



# PPP as a Solution to Watershed Financing:

## A Case Study of PPP Practice on Nanming River Watershed Management in China



**Dr. Lili Gan**  
R&D Dept.  
**China Water Environment Group Ltd.**  
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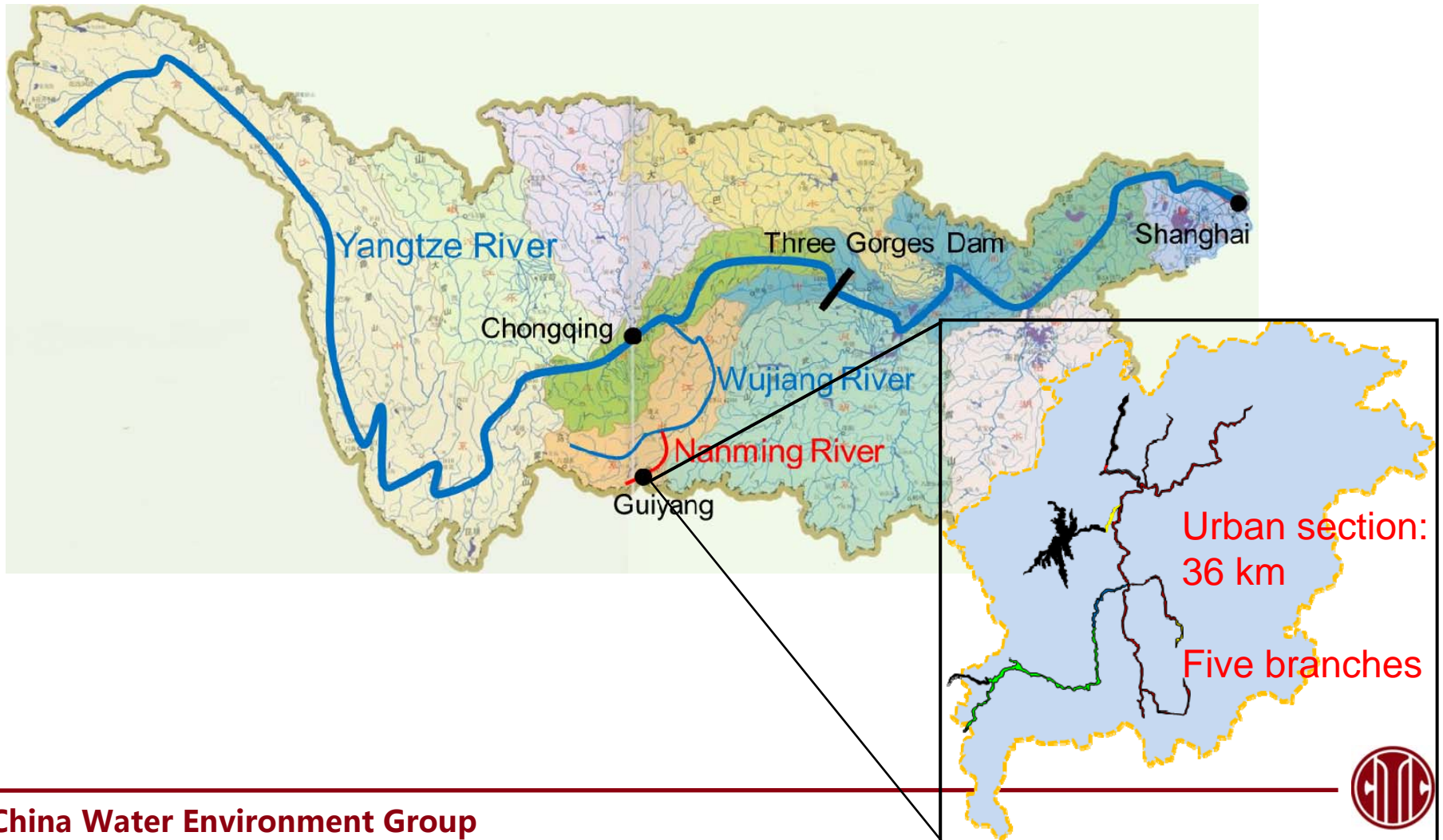


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**About the  
Nanming River  
PPP Project**

# Nanming River – the Mother River of Guiyang City

- Upper-Yangtze River Catchment; western China with low economic level
- Total length 215 km; The **City of Guiyang**, Capital of Guizhou Province





# History of the River Management

- Management projects **several times** for the past 30 years



Former Chinese President  
Mr. Hu Jintao Volunteered  
in Management Project in 1980s  
as the Province Governor

- Water quality **relapsed** as the economy grew; capacity exceeded 2 times



Situation in 2011 before the PPP Project (**Black & Odorous**, Worse than Grade V)

