



AUSTRIA: A COUNTRY RICH IN WATER



IMPRINT

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PROTECTING AND TREASURING OUR WATER

AUSTRIA BELONGS TO one of the most water abundant regions in the world. Water is both our most precious resource and one of the greatest challenges of the 21st century. We therefore need to take the utmost care to ensure that water quality is maintained and aquatic habitats continue to be improved.

The sustainable safeguarding of the valuable resource of water is one of the core tasks of the Federal Ministry for Sustainability and Tourism. This is the ministry where the framework conditions for the protection of water, its resource-efficient use and flood protection measures are established. Involving the public plays an important role in this. We want to convince as many people as possible of the importance of the careful use of water as a resource by providing information and awareness raising projects as platforms.

The Austrian water management has an excellent reputation and it is important that we use and make this know-how available: not only in Austria, but also worldwide. At the same time, we need to ensure that the power of disposal of water remains in Austrian hands. The Federal Constitutional Law passed in July 2013 stipulates that the Republic of Austria is committed to ensuring the supply and quality of water as part of its responsibility for the provision of services in the public interest. The supply of drinking water will therefore always remain in the hands of the public authorities.

Water is a lifeline for the regions. It is an indispensable commodity for agriculture, energy production, the economy and, of course, tourism. It also provides valuable habitats for flora and fauna. Only the careful use of this valuable resource by each and every one of us will ensure that our children also enjoy the same high quality of water. This brochure highlights the full spectrum of water management issues, both in Austria and internationally, and provides the latest data and facts, along with important background information and ideas.

I invite you to help shape the future of water management!

A handwritten signature in green ink, appearing to read 'E. Köstinger'.

ELISABETH KÖSTINGER
Federal Minister for Agriculture,
Regions and Tourism

Wasser ist Leben



Air adalah Kehidupan

Water is life



Вода это жизнь

Banyu ateges Panguripan

vesi merkitsee elämää

Danom Pabelom

acqua é vita

Woda jest życie

agua es vida

Rano Hidup

àgua é vida

水就是生命

Su hayattır

ura biziada

Το νερό είναι ζωή

voda je život

Mual Hangoluan



l'eau, c'est la vie

Viz az élet

Apa este viață



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»The principle
of all things is water.
All things are from water
and all things are
resolved into water.«

THALES VON MILET

WATER AS A RESOURCE



WITHOUT WATER, THE EXISTENCE OF LIFE ON EARTH ISN'T POSSIBLE

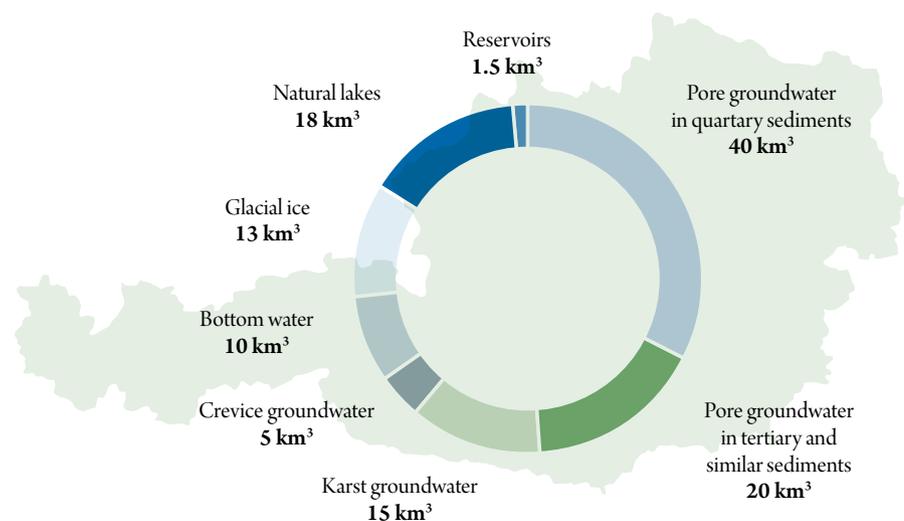
WATER IS AN INDISPENSABLE COMMODITY for both nature and people. It is also a unique habitat and is used in almost all areas of life, for the production of goods, for agriculture and for energy production. Above all, Austria's water resources characterise the country more than any other element.

Over two thirds of the earth's surface is covered with water. However, only 2.5 per cent of this water is fresh water, the majority of which comes from ice and groundwater. Only about 0.3 per cent of this fresh water is available for human consumption as drinking water, making clean and hygienically pure water a scarce commodity in many parts of the world. The steadily growing world population and globally networked consumer behaviour is placing increasing demands on water consumption. Pollution of the environment, and its effects on water bodies in particular, is one of the main reasons why water is often referred to as »Blue Gold«.

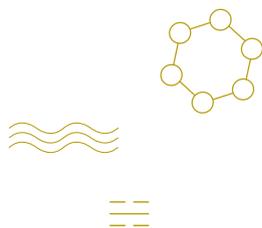
In Austria, many water related skills are bundled together at the Federal Ministry for Sustainability and Tourism. The ministry is responsible for creating the framework conditions for the protection of water as a livelihood, for the resource-saving use of water as an economic factor and for protecting communities against the dangers that this unique element can bring. All important water-related information is made available to the general public. Projects for raising awareness of water issues and special initiatives serve to promote the value of water in Austria and the need to work together to find solutions.

Water reservoirs and reserves

Reservoirs and reserves, total 122.5 km³



Source: BMNT 2017



THE VALUE OF WATER IN AUSTRIA

Although the supply of high-quality water is becoming an ever-increasing problem in many regions, Austria is one of the most water-abundant countries in the world. If all the country's water resources were brought together, the result would be a carpet of water covering the entire country with a depth of 1.5 metres. The Austrian water balance shows that we have around 86 km³ of water available each year, of which only about three per cent (approximately 2.5 km³) is used. Almost two-thirds of this is accounted for by industry, just under a third is used in households and around five per cent goes to agriculture.

Over one per cent of Austria's surface is covered by water and despite being a small country, this water presents itself in an enormous variety of forms. Austria's network of rivers and streams amounts to a total length of over 100,000 kilometres, which is enough to circle the world almost exactly 2.5 times. There are more than 25,000 standing water bodies with an area of more than 250 m², of which 62 are large lakes with an area over 0.5 km². This abundance of different types of water resources calls for different standards to be applied in the assessment of ecological conditions. In Austria, the programme of measures for the sustainable use of our waters is at the very heart of water management planning.

THE WATER CYCLE

The most important basis for the sustainable use of water by any society is an exact knowledge of the water cycle. Every second around 18 billion litres of water evaporate on our planet. Just around 0,40 per cent of all water enters the water cycle, with the majority remaining in natural reservoirs, such as oceans or ice caps.

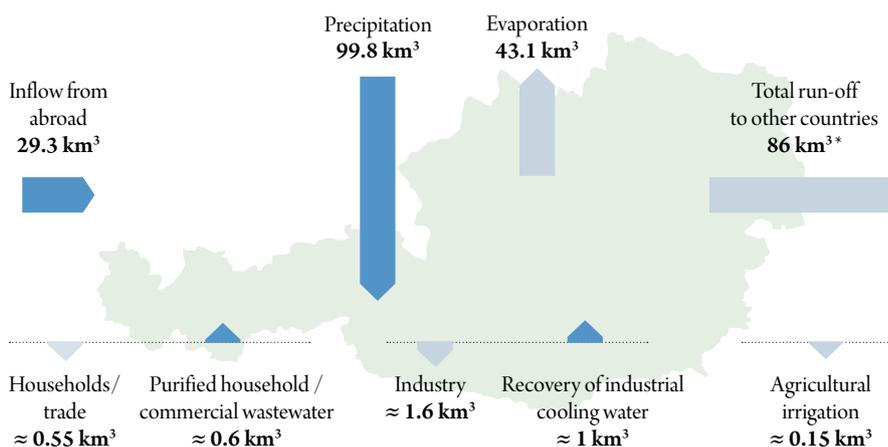
Annual rainfall in Austria is around 1,190 mm, with areas along the main Alpine ridge characterised by high precipitation. In parts of western Austria, average annual rain and snowfall of more than 2,500 mm a year can be expected, while in the north-east of the country only 600 mm or less is recorded each year.

Our water resources are stored and made available by utilising a variety of different techniques. Precipitation and evaporation are always part of a balanced cycle, meaning that not a single drop of water is wasted.



Water balance

Medium values 1986–2015 in km³/year



Source: BMNT 2018

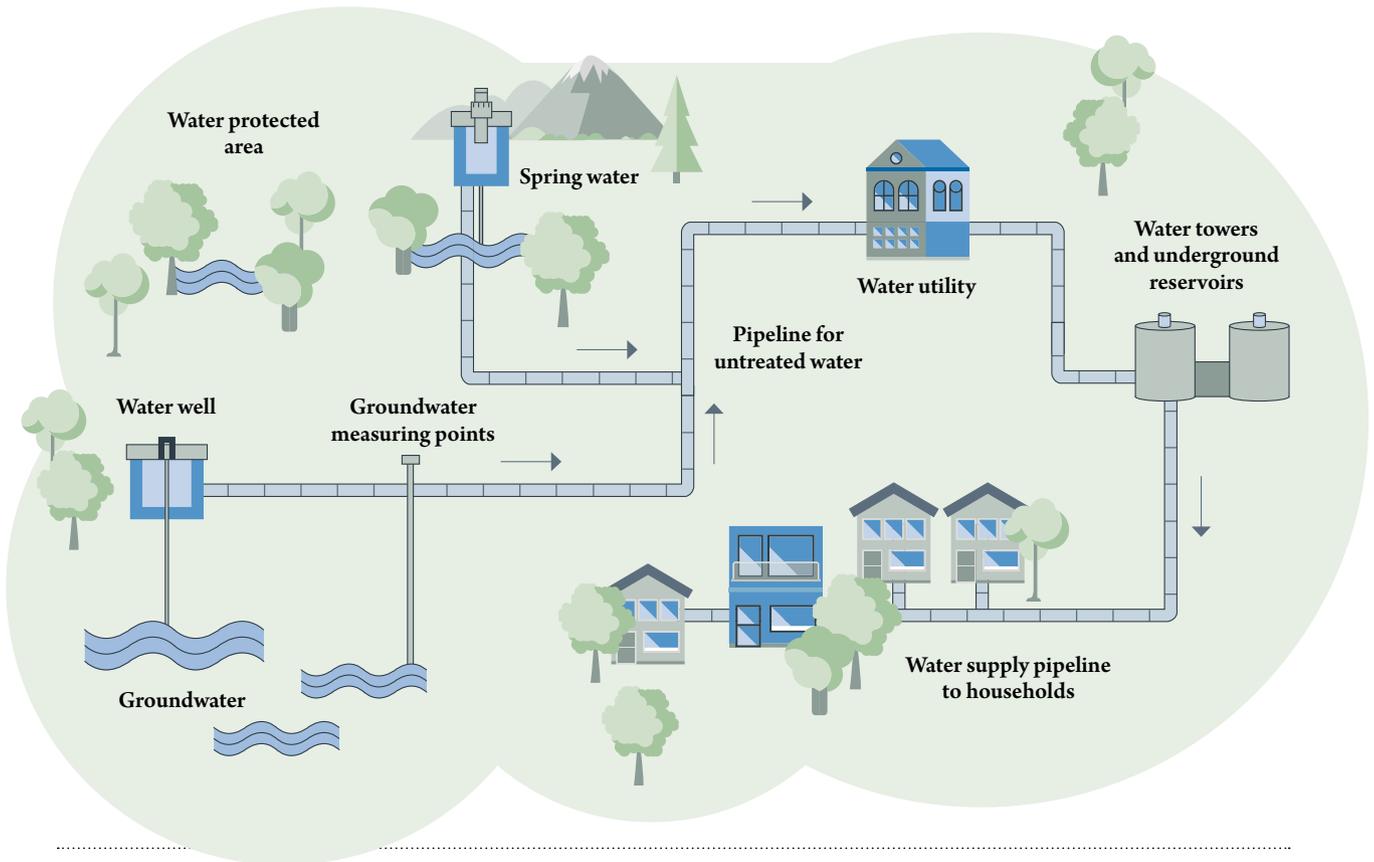
*Runoff above ground 83.5 km³ / Runoff below ground 2.5 km³

