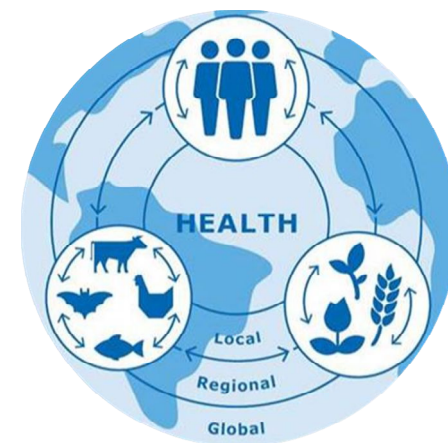


# The ocean and microplastics: a One Health approach



Claire LAJAUNIE  
Inserm  
LPED, Marseille

28 March 2022



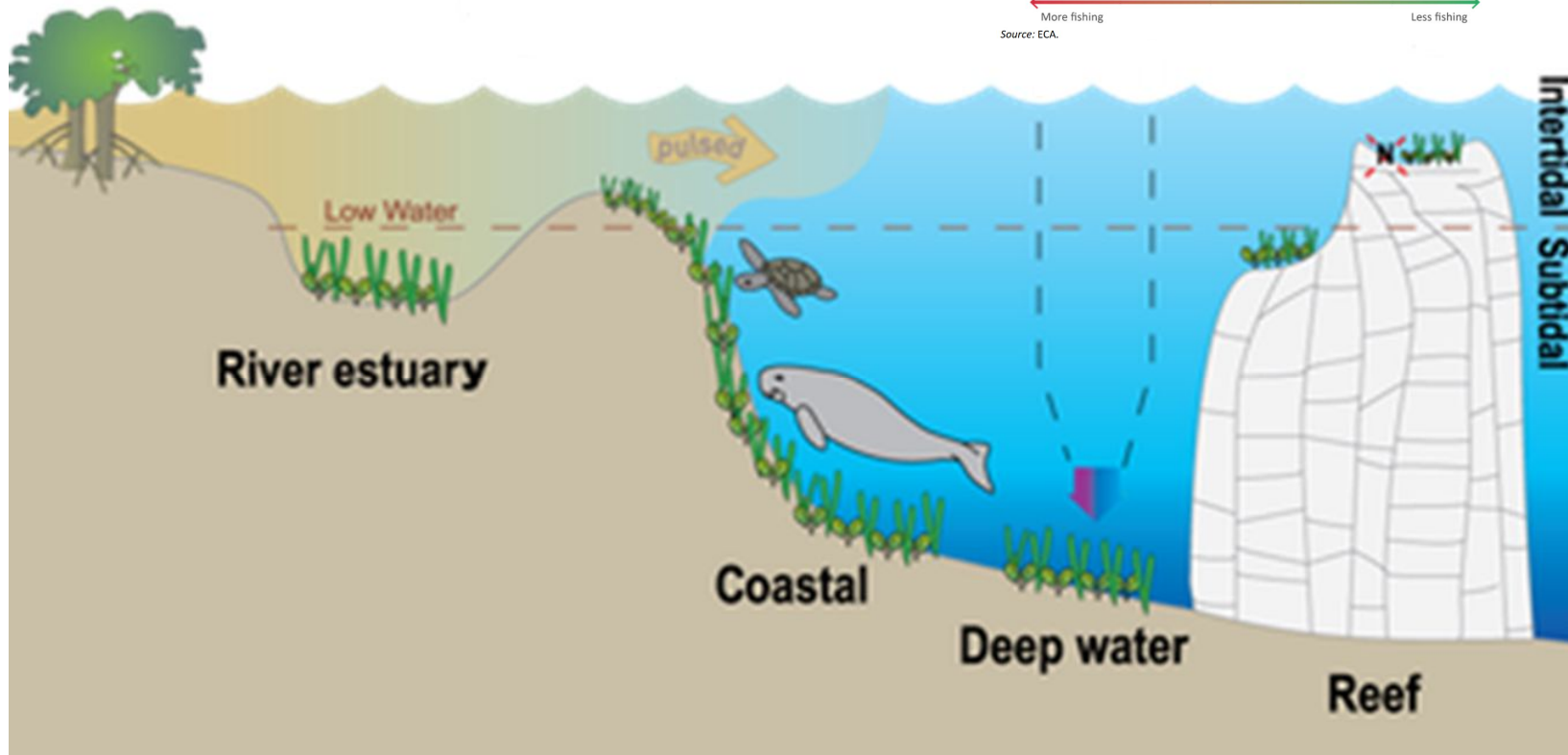
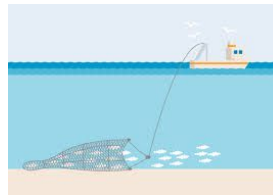
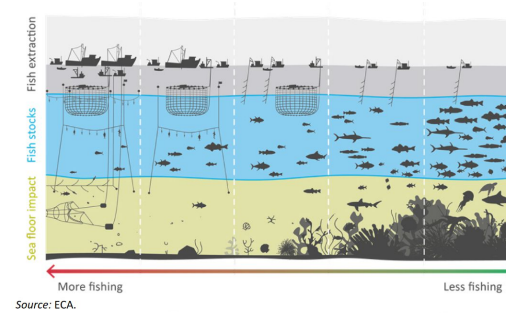
APFSD Side Event - A One Health Approach on Microplastics in the Ocean: Translating Advocacy into Action

