

Chairman and members of the Panel on Development
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Dear Sir/Madam,

Green Groups' joint request for substantiation of the conservation plan for Lantau

The undersigned green groups are deeply concerned over the proposed development plan (the Plan) for Lantau launched by the Administration in January 2016.

The plan appears to be a development-orientated proposal which fails to provide adequate protection and conservation of important sites and habitats on Lantau. We believe that conservation should be the planning premise for Lantau before any developments is proposed.

Lantau has unique characteristics including invaluable natural landscapes, rich ecological resources and cultural heritage. Lantau is our largest island with Hong Kong's second and third highest peaks. Geographically, the island is situated at the periphery of the Pearl River Estuary and the coastline is subject to both marine and brackish environments. Such unique settings have resulted in a wide range of natural habitats - from low-lying wetlands to montane grasslands, from freshwater streams to soft coral marine habitats - creating an exceptionally rich biodiversity with many rare and endangered species recorded. For example Chinese White Dolphin (*Sousa chinensis*), Finless porpoise (*Neophocaena phocaenoides*), Horseshoe Crab (*Tachypleus tridentatus*), Oval Halophila (*Halophila ovalis*), Romer's Tree Frog (*Liuixalus romeri*), Bogadek's Legless Lizard (*Dibamus bogadeki*), Common Birdwing (*Troides helena*), Grass Jewel (*Chilades trochylus*), Chinese Grassbird (*Graminicola striatus*)¹ and Brown Fish Owl (*Ketupa zeylonensis*)².

Besides a diverse ecological system, there is also a rich cultural heritage on the island with an abundance of religious retreats and facilities of different denominations. Pui O wetland has been accepted as "heritage and landscape as human values" by United Nations Educational, Scientific and Cultural Organization for harmonic human-bovid relationship. Undoubtedly, Lantau is a great treasure of Hong Kong.

However, the deficiency in enforcement capabilities due to loopholes in existing legislation has rendered Lantau vulnerable to environmental vandalism. The Planning Department is unable to enforce land use control in much of Lantau's rural areas due to lack of Development Permission Area (DPA) plans. For example, the South Lantau

¹ Listed as "Near Threatened" in the IUCN Red List.

² Class II protect animal of the PRC & regional concern [Fellowes et al. (2002)]

Coast Outline Zoning Plan (OZP) was first published in 1980³ and had not been covered by a DPA plan. As a result, eco-vandalism has been proliferating with impunity on private land, including ecologically important wetlands in Pui O. With such a loophole in statutory control under the Town Planning Ordinance, the future economic activities stimulated by the proposed developments and the ease of access caused by the relaxation of closed roads would lead to uncontrollable eco-vandalisms and further encroachment on unspoiled natural habitats. This will degrade the living and environmental quality, the tranquility, the magnificent landscape and the fragile ecological integrity of Lantau.

The “unbalanced” urban development and lack of additional conservation measures will fail to achieve the planning vision stated by the Lantau Development Advisory Committee in the public consultation document “Space for All - Lantau Development Public Engagement”: *“balancing and enhancing development and conservation”*. It will also contradict *“the due consideration to preserve the rural characteristics and to protect the ecological environment.”*

In order to effectively conserve the biodiversity of Lantau in a holistic manner, and achieve more sustainable development, green groups request the government to take the following measures:

- a. Areas without statutory protection (e.g. northwest coast of Lantau) should be designated with Development Permission Area (DPA) plans or incorporated into the Country Park system without delay to avoid any undesirable ecological damage caused by the imminent development pressure. DPA plans are also urgently needed for rural areas already covered by OZPs.
- b. Offshore waters of Yi O and Tai O (offshore western waters) should be designated as West Lantau Marine Park to connect all the Marine Parks (The Brothers Marine Park, Sha Chau and Lung Kwu Chau Marine Park, Marine Park near the vicinity of the Third Runway and the Southwest Lantau Marine Park) in the western waters of Hong Kong. This helps reduce the impacts from development projects on the dolphins by safeguarding the remaining important dolphin habitats and preserving their travelling corridors in Hong Kong.
- c. All ecologically important sites on Lantau should be adequately protected with active management in place. There should be no development or infrastructure, except for conservation, research and education, in these areas. Buffer areas should be established to avoid development encroaching on these ecologically sensitive areas. Such NO-GO areas include Country Parks, proposed and existing Marine Parks, proposed and existing Sites of Special Scientific Interest, natural streams and watercourses with high ecological value, Ecological Important Streams, reservoirs, irrigation reservoirs, water gathering grounds, and identified ecological hot spots according to “Lantau-Hong Kong Jewel” (Refer to Appendix I). Any eco-tourism should contribute to conserving the local ecological, cultural and landscape characteristics.
- d. A comprehensive transport and traffic strategy aiming to avoid air pollution, uncontrolled dumping and incompatible development on Lantau should be formulated and be put in place prior to any proposed developments. Traffic restrictions (permit system) on construction trucks and machinery for South Lantau

