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PRIMARY TELECOMMUNICATIONS SYSTEMS

in

NORTHERN ONTARIO

A Brief Inventory of Existing Facilities

and

Planned or Proposed Extensions

for

Department of Communications

Bell Canada

Ontario Northland Communications

(Ministry of Transportation and Communications)

Canadian Broadcasting Corporation

Ontario Educational Communications Authority

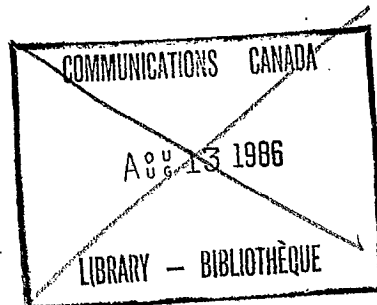
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Ontario Region

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SUMMARY

Department of Communications:

The Department is involved primarily in the northwestern section of the province through the auspices of the Northern Pilot Project. Here a number of native communities have been and are to be provided with H.F. two-way radios located usually in the band council offices with ready access to the inhabitants. A joint C.B.C./D.O.C project involving establishment of a community broadcast radio at Big Trout Lake is planned for 1973/74. A V.T.R. Study Seminar is planned in 1973/74 to evaluate the skills developed during the present Winter Works V.T.R. training session. (refer:D.O.C.)

Ontario Northland Communications (Ministry of Transportation & Communications):

Ontario Northland is primarily involved in providing common carrier service along the western coasts of James & Hudson's Bays. They operate H.F. long distance radio service from Winisk, Attawapiskat and Fort Albany south to Cochrane. They have extensive plans for upgrading service in the future involving use of thin route microwave, U.H.F. and the Anik ground station. (refer: O.N.C.)

Bell Canada:

Bell provides local telephone service to nine native communities in the area. The exchanges range in size from 50 to 70 lines except for Winisk which has only 13 lines. Bell provides long distance H.F. radio service to the first six communities listed on the map. Bell's plans include upgrading of H.F. facilities and extension of thin route microwave in conjunction with the planned Anik ground stations for the area. (refer: B.C.)

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Canadian Broadcasting Corporation:

The C.B.C. does not presently provide broadcast service north of the Sioux Lookout - Red Lake line. It has plans to provide broadcast and coverage to all communities with over 500 people in a five year period. This plan is still internal and has not yet been approved. (refer: C.B.C)

Ontario Educational Communications Authority:

The O.E.C.A. presently provides educational service via V.T.R. to isolated schools in Ontario. Their resources are being directed towards extension in the south in the future (refer: OECA)

ORGANIZATION : Department of Communications

PURPOSE : To determine the communications needs of native peoples living in small communities by providing certain basic communications services to selected areas and evaluating the response.

SERVICE INVOLVEMENT : a) High Frequency Native Radio-Telephone Network
b) Community Broadcast Radio
c) Video Tape Recording

IMPLEMENTATION/OPERATIONS

The present and planned areas of operation for each of the Service Involvement categories above are given on the lists and maps below:

A) High Frequency Native Radio-Telephone Network

Existing 1972/73:

Sandy Lake
Big Trout Lake
Sioux Lookout
Round Lake
Fort Severn
Sachigo Lake

New Osnaburgh
Kingfisher Lake
Cat Lake
North Spirit Lake
Fort Hope

Proposed 1973/74:

Kasabonika Lake
Bearskin Lake
Pikangikum
Deer Lake
Muskrat Dam

Red Lake
Wunnummin Lake
Lac Seul
Angling Lake
Popular Hill
Ogoki
Lansdowne House
Webique

