

Kring 2014

HHNK - The Netherlands



Foreword

Dear Friends and members of the Kring

We are delighted to welcome you all here in the beautiful dunes of Bergen for our annual meeting of the Kring.

You will be very safe here, as Bergen is located within an extensive dune system. Although.. we are working on a neighbouring dike reinforcement.. We will discuss this at length on the last day of our stay.

During the Kring you will be guided around the lovely island of Texel, visiting the levees and the salt marshes of the Slufter and the newly built sand dunes that form a new water defence at the Hondsbosche and Pettemer levee. Throughout the talks you will hear about our ideas of sharing and using ongoing developments in both technical and political issues in our reinforcements projects.

This year we also have an interesting additional activity to accompany the traditional meeting of the Kring. On the Sunday afternoon prior to the official meeting of the Kring we have organized two workshops. During these workshops we explore possibilities on pan-European co-operation during flood events and we elaborate a relevant case for further co-operation on data collection using state of the art methods.

During the Kring itself we hope to learn about your findings on this new activity and, of course, we will discuss with you all the results of the workshop at dinners, walks, talks and drinks.

We are excited to meet you all these days. If you have any questions during your stay please contact one of us, the Kring 2014 organising team of Hoogheemraadschap Hollands Noorderkwartier, preferably in person, as we will not be able to read emails or answer phone calls immediately.

When less urgent, please contact us on kring@hhnk.nl

We wish you all a very nice stay in Hotel Blooming and an exciting Kring meeting.



Kind regards,

Hoogheemraadschap Hollands Noorderkwartier
Petra Goessen & Simone Boogaard

Contact organising committee

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Dear members

of the KRING van Zeewerende Ingenieurs.

This year our KRING-meeting will bring us in the northern part of the Dutch coast.

After our trip to Hussum and especially remembering our contacts with mayer of the Hallig Hoge it was a great pleasure to be invited to the beautiful Wadden area. Exact 10 years ago -2004 - we were able to visit this part of the coast and learned many lessons about sediment transport, coastal investigations and beach nourishment. I still do remember very good memories about it.

Surrounded by remarkable storms in the difficult economic issues these days it is important to stay well informed in our international problems of the European coastal policy for the next centuries. It is for that reason that my expectations for the this KRING-meeting in Holland are very high. I am sure that our Dutch colleagues and friends are able to offer us - again - a very interesting program.

With kind regards,

Adrie Provoost, chairman of the Kring



Programme

Programme Sunday 21 - Tuesday 23 September

Sunday 21 September 2014

- 12:00** Registration and check-in, light lunch at hotel
- 13:00** Start workshops
- 16:30** End workshops
- 16:30** Registration and check-in for those not attending workshops
- 18:00** Welcome and informal dinner, talks about Dutch safety levels, levee construction program and new theoretical insights in peat characteristics (Dijken op Veen project)

Monday, 22 September 2014

- 07:00** Breakfast
- 08:00** Departure by bus from the hotel to visit the island of Texel
- 10:00** Arrival at NIOZ
- 12:15** Visit to the Texel dykes and salt marshes of the Slufter
- 16:00** Departure by bus
- 18:30** Arrival at Hotel Blooming
- 19:15** Formal dinner

Tuesday, 23 September 2014

- 07:00** Breakfast and check-out hotel
- 08:15** Departure by bus to Camperduin (STRUIN) to attend lecture
- 10:15** Departure by bus to Petten
- 10:30** Visit Hondsbossche & Pettemeer sea defence, talks on construction site
- 12:00** Departure by bus to Camperduin (STRUIN)
- 12:30** Informal lunch
- 13:20** Closure of Kring September 2014
- 13:30** Departure by bus, drop-off at train station Alkmaar, onwards to Hotel Blooming
- 14:30** Arrival Hotel Blooming

Workshop - *Lessons Learnt*

In this workshop we will find out what we can learn from the winter floods in the UK. The UK has experienced the most extreme sea levels in over 60 years and in some parts of the coastline, higher levels than those in 1953. The workshop will explore ways in which together, we can learn from the winter storms and how we can work together more closely in the future. Together we will find ideas and forms for pan-European co-operation. This pan-European co-operation will be reviewed in March 2015 during a webinar or during the next Kring in 2015. To be continued..



