

**Part A. Personal Information**

<b>DATE</b>	2022-09-02
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Surname	<b>Elosegi</b>	
Forename	<b>Arturo</b>	
Age	59	
Researcher codes	WoS Researcher ID (*)	B-7796-2009
	SCOPUS Author ID(*)	6602352983
	ORCID	0000-0001-8809-8484

**A.1. Current position**

Post/ Professional Category	Professor of Ecology	
UNESCO Code	250805, 250808	
Key Words	river, ecosystem functioning, hydromorphology, restoration	
Name of the University/Institution	University of the Basque Country, UPV/EHU	
	Department/Centre	Department of Plant Biology and Ecology
	Full Address	Faculty of Science and Technology, Sarriena s.n. 48940 Leioa, Spain
	Email Address	arturo.elosegi@ehu.eus
	Phone Number	+34 664 391 189
Start date	2011	

**A.2. Education**

<i>Year</i>	<i>University</i>	<i>Degree</i>	<i>Title</i>
1985	UPV/EHU	First degree	Biological Sciences
1992	UPV/EHU	PhD	Biological Sciences

**A.3. Indicators of Quality in Scientific Production**

<p>Publications: 118 SCI papers (65 Q1), 15 books, 46 book chapters, 50 outreach papers  Citations WOS. Total: 4100  h-index: 37; i10 index: 88; average IF: 3.346  PhD Thesis supervised: 10  &gt; 255 conference presentations, 16 plenary presentations  #coauthors: &gt;560  Referee in &gt;90 scientific journals  Project reviewer for 26 agencies in 12 countries</p>
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**Part B. Free Summary of CV**

I got my degree in Biology in 1985, with a Degree Thesis on planktonic primary production. Shortly afterwards, I was hired as Assistant Professor to start teaching ecology in Basque language, one of the two official languages at University of the Basque Country. I have since being teaching a range of topics: Concepts and Method in Biology, General Ecology, Basics of Applied Ecology, Limnology for undergraduate students of Biology, Environmental Sciences and Geography, predoctoral courses on Environmental Management, River Assessment and River Restoration, as well as a several short courses for postgraduates on River Ecology and Field Techniques in Ecology. I have given over 130 public lectures on environmental issues, as well as many interviews in mass media.

In 1988 I joined Dr. Jesús Pozo and Ana Basaguren to create the research group on stream ecology. We decided to focus mainly in the Agüera Stream basin, a site where we have been working since, thanks to research funds by the University of the Basque Country, the Basque Government, the Ministry of Education and Science, and the European Union, among others.

The group of stream ecology has focused the study of different aspects of global change, such as forest activities, pollution, or enhanced temperature, on the structure and functioning

of stream ecosystems. My research line focuses functional aspects such as organic matter retention and processing, nutrient retention or river metabolism. I study the response of these processes to environmental stressors including suspended solids, high nutrient concentration, drought or emerging contaminants, by combining observational and manipulative studies, both in the field and in the laboratory. I have especially participated in whole-ecosystem manipulations, including control of organic inputs, removal of in-channel large wood, channel restoration, stream fertilization, or experimental water abstraction. Now I am working to implement functional metrics into river monitoring by water agencies.

I have worked in all the Basque Country, in the Mediterranean region, in other European countries, and in both Americas. Starting from basic questions, I work intensively with environmental managers such as those in the Basque Water Agency, in the Guipuscoa Province Government, or the Basque Government. This interaction with a broader spectrum of people led me to combine research with public communication and with consultancy works. I am also involved in nature conservation through participation in consulting boards (e.g., the Board for Nature Conservation of the Basque Government), in collaboration with NGOs or in public outreach activities.

