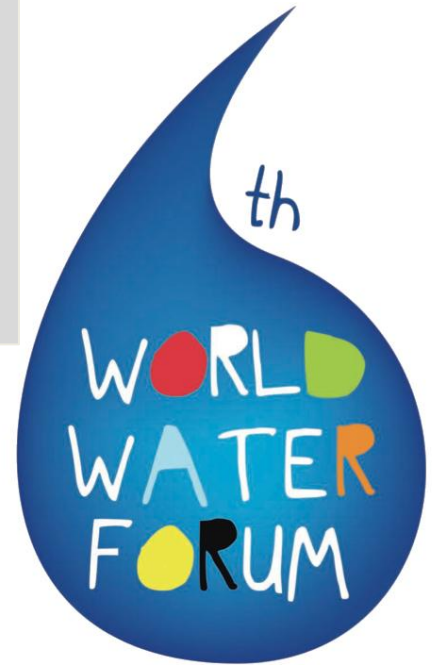


BRAZIL AND TRANSBOUNDARY RIVER BASIN MANAGEMENT

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MARSEILLE, FRANCE '12

TIME FOR *SOLUTIONS*

THE CONTEXT

- BRAZIL;
- 8,5M km²;
- All South American countries but Chile and Ecuador have borders with Brazil;
- 12 Hydrographic regions;
- 5 of them have transboundary rivers: Amazon; Paraguay, Parana and Uruguay (Plata); South Atlantic (Mirim Lagoon, Jaguarao and Chuy);
- Two conditions: downstream (Amazonian Region) and upstream (the other cases);
- Climate of cooperation; no conflict.



Source: Panorama da Qualidade das Águas Superficiais do Brasil, in press.

BRAZILIAN PERSPECTIVE REGARDING TRANSBOUNDARY ISSUES

- Conducted by the Ministry of Foreign Affairs;
- Brazilian doctrine
 - Privileges bilateral / regional negotiations;
 - Embraces the Principle 2 of Rio Declaration (Agenda 21, 1992): the right that every country has to use its natural resources according to the national policies.
- A permanent technical chamber in the National Council of Water Resources (NCWR), created in 2000: the *Technical Chamber for Transboundary Water Resources Management*:
 - Technical, legal and institutional background exchange;
 - Analyze and propose joint actions to eliminate or minimize conflicts.
- President of the Chamber is appointed by the Ministry of Foreign Affairs;

AMAZON REGION



Countries: Brazil, Bolivia, Peru (south bank); Brazil, Colombia, Ecuador, Venezuela, French Guiana, Guyana, Surinam (north bank);

Main rivers: Amazon (Solimoes; Marañon) Madeira, Purus, Juruá, Javari, Negro, Japurá;

Main Issues: Deforestation, mining (artisanal); water quality, heavy metals, sediments, biodiversity, hydroelectric potential, biogeochemical processes.

Achievements:

- Amazonian Cooperation Treaty (1978);
- OTCA;
- Integrated and sustainable transboundary water management project for Amazonian Basin (GEF/PNUMA/OEA/OTCA);
- South Bank of Amazon River Basin Water Resource Plan (PERH-MDA) with a special transboundary water resource management program.

Challenges: Legal and institutional convergence, information flow, establishing of an international management framework for transboundary basins; determine priority basins, water discharge and quality of water at the border line

Other:

- **MAP Initiative** (organization & participation; deforestation; water management);
- **Napo Basin area** (navigation).

ANA's Strategic Plan for the South Bank (PERH-MDA)

Program A7:

- Integration of institutional and legal instruments of 3 countries for the transboundary water management;
- Technical cooperation and knowledge exchange related to water resources management among the involved countries;
- Support the implementation of international arrangements for the transboundary management of water resources of the south bank.

PLATA BASIN

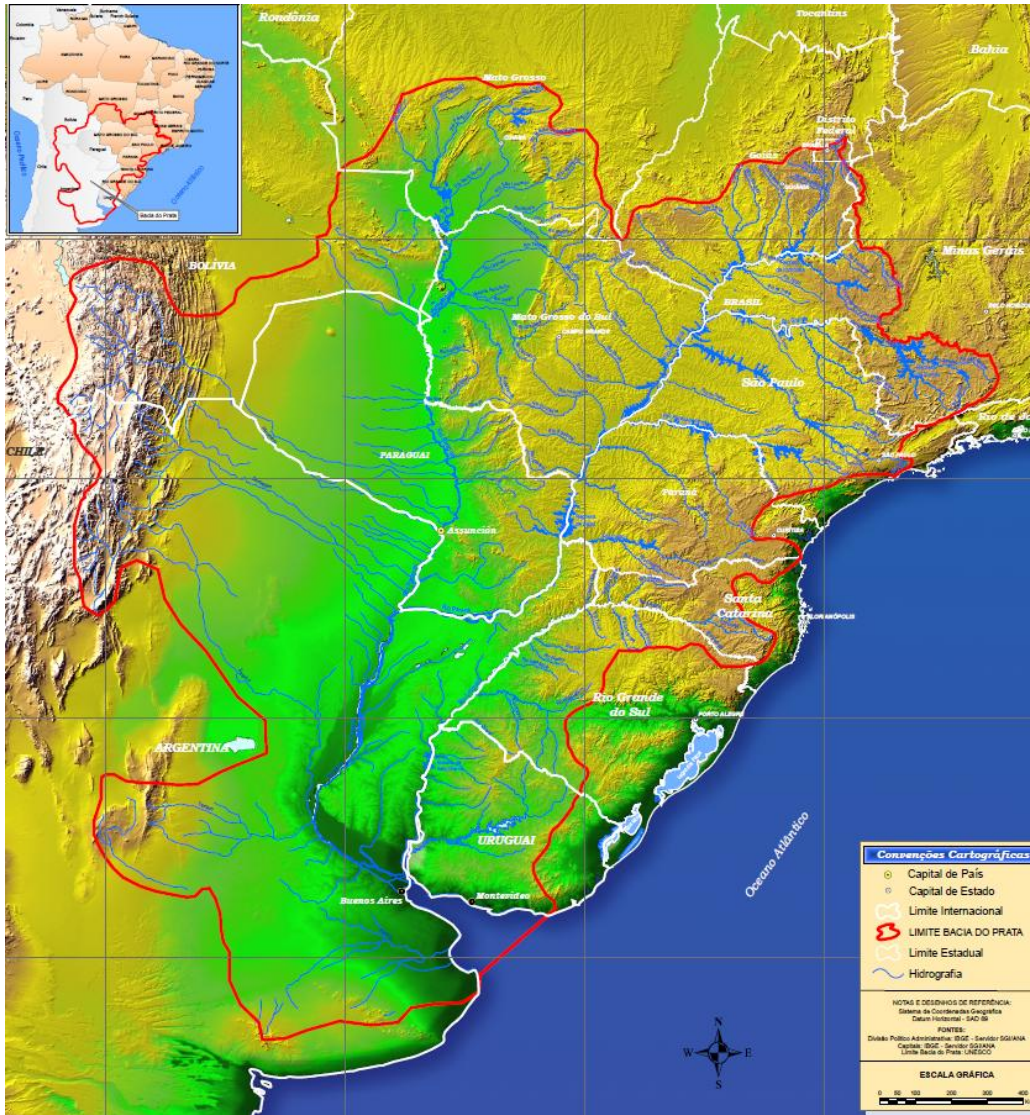
Countries: Argentina, Bolivia, Brazil, Paraguay and Uruguay and 4 national capitals.

