CNL(25)68

STRESSOR ANALYSIS
Eu Jurisdiction: France

Bénédicte Valadou
Cheffe de projet Migrateurs amphihalins
OFB / DASB

NASCO Annual Meeting
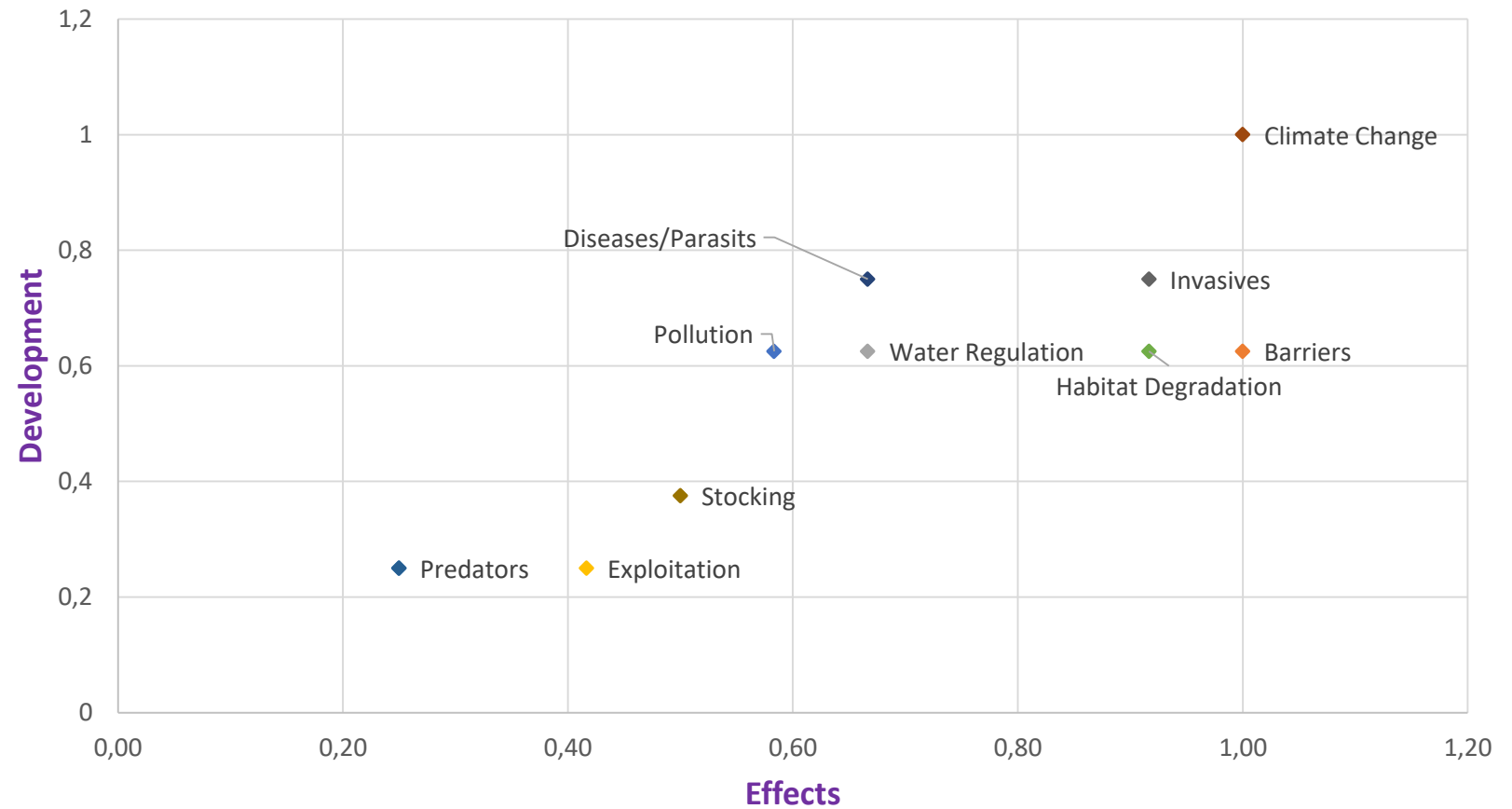
Stressors analysis

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04/06/2025

MAIN THREATS

ICES 2015 (WGERAAS)	IUCN equivalent
Stressor 1 Pollution	9. Pollution
Stressor 2 Barriers	7.2. Dams & water management/use
Stressor 3 Water Regulation	7.2. Dams & water management/use
Stressor 4 Exploitation	5.4. Fishing & harvesting aquatic resources
Stressor 5 Aquaculture	2.4. Marine & freshwater aquaculture
Stressor 6 Habitat Degradation	depending on the source : 2 agriculture, 1. urban, 4 .transportation and 7. natural system modification
Stressor 7 Diseases/Parasites	8.2. Problematic native species/diseases
Stressor 8 Climate Change	11. Climate change & severe weather
Stressor 9 Invasives	8.1 Invasive Non-Native/Alien Species/Diseases
Stressor 10 Stocking	8.3 Introduced Genetic Material
Stressor 11 Predators	8.1 or 8.2

CLIMATE CHANGE

Climate change causes :

Rising water temperatures :
- affects reproduction, growth and seasonal rhythms.
- accelerates the maturation and development of salmon ovaries, reducing their lifespan and size.
- reduces O2 content, which then becomes limiting for aquatic organisms.

Changes to river regimes, with :
- lower average river flow
- more severe and longer low-water periods, which have a major impact on the ability of diadromous fish to migrate.

Diadromous fish modified timing of upstream migration over the last 30 years in France

Marion Legrand ✉, Cédric Briand, Laëtitia Buisson, Timothée Besse, Gwenaël Artur, Didier Azam, Aurore Baisez, David Barracou, Nicolas Bourré, Laurent Carry, Anne-Laure Caudal ... See all authors ˅

INVASIVE & PREDATION

Very few Alien species have been identified as problematic for salmon. However, some species, such as the catfish (*silurus glanis*), are the object of attention due to their predation.

Réservé aux abonnés

Des milliers de silures pêchés dans la Dordogne et la Garonne pour sauver les poissons migrateurs

⏱ Lecture 4 min

Accueil · Environnement · Pêche

BARRIERS

In 2020, one structure considered as an obstacle to flow (i.e. dam, weir, bridge, fish farm, etc.) is present every 5 km in France :
- It hinders upstream migration forced reproduction of spawners in unsuitable areas
- It delays migration, preventing individuals from reaching the best habitats.

cumulative effects have :
- significant impacts on migration success, reproduction and survival of individuals (delays, exhaustion, injuries, mortality)
- encourage grouping of individuals, whether at the foot of the dam or at fish passage structures, increasing the risk of predations

Actions HO1-1.2
1- Implementation of appropriate means to limit the impact of key structures
2- publication of a guide to the ecological restoration of habitats

→ LIFE Biodiv'France

OUT !

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Action « Ouvrages » (HO1-1.2)

→ Collective identification of 25 key structures, including 5 pilot structures
→ Drafting of operational action plans (solutions to be implemented + costing of work)

→ Expected results :

2032 (fin LIFE)

13 structures restored
- 5 pilote structures
- 8 « others »

2037

+ 12 structures restored

Thank you!