



Expansion of Hong Kong International Airport into a Three-Runway System

8th Professional Liaison Group Meeting

25 June 2019

Airport Authority Hong Kong

Agenda

1. Latest Progress of the 3RS Project
2. EM&A Updates
3. Marine Ecology and Fisheries Enhancement Strategy
4. 3RS Green Design and Sustainable Construction



Latest Progress of the 3RS Project



3RS Work Progress

Activity	Status
Existing submarine cable and aviation fuel pipelines diversion works	Completed
Deep Cement Mixing Works	Substantially completed
Reclamation Works	In progress
Terminal 2 expansion works and foundation and substructure works	In progress
Automated People Mover (APM) depot	In progress
Design and build contracts of new APM and the new high-speed baggage handling system	In progress

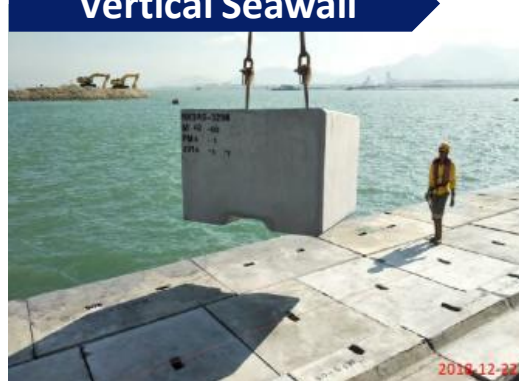


Reclamation Progress

Sloping Seawall



Vertical Seawall



Work	% Completion (as at end Mar 2019)
Deep Cement Mixing (DCM)	93%
Prefabricated Vert. Drain (PVD)	Substantially Completed
Seawall (up to +2.5mPD)	51%

