

## Investigating the Fabrication and Application of Powder Forging Components Using Experimental Methods for Quality Assurance

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### Abstract

Water resources have become very important for the growing economy and population recently; therefore, the management of water resources requires multilateral approaches by states and other international actors. This situation is more complicated when a water source is shared or transboundary between several states; because the amount of these resources is limited and should be distributed fairly among neighboring states. The European Union has attracted a lot of attention due to its abundant water resources and the conclusion of many treaties by the member states. In order to solve the challenge of how to distribute water between opposite and neighboring states using legislative and judicial approaches, the principles of reasonable and fair use, assessing the potential, actual and future needs of each state and preventing harm to others along with cooperation between states in order to provide the maximum amount of services to the whole human society have been inferred.

**Keywords:** shared waters, conflicts, European Union, regulatory approach, executive approach, judicial approach.

### Preamble

The European continent has the largest number of international river basins in the world and unique complexities that make this region one of the most extensive and complex systems regarding the governance of shared waters. This region has developed a comprehensive treaty framework, including the 1997 United Nations Convention on Non-Navigational Uses of International Waterways and its protocols and most European states must apply a general and specific law in the field of water rights to other EU member states, which of course It involves certain complications regarding cross-border cooperation.

Because of the existence of such challenges, before this issue was raised as a requirement by international institutions from the late 70s and countries were committed to it, the European Union has been one of the pioneers of integrated water resources management. For example, after the adoption of the hydrographic confederation in 1926 in Spain, in 1940 in the Tennessee Valley of the United States of America, and in 1960 in the German state of Hessen, this was realized<sup>1</sup>. Therefore, the success of this union in managing cross-border water relations is very impressive and important.

In general, there are six approaches for the management of shared water resources at the international level, including at the European Union level. In fact, it can be said that the European Union has been

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<sup>1</sup> . Kazemzadeh Daulatabad, Ahmad and Shafiei, Nozar, "Integrated management of water resources and river basin, case study: Aras-Kor water basin", Central Asia and Caucasus Studies Quarterly, year 1400, number 114, 91-129, pp.

able to handle these approaches because of its regional system; because the spirit and contents of these approaches are manifested in the agreements for implementation and execution<sup>2</sup>, and in this way a relationship is created between the theory and practice.

The first approach is based on rights. The emphasis of this approach on the right to water based on hydrographic and historical exploitation includes the concepts of sovereignty and absolute integrity. The second approach is based on need. The emphasis of this approach is on the allocation of water resources based on the needs of the countries of the watershed and this is exactly the substitute for what the surrounding areas of a watershed think they deserve. These needs are evaluated based on various criteria including population, demand, energy consumption and future development. The third approach is based on hierarchy. The emphasis of this approach is to allocate water resources based on hierarchy and this hierarchy is not necessarily the basic and vital needs of the second approach. Rather, it is possible to create hierarchies due to reasons such as historical cases, industrial, agricultural and urban needs according to existing or future conditions. The fourth approach is based on proportional division. The emphasis of this approach is to allocate water resources based on the physical division of water resources which is based on the principles of equality based on time patterns, volume or percentage of water resources. The fifth approach is based on strategic development. The emphasis of this approach of allocating water resources is based on creating a balance between the needs. For example, this could include balancing economic development and environmental needs through the use of alternative scenarios, risk assessments and dealing with uncertainty, taking into account future needs, multiple goals and needs, considering population growth, interests environmental, economic, etc. is realized. The sixth approach is based on the market. The emphasis of this approach is to allocate water resources based on the economic value that water creates in various economic activities<sup>3</sup>.

Many transboundary water allocation regimes are based on mechanisms that have become shared based on historical usage; because no application has inherent priority over others. Priority can be given only when the agreement between the countries and the custom have stipulated otherwise<sup>4</sup>. Undoubtedly, based on custom, the vital needs of humans are prioritized over other needs. Despite this, it can be said that in the policy programs of the countries, according to the national and transnational needs, certain needs may be prioritized<sup>5</sup>, which is also reflected in the agreements<sup>5</sup> that the countries conclude with each other in this field.

It is worth noting that Europe has by far the most shared pressures caused by the influence of human factors such as urbanization and population growth which greatly complicate the implementation of water policies. For example, the rivers of the Balkan Peninsula or the large basins of the eastern rivers of this continent (Dnieper, Dniester, Don and Volga) are in a poor environmental condition<sup>6</sup>. In this way, because of the number of international rivers on the level of the European continent, as well as the dependence of European countries on each other on the level of this continent, wrong decisions regarding the allocation of water resources can have proportionately more negative consequences. Despite this, until now, in general, the cooperative aspects between countries in the world, especially in the European Union, have been much more than the conflicting aspects regarding water resources.

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<sup>2</sup>. Giordano, Mark and others, 2014, "A review of the evolution and state of transboundary freshwater treaties", *International Environmental Agreements: Politics, Law and Economics*, vol. 14, No. 3, p. 245-264.).

<sup>3</sup>. McCracken, M. and others, "Typology for transboundary water allocation: a look at global trends in international freshwater agreements, forthcoming.

<sup>4</sup>. 1997 Convention on the Law of the Non-navigational Uses of International Watercourses (Watercourses Convention), Art. 10.

<sup>5</sup>. Speed, Robert and others, 2013, basin water allocation planning. Principles, procedures and approaches for basin allocation planning, Paris: UNESCO.

<sup>6</sup>. Baranyai, Gabor, 2015, transboundary water cooperation in the European Union: a hydro-political gap assessment, p. 20, retrieved 9 February 2022 from: [www.Danubewaterquality.eu](http://www.Danubewaterquality.eu)

Therefore, it is very important to examine the legal system of this region in this regard. For this reason, the approaches of this region in three legislative, executive and judicial levels and then the origin of conflicts and the solutions that can be presented for each of them will be analyzed separately.

### **1- Legal documents of the European Union in the field of environment**

Since most of the internal documents of the European Union in the field of environment have not directly dealt with the issue of how to divide shared waters, therefore, by examining and analyzing the existing documents and principles in the field of water rights, a conclusion should be reached that can be made regarding the issue of how to divide shared waters applied among European Union countries.

The principles stipulated in the set of policies regarding water resources in the European Union include the principles of high level of protection, caution, preventive action, correction of pollution at the source, the polluter should pay the compensation, integration of environmental protection requirements with the definition and implementation of other community policies such as industry, agriculture, transportation and energy and finally, the promotion and progress of sustainable development<sup>7</sup>. Now, below, we will examine and analyze some important legal documents of the European Union in the field of water resources.

