SUPREME COURT
OF
BRITISH COLUMBIA
SEAL
13-Jul-20
Victoria
REGISTRY

Court File No. VIC-S-S-202288

No. _____

Victoria Registry

In the Supreme Court of British Columbia

Between

JAIME MASSEY, JENNIFER HOUGHTON and the REIBIN ESTATE

Plaintiffs

and

HER MAJESTY THE QUEEN IN THE RIGHT OF THE PROVINCE OF BRITISH COLUMBIA as represented by the MINISTRY OF FORESTS, LANDS AND NATURAL RESOURCE OPERATIONS, INTERFOR CORPORATION, WEYERHAEUSER COMPANY LIMITED, TOLKO INDUSTRIES LTD., NK'MIP FORESTRY CORPORATION, NK'MIP FORESTRY LLP, OSOYOOS INDIAN BAND DEVELOPMENT CORPORATION and MERCER CELGAR PULP LTD.

Defendants

Brought pursuant to the Class Proceedings Act, RSBC 1996, c.50

NOTICE OF CIVIL CLAIM

This action has been started by the plaintiff(s) for the relief set out in Part 2 below.

If you intend to respond to this action, you or your lawyer must

(a) File a response to civil claim in Form 2 in the above-named registry of this court within the time for response to civil claim described below, and

(b) Serve a copy of the filed response to civil claim on the plaintiff(s).

If you intend to make a counterclaim, you or your lawyer must

(c) File a response to civil claim in Form 2 and a counterclaim in Form 3 in the above-named registry of this court within the time for response to civil claim described below, and

(d) Serve a copy of the filed response to civil claim and counterclaim on the plaintiff(s) and on any new parties in the counterclaim.

JUDGMENT MAY BE PRNOUNCED AGAINST YOU IF YOU FAIL to file a response to civil claim within the time for response to civil claim described below.

Time for response to civil claim

A response to civil claim must be filed and served on the plaintiff(s),

(a) If you were served with the notice of civil claim anywhere in Canada, within 21 days after that service,

(b) If you were served the notice of civil claim anywhere in the United States of America, within 35 days after that service,

(c) If you were served the notice of civil claim anywhere else, within 49 days after that service, or

(d) If the time for response to civil claim has been set by order of the Court, within that time.

PART 1: STATEMENT OF FACTS

1. The Plaintiff, Jaime Massey, is a resident of Grand Forks, whose property and place of residence was made uninhabitable due to the extensive damage caused by the flooding catastrophe that started on May 8, 2018. Her address is located at 1325 – 71st Avenue, Grand Forks, British Columbia V0H 1H0.

2. The Plaintiff, Jennifer Houghton, is a resident of Grand Forks, whose property suffered extensive damages caused from the flood starting on May 8, 2018. Her address is located at 6379 12th Street, Grand Forks, British Columbia V0H 1H4.

3. The Plaintiff, the Reibin Estate (the "Estate"), is the Estate of the late Frances Reibin. Marisa Reibin-Smallwood and Diane Reibin bring this action in their capacity as the Executrixes of the Estate. The Estate consists of two properties that had suffered extensive damages and became uninhabitable resulting from the May 8, 2020 flooding of Grand Forks. The addresses are located

at 266 69th Avenue, Grand Forks, British Columbia V0H 1H0, and 6865 2nd Street, Grand Forks, British Columbia V0H 1H0.

4. The Defendant, Her Majesty the Queen in Right of the Province of British Columbia, is represented by her agent, the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (the "Ministry"). The Ministry provides provincial forestry stewardship by introducing and implementing policies, legislation and practices for forest inventory, timber supply planning, determinations the Allowable Annual Cut ("AAC") by volume, forest health and land-based research to achieve sustainable management of British Columbia's forests. British Columbia Timber Sales ("BCTS") is a program within the Ministry. BCTS auctions a significant percentage of the AAC in the Boundary and Okanagan TSA, as determined by the Office of the Chief Forester ("OCF"). Its head office is at PO Box 9507 STN PROV GOVT, Victoria, British Columbia V8W 9E2.

5. The Defendant, Interfor Corporation ("Interfor"), is a corporation incorporated under the laws of British Columbia, in the business of cutting timber and producing lumber. Its head office located at Four Bentall Centre, 1055 Dunsmuir Street, Vancouver, British Columbia V7X 1H7.

6. The Defendant, Weyerhaeuser Company Limited ("Weyerhaeuser"), is a corporation which is incorporated under the laws of Canada. Weyerhaeuser grows and harvests trees, manufactures, and distributes wood-based building materials and other natural resources. Its head office is located on at 1140 West Pender Street, Suite 440, Vancouver, British Columbia V6E 4G1.

7. The Defendant, Tolko Industries Ltd. ("Tolko"), is a corporation which is incorporated under the laws of Canada. Tolko is in the business of cutting timber and producing lumber and is a leading manufacturer of a wide range of specialty forest products. Its head office is located at 1200 Waterfront Centre, 200 Burrard Street, Vancouver, British Columbia V7X 1T2.

8. The Defendant, NK'MIP Forestry Corporation ("NK'MIP"), is a corporation which is incorporated under the laws of British Columbia. It is in the business of cutting timber and producing lumber. Its head office is located at 1155 Sen Pok Chin Boulevard, Oliver, British Columbia V0H 1T8.

9. The Defendant, NK'MIP Forestry LLP ("NK'MIP LLP"), is a limited liability partnership formed under the laws of British Columbia and is in the business of cutting timber. Its head office is located at 1155 Sen Pok Chin Boulevard, Oliver, British Columbia V0H 1T8.

