

Te hauorataka, te orakataka me te whakaputaraka / Health, survival and productivity							
	Year 1	Year 2	Year 3	Years 4 and 5	Collaborators	Status	
	(July 2019-June 2020)	(July 2020-June 2021)	(July 2021-June 2022)	(July 2022-June 2024)	Who else may be involved & HGG lead(s) in bold	Progress on this action in 2023/24	
Strategic Priority 1 Intervene and care for sick, injured or underweight hoiho to improve survival and breeding success.	Action 1a Ensure that the rehabilitation system from uplift, through hospital care and rehab to release, is funded and resourced to provide essential care for hoiho on an ongoing basis. (E)				DOC, YEPT, vets and rehab groups	Good collaboration between organisations which continues to grow. c 40-50% of adults / juveniles (Northern popn) required rehab, 99% successfully released. 46% chicks required rehab, 97% successfully fledged. But, no overarching funding system and most organisations struggling to fund operations (JFN ended, and no funding through DOC Community Fund). No progress on business partnership options to fund hoiho mahi (HGG). Improvements to rehab facility on Rakiura and new YEPT rehab coordinator role created. Successful uplift of compromised birds from Whenua Hou, but issues with perceived disease risk affected release location. Continued conservation focus and development of rehab at the Otago Peninsula Eco Restoration Alliance (the OPERA, formerly Penguin Place). Sourcing fish for rehab was more difficult this season.	
	Action 1b Increase capacity and capability to identify sick, injured or underweight hoiho through an expanded programme of intervention (including Rakiura and sites which currently receive minimal intervention). (E)		Annually implement the intensive management programme. (E)		DOC, YEPT, Kāi tahu, mana whenua, site managers and landowners	Increased ranger capacity at DOC Rakiura. Reduced ranger capacity at YEPT. Increase in monitoring and interventions for Rakiura but no option for chicks (resulting in low productivity). Slight increase in monitoring / intervention on Whenua Hou (support from WH komiti & Kaitiaki Roopu, but ongoing access & disease issues). Green Island mahi (egg removal again, and minimal moult monitoring). DOC Senior Ranger role to coordinate DOC hoiho operations work.	
	Action 1c Annually assess short-term outcomes and the long-term survival and breeding success of birds who have undergone treatment and/or rehabilitation to make improvements to practices. (E)					DOC, YEPT, Kāi tahu, vets, rehab groups and researchers	End of season debrief and reporting (release/survival rate, fosters, fledging). Data collected by all organisations. Short-term survival of chicks to fledge and treatment / rehab success of birds is very high. Some investigation into long-term outcomes undertaken last year (Uni of Otago), but further investigation needed.
Strategic Priority 2 Minimise the impact of disease and unexplained mortality events on hoiho.	Action 2a Annually review the chick management protocol (including the diphtheritic stomatitis treatment protocol) and provide logistical support and training to ensure its implementation. (E)				DOC, YEPT, vets and site managers	Significant improvements to management of chicks. 85% of chicks on mainland uplifted to WHD for treatment, 96% successfully released. Only 1 chick died from DS, and significant reduction in antibiotic use (only 2-3 cases). Fewer cases and deaths from RDS (7% of hatched chicks, n=15 deaths; reduced from 15% of hatched chicks last year). Significant review of chick management protocol with stakeholder feedback (including hatching issues, relapse of DS, uplift of chicks at 3 days, egg development and supplementary feeding (latest version: v3.3 Nov 2023). End of season review with operational groups (17-May-2024).	
	Action 2b Annually review the avian malaria action plan and provide logistical support to ensure its implementation (including effective control of mosquitoes and treatment of malaria) by appropriate groups. (E)				DOC, YEPT, site managers, vets and rehab groups	Review of malaria action plan with stakeholder feedback, focusing on non-pharmacological options (latest version: v4.2 Sept 2023). Three hoiho deaths from avian malaria in 2023/24. Malarone pharmacokinetic research underway (WHD). End of season review meeting with operational groups (17-May-2024).	
	Action 2c Annually review the unexplained mortality response plan for future events (including examination and testing of birds) and incorporate Kāi Tahu tikaka. (E)					DOC, YEPT, Kāi tahu, vets and rehab groups	Oversight of disease response for hoiho led by DOC Vet Coordinator. No UM cases in 2023/24. Review of unexplained mortality response plan planned, but lower priority (UM levels, triggers & requirements) (latest version: Sept 2019).