## History of the River Management

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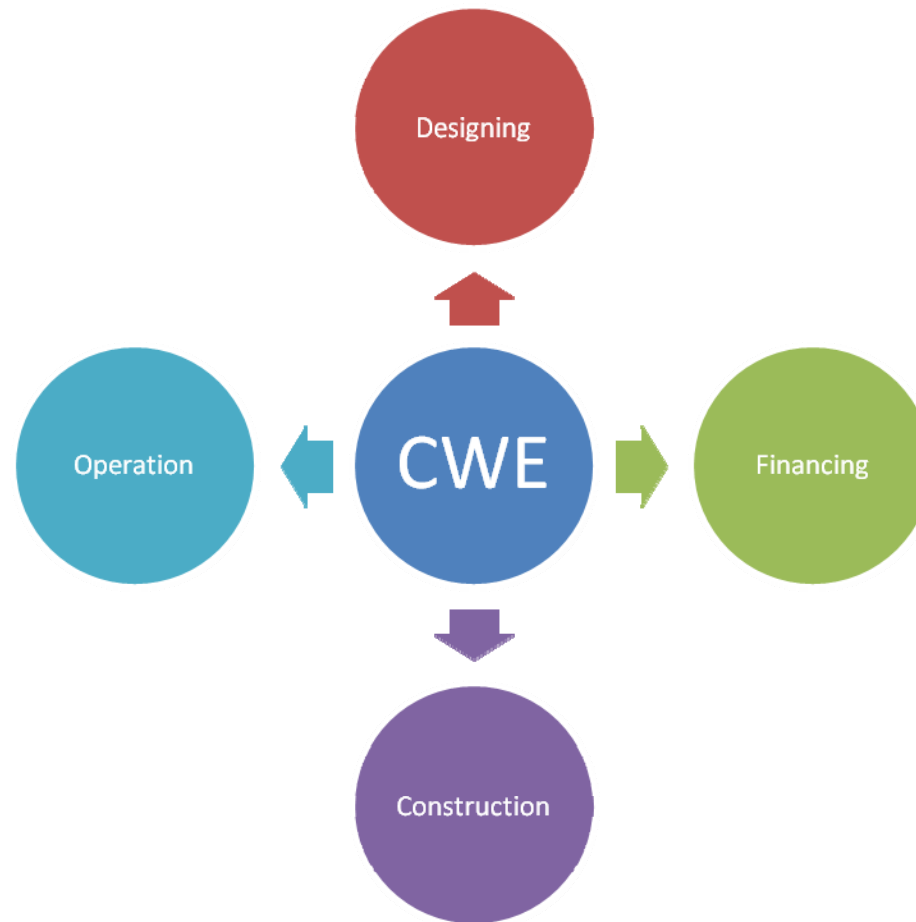
- The first **Eco Forum Global** held in 2013, before which urgent demand to improve the water quality
- But huge **local financial pressure**



- In **2012**, Guiyang Government opened the market to **Social Capital(Private Sector)**

## The New River Management Project in PPP Mode

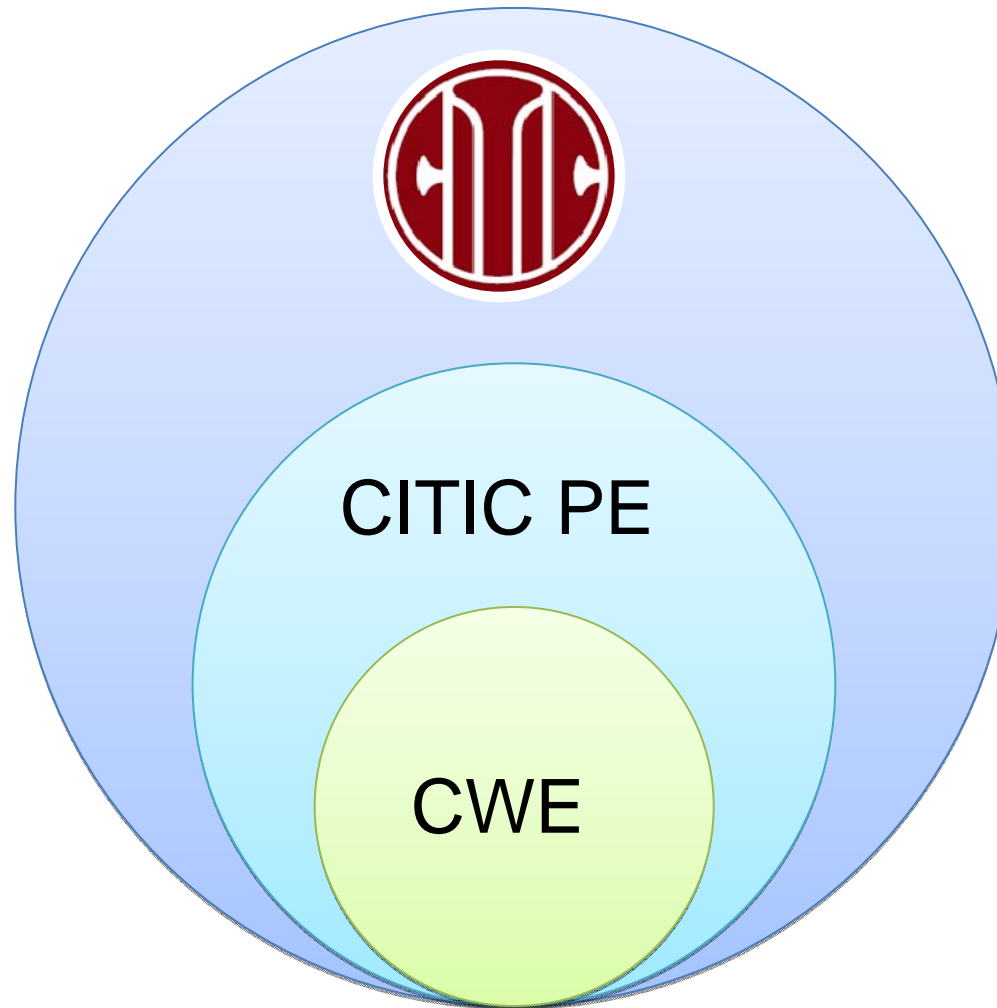
- After a **market test**, China Water Environment Group won the bidding as the Private Sector.
- A Water Affair **Investment Platform**



