

NOVEL ECOSYSTEMS: IT'S TIME TO GET REAL

MODERATOR: CHERYL ULRICH, PE
WESTON SOLUTIONS, INC



The Trusted Integrator for Sustainable Solutions

PANEL MEMBERS

Dr. Matthew Harwell, U.S. Environmental Protection Agency

**Dr. Richard Hobbs, University of Western Australia,
School of Plant Biology**

Dr. Denise Reed, The Water Institute of the Gulf



WE ARE TRAPPED!

- **Restoration**
 - An ecosystem can be returned to some previous state
 - “Original/pre-existing” condition
- **The World**
 - Will continue to change at an ever-increasing and unprecedented rate.
 - Ignoring prior and future human impact
- **Struggle**
 - With defining the goal
 - Trapped in a model of restoring to a previous static state
- **Tremendous Paradox**
 - Focus on an uncertain past and future – Stalled.
 - Readjust our definition of the goal of ecosystem restoration to include how humans intervene in ecosystems



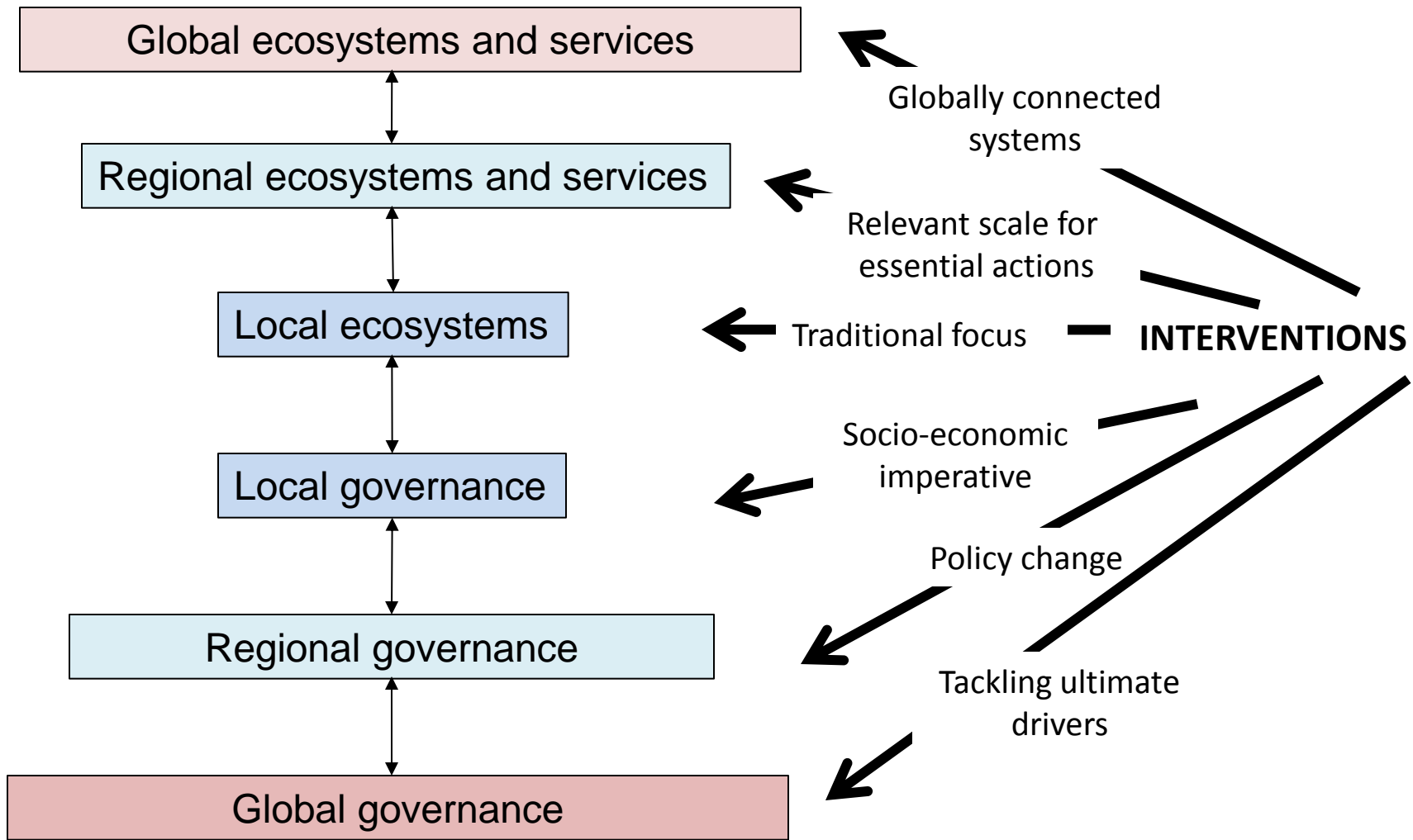
NOVEL ECOSYSTEMS WHAT IS IT?



