

Fostering Riverine Diversity: River-Wetland Corridors

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Rediscovering, Reevaluating, and Restoring Lost River-Wetland Corridors

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River: directional flow



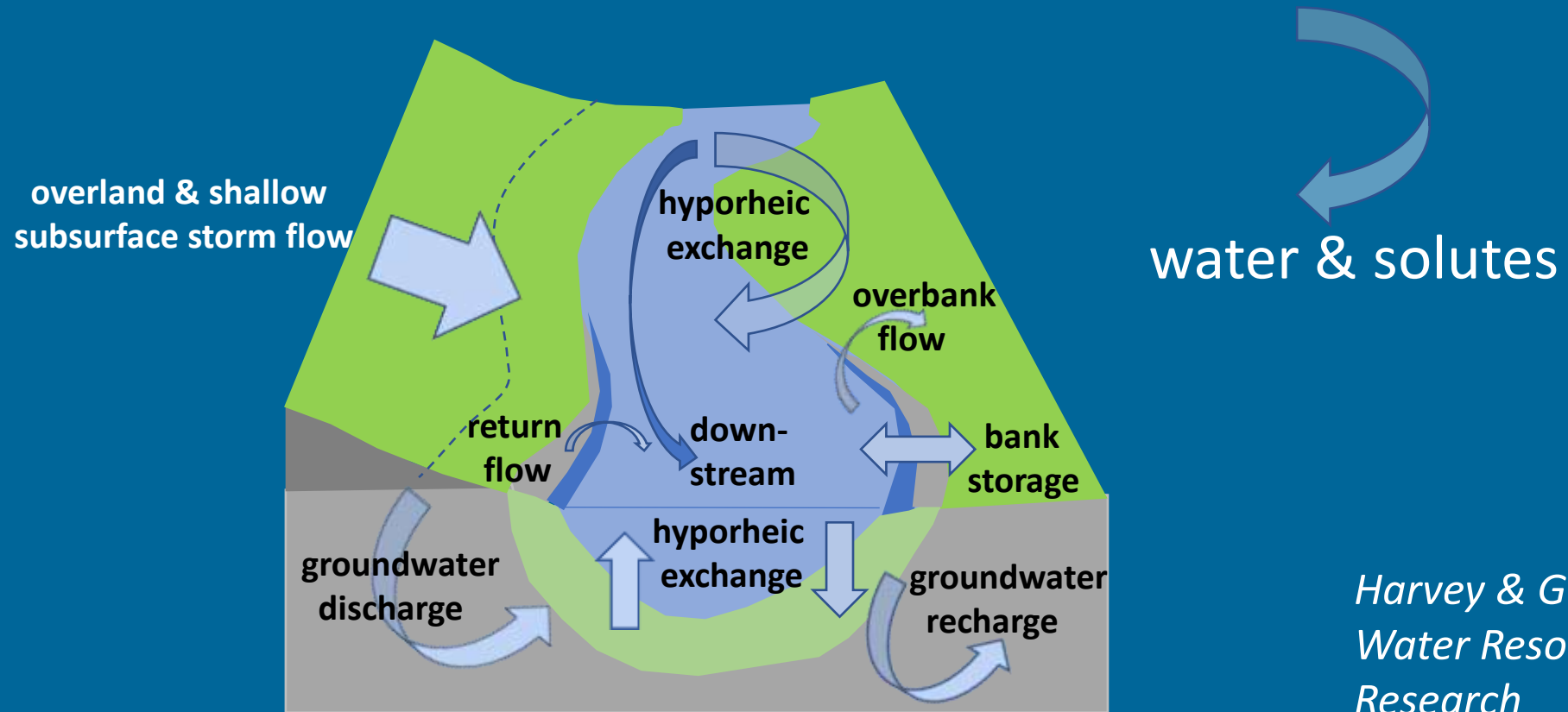
Wetland: directional flow?



