## SLUP Background Report

## Amending the SLUP's Zone 65 PCI (Proposed Conservation Initiative) Following the Creation of Ts’udé Nillíné Tuyeta Protected Area



Sahtu Land Use Planning Board
www.sahtulanduseplan.org
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The Ts'udé Nllı́né Tuyeta Protected Area is the first protected area established in the Sahtú Settlement Area (SSA) under the NWT Protected Areas Act. With the establishment agreement signed by the K'asho Got'ınę and the GNWT in September 2019, the Sahtú Land Use Planning Board (SLUPB) needs to amend the Sahtú Land Use Plan (SLUP) to revise the zoning of the new protected area itself to Established Protected Area, and the remnants of lands within SLUP Zone 65 Proposed Conservation Initiative (PCI) that were left outside the boundaries of the Ts'udé Nllı́né Tuyeta Protected Area. This process will run parallel to the development of regulations for the Ts'udé Nllı́né Tuyeta Protected Area under the NWT Protected Areas Act.

Guidance for this amendment is provided in S. 2.2 of the SLUP, which states that any change in the status of an area for protection will require a Plan amendment. The section further states that if the final boundary is different than that of the original PCI, "the SLUPB will engage the approving parties to discuss zoning options for the portions of the PCl excluded from the final boundary. Information documented on the values of the PCI during the establishment process should be used to set out CRs for these excluded portions of the PCI."

Map 1 shows the areas to be re-zoned through this amendment process. The zone designation of the protected area will be changed to Established Protected Area through the Zone 65 Amendment process. That zone designation change is a stated requirement in S.2.2 of the SLUP. The focus of this Background Report, and the amendment process to follow, is to solicit input into how the areas left out of the protected area will be zoned, and what $\mathrm{CR}(\mathrm{s})$ may be required to manage land use within those areas.

The SLUPB has prepared this Background Report to compile available social, cultural, ecological, and economical information on the area to assist readers in providing input to the SLUPB. This report also explains the process and timelines the SLUPB proposes to use for the amendment process. The process includes multiple rounds of engagement with community organisations in the K'asho Got'^nę District, other Planning Partners, and Approving Parties (Sahtú Secretariat Incorporated (SSI), Government of Northwest Territories (GNWT), and Government of Canada) on the scope and contents of the amendment application.

Planning Partners are invited to review the information provided in this document and provide written comments by Friday, October 9, 2020 to guide the SLUPB's work in preparing an amendment application for approval.


MAP 1. AREAS TO BE REZONED
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM: DIGITAL ELEVATION MODEL, CDEM, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA; RIVERS AND LAKES, CANVEC 1:1,000,000, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; SAHTU SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS administrative boundary (clab) level 1, natural resources canada, government of canada, 2017; Ts'udé nlliné tuyeta protected area, tiwg.

NOTE: SHADING INCLUDES ALL AREAS THAT FALL OUTSIDE OF THE BOUNDARIES OF SLUP ZONE 65 TS'UDÉ NLlı́ńné TUYETA PCI. UNSHADED AREAS OUTSIDE OF THE TS'UDÉ nilíné tuyeta protected area are the lands that need to be considered for re-zoning.

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## ACRONYMS

| CR | Conformity Requirement |
| :--- | :--- |
| CWS | Canadian Wildlife Service |
| CZ | Conservation Zone |
| ENR | Department of Environment and Natural Resources |
| EPA | Established Protected Area |
| GNWT | Government of the Northwest Territories |
| GUZ | General Use Zone |
| MVRMA | Mackenzie Valley Resource Management Act |
| PCI | Sahtu Dene and Metis Comprehensive Land Claim Agreement |
| SDMCLCA | Sahtú Land Use Plan |
| SLUP | Sahtú Land Use Planning Board |
| SLUPB | Special Management Zone |
| SMZ | Sahtú Settlement Area |
| SSA | Sahtú Secretariat Incorporated |
| SSI | Ts'udé Nllíné Tuyeta Working Group |
| TTWG |  |

Ts'udé Nllíné Tuyeta (Ramparts River and Wetlands) is an important cultural place for the Dene and Metis of Fort Good Hope, known as K'asho Got’ınę ("Willow People"). The final boundaries of Ts'udé Nllíné Tuyeta protected area include the headwaters of the Hume River and Ts'udé Nllíné ("the Ramparts River"), as well as the surrounding wetlands. This area includes a part of Fee Yee ("The Ramparts"). According to local stories, Fee Yee was created by a giant named Wichididelle, who created the Ramparts rapids on the Mackenzie River when he threw rocks while chasing giant beavers (The Sahtu Heritage Places and Sites Joint Working Group, 2000). Another sacred site found within the protected area is Pıdıtúé Dáyídá, known in English as the Thunderbird Place (The Sahtu Heritage Places and Sites Joint Working Group, 2000).