The water balance shows how much water falls in the form of precipitation, how much of it evaporates and how much of it flows into and out of Austria from other countries.



The route from the water to the tap

Spring and groundwater is delivered via underground pipelines from the water utility directly to individual homes.

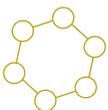


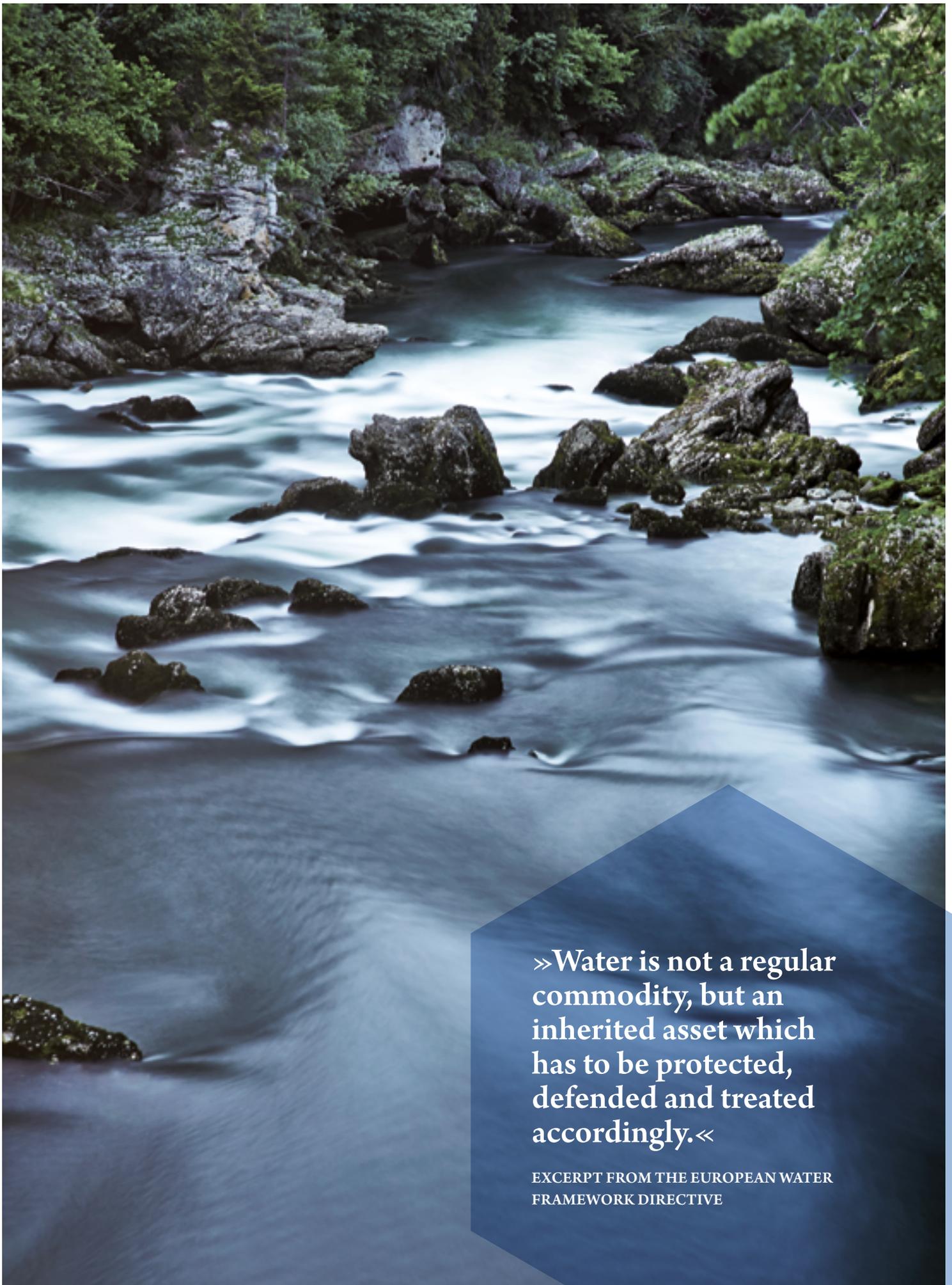
GROUNDWATER AS DRINKING WATER

Water in rivers, streams and lakes is classified as surface water. If water seeps into the ground, it is stored as groundwater. Groundwater is usually underground, for the most part not visible, and accounts for about 30 per cent of the earth's fresh water resources. In Austria, groundwater is the most important source of drinking water. Austria is one of the few countries on the planet that is fortunate enough to be able to source 100 per cent of its drinking water from groundwater and spring water.

MONITORING – MEASURING – EVALUATING

Only those who know the exact condition and development of the environment can take the appropriate action. The monitoring, measurement and evaluation of hydrological processes, along with the systematic analysis of the water balance and the dissemination of the data collected, are all hydrographical core tasks in Austria. The readily accessible Hydrological Information Service Austria (eHYD) provides an overview of both the past and present situation at Austria's 5,000 precipitation, discharge and groundwater monitoring sites for anyone who is interested.





»Water is not a regular commodity, but an inherited asset which has to be protected, defended and treated accordingly.«

EXCERPT FROM THE EUROPEAN WATER FRAMEWORK DIRECTIVE

LEGAL FRAMEWORK IN AUSTRIA

A BALANCE BETWEEN PROTECTION AND USE

THE QUALITY AND AVAILABILITY of water are of great importance to the security of supply and human health, the legal bases for its protection were therefore established at a very early stage.

A uniform Austrian Water Law was first enacted in 1869. The current water law dates from 1934 and was re-enacted after rigorous amendment as the »Water Law 1959« (WRG 1959). This substantially amended law provides the legal basis for water management planning and projects. The use, protection and the cleanliness of water bodies, as well as protection against the natural hazards caused by water, form the three most important focus areas of the law.

SUSTAINABLE OBJECTIVES

The European Union has been involved in water protection since the 1970s. Natural conditions and water management problems in the individual member states vary widely and in order to harmonise the legal framework for water policy within the European Union, the Water Framework Directive came into force at the end of 2000. The central objective of the Directive is to maintain the good ecological and chemical status of all surface waters, along with the good quantitative and chemical status of groundwater. In addition to improving aquatic ecosystems, avoiding their deterioration is also a top priority.

The purpose of the Water Framework Directive is to pursue a strategy of sustainable management of water bodies, whereby their use and protection are sensibly balanced against one other.

SUSTAINABLE MANAGEMENT

All EU member states have implemented the Water Framework Directive and are committed to the sustainable management, protection and improvement of their water bodies. This, however, requires targeted and coordinated planning. The implementation of these objectives in Austria is based on the Water Law Act, and implemented through the River Basin Management Plan. Every six years a new Plan is drawn up which, in addition to the objectives and instruments of environmental protection, also take the economic aspects of water use into consideration. The 1st National River Basin Management Plan was published in 2010. Measures for achieving conservation and remediation targets are defined in the plan and are based on a comprehensive status analysis. These programmes of improvement measures are also the centrepiece of the River Basin Management Plan.

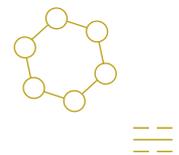
After taking stock at the end of 2015, the 2nd National River Basin Management Plan was completed. Numerous steps have since been implemented. For example, around 1,000 obstacles to the migration of fish and other aquatic organisms have been removed. Purification capacity at wastewater treatment plants has also been improved to the point where up to 80 per cent of nitrogen and 90 per cent of phosphorus are removed from wastewater. The condition of Austrian water bodies, however, still requires further improvements in order to ensure their sustainability.





SUSTAINABLE FUTURE

Only by involving the public and adapting a common goal, can water bodies remain the fundamental basis of our lives; a basis that we can shape and maintain ourselves. For this to happen, support is needed from all those who are concerned about water, because the more people make water their business, the more secure the future of our streams, rivers and lakes will become. It is also important for coming generations to find the right balance between the different interests and demands that we place on our water every day.



WATER CONSERVATION TAKES PRIORITY



PROTECTING ITS MANY AND VARIED USES

THE OBJECTIVE OF ALL MEASURES is to ensure the supply of high-quality water to both the society and the economy and to preserve an ecologically intact environment. Water also needs to be available to future generations in sufficient quality and quantity.



TAKING ACTION

Despite considerable advances, nutrients and pollutants continue to compromise the self-purification capacity of lakes and rivers and are endangering groundwater. Although the quality of water bodies and groundwater is good throughout Austria, there is still a need for regional action, especially in densely populated and intensively agricultural areas. Pollutants from industry, human settlements and traffic – occurring at either single isolated locations or extending over wide areas – can be very difficult to control. In such locations it is essential that the pollutants are either retained at their point of origin or industrial production processes are converted into environmentally friendly processes.

