

Legislative Council Panel on Environmental Affairs

**Protection of Wetlands in Hong Kong**

**PURPOSE**

This paper informs Members of the Administration's policy on the protection of wetlands and the position of the ongoing review of conservation policy which aims at giving better protection to our natural heritage including wetlands.

**BACKGROUND**

2. Wetlands include a wide range of habitats from shores and estuaries to inland water bodies such as marshes, swamps, ponds, rivers, irrigated lands, reservoirs and lakes. Wetlands generally support rich biodiversity and perform a range of environmental functions, such as breeding and nursery grounds for wildlife and habitats for birds and many other species. They help purify water by acting like filters along waterways, provide coastal protection and serve as temporary storage of overflowing water to reduce floods. They also provide economic benefits such as fisheries, recreation and tourism opportunities.

3. Hong Kong has an international obligation to protect wetlands as China is a party to the Ramsar Convention. The Ramsar Convention (i.e. the Convention on Wetlands of International Importance especially as Waterfowl Habitat) which came into effect in 1975 aims to provide for international cooperation in the conservation and wise use of wetlands.

4. Wetlands are important to Hong Kong because they -

- (i) function as "green lungs" for the increasingly developed lowland areas;
- (ii) maintain an educational and scientific resource for the community;
- (iii) perform environmental and ecological functions; and
- (iv) provide a recreational resource.

5. According to a survey conducted as part of an on-going Study on Wetland Compensation, Hong Kong now has about 10,000 hectares of wetlands broken down by the following types-

Wetland Type	1999 Total (Hectares)	% of Total
Reservoirs	2,477	25%
Freshwater marshes / Pools	1,621	16%
Fishponds	1,596	16%
Seasonally Flooded Agriculture Land	1,554	16%
Irrigated Land	1,232	12%
Drainage Channels	423	4%
Rivers/Streams/Creeks	393	4%
Freshwater Shrub Marshlands	272	3%
Gei Wais	194	2%
Freshwater Tree Marshlands	105	1%
Saline / Brackish Marsh	103	1%
<b>Total</b>	<b>9,970</b>	<b>100%</b>

Reservoirs which are mostly inside country parks make up the largest proportion of the wetlands (25%), followed by freshwater marshes / pools (16%), fishponds (16%), seasonally flooded agriculture land (16%) and irrigated land (12%). Altogether they make up 85% of the total wetlands in Hong Kong. The majority of the wetlands are found in the northwestern and northeastern parts of the New Territories, each accounting for 36% and 43% of the total area respectively. The ecological importance of these areas varies both in relation to the type of wetland and the location.

## **POLICY**

### General

6. In line with our international obligations to conserve and promote the wise use of wetland areas and in recognition of their value to our natural heritage and the diversity and landscape of Hong Kong, our policy is to prevent the loss of important wetland resources, to minimize detrimental impacts on wetlands from adjacent development; and to compensate for losses which are incurred due to unavoidable development projects.

### Ramsar Site

7. Under this policy, in 1995 we designated the Mai Po and Inner Deep Bay area covering about 1,500 hectares under the Ramsar Convention as a wetland of international importance (i.e. a Ramsar site). This "Ramsar site" comprises the most important and widest stretch of wetland habitats in Hong Kong. It supports large numbers of migratory birds.

The Agriculture, Fisheries and Conservation Department (AFCD) is the Ramsar Administrative Authority responsible for the conservation management of the Ramsar site. In this respect, AFCD has been working in close partnership with green groups including the World Wide Fund for Nature Hong Kong, the Conservancy Association and the Hong Kong Bird Watching Society. It has provided subventions for them to conduct habitat management, community education and bird population monitoring programmes at the Ramsar site. A Wetland Advisory Committee was also established in 1998 to advise the AFCD on the implementation of the Ramsar Convention in Hong Kong, the management of the Ramsar site and any other wetland related conservation matters.

### Landuse Planning Control

8. To protect the ecological integrity of the Ramsar site from development, the Town Planning Board has designated a Wetland Conservation Area (WCA) and a Wetland Buffer Area (WBA) for the Deep Bay area.

9. The WCA of about 1,600 hectares comprises the existing and contiguous fish ponds which cover about 750 hectares on the landward side of the Ramsar site. The planning intention is to conserve the ecological value of these fish ponds, as they form an integral part of the wetland ecosystem in the Deep Bay area. New development is not allowed within the WCA unless it is required to support conservation or environmental education or it is an essential infrastructural project with overriding public interest. Any such development has to be supported by an ecological impact assessment to demonstrate that the development would not result in a net loss of wetland functions and negative disturbance impacts.

10. The WBA of about 1,000 hectares generally comprises the strip of land of about 500m wide along the landward boundary of the WCA. The planning intention is to protect the ecological integrity of wetlands within the WCA and prevent any development that would have a negative off-site disturbance impact on the WCA. In general, development within the WBA has to be subject to an ecological impact assessment to demonstrate that adverse impacts could be mitigated.