#### **1-1-urban water waste treatment Directive**

This directive was compiled with the aim of protecting the environment against the harmful effects of urban sewage. Member States are also required to collect and treat municipal wastewater according to specific standards. In this way, countries should identify the water resources for treatment and review it every four years and set appropriate technical and financial plans in this regard. Countries should take the following measures to legislate and create requirements and supervision in this regard:

- 1- Member countries must approve a binding regulation so that all water resources in specific geographical areas and on specific dates are subject to treatment.
- 2- The member countries must approve a binding regulation in order to determine the need to discharge municipal wastewater subject to treatment.
- 3- Member countries must approve a binding regulation so that purified water can be transferred to fresh water sources.
- 4- Member countries must establish a procedure to obtain a prior permit for municipal wastewater treatment.
- 5- Member countries should establish a procedure to obtain a prior permit for the treatment of all industrial wastewaters, including agricultural and food industries.
- 6- The member countries must create a comprehensive monitoring and inspection program so that a detailed assessment can be made for the discharge from urban sewage treatment plants.
- 7- The member countries should establish a procedure to guarantee the quality control of treated water with relevant laboratories. Based on this, sampling and analysis methods must comply with standards and regulations. Providing laboratories with validation plans would be a means of ensuring such quality control on an ongoing basis.
- 8- Member countries should establish a procedure so that sensitive and less sensitive areas are re-evaluated and monitored at four-year intervals. In this way, for the next investigations of all sensitive

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<sup>7</sup>. regional environmental center, 2008, handbook on the implementation of EC environmental legislation, section 5-water protection legislation, p. 614, retrieved 3 February 2023 from: <https://ec.europa.eu/environment/archives/enlarg/handbook/handbook.pdf>

and less sensitive areas during this period, careful planning should be done and the criteria should be checked to ensure their validity<sup>8</sup>.

Due to the creation of tasks for countries in order to comply with the principle of pollution correction in water resources, rights can also be considered for them so that they can use the existing water resources and enjoy this right against these tasks. Therefore, since there is no lack or deficiency in creating tasks for countries and all member countries are equally obliged to comply with these tasks, none of the countries should find priority over the other in benefiting from the rights arising from these water resources. In this way, the principle of equality among countries is observed in the use of water resources, including shared waters, by member countries.

### **1-2-Directive of Nitrates**

The European Commission seeks to protect European citizens and natural ecosystems against the dangers of polluting, toxic and nitrate-containing substances. Therefore, it approves rules and regulations for the conservation of surface and underground water. These rules and regulations will be aimed at removing toxic substances from water resources, improving the water quality of oceans, lakes, rivers, streams and other surface and underground waters<sup>9</sup>. On this occasion, one of the important documents that have been approved in this field is the Nitrates Directive, which we will continue to review and analyze in this regard.

The objectives of this directive will include the following:

- A- Reducing water pollution against nitrates from agricultural sources.
- B- Prevention of more pollution of this type.

To achieve this goal, member states must identify the waters affected by these polluting sources as well as the waters that can potentially be affected by these pollutions. In this way, countries should do proper planning, monitoring and reporting to the commission regarding water resources. In order to legislate and impose requirements in this regard, countries should take the following actions:

- 1- Member countries must organize an executive system to ensure compliance with the regulations.
- 2- Member countries should identify other measures that will help reduce nitrate levels in polluted water sources such as urban and industrial wastewater sources.
- 3- The member countries must monitor the process and review of measures as follows:
  - A- Member countries must re-examine the monitoring and evaluation program of allocated waters and other water resources every four years.
  - B- The member countries should organize a proper review process in order to check the effectiveness of measures, especially action plans in vulnerable areas affected by nitrates, as a basis for conducting necessary follow-ups<sup>10</sup>.

This directive, like the previous document, based on the principle of correcting pollution in water resources and creating duties for our member countries, leads us to the conclusion that equality in duties and obligations also entails equality in rights, and this general rule can be applied in water exploitation. The subscriber also complied.

### **1-3-Groundwater Directive**

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<sup>8</sup> . <sup>8</sup> . Council directive 91/271/EEC concerning urban water waste treatment (OJ L 135, 3005.91), as amended by commission directive 98/15/EC (OJ L 67, 7.3.98) and regulation (EC) No. 1882/2003.

<sup>9</sup> . <sup>9</sup> . European commission, 26 October 2022, Questions and answers on new EU rules on surface water and groundwater pollution, retrieved 3 February 2023 from: <https://ec.europa.eu/commission/presscorner/detail/en/qanda>

<sup>10</sup> . Council Directive 91/676/EEC on the protection of waters pollution caused by nitrates from agricultural sources (OJ L 375, 31.12.91), as amended by regulation (EC) No. 1882/2003 (OJ L 284, 31.10.2003).

The purpose of this directive is to prevent the pollution of underground water due to certain hazardous substances. The member states are obliged to prevent the discharge of certain substances listed in the underground waters and make the discharge of other items subject to prior authorization. The following two lists describe hazardous substances that require more control:

- A- Prohibition of direct discharge of materials including organohalogen, organophosphorus, mercury, cadmium and hydrocarbons
- B- Prohibition of direct discharge of materials including copper, zinc, lead, arsenic fluorides.

Discharges subject to prior authorization must also be limited to certain cases and conditions, and their impact on the receiving environment must also be considered.

Certain requirements that member states must arrange in this direction are:

- 1- Member countries must set regulations to prevent the discharge of toxic substances mentioned in the first list into underground waters; unless the groundwater is permanently unsuitable for other uses, in which case discharge may be permitted under certain conditions<sup>11</sup>.
- 2- Member States must establish regulations to ensure that competent authorities maintain a list of licenses granted<sup>12</sup>.
- 3- Member countries must establish regulations by which upward and stable trends in the concentration of pollutants or pollution indicators are identified.
- 4- Member countries must establish regulations to identify conditions threatening water or terrestrial ecosystems, human health or the environment.
- 5- In this way, the measures that can be taken to prevent or reduce the discharge of polluting and toxic substances into underground water will be as follows:

The member states must devise a program of mitigation measures to prevent or limit the discharge of pollutants into underground waters. Also, they must take special measures to limit the discharge of non-hazardous pollutants.

As observed, the approach of this directive is based on the principles of caution, preventive action and correction of pollution in water resources. Therefore, according to the arguments made regarding the previous two documents, equality in duties and obligations will also result in equality in rights. This is also true for shared waters. While countries must prevent the pollution of these waters and in the meantime, they also have an equal obligation. They should benefit equally to the proportion of water that is located in their territorial limitations.

#### **1-4-Drinking water directive**

This directive stipulates the maintenance and development of sustainable use of water with the aim of improving its use by humans. The main goal of this directive is to protect human health against the adverse effects of water pollution so that the main goal of human use of safe drinking water is realized.

The directive of the Parliament and the European Council approved on December 16, 2020 regarding the quality of water for human consumption is also trying to express this important matter. In fact, this shows that mankind has always been struggling with the great concern of providing safe and sanitary water for human consumption.

The basic actions of the member countries in the field of legislation in this regard are:

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<sup>11</sup>. Art. 4, Directive 80/68/EEC.

