North Shore Sea Level Rise Risk Assessment & Adaptive Management Strategy

Stillwater Flood Map Package

Draft
July 16, 2020
KWL Project No. 031.548-300/AppB

Prepared for:
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(0.5% Annual Exceedance Probability)

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(10% Annual Exceedance Probability)

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(10% Annual Exceedance Probability)

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(0.5% Annual Exceedance Probability)
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Current Sea Level plus 200-Year Return Period
(0.5% Annual Exceedance Probability)
Figure A-1

Sea Level Rise Flood Inundation Map
Scenario A: Current Sea Level plus 200-Year Return Period (0.5% Annual Exceedance Probability)

This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Data Sources:
LiDAR - District of West Vancouver (2016), District of North Vancouver (2013), and EMBC (2016).
Vertical datum is assumed to be Canadian Geodetic Vertical Datum of 1928 (CGVD28). Orthophoto - District of West Vancouver (2016), District of North Vancouver (2016); and EMBC (2016).
Coordinate System: NAD 1983 UTM Zone 10N
Scale Disclaimer: The map scale of 1:10,000 is only valid on a 11"x17" print.
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Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government

2. Floodplain limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only if flooding of cause and extent has been assumed.

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and associated information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development projects, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Data Sources:

LiDAR - District of West Vancouver (2016),

EMBC (2016).

District of North Vancouver (2016),

and

Vertical datum is assumed to be Canadian Geodetic Vertical Datum of 1928 (CGVD28). Orthophoto - District of West Vancouver (2013), and EMBC (2016).

Figure A-2

Sea Level Rise Flood Inundation Map
Scenario A: Current Sea Level plus 200-Year Return Period (0.5% Annual Exceedance Probability)
**Use and Limitations**

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2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only; flooding of creeks and rivers has not been assumed.

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

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**Data Sources:**

LiDAR - District of West Vancouver (2016), District of North Vancouver (2013), and EMBC (2016).

Vertical datum is assumed to be Canadian Geodetic Vertical Datum of 1928 (CGVD28). Orthophoto - District of West Vancouver (2016), District of North Vancouver (2016); and EMBC (2016).

**Coordinate System:**

NAD 1983 UTM Zone 10N

**Scale Disclaimer:**

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2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (flood of course and first floor has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and result in specific site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 493, 494, 500 and 524), the Community Charter (Section 58) and the Land Title Act (Sections 88 and 216), local governments have the role of and responsibility for making decisions about floodplain development practices, including decisions about floodplain types within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

**Legend**

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watershed Boundary
- Stillwater Flood Maximum Depth (m)
  - Stillwater Flood Maximum Depth (m)
  - Stillwater Flood Maximum Depth (m)
  - Stillwater Flood Maximum Depth (m)

**Scenario A: Current Sea Level plus 200-Year Return Period (0.5% Annual Exceedance Probability)**

Figure A-4
Sea Level Rise Flood Inundation Map

Scenario A: Current Sea Level plus 200-Year Return Period (0.5% Annual Exceedance Probability)

Legend

- Municipal Boundary
- First Nations Reserves
- Fraser Port Authority Boundary
- Stillwater Flood Maximum Depth (m)
- Watercourse
- Average High Tide (no sea level rise)
- Additional Area Flooded with 0.6 m Freeboard
- 0.1 - 0.6
- > 0.6
- 1 - 2
- > 2

Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 88) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development, including decisions about floodplain limits within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only; flooding of creeks and rivers has not been assumed.

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and require site-specific map information elsewhere.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to record property location, ground elevations and designated floodplain information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 86) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Legend

- Municipal Boundary
- First Nations Reserve
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Stillwater Flood Maximum Depth (m)

- < 0.1
- 0.1 - 0.5
- 0.5 - 1
- > 1

- Additional Area Flooded with 0.6 m Freeboard

Figure A-6

Sea Level Rise Flood Inundation Map

Scenario A: Current Sea Level plus 200-Year Return Period (0.5% Annual Exceedance Probability)

Project No. 031.548

Date: January 2020

Scale: 1:10,000

District of North Vancouver
North Shore Sea Level Rise Risk Assessment and Adaptive Management Strategy

Figure A-6

Hindern limits based on coastal flood levels only and may not accurately represent potential flooding on alluvial fans.
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Floodplain limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 88) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Legend

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Stillwater Flood Maximum Depth (m)
- Additional Area Flooded with 0.6 m Freeboard

Scenario A: Current Sea Level plus 200-Year Return Period (0.5% Annual Exceedance Probability)
**Use and Limitations**

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and need site-specific map information assistance.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 55) and the Land Title Act (Sections 60 and 271), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain zoning within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

**Legend**

- **Municipal Boundary**
- **First Nations Reserves**
- **Vancouver Fraser Port Authority Boundary**
- **Waterscourse**
- **Stillwater Flood Maximum Depth (m)**