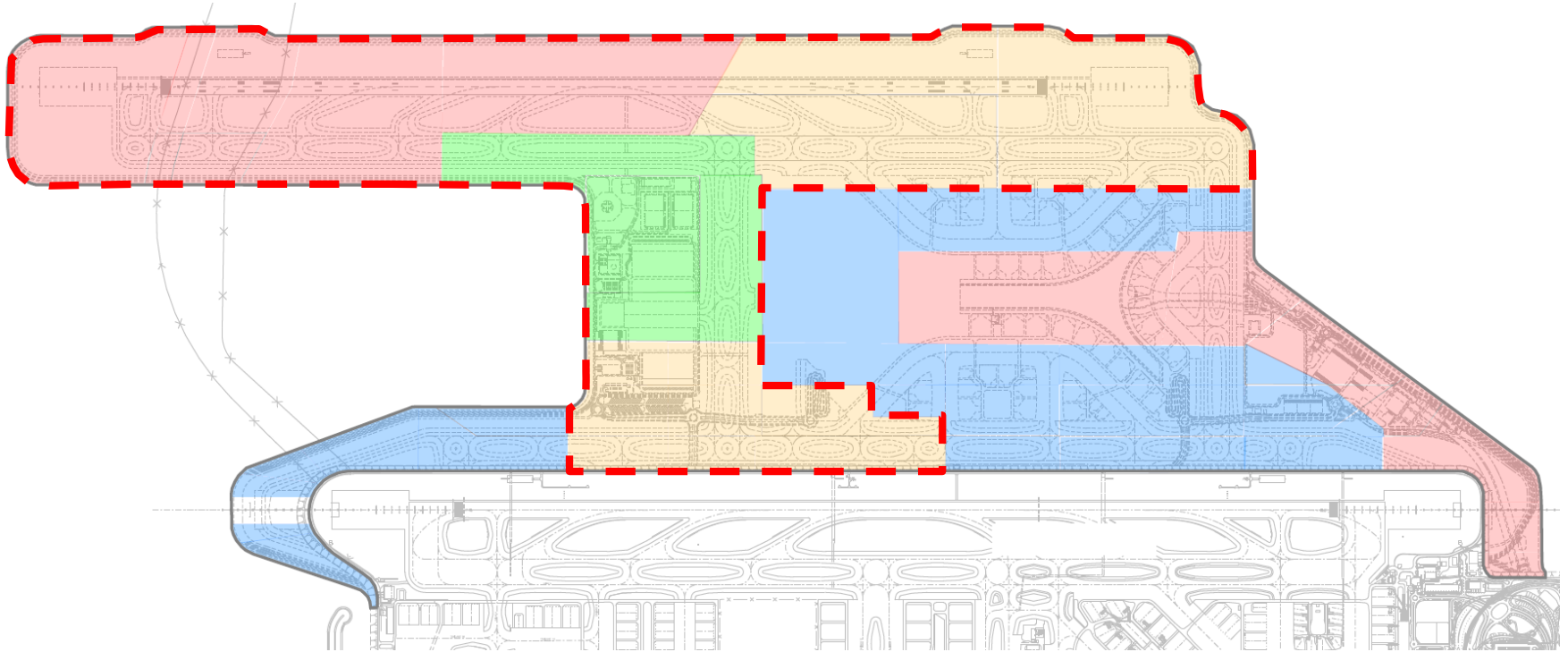
DCM Work



Reclamation Filling



Reclamation Phasing



Area needed for operation of New North Runway in 2022

Target Completion Time of Reclamation

2019

End 2019 / Early 2020

Mid 2020

■ Late 2020 to Mid 2021



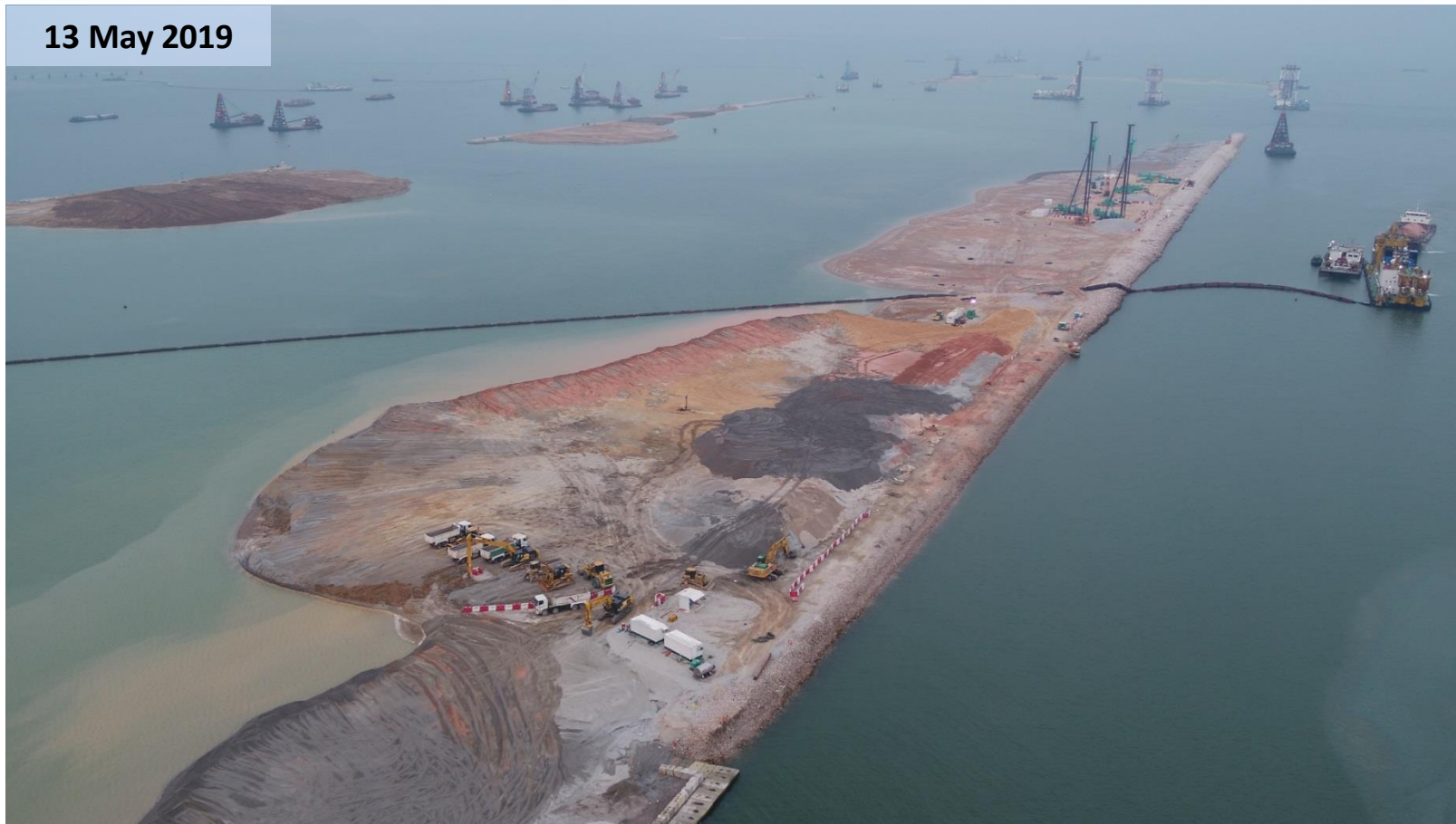
Reclamation Progress

13 May 2019



Reclamation Progress

13 May 2019



Reclamation Progress

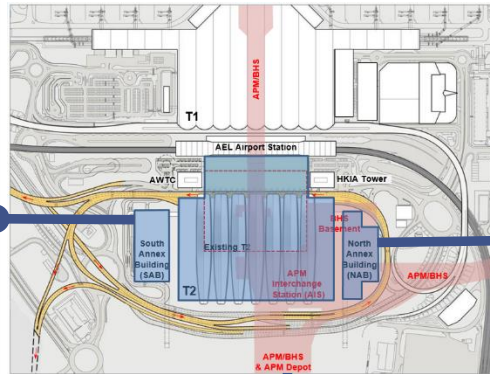
13 May 2019



Terminal 2 Expansion

South Annex Building

March 2019



BHS / AIS Basement

March 2019



APM Depot Structure

April 2017



March 2019



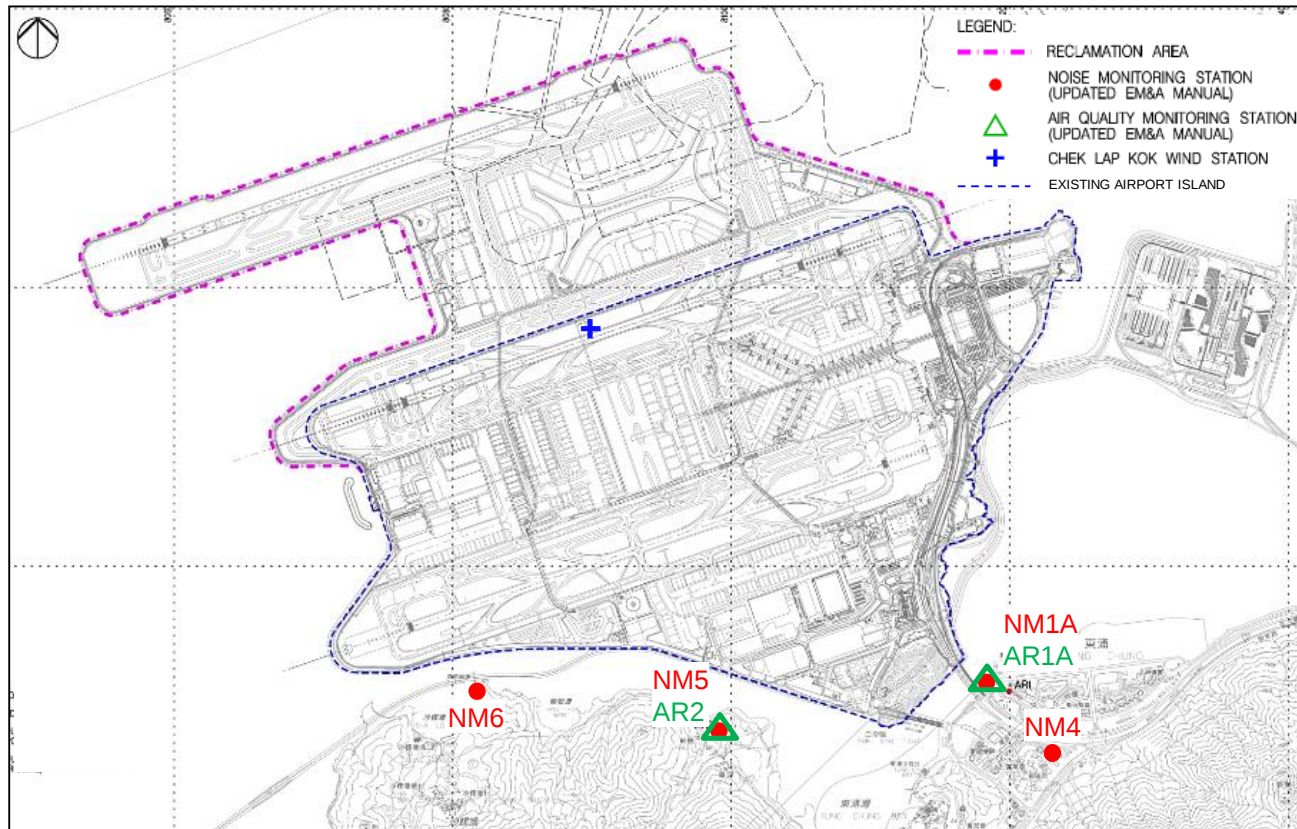
EM&A Updates



EM&A Monitoring Status (Dec 2018 – May 2019) (1)

Air Quality (2 stations) & Noise Monitoring (4 stations)

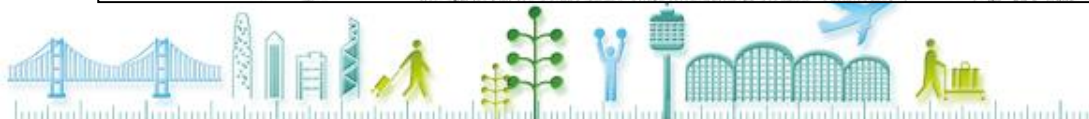
- 192 air quality and 104 noise monitoring events
- No exceedance of project-related Action/ Limit Levels was recorded



Air quality monitoring equipment (AR1A)



Noise monitoring equipment (NM6)



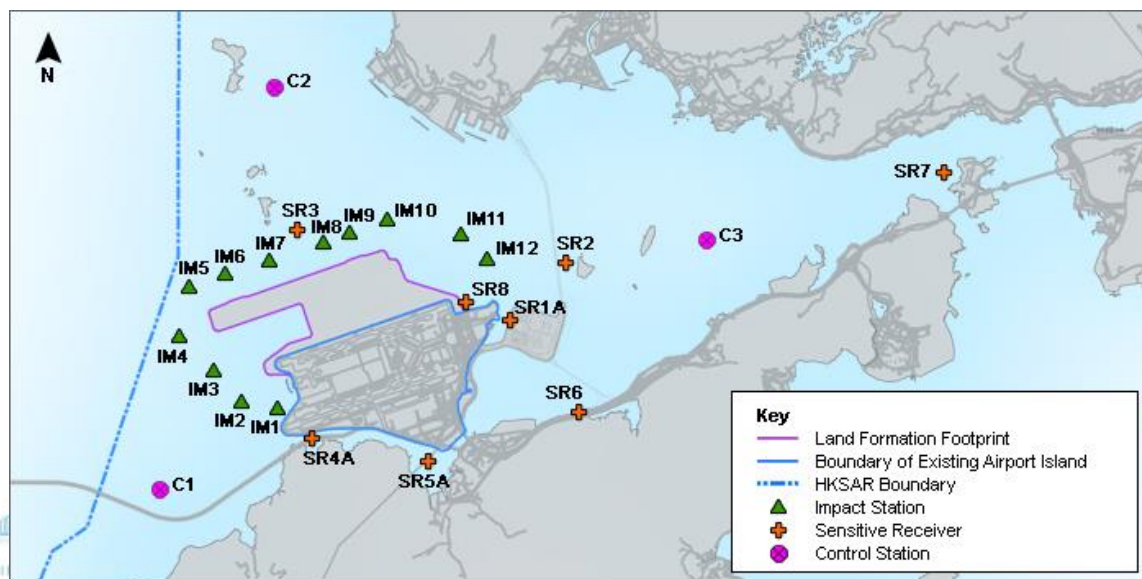
EM&A Monitoring Status (Dec 2018 – May 2019) (2)

General Impact & Regular DCM Water Quality Monitoring (23 stations)

- 12 impact stations, 8 sensitive receiver stations and 3 control stations
- 77 monitoring events
- No exceedance of project-related Action/ Limit Levels was recorded
- The monitoring location of SR1A was updated on 5 January 2019 to better reflect the water quality near the intake. The monitoring location of SR8 was also updated on the same day to avoid disruption from ongoing construction activities.



Water quality monitoring & sampling



EM&A Implementation (Dec 2018 – May 2019) (1)

Dolphin Exclusion Zone (DEZ)

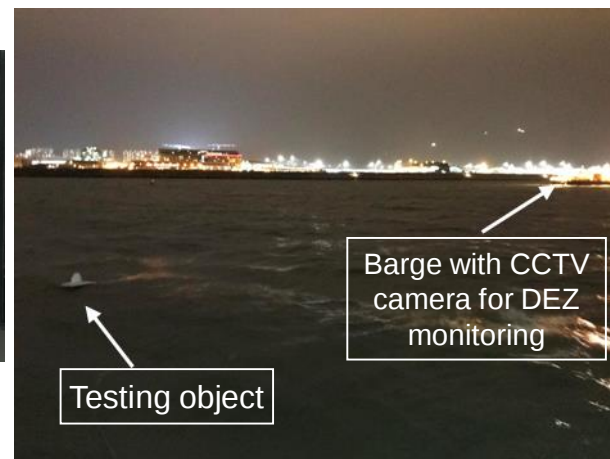
- No Chinese White Dolphin (CWD) sightings occurred within DEZs in the reporting period
- Conducted ad-hoc inspections in both daytime and night-time to check the performance of dolphin observers in DEZ implementation
- 5-17 dolphin observation stations were deployed by the contractors for continuous monitoring of the DEZ
- A contractor of DCM works adopted CCTV system for continuous monitoring of DEZ. Competence test was conducted by ET to test the practicability before implementation.



CCTV installed on barge



CCTV system for DEZ monitoring



Barge with CCTV camera for DEZ monitoring

Testing object



EM&A Implementation (Dec 2018 – May 2019) (2)

Environmental Recognition Scheme

- From July 2018, the AAHK launched the Scheme for 3RS work contracts to promote environmental awareness and good environmental practices in construction sites
- Performance of contractors is assessed quarterly, with criteria including site performance, environmental submissions, training effort for frontline staff, workers' environmental awareness, and other outstanding environmental practices



Reuse of Public Fill and C&D Waste Material

- Sorting facility were set up in Tseung Kwan O and Tuen Mun Fill Bank to maximise the utilisation and intake of public fill materials in the Project
- Rockfill from 3RS contracts, other AAHK's projects and local infrastructure projects were collected for reuse in the Project under AAHK's supervision



Rockfill reused for shoreline reinstatement on Sheung Sha Chau



EM&A Implementation (Dec 2018 – May 2019) (3)

Good Site Practice – Construction Waste Management

- In addition to the regular checking of contractors' chit ticket system and waste disposal record to ensure the proper implementation of waste management system, CCTV systems are installed at the major vehicular exits of construction sites to monitor the loadings of C&D waste on dump trucks before leaving the site



CCTV system as installed at the major vehicular exits of construction site



Images showing the body and wheels of the dump truck were properly washed and loadings were covered before leaving the site



EM&A Implementation (Dec 2018 – May 2019) (4)

More Good Site Practices

- Enhanced design of wheel washing facilities was adopted to improve drainage of silty water generated from wheel washing
- Some work contracts provided extra pre-treatment tanks and coagulants to improve the overall efficiency of the wastewater treatment system on site
- Some work contracts provided water sprinklers to enhance dust suppression measures in order to improve the condition at the stockpiling areas



Enhanced wheel washing facility



Pre-treatment tanks with coagulant provided to improve silt removal efficiency

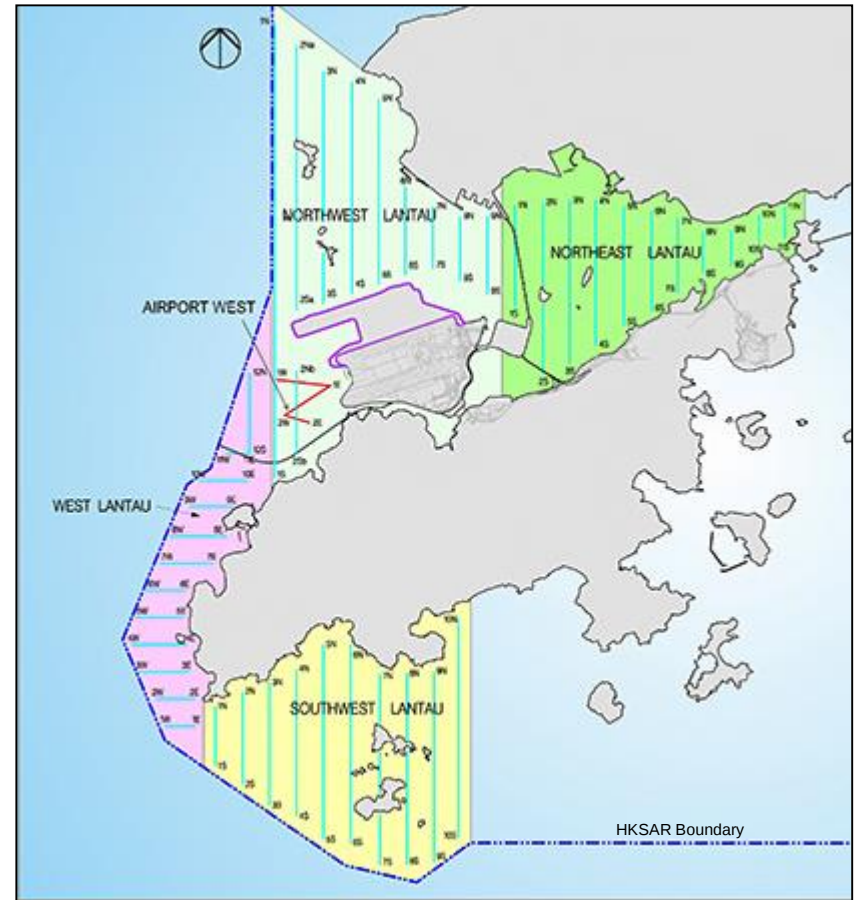


Dust suppression measures



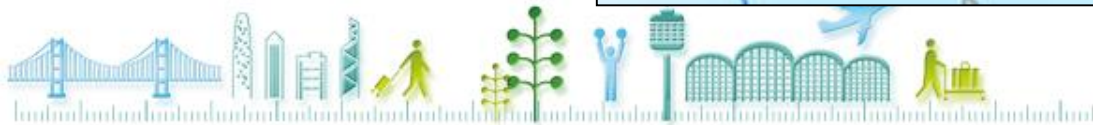
CWD Monitoring Results – Vessel Line Transect Survey (Dec 2018 – May 2019)

