

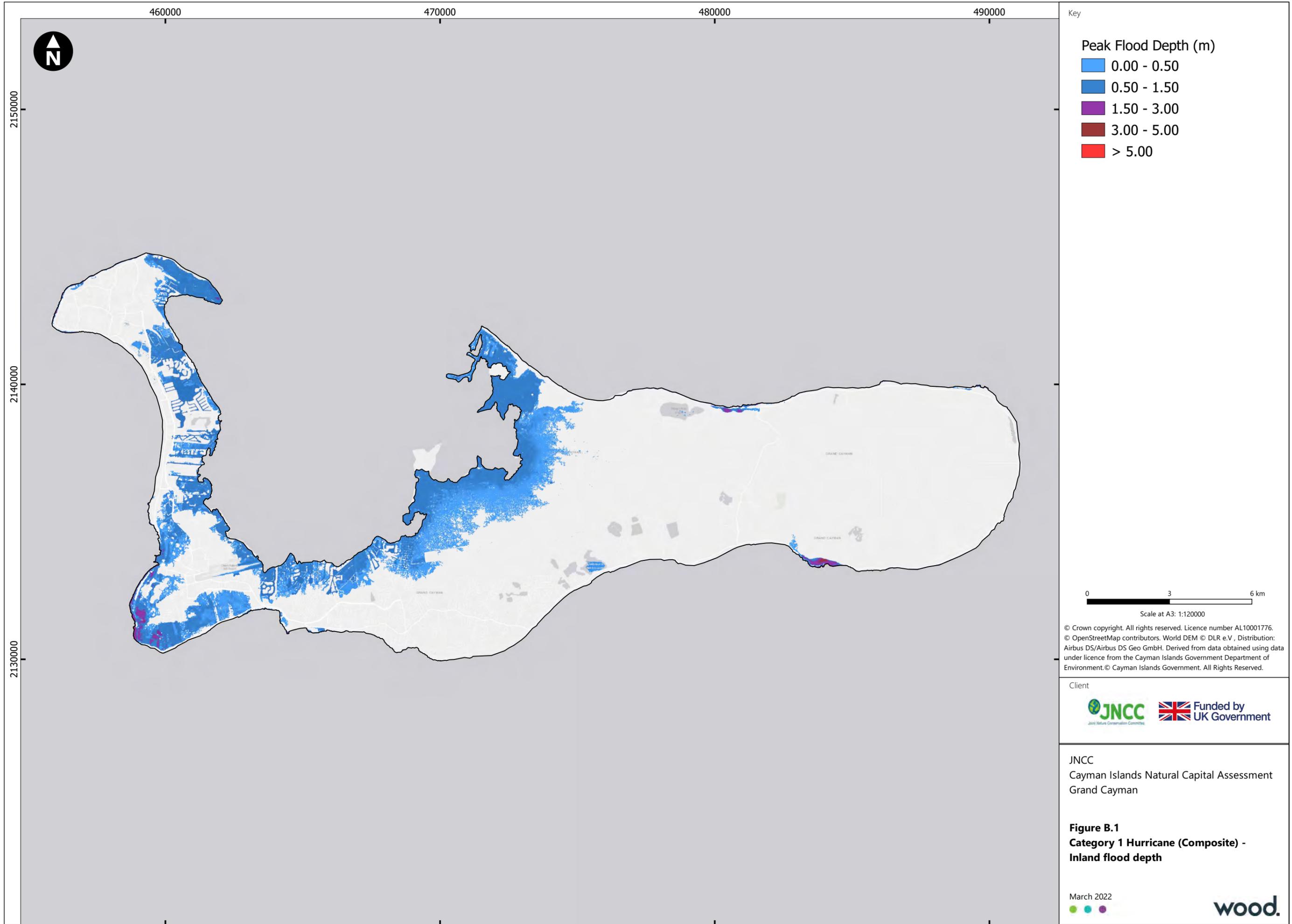
**JNCC – UK Overseas Territories Report Series**

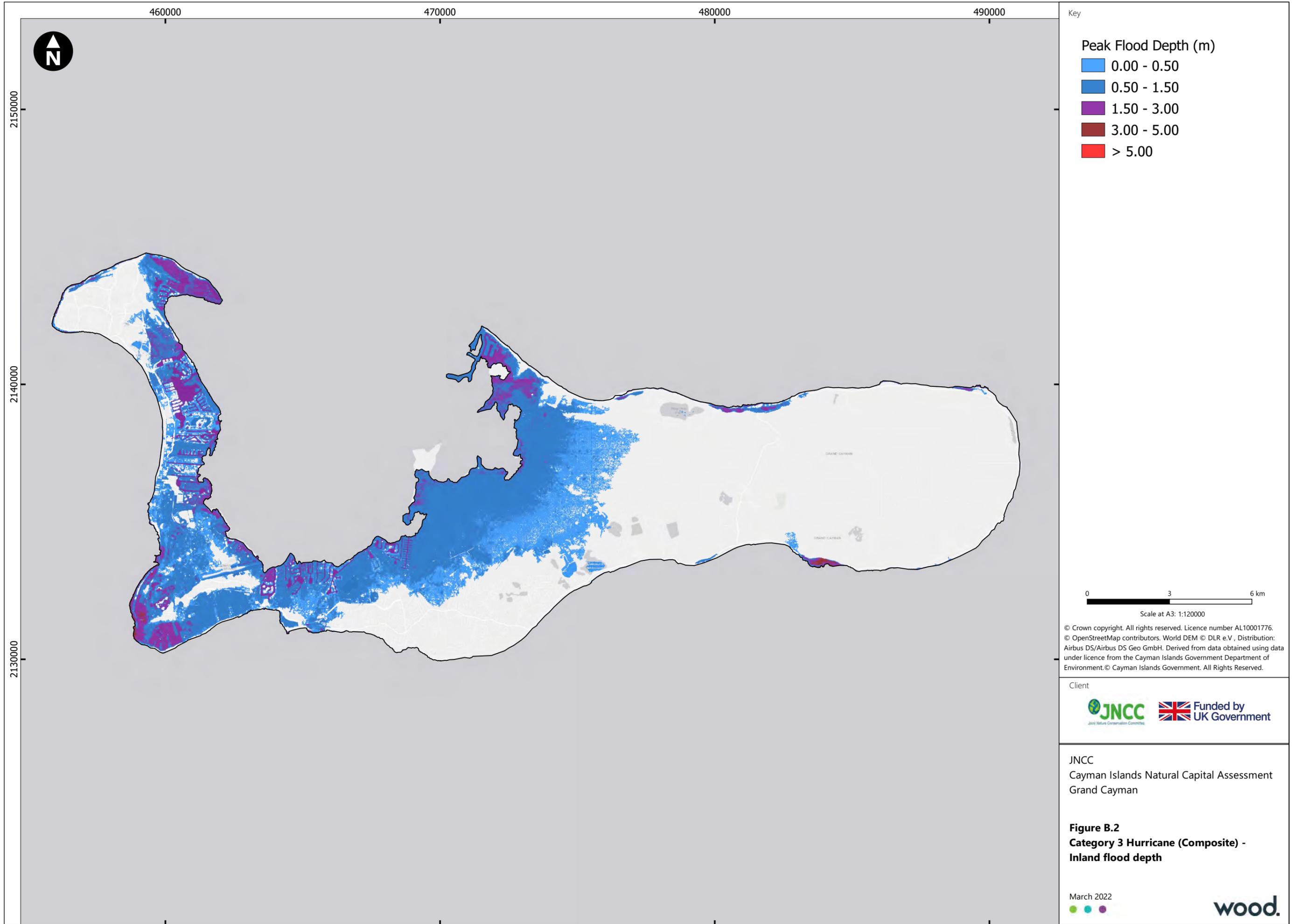
**Model development to assess the vulnerability of the Cayman Islands to storm surge and inland flooding and the role of natural capital in mitigating the impacts – Phase 2**

