

Occam's razor at Gull River Indian Reserve: The south boundary

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Abstract:

The south boundary of the Gull River Indian Reserve is a straight line through the river. The evidence strongly suggests that the intention was that the river be part of the Reserve; it was integral to the survival of the community.

Shaving:

Occam's razor is a metaphor for the principle of shaving away the irrelevant and unlikely, until one is left with the most reasonable explanation. Occam's razor should be used to re-establish a parcel boundary when 10 things conspire: cursory description; preliminary instructions; faulty geography; cancelled plan; sporadic traverse; ambiguous line; inconsistent tracings; suspect annotation; inapplicable legislation; and disparate opinions. Such a conspiracy describes the re-establishment of a small section of the south boundary of Gull River Indian Reserve, on the west shore of Lake Nipigon.

The south boundary has a length of 6.5 km; the problematic section is some 520m in length. For that section, the question is: What boundary most reasonably represents the intention of the parties in 1850 (at the time of the Treaty) and in 1887 (at the time of the survey). In particular: Is the southerly boundary a rectilinear boundary through the river,

or does it somehow follow the right bank, left bank or middle thread of the river? Let's parse the conspiracy.²

Cursory description:

The Robinson-Superior Treaty was entered into in 1850 between the Crown and the various First Nations along the north shore of Lake Superior. The First Nations ceded a large tract of land in return for various things; including Reserves. At Gull River, the Reserve was described as: "Four miles square on Gull River near Lake Nipigon on both sides of same river for the Chief Miskimuckqua and tribe."³

This description is rather vague as to whether the river is included in or excluded from the Reserve. The intention was that three boundaries of the Reserve are rectilinear – straight lines, as reflected in the parcel description ("four miles square"). There is no hint in the description that any part of the southerly boundary should be riparian. Only "Lake Nipigon" is referred to as an external riparian boundary and it forms the east (not the south) boundary of the Reserve.⁴

Preliminary instructions:

Little happened until survey instructions were drafted on August 26, 1886 by the Department of Indian Affairs. The instructions are not an exact copy of the instructions that were issued to surveyor Alexander Lord Russell at that time,

because they are not addressed, are unsigned and are in a draft form (some words are crossed out and other words inserted). They do, however, provide the gist of the instructions for Survey #1 of the Reserve.

Faulty geography:

Sadly, the gist of the instructions is based on a misconception of local geography: that the Gull River ran due west to east through the proposed Reserve to Lake Nipigon, perpendicular to the lake. The instructions anticipated that:

- the mouth of the river would be halfway between the north and south boundaries (two miles distant from each);
- the west boundary would be parallel to the general shoreline of the lake (north-south orientation);

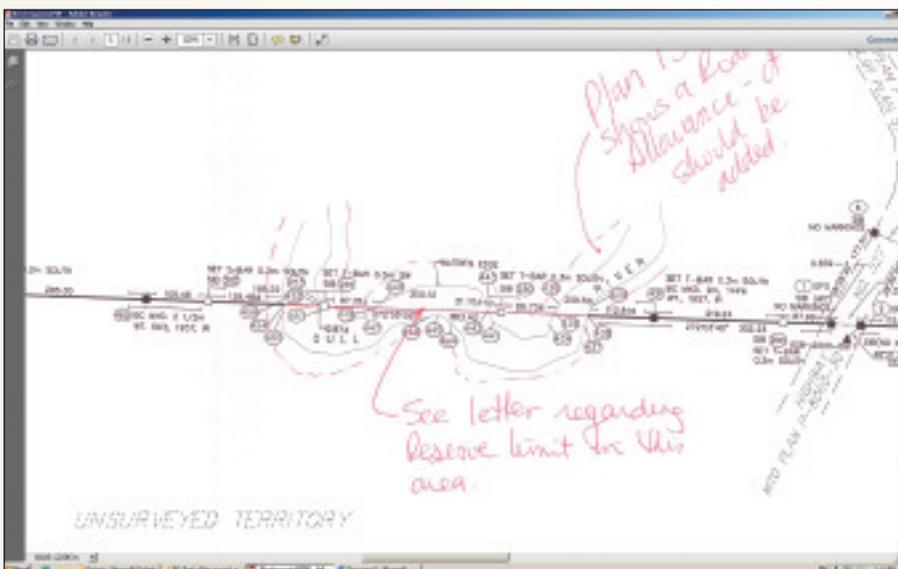


Figure 1 – Extract from draft plan showing section between stations 438 and 454 (2011)

¹ This article does not necessarily reflect the views of NRCan, nor of the Government of Canada.

