

The logo for NARBO (Network of Asian River Basin Organizations) features the acronym 'NARBO' in a bold, yellow, sans-serif font. The letters are set against a blue background that includes a stylized globe with latitude and longitude lines. Below the acronym, the full name 'Network of Asian River Basin Organizations' is written in a smaller, white, sans-serif font.

Network of Asian River Basin Organizations



**Network of Asian River Basin Organizations**

**The Fourth General Meeting**

**IWRM Seminar on Exploring Keys for Success in IWRM in the River Basins**

**Wednesday, 10 November 2010**

**Ujung Pandang-Indonesia.**

# Keys for Success in IWRM in the Bengawan Solo River Basin

**Ir. Harianto, Dipl HE**

**Director of Technical Planning and Development**



**JASA TIRTA I PUBLIC CORPORATION**  
**Brantas and Bengawan Solo River Basin Organization**

Jl. Surabaya 2A, Malang – 65115 Indonesia

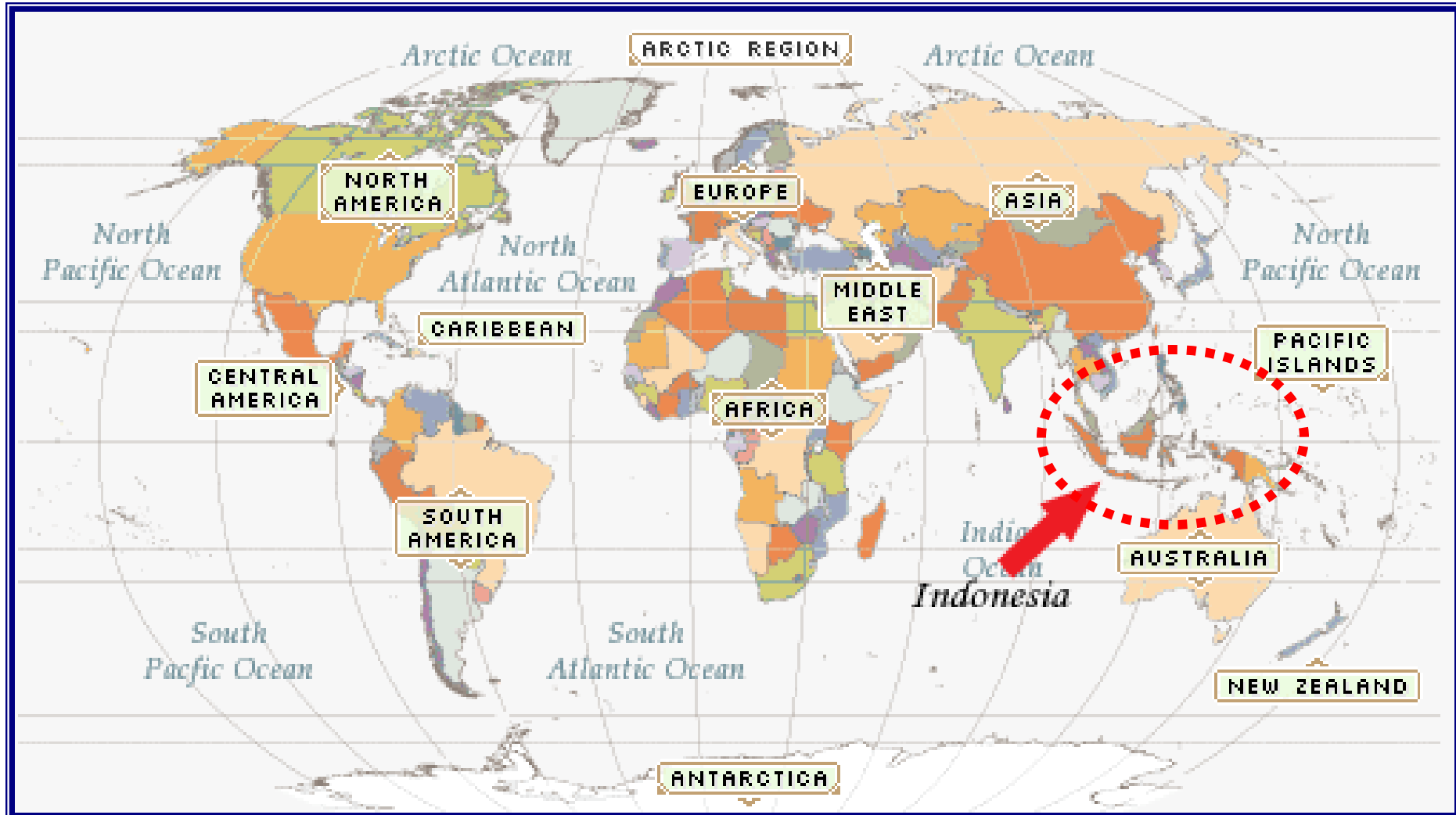
Ph. 62 341 551971, Fax. 62 341 51976

<http://www.jasatirta1.co.id>

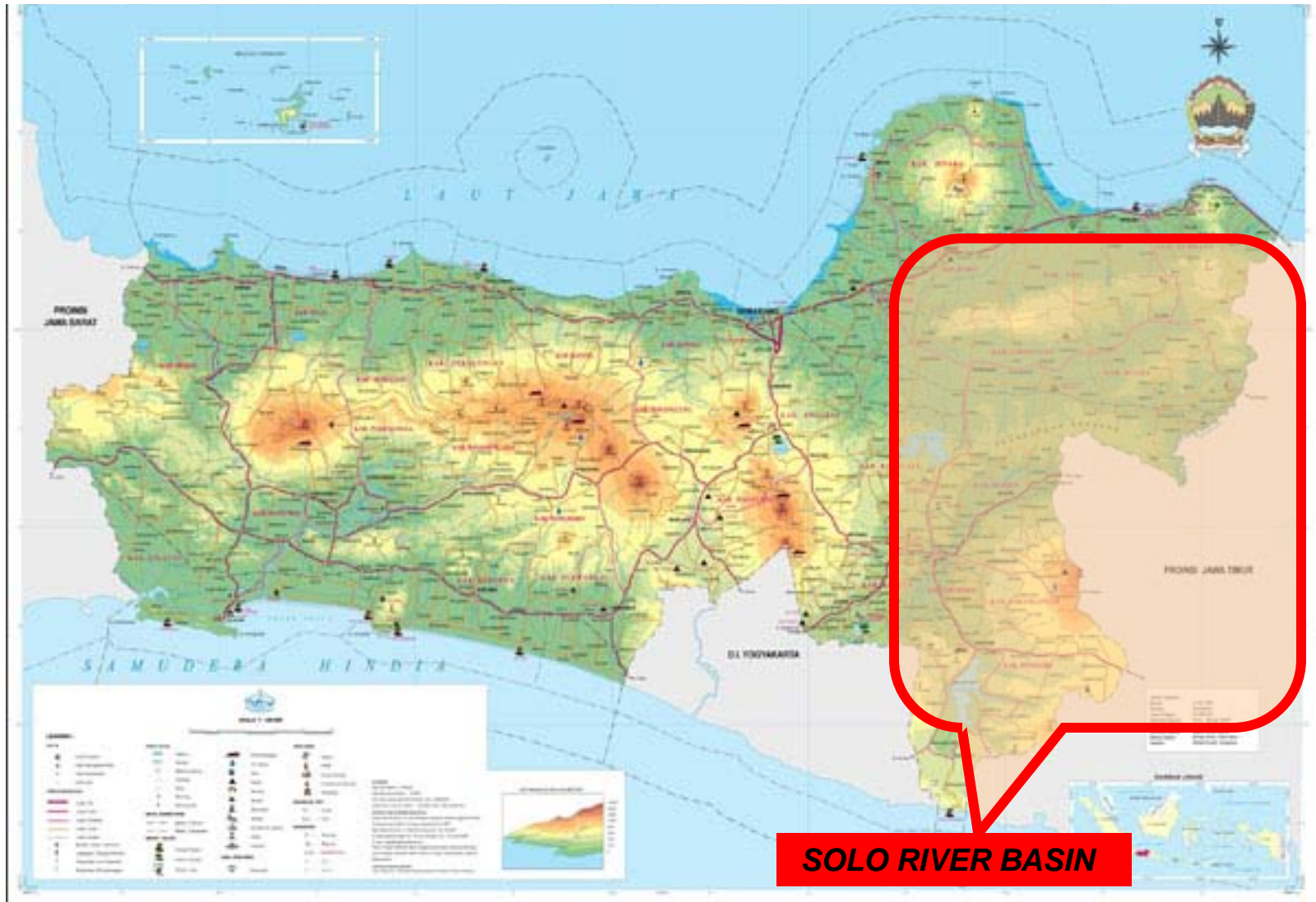


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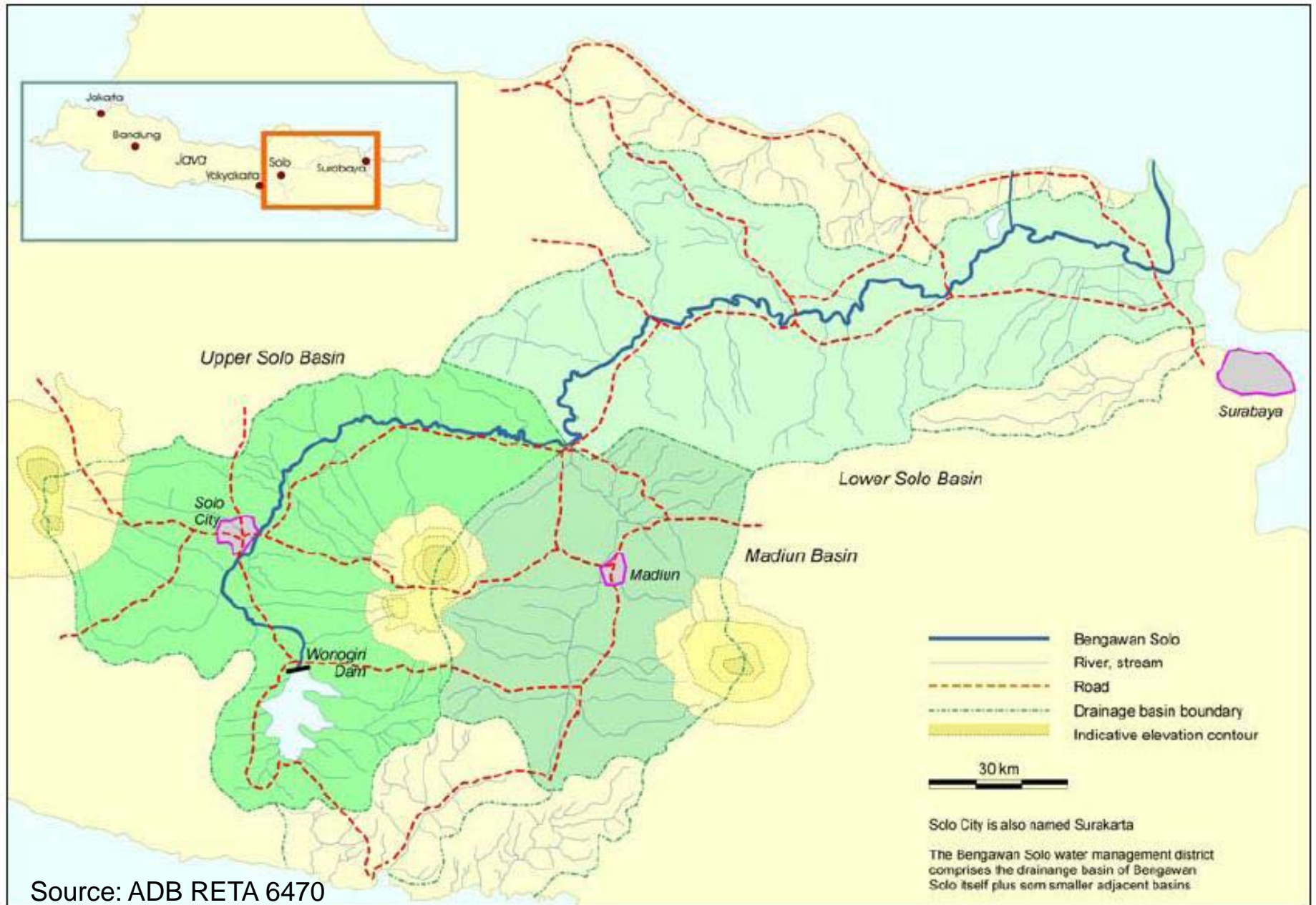
# GLOBAL MAP



# MIDDLE AND EAST JAVA



# Map of the Bengawan Solo River Basin



# About the Bengawan Solo River Basin

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- The Bengawan Solo River Basin is the largest river basin on the island of Java, Indonesia.
- The basin is located in two provinces, Central Java and East Java (Crossed Provinces River Basin).
- The basin drains a watershed area of around 20,000 km<sup>2</sup> in total, discharging into the Java Sea, in the north of Surabaya City after travelling about 600 km from its spring.
- Agriculture is the largest economic sector in the Bengawan Solo River basin, generating 29% of GRDP and 53% of the employment.



# Problems in the Bengawan Solo River Basin

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- During the rainy season, the Bengawan Solo River inundates its corridor which causes disaster to the inhabitants.
- Drought during the dry season poses another problem for most of the river system area. During dry season, droughts sweeps over 80% of the irrigated paddy field in the basin (545,000 ha).
- Recent flood happened on December 26-27, 2007 extended into 2008. Inundation was present until early February 2008.
- Land use in the Bengawan Solo River Basin is much characterized by dormant and active volcanoes.

