

DE NIEUWE
afsluitdijk



The FishMigrationRiver

Roef Mulder
Dienst Landelijk Gebied / Programma naar een Rijke Waddenzee
8 April 2014

- Historical background
- The project FishMigrationRiver
- Planning

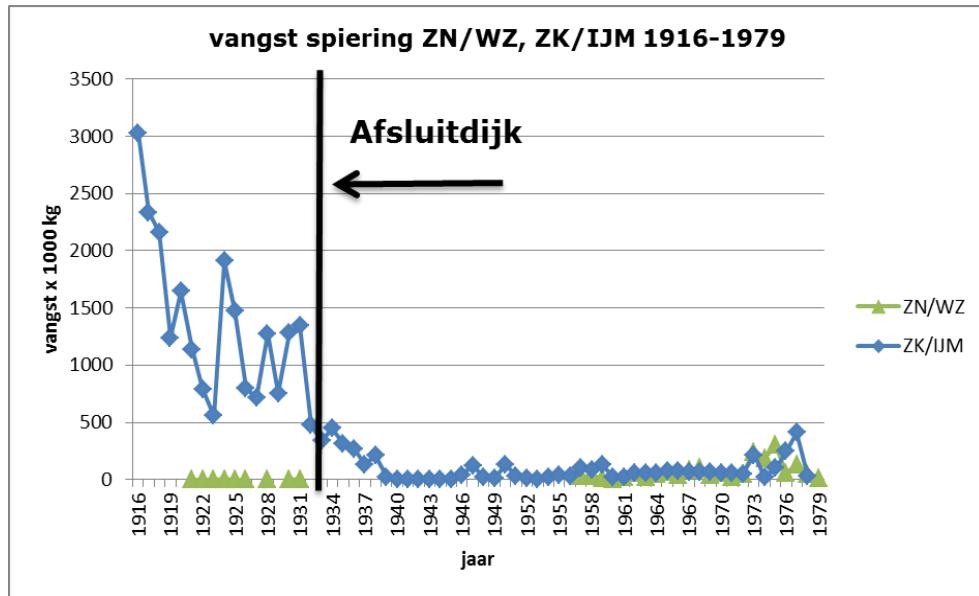


Afsluitdijk was completed in 1932;

- closure of Zuiderzee-estuary (river IJssel-Rhine)
- fresh IJsselmeer was created (safety and storage)
- barrier for fish migration

