# EAA Hydropower Position Paper, October 2020 - with an emphasis on small scale hydropower

Rivers are some of the most extensively altered ecosystems on Earth. The majority of Europe's rivers are not in a good ecological state. Our rivers are under immense pressure from a range of activities, hydropower in particular, which hamper rivers' resilience and capability to sustain wildlife.



More than 21.000 "small" hydropower plants are causing huge ecological problems across Europe. Photo: Olaf Lindner

## Study findings<sup>1</sup> (Dec 2019):

- Europe is saturated with 21,387 hydropower plants
- 8,785 additional plants are planned or under construction
- 28% of all planned hydropower is in protected areas (33% in the EU)
- 91% are small plants, which produce negligible amounts of energy (less than 10MW)

## Study findings<sup>2</sup> (July 2020):

• "The Mediterranean Basin Biodiversity Hotspot is among the most biologically diverse regions worldwide and renowned for its richness of endemic freshwater species. But the hotspot's lakes, rivers and wetlands are seriously threatened by an unprecedented boom in hydropower development."

## Guidance on the requirements for hydropower in relation to EU Nature legislation; European Commission (2018); p.4 <sup>3</sup>:

• "A significant number of Europe's wild fauna and flora species, including some 400 freshwater species protected under the Birds and Habitats Directives, depend on river and lake ecosystems for their survival. However, today most of Europe's rivers are in a highly degraded state and under immense pressure from a wide range of socio-economic activities (including hydropower)."

• "From the latest State of Environment reports it is clear that much still needs to be done to meet the objectives of the Water Framework Directive and the two Nature Directives. This can only be achieved if priority is given not just to preventing a further deterioration of our rivers but also to actively restoring their ecological status and removing, or at least significantly reducing, the pressures and threats they face.

## The EU 2030 Biodiversity strategy (May 2020)<sup>4</sup>:

• "Restoring at least 25 000 km of EU rivers to a freeflowing state"

<sup>&</sup>lt;sup>1</sup> www.wwf.eu/wwf\_news/publications/?uNewsID=356638

<sup>&</sup>lt;sup>2</sup>www.researchgate.net/publication/342804186\_Threatened\_Freshwater\_Fishes\_of\_the\_Mediterranean\_Basin\_Biodiversit y\_Hotspot\_Distribution\_extinction\_risk\_and\_the\_impact\_of\_hydropower

<sup>&</sup>lt;sup>3</sup> https://ec.europa.eu/environment/nature/natura2000/management/docs/hydro\_final\_june\_2018\_en.pdf

<sup>&</sup>lt;sup>4</sup> <u>https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/actions-being-taken-eu/eu-biodiversity-strategy-2030\_en</u>

## **10 hydropower statements by EAA**

**1)** No new hydropower plant should be installed in any European river as the negative impact on the aquatic environment, flora and fauna is devastating. And it is very unfortunate and inappropriate that any hydropower plant has been allowed in protected areas.

**2)** A reduction of the number of hydropower stations and dams are needed, as well as mitigation measures, including fish protection and fully functional fish passes. The EU's and international aspirations to put a halt to the biodiversity decline in 2010 didn't happen. It won't happen in 2020, and most likely it won't happen in 2030 either if not the number of and impacts by hydropower and dams are reduced dramatically.

**3)** Less hydropower stations and dams are needed for EU Member States to implement and comply with targets and provisions laid down in the EU's Water Framework Directive (WFD) - which is much needed as Member States are struggling to meet the 2027 deadline for achieving 'good ecological status' for their waters - the Birds- and Habitats Directives as well as to stop the loss of biodiversity.

### 4) Hydropower labelled or sold as 'green energy' is misleading

Hydropower is a renewable energy per definition, but it is not, and should not be termed 'green energy'. Arguably, existing hydropower and dammed reservoirs do more damage to the life in and around our river systems than climate change ever will – and they make our river systems less resilient to climate change.