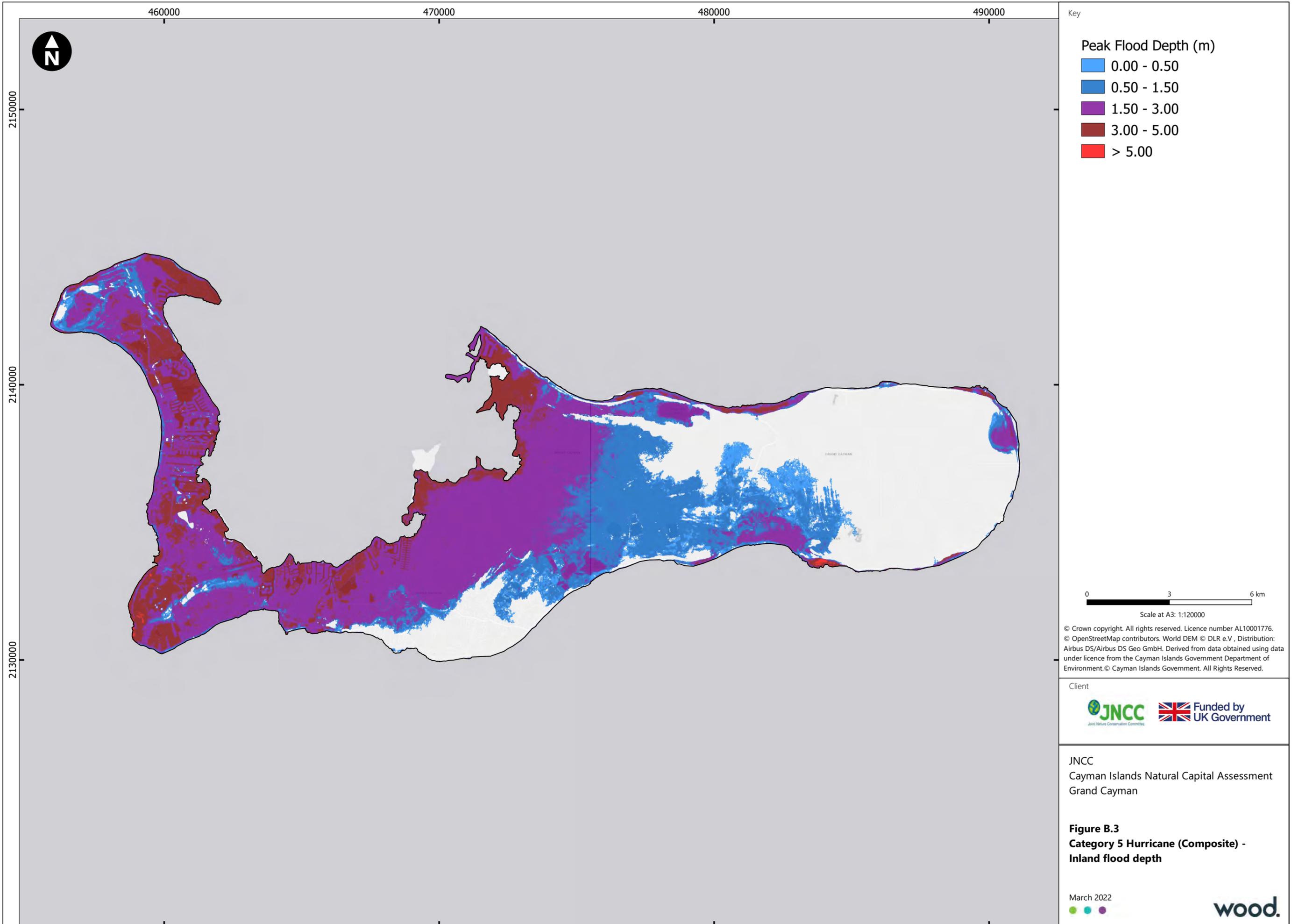
**Report 6 Appendix B:  
Coastal modelling results**



**Funded by  
UK Government**







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Key

- Peak Flood Depth (m)
- 0.00 - 0.50
  - 0.50 - 1.50
  - 1.50 - 3.00
  - 3.00 - 5.00
  - > 5.00



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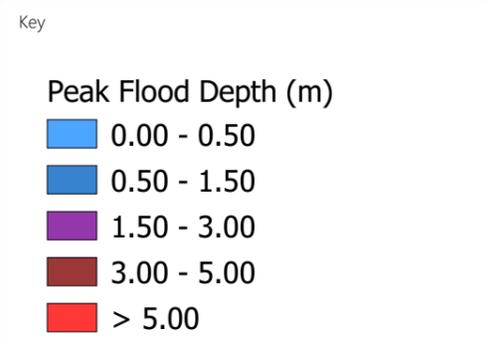
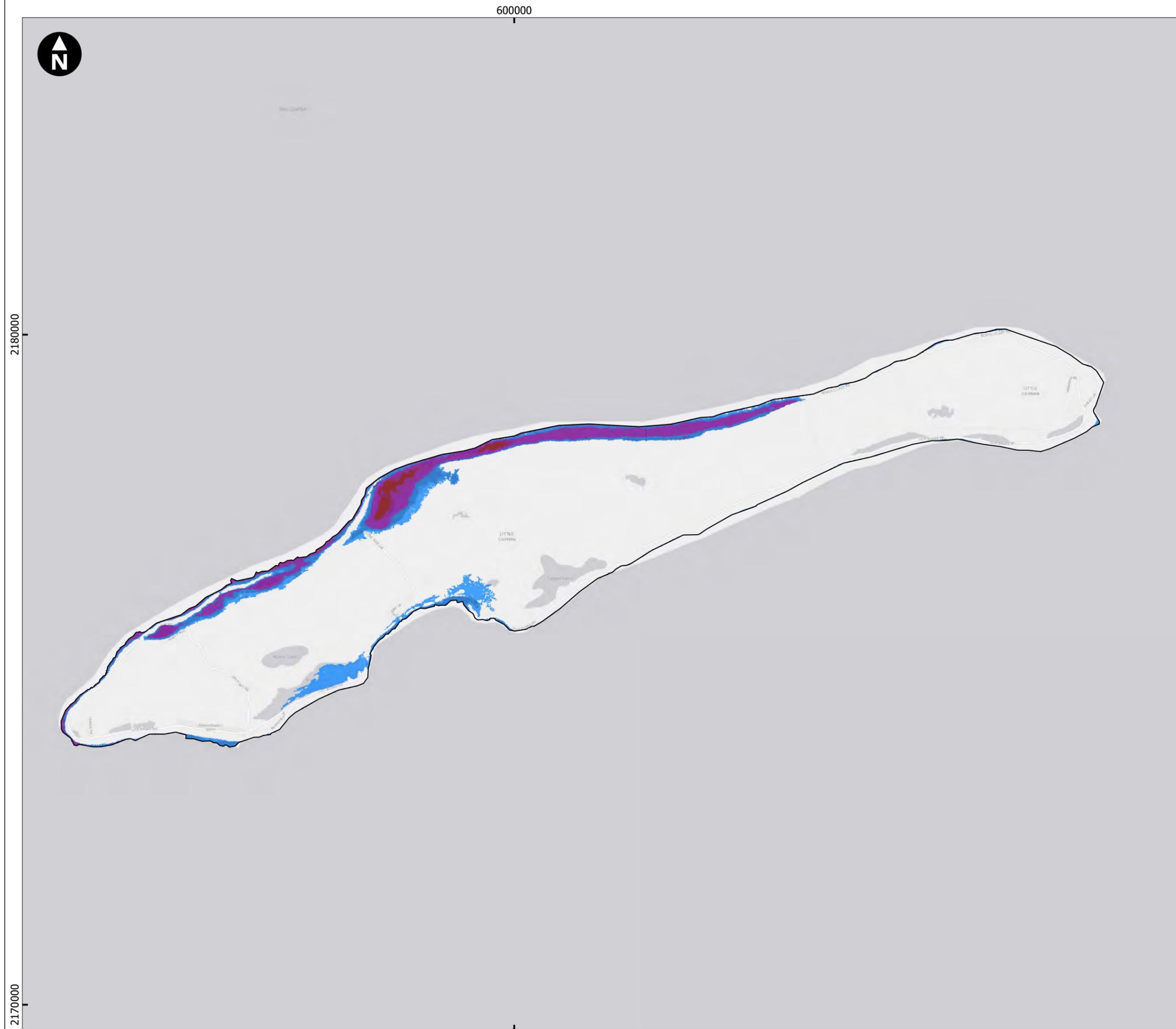


