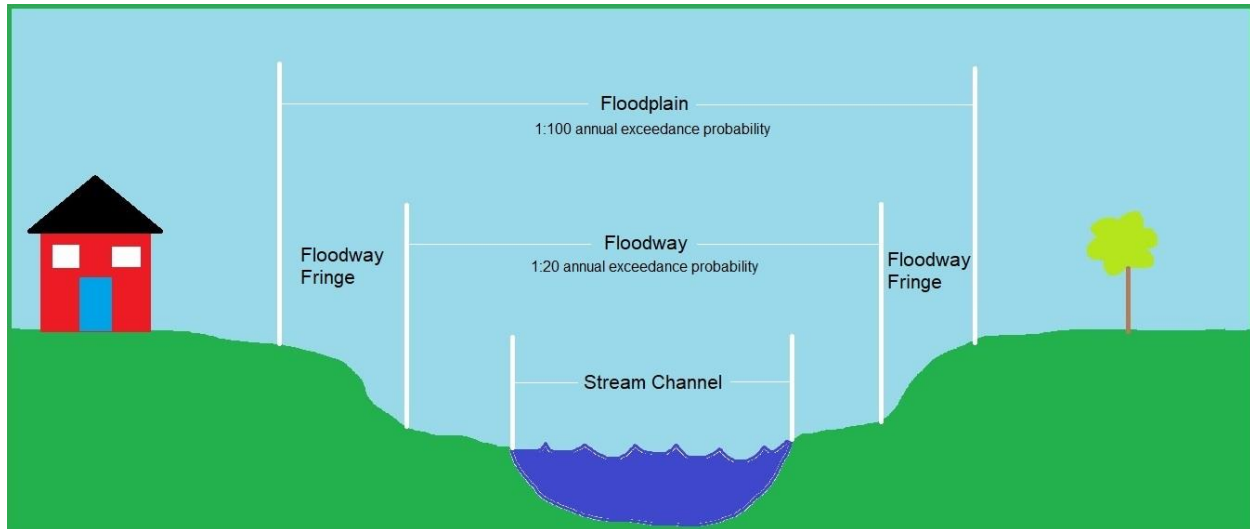


I Live in a Floodplain: Now What?

1. What is a floodplain?

A floodplain is an area of land adjacent to a lake, river, seashore or other body of water that has a 1% probability of being inundated or covered with water in any given year. A floodplain is considered to be an integral part of a body of water because it includes land occupied by that body of water for a period of time, whether that land usually contains water or not.



2. Are there different types of flooding that I need to be worried about?

Yes. River (or fluvial) flooding occurs when dry land is covered by water that has escaped the normal confines of a river, stream or lake. Urban (or pluvial) flooding occurs when surface and underground stormwater infrastructure is unable to drain water generated by a combination of rain, snow-melt and stormwater runoff fast enough and flooding of property results. Coastal (or storm surge) flooding occurs when seawater generated by the combined actions of wind, waves and high tides along the coast of the ocean covers dry land.

3. How do I know if I live in a floodplain or not?

A floodplain is a specially designated flood risk area designated by the Minister responsible for the Water Resources Act, under Section 33 of that Act, for which a hydrotechnical study has determined the extent of flooding and for which floodplain mapping is available. You can check the province's Flood Mapping Application to see if you live in a designated floodplain:

<https://gnl.maps.arcgis.com/apps/webappviewer/index.html?id=24dd4bb6f03948eb93f0535367a42a1f>

Floodplain mapping layers can also be found on the provincial Land Use Atlas:

<https://www.gov.nl.ca/landuseatlas/details/>

4. Who developed the floodplain mapping for my community?

The Water Resources Management Division (WRMD) oversees the development of floodplain mapping for the province. Most flood mapping studies are undertaken on behalf of the province by engineering consultants with expertise in this area. Designated flood risk areas are delineated using industry-standard methodologies, criteria and procedures established by the provincial and federal governments.

Communities may develop floodplain mapping on their own with the help of engineering consultants with expertise in this area. Such mapping will only be officially designated by the province if it is undertaken following criteria and procedures established by the provincial and federal governments.

A town may also designate an area as a flood zone in their municipal plan based on a history of known flooding and knowledge of the high water level.

