

VÜWÙVÒÖÁÚŒÜVÞÒÜÙÁŒ ÁÚÜURÒÔVÁÖÒŠŒÒÜŸÁ

A HUDVŒÀÜÓVŒĐO ÜÒXŒÒY ÁÜÒÚUÜVÁ

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ā] | [c^{ ^} oÁæ) åÁ ~ ætac Áæ• • ~ læ) &^Á1 | [&^••^• ÞÁV @ Á'^ca? Áålæ, • Á@ æca? Áf } Áåā^&oÁ'^] [læ Áf -Á ^¢]^¦&^}&^•Á;~Á;^¦•[}}^|Áå*¦āj*Á/¦[]&&æþÁÔ^&|[}^ÁRæ•]^¦Á&[}•ãã^¦^åÁæþ[}*•ãã^Áå^•&¦ā]œã;}•Á;~Á^^Á ŠÖT ÕÁ \$\\ \angle \angle \bar{A}\) \angle \a

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V@āÁ^}[]•ãÁá¦æ,•Á;[{Áo@Áā;Ëā^]c@Ás^à¦ã^A;|8^••Ás@æÁ;88*;¦^åÁá`¦ā;*ÁiËJÁØ^à;*æ;ÁG€GIÊÁs@æÁ aaj]|aðaÁæyÁŒeơ\HÖŒeơ\HÖŒeā]}ÁÜ^çað\ÁQŒŒÜDÉæj]¦[æ&@ŽÁV@Á^çað\Á;^o@pá[|[*^Á;&*•^•Á;}Æå^ơ\{ājāj*Á *[c^|} æ} &^Áæ Á ^|&^ãc^åÁà^Ác@ Á^c^} cÁ æ cã&ã æ} œ ÉÁV @ Áæ Áæð] || æ&@Áa Á •^åÁæ Á cæ} åæåÁ | æ&cã&^ÁI |Á ^{ ^! * ^ } & Á • ^ ! c a & ^ • Áæt ^ } & a • Áæt à Ác@ ÁCE • d æt a æt ÁÖ^ ~ } & ^ ÁØT ! & ^ Ác Á Á Á * } å ^ ! • cæt à Áæt à Áæt] ! [c ^ Á &æd æðaðað Ásch åÁ^•][}•^•Ásû Ásc@ •^Ásuða^&d Ásq c[|c^å ÉÉÉÁHÁKKÁ

QÁÃ ÁÃ] [ca) cá Á Á [c Ác@ Ác) ÁOEDE ÁÃ Á [cÁc) Á Çæ Á Çæ æð [LÁc) [LÁc) Ã [L] | [&^••Áā; c^} å•Áā; Á; | [çãā^ÁæÁå^Ëãå^}; cãã^àÁ+} æ]•@; cÁā; Áā; ^Á; Æ; æ; cã&ā; æ; cq;Á; ^!•]^&cãç^•Áā; &|`åā; *Á •^} cā ^} cæ\\D&&[\aa_a * \^\\E\\C\\A_a \aa_a \aa_a * \^\\\E\\\A_a \aa_a \aa_ , æÊ£anÁan Áai,][¦œa) có áf Án [c^Ás@ancÁan) ÁCHECHÜÁ&[^•Án [có-kanac^{] có áf Ási]}-ái{ Án ^¦&^] cái}}Á√;[{ Án ^adaicê. Á Á

V@Á^cã\ Á æ Áā ãããæc^åÁã { ^åãæe^|^Áf||| ã *Ác@Á^c^} œ Áā ÁÖ^&^{ à^¦ÁG€GHÉÁā Áæ&&| ¦åæ} &^Á, ão@Á à^• oÁ¦æ&cã&^Ág Áæç[ãåÁ[c^} cædÁ[••ÁxÁå^cædÁ, @&@&æÁxÁ Ák*¦Á[•oÁæÁð]}ãã&æ) oÁæ) åÁ*•cædi^ååÅå^àÁ $[\hat{A} = \hat{A}$ [c^\|aa] ā * Áa·· ^• Á āc@Ác@ Ác|aa) • ãcā] } Ác[Á\^&[c^\| ÈÁV@ Á] | [&^•• Á&[} • [lãa æe^ å Ác@ Áa]] * cÁæ&| [•• Á • `àËS|{{ ãœ^^• ÈÁ√@• ^Á; |[`]Ása}åÁsã,åãçãã` æþÁs^à¦ã>Á^•• ã}}•Á^• `|c^åÁsá,Á;[{ ^Â;€€Á;|`•Á;ã>&^•Á;Á åæææÁ @BR@Á ^¦^Á&Uˇ•c^\^åÁF¦Áæð æðî•ã ĚÁÁÁ

 $V @ A^* \parallel A^* = A^* = A^* = A^* = A^* + A^* = A^* =$ æ[~`} åÁs@ Á; ||[__ā; *Ás@^^Á^^Á&æe^*[¦ā*•ÁÇ ãs@Á; *|cā;|^Á*`àË&æe^*[¦ā*•DAÁ

FÁÒ¢¢^{} adÁfÁÔæð}•ÁÜ^*ð[} adÁÔ[`}&ðJÈÁ

Çã¢^• ŒÀ

^HÁÔæā}•ÁÜ^*ā[}æHÔ[`}&ā|Áæ+[Á&[}å`&o^åÁæÁ^¦ã>•Á[-Á;^|æ+Áå^à¦ã>-Á·^••ā[}•Á;āœÁæ|ÁOTVÁ;cæ-Áā[{^åãæe^|Á(||[]ā]*Ás@Á ^ç^} oÁse Á ^||Áse ÁsÁVÔÁRæ]^¦ÁP[oÁOTVÁÖ^à¦ðN-Á;} Ás@ÁFJÁÖ^&^{ à^¦ÈÁ

