



When floods strike, individuals and communities are subject to significant economic and social costs. Many British Columbians are unaware of the flood risk they face, due to out-of-date floodplain maps.

BC has the opportunity to take steps to minimize damage from future floods—this is the purpose of the British Columbia Real Estate Association’s (BCREA) initiative to ensure existing floodplain maps are updated and remain current.

Effective flood management is complex, and floodplain maps are a logical starting point. A floodplain map shows areas subject to high flood hazard, and helps guide land use decisions. Ongoing changes in hydrology, land use and climate require maps to be updated regularly, but that hasn’t happened in most parts of BC. Outdated floodplain maps compromise the ability of decision makers to effectively assess and manage flood risks, putting BC communities in jeopardy.

## *BCREA Floodplain Maps Action Plan*

On March 8, 2013, with financial support from the Real Estate Foundation of British Columbia, BCREA hosted a workshop with nearly 70 stakeholders to examine the state of floodplain maps in BC. The key output was an action plan designed to advance progress to update existing floodplain maps.



## *Implementation and Progress*

Since the publication of the initial Floodplain Maps Action Plan in April 2013, a collaborative Floodplain Maps Working Group, consisting of BCREA, and volunteers from the Adaptation to Climate Change Team at Simon Fraser University, Fraser Basin Council, Ebbwater Consulting, Northwest Hydraulic Consultants Ltd, Insurance Bureau of Canada, Urban Development Institute and Okanagan Basin Water Board have worked together, and as champions within their own spheres of influence, to move forward the Floodplain Maps Action Plan.

Because the Action Plan is very much a working, evolving document, it requires regular updates. Regardless of how much the plan changes over time, it continues to focus on ways to overcome political, technical and financial challenges. The following revised actions support a single objective: to ensure that existing floodplain maps are updated and remain current.

Having already established a multi-agency Working Group and delivered key research outcomes, the Action Plan has generated movement toward updating existing floodplain maps in BC. Moving forward, BCREA will continue to provide progress updates and revise the Action Plan, as needed.

This Action Plan, plus quarterly progress reports and resulting research reports, are available on the BCREA website at [www.bcrea.bc.ca](http://www.bcrea.bc.ca).

## Technical Actions

In April 2014, BCREA recommended the provincial government develop guidelines and specifications for the development of floodplain maps. In May 2016, the BC Government announced that it had awarded funding to the Association of Professional Engineers and Geoscientists of BC to aid the development of floodplain hazard mapping and modernize professional practice guidelines relating to flood assessments. These guidelines were published in April 2017 (see Action 4 below).

In a related project, the Public Safety Canada-commissioned *National Floodplain Mapping Assessment*, published in June 2014, recommended that Canada develop a National Floodplain Management Framework. A Federal Floodplain Mapping Framework was published in March 2017, available here: <http://bit.ly/2t8Q7ra>.

The following technical actions address the need for standards and guidelines. They are complex and require support and funding from a variety of partners, including local governments, engineering associations and other professional bodies.

Actions	Partners	Timeline
1. Monitor provincial and federal responses to the Public Safety Canada <i>National Floodplain Mapping Assessment</i> , and implementation of the National Disaster Mitigation Program.	BCREA to lead with support from Working Group	Ongoing since June 2014
2. Monitor and report on how GeoBC and other organizations are exploring ways to improve data-sharing protocols and procedures related to overcoming proprietary interests and data management requirements.	Working Group, GeoBC and others	Ongoing since June 2014
3. Undertake a research project to review the provincial government online floodplain mapping inventory and contact local governments and engineering firms to develop an up-to-date inventory of floodplain maps in BC.	BCREA to lead with support from Working Group	Published in October 2015
4. Undertake a technical project to compile case studies of current BC floodplain mapping practices based on significant flood scenarios (e.g., riparian flooding from freshet, pluvial and rain-on-snow events, debris flooding) around the province. Compile the best practices and minimum standards for floodplain mapping BC, including data requirements, engineering standards and methodologies, and integrating climate change into planning.	Engineering associations, provincial government, BCREA and others	Practice guidelines published in April 2017 by the Association of Professional Engineers and Geoscientists of BC. Available here: <a href="http://bit.ly/2t0kpi">http://bit.ly/2t0kpi</a> .
5. Utilizing developed floodplain mapping best practices, assess the quality and quantity of data available and document resource mechanisms to assist local governments prepare and maintain floodplain maps.	Working group to lead	Pending actions by the federal and provincial governments