# One Health and the ocean



Interdisciplinarity  
and  
intersectorality

# From the coastal areas to the deep sea



# One Health High-Level Expert Panel (OHHLEP)

FAO, OIE, WHO, UNEP



- enhance coordination and collaboration among sectors and agencies, nationally and internationally providing policy relevant scientific assessment on the emergence of health crises arising from the human-animal-ecosystem interface, as well as research gaps;
- 26 international experts : broad range of technical knowledge, skills and experience relevant to One Health.
- The One Health definition **One Health** *is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems. It recognizes the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and inter-dependent.*



# Decade of Ocean Science for sustainable development



- Good science is needed to inform policies
- Increase the knowledge of all stakeholders
- Need to address pressing environmental issues, such as climate change, biodiversity loss, marine pollution and the degradation of marine and coastal environments.
- Solutions to address the decline in ocean health.



One ocean, various ecosystems from the coast to the high seas

NOAA

# Ocean health: the gaps between the Ocean Decade and One health research on the ocean



'Ocean health'

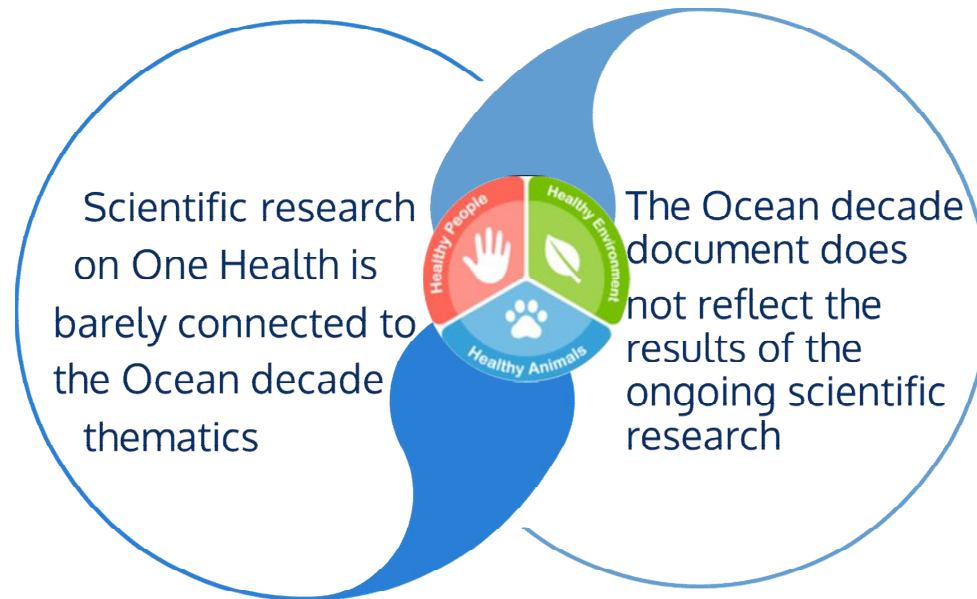


Web of Science One Health

Vocabulary of policy  
and governance

Ocean underrepresented in relation to  
One Health

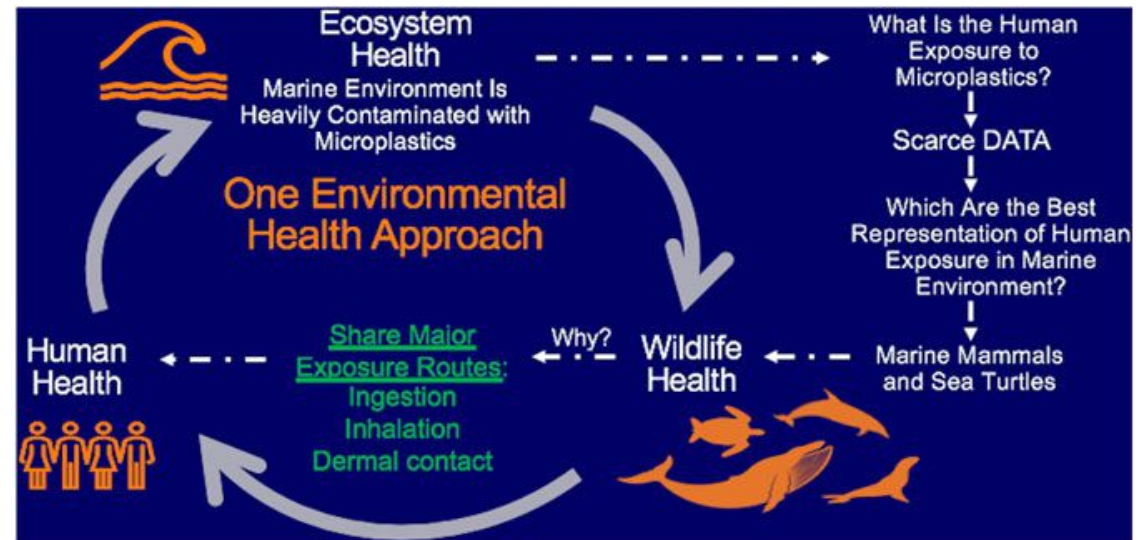
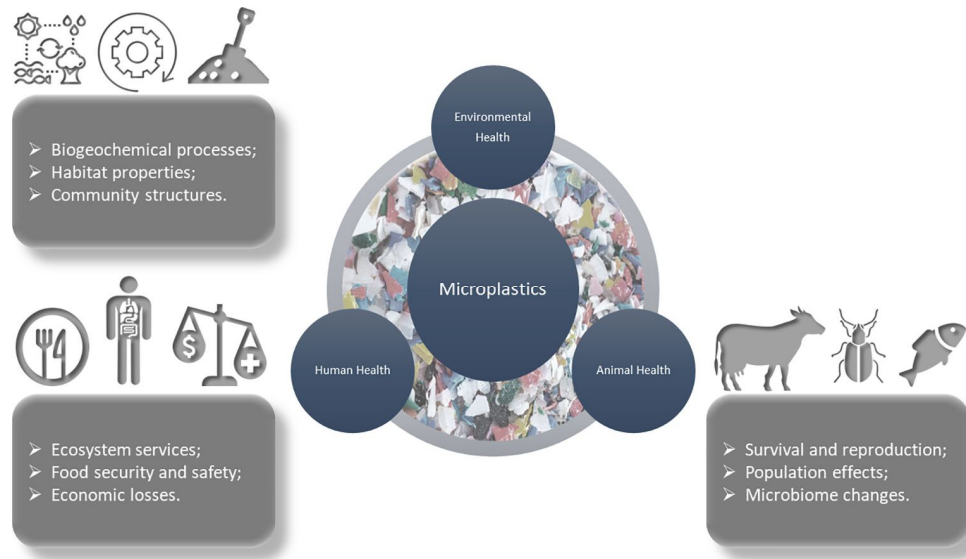
but  
different definitions according to scientific  
disciplines



Lajaunie & Mazzega (2021)  
presentation at the Virtual Ocean  
Pavilion, Climate Change Conference  
