

KERTAS 3 : URBAN REDEVELOPMENT

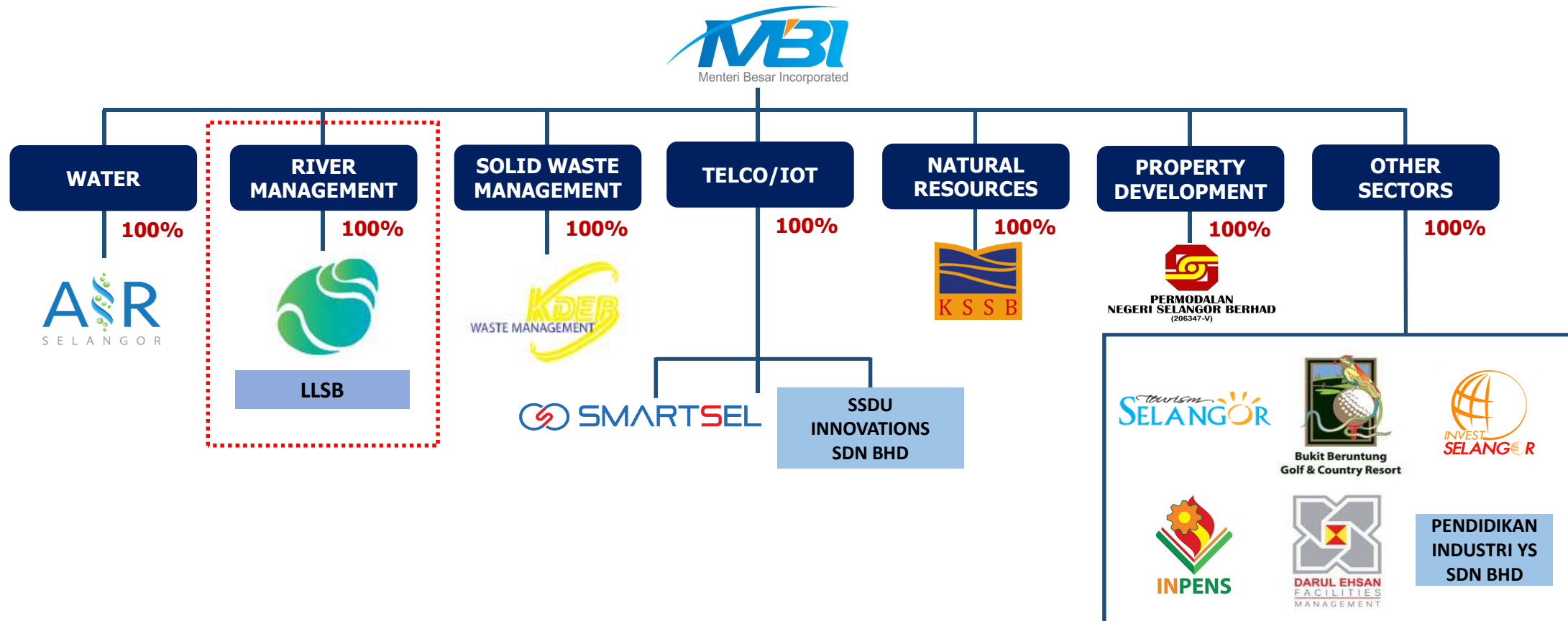
CASE STUDY :

SELANGOR MARITIME GATEWAY

Landasan Lumayan Sdn Bhd 989368-H
Ground Floor, Bangunan Darul Ehsan,
No. 3 Jalan Indah, Seksyen 14,
40000 Shah Alam, Selangor Darul Ehsan

T +603 5513 8898
F +603 5510 1758 / 0759

Gateway to a better tomorrow





"The Klang River will become a landmark to **drive new growth** and **generate a maritime economic** ecosystem linking the main towns and cities in Selangor and Kuala Lumpur via the waterway....

Y.A.B. Dato Seri Azmin Ali, Budget Speech 2016

Vision

*"To be recognised as a **key driver for an economic growth** with regard to sustainability of riverine and maritime development*

Mission Statement

*Our mission is to play a very proactive role to **unlock development potential** while ensuring sustainable social, economic and environmental benefits through the effective management, conservation, protection, promotion, rehabilitation and development of the riverine and marine resources of the Selangor State Government.*