- 12 rounds of vessel line transect surveys, covering a total distance of approx 2,730 km
- 55 groups of CWDs with 207 dolphins sighted
- About half of CWD sightings were recorded in WL survey area, followed by SWL and NWL survey areas
- The waters off Lung Kwu Chau (LKC) remain as important habitats for CWDs in Hong Kong
- Average CWD group size was 3.8, ranging from 1 to 21 dolphins; 11 sightings were recorded with the presence of mother-and-unspotted calf or mother-and-unspotted juvenile pairs



CWD Monitoring Results – Land-based Theodolite Tracking (Dec 2018 – May 2019)

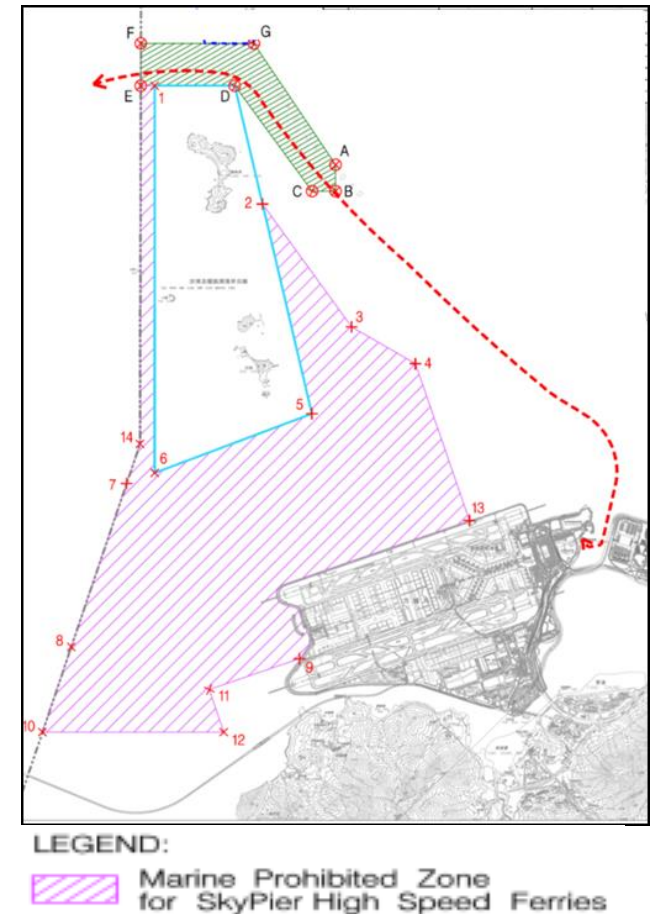
- 20 days (120 hours of effort) Land-based Theodolite Tracking were conducted on Lung Kwu Chau (LKC) and Sha Chau (SC)
- 20 CWD groups were tracked from LKC station
- No CWD groups were tracked from SC station



Implementation of Marine Traffic Route and Management Plan for High Speed Ferries of SkyPier (SkyPier Plan) (Dec 2018 – May 2019)

- Total number of diverted HSF trips*: 4,695
- Diverted SkyPier HSF trips* with average speed within 15 knots: 99.98%
- Maximum daily no. of SkyPier HSF movement: 94 (within the maximum daily cap of 125 movements)
- Daily average SkyPier HSF movements: 87 (within the maximum annual daily cap of 99 movements)
- 3 workshops were held with HSF operators to discuss previous deviation incidents and share experience to further strengthen the implementation of SkyPier Plan

* To and from Zhuhai & Macau



Complaints and Enquiries Handling

	2015 (from 28 Dec)	2016 (Full Year)	2017 (Full Year)	2018 (Full Year)	2019 (Jan-May)
Complaints	0	1	7	8	1
Enquiries	0	25	16	19	10
Total	0	26	23	27	11



Chinese White Dolphin Monitoring

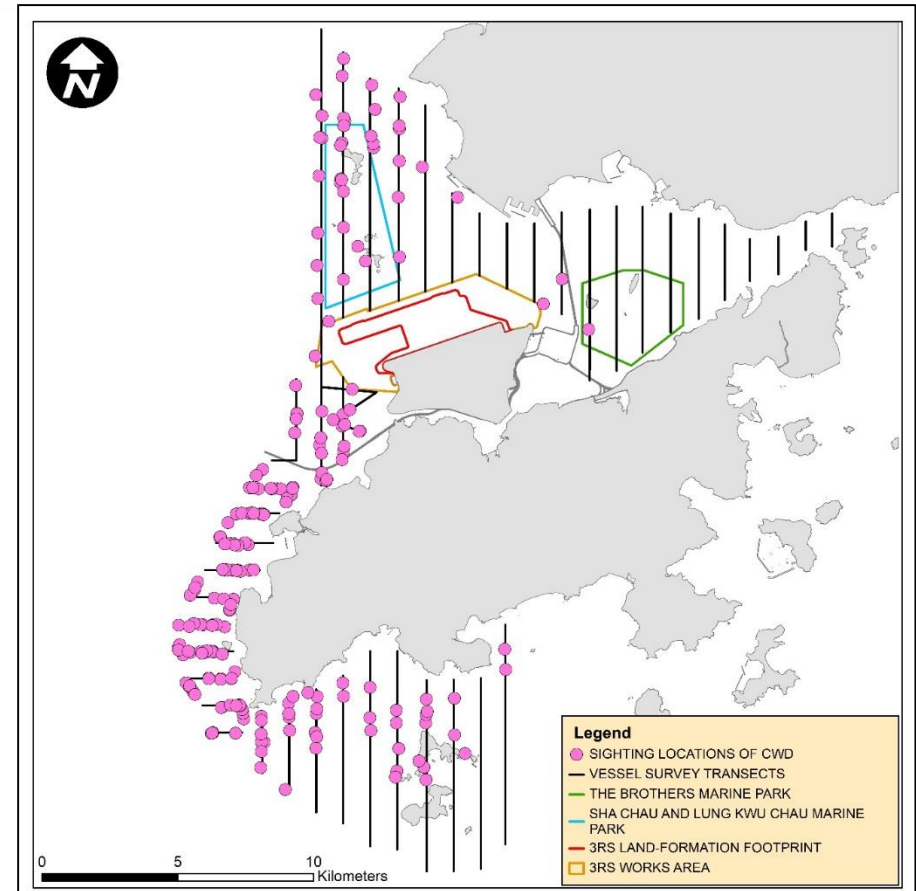
2018 Annual Review Findings



CWD Vessel Monitoring Results in 2018

Effort and Sightings

- 24 rounds of transect surveys covering NEL, NWL, AW, DB, WL and SWL survey areas completed in 2018
- Over 5,400 km survey effort collected (with around 92% conducted with Beaufort Sea State 3 or below)
- 215 groups of 686 CWDs sighted with group sizes ranging from 1 to 15
- 2 sightings of dolphins recorded in NEL in 2018 (no dolphin record between mid-Dec 2015 and Dec 2017)