³ South Lantau Coast Outline Zoning Plan No. S/SLC/19 Explanatory Statement, http://www2.ozp.tpb.gov.hk/plan/ozp_plan_notes/en/S_SLC_19_e.pdf p.19

and the Tung Chung Valley and Bay areas is vital to prevent large-scale waste and debris dumping. This will help ensure that the environmental carrying capacity is not exceeded, and also improve road safety.

- e. Maintain the strict traffic restriction of closed roads on Lantau including South Lantau Road. Public and environmental-friendly, smart, public transportation should be encouraged as the priority to deal with any transport needs on Lantau. Any new roads should be well justified, assessed (in the context of environmental impacts and cost effectiveness) and publicly consulted. Green Groups opine that no new roads should be planned in Country Parks, South Lantau and Tung Chung Bay, and near or in other ecological important sites (i.e. sites stated in, but not limited to, Appendix I).
- f. Any development plans on Lantau should be included in the on-going “Hong Kong 2030+: Towards a Planning Vision and Strategy Transcending 2030” study. Strategic Environmental Assessment (SEA) should be carried out for endorsement of all the proposed and planned developments on Lantau. All potential cumulative environmental and ecological impacts should be identified and assessed at an early planning stage to avoid adverse impacts on areas and species of conservation importance.
- g. Loopholes in existing legislations that hinder effective enforcement and protection of ecologically important sites and habitats should be resolved. This includes, but not limited to, the formulation of DPA plans for rural areas already covered by OZPs, categorizing land filling as unauthorized development under the Town Planning Ordinance, and deleting the exemption for inert waste under the Waste Disposal Ordinance.
- h. The proposed East Lantau Metropolis development should be rejected. Such large scale reclamation will further impact the marine ecology and water quality. So far there has been little supporting information produced to justify the need. The population estimates are not justified, and there is no substantive traffic and transport plan. We are deeply concerned about both the direct and indirect impacts of the traffic and transport measures including the supporting facilities (e.g. bridges and tunnels) and associated footprints of works including slope works on the various habitats. We are also concerned over the increase of vessel traffic in the surrounding waters and the threat they pose to the fisheries resources, and cetaceans in the vicinity.

We urge the government to commit itself to protecting the land and waters of Lantau for their environmental, ecological, landscape and heritage values, and not to sacrifice these recklessly based on ad-hoc development plans. The government should abandon such a single-minded development mentality and formulate a novel and visionary plan for Lantau safeguarding the natural resources for future generations.

Appendix 1 - Key species/habitats of conservation concern in different areas of Lantau

Joint-organizers:

Designing Hong Kong

Green Power

Hong Kong Bird Watching Society

The Conservancy Association

WWF Hong Kong

Co-signatories:

Ark Eden

Association for Geoconservation, Hong Kong

Christian Concern for Earth

Environmental Life Science Society .SS .HKUSU

Friends of the Earth (HK)

Friends of Hoi Ha

Friends of Sai Kung

Greeners action

Greenpeace East Asia - Hong Kong

Green Lantau Association

Green Sense

HKWildlife.net

Hong Kong Dolphin Conservation Society

Hong Kong Outdoors

Lantau Buffalo Association

Living Islands Movement

South Lantau Concerning Group

Tai O Culture Workshop

Tai O Sustainable Development Education Workshop

The Green Earth

TrailWatch

Appendix 1 - Key species/habitats of conservation concern in different areas of Lantau

