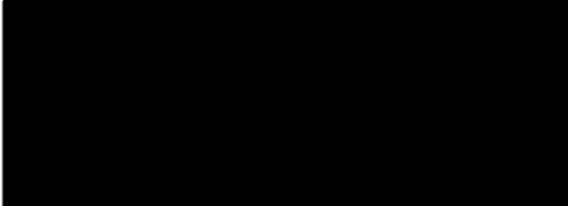




ACT
Government

ACT Health

Ref FOI18-84



Dear 

Freedom of Information (FOI) request

I refer to my correspondence of 12 December 2018 in response to your application to access information under the *Freedom of Information Act 2016* (the Act).

Decision on access

I can inform you that the review conducted by the ACT Ombudsman regarding the release of the final seven deferred documents is now completed.

I have decided to grant partial access to the seven documents. The information redacted in the documents I consider to be information that would, on balance, be contrary to the public interest to disclosure under the test set out in section 17 of the Act.

I have included as Attachment A to this decision the Schedule of documents. The documents released to you are provided at Attachment B to this letter.

In reaching my access decision, I have taken the Act and the content of the documents that fall within the scope of your request into account.

The Act has a presumption in favour of disclosure. As a decision maker I am required to decide where, on balance, public interests lies. As part of this process I must consider factors favouring disclosure and non-disclosure. In accordance with Schedule 2.2(a)(ii) of the Act, the redacted information is personal information about an individual and is therefore considered to be contrary to public interest as it could prejudice the protection of an individual's right to privacy.

Online publishing – disclosure log

Under section 28 of the Act, ACT Health maintains an online record of access applications called a disclosure log. Your original access application. My decision of 15 August 2018 and documents released to you were published on the disclosure log on 20 August 2018. My decision of 12 December 2018 and documents released to you were published on the disclosure log also. This decision and the documents released to you will be published in the disclosure log not less than three days but not more than 10 days after date of decision. Your personal contact details will not be published.

You may view the ACT Health disclosure log at <http://www.health.act.gov.au/public-information/consumers/freedom-information/disclosure-log>.

Ombudsman review

My decision on your access request is a reviewable decision as identified in Schedule 3 of the Act. You have the right to seek Ombudsman review of this outcome under section 73 of the Act within 20 working days from the day that my decision is published in ACT Health disclosure log, or a longer period allowed by the Ombudsman.

If you wish to request a review of my decision you may write to the Ombudsman at:

The ACT Ombudsman
GPO Box 442
CANBERRA ACT 2601

Via email: actfoi@ombudsman.gov.au

ACT Civil and Administrative Tribunal (ACAT) review

Under section 84 of the Act, if a decision is made under section 82(1) on an Ombudsman review, you may apply to the ACAT for review of the Ombudsman decision.

Further information may be obtained from the ACAT at:

ACT Civil and Administrative Tribunal
Level 4, 1 Moore St
GPO Box 370
Canberra City ACT 2601
Telephone: (02) 6207 1740
<http://www.acat.act.gov.au/>

Should you have any queries in relation to your request, please do not hesitate to contact the FOI Coordinator on 5124 9831 or email HealthFOI@act.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'CBarr', written in a cursive style.

Conrad Barr
Executive Branch Manager
Health Protection Service

22 July 2019

FREEDOM OF INFORMATION REQUEST SCHEDULE

Please be aware that under the *Freedom of Information Act 2016*, some of the information provided to you will be released to the public through the ACT Government's Open Access Scheme. The Open Access release status column of the table below indicates what documents are intended for release online through open access.

Personal information or business affairs information will not be made available under this policy. If you think the content of your request would contain such information, please inform the contact officer immediately.

Information about what is published on open access is available online at: <https://www.health.act.gov.au/about-our-health-system/freedom-information/disclosure-log>

NAME	WHAT ARE THE PARAMETERS OF THE REQUEST	File No
[REDACTED]	Any and all correspondence held or created by the health directorate between the health directorate and/or the chief health officer with the NSW and federal counterparts in relation to PFAS and/ or PFOS and/ or contamination of any water source or body of water in the Wreck Bay community. I seek correspondence between June 27, 2018 and September 12, 2018.	FOI18-84

Ref No	No of Folios	Description	Date	Release Status	Reason for non-release or deferral	Open Access release status
1	1 - 12	Email from GHD to various recipients – Attachment: Factual Letter 19	29 June 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes

2	13- 24	Email from GHD to various recipients – Attachment: Factual Letter 20	29 June 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
3	25	Email from Dave GHD to various recipients.	29 June 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
4	26-34	Email from GHD to various recipients – Attachment: Factual Letter 18	29 June 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
5	35	Email from GHD to various recipients.	29 June 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
6	36-42	Email from GHD to various recipients – Attachment: Factual Letter 21	29 June 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
7	43	Email from GHD to various recipients – refers to Factual Letter 21 at Folio 6	29 June 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
8	44	Email recall from GHD to various recipients	2 July 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
9	45	Email exchange between Defence and others. Refers to data included in Attachment at Folio 4	2 July 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
10	46	Email between Defence and ACT Government. Refers to data in Attachment at Folio 1	2 July 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
11	47-49	Email between Defence and ACT Government –	2 July 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes

		Attachment: data associated with Factual Letter 20				
12	50	Email between Defence and ACT Government. Refers to data in Attachment at Folio 6	2 July 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
13	51-52	Email exchange between Defence, Infrastructure and others	2 July 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
14	53-54	Email exchange between Defence, Infrastructure and others	2 July 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
15	55-56	Email from GHD to ACT Health. Refers to Factual Letter 18 at Folio 4	3 July 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
16	57-58	Email from GHD to ACT Health. Refers to Factual Letter 19 at Folio 1	3 July 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
17	59-60	Email from GHD to ACT Health. Refers to Factual Letter 20 at Folio 2	3 July 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
18	61-83	Email from GHD to various recipients – Attachments: May & June Monthly Report, Meeting Agenda & Meeting Minutes of 15 June 2018	16 July 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
19	84-86	Email from EPA to ACT Health various recipients –	17 July 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes

		Attachment: Currumbene Fishing and Dietary Advise				
20	87-93	Email from GHD to various recipients – Attachment: JBRF-PGC Meeting Minutes 16 July 2018	25 July 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
21	94-107	Email from EPA to ACT Health recipients – Attachment: Jervis Bay Precautionary Advice	25 July 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
22	108	Email from EPA to Andrew Pengilley	26 July 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
23	109-110	Emails between ACT Government employees	30 July 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
24	111-112	Letter from ACT Health A/g Chief Health Officer to Department of Infrastructure and Regional Development and Cities via CMTED	31 July 2018	Full release		Yes
25	113-116	Emails between Defence, Infrastructure and others	9 August 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
26	117-118	Emails between Conrad Barr and EPA	15 August 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
27	119-125	Email from EPA to Andrew Pengilley – Attachment: Sample Size Simulator Paper	16 August 2018	Partial release	Schedule 2, section 2.2 (ii)	
28	126	Email from Laura McNeil to Infrastructure	16 August 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes



29	127-136	Email from EPA to various recipients – Attachment: REP July 2018 Monthly Report & JBRF PCG Meeting 17 Agenda	16 August 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
30	137-139	Email from Infrastructure to various recipients – Attachment: JBT Meeting Agenda	16 August 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
31	140	Email cancelled meeting agenda	17 August 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
32	141-142	Email from Infrastructure to ACT Health	15 August 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
33	143	Email meeting notification	17 August 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
34	144-145	Emails between Defence, EPA, Infrastructure and ACT Health	20 August 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
35	146-147	Email from GHD to ACT Health	20 August 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
36	148-149	Email meeting notification	21 August 2018	Partial release	Schedule 2, section 2.2 (ii)	Yes
Total No of Docs						
36						

Stedman, Andrew (Health)

From: [redacted]@ghd.com>
Sent: Friday, 29 June 2018 5:58 PM
To: [redacted]@defence.gov.au; [redacted]@defence.gov.au; [redacted]@defence.gov.au; [redacted]@defence.gov.au; [redacted]@environment.gov.au; [redacted]@spotless.com.au; [redacted]@defence.gov.au; [redacted]@defence.gov.au; [redacted]@defence.gov.au; [redacted]@defence.gov.au; [redacted]@defence.gov.au; [redacted]@defence.gov.au; [redacted]@defence.gov.au; [redacted]@aecom.com; [redacted]@aecom.com; [redacted]@infrastructure.gov.au; Clanham, David; [redacted]@epa.nsw.gov.au; [redacted]@health.nsw.gov.au; Stedman, Andrew (Health); [redacted] Hudson, Lyndell (Health); [redacted]@shoalhaven.nsw.gov.au; [redacted]@infrastructure.gov.au; [redacted]@shoalhaven.nsw.gov.au

Subject: Factual Letter 19 - PFAS Results for Flat rock and Captains Lagoon
Attachments: 2126171_LET_factual letter 19_ June 2018.pdf

Dear JBRF PCG,
 Please find attached Factual Letter 19 – Biota sampling from flat rock creek and Captains lagoon areas.
 Please note the figure quality has been reduced for email transfer, with higher quality figures available on request.

Regards,
 [redacted]

GHD
 [redacted]@ghd.com
 Level 2, 57 Graham Street (PO Box 621) Nowra NSW 2541 Australia | <http://www.ghd.com/>
[Water](#) | [Energy & Resources](#) | [Environment](#) | [Property & Buildings](#) | [Transportation](#)

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29 June 2018

[REDACTED] - JBRF & HMAS Creswell
PFAS Investigation and Management Branch
Department of Defence

2126171_LET_factual letter 19

Dear Darron

**JBRF & HMAS Creswell- Environmental investigation: Preliminary sampling results
Aquatic and terrestrial ecology sampling results from the areas associated with Flat
rock Creek and Captains Lagoon (processed by 28 June 2018)**

1 Introduction

GHD Pty Ltd (GHD), on behalf of the Department of Defence (Defence), is undertaking the Environmental Investigation in and around Jervis Bay Range Facility (JBRF) and HMAS Creswell, within the Jervis Bay Territory (JBT) (the Site). This report includes data that has been collected and processed as at 28 June 2018, from aquatic and terrestrial sampling programs from the Jervis Bay tributaries of Flat Rock Creek and Captains lagoon.