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HUDSON BAY

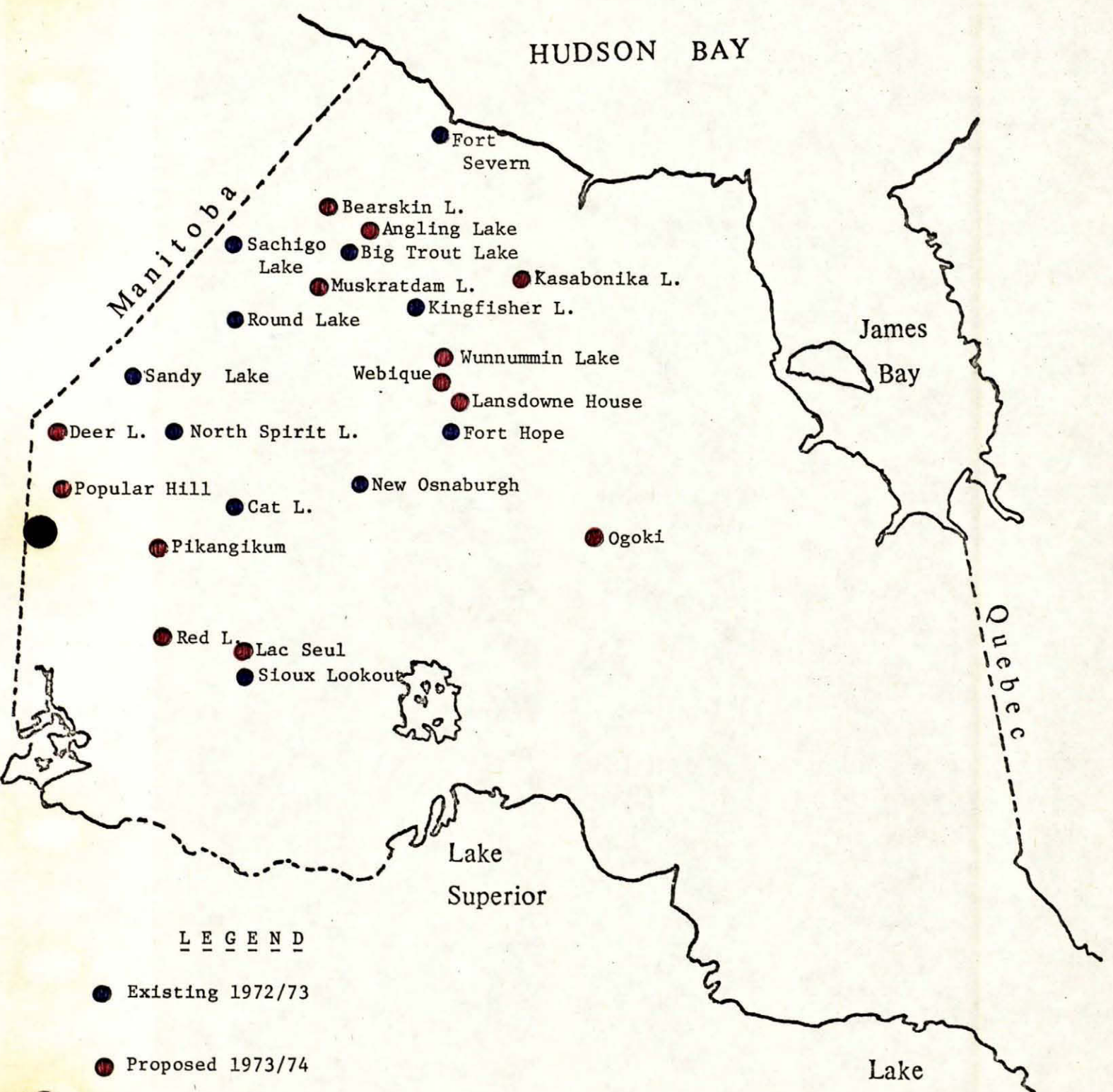
James Bay

Quebec

Lake Superior

Lake Huron

Manitoba



LEGEND

● Existing 1972/73

● Proposed 1973/74

B) COMMUNITY BROADCAST RADIO 1973/74:

- proposed for Big Trout Lake (joint C.B.C./D.O.C. project)

C) VIDEO TAPE RECORDING:

Present : Training sessions are now taking place in the following communities to establish a level of competence in the use of this equipment :