SELANGOR STATE GOVERNMENT

Asset Owner



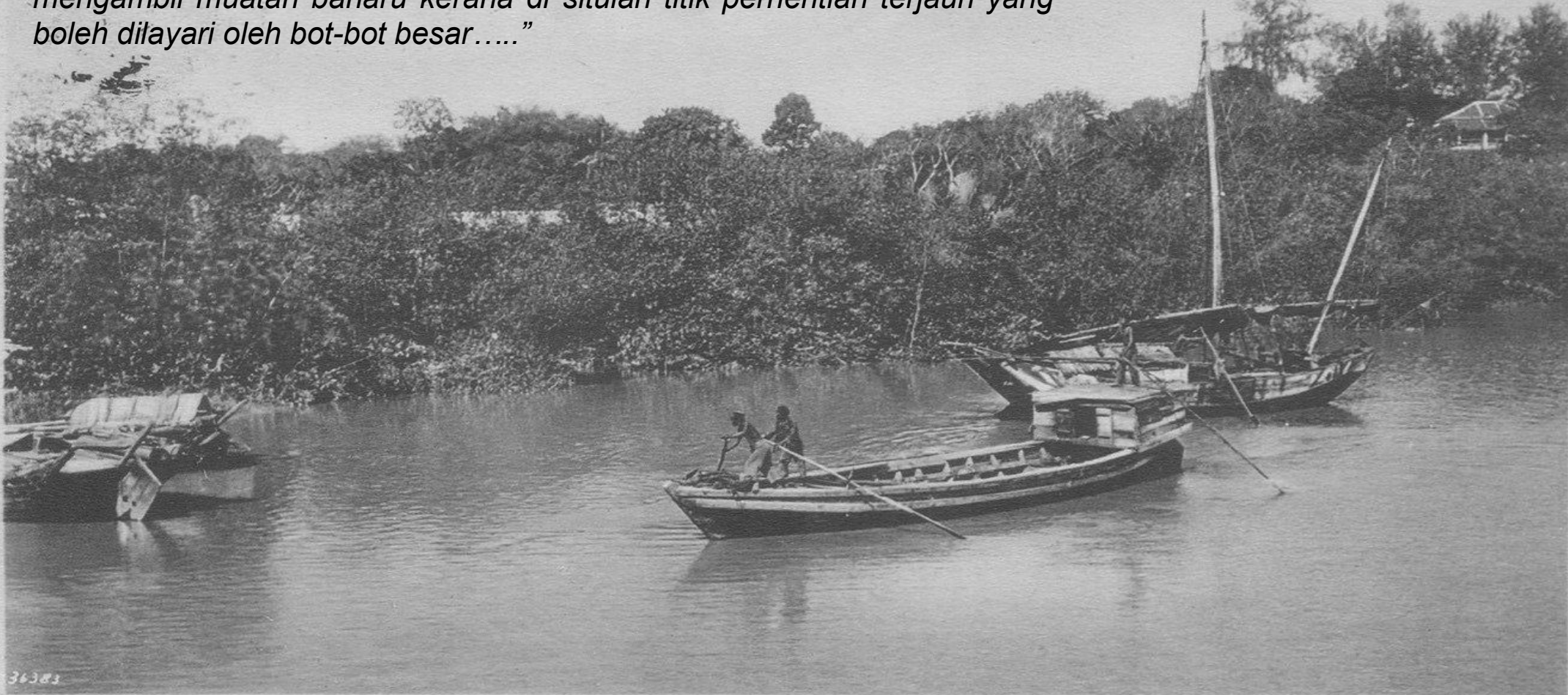
INTERGRAL AGENCIES

- Policy and regulation
- Licensing & Administration
- Enforcement
- Infrastructure development

LANDASAN LUMAYAN SDN BHD (LLSB)

Appointed by Selangor State Government to spearhead the Klang River Project which now known as Selangor Maritime Gateway (SMG).

“Ahli sejarah, J.M. Gullick menggelarnya “satu-satunya lebuhraya yang memintas hutan belantara”. Bot berulang-alik dalam perjalanan empat hari dari pekan Klang ke kuala Sungai Gombak untuk memungkah muatan dan mengambil muatan baharu kerana di situlah titik perhentian terjauh yang boleh dilayari oleh bot-bot besar.....”



253 - Klang River, Selangor.

Why is it Sungai Klang is so important for Selangor?



Issues & Challenges

Sampah, sisa binaan punca pencemaran Sungai Klang



Oleh Azidan Nahar

KUALA LUMPUR: Pencemaran sungai kecil dan longkang yang mengalir masuk ke Sungai Klang adalah antara faktor utama pencemaran teruk sungai berkenaan.

Tinjauan sekitar sungai kecil berdekatan Kampung Abdullah Hukum dan Sungai Kemensah yang mengalir masuk ke Sungai Klang mendapati banyak sampah dibuang ke sungai kecil yang kemudian-





Like clockwork: 1. Lorries can be seen unloading garbage on the riverbank. 2. An excavator then takes over to push close to the edge of the riverbank. — Photos courtesy of Dominic Khoo



Sungai Kelang has suffered a decade of abuse

► FROM PREVIOUS PAGE

Anti-Corruption Commission should investigate.

Jaya claimed that corrupt, disreputable officials visited the site and had to open the gate to the entrance to gain entry, adding that they asked if the they were from the land office.

"Within a few days, the gates were removed and it is business as usual," he said.

A spokesman from the Petaling Jaya City Council (MBPJ) said the Drainage and Irrigation Department (DID) had ensured there was no dumping of waste into the river.

As for the 2008 incident, said it was MBPJ's responsibility.

"We must ensure illegal



activities could be a game in progress under its jurisdiction."

"DID only looks into cases such as flooding," he said.

