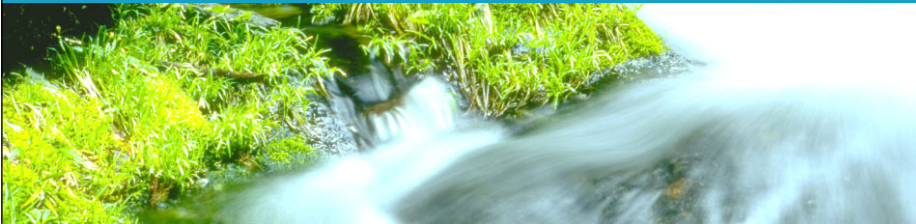




6/Mar/2019

## FY 2018 Activity

### Japanese Companies Exchange of Opinion regarding improving waterworks of PAMJAYA



Japan-Indonesia Study Committee for Water Supply Projects in Indonesia

## Contents

1. Activity of JISCOWAPINDO from 2017 to 2018
  - Survey Waterworks, Site Visit and Discuss about Improving Waterworks of PAMJAYA
  - Request for a review of “Master Plan 2014” from former president of PAMJAYA in 2018
2. Problems of current Waterworks of PAMJAYA
3. Very challenging goals of “Master Plan 2014”
4. Proposed Project outline from Japanese side
5. What do PAM JAYA need toward Japan side?

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## 1. Activity of JISCOWAPINDO from 2017 to 2018

### Operating condition of water treatment facility and reservoir

Location	Capacity (L/s)									
	2015				2016				2017	
	Design	2015	2016	2017	2015	2016	2017	2015	2016	2017
	a	b	c	d	b-a	(b-a)/a	c-a	(c-a)/a	d-a	(d-a)/a
Buaran WTP	5,000	5,426	6,033	6,076	426	9%	1,033	21%	1,076	22%
Pulogadung WTP	4,000	3,766	4,068	4,315	-234	-6%	68	2%	315	8%
CDC	3,000	3,538	4,012	4,023	538	18%	1,012	34%	1,023	34%

Note) CDC : Cilincing Distribution Center

Reference: presentation material of AETRA at visit of JISCOWAPINDO in 2017

**Overloading of water treatment facilities and reservoirs of AETRA ! PANJAYA need to construct Buaran III and water distribution center.**



2

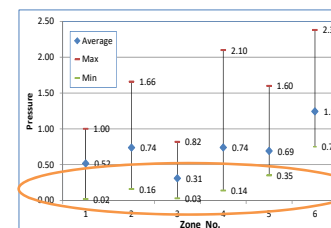
## 2. Problems of current Waterworks of PAMJAYA

Not service area (High priority area of service of drinking water)

Service area of PAM JAYA

Zone	WTP/DCR	Installed Capacity (l/s)	Production Capacity		Efficiency (%)
			m3/year	l/s	
Zone 1	WTP Pejomp. I	2,000	51,383,719	1,629	81.5
	WTP Pejomp. II	3,600	105,583,585	3,384	93.0
	Total	5,600	156,967,304	5,013	89.5
Zone 4	DCR 4	2,000	62,594,936	1,985	99.2
	WTP Taman Kota	150	3,814,800	121	80.6
	WTP Cikokol	75	2,588,667	82	109.3
Zone 5	Total	2,225	68,998,403	2,188	98.3
	DCR 5	800	25,781,487	818	102.2
	WTP Cilandak	400	12,110,193	384	96.0
Zone 2	Total	1,200	37,891,680	1,202	100.2
	West total	9,025	263,857,387	8,403	93.1
	WTP P. Gadung	4,000	120,232,870	3,813	95.3
Zone 3	WTP Buaran II	3,000	97,280,860	3,085	102.8
Zone 6	WTP Buaran I	2,000	55,182,668	1,750	87.5
East Total	9,000	272,696,498	8,648	96.1	
Jakarta Total		18,025	636,553,885	17,014	94.4

Not service area (good grand water)



Excess capacity of distribution reservoirs

Water pressure is very low, so can't deliver sufficient water at the lower area such as coastal area

3

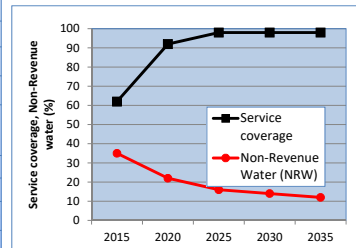
### 3. Very challenging goals of “Master Plan 2014”

