ADIRONDACK COUNCIL
PRESERVING WATER, AIR AND WILDLANDS

January 7, 2021

Ariel Lynch
Adirondack Park Agency
P.O. Box 99
Ray Brook, NY 12977
(Via electronic submission)

Re: Proposed Verizon Cell Tower in the Town of Inlet, Application No. 2019-0207

Dear Ms. Lynch,

On behalf of the Adirondack Council, I would like to thank you for the opportunity to provide comments on the *Proposed Verizon Cell Tower in the Town of Inlet, Application No. 2019-0207*. The Adirondack Park Agency's (APA) Policy on Agency Review of Proposals for New Telecommunications Towers and Other Tall Structures in the Adirondack Park (Towers Policy) has done an excellent job of preserving the wild character and scenic beauty of the Adirondack Park by ensuring that new towers fit in with the surrounding landscape and are "substantially invisible". The APA's tower policy has been successful in balancing the preservation of natural beauty while expanding cellular coverage throughout the Adirondack Park, which is fundamental to promoting the quality of life and economy of the region.

We appreciate the effort made in the proposed project to be sited as a simulated tree within a hamlet land classification along State Route 28, a major travel corridor. These aspects of the proposed tower are consistent with the Council's position on telecommunications infrastructure in the Park (see attached). However, the Council does not support the current proposed cell tower plans as submitted to the APA. In reviewing the visual impact analysis, it is evident that proposed tower fails to be "substantially invisible" as it will be visible from many public viewing points. The Council offers these comments:

<u>Reduction in Height to Reduce Visual Impact</u>
The tower will be distinguishable from approximately 1,182 acres of the Forth Lake and about 11 acres of Fifth Lake. From the Inlet Town Park/Town Hall, Shore Rd and driveways, and State Route 28 the visibility ranges from "a fairly consistent view of the tower between buildings" to "tower is significantly skylit" to "considerably skylit in most pictures" (Visual Analysis & Impact Site Assessment p. 3, 4). While the tower is "in the vicinity of existing settlements" within the hamlet, it is not clear how the tower "will be located to avoid undue adverse impacts as to be substantially invisible". We encourage the APA to work with the applicant to minimize the height of the cell tower to the greatest extent practicable to protect the aesthetic value of the surrounding landscape.

Examine Possibilities to Co-locate

The APA Tower Policy states one preferred method to reduce visibility is “using existing buildings to locate facilities whenever possible, using architecturally compatible buildings to house ground equipment; and otherwise using best available technology that avoids or minimizes visual impacts.” The Council urges the APA to exhaust all opportunities for co-location and examine locating communication infrastructure on existing structures in the town of Inlet.

In closing, the Adirondack Council does not support the proposed cell tower due to its failure to adhere to the “significantly invisible” directive in the APA’s Tower Policy. We ask that the integrity of the Tower Policy be protected and that the necessary steps are taken to make sure that any approval of this cell tower meets the requirements of the current policy and includes the recommended conditions. We believe it is possible to expand cellular service while still preserving the integrity of the Towers Policy and the scenic beauty of the Adirondack Park. The Adirondack Council will continue to monitor and provide public input on future similar projects. Thank you for reviewing our comments.

Sincerely,

Charlotte Staats
Conservation Assistant

The Adirondack Council
Position Statement on Wireless Telecommunications
In the Adirondack Park
March 2005

Background:

Today, more than two-thirds of Americans carry a wireless telephone. The exponential growth in communications technology has transformed society, and it is common to see people talking on their wireless phones nearly everywhere, even on the tops of high peaks in the middle of an Adirondack wilderness area. While 'cell phones' provide numerous benefits, especially for public safety and emergency first-responders, their rapid proliferation requires an expanding network of transmission technology.

Wireless telecommunications towers will have significant impacts within the Adirondack Park. Problems arise when new towers, often over one hundred feet high, are built without considering the environmental impacts of the roads and power infrastructure needed to service them, or the visual impacts on historic buildings, scenic rural areas, on mountain tops, or in wilderness settings. However, reliable wireless communication systems along principal existing road corridors and in the villages and hamlets could improve public safety by reducing the response time needed by police, fire and emergency medical services, as well as permitting simultaneous communications among these first-responders.

Congress designed the Telecommunications Act of 1996 to promote the growth of new technologies and provide fair access to telecommunications services for everyone. The Act also gave telecommunication companies broad powers to build their networks and prohibited communities from prohibiting towers.

In response to the Telecommunications Act, the Adirondack Park Agency developed a 'Policy on Agency Review of Proposals for new Telecommunications Towers and other Tall Structures in the Adirondack Park', which was approved on February 15, 2002 (Appendix 1.) The policy is consistent with the APA Act and the Adirondack Park State Land Master Plan. The Council provided input during the development of this policy.

Most recently, the U.S. Justice Department began the development of a nation-wide Integrated Wireless Network (IWN) that will replace the government's patchwork of law enforcement radio systems with a seamless voice and data network to let federal law enforcement officials link wirelessly with state and local counterparts. New York State's Wireless Network (SWN), designed to also meet Homeland Security standards, specifies that the system will have 97 percent coverage along roadways and 95 percent coverage of the entire landscape, and achieve the 'interoperability' among emergency responder communication systems that the federal network requires.

Council Position on Telecommunications Infrastructure in the Park:

The Adirondack Council understands that official emergency wireless telecommunications coverage is vitally important for public health and safety and is currently inadequate in many populated sectors of the Park. At the same time, commercial wireless companies are seeking to increase telecommunications coverage for private users. The Council believes that reliable emergency wireless coverage, and other private wireless uses, can be achieved while ensuring the environmental and scenic resources that the Park possesses, which serve as assets not only to the ecosystem but to the regional economy, can remain intact and reasonably undisturbed. We submit the following guidelines for consideration by policymakers, engineers, and regulators for the design and construction of new wireless communication infrastructure in the Park.

- When planning for new wireless communication coverage in the Adirondack Park, focus should be directed toward principal road corridors including: Interstate Highway 87 and NYS Routes 3, 28, 30, 8, and 9. In addition to road corridors, hamlet areas and centers of development should also be primary candidates for new coverage. These areas are most in need of coverage as they are population centers or routes traveled by the majority of the population, and
  they often have existing infrastructure on which new antennae and arrays could be sited.
- Designs for new infrastructure should exhaust every possibility to collocate new infrastructure on existing towers or other structures before suggesting the construction of new towers. There have been successful examples of collocation of wireless infrastructure both in the Park and throughout the nation. Sites inside the Park and nationwide are currently collocating wireless antennae on churches, water towers, buildings, utility structures, and existing towers. Some of these have simply entailed attaching an antenna to the structure, while others have concealed the technology as part of the building – a chimney for example. With so many existing structures in the Park's hamlets, towns, villages, and along roadways, it is feasible that wireless coverage could be drastically increased without adding new towers which obscure scenic vistas and diminish the Park's wild character.
- While wireless coverage is important in population centers and along road corridors, the Council does not believe that wireless coverage in Forest Preserve areas is necessary and therefore construction of new towers on those constitutionally protected lands would be inappropriate.
- With regard to private land not in hamlet areas including resource management lands, the Council urges the Adirondack Park Agency to mandate that applicants exhaust all opportunities for collocation before deeming applications for new towers complete. If collocation is not possible, the applicant must comply with all provisions of the Adirondack Park Agency towers policy. Additionally, these applications should be reviewed to ensure the applicant has obtained all proper permits required outside of the APA, including NYS DEC storm water State Pollutant Discharge Elimination System (SPDES) permits for pollution created during and after construction.

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February 2, 2021

VIA EMAIL AND FEDERAL EXPRESS

Ariel Lynch
Adirondack Park Agency
Route 86
Ray Brook, New York 12977
ariel.lynch@apa.ny.gov

RE: APA Project No. 2019-0207
New York RSA 2 Cellular Partnership d/b/a Verizon Wireless' Application to the Adirondack Park Agency to construct and operate a wireless telecommunications facility on Property located at 181 Route 28 (Tax Parcel No. 59.016-4-1.1) in the Town of Inlet, Hamilton County, New York (Verizon Wireless' "Eagle Bay" site)

Dear Ms. Lynch:

We are in receipt of the Adirondack Council's January 7, 2021 letter regarding the above-referenced project (the "Project"). In its letter, the Adirondack Council raised a number of concerns that, as you know, were raised by the Agency during its review of the project to date. Below are the concerns raised by the Adirondack Council in bold italicized type, followed by Verizon Wireless' responses in regular type.

Reduction in Height to Reduce Visual Impact
The tower will be distinguishable from approximately 1,182 acres of the Forth Lake and about 11 acres of Fifth Lake. From the Inlet Town Park/Town Hall, Shore Rd and driveways, and State Route 28 the visibility ranges from "a fairly consistent view of the tower between buildings" to "tower is significantly skylit" to "considerably skylit in most pictures" (Visual Analysis & Impact Site Assessment p. 3, 4). While the tower is "in the vicinity of existing settlements" within the hamlet, it is not clear how the tower "will be located to avoid undue adverse impacts as to be substantially invisible". We encourage the APA to work with the applicant to minimize the height of the cell tower to the greatest extent practicable to protect the aesthetic value of the surrounding landscape.

As you know, by application dated November 15, 2019 (and four (4) subsequent supplemental submissions) (the "Application"), Verizon Wireless applied to the Agency for a major permit to construct and operate a wireless telecommunications facility on the St. Anthony of Padua Church property to serve the Eagle Bay/Inlet area. Recognizing the location of the proposed tower and to minimize the overall visibility of the tower from the nearby Hamlet and surrounding lakes, Verizon Wireless proposed to construct a 130′ tall monopine tower[1] rather than a more typical monopole facility.

Included in the Application was Verizon Wireless' Site Selection/Design Analysis Report (Attachment K) (the "Initial RF Report") that outlines the need for the project. In the Initial RF Report, Verizon Wireless' RF Engineer Daniel Scholl described: (1) the need for the Project; (2) the fact that there are no existing towers or other tall structures capable of hosting a co-location within ten (10) miles of the search area (see pp. 3-4); (3) there were only two (2) parcels within the search ring that are large enough to host the project (the Becks and St. Anthony's Church) (see p. 5); and (4) the Becks rejected a tower on their property, making St. Anthony's Church as the only feasible location for the project (see pp. 5-6). A copy of the Initial RF Report is enclosed as Attachment 1 for your convenience.

Notably, in the Initial RF Report, Mr. Scholl first indicated that based on his analysis, a 130′ (with a 116' ACL) tower is required to deliver reliable wireless telecommunications service to the Eagle Bay service area.

The First Notice of Incomplete Application

In its Notice of Incomplete Application dated December 3, 2019, the Agency requested additional information regarding the project, however, the questions were not RF related.

The Second Notice of Incomplete Application

In its Second Notice of Incomplete Application dated May 1, 2020, the Agency asked for additional information regarding; (1) the necessary height of the tower; and (2) whether any alternate search areas were feasible. In response, Mr. Scholl prepared his first supplemental RF report outlining the need for the proposed tower height (the "Second RF Report") and Verizon Wireless' Site Acquisition specialist Sara Colman provided a supplemental site selection report outlining the site selection process and why the St. Anthony's site is the only available location for the property. location of the search area and why potential alternate search areas were rejected given the lost coverage

[1] Following the Agency-supervised balloon fly and in consultation with Agency staff, Verizon Wireless agreed to reduce the height of the proposed monopine tower from 130' to 125' AGL to minimize its overall visibility to the maximum extent practicable, while still providing much-needed wireless coverage to the Eagle Bay/Inlet area. Note that while the overall height of the tower was reduced from 130'-125', the ACL height of 116' AGL remained unchanged.

from facilities located within the theoretical alternative search areas. A copy of the Third RF Report and the supplemental site selection report are enclosed as Attachment 2 and Attachment 3, respectively.

The Third Notice of Incomplete Application

In its Third Notice of Incomplete Application dated June 22, 2020, the Agency requested yet additional information regarding the search area, the height of the proposed tower, etc. In response, Mr. Scholl provided a third RF report describing why the search area is located where it is and why expanding or relocating it is not a feasible option (the "Third RF Report"). A copy of the Third RF Report is enclosed as Attachment 4.

The Fourth Notice of Incomplete Application

In its Fourth Notice of Incomplete Application dated November 6, 2020, the Agency requested yet additional information regarding the search area, the height of the proposed tower, etc. In response, Mr. Scholl provided a fourth RF report describing why the search area is located where it is and why the location identified in the Fourth Notice of Incomplete Application is not a viable alternative (the "Fourth RF Report"). A copy of the Fourth RF Report (with corresponding exhibits) is enclosed as Attachment 5.

Examine Possibilities to Co-locate
The APA Tower Policy states one preferred method to reduce visibility is "using existing buildings to locate facilities whenever possible, using architecturally compatible buildings to house ground equipment; and otherwise using best available technology that avoids or minimizes visual impacts." The Council urges the APA to exhaust all opportunities for co-location and examine locating communication infrastructure on existing structures in the town of Inlet.

As described in the four (4) RF reports, co-locating on an existing tall structure is not a viable alternative. There simply are no towers or existing tall structures within ten (10) miles of the site.

In closing, the Adirondack Council does not support the proposed cell tower due to its failure to adhere to the "significantly invisible" directive in the APA's Tower Policy. We ask that the integrity of the Tower Policy be protected and that the necessary steps are taken to make sure that any approval of this cell tower meets the requirements of the current policy and includes the recommended conditions. We believe it is possible to expand cellular service while still preserving the integrity of the Towers Policy and the scenic beauty of the Adirondack Park. The Adirondack Council will continue to monitor and provide public input on future similar projects. Thank you for reviewing our comments.

In all, during the approximately 14-month Agency review process, Verizon Wireless submitted four (4) RF Reports and a supplemental site selection report in

response to inquiries by Agency staff regarding potential co-location, alternate locations and tower heights. For anyone to assert that Verizon Wireless somehow failed to explore alternative locations/tower heights is simply not supported by the record before the Agency.

Finally, it should be noted that during the zoning process before the Town of Inlet, a number of residents and Town officials requested Verizon Wireless consider *raising the height of the tower* to deliver service to a larger geographic area. In response, Verizon Wireless representatives expressed the need to comply with the Agency's Towers Policy and for that reason, extending the proposed tower above the 125′ proposed monopine tower was not appropriate. Simply stated, the proposed 125′ monopine tower constructed within a stand of existing trees on the St. Anthony's property (located within the Hamlet of Eagle Bay) is the only feasible location (and height) for the project. Verizon Wireless has worked tirelessly with the Agency since November 2019 to design the project in a manner that balances both the need for reliable service in the Eagle Bay service area and compliance with the Agency's Towers Policy, to the maximum extent practicable.

Should you have any additional questions, please do not hesitate to contact me. Otherwise, we would appreciate an issuance of the requested Agency Permit as soon as possible.

Very truly yours,

Jared C. Lusk

JCL/mkv
Enclosures
cc: Sara Colman
Kathy Pomponio

ATTACHMENT 1

Network Engineering - UPNY
225 Jordan Road
Troy, New York 12180

"EAGLE BAY" COMMUNICATIONS FACILITY
183 NORTH ROUTE 28, TOWN OF INLET, NY

New York RSA 2 Cellular Partnership d/b/a Verizon Wireless ("Verizon Wireless" or the "Applicant") plans to install and operate a new public utility / personal wireless service facility (the "communications facility"), including associated antennas, elevated equipment platform and related appurtenances, on the proposed 130 ft. tall monopine off 181 North Route 28 in the Town of Inlet, Hamilton County, New York (this facility is known internally as **"Eagle Bay"**).

The purpose of this project is to improve wireless coverage and capacity in the Towns of Inlet and Webb - and add new 700 MHz and Advanced Wireless Services (AWS) 2100 MHz frequencies to Verizon Wireless' existing regional wireless network. Verizon Wireless is using these frequencies for commercial activation of its fourth Generation Long Term Evolution (4G LTE) communication services network.

This project is a necessary and critical upgrade of the Verizon Wireless communications network in Hamilton County and Herkimer County. Upon completion, new, advanced emergency and non-emergency 4G Verizon Wireless communication services will be provided across the northwestern portions of the Town of Inlet and the southwestern portions of the Town of Webb.

Long Term Evolution (LTE) Technology

The technology used in Verizon Wireless' 4G network is known as LTE (Long Term Evolution). LTE is an advanced high-performance air interface standard that is designed to increase mobile telecommunications network coverage and capacity, offering throughput speeds that range from 12 to 20 times faster than Verizon Wireless' legacy 3G technology, known as EVDO (Evolution Data Optimized). It is important to note however that 4G LTE technology operates at lower power levels than 3G, and as a result spacing between new 4G facilities is generally less than spacing between legacy 3G (as well as earlier analog and 2G) facilities.

As compared to Verizon Wireless' existing CDMA network, LTE technology uses different signaling schemes (i.e., frequency division multiplexing similar to that of modern-day Wi-Fi and WiMAX versus Verizon Wireless' existing 3rd generation CDMA, or Code Division Multiple Access, technology), operating frequencies and power levels. Having said this, basic wireless network design principles are similar and apply to 4G technology, and the ability to control and minimize interference is critical to the overall performance and reliability of the network. For these reasons, the LTE deployment focuses on achieving acceptable levels of network performance by carefully minimizing interfering signals from neighboring and distant sites while maximizing coverage within each site's target coverage area. This objective is pursued by installing high performance LTE antennas at each new and existing facility, with each LTE antenna selected based on its inherent operational characteristics (antenna pattern, gain)

and adjusted (via antenna orientation, downtilt, etc.) to contain coverage within only a well-defined target area (thus reducing interference with neighboring and distant sites).

To achieve acceptable data speeds and performance in LTE, a mobile device must operate in a relatively low interference environment (i.e., where spillover coverage from surrounding and distant facilities is minimized) while receiving sufficiently strong signals from its intended serving cell. As with CDMA where a pilot or reference signal is used to determine cell coverage, LTE coverage and performance is also determined by the strength and quality of the reference signal generated by a nearby serving site. In LTE terms, the signal strength of this reference signal is referred to as the Reference Signal Received Power level, or RSRP. An LTE mobile device must be able to receive and decode the reference signal in order to successfully connect and maintain reliable connection to the wireless network. The reference signal power level used by Verizon Wireless to ensure reliable LTE coverage, service and performance in rural areas like the northwestern portions of the Town of Inlet and the southwestern portions of the Town of Webb is -95 dBm.

Eagle Bay Communications Facility

As mentioned previously, the purpose of the Eagle Bay communications facility is to provide an adequate and safe level of emergency and non-emergency Verizon Wireless 4G communications services across the northwestern portions of the Town of Inlet and southwestern portions of the Town of Webb. More specifically, the facility will offer significant improvements in both coverage and capacity (ability for the network to adequately satisfy the demand for high speed wireless services) to the homes, businesses, tourist/recreational areas and rural communities across northwestern portions of the Town of Inlet and southwestern portions of the Town of Webb, including 7.1± miles along NY Route 28 (NY-28), 2.25± miles along South Shore Rd and 0.5± miles along Big Moose Rd. Additionally, the proposed facility will improve service and fill in existing 4G network coverage gaps (the Targeted Coverage Area) along several other rural community and local roads across the Targeted Coverage Area.

Shared Use of Existing Towers/Structures

Existing 4G/LTE service in the Targeted Coverage Area is extremely limited; and originates from only 1 existing on-air Verizon Wireless communications facility – which is located within the Town of Webb in Herkimer County (see **Figure 1**). Also, there are currently no other proposed Verizon Wireless communications facilities planned to be built or operated within a 10 mile radius of the proposed “Eagle Bay” facility at this time.