10. The Defendant, Osoyoos Indian Band Development Corporation ("OIBDC"), is a corporation which is incorporated under the laws of British Columbia and in the business of cutting timber and producing lumber. Its head office is located at 1155 Sen Pok Chin Boulevard, Oliver, British Columbia V0H 1T8.

11. The Defendant, Mercer Celgar Pulp Ltd. ("MCP Ltd."), is a corporation which is incorporated under the laws of British Columbia. Its one of the largest kraft pulp mills in North America and manufactures softwood pulp, chlorine-free pulp and bio energy. Its head office is located at 1000 Cathedral Place, 925 West Georgia Street, Vancouver, British Columbia V6C 3L2.

The Proposed Class

12. The Plaintiffs bring this action on their own and behalf of a proposed class defined as: "All persons in Grand Forks, British Columbia, and within 15 kilometres of Grand Forks, whose property, place of residence, assets, business(es), health or livelihood was affected, damaged, lost or destroyed as a result of the flooding event that occurred between the 8th and 11th of May, 2018."

Forestry Stewardship Plans (FSP) and Site Plans

13. A Forest Stewardship Plan ("FSP") is a map-based, landscape-level plan of potential forest development activities that are intended to take place in its planned harvesting area. It has a term of five (5) years. The *Forest Planning and Practices Regulation* (the "*Regulation*") outlines the requirements of an FSP.

14. An FSP states how the licence holder will meet the Ministry's objectives of forestry sustainability for eleven (11) resource values specified in the *Regulation* by providing a set of measurable, verifiable results and strategies against which the Ministry enforces compliance and assures the

public of all the resource values that are conserved and protected and are not harmed by the logging of cutblocks in the specified area.

15. There are five different types of licences that are apportioned AACs by the Ministry, they are: Forest Licences Replaceable, Forest Licences Non-Replaceable, BCTS Timber Sale Licences, Woodlot Licences, and Forest Service Reserve.

16. Holders of replaceable and non-replaceable forest licences and BCTS must prepare an FSP for approval by the Ministry.

17. Holders of replaceable and non-replaceable forest licences and BCTS must prepare a site plan from their FSP prior to the start of any harvesting or road construction. Site plans identify the approximate location of cutblocks and roads, how the intended results or strategies described in the FSP apply to the site and meet stocking standards and soil disturbance limits.

18. Site plans do not require approval from the Ministry.

Administration of B.C. Crown Land and Timber in the Kettle River Basin

19. The Canadian portion of the Kettle River basin, as defined in the provincial 1:20,000 *Freshwater Atlas*, covers an area of 816,803 hectares of which 751,308 hectares are upstream of (above) the city of Grand Forks.

20. The land within the Canadian portion of the Kettle River basin is provincial Crown land. The province of British Columbia administers this Crown land by various land administration classes. The land administration classes within the Kettle River basin are the Timber Supply Area ("TSA"); Tree Farm Licence ("TFL"); and provincial parks.

21. The two TSAs within the Kettle River basin are the Boundary TSA in whole (499,054 hectares) and the Okanagan TSA in part (157,396 hectares). For the Boundary TSA, 455,102 hectares are upstream of (above) Grand Forks and 43,952 hectares are downstream of (below) Grand Forks.

The portion of the Okanagan TSA covers the high-elevation headwaters of the West Kettle River and Kettle River sub-basins and is entirely upstream of (above) Grand Forks.

22. The Defendant, the Ministry, is and was at all material times the owner of the Crown land in the Kettle River basin. The Ministry issues the licences for the harvesting of timber within the Okanagan and Boundary TSAs.

23. Prior to the 2018 Grand Forks flood, the holders of replaceable forest licences in the Boundary TSA includes the Defendants Interfor, Weyerhaeuser and Tolko, and the holders of non-replaceable forest licences included the Defendants NK'MIP, NK'MIP LLP, OIBDCC and MCP Ltd. The holders of replaceable forest licences in the portion of the Okanagan TSA are the Defendants Tolko and Weyerhaeuser.

24. For each TSA, the Ministry maintains the forest inventory and forestry data and reviews Timber Supply Reviews ("TSR") from its Forest Analysis and Inventory Branch ("FAIB").

25. For each TFL, the tenure holder maintains forestry planning, forest inventory and conducts the TSR. The only TFL within the Kettle River basin is TFL 8 and expands 77,480 hectares of Crown land and water and entirely upstream (above) from Grand Forks. Since May 1, 2008, Interfor became and continues to be the sole tenure holder for TFL 8.

26. Through the TSR process FAIB and tenure holders provide information and recommendations to the OCF to determine the AAC (volume-based figure in m^3) available for timber harvesting. FAIB defines the timber harvesting land base ("THLB"); assigns site productivity to inventory polygons; uses growth models to update polygon attributes (volume, height etc.) to the current year and to project polygon attributes over the planning horizon and uses forest estate models to simulate multi-year harvesting for a base case scenario and a number of sensitivity analyses around the base case scenario.

27. Upon determination the Minister apportions the AAC to TSA licensees and TFL tenure holders.

28. A significant majority of the AAC timber volume in the two TSAs are designated to the Defendants as licence holders.

29. In 2009, the OCF set the AAC for TFL 8 at 186,000 m^3/yr for Interfor Corporation.

30. In 2012, the OCF set the AAC for the Okanagan TSA at 3,100,000 m^3/yr. For those Defendants harvesting in the Kettle River Basin, the Minister apportioned the timber volume as:
    a. 933,091 m^3/yr to Tolko Industries Ltd. (replaceable forest licence);
    b. 180,031 m^3/yr to Weyerhaeuser Company Limited (replaceable forest licence);
    c. 604,047 m^3/yr to BCTS Timber Sale Licence.