	Action 2d Review hoiho necropsy results to date.(E)		Use results of the review to inform management and research direction. (E)			DOC, YEPT, vets and researchers	Vet coordinator annual report on disease and hoiho deaths completed. PhD ongoing reviewing penguin necropsy results using Huia database (Auckland Zoo).
	Action 2e Annually fund and send birds for necropsy to investigate cause of death, summarise necropsy results, and identify and respond to novel diseases as appropriate. (E)					DOC, YEPT, vets, rehab groups and site managers	Contract for hoiho necropsies is ongoing (Wildbase, Massey Uni). 13 adult hoiho died (excluding fisheries deaths): 7 due to predation, 3 to malaria, 1 starvation, 2 unknown). Additional small chick necropsies completed (WHD/Massey Uni). Continued funding of DOC vet coordinator role (analysis of necropsy results). Six cases of Pasteurellosis were unusual this season and DOC continue to investigate. Monitoring Highly Pathogenic Avian Influenza (HPAI) and risk to NZ avifauna continues; DOC shared guidelines with operators.
	Action 2f Commission research to identify the vector(s) of malaria and investigate the mechanisms and dynamics of Plasmodium between mosquitoes, hoiho and other native / non-native birds. (E)					DOC, YEPT, researchers, vets, rehab groups and site managers	Continued development of a malaria warning system App (Landcare). Analysis of blood to look at Plasmodium species and lineage (qPCR) research in Northern and Southern hoiho is in progress (Massey Uni). Paper published on malaria infections in seabirds including hoiho (Uni of Otago).
	Action 2g Commission research to characterise the disease status for southern and northern populations of hoiho. (H)			Use results to inform management and research direction. (H)		DOC, YEPT, researchers and vets	Ongoing hoiho pathogen discovery postdoc research into gyrovirus and RDS, and picornavirus and DS; papers published on novel gyrovirus and picornavirus (Massey / Otago). Monthly disease reports (vet coordinator). Ongoing postdoc project through CSP to link microbiome, diet, disease & fisheries (Uni of Otago). Blood samples and oral/cloacal swabs collected during Campbell Island hoiho trip. Funding secured for full genome sequencing to further investigate disease (Uni. of Otago / Massey).

		Action 2h Commission research to investigate potential causes of unexplained mortality events, including examination of correlations between events, and parameters relating to hoiho and the environment. (H)	Use results to inform management and research direction. (H)	DOC, YEPT, researchers and vets	Testing in 2021/22 for 15 marine toxins, but given insignificant results it is hard to justify further testing (expensive and won't necessarily find an answer).	
			Action 2i: Commission research to further investigate diphtheritic stomatitis in order to improve disease management (H).		NEW action in 2023/24. Ongoing pathogen discovery postdoc research into novel picornavirus and DS (Massey Uni). Significant improvements in disease management at WHD resulted in fewer deaths from DS. Bacterial culture and antibiotic sensitivity analysis testing (WHD).	
Strategic Priority 3 Follow appropriate kawa and tikaka for treatment of all hoiho.	Action 3a Develop tikaka / best practice protocol for handling and care of all hoiho for research and management purposes. (E)		Implement the protocol, including as part of the permitting process. (E)	DOC, Kāi tahu, YEPT, vets, rehab groups, researchers and site managers	Significant review of chick management protocol. Overarching tikaka protocol not started (initial discussions about naming birds, social media, handling of dead birds).	
	Action 3b Develop a dispensation process to enable fishers to temporarily hold bycaught hoiho for conservation purposes and Kāi Tahu cultural practices.		Implement dispensation process. (H)	Fisheries NZ, DOC and Kāi tahu	Dispensation process was completed in 2023/24 after an application to DOC Permissions Planning & Land.	
Strategic Priority 4 Investigate and develop additional intervention options to improve breeding success and survival.	Action 4a Investigate the full range of conservation intervention options which have the potential to improve breeding success and survival of hoiho and implement as required. (E)			DOC, YEPT, Kāi tahu, rehab groups, vets and researchers	Continuous improvements to conservation intervention options available. Fostering and egg management further developed as part of chick management protocol. Removal of eggs from Green Island hatched at WHD for second season. Chick hatch in hospital reduced DS. Streamlined chick monitoring & treatment of all mainland small chicks (increased chick survival rates).	
Strategic Priority 5 Ensure monitoring programmes, including cultural monitoring tools, provide quality information to support management decisions.	Action 5a Ensure that knowledge about the status and health of the northern population is complete and robust, by developing and implementing a well-defined annual monitoring and marking programme. (E)			DOC, YEPT, site managers, and researchers	Senior Ranger role continues to coordinate DOC hoiho operations monitoring programme. Monitoring details provided in the monitoring protocol (pre-season meeting on 18-Sep). Increased efforts to monitor and mark birds at remote sites (e.g. Green Is, Rakiura). Work with ORC to provide hoiho information for the Regional Conservation Status of Birds in Otago.	