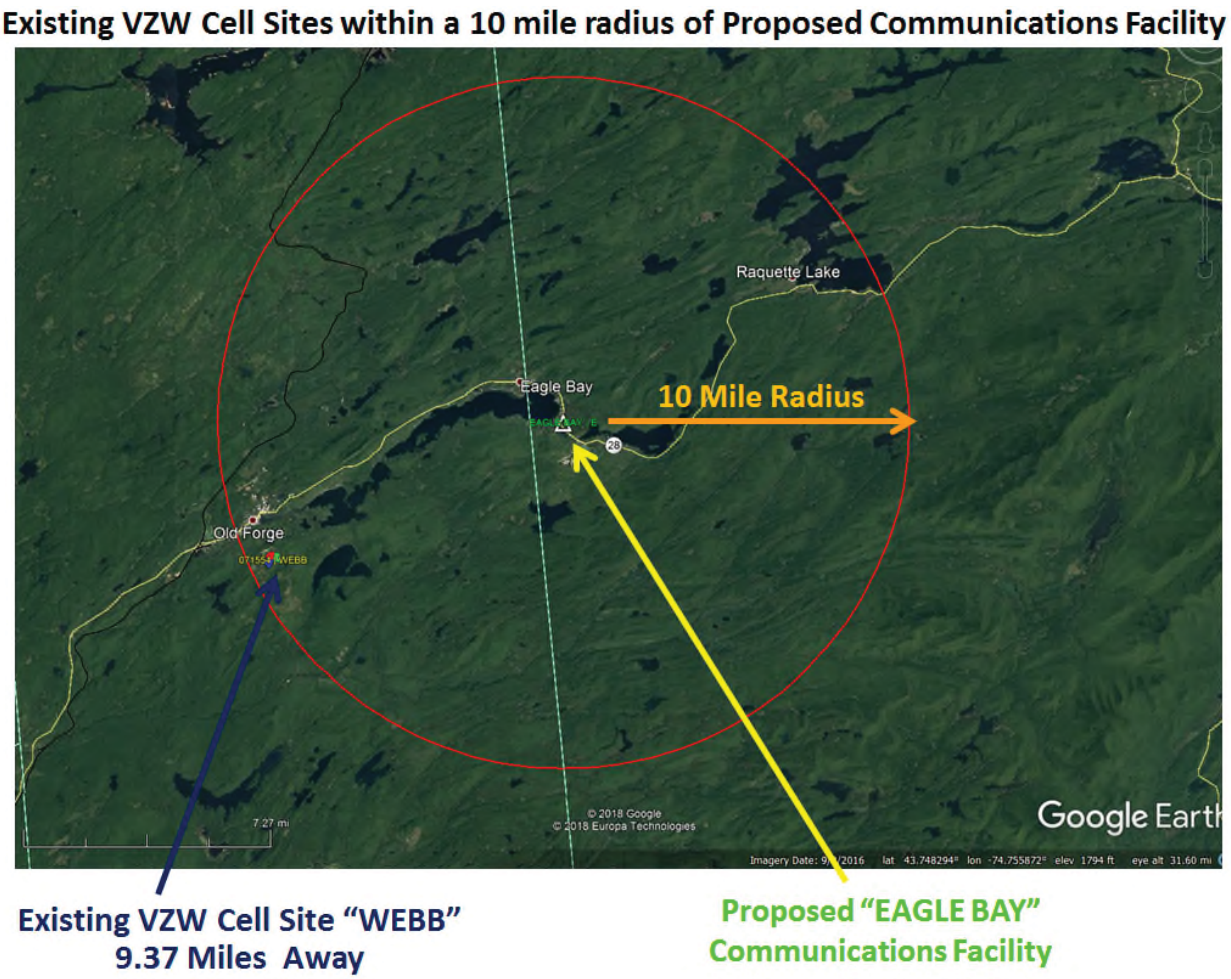


Figure 1. Inventory of existing Verizon Wireless Communication Facilities that are within a 10 mile radius of the proposed "Eagle Bay" Communication Facility.

Although this neighboring Verizon Wireless facility ("Webb") is successfully in providing coverage within its intended local target coverage area, it does not provide sufficient 4G/LTE coverage and capacity to the Targeted Coverage Area including across much of the northwestern portions of the Town of Inlet and southwestern portions of the Town of Webb, including to the residences, businesses, and the traveling public living, visiting, recreating or traveling through the Town of Inlet and the Town of Webb. A new 4G wireless facility needs to be placed generally within 1 mile of the wholly targeted 4G network performance improvement area to be successful (in a rural environment) and all of the existing Verizon Wireless' facilities are 10 or more miles away. Verizon Wireless is already operating this existing "Webb" wireless communications facility at an AMSL of 2319' – therefore even a theoretical tower height extension of any significance at that facility would still not be able to overcome the geographical distance the facility is from the Targeted Coverage Area - that the proposed Eagle Bay communications facility would intend to cover.

Additionally, thorough research and analysis has been done to identify and quantify any and all existing facilities within an 10 mile radius of the proposed "Eagle Bay" facility – in order to identify if and whether Verizon Wireless could co-locate onto any existing Non-Verizon Wireless facility. The result of this analysis is that there are no other existing Non-Verizon Wireless facilities within 10 miles of the proposed Eagle Bay facility. In fact – the closest Non-Verizon Wireless facility is approximately 16 miles away – which is the ATC tower at Stillwater Reservoir (see **Figure 2** below).

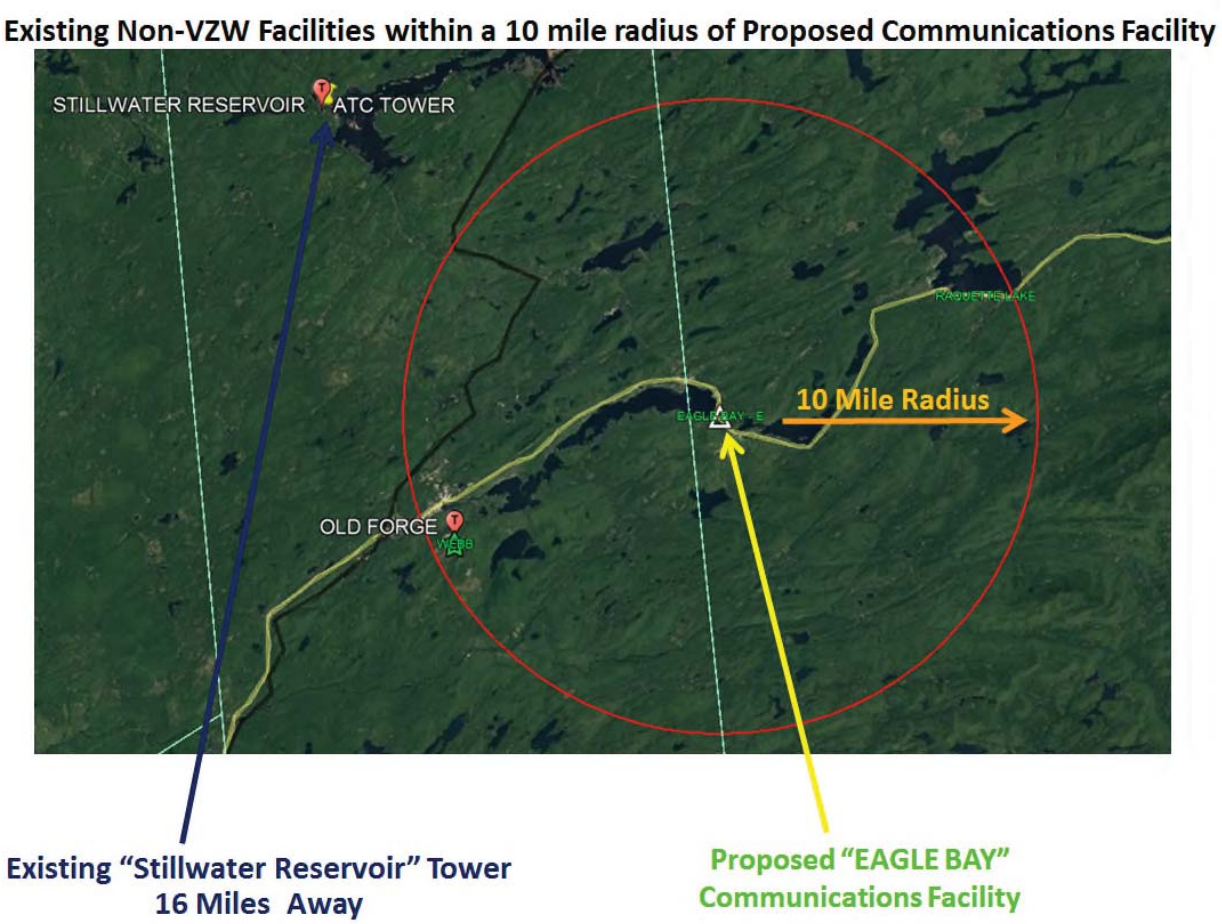


Figure 2. Inventory of Non-Verizon Wireless Facilities (within a 10 mile radius of the proposed "Eagle Bay" facility).

Therefore, there is currently no other existing facility within 10 miles of the proposed Eagle Bay communications facility with the ability of achieving the RF objectives for providing adequate and safe level of emergency and non-emergency Verizon Wireless 4G communications services to the Targeted Coverage Area.

Targeted Improvement Area

To demonstrate the currently inadequate level of 4G/LTE service in the Targeted Coverage Area, a propagation analysis (using Verizon Wireless' -95 dBm RSRP 4G design standard signal level threshold) is provided in **Figure 3**[1]. When viewing the results in **Figure 3**, areas of Blue indicate reliable coverage from Verizon Wireless' existing facilities and areas void of color indicate a lack of 4G coverage and/or capacity. As the results in the coverage map at **Figure 3** demonstrate, coverage is currently deficient across the northwestern portions of the Town of Inlet and the southwestern portions of the Town of Webb. In particular, several linear miles along main, secondary and local travel routes (e.g. 10± miles along NY Route 28 (NY-28), 2± miles along South Shore Rd and 2± miles along Big Moose Rd.) lack adequate 4G wireless service, as well as the homes, businesses and communities

[1] All propagation studies in this report were developed using an industry standard radio frequency propagation prediction tool called "Atoll".

across the Targeted Coverage Area. As a result, deployment of a new wireless facility is required to provide 4G wireless service to the Targeted Coverage Area.

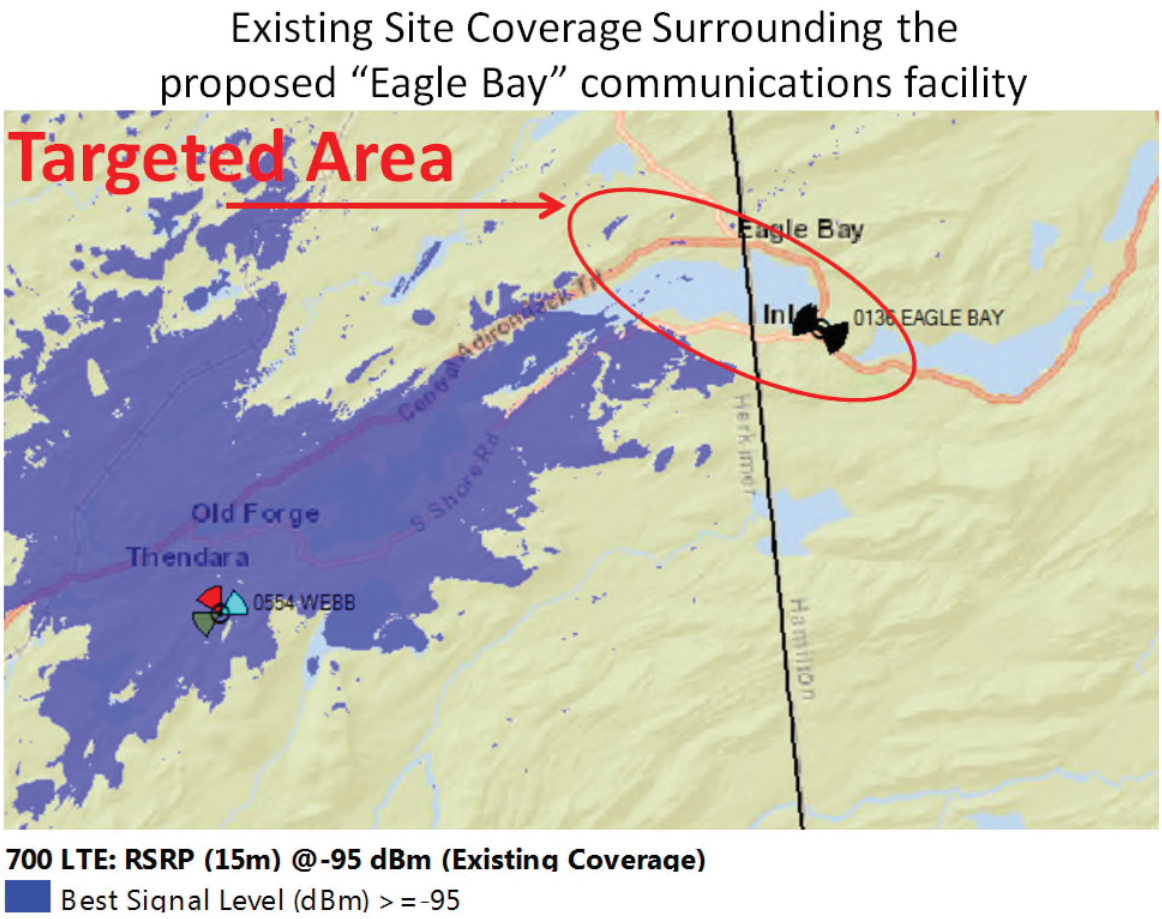


Figure 3. Existing Site Coverage surrounding the proposed "Eagle Bay" Wireless Facility

Site Selection Analysis and Proposed Site Coverage of Targeted Area

Once Verizon Wireless determines that a particular geographic area cannot be adequately served by the existing communications facilities in the surrounding network (i.e., coverage is deficient and/or calling capacity provided by the existing facilities is reaching upper limits), a new wireless facility "search area" is developed. The "search area" is created by a qualified in–house Radio Frequency (RF) engineer and is a definitive geographic area where a cell site needs to be located in order to satisfy a site's coverage and/or capacity objectives. In the case of the proposed Eagle Bay site, the first step was for Verizon Wireless to carefully consider any existing Verizon Wireless facilities, as well as existing Non-Verizon Wireless facilities. Since there were not any existing communications facilities with the ability of achieving the RF objectives for providing adequate and safe level of emergency and non-emergency Verizon Wireless 4G communications services; Verizon Wireless determined that a new communications facility would be required. The search area identified for this site was based on ability to sufficiently cover the Targeted Coverage Area and is shown in **Figure 4**. Two (2) potential candidates were identified (Beck and St. Anthony of Padua). On January 8, 2019, after speaking with them for months, the Becks declined to host a tower on their property. In any event, after extensive RF analysis, Verizon Wireless determined that the St. Anthony of Padua candidate provided better overall 4G LTE coverage to the Targeted Coverage Area, based on its geographical location and its ability to

cover NY-28 to the south/southeast as well as covering NY-28 to the north/northwest – while still providing excellent 4G LTE coverage to the Hamlets of Inlet and Eagle Bay. Therefore, a new 120 ft. tall monopole wireless facility was proposed on the privately held property of the St. Anthony of Padua Church. Since a lease agreement could be reached and the location and proposed antenna centerline height of the proposed tower would offer Verizon Wireless the ability to satisfy its network performance improvement objectives both in and around the Targeted Coverage Area.

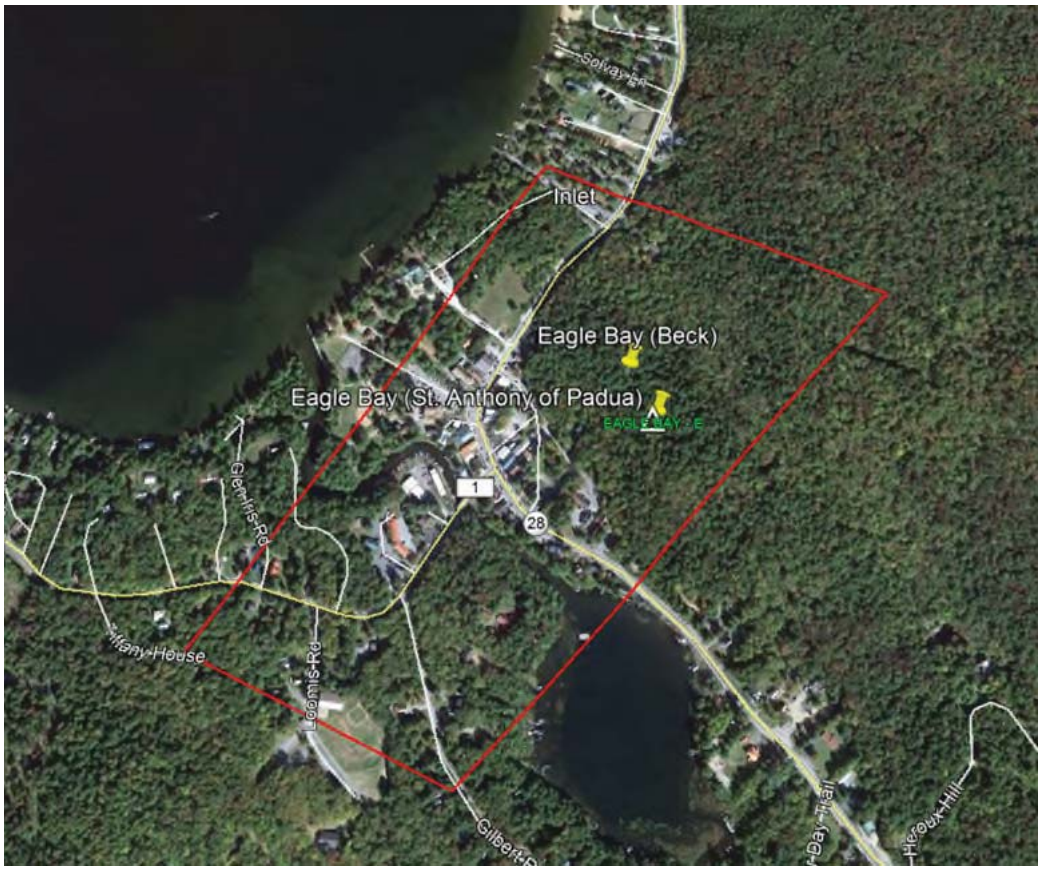


Figure 4. Eagle Bay Search Area with candidates

A propagation analysis showing the new emergency and non-emergency 4G coverage and calling capacity that will be provided by the proposed Eagle Bay communications facility (shown in the color Light Green) is included at **Figure 5**. As the results in **Figure 5** demonstrate, once completed the Verizon Wireless' Eagle Bay site will provide the desired level of new and improved 4G service across significant portions of the Targeted Coverage Area. Note that some areas will remain that will not be provided reliable 4G coverage; this is due to the widely varying terrain / elevation in the area (mostly to the northwest and southeast) and thus results in significant signal blocking into these areas from the proposed site. Verizon Wireless may choose to supplement coverage in these areas in the future, but there are currently no plans to do so.

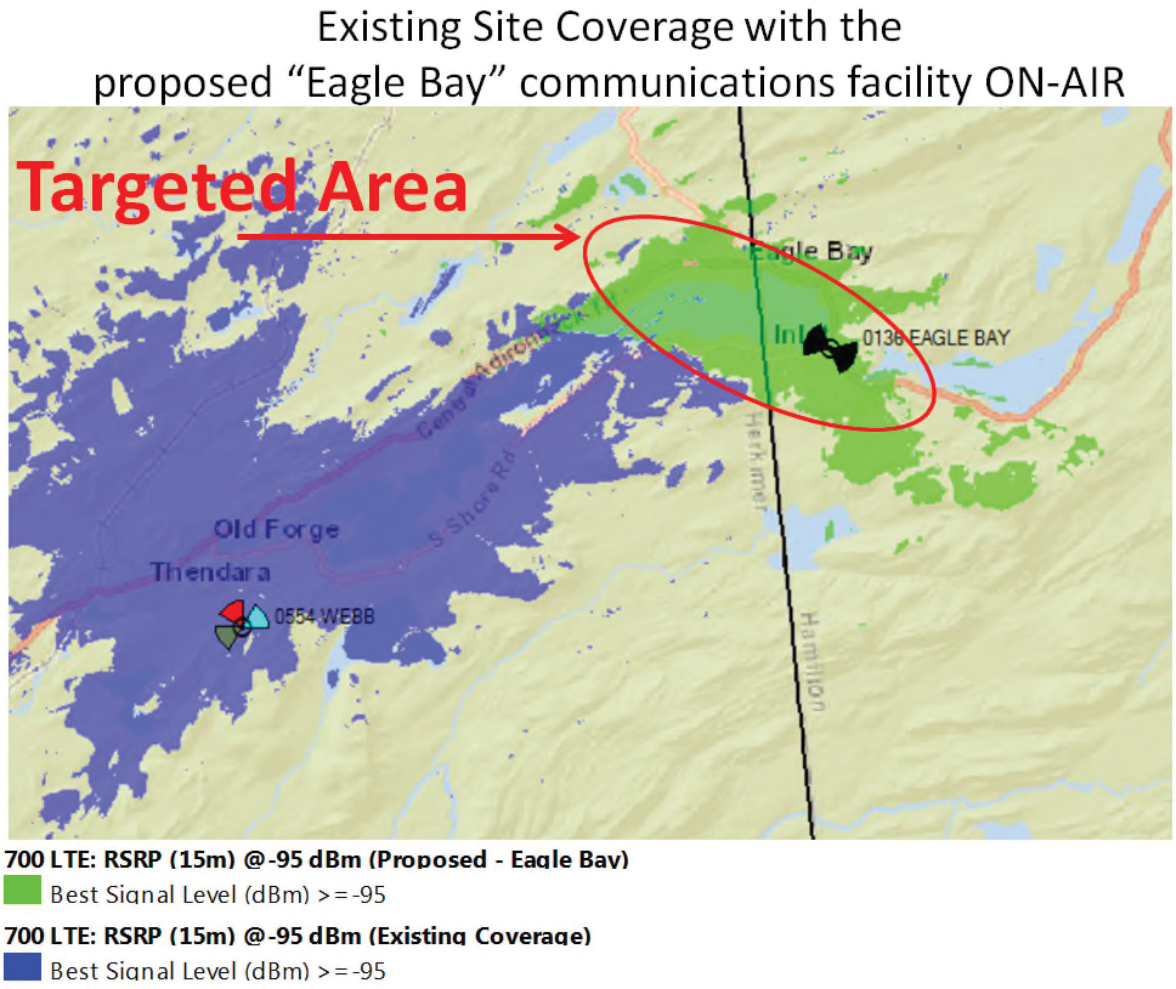


Figure 5. Existing and Future Planned Site Coverage with the proposed "Eagle Bay" Wireless Facility ON-AIR

Minimum Tower Height

The propagations shown at **Figure 6** and **Figure 7** below demonstrate expected Eagle Bay 4G wireless service coverage at proposed tower heights of 130' and 80' respectively (actual ACL would be 116' and 76' respectively).