² Don't even get me started on the issue of an illusory road allowance along the banks of the river.

³ Extract from the Robinson-Superior Treaty annotated in a corner of CLSR Plan 475.

⁴ For an excellent analysis of how intention, Treaty, negotiation, surveying and confirmation led to Reserve boundaries see: Marlatt. The calamity of the initial Reserve surveys under the Robinson Treaties. Papers of the 35th Algonquin Conference. University of Western Ontario. 2003.

- the north and south boundaries would be parallel to the river.

Such criteria did not anticipate that the river flowed in a large counter-clockwise curve, first south-easterly and then north-easterly. This geographic reality meant that not all the criteria could be met.

Cancelled plan (Survey #1):

Plan 474 was signed by Russell on October 19, 1886. It showed that Russell traversed one bank of the river, from Station #11 at Lake Nipigon to Station #58 (near the westerly boundary) to “ascertain the general bearing” of the river and to allow the side lines of the Reserve to be run parallel to the river. He followed the instructions, which contemplate that the river is part of the Reserve:

- boundaries are referred to only in the context of three rectilinear lines (the north, south and west boundaries) and to the shoreline of Lake Nipigon (the east boundary), not with reference to the river;
- the river is described as “running through the centre of the Reserve”;
- the other bank of the river was not traversed; it did not serve as a boundary.

south of the traverse line at that location. More significantly, Russell was ignorant of the meandering nature of the river at that location, as it curved three times (north, south and then north) over a distance of 26 chains. This meandering is significant.

Ambiguous line (Survey #2):

There must have been dissatisfaction with Plan 474,

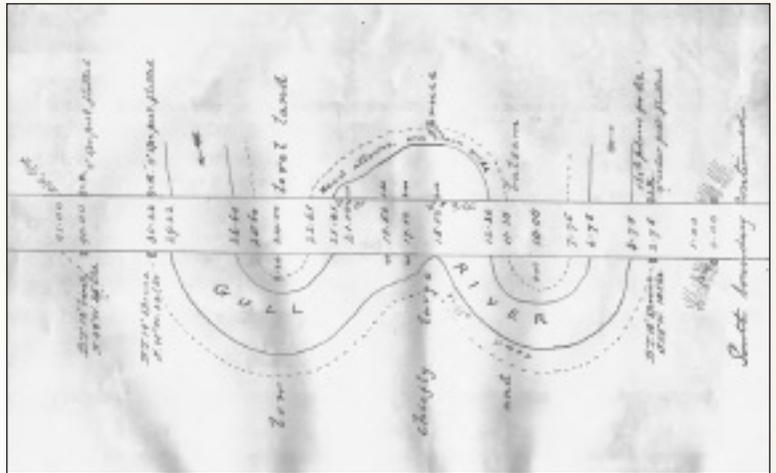


Figure 3 – Extract from CLSR FB 282 (1887)

