Vom Wasser haben wir‘s gelernt
(Water might tell us what to do ..)

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The popular song: „Vom Wasser haben wir´s gelernt …“

- „…From water have thus we been taught, from water! Though day or night shall bring it rest it ponders but its journeys quest, the water ….“
- „…Vom Wasser haben wir´s gelernt, vom Wasser! Das hat nicht Rast bei Tag und Nacht, ist stets auf Wanderschaft bedacht, das Wasser. …“

Poem by Wilhelm Müller,
composed by Franz Schubert,
sung by Fritz Wunderlich

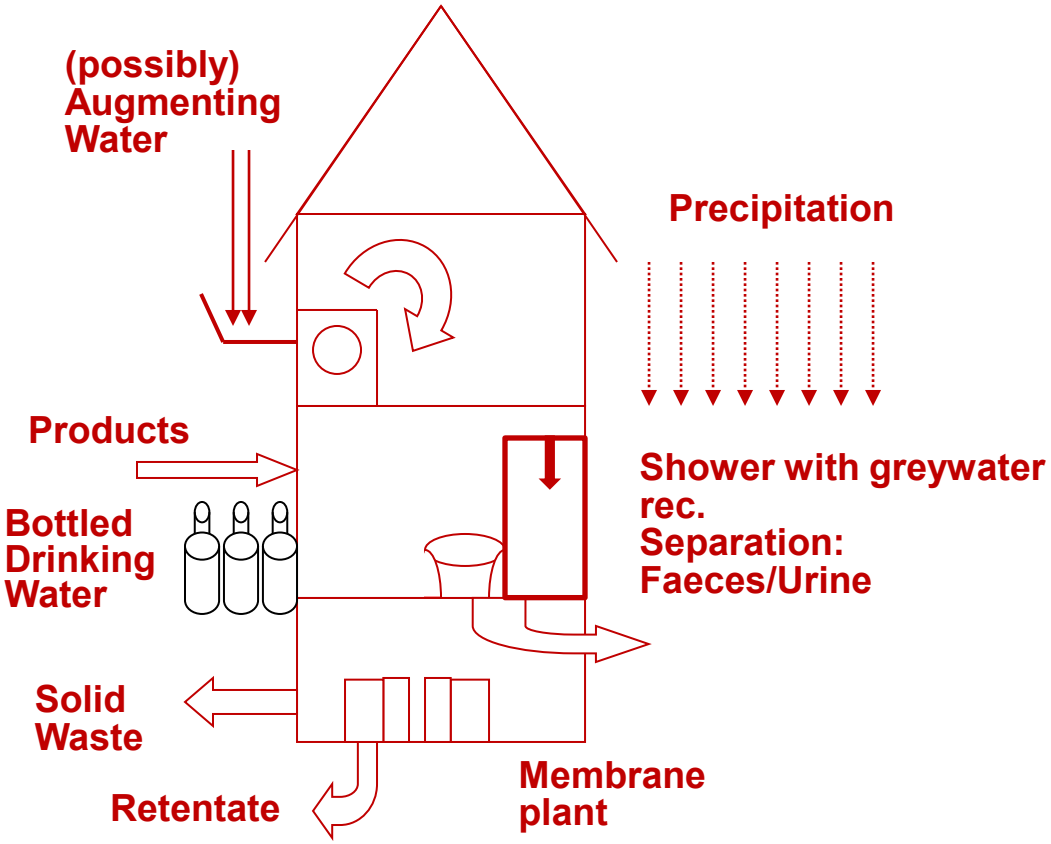
Water might tell us what to do…

- Former-days infrastructure more appropriate?
- When did our natural bodies of water change?
- Trust wholesomeness of so-called natural waters?
- Going even more into „industry-type“ water infrastructure?

Former-days infrastructure more appropriate?

- Life today without todays central water supply and disposal systems
- Dry summers and the local source of supply fails
- No sewage disposal system and carrying out by hand every drop of water
- Hygienic safety most important aspect of central water system
- Dissipation of dangerous (water) constituents through far reaching transport lines
- Giving up (subconsciously) acquired comfort

