





Outline

- What is said in the present nature conservation policy statement of Hong Kong SAR Government?
- What are the policy objectives of nature conservation of Hong Kong?
- Why there is a missing link in our nature conservation?
- Why geology and landforms need to be protected?
- How to protect?
- What AGHK is doing and will do?

Statement of Hong Kong Government's new nature conservation policy

“ is to regulate, protect and manage natural resources that are important for the conservation of biological diversity of Hong Kong in a sustainable manner, taking into account social and economic considerations, for the benefit and enjoyment of the present and future generations of the community.”

(source: New Nature Conservation Policy, EDP and AFCO 2006)

Ten policy objectives

1. to identify and monitor the important components of *biological diversity*;
2. to identify, designate and manage a representative system of protected areas for the conservation of *biological diversity*;
3. to promote the protection of *ecosystems* and *important habitats*, and the maintenance of viable populations of *species* in natural surroundings;
4. to identify, monitor and assess activities that may have adverse impacts on *biological diversity* and to mitigate such impacts;
5. to rehabilitate degraded *ecosystems* and promote the recovery of *threatened species* where practicable;

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6. to promote the protection and sustainable use of natural resources that are important for the conservation of **biological diversity**;
 7. to provide opportunities for people to appreciate the natural environment;
 8. to promote public awareness of nature conservation;
 9. to collaborate with, the private sector, including the business community, non-governmental organizations and the academia, to promote nature conservation, and to conduct research and surveys as well as to manage **ecologically important sites** for such purpose; and
 10. to co-operate with and participate in regional and international efforts in nature conservation.


(source: Policy Objectives of EPD, AFCD 2006)

A background image showing a sunset over a silhouette of a forest. The sky is a warm, golden-yellow color, and the trees are dark against the bright light of the setting sun.

Six objectives directly related to biological or ecological conservation

Four objectives related to appreciation, education and co-operative works to promote biological conservation



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- Static – not as colorful, movable and attractive as plants and animals
 - Tough image – unbreakable
 - Underestimating its important role in ecosystem
 - Insufficient geoscientific knowledge available for public
 - Taken it for granted – omnipresent, do not treasure

Why being ignored?