31. In 2013, the OCF reduced the AAC for the Okanagan TSA to 3,078,405 m^3/yr owing to a Community Forest Agreement. The reduction did not affect the AAC previously apportioned to BCTS, Tolko or Weyerhaeuser.

32. In 2014, the OCF set the AAC for the Boundary TSA at 700,000 cubic metres a year (m^3/yr). The Minister apportioned the timber volume as:
    a. 327,621 m^3/yr to Interfor Corporation (replaceable forest licence);
    b. 25,944 m^3/yr to Weyerhaeuser Company Limited (replaceable forest licence);
    c. 21,503 m^3/yr to NK'MIP Forestry Corporation (non-replaceable forest licence);
    d. 287,764 m^3/yr to BCTS Timber Sale Licence;
    e. 23,000 m^3/yr to Woodlot Licence;
    f. 14,168 m^3/yr to Forest Service Reserve.

33. In 2016, the OCF reduced the AAC for the Boundary TSA to 670,142 m^3/yr due to a Community Forest Agreement. The new apportionment is:
    a. 327,621 m^3/yr to Interfor Corporation (replaceable forest licence);
    b. 25,944 m^3/yr to Weyerhaeuser Company Limited (replaceable forest licence);
    c. 21,503 m^3/yr to NK'MIP Forestry Corporation (non-replaceable forest licence);
    d. 259,764 m^3/yr to BCTS Timber Sale Licence;
    e. 50,000 m^3/yr to First Nations Woodland Tenure;
    f. 6,813 m^3/yr to Forest Service Reserve – Small Scale Salvage.

34. From 1998 to 2017, the areas of cutblocks logged by the Defendants in the Kettle Basin above Grand Forks was: 43,044 hectares by Interfor; 15,807 hectares by Tolko; and 6,567 hectares by Weyerhaeuser; 1,522 hectares by NK'MIP. BCTS laid out and sold 44,678 hectares of cutblocks.

35. Some non-replaceable Forest Licences, the 'non-AAC Lump Sum Volume', do not form an integral part of the current or past AAC for the Boundary TSA and are excluded from the totals. They consist from a licence that is under-cut or form an unsold volume in the competitive program (BCTS). NK'MIP, NK'MIP LLP, OIBDCC and MCP Ltd. have received the non-AAC Lump Sum Volume.

36. From 1971 to 2017 the amount of forestry harvesting in the Kettle River basin by decade for all licensees and BCTS was: 29,300 hectares or 13% (1971-1980); 57,100 hectares or 25% (1981-1990); 52,100 hectares or 23% (1991-2000); 40,700 hectares or 18% (2001-2010); and approximately 46,400 hectares or 21% (2010-2017).

Over-estimation of the Allowable Annual Cut

Ministry Growth Model

37. The Boundary TSA inventory is based on photographic interpretations between 1954 and 2009. Older inventories are referred to as "FIP-based", which refers to the Forest Inventory Planning ("FIP") file in which the data is stored.

38. The Variable Density Yield Prediction ("VDYP7") is a natural stand growth-and-yield model developed by FAIB. FAIB uses the model to project the growth of the existing inventory to the current date and into the future for the TSR process.

39. VDYP7 has two modes of operation – FIP mode for use with a FIP-based inventory and VRI mode for use with a newer Vegetation Resources Inventory ("VRI"). The VRI mode uses stand basal area and trees per hectare as a measure of stand density for VDYP7 input, whereas a FIP-based

inventory does not have these stand attributes and uses crown closure as a measure of stand density for VDYP7 input.

40. In a 2009 report entitled "*TSP and VDYP7 Volume Comparison*", FAIB indicated that when used in FIP mode for the Boundary TSA, VDYP7 over-estimated stand volume by approximately 20%. FAIB did not account for this over-estimation in its estimations of timber volumes in the TSR and, consequently, the OCF did not consider this over-estimation when setting the AAC for the Boundary TSA in 2014. As a result, the AAC is over-estimated, particularly in the short term (1 to 20 years).

41. The over-estimation of roughly 20% of the ACC in the Boundary TSA permits the Ministry to delegate more timber volume to forest licensees for the clearcut logging of cutblocks than what is available and sustainable for the region. This has led to increasing the frequency, duration and magnitude of peak flows. Without sufficient timber regrowth and watershed recovery the result is increased surface runoff, increased sediment transport, increased water quantity and stream channel discharge associated with flooding that caused the major flooding events in the Kettle and Granby river systems resulting in the damages to the Plaintiffs' and Class Members' property.

Watershed Management

42. Under the FRPA, licensees are required to specify results and strategies in their FSPs that meet the objectives set by government. Objectives for water in community watersheds are established under Section 8.2 of the *Regulation*.

43. There are 57 community watersheds in the Okanagan TSA covering 358,371 hectares and five community watersheds in the Boundary TSA covering 12,678 hectares.

44. The Boundary TSA has more than one hundred domestic watersheds covering an area of 206,806 ha. The Kootenay Boundary Higher Level Plan Order ("KBHLPO") specifies stream-side management provisions to reduce the impacts of forest development on streams licensed for human consumption. Specific measures to safeguard water for human consumption must be described for activities in the stream side management zone by licensees in their FSP.

