

20 July 2017

Government Inquiry into Havelock North Drinking Water
c/- Department of Internal Affairs
WELLINGTON

havelocknorth.water@dia.govt.nz

Submission on the Havelock North Inquiry Stage 2

The Selwyn District Council (SDC) would like to thank the Department of Internal Affairs for the opportunity to provide a written response to Stage 2 of the Government Inquiry into Havelock North Drinking Water.

SDC owns and operates 30 water supplies (depending on classification). The majority of residents enjoy water supplied without disinfection residual.

It is noted that the SDC has been an active participant of the Canterbury Drinking Water Reference Group (CDWRG), and is supportive of the group's joint submission to the inquiry.

We have decided to make our own individual submission to the inquiry to cover matters particularly important to us or those issues which are over and above those submitted by the CDWRG. This submission is attached as an attachment to this letter.

The SDC would be pleased to be involved in any ongoing discussion on the way drinking water is supplied and treated. Please feel free to contact me should you like to discuss any of the points covered in this submission.

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Selwyn District Council Submission on Stage 2 of the Government Inquiry into Havelock North Drinking Water

	Issue	Scope and Elements of Issue	Selwyn District Council Submission
	High Level issues		
1	Current safety Havelock North Drinking Water		The Selwyn District Council (SDC) does not wish to submit on this issue.
2	Drinking water partnerships and collaboration	<ul style="list-style-type: none"> a) What form(s) of collaboration are most effective and workable b) Review operation and merits of the Hawke’s Bay JWG c) What level of representative should participate in JWG’s d) Leadership and guidance from Ministries on collaboration e) Should collaboration extend beyond liaison and communications to some aspects of management or supervision; if so, what aspects f) Should there be required specific outputs from a JWG e.g. a plan for a “source protection zone” as mentioned in 10 e and f below; should there be a catchment management committee within a JWG to ensure adequate focus on first barrier safety or is that unnecessary g) How should JWG’s be accountable. To whom. Role of regulator in JWG’s. h) Should collaboration be mandated or prescribed. How? i) What to avoid in collaboration j) How to avoid/address tension between parties’ regulatory and non-regulatory functions k) Role of s69U Health Act in this context 	<p>SDC supports drinking water partnerships and collaboration initiatives between agencies.</p> <p>SDC has a representative on the Canterbury Drinking Water Reference Group (CDWRG) which was formed upon request of the Canterbury Mayoral Forum and which has representatives from all Canterbury territorial authorities, the Regional Council (Environment Canterbury), Drinking Water Assessors.</p> <p>SDC also sees a benefit in ongoing collaboration on an operational, asset management and strategic planning level as well.</p> <p>The requirement for JWG’s could be a prerequisite to demonstrating ‘taking all practicable steps’ to protect the water supply.</p>
3	Drinking water safety and	<ul style="list-style-type: none"> a) This issue to be considered as context for following issues b) Compliance and safety levels applicable to bacteriological and protozoa safety to be included 	These questions could be answered by carrying out a nationwide survey on drinking water safety and

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	compliance levels in NZ	<ul style="list-style-type: none"> c) What evidence is there of trends of improvement or deterioration d) How do types and frequencies of contamination compare with similar countries e) What information is available on causes of waterborne illnesses 	compliance levels, with a follow up desktop study looking at overseas case studies.
4	Should the “secure” category in DWSNZ 4.5 and definitions remain	<ul style="list-style-type: none"> a) Is the concept of “secure” water supply (which does not need to be treated) acceptable. What difficulties or deficiencies exist in the current basic concept of a secure supply. b) What difficulties or deficiencies exist in the criteria for security currently in DWSNZ 4.5. c) If divorced from the question of treating water, is there still a legitimate role for classifying water as “secure” d) Is there a role for the “secure” rating in respect of smaller supplies which may not treat to the same level as large or medium supplies e) If the classification as “secure” remains acceptable, should the criteria for security be changed or added to; can they be substantially simplified f) If the classification is to remain, who is to confer secure status and also downgrade status when needed g) Does water age testing have a useful role in classifying bore water; if so, what. Are there risks of over-reliance on water aging? 	<p>SDC considers that there is a legitimate role for classifying water as ‘secure’ in areas where the groundwater systems are well understood and monitored / investigated on an ongoing basis,</p> <p>Sourcing secure ground water free of contaminants should be encouraged over sourcing potentially contaminated water and treating it.</p>
5	Should all drinking water be treated	<ul style="list-style-type: none"> a) What are the arguments in favour of mandatory treatment all drinking water b) What arguments against, including the wishes of communities c) How should treatment be mandated? (Health Act, DWSNZ, other) d) Should the need to treat water be determined on grounds other than the existing “secure” classification; If so, on what grounds 	<p>SDC agrees that there are benefits to providing multiple barriers to contamination and using a risk based assessment approach to determine the need for, and the level of, treatment.</p> <p>This should not necessarily lead to a requirement for chlorine residual.</p>

