



**JC-WISE**  
Water Initiative on  
Sustainability and Engagement

賽馬會惜水・識河計劃

*“My River, My Community” Scheme*

# Workshop and Guided field-trip to Kam Tin River Catchment

**28 June 2018**

# **How to conduct fieldwork along Kam Tin River**

**Anthony K. C. Yeung**

**Hong Kong Geographical Association**

# About Kam Tin River Field Study

## Relevance to the DSE GEOG curriculum

- This field study is related to ‘**Managing Rivers and Coastal Environments – A continuing challenge**’ (Compulsory Part)

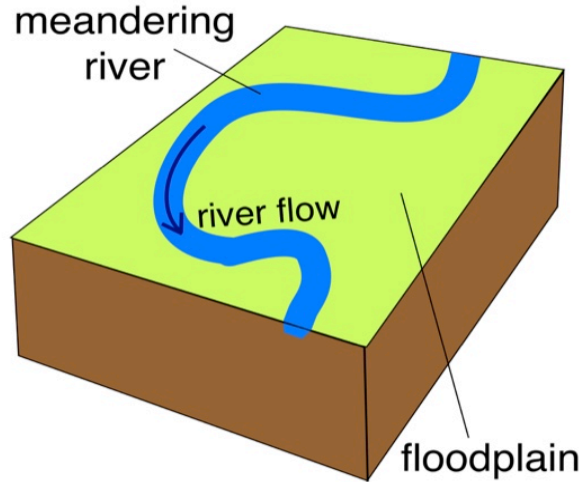
## Objectives

- To examine various types of **channel modification**; and
- To investigate how **channel modification affects the ecology and the landscape** of the area along the river.

# Pre-requisite knowledge:

## Channel modification

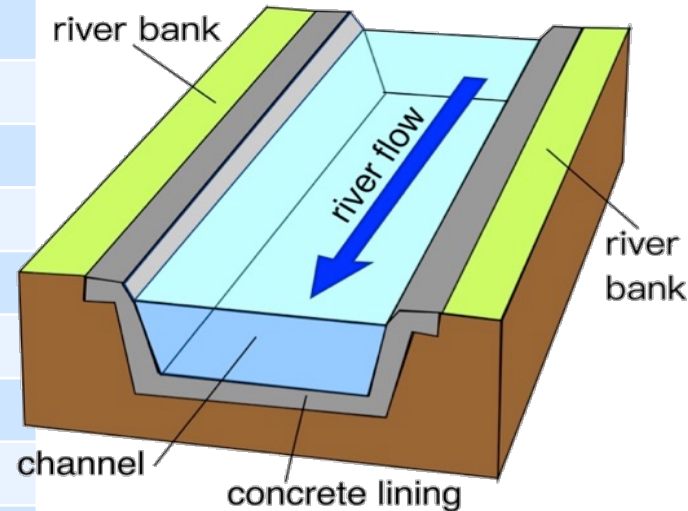
### Before channelisation



### CHANGES

- Depth
- Width
- Sinuosity
- Gradient / level
- New channel / diversion
- Flow capacity
- Flow speed
- Channel bed
- Channel wall
- River bank
- Plant and animal species