<sup>12</sup>. Art. 15, Directive 80/68/EEC.

- 1- Member countries must establish rules for human exploitation of water resources.
- 2- Member countries must establish regulatory procedures to ensure compliance with regulatory regulations.
- 3- Member countries should create procedures to deal with situations of non-compliance and create grounds for compensation.
- 4- The member countries should create procedures to inform the people about the necessary measures to deal with drinking water sources.
- 5- Member countries must create a monitoring system to meet the requirements stipulated in this directive.
- 6- Member countries must establish procedures to evaluate the effectiveness of water purification for human consumption.
- 7- Member countries must establish procedures to assist the competent authorities to fulfill the obligations stipulated in this directive, including limiting waters that may be considered a threat to human health. Therefore, necessary guidance should be given regarding making decisions about such waters.
- 8- Member countries should establish procedures in cases of deviation from this instruction to investigate and deal with it.
- 9- Member countries must establish procedures for informing the public about the nature and time frame of any deviation from this directive.
- 10- Member countries should create guidelines or criteria for the implementation of Article 15 of this directive. (Article 15 of this directive stipulates that a request can be submitted to extend the time for the implementation of this directive)
- 11- The member countries must establish guidelines and procedures to fulfill the requirements stipulated in Article 10 of this directive regarding quality assurance of equipment and materials used in the preparation and distribution of water for human consumption<sup>13</sup>.

As it was mentioned before, there is no document in the European Union level that can accurately determine the task regarding the direct distribution of fresh water. For this reason, the documents that are mentioned in this section should be analyzed and examined so that rules and principles can be deduced from their nature and essence. The Drinking Water Directive seeks to explain the principles of high level protection of human health, correction of pollution in the water source and the responsibility of compensation by the polluter. In this way, the aforementioned tasks are for the EU member states regarding the waters that are within their territorial limits. Common fresh waters will not be an exception to this rule. In this way, just as duties and obligations occur for the member countries, following this, rights also arise for the mentioned countries. In this way, the member states of the European Union will have rights and obligations to the extent of water located within their territorial limits.

#### **1-5-water framework directive**

The Water Framework Directive sets the basic principles of sustainable water policies in the EU on a tangible basis through the management of this framework for future EU water policies, which is achieved through cooperation and substantive action among member states. In order to legislate in this regard, the member states must take the following actions:

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<sup>13</sup>. Directive (EU) 2020/2184 of the European Parliament and of the Council of 16 December 2020 on the quality of water intended for human consumption.

- 1- The member countries must ensure that there is an effective system to coordinate all actions regarding all parties to ensure that regulatory measures are adopted to implement the laws.
- 2- Member countries must take measures to prevent or reduce the effects of water polluting substances caused by flood events.
- 3- Member countries must pass laws for control through licensing and approving regulations in the following fields:
  - A- Withdrawal from fresh surface water and underground water, as well as discharge and other activities that have significant adverse effects on water status.
  - B- Storage of fresh surface water
  - C- The number and dispersion of sources that cause water pollution.
- 4- Review and amendment of licenses should be done by the member states in case of violation of the stipulated conditions.
- 5- Considering the environment as a coherent whole should be such that the member countries establish regulations for the optimal management of water resources; provided that the application and implementation of the aforementioned laws do not lead to an increase in marine and surface water pollution directly or indirectly.
- 6- Preventing the direct discharge of dangerous substances into underground water should force the member countries to enact appropriate laws in this regard.
- 7- Issuing new permits for the discharge of some prohibited substances into underground waters should force the member countries to enact appropriate laws in this regard.
- 8- Removal of pollution from surface water should force the member countries to enact appropriate laws in this regard.
- 9- Ensuring the effectiveness of the measures should force the member countries to enact appropriate laws in this regard.
- 10- Designing an effective system of punishments in case of non-compliance with national regulations should force the member countries to enact appropriate laws in this regard.

This directive seeks to establish a prohibition against harming surface waters and places it as a common responsibility of all EU member states to improve water quality, which is stipulated in Article 4 of this document. On this occasion, national policy makers and government agencies have worked hard to implement this document<sup>14</sup>; because this document is set up in a macro way that compliance and non-compliance with it can cause major problems.

This directive considers the following:

- a) Integrating surface water and groundwater management to protect and improve the environment
- b) Confirming the necessity of land and water management in an integrated manner; considering environmental, social and economic factors
- c) Reducing or eliminating the entry of dangerous substances into the water; through environmental standards
- d) Prevention of further deterioration of aquatic ecosystems

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<sup>14</sup> . Salm, David, 21 September 2018, EU environmental and planning law aspects of large-scale projects, Chapter 10-the case for smart government in European water law, retrieved 2 February 2023 from: <https://www.cambridge.org/core/books/abs/eu-environmental>

- e) Ensuring that surface and underground waters reach a suitable ecological status
- f) Promotion of sustainable use of water resources
- g) Reducing the effects of floods and droughts
- r) Compensating the full environmental costs for exploitation<sup>15</sup>.

This directive is also aimed at implementing high-level principles of protection of water resources, caution, preventive action and correction of pollution in water resources, responsibility for compensation by the polluter and integration of environmental protection requirements with the definition and implementation of other policies of the society such as industry, agriculture, transport and It is the transfer of energy and the principle of promotion and progress of development. As in this direction, the member countries are committed to the water resources located in their territorial limits, they also have rights to exploit these water resources. Therefore, they can benefit from the amount of water located in their territory<sup>16</sup>. All these documents should be interpreted in the direction that the storage of transboundary fresh water resources is an important prerequisite for the survival of the ecosystem of water resources; because without storage, talking about how to allocate fresh water resources will be pointless.

Now, according to the analysis of the treaties, it is possible to reach various results regarding the methods of water allocation in the treaties governing common fresh waters, which can also be applied to the European Union. First, according to a number of agreements showing allocation methods for surface and underground water, it can be concluded that for a more appropriate allocation of fresh water, the capacity of these common fresh water resources should be increased. Second, there have been changes in the way of writing agreements between countries regarding the allocation of common waters. This is a change in the type of mechanisms that governments include in their agreements, towards indirect explanatory clauses based on principles; It moves away from direct mechanisms. This article is important because it creates flexibility in different conditions, situations and circumstances governing the relations between countries, and this possibility of flexibility in itself can prevent many conflicts and disputes between countries in the field of transboundary waters. Third, there has been an increasing trend in the number of specific groundwater allocation mechanisms since the 1970s; however, more work is needed to develop groundwater-specific mechanisms that take into account the unique characteristics of international transboundary ground waters. In this way, it can be said that the expansion of the number of mechanisms for the allocation of fresh water resources can be considered as one of the methods of facilitating the allocation of fresh water resources. Fourth, most water resource allocation mechanisms do not define a target for allocation. However, some mechanisms set goals such as agriculture, hydroelectricity and environmental goals<sup>17</sup>. Therefore, it can be said that not setting goals also pushes the mechanisms for the allocation of fresh water resources to the rule-oriented direction, and this prevents personal and situational considerations from being involved in the allocation of water resources.

