11. ENVIRONMENTAL OBJECTIVES OF WATER BODIES

Environmental objectives of water bodies

In order to achieve a proper water protection, the Water Framework Directive and the consolidated text of the Water Law establish that certain environmental objectives should be achieved to prevent, protect and recover the good status of water bodies for the year 2015. The regulation admits the possibility of establishing term exemptions (extensions) or objective exemptions (less rigorous objectives), either due to disproportionate costs, to not being technically feasible or to natural conditions. No exemptions have been applied in the Júcar River Basin Management Plan, but extensions have been considered.

In the case of water bodies that do not achieve good status, the pressures associated to non-compliance with the indicators have been analysed and actions have been put forward in order to reduce these pressures. Thus, overall, the outlook of good status compliance will depend on the outlook of implementation of the actions associated and of the outlook in which the action is expected to affect the water body.

Status objectives on surface water bodies

In the case of surface water bodies, the objectives for compliance of good status or ecological potential and for good chemical status have been defined, setting a global objective from the most restrictive one of the two.

Category of water body	Good status 2012	Good status 2015	Good status 2021	Good status 2027
Natural rivers	80	80	105	257
Rivers. Heavily modified and artificial, assimilable as a	5	5	6	19
Heavily modified and artificial water bodies due to the presence of dams (reservoirs)	19	19	21	28
Natural lakes	1	1	1	16
Heavily modified lakes	1	1	1	3
Transitional water bodies	2	2	2	4
Natural coastal water bodies	13	13	13	16
Coastal water bodies heavily modified by ports	1	1	1	6
Total surface water bodies	**122**	**122**	**150**	**349**

Summary of environmental objectives on surface water bodies

Final outlook of compliance with environmental objectives to achieve good global status in surface water bodies

Image: Cabriel River in Enguidanos

Compliance of these environmental objectives defined for water bodies of river categories does no longer depend only on the implementation of urban wastewater sanitation and cleansing actions, which is a subject that has already experienced great progress with the subsequent improvement in physicochemical quality of the bodies.

Current quality problems of these bodies are more related to the non-compliance of biological indicators such as macroinvertebrates or ichthyofauna, therefore the actions to achieve the objectives defined should aim to improve these indicators.

In this respect, the Planning involves the implementation of ecological flows in all water bodies, hydromorphological restoration measures and the recovery of their longitudinal and transversal connectivity.