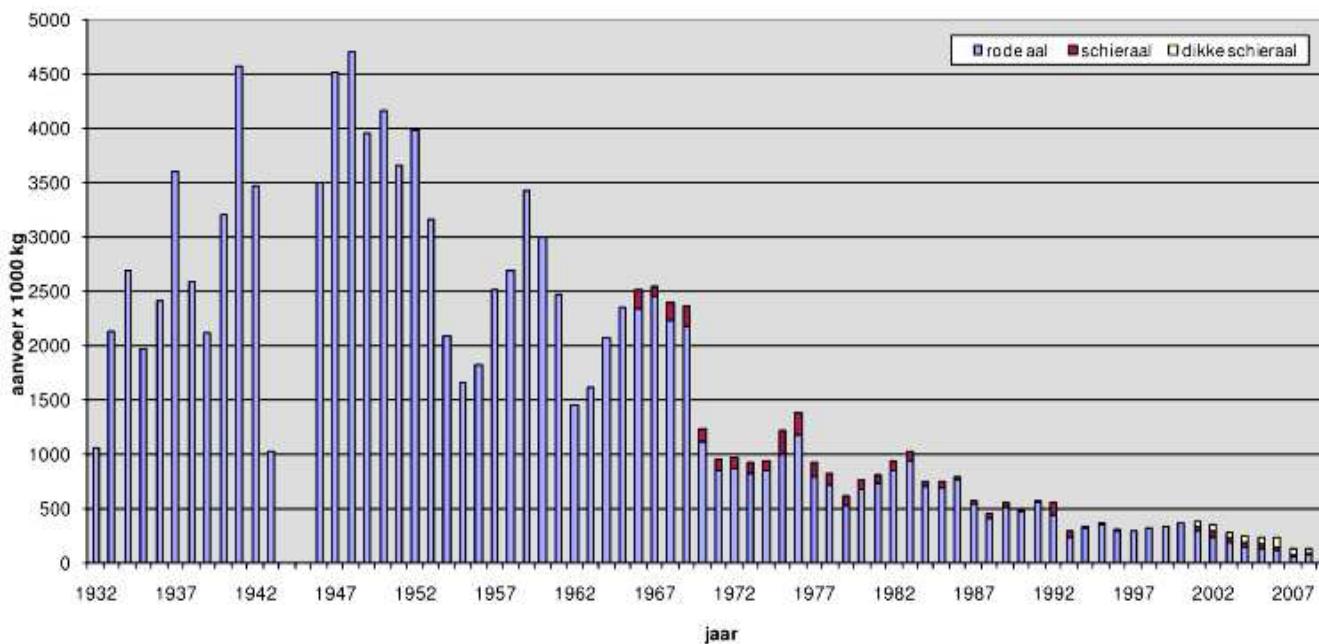






Smelt:

- No connectivity;
- isolated population
- strong decline
- decreased size



Eel:



The FishMigrationRiver

2009 Renovation of the Afsluitdijk RWS

2011 “Initiatiefdocument Vismigratierivier”
Waddenvereniging
Sportvisserij Nederland
Vereniging Vaste Vistuigen Noord
Het Blauwe Hart (Stichting VBIJ)



2012 Adopted by regional governments in
De Nieuwe Afsluitdijk

2013 Feasibility Study



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Discharge sluices to
manage waterlevel;

-Den Oever

-Kornwerderzand

strong outwards flow



Monitoring data Kornwerderzand; actual catches

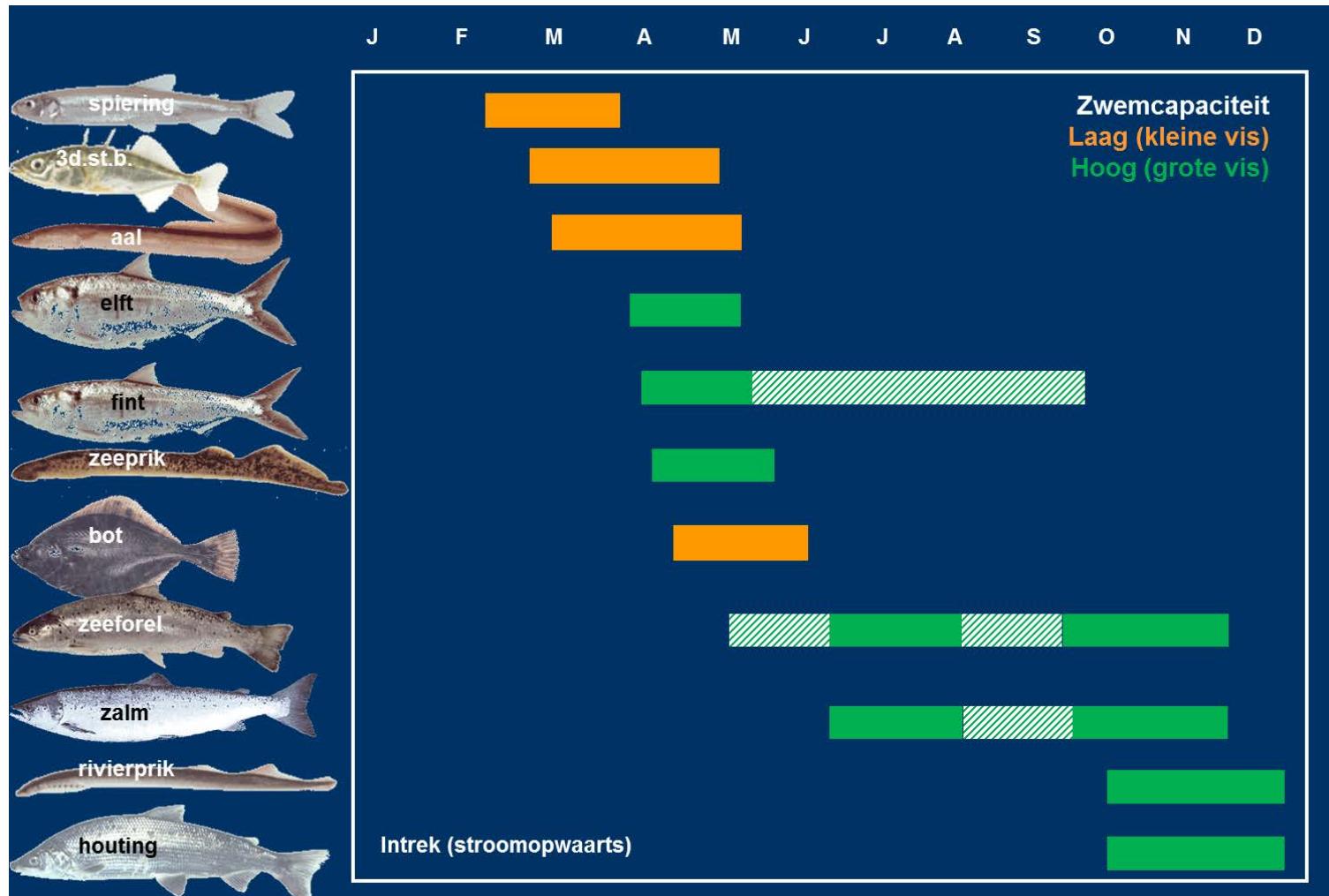
(Imares: Winter, Griffioen en Van Kreeken 2014)



