

BENEFITS OF BIODIVERSITY



At the beginning of this year, the world watched as destructive wildfires raged across parts of Los Angeles, burning more than 20,000 hectares of forests and homes in its path. In a region that was unusually dry after a record-breaking heat and a dry start to winter, winds blew embers for miles turning small ignitions into raging infernos. A report from World Weather Attribution (WWA) found that climate change made the hot, dry conditions that fuelled the deadly fires roughly 35% more likely.

While the challenges of climate change remain ever present, a new report from Swiss Re outlines the coastal flood risk reduction benefits of biodiversity and ecosystem services.

The study of Florida coastal areas shows how natural habitats, such as coral reefs, mangrove swamps and salt marshes, can reduce insurance loss frequency by around a half in coastal flood cases caused by higher frequency-lower severity storms.

This summer will see the second issue of IADC's new publication, *DFSI Magazine*. The theme of which will take chapter 3 of the *Dredging for Sustainable Infrastructure* book as its foundation focusing on the design process for which stakeholder involvement is of the utmost

importance. Only in this way can all interests involved be properly integrated in the project design, which is necessary for the sustainability of a project.

On the topic of sustainable infrastructure, dredging and reclamation projects have played an important role in the UAE's rapid development. Meanwhile efforts are continuously made to balance progress with marine ecosystem conservation. The article on page 32 explores the development of fish domes and 3D-printed artificial reefs, highlighting their role in providing marine habitats, promoting biodiversity and supporting sustainable development.

Also in this edition, we feature the winners of last year's Waterbouwprijs (Hydraulic Engineering Prize). With almost 4,000 km of dykes in the Netherlands, finding clay of the right quality for use in reinforcement is becoming less and less available. Lian Schout's graduation thesis looks at finding a suitable alternative in the form of Trisoplast. On page 18, you'll find the work of Anne-May Alkemade, whose research forms the groundwork for innovative, large-scale seagrass restoration techniques leveraging traditional dredging methods. While seagrass restoration is increasingly recognised for its potential to enhance biodiversity and contribute to carbon sequestration, current planting methods are largely based on manual techniques, posing challenges for upscaling and implementation as nature-based solutions (NbS) within the dredging industry.

And so to a changing of the guard at IADC. I want to extend a warm welcome to Arnold de Bruijn who joins IADC in April as eventual successor to René Kolman as he hands over the helm as Secretary-General before retiring on 1 November 2025.

Frank Verhoeven
President, IADC

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