<table>
<thead>
<tr>
<th>Depth (m)</th>
<th>Legend</th>
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</thead>
<tbody>
<tr>
<td>&lt; 0.1</td>
<td>Blue</td>
</tr>
<tr>
<td>0.1 - 0.5</td>
<td>Yellow</td>
</tr>
<tr>
<td>&gt; 2</td>
<td>Red</td>
</tr>
<tr>
<td>0.5 - 1</td>
<td>Orange</td>
</tr>
</tbody>
</table>

**Sea Level Rise Flood Inundation Map**

**Scenario A: Current Sea Level plus 200-Year Return Period (0.5% Annual Exceedance Probability)**

**Figure A-8**
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (flood levels in creeks and rivers have not been assessed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and reduce site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 55) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Legend

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Stillwater Flood Maximum Depth (m)
- Additional Area Flooded with 0.6 m Freeboard
- < 0.1
- 0.1 - 0.6
- > 0.6
- 1 - 2
- > 2

Sea Level Rise Flood Inundation Map

Scenario A: Current Sea Level plus 200-Year Return Period (0.5% Annual Exceedance Probability)

Figure A-9
**Use and Limitations**

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (if flooding of course and tides has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and require site-specific map information updates.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to resolve property location, ground elevations and designated floodplain information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 86) and the Land Title Act (Sections 260 and 276), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain limits within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

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**Legend**

- Municipal Boundary
- First Nations Reserve
- Vancouver Fraser Port Authority Boundary
- Watersourse
- Stillwater Flood Maximum Depth (m)
- Additional Area Flooded with 0.6 m Freeboard

<table>
<thead>
<tr>
<th>Stillwater Flood Maximum Depth (m)</th>
<th>Additional Area Flooded with 0.6 m Freeboard</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 2</td>
<td></td>
</tr>
<tr>
<td>1 - 2</td>
<td></td>
</tr>
<tr>
<td>0.1 - 0.5</td>
<td></td>
</tr>
<tr>
<td>&lt; 0.1</td>
<td></td>
</tr>
</tbody>
</table>

**Sea Level Rise Flood Inundation Map**

**Scenario A: Current Sea Level plus 200-Year Return Period (0.5% Annual Exceedance Probability)**

**Figure A-10**
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Floodplain limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

7. The vertical datum is assumed to be Canadian Geodetic Vertical Datum of 1928 (CGVD28).

8. Coordinate System: NAD 1983 UTM Zone 10N

9. Scale Disclaimer: The map scale of 1:10,000 is only valid on a 11"x17" print.

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Data Sources:

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- Vertical datum is assumed to be Canadian Geodetic Vertical Datum of 1928 (CGVD28).
- Orthophoto - District of West Vancouver (2016), District of North Vancouver (2016); and EMBC (2016).

Coordinate System: NAD 1983 UTM Zone 10N

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**Figure A-12**

**Sea Level Rise Flood Inundation Map**

**Scenario A: Current Sea Level plus 200-Year Return Period (0.5% Annual Exceedance Probability)**

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Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Data Sources: LiDAR - District of West Vancouver (2016), District of North Vancouver (2013), and EMBC (2016). Vertical datum is assumed to be Canadian Geodetic Vertical Datum of 1928 (CGVD28). Orthophoto - District of West Vancouver (2016), District of North Vancouver (2016); and EMBC (2016).

Coordinate System: NAD 1983 UTM Zone 10N

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The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Data Sources:
- LiDAR - District of West Vancouver (2016), District of North Vancouver (2013), and EMBC (2016).
- Vertical datum is assumed to be Canadian Geodetic Vertical Datum of 1928 (CGVD28).
- Orthophoto - District of West Vancouver (2016), District of North Vancouver (2016); and EMBC (2016).

Coordinate System:
- NAD 1983 UTM Zone 10N

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Scenario B:

0.5 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)
Sea Level Rise Flood Inundation Map

Scenario B: 0.5 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)

Use and Limitations
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2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (flood levels of cause and effect has been assumed).
3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.
4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.
6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Legend
- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Future Average High Tide (0.5 m sea level rise)
- Stillwater Flood Maximum Depth (m)
- Additional Area Flooded with 0.6 m Freeboard

0.1 - 0.5
0.5 - 1
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> 99
> 99.5
> 100

Project No. 031.548
Date January 2020
Scale 1:10,000
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only; flooding of creeks and rivers has not been assumed.

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood levels.