It is could not be traced for a number.

State secretary said for Tourism, Consumer Affairs and Environment, Elizabeth Wong said it was the duty of MBPJ to put a stop to illegal dumping as rubbish disposal was under the local councils.

"A joint operation besides by staff and including personnel from relevant agencies such as the Land Office and DID, will proceed further for enforcement."

A meeting was chaired by the State Secretary in December over the issue and a clean-up has been planned in the affected areas.

"Operations have already begun in selected areas last month," she Wong in a text message to StarOnline.

1 A mountain of rubbish piled at a location on the Pandan side of Sungai Kelang. This photo was taken from a road in Jalan Tiga.

2 Fish being burned at the dumpsite.

3 Rubbish clearly visible along the stretches of the river.

— Photos by RAJA FAISAL HISHAM

River of filth

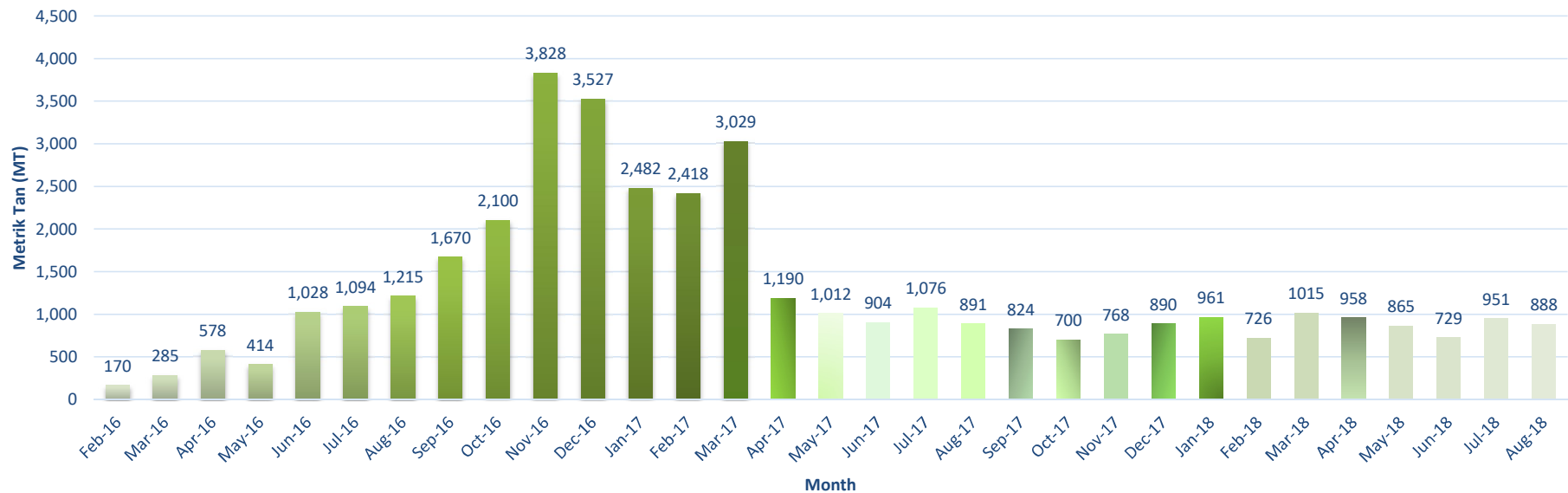
Petaling Jaya residents want the authorities to take action on the dumping garbage into Sungai Kelang. **2 & 3**