Workshop - *Flying Dutchman*

In this workshop we will start with a short introduction on the recent development on data collection; e.g. using satellites, helicopters, drones or jet skis. Members of the Kring will formulate knowledge gaps and relevant issues to be met in this field. In three groups we will focus on gaps in information of ground water level and salinity, terrain heights, water depths and vegetation. Together we will elaborate a relevant case for further cooperation to be reviewed in March 2015 during a webinar or during the next Kring in 2015. To be continued..



Participants

Surname	Firstname	E-mail	Institution	Country	
Baptiste	Alison	alison.baptiste@environment-agency.gov.uk	Environment Agency	UK	Alison is a deputy director in the flood and coastal risk management directorate of the Environment Agency. Alison is head of strategy development and is a civil engineer with more than 25 years experience
Barends	Leontien	l.barends@hhs.nl	Hoogheemraadschap van Schieland en de Krimpenerwaard	NL	As an engineer and policy advisor, I like to combine technics and politics, to negotiate and to network
Blommaart	Peter	peter.blommaart@rws.nl	RWS Water, Transport and Environment	NL	Senior adviser department Flood Defences. Specialist flood defence, safety assessment, embankments/levees and geotechnics(piping and stability)
Blum	Holger	holger.blum@nlwkn-nor.niedersachsen.de	NLWKN	D	Dipl.-Ing.
Boersema	Matthijs	matthijs.boersema@hz.nl	HZ Univ. Of Applied Sciences	NL	Drs
Boogaard	Simone	Simone.boogaard@hoogwaterbescherming.nl	Hoogheemraadschap Hollands Noorderkwartier	NL	I work on behalf of HHNK for the National Flood Defence programme as the manager programming. We produce every year a new programm. Before that I worked for the same programme but for HHNK so more on a regional bases. I am one of the organizers of this event.
Bos van den - Scholtes	Judith	jbos@uww.nl	Unie van Waterschappen	NL	I am a policy advisor for the Dutch waterauthorities. I lobby for the interest of the Dutch waterauthorities by the development of policy and law by the Dutch government and sometimes the EU
Branderhorst	Henrike	h.branderhorst@hhnk.nl	Hoogheemraadschap Hollands Noorderkwartier	NL	As program manager and head of the department "hoogwaterbescherming", I am responsible for all the dike reinforcements in the North of Holland between Amsterdam and Den Helder, including Texel.
Breteler	Mark	mark.kleinbreteler@deltares.nl	Deltares	NL	Specialist on revetments on dikes
Brooks	Wendy	wendy.brooks@environment-agency.gov.uk	Environment Agency	UK	National Flood and Coastal Risk Manager
Broos	Mark	m.broos@hhnk.nl	Hoogheemraadschap Hollands Noorderkwartier	NL	Ing
Cehak	Maciej	mcehak@ums.gov.pl	Maritime Office in Szczecin	PL	General Specialist in Maritime Spatial Planning and Development. Architect/Town and Country Planner

Participants

Surname	Firstname	E-mail	Institution	Country	
Domaradzki	Piotr	pdomaradzki@xtra.pl	Maritime Office in Szczecin	PL	I'm the head of the Inspectorate of Seashore Protection in the Maritime Office in Szczecin. We operate in the western part of the Polish coast
Dorst	Kees	kees.dorst@infram.nl	Infram BV	NL	Ir
Dugher	Mike	mike.dugher@environment-agency.gov.uk	Environment Agency	UK	Mike is the Environment Agency's early flood and coastal risk manager for the Humber Estuary and Lincolnshire Coastline. Mike is a civil engineer and has extensive coastal risk management experience, including responding to incidents and new works
Duiveman	Marjan	m.duiveman@hhnk.nl	Hoogheemraadschap Hollands Noorderkwartier	NL	Adviseur C
Faber	Harmen	harmen.faber@rws.nl	Rijkswaterstaat	NL	Senior advisor Watersafety
Fredriksson	Caroline	Caroline.Fredriksson@tvrl.lth.se	Lund University, Sweden	S	Ph D Student
Galema	Alida	alida.galema@infram.nl	Infram BV	NL	MSc
Gelder-Maas van	Carola	carola.van.gelder-maas@rws.nl	RWS WVL	NL	Projectmanager Zandmotor en Clusterleider Kust van Rijkswaterstaat WVL
Gloudemans	Eric	egloudemans@uvw.nl	Unie van Waterschappen	NL	Ir
Goessen	Petra	p.goessen@hhnk.nl	Hoogheemraadschap Hollands Noorderkwartier	NL	Senior advisor water safety, especially sandy coast and civil constructions. Interested in multidisciplinary monitoring. I have a particular drive in knowledge exchange.
Hanson	Hans	Hans.Hanson@tvrl.lth.se	Lund University, Sweden	S	Specialist in numerical models of long-term coastal evolution. Head of Sweden's ONLY coastal engineering research group
Hateboer	Jan	jhateboer@weterskipfryslan.nl	Wetterskip Fryslân	NL	Senior projectmanager dyke construction projects
Hemert van	Henk	h.vanhemert@hhnk.nl	Hoogheemraadschap Hollands Noorderkwartier	NL	20 years experience in (international) flood protection, with focus on safety assessment and design of levees. Geotechnic/geohydrology expertise
Hendriks	Michelle	michelle.hendriks@hoogwaterbescherming.nl	Hoogwaterbeschermingsprogramma	NL	Working at the central bureau of the High Water Protection Programme
Heuvel van den	Anco	anco.vanden.heuvel@rws.nl	Rijkswaterstaat	NL	Ir
Hines	Jenny	Jennifer.hines@environment-agency.gov.uk	Environment Agency	UK	FCRM Advisor, Environment Agency UK
Hinrichsen	Arfst	arfst.hinrichsen@lkn.landsh.de	LKN-SH	D	Morphodynamics, master plans sandy coasts, data management, geografic information

