



Coordinating Integrated Water Quality Management in the Brantas Basin: What are available options??

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14 February 2024

BACKGROUND AND CHALLENGE

The multi-stakeholder project “Fostering inclusive growth, health and equity by mainstreaming water quality in River Basin management in the Brantas River Basin, Indonesia” (Brantas Water Quality Project) is a 5-year (2019-2024) Indonesia-Netherlands partnership to strengthen water quality monitoring, wastewater management, and integrated water quality management (IWQM) in the Brantas

River basin. Recognizing the need for improved coordination, a Pokja Kualitas Air was established within TKPSDA Wilayah Sungai Brantas in 2019, under Komisi III “Daya Rusak Air”. The Pokja Kualitas Air met several times during 2021-2023, with funding and operational support from the project, to formulate tupoksis and make collaborative recommendations to reduce water pollution. The Pokja Kualitas Air was established to harmonize water quality management programs; discuss and evaluate plans for water quality management; support integrated data management; discuss community participation in relation to river health; and provide input to the Ministers of PUPR and KLHK, Governor of Jawa Timur, and regents and mayors. The working group is chaired by the Head of DLH Jatim, deputy chaired by the Head of BBWS Brantas, and the Director of Perum Jasa Tirta I serves as Secretary. The Pokja includes an additional eleven members.

As the Brantas Water Quality project nears completion, the project team and TKPSDA Pokja Kualitas Air recommend continued efforts to coordinate water quality management. The form of ongoing coordination mechanism(s) and funding arrangements are unresolved. There is a need to confirm which activities require ongoing coordination, decide coordination mechanisms (participation, meeting frequency, funding), and formalize. Ongoing coordination is needed because (a) multiple agencies collect water quality data and pollution source data, (b) multiple agencies perform activities related to environmental management and protection, and (c) plans for managing water quality must be synchronized with SKPD strategic and work plans and the Pola. Moreover, overall authority over water quality management is uncertain due to the Brantas’ status as a National Strategic River located entirely within one province (Jawa Timur).

KEY FINDINGS

At an activity level, several subfunctions of water quality management require coordination. These are summarized as follows:

Subfunction	Observed challenges	Observed coordination needs	Stakeholder agencies
Planning, monitoring, and evaluation	<ul style="list-style-type: none"> - RPPMA formulation challenged by lack of access to relevant data, including water quality data and pollution source data - Limited understanding of stakeholder activities, programs, and priorities - Implementing agencies not actively involved in plan formulation 	<ul style="list-style-type: none"> - Sharing data for planning, monitoring and evaluation (water quality, pollution source, spatial) - Joint formulation / evaluation of RPPMA (actions, targets, progress indicators) - Joint development of infrastructure 	KLHK, BBWS Brantas, DLH Jatim, DLH kota / kabupaten, Dinas Pertanian, Dinas Cipta Karya, Dinas Peternakan, Dinas Perindustrian, Bappeda, PU SDA Jatim
Water quality monitoring and data management	<ul style="list-style-type: none"> - Need for improved data integration 	<ul style="list-style-type: none"> - Standardized collection and reporting - Synchronization / harmonization of updates to data collection and management 	KLHK, DLH Jatim, DLH kota / kabupaten, BBWS Brantas, PU SDA
Pollution control and response	<ul style="list-style-type: none"> - Limited interaction / coordination amongst kota / kabupaten upstream to downstream - Similar capacity-building needs 	<ul style="list-style-type: none"> - Coordinate response in case of cross-regional incidents - Coordinate spot-checks / oversight - Coordinated response to specific pollution sources (e.g., diaper waste, livestock runoff) - Coordinated response to industrial violations - Joint capacity-building 	KLHK, DLH Jatim, DLH kota / kabupaten, PU SDA Jatim, private sector, communities, law enforcement agencies
Public information and community participation	<ul style="list-style-type: none"> - Low public interest in water and environment - Low demand for improved domestic wastewater and solid waste management 	<ul style="list-style-type: none"> - Unified public campaign - Support information-sharing and learning across river care communities 	KLHK, DLH Jatim, kota / kabupaten, Gubernur, PU SDA Jatim, academia, media, communities

Several coordination mechanisms relate to river water quality, including TKPSDA Brantas (facilitated by BBWS Brantas), Dewan SDA Jatim (facilitated by PU SDA), and Tim Sanitasi (facilitated by Bappeda).





