

Foreword



KK Lau

Director of Drainage Services

The Drainage Services Department is fully committed to protect the environment when delivering the drainage services. In 2009, we met the environmental targets on conservation of energy, chemicals and paper consumption, green procurement, waste recovery and ecological enhancement. In addition to our continual effort to reduce overall energy consumption, we also conducted a carbon audit at the Shatin Sewage Treatment Works. The audit has not only provided a measurement of the carbon foot print for the sewage treatment processes at the Works, but also enhanced the knowledge within the department to extend carbon audit to other sewage treatment works in the near future.

On sewerage services, we commissioned the advance disinfection facility of the Harbour Area Treatment Scheme Stage 2A at Stonecutters Island as scheduled by end 2009. Preliminary findings suggest that the bacteriological water quality of the beaches in the Tsuen Wan area has improved significantly. To help conserve water and promote the concept of its reuse, we initiated a few pilot studies to evaluate new technologies for effluent reuse in Hong Kong, in particular on the practicality of the technologies for the saline sewage. In response to more public concern on odour arising from the collection and treatment of sewage in the densely populated urban area, we presented the situation to the LegCo members in mid 2009 and took into account their views in refining our odour management strategy.

On flood protection, we completed the construction of the Sheung Wan Floodwater Pumping Station in early 2009. The operation of the pumping station not only alleviates the risk of flooding in the low-lying Wing Lok Street and the surrounding areas in the Sheung Wan District, but also provides a promenade for the enjoyment of the public. This is an example of our strategy on sustainable development, which calls for an integration of the flood protection facilities with the community as much as practicable. The restoration of the Yuen Long nullah is another example of our commitment to improve the environment. Following a feasibility study and a series of consultations with the District Council and other stakeholders, we proceeded to the detailed investigation stage of the project in late 2009.

This report discloses our environmental performance in 2009. We welcome your comments as they would certainly help us improve further on our work. Our email address is enquiry@dsd.gov.hk

K.K. Lau
Director of Drainage Services

Vision, Mission & Values

Vision

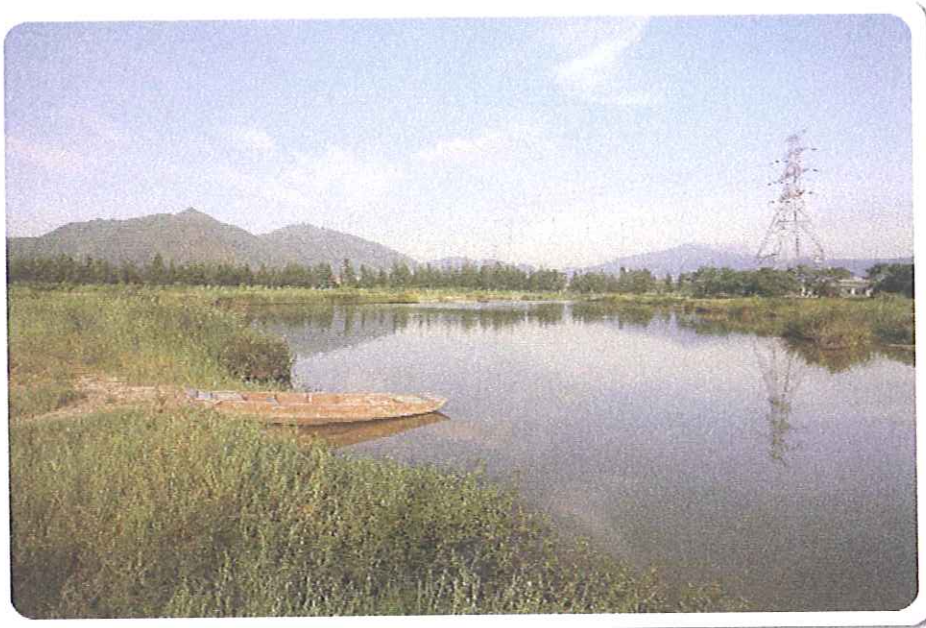
To provide world-class wastewater and stormwater drainage services enabling the sustainable development of Hong Kong

Mission

- Improving drainage services in a cost-effective and environmentally responsible manner
- Enhancing a caring, harmonious, safe and healthy work environment that fosters staff development and a mindset for change
- Strengthening relationships with community, industry and worldwide counterparts

Values

- Customer Satisfaction
- Quality
- Commitment
- Teamwork



The Compensation Wetland for Yuen Long Bypass Floodway

Environmental Policy / Goals

Environmental Policy

We are committed to being environmentally conscious in all our activities and services and endeavour to serve the Hong Kong community with the best of our expertise in safeguarding human health, protecting and preserving natural ecosystems, thus contributing to the sustainable development of Hong Kong.