Geology

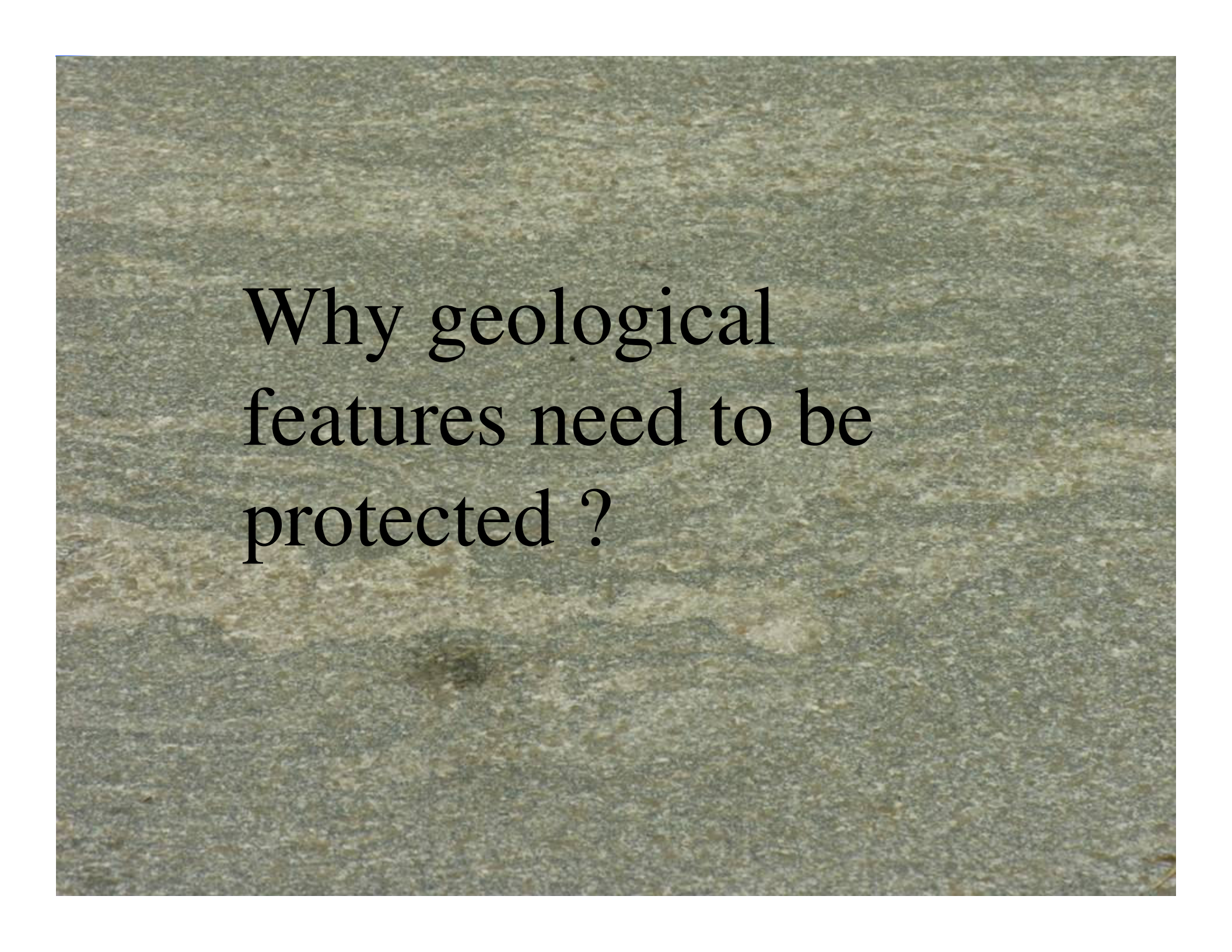
Rocks, minerals, fossils

Landforms

Soils

Water(**rivers, lakes, oceans**)

Abiotic
environment

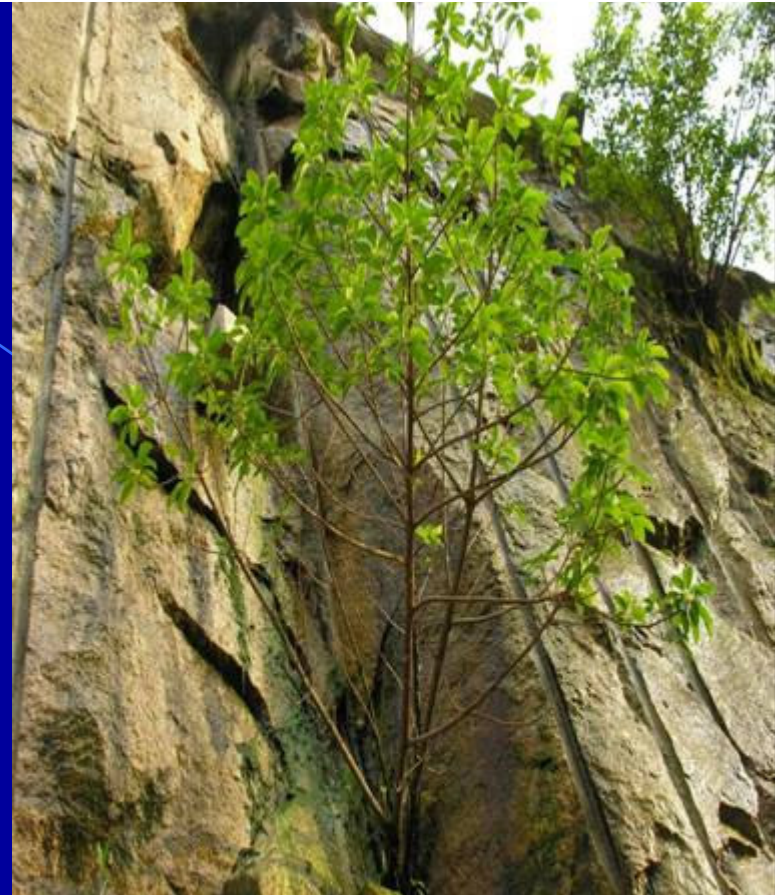


Why geological
features need to be
protected ?

