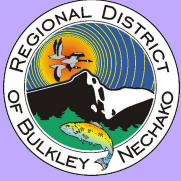


REGIONAL DISTRICT OF BULKLEY-NECHAKO

**BROADBAND COMMITTEE
AGENDA
Thursday, January 9, 2020**

<u>PAGE NO.</u>		<u>ACTION</u>
	<u>AGENDA- January 9, 2020</u>	Approve
	<u>Supplementary Agenda</u>	Receive
	<u>MINUTES</u>	
2-5	Broadband Committee Meeting Minutes - November 21, 2019	Approve
	<u>DELEGATION</u>	
6	<u>ABC COMMUNICATIONS</u> Falko Kadenbach, Vice President RE : Update – Regional LTE Project	
	<u>REPORT</u>	
7-20	John Illes, Chief Financial Officer - Project Priority Setting	Recommendation (Page 7)
	<u>SUPPLEMENTARY AGENDA</u>	
	<u>NEW BUSINESS</u>	
	<u>ADJOURNMENT</u>	

REGIONAL DISTRICT OF BULKLEY-NECHAKO**BROADBAND COMMITTEE MEETING****Thursday, November 21, 2019**

PRESENT: Chair Michael Riis-Christianson

Directors Tom Greenaway
Clint Lambert
Rob Newell
Mark Parker
Gerry Thiessen

Staff Curtis Helgesen, Chief Administrative Officer
Cheryl Anderson, Manager of Administrative Services
Nellie Davis, Regional Economic Development Coordinator
Debbie Evans, Agriculture Coordinator – arrived at 10:31 a.m.
Jason Llewellyn, Director of Planning – arrived at 10:15 a.m.
Wendy Wainwright, Executive Assistant

Others Newton Choy, Area Field Manager, Telus – arrived at 9:34 a.m.
Christa Kilbourne, PMP, Project Engineer, Pipeline Implementation West, Coastal GasLink, TC Energy – left at 11:11 a.m.
Tyler Mooi, Manager, Local Governments, Indigenous PureFibre, and Custom Deals, Telus – via teleconference at 9:34 a.m.
Chad Moulatt, Cypress Land/TELUS – left at 10:33 a.m.
Tanner Moulton, Public Affairs Coordinator, Coastal GasLink Project, TC Energy – arrived at 10:15 a.m.
Jerry Petersen, Electoral Area “F” (Vanderhoof Rural) – arrived at 9:40 a.m.
Roberta Squire, General Manager, CSD Northern BC Telus – arrived at 9:34 a.m.

CALL TO ORDER

Chair Riis-Christianson called the meeting to order at 9:30 a.m.

AGENDAMoved by Director Lambert
Seconded by Director Greenaway**BBC.2019-4-1**

“That the Broadband Committee Agenda for November 7, 2019 be approved.”

(All/Directors/Majority)

CARRIED UNANIMOUSLY**MINUTES****Broadband Committee
Meeting Minutes
– October 24, 2019**Moved by Director Parker
Seconded by Director Greenaway**BBC.2019-4-2**

“That the Broadband Committee Meeting Minutes of October 24, 2019 be approved.”

(All/Directors/Majority)

CARRIED UNANIMOUSLY

DELEGATION

TELUS – Roberta Squire, General Manager, CSD Northern BC, Newton Choy, Area Field Manager and Tyler Mooi, Manager, Local Governments, Indigenous PureFibre, and Custom Deals RE: Update of Telus High-speed Internet and Cell Coverage Plans

Chair Riis-Christianson welcomed Roberta Squire, General Manager, CSD Northern BC, Newton Choy, Area Field Manager and Tyler Mooi, Manager, Local Governments, Indigenous PureFibre, and Custom Deals.

A PowerPoint Presentation was provided.

Update on TELUS

- Connecting for Good
- Existing Wireless Investments in the Regional District
- Regional District Priorities
 - What are the main areas of focus of the RD?
 - What solutions are being considered for those communities or areas requiring connectivity?
 - PureFibre – Fibre to the Premise
 - Improved Copper
 - Improved Wireless and Cellular coverage.

Discussion took place in regard to:

- Lack of service on the Southside of Francois Lake
 - 2018 wildfire damage to hydro and telephone infrastructure
 - Ability to communicate was damaged/destroyed – safety concern
 - Discussions with Rio Tinto in regard to building cellular infrastructure on the Southside
- Electoral Area “E” (Francois/Ootsa Lake Rural) willingness to support connectivity
- Cypress Land/TELUS acknowledged the lack of connectivity on the Southside and will review
- Smart Hub options/capability
 - Telus observes critical mass
 - Monitors and identifies areas where more capacity is required
- Telus
 - Conducting assessment of infrastructure in the North
 - Easily accessible areas will have a solution first
 - Working with indigenous communities
 - Connectivity to some communities may provide more opportunities to other areas
 - Wanting to support the North
- Restriction on towers
 - To remove restriction the transport to the tower needs to increase
 - More subscribers will drive the need and awareness
- Currently 27 sites serving the RDBN
 - 23 sites are enabled with Smart Hub
 - TelusTool to determine Smart Hub coverage
 - In some areas where the tool indicated there is no coverage there is opportunity, where a strong cellular signal exists, for Telus to override
- District of Vanderhoof Connectivity challenges
 - Impedes youth and those requiring access to good connectivity
 - Impacts retention and recruitment
 - Importance and need for reliable consistent internet service
 - Telus researched the challenges in Vanderhoof
 - Telus purchased and is working with Mascon in Vanderhoof to improve service levels
 - Investment for better connectivity is needed
 - custom fibre – Telus approximate costing - \$9.2 million
- Telus technology investments beyond wireless infrastructure in the region

DELEGATION (CONT'D)

- Fibre coverage in Fort St. James
 - No cell service on Stones Bay and Sowchea Roads
 - Telus to investigate potential opportunities
- Modifications can sometimes be made in order to reach the maximum amount of people
- Electoral Area “B” (Burns Lake Rural) - #1 issue – Internet connectivity
 - Lack of download and upload speeds
 - Determination of peak number of users and lack of speeds during heavy usage
 - Utilization of bandwidth
- Maximizing utilization of the cell towers and smart hubs
- Bonding technology –using two lines and double speed
- Building partnerships and leveraging funding
- Opportunities to grow with funding partners
 - Northern Development Initiative Trust
 - All Nations Trust Company
 - Federal, Provincial, local governments
- Additional people in the region due to the pipeline construction taking place.
 - More capacity degrades the service
 - Need for permanent long-term solutions
- Telus is in conversations with the resource industry to build its infrastructure without depleting current services and potentially add capacity
 - Opportunities for connectivity for local residents
- Approvals for temporary and permanent towers
- RDBN providing its Broadband study
- Funding options and potential co-funding partnerships with local governments to move forward with connectivity projects and initiatives
 - Telus willing to invest where feasible – where there is a gap investigate to solve through collaboration and/or partnerships
 - Telus owns, operates and maintains infrastructure for the long-term
 - Determine areas requiring connectivity, costing and options to develop a business plan to move forward.