We aim to continually improve the quality of our services, and to alleviate as far as practicable the impact that our facilities and sewage and drainage systems impose on the environment of Hong Kong. To meet these objectives, we are committed to:

- Adopting state-of-the-art clean technologies and pollution prevention measures;
- Integrating sustainability considerations into the design, construction and operation of our facilities;
- Minimising and mitigating environmental impacts arising from the construction and operation of our facilities;
- Meeting all statutory and regulatory requirements on environmental performance that are applicable to the activities of the department; and
- Devising and conducting internal operations in an environmentally responsible manner.



Kam Tin River

We ensure that our Environmental Policy is communicated to all staff, our consultants and contractors, and is open to public scrutiny. Our staff are committed to upholding this departmental policy, obtaining the relevant training and deploying the necessary resources to enable its implementation.

Environmental Goals

Our environmental goals are:

- To provide and operate world-class sewerage/drainage systems and sewage treatment/disposal facilities to fulfill the growing needs of the local community and contribute to the sustainable development of Hong Kong.
- To implement sewerage and sewage treatment/disposal programmes in a professional manner, in partnership with other Government establishments including the Environmental Protection Department, and to meet the Water Quality Objectives for Hong Kong waters.
- To implement drainage and flood protection programmes in a professional manner to minimise flooding and to provide protection to local inhabitants, properties and the environment.
- To apply the principles of Reduce, Reuse, Recycle and Recover in the consumption of materials and management of wastes and seek continuous improvement in the efficient use of natural resources and energy in all our operations

Responsibilities

Responsibilities

DSD is responsible for flood protection, and collection and treatment of sewage in Hong Kong. On flood protection, the major activities include the planning and implementation of the drainage systems under each Drainage Master Plan, the river channel management in the New Territories, and the operation of flood protection facilities. On sewage collection and treatment, DSD designs, constructs, operates, and maintains sewerage system and sewage treatment plants with respect to the Sewerage Master Plan prepared by the Environmental Protection Department.

Flood Protection

With an average annual rainfall exceeding 2,300 mm, one of the highest among the cities in the Pacific Rim, flooding is a serious concern in the low-lying areas of the northern New Territories and the old urban areas. DSD is tasked to reduce the risk of flooding and has been implementing a massive flood prevention programme. It includes the development of drainage tunnel, the training of river, the provision of village flood protection scheme, and the undertaking of urban drainage improvement works. To ensure that stormwater finds its way into the sea without causing flooding, DSD carried out regular maintenance works on 2,652 km of drainage channels and stormwater drains, and 27 village flood protection schemes in 2009. Furthermore, DSD also spent \$2.2B on capital works for drainage improvement.



Chuk Yuen Floodwater Pumping Station

Sewage Collection and Treatment

DSD collected and treated 978 million cubic metres of sewage in 2009. The facilities for handling the sewage include 67 sewage treatment works (STW), 207 sewage pumping stations, 44 submarine outfalls, 3 effluent disposal tunnels, and 1,623 kilometres of sewers.

DSD continued to expand and upgrade the collection and treatment of sewage. The sewerage for collecting sewage from villages is now covering about 130 villages, and works are being carried out to extend the coverage to an additional of about 50 villages. Working towards a sustainable sewage treatment, DSD