It should be noted that these data are provided for information purposes only and that the use of these data should take into account factors that have been used to develop the conceptual site model (as presented in GHD's Sampling, Analysis and Quality Plan).

GHD will continue to provide results from further sampling, following the processing of the data.

2 Purpose

The purpose of the provision of preliminary data is to allow Defence and other stakeholders, including NSW and ACT Governments to view the data prior to its use in the technical reports for the Environmental Investigations.

3 Laboratory Analysis

Upon collection, the samples were sent under Chain of Custody (CoC) conditions to the following National Association of Testing Authorities (NATA) accredited laboratories:

- ALS Environmental, 277-289 Woodpark Road Smithfield, NSW, 2164
- National Measurement Institute (NMI), 105 Delhi Road, North Ryde, NSW 2113

4 Preliminary Results Tables

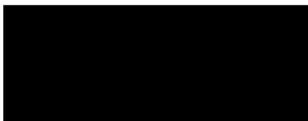
The preliminary results are provided in the attached tables.

The data is not for public distribution.

5 Closure

GHD trusts the above information is suitable for Defence requirements.

Yours Sincerely
GHD Pty Ltd



Enclosures:

Table 1: Aquatic and Terrestrial Biota Results – Flat Rock Creek

Table 2: Aquatic and Terrestrial Biota Results – Captains Lagoon

Figure 1: Biota Sample Locations

Figure 2A: Concentrations of PFHxS + PFOS (Sum) – Terrestrial Invertebrates

Figure 2B: Concentrations of PFHxS + PFOS (Sum) – Terrestrial Plants

Figure 2C: Concentrations of PFHxS + PFOS (Sum) – Terrestrial Vertebrates

Figure 3A: Concentrations of PFHxS + PFOS (Sum) – Aquatic Invertebrates

Figure 3B: Concentrations of PFHxS + PFOS (Sum) – Aquatic Plants

Figure 3C: Concentrations of PFHxS + PFOS (Sum) – Aquatic Vertebrates

Method Code	Field ID	Biota Description	Sample Type	Sample Comments	Sample Date	Height of Sample Beyond	FCY/PRMS (Sum of Total) - Rain Cole	10% particulate organic carbon (POC)	15% particulate organic carbon (POC)	20% particulate organic carbon (POC)	25% particulate organic carbon (POC)	30% particulate organic carbon (POC)	35% particulate organic carbon (POC)	40% particulate organic carbon (POC)	45% particulate organic carbon (POC)	50% particulate organic carbon (POC)	55% particulate organic carbon (POC)	60% particulate organic carbon (POC)	65% particulate organic carbon (POC)	70% particulate organic carbon (POC)	75% particulate organic carbon (POC)	80% particulate organic carbon (POC)	85% particulate organic carbon (POC)	90% particulate organic carbon (POC)	95% particulate organic carbon (POC)	100% particulate organic carbon (POC)
Harvest Creek	FC-E01-W07A	OBTYR, White	Normal		20/02/2018	1.3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Marketing Zone	Location Code	Alt ID	Make	Year	Sample Size	Surveys	2017 Annual Report: PHS Investigation	Performance without and beyond	Performance without and beyond	Performance without and beyond	Performance without and beyond	Performance without and beyond	Performance without and beyond	Performance without and beyond	Performance without and beyond	Performance without and beyond	Performance without and beyond	Performance without and beyond	Performance without and beyond	
...



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Job Number 21-26171
 Revision A
 Date 27 Apr 2018