45. The Equivalent Clearcut Area ("ECA") is the area that has been harvested, cleared or burned, with consideration given to the silvicultural system, regeneration growth, and location within the watershed. It is adjusted to account for the hydrological recovery of the disturbed areas due to forest regeneration and subsequent growth. Hydrological recovery factors (the degree of recovery) are generally based on the height of the regeneration in disturbed areas.

46. Most of the area covered by the domestic watersheds has an ECA value of more than 0.3 (see Peak Flow and Hydrological recovery below). The 2019 Interim Assessment Protocol for Aquatic Ecosystems in British Columbia, part of the Cumulative Effects Framework, includes the following benchmarks for ECA:
    a. 0.00 to 0.20: Very Low
    b. 0.21 to 0.30: Low
    c. 0.31 to 0.42: Moderate
    d. 0.43 to 0.55: High
    e. 0.56 to 1.00: Very High

47. The Defendants did not conduct watershed assessments and failed to consider, knowingly or otherwise, the overharvesting of timber over watersheds, the increases in the rates of sedimentation, sediment transport, and increases to the frequency, duration and magnitude of peak flows into the Kettle Basin watershed that caused the flooding of the Plaintiffs' and Class Members' property.

48. Hydrological assessments may be completed by licensees in watersheds not designated as community watersheds. These would be watersheds that have significant watershed sensitivity; watersheds with significant downstream or licensed domestic water users; watersheds where there is a high risk to human life, public infrastructure and public and private property associated with flooding; or where there is stream channel instability.

49. In 1995, the Interior Watershed Assessment Procedure ("IWAP") guidebook was developed under the Forest Practices Code ("FPC") to provide an assessment of the potential cumulative hydrological effects from past and proposed forest harvesting and road building.

50. The IWAP contains four assessments which are assessed individually and cumulatively to assess the sensitivity of the watershed to future forest development:
    a. Peak flow and hydrological recovery;
    b. Sediment source survey;
    c. Reconnaissance channel assessment procedure;
    d. Riparian assessment.

51. The Defendants have fallen below the standard of care by failing adhere to the IWAP four assessments criteria prior to timber harvesting in watersheds. This breach has compromised hydrologic recovery, increased the maximum peak flow and flow rate of water, sedimentation and sediment transport, resulting in increased frequency, duration and magnitude of peak flow flooding of the Plaintiffs' and Class Members' property.

Peak Flow and Hydrological Recovery

52. Peak flow is the maximum flow rate that occurs within a specified period of time, usually on an annual or event basis. Increases in peak flow can cause major flooding events.

53. In the IWAP, ECA and road density (see ***Road Density***) are the two primary factors considered in an evaluation of the potential effect of past and proposed forest harvesting on peak flows. The third key factor in determining ECA is the location of roads, logged, cleared or burned areas.

54. Peak flows tend to be generated by three contributors to streamflow: (1) rainfall, (2) rain-on-snow, and (3) a combination of radiation snowmelt and rain-on-snow. For each watershed, the hydrologist determines the elevational ranges for each of the three contributors to streamflow affecting peak flows.

55. In ECA determinations, the hydrologist accounts for the vertical variability in run-off generating mechanisms within the watershed (see ***Elevation of Cutblocks***).

56. In the BC interior, the spring peak flow peak, generated primarily by snowmelt and rain-on-snow, is the single largest hydrological event. Separate ECA calculations are required for

disturbances above or below the snowmelt line as disturbances above the snowmelt line have a greater potential to influence peak flows.

57. In the TSR process, ECA constraints are considered with both the cutblock adjacency and green-up constraints, as described below.

58. The Defendants have breached their standard of care by failing to adhere to the watershed assessments that would have properly considered the spring peak flow, the ECA and the road density in their cutblock site plans both below and above the snowmelt line. Their logging has contributed to increases in the frequency, duration and magnitude of peak flows, sedimentation and sediment transport, resulting in the severe flooding event on the Plaintiffs' and Class Members' property from May 8th to 11th, 2018.

Sediment Source Survey

59. The sediment source survey is an inventory of significant contributors of fine-grained and coarse-textured sediment within the watershed. Forestry related sediment sources are primarily associated with landslides, gullies, stream bank erosion and the road network.

60. Increases in sedimentation can affect stream flow and intensify the effect of an increase in peak flow on major flooding events.

61. The Defendants' overharvesting of timber resources has significantly increased the rate of sedimentation from their land, increased the stream flow into the Kettle Basin watershed and increased the frequency, duration and magnitude of major flooding events on the Plaintiffs' and Class Members' property.

Reconnaissance Channel Assessment

62. In a reconnaissance channel assessment, the hydrologist reviews historical aerial photography to document stream channel disturbances, locations of major sediment sources and locations of disturbed riparian areas.

Riparian Assessment

63. A riparian assessment determines the role of riparian vegetation and woody debris in maintaining channel structure and how this role is being affected by logging.

Factors Affecting Watershed Management in the Kettle River Basin

Maximum Cutblock Size, Cutblock Adjacency, ECA and Green-up

64. Under section 64 of the *Regulation*, the net area to be reforested for a cutblock cannot exceed 40 hectares of land in the Kootenay Boundary Forest Region and includes exceptions, such as timber salvage and sanitation.

65. Under Section 65, the *Regulation* specifies that a new cutblock cannot be harvested adjacent to an existing cutblock unless certain stocking and height conditions in the existing cutblock have been met.