Sighting Distribution of CWDs in 2018

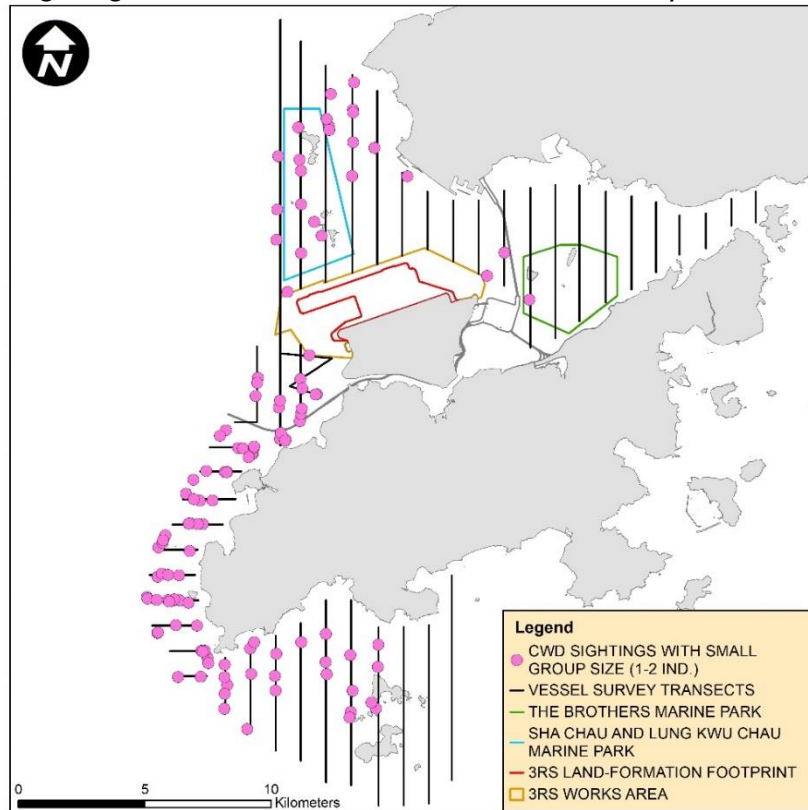


CWD Vessel Monitoring Results in 2018

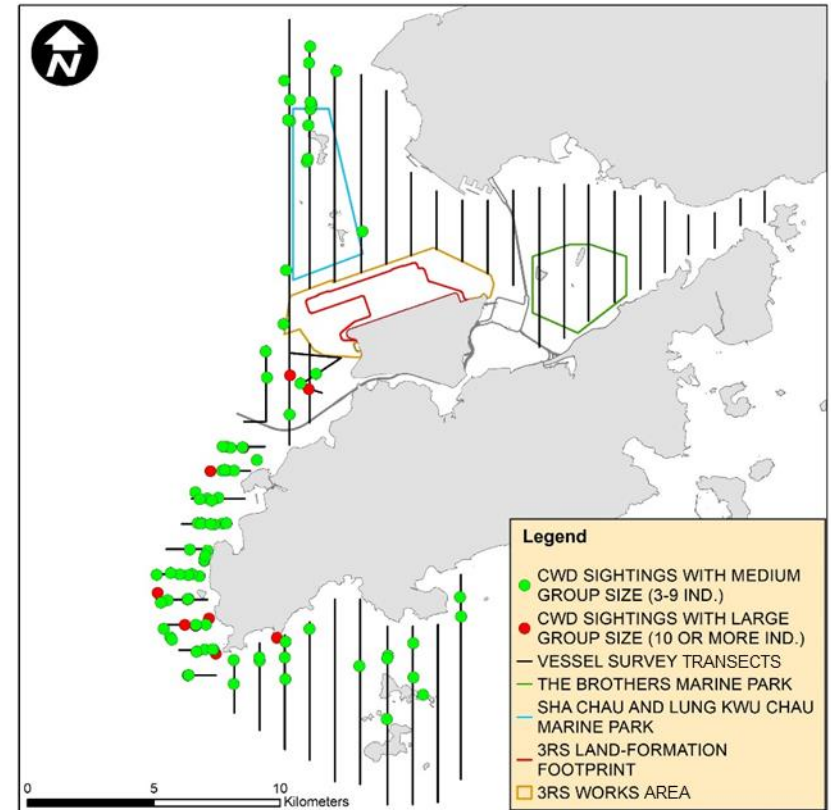
Group Size

- Average CWD group size was 3.19

Sighting Distribution of Small-sized CWD Group in 2018



Sighting Distribution of Medium-sized and Large CWD Groups in 2018

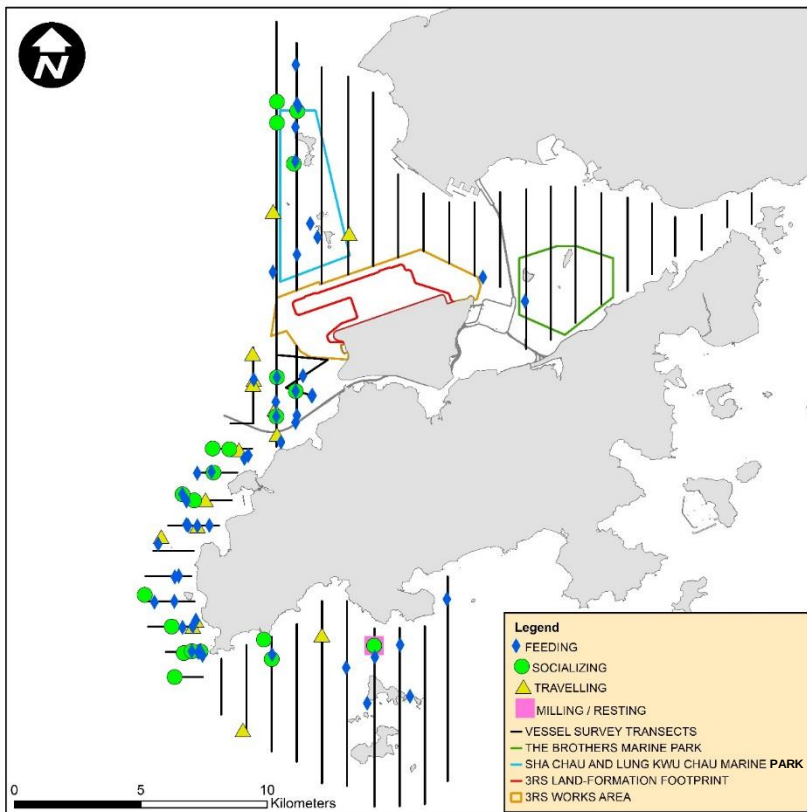


CWD Vessel Monitoring Results in 2018

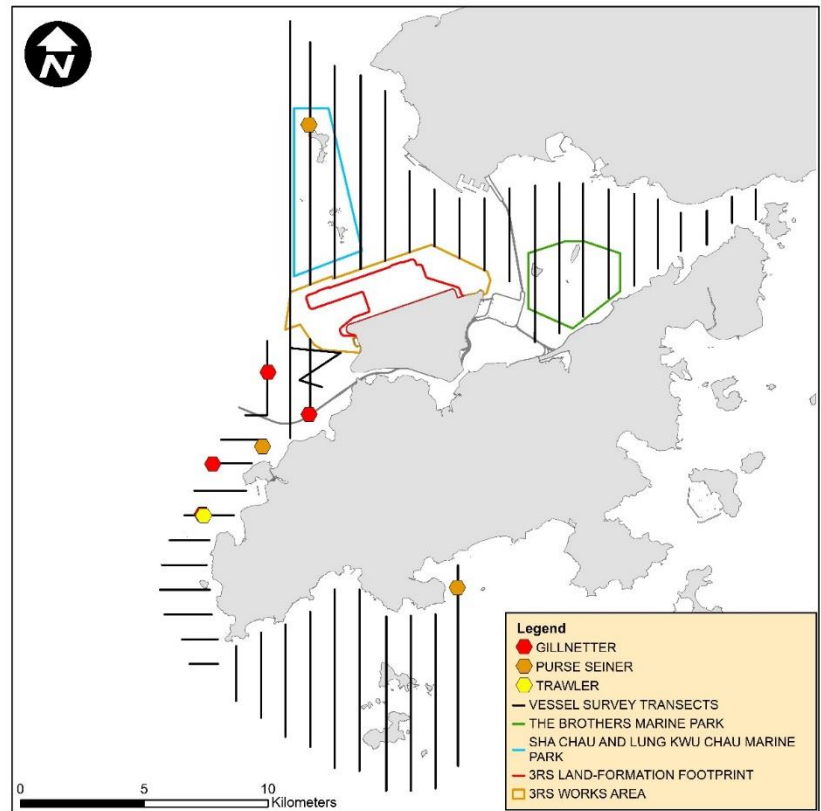
Behaviour and Association with Fishing Boats

- Behaviour and activities of dolphins (feeding, socialising, travelling and resting/milling)
- Association with operating fishing boats (gill netters, purse seiners and trawlers) mainly observed in survey areas between NWL and WL

Sighting Locations of CWD Groups engaged in different activities



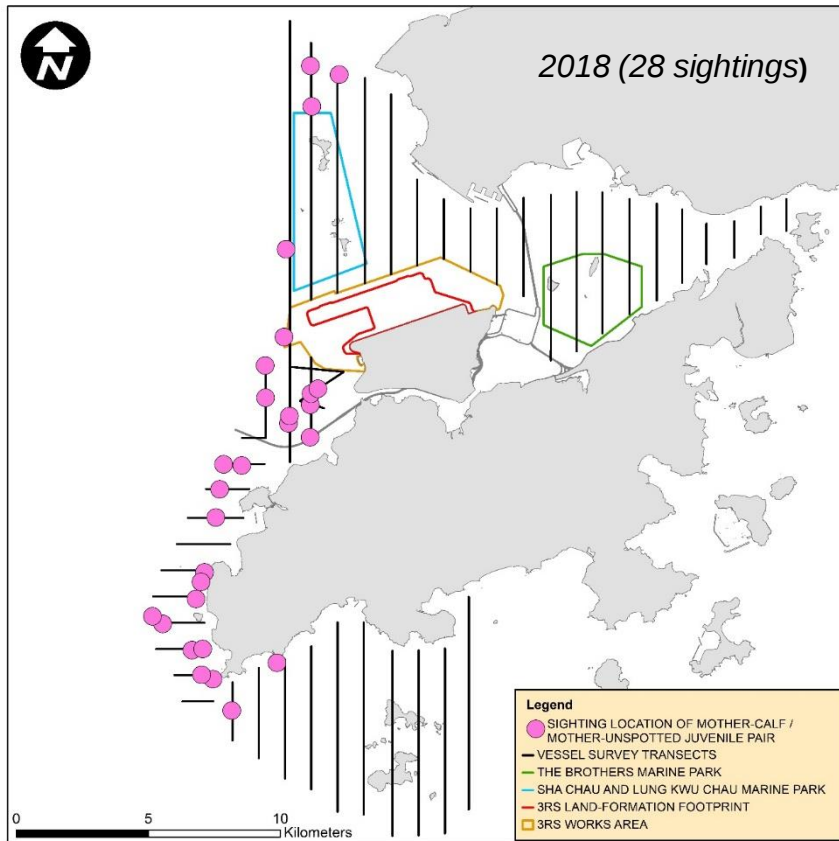
Sighting Locations of CWD Groups in association with Fishing Boat



CWD Vessel Monitoring Results in 2018

Mother-calf / Mother-juvenile Pair

- In 2018, 28 sightings were recorded with the presence of mother-and-unspotted calf or mother-and-unspotted juvenile pairs

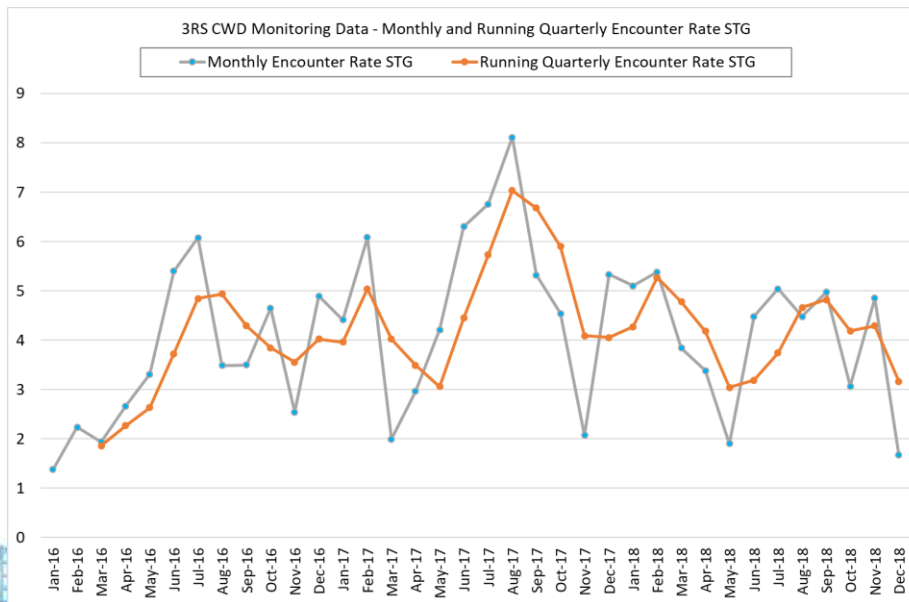


CWD Vessel Monitoring Results in 2018

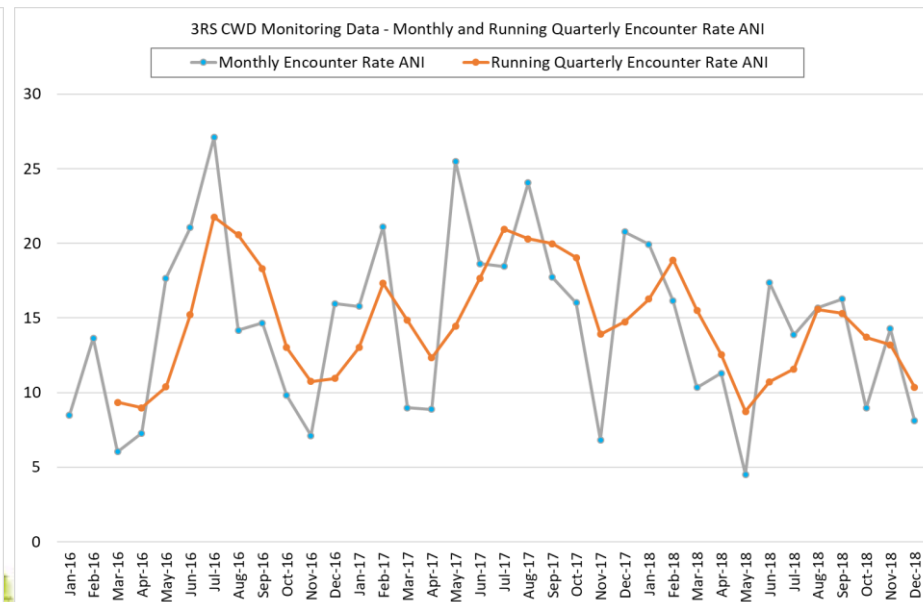
Encounter Rates

- Winter and summer months generally recorded higher STG and ANI
- The highest monthly STG and ANI occurred in February and January respectively
- The lowest monthly STG and ANI occurred in December and May respectively
- The temporal trends in 2018 were generally similar to the past year (e.g. June to September was still consistently recorded with higher STG and ANI, and the spring period was recorded with lower STG and ANI despite the occasional rise in ANI in May 2017) except for a dropped in both STG and ANI in December 2018

