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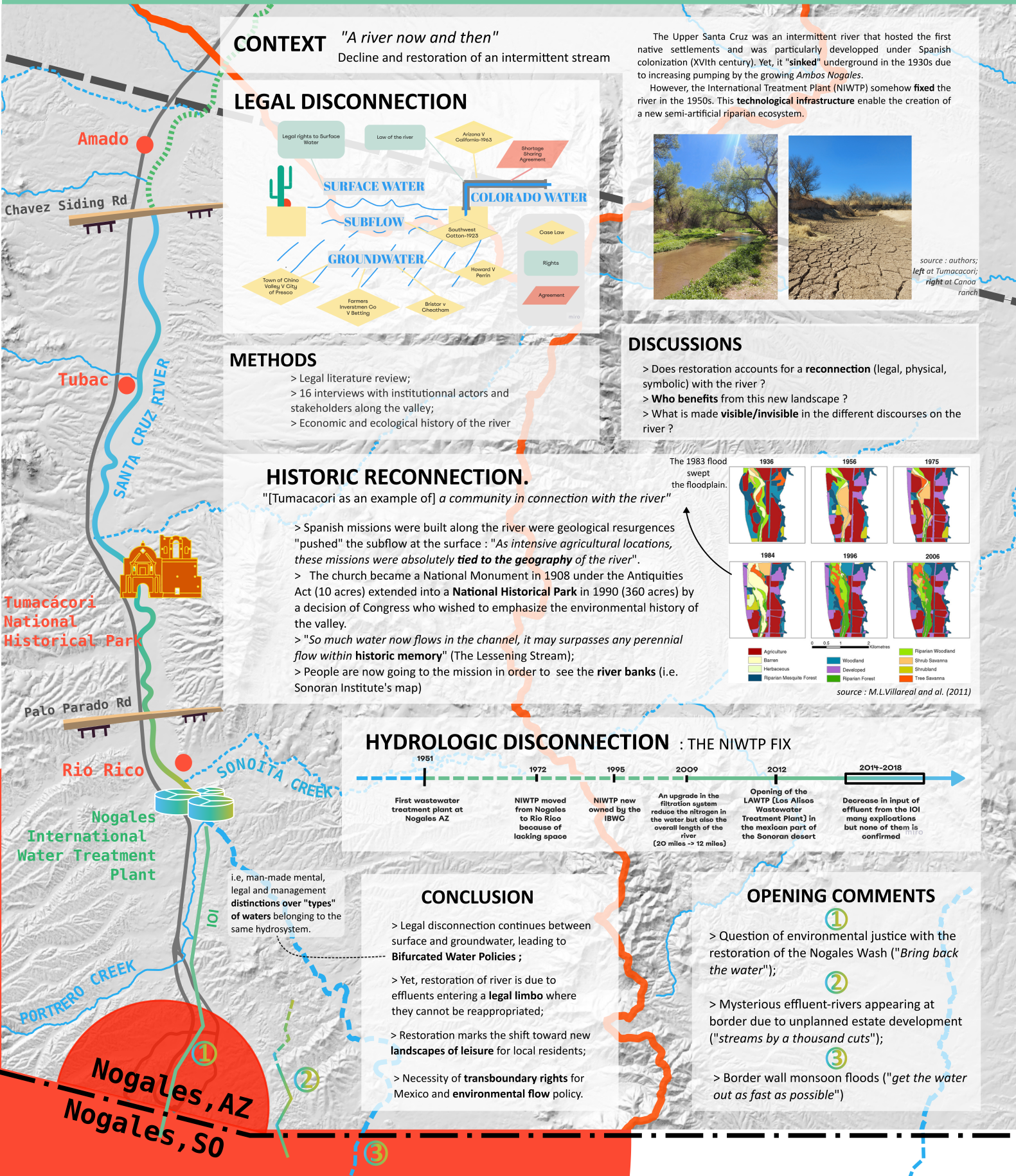
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MEXICAN WATER FOR THE AMERICAN RIPARIAN ECOSYSTEM

