



33/F, Revenue Tower, 5 Gloucester Road, Wan Chai, Hong Kong  
香港灣仔告士打道5號稅務大樓33樓

**ACE-NC Paper 2/2021**  
***For discussion on 15 June 2021***

**Establishment of the Long Valley Nature Park**

**PURPOSE**

This paper briefs Members on the progress of the establishment of the Long Valley Nature Park (LVNP).

**BACKGROUND**

2. Long Valley is the largest contiguous freshwater wetland in Hong Kong. It is widely recognised for its high ecological value, primarily due to its patchwork mosaic of wet and dry farmlands and other habitats, which support a high diversity of wetland-dependent species, including species of conservation importance (e.g. the critically endangered Yellow-breasted Bunting).

3. To conserve and enhance the ecological value of Long Valley and to mitigate the ecological impacts arising from the development of the North East New Territories New Development Areas (NENT NDAs), the core part of Long Valley (37 hectares) has been designated as the LVNP in fulfilment of the Special Conditions stipulated in the Environmental Permits issued in 2013 for the development of the NENT NDAs under the Environmental Impact Assessment (EIA) Ordinance (Cap. 499).

4. The development of the LVNP, which is undertaken by the Civil Engineering and Development Department (CEDD), commenced in December 2019 and is expected to be completed by the end of 2023. In view of the ecological sensitivity of Long Valley, the Agriculture, Fisheries and Conservation Department (AFCD) and CEDD's ecological advisor, The Conservancy Association (CA) and Hong Kong Bird Watching Society (HKBWS)<sup>1</sup>, have provided ecological advice to the CEDD throughout the

---

<sup>1</sup> The CA and HKBWS had conducted a series of habitat management and species conservation programmes in Long Valley from 2005 to 2019 under the Management Agreement (MA) scheme.

development. The AFCD will take up the long-term management of the LVNP after the completion of the construction works.

5. In the development and the future management plan of the LVNP, reference has been made to the guiding principles and recommendations given in the “Habitat Creation and Management Plan for LVNP” prepared under the development of the NENT NDAs (as a Special Condition in the Environmental Permit) and the “Review on Nature Conservation Management for Long Valley (2005 – 2018) and Principles for LVNP” prepared by the CA and HKBWS under the Management Agreement scheme. For example, the existing landscape, including earth bunds and water channels, of Long Valley should be preserved, and the future management plan should be flexible and the mosaic pattern of habitats should be maintained.

## **DEVELOPMENT**

6. As the existing habitats, including the farmland setting and the patchwork mosaic of wet and dry farmlands, contribute to the high ecological value of Long Valley, the farmland settings will be preserved as far as possible. This is in line with the other planning objectives of the LVNP in terms of conserving the agricultural landscape, historical and cultural characters of Long Valley. Existing footpaths, earth bunds and other landscape features will be retained as far as possible. Only minimal but essential habitat restoration works, as well as other improvement and ancillary works, will be undertaken as detailed below.

### *Restoration of Habitats*

7. To enhance the ecological value of the LVNP, some habitat restoration works will be undertaken to raise the ratio of wet habitats to dry habitats from about 60:40 to 70:30. In particular, the banana fields that had been planted in Long Valley over the past 10 years or so would be restored to wetlands. Some abandoned farmlands that had been heavily overgrown would also be restored. The other habitats in the LVNP that do not require restoration work, including mainly wet agricultural land, dry agricultural land, shallow water habitat, marsh, pond and mitigation wetland, will be maintained.

### *Improvement Works*

8. To support habitat management and farming activities across the LVNP, some improvement works will be necessary, including: (i) removal of substandard temporary structures scattered in the fields and asbestos sheets along the earth bunds for safety

reason, (ii) construction of a water treatment wetland connecting with an eco-friendly irrigation channel system for enhancing the quality and distribution of water for farming and wetlands, and (iii) construction of essential ancillary facilities (e.g. storage sheds, composting facilities, lodging facilities).

