



EFFORT TO CONTROL TOTAL POLLUTANS IN THE CITARUM RIVER

● ● ●
November 14, 2023

Presented by :
Resmiani, ST.,MT
Head of Environmental Pollution Control Division

DINAS LINGKUNGAN HIDUP PROVINSI JAWA BARAT
Jl. Kawaluyaan Indah Raya No.6 Soekarno-Hatta
Telp. (022) – 87353565 Fax. (022) – 87353363
www.dlh.jabarprov.go.id (email: dlh@jabarprov.go.id)

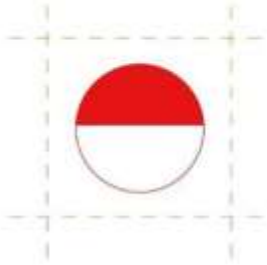
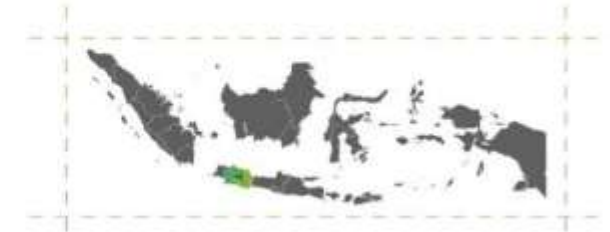




**STAKEHOLER COLLABORATION
WAS THE KEY SUCCESS FACTOR
IN CITARUM HARUM**



OVERVIEW OF WEST JAVA



Population Growth Rate:
1.48%



Area:
35,377.76 square kilometres

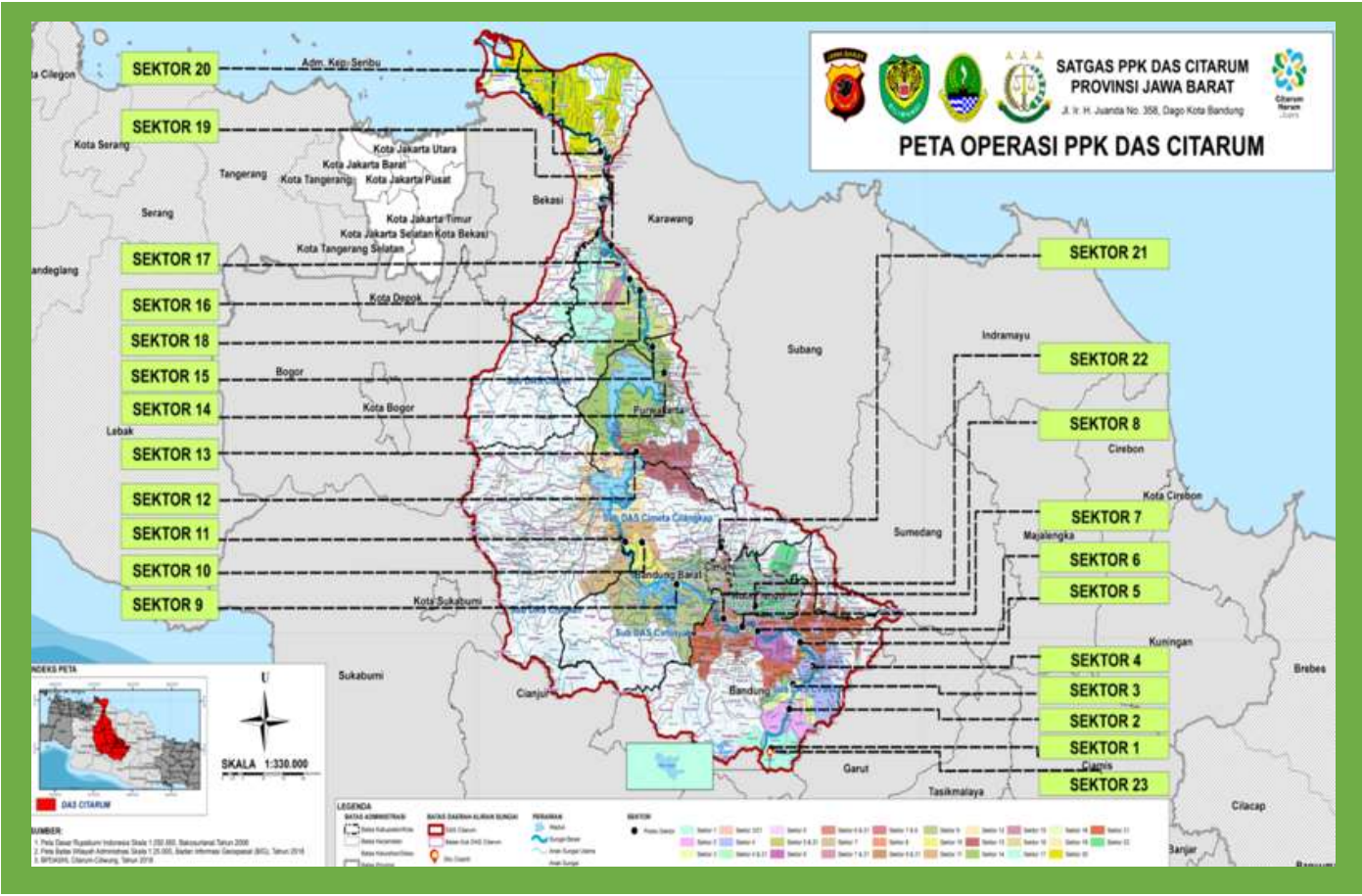


WEST JAVA
Located in Java Island of Indonesia



Population:
50 Million Population
2.246/km² Population Density
18 Million Population
Live in Citarum Watershed

CITARUM RIVER



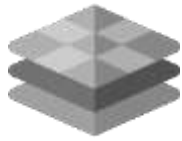
Large area: 11.323 Km²

Length of watershed: 297 Km

Constellation: 32% of Large of West Java

Total Sub-watershed: 19

PROBLEMS IN CITARUM RIVER



CRITICAL LAND AREA

1. Decrease in the catchment area due to **land damage**.



DOMESTIC WASTE WATER

2. Limited availability of proper **domestic wastewater sanitation** facilities and infrastructure.



SOLID WASTE

3. **Domestic and Hazardous waste** is poorly managed.