soort	2001	2002	2003	2005	2006	2007	2008	2009	2010	2011	2012
Diadroom (doelsoorten)											
Aal/paling	18,061	19,053	11,894	4,059	3,249	2,860	2,172	4,090	4,635	1,868	1,266
Bot	11,215	27,804	28,431	9,384	10,457	29,460	8,429	13,118	7,964	15,676	1,971
Driedoornige stekelbaars	4,133	5,184	3,536	119,989	485,952	114,760	100,462	1,085,111	1,026,154	416,242	545,520
Elft	0	0	0	0	0	0	0	0	0	0	0
Fint	102	768	2,965	703	126,703	407	313	147	16	1,000	218
Houting	1	13	22	104	19	40	19	32	12	6	5
Rivierprik	1,300	221	583	179	10	21	45	37	122	11	104
Schar	1,046	20	95	9	10	7	11	42	2	8	7
Spiering	64,273	140,124	17,884	60,317	148,974	107,325	80,990	276,136	1,229,960	35,575	44,628
Steur	0	0	0	0	0	0	0	0	0	0	0
Zalm	6	14	5	0	1	1	0	0	1	0	0
Zeeforel	24	45	12	18	19	16	23	4	2	0	2
Zeeprik	193	1	43	24	35	68	70	20	5	13	22

To put this in perspective; catching effort is limited by;
 -time (catching days)
 -net coverage x2 x5 x10 x100??