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**Figure B.4**  
**Little Cayman Category 1 Hurricane**  
**(Composite) - Inland flood depth**

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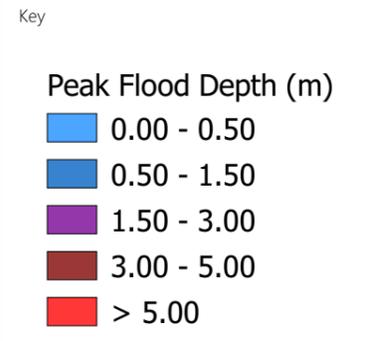
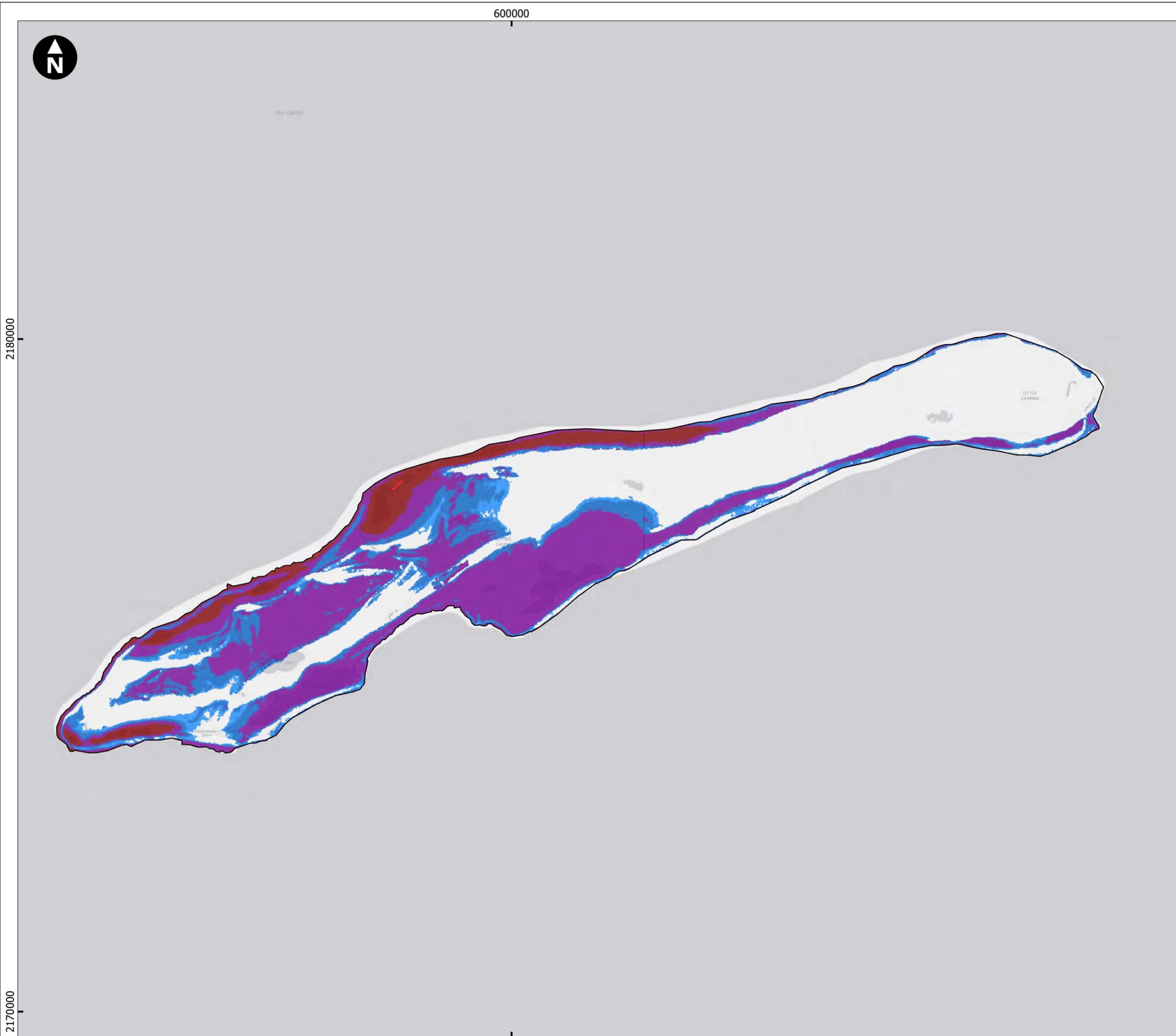


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**Figure B.5**  
**Little Cayman Category 3 Hurricane**  
**(Composite) - Inland flood depth**