Telus to provide information to the RDBN in regard to:

- Coverage
- Plans to improve coverage
- Which sites are enabled – community and site specific
- Map of existing fibre
- Capacity of fibre lines.

Ms. Squire indicated she has been tasked to find synergies and investigate opportunities to improve connectivity in the North. She noted that Telus’ plans evolve depending on other projects and initiatives moving forward.

Chair Riis-Christianson thanked Messrs. Choy and Mooi and Ms. Squire for attending the meeting.

NEW BUSINESS

RDBN Broadband Study

Moved by Director Parker
 Seconded by Director Greenaway

BBC.2019-4-3

“That the Broadband Committee recommend that the Board provide the July 15, 2019 RDBN Broadband Study completed by Tanex Engineering Corporation with Telus and CityWest.”

(All/Directors/Majority)

CARRIED UNANIMOUSLY

NEW BUSINESS (CONT'D)

Invite Coastal GasLink, TC
Energy RE: Connectivity
Infrastructure

Moved by Director Greenaway
Seconded by Director Lambert

BBC.2019-4-4

“That the Broadband Committee recommends that the Board invite Coastal GasLink, TC Energy to discuss opportunities for connectivity infrastructure.”

(All/Directors/Majority)

CARRIED UNANIMOUSLY

ADJOURNMENT

Moved by Director Greenaway
Seconded by Director Parker

BBC.2019-4-5

“That the meeting be adjourned 10:34 a.m.”

(All/Directors/Majority)

CARRIED UNANIMOUSLY

Michael Riis-Christianson, Chair

Wendy Wainwright, Executive Assistant



COMMUNICATIONS

www.abccommunications.com

November 28, 2019

Regional District of Bulkley -Nechako
37 3rd Avenue,
PO Box 820
Burns Lake, BC V0J 1E0

Dear Board of Directors,

ABC Communications is working towards reaching the federal broadband goals of 50 Mbps in as many of our service areas as possible. We recognize that Regional Districts play an integral part of the strategic broadband planning across British Columbia. As a key internet service provider in your region we want to make you are aware of our activities and strategic initiatives.

ABC continually invests in its networks and whenever possible utilizes Provincial and Federal programs to aid its network developments. Often we ask for your support and we are very thankful for your support toward our broadband projects.

We would like to make you aware that ABC is putting forth an application to the Northern Development Initiative Trust for our Regional LTE Project. This Project is wide spread touching on many parts of the province. Essentially this project builds on existing coverage areas and brings capacity up to the new broadband standard (50 Mbps). In this case we do not require a letter of support from the regional district for the application, although we would appreciate it if you would like to send one to the below mentioned address.

The area within your region that will see benefits from this project are; Fraser Lake, Vanderhoof.

As always please feel free to contact me for further details and discussion on broadband developments in your region.

Sincerely,

Falko Kadenbach

Vice President, ABC Communications

RECEIVED

DEC 03 2019

REGIONAL DISTRICT OF
BULKLEY-NECHAKO

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Regional District of Bulkley-Nechako Broadband Committee

To: Chair Riis-Christianson and Committee Members
From: John Illes, Chief Financial Officer
Date: January 9, 2020
Re: Project Priority Setting

Recommendation:

That the Committee recommend the following projects be prioritized for 2020 grant applications: Fort St. James Cellular Coverage; Buck Flats Cellular and LTE Coverage; Grassy Plains and Ootsa Lake Cellular and LTE Coverage; Industrial Cellular and LTE Coverage for Clearview Landfill, Pinkut Lake and Taltapin Lake; fibre to the home for Area B/Area E - Highway 35 and Southbank.

Overview:

In order to narrow down the scope of any future work and in preparation for the CRTC and Provincial Connectivity grant applications and at the request of potential partners for internet and cellular services, staff have provided preliminary recommendations for the Committee's discussion based on past Committee and Board comments.

Discussion:

The Board identified connectivity as a strategic priority for the Regional District in 2019 and further has provided \$100,000 from the Northern Capital and Planning Grant to create plans to bring high speed internet to the Regional District. The Board commissioned TANEx Engineering to prepare the Regional District's "Broadband Study".

The Committee has received presentations from City West and Telus describing their connectivity plans. At the November 21, 2019 meeting, the committee discussed the damage inflicted to regular forms of wired communications from the 2018 wildfires, safety concerns from the lack of cellular coverage with an emphasis for areas on the Southside and in the rural area of Fort St. James.

The CRTC has announced the next round of funding possibilities. Applications are due on March 27, 2020 and in this round of funding there is the possibility for mobile LTE networks. Potential partners have requested the Regional District prioritize areas for future discussion and collaboration. Presentations have been made by City West and TELUS at past meetings and by ABC at the current meeting. Representatives from Shaw plan to make a presentation to the Committee early in 2020.



Staff have made an attempt to prioritize projects based on past committee discussions. The following assumptions have been made:

- Internet Service Providers will within the next three years have fibre to the home service in all municipalities in the Regional District without additional funding from the Regional District.
- Cellular coverage (with LTE) is a priority for rural areas because of safety and emergency management considerations. In addition, providing wireless LTE service is an important interim step to higher speed internet. Many cell providers now have packages with unlimited data. Cellular coverage will support future emergency management communication systems.
- Cellular providers will work to cover the dead zones on Highway 16 over the next three years without additional funding from the Regional District.

Strong Cellular service in Area “C” around Fort St. James will support emergency management, industrial safety, and also provide LTE internet service. The topography of the Fort St. James area may also extend cellular service to most areas on the Eastern portion of Stuart Lake. Possibilities may exist for partnering with Nak’azdli First Nation. The Regional District’s Tanex report identifies a possibility of 961 rural subscribers for high speed internet service for this project. Many of the identified possible subscribers may already have internet but this will provide further options for high speed internet. When fibre to the home coverage reaches the municipality of Fort St. James, the rural area surrounding the community can be prioritized as a future project for the Regional District.

The same rationale has been used for cellular coverage of Grassy Plains, Takysie Lake, Ootsa Lake. The Rationale for Ootsa Lake area is also for industrial safety for logging, mining, and Rio-Tinto operations. Possibilities may exist for partnering with Cheslatta Carrier Nation, Skin Tyee Nation, Nee Tahi Buhn First Nation and Rio-Tinto. The tower proposed South of Ootsa Lake would be a solar and battery backup speciality tower. The Tanex report identified 138 households in the Takysie and Ootsa Lake areas.

Similarly, cellular coverage for the Buck Flats area South of Houston will provide internet for an identified 84 households. In the Buck Flats area the cellular service will also be used for industrial traffic related to mining, logging, and pipeline construction.