5. Why was floodplain mapping developed for my community?

If floodplain mapping was developed for your city, town or LSD, it is because there has been a history of flooding in your community. Flood mapping has been developed by the province since the 1980s for over 40 different communities. An inventory of past flood events in Newfoundland and Labrador can be found online: <https://www.gov.nl.ca/ecc/waterres/flooding/flooding/>

6. Does floodplain mapping identify all types of flooding?

There are different types of flood events including flooding due to:

- Rainfall
- Ice Jam
- Storm Surge
- Snowmelt
- Combination of causes
- Tidal Wave
- Sewer System Backups
- Other- Log Jams, Dam Failures

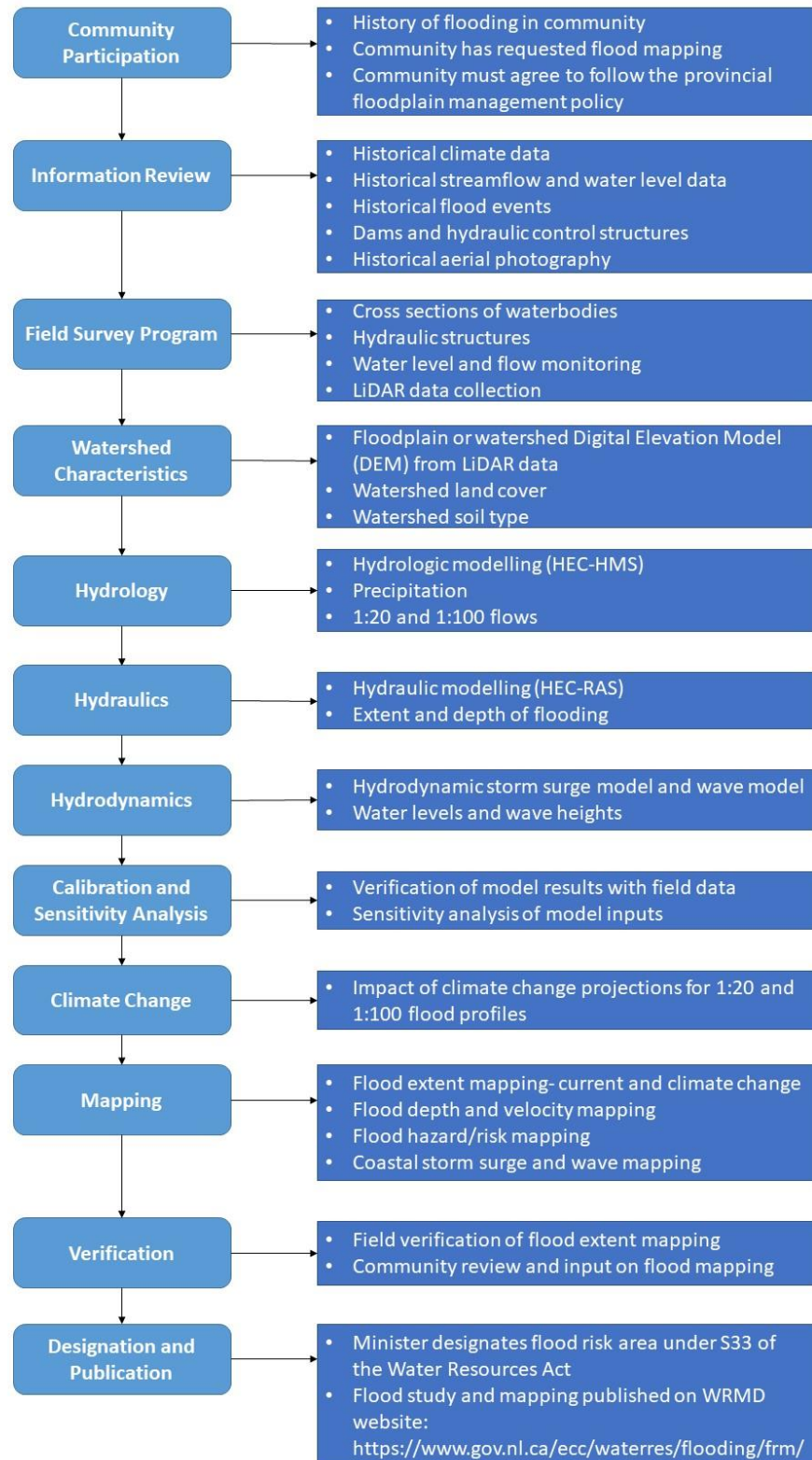
Floodplain mapping developed by the province only considers flooding from rivers and streams due to rainfall and icejams, and coastal flooding due to storm surge. Flooding caused by tidal waves, storm sewer system backups, sanitary sewer system backup, or other means is not looked at.

