







Elements



Trilateral Fish Targets 2010



Trilateral Ministers Conference Declaration: 2014 – Tønder - 2018 Leeuwarden



Swimway Vision and Action Programme 2018-2024



Trilateral Research Agenda 2018





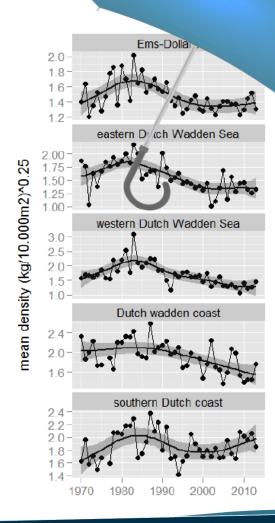
SWIMWAY or why do fish need an umbrella?

- Changes in fish populations
- Need better understanding
- QSR 2009 and 2017













Swimway Programme

Background

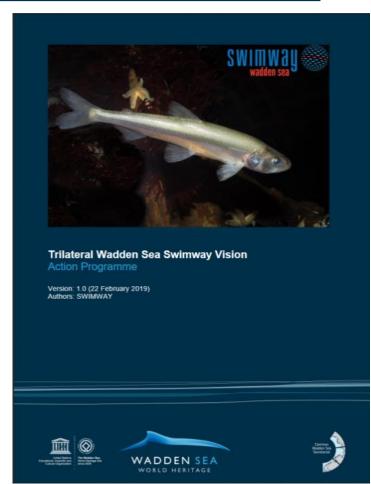
- Trilateral Ministers Conference Declaration 2014 Tønder
- Wadden Sea Board: further implement fish targets
- 3 prior meetings in Hamburg (2015-2017)

Aims

- Address Trilateral Fish Targets
- In 2017-2018 develop trilaterally supported programme for 2018-2024

Outcome

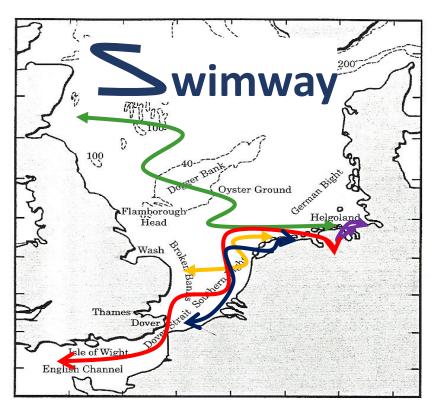
Presented at Wadden Sea Ministers Conference 2018







Swimway Wadden Sea



- All species utilising the Wadden Sea
- Focus on life-cycle and identifying bottlenecks
- Build on existing work and inspire project development and collaboration











Life-cycle approach and bottleneck analysis



Viable stocks of populations and a natural reproduction of typical Wadden Sea fish species



Occurrence and abundance of fish species according to the natural dynamics in (a)biotic conditions



Favourable living conditions for endangered fish species

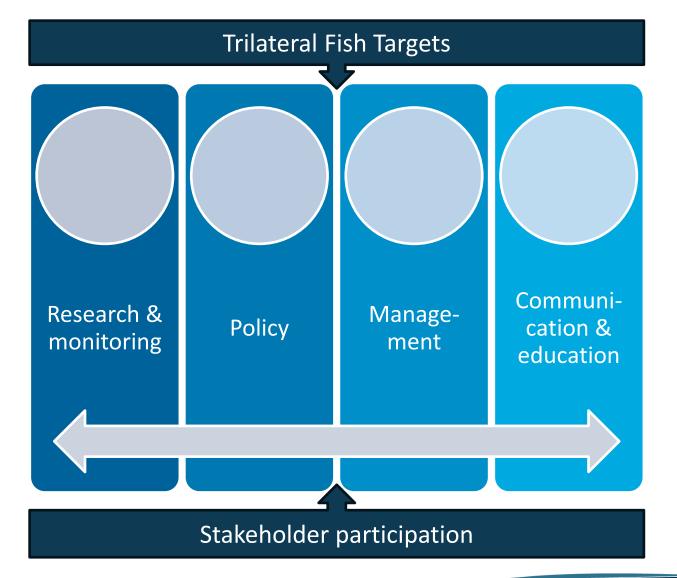


Maintenance of the diversity of natural habitats to provide substratum for spawning and nursery functions for juvenile fish



Maintaining and restoring the possibilities for the passage of migrating fish between the Wadden Sea and inland waters

SWIMWAY structure



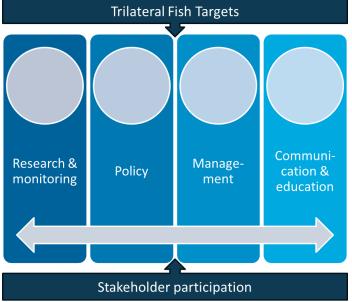


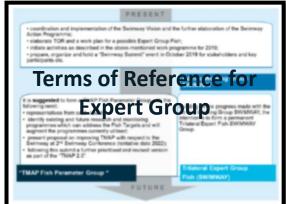


Progress in SWIMWAY activities



Policy Review





Trilateral Research
Agenda
Special attention .. for the long-distance migration routes of fish, sea-mammals and birds.