The application of pesticides and the by-products caused by their subsequent degradation, so-called metabolites, are similar to nitrates and can infiltrate groundwater via leaching processes. In Austria, a number of measures, such as »The Nitrate Action Programme«, have been implemented and are being continuously developed to achieve and maintain the good status of groundwater, rivers and lakes in agricultural areas.

River restoration as part
of the LIFE+ Project
Traisen, Lower Austria



Nature Park
Tiroler Lech

IMPROVING HABITATS

In addition to the treatment and prevention of chemical pollution in water bodies, the near-natural development and revitalisation of water bodies is becoming increasingly important. To achieve this, functional water landscapes with high value for both people and nature are once again being created.

For centuries, our water bodies have been substantially altered by factors such as river regulation, reclamation of land for agricultural use, hydropower and flood protection measures. Revitalisation of rivers means giving them back their space and allowing their natural processes and creative power to thrive once again. This stimulates the natural development of water bodies, which in turn encourages the self-purification capacity of the water and improves flood retention capacity.

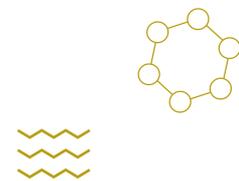
Flood protection and aquatic ecological objectives need not be a contradiction in terms. A number of individual plans and projects have successfully incorporated these synergies in recent years and bear witness to this fact. Ecologically effective remediation measures have already been implemented in all the federal states and prove that major effects can often be achieved with relatively minor interventions. Good examples of such measures can be observed at the Upper Traun in Upper Austria, at the Mur in Styria and at the Bregenzer Ach in Vorarlberg. These projects, along with many others, are beneficial to both the ecology and the regions involved.

LIFE PROJECTS AND MORE

L'Instrument Financier pour l'Environnement (LIFE) is a European Union financial instrument for the exclusive promotion of environmental and nature conservation projects. Amongst other things, it supports projects that deal with issues of »biodiversity« and serves to preserve the natural environment. A good example of this is the Nature Park Tiroler Lech, which has been part of the Europe-wide ecological protected area network Natura 2000 since its inception. With an area of around 42 square kilometres, it is the largest spatially integrated nature reserve in the Tyrolean valley. One of the last of its kind in the northern Alpine region, the wild river landscape of the Lech, with its complex system of water courses and wide riverbeds is one of the most endangered landscape types in Central Europe.

As part of the LIFE project »LIFE Lech«, eleven flood protection measures and various species protection measures have been implemented on the upper reaches of the Tiroler Lech and on its border with Germany. These successes will now be continued with a second LIFE project on the Lech and will involve close cooperation between Austria, Bavaria and regional stakeholders.

Another good example is the »LIFE + Network Danube« project. This includes fish migration aids in the form of a bypass stream at the Greifenstein hydropower plant. This has opened up a valuable new habitat for fish and improved the continuity of the Danube. The by-pass stream not only compensates for the difference in height at the power plant, it also has a positive influence on the environment by providing a new habitat and spawning grounds. The Greifenstein fish migration aid is located in the European nature reserve »Tullnerfelder Donauauen«, which is the largest continuous wetland area in Austria.



WATER AS A HABITAT

NEAR-NATURAL RIVERS AND THEIR FLOODPLAINS ARE VALUABLE ECOSYSTEMS

THE AREAS IMMEDIATELY SURROUNDING WATER BODIES are populated by a variety of animals and plants from a wide range of different habitats. Riverbanks form complex areas of wet and dry sites where steep slopes collide with shallow areas of sedimentation and just a few meters away alternating deep pools merge with shallow gravel banks. The most diverse of biotopes are naturally interconnected with one other and the improvement of these areas as habitats, and thus the biodiversity of the flora and fauna, is essential. Such aquatic habitats are also important recreational areas for people, especially in Austria where the high social benefits they bring are also a symbol of an intact natural environment.



»As the water shapes
itself to the vessel that
contains it, so a wise
man adapts himself to
circumstances.«

CONFUCIUS

ECOLOGICAL STATUS

In addition to its structure and volume of water, physico-chemical and biological characteristics are also measured when assessing the condition of a water body. For example, the composition of species and their frequency can indicate both positive and negative changes. The existence or absence of algae, aquatic plants, microorganisms and fish all indicate the condition of a body of water. Such indicators show that around 60% of Austria's rivers and streams currently do not have good ecological status that is in compliance with the Water Framework Directive.

Fish populations in particular have seen considerable change in Austrian waters over the last 150 years. Of the 75 fish species native to Austria, 7 are considered to be extinct and 39 are endangered, critically endangered or threatened. Increasing pressure on water usage has significantly affected fish habitats.

PROTECTING HABITATS

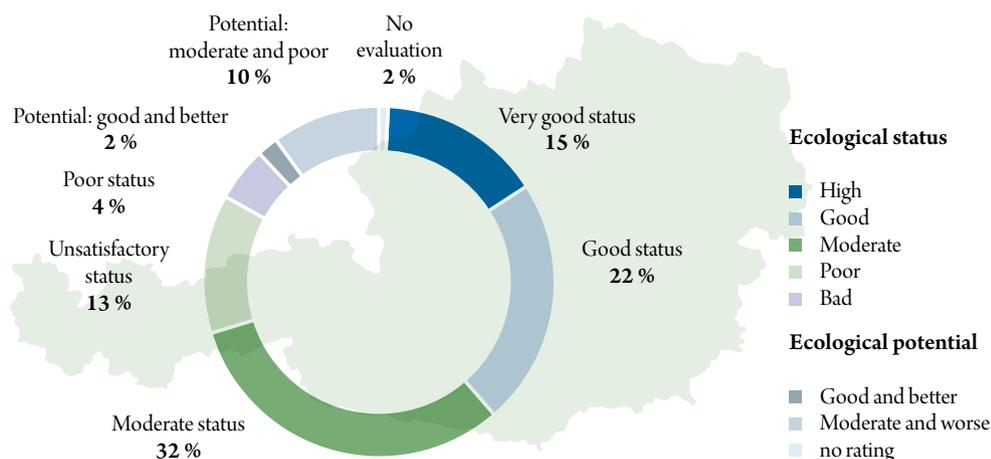
In order to ensure the restoration of biological diversity, in 1992 the European Union unanimously adopted the Directive on the conservation of natural habitats and of wild fauna and flora, also known as the Fauna-Flora-Habitat Directive (FFH Directive). The European protected area network Natura 2000 has since been established to help achieve this goal.

The Birds Directive, which entered into force in 1979, has the purpose of preserving and restoring the habitats of wild birds in the European Union as its primary objective. These bird sanctuaries also conform to the principles of the EU protected area system Natura 2000. Austria currently has 204 designated Natura 2000 sites covered by the Nature Protection Law, which occupy a total of about 15 per cent of the country's area.



Ecological status and ecological potential – Running waters

Length of water body network for running waters > 10 km²: 32,521 km

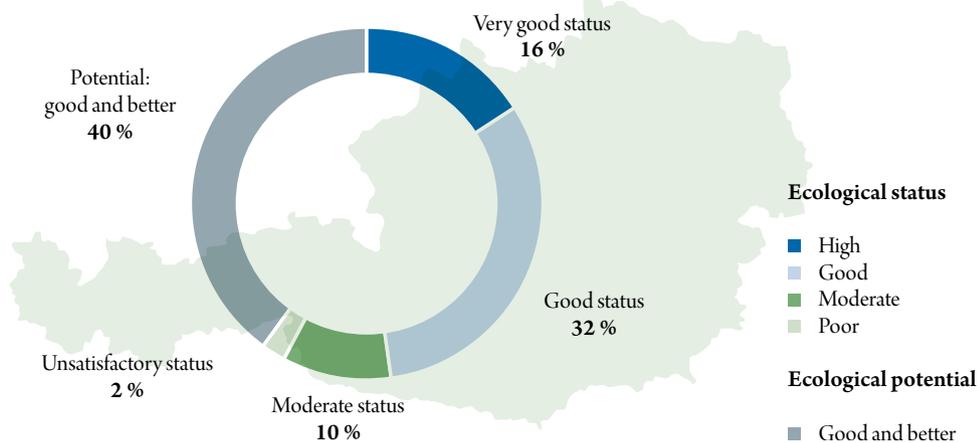


Rounding differences not adjusted; Source: BMNT 2018



Ecological status and ecological potential – Lakes

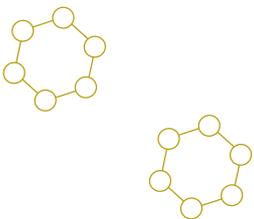
62 lakes > 50 ha



Source: BMNT 2018

MIGRATORY FISH

Our rivers, streams and lakes form a system of interconnected habitats. However, transversal structures such as dams and weirs are a primary cause of disruption to natural continuity. Fish species such as the barbel, the common nase and the Danube salmon (huchen) all have clearly defined migratory behaviour that is particularly affected by man-made obstacles. In order to connect aquatic habitats, more than 1,000 fish migration aids have been built on the 100,000 km long network of rivers and streams in Austria since 2009. This has given many species of fish the opportunity to once again migrate to the areas which are essential to the continuity of their lives.



A CHANGING HABITAT

Water is a good indicator of any change, be it global or regional. This is clearly demonstrated by the far-reaching effects of changes to the climate on the water management. Changing water volumes, distribution and quality as a result of climate change have consequences; not only for people and their settlement areas, but also for aquatic flora and fauna. Plants and animals that have adapted to cooler conditions, for instance, are restricted in their propagation by a rise in water temperature, and are forced to move upstream, or deeper into lakes to find the same temperatures as before. New suitable conditions are unfortunately often missing in such areas. According to predictions, water temperatures are expected to increase by up to 4° C by the end of the century, leading to possible major changes in today's aquatic flora and fauna.

Future environmental conditions will not only restrict the habitat of some native species, but also enable the establishment of new warmth-loving species. Migrant or imported non-indigenous species often adapt easily to their new environment. However, some are invasive and can compete with or even displace native species. Around 2,000 alien species are currently known to exist in Austria, accounting for approximately 3 per cent of the total number of species.



»Water is
the best
of all things.«

PINDAR

CLEAN WATER FOR EVERYONE

NATURAL QUALITY

WHILE CLEAN WATER is only available in many European countries after expensive treatment processes, the groundwater and spring water used in Austria is generally purified by natural filtration of the soil. Around 50 per cent of domestic drinking water comes from groundwater and the other 50 per cent come from springs. In order to ensure the quality of the water, groundwater, rivers and lakes have been monitored by the state since the early 1990s and are subject to uniform, legally defined criteria.