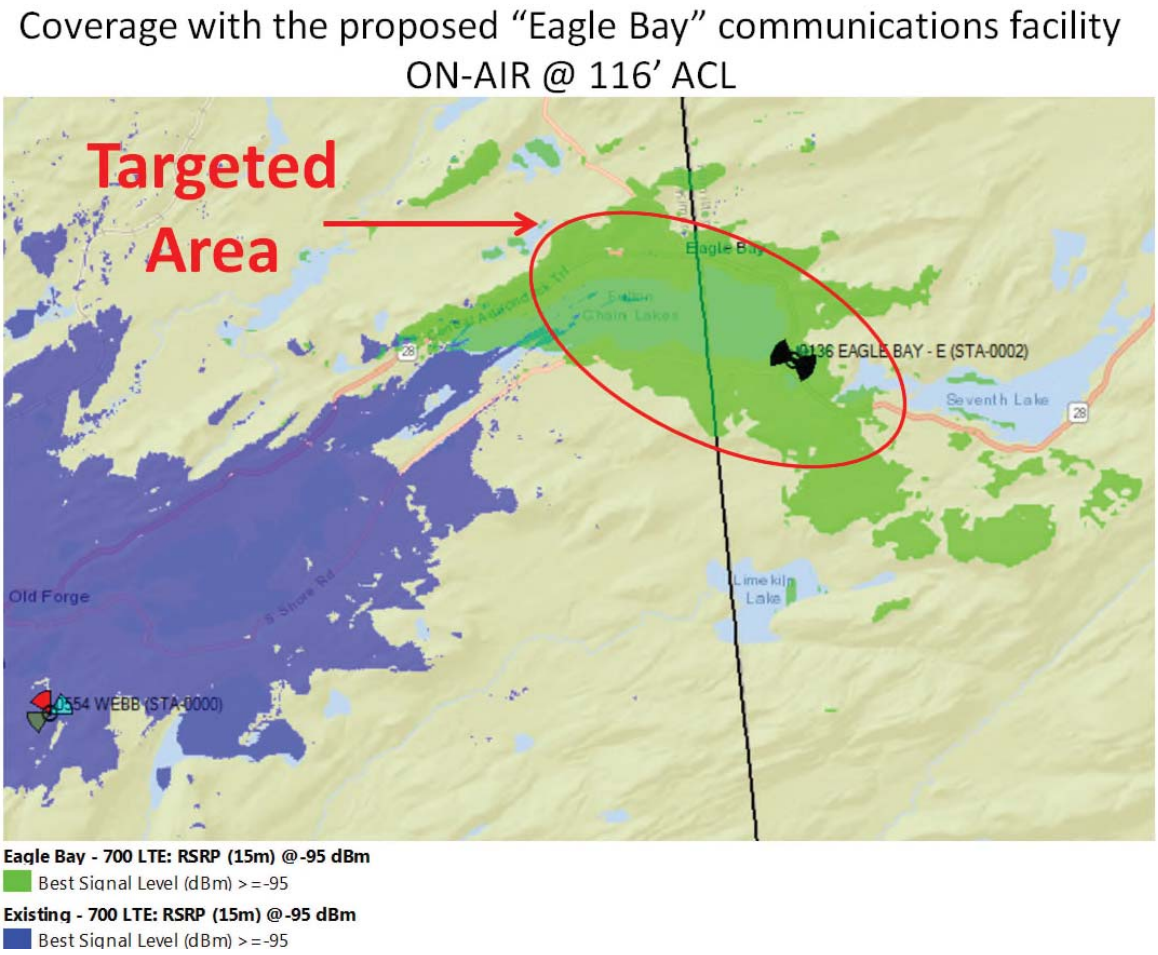


Figure 6. Eagle Bay Coverage with ACL of 116'

As shown in **Figure 6** (above), the expected Eagle Bay 4G wireless service coverage expected with a tower height 130' (ACL=116') covers a significant amount of the Targeted Coverage Area. As shown in **Figure 7** (below) the expected 4G wireless service coverage expected with a tower height lowered to 80' (ACL=76') demonstrates a substantial coverage reduction of the Targeted Coverage Area compared to the higher ACL=116'.

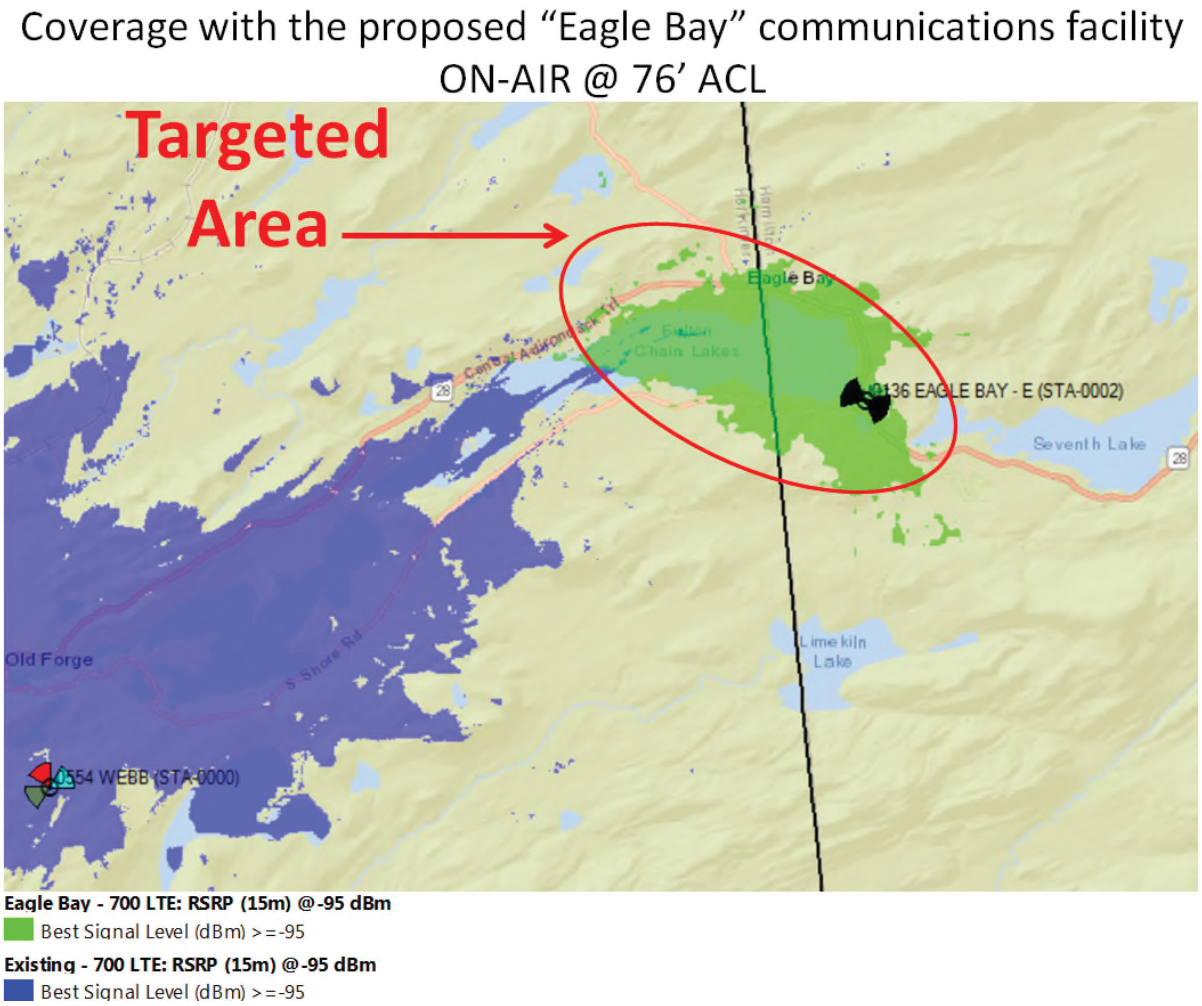


Figure 7. Eagle Bay Coverage with ACL of 76'

The difference in these propagations clearly shows a substantial lack of adequate 4G wireless service to several miles of roads (especially NY-28), as well as to the homes, businesses and communities across the target coverage improvement area. As the results illustrate, a 40 ft. reduction in tower height would significantly reduce Verizon Wireless' 4G wireless service. **Figure 8** illustrates the tower height coverage delta in a combined "overlay" propagation - where the 116' ACL propagation is shown in light green and the 76' ACL propagation is shown in dark green. Based on these findings, the proposed tower height of 130 ft. (to accommodate the monopine tower design) appears to be at or very close to the minimum height necessary for Verizon Wireless to achieve its 4G wireless network performance improvement objectives across the Targeted Coverage Area.

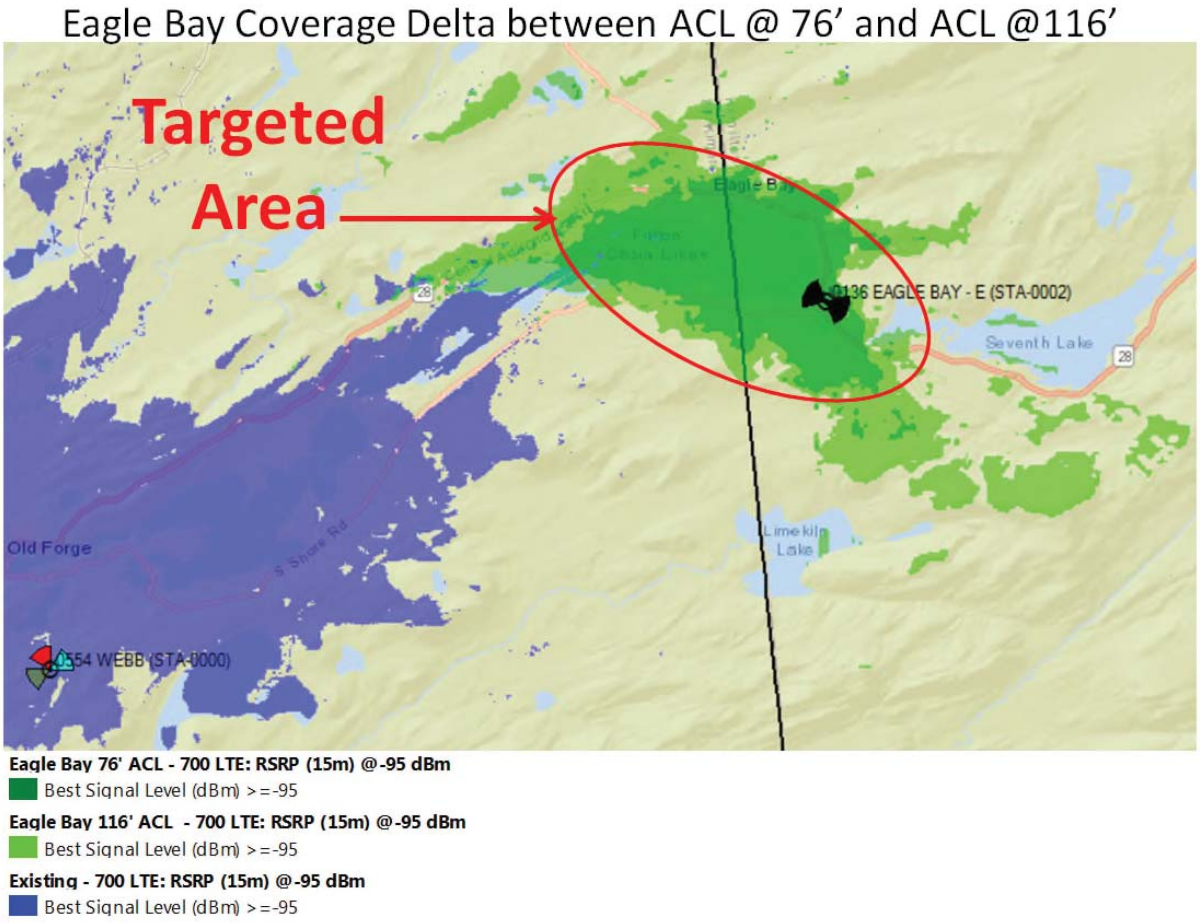


Figure 8. Eagle Bay Coverage Delta between ACL of 116' and ACL of 76'.

Compatibility with Existing Emergency Networks

New York RSA 2 Cellular Partnership d/b/a Verizon Wireless ("Verizon Wireless") operates Wireless Communications Forth Generation (4G) Services, Personal Communication Service (PCS) and/or Cellular Radiotelephone Services network authorized by the Federal Communications Commission (FCC) to provide state of the art digital and/or cellular wireless communications in many parts of the nation, including upstate New York. Verizon Wireless' operations and network are licensed and regulated by the FCC.

Verizon Wireless' radio equipment is designed to transmit frequencies only within its allocated (licensed) frequency bands and each transmitter is carefully adjusted to comply with FCC regulations for power output and frequency. These procedures prevent interference with other radio services, public safety communications, airport navigation, cordless phones, computers and other community office or residential household appliances.

The incidence of these transmissions causing interference with other radio services is rare. All other radio communication services, including broadcast radio and television, are assigned to specific frequency bands, separate and distinct from cellular and other frequencies. For instance AM Radio operates between 0.5 -1.5 MHz and VHF Television operates between 54 - 215 MHz. In addition, receivers for other services are similarly designed to prevent interference from out of band service. In the unlikely event that malfunctioning equipment or improper settings are shown to cause interference

with an existing service, Verizon Wireless would be required, under the conditions of its FCC license, to take immediate steps to correct any problems.

Carrier's Long-Range Plans for Additional Towers in the Area

With the continued exponential usage growth and evolving demand on modern wireless 4G networks and the eminent rollout of 5th Generation (5G) wireless networks, it is very difficult to predict the future need for additional wireless facilities in the Town of Inlet. We can however say with relative certainty that the proposed Eagle Bay macro site will satisfy the near- and mid- term need for both coverage and capacity in the area, and that if new wireless facilities are needed in the area within 5 years they're likely to be microcell sites on utility poles, village center rooftops, etc.

Technical Information

Frequency / Modulation / Type of Service

The frequency, modulation and class of service of Verizon Wireless' radio equipment will be:

Frequencies:	Cellular (B Band) – Legacy 3G Cellular; Future conversion to LTE Tx 880.020 – 889.98 and 891.51 - 893.970 MHz Rx 835.020 – 844.98 and 846.51 - 848.970 MHz Personal Communications Service (PCS LTE) Tx 1980.00 – 1990.00 MHz Rx 1900.00 – 1910.00 MHz WU 700 MHz Upper Band (Block C) Tx 746.00 – 757.00 MHz Rx 776.00 – 787.00 MHz Advanced Wireless Services (AWS-1) (Block F) Tx 2145.00 – 2155.00 MHz Rx 1745.00 – 1755.00 MHz
Modulation:	Long Term Evolution (LTE)
Class of Service:	Handheld Mobile Communications

Respectfully submitted by:

Daniel J Scholl
Radio Frequency (RF) Design Engineer
New York RSA 2 Cellular Partnership d/b/a Verizon Wireless

Date: October 18, 2019

ATTACHMENT 2

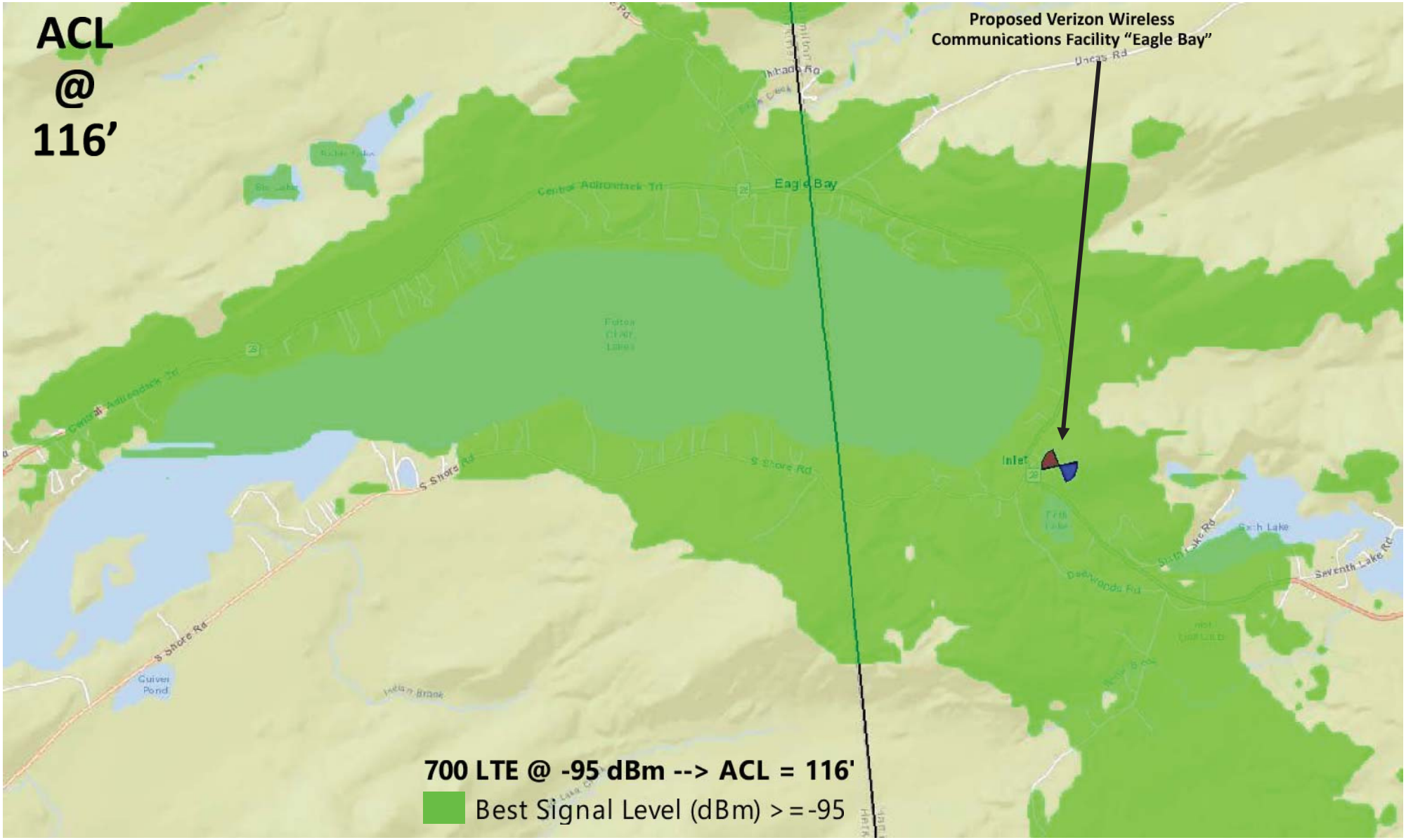
Verizon Wireless
Proposed Communications Facility
“Eagle Bay”
Tower Height Justification