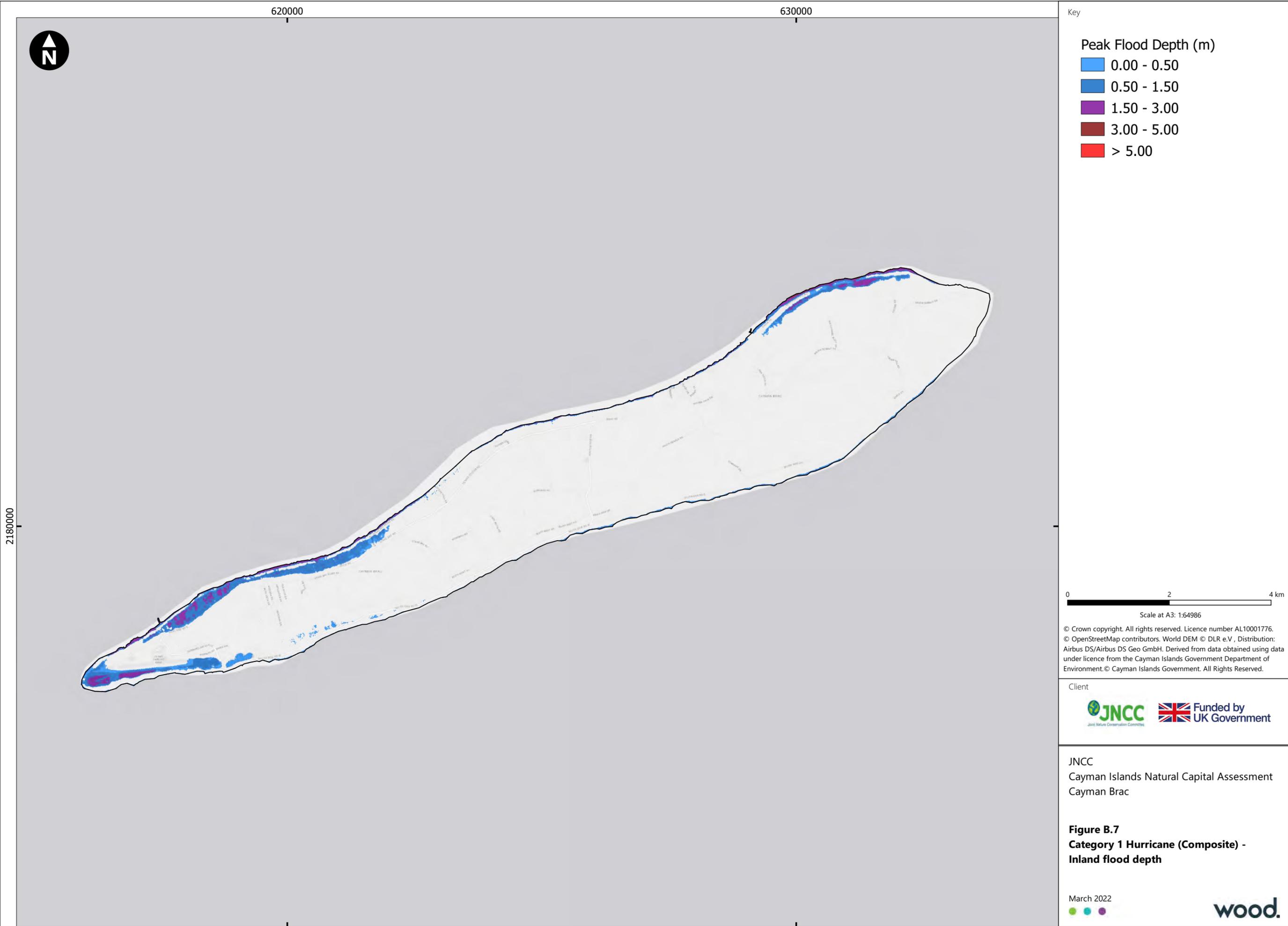


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**Figure B.6**  
**Little Cayman Category 5 Hurricane**  
**(Composite) - Inland flood depth**



Key

Peak Flood Depth (m)

- 0.00 - 0.50
- 0.50 - 1.50
- 1.50 - 3.00
- 3.00 - 5.00
- > 5.00

0 2 4 km

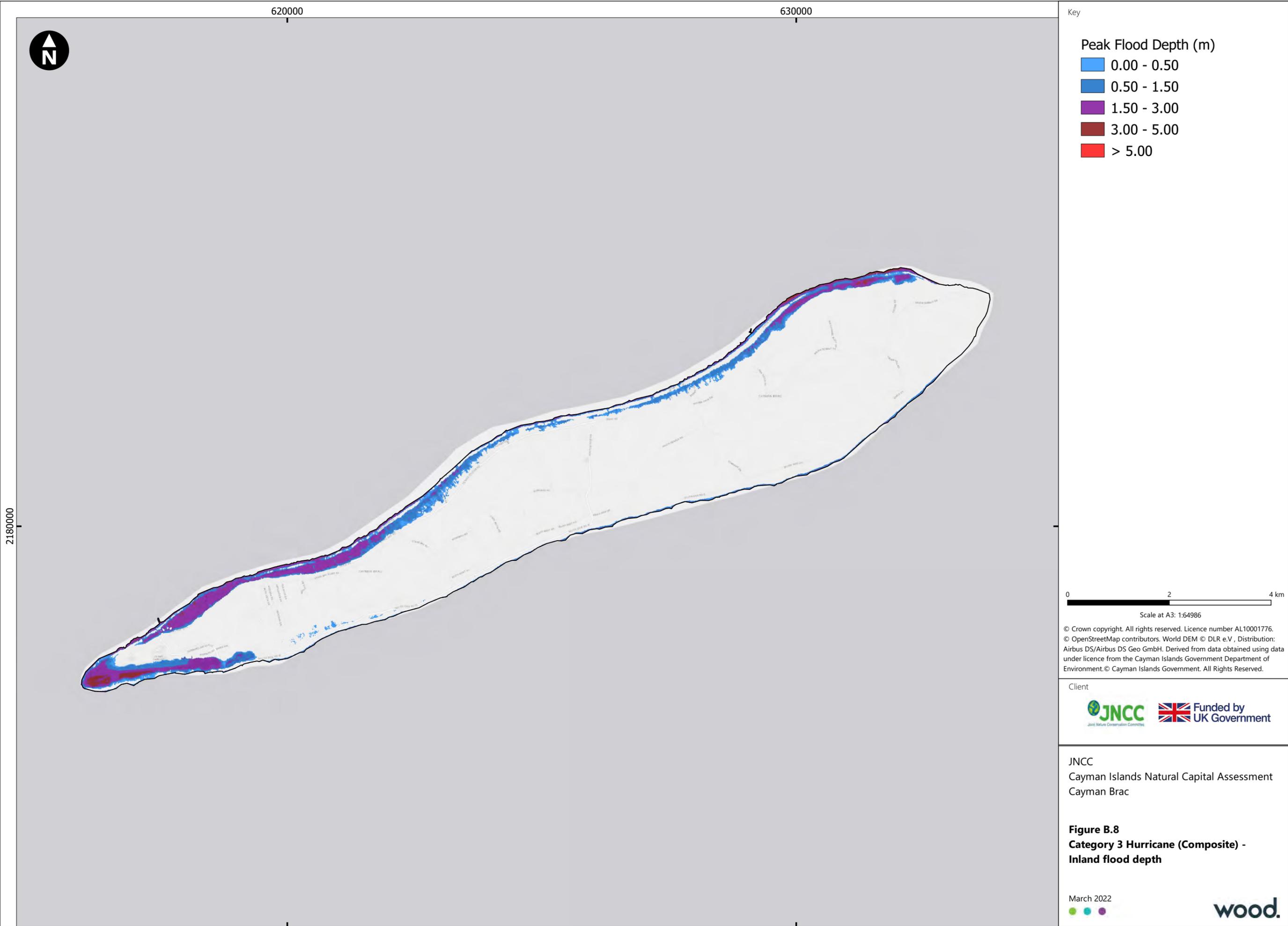
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**Figure B.7**  
**Category 1 Hurricane (Composite) -**  
**Inland flood depth**



Key

Peak Flood Depth (m)