Amount of Waste Collected

JUMLAH KUTIPAN SAMPAH DI SG.KLANG
Jumlah (Feb 2016 - Ogos 2018) = 39,186 MT



Jumlah 2016 (Feb'16-Dec'16) = 15,909 MT
Jumlah 2017 (Feb'17-Dec'17) = 16,184 MT





Other Sources of Pollution

Industrial Areas

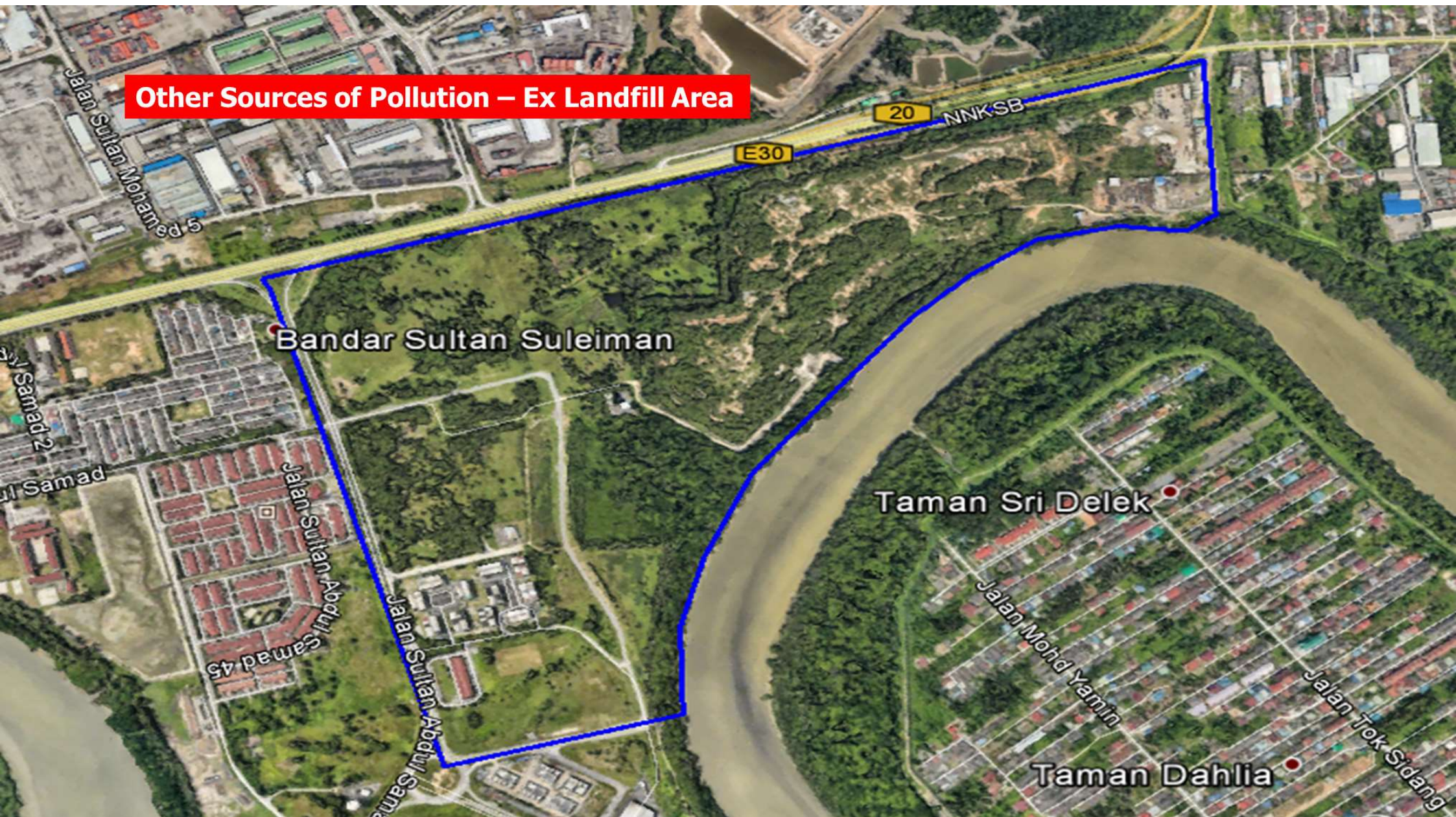
Tributaries

Klang River

Construction



Other Sources of Pollution – Ex Landfill Area



Existing Water Quality – CLASS III TO IV

Variables	Classes					
	I	IIA	IIB	III	IV	V
	Very Good	Good	Moderate	Poor	Very Poor	
Ammoniacal Nitrogen	0.1	0.3	0.3	0.9	2.7	2.7
BOD(mg/l) – Biological Oxygen Demand	1	3	3	6	12	12
COD(mg/l) – Chemical Oxygen Demand	10	25	25	50	100	100
DO(mg/l) – Dissolved Oxygen	7	5.0-7.0	5.0-7.0	3.0-5.0	3	1
pH	6.5-8.5	6.5-9.0	6.5-9.0	5.0-9.0	5.0-9.0	-
Colour(TUC)	15	150	150	-	-	-
Elect Conductivity(umhos/cm)	1000	1000	-	-	6000	-
Floatables	NV	NV	NV	-	-	-
Odour	NOO	NOO	NOO	-	-	-
Salinity(%) * *	0.5	1	-	-	4000	-
Taste	NOT	NOT	NOT	-	-	-
Total Dissolved Solids(mg/l)	500	1000	-	-	4000	-
Total Suspended Solids(mg/l)	25	50	50	150	300	300
Temperature	-	Normal 2	-	Normal 2	-	-
Turbidity(NTU)	5	50	50	-	-	-
Faecal Coliform(counts/100ml)	10	100	400	5000 @ (20000)	5000 @ (20000)	-
Total Coliform(counts/100ml)	100	5000	5000	5000	5000	5000

Kelas III – Air nampak bersih, tidak berbau, tetapi tidak selamat untuk aktiviti air