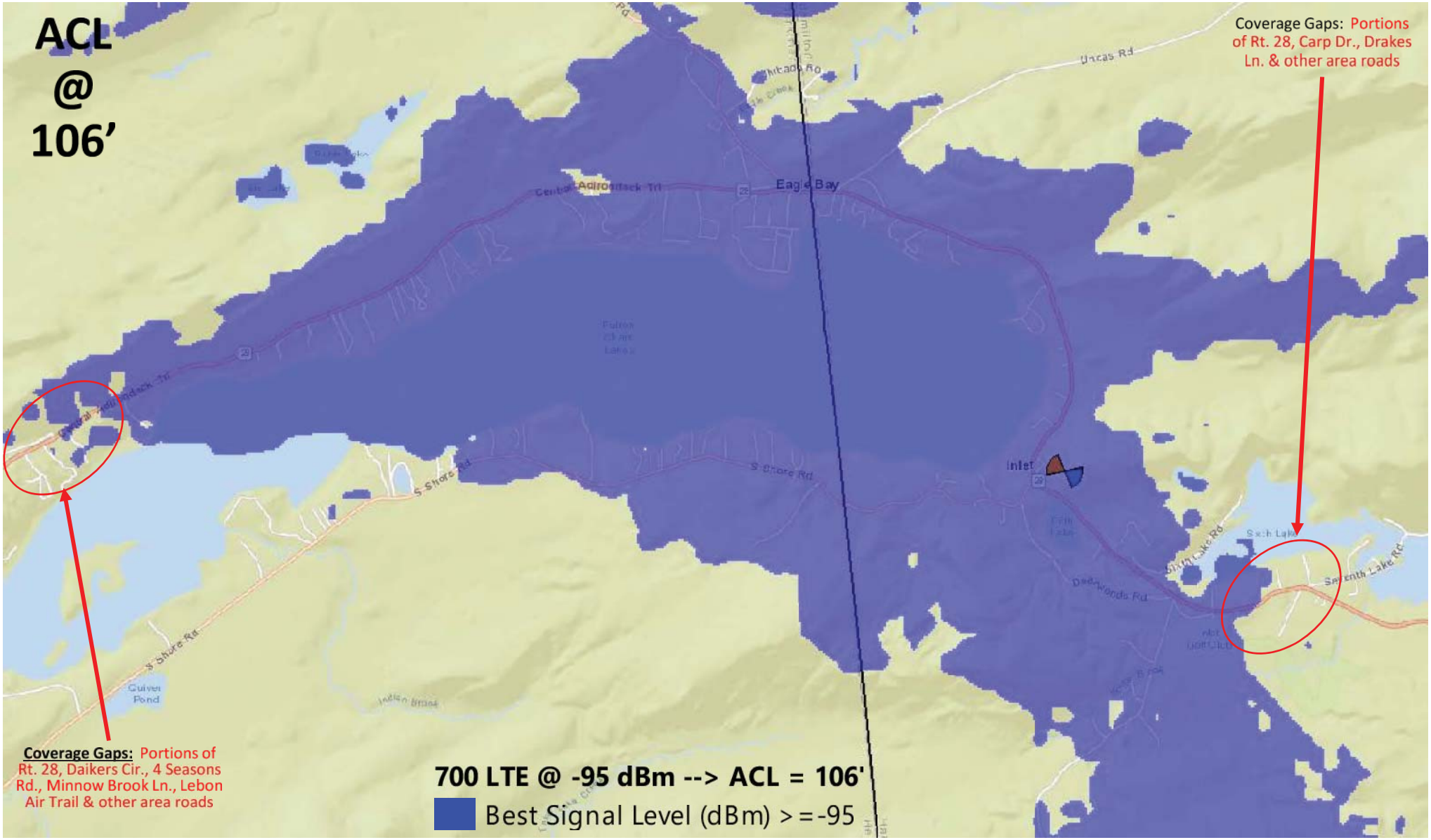
May 19, 2020

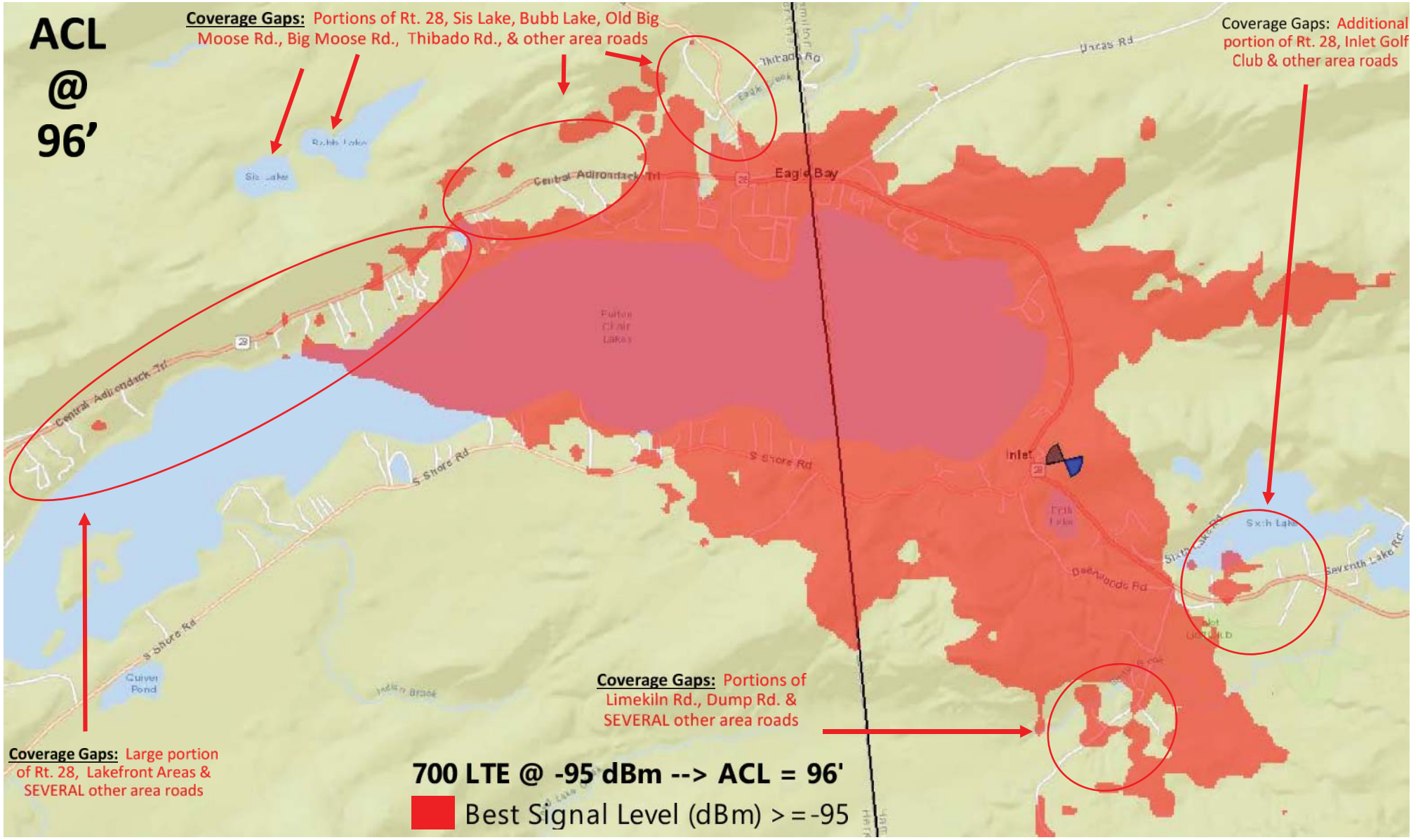
RF Design Engineer: Dan Scholl

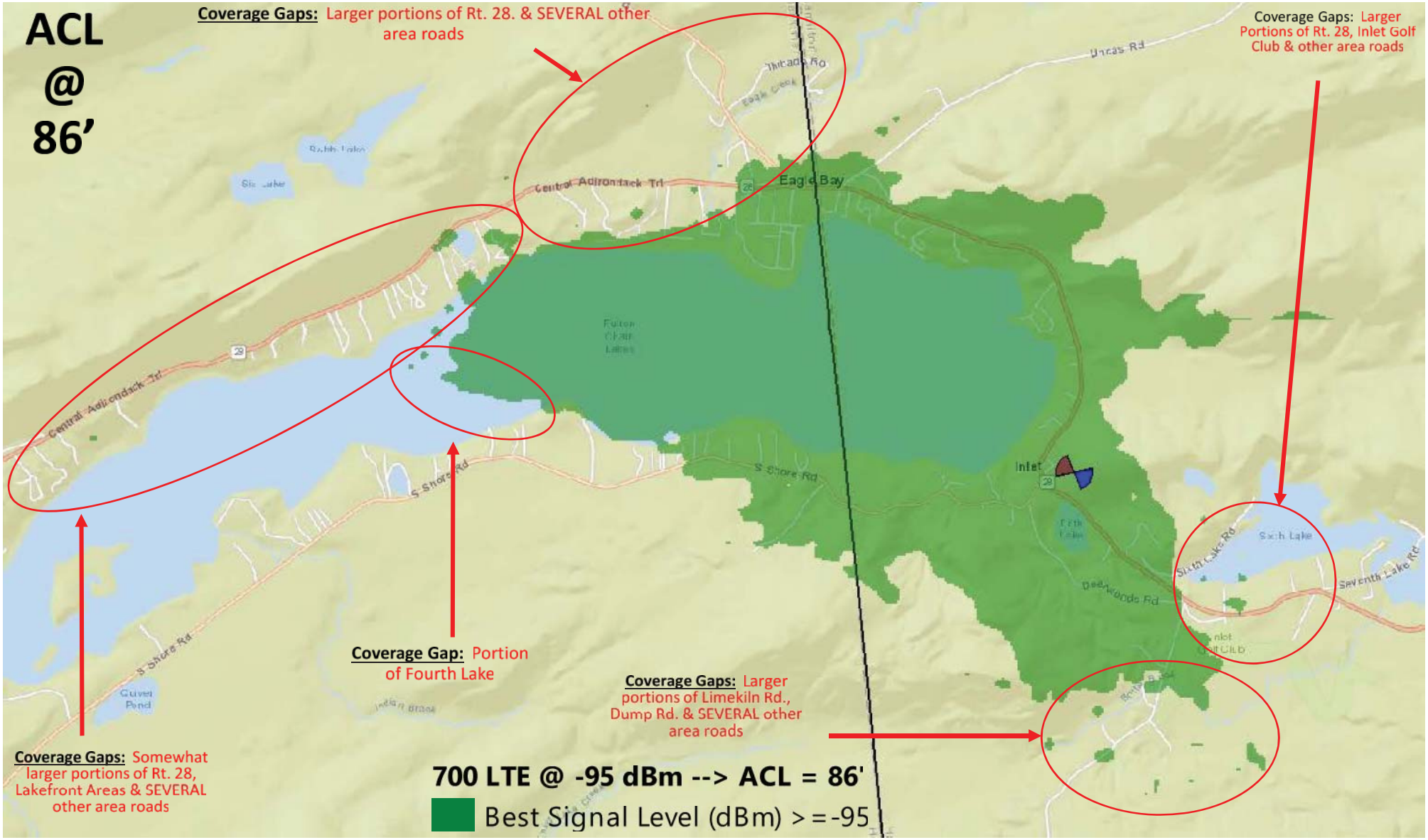
Overview

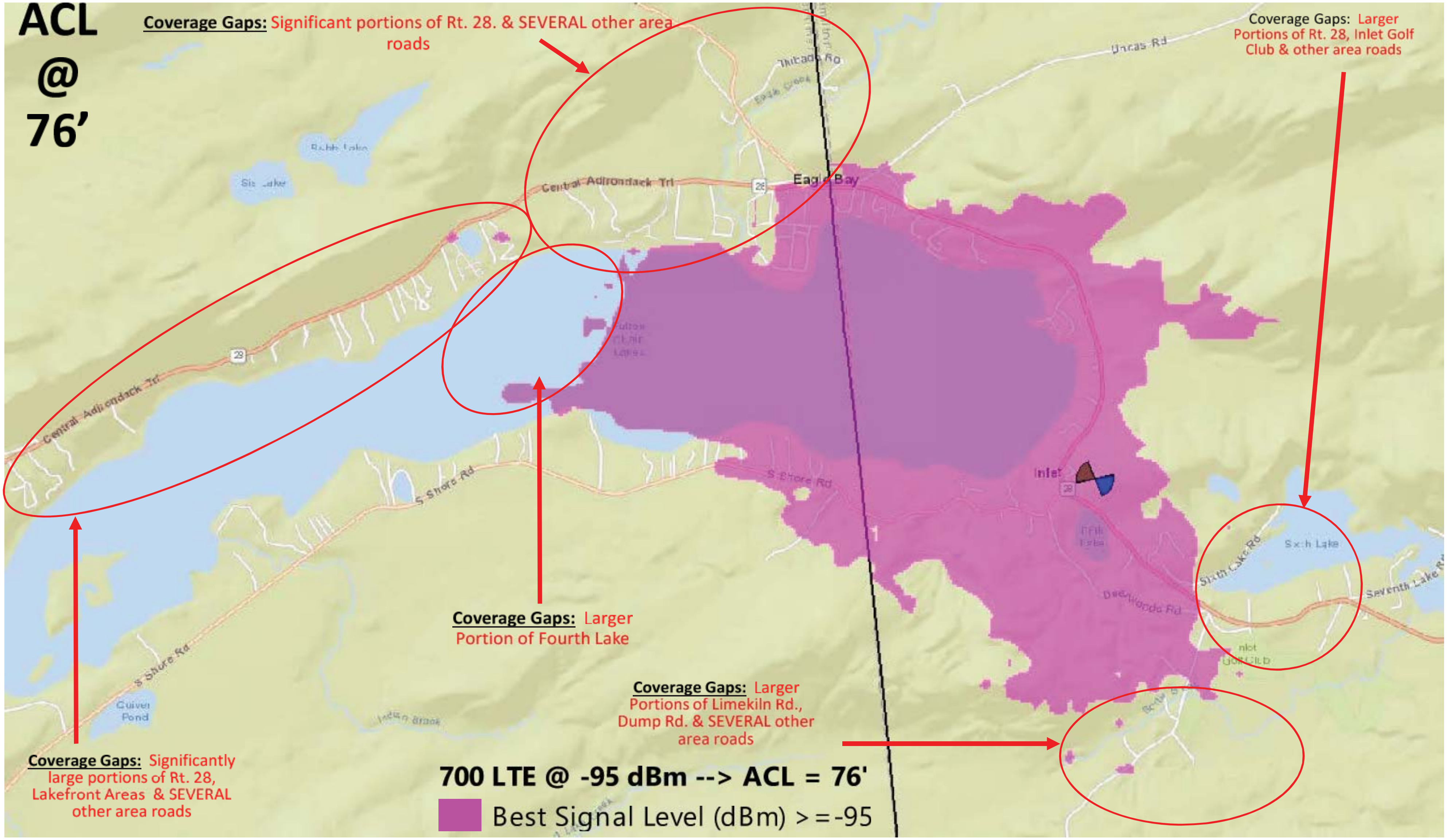
- The following 5 coverage map slides show expected Verizon Wireless cellular coverage (at various tower heights) in the Eagle Bay, Inlet and surrounding areas utilizing RF Propagation software.
- Each coverage map slide demonstrates expected Verizon Wireless cellular coverage at a different Antenna Centerline (ACL) - starting at the proposed ACL of 116’ (Note: this would result in an overall Tower Height of 120’).
- Each subsequent slide decrements the ACL by 10’; (i.e. 106’, 96’, 86’ & 76’) - and the coverage map is illustrated to show the resulting coverage gaps due to the reduction in ACL.
- The illustrations are intended to point out the “Coverage Gap” resulting from the reduction in ACL (as compared to previous coverage map slides) - and includes Roads, Lakes, Residential, Commercial, Recreational and other various types of areas.


ACL
@
116’
Proposed Verizon Wireless
Communications Facility “Eagle Bay”
Eagle Bay
Inlet
S Shore Rd
Seventh Lake Rd
700 LTE @ -95 dBm --> ACL = 116'
Best Signal Level (dBm) >=-95


ACL
@
106’
Coverage Gaps: Portions of Rt. 28, Carp Dr., Drakes Ln. & other area roads
Eagle Bay
Inlet
S Shore Rd
Deadwoods Rd
Seventh Lake Rd
Coverage Gaps: Portions of Rt. 28, Daikers Cir., 4 Seasons Rd., Minnow Brook Ln., Lebon Air Trail & other area roads
700 LTE @ -95 dBm --> ACL = 106'
Best Signal Level (dBm) >=-95


ACL @ 96’
Coverage Gaps: Portions of Rt. 28, Sis Lake, Bubb Lake, Old Big Moose Rd., Big Moose Rd., Thibado Rd., & other area roads
Coverage Gaps: Additional portion of Rt. 28, Inlet Golf Club & other area roads
Eagle Bay
Inlet
Central Adirondack Trl
S Shore Rd
Coverage Gaps: Large portion of Rt. 28, Lakefront Areas & SEVERAL other area roads
Coverage Gaps: Portions of Limekiln Rd., Dump Rd. & SEVERAL other area roads
700 LTE @ -95 dBm --> ACL = 96'
Best Signal Level (dBm) >=-95


ACL @ 86’
Coverage Gaps: Larger portions of Rt. 28. & SEVERAL other area roads
Coverage Gaps: Larger Portions of Rt. 28, Inlet Golf Club & other area roads
Eagle Bay
Central Adirondack Trl
S Shore Rd
Inlet
Sixth Lake
Seventh Lake Rd
Deerwoode Rd
Coverage Gap: Portion of Fourth Lake
Coverage Gaps: Larger portions of Limekiln Rd., Dump Rd. & SEVERAL other area roads
Coverage Gaps: Somewhat larger portions of Rt. 28, Lakefront Areas & SEVERAL other area roads
700 LTE @ -95 dBm --> ACL = 86'
Best Signal Level (dBm) >=-95


ACL @ 76'
Coverage Gaps: Significant portions of Rt. 28. & SEVERAL other area roads
Coverage Gaps: Larger Portions of Rt. 28, Inlet Golf Club & other area roads
Coverage Gaps: Larger Portion of Fourth Lake
Coverage Gaps: Larger Portions of Limekiln Rd., Dump Rd. & SEVERAL other area roads
Coverage Gaps: Significantly large portions of Rt. 28, Lakefront Areas & SEVERAL other area roads
700 LTE @ -95 dBm --> ACL = 76'
Best Signal Level (dBm) >=-95
Central Adirondack Trl
Eagle Bay
Uncas Rd
S Shore Rd
Inlet
Sixth Lake
Sixth Lake Rd
Seventh Lake Rd
Culver Pond

Conclusion

- A tower height of 120’ (ACL=116’) is the minimum tower height required in order to achieve wireless RF coverage and capacity objectives in the Eagle Bay, Inlet and surrounding areas
- Overall area wireless RF coverage and capacity significantly reduces as the tower height decreases.
- Both Emergency and Non-Emergency wireless services in various Commercial, Residential, Recreational and Tourist areas are affected by reducing the tower height.
- Over time, the continuing growth of the tree canopy (both nearby the proposed Cell Site as well as in the distance) will have a degrading effect to Verizon Wireless cellular services.

ATTACHMENT 3

ALTERNATIVES ANALYSIS
VZW's Site Name - Eagle Bay

The purpose of this Alternatives Analysis is to provide supporting details for the selection of the proposed site for a new communications facility in the Town of Inlet.

The site selection process began when Verizon Wireless' Radio Frequency Design Engineer forwarded to Airosmith Development a "search area" for the new site. The search area is the geographical area within which a new wireless telecommunications facility is required to be located, generally, to provide the necessary coverage (at an appropriate height and based on identified network performance issues in the given area as well as existing topography). The search area that was issued for this site is shown below as Exhibit 1.