Foundation of all ecosystems

- Provides habitats (nutrients, food & shelter) for plants and animals
- Geodiversity supports biodiversity
- Damages to geology = disruption & damages in ecology

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Scientific Value

- Records Hong Kong's 400 million years of natural history
- Understand the evolution and shaping forces of present landscapes
- Correlate with regional and global geology – better understanding of our planet earth
- Better understanding of our home/place



Tung Chung River - before reinstatement

- Millions or billions of years to form
- Only take seconds to destroy
- Other wildlife – able to be recovered within comparatively shorter period of time
- Rocks & landforms once lost, can never be recovered



After reinstatement

Irrecoverable nature



- Need for natural resources & raw materials
- Tourism development – ecotourism, geotourism
- Create employment, enhance local economy

Economic value

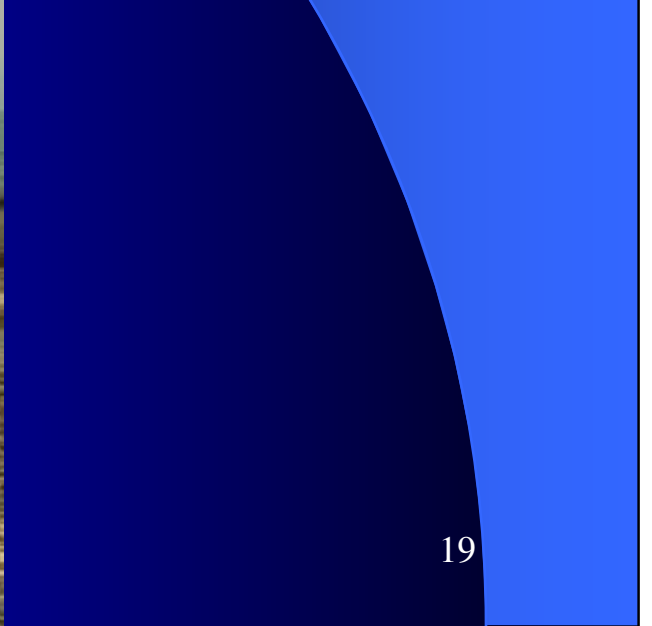
Aesthetic value



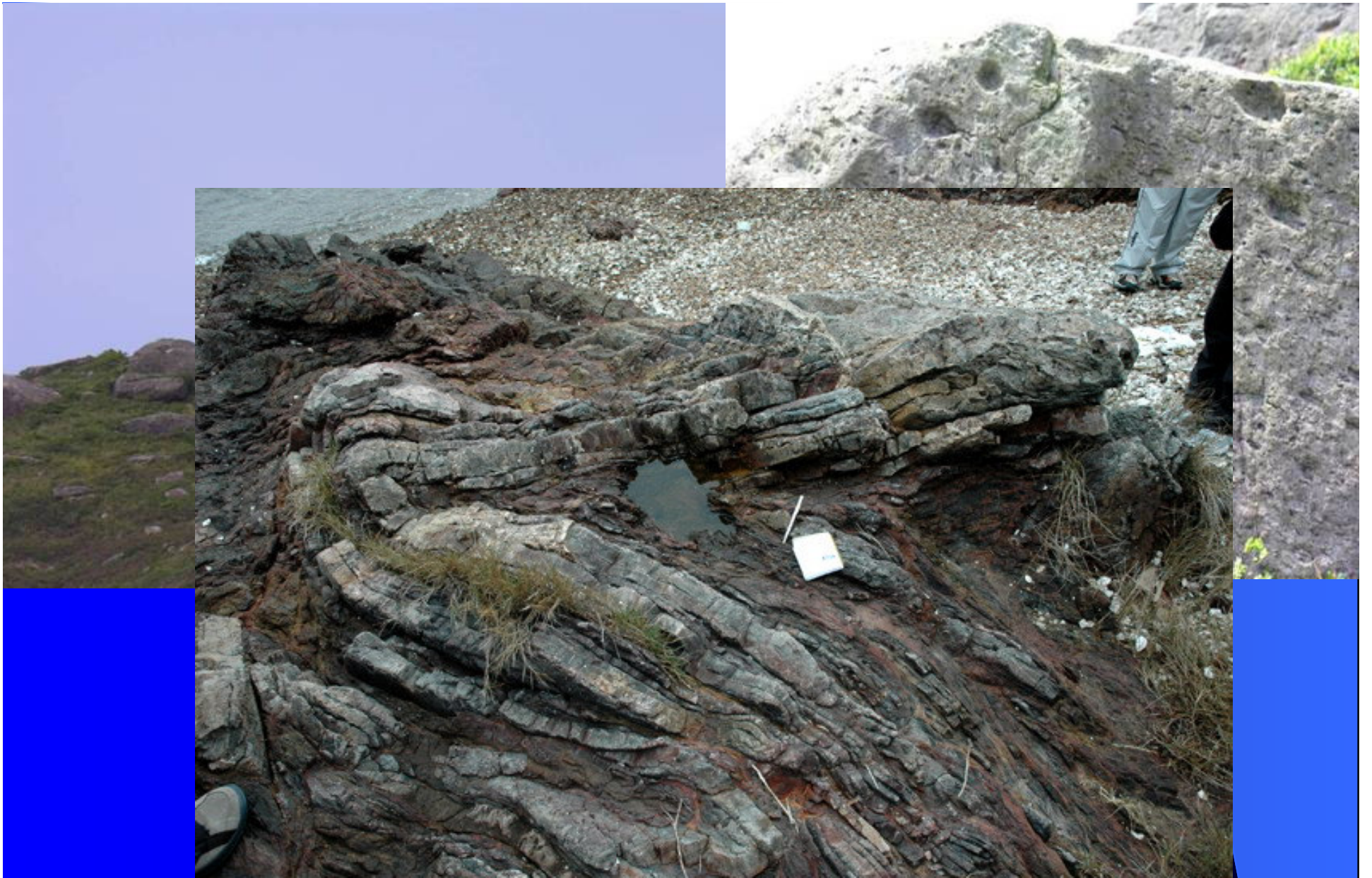




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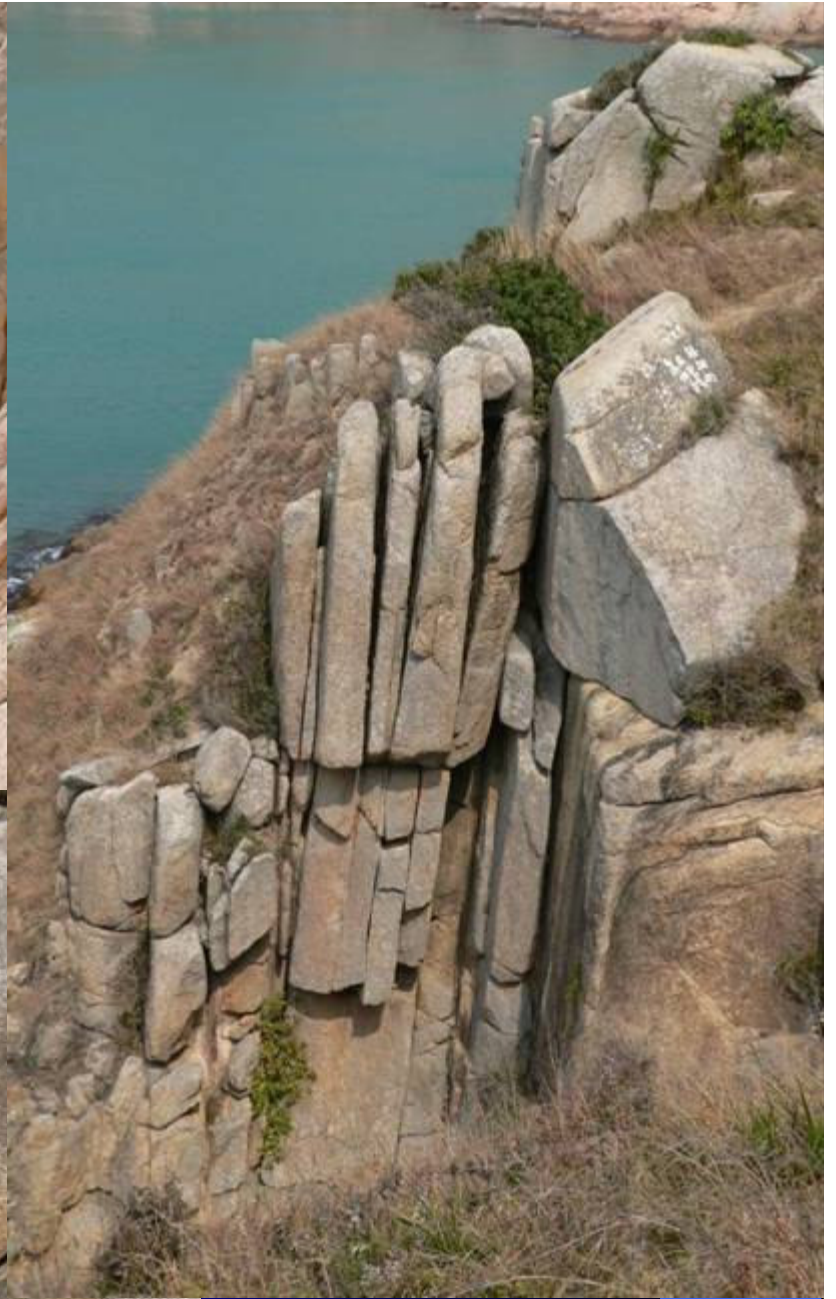