# The New River Management Project in PPP Mode

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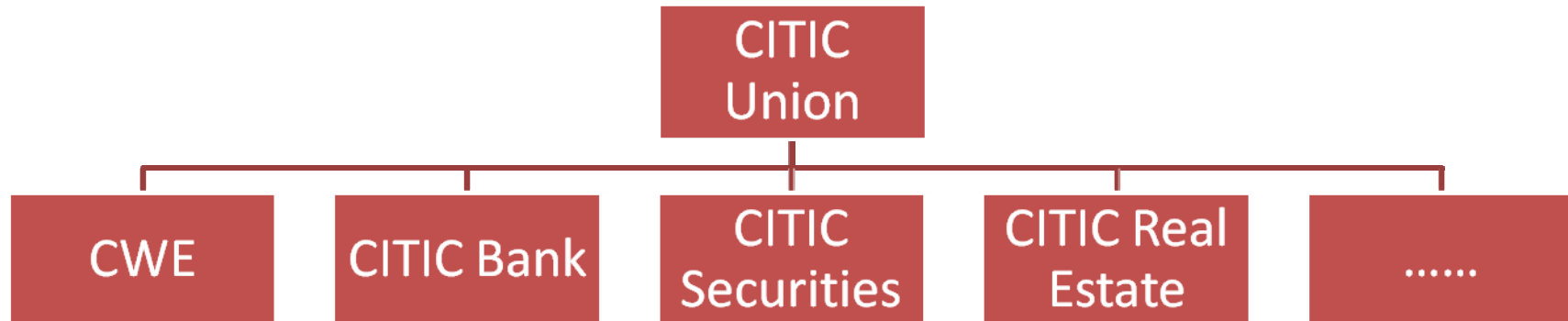
- CITIC Group (China International Trust and Investment Corporation)  
Biggest conglomerate in China



## The New River Management Project in PPP Mode

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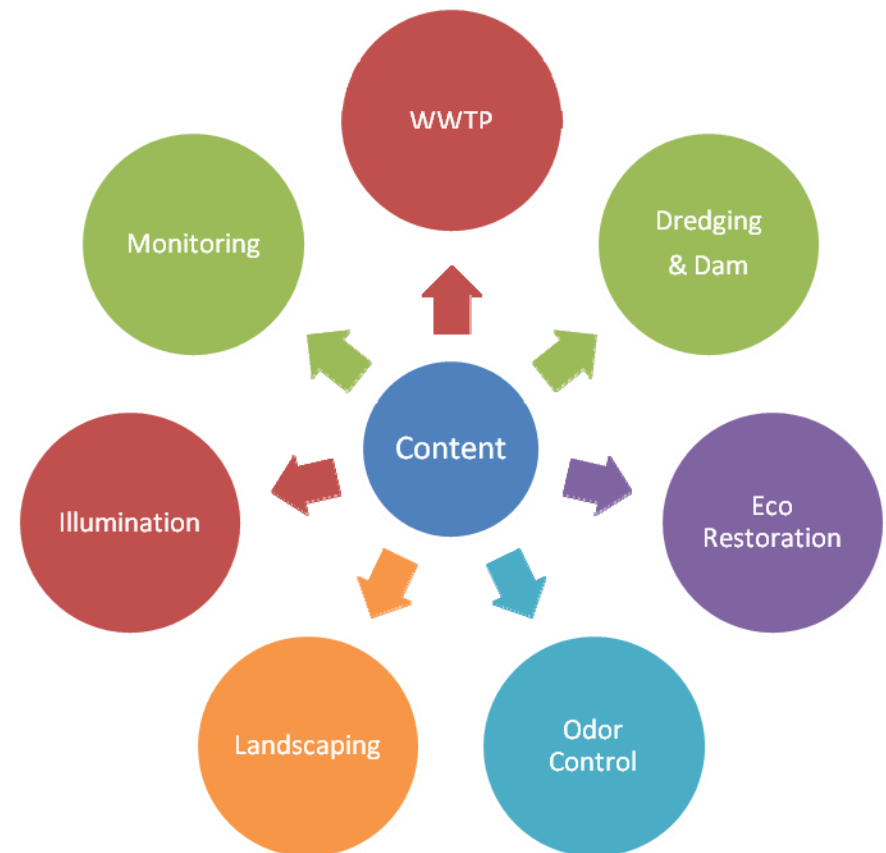
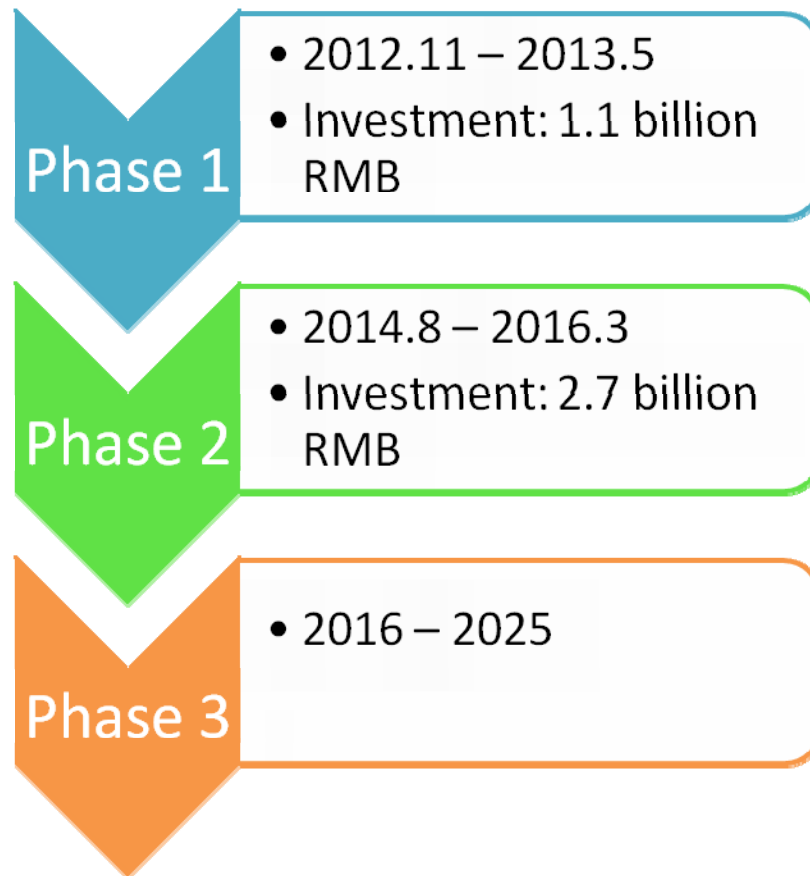
- **PPP Union** formed in CITIC Group involved in Nanming River Project