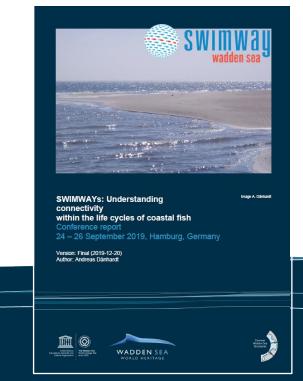
Coming together: the first multilateral SWIMWAY conference



- Swimways: Understanding connectivity within the life cycles of coastal fish
- 24 -26 September 2019 in Hamburg
- 90 scientists, managers, NGOs and other stakeholders (but no politicians!)
- 4 sessions with keynotes, 1 conference keynote,
 24 expert talks, 1 poster session, 1 education
 workshop and 4 interactive breakout sessions

Outcome (highlights)

- Knowledge community made visible & connected
- Wadden Cs: Connectivity, connectivity, connectivity
- Reach beyond immediate community: TRA, UNESCO decades, ICES, etc.
- Cooperative research projects <u>parallel</u> to immediate action (windows of opportunity)







Work priorities, networks and linking time scales

Take immediate conservation action



Acquiring missing knowledge & new context

2019-2024

Present: Wadden Tools (NL)

Under revision

Future: DAM Coastal Futures (D)

Application: Bottlenecks (D)

Draft proposal

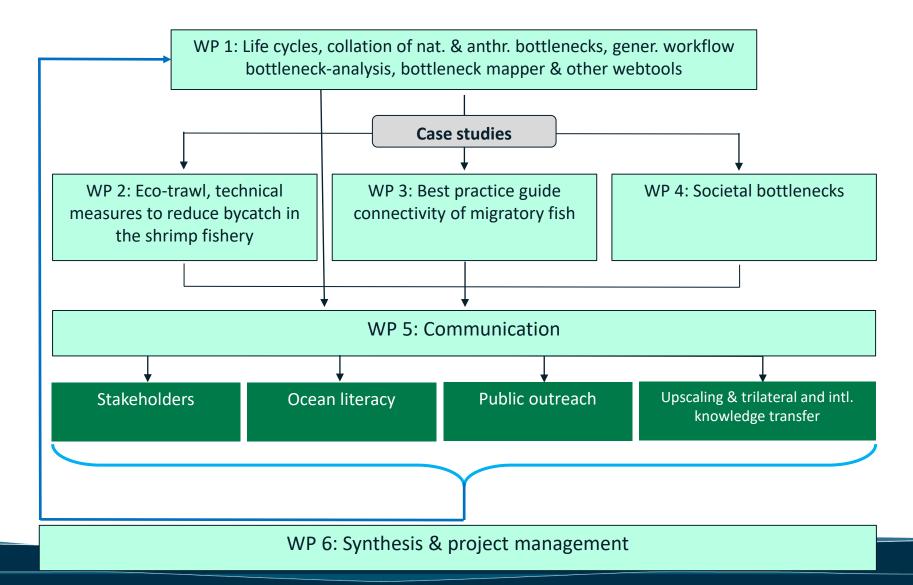
In preperation

Past: Historical references (NL, D, DK, ...)





SWIMWAY bottleneck project







SWIMWAY projects and their relationship to trilateral fish targets

Cooperative research projects are at the heart of the requirement to implement the trilateral fish targets and drive the procedural iterations to reach this goal

Step1 "Stating the big idea" Permanent Maintain generic trilateral fish targets, as revision of all adopted in 2010, to ensure broad acceptance three steps Specification < required to Step 2 "Making definitions concise" address moving baselines and as Framework for specifying questions and testable hypotheses a prerequisite for adaptive Make targets - SMART management Step 3 "Rigorous testing" Specific research questions and testable hypotheses Cooperation between stakeholders, countries, disciplines vand institutions Projects and other activities MONITORING RESEARCH COMMUN. EDUCATION





The future of (WS fish supported to be bright by) SWIMWAY

Outlook what could be reported by the SWIMWAY Expert Group to the WSB on 19.11.2030?

- > Trilateral fish targets become largely oblivious (because they are fulfilled)
- Fish realize and keep benefitting from the work of the SWIMWAY Wadden Sea group
- Harmonized monitoring and research including synergistic data exploitation across fish life cycles has become standard
- Effective incorporation of ecological knowledge and conservation issues into policies, curricula and people's everyday lives are implicit
- Together with international partners the SWIMWAY group still works hard to keep it this way







OUR **WADDEN SEA** WORLD HERITAGE