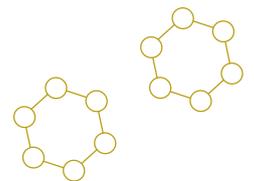
The Federal Ministry for Sustainability and Tourism is responsible for the monitoring and analysis of water quality, working in close cooperation with the Austrian Environment Agency (Umweltbundesamt) and the responsible authorities in the respective federal states. Samples are taken from a comprehensive monitoring network several times each year and examined to detect developments at an early stage and, if necessary, implement countermeasures. Around 2,000 groundwater monitoring sites are continuously monitored for 129 parameters, thereby providing important information for safeguarding the quality of Austrian drinking water. The results of the water quality studies are continuously published online and summarised every three years in reports that are freely accessible to the public.

DRINKING WATER: THE BASIS OF LIFE

Water is a central element of public services and its guaranteed availability as drinking water and many other uses is essential. In Austria, there is a clear commitment to ensuring that the usage of water and all decisions relating to it remain an exclusively Austrian matter, something that is widely appreciated by society.

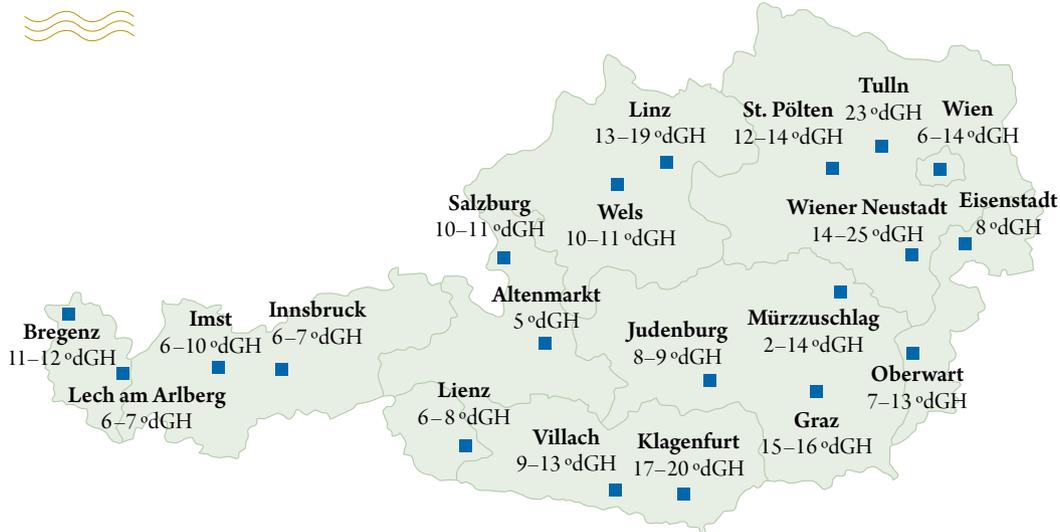
Natural water contains a variety of soluble substances and exact indicator parameters are defined in the Drinking Water Ordinance and also in Codex Chapter B1 of the Austrian Food Code. The most important substances include calcium, magnesium, sulphates and fluoride. Substances that are harmful to health in elevated concentrations are regulated by maximum permissible values that must not be exceeded. This applies especially to nitrates, pesticides and lead.

Water hardness depends on minerals that absorb the water from the ground, whereby the level of calcium and magnesium salts determines the total hardness of the water. The higher the calcium content, the harder the water is.





Water hardness in Austrian cities



Source: www.trinkwasserinfo.at

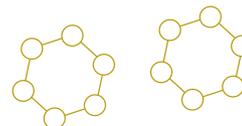
Composition of drinking water

pH-value	6.5 – 9.5
Electrical conductivity	2,500 µS/cm
Overall hardness	Degree of hardness ranging from I = soft to III = hard
I 0 °dGH – 10 °dGH	Soft to moderately hard water
II 10 °dGH – 16 °dGH	Relatively hard water
III >16 °dGH	Hard water
Sodium	200 mg/l (recommended value)
Potassium	50 mg/l (recommended value)
Nitrate	50 mg/l (threshold value)
Chloride	200 mg/l (recommended value)
Sulphate	250 mg/l (recommended value)
Pesticide	0.1 µg/l (threshold value)

Source: Drinking Water Ordinance, Austrian Food Code (Codex Chapter B1)

IN THE HANDS OF AUSTRIA

The Federal Constitutional Law passed in July 2013 stipulates that the Republic of Austria (federal ministries, federal states and municipalities) is committed to ensuring the supply and quality of water as part of the provision of services in the public interest. Drinking water in Austria is reliable, readily available and of the highest quality. The provision of drinking water should therefore remain under control of public authorities and is considered to be in the best possible hands with our cities and communities. In the European Union, decisions on the management of water resources are based on the principal of unanimity. This means that there can be no access to Austria's water without Austria's consent.



SAFEGUARDING DRINKING WATER SUPPLIES AND WASTEWATER MANAGEMENT



ENSURING THE SUPPLY OF FRESH AND CLEAN DRINKING WATER AS CORE TASK

THE AUSTRIAN DRINKING WATER SERVICES enjoy an excellent reputation both nationally and internationally. Austria's population has the utmost confidence in the quality of its water. According to the Austrian Association for the Gas and Water (ÖVGW), there are around 5,500 water supply companies in Austria, which supply almost 92 per cent of the population with drinking water. Vienna has an excellent water supply for a city of its size thanks to the pipeline that supplies the city with mountain spring water from Lower Austria and Styria. Approximately 670,000 Austrians living in rural areas receive their water from domestic wells or springs. In such areas the local people themselves are responsible for the quality and control of their water supply.

PROPER COLLECTION AND DISPOSAL

In addition to the provision of drinking water, wastewater must also be collected and disposed of in order to protect our waters from contamination. Untreated wastewater represents a significant burden on waters. In Austria, the collection and treatment of municipal wastewater is therefore constantly being improved. Wastewater treatment in Austria is of a very high standard when compared internationally, with connection to municipal sewage treatment plants in Austria at 95.2 per cent. The remaining wastewater in remote and sparsely populated areas is collected in cesspits before finally being disposed of by treatment in small and medium-sized sewage treatment plants. Today's main challenges for treatment plants are substances that are difficult to degrade, such as residues from pharmaceuticals or care products, which can pollute our water bodies in the form of micropollutants. Careful handling of wastewater also plays an important role in avoiding high costs for sewage treatment plants. For this reason, the toilet should never be used to dispose of oil, used cooking oil, medicines or hazardous substances such as paints or varnishes. These products should always be disposed of at an appropriate collection point.

Reservoir at the waterwork in Innsbruck, Tirol





Wastewater treatment plant
Hofsteig, Vorarlberg

TREATING SEWAGE SLUDGE

Another important issue is the sewage sludge produced by wastewater treatment. This contains not only nutrients but also problematic or toxic substances. The annual volume of sewage sludge from municipal plants amounts to around 240,000 tons of dry matter, which is equivalent to the weight of more than 1,700 blue whales. Innovative processes such as sewage sludge incineration and phosphorus recovery are therefore being continually developed in order to ensure optimised treatment and management.

WASTEWATER AND THE EU

Substantial and important progress has also been made in the wastewater sector in the European Union. The Urban Wastewater Directive has established the legal basis for the protection of the environment from the harmful effects of untreated wastewater for the Member States of the European Union. The steady progress of wastewater collection and treatment over the past 25 years has significantly improved the quality of water in rivers, lakes and marine areas.



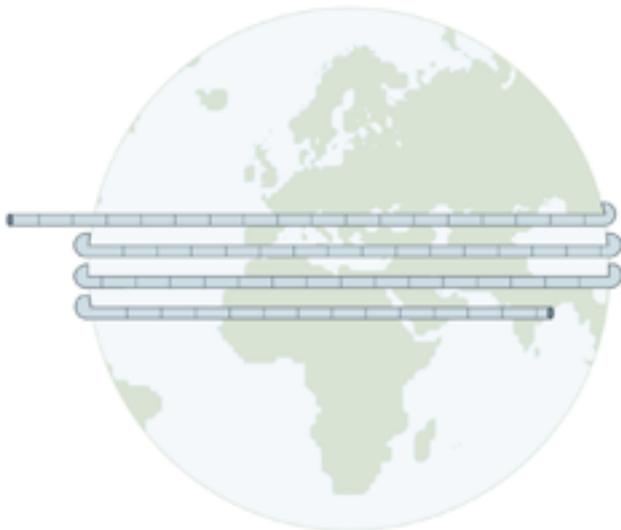
UNDERGROUND WATER NETWORKS

Water rushes out of our taps and then flows away again, silently disappearing as quickly as it appears. We take this for granted, but all kinds of processes and controls need to be undertaken before it finally arrives at its destination. Our water delivery systems run underground connecting cities, towns and villages throughout the entire country.

Nine out of ten Austrian households are connected to public water supply and sanitation facilities. In Austria, approximately 92 per cent of households are connected to the public drinking water network and 95.2 per cent to a municipal sewage network. In order to reach individual households, an extensive and high quality network is required. The total length of this network is approximately 171,000 km, a distance that could encircle the earth four times.



Drinking water and wastewater network Austria
length: 171,000 km



FINANCIAL SUPPORT FOR IMPROVEMENT MEASURES

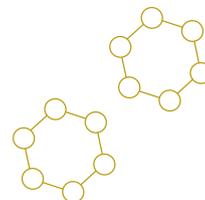
Since 1959, more than 61 billion euros have been invested in essential infrastructure. But this infrastructure has a limited service life and need to undergo regular high-tech inspections and maintenance. In order to find the economically optimal time for refurbishment, the maxim »Use it for its operational life, but don't abuse it« is applied. Water loss from the water supply system throughout the whole of Austria is, on average, around just 16 per cent. Our water is precious and should continue to flow safely through our pipes in the future.

These water infrastructure facilities are of great value and need to be maintained. This is a fact that needs to be anchored firmly not only in the consciousness of the people, but also in the minds of those responsible for our communities and cities. Campaigns such as »Prevention is better than cure! Let's look after our drinking water and wastewater networks« have contributed significantly towards achieving this objective.