7. How was the floodplain mapping developed?

The process to create flood mapping is very technical and involves a number of steps as outlined in the following flowchart. The development of provincially approved flood mapping in Newfoundland and Labrador must meet the criteria in the following:

- Technical Document for Flood Hazard Mapping Studies in Newfoundland and Labrador (provincial)
- Hydrologic and Hydraulic Procedures for Flood Hazard Delineation (federal)

Flood Extent Mapping Process



8. How is climate change incorporated into floodplain mapping?

As part of floodplain mapping studies, analysis of the impact of climate change on the flood profiles must be undertaken. Climate change scenarios include an evaluation of climate change precipitation, sea level rise, and coastal storm surge. Climate change floodplain mapping shows the additional extent of land area expected to be covered with water during a flood event using future climate change projections.

9. Does my town recognize the provincial floodplain mapping?

If floodplain mapping has been developed for your community by the province it means that your city or municipality agreed to participate in the flood study and to comply with the province's floodplain management policy in regulating development in the floodplain. There is a priority list of communities who have approached the province for the development of floodplain mapping that can be found in the Newfoundland and Labrador Flood Management Strategy:

<https://www.gov.nl.ca/ecc/files/Newfoundland-and-Labrador-Flood-Management-Strategy.pdf>

10. Do I have to move if my home is located in the floodplain?

No, you do not have to move. Existing homes identified as being located in a floodplain as part of a flood study are considered grandfathered as they pre-date the flood study.

11. My property is shown to be in a floodplain, but I've never experienced any flooding. What should do if I do not agree that my property is located in the floodplain?

Floodplain mapping is developed by engineering consultants following industry-standard methodologies, criteria and procedures set out by both the provincial and federal governments. Any issues with the flood mapping produced should be brought to the attention of the town, province, and engineering consultant responsible for developing the mapping.

12. What is the risk my property might flood?

If your property is located in a 1:20 year flood zone, there is a 5% probability that you may experience flooding in any given year. If your property is located in a 1:100 year flood zone, there is a 1% probability that you may experience flooding in any given year.

The province recommends that anyone living in a floodplain have a personal emergency plan for what to do in case of a flood.

13. What am I permitted to do with my property now that I am in a designated floodplain?

If you are located within the 1:20 year flood zone (called the floodway) you will have more restrictions on what you can and cannot do on your property than if you are located in the 1:100 year flood zone (called the floodway fringe).

If your property is located in the 1:20 year flood zone you will not be permitted to expand the building footprint on the property (e.g., shed, horizontal extension of a home). You would be permitted to make changes in grade on your property to try and floodproof your property.

If your property is located in the 1:100 year flood zone you may be permitted to develop your property with the following conditions:

- The ground floor elevation of the structure must be above the 1:100 flood level, and above the climate change flood zone where designated.
- The structure must not obstruct or displace any water in a way that worsens flooding for other properties.
- The structure and any associated utilities must be designed and constructed in accordance with the Department's flood proofing guidelines. (<https://www.gov.nl.ca/ecc/files/waterres-flooding-floodproofing-protect-your-home-against-flooding-.pdf>)
- Entrances and exits of the building must be safe to use without hindrance in the event of a flood.

If your property is located within the floodplain buffer zone, you may be permitted to develop your property with similar conditions as above.

14. What is the floodplain buffer zone?

The floodplain buffer zone is a zone of land that is to be left in its natural state and is intended to separate developed areas from bodies of water to provide basic protection of water resources. This zone may coincide with a Crown land reservation of a shoreline as prescribed by Section 7(1) of the *Lands Act*. The buffer is taken to be 15 metres measured from the high water mark which is understood to be the 1 in 100 year (1:100) high water mark or the Climate Change Flood Zone, where they have been identified.