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<sup>15</sup>. Directive 2000/60/EC of the European Parliament and the Council establishing a framework for Community action in the field of water policy (OJ L 327/1 of 22.12.2000), as amended by Decision 2455/2001/EC of the European Parliament and the Council establishing the list of priority substances in the field of water policy (OJ L 331/1 of 12.12.2001).

<sup>16</sup>. For more information see: Arthington, A.H. and others, 2018, the Brisbane declaration and global action agenda on environmental flows, *Frontiers in environmental science*, Vol. 6.

<sup>17</sup>. United Nations Economic Commission for Europe, 2021, handbook on water allocation in a transboundary context, Geneva: United Nations, p. 178.



### **1-6-The 1992 UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes**

The Convention on the Protection and Use of Transboundary Waterways and International Lakes adopted in 1992 is based on the Helsinki rules and was prepared by the United Nations Economic Commission for the European Union. The purpose of these two conventions can be considered relatively the same. Therefore, these two conventions complement each other and this creates a positive synergy between these two legal regimes. The first convention, unlike the second convention, due to a strong framework; It is supported by regular meetings of the parties, compliance mechanism, working groups and various experts and an active secretariat. The institutions of this convention are involved in a wide range of activities including water status assessment, information exchange and capacity building. Also, this convention has been implemented in new progressive fields such as adapting to climate change or ecosystem issues<sup>18</sup>. In this way, the European Union not only has more watersheds, but also has the largest number of treaties.

Also, the Convention on the Protection and Use of Transboundary Waterways and International Lakes requires the parties to ratify agreements related to the water basin. This range of agreements, which were concluded based on the spirit of the aforementioned convention, includes the treaties related to the Danube, Oder, Meuse and Scheldt basins, the Rhine and the set of bilateral water treaties between Spain and Portugal and several former Soviet member states. In the EU region, there are more than 150 large rivers and 50 large lakes that flow along the border of two or more countries, and more than 170 groundwater aquifers have been identified in the region. This convention was initially for the countries of the region; But it gradually created the necessary preparation for all countries in the international arena to follow it as an example in the way of dividing common waters and observe the principle of justice and fairness regarding the allocation of water resources and do all these actions with regard to the natural ecosystem<sup>19</sup>. The concept of justice and distribution of water based on the ecosystem seems to mean that the way of water distribution and the share of each country should be according to the status of the said country's water resources and the population settled in it, and such a division is considered as a concept of fair distribution.

According to this convention, member countries can conclude bilateral or multilateral agreements with each other in order to implement them logically and correctly, and so far about 150 bilateral or multilateral agreements have been concluded. Among them, we can refer to the "Danube River Protection Convention". Also, under the influence of this convention, in addition to the agreement, institutions have also been established at the level of the European Union. For example, one of the institutions formed in the European Union region and in line with the implementation of this convention is the International Commission for the Protection of the Danube River (ICPDR), which was established in 1998 as an international organization with the cooperation of 14 countries and the European Union. This commission manages not only the Danube River but also all watersheds, including tributaries and underground water sources.

According to Article 5 of this convention, countries are required to use "equal" and "rational" international waterways, taking into account the interests of the countries along the waterways, as well as the development and maintenance of waterways. According to this article, the way countries use an international waterway is stated in general, and they should use it in an "equal" and "logical" way. The concept of the word "same" here is not the benefit of one side; Rather, equal benefit under conditions equal benefits. If the interests are equal, it is logical that the method of benefiting is also equal; because

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<sup>18</sup> . <sup>18</sup> . [https://ec.europa.eu/environment/water/water-urbanwaste/implementation/factsfigures\\_en.htm](https://ec.europa.eu/environment/water/water-urbanwaste/implementation/factsfigures_en.htm)

<sup>19</sup> . <sup>19</sup> . Baranyai, Gabor, Op.cit, p. 21

otherwise, equal benefit has no meaning. In this way, the geographical and economic conditions may require a country to benefit in a way that it benefits more than its neighboring country. Therefore, in a situation where a river adjacent to several countries is shared equally; the method of exploitation should also be determined according to the interests of each country. It is also worth mentioning that the criterion for identifying the interests of each country is to benefit from customary, economic and geographical conditions; because it is certain that every country is trying to get more benefits from a common river. Moreover, Article 6 of this convention states the effective factors in determining a just and wise regime. In this article, geographical, climatic, ecological factors, economic and social needs of countries, the level of water dependence, current and potential exploitations and their impact are determined as criteria and indicators to determine the benefit of a country.

It is also important to mention that exploitation of countries has not been unconditionally and absolutely abandoned; rather, this exploitation should be with the condition of not causing major damage to other countries. It goes without saying that the term "major" also has a common sense of this word and any kind of damage cannot be considered as major damage and the exploitation of the country or beneficiary countries cannot be prevented under the pretext of major damage. Rather, the continuity of custom in these cases is a suitable solution for diagnosis. In fact, due to the difficult, time-consuming and costly nature of compensation in the form of compensation, prevention has actually been considered prior to compensation.

Article 10 of this convention also addresses the important point of not establishing priority between the different needs of the beneficiary countries; unless the said need is essential and vital for humans. In other words, in the absence of a custom or a treaty for priority in the use of the river, attention should be paid to the basic and vital needs of humans.

In fact, as a result of the systematic analysis of the articles of this convention in the framework of the United Nations Charter as a mother document for the international community, it can be said that all exploitations must be in line with reasonable and fair use with the condition of preventing harm to others. Some experts, such as the second reporter of the International Law Commission and the World Bank, have prioritized the theory of fair use, and others, such as the third reporter of the International Law Commission, have prioritized the condition of preventing harm to others<sup>20</sup>. It seems that this is a conflict between the two principles of ownership of what is under ownership and the principle of not harming others. On the one hand, every person will be entitled to the right of ownership over the subject of ownership, and on the other hand, he cannot harm others in this exploitation, and this exploitation, apart from the subject that is subject to the right of ownership, is accompanied by the condition of prohibiting harm to others. Regarding the rivers and the right of each country to exploit the part located in its territory, this is also an example, and this should not destroy the rights of other countries.

### **1-7-Bilateral or multilateral agreements between European countries**

In the following discussions, bilateral or multilateral agreements between European countries are analyzed in terms of applicable criteria for the allocation of water resources.