Wunnimin Lake

Big Trout Lake

Round Lake

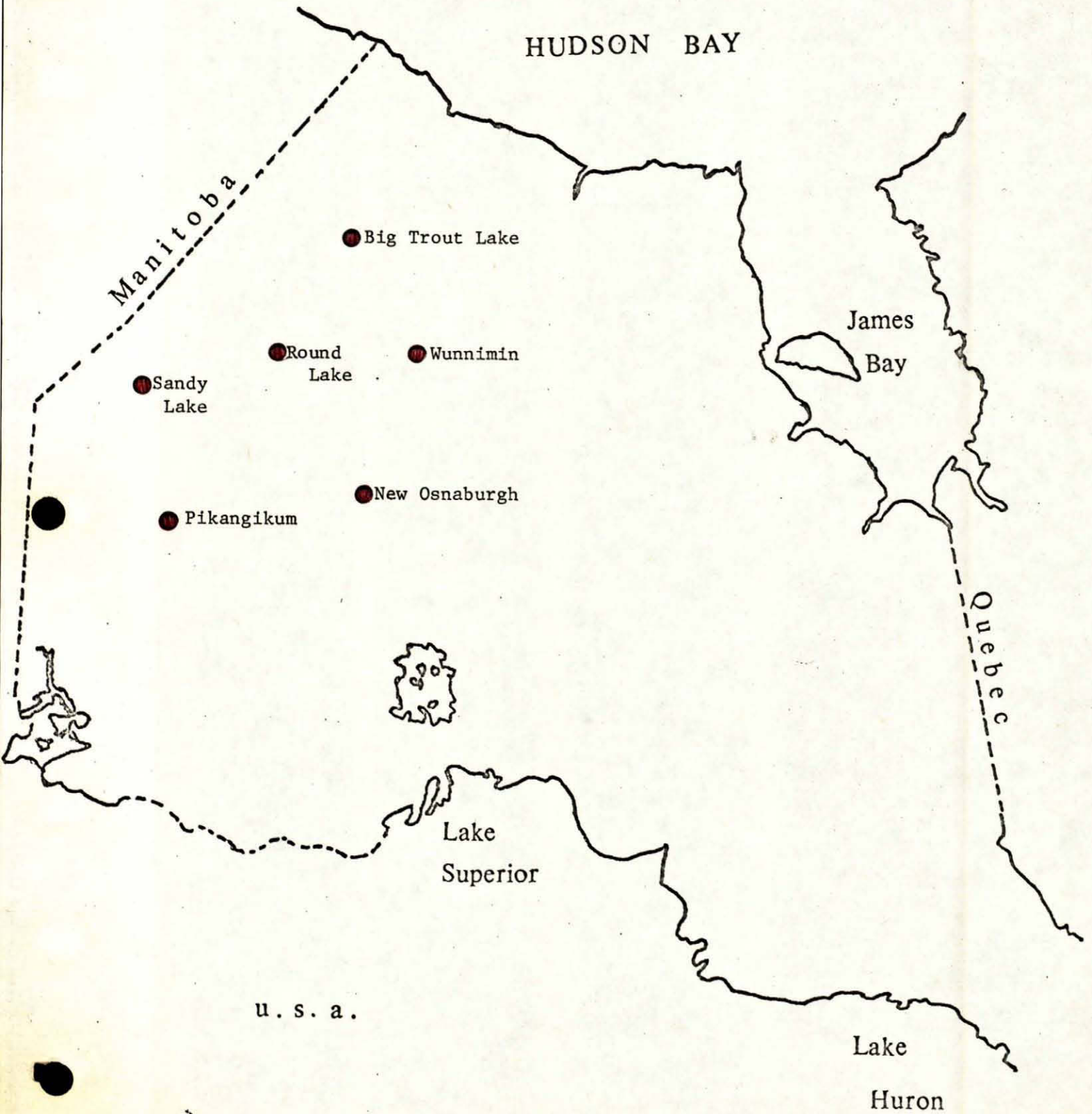
Pikangikum

New Osnaburgh

Sandy Lake

Planned : In early 1973/74 a study session will be held at a central location to establish the level of competence attained, discuss the use of the medium, its problems and attributes and to plan for its further use in the area if warranted.