### After channelisation



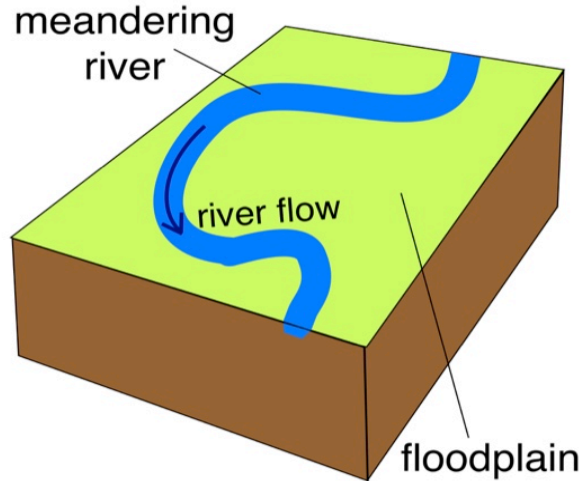


# Pre-requisite knowledge:

## Channel modification

**Before**

**flow diversion**

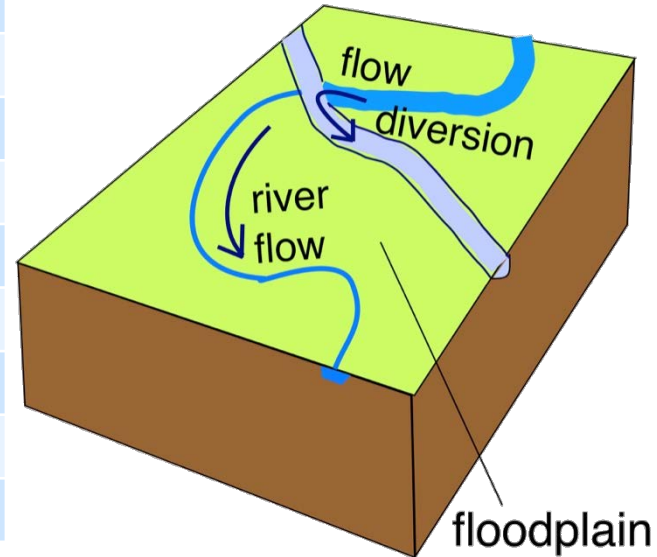


**CHANGES**

- Depth
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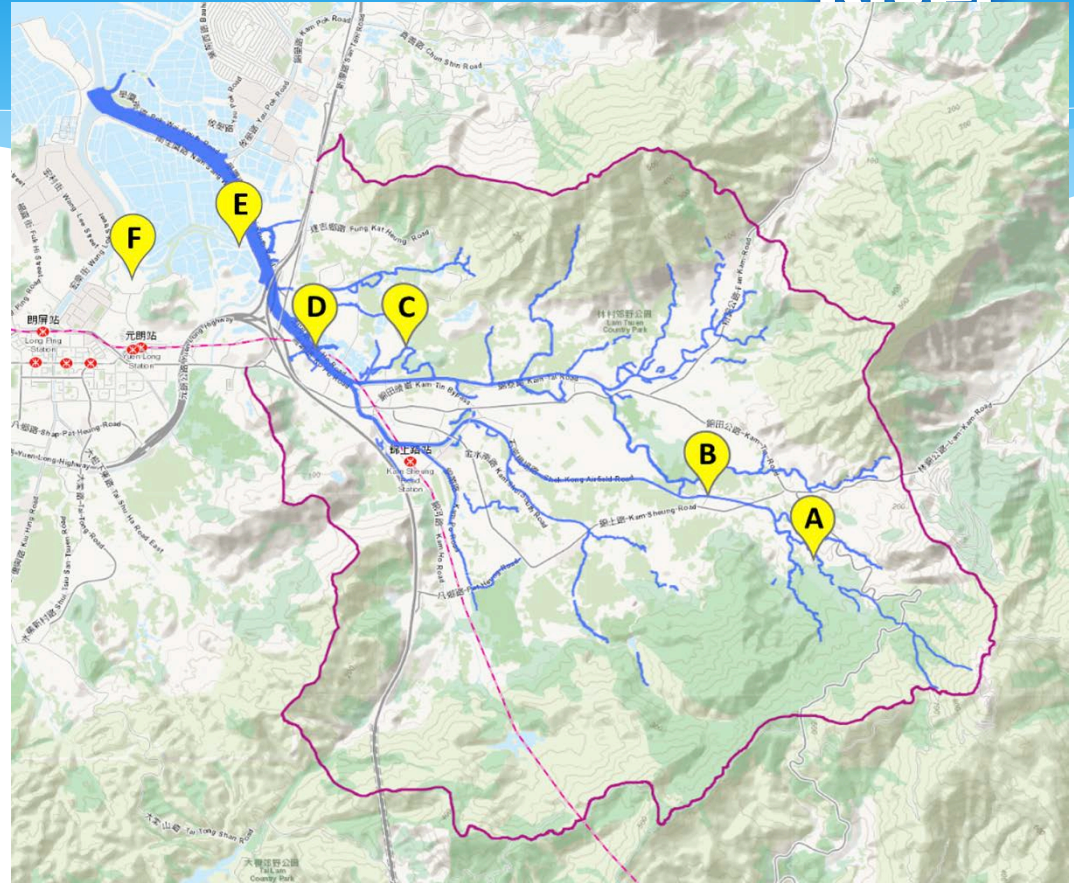
**After**