Ts'udé Nllliné Tuyeta is a place where the Dene and Métis have lived since time immemorial. This area is an important hunting, trapping, and fishing area for the Dene and Métis of Fort Good Hope, especially for moose, beaver and muskrat. It is a critical waterfowl-breeding site and a good place for the spring hunt of migratory birds (The Sahtu Heritage Places and Sites Joint Working Group, 2000). This area was recommended for protection to preserve the Dene and Métis traditional way of life for future generations - to provide a place where the Dene and Metis can always go to practice their culture, harvest food and renew their relationship with the land.

## INITIAL RECOGNITION

Efforts to protect Ts'udé Nllíné Tuyeta have spanned over 25 years. This area was first identified as being a culturally significant heritage site in the Sahtú in 1993, in the Sahtu Dene and Metis Comprehensive Land Claim Agreement (SDMCLCA). "Rakekée Gok'e Godı: Places We Take Care Of", the report finalised in 2000 by the Sahtú Heritage Places and Sites Joint Working Group, recommends protection of this area (or specific parts of this area), in various ways:

- The Ts'udé Nllíné (Ramparts River) designated as a Heritage River,
- Wetlands designated as a Migratory Bird Sanctuary to protect waterfowl nesting and staging areas,
- Ts'udé Nllíné Tuyeta (Ramparts river and wetlands) as a Critical Wildlife Area to protect subsistence and trapping species,
- Fee Yee (the Ramparts) designated as a National Historic Site, and
- Specific archaeological, burial and heritage sites to be protected through other mechanisms such as the land use plan, oral history and archaeological research to document and protect the heritage resources

Map 2 presents the areas of cultural significance identified in the "Rakekée Gok'e Godı: Places We Take Care Of" report.


MAP 2. IDENTIFIED SPECIAL AREAS FROM RAKEKÉE GOK'E GODI: PLACES WE TAKE CARE OF
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM: IDENTIFIED SPECIAL AREAS, ROUTES, AND CULTURAL GROUPS, RAKEKÉE GOK’E GODI: PLACES WE TAKE CARE OF, REPORT OF THE SAHTU HERITAGE PLACES AND SITES JOINT WORKING GROUP, 2000; DIGITAL ELEVATION MODEL, CDEM, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA; RIVERS AND LAKES, CANVEC 1:1,000,000, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; SAHTÚ SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS ADMINISTRATIVE BOUNDARY (CLAB) LEVEL 1, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; TS'UDÉ NILLíNÉ TUYETA PROTECTED AREA, TTWG.

NOTE: SHADING INCLUDES ALL AREAS THAT FALL OUTSIDE OF THE BOUNDARIES OF SLUP ZONE 65 TS'UDÉ NILÍNé TUYETA PCI. UNSHADED AREAS OUTSIDE OF THE TS'UDÉ NıLİNÉ TUYETA PROTECTED AREA ARE THE LANDS THAT NEED TO BE CONSIDERED FOR RE-ZONING.

## ESTABLISHING TS'UDÉ NILİ́NÉ TUYETA

In 2002 the Yamoga Land Corporation submitted a proposal to protect Ts'udé Nolı́né Tuyeta to the NWT Protected Areas Strategy. In 2005, the Canadian Wildlife Service (CWS) reviewed the proposal and determined that Ts'udé Nllíné Tuyeta contained ecological values of national significance, which fell within their legislative mandate (Ts'ude niline Tu'eyeta Candidate National Wildlife Area Working Group, 2012). The CWS started work to advance Ts'udé Nllı́né Tuyeta through the NWT Protected Areas Strategy as a candidate National Wildlife Area using the Canada Wildlife Act.

A five-year land withdrawal for Ts'udé N,llíné Tuyeta was secured in October 2006 through a federal Order-in-Council, to allow time for a complete assessment of the area. The Ts'udé Nllíné Tuyeta Working Group (TTWG) was established in 2006 to assess the ecological, cultural, and economic values of the area. The group made recommendations to the K'asho Got'ine District Land Corporation regarding the boundary of the protected area, its legal designation, surface and subsurface management, and management goals and process (Ts'ude niline Tu'eyeta Candidate National Wildlife Area Working Group, 2012). The TTWG met for the first time in Fort Good Hope in July of 2007.

The TTWG was made up of multiple levels of government, communities, environmental nongovernment organisation, and industry representatives (Ts'ude niline Tu'eyeta Candidate National Wildlife Area Working Group, 2012):
$\diamond$ Yamoga Land Corporation;
$\diamond$ K'asho Got'ine Dene Band;
$\checkmark$ Fort Good Hope Métis Local \#54;
$\diamond$ Fort Good Hope Renewable Resources Council;
$\diamond$ Canadian Wildlife Service (CWS);
$\diamond$ Aboriginal Affairs and Northern Development Canada (AANDC);
$\diamond$ Ducks Unlimited Canada;
$\diamond$ Government of the Northwest Territories (GNWT), Environment and Natural Resources (ENR);
$\diamond$ Association of Mackenzie Mountain Outfitters;
$\diamond$ NWT and Nunavut Chamber of Mines.

