

**Asian River Restoration Network (ARRN)**  
**International Forum on Waterfront and Watershed Restoration**  
**“Urban River Restoration for Sustainable Development”**

# **National Policy on Water Resources Restoration in Thailand**

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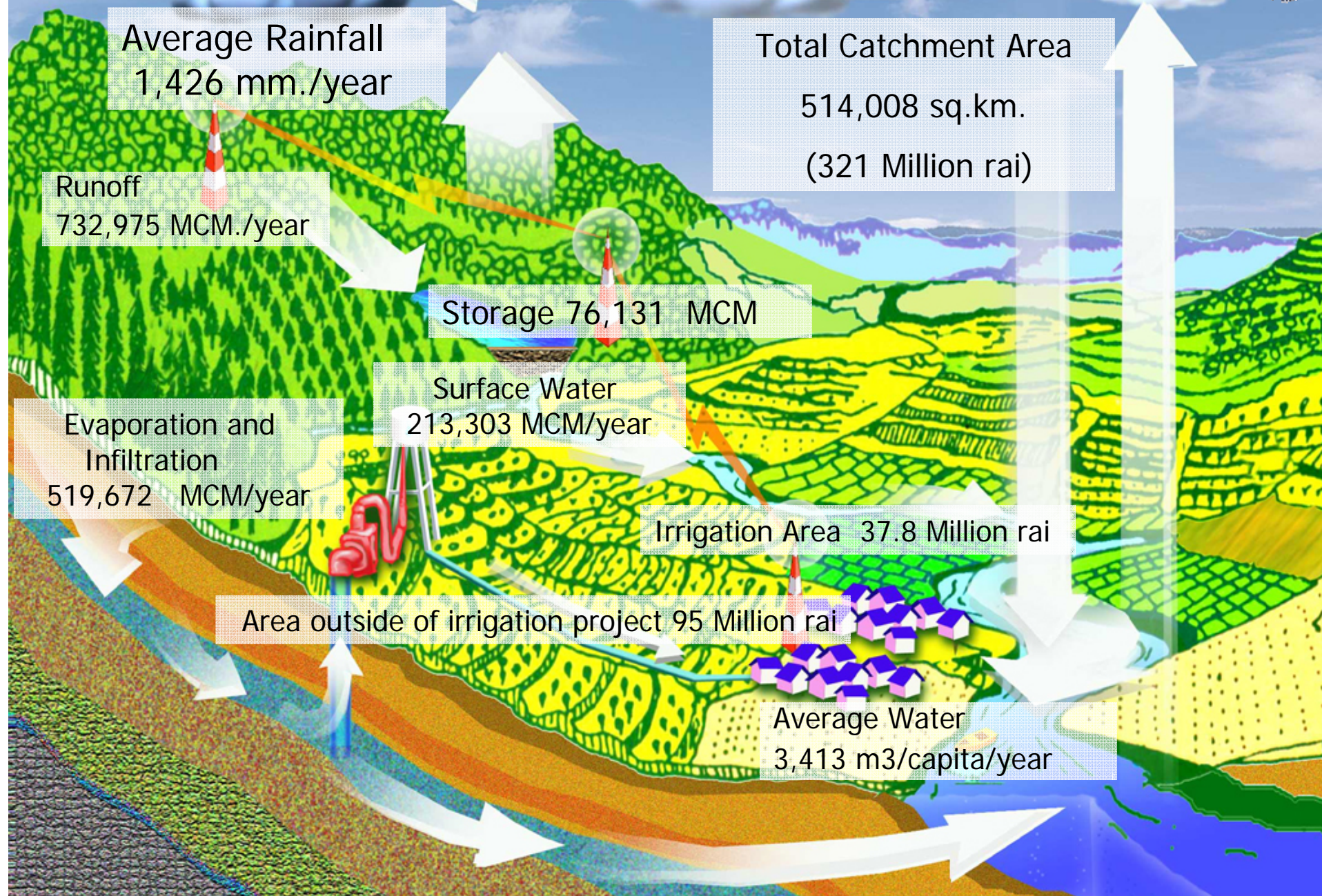


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- Problem and Cause of Degradation
- National Policy and Plan
- Key Factors for Achievement in Thailand
- Conclusion and Recommendation



