1) Why Creek Hazard Protection?

The Creek Hazard Development Permit Area (DPA) includes properties adjacent to creeks and rivers identified with a potential risk due to flooding, debris flow or debris flood. The Creek Hazard DPA is established to minimize the risk to people and property from creek hazards.

Projected increases in rainfall amounts and intensity and storm frequency due to climate change may also increase flood hazard, which could be exacerbated in low-lying areas influenced by tidal surges and rising sea level. It is important that the potential for debris flow and flood be taken into consideration for development.

2) Which creeks are subject to flooding?

Disclaimer: any creek can be subject to flooding at any time. The District has commissioned several creek hazard reports that include flooding and debris flows. The reports can be accessed via the Natural Hazards Management Program www.dnv.org/hazards

3) Where can I see a map of all of the Creek Hazard areas in the District?

The Creek Hazard areas are identified on Geoweb on the District's website at http://geoweb.dnv.org/
Under applications, properties, layers, layer manager, DPA Creek Hazard.

Disclaimer: The Creek Hazard DPA also applies to any unmapped streams that may not yet be on the Creek Hazard DPA map.

4) Which properties are included in the Creek Hazard DPA?

Properties that fall inside the potential hazard area for creeks (as identified by Qualified Professionals retained by the District) or as described in Schedule B – mapped or unmapped. The Creek Hazard DPA includes properties next to the creeks and rivers identified with a potential risk due to debris flow, debris flood and flood. The Creek Hazard Map 2.2 shows the identified risk areas for Debris Flow and Debris Flood, the potential flood areas on the major creeks and rivers and the potential flood areas on the smaller creeks. The DPA will apply to all properties within these areas and those intersecting the 10 m reference line from the small creek flood areas.

5) When would I need a Creek Hazard Development Permit?

If your property is in the Creek Hazard DPA, and you are planning to build or alter the land, a Development Permit (DP) may be required. A property in a Creek Hazard DPA may also be in a Streamside Protection DPA and a Slope Hazard DPA; a Development Permit will need to address all applicable DPAs. Certain exemptions apply (see Exemptions).
6) What are some common Exemptions (where no DP is required)?

The following do not require a Development Permit:

- Regular maintenance of existing buildings or landscaping;
- Development that takes place outside the Creek Hazard Area, provided that it does not transfer risk to neighbouring properties or impact the creek in any way;
- Reconstruction or renovation to a permanent structure on its existing foundation;
- For small creeks - Development in which the lowest level of habitable space is more than 2 metres above the lowest elevation in the adjacent creek channel, except for certain major creeks and debris flow creeks;
- Additions of less than 25 square metres (check with staff);
- Construction of an accessory building (check with staff);
- Replacement or repair of an existing deck providing that the location and dimensions of the deck do not change.

7) I am just doing an interior renovation; do I still need to go through this process?

No. Interior renovations are exempt from requiring a Creek Hazard Development Permit. However, no mechanical equipment or electrical wiring is permitted to be installed below the flood construction level (FCL), except in accordance with recommendations made by a qualified professional.

8) What information do I need to apply for a Creek Hazard Development Permit?

A legal topographical survey showing the top of bank (TOB) of the stream and creek elevation, a site plan showing the proposed location of the works to be undertaken, and possibly a report from a Qualified Professional Engineer or Geoscientist (with expertise in creek hazards) identifying potential risk from creek hazards and proposed risk reduction measures if required (including Flood Construction Levels as appropriate).

9) My house is already in the Creek Hazard Area, what should I do now?

The DPA guidelines recognize that on several properties in the District, the house, yard and existing landscaping already lie within the Creek Hazard Area. Any existing and lawfully constructed buildings, existing landscaping and other pre-existing land uses are considered to be “grandparented”, that is, they can remain in place as they are. Any proposed new development must not increase the risk and may require a Creek Hazard Development Permit.

10) I want to buy a house within the Creek Hazard Development Permit Area and I want to tear it down and build a new home. Can the original footprint of the home be ‘grandparented’?

Only under certain circumstances would a historical foundation be grandfathered. If the historical foundation meets the Streamside Protection DPA requirements and can be demonstrated as safe by a Qualified Professional, grandparenting would be considered. Generally, existing footprints or locations of structures are only grandfathered in special circumstances involving catastrophic loss such as fire or flood, but are still required to be certified as safe by a Qualified Professional.
11) **How will the Creek Hazard DPA affect my property for future development?**

All new development approval would be subject to review by a Qualified Professional Engineer or Geoscientist with expertise in creek hazards. The proposed development will be required to adhere to the guidelines set out in the Creek Hazard DPA guidelines.

12) **Will the Creek Hazard DP affect how large of a home I can build?**

Protection from Creek Hazard is one of a number of legislated requirements of the DNV. Applying this and other requirements may in certain situations decrease the potential gross buildable floor area of a home. It is very important that you review the information on the District’s website http://www.dnv.org/article.asp?a=5627&c=1166

13) **I want to build a basement in a house within the Creek Hazard DPA. What do I have to do?**

Any new habitable space developed within the Creek Hazard DPA may require a report by a Qualified Professional that demonstrates that the proposed new development is safe for the use intended. There are some exemptions that may be applicable, but a staff review is required. The Zoning Bylaw also provides details regarding basements.