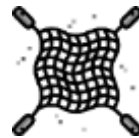
INDUSTRIAL WASTE

4. Water pollution due to the **disposal of Industry**.



FARM WASTE

5. Water pollution due to the disposal of **Animal Husbandry**.



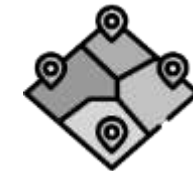
FLOATING NET

6. Unmanaged/unregistered **floating net cages**



WATER RESOURCE MANAGEMENT

7. Lack of the **water re-Source management** and Tourism have not implemented conservation principles.



LAND MANAGEMENT

8. Incompatibility of **land use** with spatial planning and weak efforts to supervise, permit and control space use



LAW ENFORCEMENT

9. Environmental **law enforcement** is not optimal



PUBLIC RELATION

10. **public relations** is not yet optimal



DATA MANAGEMENT

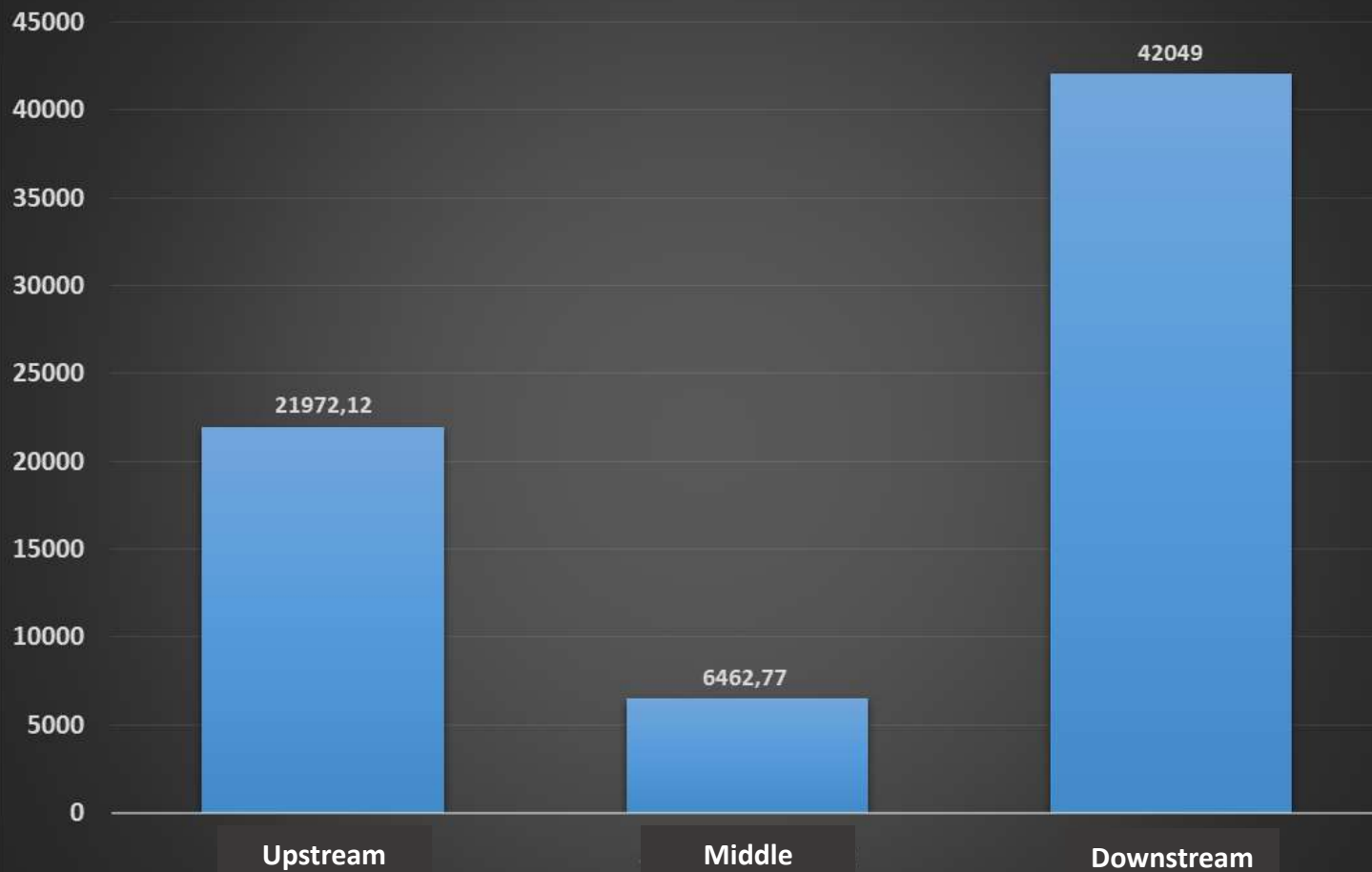
11. The provision of **technology-based data** and information



NO EDUCATIONAL SOCIALIZATION

12. Not yet optimal efforts to **educate** and **empower rural communities**

AVERAGE OF FECAL COLIFORM IN THE CITARUM RIVER



Source:

Upstream : Ministry of Environment and Forestry, Environmental Agency of West Java, Bandung Regency, Bandung City, Cimahi City, West Bandung Regency, Sumedang Regency, Perum Jasa Tirta II

Middle : Ministry of Environment and Forestry, Environmental Agency of West Java, Cianjur Regency, Perum Jasa Tirta II, IP Saguling

Downstream : Ministry of Environment and Forestry, Environmental Agency of West Java, Karawang Regency, Perum Jasa Tirta II

The contribution of domestic waste to the Citarum River is quite high

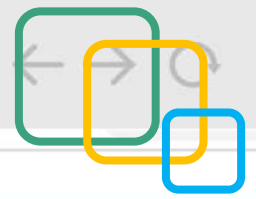


West Java as a Highest
Waste **Producer** in
Indonesia

24.790
Ton/Day

15.838
Ton/Day

CITARUM
Watershed
Waste **Receiver**



ALL SECTIONS

SEARCH

THE | DIPLOMAT

READ THE DIPLOMAT, KNOW THE ASIA-PACIFIC

SIGN IN



SUBSCRIBE



OCTOBER 21, 2021

India Hits 1 Billion Vaccine Doses



OCTOBER 20, 2021

Thailand to Cease Using Sinovac Vaccines After Supplies Are Exhausted

Indonesia's Citarum: The World's Most Polluted River

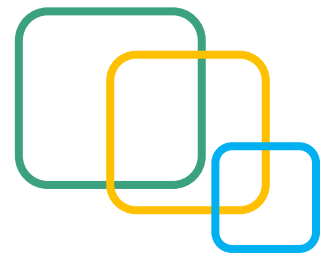
By [Dikanaya Tarahita](#) and [Muhammad Zulfikar Rakhmat](#)

April 28, 2018



Suratmo, a fisherman living on the banks of the Citarum River, could only laugh softly when asked about his catch today. He replied that he could no longer be called a fisherman. For the last five years, his income has no longer come from catching fish, but fishing used items such as glass bottles from the mountains of garbage in what is often called the world's most





People in Citarum Watershed produced 15 tons of waste every day,
55% is organic waste and 15% is plastic waste.