6. Under the provisions of the Local Government Act (Sections 473, 489, 491, 500 and 524), the Community Charter (Section 58) and the Land Title Act (Sections 290 and 294), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

7. Floodplain maps are designed to be printed at a ratio of 1:10,000. When printed on a 11"x17" print, the accuracies are:

- Vertical datum is assumed to be Canadian Geodetic Vertical Datum of 1928 (CGVD28).
- Orthophoto - District of West Vancouver (2013), and EMBC (2016).
- Data Sources:
  - LiDAR - District of West Vancouver (2016),
  - EMBC (2016).
- NAD 1983 UTM Zone 10N
- Coordinate System:
  - Vertical datum is assumed to be Canadian Geodetic Vertical Datum of 1928 (CGVD28).
- Datum of 1928 (CGVD28).
- EMBC (2016).

8. The map scale of 1:10,000 is only valid on a 11"x17" print.

9. Additional Area Flooded with 0.6 m Freeboard

10. The Terrace

11. City of North Vancouver

12. District of North Vancouver

13. Vancouver

Sea Level Rise Flood Inundation Map

Scenario B: 0.5 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)
Data Sources:
- LiDAR - District of West Vancouver (2016), District of North Vancouver (2013), and EMBC (2016).
- Vertical datum is assumed to be Canadian Geodetic Vertical Datum of 1928 (CGVD28).
- Orthophoto - District of West Vancouver (2016), District of North Vancouver (2016); and EMBC (2016).

Coordinate System:
- NAD 1983 UTM Zone 10N

Scale Disclaimer:
The map scale of 1:10,000 is only valid on a 11"x17" print.

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Use and Limitations
1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.
2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).
3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.
6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 83) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain design in their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Use and Limitations
- The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
- The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.
- Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 83) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain design in their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 83) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain design in their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).
Use and Limitations

1. The inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and reduce site-specific map information accuracy.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 53) and the Land Title Act (Sections 66 and 279), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain limits within their communities. Information on floodplain management guidelines can be found in the Fraser Inundation Atlas Land Use Management Guidelines (2020).

Legend

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse - Future
- Average High Tide (0.5 m sea level rise)
- Additional Area Flooded with 0.6 m Freeboard
- Stillwater Flood Maximum Depth (m)

<table>
<thead>
<tr>
<th>Freeboard (m)</th>
<th>Depth (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1</td>
<td>1 - 2</td>
</tr>
<tr>
<td>0.5 - 1</td>
<td>&gt; 2</td>
</tr>
</tbody>
</table>

Sea Level Rise Flood Inundation Map

Scenario B: 0.5 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 53) and the Land Title Act (Sections 66 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain zoning within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Areas Land Use Management Guidelines (KWL 2004).

Legend

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Stillwater Flood Maximum Depth (m)
  - < 0.1
  - 0.1 - 0.5
  - 0.5 - 1
  - > 1
- Additional Area Flooded with 0.8 m Freeboard
- Boundary

Sea Level Rise Flood Inundation Map
Scenario B: 0.5 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)

Figure B-5
Sea Level Rise Flood Inundation Map

Scenario B: 0.5 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)

Legend

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Stillwater Flood Maximum Depth (m)
- Future Average High Tide (0.5 m sea level rise)
- Additional Area Flooded with 0.6 m Freeboard

Project No. 031.548

Date: January 2020

Scale: 1:10,000

Inundation limits based on coastal flood levels only and may not accurately represent potential flooding on alluvial fans.

Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (flood levees or flooding of creeks and rivers has not been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes to the floodplain or channel will affect flood levels and relate site-specific map information.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 489, 491, 501 and 524), the Community Charter (Section 59) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain changes within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Inundation limits based on coastal flood levels only and may not accurately represent potential flooding on alluvial fans.

Additional Area Flooded with 0.6 m Freeboard

Legend

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Stillwater Flood Maximum Depth (m)
- Future Average High Tide (0.5 m sea level rise)
- Additional Area Flooded with 0.6 m Freeboard

Sea Level Rise Flood Inundation Map

Scenario B: 0.5 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)

Figure B-6
### Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Floodplain limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to resolve property location, ground elevations and designated flood levels.

6. Under the provisions of the Local Government Act (Sections 473, 489, 491, 501 and 524), the Community Charter (Section 53) and the Land Title Act (Sections 65 and 214), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

7. The floodplain limits are not established on the ground by legal survey. A site survey is required to resolve property location, ground elevations and designated flood levels.

---

**Legend**

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Future Stillwater Flood Maximum Depth (m)
- Present Average High Tide (0.6 m sea level rise)
- Additional Area Flooded with 0.6 m Freeboard
- 0.1 - 0.5
- 0.5 - 1
- > 1.0

**Scenario B: 0.5 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)**

**Figure B-7**
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain requisition by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave affects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood zone information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Sections 88) and the Land Title Act (Sections 250 and 279), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain zones within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Data Sources:
LiDAR - District of West Vancouver (2016), EMBC (2016).

Vertical datum is assumed to be Canadian Geodetic Vertical Datum of 1928 (CGVD28). Orthophoto - District of West Vancouver (2013), and EMBC (2016).