Department of Defence



Biota Sample Locations

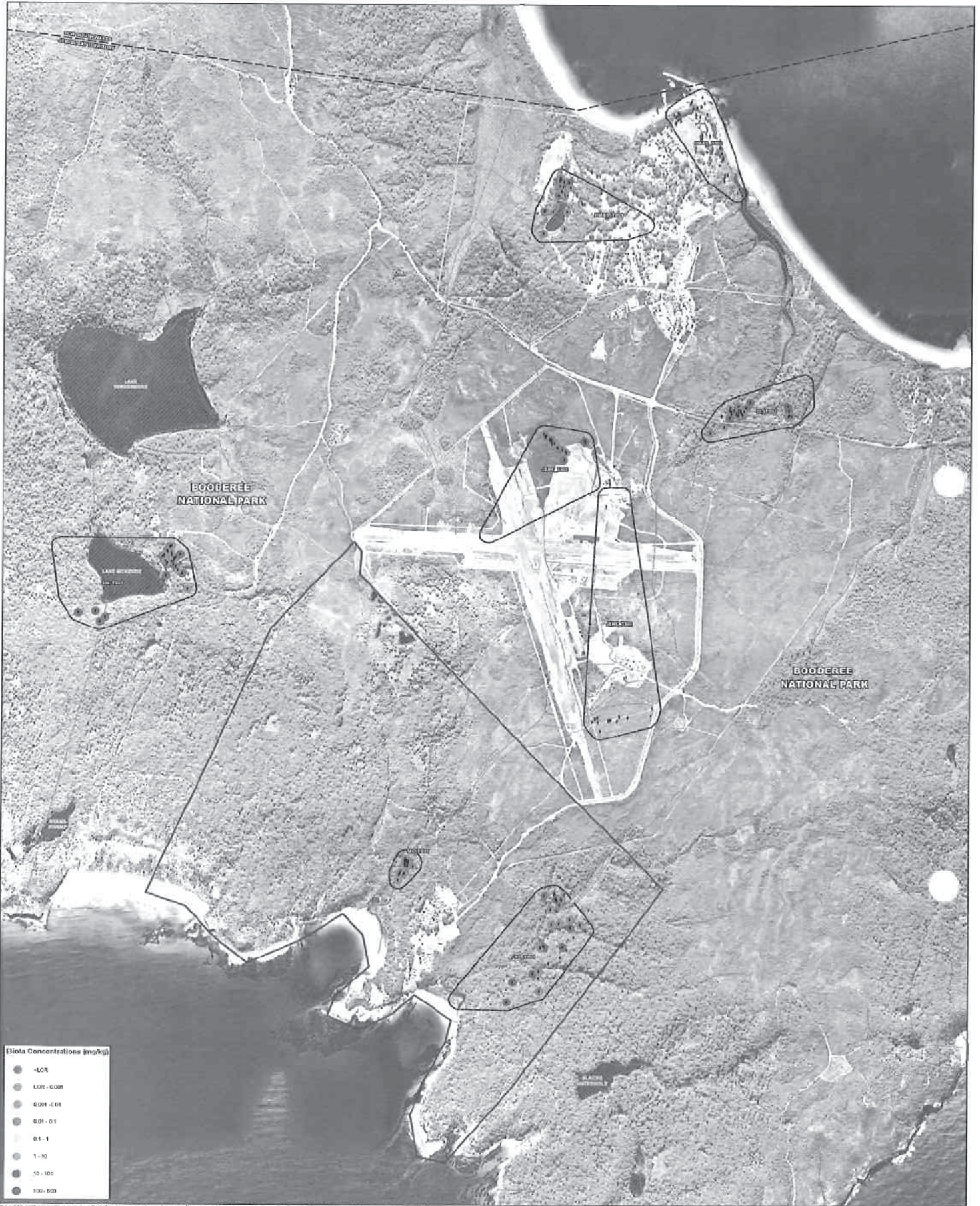
Figure 1

- LEGEND**
- Investigation Area Extent
 - Jenins Bay Range Facility
 - HMAS Creswell
 - Water Bodies
 - Drainage Areas
 - Major Waterways
 - Minor Waterways / Drainage Lines
 - Minor Waterways / Drainage Lines (Defence)
 - Estuarine Species Sampling Location
 - Freshwater Species Sampling Location
 - Terrestrial Species Sampling Location
 - Marine Species Sampling Area (Approximate)



Paper Size A3
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 Metres

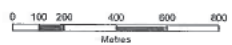
Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 56



For all found secondary samples, their locations are shown however they do not have associated results. For samples where duplicates were collected, the highest concentration is used.

LEGEND

- HMAS Creswell/JBRF Boundary
- Major Waterways
- Ecology Sampling Area
- Collected Invertebrate Samples
- Water Bodies
- Drainage Areas

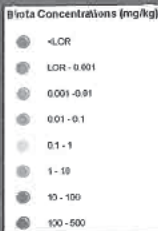


Department of Defence
HMAS Creswell and Jervis Bay Range Facility
**Terrestrial Biota Concentrations of
PFHxS + PFOS (Sum) - Invertebrates**

Job Number 21-26171
Revision A
Date 29 Jun 2018

Figure 2A

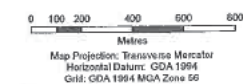
g:\hdm\g\hdm\AU\Sydney\Project\2126171\GIS\Map\Deliverables\Concentrations\21_26171_2023_Biota_TS_Invertebrate_Concentrations.mxd
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Data source: Imagery - Nearmap (dated: 14/05/2018); Topography Data - NSW LPI 2016. Created by: mweber
Level 15, 133 Castlereagh Street Sydney NSW 2000 T 61 2 9239 7100 F 61 2 9239 7199 E sydmail@ghd.com.au W www.ghd.com.au



For additional secondary samples, their locations are shown however they will not have associated results. For samples where duplicates were collected, the highest concentration is used.

LEGEND

- HMAS Creswell / JBRF Boundary
- Major Waterways
- Ecology Sampling Area
- Collected Plant Samples
- Water Bodies
- Drainage Areas



Department of Defence
HMAS Creswell and Jervis Bay Range Facility
**Terrestrial Biota Concentrations of
PFHxS + PFOS (Sum) - Plants**

Job Number 21-26171
Revision A
Date 29 Jun 2018

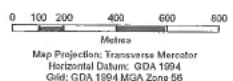
Figure 2B



For additional secondary samples, their locations are shown however they will not have associated results. For samples where duplicates were collected, the highest concentration is used.