FEÁ Ùdæn*^Áæn) åÁÒ¢^&` cãç^ÁOÇ æb^}^••ÁËÁc@ææÁ^|ææ^•Á[Á][ã, o•Ác@ææÁæb^Áå^^{ ^åÁ[Á]^!cæã;Á[Ác@Á •dæe^*æbÁrç^|Á; Áããææro'!Á&[}d[|ÈÁ

 $\begin{aligned} & \underbrace{\text{CEA} \ U} \ | \ ^{\text{Laga}} \ \} \ \text{cap} \ \hat{\text{A}} \ \hat{\text{Cap}} \ \hat{\text{A}} \ \hat{\text{Cap}} \ \hat{\text{A}} \ \hat{\text{Cap}} \ \hat{\text{A}} \ \hat{\text{Cap}} \ \hat{\text{A}} \ \hat{\text{A}} \ \hat{\text{Cap}} \ \hat{\text{Cap}} \ \hat{\text{A}} \ \hat{\text{Cap}} \ \hat{\text{Cap}$

\(\text{Accent}^* \text{Line Accent}^* \text{Line Accent}^* \text{Accent}^* \t



Figure 1 - Fundamental Inputs to Capability combined to generate Operational Capability of the LDMG-CR.

7 cbhYl hcZh Y'CdYfUhcb"

V@礥ã @•Áà^|[¸Á·@¸ |åÁà^ÁS[}•ãā^¦^åÁ¸ão@¸Áo@ÁS[} c^¢ơÁ;Áo@Á;]^|æāā}}•ĚÁV@Á^ç^}ơÁ;]æ}}^åÁ
c¸[ÁS[}&`;|^}ơ∱@æ•^•Á.ÁœÁā•ơÁşç[|ç^åÁ;|^]æbæāā}•ÁæþåÁ^•][]}•^•Á;|Á\ÔÁRææ]^|ÊÁæþåÁs@Á^&[}åÁ
]@æ•^Á^|ææ°åÁqÁ;Á^•][}åäj*ÁqÁcæÁ*à•^``^}ơÁÛF€€Á^æbÁ;|`•Áf[[åäj*Á^ç^}∂ÁœæÁ^ç^}c`ææ°åÁå`^Á
d[Áo@Áî°•c^{ (qÁ)}æþå&åÁæ¢ÅácæþÁ;ç^¦Ás@ÁÕ`|-Á^*ā[}ĚÁV@áÁ°`ææ°åÁqÁa[Á[{ ^ÁHJÁåæ°•Á;Áæ&cãpææā]}Á
[ç^¦Áo@ÁÔ@ã dæ ÁæþååÁp^¸Ã°^æÁÚ/¦ājåÁZÄcæÁÖ^&^{ à^|ÁqÁaþÁr}cæÁÖ^&^{ à^|ÁqÁaþAr}æÅå}àÁpA\$\
[ç^¦Áo@ÁÔ@ã dæ ÁæþåÅÁp^¸Ã°^æÁÚ/¦ājåÁZÄcæÁÖ^&^{ à^|ÁqÁaþÁr}æÅå}åÄ&æþd^Áå^]|^c°åÁ&æææãcÈÁÁÁÁÁ

ÎÁÕãç^}Ás@ Áā; ãææā;}•Ás^•& ¦ãs^åÉāsóná Á^& { { ^} å^åÁs@æA* ¦o@ ¦Ás[}-ā{ ææā;}Á;-Árcæe^{ ^}orÁse}åÁ^¢] [[ˈææā;}Á;-Á; å^¦|°ā;*Á å¦ãç^¦•Ána Á; æb¦æ)c°åÆjÁs@Ás[}•ãs^¦ææā;}Á;-Áājåā;*•ÈÁV@onÁs;&)°å^•Ás@Á;¦ā;¦ãnā ææā;}Á;-Á; ãnā ææā;}Á; ^æ•°¦^•ÈÁkQónánÁ |^&[{ { ^}å^åÁs@æÁs@mÁso;Ásæ&ããææ°åÁs`Átãæ)*°|æe°åÁs@Á^•°|orÁ;ão@Á;¦°çā;°•Árc°åã°•ÈÁ ĪÁÖ`^Áq;Árœç^Ánæ;¦æ)*^{ ^}orÁse;åÁså*&°åÁn°æ-ā;*Árç^|•Á;ç^¦ÁÔ@ãrc;æ-Áse;åÁro^,Är°æbÈÁ

Á Á

ÌÁ/@ ÁÔæā}•ÁSÖTŐÁ, æ•Áæ&cã;æc°åÁ;¦Áæ)Á^¢c°}å^åÁ;^¦ã¦åÁşÁ^•][}•^Á;IÁÔUXOÖËFJÁşÁG€C€ÈÀ JÁ<u>P[_ÁæÁ|_Ë^ç^|Ásæc°*[¦^Ás;&[}^Ás;&[}^Ásæĕ•^åÁÔæā}•Q́æ*^•oÁ;[[åÁşÁ;[¦^Ás@æ)Áæ&s^}č¦^ÆÖOÓÁp^_•Á;Áæ&&^••^åÁ;}ÁG€Á OE;¦ãÁG€GIÈ</u>