	Locations	Key species/habitats of conservation concern#
1	Yam O and Sunny Bay	<ul style="list-style-type: none"> • Consisting of various coastal wetlands, including mangroves and mudflats • Two species of pipefish and seagrass recorded
2	Tai Ho and Pak Mong	<ul style="list-style-type: none"> • Consisting of various wetland habitats, including natural streams, mangrove, seagrass bed, freshwater and brackish marshes and estuaries • Streams are habitats for Ayu Sweetfish • Important breeding and nursery grounds for Horseshoe Crab • Woodland and wetland habitats are suitable foraging and roosting grounds for Brown Fish Owl and Romer's Tree Frog • Tai Ho River is recognised as EIS and SSSI
3	Wong Lung Hang, Pok To Yan and Por Kai Shan	<ul style="list-style-type: none"> • Over 200 species of native plants with more than 13 protected plant species recorded, including rare orchids and the globally vulnerable and regionally restricted <i>Rhododendron hongkongensis</i>. • A butterfly hotspot as recognised by AFCD • Presence of an EIS at Wong Lung Hang
4	Tung Chung Valley and Tung Chung Bay	<ul style="list-style-type: none"> • Tung Chung River is one of the few large streams in Hong Kong remaining largely intact; recognised by AFCD as EIS. • The stream system provides habitats for many rare species such as the South China Cascade Frog and eels. • Wetlands habitats, such as mangroves, mudflats and estuaries, are breeding and nursery grounds for two Horseshoe Crab species • Proposed Marine Protection Area by local scholars. • Fung shui woodland and lowland secondary woodland are habitats for Tokay Gecko and Eurasian Eagle Owl. • Tung Chung Valley is also a butterfly hotspot which nurtures 148 species which comprises about 60% of Hong Kong's total.
5	Coast of northwest Lantau (including San Tau, Hau Hok Wan, Sha Lo Wan, San Shek Wan and Sham Wat)	<ul style="list-style-type: none"> • Coastal wetlands are breeding and nursery grounds for two Horseshoe Crab species; two species of pipefish and Green Mudskipper are recorded • Proposed Marine Protection Area by local scholars. • Tall shrub and woodlands are habitats for many rare species such as Tokay Gecko and <i>Rhododendron championae</i>. • White-bellied Sea Eagle and Bonelli's Eagle were recorded. • The shrublands and wetlands in Sha Lo Wan is a butterfly hotspot recognised by AFCD; more than 90 butterfly species were recorded, including the very rare Grass Jewel. • There are natural streams in Hau Hok Wan, San Shek Wan, San Tau, Sha Lo Wan, Sham Wat (an EIS); many species of conservation concern recorded, such as the Globally Endangered Japanese Eel.
6	Tai O	<ul style="list-style-type: none"> • Consisting of various wetland habitats, including natural streams, reedbed, mangrove, freshwater and brackish marshes, mudflats and estuaries. • These wetlands are habitats for Mangrove Water Snake and the globally near threatened Four-spot Midget. They are also feeding grounds for ardeids and wetland-dependent bird species and