# Water Cycle of Thailand





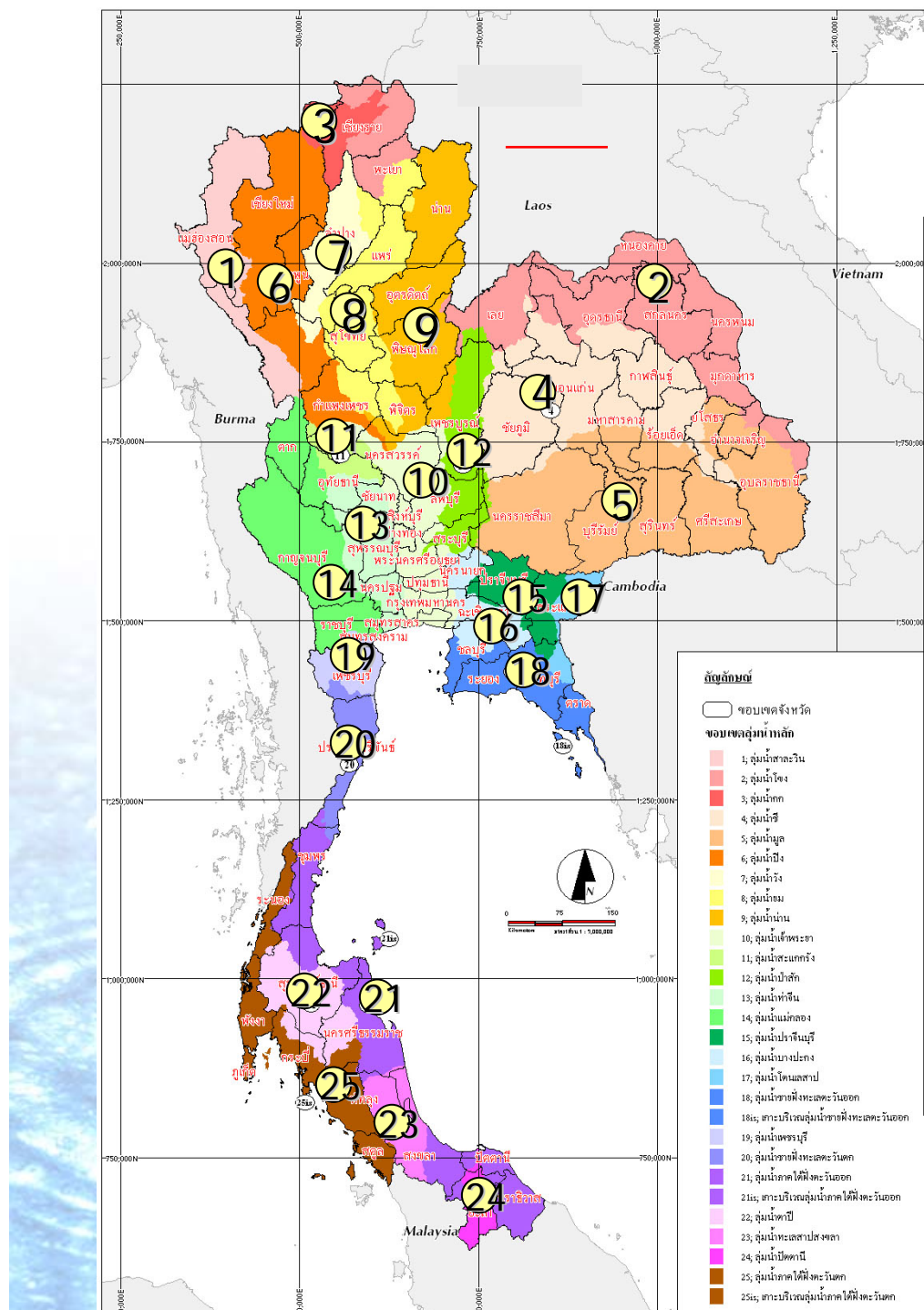


Mainstream of each main basin

Total length of mainstream 87,200 km.

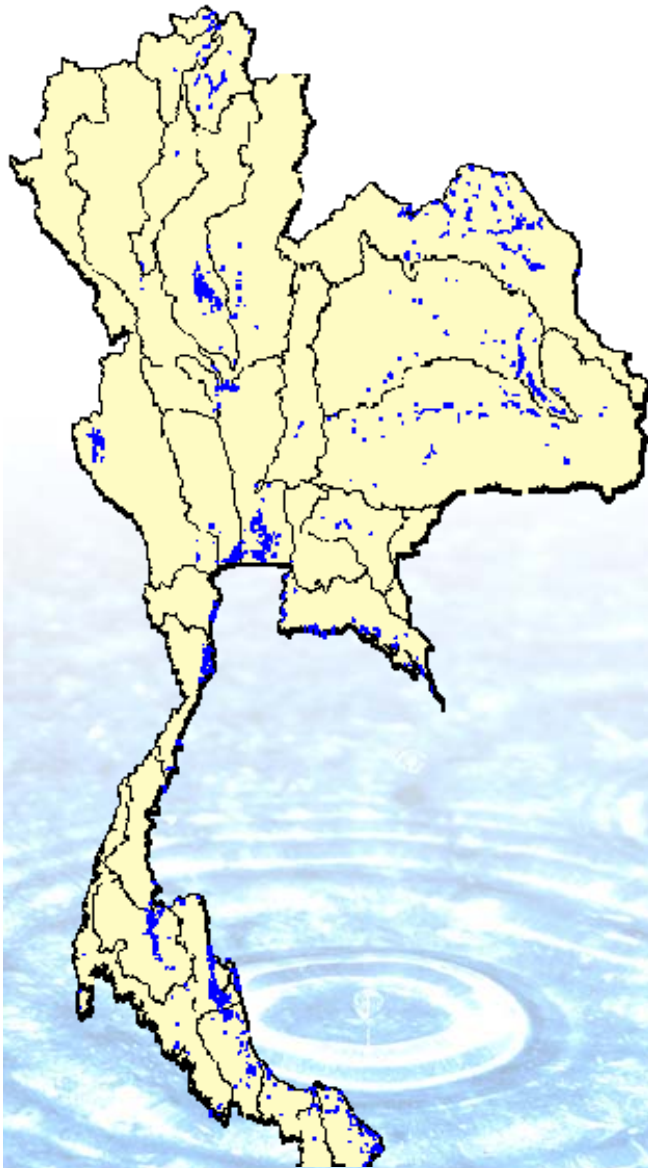
## 25 Main Basins

1.Salawin	14.Mae Klong
2.Mae Khong	15.Prachin
3.Kok	16.Bangpakong
4.Chi	17.Tonle Sap
5.Mun	18.East Coast
6.Ping	19.Phetchaburi
7.Wang	20.West Coast
8.Yom	21.South East Coast
9.Nan	22.Ta Pi
10.Chaopraya	23.Songkhla Lake
11.Sakaekrang	24.Pattani
12.Pasak	25.South West COast
13.Thachin	