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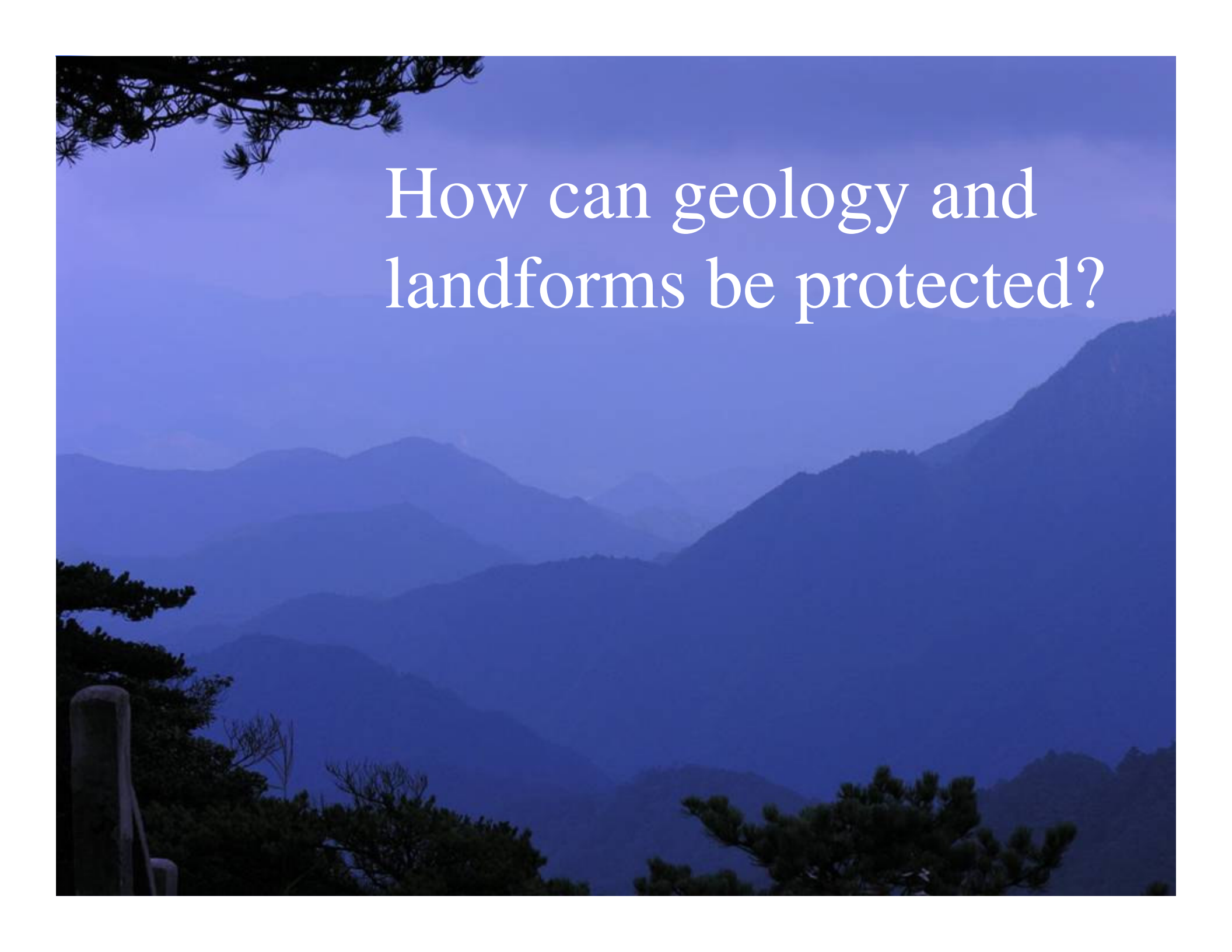
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- Unique landscapes – real identity, sense of belonging
- Home, safe, comfort, passion and love to a place
- Enhance coherence & harmony in Hong Kong