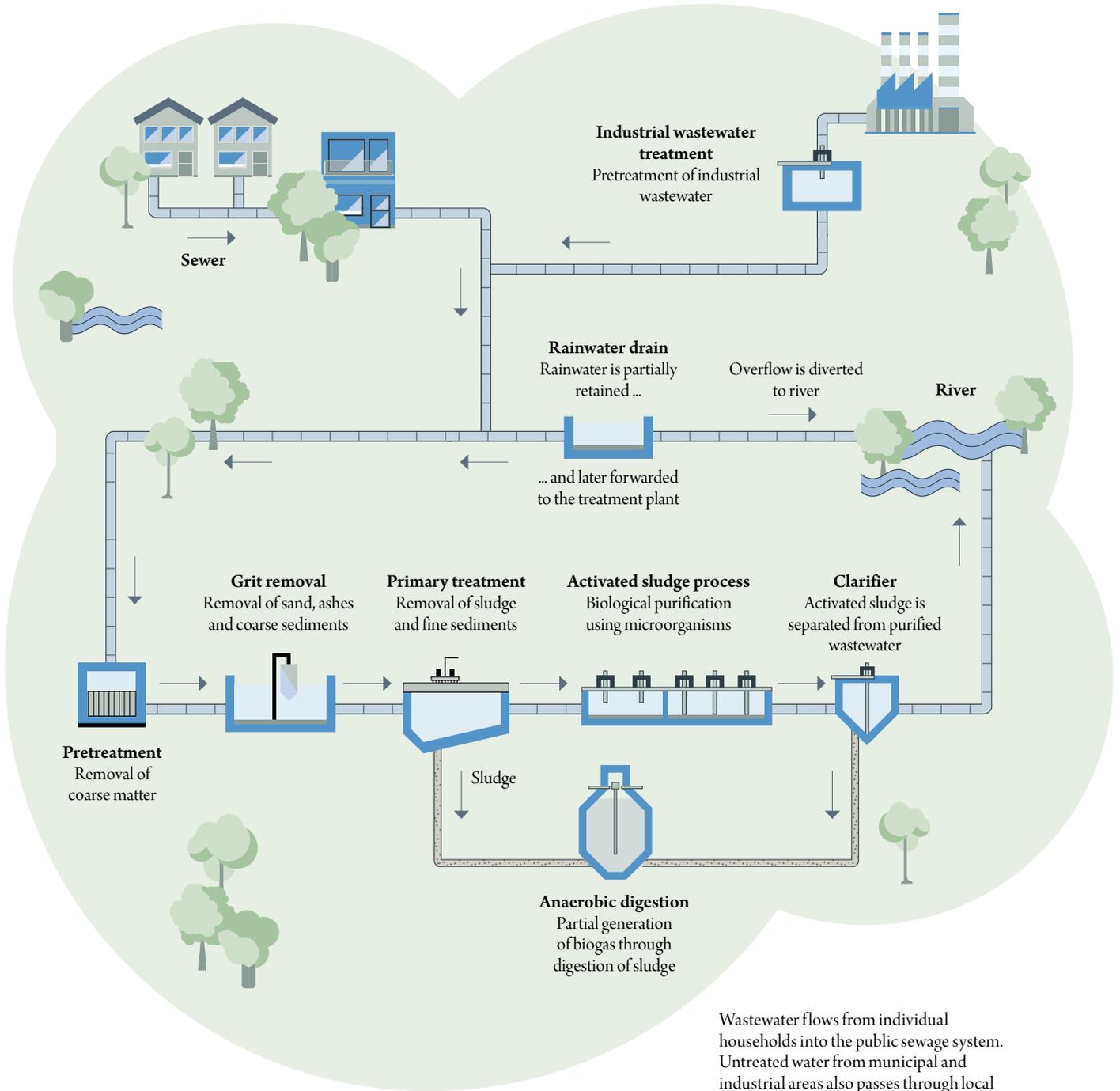
In recent decades, the focus of funding activities has been on initial infrastructure development, but this is set to shift significantly in the future towards value retention and refurbishment.

ECONOMIC EFFECTS

Investments in the drinking water and wastewater services serve not only as a driving force for the health and safety of the population and the sustainable conservation of ecosystems, but also as an important economic driver for Austria. The operation and investment of water management systems – with a gross value of more than three billion euros – makes a significant contribution to Austrian gross domestic product (GDP).



Wastewater and its journey



Wastewater flows from individual households into the public sewage system. Untreated water from municipal and industrial areas also passes through local sewers, along with rainwater, which carry it to the wastewater treatment plant where it is gradually cleaned using a number of processes before being finally discharged into the river.

USING WATER



OUR ELIXIR OF LIFE

WATER IS A VITAL RESOURCE that we use every day. It is not only used as drinking water, but also as an indispensable production and important factor for industry, trade and agriculture. Furthermore, water is a highly valued asset for transport and is used for energy production in power plants. Water shapes our landscape and is the number one tourist magnet in Austria.

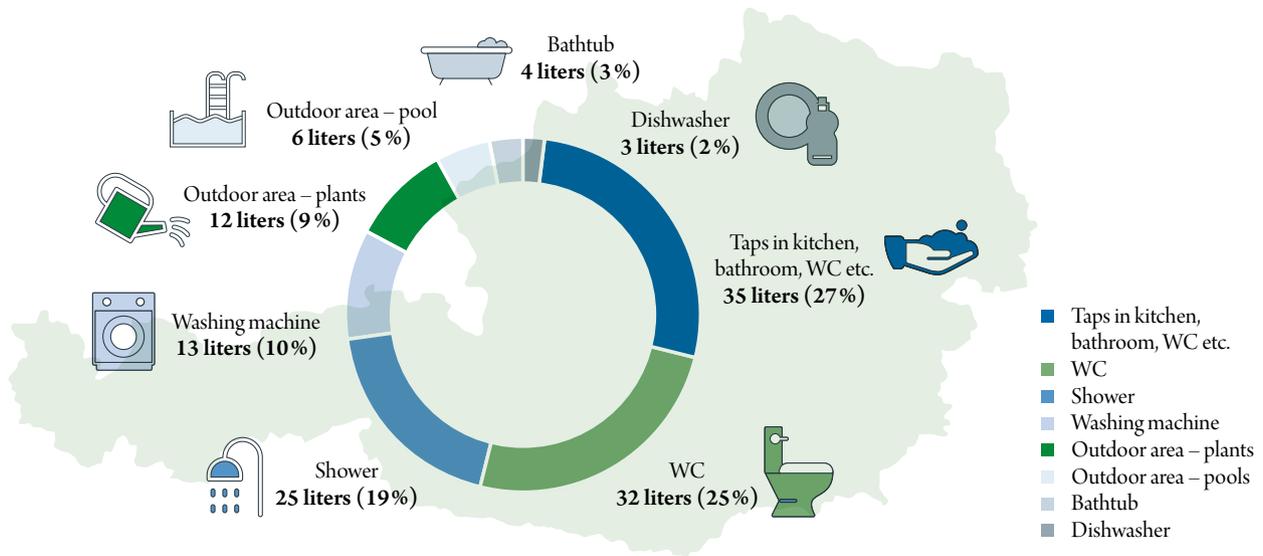


»Water is a friendly element to those who are familiar with and know how to treat it.«

JOHANN WOLFGANG VON GOETHE

Average per capita water consumption in Austrian households

130 liters/inhabitant/day (100%)



Source: ÖVGW 2017, Studie WAVE

HOUSEHOLD

Water travels a long way before it flows out of our taps. It is usually taken from sources outside of the city and stored in reservoirs before being transported along pipelines until it finally arrives in our homes. In rural areas, the route is often much shorter.

The volume of water consumed each year by Austrian households is equivalent to the total volume of water in Lake Wolfgang. This equates to an average of 130 litres per person per day, most of which is used for flushing the toilet and daily personal hygiene.

By international standards, Austrians are among the more economic consumers of water when it comes to using it on a daily basis. Even though the country has plenty of water, it still needs to be treated with care and respect. Our drinking water is our best monitored food commodity and also extremely good value for money. A litre of drinking water in Austria costs on average between 0.15–0.30 cents and comes directly from the tap. It therefore does not have to be bottled and transported over long distances above ground. Being able to enjoy fresh drinking water directly from the tap is not just a privilege, it is also resource friendly and helps to avoid the use of plastic bottles.

INDUSTRY

There is hardly any industry that can do without water. It is used both for production and in cooling processes. Water is consequently an important location factor for the domestic economy. The following sectors are particularly water intensive:

- Food industry
- Textile industry
- Paper and pulp industry
- Metal industry
- Glass industry
- Pharmaceutical industry
- Chemical industry

The treatment of the water used in production processes is strictly regulated.

WATER FOOTPRINT

Different quantities of water are required for the production of all goods, both at home and abroad. The so-called »water footprint« is an indicator of direct and indirect water consumption and corresponds to the amount of water used in connection with the production of goods, including water that evaporates or is polluted. Water is thus indirectly used by us from beyond our borders.

The amount of water that is actually required to produce specific goods can be calculated, especially for agricultural products: the water footprint for a cup of coffee, for example, is estimated to be 130 litres, a cotton T-Shirt needs approximately 2,500 litres and a car can need up to 400,000 litres. This »hidden« amount of water is known as virtual water. The water footprint can also be determined for individual countries. According to the Austrian Water and Waste Management Association, 4,377 litres is the average daily consumption per person per day.

In order to make an assessment of direct and indirect water use, local water availability is a decisive factor, because a high water footprint in water-abundant regions can be less of a problem than in arid regions. When buying products we should remember that what we are buying could lead to water stress in other countries. The following recommendations should be applied here: »regional and seasonal shopping«, »less is more« and repair products instead of disposing of them prematurely.

AGRICULTURE

By international standards, Austria's soils are fertile and climatic conditions comparatively favourable. Artificial irrigation is only used in a few regions, or for specific crops, and this is carried out almost exclusively using groundwater.

Despite this, the amount of arable land is decreasing. Many areas have become forest, some areas have been sealed off, and some land is simply lying fallow. In 1961, 49 per cent of all land area was used for agriculture; today this has fallen to just 38 per cent. Every day, around 12,9 hectares of land – the equivalent of approximately 30 football fields – are procured for housing and transport purposes. The availability of sufficient quantities of water is crucial for plant growth, watering of cattle and cleanliness and hygiene on farms.

Agriculture is also facing major challenges caused by climatic changes, perhaps more than any other sector of the economy. More frequent and longer drought periods need to be managed by means of constructive dialogue with competent authorities in order to prevent crop failures whenever possible and avoid endangering the regional water balance.





Reservoir lake
Mooserboden, Salzburg

THE POWER OF WATER

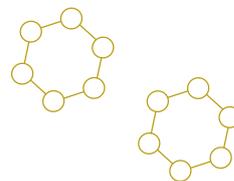
Hydropower has a long tradition in Austria. The Archimedeian screw was invented as far back as 200 BC and is still in use today.