# Water Resources and Wetland



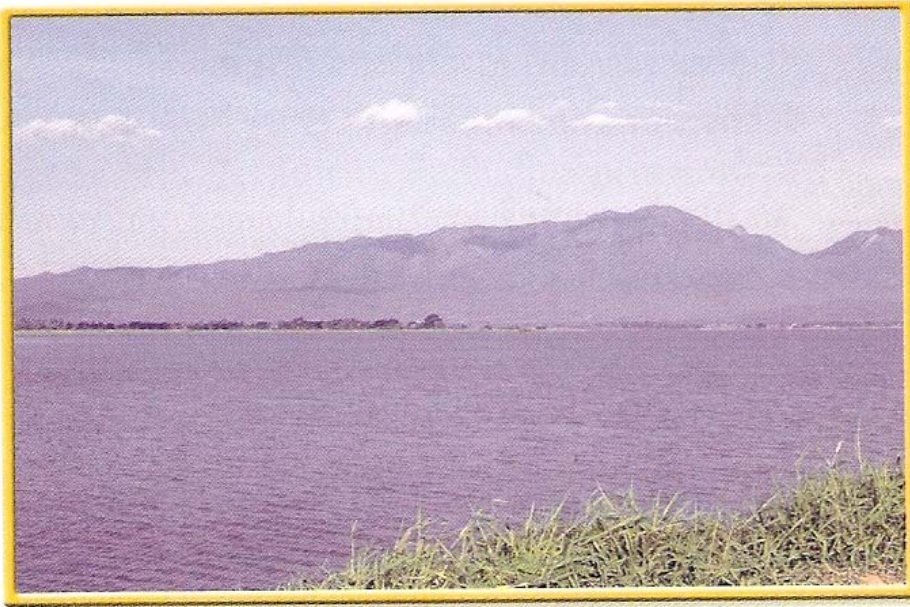
## River Basin

Country total area	514,000 sq.km.
Major river basin	25
Sub basin	254
Tributary of sub basin	5,000

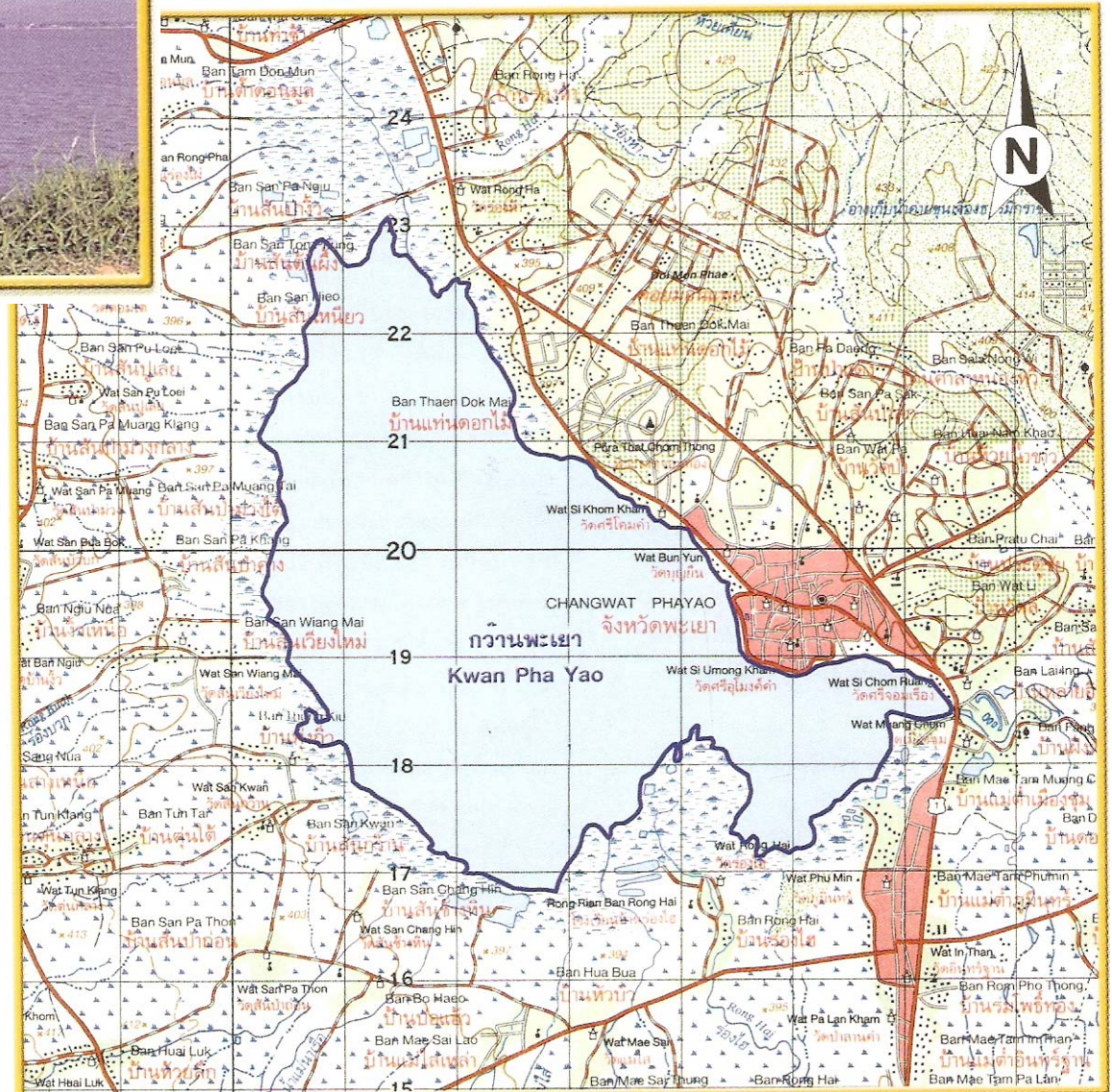
## Wetland

International	61
National	208
Local	42,384
Wetland covers 36,620 sq.km. (7.5% of total land area)	