Please contact the Water Resources Management Division at WaterInvestigations@gov.nl.ca before starting any work near a flood zone for permitting requirements.

15. I have undeveloped property in the 1:20 year flood zone, and now I cannot do anything with it. What are my options?

There are limited options for landowners with undeveloped property in a 1:20 year flood zone. Property in the 1:20 year flood zone cannot be used for residential development due to the risk of flooding, however, non-structural uses and some non-residential structures (e.g., dock, boathouse) may be allowed. Alternative uses may also include things like:

- Open space recreation- camping, RVing, forest foraging, berry picking, ornithology, and nature photography
- Pasture
- Gardening
- Trails
- Water related structures - wharves, slipways, docks, boathouses

There is no provincial program available to buy or swap private property in a flood zone.

16. What if I develop my property in the floodplain after flood risk mapping was designated without approval?

Undertaking work in a floodplain without the required approvals may trigger enforcement action by the province. If a residential property is constructed without approval after floodplain mapping is designated, and a flood event damages or destroys the residence, the homeowner will not be eligible for disaster assistance.

17. What can I do to protect my home against flooding?

The impact of flooding can be reduced or mitigated using appropriate floodproofing measures. Floodproofing is any combination of structural or non-structural changes to buildings, utilities (e.g., power lines, sewer lines) or the property. You can find guidance on how to floodproof your property here: <https://www.gov.nl.ca/ecc/files/waterres-flooding-floodproofing-protect-your-home-against-flooding-pdf>

Depending on the action you take, please contact the Water Resources Management Division at WaterInvestigations@gov.nl.ca before starting any floodproofing works for permitting requirements.

To assist with the selection of floodproofing measures, use the flood depth maps to determine the depth of flooding on your property for the 1:20 year and 1:100 year flood events.

18. Is there anything the town can do to protect homes from flooding?

Your town can help protect property from flooding in a number of different ways including:

- Adopting a net zero runoff policy for stormwater
- Reducing infiltration and inflow from stormwater into sanitary sewers
- Ensuring stormwater sewer systems have sufficient capacity
- Ensuring infrastructure like bridges and culverts are adequately sized
- Designating floodplains as restricted land use zones in municipal development plans

19. What can the province do to protect homes from flooding?

Floods can threaten human lives, destroy or cause considerable damage to property and infrastructure, and cost millions in emergency assistance, clean-up and remediation. The province develops floodplain mapping to help identify areas of land, particularly within communities, that have a high likelihood of flooding. If your property is located in the floodplain, the province can provide information on expected flood levels for your property. The province has also produced outreach material on how to prepare for a flood event and floodproof your home.

The province provides capital works and other funding programs to build and upgrade infrastructure so that it is sized to meet flood flows (e.g., bridges, culverts) and to help reduce impacts from flooding (e.g., berms, detention ponds, breakwaters, shoreline protection).

20. Is there funding to help me protect my home against flooding?

A property owner is responsible for floodproofing their own property. The cost of floodproofing should be weighed against the cost of future flood damages. A property owner should hire an engineering consultant or a professional engineer to plan and undertake the floodproofing work.

Depending on the location and time, funding programs or grants may be available at the municipal, provincial, or federal level to assist with floodproofing your home or property.

21. Will I be able to get home flood insurance now?

Insurance companies offer different types of flood insurance (e.g., flood caused by plumbing issues, sewer backup, overland flood). It is best to check with your insurer about the type of water damage and flood insurance you can get, what losses it covers, whether the coverage is optional or not, and whether it is available to you or not. Flooding caused by storm surges, tsunamis or tidal waves is typically not covered by insurers. You may not be eligible for overland flood insurance if you are located in a designated flood zone, or you may have your premium reassessed. Flood insurance is likely to be more expensive than regular home insurance. Check with your insurer or the Insurance Bureau of Canada: <http://www.ibc.ca/>

22. Will being in the floodplain affect the value of my home?

It is possible that having a home located in a floodplain may reduce its value. There are studies that have shown that property in flood zones sells for less and appreciates slower over time than similar property outside flood zones. Floodplain mapping and disclosing a flood risk may marginally affect housing prices, however, the impacts of actual floods on property values are much higher than impacts due to the availability of flood maps. The existence of floodplain mapping does not change the risk for the property, but instead, provides opportunity to implement risk mitigation strategies.