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HUDSON BAY

Manitoba

● Big Trout Lake

James Bay

● Round Lake

● Wunnimin

● Sandy Lake

● New Osnaburgh

● Pikangikum

Quebec

Lake Superior

u. s. a.

Lake Huron

ORGANIZATION : Bell Canada

PURPOSE : To provide common carrier telecommunications service in the area.

SERVICE INVOLVEMENT : Existing:-
- operation of 9 local telephone exchanges (see map)
- operation of long distance H.F. network in area and with connection to the south.

PROPOSED:-

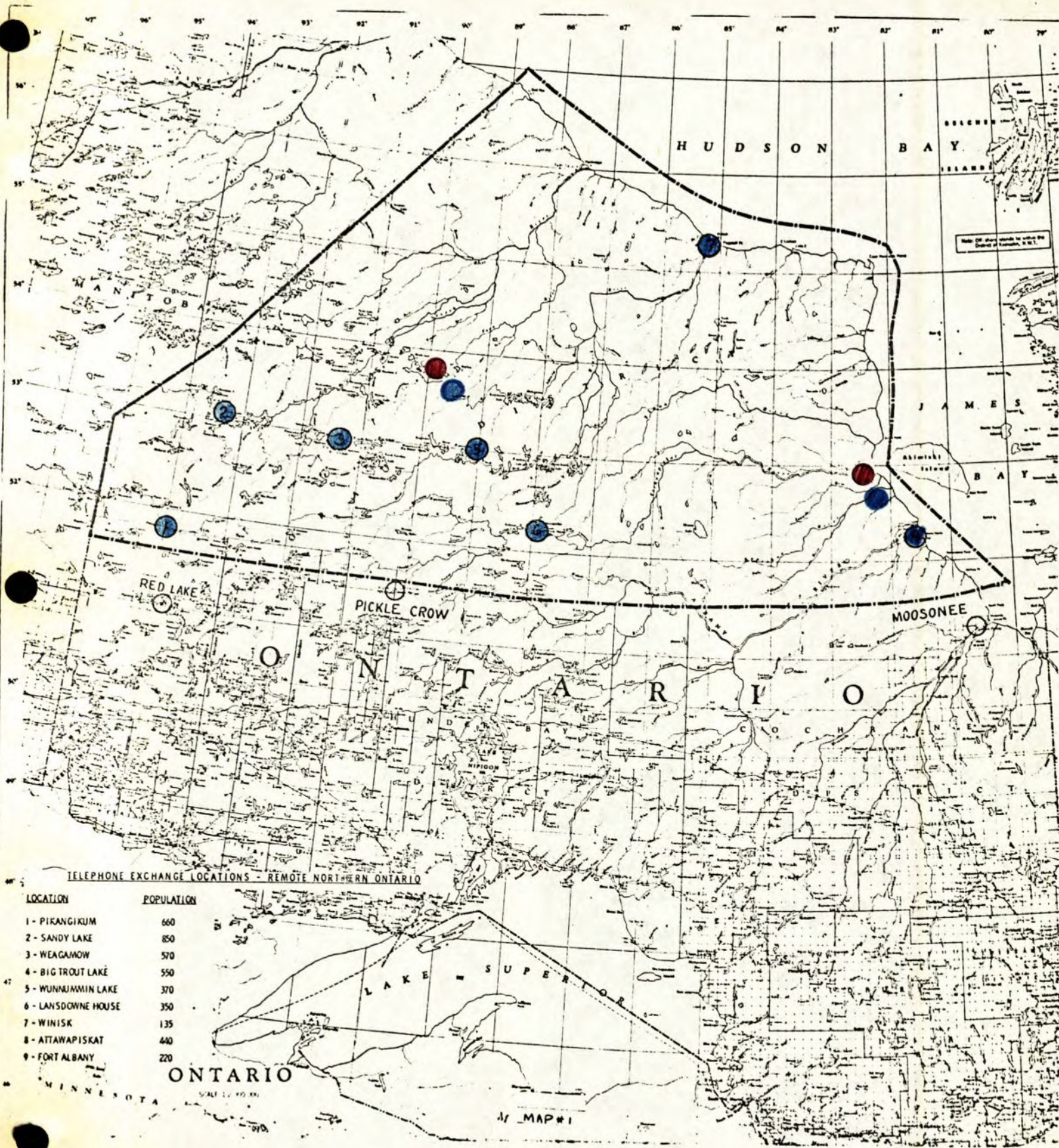
Have submitted a three phase plan for upgrading service in the north.