# The New River Management Project in PPP Mode

- 6 months investigation, 10 seminars with top scholars
- **Management Roadmap** – 3 phases, 7 sub-projects



## Results

- 2 years, 2.5 billion RMB

			Swimmable	DW source	Eco conservation
Grade V	Grade IV	Grade III	Grade II	Grade I	

	Worse than Grade V	Grade V	Grade IV	Grade III
2012.06 (Before treatment)	51.0%	10.1%	8.8%	30.1%
2013.07 (After Phase I)	17.4%	22.0%	28.2%	32.4%
2015.06 (Phase II)	7.0%	26.8%	31.6%	35.6%



# Results

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2012

Now

Position 1



Position 2





# Results

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2012

Now

Position 3



Position 4



# Results

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# Results

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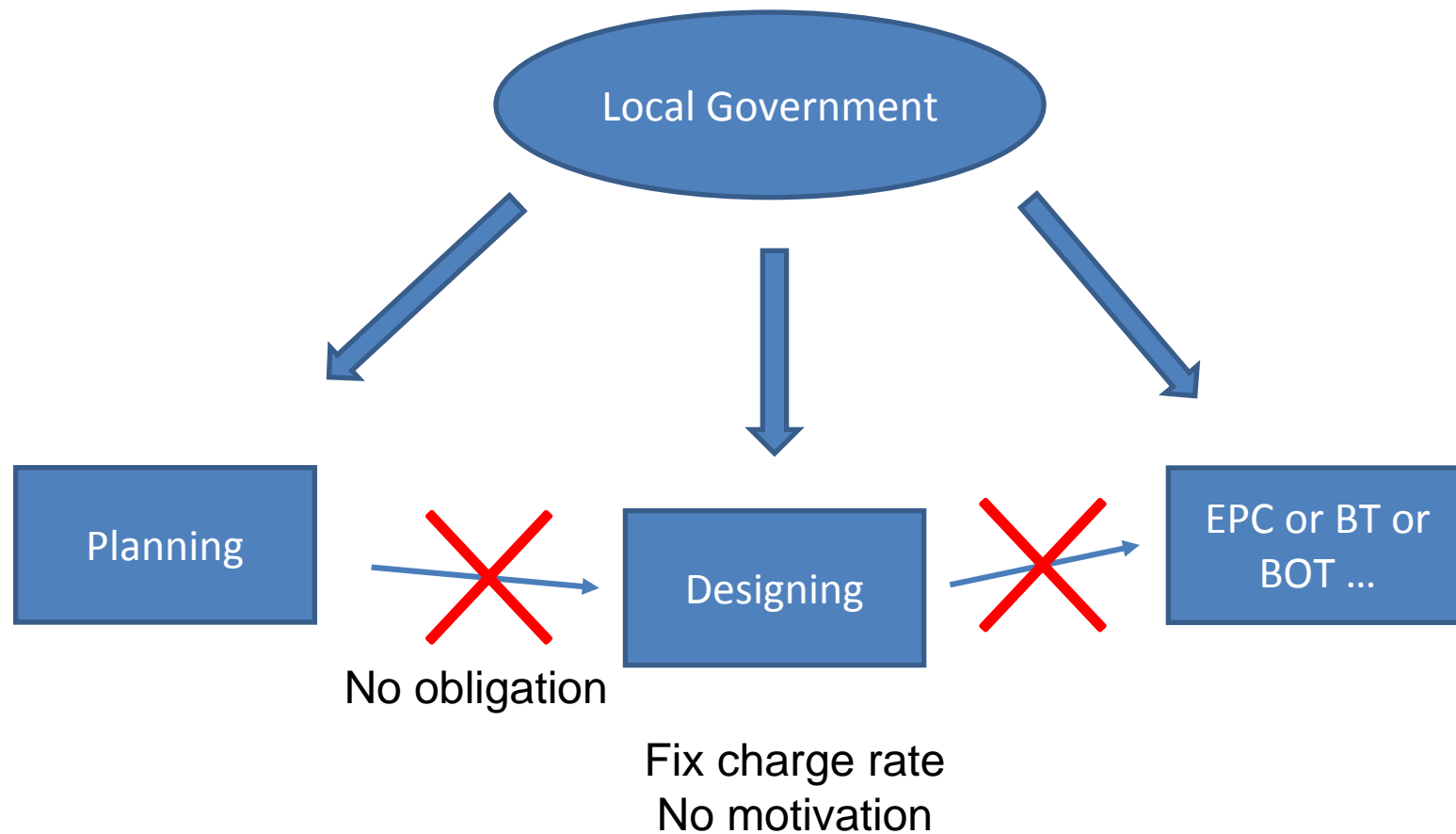
# 2