Kelas IV – tercemar, berbau busuk

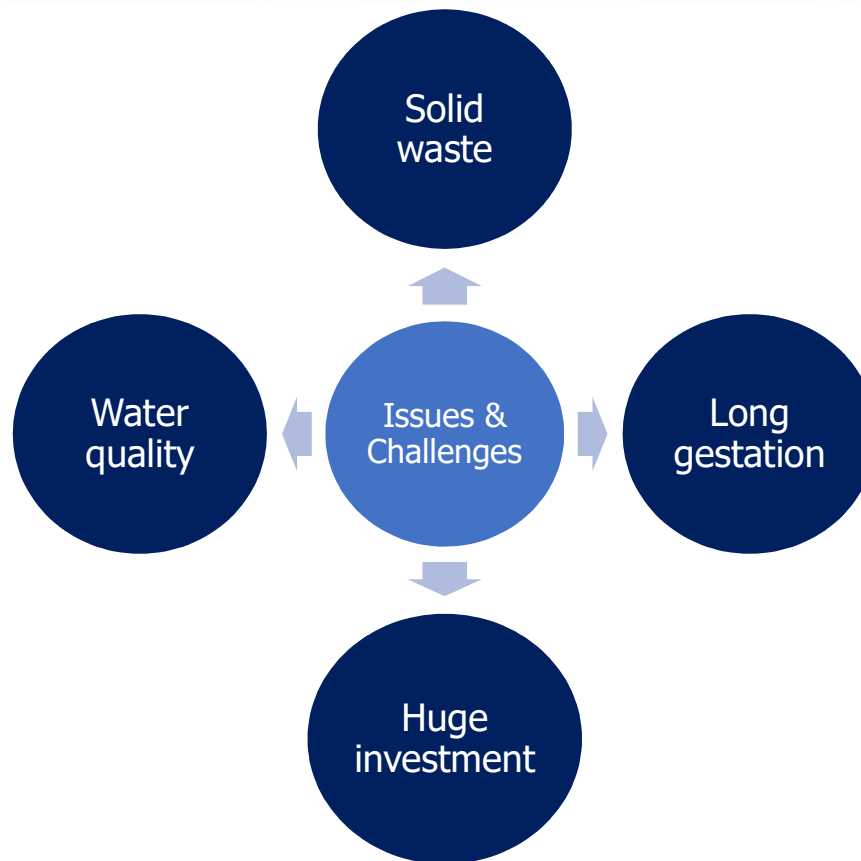
Huge Investment Required & Long Gestation

Melaka River
RM325mil
(2002 – 2010)

River of Life KL
RM4.4 Bil
(2011 – 2020)

Segget River
RM240mil
(2012 – 2017)

Singapore
River
\$200mil
(1977 – 1986)



What Should We Do?

Continue River Cleaning Operation



Continue river cleaning activity which started since February 2016





Installation of 8 new Logbooms
Status : by end of 2018 all completed



Installation of **sensors**
Status : Installed



Drone surveillance
Status : Implemented

Klang River Now...

Royal Selangor Yatch Club
(3.005248,101.389215)



Klang River Now...



Klang River Now...



Rehabilitation of the Ex Landfill



- Engineering Site Assessment (ESA)
- Proper safe closure (restore the site)



POTENTIAL HAZARDOUS WASTE ILLEGAL DUMPING



POTENTIAL RISK OF FIRE



Leachate Breakout

Variables	Classes					
	I	IIA	IIB	III	IV	V
	Very Good	Good	Moderate	Poor	Very Poor	
Ammoniacal Nitrogen	0.1	0.3	0.3	0.9	2.7	2.7
BOD(mg/l) - Biological Oxygen Demand	1	3	3	6	12	12
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1. Collaborative enforcement among all integral agencies
2. Application of technology

The Need for Catalyst Projects

Mangrove Point

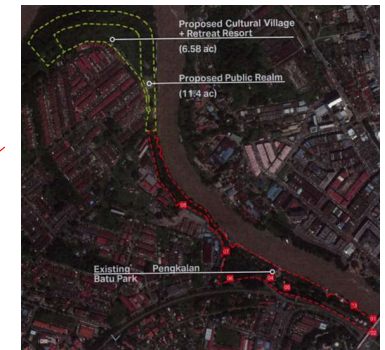


Land Area; **71 ekar**.
Proposed to remain as "Mangrove Protection" area.
Enhancement includes construction of boardwalk, galleria and other facilities for public enjoyment.



- As a step to promote Sungai Klang and Bandar Diraja Klang
- Boost water activity
- Attract investment

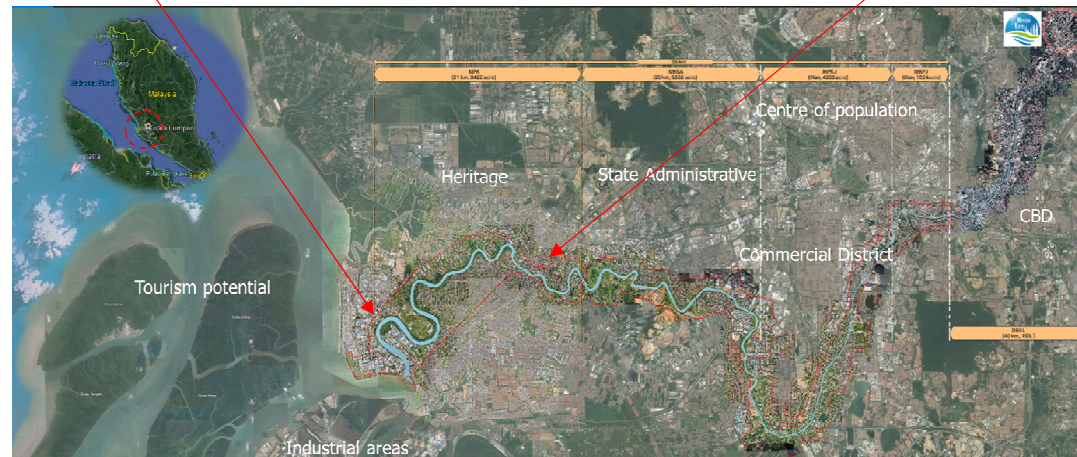
Taman Awam Pengkalan Batu



Land area; **15.97 acres**.