# WR infrastructures in the Bengawan Solo Basin



Babat Barrage



Jabung Outlet



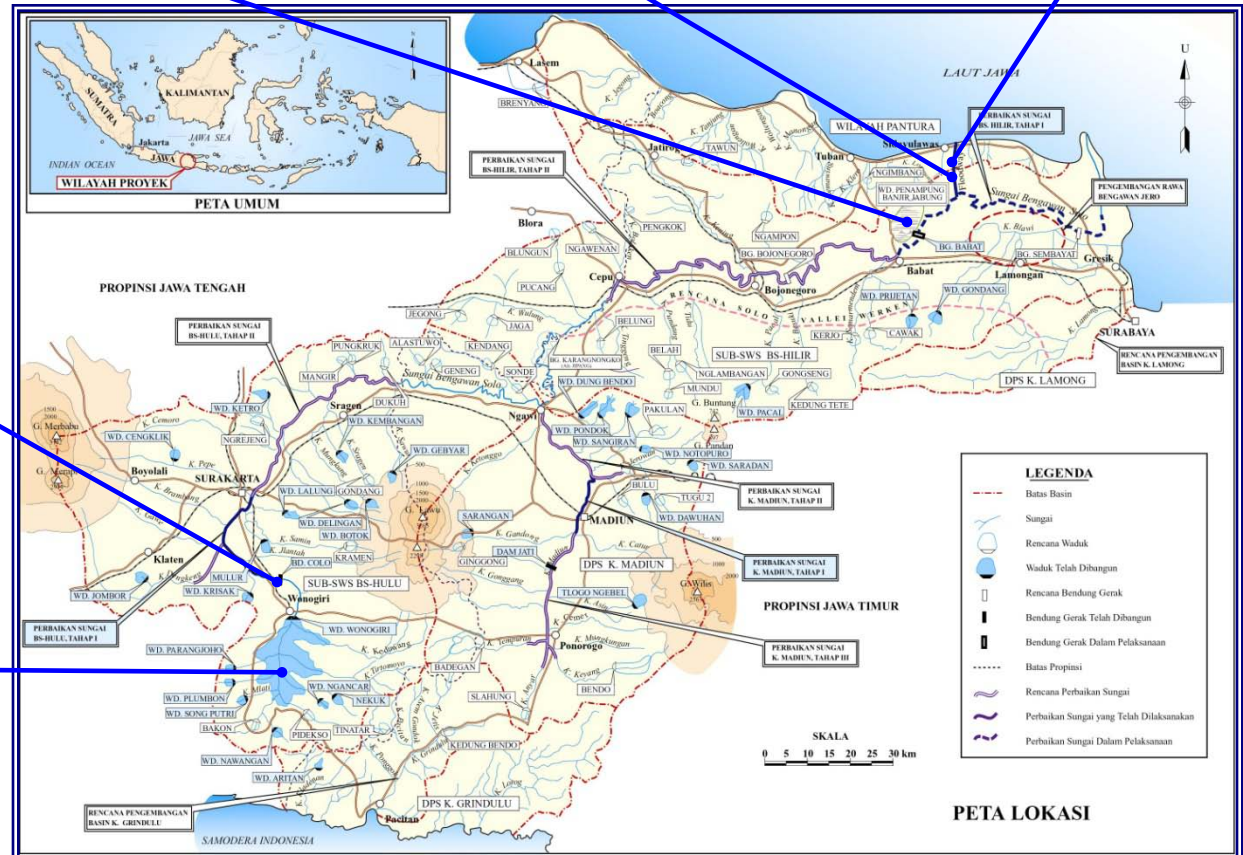
Floodway Inlet



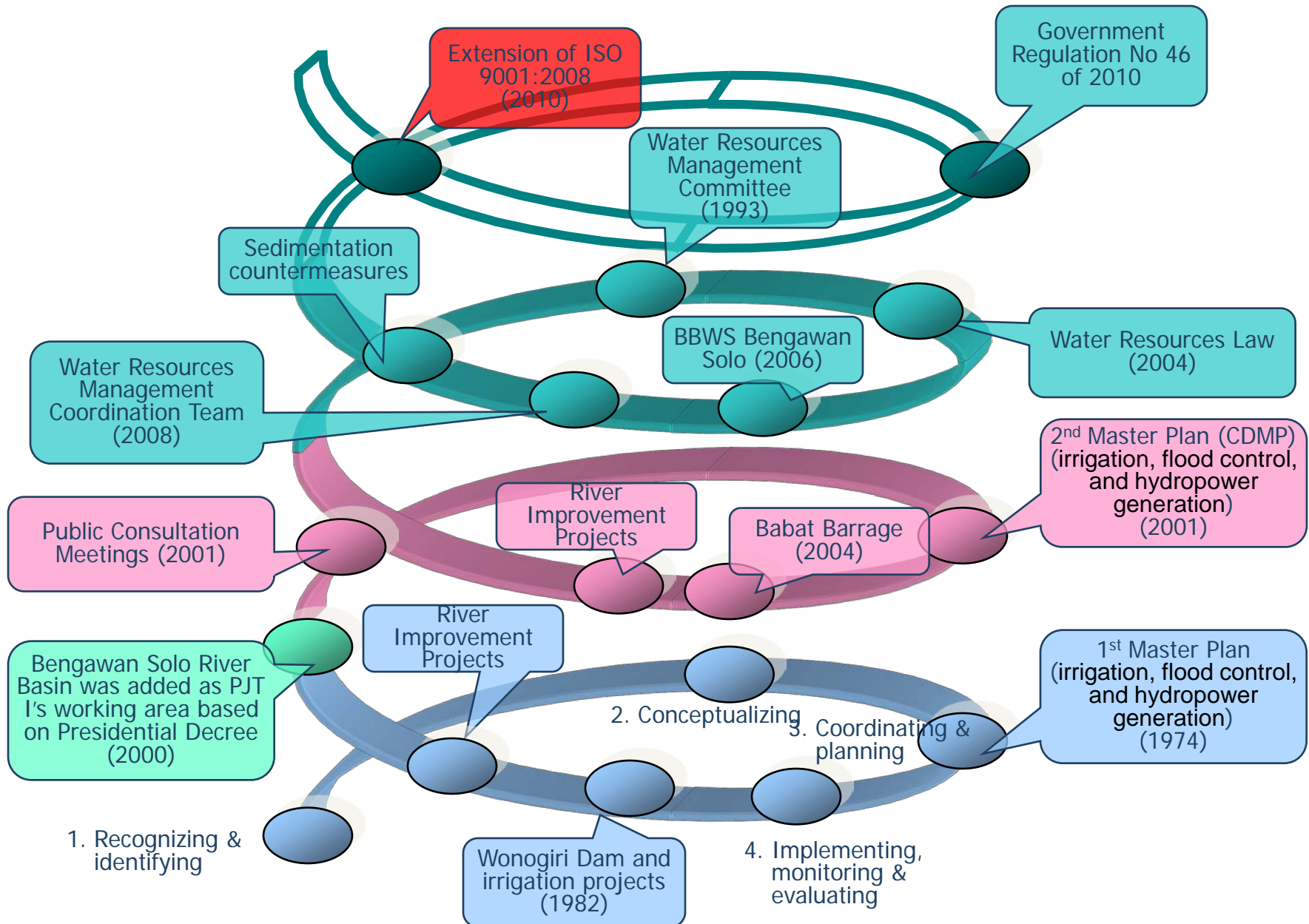
Colo Weir



Wonogiri Dam



# IWRM Spiral of the Bengawan Solo River Basin





# Key for Success in IWRM in the Bengawan Solo River Basin

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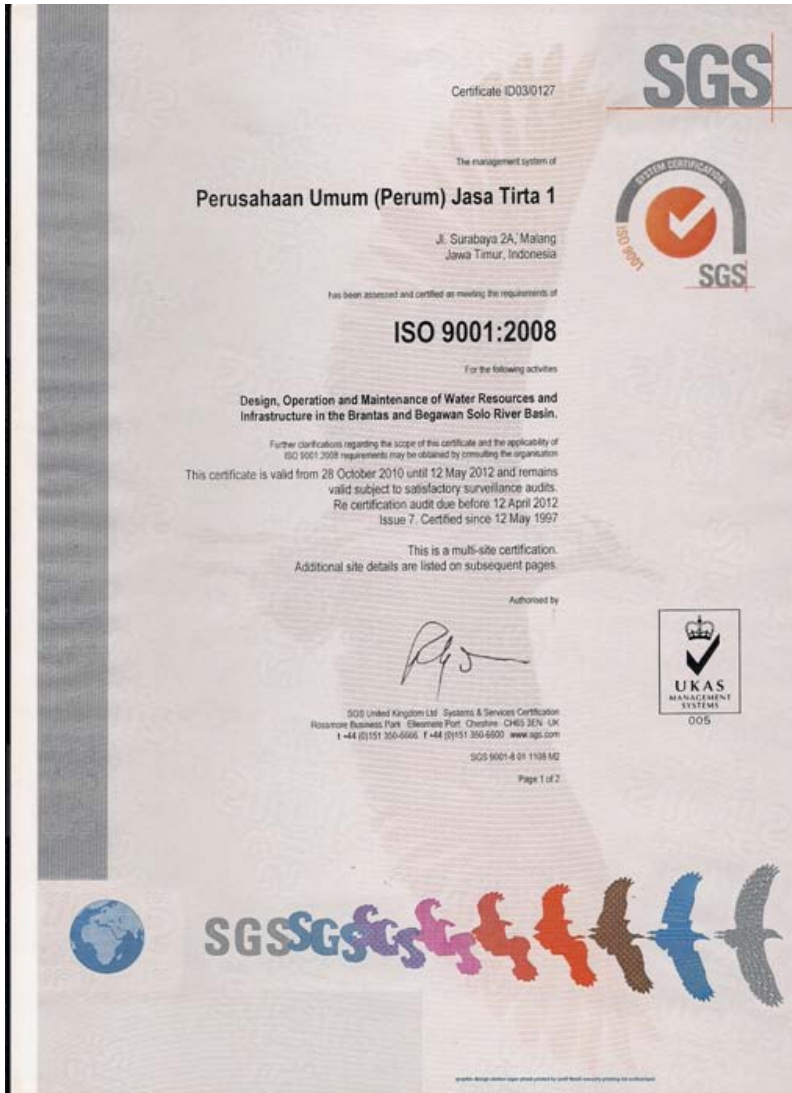
- The comprehensive plan as national priority and as river basin wide priority
  - Master Plan I (1974) : Survey and Study for the Development of Solo River Basin
  - Master Plan II (2001) : Comprehensive Development and Management Plan (CDMP) for Bengawan Solo River Basin
- Public participation and bottom-up approaches in water resources planning
  - Public consultation meetings (PCMs) held under the Comprehensive Development and Management Plan (CDMP) Study for Bengawan Solo River Basin Under Lower Solo River Improvement Project completed in 2001.
- Coordination among sectors and all stakeholders
  - The Water Resources Management Coordination Team provides a permanent platform for active participation by key public and private stakeholders
- Application of management system to achieve stakeholder satisfaction
  - As commitment to achieve stakeholders' satisfaction through continuous improvement of the system and responsive actions on stakeholders' complaints

# MANAGEMENT COMMITMENT

Top management shall provide evidence of its commitment to the development and implementation of the quality management system and continually improving its effectiveness by:

- a) Communicating to the organization
- b) Establishing the quality policy
- c) Ensuring that the quality objectives are established
- d) Conducting management review, and
- e) Ensuring the availability of resources

# Extension of ISO 9001:2008 Implementation in the Bengawan Solo River Basin (5 November 2010)



# Quality policy

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**Top management shall ensure that the quality policy :**

- a) is appropriate to the purpose of the organization
- b) includes a commitment to comply with requirement and continually improve the effectiveness of the quality management system
- c) provide a framework for establishing and reviewing quality objectives
- d) is communicated and understood within the organization, and
- e) is reviewed for continuing suitability.