Industrial and recreation cellular coverage is proposed for the Taltapin Lake and Pinkut Lake areas. The intent of this cellular service is to also include coverage for the First Nations communities of Donald’s Landing and Pinkut Lake as well as the communities of Pendleton Bay and the Marine Park at Pinkut Creek Fisheries. Placement of towers may also provide cellular coverage for marine traffic on the Eastern part of Babine Lake. These areas were in part selected by the availability of power. Possibilities may exist for partnering with Lake Babine Nation and Yekooche First Nation on this project. Estimated households are approximately 30; however, many of these properties are resort or seasonal homes.



High speed internet and cell connectivity is important for the Regional District's own operations at Clearview landfill. A project here can both provide connectivity for Regional District Operations and Safety as well as providing cellular coverage to a portion of Highway 27 with limited connectivity.

The Fibre to the home project proposed in Area B and Area E is in part based on the expected fibre line being placed from Burns Lake to Tchesinkut Lake announced by CRTC. This project proposes to extend this fibre line to Southbank (across Francois Lake). It is hoped that this will provide internet service to the higher density population at Southbank as well as provide fibre to the cellular towers proposed above. The Tanex report estimates from 502 to 637 households depending on coverage.

The next step will be to find a partner for each identified project and identify the Regional District's role within a partnership. Detailed cost estimates for each project will need to be made and cost sharing formulas between the Regional District and the identified partner will require negotiation. Meeting the deadline for the grant application on March 27 will require action by the Regional District Board to identify projects and sign a partnership agreement in the early part of 2020.

Diagrams:

The photo to the right identifies the Buck Flats area relative to Houston and includes properties with house numbers