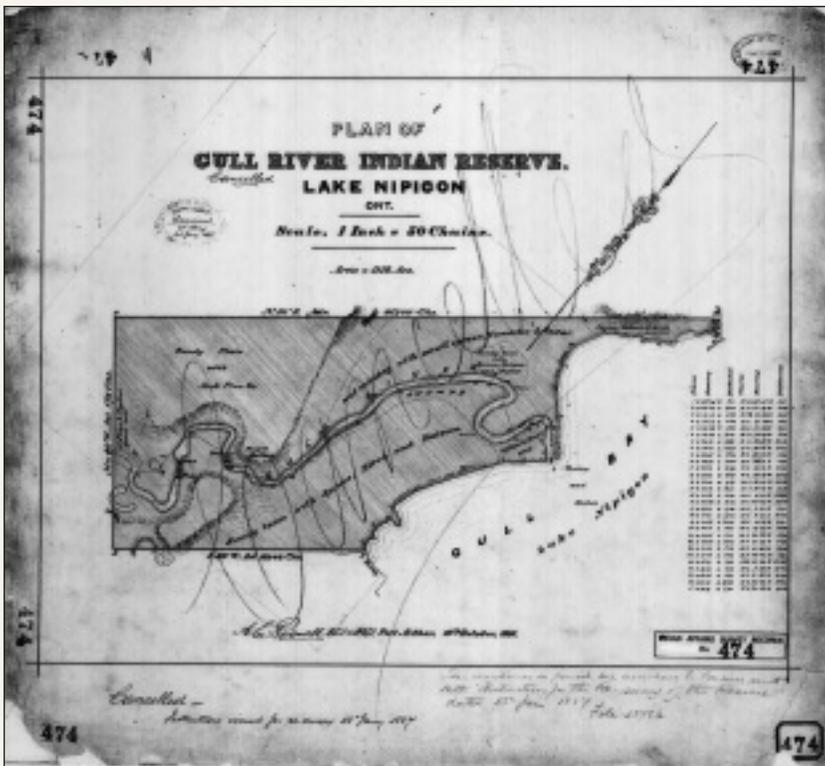


Figure 2 – CLSR Plan 474 (1886)

Sporadic traverse:

Russell’s traverse in autumn 1886 was incomplete; he had no ties to the river between Stations 56 and 57, a distance along the river of some 73 chains. He thus was ignorant of the extent to which the river dipped some 100 ch to the

because in early 1887 Russell returned to Gull River and surveyed a new Reserve, as reflected on Plan 475. The 1886 traverse of Lake Nipigon and of the Gull River (at least as far as Station # 58) was reused. However, at the area now in dispute, the river was tied in another 12 times.

Certainly, the south boundary was traversed as a straight line by Russell in 1887 between the posts he set at chainages 2.75 and 30.22,⁵ sequentially through river, upland, river, upland and river. Thus, the fieldwork is consistent with a straight line boundary.⁶ Indeed, CLSR Plan 475 does show a faint line between chainages 3.75 and 29.22. Admittedly, CLSR Plan 475 does not show a heavy line (representing the south boundary) as running through the river. However, neither does it show a heavy line along either bank of the river, nor along the middle thread of the river.

Russell’s intention was probably to run the south rectilinear boundary entirely south of the river, an objective to be met by starting the south boundary at Point B on Lake Nipigon (thus shifting the mouth of the Gull River towards the north of the IR). However, this goal was not achieved because his 1886 traverse was incomplete. That is, owing to a sporadic traverse in 1886, he was probably unaware when he surveyed the south rectilinear bound in 1887 that the river meandered south of that south boundary.

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⁵ All references to chainages refer to CLSR FB 282: Russell’s 1877 original survey of the south boundary.

⁶ Had a different (non-straight line) boundary been contemplated by Russell, then he could have traversed entirely to the south of the river, or to the north of the middle meander of the river.