12 PROGRAM PPK DAS CITARUM

There are 2 Main Activity Indications:

- Update industrial data inventory
Industrial Development Through Company
- Performance Assessment in Environmental
Management



HANDLING DOMESTIC WASTE IN CITARUM WATERSHED

SCOPE AREA



Handling of domestic wastewater in the 2020 – 2024 reaction period refers to the overlay results of several studies, namely:

SK MenLHK No. 300 tahun 2017

The study area covers 1,391 villages in 10 districts/cities



After overlaying the two data, it is determined The scope of Citarum Harum's activity area covers 1,243 villages/sub-districts, 157 sub-districts, in 10 districts/cities.



Spatial Data for the Citarum Watershed

The study area covers 1,286 villages/subdistricts in 13 districts/cities



644 Location - Sector of Acceleration of Control and Damage to River Watersheds (PPK DAS)



251 High and Very High Sanitation Risk Areas



205 Child Stunting Villages



448 ODF (Open Defecation Free) / Stop BABS



795 Villages Open Defecation (BABS), 648.603 Head of Family

- **Infrastructure Development : 643.563 Head of Family (692 Villages)**
- **Stimulants of Community Based Total Sanitation (Sanitasi Total Berbasis Masyarakat) 5.040 Head of Family (103 Villages)**



INITIAL CONDITIONS OF DOMESTIC WASTE MANAGEMENT IN THE CITARUM WATERSHED

Based on **Smart STBM** data for December 2019

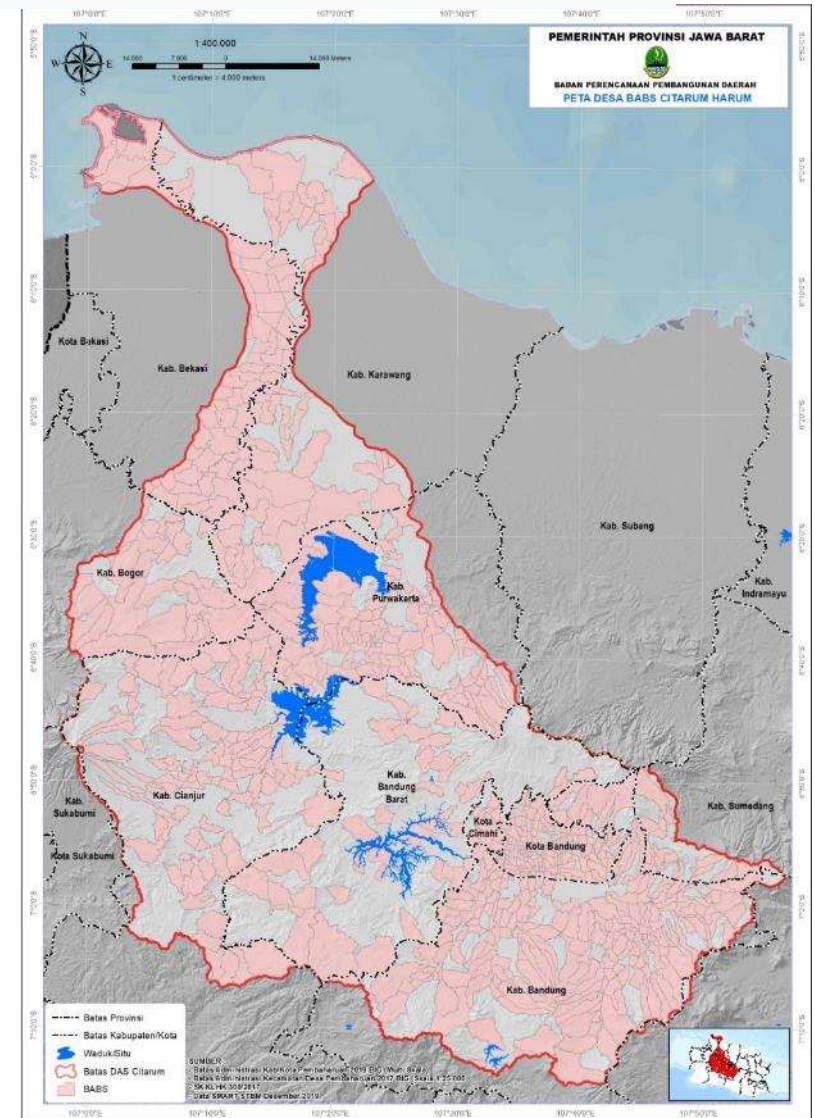
2,352,098 people or 648,603 community families spread across 795 villages/districts still practice open defecation (open defecation)



Dengan demikian, beban pencemaran BOD pada limbah domestik yang perlu diturunkan di Sungai Citarum sebesar **94.084 kg/hari**

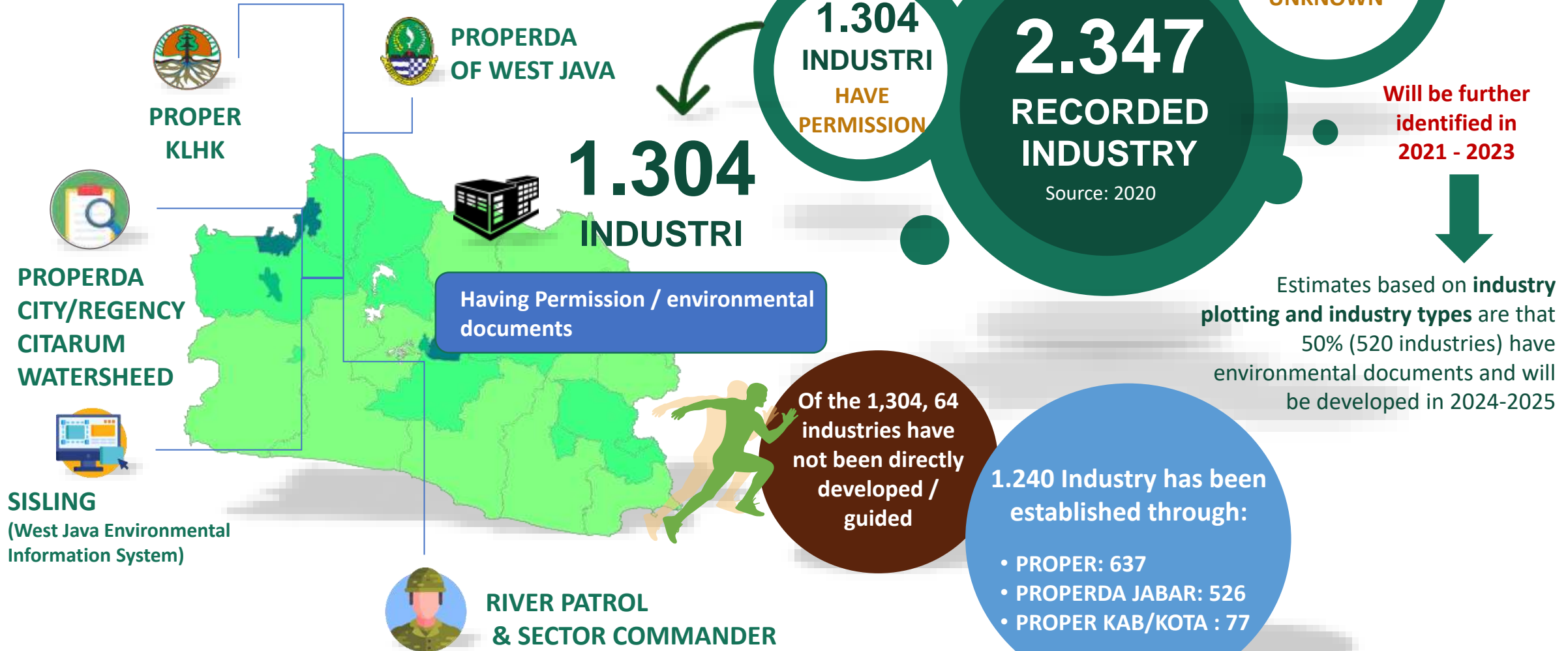
No	Kab/Kota	Jml Kecamatan BABS	Jml Desa BABS	Jml Penduduk BABS	
				(jiwa)	(KK)
1	Kab. Bandung	31	209	747.290	184.941
2	Kab. Bandung Barat	9	29	56.628	16.467
3	Kab. Bekasi	12	68	109.210	32.541
4	Kab. Bogor	7	34	85.209	47.950
5	Kab. Cianjur	18	99	216.010	72.074
6	Kab. Karawang	13	56	133.026	26.905
7	Kab. Purwakarta	14	121	98.590	20.487
8	Kab. Sumedang	4	22	9.133	4.577
9	Kota Bandung	30	144	811.578	210.738
10	Kota Cimahi	3	13	85.424	31.923
	Total	141	795	2.352.098	648.603