COORDINATION OPTIONS

Various coordination mechanisms are possible, with different arrangements according to routine versus ad hoc meeting, participation, etc. Some options are summarized below, in order from least to highest coordination / integration.

OPTION 1. BASELINE (NO COORDINATION MECHANISM)

OPTION 2. SEPARATE COORDINATION MECHANISMS BY SUB-FUNCTION

OPTION 2B, C, D.... SELECT IMPLEMENTATION (ONLY COORDINATE ONE OR SEVERAL SUBFUNCTIONS)

Mechanism:	Pokja Kualitas Air or RPPMA Working Group	Water Quality Monitoring and Data Management Team	Pollution Response Team (DLH/KLHK)	Brantas Tuntas / community action committee
Function / activities:	 <p><i>Planning, monitoring, and evaluation</i> Facilitate data-sharing for planning, monitoring and evaluation Participate in formulation / evaluation of RPPMA</p>	 <p><i>Water quality monitoring and data management</i> Coordinate water data standards, formatting, management, updates</p>	 <p><i>Pollution control and response</i> Coordinate pollution control and incident response Facilitate joint oversight</p>	 <p><i>Public information and community participation</i> Implement unified campaign Facilitate knowledge and community action networks</p>
Basis:	Routine (according to planning cycle)	Routine (annual)	Routine (4 x per year) <i>plus</i> ad hoc or Ad hoc by issue / pollution source	Routine (annual)
Convening agency:	KLHK or TKPSDA Brantas or Bappeda	KLHK	DLH Jatim	Gubernur
Participants:	KLHK, BBWS Brantas, DLH Jatim, DLH kota / kab, Dinas Pertanian, Cipta Karya, Dinas Peternakan, Dinas Perindustrian, Bappeda, PU SDA Jatim, communities, academia, private sector	KLHK, DLH Jatim, DLH kota / kabupaten, BBWS Brantas, PU SDA	KLHK, DLH Jatim, DLH kota / kabupaten, PU SDA Jatim, private sector, communities, law enforcement agencies	KLHK, DLH Jatim, kota / kabupaten, Gubernur, PU SDA Jatim, academia, media, communities

OPTION 3. COORDINATION BODY WITH SUBCOMMITTEES

Clean Brantas Commission / Pokja Kualitas Air

- Commission or working group to facilitate coordination, provide policy direction, monitor and evaluate overall water quality strategy and coordination
- Routine (annual) meetings led / facilitated by TKPSDA Brantas or Bappeda or KLHK or DLH Jatim
- Broad membership, funded by APBN through KLHK or by APBD Governor, or Bappeda

Sub-committee:		Chair:	Participants:
RPPMA	Facilitate data-sharing for planning, monitoring and evaluation, make recommendations for planning, evaluate RPPMA	KLHK or Bappeda Jatim	KLHK, BBWS Brantas, DLH Jatim, DLH kota / kabupaten, Dinas Pertanian, Dinas Cipta Karya, Dinas Peternakan, Dinas Perindustrian, Bappeda, PU SDA Jatim, communities, academia, private sector
Water Quality Monitoring and Data Management	Coordinate water data standards, formatting, management, updates	KLHK or DLH Jatim	KLHK, DLH Jatim, DLH kota / kabupaten, BBWS Brantas, PU SDA
Pollution Control	Identify critical river pollution issues, recommend action plans, coordinate pollution control and response, facilitate joint oversight	Bappeda or Gubernur or KLHK or DLH Jatim	KLHK, DLH Jatim, DLH kota / kabupaten, PU SDA Jatim, private sector, communities, law enforcement agencies
Community Action	Implement public campaign, facilitate community action network	Gubernur	KLHK, DLH Jatim, kota / kabupaten, Gubernur, PU SDA, academia, media, communities

RECOMMENDED NEXT STEPS

- Prioritize coordination needs (subfunctions)
- Identify lead facilitating agency(ies)
- Initiate planning process for further formulation / supportive regulation (e.g., workshop, letter, etc.)