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		<ul style="list-style-type: none"> e) If the default position is that drinking water should be treated, what exceptions or carve-outs (if any) should exist; Should any mandating of treatment apply to supplies of only certain types or sizes f) Should all network supplies include a residual disinfectant to provide a barrier against contamination post source/treatment 	<p>Mandatory treatment would provide a consistent barrier to drinking water safety and across NZ.</p> <p>Disadvantages of mandatory treatment include high capital costs for supplies which are currently untreated, the potential that communities are dissatisfied as they would prefer a water supply without disinfection residual (if chlorinated for an example).</p>
6	Treatments of drinking water	<ul style="list-style-type: none"> a) Is there a need to change or review the DWSNZ regulation and prescription of treatments; should the DWS address the minimum type and level of treatment required for various sources b) Is there adequate provision for reviewing the treatment provisions in the DWSNZ periodically. See 19 c below. c) (If not required by regulation) who should make the decision whether to treat or not, and what treatment to apply d) Should there be further regulation of treatment plants or methods; Should expert engineering certification be required e) Should treatment plant performance be regulated; should specified records be kept 	<p>The DWSNZ should continue to provide a toolbox approach for adequate treatment types and levels of treatment.</p> <p>The DWSNZ should contain a provision for DWAs (or another regulatory authority) to consider alternative solutions and accept them if it is felt that the alternative solution will provide safe drinking water.</p> <p>SDC believes that the DWSNZ require regular review to keep them up to date with changes and understanding of technology.</p>

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7	Should there be a dedicated drinking water supply entity or entities	<ul style="list-style-type: none"> a) What options exist for the management and delivery of drinking water; benefits of existing models b) Arguments in favour of, or against, a dedicated supply entity; is there a role for such an entity in the case of a single supplier or only on a joint basis for several suppliers c) What role could or should such an entity have; what ambit of activities should it have d) What governance and structure should it have e) What accountability would such an entity have; to whom f) Consider success or otherwise of examples of dedicated supply entities including Watercare and Wellington Water and, if useful, overseas entities <p><i>[NB excluded from this issue are the structural arrangements for local government]</i></p>	<p>SDC agrees that collaboration amongst those entities responsible for managing water supplies is of primary importance.</p> <p>The creation of the CDWRG has enhanced relationships, improved understanding and accelerated some key priority actions.</p> <p>SDC does not see a need, at this time, for a specialist drinking water entity. Sound justification for any changes to the management and supply of drinking water would be required.</p>
	Operational		
8	NES Regulations	<ul style="list-style-type: none"> a) Does the nature and extent of regional councils' responsibility for drinking water need to be reviewed/extended b) If so, are the NES Regulations the appropriate vehicle for achieving that c) Issues arising out of the application of the NES in practice; have the NES Regulations served their intended purpose d) What should be the scope and effect of the NES Regulations; are they too narrowly cast e) Is the current trigger for engagement of NES protections (activity likely to affect water in specified ways) workable and appropriate; should it be replaced, or complimented by a spatial criterion such as the stipulation of a "source protection zone" [see 10 f below re delineation of "catchment"] f) What changes, if any, should be made to regulations 7/8 g) What changes, if any, should be made to regulation 10 	<p>SDC believes that it is a priority for agencies to work closely together to protect ground and surface water quality.</p> <p>Rather than referring to 'upstream' the regulations should refer to activities located within a "source protection zone" or similar.</p>