	Action 5b Engage with mana whenua and researchers to develop objectives and a methodology, and commence a full island wide survey of Rakiura and outliers in partnership with Kāi tahu during the hoiho breeding season. (E)		Determine ongoing objectives in partnership with Kāi tahu following completion of surveys. (E)	DOC, YEPT, Kāi tahu, mana whenua, site managers, landowners and researchers	Ongoing objectives for increased action determined through Kaitiaki roopu following full survey in 2020/21. Continued liaison and involvement of mana whenua (e.g. Rakiura Māori Lands Trust, Whenua Hou Komiti). Senior ranger continues to coordinate DOC hoiho operations work, and dedicated hoiho ranger employed on Rakiura. Plans and objectives for hoiho season progressing with additional capability.	
	Action 5c Provide knowledge about the status and health of the southern population by agreeing objectives and a methodology, and securing funding for a monitoring programme. (E)		Commence a monitoring programme for the southern population. (E)		DOC, YEPT, Kāi tahu and researchers	Year 1 of CSP project to update the population estimate, monitor health and investigate foraging on Campbell Island completed (Nov 2023 to Feb 2024). Population results eagerly anticipated following next years trip, although suggestions are that numbers have declined. Some scat collection and trail camera monitoring conducted as part of sealion monitoring trip to Enderby Island (Dec-Jan).
	Action 5d Identify and use cultural monitoring tools and approaches for enhancing management of hoiho populations. (H)				Kāi tahu, DOC, YEPT, mana whenua and site managers	Not started.
Te Marae o Takaroa / Marine habitat						
Strategic Priority 6 Ensure bycatch does not threaten hoiho.	Action 6a Implement and incentivise practices that eliminate bycatch as necessary, particularly from set netting throughout the northern population range. (E)			Fisheries NZ, fishing industry and fishers	Ongoing bycatch issues for hoiho. Continued support of the Fisheries Liaison programme officer role (trawl and setnet vessels). Voluntary setnet exclusion areas off Rakiura (East of Neck, and Port Pegasus) and around Whenua out to 4 nmi still in place, as well as restrictions for Hector's dolphin along the mainland coast. Funding approved for research projects on green LEDs for mitigating bycatch through CSP and FNZ.	
	Action 6b Ensure annual observer coverage or review levels of electronic and camera monitoring of at least 50% on setnet and inshore trawl vessels within hoiho habitat to enable overlap and risk to hoiho to be estimated effectively. (E)			Fisheries NZ, DOC, fishing industry and fishers (through CSP process)	Proposed level of coverage for 2023/24 across hoiho habitat was 50%; actual level pre-October 2023 was c. 15%. Rollout of electronic and camera monitoring in October 2023 and prioritised on all setnet vessels ≥8m and trawl vessels ≤32m in hoiho habitat. Five hoiho bycaught in setnets in 2023/24 since rollout of cameras (1 fledgling, 4 adults). CSP project to identify protected species from camera detections in NZ fisheries (INT2023-02) due for completion in June 2024.	
	Action 6c Build the positive working relationship with fishers, fishing industry representatives, Licensed Fish Receivers (LFRs) and as part of the Fisheries Information Group (which meets annually) to share information and work together to solve bycatch and other fisheries issues. (E)			Fisheries NZ, YEPT, DOC, Kāi tahu, fishers, fishing industry, researchers. Facilitator: Fisheries Inshore NZ	Continued liaison with fishers, industry, LFRs and Fisheries Liaison officer.	
	Action 6d Work with Government agencies to improve the mechanism for providing information on bycaught hoiho to operations staff that monitor hoiho. (E)		Implement the mechanism for providing information on bycaught hoiho to operations staff. (E)		Fisheries NZ, DOC, YEPT, fishing industry and fishers	Significant improvements to mechanism for reporting marked hoiho in operation. Fine scale Geographical Position Reporting on fishing vessels and electronic reporting facilitates this. Daily alerts if protected species are caught (via FNZ). Good communication with Fisheries Liaison officer and FNZ.
	Action 6e Investigate the potential impacts and opportunities of transitioning fisheries from set netting to other fishing methods. (E)		Implement mechanism(s) for transitioning fisheries. (E)		Fisheries NZ, DOC, YEPT, Kāi tahu, fishing industry, fishers and researchers	Approval of special permits and new regulations to encourage spearfishing rather than setnetting. Gear innovation workshops with fishers in Southland, Canterbury and Otago to identify alternative fishing gear and methods.