**flow diversion**



# Background Information: About Kam Tin River

- originates north of Tai Mo Shan
- goes past Route Twisk, Lui Kung Tin (雷公田) and Tai Ling
- enters Kam Tin Plain
- passes Sheung Tsuen, south of Shek Kong Barracks & Ng Ka Tsuen
- Converges with a large tributary to the west of Kam Tin Shi
- continues its flow through Nam Sang Wai
- converges with Shan Pui River at Lut Chau
- enters Deep Bay





# Kam Tin River: The field sites

A

- Lui Kung Tin and Kap Lung (雷公田及甲龍)

B

- Wing Hing Wai (永慶圍)

C

- Bin Mo Bridge and cultural heritage sites of the Tang clan (便母橋及錦田鄧氏古蹟)

D

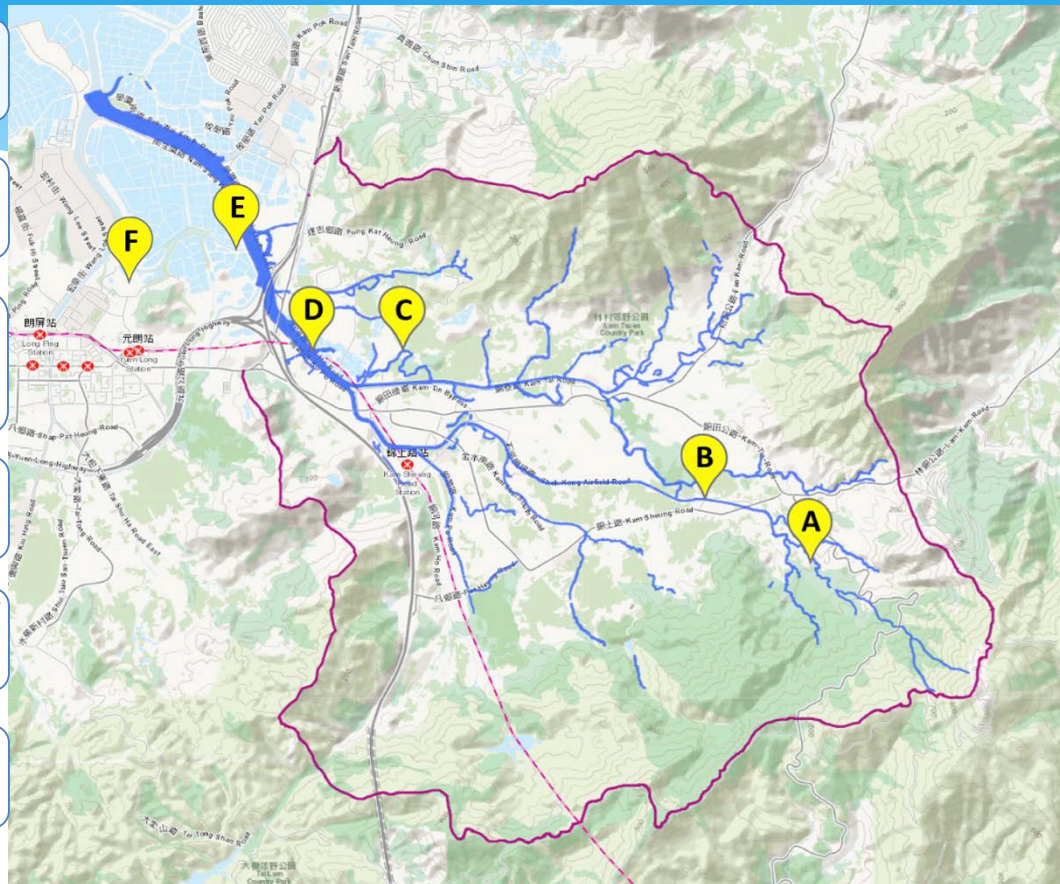
- West Rail compensatory wetland (西鐵補償濕地)