**5)** The energy contribution from small hydropower plants is 'insignificant' but cause lots of damage In 2017, the share of energy from renewable sources in gross final consumption of energy, in the EU, reached 17.5%. Of EU's 21,000+ hydropower installations 91% are 'small' (less than 10 Mw). These small hydropower stations contribute only **2.1%** of the total renewable electricity production, or **less** than 0.4% of the total EU energy consumption<sup>5</sup>. To increase small hydropower installations by e.g. **50% (ca.** <u>10,500</u> new plants) would increase the total energy production, from 0.4% to 0.6% only, but with a devastating impact on the aquatic environment as a result.

Pt. 8,785 additional plants are planned or under construction!<sup>6</sup>

**6)** In most EU countries plants with highest energy return on investment have already been built Thus, new installations generally will do more damage, with less energy return on investment.

**7)** Small hydropower plants are less profitable and do more damage per energy unit output compared with the bigger plants.

8) More small hydropower plants will increase the negative impact on the environment exponentially - most obviously maybe, in places where other hydropower stations are installed already (cumulative effect) but also when installed in a pristine river.

9) There are very few pristine rivers left (hydropower and dams free) in Europe. These rivers need special protection – 'no-go' for hydropower. We are cautiously optimistic about the Commission's proposed 'EU 2030 Biodiversity strategy' from May this year. We urge the Council and Parliament to adopt the target to restore at least 25 000 km of EU rivers to a freeflowing state.

**10)** Hydropower permits with no expiration date are unacceptable, an anachronism, which makes it more difficult to get rid of hydropower stations and dams when and where they are not needed or wished anymore.

<sup>&</sup>lt;sup>5</sup> <u>https://ec.europa.eu/eurostat/documents/2995521/9571695/8-12022019-AP-EN.pdf/b7d237c1-ccea-4adc-a0ba-45e13602b428</u>

<sup>&</sup>lt;sup>6</sup> www.wwf.eu/wwf\_news/publications/?uNewsID=356638

# EAA's top 3 demands:

## No new hydropower, stop for subsidies and removal of all dams not needed anymore!

## Hydropower is NOT 'green' energy

Clearly, electricity generated by hydropower plants is by definition **renewable energy**, but it is very misleading to label or sell it as 'green' energy<sup>Z</sup>. Anybody who knows a little about the impact of hydropower plants on rivers and the flora and fauna in and around them knows that the term 'green' is grossly misleading. **However, there are a few exceptions.** The Swedish campaign organisation 'The River Savours' issue diplomas<sup>8</sup> to owners who are very serious about minimising their plants' adverse impacts on the rivers.

## People are willing to pay for keeping their rivers hydropower free

**A survey**<sup>9</sup> among the people in the river Aspe region (France) demonstrated people's willingness to pay quite a lot for a pristine Aspe river. Unfortunately, such kind of pre-surveys are rare:

- "..the willingness to pay for a pristine Aspe (that is a satisfactory level of fish population, a very good water quality and a natural flow) is estimated between  $\leq 922$  to  $\leq 1,225$  per household per year. Considering that in the Aspe region there are slightly less than 13,000 households, the cumulative willingness to pay is not far from  $\leq 12$  million, which is **three times the revenue sharing** that would accrue to local authorities if bidders were to offer 25% revenue sharing. These results unequivocally demonstrate that people living in the region value the fluvial ecosystem."

## Fish are suffering from blocked pathways

**Millions of fish are killed each** year during their natural migration. The majority of the 25,000 hydroelectric power plants and the many 10,000's of pumping stations across Europe are not properly screened. Thousands of them are poorly designed, not even allowing fish to find their way around or through them.

**Long-distance migratory species** are seriously depleted, or even close to the edge of extinction.

The European eel<sup>10</sup> and sturgeon<sup>11</sup> are classified as 'Critically Endangered' (CR) by the IUCN.

Atlantic salmon is regionally extinct or seriously depleted in many river systems across Europe.