G97H=CB'7'E'?9M': =B8=B; G"

k

 $V@A'^c; A'_j : [8^{\bullet \bullet \bullet}AS[||^8c^*AA'] \Rightarrow caBA_j \Rightarrow ca_A']^{\bullet \bullet}]^8ca_b^* - A'_j - Ac@a_A'^c]^{\bullet A} \otimes A'_j [[A_a^*A_i^*]^{\bullet A} \otimes A'_j [A_a^*A_i^*]^{\bullet A} \otimes A'_j [A_a^*A_i^*]^$

FÉÁ @/UXYfg\]d'!'GHfUhY[]WUbX'9I YW h]j Y'5 k UfYbYgg'. Áà ãáā * Áo@ Áæ&cãçæðā} Á&æ} æà ããc Á; -Áo@ Á ŠÖÔÔÁæ} å ÁŠÖT ŐÁæ¦æ} *^{ ^} • ÁB Á¢\{ •Á; -Á/°æå^¦• @ Áæ} åÁ; ç^¦• ã @Á; Áã] ¦[ç^Ár~æða} & Áæ} åÁ ^~^&&ãç^}^••Á; -ÉÁ

ŒÁ 7 UdUW]hmicZh\ Yʻ≢bW]XYbhiAUbU[Ya YbhiCdYfUh]cbg.Á

- æĐÁ FYgcifW]b[`UbX`FYbia YfUh]cb`cZh\Y`=AHÁ.Árd^}*c@}ā¸*Ác@Á;[å^|Á;ÁCTVÁrcæ-ā¸*ÉÁ ā¸&|`åā¸*Á¦^&|`ãq(^}cÁæ)åÁ¦^c^}cāį}Á•dæe^*ã•ÉÁqíÁà^cc^¦Á[]cãįã;^Á•d`&c`¦^•Áæ)åÁ]^¦-{¦{æ}&^ÈÁ
- àDÁ=bhYfbU`7caaib]WL/njcbg`UbX`8 mbUa]WgÁÁā,&\^æ^Ác@Á\^``^}&`Áæ)åÁã;]\[ç^Ác@Á ``æþãĉÁ;Á&\ãã&æ†Áā,-{\{æā,}}Áåã•^{ā,aæā,}ÁqÁ^}@æ)&^Á&[||æà[|ææā,}Áæ)åÁ^~^&cãç^}^••Á æ&\[••Áåãæe^\\Á;æ)æ*^{ ^}o^hd`&c`\^•ÉÁ

- I ÉÁ FYWIC j Yfm 15 ff Ub [Ya Yb lg Á Á @ lāj* Ë]Á ^ & [ç^\ ^ Á d * & č \ ^ Á æ)åÁ ^ e ^ { Ág Ás ^ ce ^ \ Á d ^ æ { |āj ^ Áæ }åÁ • * • cæāj Áæ | æ) * ^ { ^ } e ^ Ás * |āj * Ád æ) • ã æ j • ã æ j • ã æ j • ã æ j • ã æ j • ã æ j • ã æ j • ã æ j • ã æ j • ã æ j • ã æ j • ã æ j • ã æ j • ã æ j • ã æ j • ã æ j •

F€ÁV@Á^][¦ơÁ,ˇđã,^•ÁơQ.•^Áœ]^&œ Áơœ Áơœ Áx@ Áx@ Áx æ dã&ã,æ) œ Áæ;åÁ^•^æ & Ææ;% æ Á&[}•ãã^¦^åÁ, -Á;[•ơÁ;][¦ææ;& ÈÁÁÁ

@/UXYfg\]d'E'GlfUhY[]WUbX'91 YW hjj Y'5 k UfYbYgg'

Tæ) ˇæḥÁT ÈÈÈH HEÁÇŠÖTÕÁÜ^•][}•ānājāmāð•ĒÁÛ | å ÈÃÕ [ç^\}{ ^} dÞĀ, ^•ÁæÁ, ājā, ˇ{ Á; ^{ à^\•@ajÁ, Áæþ Á ŠÖTÕÉQ ¸ ^ç^\ÁmÁn, [^•Á, [oÁ^¢] | ææj Ás@Á,] cā æþÁ^æå^\•@ajÁn, ç^|ÁĻ | Áræ&@Á, [•āmā,] ÈÁS^^Á, [|^•Á^|ææ^å Á d̄ Ác@ÁŠ[&æþÁÖā æ•ơ\ÁÔ[[\åājæē[\ÁÇŠÖÔDÁæ) åÁŠÖTÕËÔÜÁÔ @æāÁæ^Á[ˇdāj^åÁājÁc@ÁÖā æ•ơ\Á Tæ) æ* ^{ ^} oÁD&ÁŒH ÈÁV @āÁ¸Á°, &æj Áræ, &æj Åræ, &æj Åræ