E

- Old Kam Tin River channel (錦田河舊河道)

F

- Nam Sang Wai and hand-pulled ferry (南生圍及橫水渡)



# Field site: (A) Lui Kung Tin (雷公田)

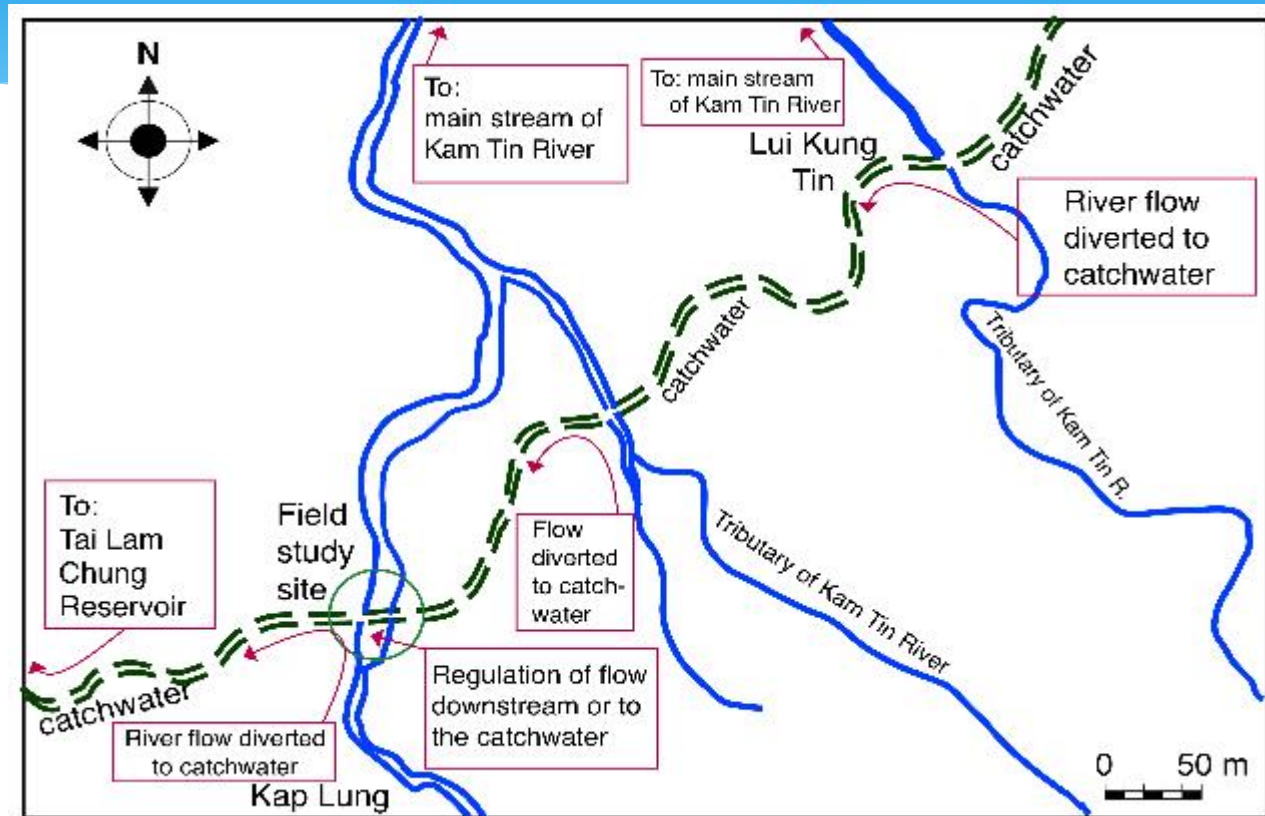
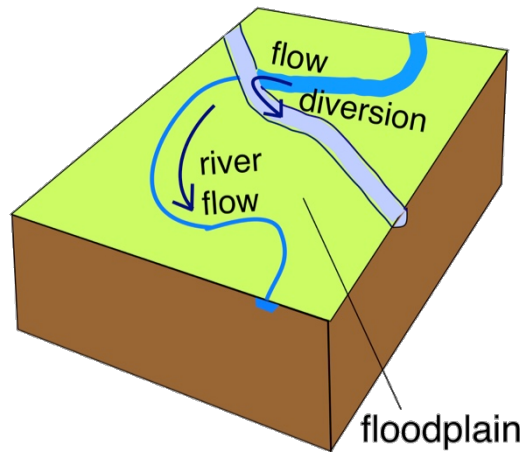
## Catchwater

