NEW BRUNSWICK

REGULATION 90-136

under the

CLEAN WATER ACT

(O.C. 90-887)

Filed November 8, 1990

Under subsection 14(1) of the *Clean Water Act*, the Lieutenant-Governor in Council approves the attached Order designating water supply watersheds as protected areas in which land use would be controlled within 75 metres of all watercourses contained in the watersheds.

ORDER OF DESIGNATION OF THE MINISTER OF THE ENVIRONMENT OF NEW BRUNSWICK

Under the provisions of Subsection 14(1) of the *Clean Water Act* Chapter C-6.1 S.N.B. 1989 as amended:

I hereby designate as **Protected Areas**, lands within seventy-five metres of the banks of watercourses located within the watersheds named herein, which watercourses are outlined in red on plans of the watersheds attached hereto and referred to as A1 to A31 inclusive. The **Protected Areas** are those portions of land upstream of the respective surface water supply intakes of the Municipalities set forth herein.

Municipality		Watershed
Baker Brook	A1	Ruisseau à Zépherin Watershed
Bath	A2	Watershed Of Unnamed Tributary To Saint John River
Bathurst	A3	Carters Brook Watershed
	A4	Middle River Watershed
Campbellton	A5	Prichard Lake - Smith Lake Watershed
Clair	A6	Ruisseau Thompson Watershed
Dalhousie	A7	Charlo River Watershed
Edmundston	A8	Ruisseau à Blanchette Watershed
	A9	Rivière Iroquois Watershed
Eel River	A10	Eel River Watershed
Crossing		
Moncton	A11	Turtle Creek Watershed

	A12	McLaughlin Road Reservoir Watershed
Perth-Andover	A13	Huds Brook Watershed
Petit-Rocher	A14	Nigadoo River Watershed
Plaster Rock	A15	Tobique River Watershed Downstream Of The Mouth Of Two Brooks Only, Including The Watersheds Of All Tributaries Which Flow Into The Tobique River Watershed Downstream Of The Mouth Of Two Brooks
Riverside-	A16	Arabian Vault Brook Watershed
Albert		
Rivière Verte	A17	Green River Watershed Downstream Of The MouthOf Little Forks Branch Green River Only, Including The Watersheds Of All Tributaries Which Flow Into The Green River Watershed Downstream Of The Mouth Of Little Forks Branch Green River
Rothesay	A18	Carpenter Pond Watershed
Sackville	A19	Ogden Mill Brook Watershed
Saint-Basile	A20	Watershed Of Unnamed Tributary To Ruisseau Des Smyth
Saint-François-		
de-Madawaska	A21	Watershed Of Unnamed Tributary To Saint John River
Saint-Hilaire	A22	Ruisseau à Félix-Martin Watershed
Saint-Jacques	A23	Rivière à la Truite Watershed
	A24	Watershed Of Unnamed Tributary To Madawaska River
Saint John	A25	Loch Lomond Watershed
	A26	East and West Musquash Watershed
	A27	Spruce Lake Watershed
Saint-Quentin	A28	Five Fingers Brook Watershed
St. Andrews	A29	Chamcook Lake Watershed
St. Stephen	A30	Dennis Stream Watershed
Verret	A31	Ruisseau Trois-Milles Watershed

- 1. The requirements described in Scheduled B are imposed in relation to this Order.
- 2. This may be cited as the Watercourse Setback Designation.
- 3. The commencement date of this Order is November 8, 1990.

Dated this 1st day of November, 1990.