Scale Disclaimer:
The map scale of 1:10,000 is only valid on a 11”x17” print.

EMBC (2016).

Datum of 1928 (CGVD28). Orthophoto - District of West Vancouver (2013), and EMBC (2016).

Coordinate System:
NAD 1983 UTM Zone 10N

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Any other use of these materials information obsolete.

North Shore Sea Level Rise Risk Assessment and Adaptive Management Strategy

1. Flooded with 0.1 - 0.5 Freeboard
2. Flooded with 0.5 - 1 Freeboard
3. Flooded with > 1 Freeboard

Legend

Municipal Boundary
First Nations Reserves
Vancouver Fraser Port Authority Boundary
Watercourse
Future Average High Tide (0.5 m sea level rise)
Additional Area Flooded with 0.6 m Freeboard
Stillwater Flood Maximum Depth (m)

Scenario B: 0.5 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (grounding of潮水 has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and require site-specific map information sources.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found on the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

**Legend**

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Stillwater Flood Maximum Depth (m)
- Future Average High Tide (2.8 m sea level rise)
- Additional Area Flooded with 0.6 m Freeboard

**Scenario B: 0.5 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)**

**Project No.** 031488

**Date** January 2020

**Scale** 1:10,000

**Datum** NAD 1983 UTM Zone 10N

**Coordinate System** WGS84 World Geodetic System 1984

**Vertical datum** Canadian Geodetic Vertical Datum of 1928

**Figure B-9**
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulations by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (ground elevation of course and mean has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and new site-specific map information is advised.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 48) and the Land Title Act (Sections 269 and 270), local governments have the role and responsibility for making decisions about local floodplain development practices, including designation of floodplains within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

7. Additional Area Flooded with 0.6 m Freeboard

8. Stillwater Flood Maximum Depth (m)

   - 0.1 - 0.5
   - > 2
   - 0.5 - 1
   - 1 - 2

9. Scenario B: 0.5 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)

10. Date: January 2020

Project No. 031548
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Floodplain limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 56 and 212), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

7. The map scale of 1:10,000 is only valid on a 11"x17" print.

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Legend

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Stillwater Flood Maximum Depth (m)

Sea Level Rise Flood Inundation Map
Scenario B: 0.5 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)

Figure B-11
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issuance of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channels will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 219 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).
Sea Level Rise Flood Inundation Map

Scenario B: 0.5 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)

Figure B-13

Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Data Sources:
LiDAR - District of West Vancouver (2016), District of North Vancouver (2013), and EMBC (2016).
Vertical datum is assumed to be Canadian Geodetic Vertical Datum of 1928 (CGVD28). Orthophoto - District of West Vancouver (2016), District of North Vancouver (2016); and EMBC (2016).
Coordinate System:
NAD 1983 UTM Zone 10N
Scale Disclaimer:
The map scale of 1:10,000 is only valid on a 11"x17" print.
Scenario C:

1 m Sea Level Rise plus 10-Year Return Period
(10% Annual Exceedance Probability)
**Study Limit (West)**

Highway 99

Bed or a Pl

Sea scape Dr

An sell Pl

Montizambe rt Wynd

Sea scape P l

Sea scape Rd

Sea scape C r t

Sea scape La ne

Sea scape Close

Pas co R d

Citrus Wynd

Law ren ce Way

Km Creek

S c l u f i e l d C r e e k

Disb row Creek

**Figure C-1**

**Sea Level Rise Flood Inundation Map**

Scenario C: 1 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)

**Use and Limitations**

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

**Legend**

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Stillwater Flood Maximum Depth (m)
  - > 2
  - > 1.0
  - > 0.5
  - > 0.1
  - < 0.1

**Project No.** 031.548

**Date** January 2020

**Scale** 0 50 100 (m)
**Use and Limitations**

1. **Sea Level Rise Flooding**
   - Sea Level Rise Flooding is shown as a broad area of land and water inundation. This inundation maps are part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. **Floodplain Limits**
   - Floodplain limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only. No flooding of creeks and rivers has been assumed.

3. **Users' Responsibility**
   - Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping and their associated accuracy. Subsequent developments or changes in the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. **Location of Floodplain Boundary**
   - The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the contour lines.

5. **Floodplain Boundary**
   - The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood hazard information.

6. **Decision Making**
   - Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 58) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Floodplain Management Guidelines (MPEP 254).