Emission Factor:
BOD = 0,04
kg/orang/hari

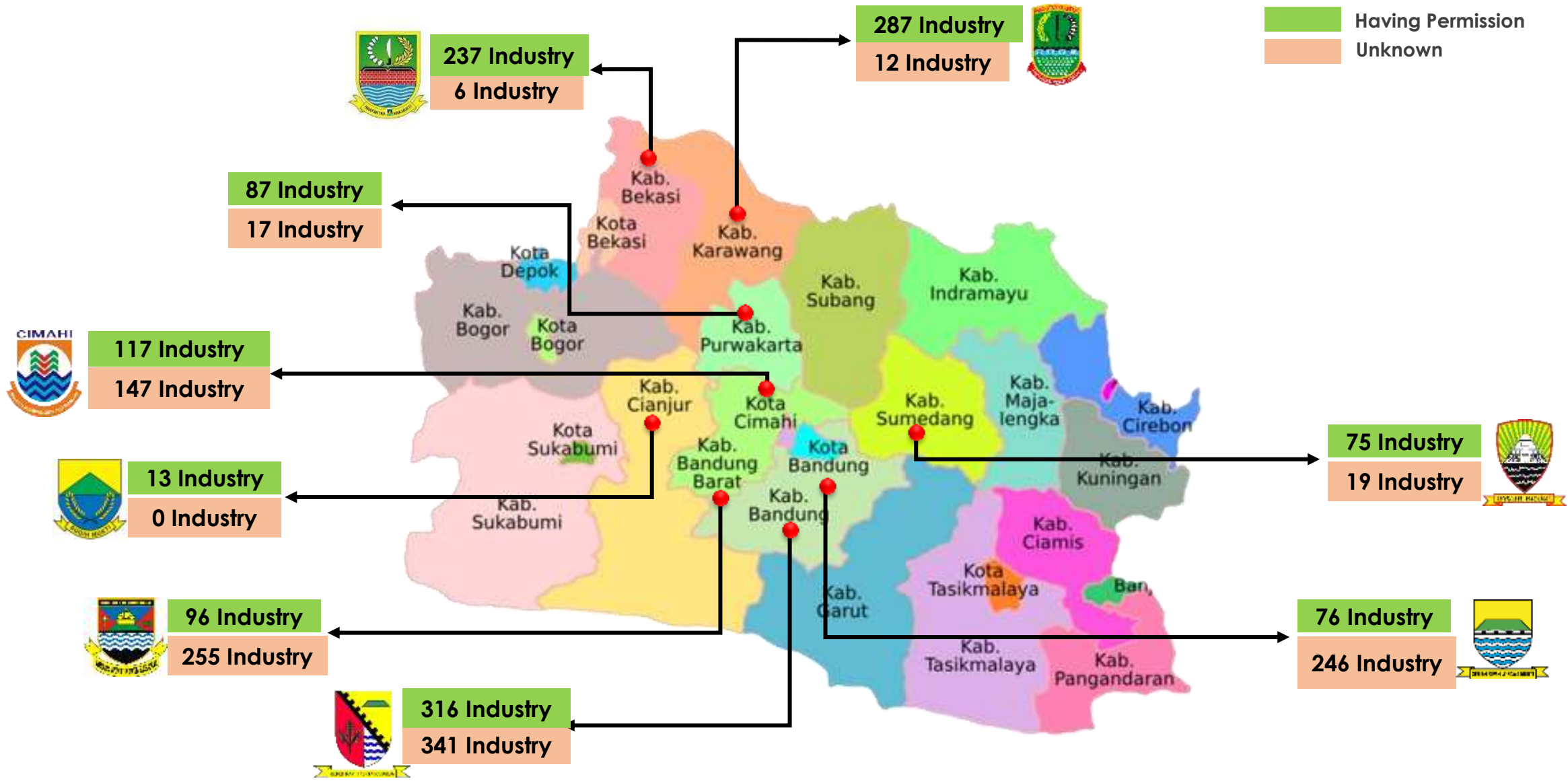


BASELINE DATA

Basis for Determining 2 Indications of Main Activities in the Industrial Waste Working Group