VAUGHN BLANEY

Minister of the Environment

SCHEDULE B

1. In this Schedule:

"act of God" means an extraordinary occurrence or circumstance that is directly and exclusively due to natural causes without human intervention, which could not by any amount of ability have been foreseen or, if foreseen, could not by any amount of human care and skill have been resisted;

"agricultural activity" means an activity which uses land for the purpose of producing crops or raising livestock and includes operating a plant nursery, greenhouse, riding school, riding stable, commerical dog kennel and sod farming;

"approved watercourse crossing" means a watercourse crossing which has been approved by the Minister of the Environment under the Watercourse Alteration Regulation;

"distribution system" means works that convey or is able to convey water from the watercourse to the users including the intake structure, pipes, man-made storage reservoirs, pumping stations, fire hydrants, service connections and the associated valves;

"dwelling unit" means a room or suite of two or more rooms designed or intended for use by an individual or family, in which culinary facilities and sanitary conveniences are provided for the exclusive use of such individual or family;

"green manuring" means incorporation of plant material, other than the primary crop, into the soil, while green or soon after maturity, for the purposes of improving the soil.

"landscaping" means the alteration of existing ground conditions together with the construction of ground features and includes minor structures, but excludes major structures such as garages, swimming pools and ponds;

"mineral extraction" means the extraction of any natural, solid, inorganic or fossilized organic substance, but does not include:

- (a) sand, gravel, clay, or soil unless it is to be used for its chemical or special physical properties, or both or where it is taken for contained minerals;
- (b) ordinary stone used for building or construction;

"mineral processing" means the dry and wet crushing of ore or other mineral bearing product in order to concentrate the grade of ore;

"multiple-family dwelling" means a dwelling containing more than one dwelling unit;

"public beaches" means public and/or private land on which the general public have access for the purpose of swimming;

"public boat launching areas" means public and/or private land on which the general public have access for the purpose of launching boats;

"rip-rap" means clean, inorganic, non-ore-bearing, non-toxic, angular, durable, quarried or field rock obtained from a non-watercourse source with at least 60 percent of the rock 0.03 m³ or larger;

"road" means any road or street constructed in order to carry out permitted activities within the Protected Area as defined under this Order;

"selection cut" means a method of cutting trees such that

- (a) a well-distributed stand of trees and other vegetation is maintained,
- (b) the trees cut are limited to 10 centimetres or more in diameter at 1.36 metres above ground level, and
- (c) no openings greater than 300 square metres are created in the forest canopy;

"single-family dwelling" means a dwelling containing only one dwelling unit;

"surface mineral exploration work" means original exploration and development work and includes:

- (a) establishing grid lines;
- (b) general prospecting;
- (c) geological, geophysical and geochemical surveying;
- (d) drilling where core or cuttings are taken and logged or analyzed;
- (e) trenching where the ore-body is exposed but no bulk sample taken;
- (f) geophysical logging of drill holes;
- (g) logging of drill core or cuttings;
- (h) boundary or control surveys and topographic mapping;

"underground exploration/development work" means all non-production work required to investigate and develop an ore-body not considered as surface mineral exploration/development work as defined in this Order:

"underground storage tank" means a storage tank that has ten percent or more of its volume, including the volume of attached underground piping, below adjacent ground level;

- 2. All uses of land, developments, activities, or things not permitted herein are prohibited within a **Protected Area.**
- 3. **Within a Protected Area,** the maintenance, development or expansion of a municipal distribution system shall be carried out provided the proper permits are obtained and care and concern for the watershed water quality is exercised.
- 4. Within a **Protected Area**, a person or body corporate may do the following, provided no contaminant is added to any watercourse and all existing applicable municipal, provincial and federal laws are adhered to:

- (A) Enjoy access for primitive recreational uses including but not limited to fishing, hiking, hunting, wildlife study, wild crop harvesting by non-motorized mechanical means, trapping, canoe portaging, cross-country skiing and snow-shoeing;
- (B) Operate a motorized vehicle on provincial highways existing on the date of commencement of this Order;
- (C) Undertake surveying and sign posting;
- (D) Carry out emergency operations conducted for the public health, safety or general welfare such as natural resource protection, law enforcement and search and rescue operations;
- (E) Maintain, renovate or make additions to existing single-family and multiple-family dwellings that have on-site sewage disposal facilities that meet the requirements of the *General Regulation Health Act* provided that
- (i) All existing residential buildings are not further converted to multiple-family dwellings or apartments;
- (ii) All existing multiple-family units are not further converted such that the number of family units is increased;
- (iii) Measures are taken to prevent the discharge or loss of sediments into the watercourse by
 - (a) Installing a sediment control device between the construction site and the watercourse before construction,
 - (b) Storing fill material near the 75 metre line or at a greater distance if practical, and
 - (c) Stabilizing exposed soil within 60 days after the beginning of construction;
 - (E.1) After notification to the Minister, rebuild a single-family or multiple-family dwelling that has been damaged or destroyed provided that it is no closer to the watercourse than the original dwelling and the requirements of subparagraph (E)(iii) are met;
 - (E.2) On properties containing a single-family or multiple-family dwelling,
 - (i) Maintain or upgrade the existing septic system,
 - (ii) Carry out routine residential property maintenance, and
 - (iii) Carry out additional landscaping provided that the landscaping is at least 5 metres from the banks of the watercourse and no trees are cut within 15 metres from the banks of the watercourse;
 - (F) Remove dead and blown down trees within 15 metres of the banks of a watercourse only on residential properties containing an existing single-family or existing multiple-family dwelling:
 - (F.1) Within 1 kilometre upstream of a surface water supply intake, carry out tree planting activities between 30 and 75 metres from the banks of the watercourse;
 - (F.2) At a distance greater than 1 kilometre upstream of a surface water supply intake, carry out tree planting activities between 15 and 75 metres from the banks of the watercourse;
 - (G) Within 1 kilometre upstream of a surface water supply intake, selection cut by mechanical or non-mechanical means between 30 and 75 metres from the banks of a watercourse provided that;
 - (i) No more than 30 percent of the stems, up to 30 percent of the volume, on any one property within a **Protected Area** are cut;
 - (ii) Any property mentioned in G(i) above shall only be cut once every five years;
 - (iii) Cutting occurs only from November 1 to March 31, inclusive, of the following year north of 46 degrees N. latitude, excluding the Village of Perth-Andover and the Village of Bath;
 - (iv) Cutting occurs only from January 1 to March 31, inclusive, of each year south of 46 degrees N. latitude, including the Village of Perth-Andover and the Village of Bath;
 - (G.1) At a distance greater than 1 kilometre upstream of a surface water supply intake, selection cut by mechanical or non-mechanical means between 15 and 75 metres of a watercourse provided that