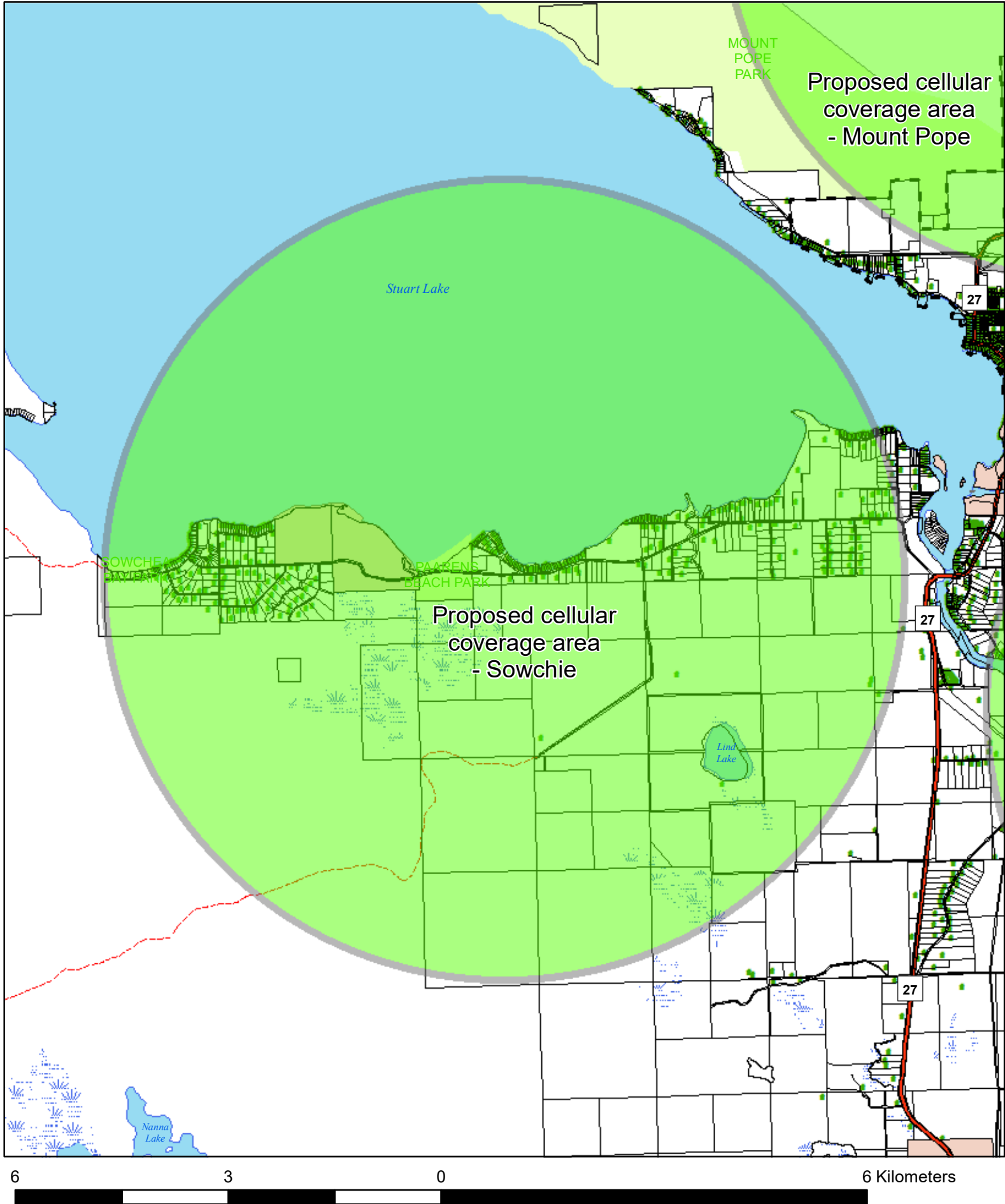




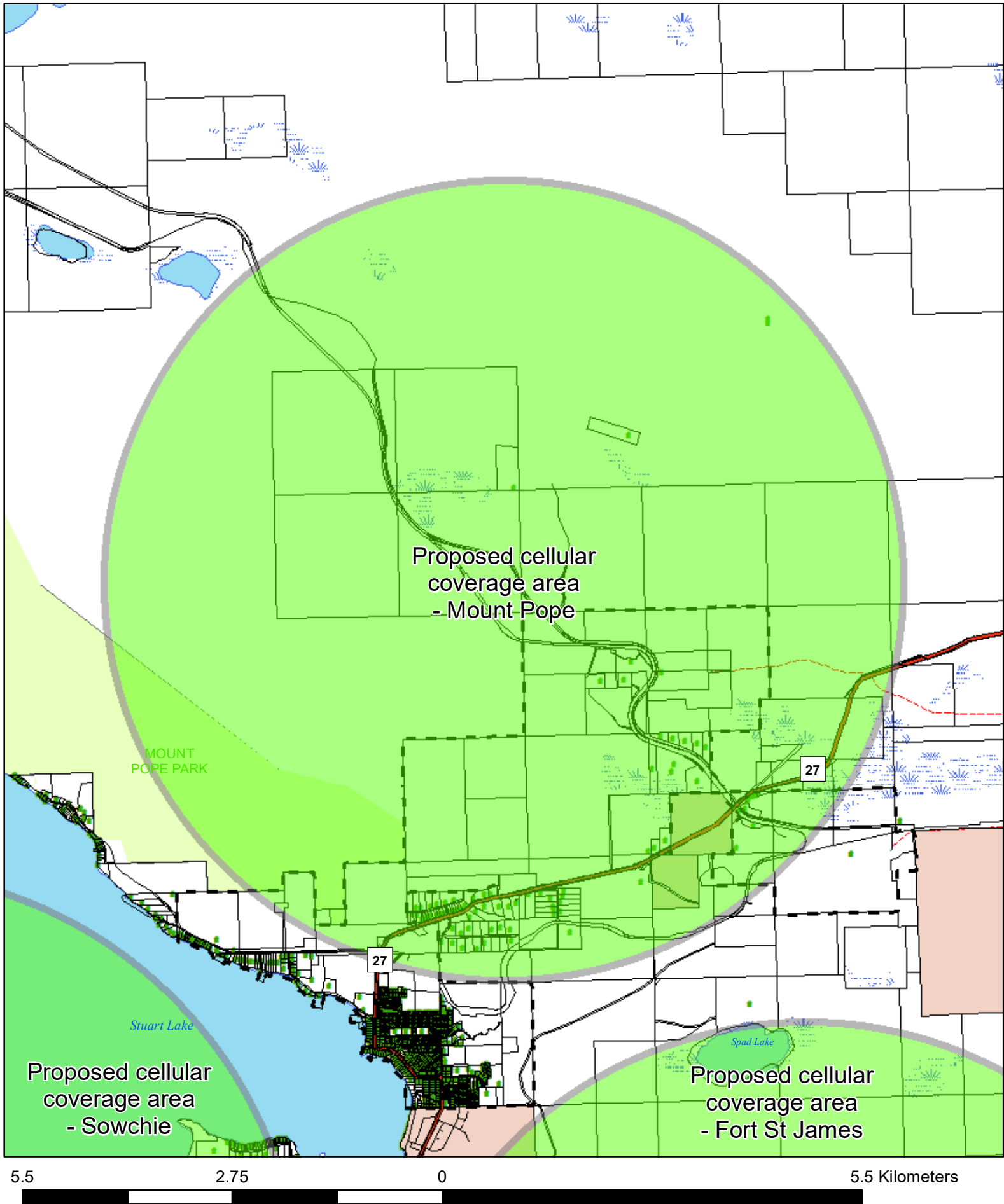
The following pictures shows easily accessed residential locations along the North portion of Highway 35. This would be part of the fibre to home proposal for Area B and E in relation to the Burns Lake.