23. Will I have to pay higher municipal taxes if my home is located in a floodplain?

Municipal taxes are set by the city, town or LSD in which you reside. The Department is not aware of any community in the province that has established higher tax rates for those who reside in a designated floodplain.

24. Does being in a designated floodplain affect my property assessment?

Once a municipality has adopted the designated floodplain in their municipal plan and the associated development regulations for these zones, the assessed property value may be affected. A change in land use zone from residential to floodplain would be more significant than a change from rural to floodplain on assessed property values, depending on the market conditions in the area affected. Other factors that may affect the assessment include how much land is affected by the floodplain designation and what type of development is allowed.

Municipalities can engage the Municipal Assessment Agency (MAA) to reassess homes located in the designated floodplain or individual property owners can request that their municipality initiate a reassessment by MAA. A change in assessed property values may have an impact on property taxes paid by the property owner and collected by the municipality.

25. If my home is damaged or destroyed in a flood, what are my options?

First, you should contact your insurer to see if there is any coverage available to you. Assistance may also be provided to eligible residents through the provincial Disaster Financial Assistance Program (DFAP) when authorized by the province in response to a specific emergency or adverse weather event. Federal disaster assistance is only authorized when the cost of damages from an event exceeds an

established initial threshold (\$1.7 million for NL as of 2022). Information on DFAP is available from the Department of Justice and Public Safety: <https://www.gov.nl.ca/jps/>

Under DFAP, financial assistance is made available to eligible homeowners and tenants to cover the cost of essentials including help to repair and restore damaged homes, and replacing items such as appliances and furniture. In order to access disaster assistance you must first apply to be considered for funding. If your home is destroyed in a flood or is no longer safe to live in DFAP may provide for the replacement value of your home, the replacement value of the contents of the property, and a value for the land.

You may not be eligible for any flood disaster compensation available through the province if:

- You developed your property in a designated floodplain without approval from the Minister responsible for the Water Resources Act after floodplain mapping was developed.
- You developed your property in a designated floodplain with approval, but in a manner that does not conform to the province's policy for floodplain management after floodplain mapping was developed.
- You received disaster assistance after a previous flood event and rebuilt in the exact same location and footprint within the 1:20 year flood zone without any floodproofing measures.

In the event that your home is damaged or destroyed by a flood event and you receive disaster compensation, WRMD encourages home owners to put the compensation towards relocating rather than rebuilding or repairing property damaged by the flood, particularly if you reside in the 1:20 flood zone. If rebuilding or repairing damaged property in a floodplain is approved, the compensation must also be used for the installation of appropriate floodproofing measures.

26. If my home is identified as being in the floodplain will government pay me to move?

No, however, if your home is damaged by flooding during a storm event you may be eligible for disaster financial assistance if authorized by the province.

27. How does flood mapping help me as a homeowner?

The existence of floodplain mapping does not change the risk of flooding for your property. A flood map shows which areas are prone to flooding in the event of water level rising to a particular elevation. A flood map provides property owners or those seeking to become property owners with the necessary information needed to make smart decisions about floodproofing, financial planning for floodproofing, and personal flood risk management.

28. My town already had Flood Risk Mapping done. Why was new mapping done? Is there any difference?

Over 20 communities in the province had flood risk mapping completed for their community in the 80s to mid-90s. Best practice is to update flood risk mapping every 10 years, and the province is working on updating any existing flood risk mapping from this period. Modern flood mapping uses improved methods and tools and will be more accurate. Climate change scenarios can also be included in new flood risk mapping to evaluate the future impacts of climate change on floodplain.

Modern floodplain mapping that uses improved methods and tools will be more accurate and may result in changes from the old floodplain mapping. In a few cases where 80s era flood mapping was replaced by modern flood mapping, some properties came out of the respective flood zones and could now be developed.

29. If I have further questions relating to flooding, who can I contact?

For any further questions relating to flooding, please email: waterinvestigations@gov.nl.ca