 $\label{eq:control_c$

Uà•^¦çæaa }•ÁÁ

- •Á V@Á^çã¸Áã^}cãã^åÁs@æÁs@Á]^!æā[}æÁ @ãÁ![{ ÁÔ[`}&ãqÁs`•∄^••ÁæÁ•*æÁ•*æÁ∮ÔŒNDÁ]^!æaā[}•Á ∄ q[Ác@Áåãææc'!Á(æ)æ*^{^}cÁæ!æ)*^{^}oÁæ!a)*^{^}óÁs[`|åÁ@æç^Áà^^}Á;æå^Á&|^æA^!ÈÚ^!•[}}^|ÁB,Ác@Á ŠÖÔÔÁ;à•^!ç^åÁs@æÁÔÜÔÁ^æå^!•Á;æ)c³áÆ[Á\æ)Á[i]æáAæ)åÁ@|]Áãç^}Ás@Áãčæaā[}Á;-[åä]*ÈÁÁ
- •Á V@á Áæà•^} &^Á, Áæák|^æ) Áà!^æb Áà^ç ^^} ÁÓOENÁæ) å ÁÓæái}• Œláa æ• æ' k'Á[[æj * Át] æ&c* å Áæ Áræå^!• @j Á ~`} &æi } Á, Á^^Á[|^• Ás Áræ ÁŠÖÔÔÉAS &| * åā * Áræ ÁŠ[&æþÓãa æ• æ' k'ÁÔ[[!åāj ææ[!ÁÇŠÖÔDÁ] [ãāj } ÉÉæp å Á &!^ææ* åÁ} { æp æ* ^æà|^Áx} Æj } •Á[{ ^Á[|^• Ás@æÁæáÁ*•] [} •ãa ðjããð*• Æj Ás[c@ÁÔ[* } &ðjÁō* ðj ^•••Á Ô[} æj * ãc ÁÚ|æ) ÁÇÓÔÚDÁæ) å Áræ ÁŠÖÔÔÁ[!ÁOT VÆÁOÆååããā] } æþ ÉÉãAý æ• Á* * * ^• æ å ÁrææÁæÁ*æÁ*æÁ* Øj A ål & æl å ål æj æ Ár * * * ^• æ å ÁrææÁæÁ*æÁ*æÁ*æÁ*æÁ*æÁ* Æj { ^Á, æbæÁæða æj æ ÉÁ
- •Á V@Án~~8coÁ[-Ác@áÁ•ãč æzā]}Á¸ ^!^Á'^][!chåÁq[Á@æç^Áà^n}Á^|cÁ[!Á[à•^!ç^åÁā]Ác@ÁQT VÁÔn||•ÈÁ Úætæða]æð orÁā]åä&æchåÁc@æÁc@áÁā;ç[|ç^{ ^}cÁ~~8chåÁ&[{ { `} 38æzā]}Á-|[¸•Áànç¸^n}Ác@Á •dæch*ä&Bæsca&æhÁæhæ ár Ár@áŠÖT ŐÁājq Ár@ÁQT VÁ[]^!æzā]}æþÁæd{Ár@[`*@`óÆæhÁæhæ ár Ár@Á !^•][]•^Á;]^!æzā]}Áæð åÁ&[}dāà*chåÆ]}dāà*chåÆ]}dāa*chåÆ]}áÁ;Áræál}Áræál}ákæl}dāa*chåÆ]
- •Á V@ā Á āč æzā[} Á\¢c^} å^å Ág Ás@ Ásæ) ãzā[} Á-[{ Á^•][} ^Ág Á-^&[ç^\^ÈV@ Á^çã\¸ Ázê^} å Ás@æÁs@ Á];[8^å` |^• Ág | Ás@ā Ásæ* ^Á, ^|^Á,[oÁ; ||[¸ ^å Áze} å Á¸ ^|^Á,[[; || Ás@[{ { `} } 38ææ* å ÈÁÁ
- Á V@Á^^åàæ&\Áæ+[Áājåä&æe*åÁæÁ&\ãã&ædÁæà•^} &^} &^Ái, -ÁæājĒ æ^ÁA^å*}åæ) &^Ái, |Ás[}æj*^} &^} &^Ái, |æj*Ái| |æj*Ái; |Á
 \^^Á•^} āi, |Á|/æå^\|• @ājÁ![|^•ÁÇÈĒÁŠÖÔĒÁÔÙUDÁæ) åÁ•[{ ^ÁŠÖTÕÁ![|^•ÉÁV@áÁāj]æ&c*åÁc@Á { æājc*}æj &^Ái, -Ás[}d[|Áæ) åÁS[{ { *}}ã&ææāj}Á*d*&č |^•Áæ) åÁ*}å^\|{ āj^åÁ*æjā£ÁS[}d[|•Áī;|Á@ā@Á œæ\^•Áå^&æāj}Ái æðā;ÁS[}d[|•Áī;|Á@ā@Á
- •Á Šã^¸ã^ÊAæÁqã^•Ác@Á(ããå|^Á|æ^\¦Á[-Á|^æå^\•@]Á¸ãc@]Ác@ÁQī VÁÇÈ ĒÉ\V^æ{ÁŠ^æå^\•LÁQī VÁ U]^¦æãj}•DÁ•^^{ ^åÁq[Áà^Á[}|^Á]ædq^Á~}&cãj}æфÉV@Á&;;!^}cÁQī VÁ[!*æjãæãj}æфÁ•d`&c;\^Á æj]^æd•Á[Áà^Á;ã•ā;*Áå^]c@ÁæjåÁæãjĒæ^Á^å*jåæj&cÁ;^æ*;\^•Á[¦Ác@•^Á^^Á;[•ããj}•ÈÁ
- •Á COÁ, æ•Á^][¦c^åÁs@æcÁs@āÁãčæcā[}Á^•`|c^åÁājÁājåãçãå`æþ•Áà^ā]*Á^``ā^åÊā[k/Áæcc^{]cāj*Êá[Æ3[}cāj`^Á c[Á[]^¦æc^ÁæcóAccÁ@ā@Áx^{@ā @Áx^{}][Á[¦Á+ā*]ãã8æa)cÁå`¦æcā[}•ÈÁZ^^åàæ&kÁæф•[Á][ā]c^åÁ([Æ\$č¦!^}cÁtæā]āj*Á