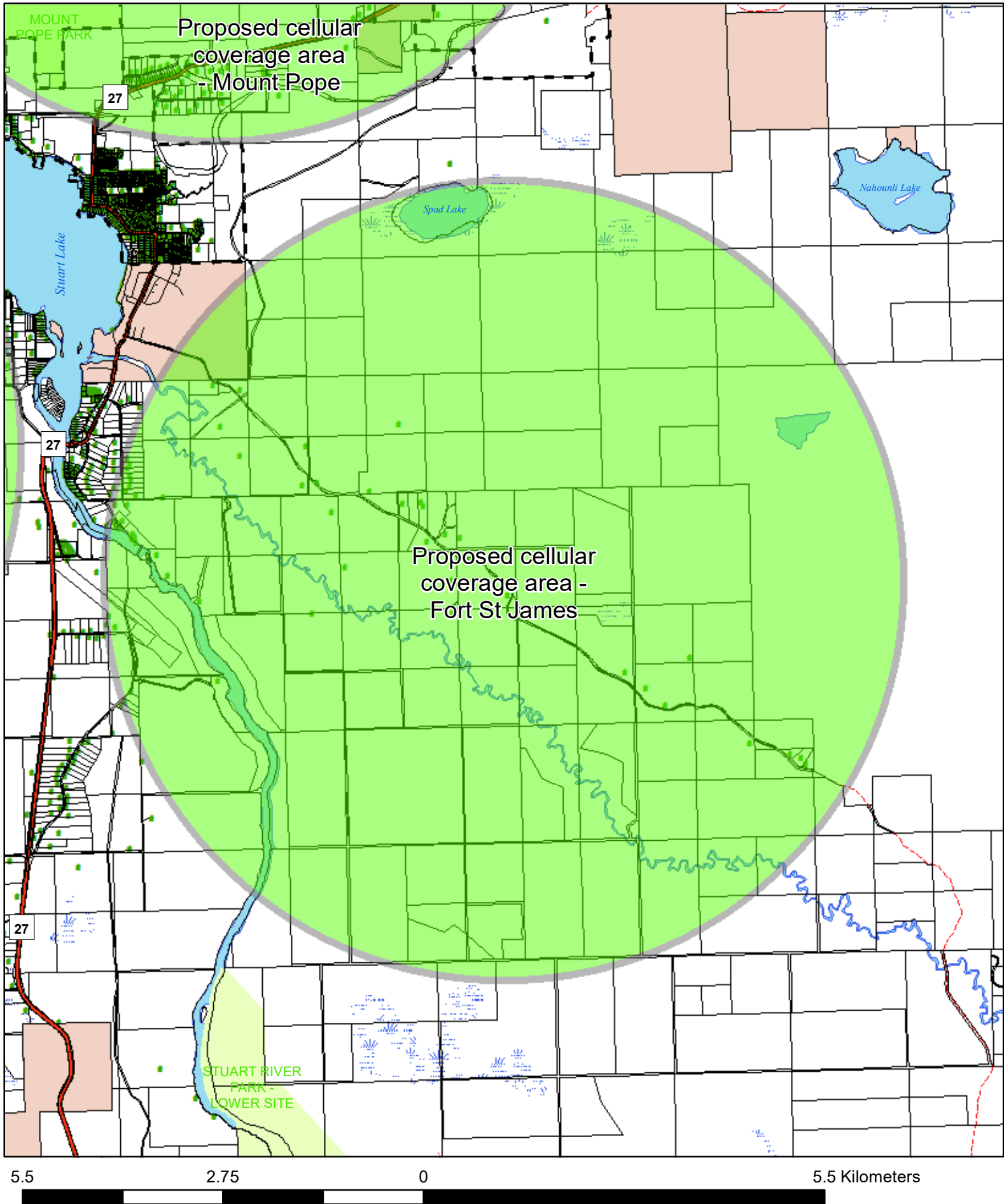
Proposed Cellular Coverage - Sowchie



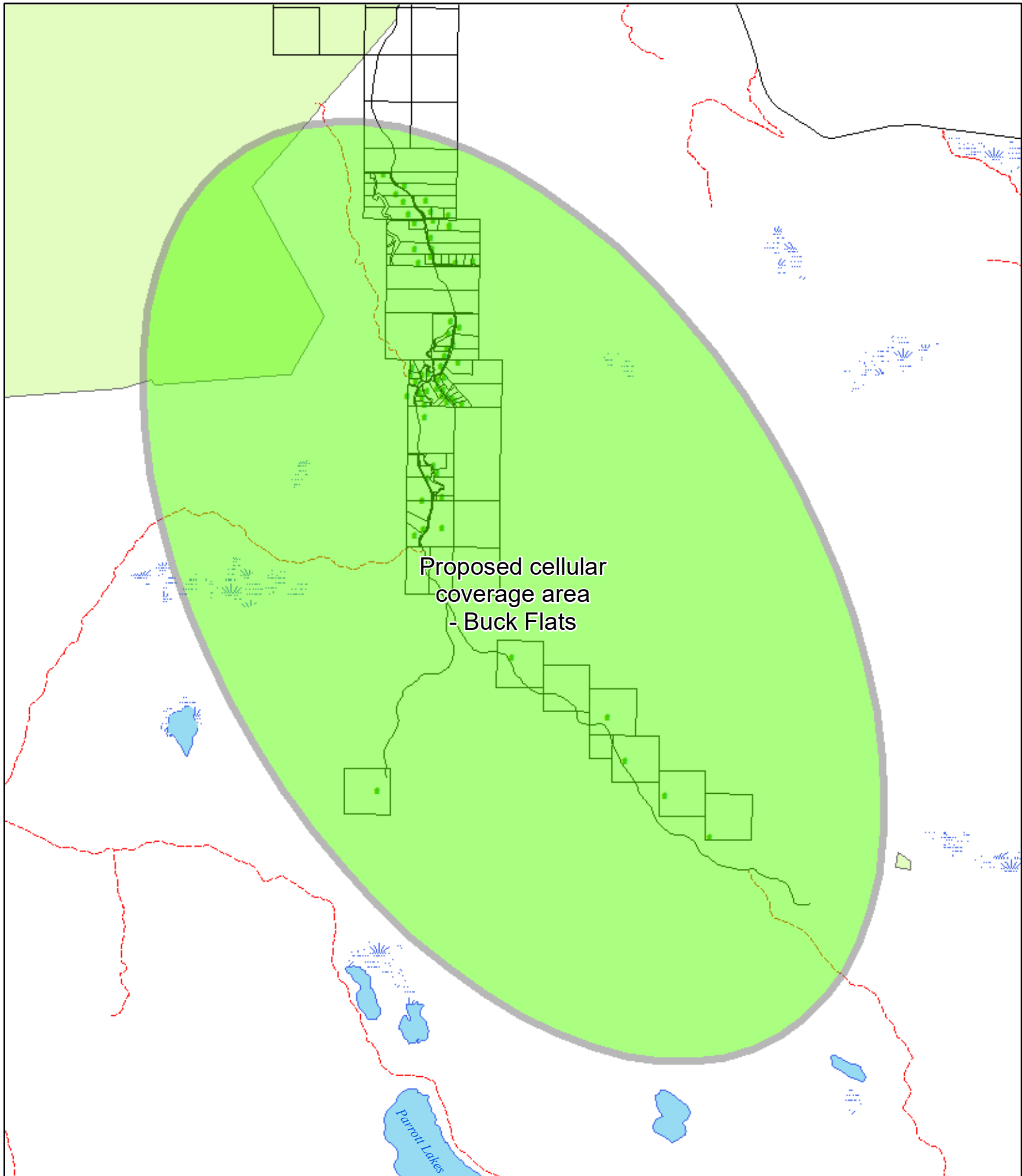
Proposed Cellular Coverage - Mount Pope