## Part C. Relevant accomplishments

### C.1. Publications

- Woodward G, Gessner MO, Giller PS, Gulis V, Hladyz S, Lecerf A, Malmqvist B, McKie BG, Tiegs SD, Cariss H, Dobson M, Elosegi A, Ferreira V, Graça MAS, Fleituch T, Lacoursiere J, Nistorescu M, Pozo J, Risnoveanu G, Schindler M, Vadineanu A, Vought LBM & Chauvet E. 2012. Continental-scale effects of nutrient pollution on stream ecosystem functioning. *Science*, 336: 1438-1440.
- Elosegi A & Sabater S. 2013. Effects of hydromorphological impacts on river ecosystem functioning: a review and suggestions for assessing ecological impacts. *Hydrobiologia*, 712: 129-143.
- Flores L, Díez JR, Larrañaga A, Pascoal C & Elosegi A. 2013. Effects of retention site on breakdown of organic matter in a mountain stream. *Freshwater Biology*, 58: 1267-1278.
- Acuña V, Díez JR, Flores L, Meleason M & Elosegi A. 2013. Does it make economic sense to restore rivers for their economic services? *Journal of Applied Ecology*, 50: 988-997.
- Aristi I, Arroita M, Larrañaga A, Ponsatí L, Sabater S, von Schiller D, Elosegi A & Acuña V. 2014. Flow regulation by dams shapes metabolism in Mediterranean rivers. *Freshwater Biology*, 59: 1816-1829.
- Ferreira V, Larrañaga A, Gulis V, Basaguren A, Elosegi A, Graça MAS & Pozo J. 2015. The effect of eucalypt plantations on plant litter decomposition and macroinvertebrate communities in Iberian streams. *Forest Ecology and Management*, 335: 129-138.
- Elosegi A, Gessner MO & Young RW. 2017. River doctors. Learning from medicine to improve ecosystem management. *Science of the Total Environment*, 595: 294-302.
- Elosegi A, Díez JR, Flores L & Molinero J. 2017. Pools, channel form and sediment retention in wood-restored streams: potential effects on downstream reservoirs. *Geomorphology*, 279: 165-175.
- Sabater S, Bregoli F, Acuña V, Barceló D, Elosegi A, Ginebreda A, Marcé R, Muñoz I, Sabater-Liesa L & Ferreira V. 2018. Effects of human-driven water stress on river ecosystems: a meta-analysis. *Scientific Reports*, 8:11462. DOI:10.1038/s41598-018-29807-7.
- Pereda O, Solagaistua L, Atristain M, de Guzmán I, Larrañaga A, von Schiller D & Elosegi A. 2020. Ecosystem manipulation reveals effects of a highly diluted wastewater treatment plant effluent on river ecosystem functioning. *Environmental Pollution*, 258: 113719.

### C.2. Research Projects and Grants

"MERLIN. Mainstreaming Ecological Restoration of freshwater-related ecosystems in a Landscape context: INnovation, upscaling and transformation" Funding Agency: EU Horizon 2020. 22.034.617,50 €, from 1-9-2021 to 31-8-2025. Coordinator: Daniel Hering. Arturo Elosegi, PI UPV/EHU

- “DESEMBALSE. Effects of the decommissioning of the Enobieta Reservoir (Navarre, Spain) on stream biodiversity and ecosystem functioning”. Funding agency: Fundación BBVA. 98.175,00 €, from 30-10-2017 to 29-10-2020. Principal Researcher: Arturo Elosegi
- “DIVERSION: Multi-scale consequences of water diversion on river ecosystems” (CGL2016-77487-R) Funding agency: Ministry of Economy and Competitiveness. 127.000,00 €, from 31-12-2016 to 29-12-2019. Principal Researcher: Arturo Elosegi
- “GLOBAQUA. Managing the effects of multiple stressors on aquatic ecosystems under water scarcity” Funding agency: EU FP7-ENV-2013-two-stage (603629). 7,590,585.60 €, from 1-2-2014 to 31-1-2019. Principal Researcher: Damià Barceló (IDAEA-CSIC, Barcelona).
- “ABSTRACT: Effects of water abstraction on river ecosystem functioning” (CGL2012-35848) Funding agency: Ministry of Economy and Competitiveness. 156.780,00 €, from 1-1-2013 to 31-12-2015. Principal Researcher: Arturo Elosegi
- “SCARCE. Assessing and predicting effects on water quantity and quality in Iberian rivers caused by global change” (CSD2009-00065). Funding agency: Ministry of Research, Development and Innovation. 3.700.000,00 €, from: 1-1-2010 to 30-12-2014. Principal Researcher: Damià Barceló (IDAEA-CSIC)
- “COMPLEXTREAM. Effects of channel complexity on the communities and functioning of river ecosystems” Funding agency: Ministry of Education and Science. 108.900,00 €, from: 1-10-2007 to 30-9-2010. Principal Researcher: Arturo Elosegi
- “GLOBRIO. Global change in river systems: effects on biodiversity, food webs and ecosystem functioning” Funding agency: Fundación BBVA. 199.990,00 €, from: 1-9-2006 to 31-8-2009. Principal Researcher: Sergi Sabater (Universitat de Girona)
- “METATOOL. Metabolism and periphyton of Atlantic rivers: a tool to assess the status of river ecosystems” Funding agency: Ministry of Science and Technology. 56.295,00 €, from: 1-12-2003 to 30-11-2006. Principal Researcher: Arturo Elosegi
- “RIVFUNCTION. Integrating ecosystem function into river quality assessment and management” Funding agency: European Union (EVK1-CT-2001-00088). 1.614.994,00 €, 180.600,00 € for UPV/EHU, from 1-4-2002 to 31-7-2005. Principal Researcher: Eric Chauvet (CNRS, Toulouse).