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		<ul style="list-style-type: none"> h) What changes, if any, should be made to regulation 12 i) Should the definition of “upstream” be amended j) Should the definition of “abstraction point” be amended k) Should the NES regulations apply to an application by a drinking water supplier for a water permit. If so, what changes are needed to make this clear. l) Is there sufficient awareness of the NES Regulations by regional and district councils; if not what steps by MfE or others should be taken m) What changes, if any, should be made to the current draft NES User’s Guide (CB75); should any of its contents be codified in the regulations n) Role of collaboration/consultation/monitoring in relation to NES Regulations; do these need to be regulated. Relationship between s69U Health Act and regional councils’ responsibilities 	
9	<p>Consenting by Regional Council.</p> <p><i>NB this issue will overlap with the NES Regs issue 8 above</i></p>	<ul style="list-style-type: none"> a) What changes in approach, if any, should be made to a regional council’s assessment of a drinking water supplier’s application for a water permit b) What changes, if any, should be made to regional councils’ approach to imposing conditions on such permits c) In relation to permit conditions, what compliance monitoring approach should regional councils be required to undertake or provide for d) Should Regional Councils consider the potential for increased risks for drinking water when granting resource consents for controlled activities e) Should Regional Councils notify the DHB and DWAs of all resource consent applications with the potential to impact upon drinking water sources 	<p>SDC believes that it is a priority for agencies to work closely together to protect ground and surface water quality.</p> <p>Protecting water sources used for drinking water must be a priority. Allocating adequate quantity of water for community supplies is also a priority over and above other water uses.</p>
10	Regional Councils’ approach to first	<ul style="list-style-type: none"> a) Should first barrier protection be accorded greater recognition and endorsement 	Collaboration is required to ensure collective understanding of roles and responsibilities of each

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	barrier protection for drinking water - other than under NES Regulations	<ul style="list-style-type: none"> b) Should regional councils have responsibilities for drinking water in addition to those in the NES Regulations c) Should the current indirect or co-incidental responsibility under the RMA be made more direct in respect of drinking water (this will overlap with the NES Regs issues, but may not be limited to the NES Regs regime) d) Should regional councils' responsibility for the protection of drinking water sources extend to collaboration and consultation with other relevant parties in the drinking water supply system e) Should the regulatory regime provide for a catchment protection plan and, if so, how should such a plan be prepared and administered f) In relation to the responsibilities of all agencies for catchment protection, how should "catchment" be delineated or defined g) Should any changes be made to regional councils' knowledge and management of potentially risky bores and other risk activities in the catchment area h) Is it sufficient that regional councils' knowledge and management is carried out through their SOE monitoring or is more specific action required i) Are any changes desirable in relation to the involvement of, and responsibility by, the Ministry for the Environment in respect of drinking water j) Should there be greater guidance and/or education of regional councils in respect of their role in drinking water 	<p>agency and ways to work together to ensure agreed water supply source protection.</p> <p>Protection Zones for drinking water sources can provide valuable protection for drinking water quality. Recharge zone management is critical to ensuring high quality source water for drinking water supplies.</p> <p>SOE monitoring is unlikely to be adequate to address the risks to drinking water. Increased monitoring and compliance is likely required.</p> <p>Higher risk bores in secure water catchment/recharge zones need to be proactively managed as a priority.</p>
11	DW Suppliers	<ul style="list-style-type: none"> a) Should there be a system of licensing water suppliers i.e. a system more rigorous and effective than the current ss69 J, and K Health Act (registration) b) should any licensing system extend to individuals acting in key roles c) What levels of resource and support should a supplier have; is there a critical size 	<p>Water is an essential food product and should have an appropriate level of QA.</p> <p>The DWSNZ already require wellhead security assessments to be undertaken by competent and experienced individuals; this concept could be expanded to other areas, however, guidelines around qualification requirements are needed.</p>