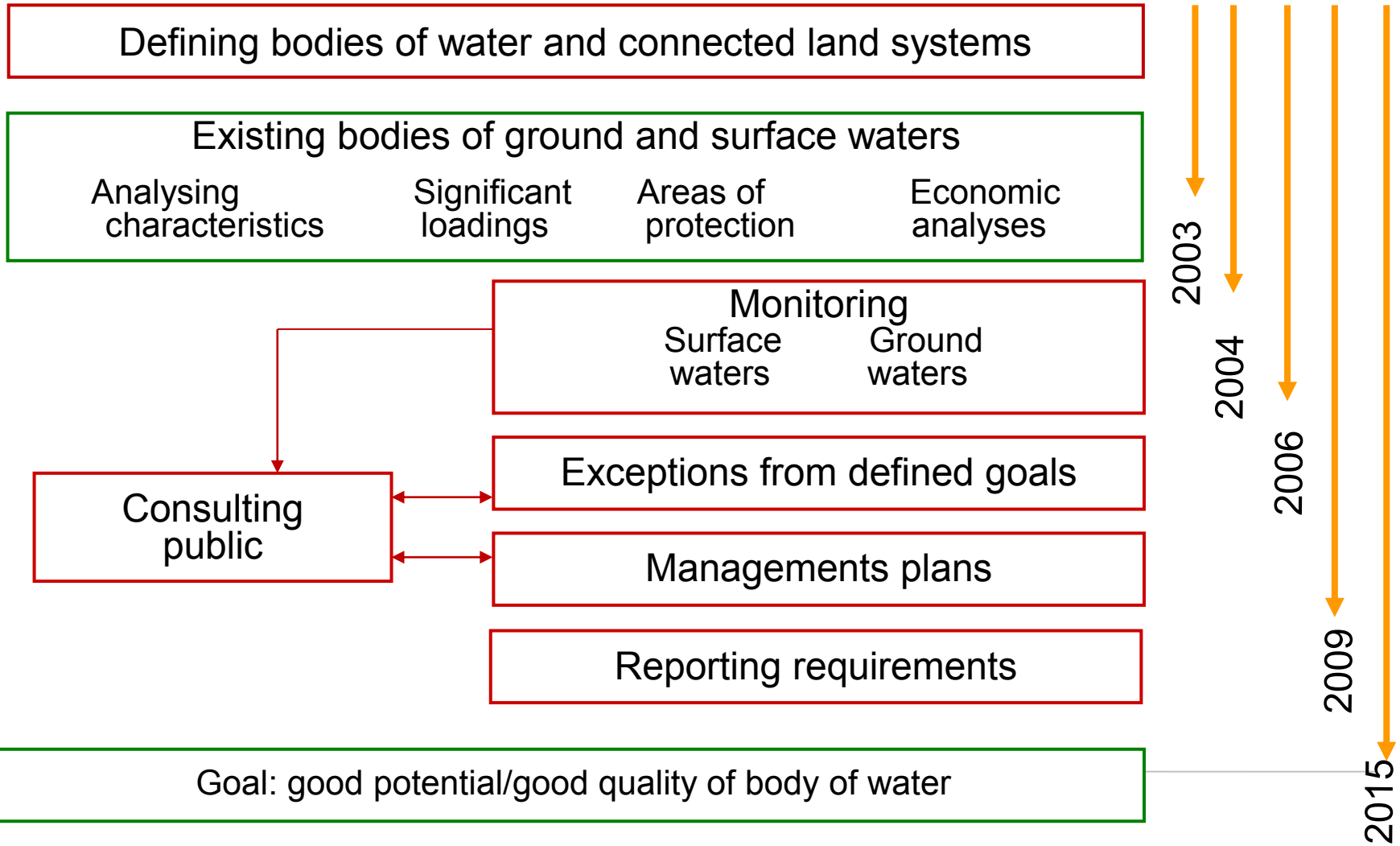
The nearly „autonomous“ house



When did our natural bodies of water change?

- Equilibrium between a body of water and its environment
- First cultivation of land might have disturbed the equilibrium
- Suffice todays efforts in re-vitalization of bodies of water
- Analyze complete drainage area to find out which of our activities have what effect
- After first disturbance of the equilibrium from now on always support balance
- How much effort to be spent on support for the aqueous compartment

Establishing a new balance between water and it‘s drainage area (WFD)



Trust wholesomeness of so-called natural waters?

- Dangerous to drink from natural source (considering reduced immunity)
- Rely on industrially supervised and bottled drinking water
- Water as carrier for things that could alleviate strenuous daily life
- No guaranteed full security for drinking water or its consumption
- Insights into water risks of tomorrow (advancing analytics, etc.)
- Effects of one or several water constituents and consequence of changing them by changing source

(German) Development of requirements for drinking water quality

- 1957 List of drinking water quality parameters in form of ‚desirable', ‚maximum' and ‚minimum' values published, no strict limits, only orientational character
- 1975 Establishing strict limits (then for heavy metals only)
- 1990 Combining ‚orientation' data and limits
- Since then: Requirements formulated in EU guidelines lengthen list of parameters and tighten limits

Going even more into „industry-type“ water infrastructure?

- Municipal plants appear as irreversible investments and structures
- Industrial structures seem to be more adjustable and flexible constructions
- Establishing a market of new and used plant elements
- Engineer stipulates a needed product quality, no production process
- Using new technology easier if decision less irreversible
- Leasing of plants or plant elements similar to industrial areas

Summary – Questions I asked

- First contact of children with water just like in the familiar song?
- To what extend can or should we go back to that ‚simple life‘?
- Or should we go even more into the direction of a totally controled water protection and production?