Proposed Cellular Coverage - Fort St James



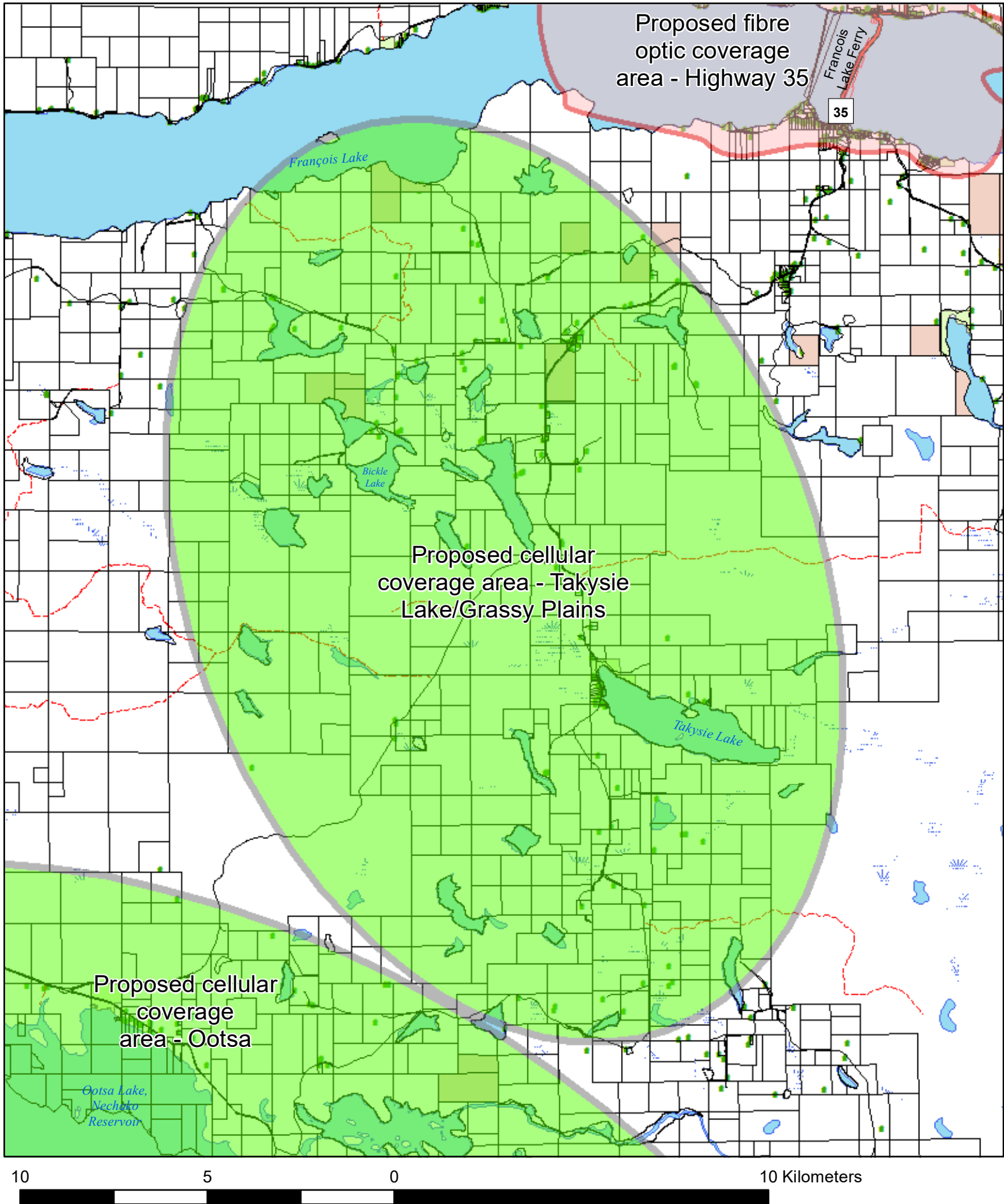
Proposed Cellular Coverage - Buck Flats



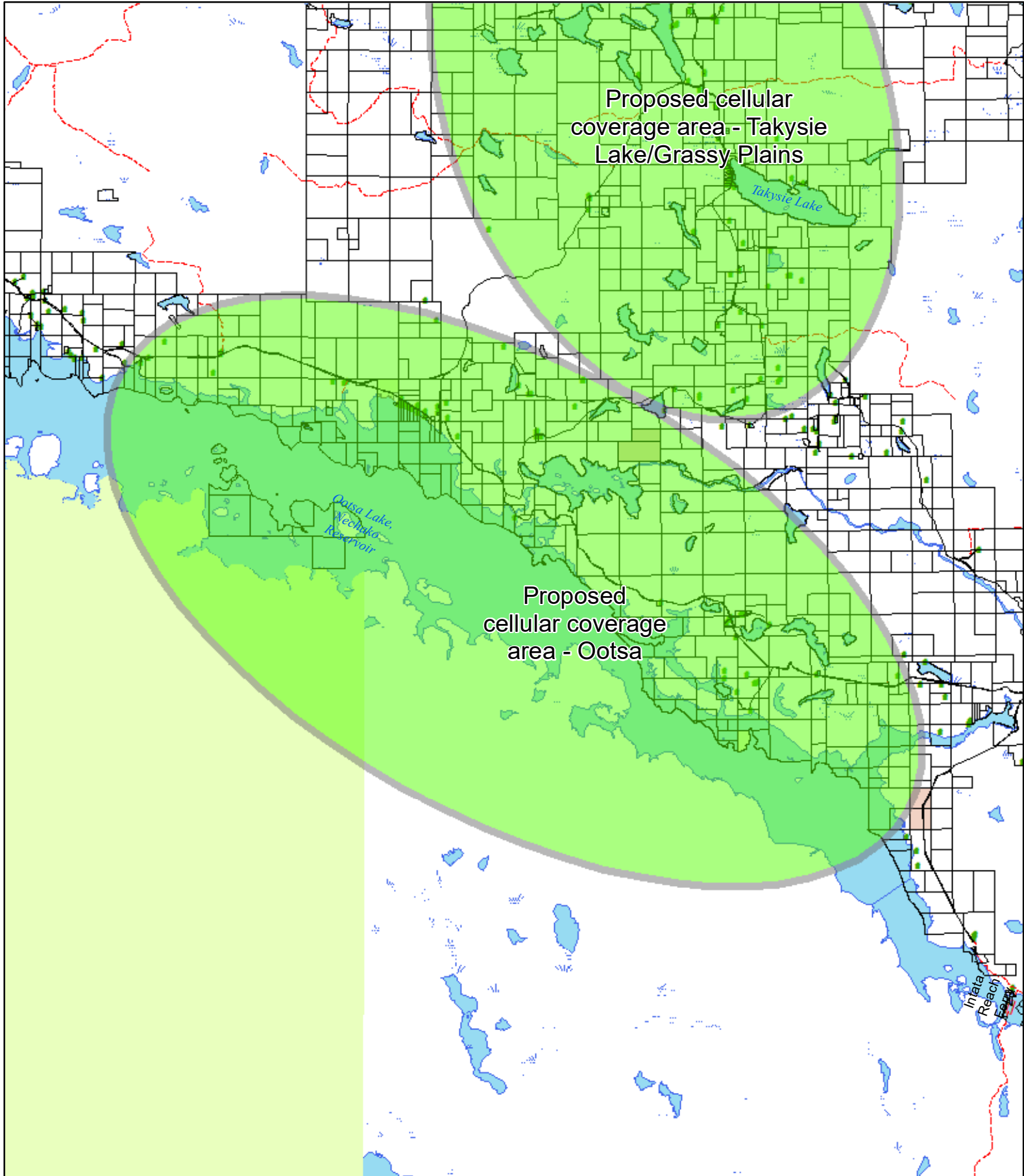