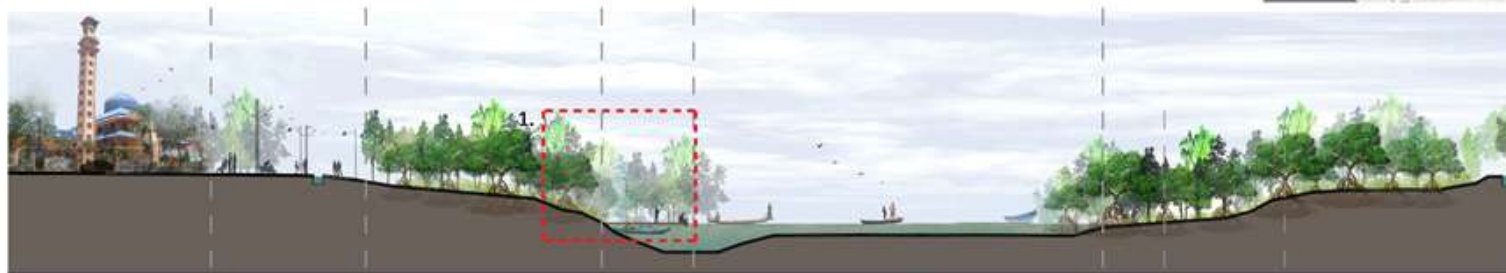
Scope of work:

1. Enhancement of the existing structure
2. Construction of new structure (if necessary)
3. River embankment
4. Landscaping works



Section through Mosque to Mangrove

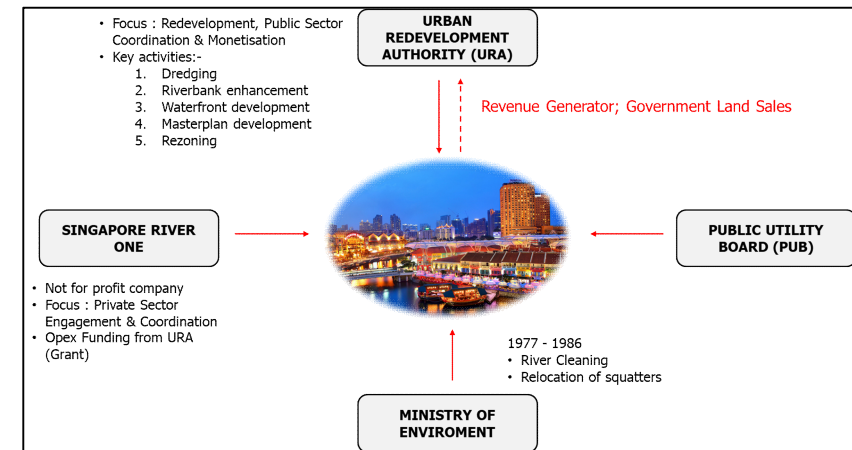
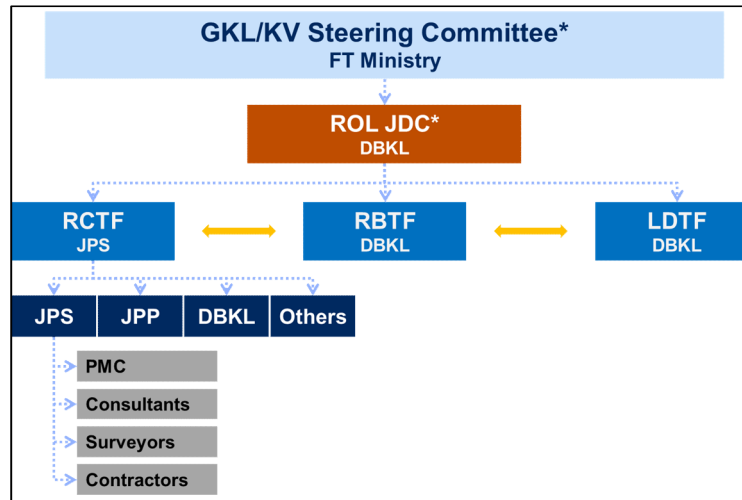
1. **EXISTING CONDITION:**
Poor condition of fishing port structure.
- DESIGN APPROACH:**
Enhance with a proper pier or reintroduce traditional fishing activities.