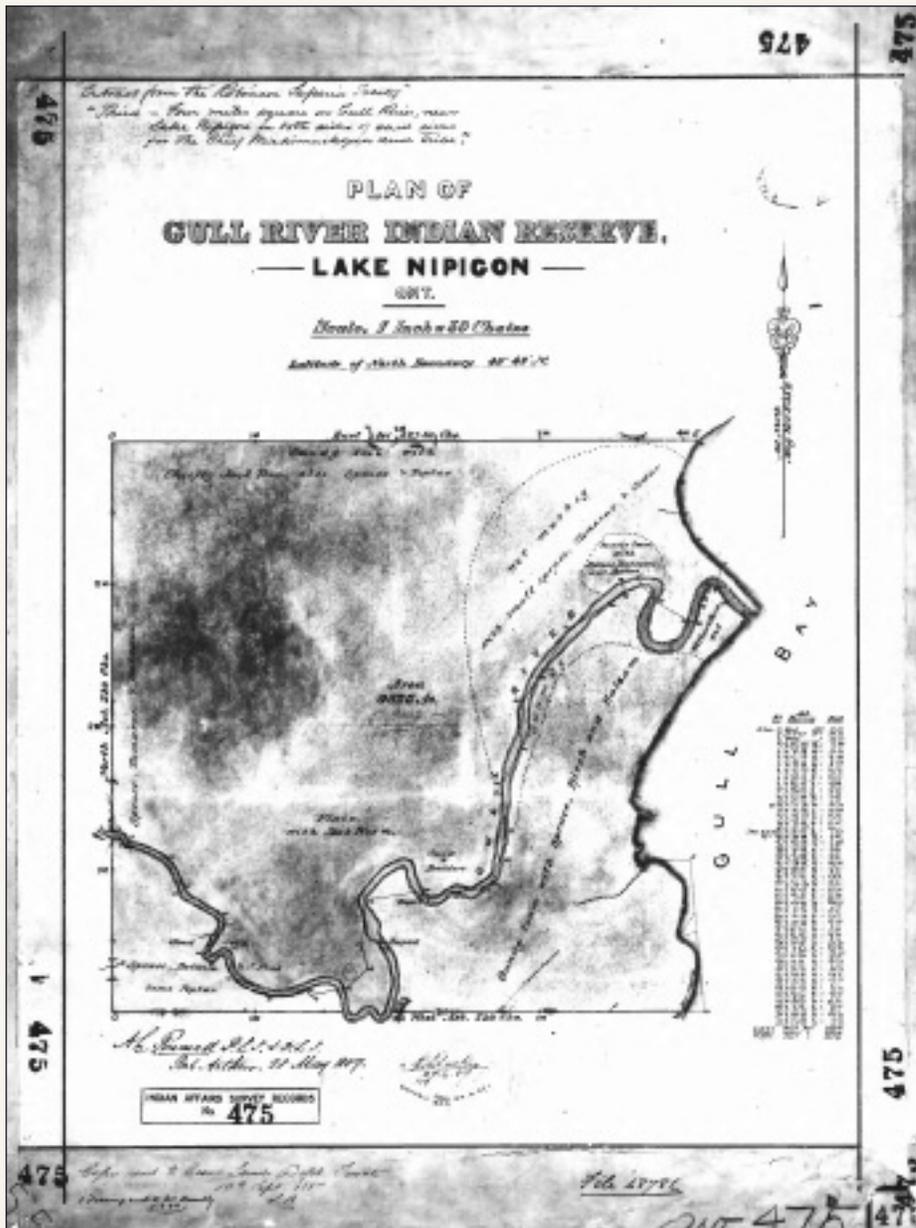


Figure 4 – CLSR Plan 475 (1887)

The suspicion that the intention was to include the river in the Reserve in 1887 is supported by various pieces of evidence:

- there is no indication that the 1886 intention – that the river was to be part of the Reserve (“running through the centre of the reserve”) - had been changed;
- there is no indication that both edges of the river were traversed, which would have been required to either establish boundaries or to calculate an area;
- Russell annotated “IR” over the river, not on either side of the river (p24 of FB 282);
- Russell reported that the river “affords easy access at all times through the heart of the Reserve ...” (p5 of Report within FB 282);
- Russell reported that the river was a “favourite fishing

ground for sturgeon and other fish – the principal food of the Indians in this district” (p6 of Report);

- Russell suggested “that the cultivation of rice in the shallow streams and marshes at the Mouth of Gull River be tried so as to afford food for the Indians.” He cautioned that in the absence of fishing in the river and cultivating rice in the river, the Indians will be “occasionally reduced to starvation” (p6 of Report).

Plan 475 appears to have been accepted by the Crown – there are various signatures and seals littering the bottom of the plan dated June 27, 1887 and September 16, 1888.⁷ The rectilinear bounds surveyed in 1886 are noted in the 1887 survey.⁸ Russell reported that the Chief “heartily approved of the New Reserve”; he advised the Chief “that the new survey at Gull River was the governing one and that all the old lines were abandoned and of no effect whatever.”

Inconsistent tracings:

There were at least two tracings made of Plan 475: T58 at time unknown (unsigned) and T656 in 1906 (unsigned by Russell; signed by Department of Indian Affairs). The pink line on Plan T656 that suggests that the river is not part of the IR is not overly persuasive, because:

- it was applied to the tracing at least 19 years after the survey;
- it contradicts the very strong evidence of the intention to include the river, at the time of the Treaty, instructions and survey;

- there is a legacy⁹ of pink lines being applied incorrectly to plans in that era. Indeed, an ambiguous pink line on Plan T-781B (Henvey Inlet IR) was debunked in 1901 by the Crown as an error, owing to “rapidity in drafting.”¹⁰

Even if one accepted the pink line as legitimate; it is inconsistently applied. On the one hand, in not crossing the Gull River along the south and west boundaries it fails to enclose a polygon. On the other hand, in crossing the Gull River at its mouth, it appears to include the bed in the Reserve.