## **Value for Money**

# Investment Efficiency

- Saving the investment from the very beginning – Let US do the **planning**

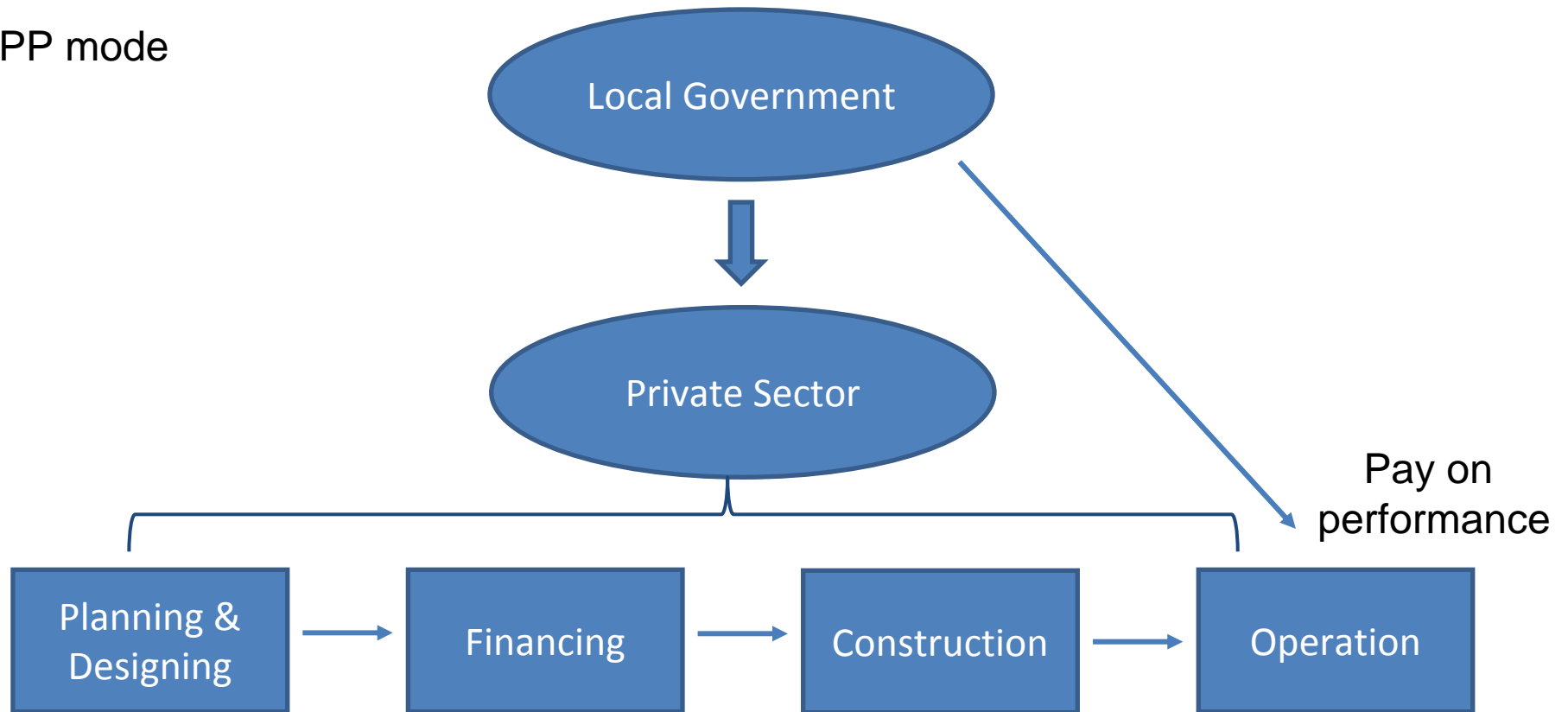
The old procurement mode



# Investment Efficiency

- Saving the investment from the very beginning – Let US do the **planning**

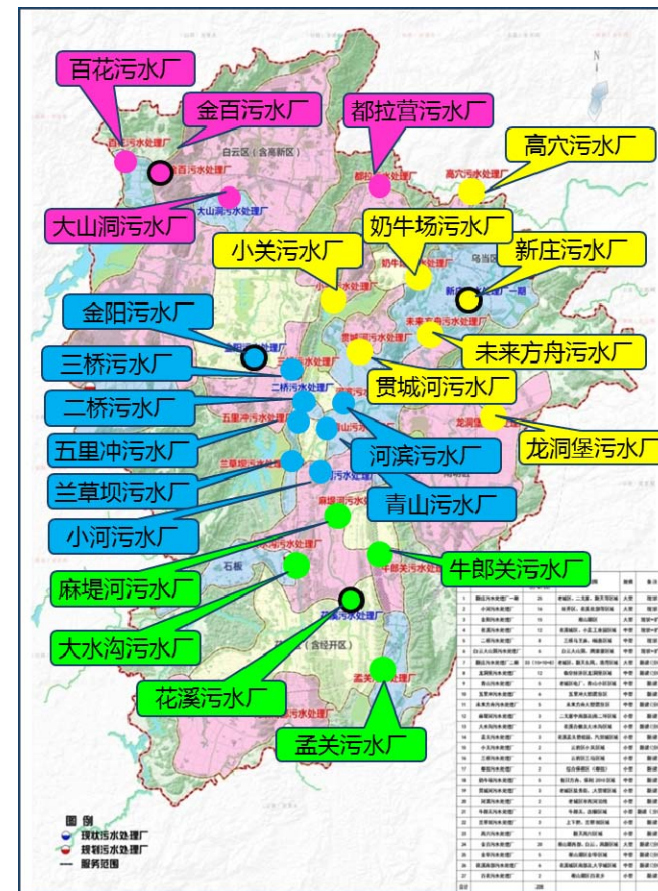
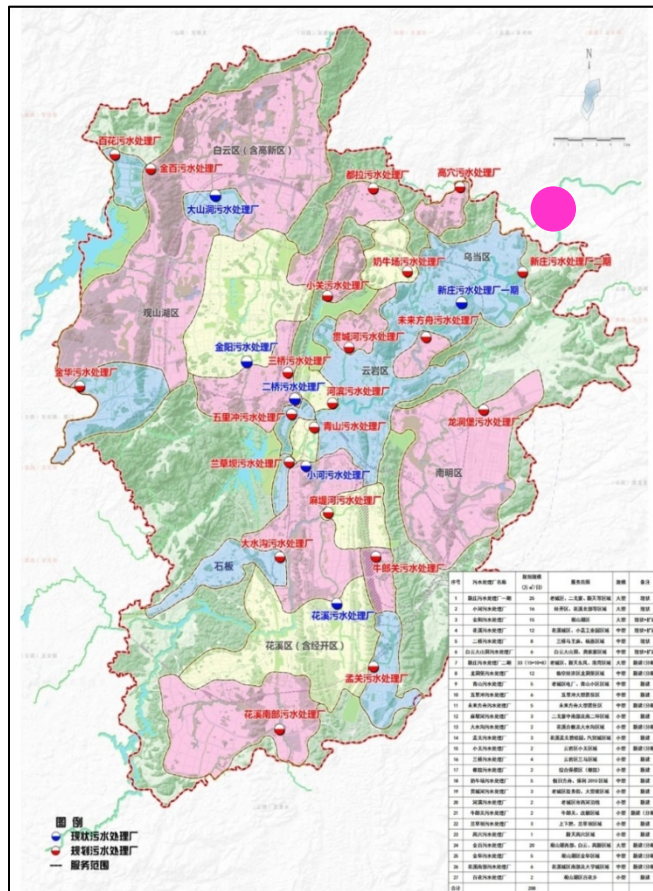
PPP mode