] \[&^••^•Áa^ā; *Áā; • ~~a&a^} oÁq Áa ~āaÁo@ Áp^ç^|•Áq Áæ; æb^} ^••Áæ; aàÁ&æ; æàājāc Áp^ ~ãaÁ; ão@a; Á ^^Á Qr VÁj |^•ÈĀFÁÁ

•Á V@•^Æ;•`^•Á^•`|c^åÆjÁ^|ææãç^|^Æj^¢]^|æð}&\åÁj^\!•[}}^|Áāj]ā;*Æ\ãææÁ[|^•Ás@ææÁæ+[Æj]æ&c^åÁ c@Á|[¸Áæ)åÁ` æjãĉÁj-Áājc^||ā^}&\Áæ)åÁS[{{`}ãææãj}ÁjãæðjåÁà^ç,^^}Ác@ÁOTVÁ&\||•Áæ)åÁ c@[`*@Ác@Á&@æájÁjÁ8[{{æjåÄãj@ààããj*Ás^&ãáj}Ë;ædåj*Ás^Á^Ádæ**ã&Áá]][ājq'^}o•ÉÁ

$S^{\hat{A}U^{8}} \{ \{ \} å accal \} \bullet \acute{A}$

- FÉÁ @/UXYfg\]d'Ë'GlfUhY[]WUbX'9IYWi'lij Y'5 k Uf YbYgg"Ó ¾åÁs@ Ás&cãpæðā} Ásæjæðãô Áp Ás@ÁšÖÔÔÁ
 æjåÁŠÖT ÕÁæ¦æj*^{ ^}o Áð Ác^¦{ •Á[-Á|^æå^¦• @ð Áæ)åÁ[ç^¦• ð @Áq Áð] ¦[ç^Á^~æða}} & Áæ)åÁ
 ^~&cãp^}^••Á; -ÁŠÖT ÕÁ;]^¦æðā} }•Ás^kÁ

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Management accepts the above recommendations noting that Council has undertaken a restructure of the Councils Disaster Management Unit and has re-established a dedicated Local Disaster Coordinator Role and a new Disaster Planner role.

As stated, this event represented the longest duration of activation of the LDMG and involved 60 IMT staff across 13 cells supported the LDMG-CR's operations and approximately 49 LDMG members. The Christmas / New Year period did impact role of LDMG versus Councils BAU as the majority of Council operations where unavailable due to Councils non-essential services unavailable to the annual Christmas Close Down.

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- Current recruitment (volunteer-based) also appeared to be insufficient at optimising IMT capability, as it appears specific skillsets are not being fulfilled, likely impacting the quality of operations, and exacerbating the staffing shortfalls that were observed.
- The review revealed that many of the positions within the IMT do not relate to Council BAU roles and filling these IMT positions with volunteers requires them to operate outside of their comfort zone. Without experience in these types of operations these individuals can quickly become overwhelmed. Equally the pressure of this environment is very difficult to simulate in training scenarios. Participants may feel prepared, until they face an actual response, whereby sensory overload, the impact from decisions and fatigue all contribute to individuals being overwhelmed.
- It was noted that requests for staff resources were being fielded from several surrounding LGAs
 throughout the event. While the LDCC attempted to facilitate these requests, this put additional
 pressure on already stretched resources. Significant levels of surge support did not arrive until
 early recovery operations had commenced.

Observations – Internal Communications and Dynamics

- The review identified that internal communications at all levels needs to be improved to enable a more effective, sustainable, and collaborative environment. The absence of situational awareness within the IMT Cells meant that they were unable to adequately, or confidently, support the strategic decision-making authority and priorities of the higher levels.
- This includes clear communications related to the transition between phases from 'Response' to 'Recovery', that did not appear to be well structured and was misunderstood by lower-level staff.
- The review also identified a possible over reliance on direction from above, which was evidenced
 by stalls in workflow during times when access to decision-makers was restricted.

Observations – LDCC Functionality

- Feedback indicates that space limitations impacted sleeping arrangements which affected the
 ability to achieve a restful and restorative sleep. Likewise, the absence of un-utilised spaces as
 a mental 'break out' space influenced people's wellbeing. Furthermore, certain dietary needs
 were not accounted for in the provision of meals.
- Personnel reported the absence of key positions responsible for ensuring the provision of food and nutrition and the scheduled cleaning of amenities amongst other key tasks was missing. Rather these roles were informally shared which meant that at times there were concerns related to food hygiene.

Key Recommendations

2. Improve the Capacity of the Incident Management Operations through:

- a) Resourcing and Renumeration of the IMT strengthen the model of Incident Management Team to better optimise structures and performance; and
- b) Internal Communications and Dynamics strengthen the frequency and quality of critical information to enhance collaboration and effectiveness across disaster management structures; and
- c) LDCC Functionality Increase depth in the capability of and redundancy of critical IMT leadership roles to better optimise capacity and quality of functions.