LEGEND

- HMAS Creswell JBRF Boundary
- Ecology Sampling Area
- Water Bodies
- Drainage Areas
- Major Waterways
- Collected Vertebrate Samples
- Collected Scat Samples



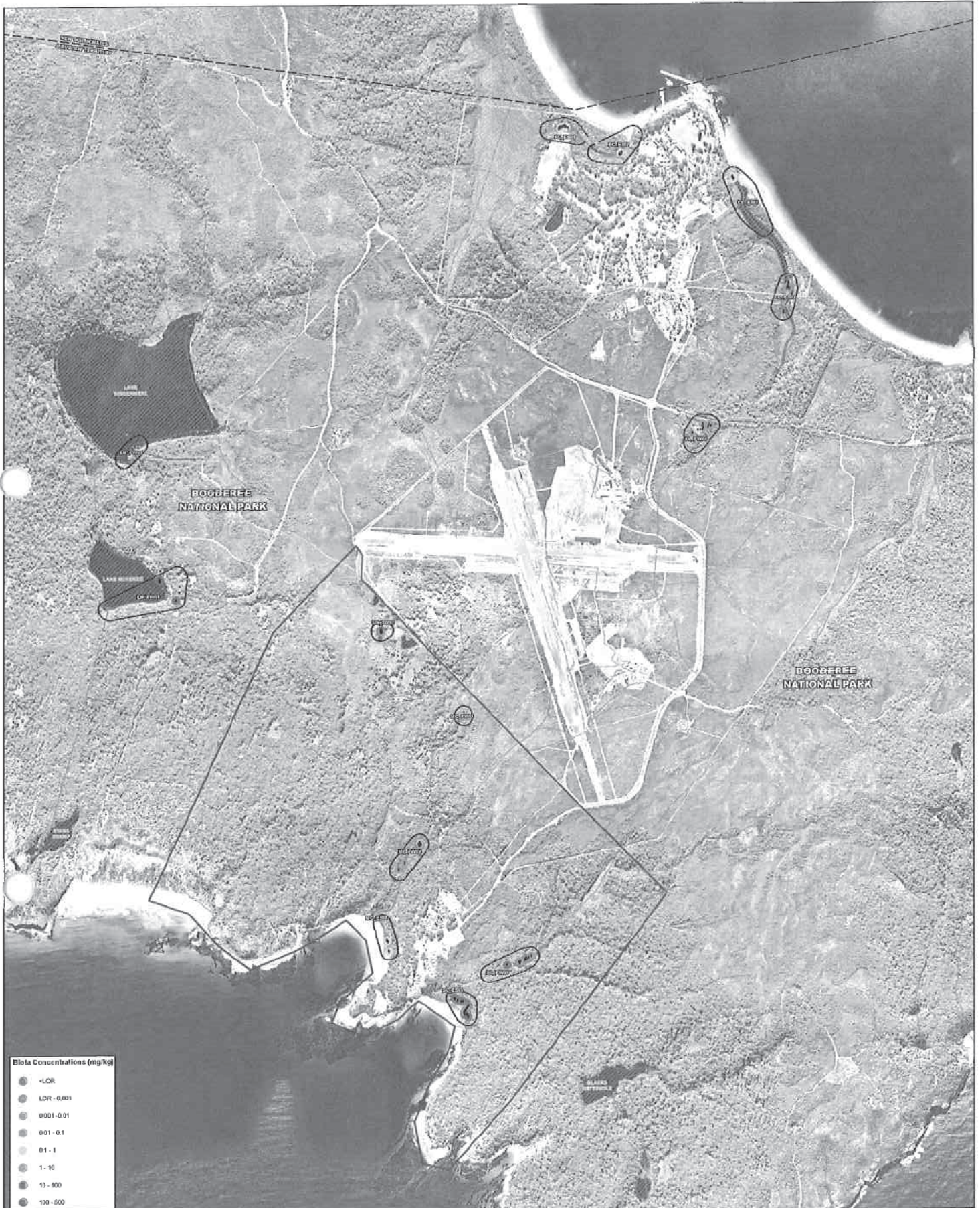
\\gdrive\gdrive\AU\Sydney\Projects\2126171\GIS\Map\Deliverables\Concentrations\21_26171_2025_Biota_TS_Vertebrate_Concentrations.mxd
 © 2018. Whilst every care has been taken to prepare this map, GHD and NSW LPI make no representation or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.
 Data source: Imagery - Nearmap (Date: 14/05/2018), Topography Data - NSW LPI 2016. Created by m.vanbier

Department of Defence
 HMAS Creswell and Jervis Bay Range Facility
**Terrestrial Biota Concentrations of
 PFHxS + PFOS (Sum) - Vertebrates**

Job Number 21-26171
 Revision A
 Date 29 Jun 2018

Figure 2C

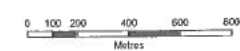
Level 15, 133 Castlereagh Street Sydney NSW 2000 T 61 2 9239 7100 F 61 2 9239 7199 E sydmail@ghd.com.au W www.ghd.com.au



For additional secondary samples, their locations are shown however they will not have associated results. For samples where duplicates were collected, the highest concentration is used.