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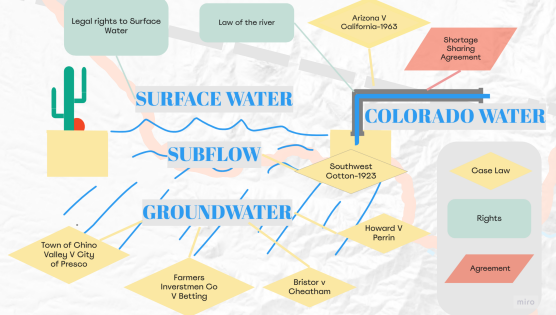


CONTEXT "A river now and then"
Decline and restoration of an intermittent stream

The Upper Santa Cruz was an intermittent river that hosted the first native settlements and was particularly developed under Spanish colonization (XVIth century). Yet, it "sunk" underground in the 1930s due to increasing pumping by the growing *Ambos Nogales*.

However, the International Treatment Plant (NIWTP) somehow fixed the river in the 1950s. This **technological infrastructure** enable the creation of a new semi-artificial riparian ecosystem.

LEGAL DISCONNECTION



source : authors; left at Tumacacori, right at Canoa ranch

METHODS

- > Legal literature review;
- > 16 interviews with institutional actors and stakeholders along the valley;
- > Economic and ecological history of the river

DISCUSSIONS

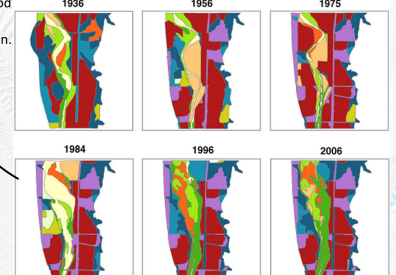
- > Does restoration accounts for a **reconnection** (legal, physical, symbolic) with the river ?
- > **Who benefits** from this new landscape ?
- > What is made **visible/invisible** in the different discourses on the river ?

HISTORIC RECONNECTION.

"[Tumacacori as an example of] a community in connection with the river"

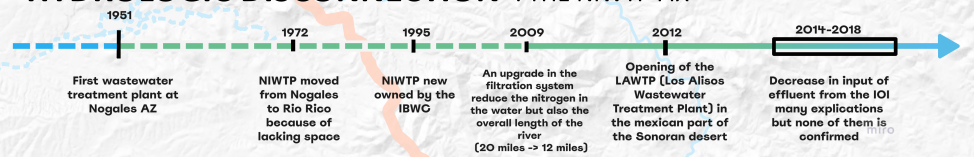
- > Spanish missions were built along the river were geological resurgences "pushed" the subflow at the surface : "As intensive agricultural locations, these missions were absolutely **tyed to the geography** of the river".
- > The church became a National Monument in 1908 under the Antiquities Act (10 acres) extended into a **National Historical Park** in 1990 (360 acres) by a decision of Congress who wished to emphasize the environmental history of the valley.
- > "So much water now flows in the channel, it may surpasses any perennial flow within historic memory" (The Lessening Stream);
- > People are now going to the mission in order to see the **river banks** (i.e. Sonoran Institute's map)

The 1983 flood swept the floodplain.



source : M.L.Villareal and al. (2011)

HYDROLOGIC DISCONNECTION : THE NIWTP FIX



CONCLUSION

- > Legal disconnection continues between surface and groundwater, leading to **Bifurcated Water Policies** ;
- > Yet, restoration of river is due to effluents entering a **legal limbo** where they cannot be reappropriated;
- > Restoration marks the shift toward new **landscapes of leisure** for local residents;
- > Necessity of **transboundary rights** for Mexico and **environmental flow** policy.

OPENING COMMENTS

- > Question of environmental justice with the restoration of the Nogales Wash ("**Bring back the water**");
- > Mysterious effluent-rivers appearing at border due to unplanned estate development ("**streams by a thousand cuts**");
- > Border wall monsoon floods ("**get the water out as fast as possible**")

i.e, man-made mental, legal and management distinctions over "types" of waters belonging to the same hydrosystem.