DISTRIBUTION OF INDUSTRIAL WASTE HANDLING LOCATIONS BASED ON REGENCY/CITY IN THE CITARUM WATERSHED

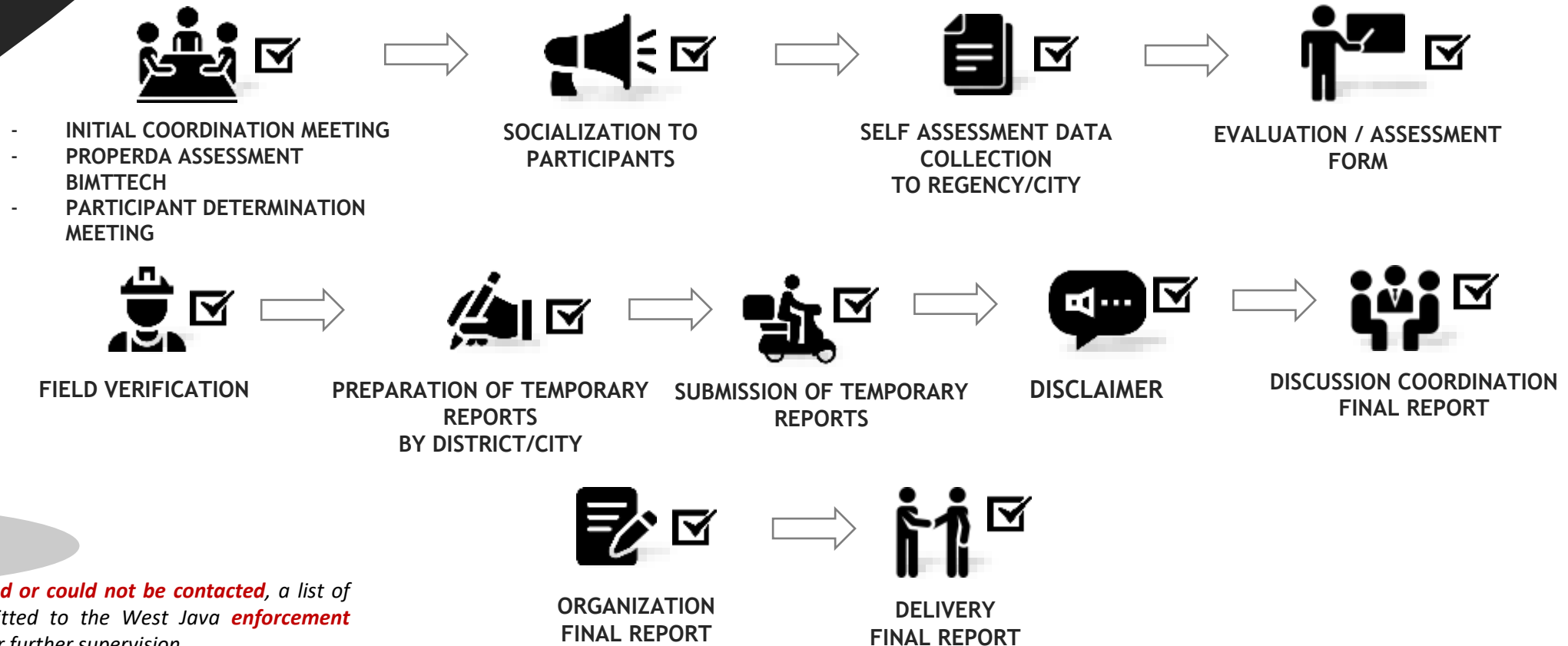


INDUSTRIAL DEVELOPMENT OBSTACLES 2022

Of the participants who have been proposed by the District/City, their progress is reduced, due to:

- Resigned because it is no longer operational
- Currently in Law Enforcement
- Does not collect data and cannot be contacted*

MECHANISM FOR IMPLEMENTING THE 2019-2025 INDUSTRIAL DEVELOPMENT PROGRAM



*For participants who **did not respond or could not be contacted**, a list of participants' names has been submitted to the West Java **enforcement department** to be used as a priority for further supervision.



Citarum Harum Juara

PROGRAM ACHIEVEMENT 2019-2023

Progress on the Track



Domestic Waste Water
378.722 Households

Target:

2023 36.624 cows | 2025 53.052 cows



Floating Net Managed
20.719 units

Target:

2023 84.729 Units | 2025 141.219 Units



Critical land area restored
33.480,17 Ha

Target:

2023 48.778,61 Ha | 2025 80.174,99 Ha

Notes:

Data on program outcomes are generally cumulative. Achievements in 2023 based on the Task Force Secretariat Report

Provincial Government of West Java



Progress on the Track



Research and Development
11 studies utilized

Target:

2023 6 study | 2025 12 studies



Education and Community Empowerment

234 Institution | 1268 Villages | 31 Communities

Target:

2023 234 Institution | 870 Villages | 15 Communities | 2025 390 Institution | 1454 Villages | 25 Communities

Space Utilization Control

46.055,61 Data collection

Target:

2023 46.055,61 Data collection | 2025 127.363,2 Ha Scope of utilization control



Citarum
Harum
Juara

PROGRAM ACHIEVEMENT 2019-2023

Achievement Needs Velocity



Farm waste intervention
28.613

Target:

2023 2025
430.831 648.603

Households Households



Solid Waste Treatment
3.383,25 tons/ day

Target:

2023 2025
4.814,85 6.636,06
ton/day tons/day



Industrial Waste Monitored

1.452 Industries built 650 Industries inventoried

Target:

2023 2025
1.304 Industries built 1.813 Industries built

1043 Industries inventoried 1.043 Industries inventoried

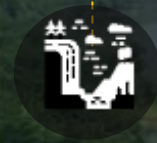
Notes:

Data on program outcomes are generally cumulative.
Achievements in 2023 based on the Task Force
Secretariat Report

Provincial Government
of West Java



Achievement Needs Velocity



Water Resource Management
and Ecotourism

35 % Inundation area	2.7 m3/d Addition raw water	5 Location Ecotourism
Target:		
2023 22 % Inundation area 2,4 m3/d Addition raw water 5 Location Ecotourism		2025 20% Inundation area 3,7 m3/d Addition raw water 5 Location Ecotourism



Public Relation Management

1 Command Center	282 manual spot & 24 Onlmo Water Quality Monitoring Location	38 Public Relation Media
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Target 2023-2025:

1 Command Center
341 manual spot & 22 Onlmo
Water Quality Monitoring Location
4 Public Relation Media

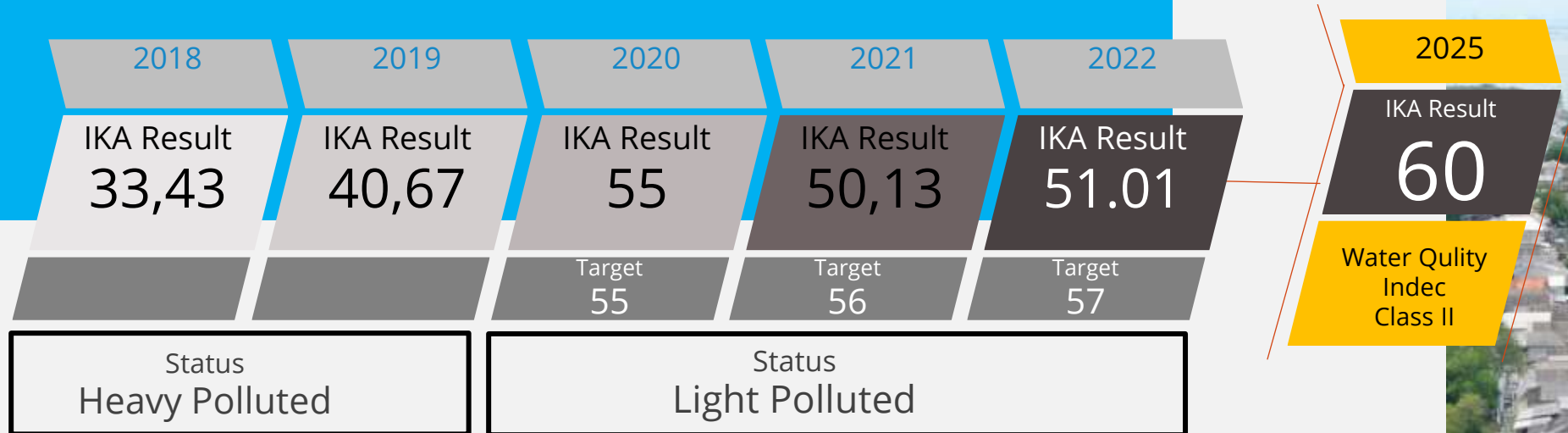
Law Enforcement

584 Cases	65 Prime/ Civil Cases	167 Administrative Cases
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Target:

2023 455 Complaint cases 29 Prime/ Civil Cases 105 Administrative Cases	2025 415 Complaint cases 29 Prime/ Civil Cases 105 Administrative Cases
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ULTIMATE GOAL



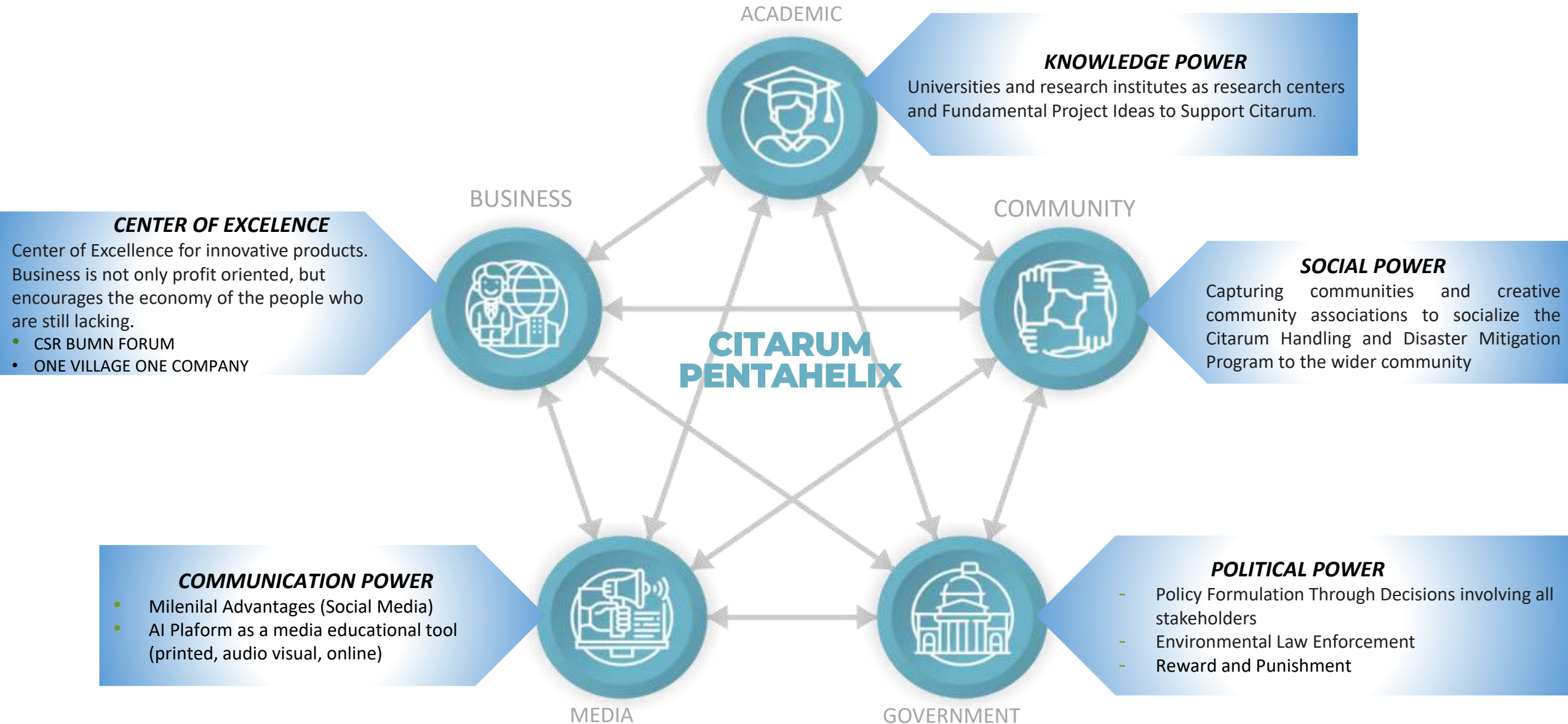
Desc:

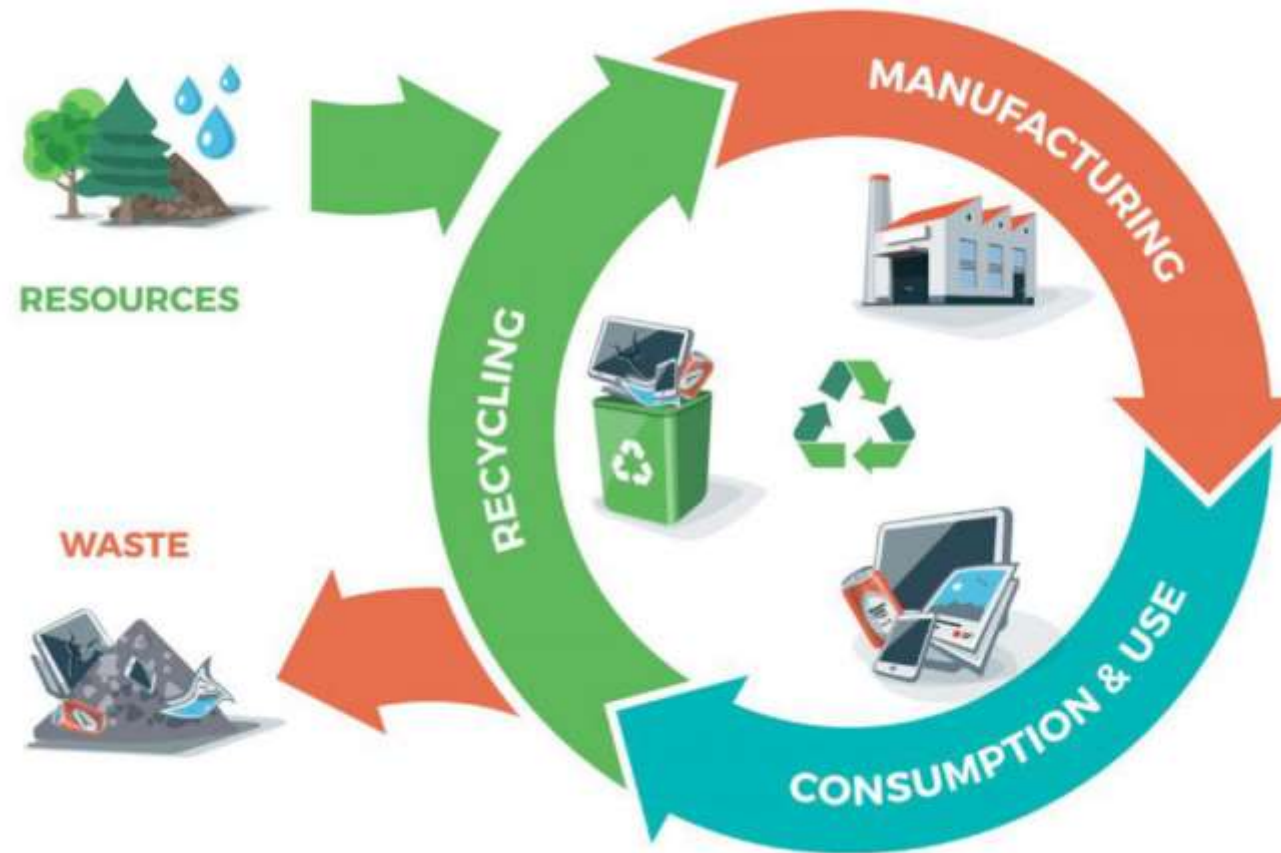
IKA: Water Quality Index

IKA 70: Water whose designation can be used for water recreation, freshwater fish cultivation, animal husbandry, irrigating plants, or other uses that require the same water quality.



PENTAHHELIX SINERGITY MODEL IN CITARUM





A circular economy is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible that aims at tackling global challenges like climate change, biodiversity loss, waste, and pollution.



SOLID WASTE REDUCTION

DISSEMINATION OF ORGANIC WASTE MANAGEMENT



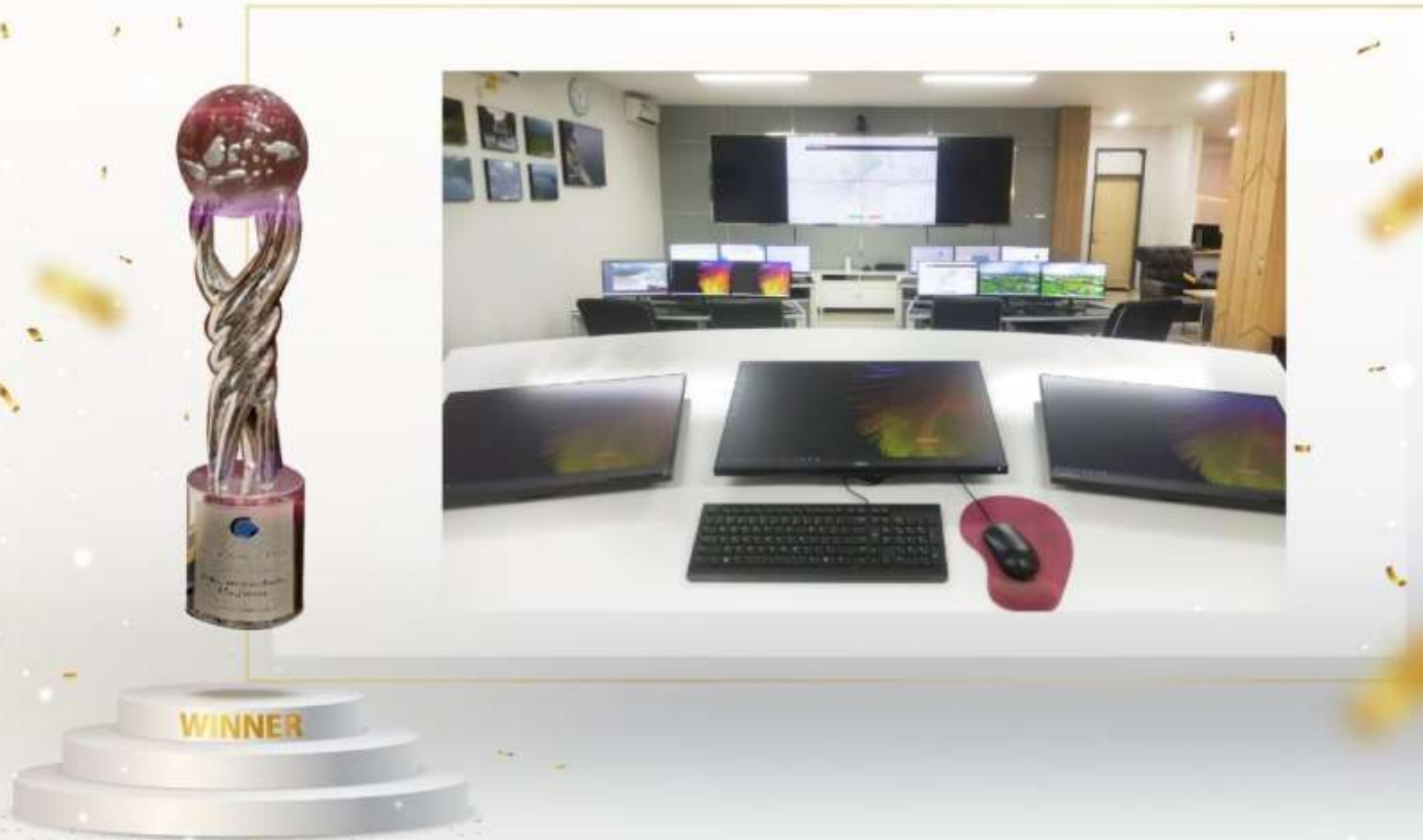
ENCOURAGING DIGITAL PLATFORM (ANDROID) IN REDUCING SOLID WASTE IN WEST JAVA



WASTE BANK



**WEST JAVA PROVINCE WON "THE BEST INNOVATION"
FROM INDONESIAN GEOSPATIAL AGENCY
FOR COMMAND CENTER OF CITARUM WATERSHED TASK FORCE**



Collaboration to Make Citarum Harum River, KODAM III/Siliwangi Sinergize with POLRI and West Java Government to manage Citarum River



Indonesian National Armed Forces (TNI)

Increase effectiveness and conditioning
people, rural apparatus, and stakeholders.