- 0.00 - 0.50
- 0.50 - 1.50
- 1.50 - 3.00
- 3.00 - 5.00
- > 5.00

0 2 4 km

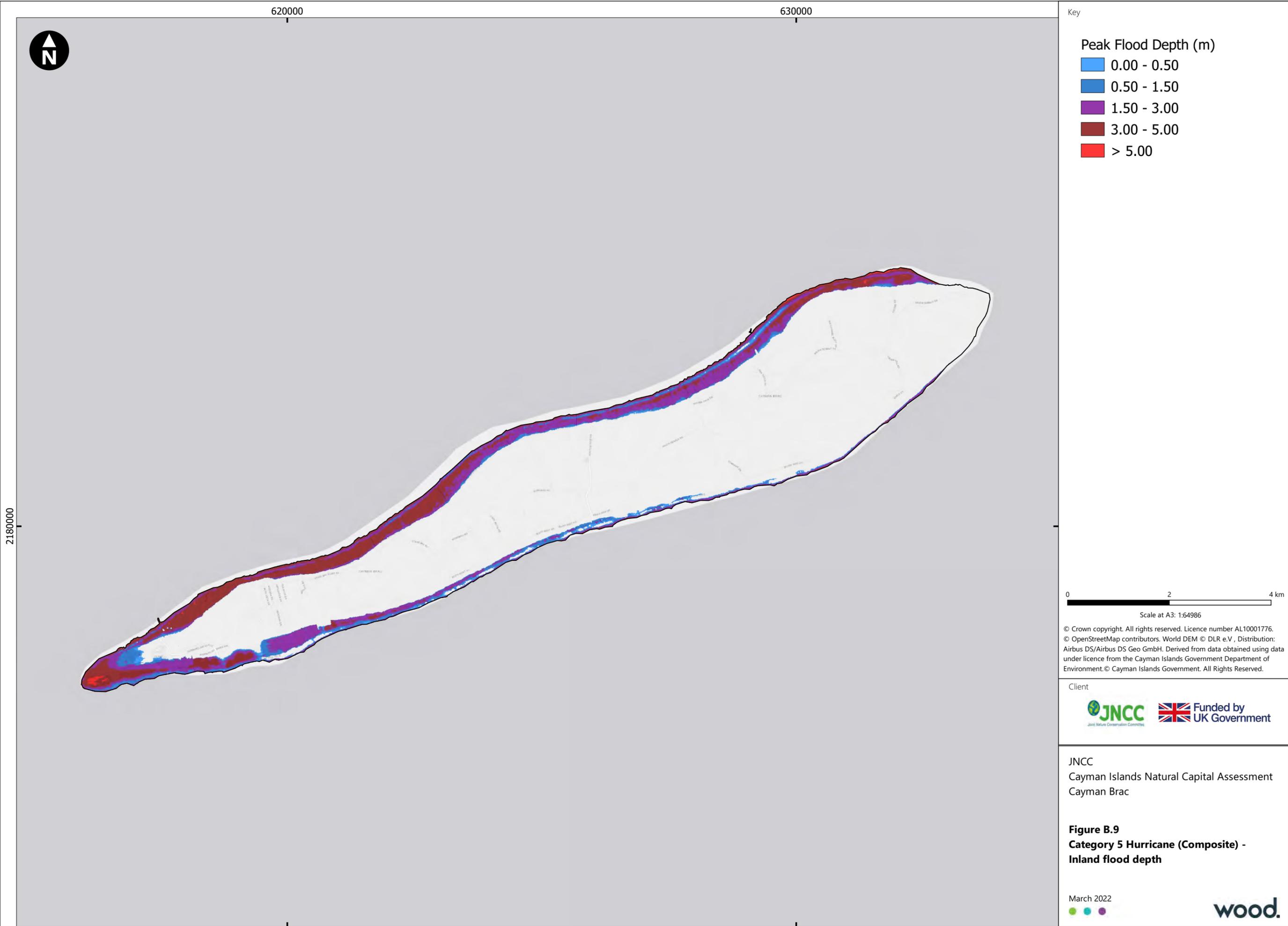
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**Figure B.8**  
**Category 3 Hurricane (Composite) -**  
**Inland flood depth**



Key

Peak Flood Depth (m)