- What is catchwater?
- Catchwater & river?
- Catchwater & channel modification?

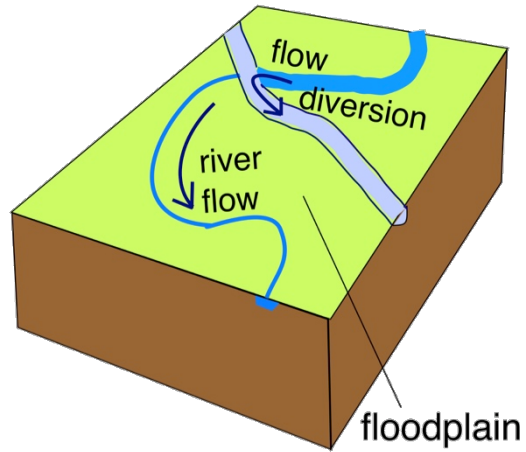




# Field site: (A) Lui Kung Tin (雷公田)



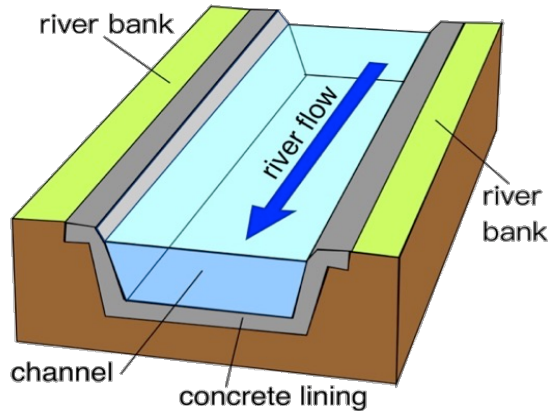
# Field site: (A) Lui Kung Tin (雷公田)





# Field site: (B) Wing Hing Wai (永慶圍)

Channel  
modification:  
Channelisation





# Field site: (C) Bin Mo Bridge (便母橋)

## Channel modification:

- Natural channel
- Compare with site B





# Field site: (C) Bin Mo Bridge (便母橋)

**Channel  
modification:**

- **Natural  
channel**
- **Compare  
with site B**





# Field site: (C) Bin Mo Bridge / Heritage



## 便母橋

余祖諱感字居咸父諱重光字燁灼母黃氏生子兄弟俊元彥元不幸幼年失怙母守孀居克勤克儉日夕庭訓今子長成娶陳氏泰生二子長男棟炳次男承德但念世居錦田村于甲申年構居故址因弟未復旧居仍在隔河泰康園母念幼孫朝夕往來常指涉水之艱于是吾努力造橋爲母之便因而名其橋曰便母若謂廣濟衆人藉以邀福非予所敢也

係福建漳州平和縣人造

康熙四十九年歲次庚寅冬月吉日鄧俊元建碑

清鄧公祠

祝院家聲

南陽世澤



# Field site: (D) West Rail Compensatory Wetland

Compensatory Wetland

vs

Natural Channel



# Field site: (D) West Rail Compensatory Wetland

Compensatory Wetland

vs

Natural Channel





# Field site: (E) Old Kam Tin River Channel

## Old Kam Tin River: Natural channel



# Field site: (E) Old Kam Tin River Channel

**New Kam Tin River: Channelised, new channel**





# Field site: (F) Nam Sang Wai (南生圍)



unique form of transportation carries tourists across the river channel near the original river mouth



