



Assessment of groundwater quantitative status
in the River Basin Community Elbe
(FGG Elbe;
German part of River Basin District Elbe)

Results of assessing groundwater status in the River Basin Community Elbe (FGG Elbe)

Number and area of groundwater bodies:

total	in main aquifers	in deeper aquifers
224	220 95.808 km² [435 km²]	4 3.821 km² [955 km²]

Results of the pressures and impacts analysis concerning quantitative status:

Number of groundwater bodies have being identified as being at risk
of failing to achieve the Water Framework Directive's objectives concerning

quantitative status

because of significant pressures from

abstraction	salt intrusion	mining
2	1	5

Results of the assessment of groundwater status:

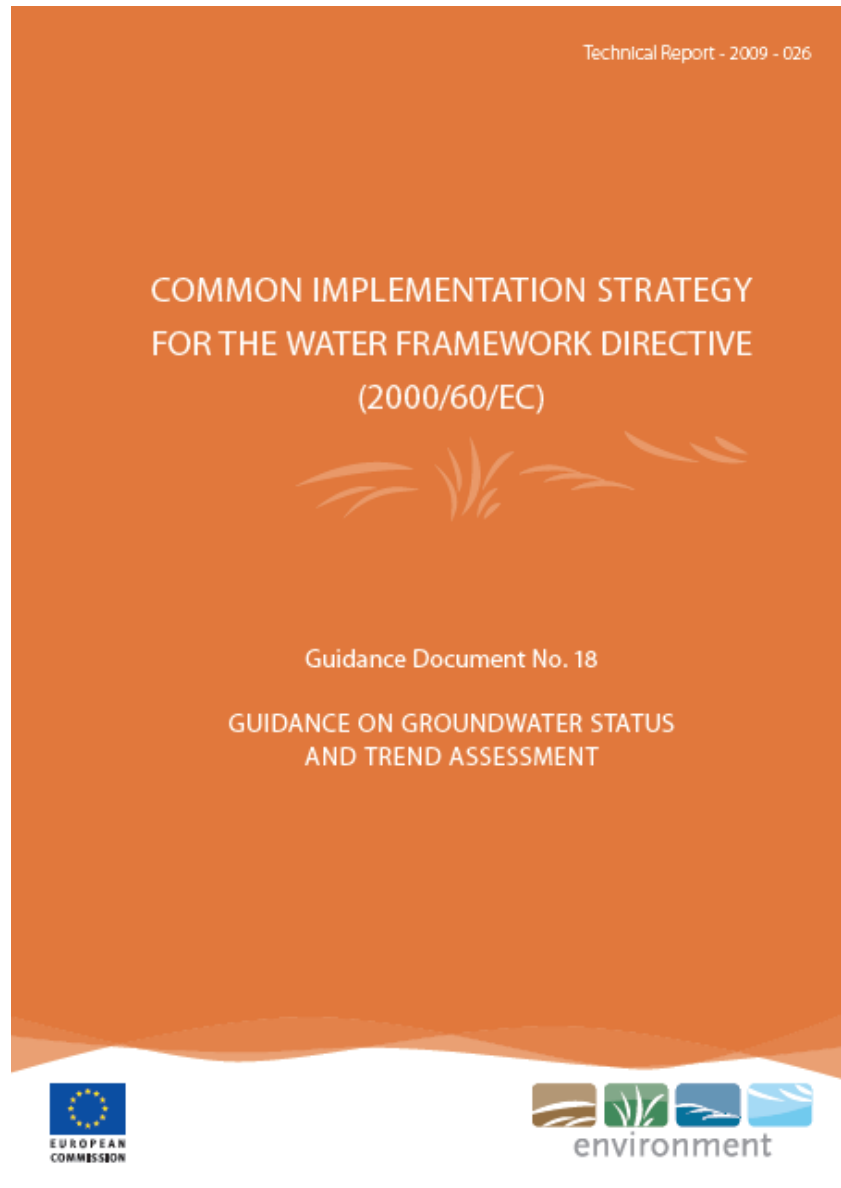
Number of groundwater bodies are considered to be of poor status concerning

<i>quantitative status</i>	<i>chemical status</i>	<i>chemical status</i>	
8	100	because of which type of pollutant	
[Total number]		nitrate	pesticides
		62	3
		other pollutants according to annex II GWD	
		15	

[Multiple answers

for one and the same groundwater body are possible]