Achieved by:

2.1. Reviewing the overall effectiveness and return on investment of the IMT model - taking account of ideal structures (including internal vs externally acquired personnel; voluntary vs



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- merit based), workforce levels and surge capacity, roles, and position (cell) descriptions, renumeration levels and types, work locations to ensure value for money and optimal operational arrangements are achieved.
- 2.2. Exploring and formalising alignment between key IMT roles and functions and CRC BAU roles for the purposes of leveraging and embedding specialist skills and knowledge into the IMT.
- 2.3. Reviewing IMT position descriptions together with recruitment and retention processes to improve the fit of personnel to key roles and help stabilise the IMT workforce.
- 2.4. Conducting IMT skills needs assessments and deliver additional training in enhanced counter disaster capabilities (workplace empowerment; high consequence decision making; gathering intelligence; situational awareness).
- 2.5. Reviewing structures and rostering processes to ensure fatigue management and fail-safe redundancy measures for all key roles.
- 2.6. Increasing advocacy to the Local Government Association of Queensland and other agencies to expand the network of shared personnel to support surge capacity.
- 2.7. Reviewing processes of internal communications to better maintain situational awareness within and between cells, and between the LDMG and IMT including use of guardian; team briefings; and handover processes etc.
- 2.8. Conducting a functional assessment of the LDCC with a view to improving operational effectiveness (for a growing workforce) and levels of personnel wellbeing.

CRC Management Comment

Council accepts all the above recommendations.

Council has 56 IMT members, all of whom are existing Council employees who nominate to be trained and therefore respond to a disaster activation above their nominal role. IMT members are paid an annual retainer to 'hold themselves in readiness'.

Council recruits new members annually and undertakes a comprehensive skills assessment prior to appointment.

With the majority of Council staff being on leave due to the annual Christmas close down, access to to additional staff who could be re-deployed from their BAU roles with Council has reduced to non-existent.

This event due to its duration and timing has provided valuable insights into how Council can best structure the IMT.

Forge Advisory Supplementary Considerations

Supplementary Considerations – Resourcing and Renumeration of the IMT

- Critical IMT leadership roles need to be bolstered for the purposes of depth, redundancy and critically, to manage the levels of fatigue that were experienced during the operation, and which undermine the ability of personnel to function to their full effect.
- Council is a large organisation and employs people with very diverse backgrounds who may
 have suitable experience in operating in these situations. Where there is alignment in skills or
 core responsibilities in BAU, the role of 'Team Lead' and 'Alternate Lead' within IMT Cells could

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be included as part of Council's nominal position descriptions and organisational structure. This ensures that each cell has a leader who is trained and aware of responsibilities (e.g., rostering) as well as a redundancy for shift change or illness.¹⁵

- Council may also be able to appoint personnel to IMT positions on a merit basis while recruiting for BAU roles that include support to the IMT position in the position description.
- The review strongly recommends Council investigate current methodology for appointing IMT positions and disaster support remuneration arrangements. The investigation should include:
 - Suitability assessment of current IMT staff to identify if existing personnel are in appropriate positions and have the requisite skills. This review should extend to include residential location and likelihood of being able to access LDCC in an event.
 - Explore why individuals weren't available to support the events, including if leave is being coordinated across the organisation.
 - Understand the surge capacity requirements for the IMT / LDCC in a large-scale operation by exploring how many that participated in event received the allowance compared to those that participated but didn't receive the allowance.
 - Conduct a return-on-investment study that considers the annual allowance costs against the total number of staff who receive the allowance and regularly participate. This will confirm if Council's current investment is providing value for money.
 - Explore alternate models for staffing critical positions including outsourcing.
- The review also advises increased levels of role specific training for IMT Cells, especially leadership positions, as well as specialised training for some roles particularly those that don't align with BAU responsibilities. Leadership positions should also be given the opportunity for further training on both their individual responsibilities as well as training in general leadership qualities, particularly when operating in high pressure environments.
- Council should advocate to LGAQ for a network of trained personnel who can be deployed at the
 onset of an event to support and assist from outside of local region during an event. Surge
 capacity is equally as important during response as the recovery phase to manage fatigue and
 adequately respond to the scope/scale of efforts.
- Consideration may extend to alternate facilities that can support IMT operations across the region. This may allow stranded personnel to support an event when they are unable to access the main LDCC.

Supplementary Considerations – Internal Communications and Dynamics

- That Council consider strategies to appoint appropriate levels and qualified staff within IMT Cells to better enable organisational collaboration and improve internal communications – flowing both up and down.
- There should be an increased focus on strategic guidance down to IMT Cell staff to promote situational awareness and achieve desired staff efforts. This includes better communication of known future priorities to enable IMT Cells to forecast rostering, aid expectation management and ensure sustainable efforts are maintained.
- Train IMT Cells in 'workplace empowerment' and how to harness it; this management concept adopts a style of communication and philosophy that promotes strategic intent and

¹⁵ This would be an expansion of existing practice where some Council Roles already include responsibilities in disaster events.



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understanding to empower subordinate decision-making ability. This is undertaken within an environment that ensures there are clear delegations and or authority protocols to guide this work.

- Conducting team bonding/building activities for IMT Cells to foster a more cohesive culture and group dynamic within the entire IMT, particularly for cells that don't work together in BAU, will assist in improving collegiality and awareness of other roles.
- This includes emphasising specialist skills assessment such as forecasting and prediction competencies.

Supplementary Considerations – LDCC Functionality

- Working as an IMT cell member during a disaster event is stressful due to the unfamiliar nature
 of work, group dynamic, tempo and duration of work periods. Taken together these aspects have
 a significant effect on levels of fatigue and overall wellbeing. An appropriate work environment
 that allows adequate rest and/or separation from stressful situations will also assist in reducing
 the impact on individuals.16
- The report proposes a full review of the physical layout and functionality of LDCC is needed to
 devise an optimal and ergonomic solution to support sustained operations by a growing
 workforce. This should include a fit for purpose assessment which includes the requirement for
 those staff working that may be geographically isolated from the LDCC.
- Incorporating key personnel tasked solely with ensuring the provision of key operational support functions such as food supplies and sanitation will significantly improve the sense of overall order and ensure the appropriate levels of nutrition are provided.