11. ENVIRONMENTAL OBJECTIVES OF WATER BODIES

Status objectives on surface water bodies

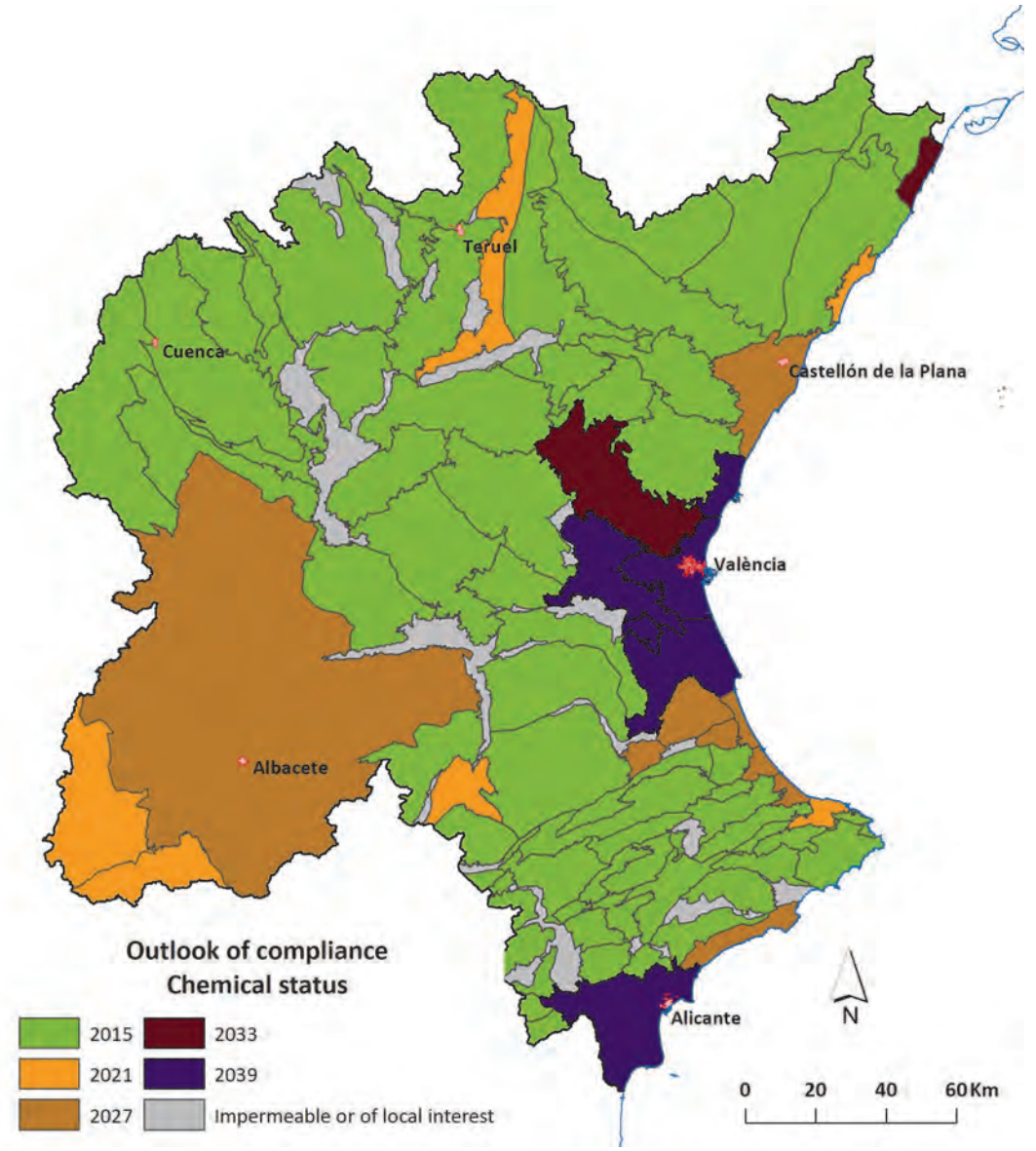
In order to establish the outlook of compliance with the good quantitative status objective, the effect of the measures has been assessed, identifying the measures that affect the quantitative status of groundwater bodies by allowing a reduction of abstractions.

In the case of the outlook of compliance of the good chemical status objective, a detailed analysis of the nitrates parameters has been performed, as nitrates are the most relevant pollutant. For this purpose, a methodology common to all Spanish territory has been used, based on the application of a simulation model of water quality (PATRICAL). The future evolution of nitrate concentration of groundwater bodies has been analysed, depending on the different scenarios of fertiliser application. In the case of the other parameters that cause non-compliance, taking into account the uncertainty about the temporal evolution of the parameters, they have been planned to achieve good status in the year 2027.

After establishing the outlooks of achievement of environmental objectives for each status (chemical and quantitative) of groundwater bodies, an outlook of global compliance has been assigned to each water body, taking into account the most unfavourable situation in case the body has different outlooks.

Category of water body	Good status Plan	Good status 2015	Good status 2021	Good status 2027	Good status 2033	Good status 2039
Good quantitative status	60	60	61	90	90	90
Good chemical status	67	67	73	82	84	90
Good global status	**49**	**49**	**53**	**82**	**84**	**90**

Outlooks of compliance of good quantitative, chemical and global status in groundwater bodies



Outlooks of compliance of good chemical status in groundwater bodies

Image: Tancat de la Pipa

Technical studies conducted at l'Albufera lake of València indicate that it is unlikely that a good ecological potential may be achieved in the short term, especially due to the eutrophication problems caused by the excess phosphorus and by the existing sediments on the lake bed.

It has been established in the specific objective Plan (in two phases) to achieve 90 µg/L of a-chlorophyll in the year 2021 and 30 µg/l in 2027 (as a trophic status indicator).

Tancat de la Pipa is an ecological restoration work made to act as a green filter and to reduce the pollutant load that reaches the lake, to recover the different typical habitat of the original humid area, and to generate spaces intended for public use that allow to approximate the results of the project, and the environmental and cultural values of l'Albufera of València to society.