#### **1-7-1- Agreement between Finland and Sweden regarding transboundary rivers**

This agreement seeks to create equal opportunities for both parties to use the rivers and prevent actions that may lead to environmental damage and use these resources in a way that leads to sustainable use

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<sup>20</sup>. Shuli, Alireza, Vatan Fada, Jabar and Fariba Arideh, "Examination of legal theories and regulations of water sharing in international laws and treaties of border waters", Promotional Scientific Quarterly of the Faculty of Frontier Sciences and Technology, 2014, Year 6, Number 2, 121 -151, pp. 135 and 136.

and Future generations will continue to preserve<sup>21</sup>. Also, everyone around this document has the right to water equally regarding Transboundary Rivers. This right is also applied in cases where a greater share of water flows in the territory of one of the treaty parties in its territory. Of course, this will not prevent a party from enjoying more under special conditions and based on a special law or court decision; With the description that none of the mentioned operations should lead to damage to the other<sup>22</sup>. In this document, an internal mechanism between these two countries for the management of common water resources is foreseen in cases of violations and possible resolution of disputes, which is the establishment of a transboundary river commission between Sweden and Finland<sup>23</sup>. Also, for an activity or action in the field of water management that may have transboundary effects on the status or use of waters, the provisions contained in articles 16 to 21 of this agreement shall be substituted for the Convention on the Protection of the Northern European (Nordic) Environment concluded by Norway, Sweden, Finland and Denmark will be applied on February 19, 1974<sup>24</sup>. Now, if a court or legal authority in another country wants to make a decision in this regard, it should act as if the said matter had happened in its own country<sup>25</sup>. In other words, the principle of national behavior should be considered by respected countries.

Therefore, the right of exploitation by each of the parties to this agreement is also included in this agreement with the condition of no damage. In spite of this, this rule can be modified by a special law or a court decision based on specific conditions and circumstances, which basically this decision is based on the needs of the countries and may require the amount of more than that. Therefore, in this document, an equality approach has been seen along with need-oriented approach, which can be considered as a suitable model in other documents and agreements as well.

#### **1-7-2-Nordic Environmental Protection Convention**

This convention seeks to prevent harmful activities for the environment. For this purpose, it has deemed necessary to conclude special bilateral or multilateral agreements between the contracting countries in this convention<sup>26</sup>. Also, these activities are considered harmful when the discharge from soil, buildings or facilities of solid or liquid waste, gases or other substances into water streams, lakes or seas requires disturbing the surrounding environment<sup>27</sup>. People affected by these harmful activities also have the right to file a complaint with a court or administrative authority that is provided for this purpose, to receive compensation and, if necessary, to challenge the decision of the said court or administrative authority<sup>28</sup>. As explained in the previous document, in cases related to transboundary water management, it is subject to the agreement between Finland and Sweden regarding Transboundary Rivers. The Nordic Environmental Convention specifically deals with environmental issues with transboundary effects, which, of course, since it places an equal obligation on the countries involved, it can be concluded that an equal obligation creates equal rights. Therefore, although the issues related to transboundary water

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<sup>21</sup>. Agreement between Finland and Sweden Concerning Transboundary Rivers, 1 October 2010, Article 2.

<sup>22</sup>. Ibid, Article 3.

<sup>23</sup>. Ibid, Article 8, 10 and 11.

<sup>24</sup>. Ibid, Article 15.

<sup>25</sup>. Ibid, para 16.

<sup>26</sup>. The Nordic Environmental Protection Convention between Denmark, Finland, Norway and Sweden, 5 October 1976, Article 1.

<sup>27</sup>. Ibid, protocol.

<sup>28</sup>. Ibid, Article 3.

management are directly referred to the previous document; But the equal environmental obligations of countries in this regard also determine their equal rights.

### **1-7-3-Convention between Norway and Sweden regarding specific questions related to the rights of waterways**

The union of Norway and Sweden ended peacefully in 1905. However, the Swedish authorities have been able to claim that Norway has taken steps to resume cooperation. One of these claims from Sweden was that the two countries should refrain from legislating on any of the shared waterways; if such regulations are not accepted by the neighboring country. The main reason for Sweden's demand is the fundamental importance of the shared rivers, which brought significant commercial benefits to Sweden. Gradually, the need was felt for the Norwegian authorities to ensure that any damage to these interests along the course of the river was avoided, considering that Sweden was considered a downstream country. The historical precedent behind the convention between Norway and Sweden regarding water rights was first signed in 1905. In 1929, the 1905 Convention was supplemented by an agreement on formal procedures for the regulation of watercourses affecting a neighboring country, making the 1929 Convention between Norway and Sweden on the Rights of Watercourses the oldest convention still in force in Europe. Is. This may be a strong reason why Sweden and Norway have avoided many of the conflicts in the upstream and downstream of the waterways that have been seen over time. For example, the dispute between India and Pakistan over the Kishanganga River, as well as the conflicts between Turkey, Syria, and Iraq regarding the Tigris and Euphrates are prominent examples of the dispute between upstream and downstream countries regarding waterways<sup>29</sup>. Therefore, this document seeks to regulate all human interventions in the waterways of Norway or Sweden, such as dam construction, construction, or even investment, in a way that leads to significant and fundamental changes in the waterways in the territory of another country, regarding the depth, direction, and level or the amount of water does not increase and also does not cause obstruction in the passage of water<sup>30</sup>. The establishment of this obligation for the countries shows the prohibition of any damage by any of these two countries to the other, which must be observed and respected in the exploitation of these waters by each of the two mentioned countries; Because the violation of these regulations will mean the violation of other rights and this violation will lead to less benefit from water resources.

In sum, according to some documents reviewed in this section, we find that the challenging geopolitical environment of the European Union requires the conclusion of multilateral treaties between European countries to include all challenging cases and prevent any disputes<sup>31</sup>. In this way, great flexibility is realized in responding to serious threats.

## **2- Executive and judicial procedure of the European Union regarding the exploitation of common waterways**

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<sup>29</sup>. Flem, B.; Stalsberg, L. and Seither, A., 2022, groundwater governance in international river basins-an analysis of the Norwegian-Swedish transborder area, *Journal of hydrology: regional studies*, No. 44, 1-13, p. 5.

<sup>30</sup>. Law under the Convention between Norway and Sweden on Certain Questions Relating To Watercourse Law of May 11, 1929

<sup>31</sup>. <sup>31</sup>. European parliament, 2023, annual report on implementation of the common foreign and security policy, retrieved 13 February 2023 from: [https://www.europarl.europa.eu/RegData/etudes/ATAG/2023/739295/EPRS\\_ATA\(2023\)739295\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/ATAG/2023/739295/EPRS_ATA(2023)739295_EN.pdf)

In normal conditions, there is no dispute regarding the use of common waters. The main challenge arises when the amount of water resources is lacking. Therefore, in these situations, governments compete over a limited resource so that each of them can exploit this resource to a greater extent, which is the result of this competition. In order to solve this dispute, the issue of sharing common waters is raised. Now we are trying to examine the executive and judicial approach at the level of the European Union so that a series of general principles that can be used and exploited in all disputes can be deduced and extracted. In all the mentioned cases, we would like to check which of the four approaches "Theory of Absolute Sovereignty", "Theory of Absolute River Integrity", "Theory of Limited Territorial Sovereignty" and "Theory of Joint Sovereignty" has been accepted.