66. The forest estate models used in the TSR process do not have the capabilities of modelling the cutblock adjacency rules specified in the *Regulation* or the ECA calculation specified in the IWAP. As a proxy, the TSR uses what is termed “green-up”. This applies a constraint that a maximum percent of a landscape unit cannot be less than a certain height.

67. For the Okanagan TSR, harvesting in a landscape unit was restricted to no more than 30% of the area being less than 2.0 metres in height. For the Boundary TSR, no more than 35% of a landscape unit could be less than 3.0 metres in height.

68. For the TFL 8 TSR, no more than 25% of a landscape unit could be less than 2.5 metres in height, but this was only modelled for the first 20 years of the planning horizon.

69. In all of the TSRs, the green-up approximation under-estimates ECA, resulting in the AAC being over-estimated. The over-estimation of the ACC in the Boundary and Okanagan TSAs permits the Ministry to delegate more timber volume to forest licensees and BCTS for the clearcutting of cutblocks than what is available and sustainable for the region. Without sufficient timber regrowth and watershed recovery, increased surface runoff and increased water quantity will

enter the Kettle and Granby river systems, increasing the sediment transport and the frequency, duration, and magnitude of flooding events to the Plaintiffs' and Class Members' property.

70. In the 2017 Okanagan TSR data package, FLNRO hydrologists have informed the OCF that current green-up heights are insufficient for hydrological recovery. The hydrologists recommend a minimum green-up height of five metres. The OCF has rejected the use of a minimum 5-metre green-up height in the base case analysis. The OCF agreed to model the 5-metre minimum green-up height, but only as a sensitivity analysis.

71. Cutblocks laid out by licensees and BCTS may meet the adjacency constraints specified in the *Regulation*, but they fail to meet well established hydrological recovery requirements recommended by the Ministry's hydrologists. Larger cutblocks accumulate more snow, are less shaded and have more exposure to rain-on-snow events. This leads to increases in the frequency, duration and magnitude of peak flows over a shorter period of time, resulting in major flooding events to the Plaintiffs' and Class Members' property.

72. From 1998 to 2017, 41% of all cutblocks logged (111,615 hectares) in the Kettle River basin upstream of (above) Grand Forks were greater than 40 hectares in size. In the TFL 8 region, 37% of the cutblocks logged were greater than 40 hectares.

73. Within the Boundary TSA, 38% of Interfor's cutblocks logged were greater than 40 hectares; 55% of First Nations' cutblocks were greater than 40 hectares; and 50% of BCTS' cutblocks logged were greater than 40 hectares. Within the portion of the Okanagan TSA, 39% of Tolko's cutblocks logged were greater than 40 hectares and 32% of Weyerhaeuser's cutblocks logged were greater than 40 hectares.

74. The result of the Defendants logging cutblocks greater than 40 hectares below and above the snowmelt line and omitting or failing to properly consider the hydrological implications has compromised hydrological stability and recovery. There is now a material increase in peak flow, frequency, duration, and magnitude of peak flows that have resulted in major flooding events on the Plaintiffs' and Class Members' property.

75. The Defendant, Interfor, has unsustainably clearcut tens of thousands of hectares of land during the last several decades in the Kettle River basin and has extensively profited from the timber resources. This has increased the frequency, duration and magnitude of peak flows that resulted in the May 8-11, 2018 flooding event. Interfor announced in March of 2020 that they will be reducing production in Grand Forks by approximately 60 per cent and withdrawing production entirely by 2023.

Elevation of Cutblocks

76. In ECA determinations, the hydrologist accounts for the vertical variability in run-off generating mechanisms within the watershed.

77. Watersheds are divided into elevation zones that represent the dominant form of precipitation that drives peak flow generation in the watershed.

78. The H60 line is the elevation contour above which 60% of the forested land in a watershed is located and is a significant region for the major snowmelt peak flows. In the Kettle River basin, snowmelt is the dominant driver of peak flow.

79. Clearcut cutblocks above the snowmelt line have a greater impact in increasing peak flow than those below the snowmelt line.

80. From 2014 to 2017, in the four largest sub-basins within the Kettle River basin (Boundary Creek, Kettle River, West Kettle River and Granby River), 69% of all cutblocks were located above the H60 line.

81. The Defendants' clearcut harvesting above the snowmelt line has adversely affected the hydrology and geomorphology of watersheds in the Kettle River basin. Clearcut harvesting coupled with an increased rate of logging at mid to high elevations has negatively impacted the rate of snowmelt, siltation, channel stability and on the timing of waterflow from their land. This increases the frequency, duration and magnitude of peak flows and induces major flood events in the 50- to 100-year return periods to occur more frequently on the property of the Plaintiffs and Class Members.

Road Density

82. Road density can influence peak flows in several ways. Ditchlines intercept surface flows and transfer the water to streams much faster than through soil. The compacted surfaces of roads reduce infiltration and transfer intercepted precipitation and snowmelt to ditchlines, and directly to the streams. Roads can also intercept and transfer surface water. Road density can impact peak flows. As with logged areas, the location of roads within a watershed significantly impacts peak flows.

83. Road density standards are voluntary in the Boundary TSA. They are appended to a Government Action Regulation (GAR) order 8-373 (the "Order").

84. A recent Forest Practices Board ("FPB") investigation concluded in August 2017 that the road density in the Boundary TSA exceeded recommended maximums and the government has not taken adequate action to address the road density situation.