- 0.00 - 0.50
- 0.50 - 1.50
- 1.50 - 3.00
- 3.00 - 5.00
- > 5.00

0 2 4 km

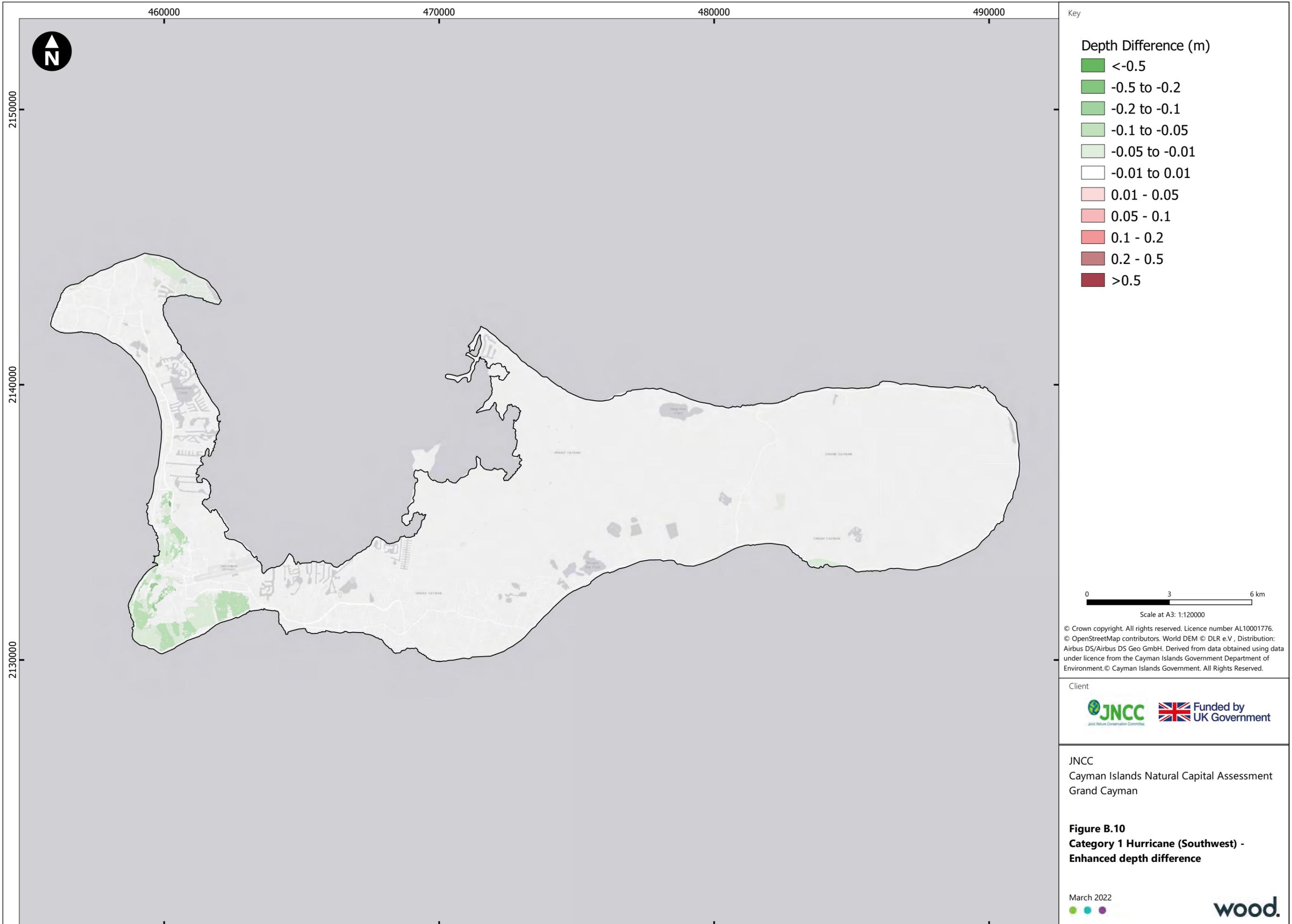
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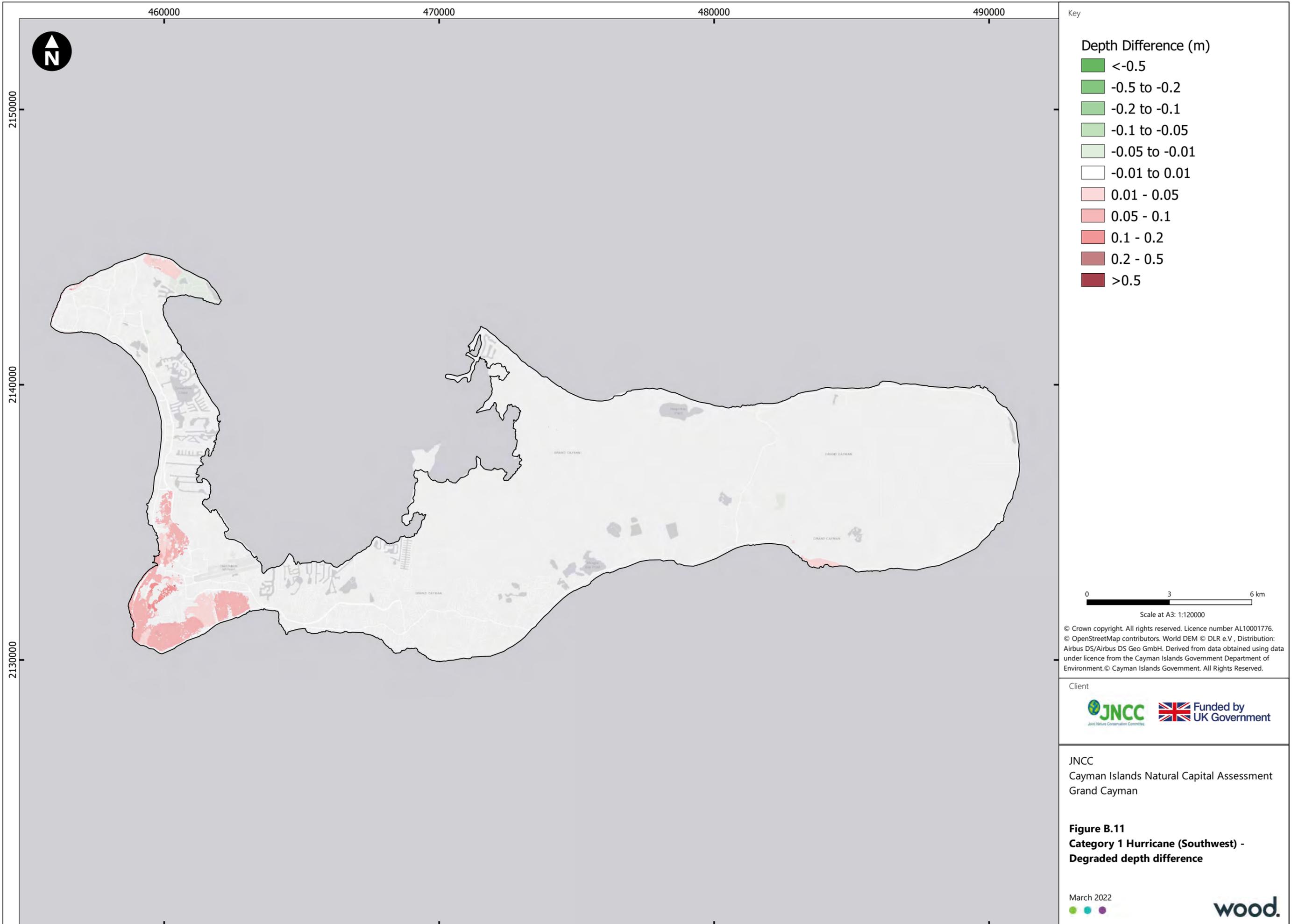
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**Figure B.9**  
**Category 5 Hurricane (Composite) -**  
**Inland flood depth**





Key

Depth Difference (m)

- <math><-0.5</math>
- 0.5 to -0.2
- 0.2 to -0.1
- 0.1 to -0.05
- 0.05 to -0.01
- 0.01 to 0.01
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.2
- 0.2 - 0.5
- >0.5

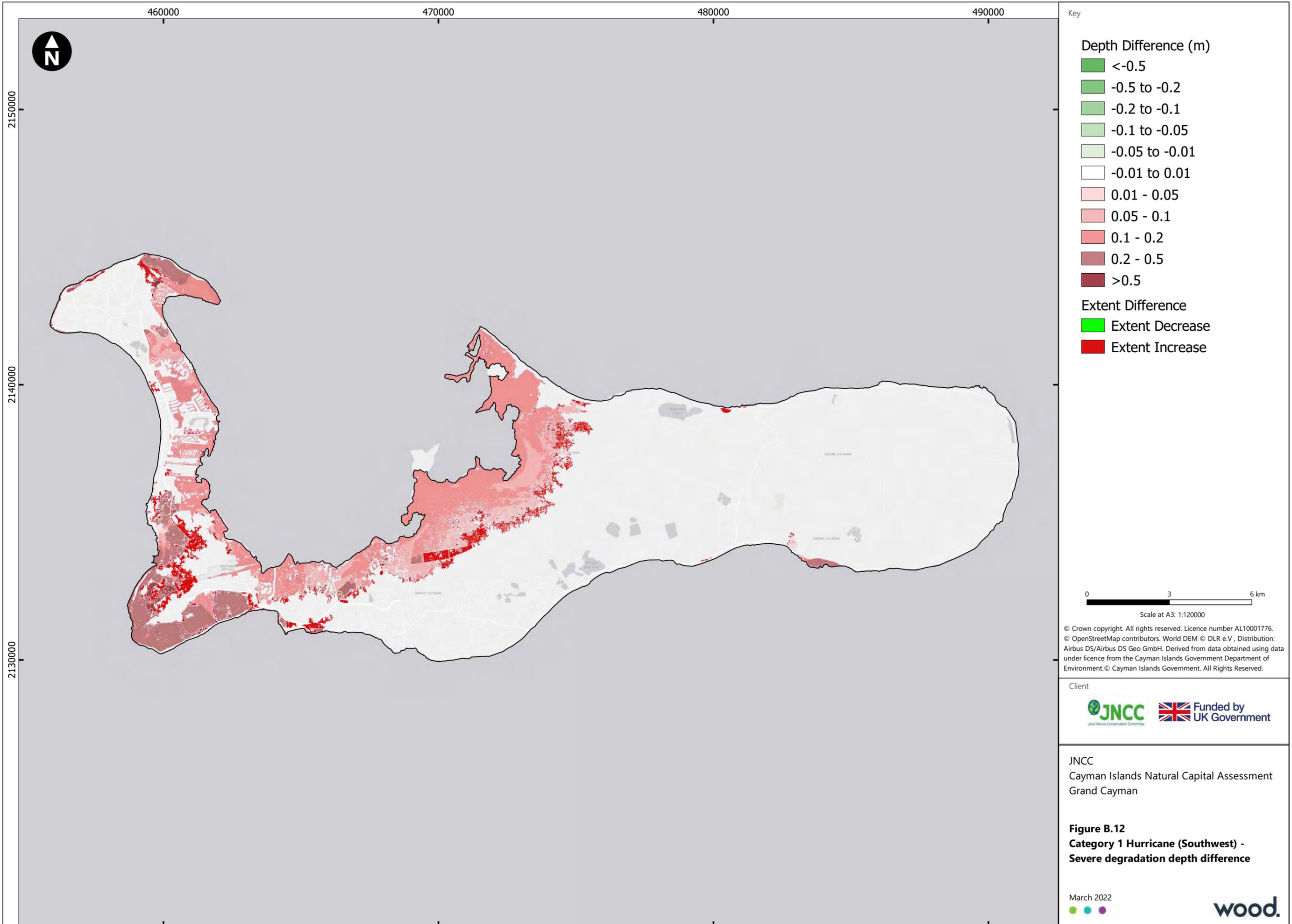
0 3 6 km  
Scale at A3: 1:120000

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**Figure B.11**  
**Category 1 Hurricane (Southwest) -**  
**Degraded depth difference**