---

**Legend**

- **Municipal Boundary**
- **First Nations Reserves**
- **Vancouver Fraser Port Authority Boundary**
- **Watercourse**
- **Stillwater Flood Depth (m)**

**Future**

- < 0.1
- 0.1 - 0.5
- 0.5 - 1
- > 1

**Future High Tide (1 m sea level rise)**

- < 0.1
- 0.1 - 0.5
- 0.5 - 1
- > 1

**Future High Tide (2 m sea level rise)**

- < 0.1
- 0.1 - 0.5
- 0.5 - 1
- > 1

**Additional Area Flooded with 0.8 m Freeboard**

- < 0.1
- 0.1 - 0.5
- 0.5 - 1
- > 1

---

**Sea Level Rise Flood Inundation Map**

**Scenario C: 1 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)**

**Figure C-2**
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and make site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain zonation within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).
### Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulations by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (modelling of waves and storm has not been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and noted site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).
District of North Vancouver

North Shore Sea Level Rise Risk Assessment and Adaptive Management Strategy

Sea Level Rise Flood Inundation Map

Scenario C: 1 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)

Legend

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary

Stillwater Flood Maximum Depth (m)
- < 0.1
- 0.1 - 0.5
- 0.5 - 1
- > 1

Watercourse

Future

Average High Tide (1 m sea level rise)

Additional Area Flooded with 0.6 m Freeboard

Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain maps within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).
**Use and Limitations**

1. Inundation limits are part of the development of an adaptive management strategy. Floodplain regulation and identification are not intended for floodplain management by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood plain information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Sections 61) and the Land Title Act (Sections 80 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

7. Additional area flooded with 0.6 m freeboard.

8. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

**Legend**

- **Municipal Boundary**
- **First Nations Reserves**
- **Vancouver Fraser Port Authority Boundary**

**Sea Level Rise Flood Inundation Map**

**Scenario C: 1 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)**

- **Stillwater Flood Maximum Depth (m):**
  - < 0.1
  - 0.1 - 0.5
  - 0.5 - 1
  - 1 - 2
  - > 2

- **Future Average High Tide (1 m sea level rise):**
  - 0.1 - 0.5
  - 0.5 - 1
  - 1 - 2

**Date Saved:** 2020-01-06 5:07:51 PM | **Author:** JLau

**North Shore Flood Inundation Map**

**District of North Vancouver**

North Shore Sea Level Rise Risk Assessment and Adaptive Management Strategy
Use and Limitations

This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

1. Floodplain limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

2. Floodplain limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Legend

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Stillwater Flood Maximum Depth (m)
- Watercourse
- Future
- Average High Tide
- Other
- Addional Area Flooded with 0.6 m Freeboard
- 0.6 m Freeboard
- > 2
- 1 - 2
- 0.5 - 1
- 0.1 - 0.5
- < 0.1

Sea Level Rise Flood Inundation Map

Scenario C: 1 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)

Figure C-7
Sea Level Rise Flood Inundation Map
Scenario C: 1 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)
District of North Vancouver

North Shore Sea Level Rise Risk Assessment and Adaptive Management Strategy

**Use and Limitations**

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. The floodplain limits are not legally defined. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain setback, within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

7. Topography is assumed to be plus or minus one-half the increment of the ground contours.

**Legend**

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Stillwater Flood Maximum Depth (m)

**Scenarios**

- **Scenario A:** 0.5 m Sea Level Rise plus 1-Year Return Period (10% Annual Exceedance Probability)
- **Scenario B:** 1 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)
- **Scenario C:** 1 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)

**Figure C-9**

Sea Level Rise Flood Inundation Map

Scenario C: 1 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)


Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Floodplain limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A side survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including adoption of floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

7. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.
Figure C-11
Sea Level Rise Flood Inundation Map
Scenario C: 1 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)

Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated floodplain information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Data Sources:

- LiDAR - District of West Vancouver (2016), District of North Vancouver (2013), and EMBC (2016).
- Vertical datum is assumed to be Canadian Geodetic Vertical Datum of 1928 (CGVD28).
- Orthophoto - District of West Vancouver (2016), District of North Vancouver (2016); and EMBC (2016).

Coordinate System:

- NAD 1983 UTM Zone 10N

Scale Disclaimer:

The map scale of 1:10,000 is only valid on a 11"x17" print.

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Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated floodplain information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 55) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2014).

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District of North Vancouver
North Shore Sea Level Rise Risk Assessment and Adaptive Management Strategy

Figure C-13
Sea Level Rise Flood Inundation Map
Scenario C: 1 m Sea Level Rise plus 10-Year Return Period (10% Annual Exceedance Probability)

Use and Limitations
1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.
2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only; flooding of creeks and rivers has not been assumed.
3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and make site-specific map information obsolete.
4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood levels.
6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 50 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Data Sources:
LiDAR - District of West Vancouver (2016), District of North Vancouver (2013), and EMBC (2016).
Vertical datum is assumed to be Canadian Geodetic Vertical Datum of 1928 (CGVD28).
Orthophoto - District of West Vancouver (2016), District of North Vancouver (2016); and EMBC (2016).
Coordinate System:
NAD 1983 UTM Zone 10N
Scale Disclaimer:
The map scale of 1:10,000 is only valid on a 11"x17" print.
Scenario D:

1 m Sea Level Rise plus 200-Year Return Period
(0.5% Annual Exceedance Probability)
Sea Level Rise Flood Inundation Map  
Scenario D: 1 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)

Use and Limitations
1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.
2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).
3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.
4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half of the increment of the ground contours.
5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.
6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Legend
- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Future Average High Tide (1 m sea level rise)
- Stillwater Flood Maximum Depth (m)

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Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 489, 491, 501 and 524), the Community Charter (Section 85) and the Land Title Act (Sections 85 and 291), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

7. The floodplain limits are based upon stillwater flood levels only (no flooding of creeks and rivers has been assumed).

8. The scale of 1:10,000 is only valid for the purposes of floodplain information, and is not intended for navigation or other uses.

9. The vertical datum is assumed to be Canadian Geodetic Vertical Datum 1988 (CGVD88).

10. The map is not intended for floodplain regulatory purposes by the local government.

11. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

12. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

13. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

14. Under the provisions of the Local Government Act (Sections 473, 489, 491, 501 and 524), the Community Charter (Section 85) and the Land Title Act (Sections 85 and 291), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

15. The map scale of 1:10,000 is only valid for the purpose of floodplain information, and is not intended for navigation or other uses.

16. The vertical datum is assumed to be Canadian Geodetic Vertical Datum 1988 (CGVD88).

Legend

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Future Average High Tide (1 m sea level rise)
- Future Stillwater Flood Depth (m)
- > 0.1
- 0.1 - 0.5
- 0.5 - 1
- > 2
- Additional Area Flooded with 0.1 m Freeboard
- Watercourse

Sea Level Rise Flood Inundation Map

Scenario D: 1 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.
2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).
3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.
4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.
6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and require site-specific map information updates.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain mapping. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects). Flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. Accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 58) and the Land Title Act (Sections 66 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain maps within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

7. Municipal boundary, First Nations Reserves, Vancouver Fraser Port Authority Boundary, Additional Area Flooded with 0.6 m Freeboard, Sea Level Rise Flood Inundation Map Scenario D: 1 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)

Legend

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Stillwater Flood Maximum Depth (m)

- 0.1
- 1 - 2
- > 2
- 0.1 - 0.5
- 0.5 - 1
- < 0.1
- 0 - 0.1

- Additional Area Flooded with 0.6 m Freeboard

Figure D-5
Sea Level Rise Flood Inundation Map

Scenario D: 1 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)

Legend
- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Future Average High Tide (1 m sea level rise)
- Stillwater Flood Maximum Depth (m)

Use and Limitations
1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.
2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of course and river has been assumed).
3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and results of site-specific map information obsolete.
4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.
6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 55) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2014).

Figure D-6

District of North Vancouver
North Shore Sea Level Rise Risk Assessment and Adaptive Management Strategy

Project No. 031.548
Date January 2020
Scale 1:10,000

Map Scale 1:10,000 is only valid on a 11"x17" print.
Use and Limitations

This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

1. Inundation limits are based on consideration of coastal stillwater (excluding wave effects), flood levels only (no flooding of creeks and rivers has been assumed).
2. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and require area-specific map information updates.

3. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
4. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood plain.
5. Under the provisions of the Local Government Act (Sections 473, 489, 491, 501 and 524), the Community Charter (Section 88) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain boundary within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

6. Additional Area Flooded with 0.6 m Freeboard

Legend

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Stillwater Flood Maximum Depth (m)
- Future Average High Tide (1 m sea level rise)
- < 0.1
- 0.1 - 0.5
- > 0.5 - 1
- > 1 - 2
- > 2

Scenario D: 1 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and river has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and require site-specific map information updates.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 489, 491, 500 and 524), the Community Charter (Section 58) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Legend

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary

Watercourse
- Future Average High Tide (1 m sea level rise)

Stillwater Flood Maximum Depth (m)
- > 2.0
- 1.0 - 2.0
- 0.5 - 1.0
- < 0.5

Additional Area Flooded with 0.6 m Freeboard

Sea Level Rise Flood Inundation Map
Scenario D: 1 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Floodplain limits are based on consideration of coastal stillwater (excluding wave effects). Flood limits are subject to changes due to both flooding of creeks and normal tides (no assumptions).

3. Users must note that floodplain regulations are dependent on the date of base mapping, aerial photography, ground or bathymetric surveys and issues of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and reduce site-specific floodplain performance.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated floodplain information.

6. Under the provisions of the Local Government Act (Sections 473, 489, 491, 500 and 524), the Community Charter (Section 53) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including objections about floodplain zonings within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Areas Land Use Management Guidelines (MLWAP 2016).