Timing and swimming capacity

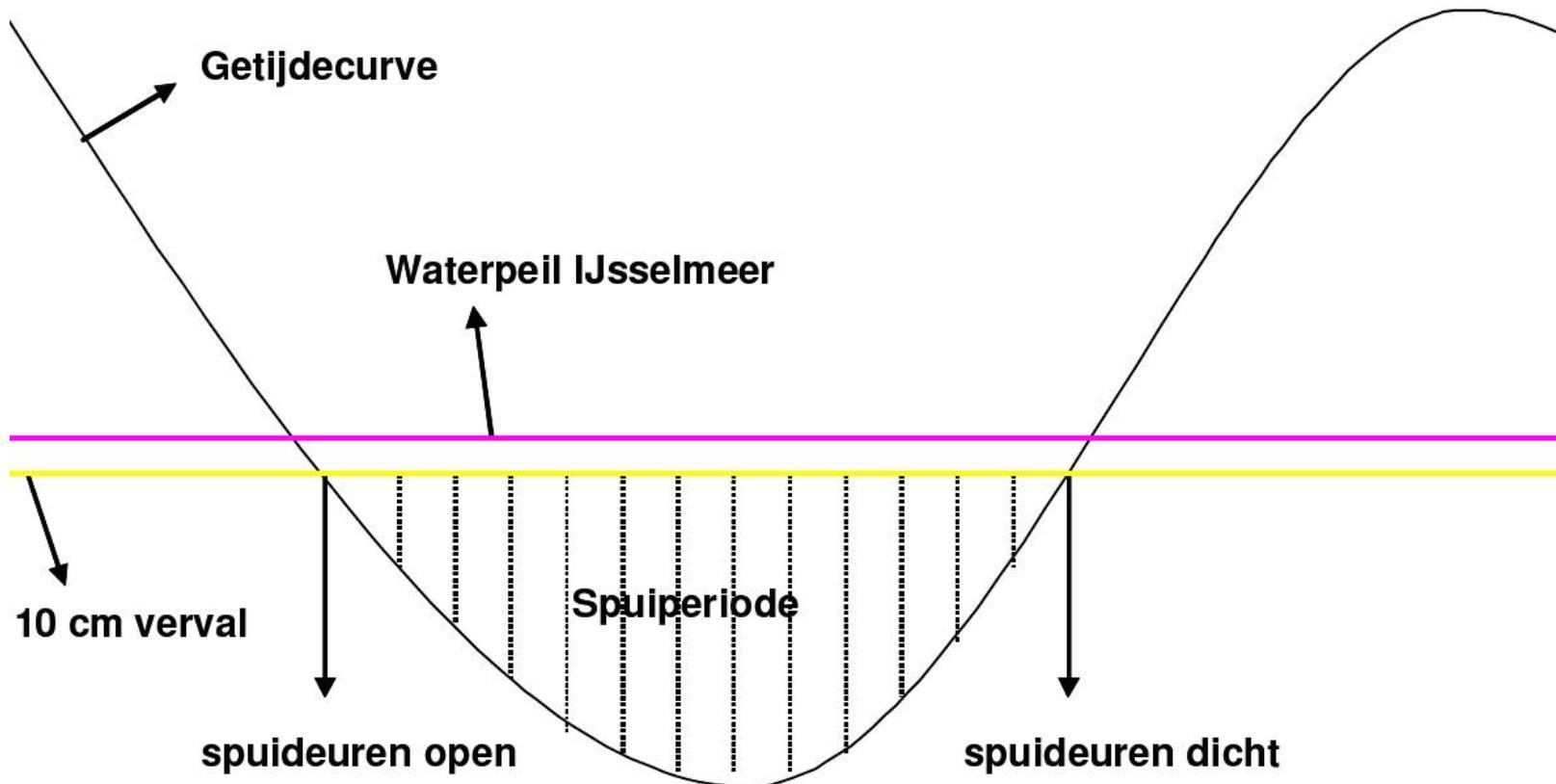


Functional design:

- Facilitate all species
- Tidal migrants can lift on incoming tide
- Effective migration-window (day-year)
- Attraction-flow of 10-15 m³/s
- Gradient salt to fresh (transition zone)
- *IJsselmeer needs to remain fresh*
- Education and recreation
- Other: Natura 2000 (breeding) birds