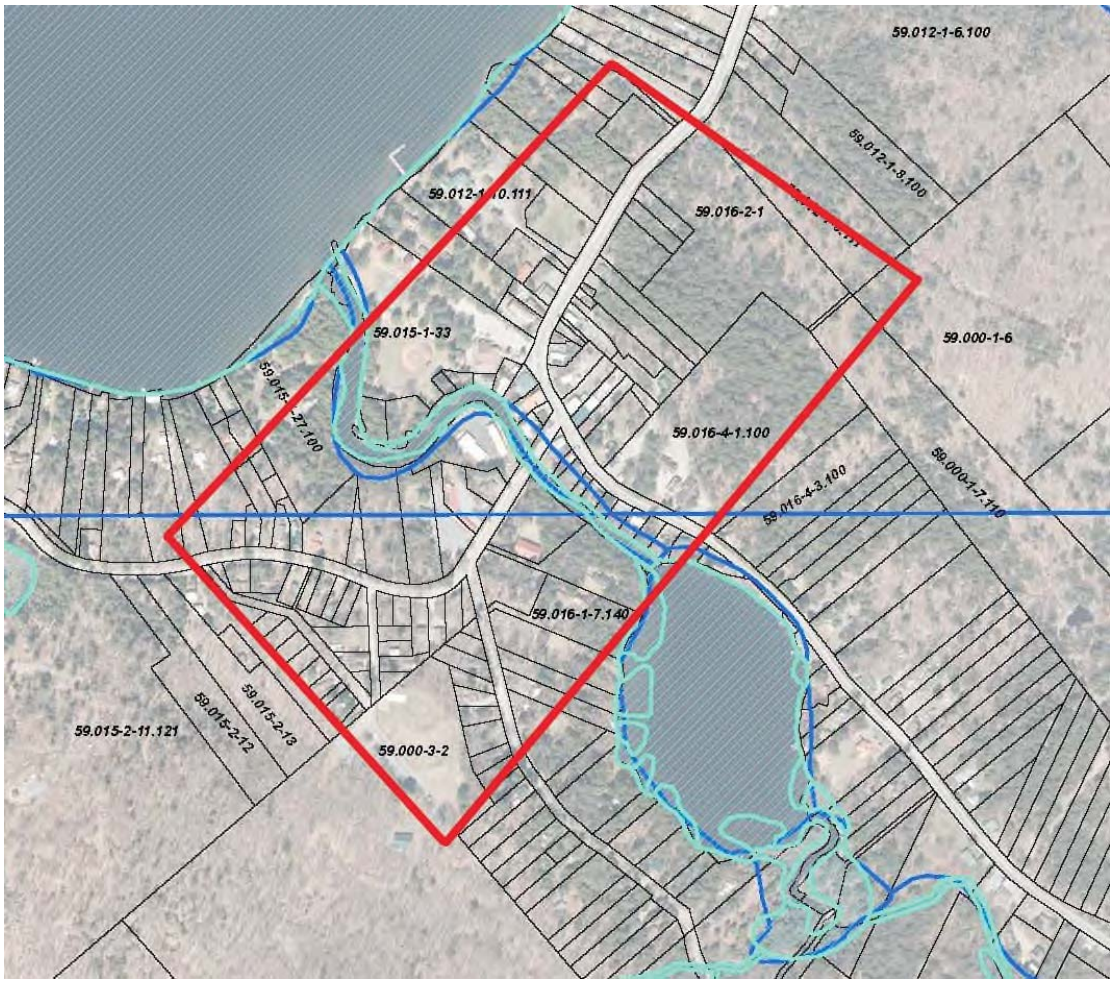


Exhibit 1 – Eagle Bay Search Area overlay on an Aerial Tax Map.

A thorough evaluation was then completed of the Eagle Bay search area in an effort to identify suitable candidates for the proposed communications facility. Site Acquisition's responsibility

includes reviewing the search area in conjunction with the zoning ordinance. The search area for the proposed Eagle Bay facility is shown on the tax map aerial overlay below, where the red box is the search ring and the possible potential candidates are labeled A thru F; below in Exhibit 2.

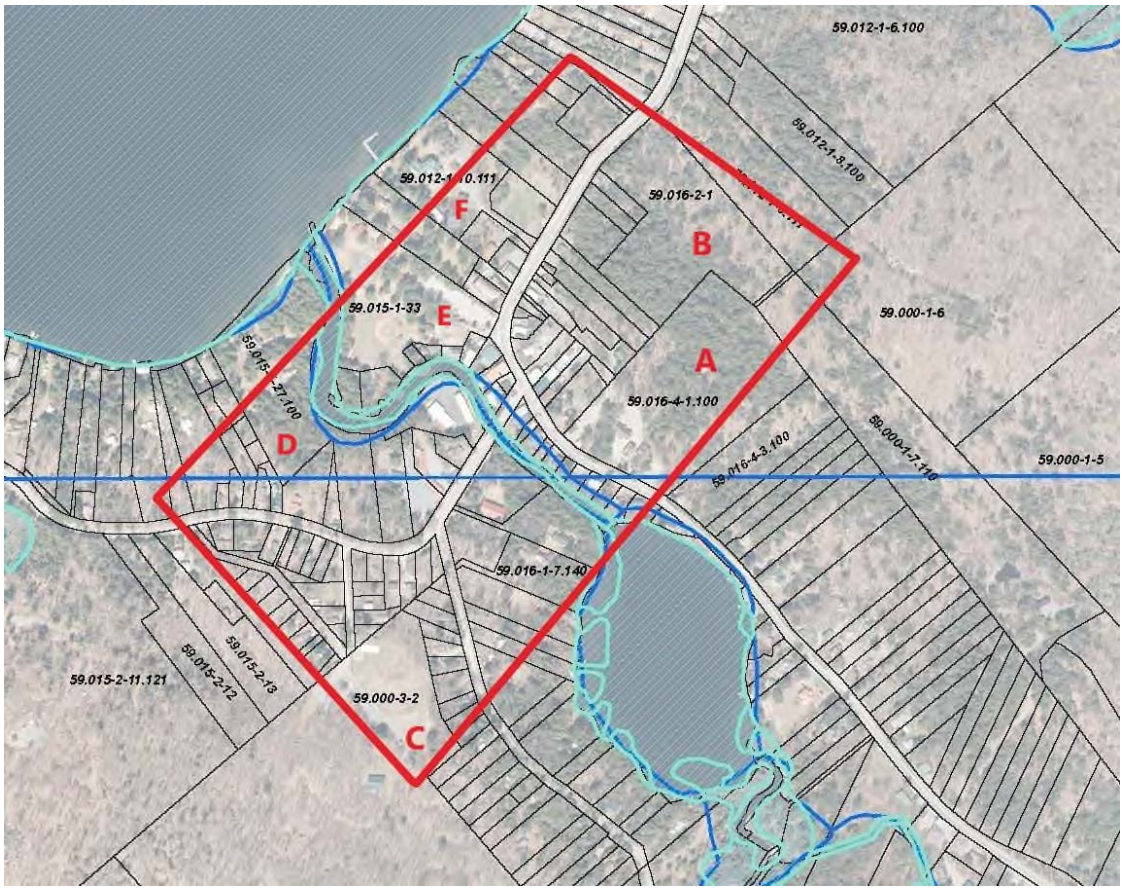


Exhibit 2 – Eagle Bay Search Area Tax Map overlay on an Aerial Map showing possible Candidates.

There are approximately one hundred and twenty-eight (128) parcels within this search area in the Town of Inlet. Approximately one hundred and twenty-two (122) of those parcels are too small to host a telecommunications facility. These smaller parcels either have a residence on them and/or would not meet the required tower fall zone setback. All of these parcels are 1.9 acres or smaller. For these reasons, those parcels were not viable and not pursued for a possible tower location. These tax map parcels are highlighted in yellow as shown in Exhibit 3.

There were six (6) parcels left that were potential candidates for the proposed tower location after review of their current uses, sizes, and the elevation.

Parcel "A" – St. Anthony's of Padua in Inlet - Section Block Lot 59.016-4-1.100 - St. Anthony's of Padua Church in Inlet was interested in leasing a portion of land to Verizon Wireless. Therefore, a new 120 ft. tall wireless facility was proposed on the privately held property of the St. Anthony of Padua. Since a lease agreement could be reached and the location and proposed antenna centerline height of the proposed tower would offer Verizon Wireless the ability to satisfy its network performance improvement objectives both in and around the northwestern portions of

the Town of Inlet and southwestern portions of the Town of Webb. Verizon Wireless moved forward with this property.

Parcel "B" – Susan and David Beck – Section Block Lot – 59.016-2-1 – The Beck's own a larger parcel within the search ring. VZW had numerous conversations, emails and went back and forth on lease negotiations with the Beck's about the cell tower being proposed on their property. Finally, Susan and David Beck stated on January 8th, 2019, they were NOT interested in leasing property for the cell tower. Therefore, this parcel was no longer available for the proposed facility.

Parcel "C" – Town of Inlet Fern Park Property – Section Block Lot – 59.000-3-2 –Verizon Wireless had numerous discussions with the Town of Inlet Supervisor and the Chairman of the Hamilton County Board of Supervisors to try and utilize a portion of this property to site a wireless telecommunications facility. However, this property is a park and the Town is prohibited from alienating parkland for purposes of a lease to permit a wireless telecommunication facility without following the parkland alienation process through the NYS legislature—a process the Town was unwilling to pursue. Therefore, this parcel was not available for the proposed facility.

Parcel "D" – Phoenix Inlet Corp – Section Block Lot 59.015-1-27.100 - This parcel was much lower in elevation, approximately 130'-140' lower. A proposed facility on this parcel would result in having to construct a much taller facility. Therefore, this parcel was not further evaluated based on the need for a taller tower in the Hamlet area of Inlet.

Parcel "E" – Town of Inlet Arrowhead Park Property– Section Block Lot 59.015-1-33 - This property is a park and the Town is prohibited from alienating parkland for purposes of a lease to permit a wireless telecommunication facility without following the parkland alienation process through the NYS legislature. This parcel was also much lower in elevation. Therefore, this parcel was not further evaluated for the proposed facility.

Parcel "F" – NDF Point LLC – Section Block Lot 59.012-1-10.111 - This parcel was much lower in elevation, approximately 130'-140' lower. A proposed facility on this parcel would result in having to construct a much taller facility. Therefore, this parcel was not further evaluated based on the need for a taller tower in the Hamlet area of Inlet.

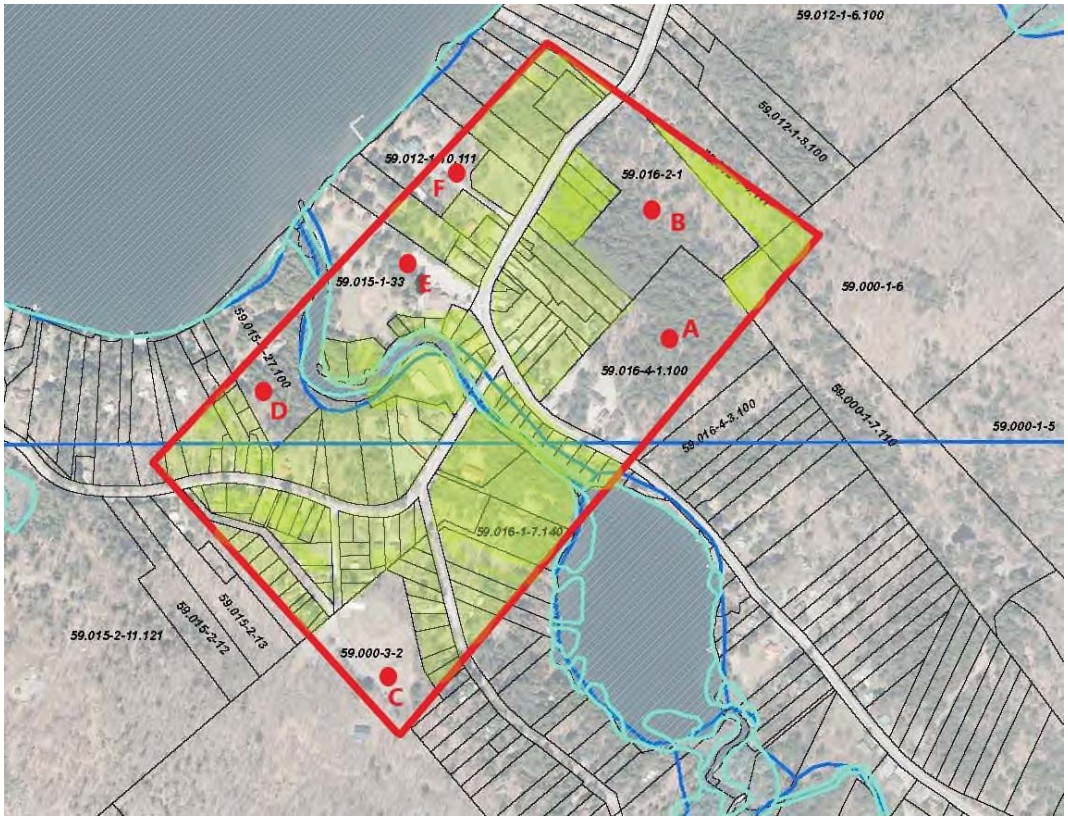


Exhibit 3 – Eagle Bay Search Area Tax Map overlay on an Aerial Map showing all parcels within the search area.

Verizon Wireless routinely seeks to install its antennas and equipment on an existing communications tower or other tall structures, including municipally owned properties ("Collocation"), whenever feasible. Local communities universally favor Collocation because they can minimize the number of wireless telecommunication towers in an area. Collocation is preferred by wireless providers because it is generally a less expensive and quicker review process, compared to installation of a new tower facility. The Town of Inlet does not currently have any existing telecommunications towers or facilities. There are currently no other taller structures in the Town of Inlet as well. In cases where Collocation is not viable then Verizon Wireless needs to develop a new telecommunications facility.

An excerpt from the Adirondack Park Agency's Impact Mitigation of the Agency's GIR is stated below. Verizon Wireless considered most of the twelve (12) items listed in the GIR Section 13. B.

Section B. Describe efforts to reduce the impacts of the project, such as:

1. Avoiding ridge lines where the tower will be silhouetted to the sky or site the tower and facilities to be back-dropped by existing trees and topography;

   VZW did not place the tower on top of the hill to reduce the tower being skylit. The facility is back-dropped by this topography and the existing trees, minimizing to the extent practicable the tower's overall visibility (in conjunction with the monopine tower design).

2. Limiting the amount of vegetation removal to provide maximum screening (e.g., separating the equipment shelter from the tower to maintain vegetation near the tower; constructing the equipment shelter on piers rather than at grade level; helicoptering materials in rather than constructing a new access road through wooded areas);

VZW is removing minimal trees for this proposed facility and the 200' no-cutting buffer surrounding the tower will permanently screen view of the tower from the surrounding area.

3. Locating the tower in areas of existing tall trees and providing an effective year-round landscaped buffer (with supplemental plantings if necessary) that is under the control of the landowner or lessee;

This proposed facility is sighted within a stand of thick dense pine trees for a year round buffer.

4. Using existing roads or driveways for access rather than constructing new roads and driveways;

This proposed facility is using the Church's entrance to the property and through the parking lot to minimize the clearing required to construct a new driveway.

5. Screening the tower with false walls, columns or other building elements as appropriate to the setting;

Given the tower's location within a stand of existing tall pine trees, VZW is proposing a monopine tower in this location. Frankly, an alternate design using building elements would look out of place for the surrounding area.

6. Using security spot lighting, where necessary, that will direct the light toward the ground and in a manner that is non-obtrusive to adjacent landowners;

VZW is not installing any lighting on the tower. A light is proposed on the ground equipment that will be operated by a manually operated timer switch for technicians to use while servicing the light during low light conditions. The light will be installed above the equipment cabinet, pointed towards the cabinet and the ground.

7. Using color to blend the tower with its surroundings;

This proposed facility will be painted the Adirondack Park Agency's preferred color of Thunder Grey or any other color designated by the Agency.

8. Using different tower and antenna configurations (e.g., different tower construction, simulated tree, smaller dimensioned cross members, lattice structures) to minimize visibility;

Verizon Wireless has proposed a monopine or a monopole painted Thunder Grey, as well as agreed to reduce the overall height of the tower

5'from its original proposed height to minimize visibility at this proposed location.

9. Locating the tower so that if there is a failure of the structure it will not impact adjacent land uses or be of any potential danger to adjacent landowners;

   This proposed facility is positioned to not be of any potential danger to adjacent landowners.

10. Not siting towers in or near wetlands;

    This proposed facility is not located near or in wetlands.

11. Not siting towers in areas of high bird concentrations or migration routes; and

    This proposed facility is not located in high bird concentration areas.

12. If fencing is to be installed, ensuring that it will minimize habitat fragmentation.

    The fencing surrounding the compound has been designed to be as small as necessary to host the necessary equipment to avoid habitat fragmentation (and in accordance with VZW's standard design throughout the Adirondack Park).

Following a years-long search of the search area, as a result of the low elevation of Parcels D, E & F in the search area and a single interested property owner, VZW determined that the St. Anthony's of Padua Church in Inlet property is the only feasible location for the proposed wireless telecommunication facility. There are simply no other alternate locations. Also after extensive RF analysis, Verizon Wireless determined that a 120' tower at the St. Anthony of Padua site will provide reliable 4G LTE coverage to the Eagle Bay cell, based on its geographical location and its ability to cover NY-28 to the south/southeast as well as covering NY-28 to the north/northwest – while still providing excellent 4G LTE coverage to the Hamlets of Inlet and Eagle Bay.

Prepared by:

Sara Colman
Airosmith Development
Consultant to Verizon Wireless

ATTACHMENT 4

verizon

Network Engineering - UPNY
225 Jordan Road
Troy, New York 12180

"EAGLE BAY" COMMUNICATIONS FACILITY
183 NORTH ROUTE 28, TOWN OF INLET, NY

New York RSA 2 Cellular Partnership d/b/a Verizon Wireless ("Verizon Wireless" or the "Applicant") plans to install and operate a new public utility / personal wireless service facility (the "communications facility"), including associated antennas, elevated equipment platform and related appurtenances, on the proposed 120 ft. tall monopole (124' with lightening rod) off 181 North Route 28 in the Town of Inlet, Hamilton County, New York (this facility is known internally as **"Eagle Bay"**).

The purpose of this project is to improve wireless coverage and capacity in the Towns of Inlet and Webb - and add new 700 MHz and Advanced Wireless Services (AWS) 2100 MHz frequencies to Verizon Wireless' existing regional wireless network. Verizon Wireless is using these frequencies for commercial activation of its fourth Generation Long Term Evolution (4G LTE) communication services network.

This project is a necessary and critical upgrade of the Verizon Wireless communications network in Hamilton County and Herkimer County. Upon completion, new, advanced emergency and non-emergency 4G Verizon Wireless communication services will be provided across the northwestern portions of the Town of Inlet and the southwestern portions of the Town of Webb.

SEARCH AREA ANALYSIS

Targeted Improvement Area

Once Verizon Wireless determines that a particular geographic area (i.e. "Targeted Improvement Area") is not being adequately served by Verizon Wireless 4G coverage (or cannot be adequately served) by the existing communications facilities in the surrounding network (i.e., coverage is non-existent, deficient and/or calling capacity provided by the existing facilities is reaching upper limits), a "Search Area" is developed. A propagation analysis (using Verizon Wireless' -95 dBm RSRP 4G design standard signal level threshold) is provided in **Figure 1**[1]. When viewing the results in **Figure 1**, areas of Blue indicate reliable coverage from Verizon Wireless' existing facilities and areas void of color indicate a lack of 4G coverage and/or capacity. As the results in the coverage map at **Figure 1** demonstrate, coverage is currently deficient across the northwestern portions of the Town of Inlet and the southwestern portions of the Town of Webb. In particular, several linear miles along main, secondary and local travel routes; e.g. several miles along NY-28, 2± miles along County Route 118 (South Shore Rd), 1.5 ± miles along County Route 14 (Limekiln Rd) and 2± miles along Big Moose Rd. lack adequate 4G wireless service, as well as the homes, businesses and communities across the

[1] All propagation studies in this report were developed using an industry standard radio frequency propagation prediction tool called "Atoll".

Targeted Improvement Area. As a result, deployment of a new wireless facility is required to provide 4G wireless service to the Targeted Improvement Area.