Indonesian National Police (POLRI)

Carry out prevention, development, and law
enforcement for people who dispose of waste those
does not accordance standard quality in Citarum
River.

River Crossing Activities Involving All Elements



Citarum Harum Task Force activities in collaboration with the community to collect those garbage



PLANTING AND CLEANING IN Citarum collaboration with INDONESIA NATIONAL ARMED FORCES (TNI)



River based arrangement activities in citarum watershed



Handling the floating net cage and making temporary embankment



Management of Critical Land in the Upper Citarum Watershed



Before



After



Location: Mekarwangi District, Bandung Regency

Cleaning Up Disturbing Water Algae “Eceng Gondok” in the Citarum River



Before



After



Location: Posko Sektor, West Bandung Regency

Construction of Retention Ponds to reduce Flood Inundation Area



Before



After

 **Location: Kolam Retensi Andir, Andir district, Bandung Regency**



Before



After

 **Location: Sepadan River, 8 Sector Territorial, Katapang district, Bandung Regency**

Construction of the Bridge as a result of the Collaboration between the Citarum Task Force and the Tsu Zhi. Buddhist Foundation CSR



Before



After

 **Location: Kertasari district, Bandung Regency**

IMPLEMENTATION OF ACTIVITIES



TREE PLANTING



TREE NURSERY

IMPLEMENTATION OF ACTIVITIES



CONSTRUCTION OF COMMUNAL WC



MANUFACTURING COMMUNAL
WASTEWATER TREATMENT

IMPLEMENTATION OF ACTIVITIES



DEMOLITION OF ILLEGAL BUILDINGS



REMOVAL OF FLOATING
NET CAGES

Before After Kegiatan Penanganan Keramba Jaring Apung

Before



2019

Sumber : antaranews.com

Penanganan



2021

Sumber : Republika.co.id

After



2022

Sumber : Sekretariat Satgas Citarum

**Waduk
Jatiluhur,
Kecamatan
Jatiluhur, Kab
Purwakarta**

Before



2019

Sumber : republika.co.id

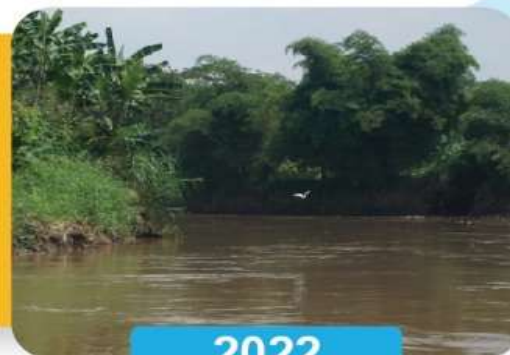
Penanganan



2021

Sumber : Sektor 9 Citarum Harum

After



2022

Sumber : Sekretariat Satgas Citarum

**Eceng Gondok
di Waduk
Saguling,
Kab
Bandung**

Before After Kegiatan Pengendalian Pemanfaatan Ruang

Before



2017

Sumber : Sekretariat Satgas Citarum

Penanganan



2018

Sumber : Sektor 18 Citarum Harum

After



2021

Sumber : Sekretariat Satgas Citarum

**Sepadan Sungai
Citarum,
Kecamatan
Nanjung, Kab
Bandung**

Before



2018

Sumber : Sekretariat Satgas Citarum

Proses



2020

Sumber : Sekretariat Satgas Citarum

After



2022

Sumber : Biro Administrasi Pimpinan Pemprov Jabar

Before After Kegiatan Pengendalian Pemanfaatan Ruang

Before



2021

Sumber : Sekretariat Satgas Citarum

Penanganan



2021

Sumber : republik.co.id

After



2021

Sumber : Google

**Sepadan Sungai
Cidurian,
Kecamatan
Antapani, Kota
Bandung**

Before



2021

Sumber : Yayasan Budha Tzu Chi

Progres



2021

Sumber : Sekretariat Satgas Citarum

After



2022

Sumber : Administrasi Pimpinan
Pemprov Jabar

**CSR Jembatan
Budha Tzu Chi,
Kecamatan
Baleendah, Kab
Bandung**

Before After Kegiatan Pengendalian Pemanfaatan Ruang

Before



2018

Sumber : Istimewa

Progres



2019

Sumber : PUPR

After



2021

Sumber : Data Informasi & Humas Citarum

**Terowongan
Nanjung**
Kecamatan
Nanjung, Kab
Bandung

Before



2018

Sumber : detik.com

After



2020

Sumber : 60detik.com



2021

Sumber : Sekretariat Satgas Citarum

**Jembatan
Citarum,**
Kecamatan
Baleendah, Kab
Bandung

Before After Kegiatan Pengolahan Limbah Industri

Before



2016

Sumber : vice

After



2022

Sumber : Sekretariat Satgas Citarum

Anak-Anak Bermain di Sub DAS Cikijing, Kecamatan Majalaya, Kabupaten Bandung

Before



2015

Sumber : vice

Penanganan



2019

Sumber : islampus.com

After



2021

Sumber : Sekretariat Satgas Citarum

Bataran Waduk Saguling, Kabupaten Bandung

Before After Kegiatan Penanganan Keramba Jaring Apung

Before



2019

Sumber : antaranews.com

Penanganan



2021

Sumber : Republika.co.id

After



2022

Sumber : Sekretariat Satgas Citarum

**Waduk
Jatiluhur,
Kecamatan
Jatiluhur, Kab
Purwakarta**

Before



2019

Sumber : republika.co.id

Penanganan



2021

Sumber : Sektor 9 Citarum Harum

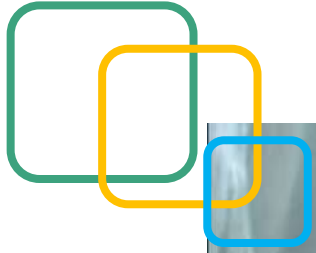
After



2022

Sumber : Sekretariat Satgas Citarum

**Eceng Gondok
di Waduk
Saguling,
Kab
Bandung**



THANK YOU

WE TAKE CARE OF NATURE, NATURE TAKES CARE OF US

WEST JAVA ENVIRONMENTAL AGENCY

Kawalayaan Indah Raya Street Number 6 Soekarno-Hatta, Bandung City

Phone. (022) – 87353565 – Fax. (022) – 87353363

Website: www.jabarprov.go.id | email: dlh@jabarprov.go.id