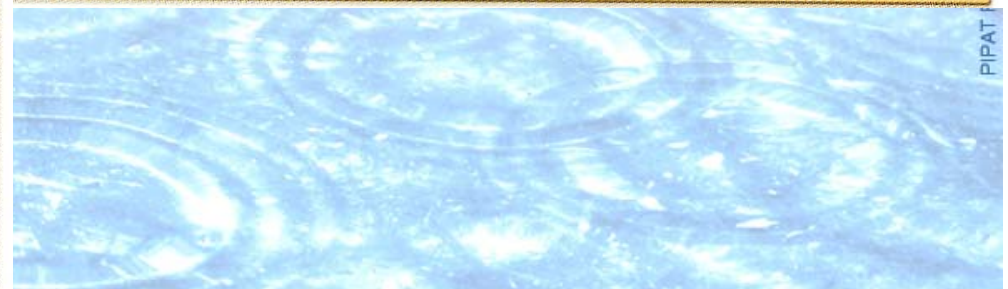


# Kwan Pha Yao





# Bung Boraphet



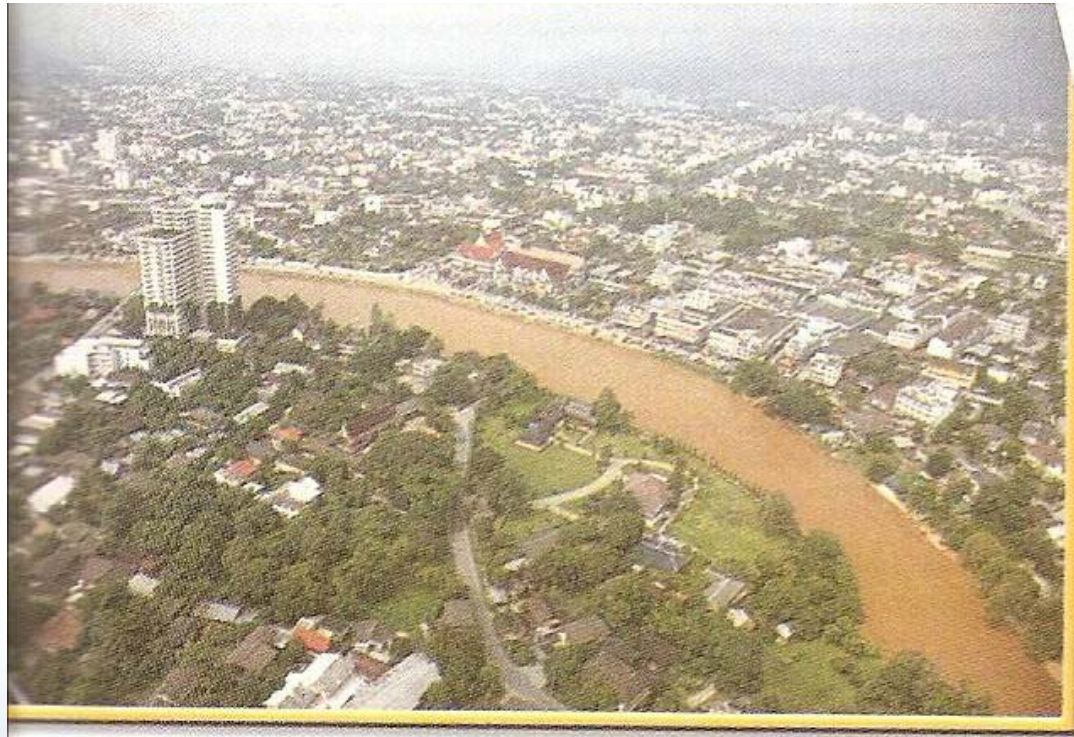




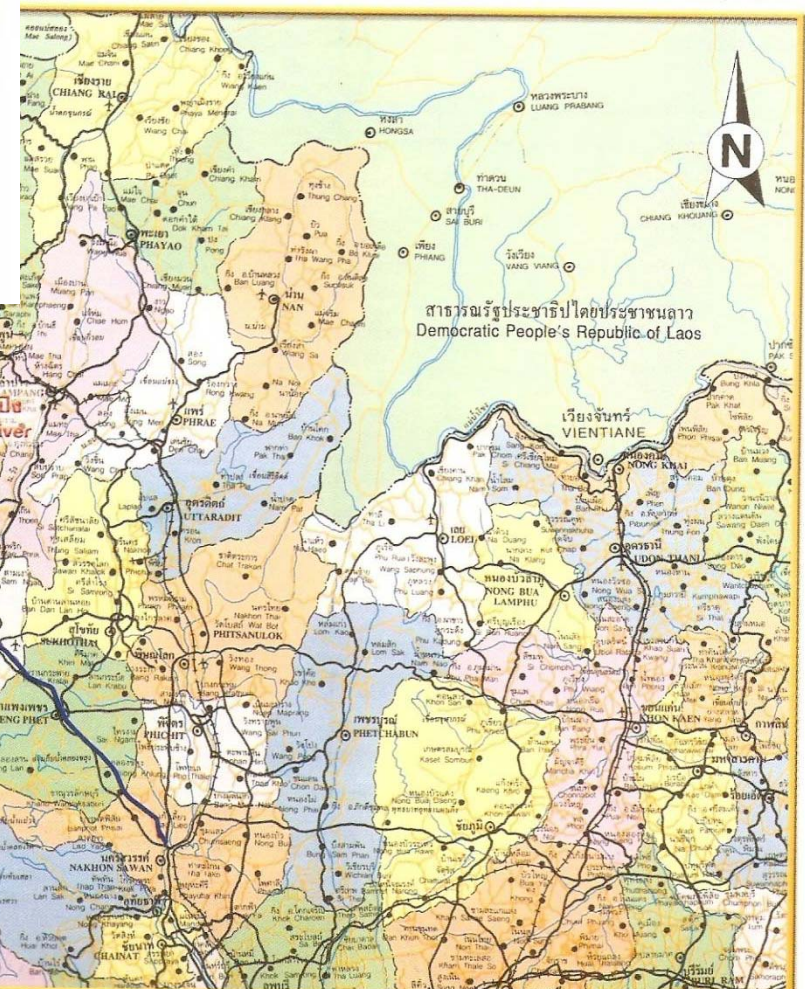