Sea Level Rise Flood Inundation Map

Scenario D: 1 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)

Figure D-9
Sea Level Rise Flood Inundation Map

Scenario D: 1 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)

Legend

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Stillwater Flood Maximum Depth (m)
- Future Average High Tide (1 m sea level rise)
- Additional Area Flooded with 0.6 m Freeboard

Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Floodplain limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (assuming no changes and no sea level rise has been assumed). Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issues of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and these site-specific map information absences.

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issues of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and these site-specific map information absences.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the grounds by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including adoption of floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

7. 0.1 - 0.5

8. < 0.1

9. 1 - 2

10. 0.5 - 1

11. > 2

12. 0.6 m Freeboard

13. Additional Area Flooded with 0.6 m Freeboard
District of North Vancouver

North Shore Sea Level Rise Risk Assessment and Adaptive Management Strategy

Sea Level Rise Flood Inundation Map
Scenario D: 1 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)

Use and Limitations
1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.
2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood depths only (no flooding of creeks and rivers has been assumed).
3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.
4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.
6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2014).
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2003).

Sea Level Rise Flood Inundation Map
Scenario D: 1 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)
District of North Vancouver
North Shore Sea Level Rise Risk Assessment and Adaptive Management Strategy

Sea Level Rise Flood Inundation Map
Scenario D: 1 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)

Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (flood of course and river has not been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).
Scenario E:

2 m Sea Level Rise plus 200-Year Return Period
(0.5% Annual Exceedance Probability)
Study Limit (West) Study Limit (West)

Highway 99
Bedora Pl
Seascape Dr
Ansell Pl
Montizambert Wynd
Seascape Pl
Seascape Rd
Seascape Cr
Seascape Lane
Seascape Close
Pascos Rd
Citrus Wynd
Lawrence Way

Figure E-1
Sea Level Rise Flood Inundation Map
Scenario E: 2 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)

Use and Limitations
1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.
2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).
3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issuance of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.
4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood levels.
6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Legend
- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Future Average High Tide (2 m sea level rise)
- Stillwater Flood Maximum Depth (m)

Stillwater Flood Maximum Depth (m)
- < 0.1
- 0.1 - 0.5
- 0.5 - 1
- > 1
- > 2

Additional Area Flooded with 0.6 m Freeboard

Project No. 031.548
Date January 2020
Scale 1:10,000

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Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (youth flooding of creeks and storm has been assumed).

3. Users note the dates of base mappers, aerial photography, ground or bathymetric surveys and issues of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and revise site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 88) and the Land Title Act (Sections 208 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Legend

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Future Average High Tide (2 m sea level rise)
- Stillwater Flood Maximum Depth (m)
- Additional Area Flooded with 0.6 m Freeboard

Sea Level Rise Flood Inundation Map
Scenario E: 2 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)
SOUTH SHORE SEA LEVEL RISE RISK ASSESSMENT AND ADAPTIVE MANAGEMENT STRATEGY

**Use and Limitations**

1. The accuracy of the location of the floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only; flooding of creeks and rivers has not been assumed.

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and make site-specific map information obsolete.

4. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

5. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain boundary changes. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

6. The map scale of 1:10,000 is only valid on a 11"x17" print.

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Sea Level Rise Flood Inundation Map

Scenario E: 2 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)

Figure E-3
Use and Limitations
1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.
2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).
3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.
4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood levels only (no flooding of creeks and rivers has been assumed).
6. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects). Flood levels only (no flooding of creeks and rivers has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on the map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain maps within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea-level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of course and river has been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and require site-specific map information updates.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the contour intervals.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Sections 56) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Legend

Municipal Boundary
First Nations Reserves
Vancouver Fraser Port Authority Boundary
Watercourse
Stillwater Flood Maximum Depth (m)

- 0.1
- 0.1 - 0.5
- 0.5 - 1
- 1 - 2
- > 2

Sea Level Rise Flood Inundation Map
Scenario E: 2 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)

Figure E-6
Use and Limitations

1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.
2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).
3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.
4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood levels information.
6. Under the provisions of the Local Government Act (Sections 473, 488, 493, 491, 500 and 524), the Community Charter (Section 58) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Legend

- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse

Future Average High Tide (2 m sea level rise)
Stillwater Flood Maximum Depth (m)
- < 0.1
- 0.1 - 0.5
- > 0.5 - 1
- > 1 - 2
- > 2

Additional Area Flooded with 0.6 m Freeboard

Sea Level Rise Flood Inundation Map

Scenario E: 2 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)

Figure E-7
Sea Level Rise Flood Inundation Map
Scenario E: 2 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)

Figure E-8

Legend
- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Stillwater Flood Maximum Depth (m)
  - > 0.1
  - 0.1 - 0.5
  - 0.5 - 1
  - < 0.5

Use and Limitations
1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.
2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (flood levels of causes and tone has been assumed).
3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map areas. Subsequent developments or changes within the floodplain or channel will affect flood levels and reader site specific map information obsolete.
4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
5. The floodplain limits are not established on the ground by legal survey. A site survey is required to resolve property location, ground elevations and designated flood levels information.
6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 86) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including changes about floodplain levels within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2014).
Sea Level Rise Flood Inundation Map

Scenario E: 2 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)

Figure E-9
**Use and Limitations**

This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

1. Floodplain limits are based on current data and topography, including landforms, terrain and bathymetry, and may not account for all potential impacts of sea level rise.

