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

Upcoming delta events with Delta Alliance participation

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

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

Conference Dynamic Deltas, April 17-20, 2012, the Netherlands and other upcoming events!

Delta Alliance Declaration

Whereas Delta Alliance has the mission to improve the resilience of deltas worldwide Whereas deltas are highly valuable and vulnerable locations

Whereas economic, ecological, and social resilience are interdependent and essential for overall resilience

The members of Delta Alliance will together develop and share knowledge to:

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

In pursuing these goals, members will strive to:

- share knowledge, expertise and best practices between deltas worldwide
- co-create and integrate knowledge across deltas, sectors and disciplines
- connect expertise and parties from throughout the watershed
- incorporate local knowledge in research and other knowledge-building
- provide knowledge and insight to support any use, including education, policy development, investments and disaster response.

Sign the Declaration and you will become a member of Delta Alliance and receive the newsletter! www.delta-alliance.org/declaration

For more information

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

WEA

World Estuary Alliance

Connecting **Delta Cities**



For the resilience of deltas worldwide

Delta Alliance is an emerging international network devoted to finding successful responses to present and future problems of Delta-regions worldwide



River deltas belong to the most valuable and vulnerable areas in the world. With increasing pressure from population growth, industrialization and changing climate, it is more important than ever that these 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 thereby contribute to an increased resilience of their delta region.



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,

- 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

without -

Ciliwung Delta and Mahakam Delta,

Indonesia

Delta Alliance has an International Governing Board and Secretariat. The network consists currently of ten network Wings where activities are focused: San Francisco 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 2012. Applications have already been received from organizations in Ghana (Volta Delta), Kenya (Tana Delta), Mozambique (Zambezi Delta), Senegal (Senegal

Delta), Taiwan (several deltas) and Romania (Danube Delta).

 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, San Francisco Bay and Delta, and Mississippi River.

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 has been carried out by Deltares, Alterra Wageningen UR, WWF and

experts from 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 are carrying out applied research. One PhD is focusing on tools to assess flood risk under future climate and socio-economic change, the other is focusing 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, Gadja 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.