INTERVENTION

- **Intervene with an eye towards the future**
- **Can our interventions be planned and guided in a way that is beneficial both to humanity and to other organisms?**
- **Reactive, Active, Proactive Intervention**
- **Local, Regional and Global Scales**
- **Changing rules and governance approaches may have more of a profound impact than tinkering with ecosystem restoration**






**CASE STUDIES
OF NOVEL ECOSYSTEMS
LESSONS LEARNED**



THOUGHTFUL INTERVENTION: ARROGANCE VERSUS HUMILITY

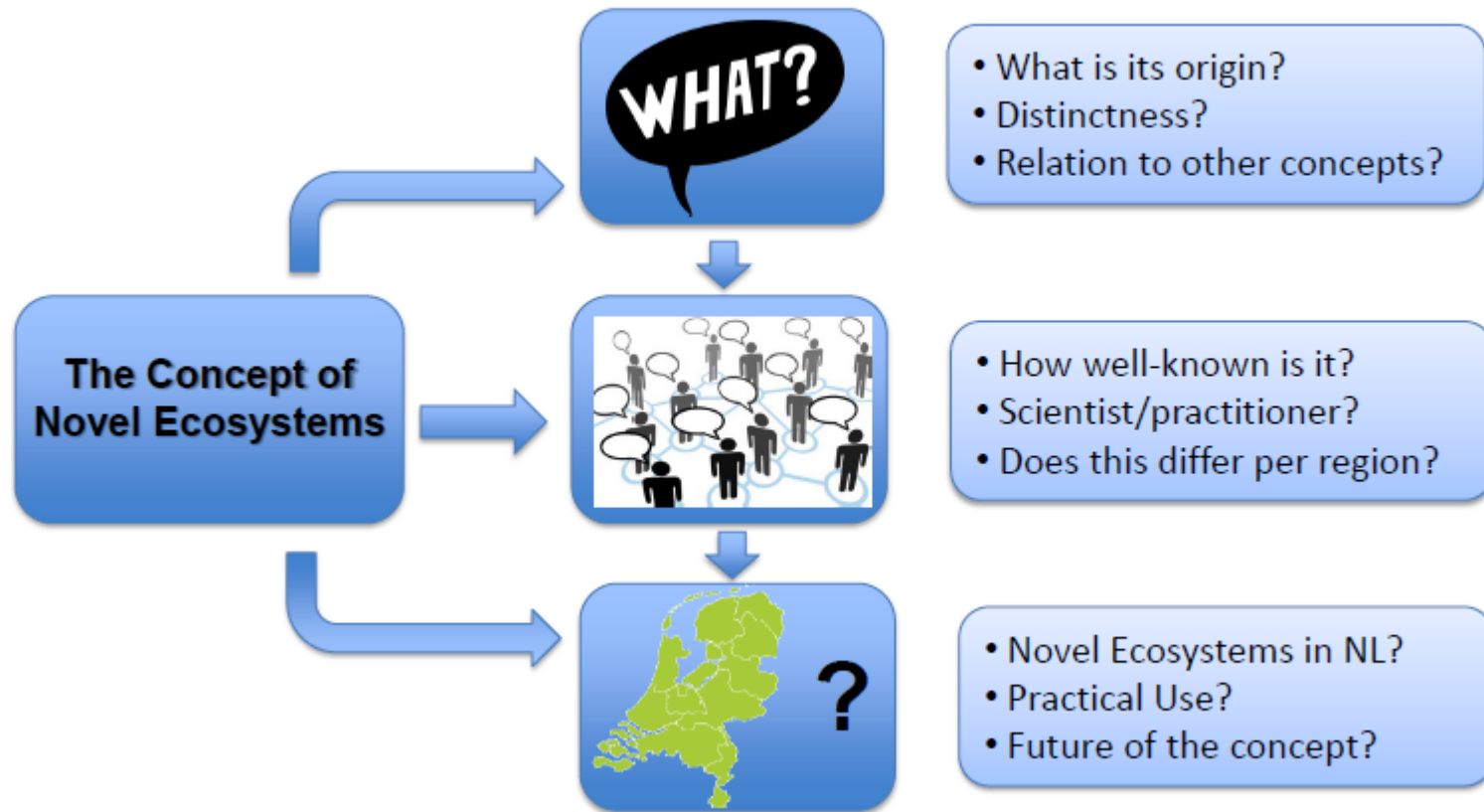
- **Need to decide which interventions are feasible, desirable, and likely to result in positive outcomes for humanity and biodiversity.**
 - **When do you declare targets as non-attainable?**
 - **Are we actively adapting to disturbances?**
 - **Should novel ecosystems be restored and safeguarded?**
- 

CHALLENGES OF APPLYING THE NOVEL ECOSYSTEM APPROACH



Martin Wassen – Intercol 2012 – Dutch Perspective

Novel Ecosystems: An Analysis of the Influence, Usefulness and State of the Concept



PATH FORWARD

OPEN DISCUSSION



THANK YOU!

**CONTINUE TO DO GREAT THINGS
FOR THE PLANET!**



Novel Ecosystems

Intervening in the New Ecological World Order

Edited by Richard J. Hobbs, Eric S. Higgs and Carol M. Hall



 WILEY-BLACKWELL