LEGEND

HMAS Creswell / JBRF Boundary	Water Bodies
HMAS Creswell	Drainage Areas
403 Area	Major Waterways
Ecology Sampling Area	Collected Invertebrate Samples



Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Department of Defence
HMAS Creswell and Jervis Bay Range Facility
Freshwater and Estuarine Biota Concentrations of
PFHxS + PFOS (Sum) - Invertebrates

Job Number | 21-26171
Revision | A
Date | 29 Jun 2018

Figure 3A

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Data source: Imagery - Nearmap (Date: 14/08/2018); Topography Data - NSW LPI 2018. Created by mwbeber



For additional secondary samples, their locations are shown however they will not have associated results. For samples where duplicates were collected, the highest concentration is used.

LEGEND

	HMAS Creswell / JBRF Boundary		Water Bodies
	HMAS Creswell		Drainage Areas
	403 Area		Major Waterways
	Ecology Sampling Area		Collected Plant Samples

0 100 200 400 600 800
Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56



Department of Defence
HMAS Creswell and Jervis Bay Range Facility

Job Number 21-26171
Revision A
Date 29 Jun 2018

Freshwater and Estuarine Biota Concentrations of
PFHxS + PFOS (Sum) - Plants

Level 15, 133 Castlereagh Street Sydney NSW 2000 T 61 2 9239 7100 F 61 2 9239 7199 E eydmail@ghd.com.au W www.ghd.com.au

Figure 3B

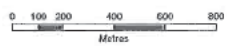
ghd\gms\AU\Sydney\Projects\2106171\GIS\Map\Deliverables\Concentrations\21_26171_2021_Data_FW Plant_Concentrations.mxd
© 2018. Whilst every care has been taken to prepare this map, GHD and NSW LPI make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any omissions, errors, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unusable in any way and for any reason.
Data source: Imagery - Nearmap (Date: 14/05/2018); Topography Data - NSW LPI 2016. Created by: rweber



For additional secondary samples, their locations are shown however they will not have associated results. For samples where duplicates were collected, the highest concentration is used.

LEGEND

- HMAS Creswell/Jervis Bay Boundary
- Major Waterways
- Ecology Sampling Area
- Collected Vertebrate Samples
- Water Bodies
- Collected Seal Samples
- Drainage Areas



Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Department of Defence
HMAS Creswell and Jervis Bay Range Facility
Freshwater and Estuarine Biota Concentrations of
PFHxS + PFOS (Sum) - Vertebrates

Job Number 21-26171
Revision A
Date 29 Jun 2018

Figure 3C

HighResigh@MJDnsydney\Projects\21051711\GIS\Map\Definable\Concentration\21_20171_2018_Biota_FWI_Vertebrate_Concentrations.mxd
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Data source: Imagery - Nearmap (Dated: 14/06/2018); Topography Data - NSW LPI 2016. Created by mweber
Level 15, 133 Castlereagh Street Sydney NSW 2000 T 61 2 9239 7100 F 61 2 9239 7199 E sydmail@ghd.com.au W www.ghd.com.au

Stedman, Andrew (Health)

From: [REDACTED]@ghd.com>
Sent: Friday, 29 June 2018 6:08 PM
To: [REDACTED]@defence.gov.au; [REDACTED]@defence.gov.au; [REDACTED]@defence.gov.au; [REDACTED]@environment.gov.au; [REDACTED]@spotless.com.au; [REDACTED]@defence.gov.au; [REDACTED]@defence.gov.au; [REDACTED]@defence.gov.au; [REDACTED]@defence.gov.au; [REDACTED]@defence.gov.au; [REDACTED]@defence.gov.au; [REDACTED]@aecom.com; [REDACTED]@aecom.com; [REDACTED]@infrastructure.gov.au; Clapham, David; [REDACTED]@epa.nsw.gov.au; [REDACTED]@health.nsw.gov.au; Stedman, Andrew (Health); [REDACTED] Hudson, Lyndell (Health); [REDACTED]@shoalhaven.nsw.gov.au; [REDACTED]@infrastructure.gov.au; [REDACTED]@shoalhaven.nsw.gov.au

Subject: Factual Letter 20 - PFAS Results for Mary Creek and Summercloud Creek
Attachments: 2126171_LET_factual letter 20_ June 2018.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Dear JBRF PCG,

Please find attached Factual Letter 19 – Biota sampling from Mary Creek and Summercloud Creek areas.
 Please note the figure quality has been reduced for email transfer, with higher quality figures available on request.

Regards,

GHD

[REDACTED]@ghd.com
 Level 2, 57 Graham Street (PO Box 621) Nowra NSW 2541 Australia | <http://www.ghd.com/>
 Water | Energy & Resources | Environment | Property & Buildings | Transportation

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29 June 2018

2126171_LET_factual letter 20

[REDACTED] – JBRF & HMAS Creswell
PFAS Investigation and Management Branch
Department of Defence

Dear Darron

**JBRF & HMAS Creswell- Environmental investigation: Preliminary sampling results
Aquatic and terrestrial ecology sampling results from the areas of Mary Creek and
Summercloud Creek (processed by 28 June 2018)**

1 Introduction

GHD Pty Ltd (GHD), on behalf of the Department of Defence (Defence), is undertaking the Environmental Investigation in and around Jervis Bay Range Facility (JBRF) and HMAS Creswell, within the Jervis Bay Territory (JBT) (the Site). This report includes data that has been collected and processed as at 28 June 2018, from aquatic and terrestrial sampling programs from the Wreck Bay tributaries of Mary Creek and Summercloud Creek.