Proposed cellular
coverage area
- Buck Flats



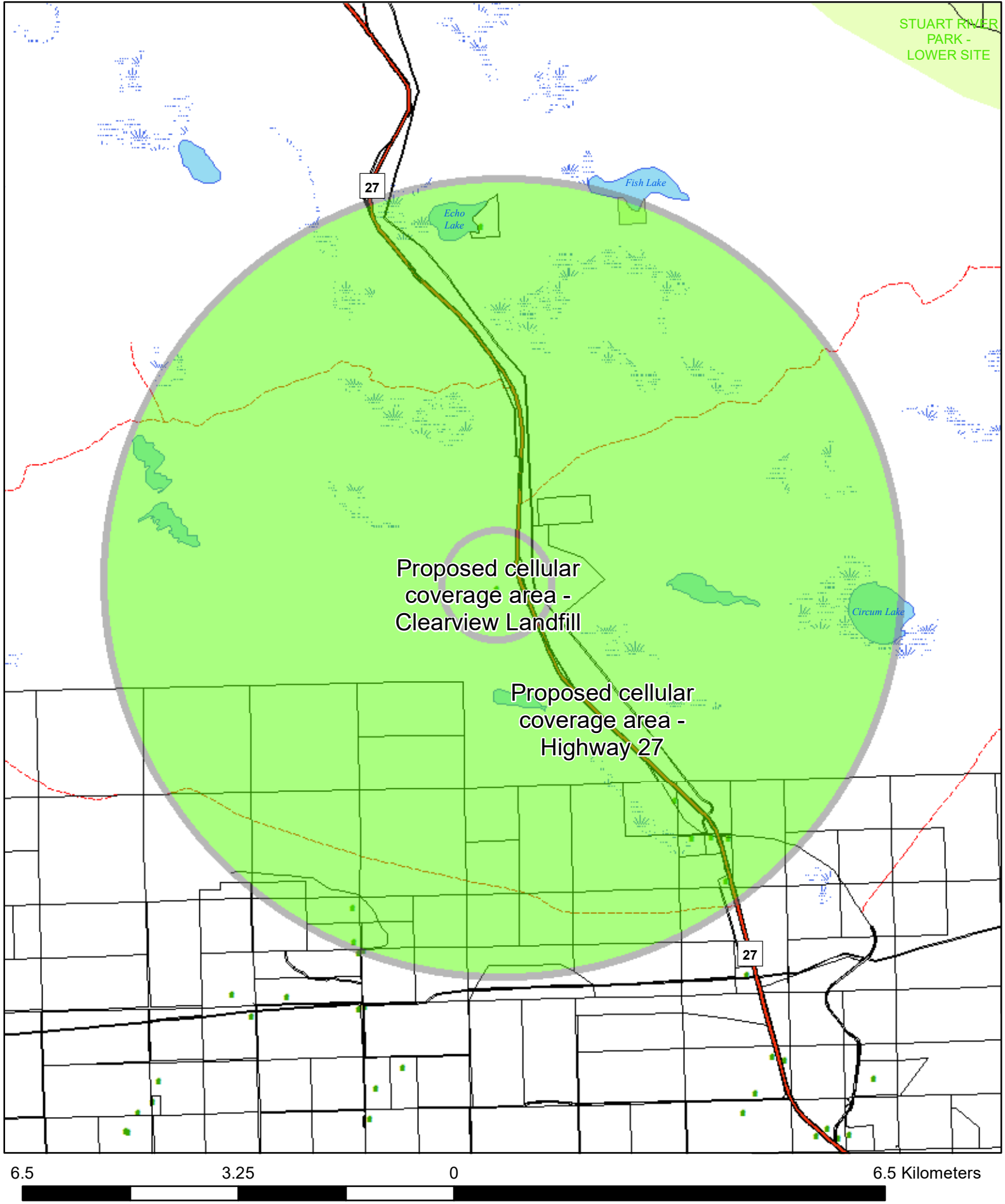
Proposed Cellular Coverage - Takysie Lake/Grassy Plains