# Songkhla Lake





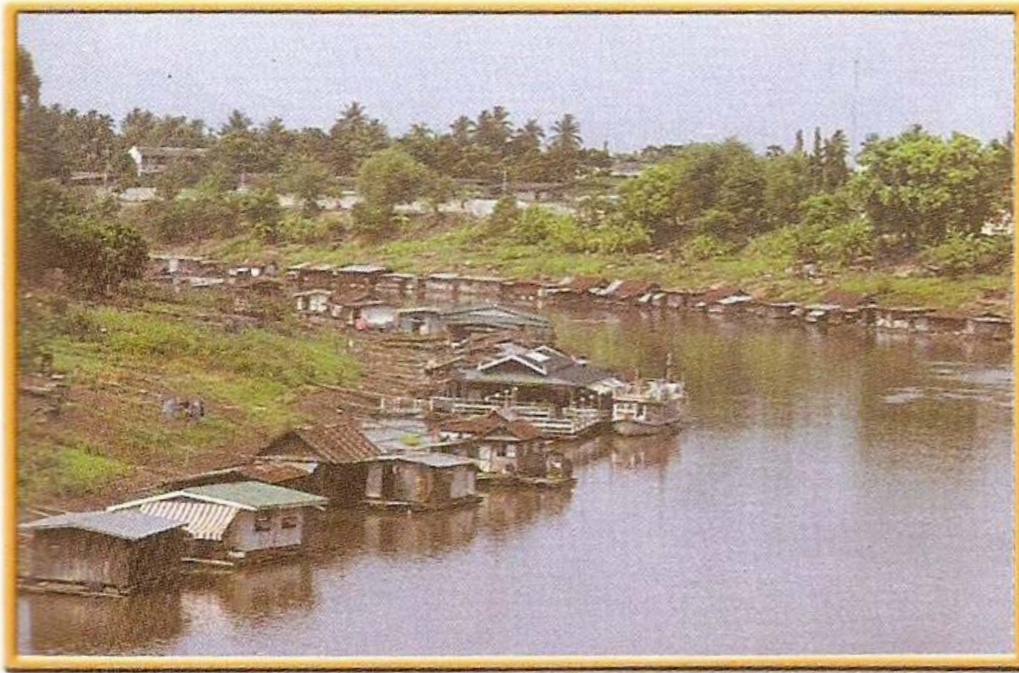


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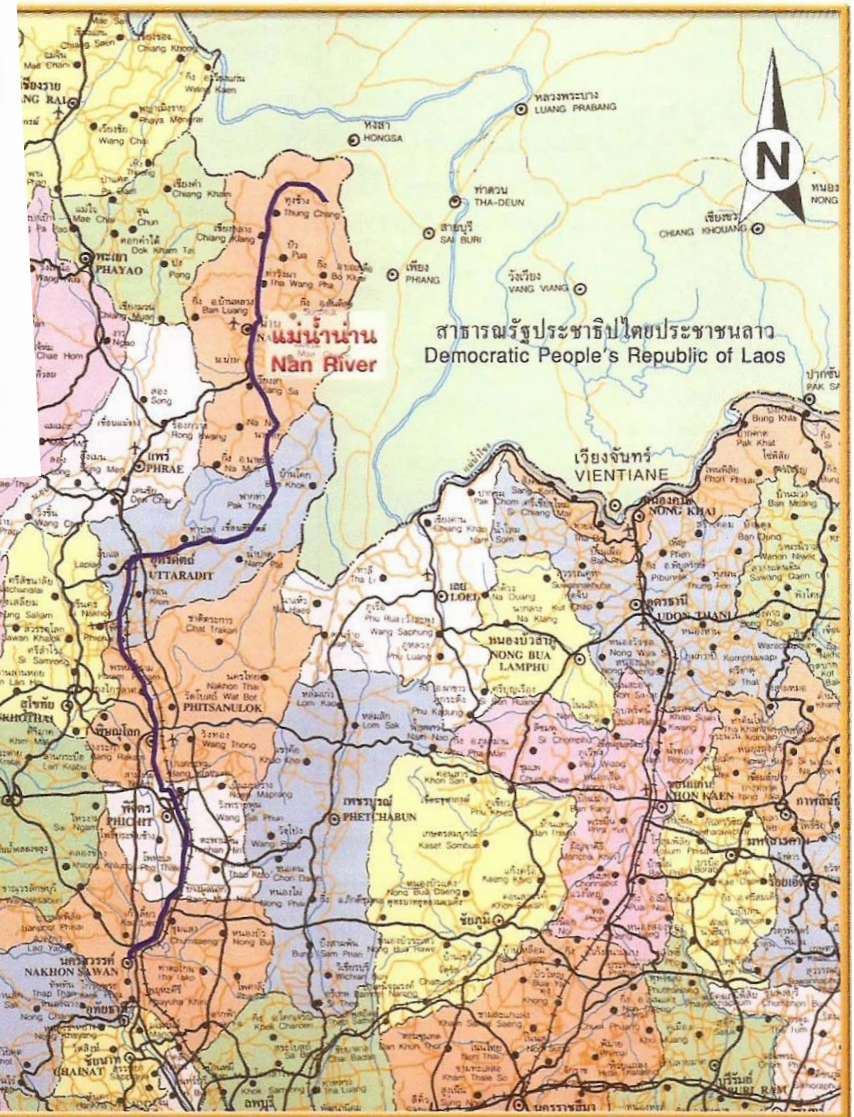


