

### 3<sup>rd</sup> PIANC Working with Nature Award

## PIANC World Congress Cape Town 2024

presented by

Burton Suedel, Elmar Fuchs, and Paul Scherrer PIANC EnviCom 2 May 2024

# Submitted Projects for Working with Nature Award (2019 – 2024)

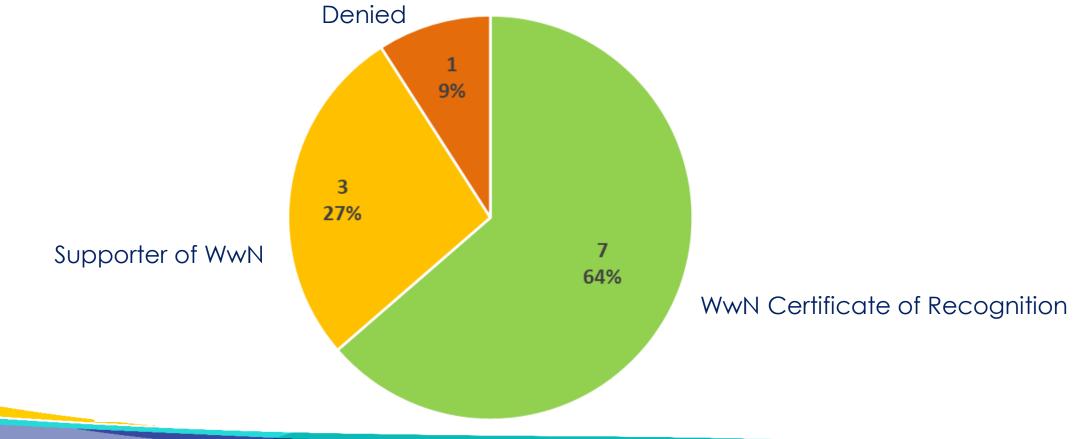
**11 Project Submissions** 1



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#### Working with Nature Jury Voting

#### **Certificate of Recognition / Supporter / Denied**





#### Working with Nature Jury + WwN Vice-Chair rankings

Three highest ranked projects (in order of submission)

- Madeira River Navigation Improvement Planning Study
  - Submitter: Calvin Creech, USACE, Brazil
- Recovery of Habitats Beneficial Use of Dredged Materials and Bio-tools
  - Submitter: Rocío López Picón, Port Authority of Huelva, Spain
- Hancock County Marsh Living Shoreline and Pearl River Maintenance Dredging
  - Submitter: Wendell Mears, Anchor QEA, Inc, USA



#### Madeira River Navigation Improvement Planning Study

Intergovernmental Partnership USACE / Brazilian National Department of Transportation Infrastructure

- Balances navigation, ecological, and social benefits along the 1,080 km Madeira River Waterway
- Designs navigation improvement measures that leverage the natural geomorphic processes, rather than providing designs that fix large reaches in place to "control" the river against its natural processes
- Selects measures that promote navigation through channel restriction and development of a self-scouring condition
- Has highest benefit/cost ratio amongst proposed solutions for navigation improvements



#### Madeira River Navigation Improvement Planning Study





Recovery of Habitats Beneficial Use DM and Bio-tools Port of Huelva

- Maintenance /occasional dredging to access the Port of Huelva
- Tidal marsh ecosystems of great ecological richness
- Beneficial and low-risk use of DM within the Port-City-Estuary vicinity
- Use of contaminated DM to obtain ecological benefits for the creation of nesting and breeding habitats and to enhance ecological connectivity
- Uses bio-tools for the recovery of ecological functions
- Includes socio-ecological needs in the development of a co-existing Port-City-Estuary area



#### Recovery of Habitats Beneficial Use DM and Bio-tools





Hancock County Marsh Living Shoreline and Pearl River Maintenance Dredging

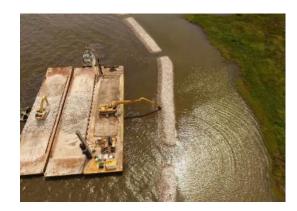
Anchor QEA Inc.

- For navigation and Port Bienville operation purposes dredging of WTI is needed
- Interdisciplinary team of relevant local institutions and stakeholders search for solutions to restore the Hancock County marsh
- Stakeholders collaborated to save funds and beneficially use DM for marsh restoration and future maintenance DM placements
- Eco-engineering guided placement of DM protects shoreline and coastal habitats (e.g., shellfish reefs) of Hancock County Marsh Coastal Preserve



#### Hancock County Marsh Living Shoreline and Pearl River Maintenance Dredging











# And the 3rd PIANC Working with Nature Award goes to...

Recovery of Habitats Beneficial Use of Dredged Materials and Bio-tools presented by Rocío López Picón, Port Authority of Huelva, Spain



**PIANC 2024** 

#### **PIANC Working with Nature Award**

**Congratulations!** 

# Enhorabuena por haber ganado este premio!

Recovery of Habitats Beneficial Use of Dredged Materials and Biotools





#### Working with Nature Award Cycle 2019-2024

Winner Recovery of Habitats Beneficial Use of Dredged Materials and Bio-tools

presented by Rocío López Picón, Port Authority of Huelva, Spain

**2<sup>nd</sup> Place** Hancock County Marsh Living Shoreline and Pearl River Maintenance Dredging

presented by Wendell Mears, Anchor QEA, Inc, USA

**3<sup>rd</sup> Place** Madeira River Navigation Improvement Planning Study presented by Calvin Creech, USACE, Brazil



PIANC 2024



### Thank you for attending!

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