



Visit our website www.delta-alliance.org for more information about the Delta Alliance Wings, projects and upcoming events.

Upcoming Delta Alliance events:

World Delta Summit: the pulse of deltas and the fate of our civilisation. Jakarta, Indonesia, November 21-26, 2011

Other upcoming delta events with Delta Alliance participation

Delta Urbanism Track, American Planning Association National Conference. Boston, USA, 9-12 April 2011

24th ICID European Regional Conference: Integrated water management for multiple land use in flat coastal areas. Groningen, the Netherlands, 16-20 May 2011

The Venice Conference: Improving the Capacity to Assess and to Adapt to Climate Change in Urban Coastal Regions. Venice, Italy, 12-14 September 2011

5th International Conference on Flood Management (ICFM5). Tsukuba, Japan 27-29 September 2011

International Water Week, Amsterdam, the Netherlands. 29 October - 4 November 2011

World Water Forum 6, Marseille, France, 12-17 March 2012

Dutch Delta Design 2012, Rotterdam-Delft-Wageningen, the Netherlands. A 3 months long international campaign, 1 April – 30 June 2012

Delta Urbanism Symposium. Los Angeles, USA, organised by the American Planning Association, April 2012

For more information

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Working together on safe, vital and sustainable deltas in times of climate change.

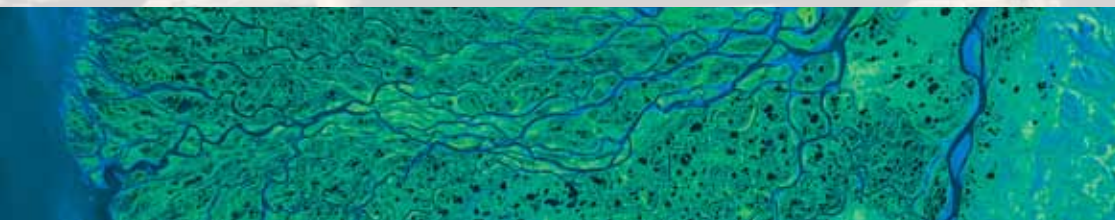
**Connecting
Delta Cities**

WEA
World Estuary Alliance

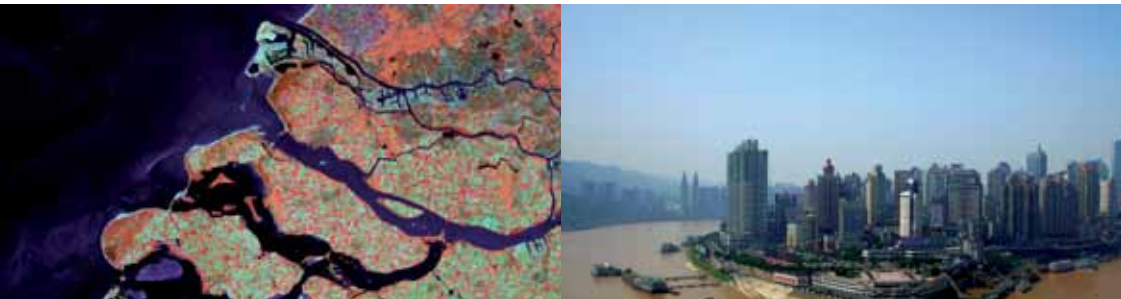


For the resilience of *deltas worldwide*

Delta Alliance is an emerging international network devoted to succesful responses to the most critical present and future problems facing delta regions worldwide



With increasing pressure from population growth, industrialization and a changing climate, it is more important than ever that these valuable and vulnerable locations increase their resilience to changing conditions. Delta Alliance brings people together who live and work in deltas. They can benefit from each other's experience and expertise and as such contribute to an increased resilience of their delta region.



Delta Alliance has an International Governing Board and Secretariat. The network consists currently of ten network Wings where activities are focused: California Bay and delta (USA), Ciliwung and Mahakam (Indonesia), Mekong (Vietnam), Rhine-Meuse (the Netherlands), Nile (Egypt), Pantanal (Brazil), Ganges-Brahmaputra-Meghna (Bangladesh), Mississippi (USA), Yangtze (China) and Parana (Argentina). Each Wing represents a network of organizations involved in delta issues. It is the intention to extend the Delta Alliance Network to twenty Wings by the end of 2011.