River-wetland corridors: channels & wetlands influenced by river processes

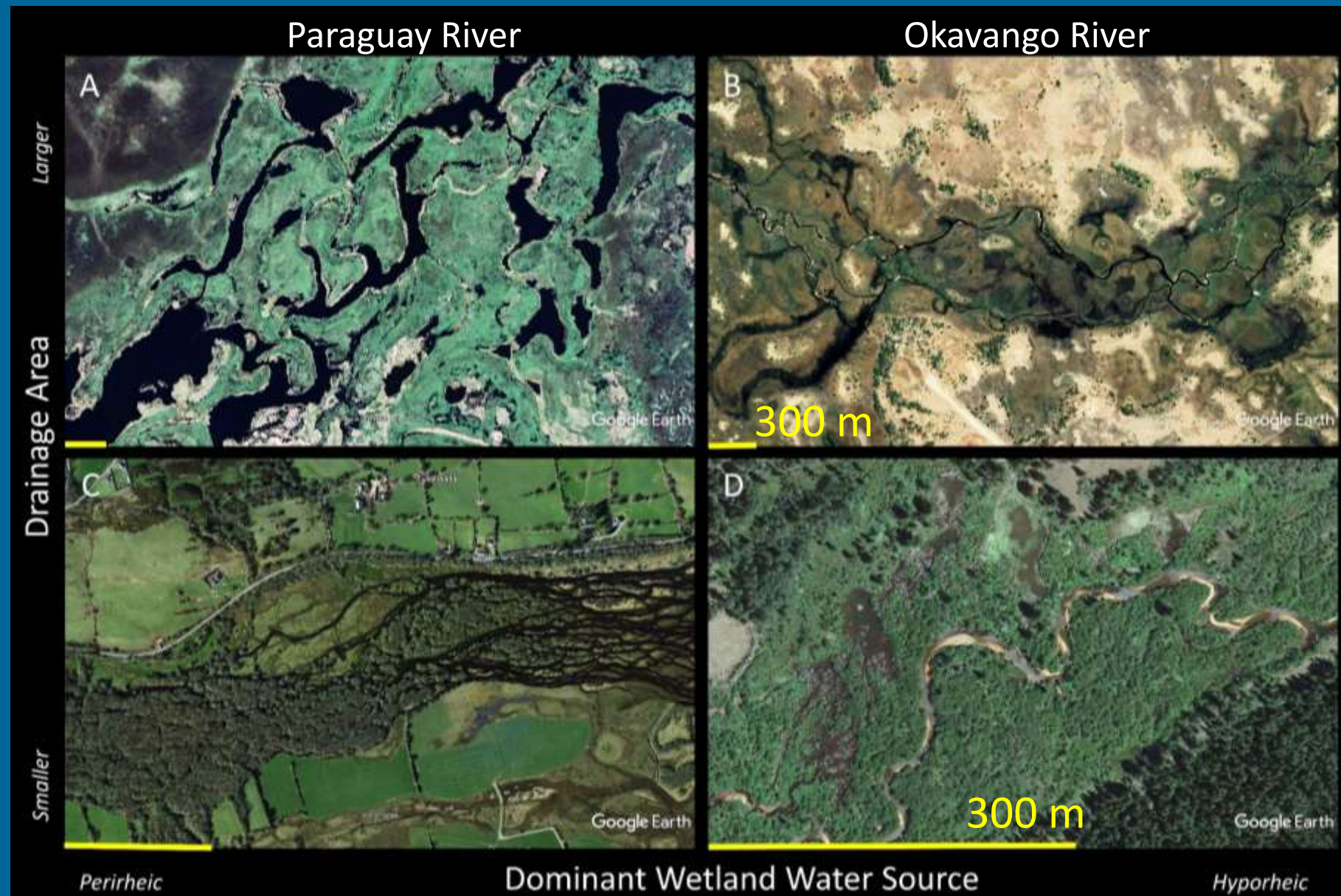


A **river corridor** includes the active channel(s), floodplain, & underlying hyporheic zone



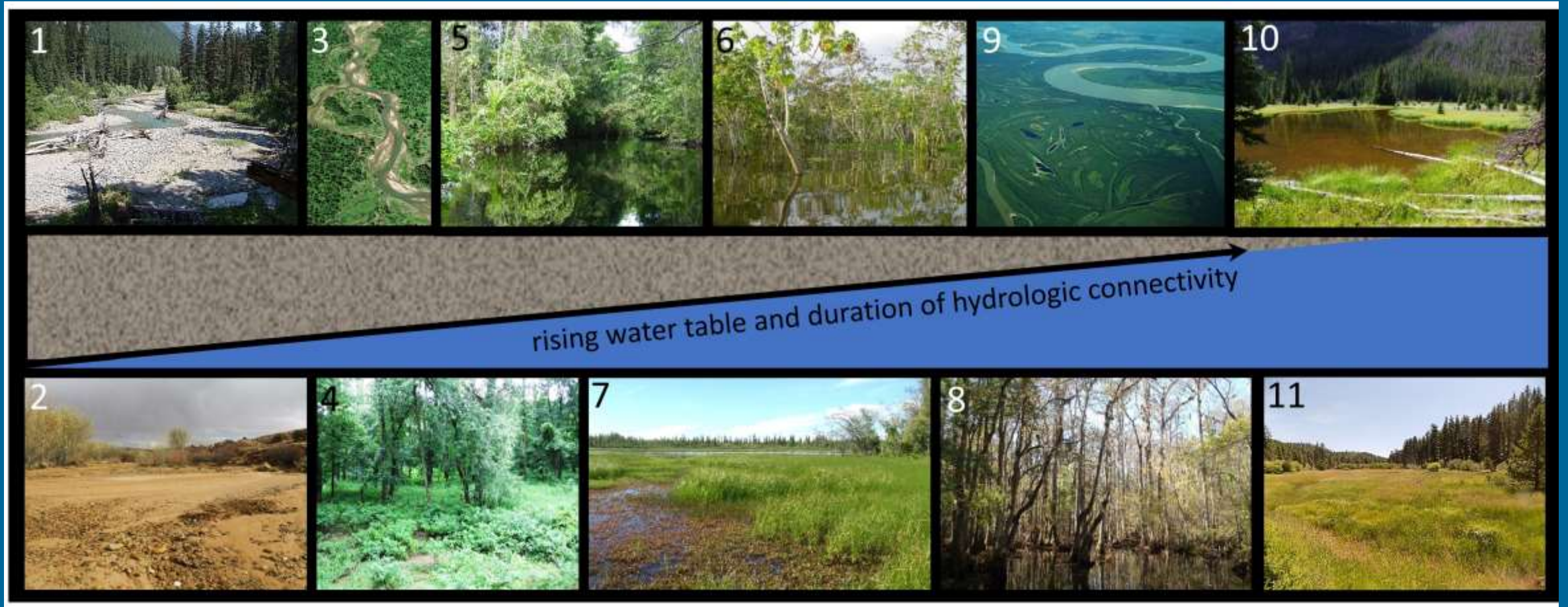
*Harvey & Gooseff, 2015,
Water Resources
Research*