- (i) No more than 30 per cent of the stems, up to 30 per cent of the volume of trees, on any one property is cut once every five years or the volume of trees cut is cut in accordance with a forest management plan prepared by a Registered Professional Forester as defined in *The New Brunswick Foresters Act*, 1958;
- (ii) Cutting occurs only from November 1 to March 31, inclusive, of the following year north of 46 degrees N. latitude, excluding the Village of Perth-Andover and the Village of Bath;
- (iii) Cutting occurs only from January 1 to March 31, inclusive, of each year south of 46 degrees N. latitude, including the Village of Perth-Andover and the Village of Bath;
- (H) Within 1 kilometre upstream of a surface water supply intake, carry out existing agricultural activities between 30 and 75 metres from the banks of those watercourses identified on plans A1 to A31 inclusive provided that:
- (i) Plowing or tilling is contoured across the slope;
- (ii) Plowing or tilling shall not occur on slopes greater than 5 horizontal to 1 vertical, without diversion terraces as specified in Implementation Guidelines for Cooperation Agreement Canada-New Brunswick on Agricultural Food Development;
- (iii) Surface runoff from each field does not flow directly into the watercourse;
- (iv) Fields utilized for livestock grazing shall have a suitable fence constructed along the periphery of the 30 metres in order to allow the livestock no closer than 30 metres to the watercourse;
- (v) The practise of green manuring shall be required in addition to inorganic fertilizing;
- (H.1) At a distance greater than 1 kilometre upstream of a surface water supply intake, carry out existing agricultural activities between 15 and 75 metres from the banks of those watercourses identified on plans A1 to A31 inclusive, provided that:
- (i) The requirements of subparagraphs (H)(i), (ii), (iii) and (v) are met;
- (ii) Fields utilized for livestock grazing have a suitable fence constructed along the periphery of the 15 metres in order to allow the livestock no closer than 15 metres to the watercourse;
- (H.2) Notwithstanding paragraph (H.1), at a distance greater than 1 kilometre upstream of a surface water supply intake, hay removal is permitted up to 5 metres from the banks of a watercourse;
- (I) Within 1 kilometre upstream of a surface water supply intake, spray pesticides between 30 and 75 metres from the banks of those watercourses identified on plans A1 to A31 inclusive provided that:
- (i) Any person who sprays pesticides within this area holds a Class B Level 4 or other appropriate certification under the *Pesticides Control Act*;
- (I.1) At a distance greater than 1 kilometre upstream of a surface water supply intake, spray pesticides between 15 and 75 metres from the banks of those watercourses identified on plans A1 to A31 inclusive provided that any person who sprays pesticides within the area holds a Class B Level 4 certificate or other appropriate certification under the *Pesticides Control Act*;
- (J) Construct roads at approved watercourse crossings provided that:
- (i) Off-take ditches shall be constructed to help prevent the direct discharge of sediment into a watercourse;
- (ii) Off-take ditches or water diversion bars shall be constructed along the ditch of the road at spacings determined by dividing 500 metres by the road grade (in percent);
- (iii) For every hectare of exposed construction area, sediment basins or traps having a minimum storage volume of 190 cubic metres shall be constructed to intercept overland flow;
- (iv) Sediment traps shall be maintained in the ditches until grading and stabilization of the entire construction site is completed;
- (v) All exposed bank material shall be immediately stabilized to reduce siltation of the watercourse through the use of vegetation and/or riprap;
- (vi) All road surfaces shall have a minimum shoulder to shoulder width of 5.5 metres with the exception of a logging road and a residential driveway to a single family dwelling which shall have a minimum shoulder to shoulder width of 3.5 metres;
- (vii) The roadbed of all roads, except logging roads, shall be surfaced with clean, good draining, coarse granular material, asphalt or chip-seal;

- (viii) Water bars shall be installed across all roads which are no longer used. They shall extend at least 300 millimetres above the road surface and 300 millimetres below the road surface and spaced as follows:
 - (a) 1 2 % slope, every 75 metres;
 - (b) 3 5 % slope, every 50 metres;
 - (c) 6 10 % slope, every 30 metres;
 - (d) 11 15 % slope, every 20 metres; and
 - (e) Greater than 15 % slope, every 15 metres;
 - (ix) Borrow pits and topsoil disposal piles shall not be located within the **Protected Area**;
 - (x) All rights-of-way, landing areas and borrow pit locations shall be pre-cut. Standing trees shall not be bulldozed;
 - (xi) The ground shall not be disturbed within 75 metres of an approved watercourse crossing until the start of the bridge or culvert installation and equipment activity near watercourses shall be kept to a minimum;
 - (xii) Hillside cuts shall be kept to a minimum on slopes containing loose material, and shall not exceed slopes of 2 horizontal to 1 vertical in unstable areas;
 - (xiii) Unstable areas shall be filled with gravel, rock, or other suitable material to prevent erosion;
 - (xiv) Ditch run-outs shall be constructed so that flow will be effectively dissipated and not cause erosion away from the road;
 - (xv) Ditches shall not be constructed to empty directly into a watercourse;
 - (xvi) Roadbed culverts shall be installed at proper elevations and slopes in order to prevent ponding of water or erosion;
 - (xvii) The minimum size circular corrugated steel pipe required for a particular drainage area shall be as follows:
 - (a) With a drainage area of less than or equal to 50 ha, the minimum size culvert shall be 750 mm;
 - (b) With a drainage area of greater than 50 ha but less than or equal to 80 ha, the minimum size culvert shall be 900 mm;
 - (c) With a drainage area of greater than 80 ha but less than or equal to 100 ha, the minimum size culvert shall be 1000 mm;
 - (d) With a drainage area of greater than 100 ha but less than or equal to 170 ha, the minimum size culvert shall be 1200 mm;
 - (e) With a drainage area of greater than 170 ha but less than or equal to 240 ha, the minimum size culvert shall be 1400 mm;
 - (f) With a drainage area of greater than 240 ha but less than or equal to 350 ha, the minimum size culvert shall be 1600 mm;
 - (g) With a drainage area of greater than 350 ha but less than or equal to 475 ha, the minimum size culvert shall be 1800 mm;
 - (h) With a drainage area of greater than 475 ha but less than or equal to 600 ha, the minimum size culvert shall be 2000 mm;
 - (xviii) All debris and excavated material shall be removed from the watercourse and adjacent areas and disposed of, or placed in a manner where it cannot be returned to the watercourse;
 - (xix) All necessary precautions shall be taken to prevent discharge or loss of any contaminant;
 - (xx) The slope of the culvert structure shall be 0.5 percent or less. In cases where the stream gradient does not allow for this requirement then pipe arches, interior baffling, or stilling basins shall be used to maintain adequate depth of flow and velocity for fish passage;
 - (xxi) The invert of the culvert structure shall be set a minimum of 150 millimetres below the original channel bottom level, except in multiple culvert installation;
 - (xxii) Multiple culvert installations shall be restricted to two culverts in a natural stream channel;
 - (xxiii) Multiple culverts shall be placed a distance of one-half the diameter or span apart, or 1 metre, whichever is greater. The bottom of one culvert shall be set 150 millimetres below the