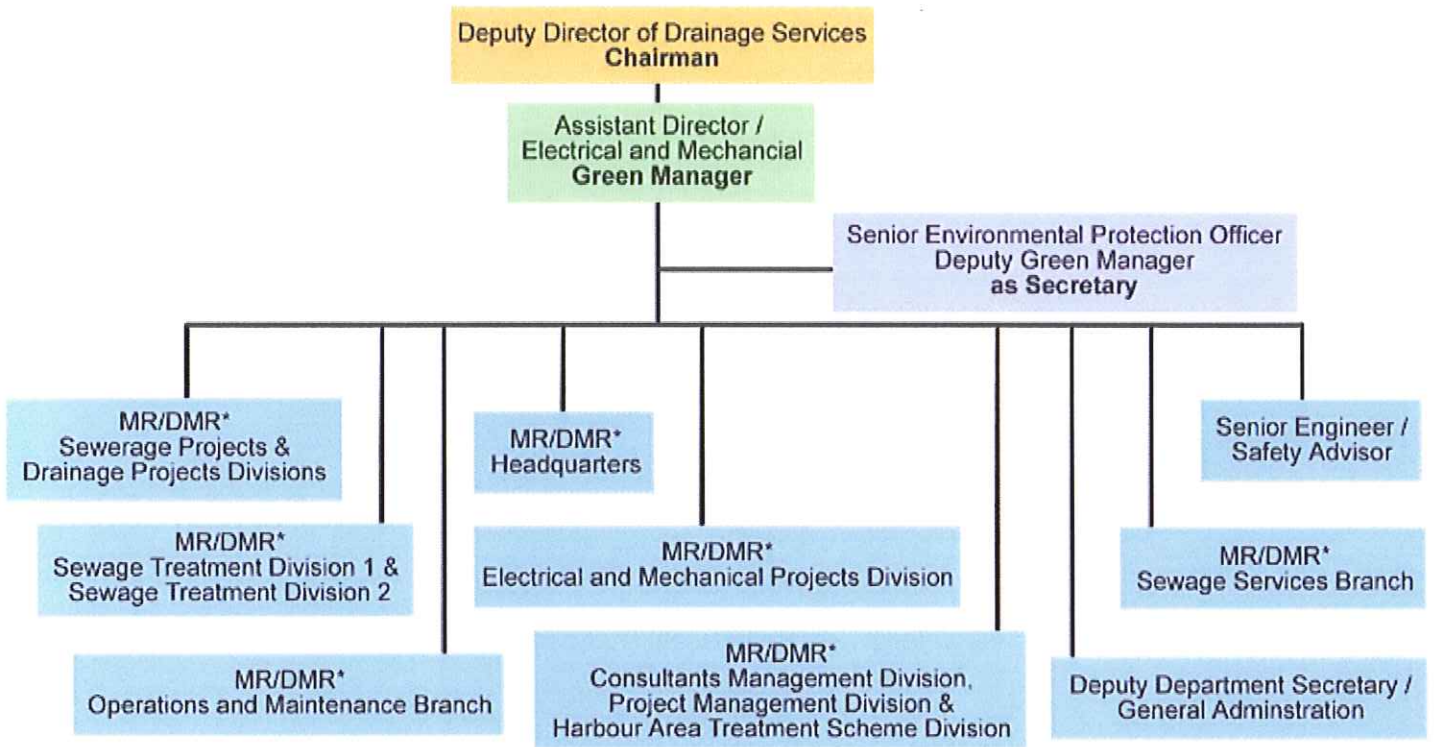
Shatin Sewage Treatment Works

Environmental Management

DSD has approximately 1930 staff, consisting of about 300 professional staff, 1,100 technical and general staff, and 530 frontline staff and direct labours. The department is divided into four branches - Projects and Development, Operations and Maintenance, Electrical and Mechanical, and Sewage Services. Each branch is headed by an Assistant Director. There are seven Integrated Management System under ISO 9001 and ISO 14001 to cover all aspects of DSD.

The Deputy Director chairs a Green Management Committee to formulate and review the environmental policies and goals of the department. The Committee monitors the performance of environmental targets, and promotes staff awareness and involvement in protecting the environment. It is represented by the Management Representative or Deputy Management Representatives of each Integrated Management System under which the environmental policies are implemented and monitored. A green manager at the Assistant Director level with assistance from a senior professional and the department administration oversees and coordinates the day-to-day green issues.