**Many short-distance migratory species** are also in alarming decline. Globally, migratory freshwater fish have dropped 76 percent in less than 50 years.<sup>12</sup>

"**Sturgeon is a flagship species** for the Danube River Basin and valuable indicators of water quality and ecosystem health... From the six native Danube sturgeon species which partly migrated as far as Regensburg on the Upper Danube, one is already extinct, one is functionally extinct, three are on the verge of extinction, while one is considered threatened. "; cutting from the program: "**Sturgeon 2020**"<sup>13</sup>

Eels killed by hydropower turbines during their downstream migration Photo: Frode Kroglund



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A misleading advertisement by

McDonalds in Germany.

<sup>&</sup>lt;sup>7</sup> www.eaa-europe.org/news/10213/a-mistake-the-european-commission-labels-hydropower-green-energy.html

<sup>&</sup>lt;sup>8</sup> www.mynewsdesk.com/se/pressreleases/ljusdal-energi-faar-miljoediplom-av-aelvraeddarna-2529374

<sup>&</sup>lt;sup>9</sup> <u>Economic and Environmental Implications of Hydropower Concession Renewals</u>; Pontoni, Creti, Joëts (2018)

<sup>&</sup>lt;sup>10</sup> www.iucnredlist.org/species/60344/45833138

<sup>&</sup>lt;sup>11</sup> www.iucnredlist.org/search?query=european%20sturgeon&searchType=species

<sup>&</sup>lt;sup>12</sup> worldfishmigrationfoundation.com/wp-content/uploads/2020/07/LPI-Migratory-Freshwater-Fish-press-release.pdf, 28 July 2020

<sup>&</sup>lt;sup>13</sup> www.dstf.eu

### Fishing restrictions deliver little to nothing if other factors remain unattended

When dealing with declining migratory fish it is sometimes heard that a logical, prime measure is to stop fishing. Indeed, fisheries need to be regulated and controlled but it won't make a difference if other factors such as hydropower turbine-induced mortality, habitat loss and blocked migration pathways remain unattended.

#### **Mitigation measures**

All hydropower plants must have functional fish protection and fully functional fish passes for upstream and downstream migration. Retrofitting with state-of-the-art technology pumps and turbines would help to protect migratory fish. The fish passes need to be equipped with a system to monitor and record the effectiveness of the passage for migration up and down the system. Proper screens are needed to protect fish, small birds and other aquatic animals from getting into the turbines. A bypass should be open at all times for downstream migration.



Many eels saved in one night from being killed in hydropower turbines during their natural downstream migration. State of the art fish protection for small hydropower has been available for many years, but few are installed. Photo: Dr. Guntram Ebel

#### We agree with WWF that:

"If a hydropower plant is proposed in a protected area the plans should not go forward."<sup>14</sup>

### **Minimum ecological flow**

All hydropower owners should comply with regulations for minimum ecological flow. Lawmakers should create regulations for minimising the oscillating flow that may result in hydropeaking. And proper control of compliance is a must.

## **Ecological Flow Release (EFR)**

EU ought to adopt the European Investment Bank's requirements where these requirements are more demanding than WFD provisions, for example with regard to Ecological Flow Release (EFR): "EFR must include a continuous programme of monitoring (including both flow and biological indicators), evaluation, and adjustment - commonly referred to as adaptive management - so that it can be periodically reviewed and where necessary modified in response to increased understanding or changes in downstream ecosystem or socioeconomic conditions."<sup>15</sup>

## **Stop for subsidies**

Public subsidies, direct or indirect (Feed-in tariffs), should not be offered for small scale hydropower plants. Often a new hydropower plant is only economic viable due to subsidies. And externality cost is left to the tax-payers and the electricity consumers.

## Hydropower makes use of water and degrades the river and water quality - for free

The water use cost recovery principle stipulated by the WFD ought to apply fully to hydropower - as suggested by the EU Commission<sup>16</sup>. It is only fair that externalities are identified and paid for, including for the hydromorphology impact (water flow, temperature, oxygen content, sediment transportation), and for fish and fauna killed and damaged in the turbines, the river connectivity impairment (habitat fragmentation), impaired fish migration etc.

#### 'No-Go' areas

We request strongly, that EU Member States should be obliged to designate 'No Go' areas for hydropower installations on pristine river systems e.g. Alpine areas, Natura 2000 sites and rivers known to be crucial for breeding of vulnerable and endangered fish species (e.g. genetically pure Danube trout). These areas should be reserved for conserving biodiversity and recreational value.