85. The FPB found using 2006 data that road densities exceeded 0.62 km/ km^2. The complainant, a local group from Grand Forks called the Friends and Residents of the North Fork, found that road density exceeded 0.60 km/ km^2 in 59% of the wildlife habitat area for grizzly bears as of 2013.

86. The FPB report states, "While both BCTS and Interfor said that their practices are consistent with the Order's legal requirements, neither implemented the road density recommendations from the Order."

87. The Defendants have increased road density in the Boundary and Okanagan TSAs. This has resulted in increased rates of transfer of snowmelt water and surface runoff to streams and increased sedimentation, sediment transport and peak flows in the Granby and Kettle River systems. The cumulative effects have increased the frequency, duration, and magnitude of severe flooding events on the Plaintiffs' and Class Members' property.

The Grand Forks Flooding Event of May 8-11, 2018

88. The community of Grand Forks is located in the Kettle River basin and has a population of roughly 4,000, in the Boundary Country of the West Kootenay region of British Columbia. It is on the confluence of the Granby and Kettle Rivers, a tributary of the Columbia River between the Okanagan Highland Range of the Monashee Mountains and the Christina Mountain Range.

89. On or around May 8 to May 11, 2018 the town of Grand Forks experienced an unprecedented flooding event. The severity of this event has been the result of forestry harvesting and watershed resource mismanagement that has significantly increased levels of sedimentation, sediment ransport, water quantity, the timing of flow and the runoff into the Granby and Kettle rivers during peak melt seasons, increasing the frequency, duration and magnitude of flood events in the range of 50- to 100-year return periods, and raising the likelihood of destructive flooding events on the Plaintiffs' and Class Members' property.

90. The flood waters that caused the Grand Forks flooding had emanated from the Defendants' land. It is a direct result of the overharvesting cutblocks by the Defendants at mid to high elevations, including the cutblocks sold by BCTS for harvesting in the Kettle River basin.

91. The overharvesting of timber by the Defendants and the sales of cutblocks by BCTS have changed the natural flood cycle in the Kettle River basin to permanently increase the frequency, duration and magnitude of peak flows of flooding events in and around the town of Grand Forks.

92. As a result, further massive flooding has occurred in late May and early June of 2020.

PART 2: RELIEF SOUGHT

93. An order certifying this action as a class proceeding pursuant to the *Class Proceedings Act,* RSBC 1996, c.50.

94. An order appointing the Plaintiffs as the representative Plaintiffs for the Class Members.

95. An order for the aggregate assessment of monetary relief and distribution to the Plaintiffs and Class Members.

96. Declarations that:

    a. The Defendants, jointly and severally, by reason of the nuisance have caused the Plaintiffs and Class Members to suffer an interference with the use and enjoyment of their property that resulted from the Defendants having caused the flooding event of May 8-11, 2018 by unsustainably harvesting timber in the Kettle River basin;

    b. The flooding event of May 8-11, 2018 resulted from the forestry practices of the Defendants, jointly and severally, and caused substantial damages to the Plaintiffs' and Class Members' property, including but not limited to their residences, businesses, livelihoods, neighbourhoods, local parks, and surrounding areas;

    c. The Defendants, jointly and severally, had unreasonably conducted their timber harvesting operations that directly resulted in the flooding event of May 8-11, 2018 to the Plaintiffs' and Class Members' property;

    d. The Defendants, jointly and severally, knew or ought to have known of the risk that their timber overharvesting activities would have caused flooding to the Plaintiffs' and Class Members' property, and they failed to sustainably harvest timber resources in the Kettle River basin in a manner that would have avoided or prevented the aforementioned flooding event;

    e. The Defendants, jointly and severally, owed a duty of care to the Plaintiffs and Class Members to conduct their clearcutting timber operations sustainably and prudently in the Kettle River basin;

    f. The Defendants, jointly and severally, breached the standard of care by failing to sustainably conduct timber harvesting operations in the Kettle River Basin watershed and caused increases to the frequency, duration and magnitude of flooding events, that has resulted in the flooding event of May 8 to 11, 2018 in Grand Forks.

97. Damages for the losses suffered by the Plaintiffs and Class Members, including and without limiting the foregoing, loss of value of their properties, residences, and their contents, expenses for moving, and repairs.

98. Punitive damages in light of the high-handed disregard of the safety and property of the Plaintiffs and Class Members.

99. Pre- and post-judgment interest.

PART 3: LEGAL BASIS

100. The Plaintiffs relies on the following statutes:

a. *The Class Proceedings Act*, R.S.B.C. 1996, c.50;
b. *Forest Range and Practices Act*, S.B.C. 2002, c.69;
c. *Land Act*, R.S.B.C. 1996, c.245;
d. *Wildlife Act*, R.S.B.C. 1996, c.488;
e. *Forest Act*, R.S.B.C. 1996, c.157;
f. *Negligence Act*, R.S.B.C. 1996, c.333.

Nuisance: The Defendants

101. The substantial interference of the use and enjoyment of the Plaintiffs' and Class Members' land resulting from the Grand Forks flood of May 8 to 11, 2018 was a direct consequence of the Defendants' overharvesting and clearcutting activities that increased river sedimentation, sediment discharge and transport, and water quantity, an increased the frequency, duration and magnitude of peak flows from their land into the Kettle River basin.

102. The nuisance that emanated from the Defendants' land onto the Plaintiffs' and the Class Member's property resulted in substantial damages including, but not limited to:

a. Damages and destruction to the Grand Forks community, including but not limited to the homes of its residences, business owners, livelihoods, neighbourhood streets and local parks, surrounding areas, and the use and enjoyment of the land on which these buildings are located;

b. Local businesses suffered damages and loss of profit;

c. Mental distress from the Plaintiffs and the Class Members, and anguish from knowingly residing on land that is increasingly susceptible to potentially recurring destructive flooding events.