#### Survey “Master Plan 2014”

- Service Connections (No. of Households) : 880,027
- Service Coverage : 62%
- Production Volume : 17,901L/s
- Service Coverage : 2015: 62% → 2020: 92% → 2035: 98%
- Non-Revenue Water Rate: 2015: 35% → 2020: 22% → 2035: 12%

**These goals are very challenging**

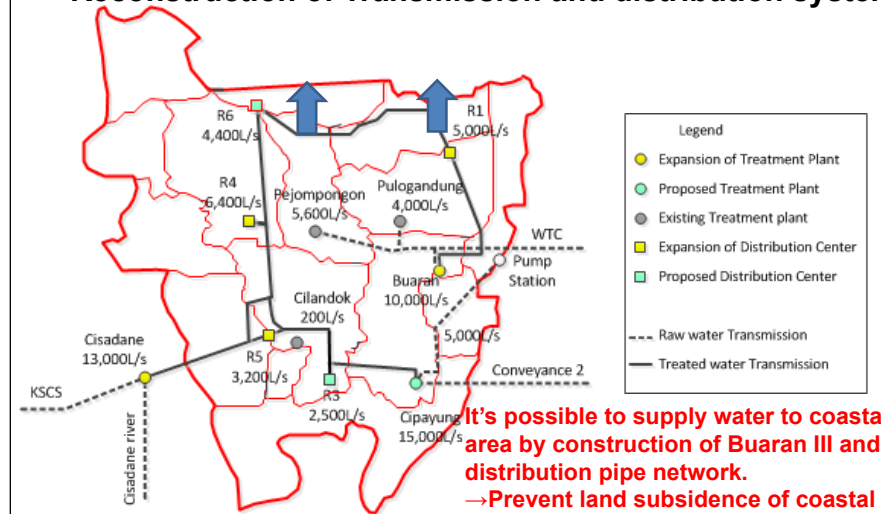
Description	Year		
	2015	2020	2035
Service coverage	62	92	98
Total connections	880,027	1,249,439	1,510,945
Production volume, m <sup>3</sup> /year	564,532,626	783,325,571	862,910,967
Production volume, L/s	17,901	24,839	27,363
Non-Revenue Water	35	22	12
NRW volume, m <sup>3</sup> /year	197,586,419	172,331,626	103,473,630
NRW volume, L/s	6,265	5,465	3,281
Sold water volume, m <sup>3</sup> /year	366,946,207	610,993,945	759,437,337
Sold water volume, L/s	11,636	19,374	24,082



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### 4. Proposed Project outline from Japanese side

#### Reconstruction of Transmission and distribution system



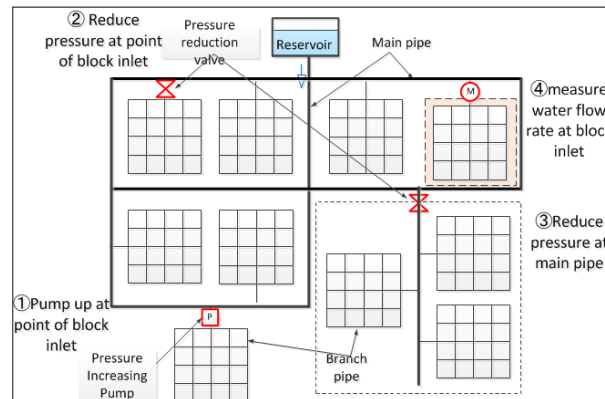
**It's possible to supply water to coastal area by construction of Buaran III and distribution pipe network.  
→ Prevent land subsidence of coastal area by stopping abstraction of groundwater**

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### 4. Proposed Project outline from Japanese side

#### Countermeasure of non revenue water

##### Outline of “Block Distribution System”



Replace and rehabilitation of distribution pipe network



Control of pressure at distribution pipe network



Countermeasure of leakage of pipe network



**“Block Distribution System” can control appropriate pressure of distribution pipe network, and find leakage by comparing customer demand and flow rate**

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### 5. What do PAM JAYA need toward Japan side?

#### Procedure of implementing project

- Preparation of an application form from Indonesian side (PAMJAYA)
- Formation of the Project as a Governmental project, negotiation among related Ministries (Ciptakarya)
- Posting the Project on the Blue Book (BAPPENAS)
- Assistance to form Preparatory Study for the Project (JISCOWAPINDO, Consultants)
- Budgeting, public announcement and bidding of Preparatory Study (JICA)
- Implementation of Preparatory Study (Basic Design, Feasibility Study) (JICA)
- Implementation of the Project by Japanese Yen Loan (JICA)

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