Identity & sense of place

A blue-tinted landscape photograph of a mountain range. The foreground features dark silhouettes of pine trees and a wooden post. The middle ground shows several layers of mountain ridges, with the closest being the most detailed and the furthest being the most hazy. The sky is a uniform, light blue color. The text "How can geology and landforms be protected?" is overlaid in white, serif font in the upper right quadrant.

How can geology and
landforms be protected?

- 
- Site audit & selection
 - Legislation
 - Site safeguard & threat deflection
 - Site management
 - Public awareness & education

Site audit & selection

- What, where, why, how ?

- Criteria – different values

e.g. UK: Geological Conservation Review(GCR) – scientific values;

Regional Important Geological & Geomorphological Sites(RIGS)
includes educational & aesthetic values

Values as criteria of sites of geological significance (SGS):

- Geological & scientific value
- Educational value
- Aesthetic value
- Geotourism value



Three Groups

- 100 sites are selected
- Classified into 3 groups (Group I, II & III) according to their degrees of significance

Group I -

- Most significant
- Require immediate protection

Group III

- Least significant
- Require some protection

Group II

- Medium significant
- Require protection



Objectives:

- Incorporate as an element in the Environmental Impact Assessment Ordinance / EIA report
- Stiffer penalties on illegal excavation, rock & soil specimen disruption & removal

Legislation

Geoconservation Watch-dog

- Work closely with various government departments e.g. AFCD, EPD, CEDD, Planning Department etc.
- Work closely with district councils
- Work closely with green groups
- Immediate report and actions to stop inappropriate activities and developments
- Comment and suggest alternatives to development projects