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		<ul style="list-style-type: none"> d) What training, qualifications, certification and competence should water supply personnel have; what recurrent training and ongoing competence review e) What risk-assessment expertise is needed f) Is there a need to define more clearly roles and responsibilities within a supplier g) Should there be a mandatory QA function (possibly independent QA) h) Are local government water suppliers sufficiently accountable; are the LGA provisions in ss 67-81, 82-87, 93-99 effective and sufficient in the context of drinking water i) How should suppliers retain important safety information in their institutional memories; how should consultants' knowledge be transferred to suppliers. j) What is the role of external advice and assistance to suppliers; should the competence and expertise of external advisors be regulated. 	
12	DWAs	<ul style="list-style-type: none"> a) What issues, if any, exist in relation to DWAs' employment by and role within a DHB; should DWAs be managed and constituted outside the DHB b) What size and structure of DWA organisation should there be; should there be "agency" DWAs as per 69ZK c) Should the present informal amalgamated units (e.g. CNIDWAU) be formalised/extended d) What national oversight and co-ordination exists; what should there be e) Is there a need for greater consistency in DWA work across NZ f) Does the Ministry of Health maintain effective and adequate links with DWAs g) What training, certification and expertise should DWAs have h) Is the requirement in s69ZK(2)(b) for accreditation effective and beneficial; what matters should be within the scope of accreditation; can accreditation be used more fully or to better effect. i) To whom should DWAs be accountable 	SDC considers that the role of the DWAs within the DHB appears logical. The DWA and DW Supplier would benefit from the creation of a set of template audit and check-sheet documents to prove compliance and consistency.

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		<ul style="list-style-type: none"> j) Are any changes needed to section 69ZL Health Act k) What resources should DWAs have; are DWAs appropriately supported in the exercise of their statutory duties l) Should DWAs have greater or different enforcement powers m) Is there need for any change in the approach of DWAs to DWSNZ compliance assessment n) Should the DWA practices in relation to WSPs and ERPs be changed o) Does the National Drinking Water Assessors Technical Manual (CB54) need revision p) Is any change needed to the enforcement by DWAs of s69ZD obligations (records) q) Should trained professionals from international jurisdictions be able to be recruited as DWAs to address DWA under supply; r) Should demonstrating compliance with s69ZZZ (protection against backflow) be included in the annual assessment of compliance with DWSNZ 	
13	Roles of agencies in relation to drinking water <i>[NB DWA and Regional Council roles dealt with separately above]</i>	<ul style="list-style-type: none"> a) Should there be a single drinking water regulator b) Is there a problem with fragmentation of responsibility between agencies for drinking water c) Are the resources applied by DHBs to drinking water adequate d) Are the resources applied by MOH to drinking water adequate e) Is there a need for clarification and/or guidance in relation to the roles and responsibilities of various agencies 	The issues need to be defined and clarified before any decisions on a mechanism / process or institutional / entity change is considered.
14	Water Safety Plan	<ul style="list-style-type: none"> a) What changes, if any, are needed to the identification and assessment of risks in WSPs 	WSP should be linked to the corporate risk management framework but kept separate to

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		<ul style="list-style-type: none"> b) Should a WSP be part of a supplier's corporate risk management process and also recognised at senior management and governance levels c) Are changes needed to the process of updating and renewing WSPs d) Is any change needed in the extent to which suppliers devolve WSP responsibilities to consultants e) Are changes needed to the enforceability of WSP promises or obligations, and the assessment of implementation of WSPs f) What sanctions or consequences should follow a failure to implement a WSP g) What changes, if any, should be made to the WSP Guidelines document or the use of it h) Should a ERP be part of a WSP i) Are any changes needed to CB158, 159 DWA Manual; should WSPs be prepared according to a template or should they be entirely bespoke j) Are any changes needed to sections 69Z-ZC Health Act. 	<p>allow detailed technical input, review and amendment.</p> <p>There should be minimum mandatory requirements for a WSP to be approved.</p> <p>WSPs include contingency plans for major adverse events and could be part of a wider ERP. A response exercise including appropriate staff and testing these specific water supply related plans could be a useful tool.</p> <p>The CDWRG has shared Contingency Plans across the region to encourage best practice.</p>
15	Monitoring and Testing	<ul style="list-style-type: none"> a) Are any changes needed in the DWSNZ provisions governing monitoring and testing b) Are any changes needed to the reporting and use of test results c) Do the WINZ database and systems for recording test results need change; are changes needed to access to test result data d) Where should the regulation of sampling fit within the drinking water regime. Are further rules required to regulate sampling 	<p>SDC has found that the new WINZ system has a number of limitations particularly around reporting. Training of the new system has been limited.</p>
16	Laboratories	<ul style="list-style-type: none"> a) Should there be greater regulation of laboratories within, instead of separate from, the drinking water regime 	<p>SDC believes that the IANZ accreditation process provides suitable assurance that a laboratory acts as an independent third party.</p>