# CUSTOMER FOCUS

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- Top management shall ensure that customer requirements are determined and are met with the aim of enhancing customer satisfaction

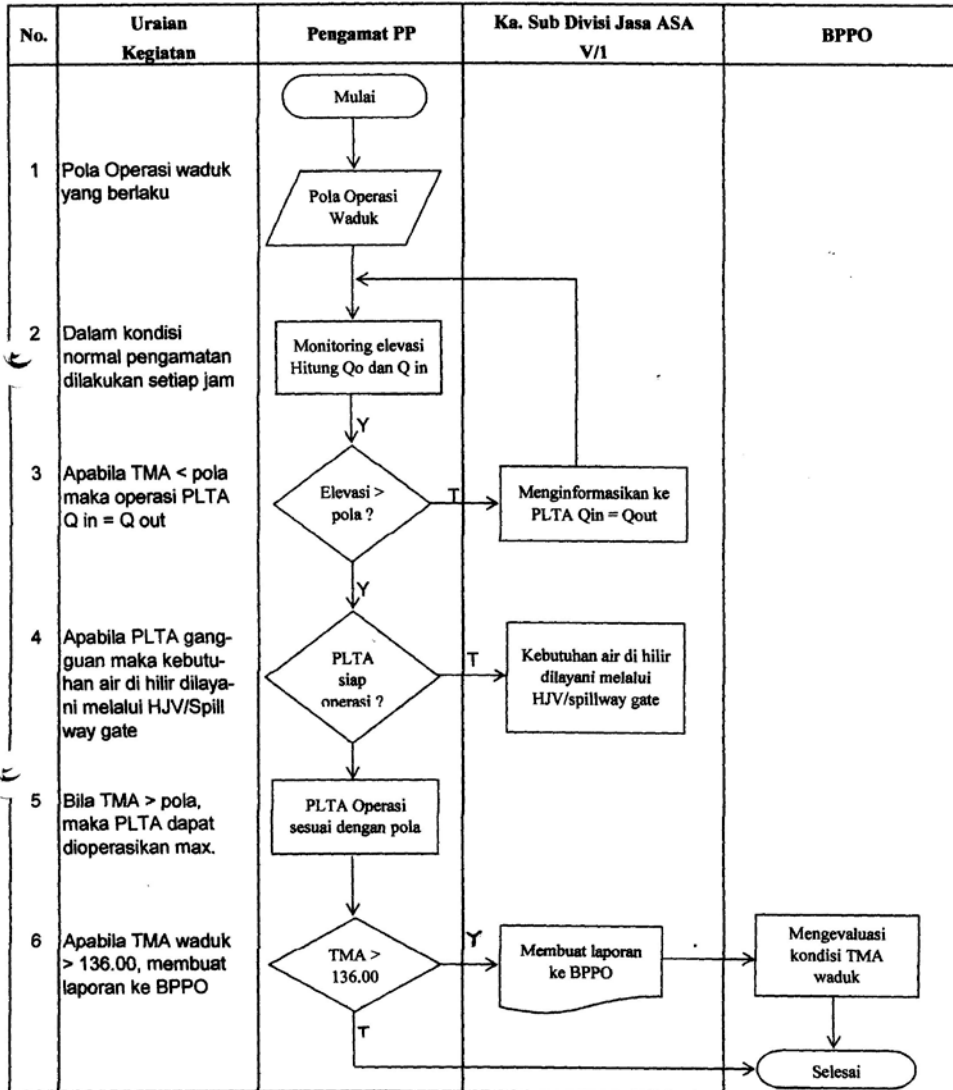
## RESPONSIBILITY AND AUTHORITY

- Top management shall ensure that responsibilities and authorities are defined and communicated within the organization



1.0 PROSES OPERASI HARIAN WADUK  
UNTUK WADUK WONOGIRI

No Dok : QP/BS5/01  
Tgl. Terbit : 24/8/2004  
Status/Tgl : " 0 "