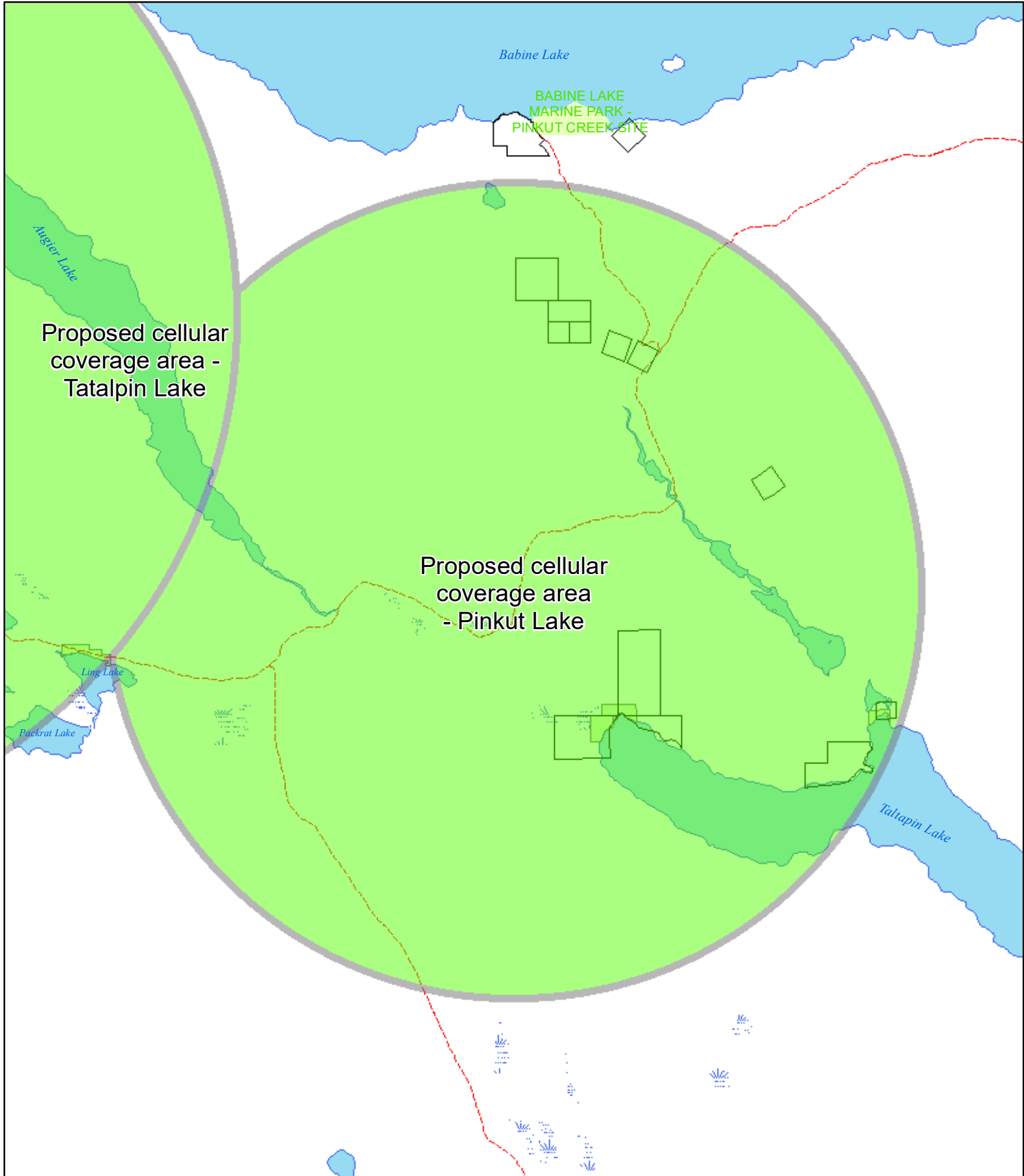
Proposed Cellular Coverage - Ootsa



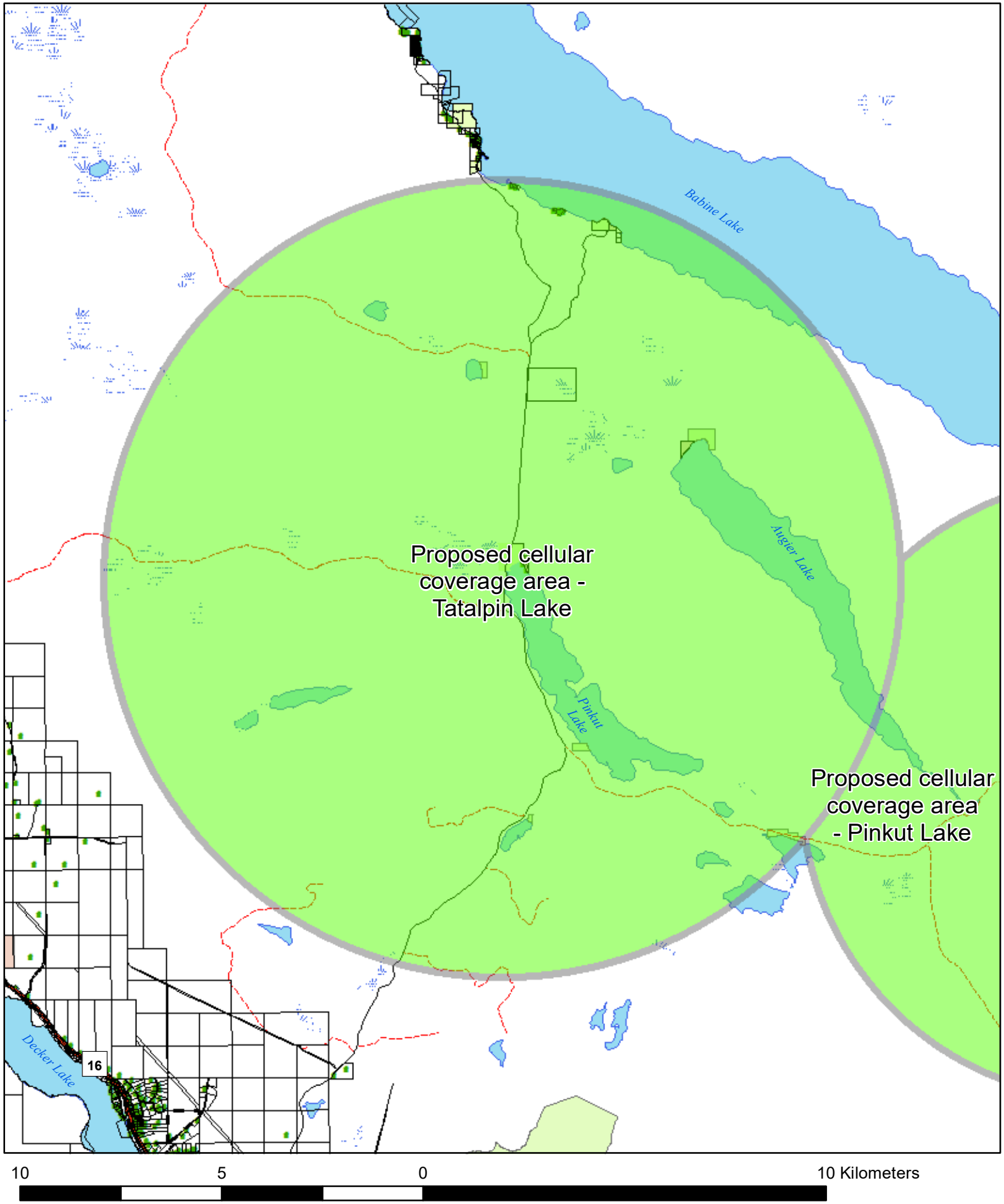
Proposed Cellular Coverage - Highway 27



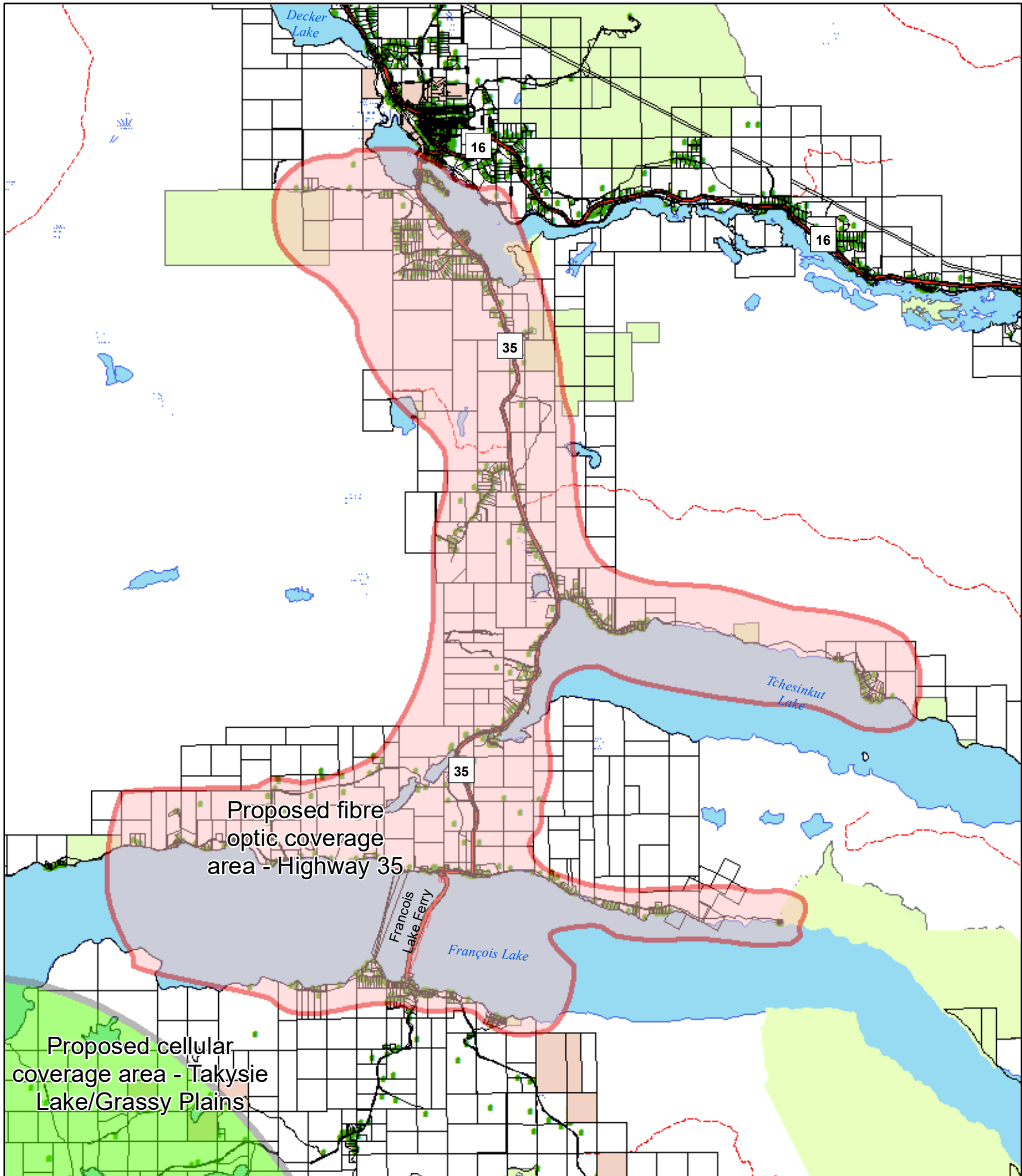
Proposed Cellular Coverage - Pinkut Lake



Proposed Cellular Coverage - Tatalpin Lake



Proposed Fibre Coverage - Highway 35



Proposed fibre optic coverage area - Highway 35

Proposed cellular coverage area - Takysie Lake/Grassy Plains