2. Floodplain limits are based on current data and topography, including landforms, terrain and bathymetry, and may not account for all potential impacts of sea level rise.

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channels will affect flood levels and the site-specific map information should be used.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

6. Under the provisions of the Local Government Act (Sections 473, 489, 491, 500 and 524), the Community Charter (Section 65) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including adoption of floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

7. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

8. Under the provisions of the Local Government Act (Sections 473, 489, 491, 500 and 524), the Community Charter (Section 65) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including adoption of floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

9. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.

10. Under the provisions of the Local Government Act (Sections 473, 489, 491, 500 and 524), the Community Charter (Section 65) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including adoption of floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

---

**Legend**

- **Municipal Boundary**
- **First Nations Reserves**
- **Vancouver Fraser Port Authority Boundary**
- **Watercourse**
- **Stillwater Flood Maximum Depth (m)**

**Stillwater Flood Maximum Depth (m):**

- < 0.1
- 0.1 - 0.6
- 0.6 - 1
- 1 - 2
- > 2
- Additional Area Flooded with 0.6 m Freeboard

**Scenario E: 2 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)**

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**Project No:** 031548

**Date:** January 2020

**Scale:** 1:10,000

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**District of North Vancouver**

North Shore Sea Level Rise Risk Assessment and Adaptive Management Strategy
Use and Limitations
1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.
2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (no flooding of creeks and rivers has been assumed).
3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.
4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood levels.
6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).
Figure E-12

Sea Level Rise Flood Inundation Map
Scenario E: 2 m Sea Level Rise plus 200-Year Return Period (0.5% Annual Exceedance Probability)

Use and Limitations
1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.
2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects). Flood levels only to flooding of creeks and rivers has been assumed.
3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.
4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood level information.
6. Under the provisions of the Local Government Act (Sections 473, 488, 490, 491, 500 and 524), the Community Charter (Section 38) and the Land Title Act (Sections 209 and 219), local governments have the role of and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2004).

Legend
- Municipal Boundary
- First Nations Reserves
- Vancouver Fraser Port Authority Boundary
- Watercourse
- Future Average High Tide (2 m sea level rise)
- Stillwater Flood Maximum Depth (m)
- Additional Area Flooded with 0.6 m Freeboard

- < 0.1
- 0.1 - 0.5
- 0.5 - 1
- > 1

Data Sources:
- LiDAR - District of West Vancouver (2016), District of North Vancouver (2013), and EMBC (2016).
- Vertical datum is assumed to be Canadian Geodetic Vertical Datum of 1928 (CGVD28).
- Orthophoto - District of West Vancouver (2016), District of North Vancouver (2016); and EMBC (2016).
- Coordinate System: NAD 1983 UTM Zone 10N

Scale Disclaimer:
The map scale of 1:10,000 is only valid on a 11"x17" print.

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1. This inundation map is part of the development of an adaptive management strategy for risks associated with coastal flooding, including sea level rise. The map is not intended for floodplain regulation by the local government.

2. Inundation limits are based on consideration of coastal stillwater (excluding wave effects) flood levels only (flood levels of creeks and rivers have not been assumed).

3. Users must note the dates of base mapping, aerial photography, ground or bathymetric surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel will affect flood levels and render site-specific map information obsolete.

4. The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.

5. The floodplain limits are not established on the ground by legal survey. A site survey is required to reconcile property location, ground elevations and designated flood levels with information.

6. Under the provisions of the Local Government Act (Sections 473, 483, 491, 500 and 524), the Community Charter (Section 56) and the Land Title Act (Sections 86 and 219), local governments have the role and responsibility for making decisions about local floodplain development practices, including decisions about floodplain bylaws within their communities. Information on floodplain management guidelines can be found in the Flood Hazard Area Land Use Management Guidelines (MLWAP 2014).

Legend

Municipal Boundary
First Nations Reserves
Vancouver Fraser Port Authority Boundary
Watercourse
Stillwater Flood Maximum Depth (m)
Future Average High Tide (2 m sea level rise)
0.6 - 1
1 - 2
> 2
0.1 - 0.5
0.5 - 1
< 0.1

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