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		<ul style="list-style-type: none"> b) Should laboratories be part of the drinking-water partnerships & collaboration, or are they necessarily a separate element by nature of their function and role c) Are any changes needed to accreditation, training, certification, registers or other aspects of the regime applicable to water testing laboratories d) What level of expertise is needed by water testing laboratories e) Should there be a requirement for larger and better resourced laboratories to service water suppliers, or certain sized water suppliers; is there a case for a Government-run laboratory or is private sector supply better; should laboratories be independent of the water supplier(s) f) What changes are needed to the supervision and auditing of water testing laboratories. Is there adequate internal QA function for laboratories g) In the event of a positive result, what reporting obligation should laboratories have h) Is any change needed to the current system for approving laboratories to carry out individual tests i) What should the process be in the event of laboratory “issues”, such as cross-contamination or errors in testing processes 	<p>Ongoing training of the sampling and testing staff is required, particularly around water sampling processes and the recording of any unusual observations.</p>
17	Protozoa Risk	<ul style="list-style-type: none"> a) Are changes needed in relation to education about protozoa risks to drinking water b) Are current DWSNZ rules for protozoa deficient c) If so, what is needed in relation to implementation of better protozoa procedures and risk assessment d) How frequently should there be reviews of protozoa provisions. See 19 c below. e) Roles of MOH and MfE in relation to protozoa risks 	<p>Education around Protozoa should be improved and rules in the DWSNZ improved and simplified.</p>

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18	Boreworks & casings	<ul style="list-style-type: none"> a) What deficiencies exist in the current system relating to boreworks and casings (NZS4411, DWS, WSP, Guideline, RC RRMP) b) Is a single source of specification preferable; is a code of practice needed c) Should there be a mandatory inspection regime, accountability d) Should below-ground bore heads be allowed e) Is an Asset Management Plan adequate to deal with aging reticulation assets 	The SDC agrees that a Code of Practice and guidelines are required.
	Regulatory		
19	Health Act	<ul style="list-style-type: none"> a) Does the regulatory framework need to be strengthened to increase accountability for drinking water safety to the Government and the community; or is the present level of regulation sufficient b) What is the proper relationship between the respective components of the drinking water regime - is there a need to review some of the aspects that overlap, to ensure certain obligations are not omitted c) Is the statutory regime for changing any DWSNZ provisions acceptable (s69P- need to consult 3 years before any change to DWSNZ; s69R further 2-year delay unless urgent) d) Should there be different or further sanctions for failures to comply with any of the provisions of Part 2A Health Act; are ss69N and 69ZZH effective/useful? Should the offence provisions in s69ZZR-ZZX be reviewed e) Should compliance with DWSNZ be discretionary or optional f) Should s69U Health Act (duty to protect source) be changed g) Should the s69V Health Act regime (“all practicable steps”) be changed; see also s69S. Should the section 69H Health Act definition of “all practicable 	<p>SDC considers that any amendment to the health act, if proposed, must allow for an adequate lead in time for any implementation required.</p> <p>SDC supports the risk based approach of WSP while recognising that the WSP should provide a timeframe and pathway to fully meet the drinking water standards.</p>