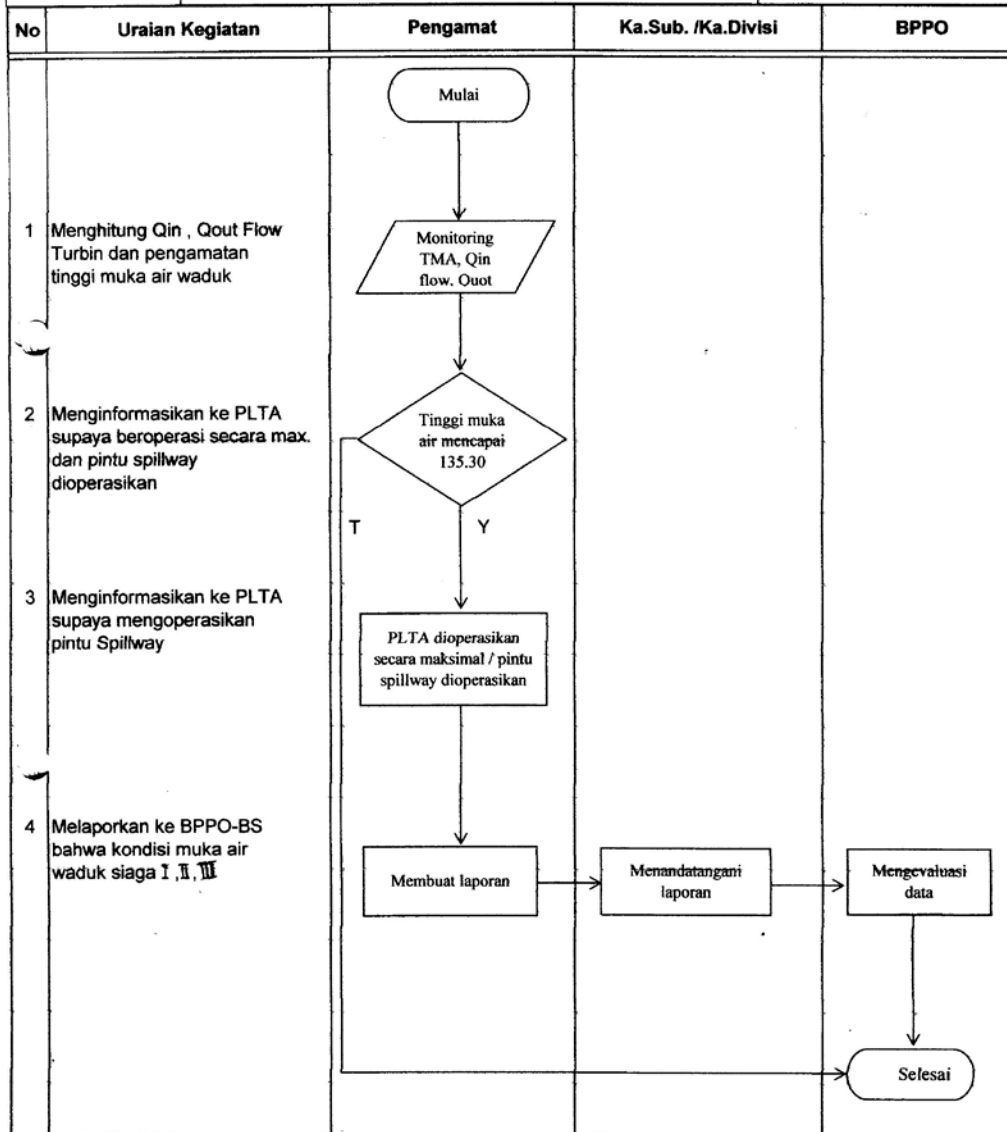


## EXAMPLE:

### PROCESS OF DAILY RESERVOIR OPERATION

- CUSTOMER FOCUS
- RESPONSIBILITY AND AUTHORITY



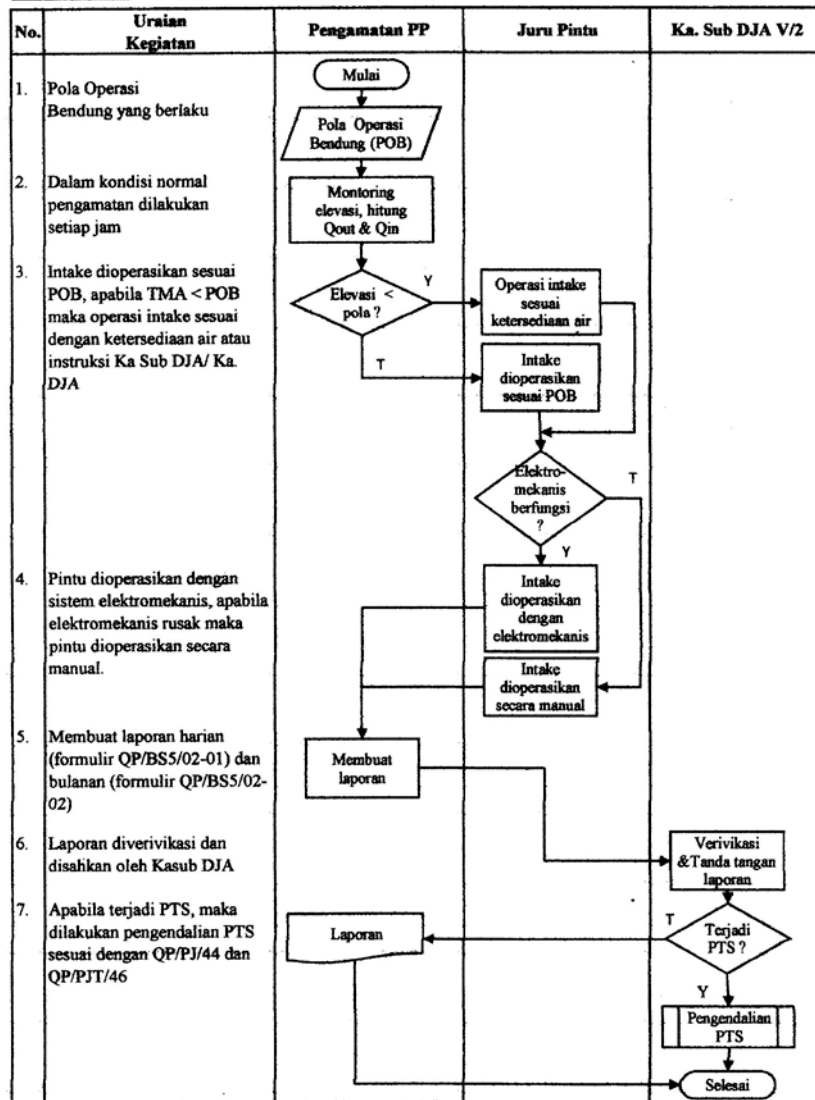


## EXAMPLE :

### PROCESS OF FLOOD CONTROL WONOGIRI –BENGAWAN SOLO RESERVOIR

- CUSTOMER FOCUS
- RESPONSIBILITY AND AUTHORITY





## EXAMPLE :

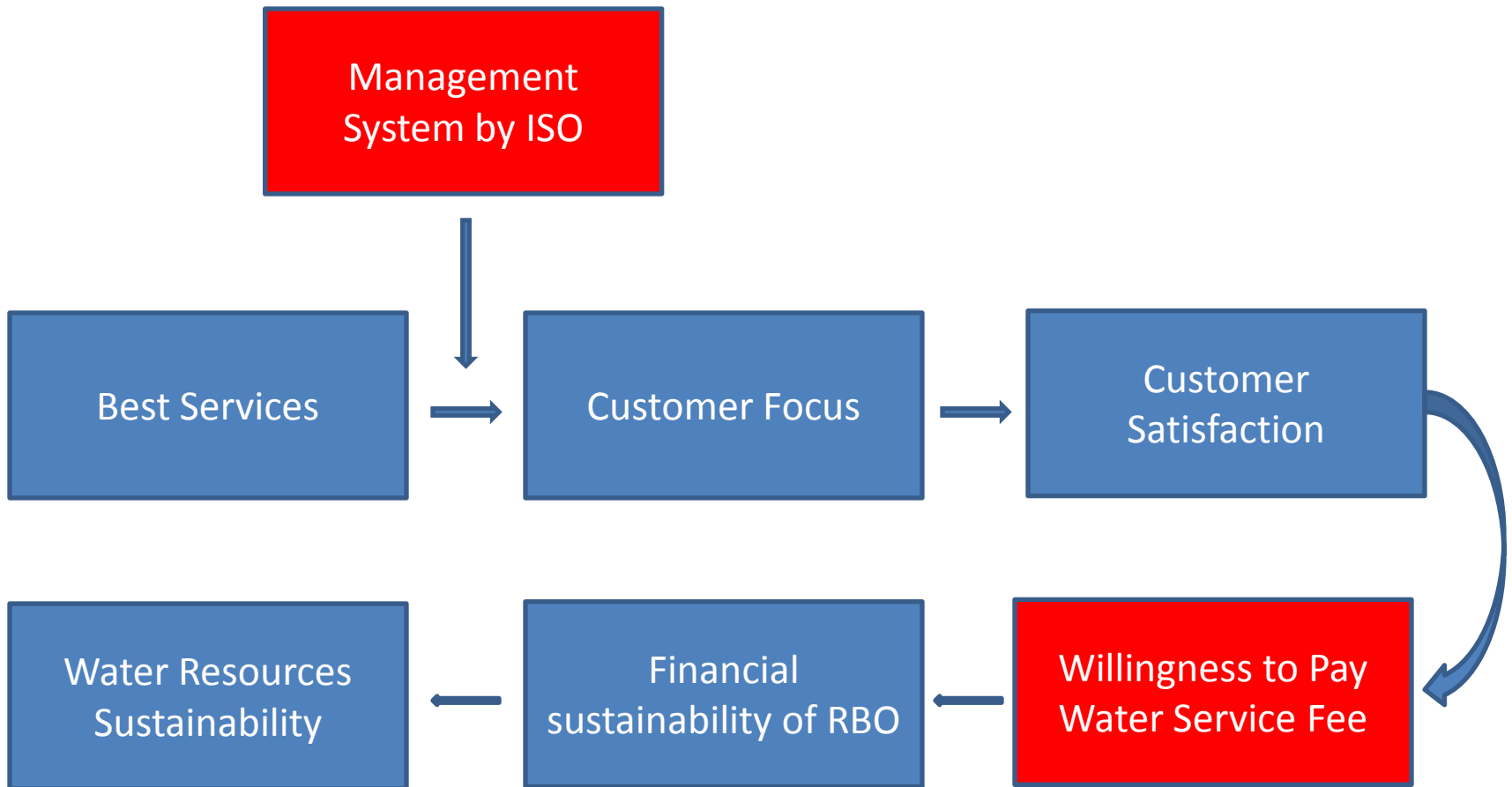
### PROCESS OF DAILY WATER ALOCATION COLO BARRAGE–BENGAWAN SOLO

- CUSTOMER FOCUS
- RESPONSIBILITY AND AUTHORITY
- CUSTOMER SATISFACTION



# Benefit from the Implementation of ISO

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# Conclusions (1/2)

- Water is a value as an economic goods, many past failure in water resources management are attributable to the fact that water has been and is still viewed as a free goods, or at least that the full value of water has not been recognized.
- Some keys for success in IWRM have been identified in the Bengawan Solo River Basin.
- In order to sustain water resources management and to address effective water governance in the Bengawan Solo River Basin, by the President degree 129/2000 and Government Regulation 46/2010, Government of Indonesia has established and strengthened River Basin Organizations (RBOs) namely Jasa Tirta I Public Corporation (PJT I) as neutral and professional institutions who apply in balance between healthy corporation principles and accountable public service norms on water resources supported by stakeholders participation.

## Conclusions (2/2)

- Some issues faced by PJT I identified in technical, financial, social, organizational, and institutional and legal aspect, especially in “flood control and water allocation.
- To cope these issues, PJT I done some action for each relevant issues.
- ISO 2001-2008 FOR DESIGN, OPERATION AND MAINTENANCE OF WATER AND INFRASTRUCTURES ESPECIALLY FOR FLOOD CONTROL AND WATER ALLOCATION is one of the institution development strategy.
- SINERGY WITH BBWS BENGAWAN SOLO (Government RBO), Jasa Tirta I Public Corporation with ISO 2001-2008 shall ensure that the qauality policies are met with “CUSTOMER SATISFACTION”.

# The “CHAIN” of Success Factors by ISO 2001-2008 on BENGAWAN SOLO-RBO



By: Harianto-pjt1  
Indonesia, 10 November 2010.



THANK YOU

Wonogiri Reservoir