

6-2019

Effects of Water Funds Projects on Forest Loss and Water Quality in Ecuador and Brazil

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Resources for the Future

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Citation Details

Blackman, Allen and Villalobos, Laura, "Effects of Water Funds Projects on Forest Loss and Water Quality in Ecuador and Brazil" (2019). *Forest Collaborative Research*. 17.
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Effects of Water Funds projects on forest loss and water quality in Ecuador and Brazil

6th biannual meeting
EfD Forest Collaborative
Manchester June, 2019

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graph LR; A[Forest Conservation Policies] --> B[Forest Cover]; B --> C[Water quality]
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Forest
Conservation
Policies

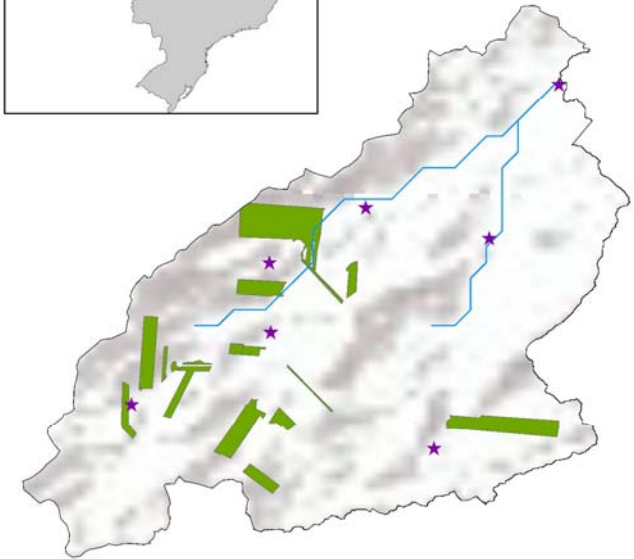
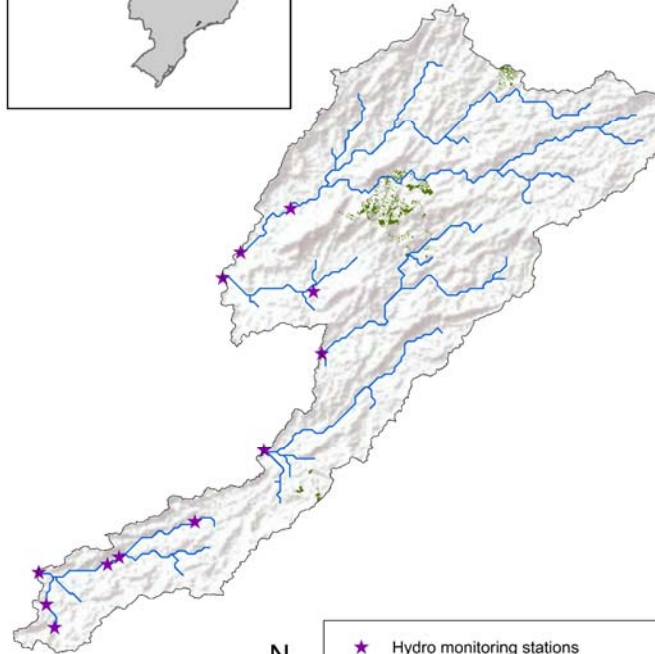
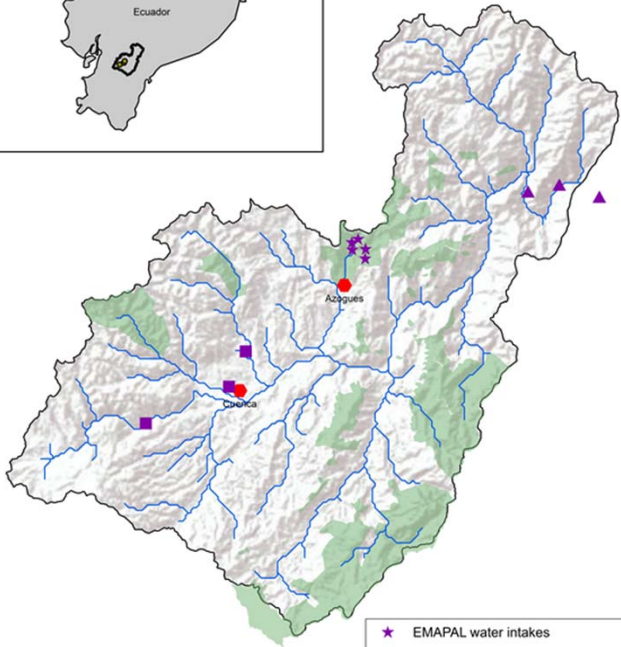
Forest Cover

Water
quality

Water Funds Projects

- Aim to conserve and/or restore forest NI in order to provide clean water to LAC cities
- Financial and technical support provided by Latin American Water Fund Partnership, an umbrella organization headed by TNC, IDB, FEMSA, GEF
- 2000: first project, FONAGUA, Quito
- Today: 16 Water Funds in operation, 24 being planning
- Interventions
 - Protection: increased enforcement patrols, fencing
 - Active and passive revegetation
 - Soil conservation on agricultural lands
 - Environmental education
 - Etc.