<sup>15</sup> 'Environmental, Climate and Social Guidelines on Hydropower Development'; EIB (Oct 2019), page 25.

www.eib.org/attachments/eib\_guidelines\_on\_hydropower\_development\_en.pdf

<sup>&</sup>lt;sup>14</sup> https://wwfeu.awsassets.panda.org/downloads/third\_rbmps\_wwf\_recommendations\_final.pdf (july 2020)

<sup>&</sup>lt;sup>16</sup> <u>http://europa.eu/rapid/press-release\_IP-11-1264\_en.htm?locale=en</u>

#### The Water Framework Directive (WFD) and hydropower

The WFD<sup>17</sup> is the most comprehensive instrument of EU water policy. The directive contains a number of important objectives including Member States "shall implement the necessary measures to prevent deterioration of the status of all bodies of surface water..". This means, or ought to mean (there are derogation possibilities), it is very difficult to install a hydropower plant in any new location, as that would almost always lead to deterioration of that water body's status. It is important to stress that prevention of deterioration is not enough for compliance. Cutting from 'Guidance on the requirements for hydropower in relation to Natura 2000' <sup>18</sup>:

- "From the latest State of Environment reports it is clear that much still needs to be done to meet the objectives of the Water Framework Directive and the two Nature Directives [the EU Birds and Habitats Directives]. This can only be achieved if priority is given not just to preventing a further deterioration of our rivers but also to **actively restoring their ecological status** and **removing, or at least significantly reducing, the pressures and threats they face**."

Also, in this report, conducted for the EU Commission, 'Hydropower generation in the context of the EU water framework directive'<sup>19</sup>, it is stressed that:

- "The environmental impacts of hydropower are well known, as are corresponding mitigation measures. Especially the demand for river continuity within a chain of obstacles **can only** be fulfilled by **reducing the number of obstacles**, **even if well-functioning fishways are built.** Hence focus should be placed on development or refurbishment of large power plants."

Only around 40%<sup>20</sup> of the EU surface waters (rivers, lakes and transitional and coastal waters) are in 'good ecological status' or 'potential' as required by WFD to be reached by 2027 at the latest.

#### The biodiversity loss should have been put to a halt in 2010, but it didn't happen

**The new deadline 2020<sup>21</sup> won't be met either.** Much of the biodiversity trouble lies with EU's 21,000+ hydropower plants and hundreds of thousands of dams and weirs. Tens of thousands of dams are deemed obsolete<sup>22</sup> and should be removed immediately.

#### EAA is well aware that fossil fuels must be replaced by renewable energy

**However, this transition should not add to existing problems, or create new ones.** Renewable energy can be produced by various means, with low to high impact on habitats, biodiversity, and ecosystem services like recreational angling, boating and tourism. The range of effects a hydropower facility can have on species and habitat types will vary considerably from one site to another. It is necessary to look at each facility on a case-by-case basis as well as in the context of the whole water system. In this regard, EAA is very supportive of the WFD's "one out all out" rule, which helps to achieve and secure "good ecological status" of the water bodies e.g. by keeping down the number of hydropower plants.

#### Many more hydropower plants are expected in Europe

An estimation for 2050<sup>23</sup> worryingly expects increase in the number of hydropower plants of about 10% for large plants and 25% for small plants, with a rise in electricity generation of only 11%<sup>24</sup>. The European Environment Agency (EEA) writes (2018): "Investments in large-scale hydropower (> 10 MW) were mainly made before 2000. Most of the best sites have already been developed (..) which is why hydropower capacities evolve only slow and little across Europe (..) Small and medium run-of-river hydro plants (< 10 MW) have the potential to contribute to addressing future energy needs, providing that new projects do not conflict with the objectives of nature- and water-related legislation (...) Despite the low total growth rate anticipated up to 2020 at the EU level, the importance of hydropower may increase, in response to the need to create an overall more sustainable and climate-compatible energy system."