#### 2-1-The executive approach of the European Union regarding the use of common waterways

In this section, we are trying to infer and present a suitable solution to solve the challenge that may arise in the field of common water resources, without any conflict and only in the form of cooperation, through the executive or functional approaches that rule in the field of shared water resources.

##### **2-1-1-Adaptation of the Western Bug River with the European Union Water Framework Directive**

The Western Bug is a transboundary river with a significant environmental impact on the Baltic and Vistula rivers. In this area, the European Union must adapt all its regulations to the European Union Water Framework Directive. This guideline aims at the integrated management of water resources and evaluates the existing pollution regime in this transboundary river using a multi-step method including systemic screening, collection of pressures caused by pollutants, comparison with the biological situation and analysis of the detailed process of relevant interactions<sup>32</sup>. In terms of quality, it should be said that along the river, the water quality varies significantly; because the morphological or morphological condition of the river is one of the other factors to improve water quality<sup>33</sup> and naturally, the morphological condition of the river varies in different places. Since this river is considered as a continuous river in the strict sense of the word; therefore, all the countries located in this area have limited sovereignty over that river. In other words, according to their will, the European countries handed over part of their sovereignty to the European Union. As a result, while the countries have sovereignty, the European Union as a whole will also have the right to sovereignty, and in necessary cases, countries must obey the sovereignty of the European Union. In the necessary cases, countries' compliance with European sovereignty should be realized in various aspects, including the sharing of common waters<sup>34</sup>. This means that all countries can use the water of the river to an extent that does not harm the rights of other countries.

##### **2-1-2- European Union strategy regarding the Danube region approved in 2012**

On December 8, 2010, the European Commission proposed a regional macro-strategy for the development of the Danube region. This strategy, which is henceforth referred to as the EU strategy for the Danube region, was jointly established by the European Commission and the countries located in the Danube region and its stakeholders in order to address common challenges<sup>35</sup>. It was established

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<sup>32</sup>. Tranckner, Jens, Helm, Bjoern, Blumensaat, Frank and Terekhanova, Tatyana, 2012, integrated water resources management: approach to improve river water quality in the western Bug River Basin, retrieved 22 July 2022 from: [https://link.springer.com/chapter/10.1007/978-94-007-3949-9\\_6](https://link.springer.com/chapter/10.1007/978-94-007-3949-9_6)

<sup>33</sup>. Hagemann, N., Blumensaat, F., Tavares Wahren, F., Trümper, J., Burmeister, C., Moynihan, R., and Scheifhacken, N., 2014, The long road to improving the water quality of the Western Bug River (Ukraine) - A multi-scale analysis, Retrieved 5 September 2022, p.2439, from: <http://ui.adsabs.harvard.edu>.

<sup>34</sup> . Kodkhodaei, Abbas Ali and Mazloumi, Mersedeh, "The state of sovereignty in the European Union in the light of the decisions of the Court of Justice of the European Union", Allameh Tabataba'i University Public Law Quarterly, year 1400, volume 23, number 71, 35-61.

<sup>35</sup>. European Union strategy for the Danube region (EUSDR) approved in December 2010

to create greater synergy and coordination between existing policies and initiatives in the Danube region.

The watershed of the Danube River includes the territory of 19 countries, which has made this river the most international river in Europe and the world. However, most of the Danube watershed is occupied by parts of 9 European Union countries including Germany, Austria, Czech Republic, Hungary, Slovakia, Slovenia, Croatia, Bulgaria and Romania and 5 non-European countries including Serbia, Bosnia and Herzegovina, Montenegro, Ukraine. And Moldova is covered. This river has a length of 2857 km, which is a key highway for communication between the East and West of Europe and for the purpose of transporting people and goods; in such a way that this river basin includes three upper, middle and lower parts. It is worth mentioning that considerable differences are evident regarding the economic development of countries and their living standards. The Danube is significantly affected by drought. If the drought continues, urgent and necessary measures should be taken to deal with it<sup>36</sup>. If there is not enough attention regarding the policies that can be adopted regarding the Danube, a large part of Europe will suffer significant problems regarding the allocation of common water resources.

One of the institutions established in the European Union region in order to implement this policy as best as possible is the International Commission for the Protection of the Danube River. This commission is essentially an international organization with the cooperation of 14 countries and the European Union established in 1998. This commission manages not only the Danube River but also all watersheds, including tributaries and underground water sources.

This river is also a continuous river and related to different countries, all of these countries have the right to exploit and exercise sovereignty to implement this exploitation, but the exercise of sovereignty by each of these countries is limited and depends on the extent of adherence and commitment to international regulations. It depends and should be to the extent that it does not harm the rights of other countries.

### **2-1-3- England's strategy regarding the hazardous substances directive approved in 2006**

In one of the member countries of the Hazardous Substances Directive, England, the National Environment Agency has been designated as the competent authority for the implementation of this directive. Also, this agency is responsible for the control and prevention of comprehensive pollution and river basin management; So that there is a close cooperation between inspectors who deal with industrial pollution and the issue of water management. In this country, the hazardous substances directive has been expressed in the form of three different national regulations. National Regulation No. 74/90 creates a legal framework. Two other laws are set as special laws that are less restrictive; because they can be applied according to conditions and circumstances<sup>37</sup>. In this way, in this country, according to the principles of caution and preventive action, a suitable strategy and practical procedure has been adopted against one of the directives in the field of water rights.

### **2-1-4- The practical connection between investor rights and the implementation of environmental obligations**

One of the important points at the European Union level is the discussion of the investments that these countries make in the area of water resources. Meanwhile, on the one hand, the rights of foreign investors are discussed, and on the other hand, the issue of environmental rights and how to use water resources is discussed. This conflict has two aspects between investor support and environmental

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<sup>36</sup>. Sušnik, Andreja and Moderc, Andreja, 2018, Case Study: The Danube Region, p. 2, retrieved 4 February 2022 from: [https://www.preventionweb.net/files/78464\\_cs7.danuberegionfinal20210215forpro.pdf](https://www.preventionweb.net/files/78464_cs7.danuberegionfinal20210215forpro.pdf)

<sup>37</sup>. regional environmental center, 2008, handbook on the implementation of EC environmental legislation, section 5- water protection legislation, p. 708, retrieved 3 February 2023 from: <https://ec.europa.eu/environment/archives/enlarg/handbook/handbook.pdf>

issues. On the one hand, the foreign investor tries to predict the risk of the investment economy over time and even before that. On the other hand, the host government must specify its legal and executive powers at the time of investment, so that the conditions for encouraging investors in its country are provided and also its environmental obligations are not distorted. What can reasonably provide both aspects of expectations is the principle of fair and just behavior, which of course can be said to have a broad concept that should be expressed in various formats, including supporting the minimum standard of behavior, supporting the reasonable expectations of investors, and non-discrimination. Show transparency and protection against bad faith, coercion and threats in the contract<sup>38</sup>. Also, this principle, if implemented correctly, can guarantee the rule of law. Therefore, the principle of reasonable and fair behavior can be considered as a basis for foreign investors to benefit from these environmental resources, including common water resources.

