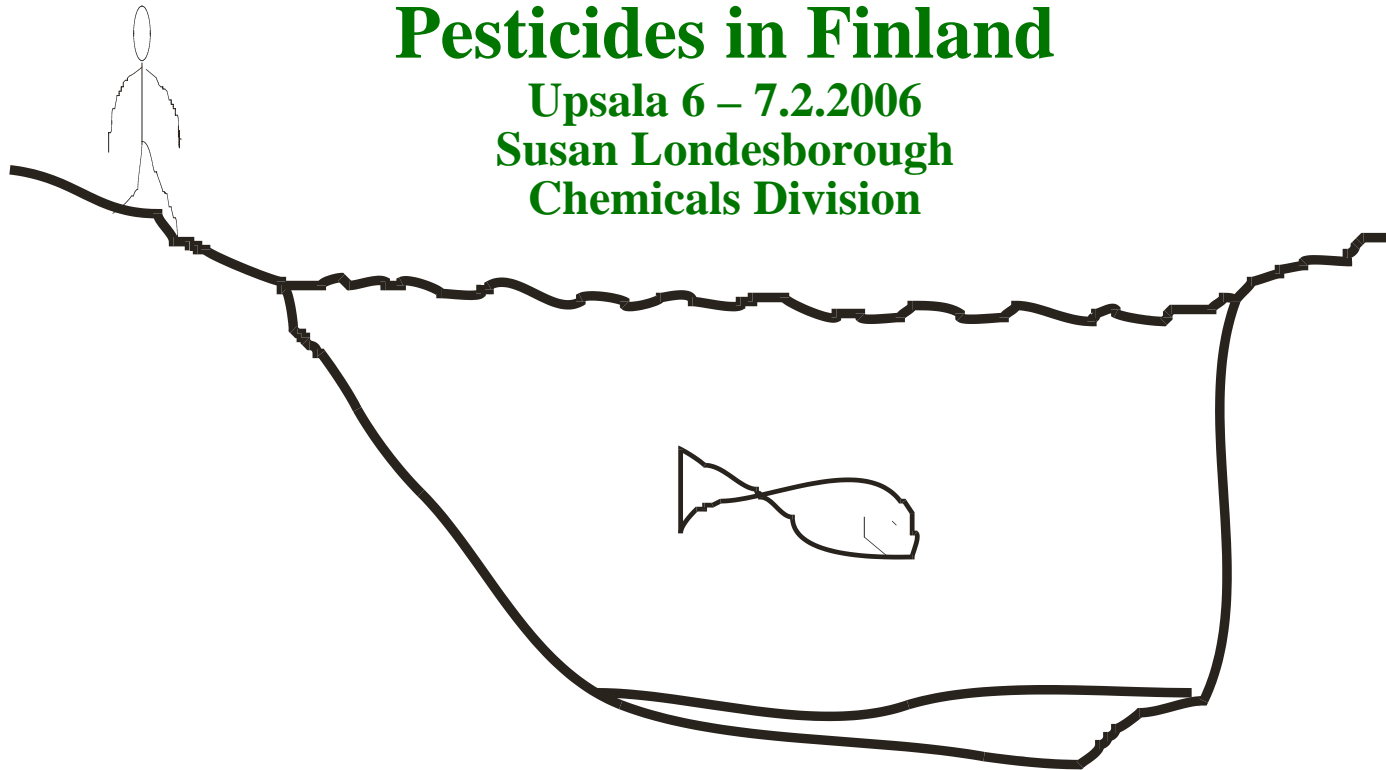




Deriving Water Quality Standards for Pesticides in Finland

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Environmental Quality Standards (EQS)

In the WFD EQS-values define the border line between good and moderate status in the classification of water bodies

- for WFD priority substances:

concentration < EQS => good chemical status

- and for other pollutants:

concentration < EQS => good ecological status

concentration > EQS => moderate ecological status

=> GOOD STATUS IS THE OVERALL OBJECTIVE OF THE WFD



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Methods:

- WFD annex 5, point 1.2.6
- Technical guidance document for the risk assessment of new and existing substances (TGD)
- For pesticides methods and principals of 91/414/EEC apply
- Guidance Document for deriving EQS (Fraunhofer/ Lepper 2002)

=> EQS values derived in Finland according to the same methods and format as for WFD priority substances

■ Data sources:

EU risk assessment reports

US-EPA Aquire ecotox –database

Nordic assessment reports of pesticides



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EQS values for six pesticides:

Dimethoate	insecticide
Ethylenethiourea (degradation product of mancozeb)	fungicide
MCPA	herbicide
Metamitron	herbicide (sugar beat, strawberries,
Prochloraz	fungicide
Tribenuron-methyl	herbicide

Selected pesticides represent different use purposes. Selection based on use volumes and properties. Selection on expert judgement with the help of a pesticide risk indicator



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Proposed EQS-values

	Fresh water μg/l	MAC-value μg/l	Marine Water μg/l	Sediment mg/kg d.w.	Secondary poisoning mg/kg fish (w.w.)
Dimethoate	0,7		0,07	-	-
Ethylenethio urea	200	200	20	-	-
MCPA	1,6	15	0,16	-	-
Metamitron	32	170	3,2	-	-
Prochloraz	1	7,3	0,1	0,3 – 0,4	3,3
Tribenuron-methyl	0,1	0,4	0,01		

Drinking water abstraction: Σpesticides < 1 μg/l (75/440/EEC)



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