Site safeguard & threat deflection



Close-up of
volcanic
shorelines

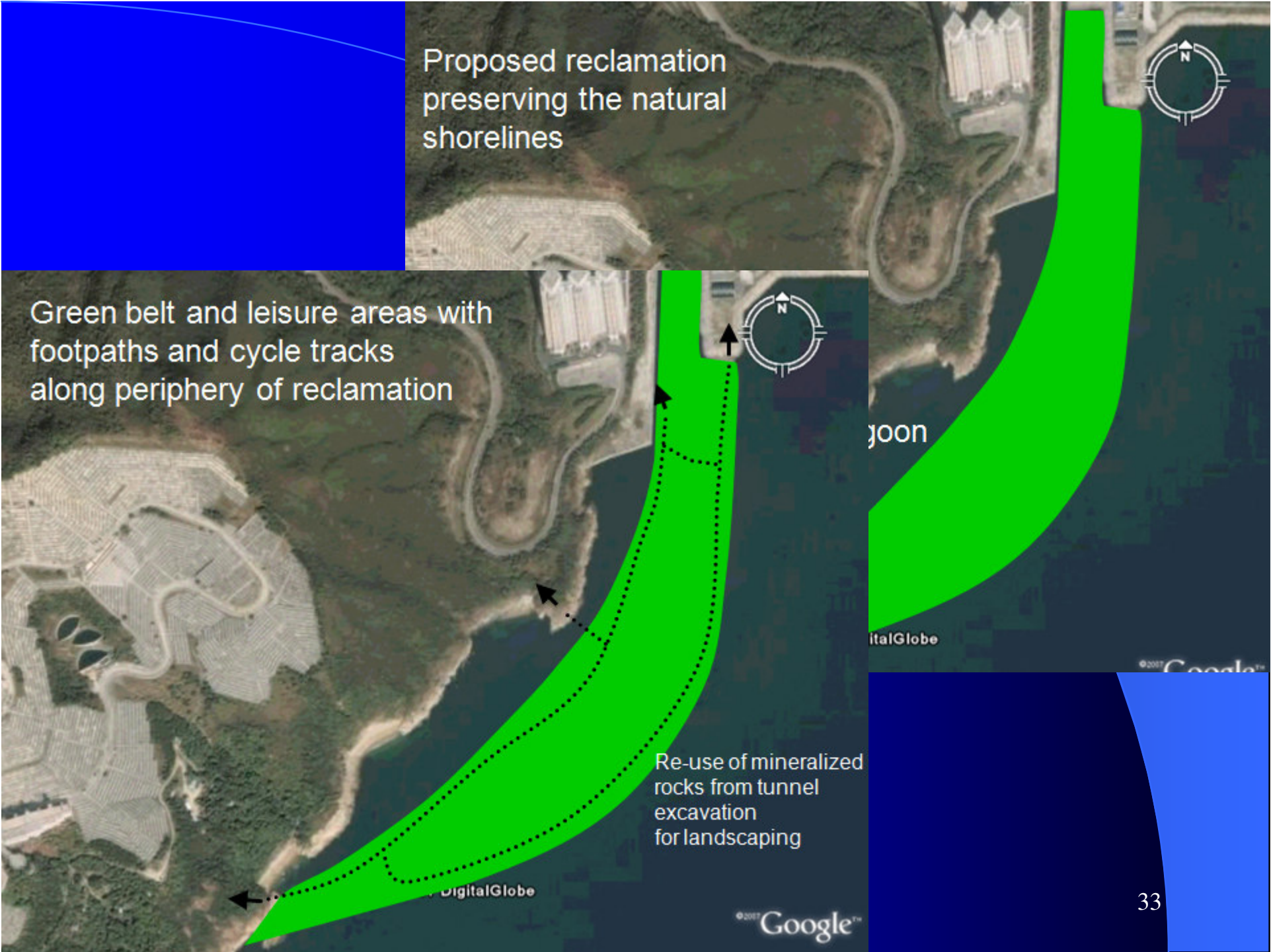
Image © 2007 DigitalGlobe

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Proposed reclamation
preserving the natural
shorelines

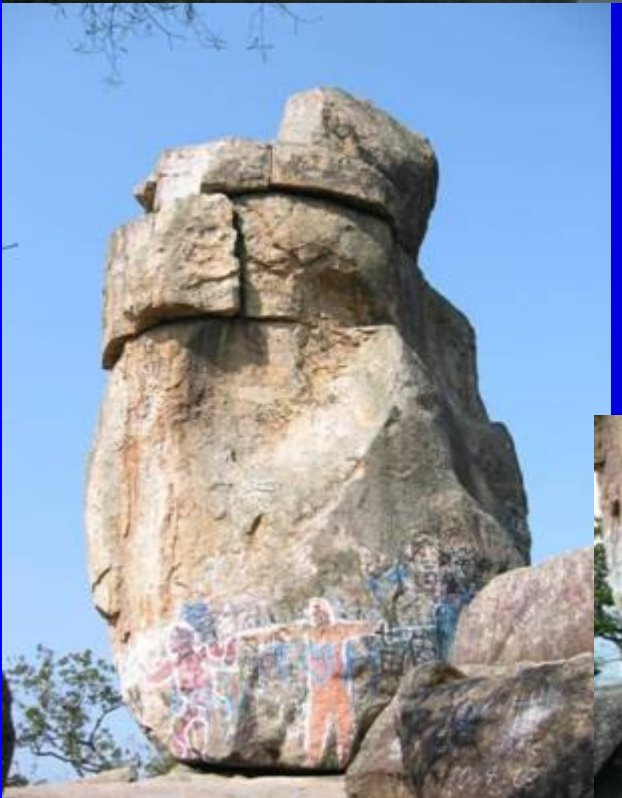
Green belt and leisure areas with
footpaths and cycle tracks
along periphery of reclamation

Re-use of mineralized
rocks from tunnel
excavation
for landscaping



Site management

- Site management plans
- Setting up measurable conservation objectives
- Regular site inspection
- Set up warning, interpretive signs etc.
- Recovery of damaged sites caused by vandalism, graffiti, excavation



