Ministerie van Verkeer en Waterstaat

# An overview of the coastal fishery in the Netherlands and the impact on salmon, Salmo salar 

Eddy Lammens<br>André Breukelaar<br>Johan Giels

Rijkswaterstaat

## Reference reports used for the estimate

- Imares report 2008 on salmon mortality in Dutch part of Rhine
- Telemetrie reports 2010 and 2012 on salmon migration in Dutch Rhine Delta
- Imares report 2015 on recreational fishery
- ATKB report 2015 on overview coastal fishery


## An overview of:

- Fishery at the coastal area 1 km offshore from Kornwerderzand up to the Belgian border
- Licences for gill-nets, fykes, trawls and seines
- Recreational fishery with gillnets.
- Anglers
- Estimate of number of adult salmonids caught and number of salmon reaching the German
 border


## Who are fishing in the coastal areas?

Professional fisherman licenses: shrimp-trawls 319, gillnetts 97(250 km total length) fykes 124(25.000 total number) seines 23(1500 m seine length)


Recreational fisherman: 700 ( 35 km total length)

Anglers Half a million


## Fykes



On top fykes located next to the shore, below fykes used to fish in the open water Aprox. 100-1300 adult salmonids (seatrout and salmon) are caught. Mortalty is 10-40\%.


## Gill nets



Gill nets used for pelagic (top) and bottom fishery Both professionel and recreational fisherman use these nets and catch 300-800 adult salmonids yearly, in approx. equal amounts. All fish die.


## Trawling



Bottom left trawl for shrimps with green protection net to prevent fish to enter the net Bottom right beam trawl used for demersal fish.
Shrimp fishing is most important without any substantial bycatch of salmonids


## Anglers



According to the interviews the number of salmonids caught was 0.07 fish per angler, multiplied by half a million anglers would count for 40.000 salmonids. Only a small percentage ( $20 \%$ ) is mature, that is 8000 , of which 5700 are retained. The inaccury of this estimate is high

## Overview of catch and withdrawal salmonids

- Considering professionel fishery fykes and gill nets catch most salmonids (300-1700), trawls and seines hardly any
- Recreational fishermen (gill nets) catch 200-400 salmonids
- Anglers fishing at sea catch 1500-8000 adults
- Totally 2000-10000 adult salmonids are caught
- 500-1500 die in gill nets and fykes and 1000-5500 are retained (illegally), so 1500-7000 disappear
- Approx. $10 \%$ of the salmonids is salmon, so max. 150-700 salmons are caught in the coastal area
- BUT ... only $40 \%$ would enter the river and only $10 \%$ would arrive at the German border, that is $15-70$ individuals