# Investment Efficiency

- Decentralized WWTP distribution
- Saving sewer pipe cost 1.1 billion RMB, pumping cost 30 million RMB/a
- Saving water resource and providing a higher river flowrate





# Investment Efficiency

- Underground WWTP – no odor, no noise, no protection zone, water garden
- Saving land 72 hectare



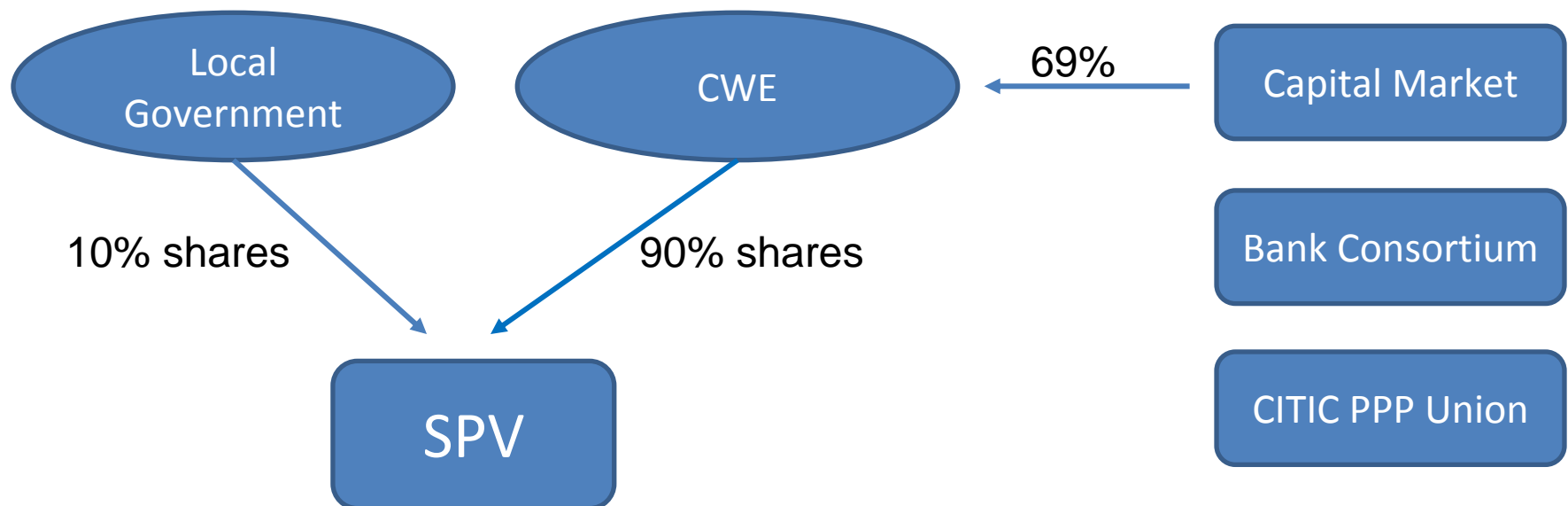


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**Government  
Affordability**