¹⁶ While this aspect was primarily raised during debriefs with the IMT Cells, there is equal relevance to all persons present in the LDCC.



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Public Messaging

A core role for Local Government in an event is public messaging. This is particularly the case for incidents of flash flooding, which is inherently challenging.¹⁷

In TC Jasper this process was intensely challenging for of the following reasons, some of which were outside of the LDMGs control:

- speed at which the changing situation evolved,
- · ambiguity of the intelligence, and
- the overlay of a new national warning system that had not been previously tested for this type of event.

Observations

It is reiterated that an AAR is not a critique of operations, and the following observations are provided with the aim of contributing to the LDMG's continuous improvement and quality assurance processes. The AAR debrief sessions noted that all members of the LDMG and IMT performed their roles in a professional and timely manner.

- Feedback indicates that CRC developed and pushed out large amounts of public information during the event¹⁸, however perceptions are that this is still not resonating with many members of the community.
- This was particularly evident regarding the reported community's lack of understanding as to the
 difference between the impact from storm surge and flooding. Additionally, ABC radio, as the
 official emergency broadcaster, did not appear to be actively engaged with the LDMG-CR.
- Feeback indicated that the LDMG's social media strategy during a disaster event is not well understood. It appeared that resourcing was inadequate to manage social media engagement, and those that were tasked sought increased direction regarding their engagement.
- The issues with communications, including Emergency Alerts (EAs), were caused by several
 factors some of which are outside the LDMG-CR's control. Effective engagement with the
 District and State is essential to confirm the procedure to meet the collective duty to the Cairns
 population. Feedback indicates that the operational relationship between the LDMG and DDMG
 and their respective coordination centres must be clarified and improved.

Key Recommendations

1. **Public Messaging** – increase the rate¹⁹ of dissemination, reach and effectiveness of public information and communication channels to improve the flow of critical messaging by:

- 1.1. Review the Public Information and Community Awareness sections of the Cairns Local Disaster Management Plan with the intent of ensuring the communication strategy is being executed as intended and/or update as required. It should also identify how social media can be incorporated into the strategy and target those hard-to-reach groups that may be disengaged/isolated from traditional communication channels. Social media can be a means of addressing mis-information within the community. The review should focus on
 - Section 9.2 Community Warning & Alert System and Dissemination

¹⁷ Usually defined as occurring under six hours and can be localised or widespread. Does not include storm surge or slow/slower onset riverine flooding.

¹⁸ Post review analysis provided by CRC identified that public messaging included 8 emergency alerts; 22 discrete disaster Facebook posts; 20 CRC Facebook posts; 62 Media Engagements; Disaster Dashboard accessed by 244,000 users with 2.8 million event counts recorded; Disaster Facebook page reached 710,000 people and attracted 9,300 new followers; Website calls rose from 600 per day to 200,000 per day during the event.

¹⁹ Rate in this instance is in terms of time taken to get a message to the community, not necessarily the number of messages that are disseminated.



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 - Section 8.3 Community Awareness
 - A.10 Public Information and Warnings Operational Plan
 - 1.2. Continuing those community engagement activities that build public awareness of the types of hazards, increased prevalence, and impacts.
 - 1.3. Increasing engagement with the District Disaster Management Group to increase a shared understanding of support requirements in an activation, particularly related to public messaging.

CRC Management Comment

Council accepts all the above recommendations.

Forge Advisory Supplementary Considerations

- Investigate which Cells could have assisted in preparing for the transition between the phases of the event, including preparing community messaging, and assessing levels of resourcing required. A well-resourced and dedicated cell/s tasked with forecasting and managing key changes in the nature of the event via public messaging is vital.
- Establish a clear event specific Social Media plan within the overall public messaging strategy as a one-way information flow to the community that disables comments and directs all members to the single source of truth, with redundancies. This strategy should emphasise the following communication mechanisms:
 - Primary: Disaster dashboard online.
 - Alternate: ABC radio updates wireless.
 - Contingency and/or to report incidents: Council disaster hotline phone.
 - Emergency: Life threatening 000.
- Continue community engagement activities that advise the public of the likely increase in events and their impact, such as those conducted at Holloways Beach immediately prior to TC Jasper. Examples from recent events can be used to demonstrate the impact on the community, such as:
 - The duration that houses were without power and the impact this had on food supplies. 0
 - How early some of the northern beaches were cut off, highlighting how important early decisions are around evacuation.
 - The impact that debris can have during cyclones and floods and the benefit of cleaning up at the start of disaster season.
- Investigate / Review options to disseminate information to elements of community not currently engaged, including during all phases of disaster preparedness, response, and recovery.
- LDMG-CR Executive meet with the DDMG to discuss the issues encountered during the recent events. The discussion should include the processes for issuing EAs; general areas for improving the operational relationship between the two Groups; and where opportunities exist for increased engagement of the DDMG with LDMG-CR outside of activations.



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Recovery Arrangements

The LDMG-CR has responsibility for transitioning the event's operations from 'Response' to 'Recovery' under the Queensland Disaster Management Arrangements. This is usually facilitated by a recovery sub-committee who develop dedicated recovery plans and report to the LDMG-CR.

This phase is complex in large scale events such as TC Jasper, in which the recovery phase requires similar levels of resourcing – or more – than the response phase. Often the LDMG-CR is continuing with response operations while the recovery arrangements are put into effect.