Key

Depth Difference (m)

- <-0.5
- 0.5 to -0.2
- 0.2 to -0.1
- 0.1 to -0.05
- 0.05 to -0.01
- 0.01 to 0.01
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.2
- 0.2 - 0.5
- >0.5

Extent Difference

- Extent Decrease
- Extent Increase

0 3 6 km  
Scale at A3: 1:120000

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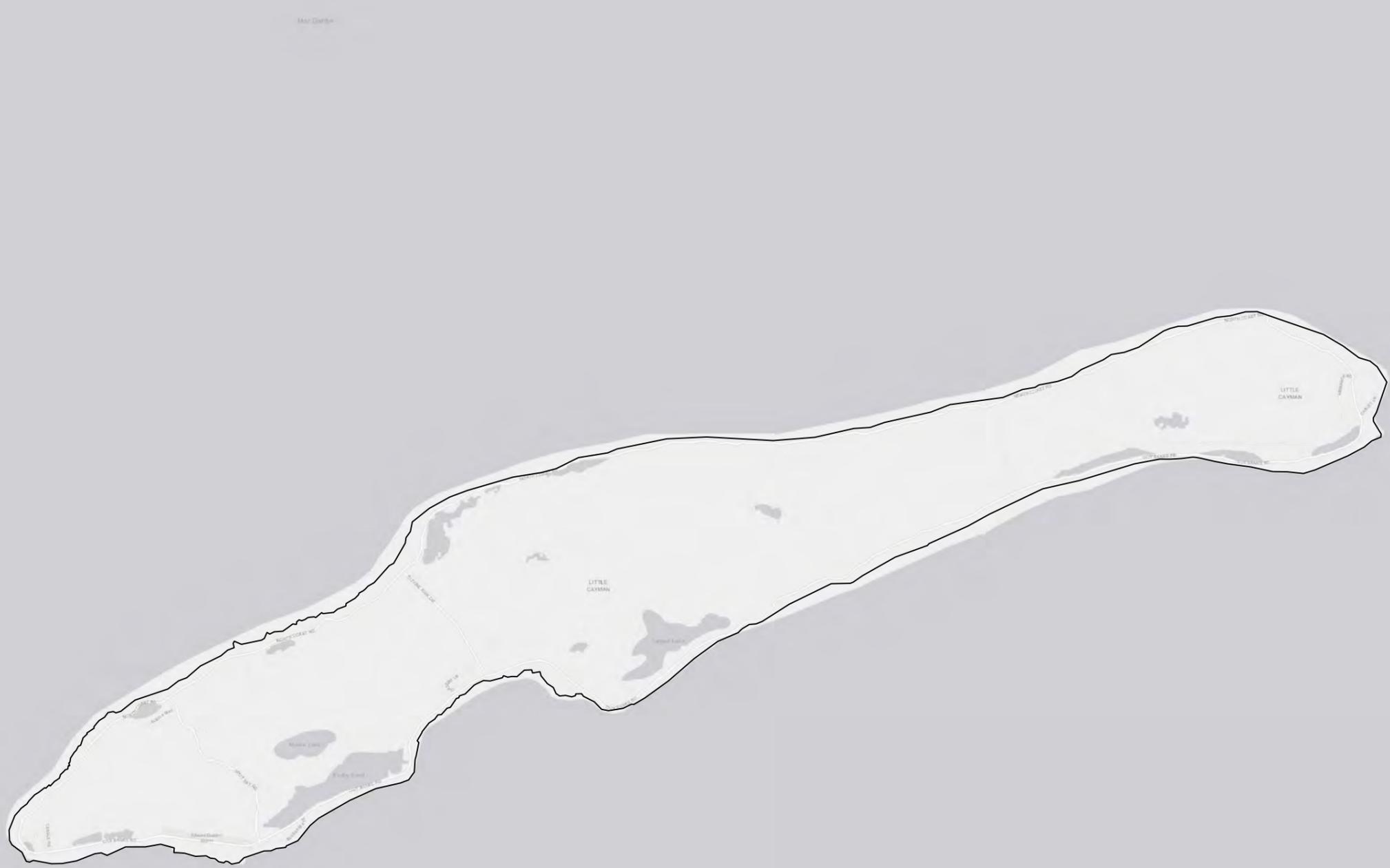
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**Figure B.12**  
**Category 1 Hurricane (Southwest) -**  
**Severe degradation depth difference**

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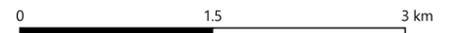


Key

Depth Difference (m)<sup>1</sup>

-  <-0.5
-  -0.5 to -0.2
-  -0.2 to -0.1
-  -0.1 to -0.05
-  -0.05 to -0.01
-  -0.01 to 0.01
-  0.01 - 0.05
-  0.05 - 0.1
-  0.1 - 0.2
-  0.2 - 0.5
-  >0.5

<sup>1</sup>Negligible (<0.01m) impact is anticipated to inland peak flood depths, hence no depth difference is visible.



Scale at A3: 1:55000

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**Figure B.13**  
**Little Cayman Category 1 Hurricane**  
**(North) - Enhanced depth difference**