It should be noted that these data are provided for information purposes only and that the use of these data should take into account factors that have been used to develop the conceptual site model (as presented in GHD's Sampling, Analysis and Quality Plan).

GHD will continue to provide results from further sampling, following the processing of the data.

Purpose

The purpose of the provision of preliminary data is to allow Defence and other stakeholders, including NSW and ACT Governments to view the data prior to its use in the technical reports for the Environmental Investigations.

2 Laboratory Analysis

Upon collection, the samples were sent under Chain of Custody (CoC) conditions to the following National Association of Testing Authorities (NATA) accredited laboratories:

- ALS Environmental, 277-289 Woodpark Road Smithfield, NSW, 2164
- National Measurement Institute (NMI), 105 Delhi Road, North Ryde, NSW 2113

3 Preliminary Results Tables

The preliminary results are provided in the attached tables.

The data is not for public distribution.

4 Closure

GHD trusts the above information is suitable for Defence requirements.

Yours Sincerely
GHD Pty Ltd



Enclosures:

Table 1: Aquatic and Terrestrial Biota Results - Mary Creek

Table 2: Aquatic and Terrestrial Biota Results - Summercloud Creek

Figure 1: Biota Sample Locations

Figure 2A: Concentrations of PFHxS + PFOS (Sum) – Terrestrial Invertebrates

Figure 2B: Concentrations of PFHxS + PFOS (Sum) – Terrestrial Plants

Figure 2C: Concentrations of PFHxS + PFOS (Sum) – Terrestrial Vertebrates

Figure 3A: Concentrations of PFHxS + PFOS (Sum) – Aquatic Invertebrates

Figure 3B: Concentrations of PFHxS + PFOS (Sum) – Aquatic Plants

Figure 3C: Concentrations of PFHxS + PFOS (Sum) – Aquatic Vertebrates

Table 1
Assets and Liabilities Report - Summary

Account Name	Account Number	Account Description	Balance	Current Year	Previous Year	Change
ASSETS						
CURRENT ASSETS						
Cash	100		100.00	100.00	0.00	
Accounts Receivable	200		200.00	200.00	0.00	
Prepaid Expenses	300		300.00	300.00	0.00	
INVESTMENTS						
Capital Assets	400		400.00	400.00	0.00	
LIABILITIES						
CURRENT LIABILITIES						
Accounts Payable	500		500.00	500.00	0.00	
Accrued Liabilities	600		600.00	600.00	0.00	
NET ASSETS						
Total			1,000.00	1,000.00	0.00	

Table 2
 Applicant Testimonial Exam Results - Demographic Data

Applicant Name	Applicant ID	Applicant Type	Exam Date	Exam Time	Score	Percentile Rank	Subtest	Score	Percentile Rank	Subtest	Score	Percentile Rank	Subtest	Score	Percentile Rank	Subtest	Score	Percentile Rank	Subtest	Score	Percentile Rank			
1. A. J. BROWN	1000000001	Other	10/10/17	10:00	75	100	Verbal Reasoning	14	100	Quantitative Reasoning	11	100	Writing and Language	15	100	Reading and Content Knowledge	10	100	Mathematical Knowledge	12	100	Science and Technical Knowledge	13	100
2. B. C. WHITE	1000000002	Other	10/10/17	10:00	75	100	Verbal Reasoning	14	100	Quantitative Reasoning	11	100	Writing and Language	15	100	Reading and Content Knowledge	10	100	Mathematical Knowledge	12	100	Science and Technical Knowledge	13	100
3. C. D. GREEN	1000000003	Other	10/10/17	10:00	75	100	Verbal Reasoning	14	100	Quantitative Reasoning	11	100	Writing and Language	15	100	Reading and Content Knowledge	10	100	Mathematical Knowledge	12	100	Science and Technical Knowledge	13	100