# Interpretation & conclusion

## CHANGES

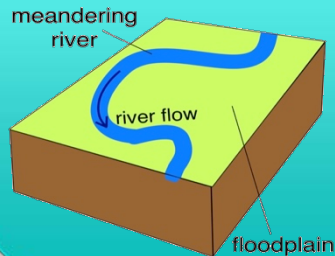
**WHERE:** river mouth, confluence, ...

**WHAT:** hydrology, geomorphology, eco-system:  
abiotic, biotic components, interaction, ...

**HOW:** channelisation, catchwater, ...

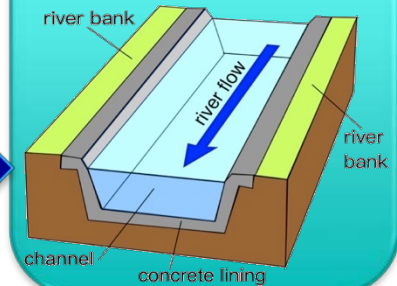
**WHY:** flood control, water for reservoir, ...

## BEFORE



## Channel modification

## AFTER



## EFFECTS

- |               |               |                |
|---------------|---------------|----------------|
| ■ Environment | ■ Agriculture | ■ Settlement   |
| ■ Transport   | ■ Land uses   | ■ Use of river |



# Conducting Enquiry Field Study: Evaluation & Notes

## Time factor: Date & time of the field study

11 May 2018

Wing Hing Wai

20 June 2018





# Conducting Enquiry Field Study: Evaluation & Notes

Secondary data  
needed:  
Historical maps &  
photographs

1949年的錦田水頭村及二帝書院  
Shui Tau Tsuen and Yi Tai Study Hall at Kam Tin in 1949



錦田原名岑田，從字義而言，錦田乃錦繡良田之意。據鄧氏族譜記載，在明朝萬曆十五年（1587年），寶安縣西部發生嚴重旱災，饑饉耗盡。寶安縣縣令邱體乾親往各鄉包括錦田賑賑，但各鄉捐助之米糧有限，唯獨錦田水尾村之鄧元勳（錦田開基祖鄧洪儀七傳後人）慷慨捐穀一千石（約十二萬斤）。縣令邱體乾以其地為錦繡之鄉，故改鄉名為錦田。

錦田《鄧氏族譜》記載有寶安（新安）縣令邱體乾將岑田命名為錦田的由來  
Renaming of Shum Tin to Kam Tin by Baoan (Xinan) Magistrate Qiu Tiquan as mentioned in the Tang Genealogy of Kam Tin

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2012年的錦田水頭村及二帝書院  
Shui Tau Tsuen and Yi Tai Study Hall at Kam Tin in 2012



航空照片由地政總署提供  
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Aerial photo from Lands Department  
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## 錦田的命名 Naming of Kam Tin

Kam Tin, which literally means fertile field, was originally known as Shum Tin. According to the genealogy of the Tang clan, a serious drought in western Baoan county in the 15th year of the Wanli era (1587) of the Ming dynasty severely depleted the government's granaries. Qiu Tiquan, the magistrate of Baoan, enlisted help from various districts, including Shum Tin. The contributions he received, however, were meagre, with the exception of those donated by Tang Yuen-lan of Shui Mei Tsuen, a seventh-generation descendant of the principal founding ancestor of the Kam Tin lineage. Tang Hung-yi, who gave one thousand piculs (equivalent to 120,000 catties) of grain to the local government. Impressed by the richness and fertility of the area, Qiu renamed the area as Kam Tin.

1949年的錦田水頭村及二帝書院  
Shui Tau Tsuen and Yi Tai Study Hall at Kam Tin in 1949



# How to conduct field study in Kam Tin River

Q & A

Thank you