	Locations	Key species/habitats of conservation concern#
		<p>migrants.</p> <ul style="list-style-type: none"> Seagrass was recorded at the salt pan area
7	Luk Wu and Keung Shan	<ul style="list-style-type: none"> Consisting of mature secondary woodlands and important habitats for various wildlife and flora species. The stream system is complex and largely natural. Keung Shan is an amphibian hotspot recognised by AFCD Odonate and butterfly species of conservation interest recorded include Yellow-spotted Shadowdamsel (dragonfly of Global Concern) and the very rare Common Awl (butterfly).
8	Yi O, Shui Lo Cho and Man Cheung Po	<ul style="list-style-type: none"> A diversity of protected orchids were recorded in the ravine woodland, such as <i>Cryptochilus roseus</i>. The mature woodlands and wetlands are habitats for Romer's Tree Frog and Eurasian Eagle-Owl. Wetlands, such as reedbed, freshwater marsh, mangrove, mudflat and estuaries, are habitats for Green Mudskipper, and breeding and nursery grounds for two Horseshoe Crab species. Highly restricted fish species, Striped Lesser Bream and Rice Fish, are recorded in the lowland streams.
9	West Lantau Waters	<ul style="list-style-type: none"> Core habitat for Chinese White Dolphin, but the Tai O to Yi O section is unprotected
10	Fan Lau	<ul style="list-style-type: none"> A butterfly hotspot recognised by AFCD One of the first Danaine butterfly pre-wintering sites recorded Important to migratory birds
11	Shui Hau	<ul style="list-style-type: none"> Wetlands, such as mangroves, mudflat and marshes, are breeding and nursery grounds for Horseshoe Crab. An amphibian hotspot recognised by AFCD A butterfly hotspot recognised by AFCD. A total of 162 butterfly species was recorded. One of the pre-wintering aggregation sites for Danaine butterflies. The fung shui woodland is a reptile hotspot. Was proposed to be an SSSI by AFCD.
12	San Shek Wan (South Lantau), Cheung Sha and Tong Fuk	<ul style="list-style-type: none"> Tong Fuk has one of the most important <i>fung shui</i> woodlands on Lantau which nurtures restricted and rare plant species. Amphibian species of conservation concern recorded include Short-legged Toad and Romer's Tree Frog. Tong Fuk is also a butterfly hotspot recognised by AFCD The streams at Cheung Sha Sheung Tsuen, Cheung Sha Beach, San Shek Wan (South Lantau), Tong Fuk (an EIS) are largely natural. Fish species of conservation concern were recorded, such as Purple Neon Goby.
13	Pui O, Shap Long and Chi Ma Wan Peninsular	<ul style="list-style-type: none"> Wetlands in Pui O (include abandoned paddy fields grazed by water buffaloes, mangrove, mudflat and estuary) are an amphibian hotspot recognised by AFCD. Three-striped Grass Frog and Paradise Fish were recorded. More than 180 bird species were recorded. Species of conservation concern include Brown Fish Owl, Malayan Night Heron and Smew. Pui O is also a butterfly hotspot recognised by AFCD. More than 90 species of butterflies were recorded including Golden Birdwing and Common Birdwing.

	Locations	Key species/habitats of conservation concern#
		<ul style="list-style-type: none"> • There are various streams and waterbodies important for freshwater fishes, such as Pui O Stream (an EIS), Shap Long Stream and Shap Long Irrigation Reservoir.
14	Mui Wo	<ul style="list-style-type: none"> • Mui Wo has the highest breeding bird diversity on Lantau. • Wetlands, such as freshwater and brackish marshes, abandoned fish ponds and estuaries, are important habitats for water birds and wetland-dependent bird species. • Wetlands in Mui Wo are also an amphibian hotspot recognised by AFCD. Species recorded include Romer's Tree Frog and Chinese Bull Frog. • More than 80 butterfly species were recorded, including the very rare Rounded Six Line Blue and rare Yellow Pansy. • Diverse bat communities utilising the caves and tunnels. Rare bat species such as the Wrinkle-lipped Free-tailed Bat was recorded. • Fishes of high conservation importance, such as Dark-margined Flagtail, were recorded in the stream network in Mui Wo.
15	Lantau Peak, Nei Lak Shan, Ngong Ping and Sunset Peak	<ul style="list-style-type: none"> • Consisting of mature woodland, shrubby grassland and grassland habitats. • Upper grassland areas are habitats for montane bird specialists such as Chinese Grassbird and Upland Pipit. • Ngong Ping and Nei Lak Shan are butterfly hotspots (former location recognised by the AFCD). A total of more than 100 butterfly species have been recorded, including the very rare Striped Bush Hopper. Shek Pik is one of the butterfly aggregation sites in Southwest Lantau. • Ngong Ping is recognised as an amphibian hotspot by the AFCD. Species of conservation concern recorded include Romer's Tree Frog and Tokay Gecko. • Natural upland stream sections and seasonal streams are habitats for various protected plant species, amphibian and odonate species, such as Hong Kong Newt and Yellow-spotted Shadowdamsel.
16	Nim Shue Wan, offshore islands of Lantau and South Lantau Waters	<ul style="list-style-type: none"> • The waters around the Soko Islands, Shui Hau Wan, Shek Kwu Chau and Cheung Chau are core habitat for Finless Porpoise. • The waters off Soko Islands are habitats for both Finless Porpoise and Chinese White Dolphin. • Brown Fish Owl and seagrass are recorded at Nim Shue Wan. • Bogadek's Legless Lizard is recorded on Shek Kwu Chau, Sunshine Island and Hei Ling Chau. • Shek Kwu Chau and Green Island are nesting sites of White-bellied Sea Eagle.

#Abbreviations used: AFCD - Department of Agriculture, Fisheries and Conservation Department; EIS - Ecologically Important Stream; SSSI - Site of Special Scientific Interests