#### *Visitor Facilities*

9. To provide a safe and accessible environment for the general public to learn about and thus appreciate the importance of freshwater wetlands and conventional farming practices to wildlife conservation, some basic visitor facilities will be provided in the Visitor Zone (please refer to para. 17 below) which include: (i) visitor walkway, (ii) bird hide, (iii) outdoor classroom, (iv) farmers' forum, (v) tea house and (vi) carpark. Besides, a visitor centre with a viewing balcony and two multi-function rooms for displaying exhibition and organising education activities related to the ecological and cultural values of Long Valley will be constructed.

### **FUTURE MANAGEMENT**

10. Being a site of high conservation importance where its ecological value relies heavily on the existing farming practices, the overall long-term management objectives of the LVNP are: (i) to conserve and enhance the ecological value of Long Valley, (ii) to maintain the traditional farming practices, wet agriculture in particular, in Long Valley, and (iii) to raise the public awareness of the importance of freshwater wetlands and traditional farming practices to wildlife conservation.

#### *Target Species and Habitats*

11. To facilitate the formulation of conservation and management strategies, species regularly found in Long Valley, species of conservation importance recorded in Long Valley and species that may be significantly impacted by the development of the NENT NDAs, as well as the target species of the then MA projects at Long Valley, have been included as the target species of the LVNP. A list of the target species is given in **Annex I**.

12. The availability of suitable habitats plays a pivotal role in the conservation of the target species by providing foraging, roosting and breeding grounds to them. Based on the needs and characteristics of the target species, wet agricultural land and wetland habitats will be the primary target habitats of the LVNP. To further enhance the habitat diversity, dry agricultural land, deep water pond and reedbed are also the target habitats. A list of the target habitats is given in **Annex II**.

### *Management Approach*

13. The management of the LVNP would adopt an adaptive approach to allow a high degree of flexibility catering for its complex mosaic of habitats based on the results of ongoing monitoring and circumstances of individual plots (e.g. presence of nests, crop rotation, etc.), and for addressing specific conservation and management needs as and when they arise.

### *Management Zones*

14. The LVNP will be divided into three management zones, viz. Biodiversity Zone, Agriculture Zone and Visitor Zone, with different management aims and modes (**Annex III**). To respect the needs of farmers and nearby villagers for daily commutes, the LVNP will allow open access to the public. Nevertheless, soft management approach will be adopted to control the accessibility of areas that are more ecologically sensitive (i.e. Biodiversity Zone) by reducing the number of existing access points with the use of soft landscape features and other appropriate measures. Visitor walkways will also be designed and constructed to guide the circulation of visitors and encourage them to stay in the Visitor Zone. Details of the management zones are set out in the ensuing paragraphs.

#### (i) Biodiversity Zone

15. The Biodiversity Zone (approximately 21 hectares) constitutes the largest part of the LVNP. It is mainly located on the northern and eastern sides of the LVNP, and covers most of the fields under the then MA scheme at Long Valley. The aim of this zone is to provide foraging, roosting and breeding grounds for waterbirds, amphibians and other wetland-dependent species through active habitat management. No application of pesticides, herbicides and chemical fertilisers is allowed. A management party with sufficient relevant knowledge and experience on wetland conservation and both wet and dry agricultural practices will be hired to undertake habitat management in this zone.

#### (ii) Agriculture Zone

16. The Agriculture Zone (approximately 11 hectares) is located on the western and southeastern sides of the LVNP. The aim of this zone is to maintain open field of commercial farming in an eco-friendly manner. For instance, heavy use of pesticides and herbicides, erection of large scale structures (e.g. greenhouse) and planting of trees

(e.g. orchard) are prohibited. A portion of this zone will be designated as an organic farming area where only organic farming practices will be permitted. Leisure/hobby farming (i.e. non-bona fide farming) will not be allowed in order to minimise potential human disturbance to wildlife. The farmland in this zone will be allotted to farm operators by way of tenancy upon application<sup>2</sup>.

### (iii) Visitor Zone

17. The Visitor Zone (approximately 5 hectares), which is located on the southwestern side of the LVNP, will be devised with all habitat types present at the LVNP and visitor facilities (please refer to para. 9 above) for public education purpose. Visitors will be guided by the visitor walkway to gain access to all habitats and facilities within this zone.