STG (number of dolphin sightings per 100 km survey effort)



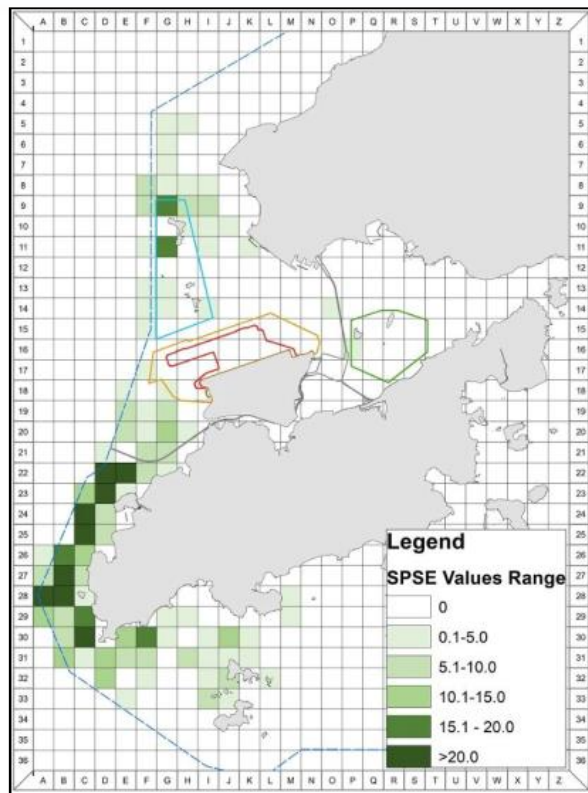
ANI (total number of dolphins per 100 km survey effort)



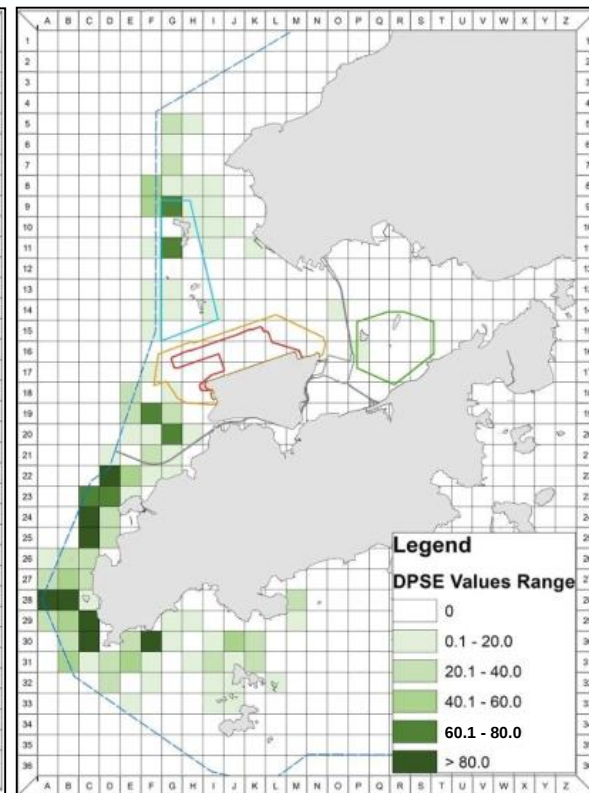
CWD Vessel Monitoring Results in 2018

Quantitative Grid Analysis

- Quantitative grid analysis on habitat use using 3RS sighting data for December 2018
 - NWL: Increased usage in waters between Sham Wat and the 3RS works area
 - WL: Entire coastal waters of WL remain as important habitat for CWDs
 - SWL: Reduced usage in the coastal waters from Shek Pik to Lo Kei Wan, Shui Hau and offshore waters around the Soko Islands
- The waters around Lung Kwu Chau and entire West Lantau area particularly Tai O, Yi O, Peaked Hill and Fan Lau remain as important habitats for CWDs in HK



SPSE (no. of on-effort CWD sightings per 100 units of survey effort) – Dec 2018



DPSE (no. of CWDs per 100 units of survey effort) – Dec 2018



CWD Vessel Monitoring Results in 2018

Density and Abundance

- The estimated pooled abundance for NEL, NWL, SWL, WL and DB is 77 in 2018
- Size-bias corrected average group size (determined by the linear regression method in the program Distance, which accounts for possible missing of small groups at long distances) was higher in 2018
- Abundance estimate could be influenced by behaviour of dolphins that affects their sightability

Time Period	Stratum	No. of Sightings@	Average Group Size*	Trackline Detection Prob. - g(0)#	Individual Density (no./100km ²)	Abundance	95% CI (Abund.)	%CV
Jan-Dec 2018	AW	5	2.8	1.0	43.05	2	1-5	45.0
Jan-Dec 2018	DB	2	2.8	1.0	4.51	1	1-2	19.7
Jan-Dec 2018	NEL	2	2.8	1.0	2.94	2	0-6	73.2
Jan-Dec 2018	NWL	46	2.8	1.0	24.85	22	13-36	25.6
Jan-Dec 2018	SWL	40	2.8	1.0	22.23	15	8-27	31.1
Jan-Dec 2018	WL	107	2.8	1.0	137.68	38	25-59	22.0
Jan-Dec 2018	Pooled^	202	2.8	1.0	29.13	77^	53-112	18.9

@ Before truncation

From Jefferson (2000)

* The line transect analysis used a pooled group size for all survey areas as group size samples for some areas was very small.

^ Pooled abundance not including Airport West (AW). Note that the pooled estimates do not necessarily add up to the sum of the individual stratum estimates, as these are computed separately.



CWD Vessel Monitoring Results in 2018

Photo Identification

- 36 newly identified CWD individuals (cumulative record of 255 identified individuals for 3RS Project Photo ID catalogue)
- 158 individuals identified
- 97 individuals sighted for more than once and 32 individuals were sighted for five times or above
- 63 individuals showed cross-area movement between different survey areas
- 7 individuals re-sighted in three main survey areas, WL, SWL and NWL (including AW)



The most frequently re-sighted dolphin in 2018 (11 times)



The most frequently re-sighted dolphin since mid-Dec 2015

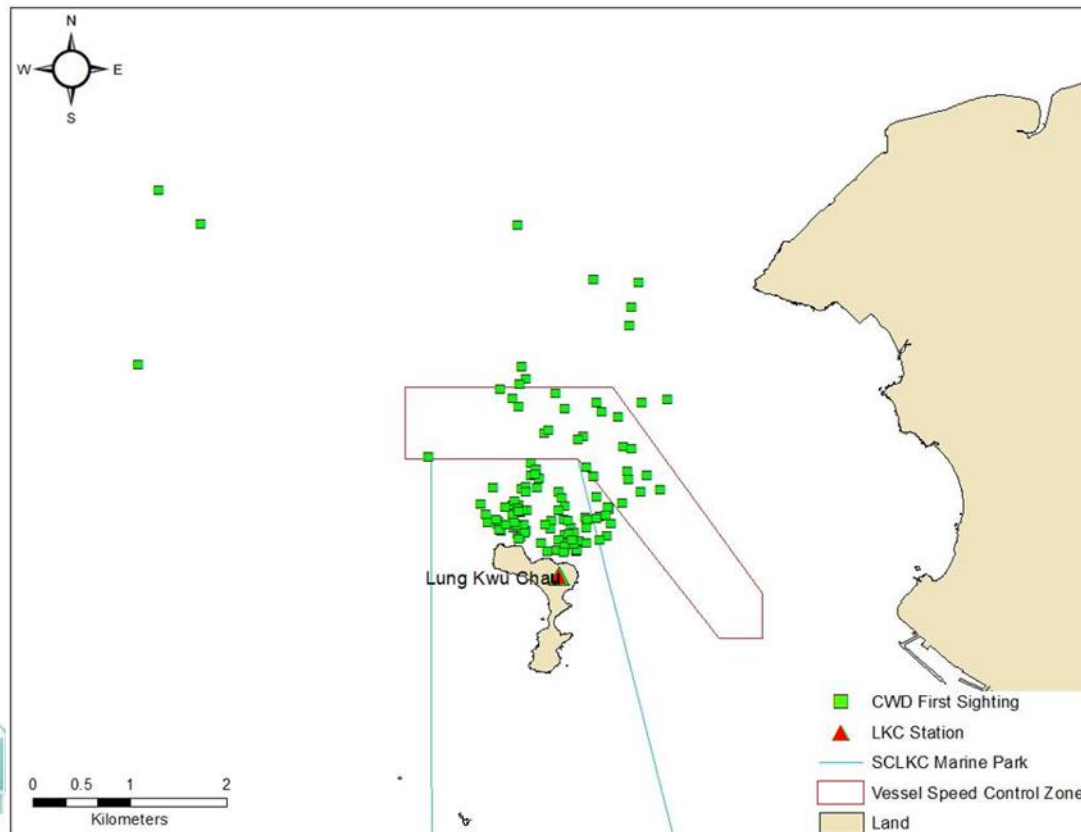


Mother-and-spotted juvenile pair, increased their use of NWL waters in 2018 with limited records in 2017



CWD Land-based Theodolite Tracking Monitoring Results in 2018

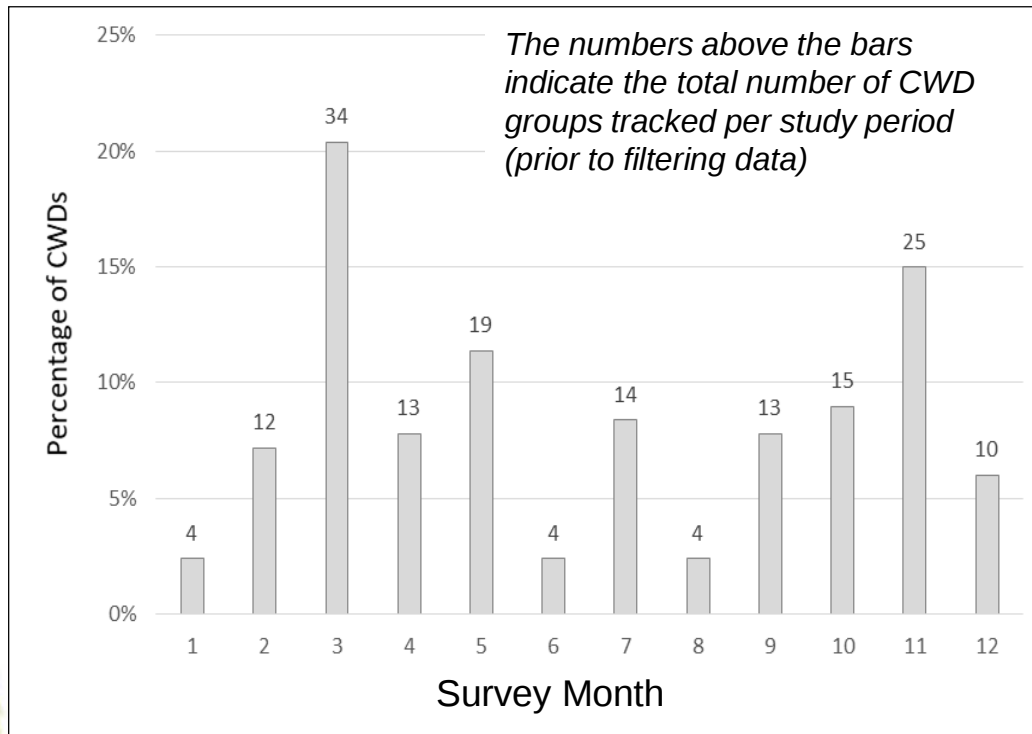
- 60 days (360 hours of effort) Land-based Theodolite Tracking conducted at Lung Kwu Chau (LKC) and Sha Chau (SC) stations
- Lung Kwu Chau (LKC) station: 167 CWD groups tracked in 2018; Group size ranging from 1 to 8 dolphins
- Sha Chau (SC) station: No CWD group tracked in 2018