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Date | 27 Apr 2018

Department of Defence



Biota Sample Locations

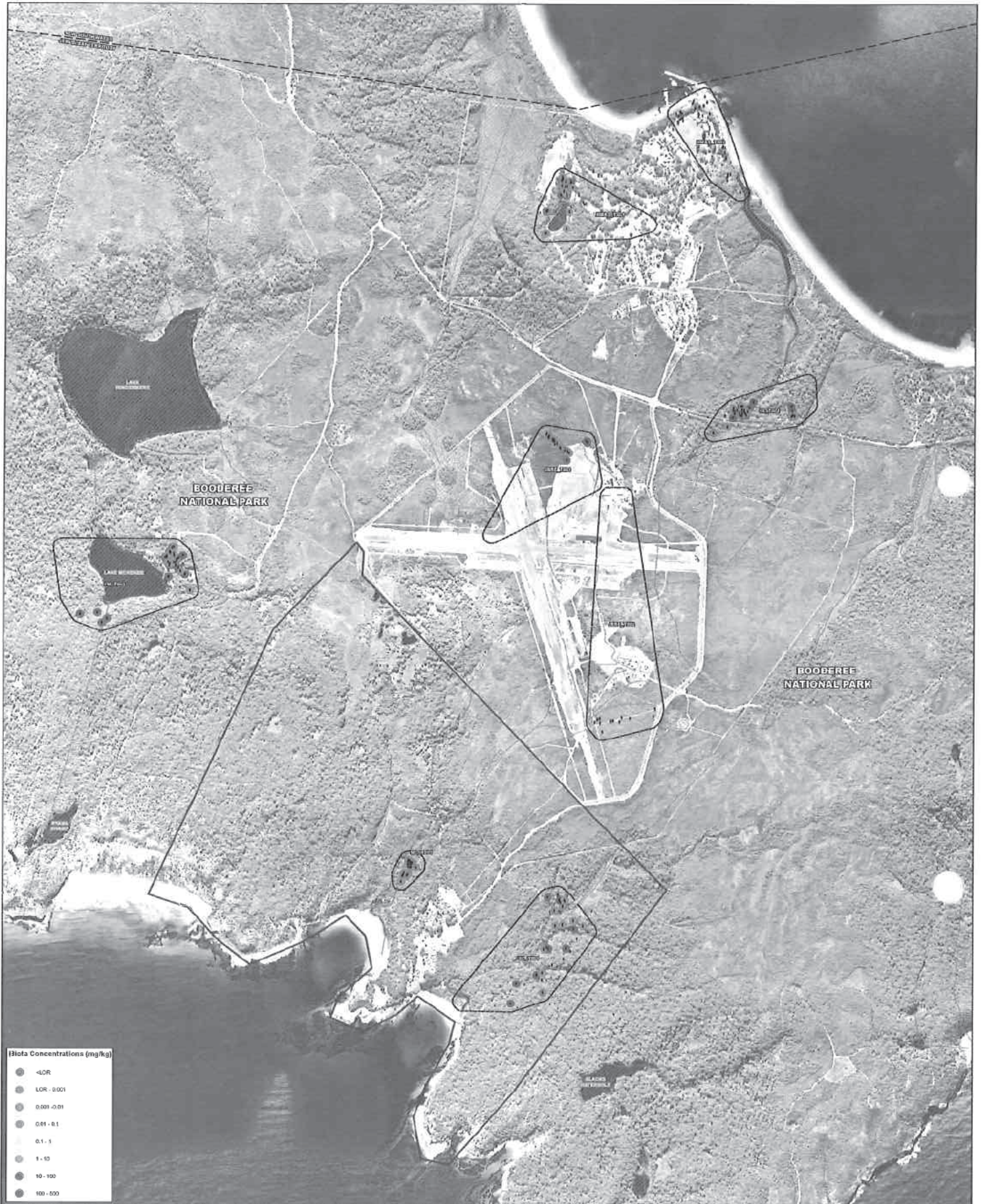
LEGEND

- Investigation Area Extent
- Jervis Bay Range Facility
- HMAS Criswell
- Water Bodies
- Drainage Areas
- Major Waterways
- Minor Waterways / Drainage Lines
- Minor Waterways / Drainage Lines (Defence)
- Essaurine Species Sampling Location
- Freshwater Species Sampling Location
- Terrestrial Species Sampling Location
- Marine Species Sampling Area (Approximate)

Paper Size A3
0 345 690 1,380 2,070
Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1984
Grid: GDA 1984 MGR Zone 56

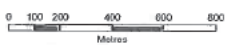
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For additional site boundary settings, their location is not shown however they will not have associated results. For samples where duplicates were collected, the highest concentration is used.

LEGEND

- 3MMS Creswell / JBRF Boundary
- Map Waterways
- Ecology Sampling Area
- Collected Invertebrate Samples
- Water Bodies
- Drainage Areas



Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 58

Figure 2A
 Terrestrial Biota Concentrations of
 PFHxS + PFOS (Sum) - Invertebrates

Department of Defence
 HMAS Creswell and Jervis Bay Range Facility
 Terrestrial Biota Concentrations of
 PFHxS + PFOS (Sum) - Invertebrates

Job Number | 21-26171
 Revision | A
 Date | 29 Jun 2018

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 Data source: Imagery - Nearmap; (Date: 14/06/2018); Topography Data - NSW LP 2016. Created by mweber



For additional secondary samples, their locations are shown heavily; they will not have associated results. For samples where duplicates were collected, the highest concentration is used.

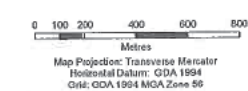
LEGEND

HMAS Creswell JBRF Boundary — Major Waterways

Ecology Sampling Area ▲ Collected Plant Samples

Water Bodies

Drainage Areas



Department of Defence
HMAS Creswell and Jervis Bay Range Facility
**Terrestrial Biota Concentrations of
PFHxS + PFOS (Sum) - Plants**

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Figure 2B

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For additional secondary samples, their locations are shown however they 'may' not have associated results. For samples where duplicates were collected, the highest concentration is used.

LEGEND

HMAS Creswell / JBRF Boundary	Major Waterways
Ecology Sampling Area	Collected Vertebrate Samples
Water Bodies	Collected Soil Samples
Drainage Areas	

0 100 200 400 600 800
Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 56

Department of Defence
HMAS Creswell and Jervis Bay Range Facility
Terrestrial Biota Concentrations of
PFHxS + PFOS (Sum) - Vertebrates

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Date | 29 Jun 2018

Figure 2C

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