Ping River

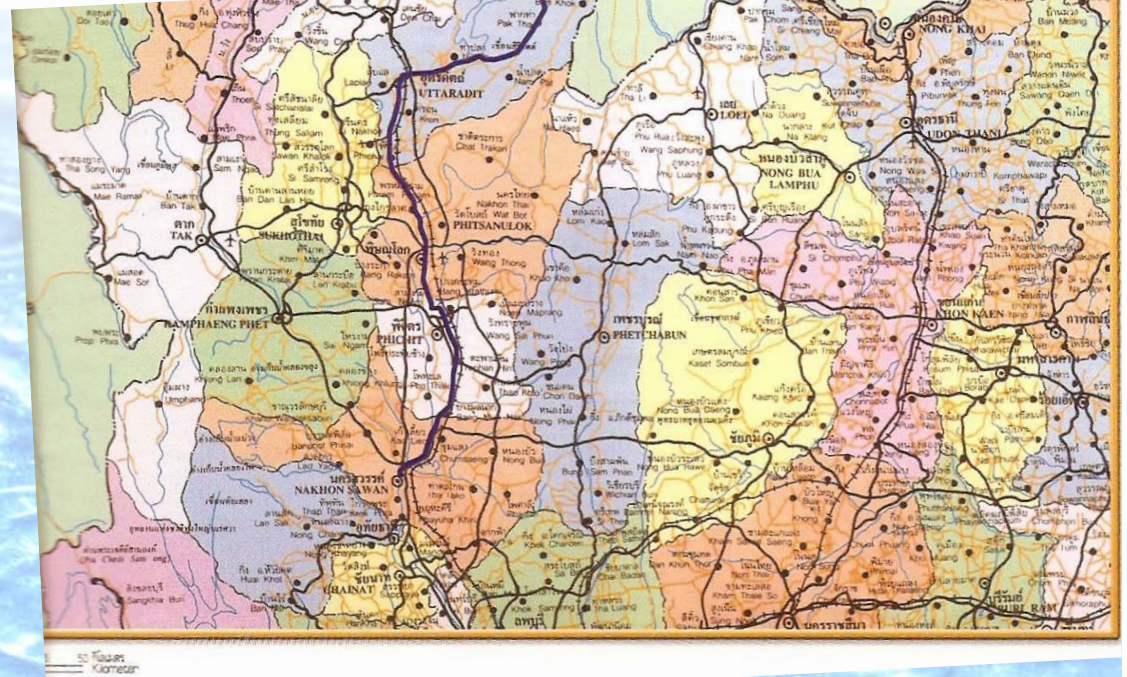




III, 5144 IV, 5145 I, III, 5146 I, II, 5147 I, II, 5148 II



Nan River





# The Importance of natural water sources/wetland



- **Support biodiversity**
- **Retain and retard water for the purpose of flood and drought mitigation**
- **Support economic activities e.g. fishery, forestry around the area**
- **Use for navigation**
- **Use for recreation**

# Problem and Cause of Degradation

## Problem

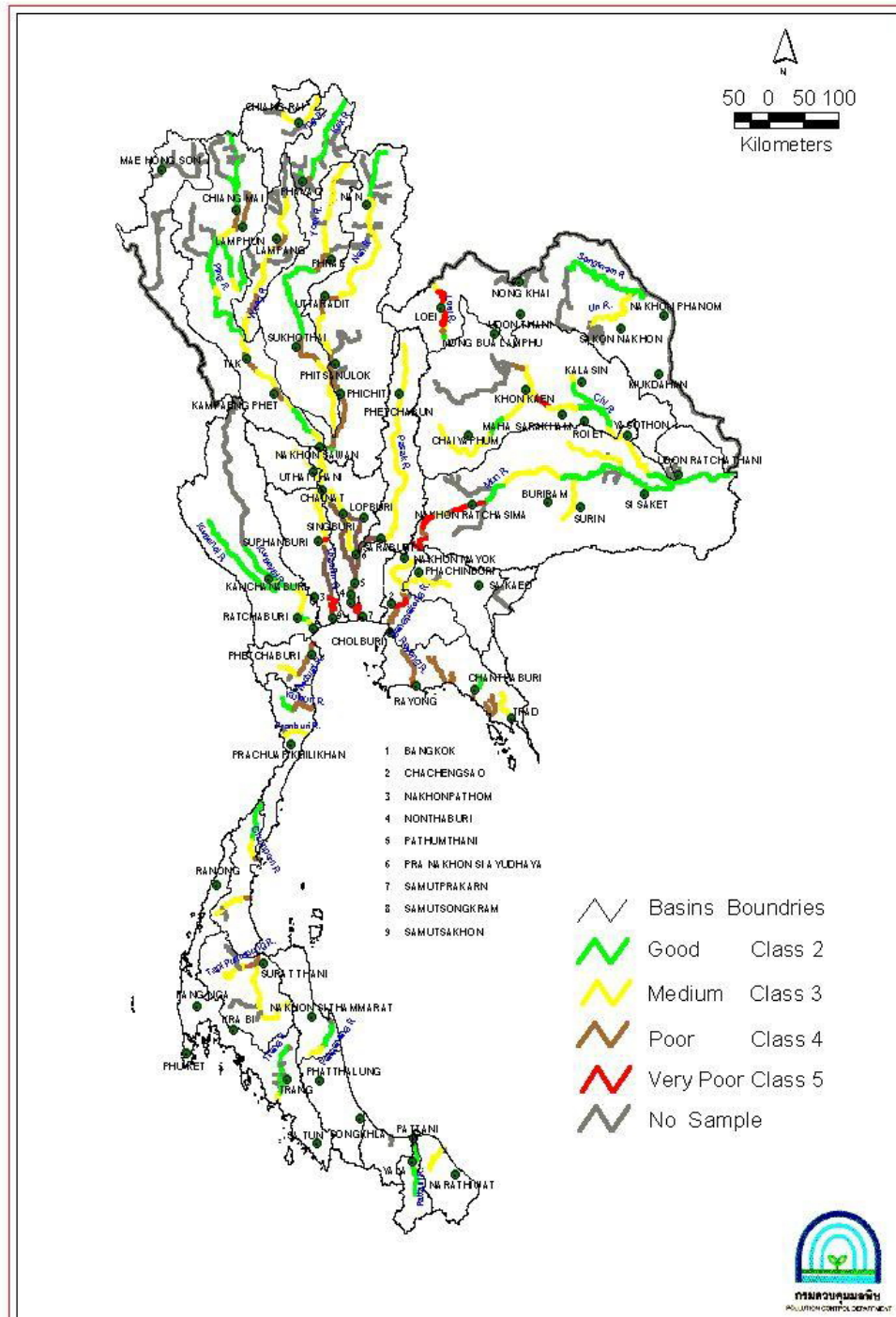
- Encroaching and constructing that obstruct the water way
- Contaminating of waste water and solid waste
- Shallows due to silting and weed

## Cause

- Increasing of population and consequently social and economic development leads to demand for more use of water sources/wetland
- Inefficient use and lack of good management
- Lack of information, knowledge, and participation in managing and developing
- Natural disaster e.g. flood, land slide, drought



- State of Surface Water Quality in Thailand in 2006







**Landslide**  
**Chiang Mai (2003)**



# ***National Policy on Water Resources Restoration***

- 1. Determine guideline and control riparian land use**
- 2. Reserve natural environment, cultural heritage, and traditional community's live**
- 3. Determine and control direction of nearby community expansion**
- 4. Rehabilitate water quality**
- 5. Promote an appropriate use of water source/wetland**
- 6. Promote knowledge, awareness, and understanding of concerned stakeholders to participate in water source/wetland management**
- 7. Improve law and its enforcement**