Hydropower plants use the energy of the water to generate electrical energy and are one of the world's most important and most intensively used renewable energy sources. This energy source accounts for approximately 16 per cent of the global power supply, with the largest hydropower electricity volumes generated in China, Brazil and Canada. Austria's power plants are setting international standards. In addition to water supply and wastewater disposal technology, hydro-power know-how from Austria is in demand throughout the world, with a number of internationally successful companies active in this field.



»GREEN BATTERY«

As an alpine country, Austria offers excellent conditions for the use of hydroelectric power. So much so that two thirds of the country's electricity can be generated from hydro-power, with over 14 per cent of European pumped storage capacity stored in the heart of Europe as a »green battery«. At present, around 40,000 GWh of electricity is produced in this way in Austria, with large power plants (> 10 MW) being responsible for the majority of electricity production.



WATER-FRIENDLY HYDROPOWER USE

The use of hydropower allows for near CO₂-free energy production. Nevertheless, hydroelectric power generation also affects natural river ecosystems and their careful handling is therefore essential. There are currently more than 5,000 hydropower plants producing renewable energy for Austria. For each existing and new hydropower plant, appropriate mitigation measures need to be implemented in order to minimise their ecological impact as much as possible.

This applies particularly to:

- possibilities for fish migration at transversal structures
- residual water
- measures to improve and maintain habitat diversity

USING RENEWABLE ENERGY

The global goals set by the 2015 Paris Climate Agreement call for a »decarbonised society«. Austria has set itself the task of increasing the amount of renewable energy for gross final energy consumption to 45 – 50 percent by 2030. The current share is 33.5 percent. Furthermore, it is intended that renewable energy sources will account for 100% of total electricity consumption in 2030.

Strategic planning to increase hydropower generation and simultaneously ensure the protection of ecologically valuable water bodies, based on the National River Basin Management Plan, will be a supporting tool for the sustainable achievement of these goals. The expansion of renewable energy sources is an essential step towards the decarbonisation of the energy industry.



An average of ten million tons of goods are transported on the Austrian stretch of the Danube each year.

WATERWAYS

The major river systems of Europe have been the main transport routes for heavy cargo since the Middle Ages.

With its huge capacity reserves for cargo and low environmental impact, the inland waterway offers many economic advantages over road and rail transport. It can help to relieve congestion on roads and transport goods in an energy-efficient way.

The waterways in Austria include the Danube, the Thaya and the March. The Austrian stretch of the Danube is approximately 350 km long and lies at the center of the Rhine-Main-Danube axis, which traverses Europe as an important traffic artery from the North Sea to the Black Sea. On this section of the river alone, more than one million people and over ten million tons of goods are transported annually.

The maintenance and development of waterways in Austria is the responsibility of viadonau – Österreichische Wasserstraßen-Gesellschaft mbH, a subsidiary of the Federal Ministry for Transport, Innovation and Technology.





WATER TOURISM

The emotional proximity to the water is deeply anchored in our subconscious, and for many people experiences in natural surroundings are vital recreational elements. It is therefore no surprise that the use of waterside recreational areas is increasing. These areas have an important social function and contribute substantially to our physical and emotional well-being.

Austria offers attractive opportunities for recreation on the water throughout the year. Something that is appreciated not only by the Austrians, many of whom prefer to spend their holidays at home, but also the many international guests who visit Austria each year. This is reflected in the fact that a total of over 144 million overnight stays were recorded in 2017.

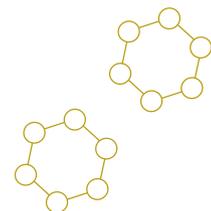
Every of our 9 Austrian states has insider tips for enjoying the natural beauty of its ponds, rivers and lakes. A perfect example of this is the Danube Cycle Path from Passau to Vienna where it is possible to experience changes of nature and culture on both banks of the Danube for nearly all of its 330 km. According to statistics, a total of 670,000 people cycled along the Danube Cycle Path in 2017.



LAKESIDE RENDESVOUS

Austrian lakes have a high recreational value for both locals and holiday guests. Out of the more than 2,000 lakes, 62 are larger than 0.5 km², helping to make Austria a beautiful country with an abundance of lakes. The Austrian Federal Forests (Bundesforste) are responsible for more than 70 per cent of the country's lake areas and can thus be considered to be the »Austria's lake manager«. More than 40 natural bathing areas have been set up allowing free access to unlimited bathing pleasure.

Due to the first-class quality of their water, most Austrian lakes offer a bathing experience of the highest quality. The European Environment Agency consistently endorses Austria as being one of the top ten countries for water quality in its annual bathing water report, with 95 per cent of the country's bathing water classified as »excellent«. The Weissensee in Corinthia for instance, with its almost completely unspoilt shoreline, is the cleanest bathing lake in the Alps.



THE CHALLENGE OF WATER

BOTH A BLESSING AND A CURSE

BETWEEN IDYLIC PARADISE and hard reality; water can be both a blessing and a curse. although it is an element that forms the essential basis of our existence, it can also do untold damage. A lack of water and drought isn't the only threat to humanity, an excess of water in the form of natural hazards such as floods, mudslides, landslides or rockfalls and avalanches are all frequent occurrences that can have catastrophic consequences on communities. Protection against natural hazards is therefore one of the core tasks of the Federal Ministry for Sustainability and Tourism. The Federal Water Engineering Administration and the Austrian Service for Torrent and Avalanche Control work closely together to implement 1,400 projects annually throughout Austria. The Federal Ministry for Sustainability and Tourism invests 200 million euros per year for this purpose. This represents an important investment in the protection of the population, settlement areas and economic zones.



LIVING WITH NATURAL HAZARDS

Due to its alpine landscape, just 39 per cent of Austria is suitable for permanent settlement, in Tyrol, for example, this is a mere 12 per cent.



Floods are natural recurring events that are part of the natural water cycle. When too much rain falls, the water level in our rivers and streams rise, causing inflows in the catchment area to increase. Once the capacity of the river or stream is reached, the water has no other route to follow but to overflow its banks. Flooding is the result.

Natural hazards often occur in Austria as a result of the movement of water or snow. Floods, mudslides, landslides and avalanches have always been dreaded events and pose a high risk to people and their surroundings. Many measures are being implemented to raise the awareness of the general public and improve personal preparedness. Examples of this include the publicly accessible forecasting models (eHyd), the high water platform »Natural Hazard Overview & Risk Assessment Austria« (HORA) and the brochure »Living with natural hazards«. Floods affects everyone and knows no boundaries. Dialogue between all parties involved therefore needs to be encouraged and strengthened in order to mitigate damage and offer rapid assistance in future emergency events.

THE CLIMATE AND (NATURAL) HAZARDS

A global overview confirms that climate change is taking place with most climatologists in agreement that extreme weather events are becoming more frequent. It can therefore be assumed that damage caused by natural disasters, increasingly due to extreme local events, will also increase. The effect of these events on society also needs to be taken into consideration – a significant increase in the number of settlement areas that find themselves located in vulnerable areas is to be expected unless appropriate measures are taken.

BACK TO THE BEGINNING

Rivers and streams and their shore areas are dynamic habitats that need sufficient space to develop not only their ecological functions, but also their effectiveness in terms of water retention. Rivers and streams that have been preserved in their original state have become extremely rare. Today, rivers have one-third less space than in 1870, and natural floodplains have seen a decline of up to 80 per cent. This has disadvantages for both humans and nature because the more intensively a river's floodplain is used, the greater the potential for damage. This is a lesson that has often been learned the hard way in the past, sometimes as a result of serious events. In the future, this situation will be mitigated by restoring water bodies to their natural state. In addition to technical and structural measures, which often serve as immediate protection, the widening of water bodies and the connection of separated side-arms are considered to be the most effective long-term and ecologically protective measures.



Flood protection measures
Almbach Adnet-Seidenau,
Salzburg

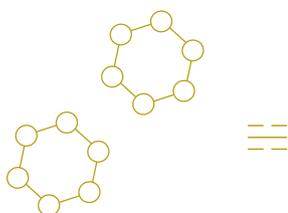
»LESSONS LEARNED«

Disasters of extreme magnitude have occurred repeatedly throughout the history of Austria. However, the so-called »floods of the century« in the years 2002 and 2013 are among the most far-reaching events. The flood in 2002 led to the initiation of a process not only in Austria, but throughout Europe which marked a legal turning point in dealing with these natural hazards.

In 2007, the European Parliament and Council adopted a new directive with measures for a comprehensive series of flood risk management plans to be implemented in 6-year cycles. The purpose of the so-called Flood Directive is to protect people, the environment, cultural assets and economic activities from damage. The ban on shifting the risk of flooding to people living further downstream is intended to prevent shifting the problem itself downstream and to promote a common solution between the countries concerned. Important lessons can be learned from the past and hindsight is often the best preparation for future disasters.

FLOOD PROTECTION CONCERNS US ALL

Despite early warning systems and wide-ranging precautionary measures, there is no 100% protection against natural hazards. The most important measure is and remains the awareness of the risk of natural hazards amongst the population. Each and every individual can make personal provisions and be aware of the risks, so that they are able to make an important contribution to protection against natural hazards.



THE CHALLENGE OF CLIMATE CHANGE

THE BLUE GOLD IN FOCUS

SINCE THE INDUSTRIAL REVOLUTION, people have been heavily reliant on fossil fuels, such as coal, oil and gas. The resulting increase in CO₂ in the atmosphere during the period 1880 to 2012, combined with other greenhouse gases, has subsequently led to a global average warming of 0.85 °C. Austria has also already become warmer, with the country having experienced a temperature increase of 2 °C, particularly in Alpine regions.

CLIMATE CHANGE AND AUSTRIA

Exceptionally hot days, long periods of drought and heavy, often localised, precipitation are all weather events that can be expected to occur more frequently in the future. The consequences of climate change are becoming increasingly apparent in Austria, with its effects having a wide variety of impacts throughout the course of the year. In the south of Austria, where winter precipitation is expected to increase, groundwater recharge is expected to increase or remain stable. In the low-precipitation regions of eastern Austria, a decrease in groundwater recharge or a slight change is predicted for the future. Severe regionally limited precipitation events, so-called heavy rainfall, are also expected to cause an increase in local flooding, whereby natural fluctuation patterns in flood events are much stronger than those caused by climate change. The relationship between climate change and water management have been analysed in detail by the Vienna University of Technology in two studies commissioned by the Federal Ministry for Sustainability and Tourism and the federal states.