Groundwater quantitative status assessment - Helpful Common Implementation Strategy (CIS) documents

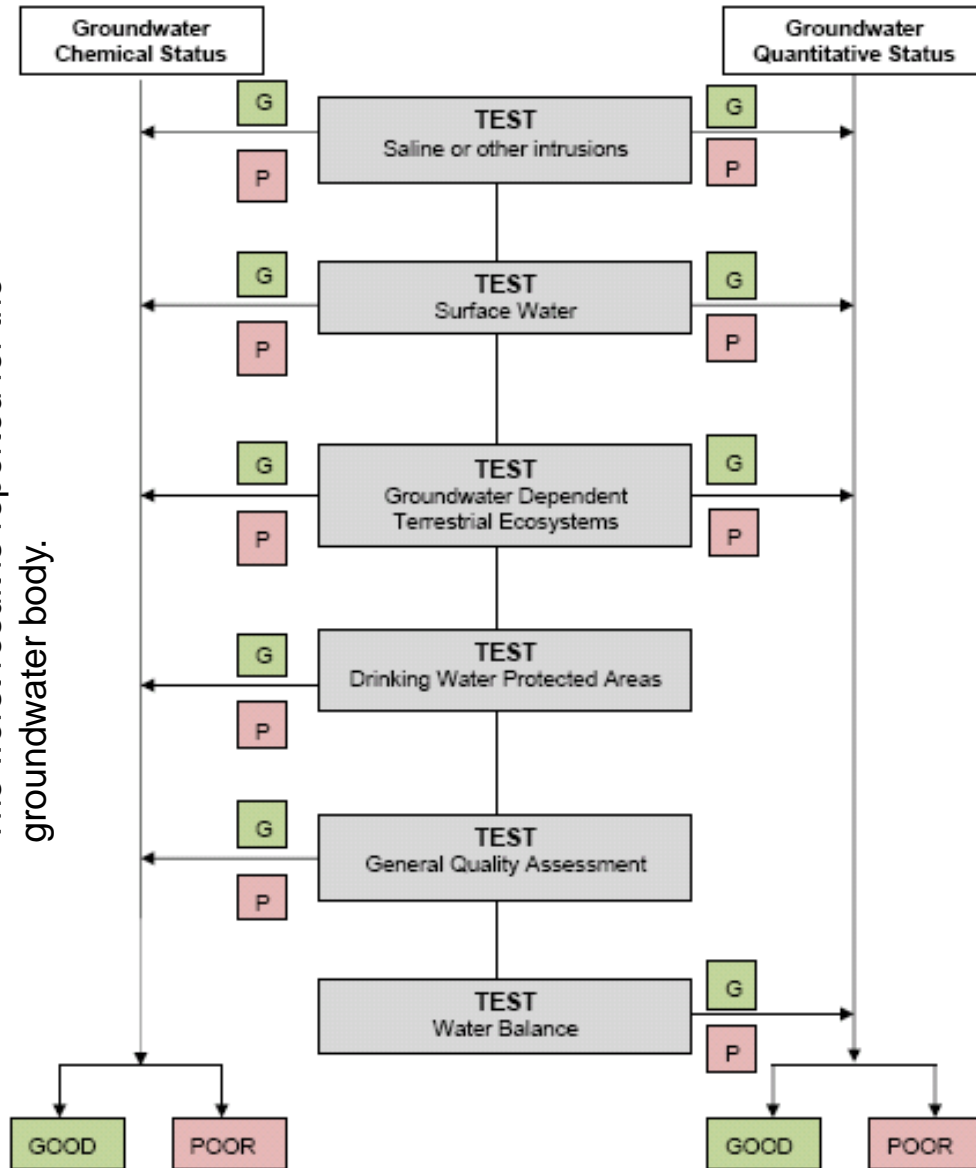


5 QUANTITATIVE STATUS ASSESSMENT

- 5.1 Definition of Good Quantitative Status
- 5.2 Elements of quantitative status assessment
- 5.3 Procedure for assessing groundwater quantitative status
 - 5.3.1 Test: Water Balance (GWB scale)
 - 5.3.2 Test: Surface Water Flow
 - 5.3.3 Test: Groundwater Dependent Terrestrial Ecosystems (GWDTE)
 - 5.3.4 Test: Saline (or other) Intrusion