	Action 6f Update spatially explicit fisheries risk assessment (SEFRA) whenever new information is available to provide reliable and up-to-date estimates of risk. (E)				Fisheries NZ, YEPT and DOC (through AEWG process)	Ongoing advice provided to FNZ & contractors to inform AEBAR, SEFRA and multi-threat risk assessment project (PRO2022-01). Review of the hoiho chapter in this years AEBAR.

	Action 6g Identify mitigation measures based on the results from a Multi-threat risk assessment for hoiho for fisheries around the east coast of the South Island, Rakiura and offshore islands. (E)	Implement mitigation measures around the east coast of the South Island, Rakiura and offshore islands. (E)	Fisheries NZ, fishing industry and fishers	Multi-threat risk assessment has been delayed and is still underway. Ongoing support of three voluntary setnet exclusion areas around Rakiura (one off Whenua Hou to 4nm, one East of the Neck, and one in Port Pegasus).	
		Action 6h Assess the risk of bycatch from inshore trawl fisheries. (H)	Fisheries NZ, DOC, YEPT, fishing industry, fishers and researchers	Rollout of electronic and camera monitoring in October 2023, prioritised on all trawl vessels ≤32m in hoiho habitat (and Hector's dolphin) habitat.	
		Action 6i Identify areas where hoiho are at risk from recreational fisheries (e.g. Rakiura) and use appropriate tools to educate fishers and mitigate risk. (M)	Fisheries NZ, DOC, YEPT, rec fishers and researchers	No action taken to identify at risk areas	
		Action 6j Ensure that footage from electronic monitoring of setnet and trawl vessels within hoiho habitat is prioritised and effectively reviewed. (E)		NEW action in 2023/24. Electronic and camera monitoring was prioritised for all setnet and trawl vessels within hoiho habitat.	
Strategic Priority 7 Protect and support marine habitats and ecosystems that nourish hoiho.	Action 7a Determine which marine protection measures are most appropriate/effective to protect hoiho habitat and food sources. (E)	Promote the implementation of the most appropriate/effective marine protection measures. (E)	Fisheries NZ, Kāi tahu, DOC, YEPT, fishing industry, mana whenua, researchers	South East Marine Protection (SEMP) type 1 protected areas announced, but although wider ecosystem benefits, unlikely to protect hoiho (minimal overlap). Ongoing Regional Policy Statement (RPS) work which sets direction for natural resource	
	Action 7b Commission a marine spatial planning exercise to map biotic and abiotic factors within hoiho habitat. (E)	Use the marine spatial planning data to inform marine protection measures and applications for activities under statutory processes which may adversely affect hoiho. (E)	DOC, YEPT, Fisheries NZ and researchers	Paper published on spatial overlap between hoiho, fisheries and protected areas (Uni of Otago). Otago Peninsula Marine Habitat Mapping group established with various stakeholder groups.	
	Action 7c Contribute to national and international policy instruments relating to climate change that will recognise and promote the conservation of hoiho and their habitat. (E)		DOC, YEPT, Kāi tahu and researchers	No further progress with DOC climate change adaptation action plan (including biodiversity risk assessments).	
	Action 7d Commission research to investigate foraging ecology of hoiho from colonies where little data currently exist. (E)	Use results to inform management and research direction. (E)	DOC, Fisheries NZ, YEPT, Kāi tahu, and researchers	Tracking of hoiho from Campbell Islands show hoiho dive to 100-130m, breeding adults forage within 12nm and post-breeding birds range further to 120km. Paper published from PhD investigating marine distribution of hoiho (Uni of Otago). Foraging tracks used to support Multi-threat risk assessment work. Funding approved and work contracted for CSP project to further investigate foraging around Rakiura.	
	Action 7e Commission research to examine the spatial and temporal patterns in hoiho diet. (E)	Use results to inform management and research direction. (E)	DOC, YEPT, Fisheries NZ, Kāi tahu, and researchers	Faecal & feather samples collected (Northern population & Southern). Postdoc research started (funded by CSP) investigating diet of hoiho as well as microbiome and disease risk (Uni of Otago). Animal borne camera research, opalfish are major part of diet on Campbell & Auckland Islands (Uni of Otago).	
	Action 7f Commission research to examine the spatial and temporal patterns of stress in hoiho. (E)	Use results to inform management and research direction. (E)	DOC, YEPT, Kāi tahu, and researchers	Feathers collected from mainland and Rakiura.	
