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Brantas XOXO: Community river art for river community action

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The challenges of plastic waste-related river pollution in the Brantas River basin in East Java, Indonesia, are the focus of concern for a core group of water managers, scientists, engineers, and environmental activists. But some of the most operable *solutions* to plastic waste pollution fall largely on the shoulders of citizens, who take on the bulk of solid waste management through community models, influence over allocation of government funding at the village level for waste management, and daily improvisation related to waste disposal from the household. Nevertheless, generally low community interest in solid waste management and river health is a commonly-cited barrier to the scaling up of available community-based waste management models – an issue repeatedly mentioned by social scientists, river activists, and government agents alike. Disinterest is attributed to a low level of knowledge about river health, inability to visualize sources and resultant problems due to river flows, and the absence of effective science communication targeting the communities who are both most affected by and most influencing of plastic waste streams.

The Brantas XOXO project initiated by Ecoton, a river action NGO, couples photography, sculpture, and performative community art with practical waste management solutions in a traveling exhibit. Brantas XOXO aims to inspire interest and action in plastic waste amongst riverine communities and empower citizens to participate in policy deliberation and solution-finding. Within the traveling exhibit, three art installations are coupled with exhibits highlighting community-based solutions for waste reduction, waste management, and river education to create an engaging context for science communication. An immersive plastic bottle tunnel sculpture, constructed from plastic waste taken from the Brantas, demonstrates the average amount of bottle waste produced by one resident of the Brantas basin in a year – much of which ends up in water resources - in order to visually communicate the scale of plastic waste. A photography exhibition includes images of life on the river, river pollution, and impacts of plastic pollution on riverine life. Last, a community problem tree sculpture invites participants to share their concerns and hopes for river health in a collaborative sculpture. These community inputs are to be collated and included in deliberations over a joint problem analysis with government agencies and industry. The three art exhibits are also complemented by additional Brantas XOXO stations focused on river water quality testing and monitoring, community models for waste management, and bulk or non-plastic alternative goods for household consumption (e.g., refillable cooking oil, cloth diapers).



