

## Agreement to Sustain the World's Food-Producing River Basins

## **General Statement:**

More than 35 percent of the world's traditional cropland is located within major river basins comprising 525 million hectares across five continents; producing the vast majority of the world's food supply. In conjunction, less than I percent of the world's stock of freshwater resources is accessible by people; of that less than I percent, rivers sustain the most withdraws, and yet, rivers account for 0.006 percent of the world's freshwater. These two ecosystem services provided by rivers make them essential to life on Earth.

Intact rivers, streams, and lake ecosystems deliver drinking water, resilience to floods and drought, and absorb human and natural pollutants.

Rivers, lakes and aquifers are a direct indicator of the sustainability of urban planning, industrial development, and food production. Unsustainable practices in these fields (such as the excessive use of phytosanitary substances and nutrient inputs) results in pollution that is often drained into surface water and groundwater.

Therefore, it is imperative that national and local governments as well as organizations and private entities develop capacity and approaches to implementing integrated management of both agricultural production and protection of aquatic ecosystems. Such initiatives should be undertaken beyond the river channel and its floodplain, at the scale of the basin in order to include drainage areas of the rivers. Parties to this agreement concur to pursue the following:

## Protect surface and ground waters to ensure food security and access to drinking water:

- Develop a water quantity, quality, and pollutant alert program to sustain adequate environmental flows and reduce the loading of contaminants and nutrients into rivers, streams, and lakes from industry, municipalities, and agriculture.
- A water quality and quantity program may be comprised of:
  - -a robust water monitoring strategy that tracks flows and the pollutant and nutrient loading from both point and non-point sources across the basin:
  - -the expansion of water treatment facilities to increase capacity and reduce the use of systems that combine runoff and municipal effluent to maximize the quality of municipal and industrial discharges;

- -the implementation of an Integrated Water Resources Management (IWRM) approach that takes into account soil management, in particular the need to improve regulation around flood prone areas subject to urbanization as well as limit soil sealing in urban areas by the installing of urban catch-basins to filter runoff before the effluent is discharged into the nearby water channel;
- -the renaturing of areas in and adjacent to cities on both major waterways and smaller tributaries including the development of city riverfront parks, marshes and wetlands that use indigenous species to restore ecology, filter urban runoff, protect cities from storm events, and revenetate to provide cover to watercourses and limit the increase of water temperature;
- -the restoration and conservation of forests, grasslands, and aquatic ecosystems:
- -the safeguarding of an environmental flow regime that will maintain the critical environmental services that rivers provide to society involving not only protection of low flows but recognition of the role of floods in maintaining many river ecosystems;
- -creation of floodplain agricultural land uses and infrastructure resilient to episodic flooding;
- -renaturing of main-stem and tributary river banks throughout intense agricultural zones to restore habitat connectivity, enhance nutrient filtration, reduce excessive sedimentation and erosion, improve water/moisture retention:
- -employ sustainable agricultural practices that may include, but not be limited to a) installation of cover crops and field rotation techniques, b) use of low flow irrigation, c) increase in rain-fed and flood resilient agriculture, d) formation of tiered fields, e) planting of riparian borders, f) setting of conservation easements between fields and water bodies, g) introduction of integrated pest management techniques, h) substitution of organic fertilizers in place of chemical, and i) the conversion of crop land to pasture land.
- We will report on our actions and share the progress made pursuant to section 4 of the INBO Paris Pact.

Signatories

Mississippi River Cities & Towns Initiative, International Commission for the Protection of the Rhine, Senegal River Basin Development Organization, North American Network of Basin Organizations, Brazilian Network of Basin Organizations, Mediterranean Network of Basin Organizations, African Network of Basin Organizations, European Network of Basin Organizations, Mexican Network of Basin Organizations, the Nation of Senegal, International Network of Basin Organizations.