Plots of First Sightings of All CWD Groups (prior to filtering out short-track data) obtained from Land-based Station at Lung Kwu Chau in 2018

CWD Land-based Theodolite Tracking Monitoring Results in 2018

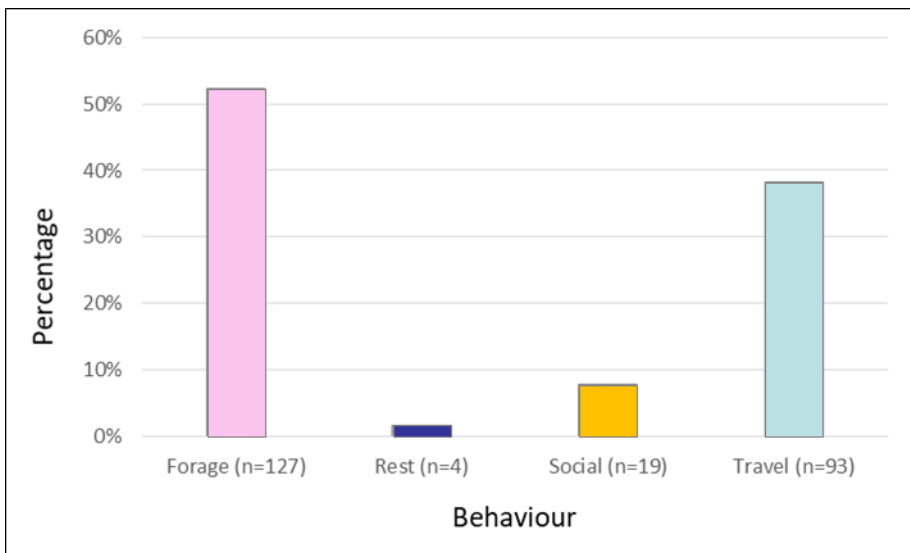
- Highest number of CWD groups observed from LKC recorded in March 2018
- Lowest number of CWD groups observed in January, June and August 2018
- The peak percentage of CWDs off LKC observed during spring and autumn
- Low percentage of CWDs observed during winter and summer



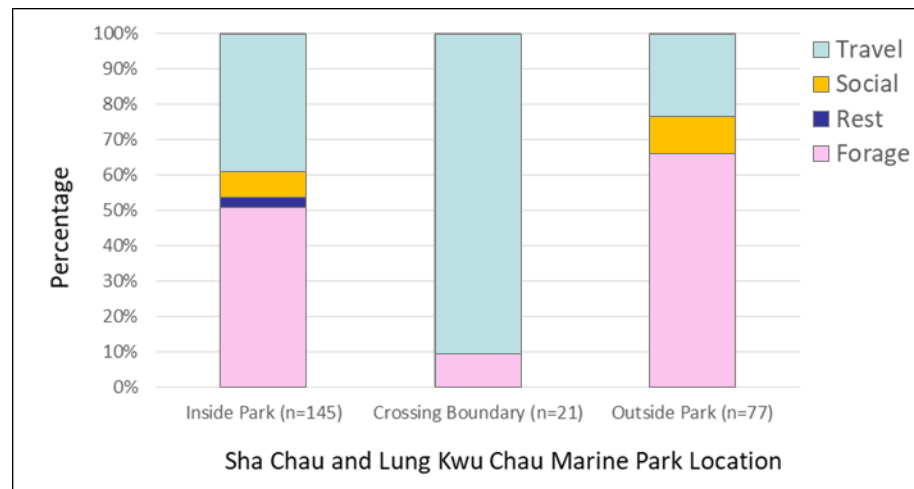
CWD Land-based Theodolite Tracking Monitoring Results in 2018 – Behaviour

- Observations confirm the waters off Lung Kwu Chau remain an important foraging area for CWDs
- The majority of the CWD groups tracked across the Sha Chau and Lung Kwu Chau Marine Park (SCLKMP) boundary were observed travelling (~90%)

Distribution of CWD's known behavioural states recorded in waters off Lung Kwu Chau

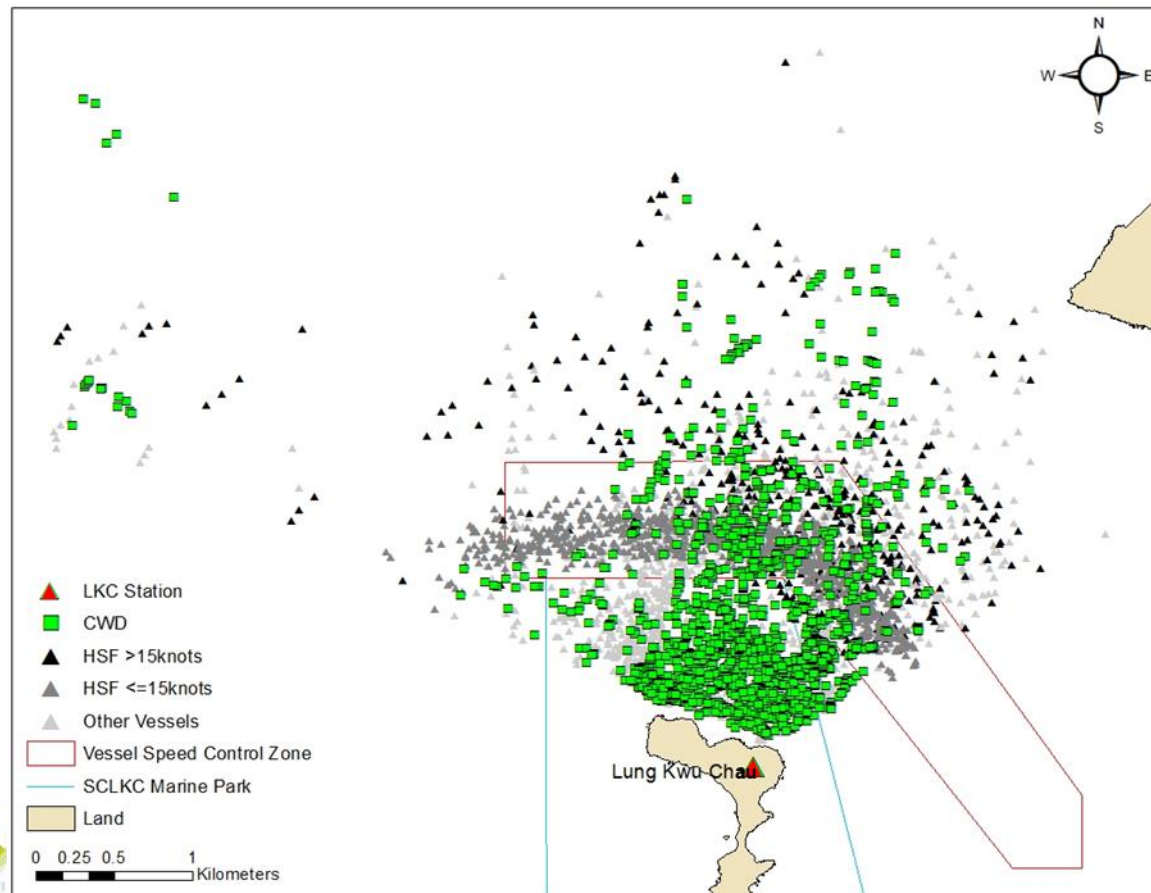


Distribution of CWD's known behavioural states recorded relative to the SCLKCMP Location



CWD Land-based Theodolite Tracking Monitoring Results in 2018 – Vessel Activity & Dolphin Movement

- Plots of all vessel positions and all CWD positions (prior to filtering out short-track data) obtained from Lung Kwu Chau in 2018 are illustrated below
- Swimming speed was faster in the presence of high-speed ferries under speed restriction and “other” non-ferry boats