**However, 25% is an underestimate.** As shown on the first page of this position paper **8,785 plants** are already planned or under construction in addition to the 21,000+ existing ones.

<sup>20</sup> www.eea.europa.eu/publications/state-of-water

<sup>&</sup>lt;sup>17</sup> <u>https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32000L0060</u>

<sup>&</sup>lt;sup>18</sup> <u>http://ec.europa.eu/environment/nature/natura2000/management/docs/Hydro final May 2018.final.pdf</u>

<sup>&</sup>lt;sup>19</sup> https://publications.europa.eu/en/publication-detail/-/publication/67f12506-5494-4b7e-8742-11b70c6cd280/language-en

<sup>&</sup>lt;sup>21</sup> <u>https://ec.europa.eu/environment/nature/index\_en.htm</u>

<sup>&</sup>lt;sup>22</sup> www.ecrr.org/Portals/27/Dam-Removal-Europe-Report-2018-DEF-1.pdf

<sup>&</sup>lt;sup>23</sup> http://ec.europa.eu/environment/nature/natura2000/management/docs/Hydro final June 2018.pdf

<sup>&</sup>lt;sup>24</sup> https://publications.europa.eu/en/publication-detail/-/publication/67f12506-5494-4b7e-8742-11b70c6cd280

# Allowing more small hydropower plants is irresponsible

Any increase in hydropower plants will make it more difficult or even impossible to meet environmental and biodiversity objectives and the deadlines set in EU legislation and international conventions. **A hydropower/WFD report**<sup>25</sup> to the EU Commission warns, that "new constructions will not only have impacts on the environment (upsurge operation) but also face social resistance."

# No more new plants, but refurbishing of existing plants instead

Existing hydropower plants often can be made capable of producing more electricity with less adverse impact on fish stocks and the environment. And, renewable energy can be produced by other, more sustainable means (wind, solar...).



Villagers in Serbia tear out hydropower pipes in protest. Euronews 16 Aug 2020

# Hydropower, other ecosystem services and stakeholder involvement

Hydropower plants may deny valuable human activities like tourism, boating and recreational angling, as well as hampering other ecosystem services like freshwater supply, nutrient and sediment transport. Some, but rarely all negative impacts are considered or taking into account in the decision-making process before a new plant is allowed to be built or not. It can be difficult for stakeholders other than the hydropower interests to be influential on the decision-making. **EAA recommends stakeholders** to form alliances, to increase capability and share the burden of cost.

# Last resort: go to court

**Arguably, the building of many new plants could be stopped if brought to court.** However, not all complainants will be granted legal standing, and court cases are very expensive (lawyer cost) and run for a long period of time. Relevant angling organisations most often will be granted legal standing, but they often lack the resources to go to court.

# Hydropower dams

Many, but not all dams are used by or built for the purpose of hydropower. Dams create both upstream and downstream migration barriers that severely affect fish and other aquatic fauna. A hydropower dam extends from one river bank to the other to build up a water reservoir behind the dam. Thus, the water flow in the river below the dam comes under control of the hydropower plant operator. (Mis)management can minimise the water flow behind the dam dramatically, or even stop the flow altogether, to optimize the profitability of the plant - a practise known as hydropeaking<sup>26</sup>. Too little, or no flow has a devastating impact on the life in and around the river. Fish eggs die from oxygen depletion or dry out if the water flow is too little or missing for too long. Fish die due to warmed water, from which they cannot escape. Often a series of hydropower plants installed in the same river or river basin make matters worse due to cumulative effects, which planners and concession givers should be very aware of. The WFD's 'one-out-all-out'<sup>22</sup> principle might be compromised. For an example, if a new plant kills no more fish than any other plant in that river, the additional fish kill may bring the WFD quality element 'fish' below its threshold.

# Hydropower reservoirs produce $\ensuremath{\text{CO}_2}$ and methane – but not counted

Hydropower reservoirs can produce significant amounts of  $CO_2$  and methane. Plant matter settling on the reservoir's bottom decomposes anaerobically. This results in a build-up of dissolved methane, which is released into the atmosphere when water passes through the dam's turbines. Methane's effect on global warming is 34 times greater<sup>28</sup> than carbon dioxide. An often referred to example is the Curuá-Una Reservoir<sup>29</sup> in Brazil, which was found to emit 3.6 times more green-house gasses than what would have been emitted by generating the same amount of electricity from oil.

