A New Era Model Organization to the Portuguese Water Management - a proposal Ana Pereira, Mónica Silva, Pedro Machado



- Government must prioritize environmental sustainability in national and international hydropolitics. We propose:
- Rivers and water management from an ecocentric point of view, and not only from an extractive perspective, supporting life, as ecological corridors, and taking into account the same environment in river and water management (from Watershed Management Plans to Environmental Watershed Management Plans);



 Management of water by hydrographic regions, instead of administrative regions, optimizing the a sustainable water consumption: Environmental Management Plans of a real environmental management by a field multidisciplinary team (from both countries in international rivers like Tejo, Douro, Tamega, Guadiana) that integrates both a detailed characterization in all his extension and dimension as the identification of threats and the plan of regeneration, rehabilitation and ecological management of the fresh and ground water;



exclusive public • An water management by hidro geographic regions as well as riparian vegetation borders. We believe that, the Environmental Management Plans teams should be responsible for the licensing of surface and underground water extraction projects, attaining the rule of sustainability (instead of by farm management cooperativs);

 The Ministry of Agriculture and Fishery must be dependent of the Ministry of Environment and Climatic Transition in the approval of projects that need water extraction, to avoid hydric stress;

GREEN JOBS

- Control the use of fertilizers and pesticides in agriculture near river borders and promote environmental authorities' oversight;
- Implement: tax benefits to farming in a biological rotative diverse mode; agroecology production in rivers margins; benefits to owners that occupy part of his land to natural native forest, essential to promote water cycle and rain, descarbonizariam and desmetanization; afforestation of river margins;



• Rivers must be free for its natural balance, so it's imperative to forbid the construction of transverse structures. It's essential the construction of continuity and transposition facilities and systems for aquatic fauna and flora in the functionating hydraulic structures; the removal of obsolete transversal structures is of great importance for restoring the maximum of the river connectivity, the draining capacity, natural landscape and biodiversity;



- It's necessary to review and update the water law to include rivers rights – rivers jurídic personality- and define with objectivity the crime of water pollution, governance of its implementation and supervisory entities, including the crime of water pollution with high penalization;
- Prioritize all citizen demands in the APA (Portuguese Agency for the Environment) to comply with its obligations, in each case of transgression on water, with the appropriate competent action of the authorities



 Increase investment and effort in scientific research in riparian ecosystems, rivers, groundwater, WWTPs, water management, urban sanitation networks, separation of rainwater from sewage, planning and reuse of treated water, use and reuse of water in homes, green architecture, alternatives to dams for energy or water retention, etc., generating green jobs;

- Urgent strengthening of SEPNA's (environmental field authority) staff in numbers, training and extend to 24 working hours, acting in each report of river pollution in an emergency, with agents on the ground, and in the proper identification of the pollution source;
- That the career of the Nature Guards be reviewed and that the Forest Guards and River Guards, with high knowledge and skills, be included in the military forces of SEPNA, as once time ago;

GREEN

JOBS

 Protect the integrity of estuary habitats from any form of transformation for its absolute preservation, due to its unique biogeographic importance for the balance of ecosystems;



- Due to soil waterproofing in cities and the incapacity to treat all the pluvial waters, Municipalities must implement the obligation, for all new constructions, to collect pluvial waters, in retention pools, to use for irrigation;
- Create tax benefits to works for the implementation and improvement of WWTPs (Waste Water Treatment Plants) and Stormwater Storage and Reuse Systems in all factories, and local governments;
- Carry out an independent national survey for all existing WWTPs and that monthly functioning monitoring reports must be published on a public site and planning the reuse of treated water;
- Survey of all sewers that continue to drain directly into the water lines and connect them to the sanitation network collectors and WWTPs (still exists very direct sewers draining to rivers);



- It's essential to create a sustainable way to approach people to rivers, through sports, nature walks, ecotourism, promoting a positive and healthy public perception need;
- That a dynamic and appealing Strategy be created on children's and youth education for better knowledge of the water cycle, rivers, natural forests, clean agriculture and sustainable water management.

GREEN





If the one we know was on in the Prictordial Sea of life on Earth, of which be depend and are a part, is impossible without water. For each polluted iver and for each extinct species, our health, our quality of life, our probability of survival, decreases drastically.