original channel bottom level, with the second culvert set at an elevation equal to the original stream bed;

- (xxiv) Rip-rap shall be placed at both ends of the culvert up to one-half a pipe diameter or a maximum of 0.5 metre above the top of the pipe and a minimum of one pipe diameter on each side:
- (xxv) The final grade of the road crossing shall be at least one-half pipe diameter higher than the top of the culvert;
- (K) Install and operate electrical pump stations, provided that they conform to the following standards:
- (i) Be equipped with a CSA approved device to prevent backflow;
- (ii) The intake pipes shall be located a minimum of 100 metres downstream or 500 metres upstream of the municipal water supply intake and shall not disturb the bed or banks of the watercourse;
- (iii) The intake pipes at the pumping stations shall be screened at the inlet;
- (iv) An open area of 0.19 square metres of screen shall be provided for each 0.028 m³/sec of water being withdrawn;
- (v) The screen shall not have openings larger than 57 square millimetres; and
- (vi) The maximum water withdrawal rate from the watercourse shall ensure that a maintenance flow of not less than 25 percent of the mean monthly flow be maintained in the watercourse at all times:
- (L) Install and operate gasoline powered pumps between 30 and 75 metres from the banks of a watercourse, provided that they conform to (K) (i) through (K) (vi), above;
- (M) Undertake underground exploration/development work or mineral extraction where it can be shown that the underground exploration/development work or mineral extraction is at sufficient depth not to influence the watercourse;
- (N) Drive motorized recreational vehicles at approved watercourse crossings;
- (O) Utilize existing public beaches;
- (P) Utilize existing public boat launching areas;
- (Q) Construct and operate substations, terminal stations and any part of a transmission line at approved watercourse crossings;
- (R) Undertake a sugar bush operation provided that no mechanical equipment or sap processing occurs within 30 metres of the watercourse;
- (R.1) Conduct watercourse bank protection activities subject to the requirements of the *Watercourse Alteration Regulation Clean Water Act*;
- (S) Undertake the following surface mineral exploration activities:
- (i) establishing grid lines;
- (ii) general prospecting;
- (iii) geological, geophysical and geochemical surveying;
- (iv) boundary or control surveys and topographic mapping; and
- (T) Construct and operate the intake structure and conveyance works associated with a commercial aquaculture facility provided the proper permits are obtained and care and concern for the watershed water quality is exercised.

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