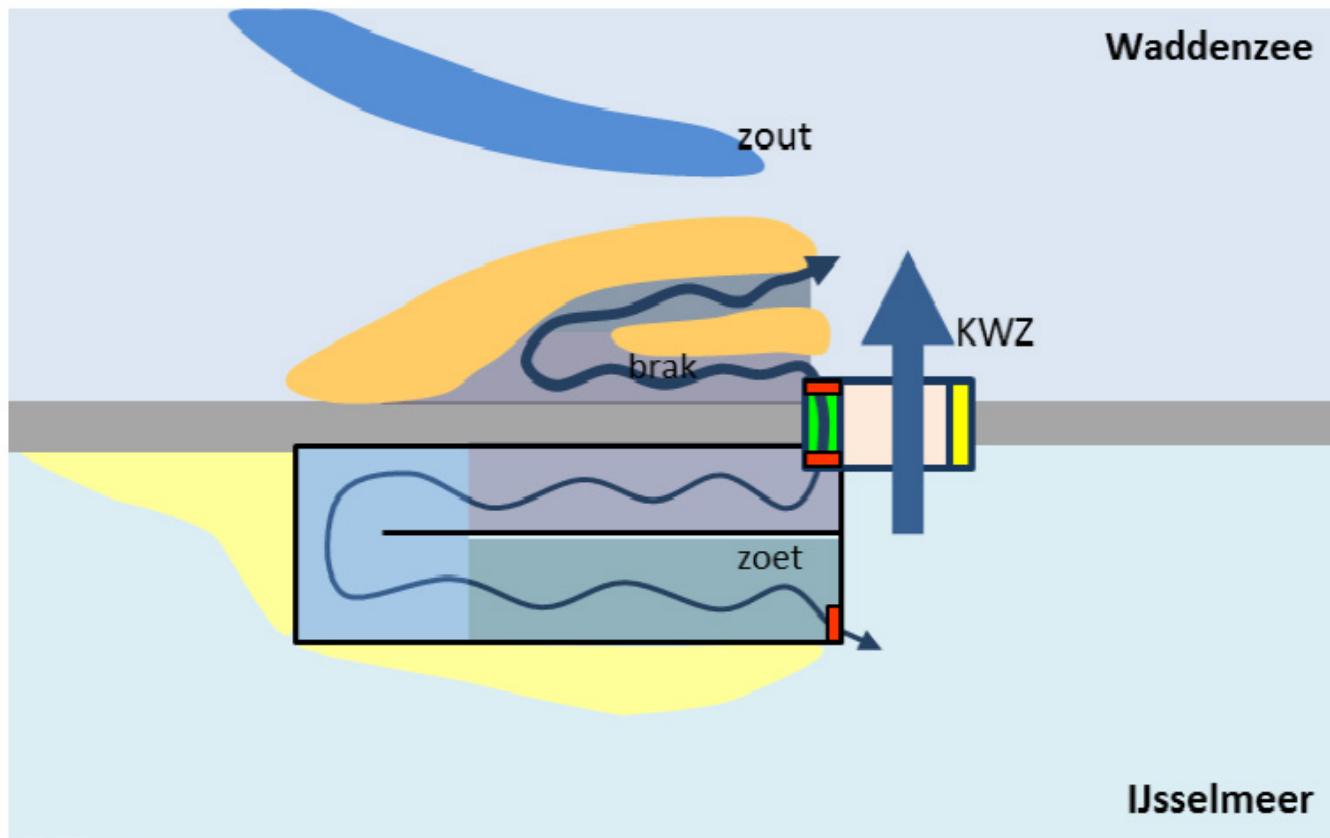


Discharge sluice management



-spring 2014; adaptive sluice management RWS-

Initial design:



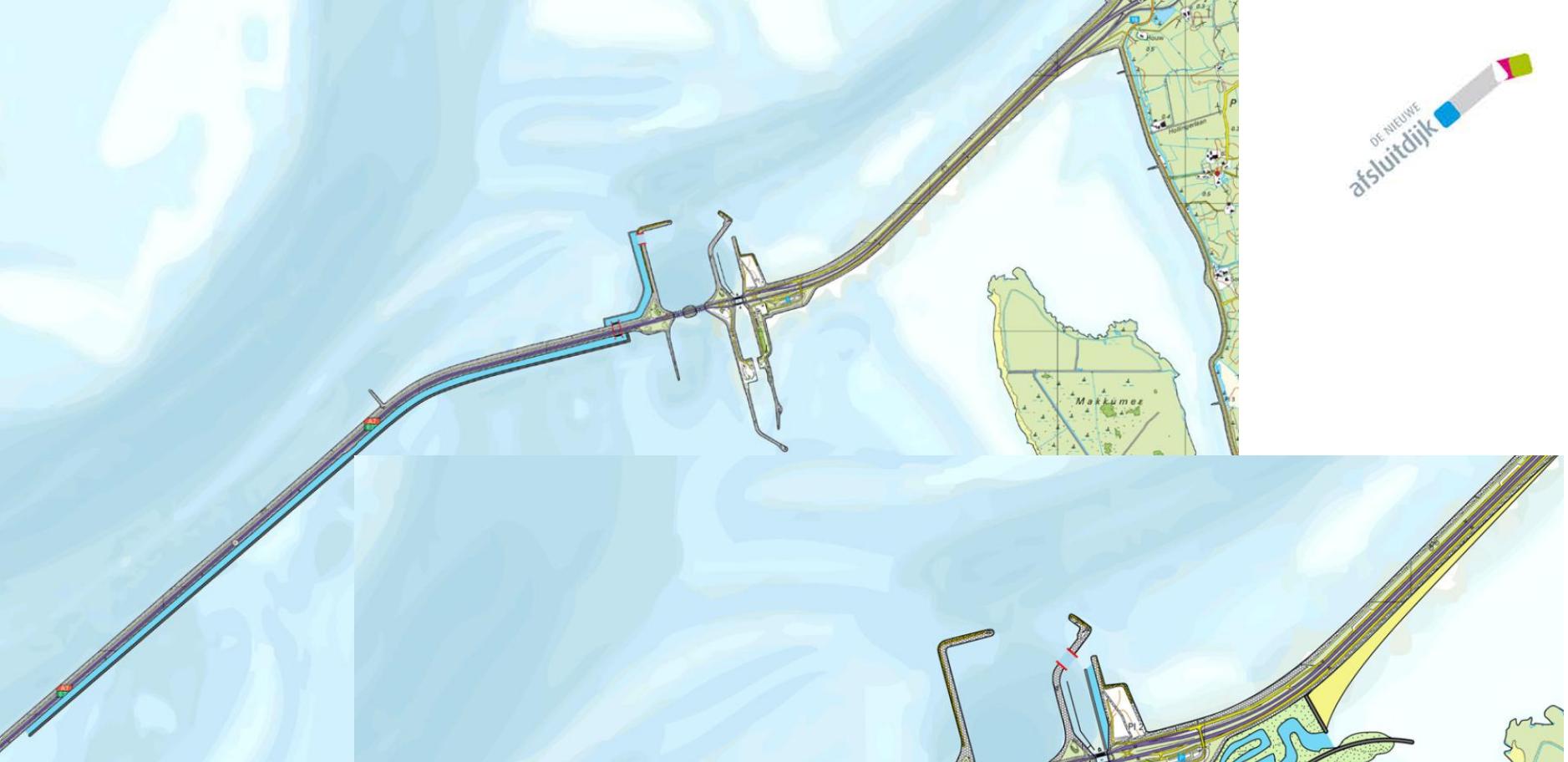
schetsontwerp/concept voor een vispassage bij een spuilocatie op de Afsluitdijk