One of the other criteria that can be helpful in solving this kind of disputes is the principle of proportionality. The principle of proportionality first originated from the German legal system. Then it entered the domestic law of other countries and then it entered the law of the European Union from the domestic law systems. For this reason, it has been clearly expressed in the opinions of the European Court of Justice and the European Court of Human Rights. Then he entered various parts of international law topics, including the international responsibility of governments. In this way, the proportionality criterion is very helpful for the interpretation of bilateral investment treaties between the investing country and the foreign investor<sup>39</sup>. Therefore, the way investors exploit shared water resources should provide the principle of proportionality stipulated in Article 38 of the Statute of the International Court of Justice and Article 31 of the Vienna Convention on the Law of Treaties as an auxiliary principle in order to interpret bilateral investment treaties.

The effective and main practical procedure in the European Union is to maintain and improve the quality of the environment as well as to protect human health and help the rational use of natural resources based on paragraph 1 of Article 192 of the Treaty on the Functioning of the European Union and the former Article 175 of the Treaty establishing the European Community. Measures are taken out of the regional level and brought to the international level to deal with regional and international environmental problems<sup>40</sup>. Therefore, the approach of the European Union regarding shared fresh water between countries is also considering the effects of shared water allocation on the environment and human health and rational and fair exploitation of these waters.

## **2-2- European Union's judicial approach regarding the use of common waterways**

Conflicting interests of watershed governments lead to international disputes between them. Legal methods should be used to resolve these disputes. The role of international judicial authorities plays an important role in strengthening the guarantee of the implementation of environmental obligations. In this way, the civil responsibility of the governments towards each other and the criminal responsibility of the environmental offenders will be established<sup>41</sup>. On this occasion, in this part, the approach of the

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<sup>38</sup>. Behzadi Parsi, Arash and Seifi, Seyed Jamal, 2018, the relationship between the rights of foreign investors and the international obligations of human rights and the environment, *International Law Journal*, No. 61, 43-74, p. 51.

<sup>39</sup>. *Ibid*, p. 48.

<sup>40</sup>. European Commission, 2018, proposal for regulation of the European parliament and of the council on minimum requirements for water reuse, retrieved 10 February 2023 from: [https://ec.europa.eu/environment/water/pdf/water\\_reuse\\_regulation.pdf](https://ec.europa.eu/environment/water/pdf/water_reuse_regulation.pdf)

<sup>41</sup>. Ardakani, Mohammad Zakir and Arashpour, Alireza, Judicial evaluation of the settlement of international environmental disputes, *Tehran University Public Law Studies Quarterly*, Volume 52, Number 1, 437-421, pp. 433 and 434.

European Court of Justice as a judicial authority at the level of the European Union is examined and analyzed on a case-by-case basis regarding the disputes arising in the field of common water resources.

### **2-2-1- The case of the European Commission against Germany**

The European Commission's complaint against Germany for violating Directive 440/75 on "the required quality of surface water taken into account for the abstraction of drinking water in member states"<sup>42</sup> was brought to the European Court of Justice. The commission claimed that Germany has violated the obligations related to water quality classification into three levels, regulating and maintaining quantitative water levels, and planning and informing in this regard<sup>43</sup>.

First, the commission claimed that Germany failed to provide an official and correct classification regarding water treatment<sup>44</sup>. On the other hand, Germany stated that whenever a method of water purification was chosen, the classification of waters was also done by Germany. Referring to Article 2 of this directive, the court mentioned that the wording prescribed in the document should be taken into account. Based on this, there is no need for the member states to make separate obligations; rather, if countries take measures related to surface water treatment, they have fulfilled their obligation<sup>45</sup>. Therefore, the court agrees with the claim of the commission. The Commission's claim regarding Germany's inability to comply with the standards stipulated in this document, regarding water quality classification, points to the inefficiency of the German federal system<sup>46</sup>. Also, the court stated that based on paragraph 1 of article 8 of this document, there was a need for Germany to provide information to the commission, and Germany did not comply with this obligation either. Therefore, according to the judgment issued in October 1991, Germany was required to follow the court's order to present a systematic plan for water quality classification and full disclosure of information in this regard. However, the main problem was that Germany had a federal law regarding water management; while the state of Lander as one of those states had not approved special regulations in this regard. According to the ruling issued by the court, each of the states, in addition to approving the law, must also present systematic programs regarding the improvement of water quality<sup>47</sup>. The commitment to the quality classification of water by the surface water basin governments comes from the important point that these waters are shared. Therefore, the idea of sharing, just as it creates rights for the governments of the mentioned basin, is also an obligation. In this way, in proportion to the creation of an obligation for the countries, the right to use common waters also arises for the countries.

### **2-2-2- The case of the German Nature and Environment Protection Umbrella Organization against the Federal Republic of Germany**

On July 30, 2014, the environmental protection umbrella organization filed a petition on behalf of the Federal Republic of Germany with the German Federal Environmental Protection Agency. This organization sought to ban sea fishing methods using fishing devices that hit the seabed and fixed nets. In addition, the aforementioned ban was a necessary preventive measure in the sense of clauses 11

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<sup>42</sup>. European Council, concerning the quality required of surface water intended for the abstraction of drinking water in the Member States, Directive, and 16 June 1975.

<sup>43</sup>. Opinion of Advocate General Jacobs delivered on 8 May 1991 in European Court of Justice Case C 58/89 Commission V. Germany [1991] ECR I-04983, para 3.

<sup>44</sup>. Para, para. 14.

<sup>45</sup>. Judgment of the Court of 17 October 1991 in European Court of Justice Case C-58/89 Commission V. Germany [1991] ECR I-04983, para. 8.

<sup>46</sup>. Pursuant to federal framework law on the management of water resources .

<sup>47</sup>. Reasoned opinion issued on 21 November 1995, K (95) 2431 endg, 2.



and 12 of Article 2 of Directive 35/2004<sup>48</sup>. According to the decision of the German Federal Environmental Protection Agency on October 29, 2014, the petition of the umbrella protection organization was not heard<sup>49</sup>. In this way, the environmental protection umbrella organization filed its petition against the decision of the German Federal Environmental Protection Agency before the German Administrative Court<sup>50</sup>.

The Federal Environmental Protection Agency of Germany also stated in its defense bill before this administrative court that due to jurisdictional reasons, it cannot take action regarding the cases referred by the umbrella organization for the protection of the environment of Germany; Because according to part d of paragraph 1 of Article 3 of the Treaty on the Functioning of the European Union, this competence belongs exclusively to the European Union. Based on this, Article 11 of Regulation 2013/1380 gives the EU member states the authority to adopt certain measures; but since such measures may affect the fishing vessels of other member countries, according to the same article, the said measures may only be adopted by the Commission<sup>51</sup>. In fact, the European Commission can act on behalf of European countries.

