Summerland Credit Union: Understanding and managing climate risk in the financial sector

Summary

Summerland Credit Union is a customer-owned financial institution that undertook a CoastAdapt test case project to obtain a high level picture of how current and future climate risks including flooding, coastal inundation and bushfire hazards could affect their property lending portfolio in the New South Wales Northern Rivers region. To this end, Summerland undertook a CoastAdapt test case project that involved a workshop in which ‘case study’ properties were analysed in terms of the climate risks associated with them, using mapping and guidance documentation from CoastAdapt and other sources. This snapshot outlines the key outputs of this risk review and the usefulness of CoastAdapt in this process.

With a greater understanding of how climate risks could affect their business, this information can be used by Summerland in the future to complete more detailed investigations across their portfolio in the Northern Rivers region.

Summerland Credit Union is a customer-owned financial institution that undertook a CoastAdapt test case project to obtain a high level picture of how current and future climate risks including flooding, coastal inundation and bushfire hazards could affect their property lending portfolio in the New South Wales Northern Rivers region. Floods in this region have already affected Summerland’s assets and operation.

The overall goals of the test case project were to:

• build the skills for Summerland staff to use CoastAdapt and other tools to review current and future credit risks
• identify metrics and tolerance levels to trigger specific climate change adaptation and mitigation (risk treatment) responses for assets under the responsibility of Summerland Credit Union.

Keywords

Climate risks, climate resilience, credit union, financial institution, lending risk, test case
The methodology to meet the goals included:

- identifying ‘case study’ properties potentially affected by climate risks
- identifying guidance material on hazard mapping and risk assessment available for these properties to better define the risk. These included properties potentially affected by overland flooding, storm tide inundation, coastal erosion and bushfire under current and projected future climate conditions
- carrying out a risk workshop to review the case study properties and identify adaptation pathways
- documenting the outcomes of the workshop in detailed notes that Summerland could take back to consider in terms of next steps and policy responses.

Hazard mapping that was used to assess the risks was sourced from CoastAdapt (see Figure 1 as an example) as well as other sources including State and local government flooding, storm-tide and bushfire mapping. Some of the specific contents of CoastAdapt that were used are as follows:

- mapping functions including Water Observations from Space (WOfS) and sea-level rise mapping (SLR and You)
- the 1st pass and 2nd pass risk guidance documents under C-CADS
- advice and guidance documentation for adaptation pathways
- reference to externally linked documents and information (climate change trends and similar).

Some of the key outputs of the risk review included:

(i) Conceptual Framework for Assessing Property Level Risk

A high-level conceptual framework for assessing climate risk at a property level was developed that could be applied across the loan portfolio. This framework is shown in Table 1. As a follow up action, more detailed assessment can be done by Summerland to understand their current and future risk profile using this framework as a guide, including setting triggers for the application of risk treatment tools (see below).

(ii) Toolkit of Risk Treatment Options

Consistent with the adaptation pathways approach outlined in CoastAdapt, a toolkit of potential risk treatment (e.g. adaptation) options that Summerland can use to treat the current or future risk in the context of new loan decisions was developed. These included:

1. Reducing the LVR (loan value ratio) to reduce Summerland’s financial interest in the property (note that this is the current approach taken for flood prone properties)
2. Pricing for risk over time either in terms of the price of loan products or higher interest rates on loan repayment
3. Requiring the home owner to cover and maintain insurance over the property for the life of the loan (assuming it can be insured)
4. Reducing loan term or inserting conditions that would allow Summerland to re-open or re-negotiate loan terms subject to occurrence of particular triggers or events
5. Not lending to highest risk properties.

Table 1: Conceptual Framework for Property Level Climate Risk Assessment. Source: Summerland Credit Union 2017.

<table>
<thead>
<tr>
<th>Property 'A' Address</th>
<th>Timeframe</th>
<th>Type of Hazard Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Current - 2030</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2030 - 2050</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Beyond 2050</td>
</tr>
<tr>
<td>Flooding (catchment)</td>
<td>Y</td>
<td>X</td>
</tr>
<tr>
<td>Storm Tide (from sea)</td>
<td>Z</td>
<td>Y</td>
</tr>
<tr>
<td>Bushfire</td>
<td>Z</td>
<td>Z</td>
</tr>
<tr>
<td>Coastal Erosion</td>
<td>Z</td>
<td>Z</td>
</tr>
</tbody>
</table>

**LEGEND:**

- **X** = **High Risk** (demonstrated hazard risk as indicated in a valuation report or a s.149 planning certificate – this level of risk is a trigger for when lending that additional risk treatment measures may be needed (as would need to be outlined in Summerland’s Loans Policy and Risk Appetite statement))
- **Y** = **Potential Risk** (property is in a current or future hazard map published by local government – action would be to raise this with the valuer as part of the next valuation for the property and to investigate current or future risk level and if it needs to be elevated to high risk)
- **Z** = **No Risk** or not applicable (property is not on a current or future hazard map)
(iii) Additional Resilience Measures

Summerland was also interested in ways that resilience to future climate risks could be developed that would benefit both its own business as well as its customers. Some additional measures and ideas that could be explored by Summerland in partnership with State and local authorities to build resilience and educate existing loan customers about their risks include:

- providing information on disaster preparedness (through events, mail out, education, etc.)
- providing information on evacuation routes and related information of what to do in an event or disaster
- directing property owners to where they can find out more information including if they are in a current or future risk area due to climate change (which can generally be found in local and State hazard mapping studies and approved plans)
- advising property owners how they can undertake practical measures to build flood, storm tide and bushfire hazard resilience into their property (with relevant links to State and local programs, guidelines and SES information).

Overall the test case project was perceived by the participants to be very useful in building awareness and understanding of how future climate risk could affect Summerland’s business lending activities. The information and outputs can also be used by Summerland to complete more intensive investigation of climate change risks in specific areas of the Northern Rivers in the future.

Further reading

Summerland Credit Union’s website:

This Snapshot was prepared by Greg Fisk of BMT WBM as part of a series of test cases conducted to assess CoastAdapt’s performance and utility in real life adaptation situations. A special acknowledgement goes to Donna Kildea of Summerland Credit Union who also contributed valuable feedback to the test case.

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Figure 1: Sea-level rise inundation maps (High emission scenario at year 2050) of the Clarence Valley council where Summerland has a number of mortgages. Source: CoastAdapt 2017.