Public awareness & education

- Geology is NOT an exclusive property of geologists. It belongs to every Hong Kong resident
- Public awareness and support are essential
- Geosciences must be popularized
- Public education, school curriculum, environmental education, proper geotourism and ecotourism training
- Make use of 2008 as UN International Year of Planet Earth
- Regular geoconservation activities, fieldtrips, seminars, conferences
- Publish geology books in layman's term
(working on 2 books with HKIE, CUHK & AFCD)



Other AGHK's upcoming geoconservation activities in 2007 & 2008

- Geoconservation Month – November, 2007
- Cleaning up SSSI – Litter collection, December, 2007
- HK's 10 Most Beautiful Rocks Pageant – December, 2007
- International Geoconservation Seminar – August , 2008



Geoconservation Month

November, 2007

- Geoconservation pamphlets distribution
- Geoconservation road shows at geological heritage sites such as Tung Ping Chau, Man Yee East Dam etc.
- Free guided rock appreciation tours for public



Cleaning Up Sites of Special Scientific Interest (SSSI)

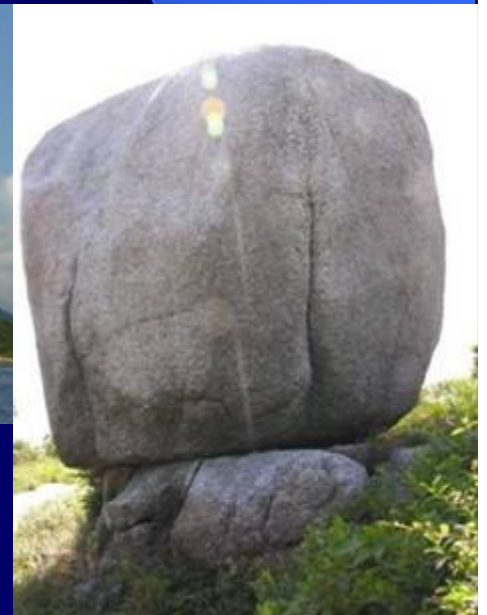
- December 1, 2007
- AGHK collaborates with Hong Chi Association (匡智會) for the Mentally Handicapped and several high schools, sponsored by HSBC , co-organized and supported by AFCD & FEHD
- Litter collection in Ma Shi Chau SSSI



HK's 10 Most Beautiful Rocks Pageant 2007

The event comprises 2 parts:

- Internet voting – through web sites of AGHK and other co-organizers, between mid Oct – mid November, 2007
- December 2 : Result release ceremony & trail walking, in Pak Tam Chung, Sai Kung



HK's 10 Most Beautiful Rocks Pageant

Participating organizations (8):

- AGHK
- HKIE's Geotechnical Division/ Young Members Committee
- AFCD
- Rotary Club (Tolo Harbour)
- Hong Kong Mountaineering Union (HKMU)
- The Conservancy Association
- Youth Hostel Association (YHA)
- Hong Kong Travelers



香港工程師學會
岩土分部及
青年會員事務委員會



漁農自然護理署



吐露港扶輪社



香港攀山總會



旅行家 旅行家有限公司

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International Geoconservation Seminar

- **Organizers:** AGHK, HKIE & CUHK
- **Title:** Enhancing Geotechnical Engineers' Knowledge on Rocks Formation and on Geological Conservation
- **Guest speakers** – inviting 7-8 international (e.g.UNESCO and European) , Chinese (CAGS) and local experts
- **Date:** August 2 (Seminar) & 3 (Fieldtrip), 2008



Books and publication

- As a means to popularize geosciences and promote geological conservation
- Non-academic approach

- Currently working on two books:
 - AGHK, HKIE, CUHK & AFCD - Understanding rocks of Hong Kong – for engineers, planners and other professionals.
 - AGHK, AFCD, EPD & CLP - Rock appreciation in Hong Kong – for the public

Conclusion

- Geology forms the abiotic or physical part of our environment. It is the foundation of all ecosystems. Without geology, plants will not flourish and animals will not survive. Geodiversity supports biodiversity.
- Current nature conservation is fragmentary and biased as the importance of geology is underestimated or being neglected.
- Geology does not only belong to geologists. It belongs to every single member of our society. Without public understanding , appreciation and support, geoconservation will not succeed.
- By re-discovering this missing link and adding geology in nature conservation, a balanced conservation approach to tackle the complicated environmental problems can then be developed.



End

Thank you
very much !!



Questions and answers

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