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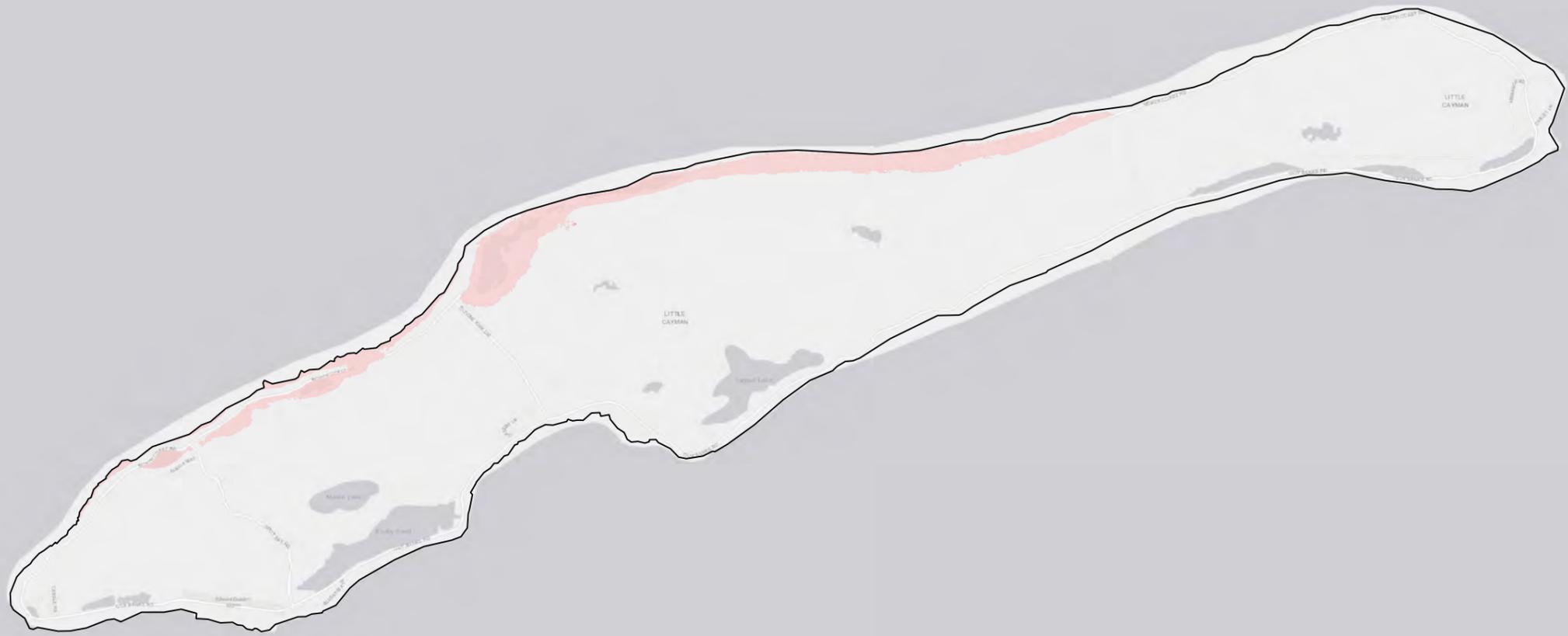


Key

Depth Difference (m)

- <-0.5
- 0.5 to -0.2
- 0.2 to -0.1
- 0.1 to -0.05
- 0.05 to -0.01
- 0.01 to 0.01
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.2
- 0.2 - 0.5
- >0.5

2180000



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**Figure B.14**  
**Little Cayman Category 1 Hurricane**  
**(North) - Degraded depth difference**

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Key

Depth Difference (m)

- <-0.5
- 0.5 to -0.2
- 0.2 to -0.1
- 0.1 to -0.05
- 0.05 to -0.01
- 0.01 to 0.01
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.2
- 0.2 - 0.5
- >0.5

Extent Difference

- Extent Difference
- Extent Increase



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**Figure B.15**  
**Little Cayman Category 1 Hurricane**  
**(North) - Severe degradation depth**  
**difference**

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Key

Depth Difference (m)

- <math><-0.5</math>
- 0.5 to -0.2
- 0.2 to -0.1
- 0.1 to -0.05
- 0.05 to -0.01
- 0.01 to 0.01
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.2
- 0.2 - 0.5
- >0.5

0 2 4 km

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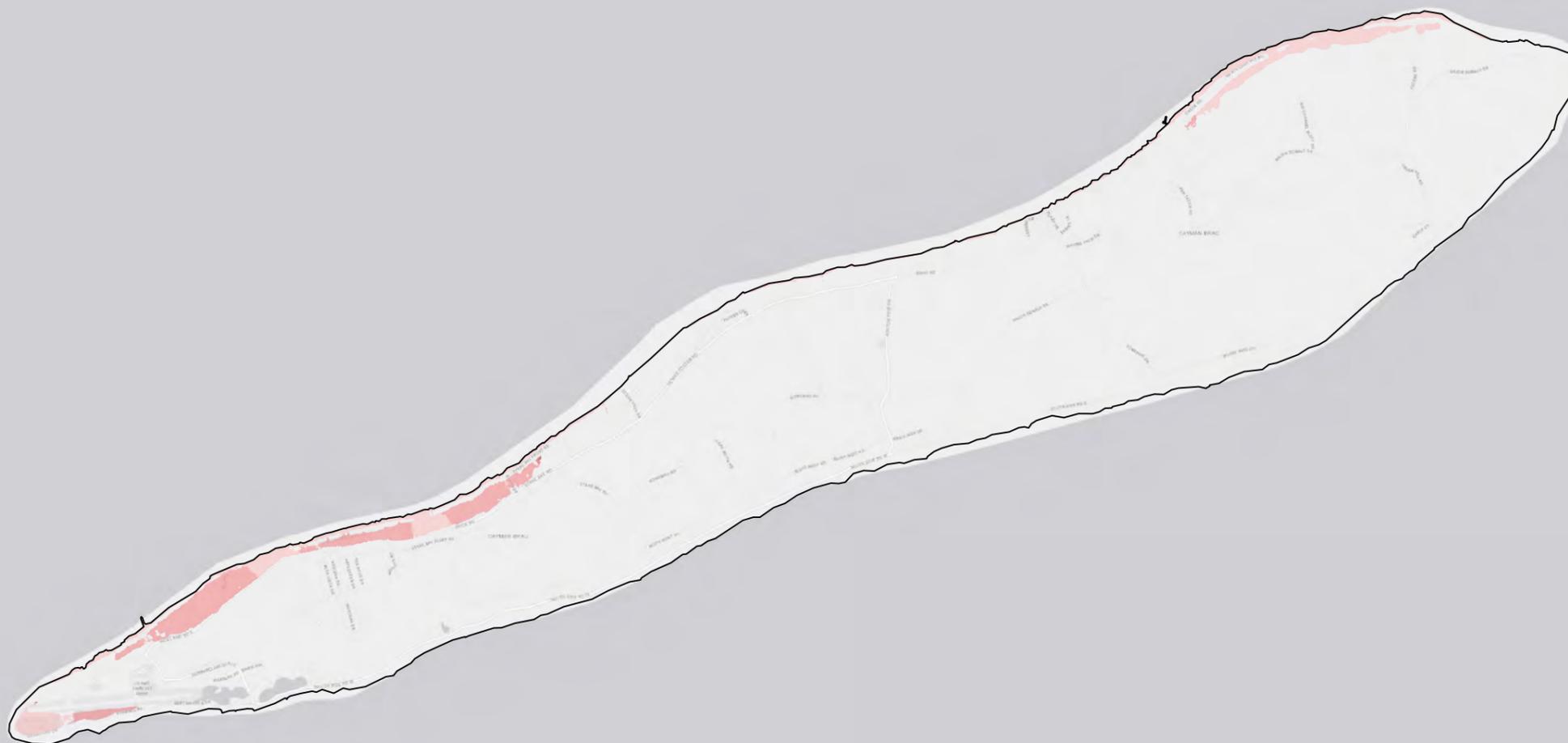
**Figure B.16**  
**Category 1 Hurricane (North) - Enhanced depth difference**



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Key

Depth Difference (m)

- <-0.5
- 0.5 to -0.2
- 0.2 to -0.1
- 0.1 to -0.05
- 0.05 to -0.01
- 0.01 to 0.01
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.2
- 0.2 - 0.5
- >0.5



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**Figure B.17**  
**Category 1 Hurricane (North) -**  
**Degraded depth difference**

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Key

**Depth Difference (m)**

- <math><-0.5</math>
- 0.5 to -0.2
- 0.2 to -0.1
- 0.1 to -0.05
- 0.05 to -0.01
- 0.01 to 0.01
- 0.01 - 0.05
- 0.05 - 0.1
- 0.1 - 0.2
- 0.2 - 0.5
- >0.5

**Extent Difference**

- Extent Decrease
- Extent Increase

0 2 4 km  
Scale at A3: 1:64986

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**Figure B.18**  
**Category 1 Hurricane (North) - Severe degradation depth difference**