## Political Actions

The priority to acquire political support provincially and locally on the urgency of floodplain mapping remains. BCREA has supported several efforts in this regard, including hosting a conference in April 2014, where REALTORS® from around the province met with Members of the BC Legislative Assembly to discuss the need to update floodplain maps. BCREA also makes presentations, attends conferences and tradeshow, and continues to provide stakeholders with regular updates about its initiative and the relevant actions of others.

The following actions continue this effort. They are also designed to overcome capacity issues within local governments to undertake floodplain mapping projects, and support the need for ongoing dialogue among all stakeholders.

Actions	Partners	Timeline
6. Communicate the progress and outcomes of the Lower Mainland Flood Management Strategy to enable opportunities to advance flood hazard mapping provincially.	Fraser Basin Council and others	Phase 1 complete in June 2016; Phase 2 underway
7. Through a structured communications approach, engage key public and private organizations and associations to raise awareness among decision makers and stakeholders, and strengthen political support; e.g., facilitate opportunities to bring together municipalities for peer-to-peer discussions, host one or more sessions at local government conferences, develop a set of visual tools to improve understanding about the importance of floodplain mapping / flood hazard management, and to support the allocation of the necessary resources.	BCREA and Working Group	Ongoing since April 2013
8. Ask the provincial government to clarify liability and access to emergency funds, with respect to local governments and residents, in designated floodplains.	BCREA and others	Ongoing since October 2013

## Financial Actions

Progress on identifying funding options and supporting local government efforts in undertaking floodplain mapping projects has already been highlighted and shared broadly, through the publication of BCREA's *Floodplain Mapping Funding Guidebook for BC Local Governments*. In 2014, the federal government announced \$200 million to establish a National Disaster Mitigation Program. The program provides funding to provincial and territorial governments for floodplain mapping, and these governments can redistribute funding to eligible entities such as local governments, public or private sector bodies and band councils.

Actions	Partners	Timeline
9. Review the <i>Floodplain Mapping Funding Guidebook for BC Local Governments</i> every year and update as required.	BCREA	Updated: June 2015, May 2016, October 2017.

## Aspirational Actions

The original Floodplain Maps Action Plan identified several aspirational actions that will advance progress on updating existing floodplain maps. These actions are beyond the capacity of BCREA and the Working Group to deliver alone, but reflect the foresight of the attendees at the March 2013 workshop.

As noted earlier, a project to create provincial guidelines is underway, as of spring 2016. Whether that project addresses the objectives articulated in this plan remains to be seen, though the step toward a consistent approach is encouraging.

Actions	Partners
10. If no federal floodplain mapping program is developed, the provincial government should assess the current <b>capacity</b> of local governments to develop floodplain maps and, if necessary, provide financial and technical assistance to strengthen the capacity of local governments to develop floodplain maps and implement flood management.	Provincial government, with local governments
11. Develop, and update every five years, floodplain mapping guidelines and specifications to reflect current technologies and realities, improve consistency, and build technical capacity to support utilization of a broader suite of technical tools. If appropriate, the provincial government would consider adopting some or all of the standards detailed in Public Safety Canada report.	Provincial government Practice guidelines completed in April, 2017 by the Association of Professional Engineers and Geoscientists of BC (see Action 4 above)
12. Consider public education and outreach to help strengthen political support (e.g., local media, displays in malls, posters, banners, etc.).	All stakeholders
13. Leverage funds to create a province-wide plan to complete floodplain mapping.	Federal, provincial and local governments



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The British Columbia Real Estate Association (BCREA) is the professional association for about 22,000 REALTORS® in BC, focusing on provincial issues that impact real estate. Working with the province's 11 real estate boards, BCREA provides continuing professional education, advocacy, economic research and standard forms to help REALTORS® provide value for their clients.

To demonstrate the profession's commitment to improving Quality of Life in BC communities, BCREA supports policies that encourage economic vitality, provide housing opportunities, respect the environment and build communities with good schools and safe neighbourhoods.