- Sets the framework for the physical and spatial arrangement and composition of built-forms and their three-dimensional relationship with the spaces around them and the surrounding settings for achievement of aesthetic and socio-cultural qualities
- Technical guidelines / specification on the development/restoration of the riverbank area i.e. construction of walkways, buildings, parks, other public spaces, access roads, commercial establishments.
- Alignments of utility infra lines along Klang River.
- Prevention of the uncontrollable development(s) that will cause irreversible environmental impact i.e flash flood.
- Prevention of the discharge of treated and untreated sewage into the river through construction of sewers diversion works.

Enhance River Governance

Collaborative governance enables better coordination and cooperation across geographical boundaries



- 120km stretch of Klang River covers six (6) municipalities : **MPAJ, DBKL, MBPJ, MPSJ, MBSA and MPK.**
- Issues** : Fragmented structures and policies with non effective mutual communication, the basis of dialogue and platform no link to a link to coordinate, splashing through the decision-making watershed affairs of the parties to a conflict of interest.
- Proposed solution** : Creation of collaborative governance by establishing unified river management entity for Klang River. This shall eradicate complex hierarchies, better quality of policy outputs and achieving economic of scales.

The Selangor State Government requested to LLSB to conduct the awareness campaign in relation to the river cleaning and rehabilitation activities. The idea is to educate the public on the importance of rivers and the environment in our lives while consequently highlighting the critical state of pollution faced by the Klang River.

EDUCATIONAL TALKS

PLOGGING

LAUNCHING OF SMG



SOURCE : GOOGLE

Section 4.0 – Summary & Conclusion





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Y.A.B. Dato Seri Azmin Ali, Budget Speech 2016

Kerajaan Negeri telah mengorak langkah supaya Sungai Klang yang selama ini mengalir lesu diberikan pembelaan.....

Status terkini : telah diberikan pembelaan

Kita gagal melihat sungai sebagai sumber ekonomi dan pusat pertumbuhan.....

Status terkini : Pelan Pembangunan sedang dilaksanakan dengan tujuan utama bagi meningkatkan pertumbuhan ekonomi di Selangor dan Malaysia secara amnya.