14) **The owner of the property next door/across the street/at the end of my block built a new home. Can I build mine like theirs?**

Every lot is unique and not all lots are in the Creek Hazard Development Permit Area. Additionally, some lots are in other Development Permit areas; therefore, it is not possible to compare lots to each other.

15) **There is an existing storm connection that goes directly to a creek on my property. What happens when I redevelop the lot?**

DNV staff will determine if a new or alternative storm connection or location will be required during redevelopment.

16) **How long does the Creek Hazard DP process take?**

Process time varies depending on whether or not there are any other DPs required, the completeness and accuracy of the reports and information received and the overall complexity of the project. There is often a pre-application stage to gather the environmental baseline information, and an application review stage which involves screening the information. Once all information is received, then processing generally takes 4 – 6 weeks. This may depend on whether additional information is required to process the application.

17) **How much does a Creek Hazard DP cost?**

The fees are set out in the Fees and Charges Bylaw. In 2014, the Development Permit fee is $105 for a renovation or $530 for a new home, plus a $50 scanning fee.
18) **Who do I hire for professional reports, surveys, etc.?**

“Qualified Professional” means a professional with appropriate education, training and experience, fully insured and in good standing with the relevant professional association, and means:

1. for the purpose of the flood and slope hazard assessments (*Creek Hazard DPA* and *Slope Hazard DPA*), a specialist Professional Engineer or Professional Geoscientist, as appropriate, with experience or training in geotechnical and geohazard assessments, river hydraulics and hydrology and, where appropriate, debris flow processes experience or training and/or structural engineering expertise in connection with mitigation works; and

2. for the purpose of the wildfire hazard assessments (*Wildfire Hazard DPA*), a Registered Forest Professional qualified by training or with at least two years’ experience in the assessment, fuel management prescription development and mitigation of wildfire hazards in British Columbia.

19) **When can I apply for my building permit?**

Once staff has accepted a DPA package and no further design changes are expected, a Building Permit application will generally be accepted.

20) **Will my creek flood my home? How can I find out if it will flood or not?**

The District has limited information on flood hazards related to individual properties and severe weather events and other factors that lead to flooding are extremely difficult to predict. Please refer to the information on the District’s website. If you are concerned, please hire a (QP) engineer or geoscientist with the appropriate experience in assessing flood risk.

The District is working hard to reduce the risk of urban flood problems including the use of planning tools such as the Creek Hazard DPA. The Creek Hazard Development Permit Area (DPA) includes properties adjacent to creeks and rivers identified with a potential risk due to flooding, debris flow or debris flood.

The insurance industry highlights that there will always be a chance that basement flooding can occur and homeowners are advised to learn more about measures that they can take to reduce the risk of basement flooding.

http://www.dnv.org/article.asp?a=5129&c=1110
http://www.ibc.ca/en/Natural_Disasters/Protect_Yourself_from_Climate_Change/Water.asp

21) **Does my insurance cover flooding damage to my home?**

In many cases, basement flooding damages are uninsurable. Most homeowners are not covered by damages caused by overland flooding; make sure you know your coverage. The insurance industry advises that water-related damage and insurance claims are on the rise across Canada as a result of climate change. To learn more information, please see:

http://www.ibc.ca/en/Natural_Disasters/Protect_Yourself_from_Climate_Change/Water.asp

22) **When did council adopt legislation requiring a Creek Hazard DPA?**

23) **What do I submit if the property falls into multiple DPAs?**

If your property falls into multiple DPAs please review all relevant information on the District’s website [http://www.dnv.org/](http://www.dnv.org/) prior to any type of design work. If clarification is still needed, you may contact staff in the Environment Section.

You will need to designate a lead professional to coordinate the assessment report.

24) **What do I do if the property is also within a DPA for:**

- Form & Character for Commercial, Industrial or Multi-Family Development and / or
- Energy & Water Conservation & Reduction of Greenhouse Gas Emissions?

If your property also falls within one of these DPAs, please review all relevant information on the District’s website [http://www.dnv.org/](http://www.dnv.org/) prior to any type of design work. The lead DNV staff contact will be a Development Planner. You can contact Development Planning by telephone at 604-990-2387 or by email at planning@dnv.org for an appointment.

25) **Do District of North Vancouver (DNV) projects have to follow the DPA guidelines?**

Yes all DNV projects are expected to follow the DPA guidelines. However, the DNV is responsible for maintaining and providing critical public infrastructure such as roads, bridges, water and sanitary sewer pipes and for maintaining existing community service infrastructure.

Much of this infrastructure was installed many years ago when knowledge and requirements protecting riparian lands were not as prevalent. In many cases there were no regulations governing environmental protection at the time of design and construction. As a result much of this infrastructure is located in areas of sensitive environmental habitat that would be preferable to avoid all together. This is not always possible; however, the DNV strives to adhere to the most current environmental best management practices in all of our operations and capital projects.