	Action 7g Commission research to examine the physical parameters associated with hoiho habitat, including mapping the seabed. (H)	Use results to inform management and research direction. (H)	DOC, YEPT, Kāi tahu, and researchers	Paper published from PhD investigating marine distribution of hoiho (Uni of Otago). Use of research tools: e.g. Marine Heatwave Tool (www.moanaproject.org), remote sensing imagery (ocean colour) for sedimentation and hoiho cameras to look at habitat where birds are foraging. Animal borne camera research, sand is major foraging substrate: 100% at Enderby, 65% at Campbell (Uni of Otago).	
	Action 7h Advocate for the protection of hoiho and their habitat in statutory processes relating to marine activities which may adversely affect hoiho. This includes applications under the Resource Management Act, Crown Minerals Act and EEZ Act. (H)		DOC, YEPT, Kāi tahu and local authorities	Advice provided for resource consent applications. Ongoing Regional Policy Statement (RPS) work (sets direction for natural resource management). Pre-consultation on Regional Land and Water Plan.	
			Action 7i Assess the conservation status of the southern population (using data collected under Action 5c) in relation to environmental and anthropogenic variables, and compare to the northern population. (H)	DOC, YEPT, Kāi tahu, and researchers	Not started. Requires additional data from action 5c and year 2 of Campbell Island trip to progress.
			Action 7j Commission research to analyse the incidences of injuries from marine predators to ensure confidence when assessing the impact of this threat. (M)	DOC, YEPT, vets and researchers	Hoiho death data is collated by DOC vet coordinator (includes predation cases). MVSc research on marine predator injuries in hospitalised hoiho not completed (Massey Uni)
		Action 7k Commission research to analyse the extent of predation from sea lions using scat and cast samples to ensure confidence when assessing the impact of this threat. (M)	DOC, YEPT and researchers	MSc research project started investigating diet of sealions across Otago Peninsula (Uni of Otago).	
Strategic Priority 8 Ensure marine pollution, disturbance and noise do not threaten hoiho.	Action 8a Ensure oil spill response plans include specific hoiho population data and treatment options and engage with the agencies responsible to prepare for emergencies as required. (E)		DOC, YEPT, local authorities, central government and other agencies	(Latest version of ORC plan: April 2019; latest version of ES plan: Sept 2018)	
	Action 8b Build proactive relationships and collaborate with local and regional government to understand, avoid and mitigate the impacts of marine pollution, sedimentation, disturbance and noise on hoiho. (H)		DOC, YEPT, Kāi tahu, local authorities, central government and researchers	Discussions started with ORC highlighting issues related to hoiho as part of their Te Awa Ōtākou scoping work. Relationship building with DCC wastewater liaison group, CDC and SDC.	
	Action 8c Engage with local and regional government to promote hoiho conservation and contribute to the development of marine monitoring frameworks. (H)		DOC, YEPT, Kāi tahu, local authorities and researchers	Liaison with biodiversity, marine and policy staff at ORC (including as part of Te Awa Ōtākou). Relationship building with DCC wastewater liaison group, CDC and SDC.	
		Action 8d Commission research to identify, characterize and highlight the potential impacts of marine pollutants and sedimentation on hoiho and identify important areas for further work. (H)		DOC, YEPT, Kāi tahu, local authorities, and researchers	No known research conducted this season. (Heavy metal testing of hoiho chicks completed in 2021/22).
Te whakaekeka o te takata / Human disturbance					

Strategic Priority 9 Reduce the impact of tourism and recreation activities to ensure they do not threaten hoiho.	Action 9a Further investigate mechanisms (e.g. closure / rāhui, controlled access, rangers, fences, signs, tracks) to manage visitors at hoiho sites. (E)		Implement appropriate mechanisms at priority sites. (E)	DOC, Kāi tahu, YEPT, local a	Specific closures / restrictions at hoiho sites (e.g. Boulder Beach, western Sandfly Bay and Tavora from 1Nov to 28 Feb). Track closed temporarily at Curio Bay to protect hoiho. Summer rangers (coastal Otago & Catlins), kaitiaki ranger at Katiki Pt, volunteers and community groups. Track re-alignment mapping and assessment to avoid hoiho habitat at Sandfly Bay.
	Action 9b Move moulting and other at-risk birds from beaches where disturbance is likely to safer areas, as required. (E)			DOC, YEPT, site managers a	Increased effort to identify moulters (Rakiura) and ongoing efforts across the mainland. Relocation of birds effectively delivered by several organisations.