1972/73 - upgrade of H.F. service in the North.

1974 - upgrade of toll service in Winisk and Big Trout Lake Areas via Anik ground stations in each community.

1977/80 - upgrade of long distance service via terrestrial thin route microwave by:
- extension from existing terrestrial microwave northward.
- extension outwards from Anik ground station sites.

In Southern Ontario there have been talks of a formative nature between Bell and the Provincial Government toward development of the "wired-city concept" in the proposed new town of North Pickering (adjacent to the planned new Toronto airport.)



TELEPHONE EXCHANGE LOCATIONS - REMOTE NORTHERN ONTARIO

LOCATION	POPULATION
1 - PIKANGIKUM	660
2 - SANDY LAKE	850
3 - WEAGAMOW	570
4 - BIG TROUT LAKE	550
5 - WUNNUNWIN LAKE	370
6 - LANSDOWNE HOUSE	350
7 - WINISK	135
8 - ATTAWAPISKAT	440
9 - FORT ALBANY	220

ONTARIO

SCALE 1:50,000

MAP #1

● Sites for planned Telesat Ground Stations

ORGANIZATION : Ontario Northland Communications (Ministry of Trans. & Comm.)

PURPOSE : Operation of long haul common carrier service on the Western James Bay Coast in the Moosonee-Attawapiskat Area.