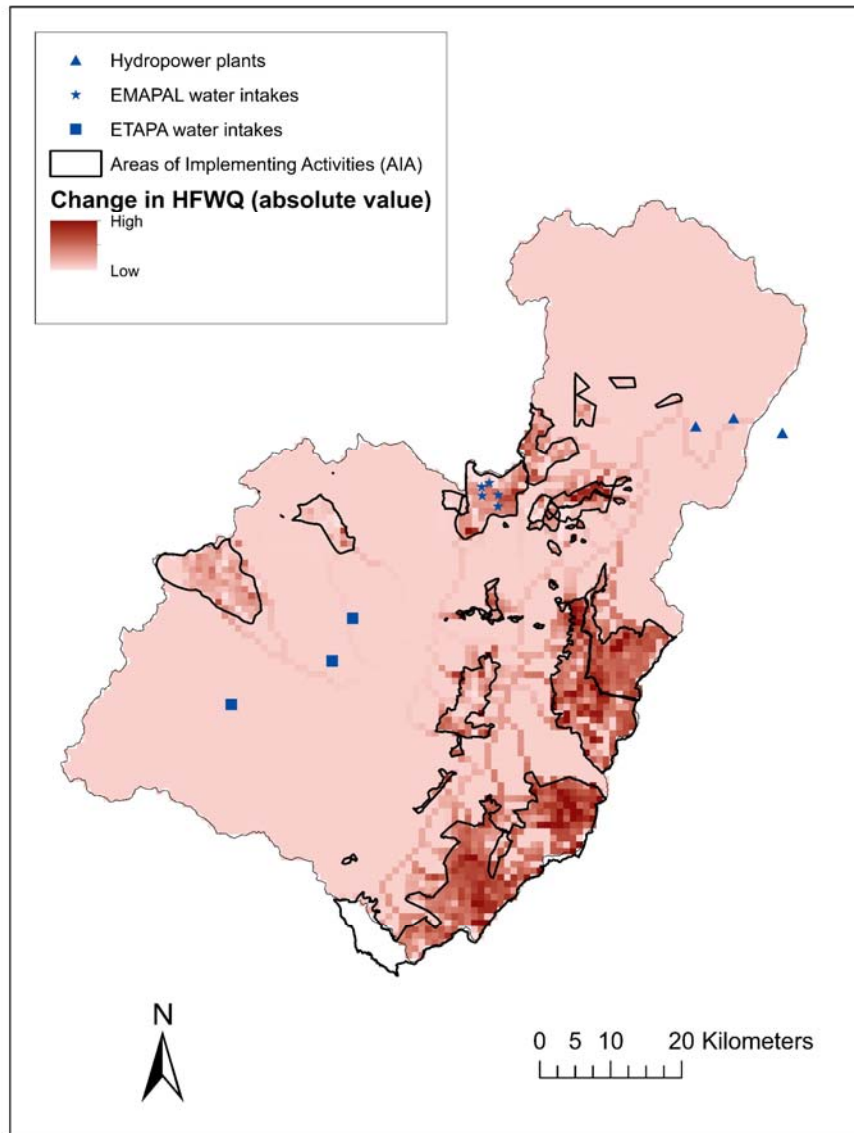
Project sites



Preliminary Results

- Water funds are effective at preventing forest loss
- However, this avoided deforestation is not translated into substantially better water quality as measured by the hydrological model
- The benefits are much smaller than costs

	FONAPA	CAMBORIU	SAO PAULO
Annual reduction in forest loss below baseline rate (%)	9	13	7
Annual change in HFWQ (%)	0.18	0.005	0.000
Annual change in water utility total costs/WF admin costs (%)	5.67	0.58	0.00



Explanations

- Conservation activities and water intakes don't overlap
- Baseline pollution levels are not severe
- We don't account for reforestation, paramo protection
- Our measure of benefits (saved costs) could be incomplete