Main rivers: Paraguay, Parana, Uruguay

Issues: many hydroelectric developments of different sizes; droughts, irrigation ; floods; deforestation; Pantanal environment/biodiversity protection, sediments; mining impacts and pollution; huge cities with deficient sanitation; erosion; impacts of navigation in Paraguay river; urban sewage

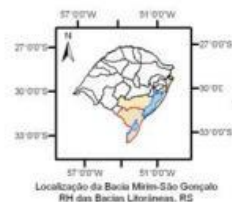
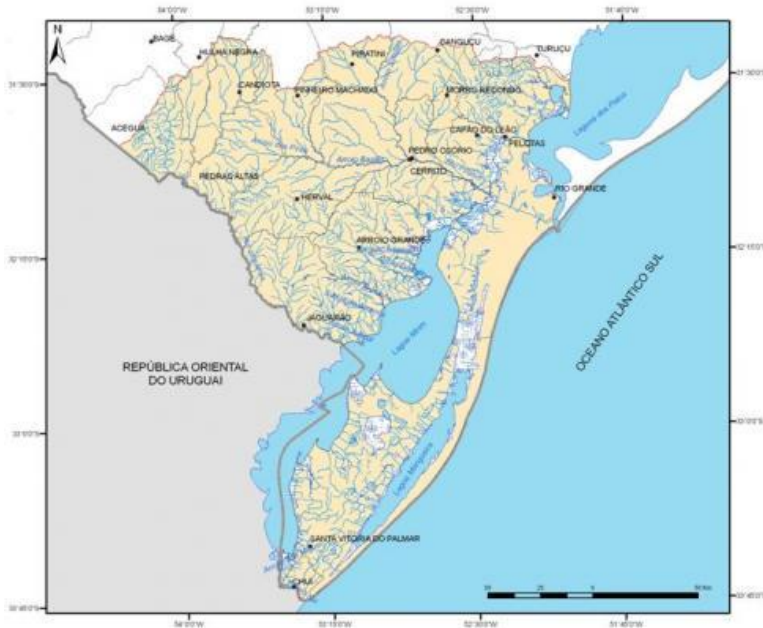
Main achievements: overcoming of potential conflicts: building and strengthening a solid cooperation among 5 countries ; treaties and agreements on energy development, waterways and transportation; shared management of water resources . “Programa Marco” - program for sustainable management

Challenges: Complexity and environmental value of the region; diversity of problems.



SOUTH ATLANTIC HYDROGRAPHIC REGION

- **Countries:** Brazil and Uruguay
- **Main rivers:** Mirim Lagoon, Chuy and Jaguarao rivers
- **Issues:** navigation, joint economic development, environmental protection
- **Main achievements:** full, stable and mature cooperation on uses, management and development.
- **Challenges:** keep momentum



Fonte: DRH-SEMA - Junho/2005
Sistema de Coordenadas: SAD 1989
Projeção: Transversa de Mercator

CONCLUSIONS (1)

- Management of transboundary river basins have traditionally focused on issues like navigation, hydropower production and water sharing agreements.
- Cooperation on environmental issues can connect local issues such as habitat and flood protection with the overall health of the river and region.
- Public involvement is a must.
- Management of transboundary river basins: one of the most important issues in global water resources governance.

CONCLUSIONS (2)

- Three huge transboundary river basins, three different stages of integration. All under pacific cooperation among states
- Amazonian Basin – the largest; in the earlier stages; less populated; highly vulnerable, requires caution.
- Plata Basin – most developed (economy, energy, social) and populated; advanced stages; has experienced big improvements since the 80s; due to development, problems are complex.
- South Atlantic Hydro Region (Mirim Lagoon, Chuy and jaguarao Rivers)- small size (two rivers, one lagoon); two countries; fastest build up of Cooperation

Thank you!

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