The Ten Delta Alliance Wings

San Francisco Bay and Delta, USA

- More than 95% of the original tidal marshes have been leveed
- Supplies water for 23 million people and over 2.8 million hectares of farmland

Yangtze Delta, China

- Major cities in the delta include Wuxi, Suzhou, and at the river's mouth, Shanghai
- Focus on the conservation of a large wetland area in front of Shanghai city

Rhine-Meuse Delta, the Netherlands

- Houses large cities and industrial areas for centuries
- Sea level rise expected by 2050 will increase the risk of flooding in the port city of Rotterdam by a factor of 10

Mississippi Delta, USA

- Relatively low population density, with some 500.000 people living in the city of New Orleans
- After hurricane Katrina and oil spill focus on coastal restoration and protection and on urban water management

Ciliwung Delta and Mahakam Delta, Indonesia

- Ciliwung river causes regular floods in the metropolis Jakarta with 8.5 million inhabitants
- Increasing conversion of mangrove forest in fish and shrimp ponds in Mahakam Delta

Ganges-Brahmaputra-Meghna Delta, Bangladesh

- With 100.000 km² and 130 million inhabitants the world's largest and most densely populated delta
- Challenges ahead through salt intrusion and changing hydrological dynamics

Nile Delta, Egypt

- 50% of the Egyptian population (exclusive of Cairo) lives in the Nile Delta
- One of the world's most fertile farming areas surrounded by a highly arid environment

Pantanal, Brazil

- Largest inland wetland in the world consisting of flooded grasslands, savannahs and tropical forests
- Increasing pressure by cattle breeding, deforestation, sedimentation and overfishing

Parana Delta, Argentina

- Located in the final part of the Plata River Basin about 32 km northeast of Buenos Aires
- Degradation by urbanization, changing drainage practices, forestry plantations and large scale livestock farming

Mekong Delta, Vietnam

- With 5.5 million hectares of agricultural land the food basket of the country
- Climate and upstream land use change threatens agriculture, aquaculture and nature

Delta Alliance in Action

Delta Alliance supports projects that stimulate cooperation and exchange between deltas. Specifically, the members of Delta Alliance work together on projects to:

- envision resilient deltas;
- measure, monitor and report resilience in deltas;
- provide inspiration and support for improved resilience in deltas

Comparative assessment of the vulnerability and resilience of 10 deltas

Delta Alliance has executed a comparative study on the various aspects of delta development and management for 10 deltas: the Nile, Incomati, Ganges-Brahmaputra-Meghna, Yangtze, Ciliwung, Mekong, Rhine-Meuse, Danube, California-Bay, and Mississippi River deltas. An innovative framework for delta assessment has been applied, sufficiently generic to make this integrated approach applicable to all deltas. The synthesis report provides a comprehensive overview of the present status of these deltas. For each delta, a summarizing *Delta scorecard* provides an overall impression of the resilience and sustainability (current and future state), which for most deltas is not satisfactory. The knowledge and research gaps identified give ample opportunities for valuable knowledge exchange and collaborative (research) projects between deltas. This project is carried out by Deltares, Alterra Wageningen UR, WWF and experts of the Delta Alliance Wings.

Jakarta climate change adaptation tools

Aim of the research program is to build knowledge and tools for climate proof and integrated spatial planning and water management and to incorporate newly developed insights directly in projects in Jakarta. Therefore two Indonesian PhD candidates will carry out applied research. One PhD will focus on tools to assess flood risk under future climate and socio-economic change, the other will focus on the economic costs and benefits of alternative options for climate adaptation. Both PhD projects aim to contribute to climate proofing of integrated spatial planning and water management in Jakarta and link up with projects in other delta's such as the Netherlands and Vietnam. A consortium consisting of Royal Haskoning, LIPI, Gadjah Mada University, Agricultural University Bogor, VU Amsterdam and Wageningen University is carrying out this project under the Indonesian Delta Alliance Wing. To link to the practical applications they will work closely together with government agencies and consultancies.