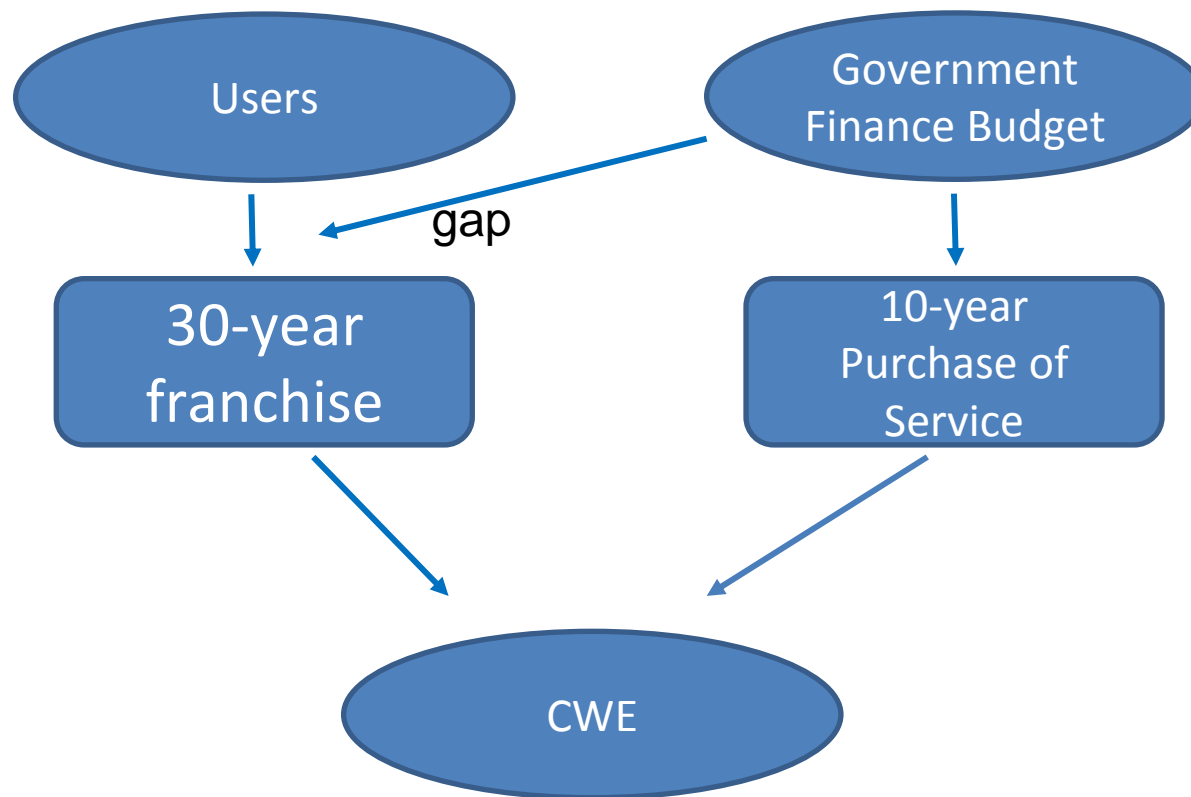
## Investment Structure

- SPV holding – 10% from local government, 90% from CWE
- Financing – all by CWE, 31% from our own capital, 69% from capital market



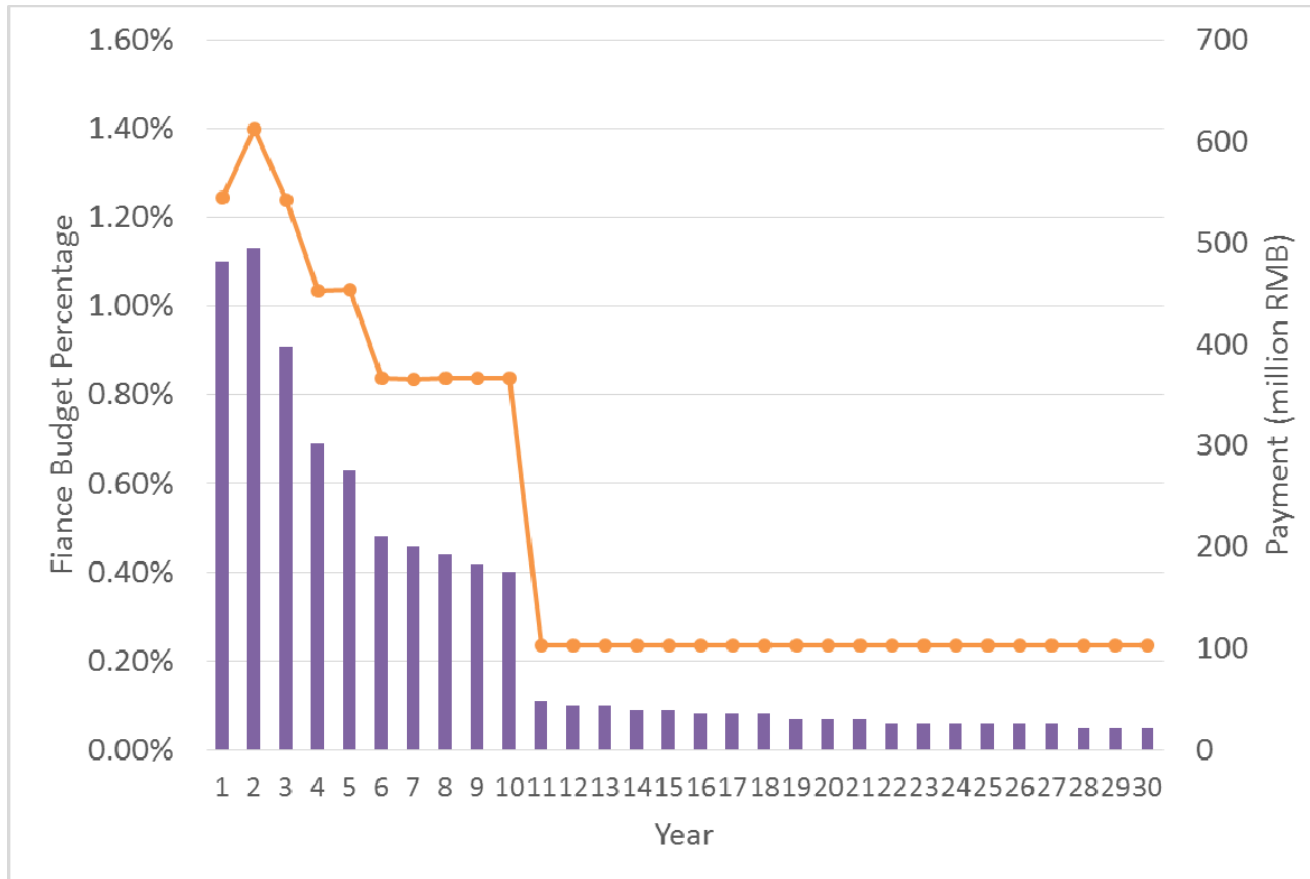
## Return mode

- Incoming:
  - 30 years franchise of WWTP etc.
  - 10 years purchase of service
- Different IRRs