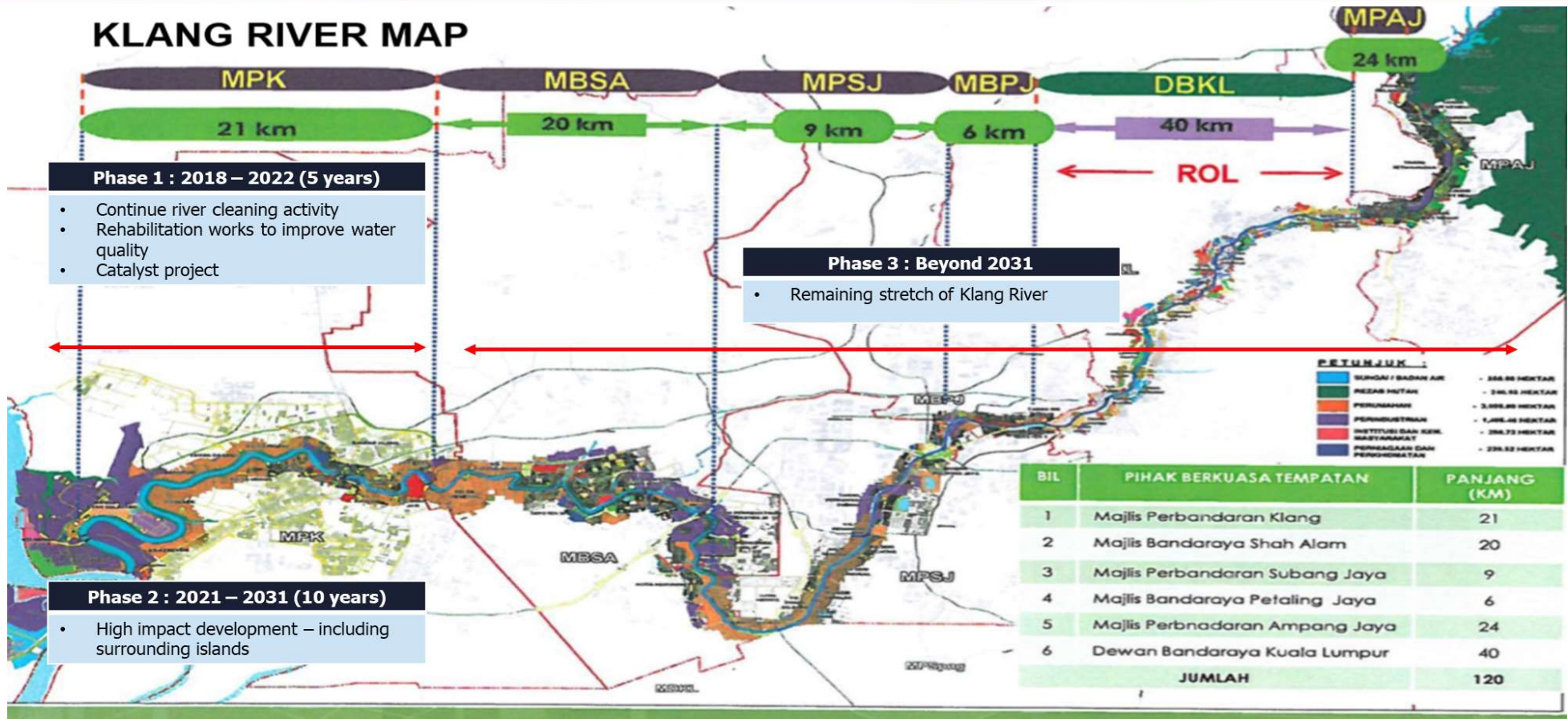
Our Commitment

Public-Private Partnership Model in SMG development



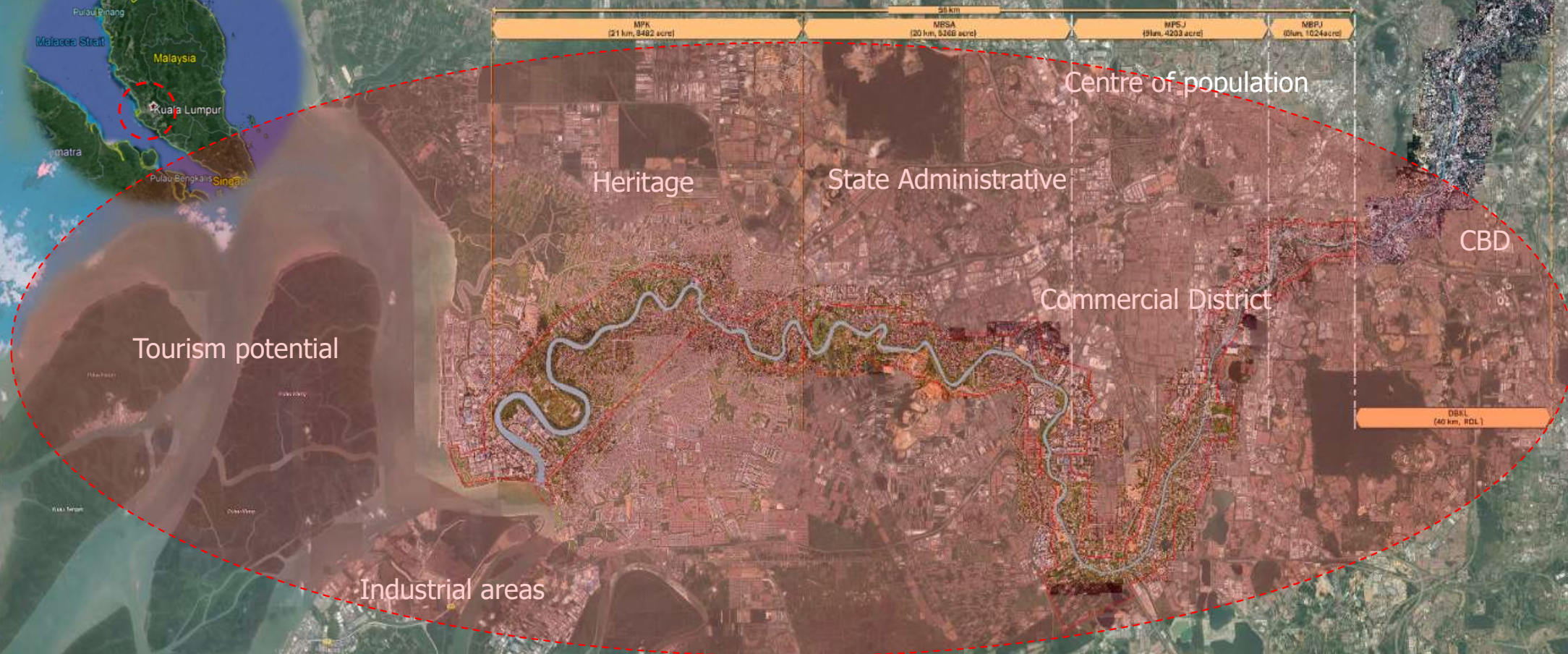
- Removal of waste
- Work started since 2016
- Improvement in water quality
- Unlock development potential

Implementation Phases



End Game...

CENTRAL ECONOMIC REGION



- Support affordable housing industry / sectors;
- Job creation in various sectors including construction, services, manufacturing and digital economy;
- Support industry growth (KL → Klang);
- Boost local tourism industry;
- Attract foreign direct investment ("FDI"); and
- Re-coupe back the investment made by the federal government for ROL project

Vision: Selangor as the Smart State By 2025

Smart Selangor Goals:

1. Increased Economic Growth
2. Ensure Environmental Preservation
3. Enhanced Quality of Life (QoL)
4. Job Creation
5. Stronger Fiscal Position of the State

A Smart Selangor will need to have all its constituents 'Smart' and working together in a smarter way to deliver sustainable growth and higher quality of life for all

Selangor Maritime Gateway fulfils all the Smart Selangor Goals



THANK YOU

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