Participants

Surname	Firstname	E-mail	Institution	Country	
Hodge	Ian	ian.hodge@environment-agency.gov.uk	Environment Agency	UK	Deputy Director, FCRM: Head of Investment & Delivery Assurance. Ian is a civil engineer with more than 20 years experience in water engineering and is a long time supporter of the Kring
Hofstede	Jacobus	jacobus.hofstede@melur.landsh.de	Schleswig-Holstein State Government	D	I'm the Flying Dutchman!
Hutchison	Jim	Jim.Hutchison@Belfourbeatty.com	Balfour Beatty plc	UK	Business Development Director Flood and Coastal Risk Management
Janssen	Hans	hans.janssen@rws.nl	Rijkswaterstaat	NL	I am a senior hydraulic engineer involved in coastal projects (o.a. Maasvlakte 2, sea defences, structures and storm surge barriers)
Janzen	Ria	rjanzen@wetterskipfryslan.nl	Wetterskip Fryslân	NL	Working on the safety checks for the dikes at the Waddenseacoast and IJsselmeercoast of Wetterskip Fryslan
Jongejans	Rombout	rjongejans@wetterskipfryslan.nl	Wetterskip Fryslân	NL	Manager watersysteem en waterketen, Wetterskip Fryslan
Jonker	Ernst	ernst.jonker@scheldestromen.nl	Waterschap Scheldestromen	NL	I provide input for data management automation (GIS), contribute to the projects Waterdunen (regional flood defences), port of Terneuzen, Hedwige- and Perkpolder. Contribute to the transfer of primary flood defences by RWS to the water board, contribute to the Policy Regional Flood Defences, contribute to the review of the Waterdefence Management and the licensing policy. Contribute to the review of Primary and Regional Water Defences, provide input for WTI 2017. Advises for permits and plans of third parties
Joosten	Ruud	r.joosten@hhnk.nl	Hoogheemraadschap Hollands Noorderkwartier	NL	I am working for over 30 years in the dyke safety business for the regional government , specialised in safety assessments and management of sea defences
Kieftenburg	Annette	annette.kieftenburg@deltares.nl	Deltares	NL	Vulnerable Infrastructure, sharing knowledge
Kolodziejski	Roman	roman.kolodziejski@umgdv.gov.pl	Maritime Office Gdynia	PL	Mr