Artist Impression;

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afsluitdijk



IJsselmeer



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Breeding habitat for birds;

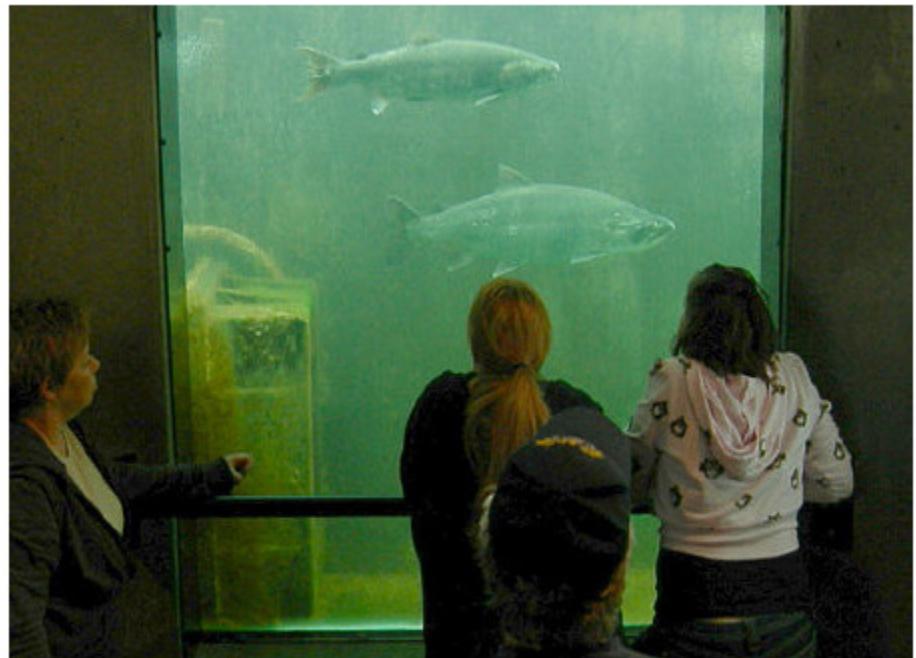
- Arctic & Common Tern
- Ringed & Kentish Plover

Non-breeding birds;

- High-tide roost for waders, gulls etc.
- Increase food availability in IJsselmeer for terns, various wildfowl



Education & monitoring



Educatiecentrum "Mosselum" bij de vispassage en kijkraam voor zalmtrek in de VS

Planning 2014;

- Literature overview fish migration salt to fresh
- Monitoring: numbers, timing and location KWDZ
- Telemetry: individual behaviour of migrants
- Modelling fish-behaviour, sedimentation, salt
- Technical design – MER procedure
- Permits & Financing
- Adaptive sluice management (RWS)

Design: June 2014

Go/No-go: September 2014

-> join RWS in contracts, civil works etc.



Dienst Landelijk Gebied
Ministerie van Economische Zaken



Vereniging
Vaste
Vistuigen Noord

PROGRAMMA NAAR EEN RIJKE WADDENZEE