103. The Defendants' timber harvesting operations were unreasonable in the circumstances because:

a. The overharvesting and clearcutting of timber in cutblocks larger than 40 hectares knowingly increased the sedimentation, water quantity, sediment discharge and the timing of peak flow into the Granby and Kettle river systems, resulting in increased frequency, duration and magnitude of flood events in the Kettle River basin;

b. The Defendant, the Ministry, knowingly overestimated the AAC for the Boundary TSA by 20% resulting in over-apportioning the AAC to TSA licensees and TFL tenure holders causing hydrologic runoff and increased frequency, duration and peak flow from Crown land into the Granby and Kettle River systems;

c. The Defendants did not conduct watershed assessments and knowingly failed to consider the overharvesting of timber over watersheds, the increases to the rates of sedimentation and sediment transport and increases to the frequency, duration and magnitude of peak flows into the Kettle Basin watershed that caused the flooding of the Plaintiffs' and Class Members' property.

d. The Defendants' road density throughout the Boundary TSA exceeded Government Action Regulation guidelines and failed to deactivate roads to reduce road density, contrary to FPB recommendations and increased the rates of transfer of snowmelt water, surface runoff and sedimentation that led to increased peak flows in the Granby and Kettle River systems and resulted in the flooding of the Plaintiffs' and Class Members' property.

Negligence: The Ministry (BCTS)

104. BCTS owes a duty of care to the Plaintiffs and Class Members to use accurate forestry data, formulated policies, use expert and professional opinions and adhere to technical standards to create sustainable cutblocks that will not increase sedimentation, water quantity, and the timing of flow from its auctioned land that can cause major flooding events of the Kettle Watershed basin and contribute to the flooding of the Plaintiffs' and Class Members' property.

105. The Defendant, BCTS, owed a duty of care to the Plaintiffs and the Class Members to:

a. Ensure all cutblocks adhere to the Regulation and do not exceed 40 hectares of land in the Boundary and Okanagan TSA prior to auction and the location of cutblocks, notably cutblocks in the mid to high elevations have met the objectives pursuant to the *Regulation*;

b. Ensure that their FSPs are conducted pursuant to the practical implementation of formulated policies and based on expert and/or professional assessment;

c. Conduct prudent and accurate hydrological assessments in community watersheds prior to the auctioning of cutblocks to the impacts on sedimentation, water quantity, and the timing of flow on its land that can cause major flooding events;

d. Reduce road density to conform with Government Action Regulation guidelines.

106. The standard of care owed by BCTS is significant given the access to forestry inventory and TSR information from FAIB and the responsibility to establish and auction harvest timber cutblocks that sustainably manage rates of sedimentation, water runoff, timing of peak flow and runoff emanating from their land in the Kettle River basin.

107. The Defendant, BCTS, breached the standard of care by:

a. Known or ought to have known that the OCF and FAIB knew that the AACs for the Boundary and Okanagan TSAs were over-estimated and would increase sedimentation, increase water quantity, the timing of flow and surface runoff from the clearcutting of

cutblocks on Crown land would result in increased frequency and severity of flooding for the Class Members' property;

b. Known or ought to have known that the determination of the AAC for the Boundary TSA is overestimated by 20% resulting in overharvesting of timber resources and in an increase in sedimentation and water quantity, timing of flow and surface runoff from Crown land into the Kettle River basin, causing increased frequency and severity of flooding events in the Kettle River basin watershed;

c. Failing to ensure all cutblocks did not exceed 40 hectares of land in the Boundary and Okanagan TSA prior to auction;

d. Failing to ensure FSPs and community watershed assessments have adhered to the objectives in the *Regulation* to account for the adverse effects of overharvesting and clearcutting in cutblocks;

e. Ignoring the recommendations of the Forest Practices Board in 2017 to reduce road density in the Boundary TSA resulting in increased water sedimentation, discharge from auctioned cutblocks and a rise in surface runoff into the Kettle Watershed basin.

108. BCTSs conduct of creating and auctioning cutblocks has knowingly and materially contributed to the overharvesting of timber resources, resulting in increased sedimentation and in increased water quantity, the timing of flow and surface runoff from Crown land into the Kettle River basin, causing increased frequency and severity of flooding events to the Plaintiffs' and Class Members' property.

109. BCTSs negligent conduct caused the Plaintiffs and Class Members to suffer substantial damages, as particularised below.

Negligence: Interfor, Weyerhaeuser, Tolko, NK'MIP, NK'MIP LLP, OIBDCC and MCP Ltd.

110. It is reasonably foreseeable that a failure to conduct sustainable harvesting in the Boundary and Okanagan TSAs and Interfor in TFL 8 would increase the sedimentation, quantity of water, the timing of the peak flow and surface runoff that would emanate from their land into the Kettle and Grange river systems.

111. The Defendants owed a duty of care to the Plaintiffs and the Class Members to:

a. Ensure all cutblocks in the Boundary and Okanagan TSA adhere to the *Regulation* and do not exceed 40 hectares and the location of cutblocks, notably cutblocks in the mid to high elevations have met the objectives in the *Regulation*;

b. Conduct FSPs to meet the objectives set by the government pursuant to the *Regulation* that every cutblock can be both measured and verified to sustainably manage the sediment discharge, quantity of water and the timing of the flow of surface runoff emanating from their land;

c. Conduct watershed assessments over community watersheds to prevent increasing the sedimentation, sediment transport, water quantity, timing of flow and surface runoff from their land to prevent increases to the frequency and severity of flooding events;

d. Reduce road density to conform with Government Action Regulation guidelines.