<sup>&</sup>lt;sup>25</sup> https://publications.europa.eu/en/publication-detail/-/publication/67f12506-5494-4b7e-8742-11b70c6cd280

<sup>&</sup>lt;sup>26</sup> <u>https://academic.oup.com/bioscience/article/66/7/561/2463266</u>

<sup>&</sup>lt;sup>27</sup> http://www.europarl.europa.eu/doceo/document/E-8-2015-008966-ASW\_EN.html

<sup>&</sup>lt;sup>28</sup> <u>http://www.sciencemag.org/news/2016/09/hundreds-new-dams-could-mean-trouble-our-climate</u>

<sup>&</sup>lt;sup>29</sup> www.sciencedirect.com/science/article/pii/S1872203214000249#b0035

Greenhouse gases coming from these water bodies are not counted. Does it matter? "..this issue does not relate so much to Europe, as to other continents," it is said in a report<sup>30</sup> to the EU Commission from 2011. Maybe not, but how much is it? **We would like to know.** 

## Hydropower reservoirs change the aquatic habitat and the water temperature

Larger hydropower reservoirs change the habitat for many freshwater species by reducing the river flow, dissolved oxygen and increasing water temperatures. These changes prevent a number of fish species from inhabiting or successfully reproducing in the modified waterways, thus significantly lessening the area of their natural distribution, or making them locally extinct.

# Small hydropower plants do more damage than large plants

The total number of hydropower plants in EU is 21,000+. The vast majority (91%) are so-called 'small hydropower plants' (capacity  $\leq$  **10 MW).** The small plants generate **only 13%** of the total electricity production from hydropower vs. 87% by the bigger plants. Small hydropower plants are predominantly of the run-of-river type, without reservoirs. But that doesn't mean they are without adverse impacts, **far from it**.<sup>31</sup> They are mostly built in small tributaries, sensitive habitats vital for fish reproduction and recruitment, thus often have a devastating impact on fish populations.

**Small hydropower, small efficiency but massive negative impact** Small hydro-power plants are inefficient. The small hydropower plants produce only 0.4 % of the total electricity production in Europe. At the same time, they block many thousands of migration pathways and access to habitats for trout, salmon, eels and other migratory fish.

## Hydropower and fish - injuries

Fish can be injured by hydropower in several ways including: a) being sucked onto intake screens and/or injured by the screen cleaning machines,

**b) suffering from** the sudden and dramatic pressure changes during turbine passage,

**c) being damaged or killed** by impact with the guide vanes, turbine runner or turbine casing and

**d) becoming prone to predation** downstream due to disorientation from the effects of turbine passage, and predators which have learned by experience that this is a good place to wait for food.

**Fish passing through turbines** will often be injured or killed. The risk increases exponentially with increased body size and length of the fish. The eel, which is a threatened species, is particularly prone to being chopped up by the turbine blades. Nearly all fish species are severely affected by hydropower.



Very few hydropower plants are state-of-the art equipped to protect fish and secure fish migration. Photo Olaf Lindner



State of the art grate with automatic cleaning system and bar spacing of 2 cm. Photo: Olaf Lindner

**ICES writes in an eel advice**,<sup>32</sup> (Nov 2018), "The non-fishing anthropogenic mortality factors can be grouped as those due to

(a) hydropower, pumping stations, and other water intakes; (b) habitat loss or degradation; (c) pollution, diseases, and parasites; and (d) other management actions that may affect levels of predation, e.g. conservation vs. control of predators."

**The eel is** also affected by hydropower upstream as the **elvers** ['baby eels'] cannot enter the river system or progress upstream.