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		<p>steps” be changed</p> <p>h) Should s69ZF Health Act be changed such that remedial steps are mandatory</p> <p>i) Whose responsibility is it to monitor and enforce the s69V obligations on a water supplier</p> <p>j) Health Act does not specifically require an ERP- should it</p> <p>k) Is there a role for a Water Auditor.</p>	
20	DWSNZ	<p>a) Are the DWSNZ comprehensible to users; can they be simplified or clarified</p> <p>b) Adequacy of remedial actions: Greater sampling, speedier chlorination, longer chlorination; more than 3 clear results in contamination protocol; (cross refer s69ZF Health Act)</p> <p>c) Does section 5.16 (UV treatment) need to be reviewed</p> <p>d) Does 5.2(a) table entry re protozoa need review</p> <p>e) DWSNZ do not specifically require a ERP- should they</p> <p>f) Should requirement for annual report to DWA on borehead issues be in DWSNZ (rather than in Guidelines 3.2.5.5</p> <p>g) Should DWSNZ have stricter rules about drinking water bores; Minimum depths; More stringent aquifer stability requirements.</p> <p>h) Are the turbidity provisions at 5.7 and 4.3.2.1 and elsewhere appropriate; is change needed</p> <p>i) Given its prevalence in documented outbreaks around the world, should heavy rainfall be accorded better status and prominence in the DWSNZ (or elsewhere)</p> <p>j) Should the DWSNZ address the risks from animal contamination more fully</p> <p>k) Should the DWSNZ include requirements from qualification, training, ongoing competence reviews for water supply operators</p>	<p>The DWSNZ is a comprehensive document. SDC would support a review of the document including making the document more usable. It is acknowledged that safe drinking water is a complex issue and that this review would have its challenges.</p> <p>SDC has a program of installing turbidity meters on all its water supply sources, including secure bores. If a secure source was seen to change parameters quickly this would be a sign of a change in the aquifer and provide a warning that a standby treatment system should be implemented. SDC water supplies have a provision for the connection of a standby chlorine systems.</p>

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21	DW Guidelines	<ul style="list-style-type: none"> a) review concept of a Guideline in addition to the DWSNZ. b) Could the two be combined c) What deficiencies exist in relation to existing Guidelines 	The DWSNZ and the Guidelines should be kept as separate documents.
	OUTBREAK MANAGEMENT ISSUES		
22	<p>ERPs (Emergency Response Plan)</p> <p>(a.k.a Contingency Plans)</p>	<ul style="list-style-type: none"> a) What regulation should there be for ERPs, both their existence and content b) Size and scope: how comprehensive should ERPs be; should they be relatively short and concise documents? c) Should drinking water ERPs be multi-agency plans d) In addition to a ERP, is there a role for a MOU between agencies, or some of them in relation to emergency response; covering such issues as communications, decision-making (an MOU being more directive and enforceable than a ERP) e) Should training, including multi-agency joint training, be specifically required f) Should periodic reviews and updates of ERPs be required g) What further guidance is needed, if any, on the issuance of boil water notices: who, when what consultation 	SDC endorses the need to consider the ERP as part of wider emergency management planning, particularly Civil Defence, to build scenarios and responses.

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23	Communications	<ul style="list-style-type: none"> a) What changes are needed to communication practices in relation to a drinking water emergency b) Should a messaging system be used 	SDC notes that issuing a boil water notice (BWN) is a highly challenging exercise. To aid in this we have developed a text and email notification system which is very fast. The system abstracts email and cell phone details from our rating database. Using pre drafted and approved messages, notices can be issued within 5 min of a positive Ecoli result being received.
24	Other outbreak management issues	<ul style="list-style-type: none"> a) What practices should be adopted in relation to use of schools, GPs or others, as early warnings of an outbreak b) Should the Ministry of Education have a role? c) Should greater emphasis be placed on drinking water emergencies and the drinking water aspects of other civil defence emergencies? Should drinking water be recognised in civil defence emergency responses as an essential lifeline (as opposed to infrastructure to be managed 	The SDC supports the CDHB's submission on this point, in particular around methods for early identification of an outbreak and the need for pre-prepared communication plans.