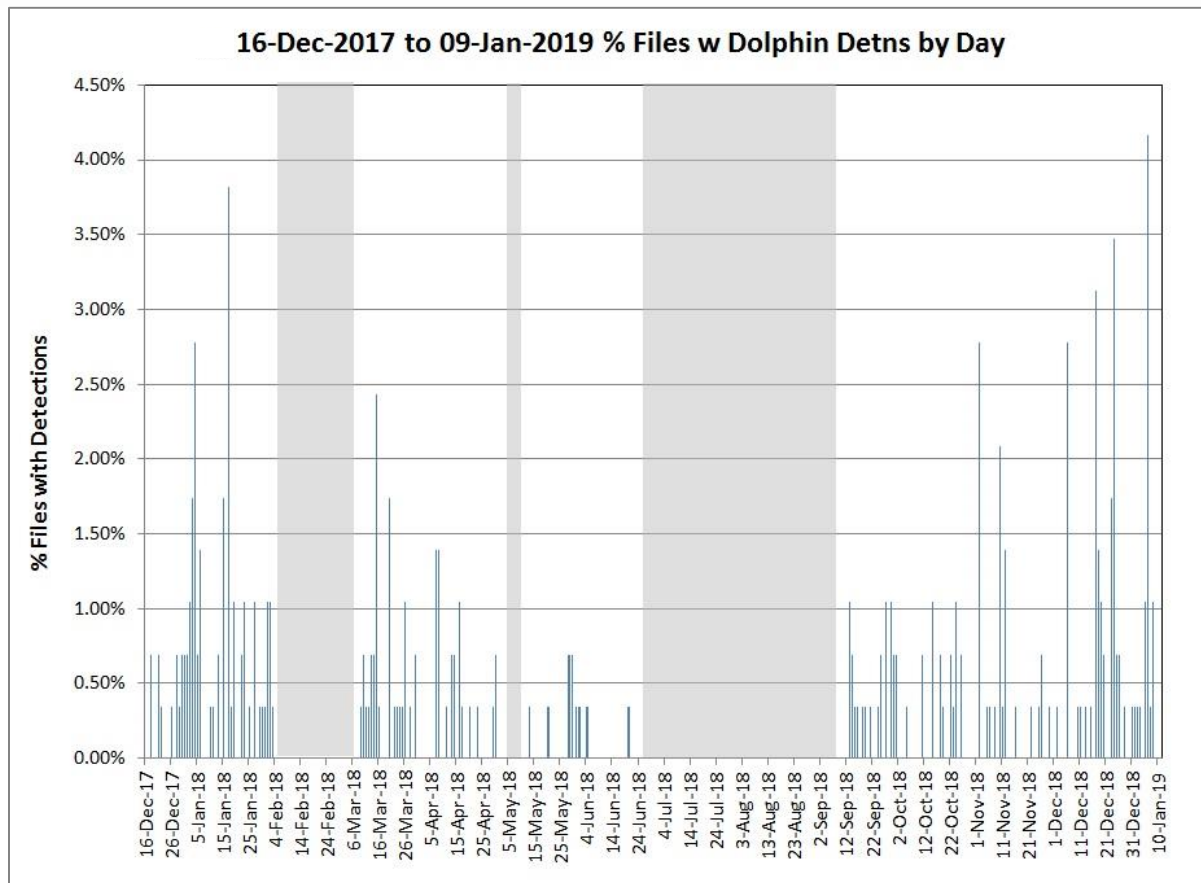


Note: HSF >15 knots include non-SkyPier HSF

CWD Passive Acoustic Monitoring Results in 2018

Dolphin Detns

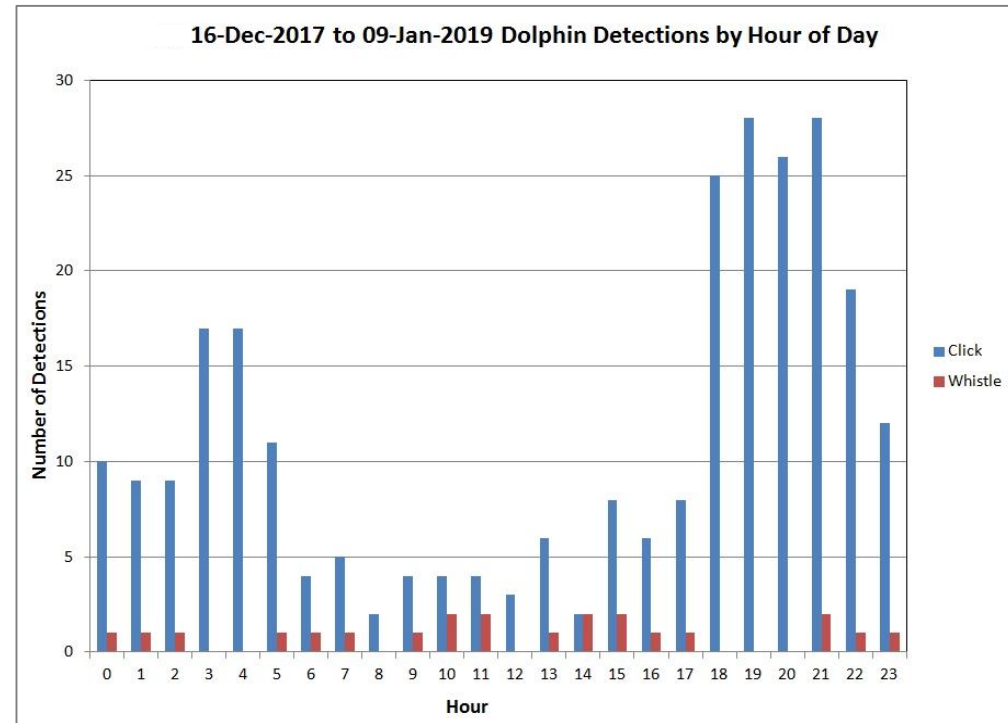
- Dolphins detected on 123 of 281 (44%) days with recording effort from 16 December 2017 to 9 January 2019
- Dolphins using the area around south of Sha Chau throughout the year



CWD Passive Acoustic Monitoring Results in 2018

Dolphin Diel Pattern

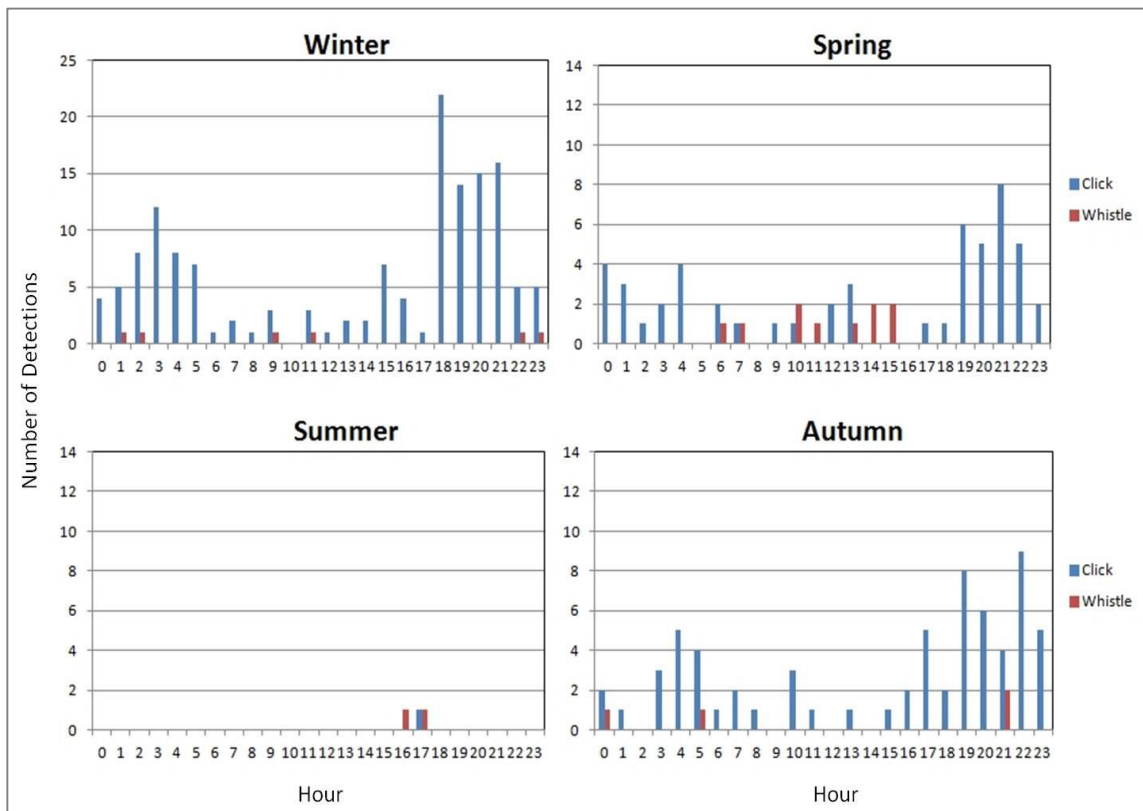
- Clicks were the predominant type of dolphin signal detected (267 detections)
- Whistles (22 detections) were occasionally detected throughout the monitoring period
- The metrics are remarkably similar to those of the previous year in 2017
- Diurnal detection of clicks showed a consistent pattern of higher levels at night compared with the daytime
- Peak detection hours between 1800 and 2100



CWD Passive Acoustic Monitoring Results in 2018

Seasonal Pattern

- Dolphins using the area around south of Sha Chau throughout the year
- Dolphin acoustic detection rates were highest in winter, decreased in spring through early summer, and increased again in late autumn through winter.
- In winter, detection peaked at 1800
- In spring and autumn, dolphin detections were higher during the hours 1900-2200
- In summer, the diel pattern was not evident in which the number of detections (and recording effort) was low



CWD Monitoring Results in 2018

Concluding Remarks (1)

Vessel Line-Transect Surveys

- In general, findings from this study are consistent with findings from the long-term monitoring commissioned by AFCD;
- Two sightings of dolphins by vessel survey were recorded around the Brothers Marine Park of NEL (dolphin records was absent between mid-Dec 2015 and Dec 2017);
- The waters around Lung Kwu Chau and entire coastal waters of West Lantau area remain as important habitats for CWDs in HK
- Average annual abundance in Hong Kong's western waters was estimated at 77 individuals in 2018 from line-transect analysis, which is somewhat higher than previous years;
- No evidence of a decline in dolphin use of the HSF speed control zone around Lung Kwu Chau since ferries have been re-routed to that area with slower speeds at the end of 2015, as the estimate abundance of NWL in 2018 was 22 dolphins which is higher than previous years (i.e. 15 dolphins in 2016 and 14 dolphins in 2017)



CWD Monitoring Results in 2018

Concluding Remarks (2)

Land-based Theodolite Tracking Surveys

- The waters off Lung Kwu Chau remain an important foraging area for CWDs throughout the year;
- Group sizes of CWDs were generally smaller closer to shore, singletons were only observed within the MP boundary. This trend may reflect a sighting bias wherein single CWDs may be more difficult to locate farther from the survey platform;
- The peak percentage of CWDs off LKC observed during the spring and autumn. Low percentage of CWDs observed during winter and summer;
- Swimming speed was faster in the presence of high-speed ferries under speed restriction and “other” non-ferry boats, indicating potential avoidance of vessels;
- No record off Sha Chau reflects a reduced use of the area north of the airport and south of the Sha Chau and Lung Kwu Chau Marine Park



CWD Monitoring Results in 2018

Concluding Remarks (3)

Passive Acoustic Monitoring

- Acoustic monitoring showed consistently higher levels of clicking activity at night, which may indicate increased use of echolocation by dolphins during hours of darkness
- Dolphins used the area around south of Sha Chau throughout the year
- Dolphins were present with especially high incidence in winter, and less so in other seasons



Marine Ecology and Fisheries Enhancement Strategy



Overview of MEEF Funded Projects

Fund	No. of Funded Projects / Total Funded Amount	Projects
Marine Ecology Enhancement Fund (MEEF)	Jul 2017 – Jun 2018: 6 Nos. / ~HK\$5.08M Jul 2018 – Jun 2019: 6 Nos. / ~HK\$6.55M	• Dolphins related projects: • Population Surveys of Chinese White Dolphins in Pearl River Delta region • Interaction between dolphins and fisheries in Hong Kong • Night-time acoustic monitoring on Chinese White Dolphins • Other projects: • Reproductive biology of Octocoral <i>Guaia</i>gorgia in Hong Kong western waters • Ecosystem study on Tung Chung mangroves • Impact of microplastics on horseshoe crabs in Hong Kong western waters

Remark: The MEEFMC's accepted completion reports of the MEEF-funded projects have been uploaded onto the dedicated website.



Overview of FEF Funded Projects

Fund	No. of Funded Projects / Total Funded Amount	Projects
Fisheries Enhancement Fund (FEF)	Jul 2017 – Jun 2018: 4 Nos. / ~HK\$2.93M Jul 2018 – Jun 2019: 3 Nos. / ~HK\$3.70M	• Pearl farming pilot project • Installation of radar reflector on fishing vessels • Feasibility study on Hong Kong Fisheries Festival • Development of mobile application to support the sales of local capture fisheries • Study of the cumulative impact of reclamation works in Hong Kong and adjacent waters on the fisheries industry

Remark: The FEFMC's accepted completion reports of the FEF-funded projects have been uploaded onto the dedicated website.



Potential Enhancement Measures

Potential Enhancement Measures	Status
Eco-enhancement of seawall design	Installation of eco-enhanced blocks (rock pools) on northern vertical seawall was completed in late February 2019. Eco-enhanced concrete blocks planned for installation on eastern vertical seawall in Q3 2019.
Voluntary surveillance & potential measures that may aid or assist in the effective management of Marine Parks	A six-month pilot test was conducted from May to October 2018. The test recorded any activities suspected to be non-compliant and information was shared with AFCD.
Artificial reef deployment	Feasibility studies have been conducted, preparation for the pilot tests in progress.
Fish restocking / Fish fry release	Feasibility studies have been conducted, pilot programme first phase bulk release conducted in May 2019.