Considering that the claim can only be defended if the Federal Republic of Germany and not the Commission can adopt the measures requested by the petitioner, the German Administrative Court decided to stop its proceedings and refer the following questions to the European Court of Justice for issuing Refer the preliminary vote:

1- Does Article 11 of Regulation No. 2013/1380 in connection with the waters under the jurisdiction or sovereignty of the member states have deterrence characteristics? This question arises from the fact that countries' exploitation of waters under their jurisdiction or sovereignty and the benefits derived from these waters may affect the fishing vessels of other member countries. Also, the second question that is raised is whether this article imposes a general ban on commercial marine fishing if countries use fishing gear that hits the seabed and fixed nets?

Specifically;

a) Does Article 11 of Regulation No. 2013/1380 include the concept of "protective measures" including the prohibition of fishing using methods in the concept of the first question?

b) Is Article 11 of Regulation No. 2013/1380 the concept of "fishing vessels of other countries?"

c) Does Article 11 of Regulation No. 2013/1380 include the actions of one of the member states of the Union, which only fulfills the goals stipulated in this regulation, under the concept of "fulfilling the goals of the laws of the Union"?

2- Does Article 11 of Regulation No. 1380/2013 have deterrent characteristics for countries in relation to waters under their jurisdiction or control? This deterrence is necessary in order to fulfill obligations based on Directive No. 35/2004 regarding the prevention and compensation of environmental damages.

3- If the first and second questions are to be answered individually or in general, the question that arises is whether the members of the European Union have exclusive jurisdiction in the field of protection of

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<sup>48</sup> . <sup>48</sup> . ECJ, the case of Deutscher Naturschutzring – Dachverband der deutschen Natur-und Umweltschutzverbände eV V. Bundesrepublik Deutschland, 13 June 2018, judgement, para 23.

<sup>49</sup> . <sup>49</sup> . Ibid, para 24.

<sup>50</sup> . <sup>50</sup> . Ibid, para 25.

<sup>51</sup> . <sup>51</sup> . Ibid, para 26.

marine biological resources under the common policies stipulated under part d of paragraph Does Article 3 of the Treaty on the Functioning of the European Union prevent the adoption of the above measures by the member states<sup>52</sup>?

The answer to the mentioned questions, according to the procedure, requires the interpretation that the interpretation of EU law by a national court can be referred to the European Court of Justice. The Court may also refrain from ruling on a question referred by a national court only in cases where it is quite obvious that the interpretation of EU law has no relation to the actual facts of the main dispute or its objectives<sup>53</sup>. Therefore, the European Court of Justice interprets EU law in most cases.

Regarding the first question, which seeks to explain the preventive measures for countries in exploiting water; the national court requests an interpretation from the European Court of Justice. In fact, this interpretation seeks to clarify whether Article 11 of Regulation No. 1380/2013 is a deterrent for member states in relation to waters under jurisdiction or sovereignty in order to fulfill the obligations of member states based on Article 6 of Directive No. 43/92? Also, regarding the interpretation of the second question, it should also make clear what effect fishing using devices that hit the seabed and fixed nets has on other member states?

According to the interpretation provided by the European Court of Justice, according to paragraph 1 of Article 11 of Regulation No. 1380/2013, member states must act in such a way as not to affect the exploitation of waters under their jurisdiction or sovereignty, such as the fishing area of other member states, in order to achieve the goals stipulated in paragraph 4, Article 13 of Directive No. 56/2008, Article 4 of Directive No. 147/2009 and Article 6 of Directive No. 43/92 should be put into effect, that these measures also provide the goals stipulated in the EU law<sup>54</sup>.

This case refers to the request for an interpretation from the European Court of Justice regarding how countries use waters under their jurisdiction or sovereignty. As it was mentioned, fishing and the way of using the ships also lies in this exploitation. This exploitation should be in such a way that it does not harm the exploitation of other EU member states. As this article applies to fishing vessels and fishing operations, it also applies to other cases related to the exploitation of waters under jurisdiction or sovereignty. Based on the task stipulated in the matter of exploitation, the rights of the countries in this area will also be determined; Because, as a result, governments that do not observe these principles in exploitation will have less rights. Based on this, according to this case, if the countries observe these principles, they can benefit in equal proportion according to the coasts they have. Only when a ban is created and this ban creates a limitation in the matter of exploitation, if the use of countries leads to damage to other member states.

## Conclusion

Exploitation of shared or transboundary water resources is not a challenge by itself among countries. The main challenge arises when countries have problems exploiting these resources due to the lack of water resources. Often, this problem exists in the exploitation of common water resources for countries adjacent to the watershed. The European Union is very important for examination in this regard due to the wide range of common water resources and various bilateral or multilateral treaties concluded between the member states of the Union.

On this occasion, the legislative, executive and judicial approaches proposed in this area have been examined and analyzed, and in the meantime, by examining the laws and regulations and executive

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<sup>52</sup> . <sup>52</sup> . Ibid, para 27.

<sup>53</sup> . <sup>53</sup> . Ibid, para 29.

<sup>54</sup> . <sup>54</sup> . Ibid, para 33.

and judicial examples proposed in this regard on a case-by-case basis, it is possible to derive principles and rules that it is very helpful.

In this article, the urban wastewater treatment directive, the nitrates directive, the groundwater directive, the drinking water directive and the water framework directive have been examined and as a result, principles and rules have been deduced for the distribution of common water resources among the watershed countries. An important principle that should be considered is that in order to distribute water resources, the principle of fairness and justice should be considered in this distribution. This principle is the main and general principle under which a set of rules and regulations are placed. Among other things, in the distribution of water resources, the population of each country, potential and actual and future needs of each country should be taken into consideration. Also, the principles of non-discrimination and equality in the use of common water resources must be observed. This means that countries that are in equal conditions should also benefit equally from shared water resources. Also, since cooperation regarding common water resources has priority over finding a solution to resolve the conflict in this regard, participation among the countries of the watershed can be very helpful and since the transparency of affairs can resolve many misunderstandings among countries. Access to information can bring the countries of a common watershed closer to a common point of understanding. Also, the priority in enjoying vital needs can be considered as a determining criterion for countries in the extent of benefiting from common water resources, especially where there is no treaty or custom.

The existing executive and judicial procedure in the European Union will also indirectly try to explain the tasks set for the countries of a watershed and consequently explain the rights for the mentioned countries. This means that the countries located in a watershed will be obliged to comply with a set of principles such as the principle of caution, the principle of preventive action, the principle of compensation, and so on. Subsequently, in the exploitation of these water resources, they will have the right to exploit the water located in their territorial limits.

All these cases lead us to the conclusion that the principles of limited governance and joint use are applied as two criteria regarding the exploitation of common water resources today.

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