CONSEQUENCES OF DROUGHT

Prolonged drought means increased irrigation requirements for agriculture. This can only be achieved if sufficient groundwater or surface water is available. Water abstraction must be carried out carefully, taking the water balance of the region into account. For aquaculture, the combination of low water exchange with elevated water temperatures means a lack of oxygen, which can lead to fish mortality. If there is a decline in the outflow from larger water bodies, power generation from hydropower plants is also reduced. Careful use of water is especially important during periods of drought and includes restrictions such as filling swimming pools and washing cars.





WATER: A KEY FACTOR

The additional need for water is significantly increasing the already existing pressure on limited natural resources and ecosystems. More than 40 per cent of the world's population are expected to be living in areas of severe water stress by 2050.

The United Nations is talking about a global water crisis.

Worldwide consumption of water increased approximately six-fold between 1930 and 2000. This was due to the tripling of the world's population and the doubling of average water consumption per capita. This situation is compounded by higher life expectancy, technological progress and booming industry, all factors which are putting pressure on the ever increasing demand for water.

The physical world of water is thus closely linked to the socio-political world, with water often being a key factor in the management of threats such as hunger, migration, epidemics, inequality and political instability. Adequate and proper water management is therefore essential to ensure the avoidance of increased competition for water and the escalation of a variety of cross-sectorial water crises. The global lack of water unsurprisingly tops the list of environmental problems that humanity must solve in the 21st century.

GLOBAL EFFECTS OF CLIMATE CHANGE

Higher temperatures, rising sea levels, melting glaciers, a shift in climate zones, weather extremes, the spread of tropical diseases and environmental refugees are among the world-wide overriding predicted consequences of global warming. Our oceans are one of the world's largest carbon dioxide sinks and contain around 50 times more carbon than our atmosphere. Continuous warming is expanding the water and once stable currents are now causing drastic weather phenomena. The acidification of the oceans and its far-reaching consequences is just one of many parallel effects of the increase in CO₂ globally. The focus is always on water, because nowhere are the effects of climate change more strongly felt than in and around water.

RIGHT OF ACCESS TO CLEAN WATER

On July 28, 2010, the United Nations General Assembly declared, with an overwhelming majority, that the right to safe drinking water and sanitation is a universal human right. According to the United Nations report from 2017, 2 billion people are currently affected by water stress.

Although the »hygienic revolution« has been successful in our latitudes and we currently have no water shortage in Austria, in global terms polluted water is one of the greatest challenges for both humanity and the environment.



GOALS: SUSTAINABLE LIFE



AGENDA OF THE FUTURE

ON SEPTEMBER 25, 2015, the United Nations General Assembly (UN) in New York passed the 17 »Sustainable Development Goals« (SDGs). This is the first time that a political orientation system of global validity for a transformation towards sustainability was adopted, and to which all 193 states of the United Nations have committed themselves.

The 2030 Agenda is the »Plan of Action for People, the Planet and Prosperity« and, with its 169 sub-goals, represents an important orientation system for Austrian politics, giving direction for all political decisions. The implementation of the SDGs is carried out by all federal ministries in their respective areas of responsibility. Objective 6 (clean water and sanitation) and Objective 14 (life below water) are of particular importance for the water sector and therefore fall mainly within the competence of the Federal Ministry for Sustainability and Tourism. Even though we generally have no water shortages in Austria, the careful use of water is still the prime objective of a functional living environment.

International cooperation and solidarity is crucial if the world's major challenges such as the lack of clean water and food, social injustice and the loss of biodiversity are to be tackled successfully. Austria is committed to the international climate goals and to pursuing an active climate protection and energy policy. Implementation of these objectives can only succeed if the concept of sustainability is even further embedded and actively practiced.

Sustainable Development Goals for Water

6 CLEAN WATER AND SANITATION



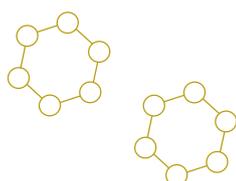
14 LIFE BELOW WATER

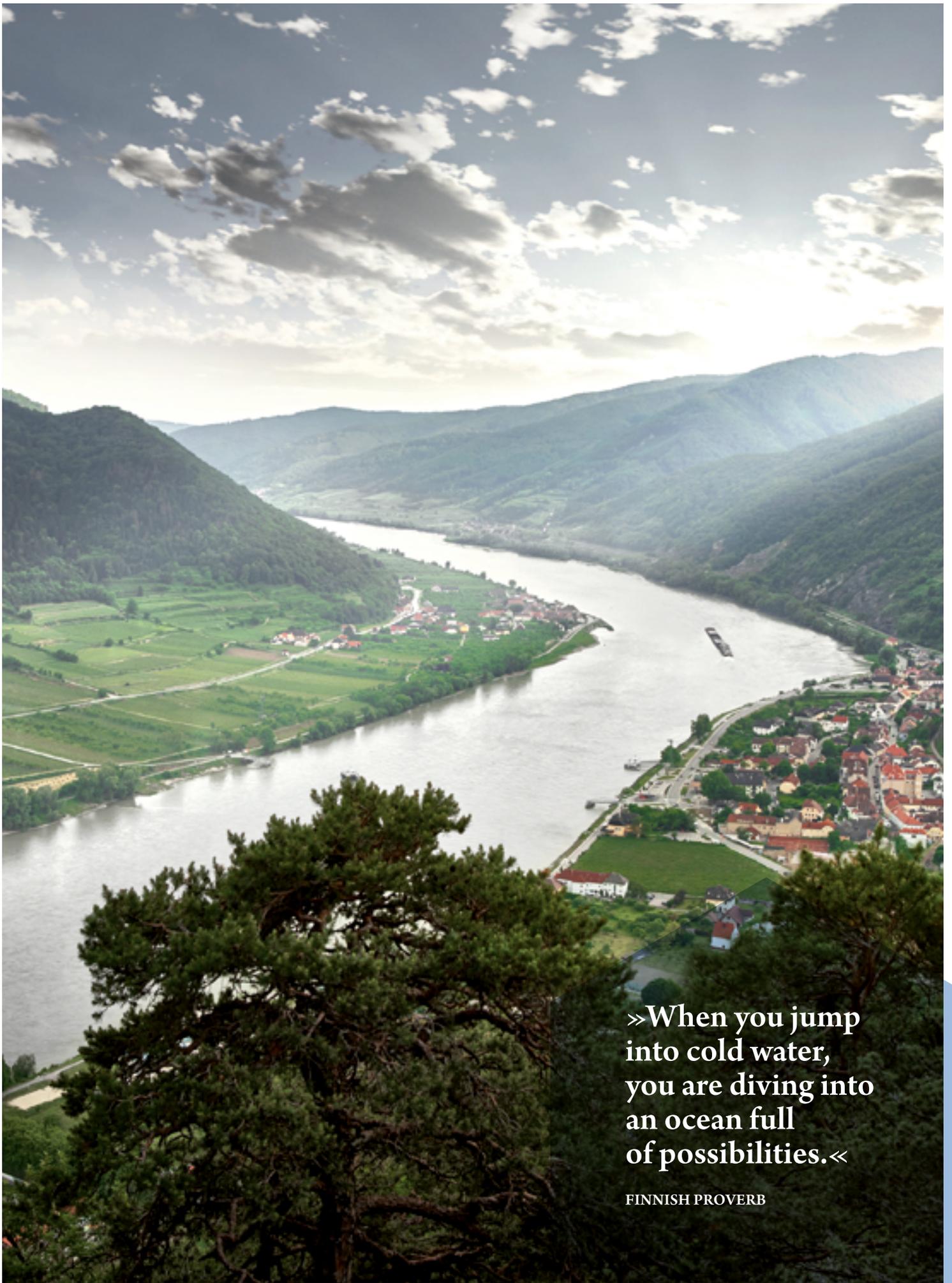


Source: United Nations (UN)

»We may be the first generation to succeed in eradicating poverty and, at the same time, perhaps the last generation to have the chance to save our planet.«

GENERAL ASSEMBLY RESOLUTION,
2015





»When you jump
into cold water,
you are diving into
an ocean full
of possibilities.«

FINNISH PROVERB

WATER WITHOUT BORDERS



WATER CONNECTS

WATER KNOWS NO BORDERS in its quest to connect countries with one another. Flowing through a myriad of surface and underground arteries, it connects villages with cities, forests with fields, mountains with oceans and finally even continents with one other via the currents of the oceans and the atmosphere.

As a landlocked country, 96 per cent of Austria is connected via the Danube River Basin to the Black Sea and 4 per cent of the country is connected to the North Sea via the Rhine and the Elbe. This cross-border utilisation and the setting of objectives for improving the condition of water bodies require solidarity across the respective state borders.

INTERNATIONAL PROTECTION FOR THE DANUBE

Running predominantly from west to east, the Danube flows through and connects some of the most prosperous areas with some of the poorest regions in Europe. With a length of 2,857 km, the Danube, next to the Volga, is the second longest and second largest river in Europe, flowing through ten countries on its way from the Black Forest in Germany to the Black Sea in Romania. The Danube River Basin extends over 19 countries, making it the most international river basin in the world, and contains 10 per cent of the continental European area within its catchment area. In order to balance the various needs of the environment, economy and society within the river basin, integrative water management is essential. This requires coordination on an international level. For this reason, on June 29 1994 the largest riparian states in the catchment area and the European Union signed the Danube River Protection Convention in the Bulgarian capital, Sofia. This led to the establishment of the International Commission for the Protection of the Danube River (ICPDR), with its secretariat in Vienna.

CLEAN – HEALTHY – SAFE

The Danube Declarations are important milestones for cooperation in the Danube region and are adopted by the ministers of the Danube countries. The objectives of the ICPDR are clearly defined within these declarations and aim to ensure the sustainable use of the waters of the Danube River Basin with a naturally balanced ecosystem:

- clean due to less industrial pollution
- provide healthier habitats for aquatic plants and animals
- safe for people in case of flood events.

Experts, national delegates and representatives from the ministries, along with members of NGOs and academics, all work closely together in groups of various specialisations to form the backbone of the commission. In Austria, the Federal Ministry for Sustainability and Tourism is responsible for the implementation of the important tasks of this commission, providing the many experts required for strategic orientation and the working groups that are important for its success. This guarantees that Austrian water know-how is not only applied at home, but also helps in transnational projects.





The sturgeon is considered to be a >living fossil< and is one of the largest and oldest freshwater fish in Europe.

THE OLD STURGEON AND THE DANUBE

The quality of the Danube and the condition of its inhabitants are constantly monitored. The sturgeon is very sensitive to environmental influences and is therefore considered to be a reliable indicator of a healthy river system.