	Action 9c Educate visitors about appropriate tikaka / behaviour and consequences for hoiho and ensure that messaging is consistent. (E)			DOC, Kāi tahu, YEPT, site managers, mana whenua, landowners, tourism industry, local authorities, public and researchers	Advocacy by summer rangers, Kaitiaki ranger, and volunteers. Education and advocacy via press releases and social media (several groups). Ongoing work to ensure consistency of messaging.
	Action 9d Collect information on visitor numbers and pressure points, and assess visitor management mechanisms to inform Action 9a. (H)			DOC, Kāi tahu, YEPT, site managers, landowners, tourism industry, local authorities, public and researchers	Visitor counters collecting data (Katiki, Sandfly, Curio Bay, Okia). Reports from Summer rangers. DOC compliance App - incidents recording and compliance (MyCLE and CLE works). Research into visitors on Enderby recommended: limit vessel landings to 9am-5pm, limit walking tours to 10am-3pm, limit loitering in Sandy Bay, Penguin Alley & Bones Bay) (Uni of Otago).
			Action 9e Commission a site-based analysis of the key risks recreational activities pose to hoiho and methods to alleviate them. (M)	Work with landowners and local government to implement recommendations. (M)	DOC, Kāi tahu, YEPT, local authorities, landowners, site managers, recreation users, public and researchers
		Action 9f Coordinate with marketing agencies and tourism companies to rectify unrealistic expectations for hoiho tourism. (M)		DOC, YEPT, Kāi tahu, local authorities, and researchers	No progress.
Strategic Priority 10 Eliminate mortality from dogs.	Action 10a Work with local government to improve enforcement of bylaws at hoiho sites which are listed as prohibited dog areas and assess whether new sites need to be added. (E)			DOC, YEPT and local authorities	Engagement with DCC and submissions on the proposed Dog Bylaw and Policy. Work with local councils on ongoing compliance issues at sites as people continue to ignore signage (e.g. Okia, Long Point). DOC compliance App to aid enforcement (fining ability).
		Action 10b Commission a social scientist to review the effectiveness of advocacy, signage and other tools for reducing dog impacts and design an improved set of tools. (E)	Implement those recommendations. (E)	DOC, YEPT, local authorities, dog owners and researchers	PhD underway on dog interactions, review of signage / advocacy, and recommendations for messaging, focused on sites in Otago and Catlins (Uni of Otago).
			Action 10c Advocate for the protection of hoiho on beaches through education programmes with the wider community or using other tools to prevent dog attacks.(E)		New action in 2023/24. Several social media posts and media releases particularly during moult to inform dog owners and highlight risks, given ongoing issues with dogs. Info about interactions with wildlife on beaches sent to dog owners with dog registration packs. Continuation of Lead the Way Programme (dog interactions on beaches).
Strategic Priority 11 Provide opportunities for Kāi Tahu to exercise kaitiakitaka.	Action 11a Identify opportunities for Kāi Tahu to be active kaitiaki in relation to hoiho visitor management and tell the story of hoiho as taonga. (M)			Kāi tahu, DOC, YEPT, mana whenua and tourism industry	Kaitiaki ranger at Moeraki.
Strategic Priority 12 Minimise stress and disturbance from research and management activities.	Action 12a Support disturbance for research and management purposes only where there is direct conservation benefit for hoiho and ensure consistency with Kāi Tahu tikaka and kawa. (H)			DOC, Kāi tahu, YEPT, site managers and researchers	Managed through Wildlife Act permissions process for research and conservation organisations, case by case evaluation. Operational management through specific protocols and SOPs.
Te nohoka ki te whenua / Terrestrial habitat					
Strategic Priority 13 Effectively control mammalian land-based predators at hoiho breeding sites.	Action 13a Support the Maukahuka Project Team goals to eradicate pigs, cats and mice in the Auckland Islands. (E)			DOC and pest control organisations	Significant operational planning, and technological development work continues. Project needs funding support to re-activate.
	Action 13b Reduce pig numbers at hoiho sites to minimise the impact on hoiho in their northern population range. (E)			DOC, site managers and pest control organisations	Monthly checks and follow-up undertaken in North Otago. Control at targeted sites as necessary.
	Action 13c Assess spatial and temporal predator control coverage in mainland hoiho habitat. (E)	Ensure all mainland hoiho sites have effective predator control in place for mustelids, cats and rats. (E)		DOC, YEPT, Kāi tahu, landowners, mana whenua, site managers, pest control orgs and researchers	Additional trap coverage (e.g. Long Point, Waianakarua Bluffs) and ongoing replacement of traps. Addition of focused rat trapping in 2023/24 at some sites (e.g. Long Point, Helena) where rats had killed chicks.