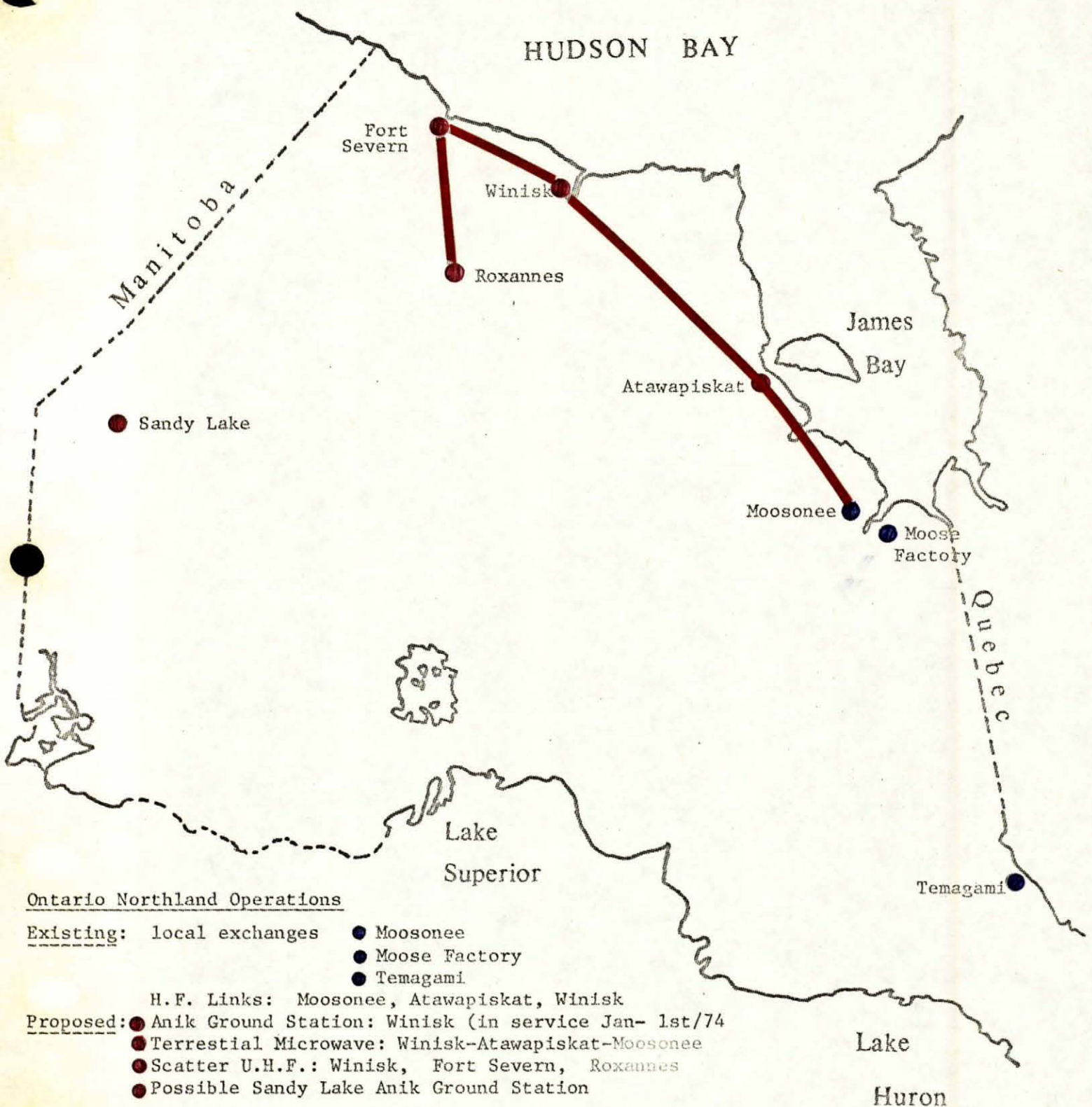
SERVICE INVOLVEMENT: Existing:-

- local exchanges in Moosonee, Temagami, Moose Factory
- H.F. long distance service between Moosonee and Winisk.

Planned:-

- extension outward from Winisk Telesat ground station with terrestrial microwave to provide upgraded long distance service to Moosonee replacing present H.F.
- tropospheric scatter U.H.F. Winisk, Roxannes, Fort Severn to provide upgraded long distance toll service
- Telesat may propose to build another Anik ground station at Sandy Lake for service by 1975/76.

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Ontario Northland Operations

Existing: local exchanges ● Moosonee
 ● Moose Factory
 ● Temagami

H.F. Links: Moosonee, Atawapiskat, Winisk

Proposed: ● Anik Ground Station: Winisk (in service Jan- 1st/74)
 ● Terrestrial Microwave: Winisk-Atawapiskat-Moosonee
 ● Scatter U.H.F.: Winisk, Fort Severn, Roxannes
 ● Possible Sandy Lake Anik Ground Station

ORGANIZATION : Canadian Broadcasting Corporation.

PURPOSE : Extension of broadcast service to isolated Northern communities.