<sup>&</sup>lt;sup>30</sup> https://publications.europa.eu/en/publication-detail/-/publication/67f12506-5494-4b7e-8742-11b70c6cd280

<sup>&</sup>lt;sup>31</sup> www.researchgate.net/publication/267276135 The impacts of 'run-of-

river' hydropower on the physical and ecological condition of rivers Physical and ecological impacts of ROR hydropower <sup>32</sup> http://ices.dk/sites/pub/Publication Reports/Advice/2018/2018/ele.2737.nea.pdf

<sup>33</sup> www.eaa-europe.org/news/7232/swedish-court-ruling-on-fish-passage-and-water-flow-a-major-win-for-fish-and-anglers.html

8

# 1.3 MILLION



MINISTERIUM -UR EIN LEBENSWERTES

ÖSTERREICH

Salmon and trout cannot reach their spawning grounds if a high dam stops their progress without a suitable fish passage in place. About 50% of **Baltic salmon** populations are facing extinction due to hydropower.

In a landmark case<sup>33</sup> the high court on environmental issues in Sweden, 'Miljööverdomstolen', ruled<sup>34</sup> that species other than traditional migratory fish like salmon and trout also need adequate migration space in the river.

## EAA would very much like to see that ruling to make precedence across Europe!

Fish need migration space – some more than others

migrate to complete their lifecycle. Rivers are fish' natural

MAIN HYMO IMPACTS

Europe hinder fish, and many other freshwater species, from

Animals across the globe fly, swim, walk or drift in their effort to find places to breed, feed or a more hospitable climate. It is of

### **Hydropower permits**

natural migration.

Permits with no time limitation should be revoked. Improvement of existing hydropower plants instead of building new ones should be the preferred option in permit renewals. Permits shall not take precedence over present or future legislation like the EU's nature directives, the Water Framework Directive or other legislation to protect and conserve the water habitats, biodiversity, and flora and fauna. It must be secured that permits for new plants, and permit renewals abide strictly to the rules laid down in the WFD and other EU or national legislation. Process transparency and public consultations as required by EU legislation must be complied with. Access for citizens and organisations to file complaints and to process them must not be prevented by overly complicated procedures or fees.

EAA appreciates that the Commission has made available a special WFD complaint form: http://ec.europa.eu/environment/legal/law/pdf/complaint form.docx



<sup>&</sup>lt;sup>34</sup> www.markochmiljooverdomstolen.se/Domstolar/markochmiljooverdomstolen/M 9888-12.pdf

# Annex – additional information

# • EAA is a proud supporter of the WFD

EAA has no wish to see the WFD opened for change as some EU Member States would like it to happen. Therefore, EAA together with four other prominent NGOs (the European Environmental Bureau, the European Rivers Network, Wetlands International and WWF), established the **'Living Rivers Europe'**\_coalition to protect the WFD against being watered down: www.livingrivers.eu/about/who-we-are

• Living Rivers Europe ran a campaign concerning the fitness check of the WFD. Over the course of 2018 and 2019, 375,386 people called on the European Commission to defend Europe's strong water law, making the EU's public consultation on the legislation one of the largest ever in the history of the European Union. In December 2019, the EU Commission deemed the WFD 'fit for purpose'. In June this year, the Commission announced what we had hoped and campaigned for, that the WFD won't be opened for changes:

www.eaa-europe.org/news/14226/eu-water-law-will-not-be-changed-confirms-european-commission.html

# • Leaflet by Living Rivers Europe:

**Bringing life back to Europe's waters: The EU water law in action; (2018),** Chapter 2: 'Hydropower': http://d2ouvy59p0dg6k.cloudfront.net/downloads/bringing life\_back\_to\_europe\_s\_waters\_web\_1.pdf

• EAA and EFTTA hydropower campaign film: "The End of the River": www.youtube.com/user/JJKK794

• **Conference 29 Jan 2019**, European Parliament, arranged by the Recreational Fisheries & Aquatic Environment Forum: *The Water Framework Directive Fitness Check and the protection of EU waters* Agenda, presentations and report:

www.eaa-europe.org/european-parliament-forum/forum-events-2014-2019/29-january-2019-wfd.html



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EAA, The European Anglers Alliance is a pan-European NGO composed of 14 national organisations representing the interests of 3 million members at the European level and beyond.