COP26

<https://oneoceanhub.org/connecting-the-one-health-approach-to-the-ocean-climate-nexus/>

# One Health consideration of microplastics: a full lifecycle approach



Meaza et al. (2021) Microplastics in Sea Turtles, Marine Mammals and Humans: A One Environmental Health Perspective, Front. Environ. Sci.

Prata et al. (2021) A One Health perspective of the impacts of microplastics on animal, human and environmental health, SC. of the Total Environment.

# From science to political action



**United Nations  
Environment Assembly of the  
United Nations Environment  
Programme**

---

**United Nations Environment Assembly of the  
United Nations Environment Programme**

**Fifth session**

Nairobi (hybrid), 22–26 February 2021  
and 28 February–2 March 2022

## **Draft resolution**

### **End plastic pollution: Towards an international legally binding instrument\***

*The United Nations Environment Assembly,*

*Noting with concern that the high and rapidly increasing levels of plastic pollution represent a serious environmental problem at a global scale, negatively impacting the environmental, social and economic dimensions of sustainable development,*

*Recognizing that plastic pollution includes microplastics,*

*Further noting with concern the specific impacts of plastic pollution on the marine environment,*

*Further noting that plastic pollution, in marine and other environments, can be of a transboundary nature and needs to be tackled, together with its impacts through a full lifecycle approach taking into account national circumstances and capabilities,*



# Thank you for your attention!



Photo by [Naja Bertolt Jensen](#) on [Unsplash](#)