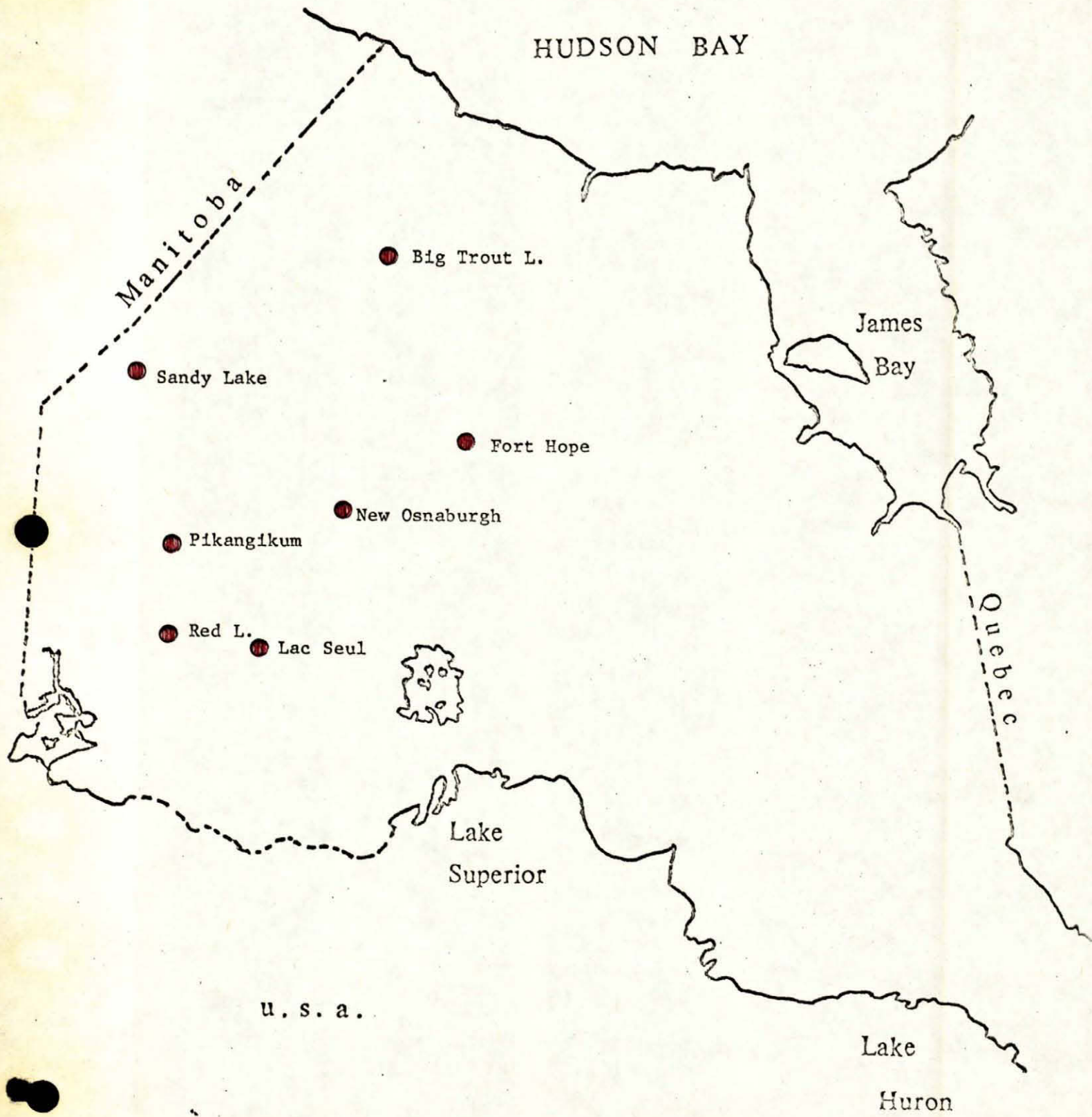
SERVICE INVOLVEMENT : Provision of broadcast service.

The C.B.C. has a plan (as yet an internal document) to extend broadcast service coverage to all communities with populations over 500. within a five year period.

The following is a list of those communities with a population of 500 or over:

<u>Community</u>	<u>Population</u>
Big Trout	686
Sandy Lake	1104
Pikangikum	639
Fort Hope	584
New Osnaburgh & Cent. Pat.	640
Lac Seul & Hudson	640
Red Lake & Area	990

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HUDSON BAY

Manitoba

● Big Trout L.

James Bay

● Sandy Lake

● Fort Hope

● New Osnaburgh

● Pikangikum

● Red L. ● Lac Seul

Quebec

Lake Superior

u. s. a.

Lake Huron

ORGANIZATION : Ontario Educational Communications Authority.
PURPOSE : Provision of an educational information service.

SERVICE INVOLVEMENT : Existing:-

- O.E.C.A. ships programs on Video tape to schools in the North (designated isolated by O.E.C.A.)
- provides video taped programs to any C.A.T.V. operator who may want this service (up to 10 hours per day)

Planned:-

- no near or intermediate term prospects for extending or upgrading present operations in the North (resources are being allocated to extension of system in the south due to pressures here of squeeze on frequency space.)