## Government payment

- Government payment = risk deposit + user fee gap + purchase of service



- PPP savings > Private Sector Profit Margins







# 4

## **Thoughts on Chinese PPP Rush**

## PPP Rush

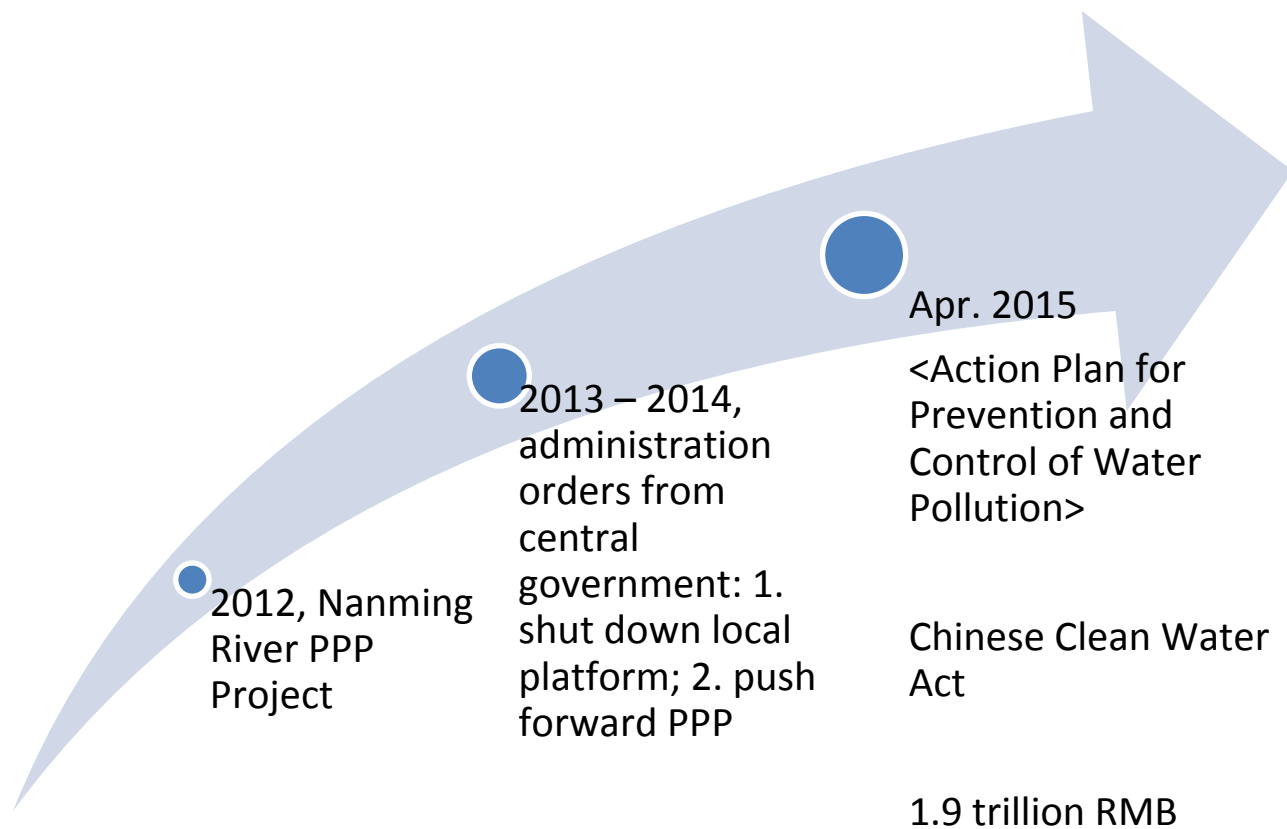
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- Gold Rush – PPP Rush
- Nanming River PPP Project – awarded as the first batch of PPP demonstration projects by Ministry of Finance in 2014 – 14/30, 180 b RMB
- 2015, second batch of the demonstration projects – 50/206 , 650 b RMB
- Lots of the projects cannot find the private sectors
- Why in a hurry?



# PPP Rush

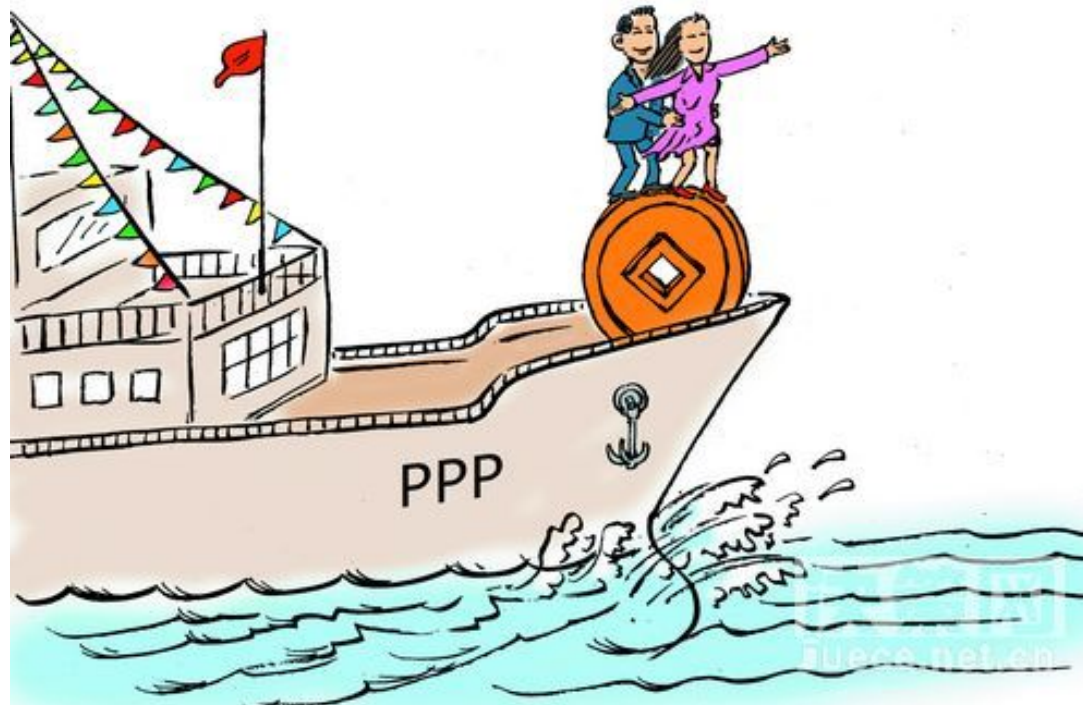
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## PPP Rush

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PPP is a marriage instead of a wedding.



Spirit of Contract

## Outlook

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China Water Environment Group is of the enthusiasm and ability to cooperate with governments and companies, through PPP to provide a better water environment to the whole Asia.







**Thank you!**