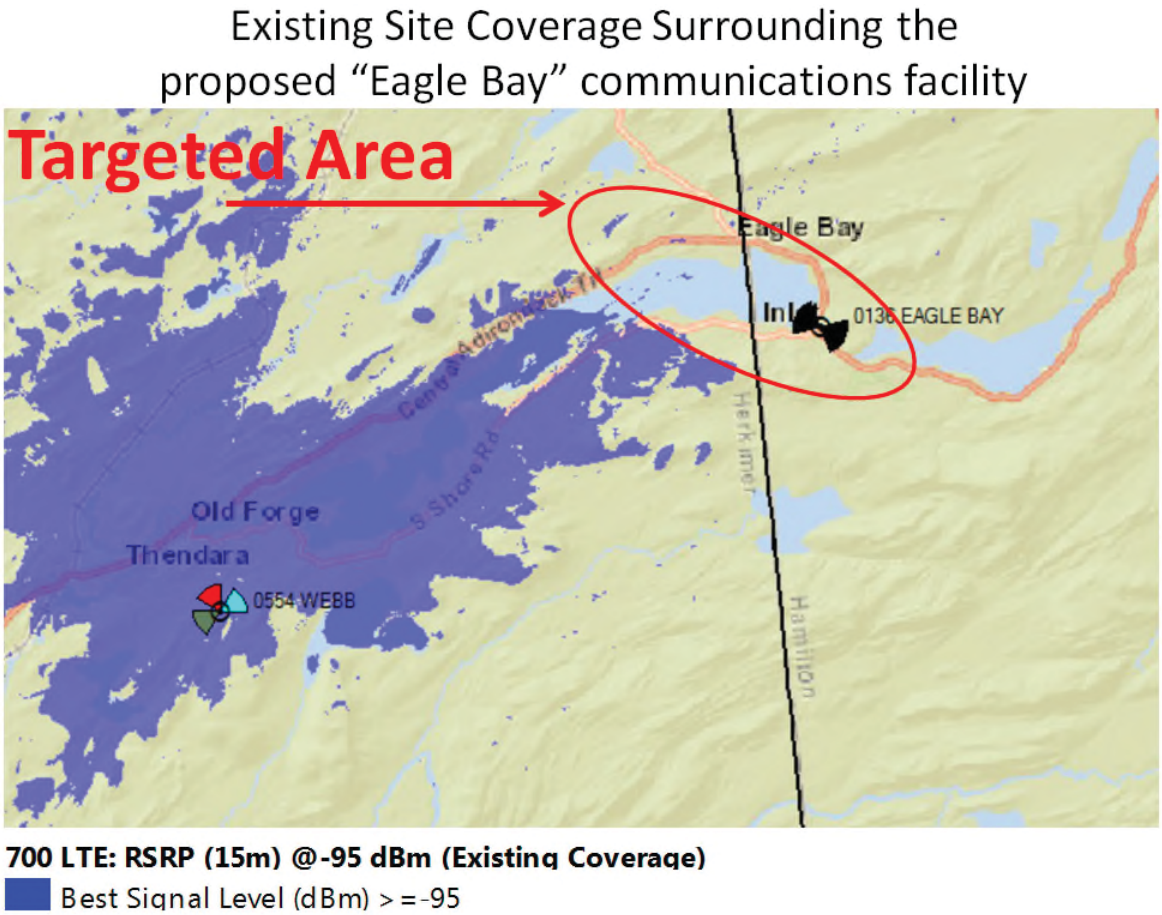


Figure 1. Existing Site Coverage surrounding the proposed "Eagle Bay" Wireless Facility

Search Ring Development

The Eagle Bay search area (see **Figure 2** below) was created after considering several important factors, first of which includes unserved coverage area in the Hamlets of Inlet & Webb and several miles along NY-28, 2± miles along County Route 118 (South Shore Rd), 1.5 ± miles along County Route 14 (Limekiln Rd) and 2± miles along Big Moose Rd. (as can be seen in Figure 1) and secondly - significant local terrain variations (including Lakes, Mountains, Rivers, Villages, Camps/Resorts, Entertainment facilities, Hiking/Snowmobile Trails) - and the goal of providing as much reliable seamless wireless telecommunications coverage as possible.

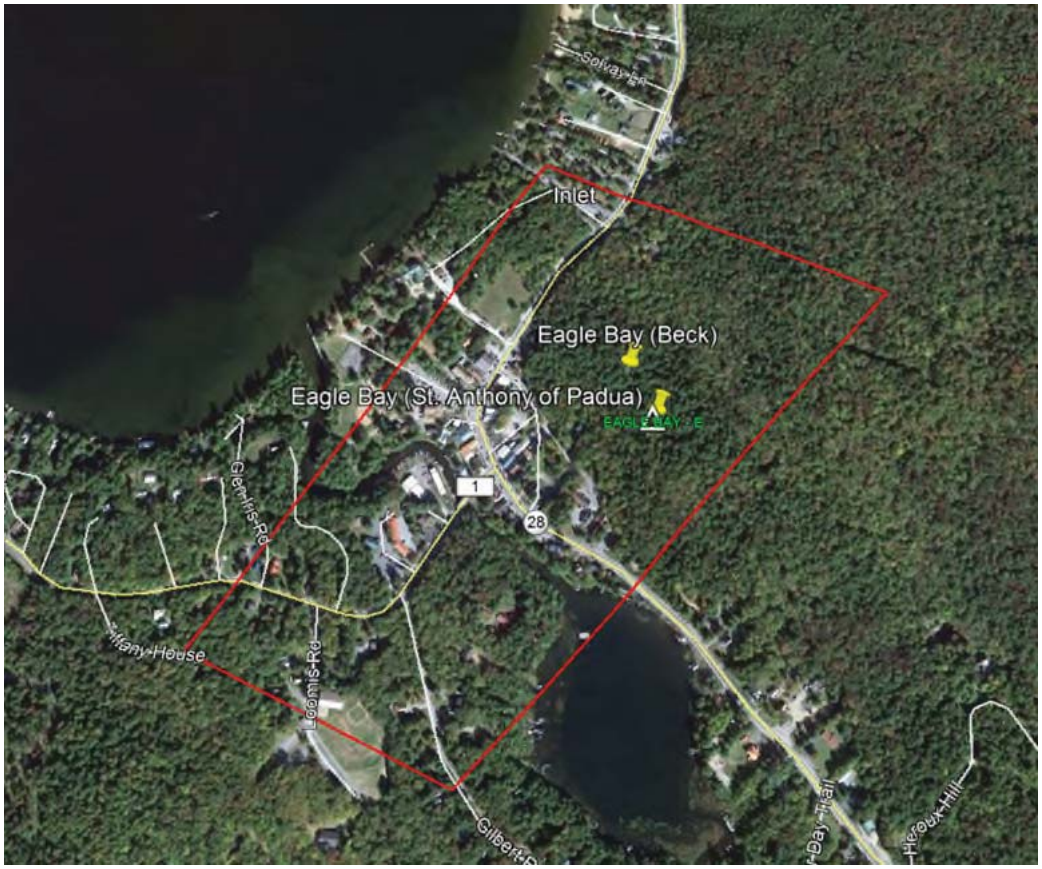


Figure 2. Eagle Bay Search Area with candidates

The 3-Dimensional (3-D) topo map provided at **Figure 3** below illustrates the targeted coverage area (illustrated with the RED arrows and RED circle - generally along NY-28 between Eagle Bay and Inlet including a large portion of 4th Lake and 5th Lake and surrounding areas). **Figure 3** also indicates the proposed Eagle Bay site location (black dot labelled "Proposed Site"). Note that some of the target coverage area extends east on NY-28 through 5th Lake and into 6th Lake (attempting to cover several residential and recreational areas). Therefore, due to the geographical nature of the targeted coverage area (which when viewed on a 3-D map - is mostly contained within a "bowl" of dense mountains and hillsides surrounding 4th and 5th Lakes) – the specific location of the Search Area and subsequent proposed communications facility is critical in achieving the stated RF objectives for the targeted coverage area.

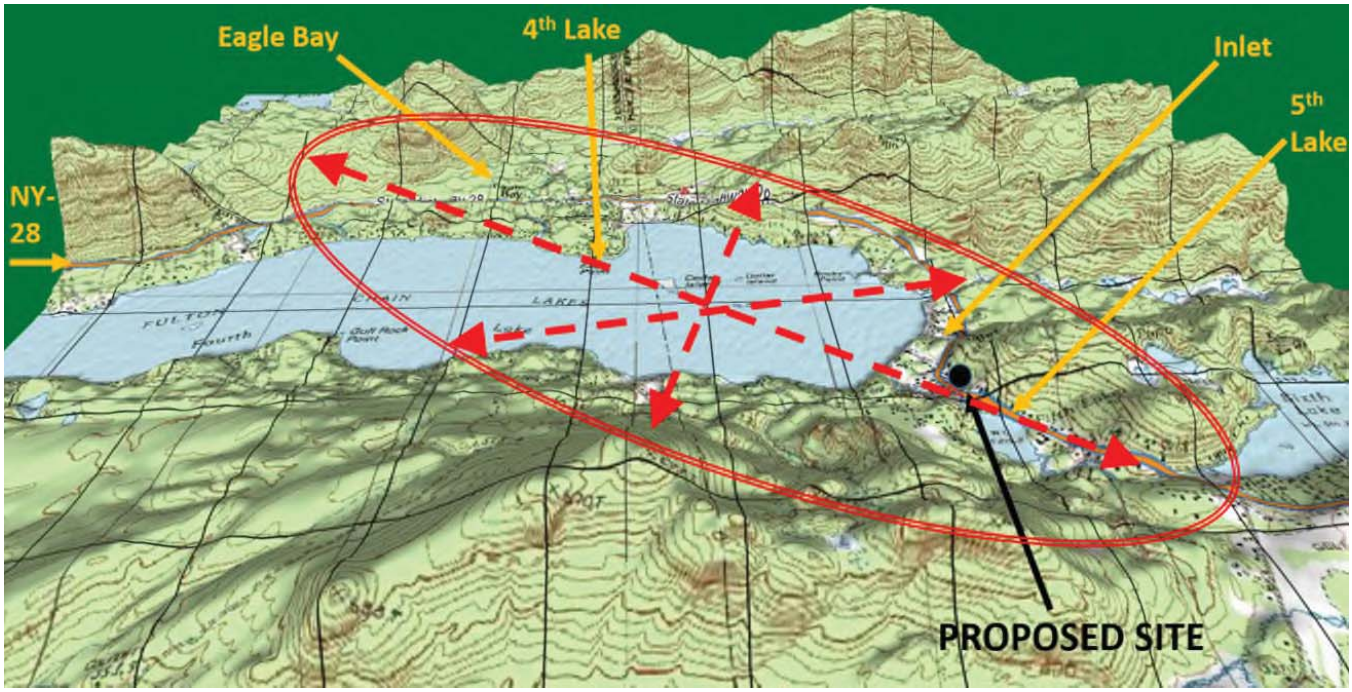


Figure 3. 3-D Map of the Eagle Bay Site's Targeted Coverage Area and Proposed Site Location

When viewing the map in **Figure 3**, it is relatively easy to see why the chosen hillside on the southeast side of the Hamlet of Inlet was selected for a potential wireless facility as it is positioned where radio line-of-site coverage can extend northwest and southeast along NY-28, cover the Hamlets of Eagle Bay and Inlet, 5th Lake as well as a significant portion of 4th Lake and surrounding area. The chosen hillside also allows the proposed tower to be positioned so that the desired level of unobstructed wireless coverage can be realized from an antenna height slightly above the surrounding tree canopy while maintaining sufficient natural background screening from higher terrain and associated tree line behind the tower (at least when viewed from points along NY-28, the 4th Lake and the Hamlet of Inlet).

Alternative Search Areas

As mentioned earlier, the exact location of the search area for the proposed site was carefully considered – such that the Targeted Improvement Area would be adequately served by the newly proposed facility; including several miles along NY-28, 2± miles along County Route 118 (South Shore Rd), 1.5 ± miles along County Route 14 (Limekiln Rd) and 2± miles along Big Moose Rd. (as can be seen in Figure 1) and secondly - significant local terrain variations (including Lakes, Mountains, Rivers, Villages, Camps/Resorts, Entertainment facilities, Hiking/Snowmobile Trails) - specifically extending northwest and southeast along NY-28, covering the Hamlets of Eagle Bay and Inlet, 5th Lake as well as a significant portion of 4th Lake and surrounding area. With the standing RF objective for covering the Targeted Improvement Area - four other alternative search areas were also considered and evaluated. Within each of the four alternative search areas, an alternatively proposed site (each with the same ACL as the VZW proposed site) were analyzed and compared to Verizon Wireless' Proposed Site in terms of RF coverage and ability to serve the Targeted Improvement Area. The coverage gap comparisons between the alternative search areas / sites are illustrated below in **Figures 4, 5, 6 & 7**. In each comparison, the original VZW proposed site RF coverage is illustrated with Dark Blue THATCHING; and the alternative search area / site RF coverage is illustrated in solid RED. (Note that the deeper RED areas indicate commonality of VZW proposed site RF coverage and alternative site RF coverage – and the lighter RED indicates areas of alternative site RF coverage only). As can be seen –

the proposed search area / site location provides the best ability to serve the Targeted Improvement Area; while the alternative search area / sites demonstrate severe lack of Verizon Wireless RF coverage in some Critical areas including Rt. 28, the Hamlets of Eagle Bay and Inlet and in extending east on NY-28 through 5th Lake and into 6th Lake - as well as a significant portion of 4th Lake and surrounding area (including several residential and recreational areas). A few of the more critical gaps in coverage are illustrated accordingly.

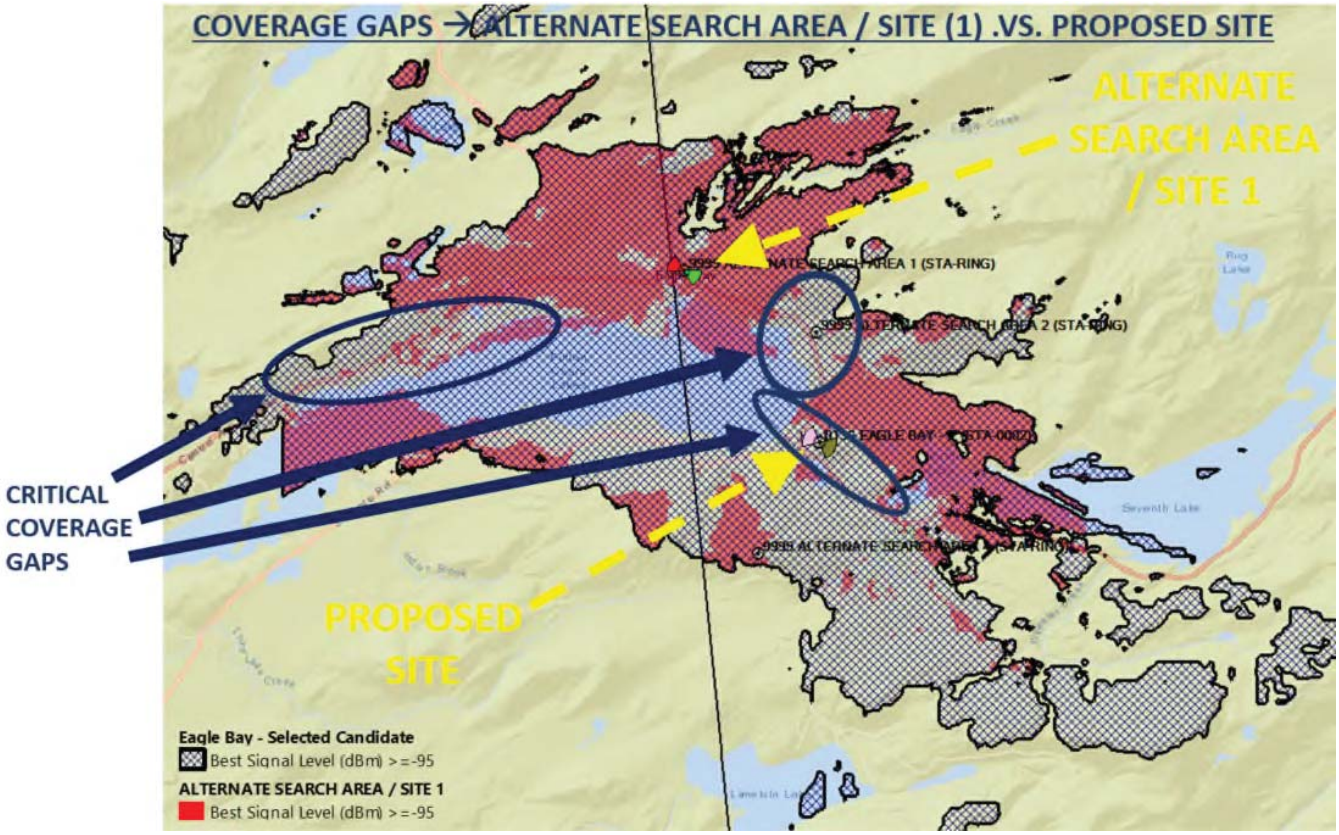


Figure 4. Coverage Gap Comparison between Proposed Site and Alternative Search Area / Site 1

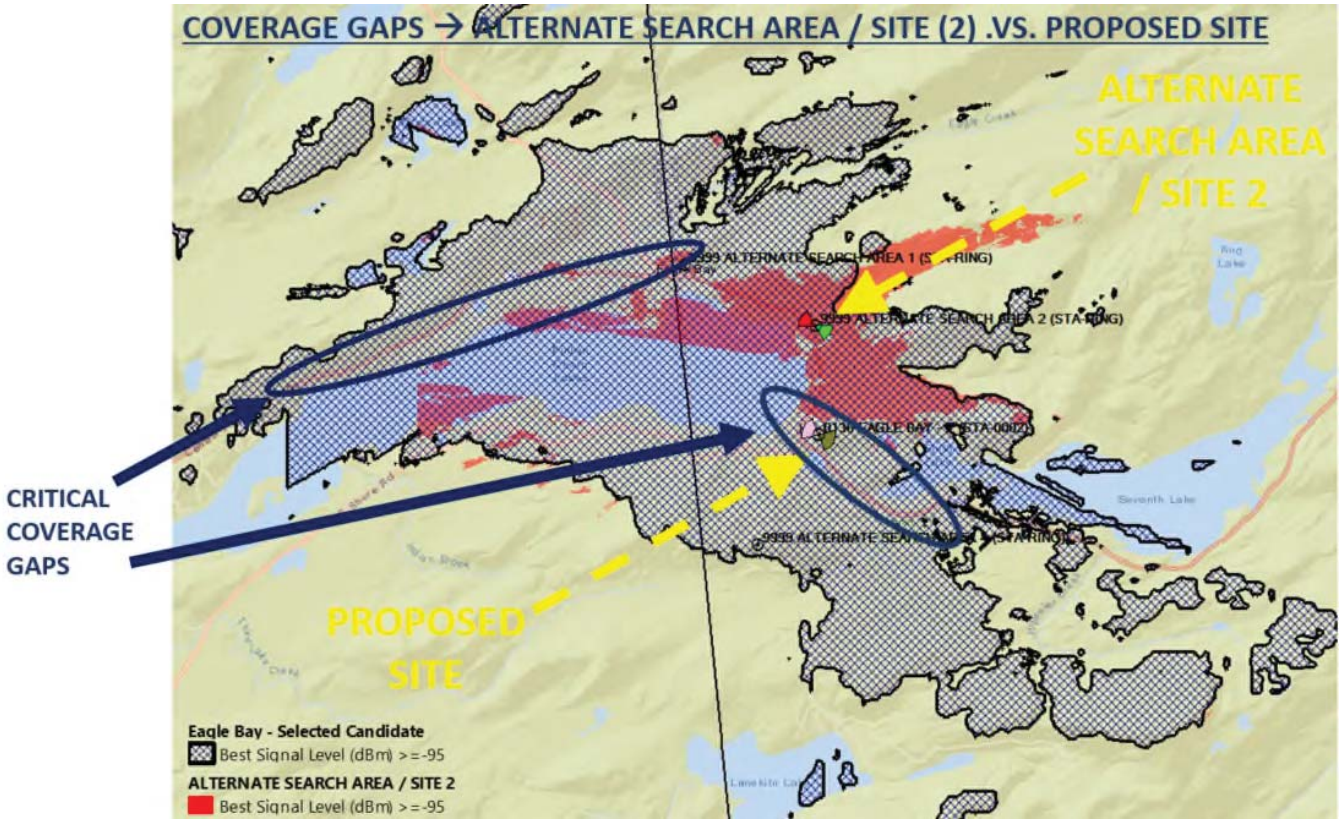


Figure 5. Coverage Gap Comparison between Proposed Site and Alternative Search Area / Site 2