Overall procedure of classification tests for assessing groundwater status

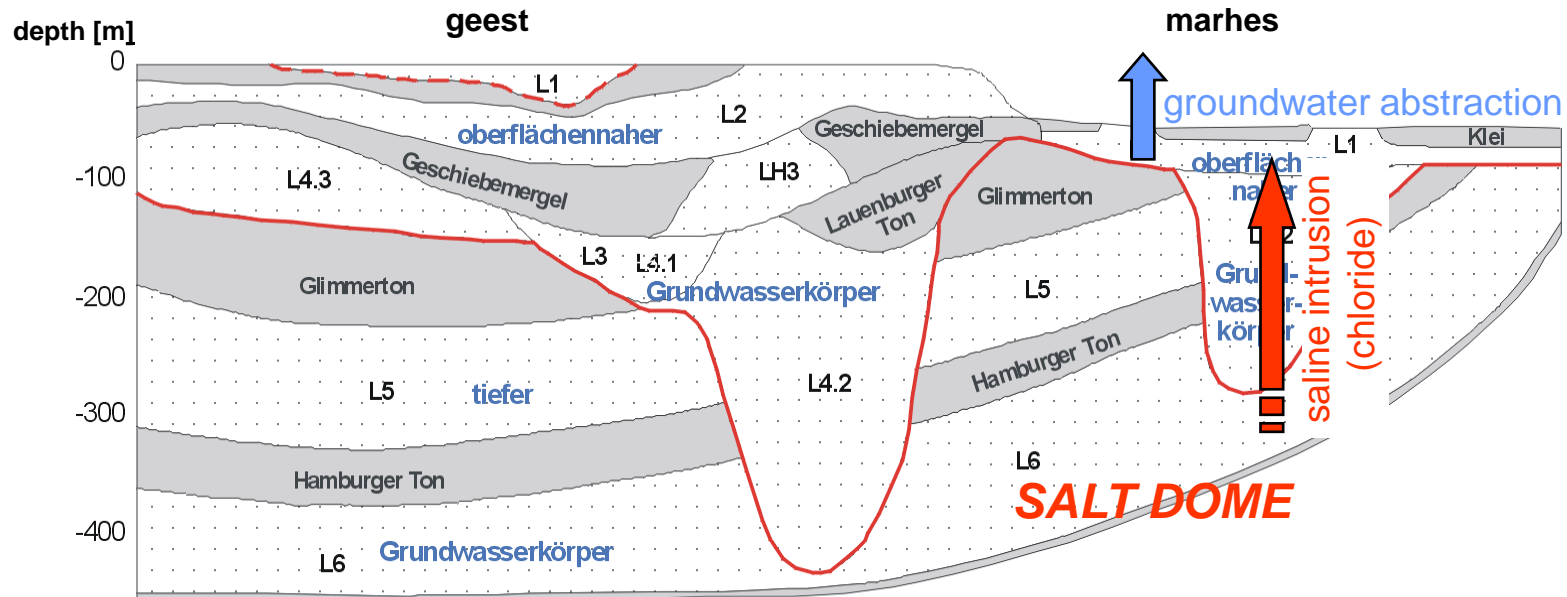
All relevant tests must be completed
(considering classification elements
which are at risk).
The worst result is reported for the
groundwater body.



*Did we make the test
in the River Basin Community Elbe
(FGG Elbe)?*



Geological conditions in Hamburg – Saline intrusion into groundwater body EI12



Geological profile of the north- and centralgerman granular soil region

L1 Sande, Holozän und Nachschüttphase der Weichsel-Kaltzeit in der Geest

nearest surface aquifer

groundwater bodies in main aquifers:

L1 Sande, Holozän und Nachschüttphase der Weichsel-Kaltzeit in der Marsch

L2 Sande, Weichsel-Kaltzeit und Nachschüttphase der Saale-Kaltzeit

LH3 Sande, Saale-Kaltzeit

L3 Sande, frühe Saale-Kaltzeit und Nachschüttphase der Elster-Kaltzeit

L4.1 Sande, Elster-Kaltzeit

L4.2 Sande, Kiese, Elster-Kaltzeit in tiefen Rinnen

L4.3 Kaolinsande (Tertiär)

first main aquifer

connected aquifers

groundwater bodies
in main aquifers

deep groundwater bodies:

L5 Obere Braunkohlensande

L6 Untere Braunkohlensande

deep aquifers

deep
groundwater bodies



Free and Hanseatic City of Hamburg
State Ministry for Urban Development and the Environment