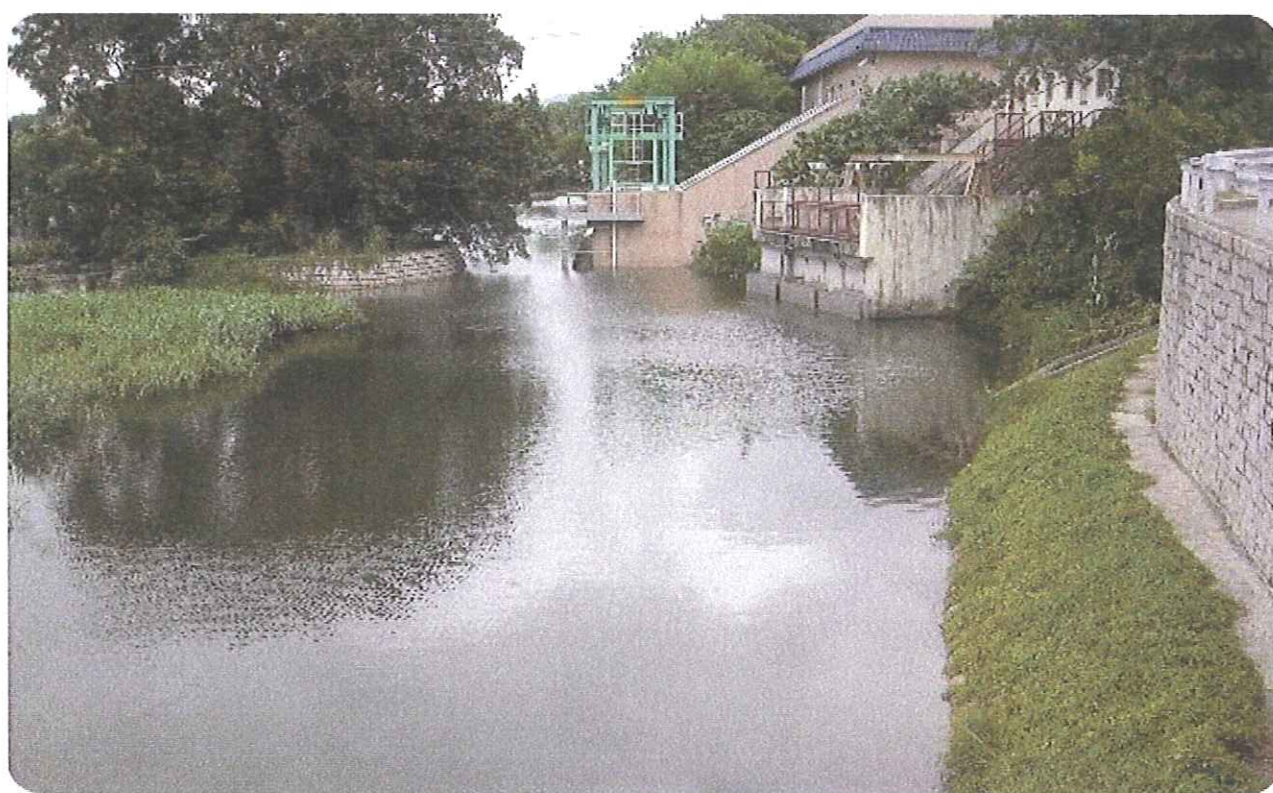
Green Management Committee



* MR/DMR : Management Representative / Deputy Management Representative of the ISO 9000 and ISO 14001 Integrated Management System

This chapter presents our environmental performance on the following areas:

- Achievement in Sewage Treatment
- Environmental Compliance and Monitoring
- Ecological Enhancement
- Green Office
- Progress of Clean Air Charter

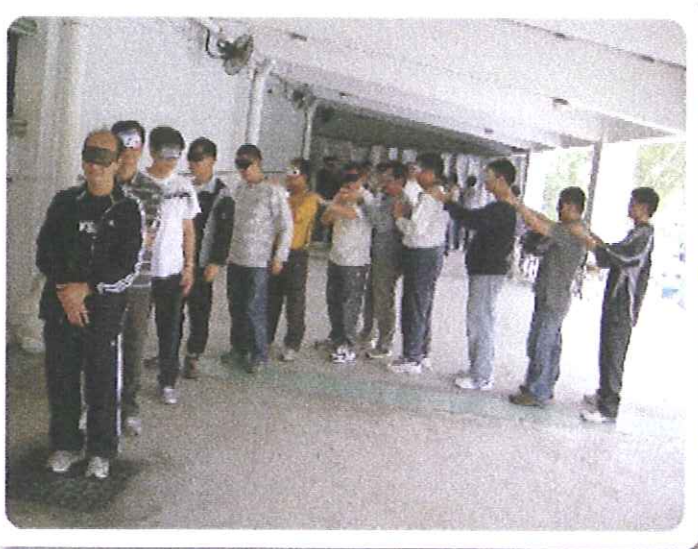


Sheung Cheung Wai Floodwater Pumping Station

Stakeholder Engagement

Staff Training

DSD believes that training is important for both her staff and the organization to provide good services on drainage to meet the escalating demand from the public and the changing requirements for sustainability. In 2009 we supported 19 staff to participate in overseas conferences and duty visits, and 210 staff to attend local conferences, seminars and training courses on environmental and sustainability matters.



Team Building Workshop

Community Engagement



Leisure Park above Floodwater Pumping Station

DSD maintains effective communications with external stakeholders as they provide useful feedback to help minimize the impact of our operations on the environment. In 2009, we continued to engage the stakeholders such as green groups, academia, professional organizations, LegCo members and District Council members on our projects.

The opening of the Sheung Wan Floodwater Pumping Station in early 2009 marks another success in delivering drainage services with community engagement. The project combines an underground temporary storage of floodwater and a leisure park above it in a piece of land, and thus serves the dual purposes of reducing the flooding risk in Shueng Wan and providing a recreation site at the waterfront.

Our Director continued to attend meetings at District Councils to update members on our works and listen to their concern on drainage services. A meet-the-media function was organized to enhance our communications with the press. We continued our effort to address the concerns of the stakeholder affected by the construction of the Tsuen Wan Drainage Tunnel and the Hong Kong West Drainage Tunnel in 2009 through the Community Liaison Group. Additional description on stakeholder engagement activities could be found in our [Annual Report](#).

Environmental Targets

2009 Achievement of Environmental Targets

Environmental targets are set each year as a tool to help colleagues to focus on the environmental quality that is of major concern of DSD. They are also important elements in the “Plan-Do-Check-Act” management cycle for continuous improvement.

Click [Here](#) for Achievement of Environmental Targets

Click [Here](#) for Environmental Targets for 2010