	Action 13d Support Predator Free Rakiura goals to eliminate possums, rats, feral cats and hedgehogs. (H)			DOC and pest control organisations	Predator Free Rakiura project focused on planning and community engagement. Various individuals and organisations working towards predator free. Whenua hou celebrates 25y predator-free. Ulva rat incursion resolved.
	Action 13e Leverage funding, technical knowledge and delivery of predator control to increase efficiency through connection with other predator control initiatives. (H)			DOC, YEPT, Kāi tahu, pest control organisations and researchers	Ongoing liaison and cooperation with Predator free Dunedin, PF2050, Halo Project and OPBG. Ongoing development of new trap technologies to improve trapping (e.g. NZ AutoTraps).
	Action 13f Implement management tools derived from the observations and monitoring by kaitiaki to inform predator control planning and decision-making. (H)			Kāi tahu, DOC, YEPT and mana whenua	Not started.
	Action 13g Identify employment opportunities for Kāi Tahu in predator control. (M)			Kāi tahu, DOC and predator control organisations	Not started
		Action 13h Analyse the extent of predation from weka to ensure confidence when assessing the impact of this threat and develop preferred management options. (M)		DOC, YEPT, Kāi tahu, mana whenua, landowners and researchers	Not started.

Strategic Priority 14 Provide habitat on land that protects hoiho and buffers against natural events and other impacts.	Action 14a Identify specific areas within hoiho habitat that are at risk from fire, erosion, flooding, sea-level rise and increased temperatures, and identify and implement land-based management tools for buffering these impacts. (E)	DOC, YEPT, Kāi tahu, landowners, site managers and local authorities	Continued site based management (e.g. firebreaks, stabilising cliffs, ensuring access in eroded dunes, planting to reduce run-off, removal of pooled water) (various organisations). For example: major sand dune erosion at Whenua Hou, Okia and Otapahi.
	Action 14b Optimise hoiho habitat to ensure adequate provision of habitat for moulting, nesting, socialising and access, through revegetation and other mechanisms. (H)	DOC, YEPT, Kāi tahu, landowners, mana whenua and site managers	Continued site based management (e.g. tracks for hoiho, nest boxes, shade, flood protection (various organisations). For example: moving new nestboxes at Okia, cutting penguin access tracks at Waianakarua Bluffs and Otapahi.
	Action 14c Ensure important hoiho habitat that is public conservation land prioritises hoiho conservation over other objectives and that the classification of these lands reflects this priority. (H)	DOC, YEPT and Kāi tahu	Reclassification of strip as Wildlife Refuge between Katiki and Okahau Point under discussion between rūnaka and DOC.
	Action 14d Engage with landowners to ensure that important hoiho habitat has adequate statutory protection. (H)	DOC, YEPT, Kāi tahu and landowners	Minimal discussions occurring at specific sites, but slow progress.
Strategic Priority 15 Protect hoiho and habitat from the negative effects of stock and browsers	Action 15a Exclude large stock from hoiho habitat. (E)	DOC, YEPT, Kāi tahu and landowners	Ongoing liaison and discussions with landowners, and fixing fences as required.
	Action 15b Work with regional councils to ensure Regional Pest Management strategies are effective at protecting hoiho habitat. (H)	DOC, YEPT, Kāi tahu and local authorities	(Advice provided for latest version of strategies: ORC and ES 2019)
	Action 15c Identify priority sites and implement wild browser control. (M)	DOC, YEPT, Kāi tahu, local authorities, pest control organisations, landowners and site managers	Site by site implementation of control. Possum control (e.g. via PF2050, PF Dunedin, OPBG) and Otago Peninsula almost possum free. Rabbits are a major problem, but improved, funded and coordinated rabbit control occurring (ORC).
Ka mahi tahi / Working together			
Strategic Priority 16 Prioritise and support resourcing of hoiho conservation	Action 16a Develop strategies to enable resourcing to deliver the actions in this plan. (E)	DOC, YEPT, Kāi tahu and Fisheries NZ	No major funding sources available for hoiho operational groups (e.g. DOC Community Fund, JFN). Many groups struggling for funding. Some funding for research through grants, Conservation Services Programme and Mountains to Sea / DOC Biodiversity. No progress on investigation into business partnership options to fund hoiho mahi.