#### *Monitoring*

18. To facilitate the evaluation of conservation and management measures, continuous monitoring of the ecological condition of the LVNP will be conducted. In addition to regular survey of wildlife, such as birds, amphibians, reptiles, butterflies, dragonflies, freshwater fish, mammals as well as flora, water quality monitoring and general site inspection (e.g. irrigation channels, drainage ditches, visitor walkways) will be arranged. The monitoring results will be analysed to evaluate the effectiveness of the conservation and management measures, and inform adaptive management measures as appropriate.

#### *Education*

19. To serve as a place for environmental and cultural education that highlights the importance of freshwater wetlands and traditional farming practices to wildlife conservation, the LVNP will facilitate self-paced visits (with a visitor centre, a bird hide and information panels) and organise guided tours and experiential farming activities for the public. Besides, we also welcome tertiary institutes and non-governmental organisations to conduct ecological studies and eco-friendly farming projects in the LVNP to encourage research and education.

---

<sup>2</sup> Long Valley farmers who had registered in the Farm Operation Survey conducted by the AFCD will have priority in farming at the LVNP.

## **ADVISORY GROUP**

20. To accomplish the management objectives given in paragraph 10 above, the AFCD will set up a LVNP Advisory Group in late 2021 to provide steer on the strategies/principles for the management of the LVNP. Apart from the representatives from the AFCD, members of the committee will be invited from different stakeholder groups, including academia, conservation/green group, agriculture sector, local communities as well as education and publicity sector.

## **ADVICE SOUGHT**

21. Members are invited to note and comment on the establishment of the LVNP.

**Environmental Protection Department  
Agriculture, Fisheries and Conservation Department  
June 2021**

## List of Target Species of the LVNP

Common Name	Scientific Name
<b>Birds</b>	
Japanese Quail	<i>Coturnix japonica</i>
Northern Shoveler	<i>Spatula clypeata</i>
Northern Pintail	<i>Anas acuta</i>
Garganey	<i>Spatula querquedula</i>
Eurasian Teal	<i>Anas crecca</i>
Black-faced Spoonbill	<i>Platalea minor</i>
Yellow Bittern	<i>Ixobrychus sinensis</i>
Von Schrenck's Bittern	<i>Ixobrychus eurhythmus</i>
Cinnamon Bittern	<i>Ixobrychus cinnamomeus</i>
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>
Chinese Pond Heron	<i>Ardeola bacchus</i>
Eastern Cattle Egret	<i>Bubulcus coromandus</i>
Grey Heron	<i>Ardea cinerea</i>
Great Egret	<i>Ardea alba</i>
Intermediate Egret	<i>Egretta intermedia</i>
Little Egret	<i>Egretta garzetta</i>
Eurasian Hobby	<i>Falco subbuteo</i>
Ruddy-breasted Crake	<i>Porzana fusca</i>
Black-winged Stilt	<i>Himantopus himantopus</i>
Pied Avocet	<i>Recurvirostra avosetta</i>
Grey-headed Lapwing	<i>Vanellus cinereus</i>
Pacific Golden Plover	<i>Pluvialis fulva</i>
Little Ringed Plover	<i>Charadrius dubius</i>
Greater Painted-snipe	<i>Rostratula benghalensis</i>
Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>

Common Name	Scientific Name
Swinhoe's Snipe	<i>Gallinago megala</i>
Marsh Sandpiper	<i>Tringa stagnatilis</i>
Common Greenshank	<i>Tringa nebularia</i>
Green Sandpiper	<i>Tringa ochropus</i>
Wood Sandpiper	<i>Tringa glareola</i>
Temminck's Stint	<i>Calidris temminckii</i>
Long-toed Stint	<i>Calidris subminuta</i>
Red-necked Phalarope	<i>Phalaropus lobatus</i>
Oriental Pratincole	<i>Glareola maldivarum</i>
Savanna Nightjar	<i>Caprimulgus affinis</i>
House Swift	<i>Apus nipalensis</i>
White-throated Kingfisher	<i>Halcyon smyrnensis</i>
Black-capped Kingfisher	<i>Halcyon pileata</i>
Common Kingfisher	<i>Alcedo atthis</i>
Pied Kingfisher	<i>Ceryle rudis</i>
Eurasian Hoopoe	<i>Upupa epops</i>
Eurasian Wryneck	<i>Jynx torquilla</i>
Long-tailed Shrike	<i>Lanius schach</i>
Black Drongo	<i>Dicrurus macrocercus</i>
Collared Crow	<i>Corvus torquatus</i>
Eurasian Skylark	<i>Alauda arvensis</i>
Barn Swallow	<i>Hirundo rustica</i>
Red-rumped Swallow	<i>Cecropis daurica</i>
Japanese Bush Warbler	<i>Horornis diphone</i>
Dusky Warbler	<i>Phylloscopus fuscatus</i>
Oriental Reed Warbler	<i>Acrocephalus orientalis</i>
Black-browed Reed Warbler	<i>Acrocephalus bistrigiceps</i>
Lanceolated Warbler	<i>Locustella lanceolata</i>
Pallas's Grasshopper Warbler	<i>Helopsaltes certhiola</i>