Participants

Surname	Firstname	E-mail	Institution	Country	
Komen	Sandra	s.komen@hhnk.nl	Hoogheemraadschap Hollands Noorderkwartier	NL	I'm only working at HHNK and water safety for 7 years now and especially enjoying the complexity of the subject matter and need to translate this to a coherent and simple tekst for decicion makers.
Kooij	Arjan	arjan.kooij@rws.nl	Hogeschool van Amsterdam	NL	Ir
Kortsmit	Bert	bert.kortsmit@rws.nl	Rijkswaterstaat	NL	Projectmanager projectbureau Zeeweringen
Kramer	Nienke	Nienke.Kramer@deltares.nl	Deltares	NL	Ir
Krol	Jannes	jkrol@wetterskipfryslan.nl	Wetterskip Fryslân	NL	Ingenieur
Kroon	Anna	kroon@svasek.com	Svasek Hydraulics	NL	Consultant in coastal hydraulics and coastal morphology. The most recent relevant projects I worked on are the construction of the Maasvlakte 2 and the design of the strengthening of the Hondsbossche & Pettemer sea defence
Kuijk van	Eric	eric.van.kuijk@rws.nl	Rijkswaterstaat	NL	Senior advisor hydraulic engineering on various projects
Laan van der	Anske	anske.vander.laan@rws.nl	Rijkswaterstaat GPO	NL	Ir
Labrujere	Astrid	astrid.labrujere@rws.nl	RWS WVL	NL	I work in the water safety field. This includes activities for the new safety standerd which we are hoping to implement in 2017 as work on the assessment and design part of levees
Lalkens	Peter	j.p.lalkens@noorderzijlvest.nl	Waterschap Noorderzijlvest	NL	Dhr
Lenselink	Robbert-Jan	Robbert-Jan.Lenselink@scheldestromen.nl	Waterschap Scheldestromen	NL	Ir.
Lodder	Quirijn	Quirijn.Lodder@rws.nl	Rijkswaterstaat	NL	I have a lot of experience and expertise on the maintenance of the Dutch sandy coastline.
Lyness	Nick	nick.lyness@environment-agency.gov.uk	Environment Agency	UK	Nick is the Environment Agency's Wessex Area Flood & Coastal Risk Manager, with more than 25 years experience in water engineering, specialising in coastal engineering and community engagement issues
Malkiewicz	Andrzej	andrzej.malkiewicz@umgdy.gov.pl	Maritime Office Gdynia	PL	Mr
Marx	Sarah	Sarah.marx@rws.nl	RWS WVL	NL	MSc

Participants

Surname	Firstname	E-mail	Institution	Country	
Meer van der	Martin	m.vdmeer@fugro.nl	Fugro GeoServices B.V.	NL	Since 1988 committed to improve flood defence and dike safety worldwide within Fugro. Since 2006 part-tim lecturer Geo Risk Management at the Delft University
Meijer	Kurt	k.meijer@noorderzijlvest.nl	Waterschap Noorderzijlvest	NL	Projectleader infrastructural work
Mertens	Tina	tina.mertens@vliz.be	VLIZ	B	Tina Mertens worked from 2005-2012 for the Belgian Coastal Division (Flemish Government) and was responsible for the set-up of a Master Plan for Coastal Safety to protect the Belgian coastline against a 1000 year storm event. This work involved the management of a varied team of engineers, marine biologists, legal experts, economists, communication experts and the follow-up of coastal protection works. In June 2012 she started as an Assistant Director at the Flanders Marine Institute (VLIZ) to assist the General Director in implementing and coordinating the policy and objectives of the institute. This mainly includes the set-up and follow-up of policy documents and cooperation agreements with national and international marine institutes.
Mörs	Marion	m.mors@hhnk.nl	Hoogheemraadschap Hollands Noorderkwartier	NL	Organisation
Nieuwenhuis	Jan Willem	J.W.Nieuwenhuis@noorderzijlvest.nl	Waterschap Noorderzijlvest	NL	Hoofdwerkzaamheden: Dijkverbetering/HWBP activiteiten en projectleider LiveDijk XL Noorderzijlvest (sensoren in de kering, live volgen gedrag via Dijk Data Service Centrum)
Nurmohamed	Nisa	nnurmohamed@hhdelfland.nl	Hoogheemraadschap van Delfland	NL	Policy advisor of Flood defences. Advisor on the Deltadecission New Safety Standards
Oosterwijk	Willemijn	willemijn.oosterwijk@arcadis.nl	Arcadis Nederland B.V.	NL	Active in Stakeholdermanagement, process management en project management in large waterprojects in The Netherlands. Connects strategic thinking and process management with technical water knowledge.