Inapplicable legislation:

Navigability of the Gull River is irrelevant. The *Beds of Navigable Waters Act* only applies to Crown grants and thus not to this Reserve, and the *ad medium filum* (amf)

⁷ The plan is annotated with the initials of Samuel Bray, Chief Surveyor, Department of Indian Affairs.

⁸ The notes show the “old line” (pp 3 & 12).

⁹ I assume that a legacy can consist of only two pink line imbroglis.

¹⁰ Ballantyne. Rhapsody in pink: Jurisdictional boundaries of Henvey Inlet IR. Ontario Professional Surveyor, pp.6-10. Summer 2013.

presumption applies to riparian parcels on non-tidal rivers in Ontario.¹¹ There is no explicit exclusion of the river, meaning that the amf presumption has not been rebutted.

Disparate opinions:

In early 2011, the south boundary was re-surveyed, and seven parties began weighing in with opinions. The parties included the Canada Lands Surveyor, Indian Affairs - Canada (Gatineau and Thunder Bay offices); the Surveyor General – Ontario; and the Surveyor General – Canada (Ottawa, Toronto and Edmonton offices). Those who argued that the south boundary was not a straight line over that 520m section implied either that the boundary was ambulatory or that the bed was excluded from the Reserve; they relied on a mixture of fact and assertion:

- there is no heavy line through the Gull River on Plan 475 (fact);
- the 1850 Treaty description vested the bed in Ontario (assertion);
- the 1886 draft instructions excluded the river, because the Reserve was to have “an area of sixteen Square Miles exclusive of the Gull River or any large lakes you may come cross in your survey” (assertion);
- the pink line on Plan T656 does not cross the bed of the Gull River (fact).