112. The standard of care owed by the Defendants to the Plaintiffs and the Class Members is significant because they have the responsibility to ensure timber harvesting would sustainably manage water runoff, timing of flow and runoff emanating from their land.

113. The Defendants did not meet a reasonable standard of care. Particulars of the breach of the standard of care include, but are not limited to:

a. Failing to sustainably harvest cutblocks resulting in increased sedimentation, sediment transport, water quantity, the timing of flow and surface runoff from their land into the Granby and Kettle rivers causing the Grand Forks flood of May 8 to 11, 2018;

b. Failing to limit cutblocks to 40 hectares, notably above the snowmelt line, negatively impacting flood and geomorphic regimes, increased sedimentation, sediment transport, water quantity, and the timing of flow in watersheds that resulted in increased runoff into the Kettle and Granby river system;

c. Failing to conduct watershed assessments resulting in increased sedimentation, sediment transport increased water quantity and timing of peak flow into the river basin, resulted in the Grand Forks flood of May 8 to 11, 2018;

d. Ignoring the recommendations of the Forest Practices Board in 2017 to reduce road density in the Boundary TSA resulting in increasing sedimentation, increasing surface run-off of water increased water sedimentation, water quantity and timing of peak flow into the Kettle basin watershed.

114. As a result of the negligence caused by the Defendants, the Plaintiffs and Class Members have suffered substantial damages, as particularised below.

Damages

115. As a result of the nuisance and negligence caused by the Defendants, the damages suffered by the Plaintiffs and the Class Members was significant and includes, but is not limited to:

d. Damages to their residence and other building owned and occupied by the Plaintiffs and Class Members;

e. Damages to the use and enjoyment to their land on which their residences and other buildings were located;

f. The damages and contamination of soil and buildings;

g. Damage and loss of personal property;

h. Physical injury and negative health concerns resulting from flooding, including but not limited to, the exposure to the bacteria, mold, and other harmful contaminants in the flood waters;

i. Loss of amenities of life and loss of community;

j. Mental, emotional, psychological damage and loss of enjoyment of life;

k. Loss of income and loss of future income.

Plaintiffs' address for service:

PETER I. WALDMANN LAW CORPORATION
Peter I. Waldmann
2 Government Street
Victoria BC V8V 2K3
Email: peter@peteriwaldmann.com

Place of Trial: Victoria Law Courts

Address of the registry: 850 Burdett Avenue, Victoria, BC V8W 1B4

Date: July 13, 2020

Signature of
[ ] Plaintiff [X] lawyer for Plaintiffs

Rule 7-1 (1) of the Supreme Court Civil Rules states:
(1) Unless all parties of record consent or the court otherwise orders, each party of record to an action must,
within 35 days after the end of the pleading period,

(a) prepare a list of documents in Form 22 that lists

(i) all documents that are or have been in the party's possession or control and that could, if available, be used by any party at trial to prove or disprove a material fact, and (ii) all other documents to which the party intends to refer at trial, and

(b) serve the list on all parties of record.

[*The following information is provided for data collection purposes only and is of no legal effect.*]

Appendix

Part 1: CONCISE SUMMARY OF NATURE OF CLAIM:

The Plaintiff's claim is against the Defendants for damages for nuisance and negligence.

Part 2: THIS CLAIM ARISES FROM THE FOLLOWING:

[*Check one box below for the case type that best describes this case.*]

A personal injury arising out of:

[ ] a motor vehicle accident
[ ] medical malpractice
[X] another cause

A dispute concerning:

[ ] contaminated sites
[ ] construction defects
[ ] real property (real estate)
[ ] personal property
[ ] the provision of goods or services or other general commercial matters
[ ] investment losses
[ ] the lending of money
[ ] an employment relationship
[ ] a will or other issues concerning the probate of an estate
[X] a matter not listed here

Part 3: THIS CLAIM INVOLVES:

[*Check all boxes below that apply to this case*]

[X] a class action

[ ] maritime law

[ ] aboriginal law

[ ] constitutional law

[ ] conflict of laws

[ ] none of the above

[ ] do not know

The *Court Order Interest Act*, R.S.B.C. 1996, c. 79.

No. _____
Victoria Registry

In the Supreme Court of British Columbia

Between

JAIME MASSEY, JENNIFER HOUGHTON and the REIBIN ESTATE

Plaintiffs

and

HER MAJESTY THE QUEEN IN THE RIGHT OF THE PROVINCE OF BRITISH COLUMBIA as represented by the MINISTRY OF FORESTS, LANDS AND NATURAL RESOURCE OPERATIONS, INTERFOR CORPORATION, WEYERHAEUSER COMPANY LIMITED, TOLKO INDUSTRIES LTD., NK'MIP FORESTRY CORPORATION, NK'MIP FORESTRY LLP, OSOYOOS INDIAN BAND DEVELOPMENT CORPORATION and MERCER CELGAR PULP LTD.

Defendants

Brought pursuant to the Class Proceedings Act, RSBC 1996, c.50

NOTICE OF CIVIL CLAIM

Peter I Waldmann
Barrister & Solicitor
Peter I Waldmann Law Corporation
2 Government Street
Victoria B.C. V8V 1B4
Tel: (416) 921-3185