Eco-enhancement of Seawall Design

- Eco-enhancement seawall design, which incorporates concrete seawall blocks and vertical seawall panels with rough surfaces to facilitate and promote colonisation of epifauna and to increase microhabitat complexity



Updates of the Pilot Test on Fish Restocking

2019 Q1-Q2

Conducted trials
and finalised
survey
methodology

- Setup of Baited Remote Underwater Video System (BRUVS)
- Acoustic tags trial

April 2019

Fish arrival and
acclimatisation
at fish farm

- Fish fingerlings (yellowfin seabream, black seabream and green groupers) arrived Hong Kong and acclimatised at fish farm in Cheung Sha Wan
- Fish health and sizes were monitored
- Pre-release monitoring by BRUVS and fish surveys

May 2019

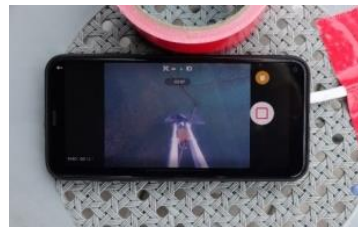
First batch fish
release and
post-release
monitoring

- Yellowfin seabream and black seabream fingerlings were released to HKIAAA Area 1
- Post-release monitoring by BRUVS and fish surveys are being undertaken



Trials of the Pilot Test on Fish Restocking (1)

- Baited Remote Underwater Video System (BRUVS)
 - Optimal distance between the video camera and the baits
 - Types of baits



Bread



Frozen Fish



Fish Pellets

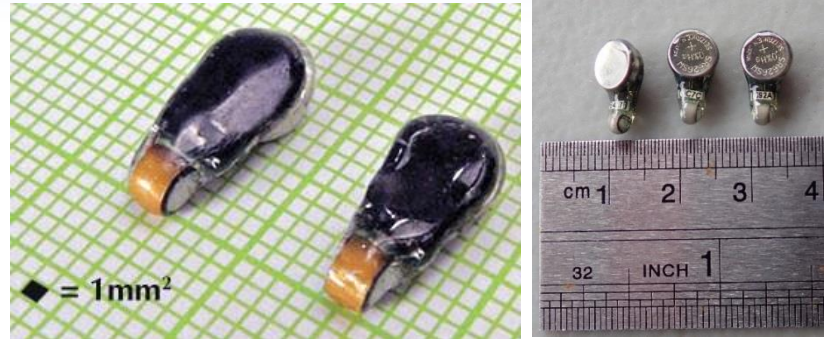


Krill with Fish Bait Powder



Trials of the Pilot Test on Fish Restocking (2)

- Acoustic telemetry
 - Implantation of acoustic tag
 - Detection range of the hydrophone



WHS Data Viewer - File: P:\Projects\0313181 AAHK 3RS EPC12 Fish Fry Release\01 Data\20190417\Trial 2 (Tagged Fish).JST

Filter Options: Tag ID Direct Entry

Save Filter Load Filter New

Tag ID	Count
41581	NOT FOUND
46135	8
15484	8
15717	NOT FOUND
26922	NOT FOUND

Specify Minimum Detections: 1

Run Filter

Date Range Options

Most Recent Data: Last Partial Day

Specify a Date Range

Start: Wednesday, April 1

End: Wednesday, April 1

Clear Date Search Run Date Search

Index	Tag ID (dec)	Tag ID (hex)	Date	Time	Fraction of Second	Power
3	46135	B437	April 17, 2019	11:12:14	0.39182	491
21	46135	B437	April 17, 2019	11:12:54	0.88848	852
25	46135	B437	April 17, 2019	11:14:15	0.77972	842
30	15484	3C7C	April 17, 2019	11:14:45	0.83037	811
36	46135	B437	April 17, 2019	11:15:15	0.26196	824
40	46135	B437	April 17, 2019	11:15:35	0.35760	870
165	46135	B437	April 17, 2019	11:40:21	0.15336	409
168	46135	B437	April 17, 2019	11:40:41	0.22658	769
199	15484	3C7C	April 17, 2019	11:44:13	0.45264	745
216	15484	3C7C	April 17, 2019	11:45:55	0.00504	764
229	46135	B437	April 17, 2019	11:47:42	0.65452	94
248	15484	3C7C	April 17, 2019	11:49:58	0.64939	39

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Fish Acclimatisation at Fish Farm



Fish transfer by fish carrier



Fish transfer by oxygen saturated plastic bags



Fish farm at Cheung Sha Wan



Fish feeding by pellet feed



Fish Release Operation in May 2019 (video)

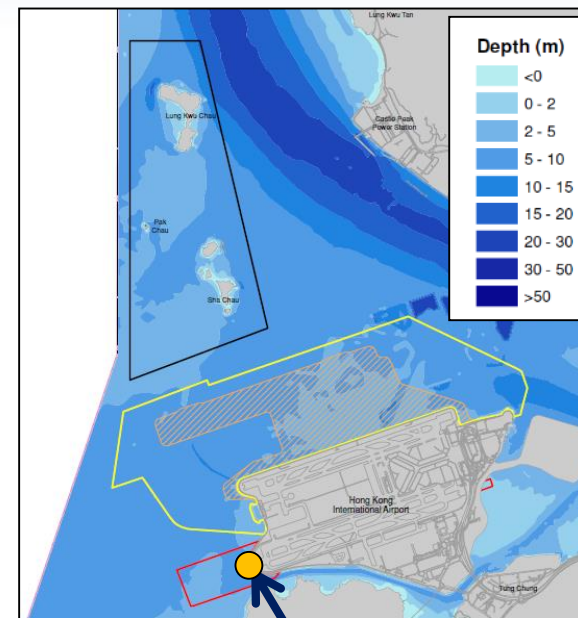
- Released species: Yellowfin Seabream, Black Seabream
- Size: ~10-20 cm each
- Quantity: ~7,000 fingerlings



Fish transfer to cage



Fish in cage and release



Fish Restocking at Artificial Seawall
(within HKIAAA)



Fish cage was transferred to the seawall by surface swimming



Fish cages

Monitoring for the Pilot Test on Fish Restocking *(video)*

- Proposed monitoring methods including
 - Cage-trapping and Hand-lining
 - Baited Remote Underwater Video System (BRUVS)
 - Acoustic tags and monitoring (to be performed in second batch release)
- Pre-release and post-release surveys to monitor effectiveness



Cage-trapping and hand-lining

Baited Remote Underwater Video System



Acoustic tags and receiver



Way Forward for the Pilot Test on Fish Restocking

- Undertake post-release monitoring for 6 months
- Implantation of acoustic tags to selected fish (black seabream and green groupers)
- Second batch fish release to be conducted in September 2019 after summer season
- Post-release acoustic monitoring to be conducted for 6 months after second batch fish release

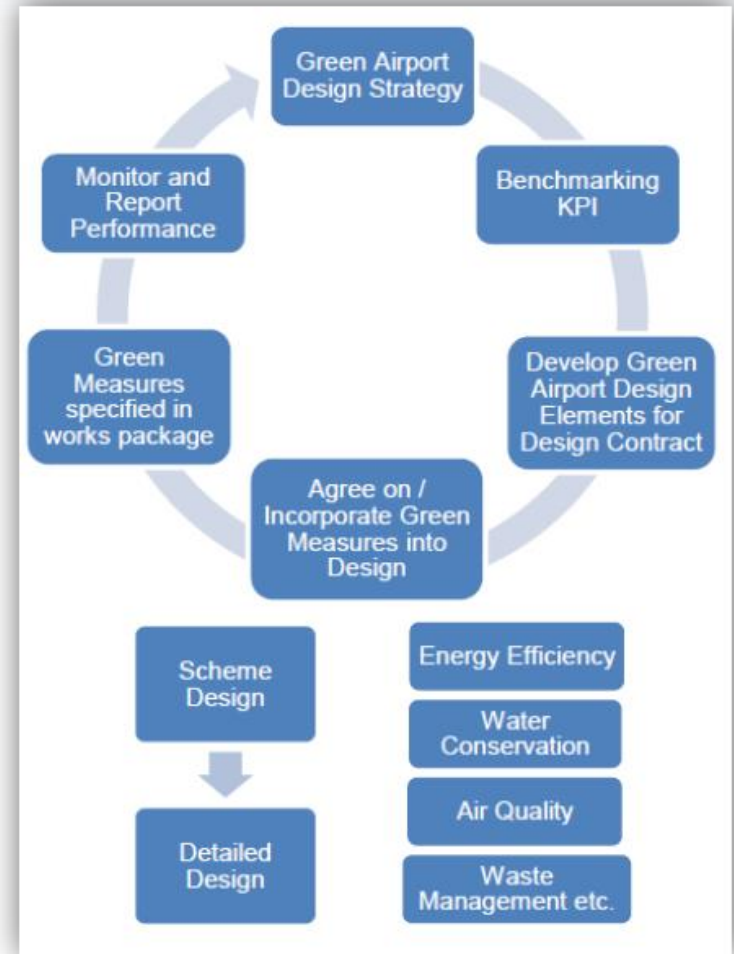


3RS Green Design and Sustainable Construction



AAHK's Green Airport Design Strategy

- AAHK is committed to making HKIA one of the **world's greenest airport**.
- A **Green Airport Design Strategy** has been established and implemented since the scheme design stage of the 3RS Project.
- The Strategy requires design consultants to identify **possible green design elements** and evaluate related pros and cons over the project's life cycle.
- Where considered useful, **third party certification** is pursued for demonstrating AAHK's commitments in delivering sustainable design and construction for the 3RS Project.



Green Building Certification

AAHK's previous achievement in Midfield Concourse project

- Won the **Grand Award for New Buildings** – Completed Project Category at Green Building Awards 2016
- Achieved BEAM Plus V1.1 **Final Gold** (2017)

AAHK's upcoming targets

- Pursuing highest possible rating (**Platinum**) in BEAM Plus assessments for:
 - **T2 Expansion Project**
 - **Third Runway Concourse**



3RS Sustainable Construction

AAHK's achievement in 3RS Advanced Works – Aviation Fuel Pipeline Diversion

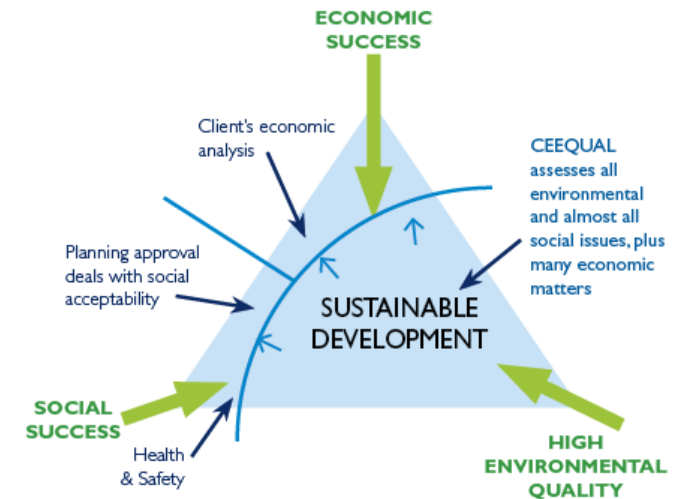
- **Merit Award** under Organisation Category in CIC Sustainable Construction Award (2018);
- **Excellent and Outstanding awards** under Industry Practitioners Category in CIC Sustainable Construction Award (2018).



CEEQUAL Version 5 coverage

AAHK's upcoming target

- Pursuing the Whole Team Award for **C3303 Third Runway and Associated Works** and the related *Infrastructure Design* under **CEEQUAL***



* **CEEQUAL**, which is based on its original name “**Civil Engineering Environmental Quality Assessment and Awards Scheme**”, is an international sustainability assessment scheme for civil engineering and infrastructure projects first developed by the UK Institution of Civil Engineers in 2003.

Thank You