11. Outside the Deep Bay area, wetlands of significant conservation concern are zoned "Sites of Special Scientific Interest", "Conservation Areas" and "Coastal Protection Areas" where development is not normally permitted. Other wetlands are zoned "Agriculture" and "Green Belt" where permitted uses not requiring approvals from the Town Planning Board are generally restrictive. There are also wetlands which are protected within existing country parks.

### Environmental Impact Assessment

12. Apart from landuse controls, the Environmental Impact Assessment (EIA) Ordinance

provides a mechanism for the protection of wetlands. Under this Ordinance, proponents of designated projects that may cause disturbance to wetlands of ecological importance have to identify mitigation measures in the project planning process. The objective is to avoid if avoidance is at all possible and if not, to mitigate any negative impacts and compensate for any losses incurred during the construction and operation of the projects so that the wetland functions are maintained. Work cannot start unless the Director of Environmental Protection (DEP) has approved the EIA report and issued an environmental permit under the EIA Ordinance.

13. To allow for public participation in the scrutiny of EIA reports, the EIA Ordinance provides that members of the public may give their written comments to DEP on the EIA reports when they are exhibited for public inspection. DEP is obliged to consider such comments received from the public and also those from the Advisory Council on the Environment in considering whether to approve or reject an EIA report. This consultation process ensures transparency of the EIA mechanism. In examining the EIA reports, DEP has to follow the procedures, guidelines and criteria for assessment set out in the EIA Ordinance and the Technical Memorandum on the EIA Process. DEP is required to take advice from relevant government departments on specific subject areas, e.g. AFCD's advice on nature conservation and ecological assessment. The EIA Ordinance also has provisions for an appeal mechanism whereby aggrieved parties could appeal against DEP's rejection of EIA reports.

## **STUDY ON WETLAND COMPENSATION**

14. Since wetlands in the New Territories are being subjected to increasing development pressures, it is important to assess these projects' cumulative impacts on wetland resources and to identify suitable areas for compensation purpose. However, the project-by-project assessment approach under the EIA Ordinance is not fully effective in identifying and compensating for the cumulative effects of wetland loss. We also lack systematic baseline information on the wetland types or stock and their ecological value. Against this background, AFCD commissioned the Study on Wetland Compensation in 1998. Its objectives are to conduct a survey of existing wetlands; to develop criteria for ranking their ecological importance; to assess the cumulative impact of development projects, and, to propose plans for the conservation of important wetlands.

## **CONSERVATION POLICY REVIEW**

15. In parallel with the on-going Study on Wetland Compensation which will make recommendations specifically on wetlands, we are conducting a comprehensive review of our nature conservation policy which will address the adequacy of conservation measures for all

types of natural habitats.

16. As outlined in paragraph 6, our current nature conservation policy seeks to protect existing conservation areas, identify new areas of ecological value for conservation and compensate for areas which merit conservation but which are unavoidably lost to essential development projects. We currently implement this policy through the designation of country parks and marine parks, the zoning of areas of importance for conservation as Sites of Special Scientific Interest or Conservation Areas, and the enforcement of the Environmental Impact Assessment Ordinance. The existing conservation mechanisms have protected ecologically important sites from development threats. But there are a number of areas which we need to examine in detail so as to protect and sustain the ecological value of important sites, particularly in private lots. These include the following -

- (i) developing a reliable database and priority system for ecological assets;
- (ii) possible extension of existing protected areas, i.e. country parks and conservation-type zonings, to cover other ecologically important sites;
- (iii) ownership and conservation management of ecologically important sites;
- (iv) the need to build up a widely acceptable mechanism to deal with conservation of important habitats located on private land, as on one hand some landowners have strong views on constraints imposed by the Government on development potential of important ecological sites situated in private lots while green groups on the other hand criticize Government for failing to offer adequate protection to such ecologically important sites; and
- (v) resource implications of any new measures.

17. We are examining these issues in the on-going comprehensive review of our nature conservation policy. We will identify new mechanisms to strengthen our conservation efforts and consult the public on our proposed initiatives.

18. To establish greater certainty for planning purposes, AFCD is evaluating the results of a biodiversity survey completed by The University of Hong Kong, with a view to drawing up a priority list for conservation efforts. AFCD's evaluation work will facilitate our nature conservation policy review by identifying target areas for protection. The findings of the Study on Wetland Compensation will also complement our policy review by providing an analysis of the distribution and abundance of wetlands. The Study will also provide recommendations on further protection of wetlands taking into account the development pressures they are subject to. We will co-ordinate the findings of the policy review, the Study on Wetland Compensation and AFCD's evaluation in order to propose new conservation measures for public consultation in 2001.

## **ADVICE SOUGHT**

19. Members are invited to note the contents of this paper. The Administration would welcome any comments on the conservation of wetlands.

**Environment and Food Bureau  
Agriculture, Fisheries and Conservation Department  
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