Diverse geomorphic settings & spatial scales from headwaters to large lowland rivers



Ciénaga Carr Pond Swamp
Beaver meadow
Oxbow lake Marsh Vlei Lake Bayou
Wet meadow Billabong

High riparian water table sustains floodplain wetlands

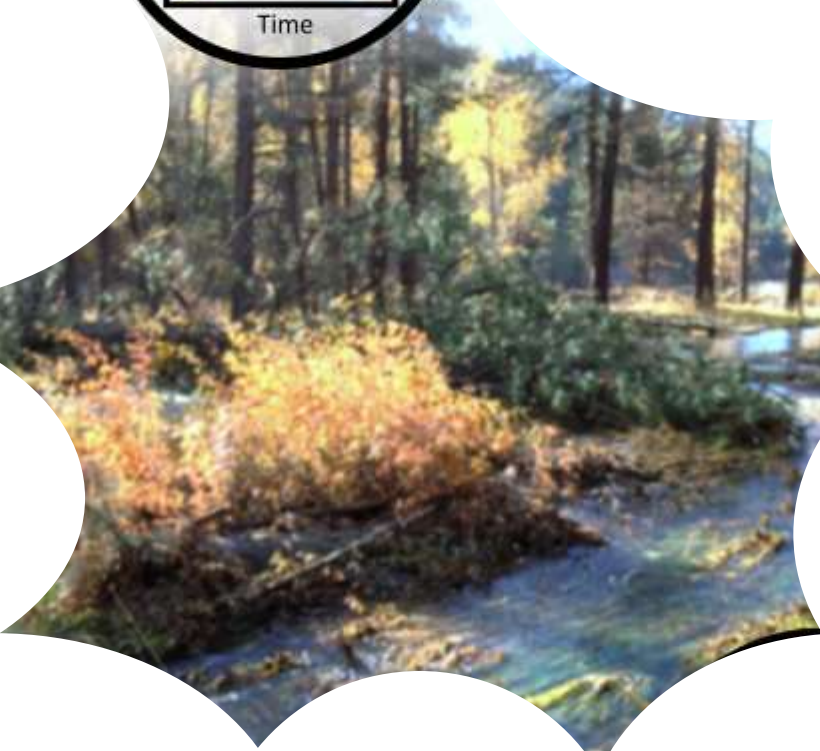
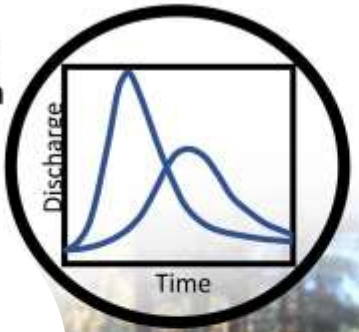


Causes of high riparian water table



Ecosystem services

flood
attenuation



Restoration relies on enhanced hydrologic connectivity within the river corridor



introducing obstructions to the channel

lowering the floodplain surface elevation



before



after

restoring peak flows sufficient to inundate the floodplain



restoring processes that recharge alluvial aquifers

some combination of these changes



River-wetland corridors were not ubiquitous,
but they were more extensive & common historically
& should be considered as a restoration option