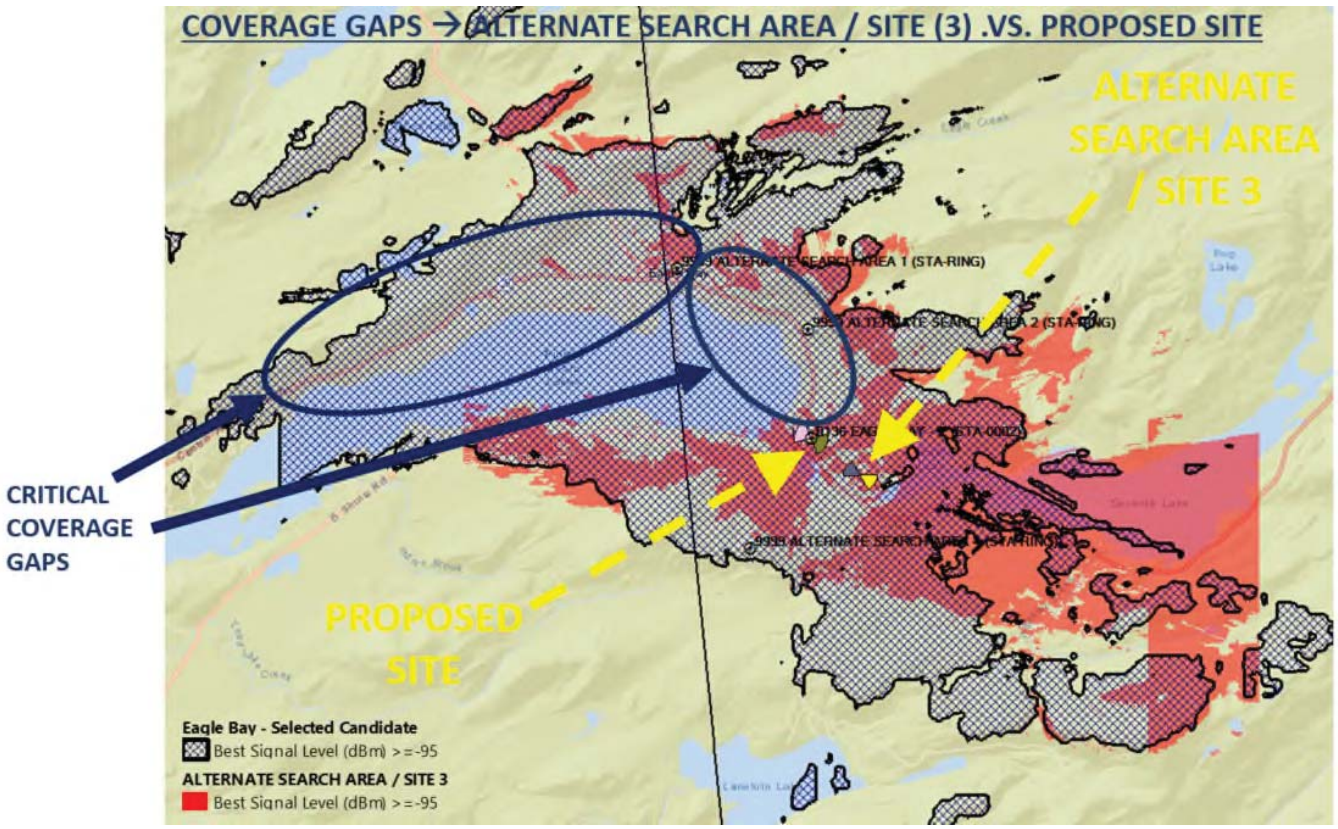


Figure 6. Coverage Gap Comparison between Proposed Site and Alternative Search Area / Site 3

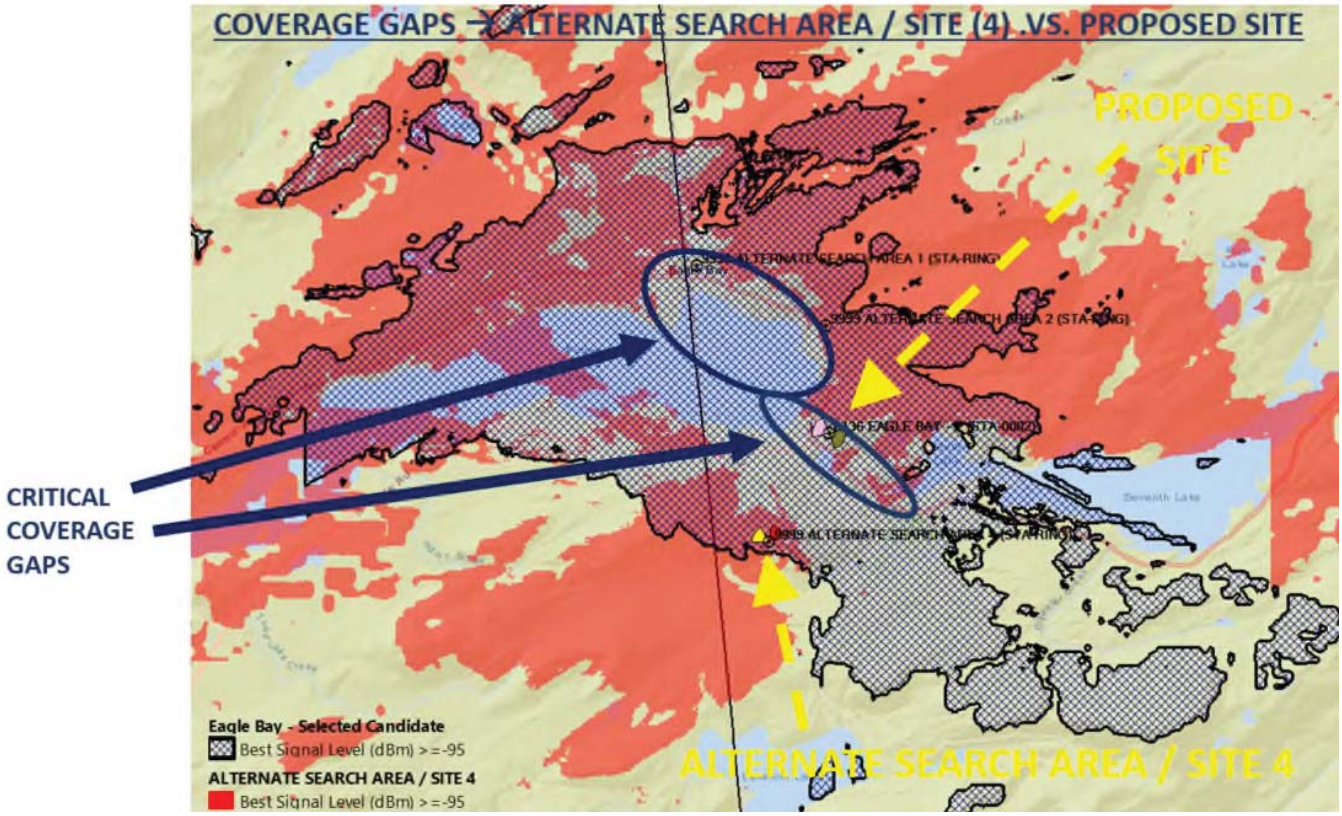


Figure 7. Coverage Gap Comparison between Proposed Site and Alternative Search Area / Site 4

Each of these coverage gap comparisons shows that the best ability to serve the Targeted Improvement Area is with the Proposed site; while the other alternative search area / sites demonstrate severe lack of Verizon Wireless RF coverage in some Critical areas including Rt. 28, the Hamlets of Eagle Bay and Inlet and in extending east on NY-28 through 5th Lake and into 6th Lake - as well as a significant portion of 4th Lake and surrounding area (including several residential and recreational areas).

Site Specific Search and Candidate Evaluation within the Search Area

With the search area established, the Real Estate Team visited the Eagle Bay area with the goal of identifying potential locations where development of a wireless telecommunications facility would substantially comply with the Adirondack Park Agency's tower siting guidelines and satisfy Verizon Wireless' coverage objectives. The Real Estate Team, as part of its visit, searched for any existing tall structures (either inside or immediately outside the search ring) before new (i.e., raw land) sites were considered. Upon review of the Eagle Bay search area, no existing structures were found in or near the search ring that are capable of satisfying the stated coverage objectives, so only properties capable of hosting a new tower were considered.

With limited-to-no other feasible site development options, Verizon Wireless targeted the St. Anthony of Padua Church property as the host parcel for the proposed Eagle Bay facility. The proposed location offers sufficient ground elevation from which coverage objectives can be satisfied from minimal antenna height above the local tree canopy; while allowing for future natural tree growth to take place and still maintaining initial RF coverage objectives.

Coverage from the proposed communications facility established within the Search Ring

Figure 8 contains a propagation analysis showing the new emergency and non-emergency 4G coverage and calling capacity that will be provided by the proposed Eagle Bay communications facility (shown in the color Light Green). As demonstrated, once completed - the Verizon Wireless' Eagle Bay site will provide the desired level of new and improved 4G service across significant portions of the Targeted Coverage Area. Note that some areas will remain that will not be provided reliable 4G coverage; this is due to the widely varying terrain / elevation in the area (mostly to the northwest and southeast) and thus results in significant signal blocking into these areas from the proposed site

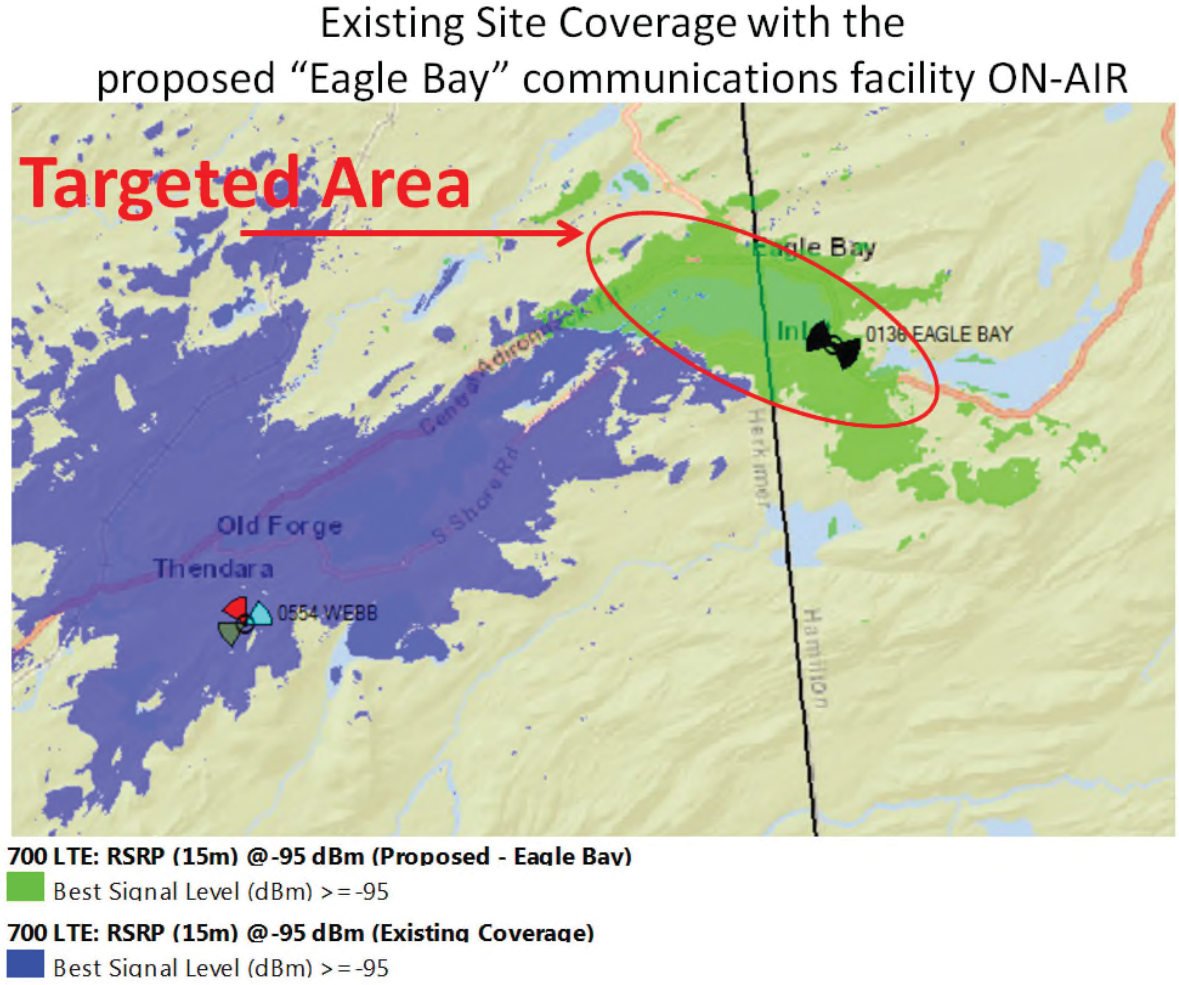


Figure 8. Existing and Future Planned Site Coverage with the proposed "Eagle Bay" Wireless Facility ON-AIR

Respectfully submitted by:

DJ Scholl

Daniel J Scholl
Radio Frequency (RF) Design Engineer

New York RSA 2 Cellular Partnership d/b/a Verizon Wireless

Date: July 15, 2020

ATTACHMENT 5

EAGLE BAY – APA Project No. 2019-0207

APPLICANT'S WRITTEN RESPONSES TO THE APA'S REQUEST FOR ADDITIONAL INFORMATION

The items in bold italicized type reflect the items of "Additional Information" requested by the APA in its Fourth Notice of Incomplete Application dated November 6, 2020, followed by the Applicant's written answer in regular type, and accompanying exhibits, where applicable.

REQUESTED INFORMATION:

Please submit your response to this notice by e-mail to ariel.lynch@apa.ny.gov and follow up to be sure it is received. All application submissions should be in PDF or similar format and be legible. Electronic copies of plans must be fully scalable. Photographs and simulations must be of original digital quality (not scans).

1. Alternatives Analysis: Thank you for providing Attachment Z, the Supplemental RF report prepared by Daniel J. Scholl, RF Design Engineer, and dated July 15, 2020.

a. Please identify the locations of the alternative search areas/sites shown in Figures 4, 5, 6, and 7.

Response: The lat/long locations for the alternate locations depicted in Figures 4, 5, 6 & 7 are shown in Attachment BB.

b. Please identify the tower heights used in these alternative analyses.

Response: The ACL height used at each alternate location is 116' AGL. See Attachment CC.

c. While difficult to discern, it appears the alternate search area/site shown in Figure 7 is at a higher topographic position than the downtown Inlet area and Fourth Lake, without any intervening topography between the alternate search area/site and these locations. Therefore, please explain why Figure 7 shows coverage gaps in the downtown Inlet and Fourth Lake areas.

Response: According to the RF Engineer for the Project, there are three (3) contributing factors for the loss of coverage depicted in the RF plot in Figure 7:

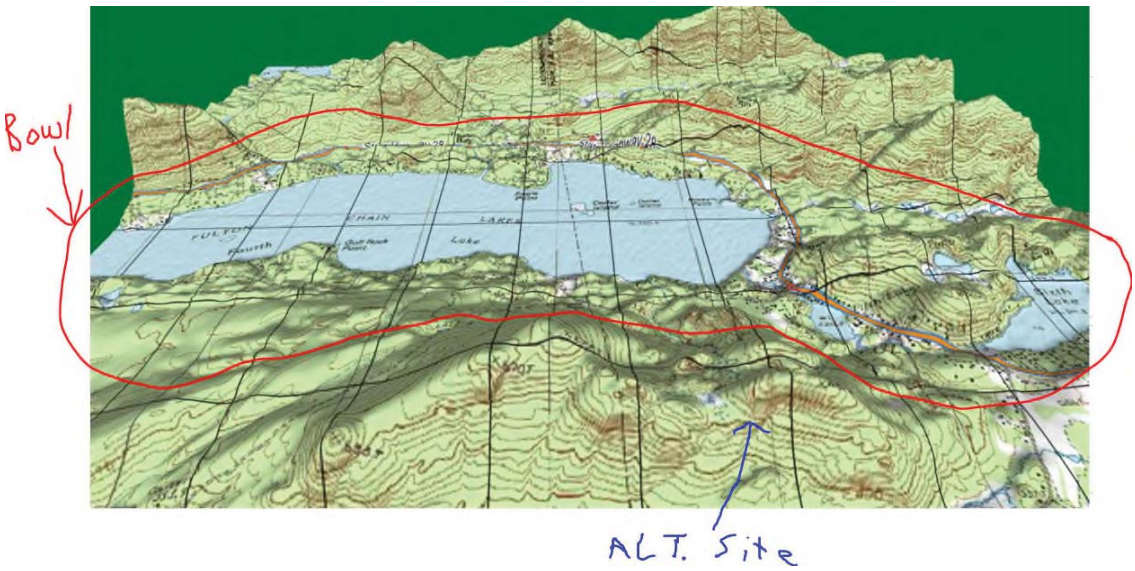
1. The location of Alternate Site 4 is approximately .94 miles away from the proposed Eagle Bay Site. See PIC below. This puts the RF signal source even further away from 2 of the main RF coverage objectives (Hamlet of Inlet and Hamlet of Eagle Bay - as well as west side of 4th Lake) within the Targeted Improvement Area. The farther an RF signal travels, the more it weakens - reducing its ability to penetrate through/around trees & foliage as well as its

ability to penetrate through/around man-made structures. The weakening of an RF signal as it travels is commonly known as "path loss."

2. Second, unlike the Alternate Location depicted in Figure 7, the location of the Proposed Eagle Bay candidate is ideal for a couple main reasons:

A. The VZW Proposed Site is positioned within the same "bowl" as the Targeted Improvement Area. This helps the RF signal to be better contained within the "bowl" (without dispersing into free space). See PIC below. To put it another way, having the RF signal "ORIGINATING" from within the "Bowl" to start with - and then "STAYING" within the Bowl - is better than an RF signal "ORIGINATING" from "OUTSIDE" the "Bowl" and having to travel (propagate) further to get into the bowl and provide coverage.

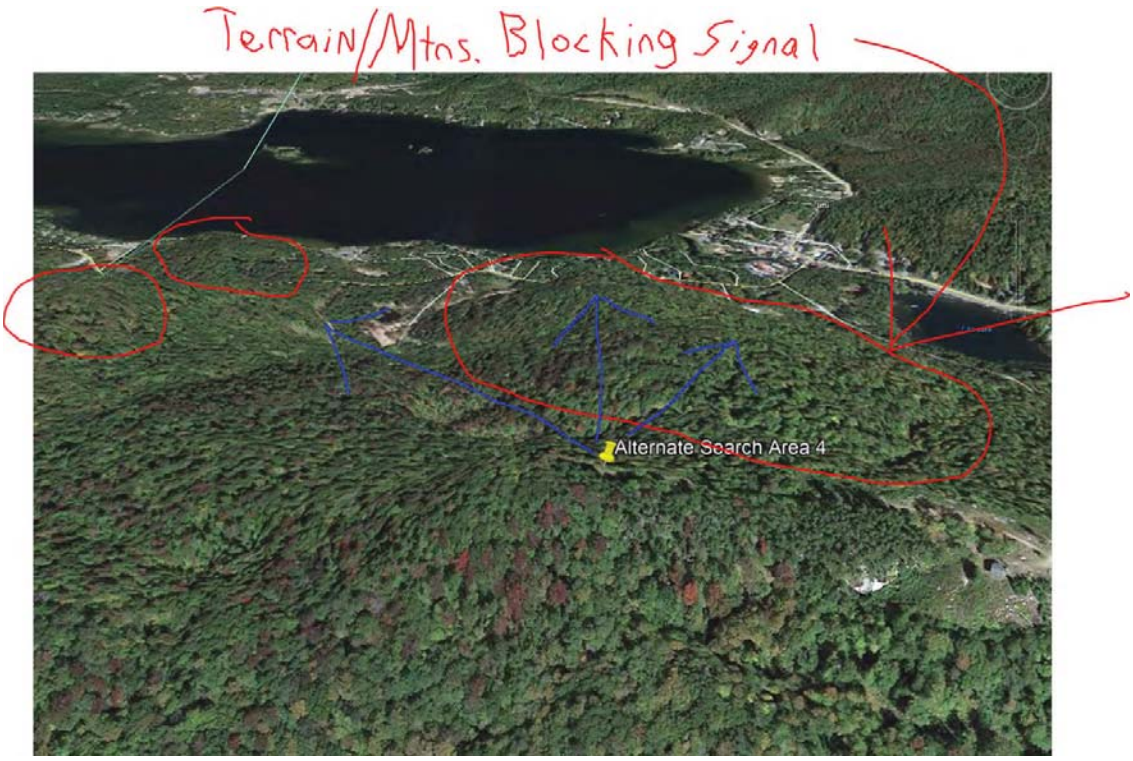
B. The RF signal at the VZW Proposed site is advantaged by "reflection" off of 4th and 5th Lakes. This helps push the RF signal along even further and stronger than it normally would be. This is due to the close proximity of the Proposed Site from 4th and 5th Lakes.