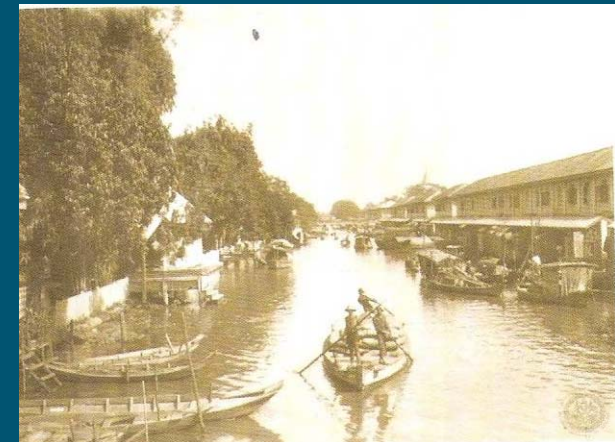
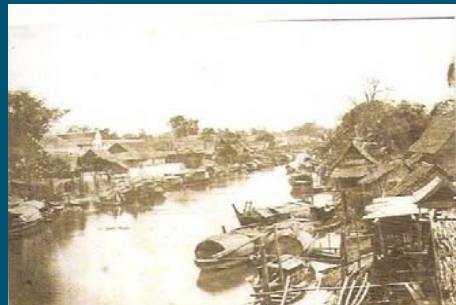
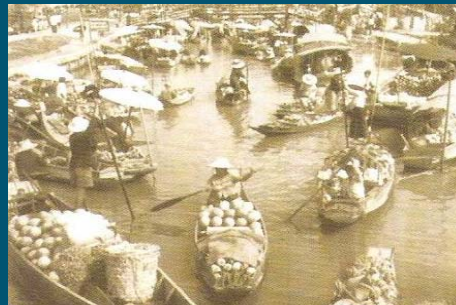
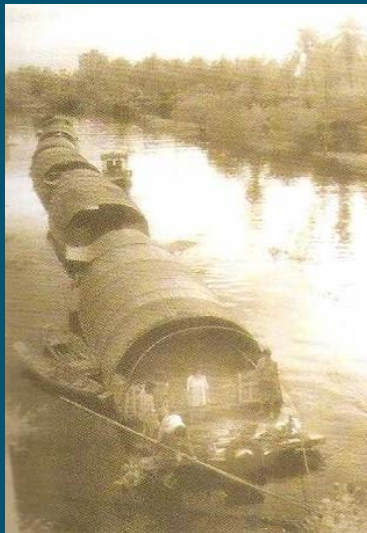
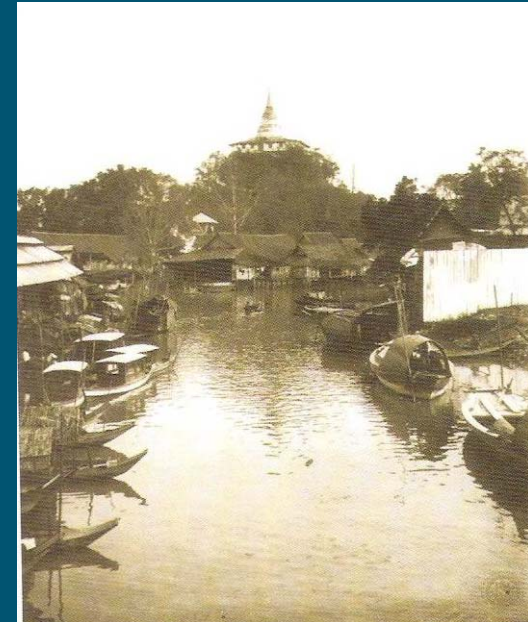
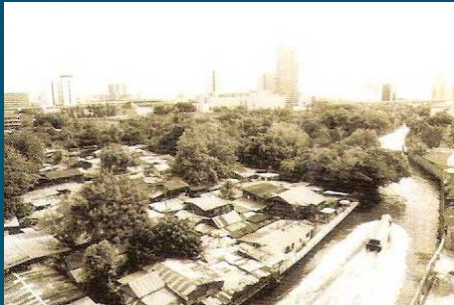


# *Measures for problem solving*

- Measures for reducing of upstream soil erosion e.g. rehabilitation of upper watershed, construction of check dam
- Solving of encroaching problem by surveying to determine boundary, and fencing
- Rehabilitation of natural water sources/wetland
- Solving of water pollution and solid waste
- Preventing of river bank erosion



# Before: Canals in Bangkok





# After Restoration





## **Nam Sai Water Sources Improvement Chacheongsao Province**





# Stakeholders participated in project implementation





## **Bung Pra Archarn Improvement Nakhon Nayok Province**



14 8 2007



# Participation in Water Quality Monitoring

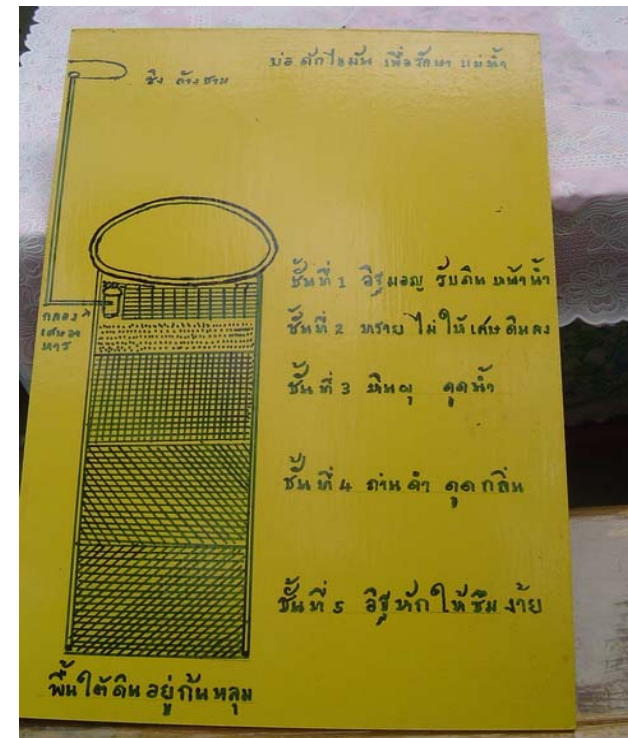




# Contributing Fund to Support Activities Related to the Water Pollution Management



# *Using Local Wisdom to Treat Domestic Wastewater Before Discharging*





# *Key Factors for Achievement in Thailand*

- The princess paid a visit and recommended a guideline for rehabilitation one of the most degraded canal in Bangkok on 20 September 1994. Since then the Cabinet determined the day to be the National Day of River Rehabilitation every year.
- Structure of the National Water Resources Committee and the River Basin Committee
- The National Water Agenda of 21 May 2007
- Association of Thai culture with water e.g. Loy Krathong festival (floating lantern), Songkran festival (throwing water), traditional boat racing, and Royal Barge Procession