In events of the magnitude of TC Jasper the transition phase is made more complex because:

- resources (including key personnel) are already deployed or exhausted,
- resources (including personnel) may be stranded and/or unable to deploy to the region due to highway or airport closures,
- the span of leadership/responsibility increases as more agencies/groups provide support increasing coordination requirements.

Observations

It is reiterated that an AAR is not a critique of operations, and the following observations are provided with the aim of contributing to the LDMG's continuous improvement and quality assurance processes. The AAR debrief sessions noted that all members of the LDMG and IMT performed their roles in a professional and timely manner.

- The review identified that the transition from 'Response' to 'Recovery' was not well planned and recovery efforts were delayed or conflated with response. This created an environment in which the LDMG-CR and elements of the recovery sub-committee were reacting to community issues, some of which were outside of the LDMG's responsibility. This contributed to confusion as to who had authority in the LDCC across all tiers and resulted in the IMT cells being pulled offline to conduct recovery tasking while still undertaking response efforts.
- Externally, issues such as tension with the spontaneous community groups formed and was
 incorrectly tasked to the IMT which inhibited engagement/communication with these groups. This
 allowed the generation of unsolicited and unwanted donations that required resources to
 manage, which could have been better used elsewhere. This was heightened by a lack of
 information within the community which was often filled by misinformation by individuals with
 varying intentions.
- An element of friction during the transition from response to recovery is unavoidable and in this
 instance was exacerbated by pending Council elections. However, being on the front foot with
 information/communication may have reduced the impact.
- Recovery efforts are partially executed by non-government organisations who rely on government funding for resources, their efforts can be coordinated, but not controlled by the LDMG. Until these entities can confirm their funding sources and the full extent of the resources they're able to deploy, they have limited ability to offer services.

Key Recommendations

- 4. **Recovery Arrangements** shore-up recovery structures and systems to better streamline and sustain arrangements during transition²⁰, by:
 - 4.1. Increasing awareness of the Cairns Local Recovery Plan and associated arrangements including the LDMG processes that support the transition from response to recovery, the

²⁰ The report outlines those aspects that the participants and research team considered of most importance.



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span of authority for these operations (LDC / LRC; IMT or CRC BAU), and processes for the allocation of adequate resourcing – via training and functional exercises.

4.2. Reviewing operational resources and information systems that support recovery processes to ensure they are up to date and accessible.

CRC Management Comment

Council accepts all the above recommendations.

As stated, this phase is complex in large scale events. The Local Recovery Committee has remained at Stand Up since the 19th December 2023.

Whilst the transitional arrangements from response to recovery can be improved, it is important to note that the Local Recovery Committee has completed the Tropical Cyclone Jasper Local Disaster Recovery Plan 2024-2026 which has been endorsed by the LDMG-CR on 18 June 2024 and reported to Council on 10 July 2024.

Forge Advisory Supplementary Considerations

- The review revealed a need to improve the awareness of all arrangements that support the transition from 'response' to 'recovery', including what roles sit with the LDC and the Local Recovery Coordinator (LRC), as well as the IMT and what needs to be resourced through other resources.
- If IMT resources are required, dedicated resources need to be allocated towards the transition from 'Response' to 'Recovery' and this arrangement should be clearly communicated to personnel. Alternately, the LRC should be allocated resources to support this planning.
- These resources and efforts should be focussed on anticipating the community's requirements
 through the transitional period. They should either be looking to inform the requirements for
 additional services from broader government and non-government agencies or to identify
 mechanisms to fill gaps while these agencies establish resources and funding.
- This would enable improved understanding of what the LDMGs responsibilities are during an
 event, what differing agencies abilities are, clarify point of contact in different agencies and
 organisations and generally reinforce messaging around preparing for events and improving
 resilience.
- While resource intensive to maintain the time spent on this outside of disaster season will be beneficial when required at short notice during an event.

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SECTION D - CONCLUSION

Australia has always experienced natural disasters, but their frequency, severity and cost is increasing as climate change progresses. As concluded in the 2020 report of the Royal Commission into National Natural Disaster Arrangements (RCNNDA): 'Natural disasters have changed, and ... the nation's disaster management arrangements must also change' (p22)

Natural disasters and climate risk. Parliament of Australia

Cairns is not exempt from the above statement and through the recent occurrences of Tropical Cyclone Jasper and the associated flood event the region has experienced these changes firsthand. Whilst the LDMG-CR performed well in managing these events there are always opportunities for improvement. It is the intent of a thorough AAR to identify these opportunities so that they can be incorporated into plans for the management of future events.

It is acknowledged that CRC's performance during the recent events was impacted by the availability of experienced staff and the challenging nature of the two events that struck in succession and so close to Christmas. This AAR report has highlighted several areas where changes could be made to improve future performance, these have generally revolved around the very broad themes of training, leadership, internal and external communications. Recommendations have suggested potential options which may assist CRC in addressing these observations. The report has generally structured the observations around the strategic level of disaster control, quick fixes and systemic operational issues that are likely to require a greater degree of consideration.

The increase in frequency and impact of disaster events that the above quote discusses indicates that disaster event coordination must continue to evolve. Currently at a local level disaster coordination must be further incorporated into BAU for Councils. In line with this, whilst every effort should be made to take advantage of the experiences from the recent events, it is important to reaffirm that learning does not stop with this AAR and report. Only through continuous improvement of its plans, procedures and organisational structure can the LDMG and CRC hope to adapt and be prepared for the next event.