Common Name	Scientific Name
Zitting Cisticola	<i>Cisticola juncidis</i>
Golden-headed Cisticola	<i>Cisticola exilis</i>
Red-billed Starling	<i>Spodiopsar sericeus</i>
White-cheeked Starling	<i>Spodiopsar cineraceus</i>
Black-collared Starling	<i>Gracupica nigricollis</i>
Bluethroat	<i>Luscinia svecica</i>
Siberian Rubythroat	<i>Luscinia calliope</i>
Stejneger's Stonechat	<i>Saxicola stejnegeri</i>
Eastern Yellow Wagtail	<i>Motacilla tschutschensis</i>
Citrine Wagtail	<i>Motacilla citreola</i>
Richard's Pipit	<i>Anthus richardi</i>
Olive-backed Pipit	<i>Anthus hodgsoni</i>
Pechora Pipit	<i>Anthus gustavi</i>
Red-throated Pipit	<i>Anthus cervinus</i>
Buff-bellied Pipit	<i>Anthus rubescens</i>
Crested Bunting	<i>Emberiza lathami</i>
Chestnut-eared Bunting	<i>Emberiza fucata</i>
Yellow-breasted Bunting	<i>Emberiza aureola</i>
Japanese Yellow Bunting	<i>Emberiza sulphurata</i>
<b>Amphibians</b>	
Asian Common Toad	<i>Duttaphrynus melanostictus</i>
Spotted Narrow-mouthed Frog	<i>Kalophrynus interlineatus</i>
Asiatic Painted Frog	<i>Kaloula pulchra</i>
Butler's Pigmy Frog	<i>Microhyla butleri</i>
Ornate Pigmy Frog	<i>Microhyla fissipes</i>
Marbled Pigmy Frog	<i>Microhyla pulchra</i>
Paddy Frog	<i>Fejervarya limnocharis</i>
Chinese Bullfrog	<i>Hoplobatrachus rugulosus</i>
Gunther's Frog	<i>Sylvirana guentheri</i>

Common Name	Scientific Name
Two-striped Grass Frog	<i>Hylarana taipehensis</i>
Brown Tree Frog	<i>Polypedates megacephalus</i>
<b>Reptiles</b>	
Buff-striped Keelback	<i>Amphiesma stolatum</i>
Many-banded Krait	<i>Bungarus multicinctus</i>
Chinese Cobra	<i>Naja atra</i>
King Cobra	<i>Ophiophagus hannah</i>

## List of Target Habitats of the LVNP

Habitat	Description
<b>Primary</b>	
Shallow Water Habitat	Very shallow water that is free of weeds and crops
Less Intensive Wet Agricultural Land	Mainly wet crops which require lower labour inputs than commercial crops, such as paddy rice, water chestnut and Chinese arrowhead
Intensive Agricultural Land	Mainly commercial wet crops, such as water spinach and watercress
Water Flea Pond	Shallow and nutrient-rich pond that is free of vegetation for raising invertebrates as food sources for waterbirds
Fish and Marsh Pond	Pond with emergent vegetation, such as lotus and water lily
<b>Secondary</b>	
Dry Agricultural Land	Mainly commercial species, such as lettuce and other leafy vegetables
Deep Water Pond	Pond, with fish fry, which is drained for use by waterbirds
Reedbed	Pond which is densely planted with reeds ( <i>Phragmites australis</i> )

Location Plan of the Management Zones of the LVNP