Participants

Surname	Firstname	E-mail	Institution	Country	
Provoost	Yvo	yvo.provoost@rws.nl	RWS	NL	Ir
Provoost	Adrie	adrie.provoost@scheldestromen.nl	Waterschap Scheldestromen	NL	The KRING chairman is involved as the leader of a coastal defence program of the "Scheldestromen Waterboard" of the sea-defence in the Dutch part of Flanders. In this area several projects of reinforcement of dykes, dunes, beaches and scluses take place until the end of 2015. An important part of these projects is the realisation connected part-projects of other organisations of nature reserve (Waterdunen), recreation areas and a new yacht-harbour (CADZAND-Maritiem).
Regeling	Eric	eric.regeling@rws.nl	Rijkswaterstaat	NL	Ing
Rietdijk	Jeroen	jrietdijk@hhdelfland.nl	Hoogheemraadschap van Delfland	NL	Beleidsadviseur Waterkeringen bij het Hoogheemraadschap van Delfland
Riksen	Michel	michel.riksen@wur.nl	WUR	NL	Researcher aeolian processes and landscapes
Roos	Alex	a.roos@hhnk.nl	Hoogheemraadschap Hollands Noorderkwartier	NL	I work for the Hoogheemraadschap for one year now, on the interesting project Markermeerdijken. Before that I worked for Rijkswaterstaat and a year for US Army Corps of Engineers on different levee safety projects
Sande van der	Hans	hans.vandersande@scheldestromen.nl	Waterschap Scheldestromen	NL	More than 20 years' experience with flood defence: safety analysis, design for several improvements of dikes and dunes. Intensive investigation of the dynamic response of the water level under a dike in order to reduce the piping problem for tidal conditions
Schelde, van der	Guiljam	Guiljam.vanderSchelde@Scheldestromen.nl	Waterschap Scheldestromen	NL	Sinds 1 februari j.l. werkzaam als hoofd afdeling Waterkering van Waterschap Scheldestromen
Slinger	Jill	j.h.slinger@tudelft.nl	Delft University of Technology	NL	Member of the Dutch Expertise Network water Safety. Lecturer in Civil Engineering and Policy Analysis
Starre v.d.	Peter	pvanderstarre@wetterskipfryslan.nl	Wetterskip Fryslân	NL	Project leader

Participants

Surname	Firstname	E-mail	Institution	Country	
Steenbergen-Kajabova	Jana	jana.steenbergen@grontmij.nl	Grontmij Nederland B.V.	NL	Geotechnical and Hydraulic engineer passionate with water 17 years experience with flood protection (measures) and track record in several coastal schemes in the Netherlands
Steetzel	Henk	Henk.Steetzel@Arcadis.nl	Arcadis Nederland B.V.	NL	Senior advisor
Stelmaszyk-Swierczynska	Anna	dyrtech@umgdy.gov.pl	Maritime Office Gdynia	P	MSC
Stouten	Piet	pjstouten@zeelandnet.nl	STOWA	NL	Ir
Termes	Paul	a.p.p.termes@hva.nl	Hogeschool van Amsterdam	NL	Teacher/Researcher Civil Engineering, river and coastal engineering
Tiggeler	José	j.tiggeler@hhnk.nl	Hoogheemraadschap Hollands Noorderkwartier	NL	Organisation
Veendorp	Marco	marco.veendorp@arcadis.nl	Arcadis Nederland B.V.	NL	More than 25 years experience in Flood Risk Management, Flood Protection, project/process management and general management
Veer	Joost	joost.veer@rijnland.net	Hoogheemraadschap van Rijnland	NL	Loves the beach!
Verkerk	Esther	everkerk@wetterskipfryslan.nl	Wetterskip Fryslân	NL	BBA
Visser de	Marieke	marieke.devisser@arcadis.nl	Arcadis Nederland B.V.	NL	I am working a variety of projects within the discipline of flood protection, like dike improvement projects and assessments throughout the Netherlands and post-Sandy development of flood protection in New York. Besides this I am involved in the VNK2-project, a large-scale quantitative risk analysis for the low-lying parts of the Netherlands.
Vries de	Wout	wout.devries@rws.nl	RWS-VWL	NL	Ir
Wentholt	Ludolph	Wentholt@stowa.nl	STOWA	NL	Ir
Zuideveld-Venema	Nelleke	nelleke.zuideveld@anteagroup.com	Antea Group	NL	Passionate flood risk manager, driven and open, keen on sharing (international) coastal experiences and establish new contacts
Zych	Andrzej	azych@ims.gov.pl	Urząd Morski w Szczecinie	PL	Dealing with the protection of the natural environment of the coastal zone, marine Natura 2000 sites and the creation of management plans for these areas, as well as the preparation of projects in coastal protection in terms of environmental sustainability

