



Natural watercourses

Almost all watercourses in Sweden are influenced by human activity. So, how do we know what a natural watercourse looks like?

Factors describing a watercourse

Morphology Morphology (Appearance of the watercourse):

- Distribution of boulders, stones, and gravel in the water and in the shoreline zones
- Depth and width of the water
- Meandering of the watercourse in the landscape
- Impact of ice on the watercourse and shores
- Presence of deadwood

Hydrology (The study of water on land areas, its occurrence, distribution, characteristics, and cycles):

- The volume of water flowing in the watercourse during different parts of the year
- Flow velocity in various parts of the watercourse channel
- Flooding of shores.
- Influence of groundwater in the shoreline zone



Water chemistry (Presence of substances in the water):

- pH value, indicating the acidity of the water
- Nutrients, such as nitrogen and phosphorus
- Heavy metals or other environmental pollutants

Biology (Life in and around the water):

- Naturally occurring species
- Viable populations, meaning a sufficient number of individuals of a species and opportunities for reproduction
- Presence of invasive species that may pose a risk of outcompeting the naturally occurring species

Watercourse processes

When human activities have not influenced the morphology or hydrology of a watercourse, the natural processes of the watercourse can function fully. This means, for example, that:

- Water spills over the shores during high flows, carrying nutrients from the soil to the watercourse.
- Erosion along the shore edges contributes to trees falling into the water, creating habitats and food for aquatic animals.
- Finer bottom materials like sand and gravel are moved around, creating environments crucial for various animals and plants in the water.



A section of Gimån that has not been cleared for timber floating.