3. Finally, the location of Alternate Site 4 is somewhat Terrain Blocked from covering/reaching portions of VZW's Targeted Improvement Area. As mentioned in previous documents (and repeated here again) - below is a description of VZW's Targeted Improvement Area:

"Critical areas including Rt. 28, the Hamlets of Eagle Bay and Inlet and extending east on NY-28 through 5th Lake and into 6th Lake - as well as a significant portion of 4th Lake and surrounding area (including several residential and recreational areas)."

As can be seen is the Google Earth 3D pic below, the location of Alternate Site 4 may result in RF signal coverage issues, due to the geographic area.



In conclusion, these are causes for the loss of coverage depicted on the RF plot in Figure 7.

2. ***Visual Assessment: Thank you for providing Attachment AA, the Visual Impact & Site Assessment prepared by Costich Engineering and dated January 2020. Section VI of the Assessment characterizes views of the tower from large areas (e.g., ~1182 acres of Fourth Lake and ~1367 feet of Route 28) and views that are "25' skylit," "considerably skylit," and "significantly skylit." As currently proposed, the monopine tower appears to be substantially visible from Fourth Lake, Fifth Lake, and NY State Route 28 in downtown Inlet. Further, the monopine tower does not appear to be in scale with its surroundings.***

a. ***Please continue to explore any and all potential alternatives that would reduce the visibility of the tower.***

Response: As previously stated in prior responses to the Agency, Verizon Wireless has spent years in search of a location to service its Eagle Bay coverage area. The proposed location is the only location available and the proposed height is the minimum height necessary to deliver reliable service to the Targeted Improvement Area.

b. ***The current height of the proposed monopine tower is 125 feet. The provided photo simulations show a 130-foot-tall monopine. Please revise the photo simulations to show the correct proposed/revised tower height.***

Response: The requested simulations depicting the proposed 125′ monopine are enclosed as Attachment DD.

ATTACHMENT BB

Map: __START_OVER_NEW_PSD_1.ATL | Map: 8s_AND_Shapes_Eagle_Bay_Alt_Locs....

-75.2500 -75.1667 -75.0833 -75.0000 -74.9167 -74.8333 -74.7500 -74.6667 -74.5833 -74.5000 -74.4167 -74.3333

9999 ALTERNATE SEARCH AREA 1 (STA-R...

Transmitter	Azimuth (°)	Height (ft)	Centerline (ft)	Mechanical Downtilt (°)	Additional Electrical Downtilt (°)	Auto Antenna Update	Remote Electrical Tilt (deg)	Total Tilt (deg)	Force VzApply	Automatic Model Assignment	Modeling Latitude (NAD83)	Modeling Longitude (NAD83)	Tip Height (ft)
071136-01-B13_10MHz_5230 (4-RING)	120	120	116	0	0	Yes		2		On	*43.76999*	*-74.811822*	120
071136-02-B13_10MHz_5230 (4-RING)	300	120	116	0	0	Yes		2		On	*43.76999*	*-74.811822*	120

Rec. 0

9999 ALTERNATE SEARCH AREA 2 (STA-R...

Transmitter	Azimuth (°)	Height (ft)	Centerline (ft)	Mechanical Downtilt (°)	Additional Electrical Downtilt (°)	Auto Antenna Update	Remote Electrical Tilt (deg)	Total Tilt (deg)	Force VzApply	Automatic Model Assignment	Modeling Latitude (NAD83)	Modeling Longitude (NAD83)	Tip Height (ft)
071136-01-B13_10MHz_5230 (4-RING) (3)	120	120	116	0	0	Yes		2		On	*43.763253*	*-74.792057*	120
071136-02-B13_10MHz_5230 (4-RING) (3)	300	120	116	0	0	Yes		2		On	*43.763253*	*-74.792057*	120

Rec. 0

9999 ALTERNATE SEARCH AREA 3 (STA-R...

Transmitter	Azimuth (°)	Height (ft)	Centerline (ft)	Mechanical Downtilt (°)	Additional Electrical Downtilt (°)	Auto Antenna Update	Remote Electrical Tilt (deg)	Total Tilt (deg)	Force VzApply	Automatic Model Assignment	Modeling Latitude (NAD83)	Modeling Longitude (NAD83)	Tip Height (ft)
071136-01-B13_10MHz_5230 (4-RING) (2)	120	120	116	0	0	Yes		2		On	*43.74728*	*-74.78415*	120
071136-02-B13_10MHz_5230 (4-RING) (2)	300	120	116	0	0	Yes		2		On	*43.74728*	*-74.78415*	120

Rec. 0

9999 ALTERNATE SEARCH AREA 4 (STA-...

Transmitter	Azimuth (°)	Height (ft)	Centerline (ft)	Mechanical Downtilt (°)	Additional Electrical Downtilt (°)	Auto Antenna Update	Remote Electrical Tilt (deg)	Total Tilt (deg)	Force VzApply	Automatic Model Assignment	Modeling Latitude (NAD83)	Modeling Longitude (NAD83)	Tip Height (ft)
071136-01-B13_10MHz_5230 (4-RING) (4)	40	120	116	0	0	Yes		2		On	*43.73937*	*-74.800847*	120
071136-02-B13_10MHz_5230 (4-RING) (4)	300	120	116	0	0	Yes		2		On	*43.73937*	*-74.800847*	120

Map: __START_OVER_NEW_PSD_1.ATL | Map: 8s_AND_Shapes_Eagle_Bay_Alt_Locs....

-75.2500 -75.1667 -75.0833 -75.0000 -74.9167 -74.8333 -74.7500 -74.6667 -74.5833 -74.5000 -74.4167 -74.3333

9999 ALTERNATE SEARCH AREA 1 (STA-R...

Transmitter	Azimuth (°)	Height (ft)	Centerline (ft)	Mechanical Downtilt (°)	Additional Electrical Downtilt (°)	Auto Antenna Update	Remote Electrical Tilt (deg)	Total Tilt (deg)	Force VzApply	Automatic Model Assignment	Modeling Latitude (NAD83)	Modeling Longitude (NAD83)	Tip Height (ft)
071136-01-B13_10MHz_5230 (4-RING)	120	120	116	0	0	Yes		2		On	*43.76999*	*-74.811822*	120
071136-02-B13_10MHz_5230 (4-RING)	300	120	116	0	0	Yes		2		On	*43.76999*	*-74.811822*	120

Rec. 0

9999 ALTERNATE SEARCH AREA 2 (STA-R...

Transmitter	Azimuth (°)	Height (ft)	Centerline (ft)	Mechanical Downtilt (°)	Additional Electrical Downtilt (°)	Auto Antenna Update	Remote Electrical Tilt (deg)	Total Tilt (deg)	Force VzApply	Automatic Model Assignment	Modeling Latitude (NAD83)	Modeling Longitude (NAD83)	Tip Height (ft)
071136-01-B13_10MHz_5230 (4-RING) (3)	120	120	116	0	0	Yes		2		On	*43.763253*	*-74.792057*	120
071136-02-B13_10MHz_5230 (4-RING) (3)	300	120	116	0	0	Yes		2		On	*43.763253*	*-74.792057*	120

Rec. 0

9999 ALTERNATE SEARCH AREA 3 (STA-R...

Transmitter	Azimuth (°)	Height (ft)	Centerline (ft)	Mechanical Downtilt (°)	Additional Electrical Downtilt (°)	Auto Antenna Update	Remote Electrical Tilt (deg)	Total Tilt (deg)	Force VzApply	Automatic Model Assignment	Modeling Latitude (NAD83)	Modeling Longitude (NAD83)	Tip Height (ft)
071136-01-B13_10MHz_5230 (4-RING) (2)	120	120	116	0	0	Yes		2		On	*43.74728*	*-74.78415*	120
071136-02-B13_10MHz_5230 (4-RING) (2)	300	120	116	0	0	Yes		2		On	*43.74728*	*-74.78415*	120

Rec. 0

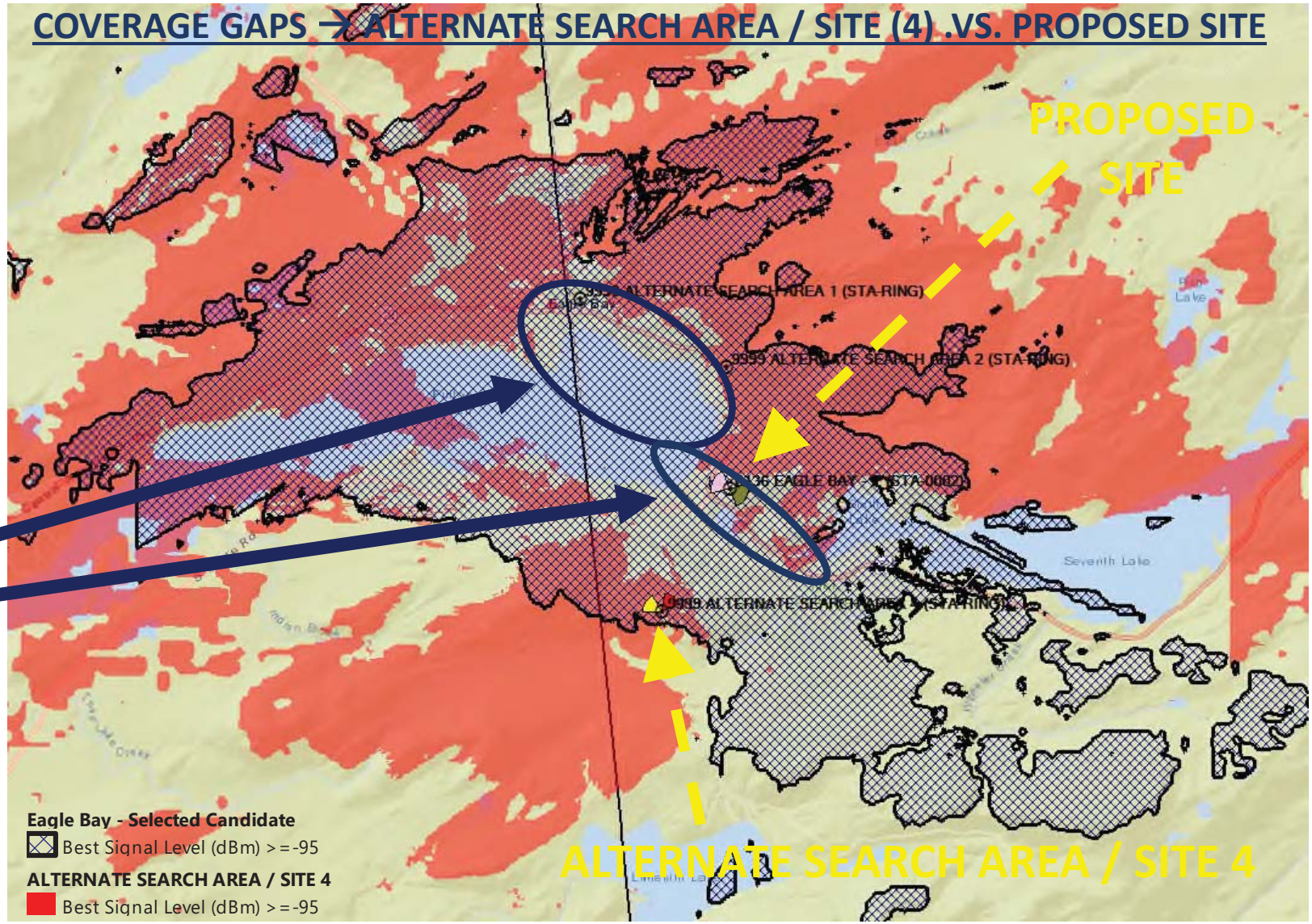
9999 ALTERNATE SEARCH AREA 4 (STA-...

Transmitter	Azimuth (°)	Height (ft)	Centerline (ft)	Mechanical Downtilt (°)	Additional Electrical Downtilt (°)	Auto Antenna Update	Remote Electrical Tilt (deg)	Total Tilt (deg)	Force VzApply	Automatic Model Assignment	Modeling Latitude (NAD83)	Modeling Longitude (NAD83)	Tip Height (ft)
071136-01-B13_10MHz_5230 (4-RING) (4)	40	120	116	0	0	Yes		2		On	*43.73937*	*-74.800847*	120
071136-02-B13_10MHz_5230 (4-RING) (4)	300	120	116	0	0	Yes		2		On	*43.73937*	*-74.800847*	120

ATTACHMENT CC

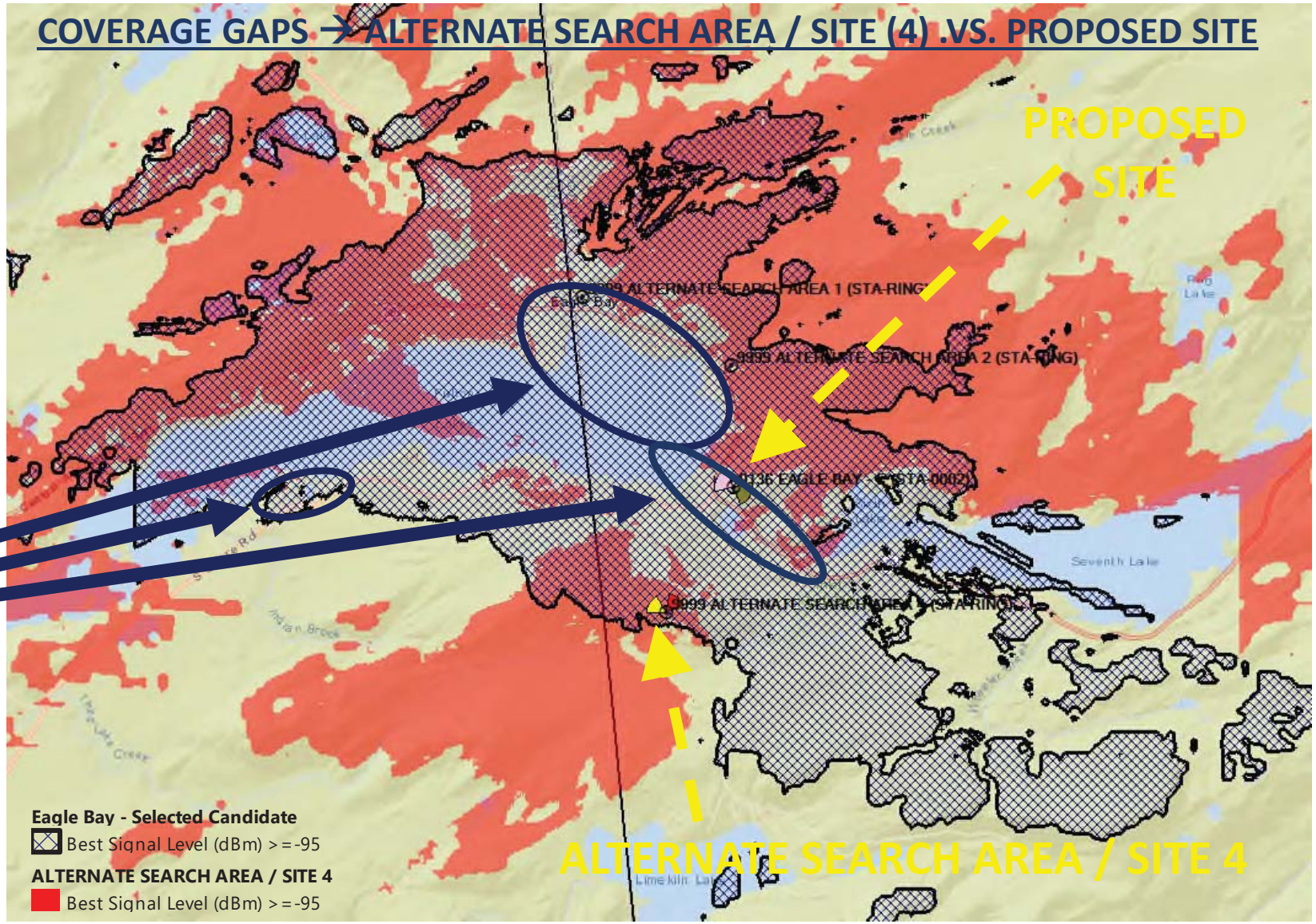
ACL 116’

CRITICAL COVERAGE GAPS



ACL 80’

COVERAGE GAPS → ALTERNATE SEARCH AREA / SITE (4) .VS. PROPOSED SITE



CRITICAL COVERAGE GAPS

From: Pam Berchtold
To: Lynch, Ariel D (APA)
Subject: APA Project No. 2019-0207
Date: Friday, January 15, 2021 11:54:21 AM

Dear Ariel,

This responds to the above mentioned Major Project Public Notice for a 5G tower in Inlet, NY. As previously relayed to the Town of Inlet we strongly oppose such towers. When cell phones were first introduced in the 1980s there were few studies done to determine the risk of them. However, at that time they were determined safe - barely.

Since that time there have been no independent studies related to 4G and now 5G by any of the cell phone providers. In fact, congress has asked repeatedly for these impact studies but they have never been produced. Light is now being shed on the true effects of 5G which emits radiation. We do know that the closer the towers are to humans the more health impact issues people are experiencing. 5G towers by schools have resulted in headaches, nose bleeds, hospitalizations and much more. Heart issues have been enhanced with 5G. It was also revealed by independent studies performed by watch dogs that it does impact animals and the environment.

We strongly oppose this as we have a neighbor with heart issues as well as myself. Knowing that is does affect humans and the environment would be negligible to allow this to occur. Without proper due diligence when health issues arise, whose liability would that fall on? Would it fall on the APA for allowing this to happen? Verizon? The Town of Inlet?

Other cities throughout the country are now requiring studies before allowing something that has potential to be harmful to their citizens and the environment.

I've attached a link to one independent study not performed by the carriers but by the State of New Hampshire. This study clearly reveals that there is impact on the environment and personal health. More independent studies by other states will be following shortly. Also, please note that other countries will NOT allow 5G. A good question to ask is why is that?

Thank you,

Pam & Scott Berchtold
childrenshealthdefense.org/defender/landmark-study-highlights-health-threats-5G-people-planet/

From: Linda Rosenbloom
To: Lynch, Ariel D (APA)
Cc: supervisor@inletny.com
Subject: Cell phone towers in the town of Inlet
Date: Wednesday, August 19, 2020 4:17:55 PM

Mr & Mrs James Rosenbloom
P.O. Box 687
Inlet, NY 13360
315 357 2560
412 973 6153 (cell)
Linrose355@gmail.com

Ms. Ariel Lynch
NYS Adirondack Park Agency
P.O. Box 99
1133 NYS Route 66
Ray Brook, NY 12977

Dear Ms. Lynch,

I am writing this letter after numerous phone calls to town officials and agencies in and around the Adirondack Park and in absolute frustration with a situation that has been of concern to us for years. I am aware that the issue of additional cell phone towers in our area close to population centers has been addressed for years and after hearing so many officials pass the blame, I feel I have to do something.

We are fortunate to spend our summers in this incredible park enjoying everything that the park and nearby hamlets have to offer. We have been tolerating the lack of communication services for many years and this year we have reached the point where we have serious concern for our **health and safety**. We live on the South Shore of Fourth Lake in what many consider a "dead zone" for communication. Frontier is the only landline phone service available (Time Warner Cable is a short distance away in both directions but will not service us) and we have absolutely no cell service at our home. In the past 4 days our land line phone has been out of service approximately 40% of the time. We switched our internet to HughesNet last year after Frontier Internet stopped working and we could not get them to come out for repairs. Having HughesNet for internet prevents us from using WiFi calling through the internet because of the satellite delay.

Just yesterday a man drowned in Fourth Lake and a neighbor who witnessed his empty boat tried to call 911 only to find the landline not working and she had no cell phone reception. One can only wonder if the outcome would have been different if 911 was reached sooner.

We are both active senior citizens who still own several businesses and work remotely during the summer. We would not have had to be alone all summer during the pandemic if our adult children

had been able to **work remotely** from our home in the Adirondack Park. At a time when we need to **work remotely** and the need for access to **remote education** is essential, I cannot understand what can possibly be preventing the installation of cell towers that would solve this problem. The Town of Inlet has the money and the locations to install towers. Please approve the pending applications without height restrictions so that we can feel safe and connected at our home in the Adirondack Park. The concern over seeing a few cell towers among the six million acres of trees should not overshadow the **health and safety** of us or our neighbors.

Sincerely,

James and Linda Rosenbloom