Sturgeons have existed on Earth since the time of the dinosaurs, and the Beluga sturgeon is one of the largest freshwater fish in Europe. There is only one other wild sturgeon in Austria, the sterlet, which can only be found in a very small area of the Danube. For these reasons the ICPDR has endorsed the sturgeon as its flagship species. The Sturgeon 2020 program has also been established to protect the Danube sturgeons and ensure viable populations of sturgeons and other native fish species by the year 2020. The main measures included in this program, in addition to the protection of habitats, are the restoration of migratory routes and economic alternatives to sturgeon fisheries. An internationally acclaimed LIFE-Sterlet project is currently running in Vienna, with the aim of strengthening the wild-life population of the species and re-establishing healthy populations.

RAISING AWARENESS AND ENVIRONMENTAL EDUCATION

The public also has a significant role to play in the protection of the Danube.

A group of public participation experts are tasked with focusing on awareness-raising activities for all issues relevant to the Danube River Basin. This guarantees a coordinated approach from all participating countries. The ICPDR is the only commission in which a separate working group is dedicated exclusively to matters relating to information, communication and the involvement of the general public to support it in its activities. One of the prime focuses is on youth, whereby targeted projects, such as the Danube Box and the Danube Art Master have been designed to make the involvement of all young people living along the river more attractive. Activities such as the »Danube Art Master« encourage school classes to create works of art from materials found along the Danube's riverbanks and tributaries.

The anniversary of the signing of the Danube River Protection Convention on 29 June 1994 is a tangible sign of the importance of the Danube and its habitats. For this reason, every year around this day »Danube Day« takes place to inform and raise children's awareness of the many and varied aspects of the Danube. The event sees large festivals and activities take place throughout all of the Danube countries.



STRENGTHENING WATER AWARENESS

IF YOU WANT TO CHANGE THE WORLD, YOU HAVE TO START WITH YOURSELF

EACH AND EVERY ONE OF US can trigger positive effects on the environment and water by making small changes.

Water awareness is characterised by the realisation that water should be valued and treated responsibly as our most valuable asset. Creating a stronger awareness of water with the general public is therefore one of the strategic focuses of the Federal Ministry for Sustainability and Tourism. People need to know just how valuable and important the resource water and its habitats are. For this to happen, they need to be provided with information and appropriate activities that motivate them to get involved.



GENERATION BLUE

Children and young people are especially open to new ideas. This thirst for knowledge needs to be exploited through targeted information and activities concerning the topic of water. The youth platform »Generation Blue« was founded in 2004 and is intended for everyone who wants to shape the future of water in Austria. In addition to its digital focus and a »mobile awareness of water«, young people between the ages of 13 and 19 are encouraged to participate in a variety of water activities. Water education also takes place in schools.

Teaching materials such as the »Water Workshop« ensure that »Generation Blue« provides a practice-oriented working basis for teachers.

One of the highlights of the youth water platform is the Drink Pass (Trinkpass). Every year, up to 25,000 children and young people participate in the Drink Pass campaign, thereby creating one of the largest environmental campaigns in Austria. The event encourages young people to drink enough water and be creative with water.

Social media networks, including Facebook and YouTube have an important contemporary role to play for the platform in reaching the mobile target group. Water knowledge can be made to come alive by using a variety of formats in clearly structured units. Generation Blue is a highly regarded project on an international level and is extremely well networked. There is no comparable project in which such a clear focus on water for a young target group has been consistently developed and expanded over such a long period of time.



ACTIVE FOR OUR WATER

In order to discuss and contribute to matters concerning water, a comprehensive understanding and knowledge is required. This is precisely what the Federal Ministry for Sustainability and Tourism offers with the »Water Active« platform. Since 2009, Austria's largest water platform has regularly provided up-to-date first hand information, event tips and online tools for water related issues. The main areas of information covered are water as a resource, water & leisure, water & nature, water safety and water bodies as habitats. A lexicon, a water map with sample projects from all over Austria and a water quiz app complete the interactive offer. Every year during the summer months a »Water Active« photo competition takes place. A separate »Water Active« video series shows current water topics presented in short animation trailers. Current videos deal with the topics of virtual water, drinking water from the source to the glass and »plastic free – be there!«

»Water Active's« numerous activities also serve to gain trust and to provide a community of people who are inspired by water with high-quality services and answers to their questions and concerns.



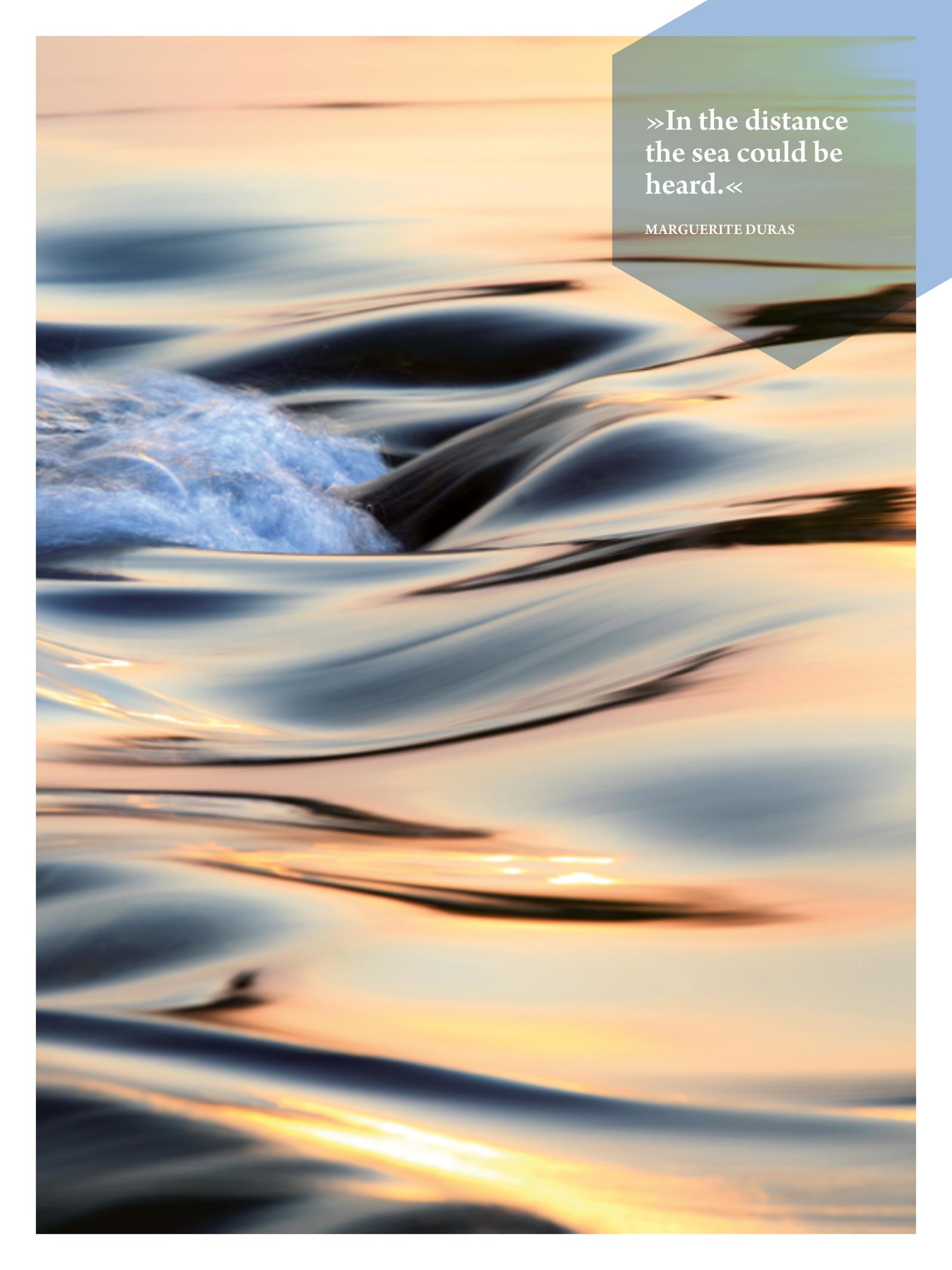
APPRECIATING WATER

World Water Day aims to draw public attention to the critical water issues of our time. It was launched at the 1992 UN Conference on Environment and Development in Rio de Janeiro and has since been held every year on 22 March.

During this time, the Neptune Water Prize was founded in Austria in 1999 with the aim of emphasising the importance of water as a resource for life, the environment, the economy, art and society. Since then, it has been awarded every two years around about the time of World Water Day. As an Austrian environmental and innovation prize, it focuses on various categories of Austrian related projects. The award is not only for experts, but also for artists, private individuals, associations, schools and communities. The Neptune Water Prize is widely considered to be a showcase for Austrian innovative water projects and the Austrian water community. It is an event which stimulates sustainable water awareness through active participation and by bringing together partners and the business community.

OUTLOOK

The world of water is characterised by many natural, professional and legal factors. It is also influenced by people, often with quite personal characteristics. A recent survey by the European Union shows that many people in Europe are concerned about water. The future of this valuable resource and how we solve the global water crises lies mainly in our own hands. Austria, a land which is rich in water, is in an excellent position to act as a role model; not only for Europe, but also for the future of water around the world.



»In the distance
the sea could be
heard.«

MARGUERITE DURAS

SERVICE

LINKS – WEB:

Federal Ministry of Agriculture, Regions and Tourism
www.bmlrt.gv.at/english

Generation Blue
www.generationblue.at

Water Active
www.wasseraktiv.at

Neptune Water Prize
www.neptun-wasserpreis.at

Danube Day
www.danubeday.at

Hydrological Information Service Austria
<https://ehyd.gv.at>

Natural Hazard Overview & Risk Assessment
Austria
www.hora.gv.at

Federal Agency for Water Management
www.baw.at

Environmental Agency Austria
www.umweltbundesamt.at/en

Austrian Association for Gas and Water
www.ovgw.at

Austrian Water and Waste Management Association
www.oewav.at

International Commission for the Protection
of the Danube River
www.icpdr.org

Water Information System for Europe (WISE)
<https://water.europa.eu>

European Environment Agency
www.eea.europa.eu/de

UN Water
www.unwater.org

Sustainable Development Goals
<https://sustainabledevelopment.un.org>

LINKS – SOCIAL MEDIA:

www.facebook.com/Nachhaltigkeitsministerium

www.facebook.com/GenerationBlue

www.facebook.com/wasseraktiv

www.instagram.com/wasseraktiv.at



