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from the sea. At this season of the year the contracted entrance to the river, which at other seasons excludes the rushing tides of the Bay of Fundy (preventing the formation of mud flats, a striking feature in the estuaries of rivers further up the Bay), also impedes the discharge of the spring floods.

These pent up waters are then compelled to spread themselves over the lowlands of the valley of the river, and such affluents as the Kennebecasis, Nerepis, Washademoak, Belleisle, Grand Lake and the Oromocto. Two extensive, though irregularly shaped, lakes are thus formed,—the lower one extending, in the form of an oxbow, down the valley of the Kennebecasis, around Grand Bay, and up the "Long Reach" and Belleisle Bay; the upper one embracing a large area, beginning at the lower end of Long Island, and extending upwards over the low lands lying around the Washademoak River, Grand Maquapit, and French Lakes, and all the interval lands between Gagetown and the Oromocto—submerging also the lands on each side of this river for many miles up. The area of these lake-like expansions of the St. John River, which lie partly among the southern hills, and partly to the northward of them, cannot fall far short of six hundred square miles.

During the summer and autumn these extensive sheets of water, which ramify through the southern part of the Province at the opening of navigation on the river, have shrunken to very limited proportions, being represented chiefly by the waters of Grand Lake on the one hand, and those of Grand and Kennebecasis Bay on the other.

As the excess of water in the southern tributaries, namely, the Kennebecasis, Nerepis and Belleisle Rivers, has, to a great extent, been discharged before the "freshet" of the main river rises, the great rush of water from the upper affluents of the St. John causes a reflux into the above mentioned rivers, which second overflow is known on the Kennebecasis as the "back freshet." This large body of cold water, which does not subside before the first week in June, undoubtedly retards very much the development of vegetation on the lower part of the St. John River. About two weeks after the ice in this part of the river has been discharged into the Bay, that from the upper part (above the Grand Falls) makes its appearance in the harbor, and is distinguished not only by the great quantity of drift-wood and freshet *débris* which accompany it, but also by its clearness and solidity (hence called the "black ice.")

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