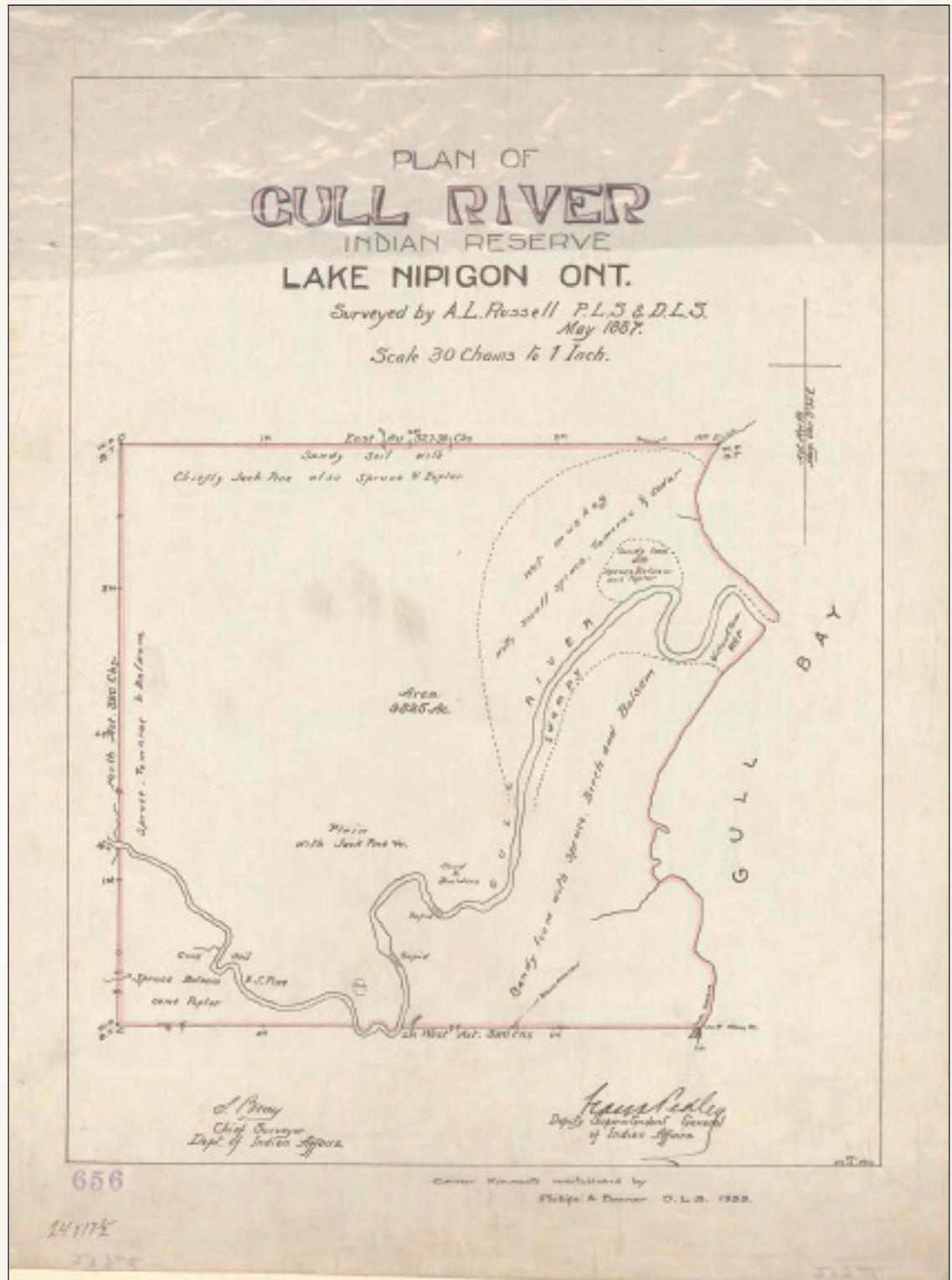


Figure 5 – CLSR Plan T656 (1906)

In the absence of Occam:

Sadly, those who rejected the boundary as a straight line did not propose an alternative boundary. The only alternative is that the southerly boundary of the Reserve between the 1887 chainages 3.75 and 29.22 (akin to between the 2011 stations 438 and 454)¹² is a riparian boundary. Let’s

¹¹ Keewatin Power Co. v. Kenora, (1908 - Ont CA).
¹² The river has shifted insignificantly over the 124 years.

examine the hypotheses that the boundary is the middle thread¹³ or the south bank of the Gull River. First, neither interpretation (middle thread or south bank) is supported by the parcel description. That is, the “four miles square” is interrupted by three offsetting bits if middle thread is used, and by two southerly bits if south bank is used.

If the middle thread is the boundary, then two bits are added to the Reserve (south of the projected straight line) and one bit is subtracted from the Reserve (north of the projected rectilinear boundary):

- 5.5ch south with an area of about 7.5ac, between chainages 5.25 and 13.65;
- 3.5ch south with an area of about 5.5ac, between chainages 18.31 and 27.91; and
- 1ch north with an area of about 0.9ac, between chainages 13.65 and 18.31.

Thus, rejecting a rectilinear boundary in favour of the middle thread over that 22.66ch distance has the net effect of adding some 12.1 ac to the Reserve.

If the south bank is the boundary, then two bits are added

to the Reserve (south of a projected rectilinear boundary):

- 7ch south with an area of about 12.4ac, between chainages 3.75 and 15.00; and
- 4.8ch south with an area of about 10.6ac, between chainages 15.00 and 29.22.

Thus, rejecting a rectilinear boundary in favour of the south bank over that 25.47ch distance has the net effect of adding some 23ac to the Reserve.

The moral of the story:

In setting out on an expedition to re-establish a boundary, researchers (surveyors and other experts) should equip themselves with four things: a sense of wonder (be curious), an aura of indefatigability¹⁴ (be dogged); Occam’s razor (be reasonable); and the spirit of Santayana¹⁵ (know your history). Those four tools are indispensable to arriving at a rigorous answer.



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¹³ If the boundary is the north bank, then the Reserve is presumed to extend to the middle thread: R v. Nikal, (SCC- 1996); R v. Lewis, (SCC – 1996).

¹⁴ As captured by the injunction to “leave no stone unturned.” Not to be confused with “no left turn unstoned,” the mantra of the Merry Pranksters: Wolfe. The Electric Kool-Aid Acid test. 1968.

¹⁵ Those who cannot remember the past are condemned to repeat it: Santayana. The life of reason. 1905.