A Half-Millennium-Old Dike in Holland Gets a State-of-the-Art Upgrade

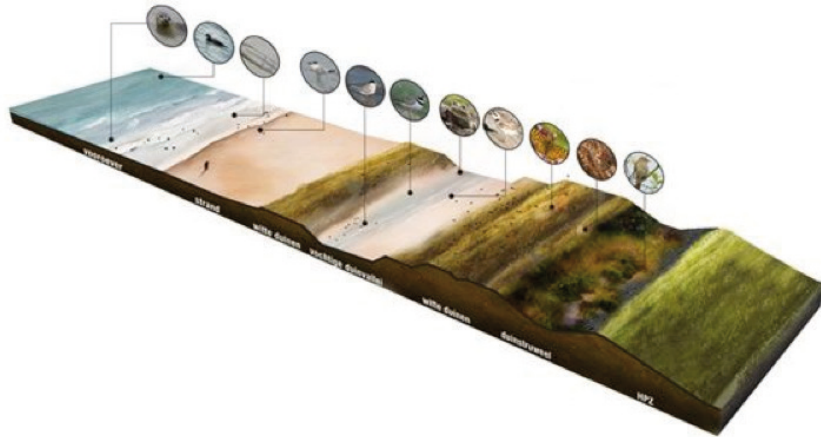


The New Hondsbossche Dunes. (Illustration by WEST8)

The Netherlands' combative relationship with the sea is well known. American kids grow up hearing the story of Hans Brinker, who saved his village by sticking his finger in a leaking dike. The Dutch word "polder" has been used from Indonesia to New York City, inspiring new ways of reclaiming land and sharing lessons from centuries of experience. But even today, the Netherlands is constantly searching for new ways of securing and improving its fragile coastline. The New Hondsbossche Dunes is a huge project that will replace existing dikes at Hondsbossche and the Pettemer seawalls — the last weak links in the extensively and heavily reinforced Dutch coast. Thirty-five million cubic meters of sand will be used to sculpt this vulnerable stretch of beach into a new recreational area

that will attract wildlife and provide protection from the North Sea for another 50 years. Once the eight-kilometer project is completed, it will become Europe's longest uninterrupted dunescape. The New Hondsbossche Dunes project is a joint venture between Van Oord Dredging and Marine Contractors and Boskalis for Hoogheemraadschap Hollands Noorderkwartier. The contract includes construction of the dunes, which has already begun, as well as management of the new shoreline for the next two decades. The construction phase should be completed by the end of 2015.

Historically, this part of Noord Holland has been the site of the Netherlands' most serious struggles against the sea. After the devastating Sint-Elizabeth flood of 1421, work began on the construction of dikes in this same area between the villages of Camperduin and Petten. The Sint-Elizabeth flood actually wiped out the entire town of Petten; a century and a half later, during the Allerheiligen flood of 1570, Petten once again disappeared into the sea. Medieval dike construction was characterized by piled earth layered with seaweed and secured with poles. Over a short period of time, the rotting seaweed and natural compression created strong dikes that required very little maintenance.



- The new dike is designed to protect the area from the sea for the next 50 years. (Illustration by WEST8)
- Of course, this technology was hardly foolproof (as evidenced by the repeated flooding), and in 1823 the dikes at Hondsbossche were rebuilt with stone — the first massive modern dike in the Netherlands. In 1977, the stone dike was once again reinforced and raised to new safety standards. Today, those standards have once again been increased, in response to growing threats from global warming. The New Hondsbossche Dunes will implement protections to meet those new standards and soon become one of the strongest defenses along the Dutch coast.
- The project is groundbreaking because unlike traditional coastal engineering projects, the New Hondsbossche Dunes not only serve as a pragmatic barrier

against the sea, but also strengthen the area's tourism sector and support biodiversity and native vegetation. The massive amounts of sand dredged from the sea floor and spouted onto the beach will quickly grow into large, "natural" dunes, shaped by wind and water over time, creating a dynamic environment that will become a habitat for rare plants, birds and other animals. The new, wide beaches will encourage tourism and recreational development. According to the office for urban design and landscape architecture behind the project, WEST8, "The design unites a technical solution with a romantic narrative."

- As part of the second national Flood Protection Program, the project also has a role to play in the country's changing water-management strategy. In contrast to previous dike construction – which was technical above all else – the New Hondsbossche Dunes seem to indicate a shift toward solutions that address not only safety needs, but also local environmental and economic concerns. This clever approach combines public and private interests to create new opportunities while still providing the service that all Dutch citizens have come to expect: better protection from the next flood.



*Thank you for joining this KRING 2014 and we
look forward to seeing you all again next year!*

HHNK The Netherlands