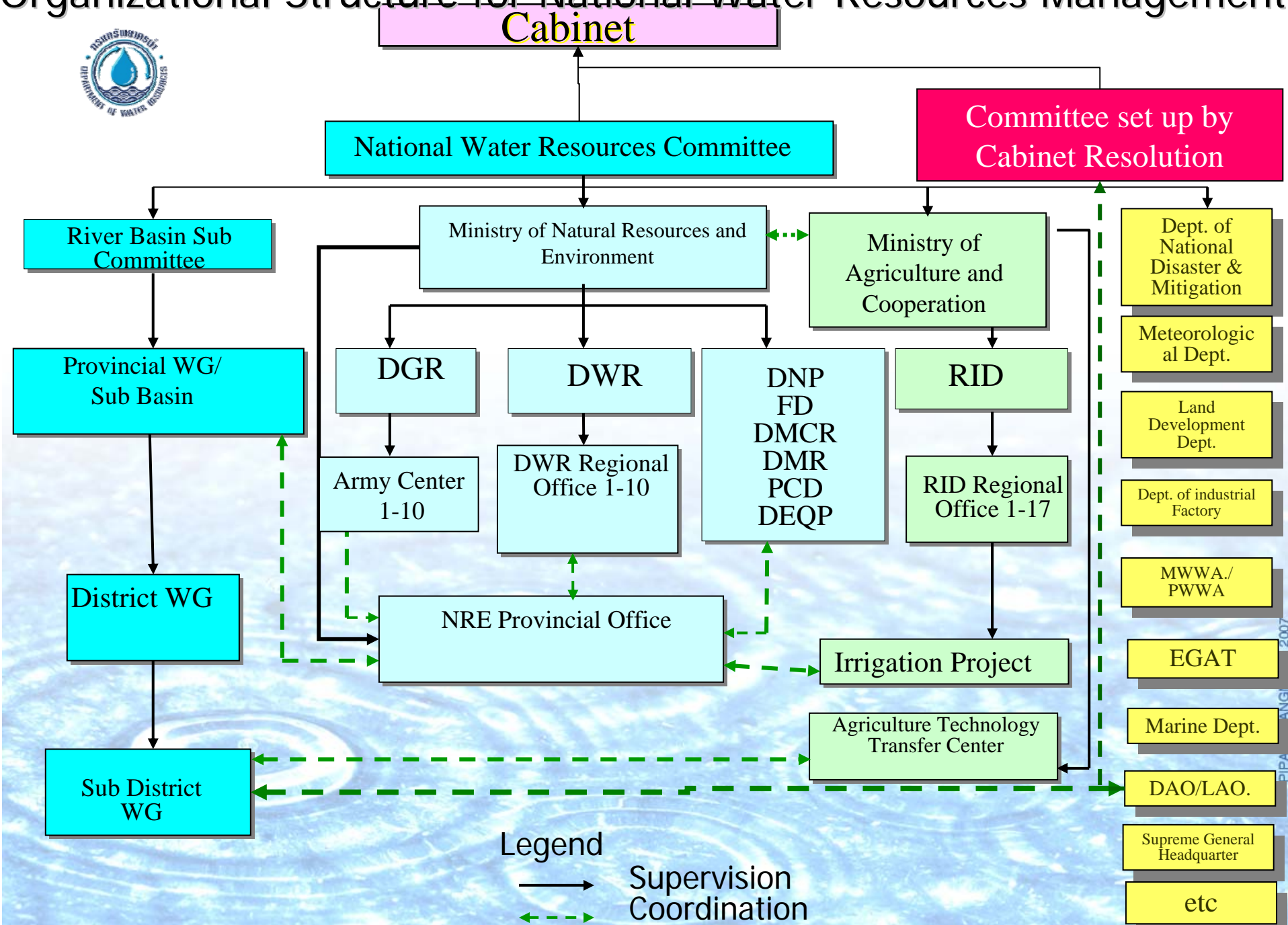


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# Organizational Structure for National Water Resources Management







**Songkran Festival in Bangkok (Main Chao Phraya and Chiang Mai in the North of Thailand (Ping River Basin)).**





## Loy Krathong Festival





# The Royal Ceremony



The Royal Barge Procession : to present new robes to the monk in the rainy season







**The Grand Palace in Bangkok is located at the bank of the Chao Phraya River**

## Conclusion and recommendation

- Degradation of natural water sources and wetland have made Thailand paying more attention to restore them.
- Some of the degraded wetlands have been restored with participatory process.
- Royal family and the Government are interested and give priority to conservation of natural water sources and wetland.
- From now on packages of measure for water sources restoration including strategy and guidelines must be coherently implemented to ensure efficient solutions.
- International network will be a good way of catalyzing the process of natural water sources and wetland restoration in Thailand.



A vibrant tropical beach scene. On the left, a dense cluster of palm trees with lush green fronds stands on a sandy shore. The beach is composed of fine, white sand. In the foreground, several large, dark, smooth rocks are scattered along the water's edge. The ocean is a brilliant turquoise color, with white foam from gentle waves washing onto the shore. The horizon is a straight line in the distance. The sky is a deep, clear blue, with a few wispy white clouds visible on the right side. The overall atmosphere is peaceful and idyllic.

Thank you