	Action 16b Advocate to funding agencies the need to recognise and fund all project aspects, including administration and management, and the importance of multi-year funding. (E)	DOC, YEPT, Kāi tahu and Fisheries NZ	HGG advocating to move to more sustainable funding (e.g. business partnership) have stalled.
Strategic Priority 17 Support the delivery of hoiho conservation through effective communication and collaboration strategies	Action 17a Maintain and improve mechanisms to support effective communication with everyone involved in hoiho conservation to ensure collaboration. (E)	DOC, YEPT, Kāi tahu, Fisheries NZ and all stakeholders	Improved operational mechanisms include: pre-/post-season meetings, regular email updates, annual YEP symposium. Kaitiaki roopu committees and Whenua Hou komiti. Other comms through working groups (e.g. fisheries, disease, AEWG) and spatial advisory groups (e.g. Te Rere).
	Action 17b Maintain and improve effective collaboration with local and regional government to deliver hoiho conservation. (H)	DOC, YEPT, Kāi tahu and local government	Ongoing support of Regional Policy Statement (RPS) work. Liaison with DCC to support Dog Control Bylaw and Policy Review. Otago Peninsula Marine Habitat Mapping group established with various stakeholders. Liaison with ORC biodiversity, marine and policy staff.
Strategic Priority 18 Ensure Kāi Tahu is engaged in decision-making from the flax roots to governance	Action 18a Ensure Kāi Tahu are involved in planning and decision-making from 'flax roots' to governance. (E)	DOC, Kāi tahu, YEPT, Fisheries NZ and mana whenua	Ongoing liaison at various levels: Crown Treaty partnership, HGG/ HTG partnership, Kaitiaki roopu, Whenua Hou Komiti, Rakiura Māori Lands Trust, Papatipu rūnaka (e.g. kaitiaki ranger at Moeraki, iwi rep for WH monitoring and Catlins mahi).
	Action 18b Increase awareness of Kāi Tahu mātauraka and tikaka that guides hoiho management among all practitioners. (H)	DOC, Kāi tahu, YEPT, Fisheries NZ and mana whenua	Guidance through Te Kaweka and Te Mahere.
	Action 18c Ensure Kāi Tahu engagement occurs when DOC enters into partnerships with other parties. (H)	DOC and Kāi tahu	Ongoing relationship building - Crown Treaty partnership.
	Action 18d Support opportunities that enable Kāi Tahu to reconnect with hoiho in the takiwā, undertake cultural practices and build capacity and capability. This includes training and employment, involvement in research / monitoring and use of cultural management tools. (M)	DOC, Kāi tahu, YEPT and mana whenua	Continuing Kaitiaki roopu and Whenua Hou komiti relationships, Moeraki kaitiaki ranger, ongoing RMLT liaison, rūnaka level hoiho monitoring opportunities provided on Whenua Hou and through Awarua. TRoNT visits to Rakiura and mainland hoiho sites with various groups.
Strategic Priority 19 Ensure research is strategic, well-coordinated and includes Mātauranga Māori perspectives	Action 19a Establish and maintain a process to identify and coordinate research and disseminate research outcomes. (E)	DOC, YEPT, Kāi tahu, mana whenua and researchers	Coordination and identification through Te Mahere. Dissemination at Annual YEP Symposium and through DOC updates. Improved management of disease projects through vet coordinator.
	Action 19b Support and invest in Mātauranga Māori based research and management. (H)	Kāi tahu, DOC, YEPT, mana whenua and researchers	Investment opportunities not found.
	Action 19c Support opportunities for Kāi Tahu whānau, hapū and iwi to undertake research. (M)	Kāi tahu, DOC, YEPT, mana whenua and researchers	Opportunities not found.
Strategic Priority 20 Ensure accurate, usable and accessible data contributes to hoiho conservation.	Action 20a Ensure permit conditions set minimum data standards so that all groups are providing consistent accurate data for hoiho conservation. (E)	DOC, YEPT, Kāi tahu, rehab groups, vets, site managers and researchers	Permit conditions set on a case by case basis. Data standards included in protocols shared at pre-season meeting. Data contributions to shared platforms (e.g. googledocs) by several organisations has improved.
	Action 20b Identify and undertake priorities for improvements to the data sets and systems (including accountability for curation) which are managed to support hoiho conservation. (H)	DOC, YEPT, Kāi tahu, Fisheries NZ, rehab groups, vets and researchers	Improved data contribution and sharing through googledrive and hoiho database. Diseases monitored by vet coordinator. Improved sharing of fisheries bycatch data. Minimal investigation into long-term options for the database started.