The purpose of holding the TTWG meetings in Fort Good Hope was to:

- consider the information gathered (resource and cultural assessments) and discuss direction for the protected area;
- update stakeholders on the Protected Areas Strategy process for Ts'udé Nllíné Tuyeta; and
- open the meeting to community members to consider their questions and concerns (Ts'ude niline Tu'eyeta Candidate National Wildlife Area Working Group, 2012).

Based on the outcome of the Sahtu Land Use Planning Board (SLUPB) public meeting in June 2011, with significant input from community members of Fort Good Hope, the TTWG met in July 2011 to approve a change in the recommended boundaries for the Ts'udé Nolíné Tuyeta protected area (Ts'ude niline Tu'eyeta Candidate National Wildlife Area Working Group, 2012). This resulted in a reduction of the size of the proposed protected area, with the recommended boundaries being $67 \%$ of the size of the original candidate protected area. These boundaries excluded areas with high mineral potential in the south, as well as areas to the northwest, focusing on the protection of the wetlands (Ts'ude niline Tu'eyeta Candidate National Wildlife Area Working Group, 2012). The Final Working Group Recommendation Report was then released in 2012, recommending the final boundary of the Ts'udé Nolíné Protected area, which is shown on all maps in this report.

The final boundaries of the protected area aim to conserve the features listed below. These are presented as a percentage of the area covered by each feature identified in SLUP Zone 65 PCI (Ts'ude niline Tu'eyeta Candidate National Wildlife Area Working Group, 2012):
$\diamond 75 \%$ of the Ramparts River watershed, $43 \%$ of the Ontaratue River watershed, and 100\% of the Hume River watershed;
$\diamond 100 \%$ of the Tuyát'ah (Tuyeta) area identified in Rakekée Gok'e Godı: Places We Take Care Of report;
$\diamond 95 \%$ of Fort Good Hope's harvesting area on the west side of the Mackenzie River;
$\checkmark 97 \%$ of the Key Migratory Bird Terrestrial Habitat Site identified by CWS;
$\checkmark 93 \%$ of camps and cabins;

- 50\% of heritage sites;
$\checkmark 100 \%$ of burial sites;
- 40\% of archaeological sites.

Interim land withdrawals were extended a few times until December 17, 2017 to provide interim protection as the site was advanced through the Protected Area Strategy. At this point it was determined that the Ts'udé Nllíné Tuyeta area had sufficient protection through the Sahtu Land Use Plan (SLUP) under the Zone 65 Proposed Conservation Initiative designation, that another extension of the land withdrawal was not needed.

## TIMELINE OF RESOURCE AND CULTURAL ASSESSMENTS

The TTWG conducted a number of cultural, ecological and economic assessments to inform their boundary decisions and other final recommendations for the protected area.

## The assessments of the Ts'udé N N líné Tuyeta area are as follows:

$\diamond$ Draft Renewable Resource Assessment (2006);
$\checkmark$ Hydrocarbon Potential Summary Report (2007);
$\checkmark$ Cultural Documentation (2007);
$\diamond$ Non-Renewable Resource Assessment Phase 1 - Petroleum (2007);
$\diamond$ Ecological Assessment Phase 1 \& 2 (2007);
$\diamond$ Non-Renewable Resource Assessment Phase 1 - Minerals (2008);
$\checkmark$ Socio-Economic Assessment Phase 1 (2009);
$\checkmark$ Hydrocarbon Potential Final Report (2010);
$\checkmark$ Non-Renewable Resource Assessment Phase 2 (2010);
$\checkmark$ Socio-Economic Assessment Phase 2 (2011);
$\diamond$ Ts'ude niline Tu'eyeta Candidate National Wildlife Area Recommendations Report (2012).

The socio-economic assessments and final recommendations report documented a strong cultural and spiritual connection to Ts'udé Nllíné Tuyeta, with "many birth and burial sites, unusual animal sightings, spiritual power, personal experiences, and cultural stories" (Ts'ude niline Tu'eyeta Candidate National Wildlife Area Working Group, 2012).

## CURRENT STATUS AND NEXT STEPS

The establishment agreement for Ts'udé Nllíné Tuyeta Protected Area was signed by all Parties in September 2019 (Government of the Northwest Territories, Yamoga Land Corporation, Ayoni Keh Land Corporation, Fort Good Hope Métis Nation Local \#54 Land Corporation, Fort Good Hope Dene Band, and Behdzi Ahda First Nation). The GNWT is currently developing regulations for Ts'udé Nllíné Tuyeta under the NWT Protected Areas Act, which is the final step to establish it as a protected area under the NWT Protected Areas Act. The regulations are expected to be completed around February 2021. That process is being run by the GNWT in parallel to the SLUPB's Plan Amendment process for Zone 65.

In the SLUP, approved in 2013, Ts'udé Nllíné Tuyeta was designated as Zone 65 Proposed Conservation Initiative (PCI), which provides interim protection from industrial activities until the protected area is established. As the final boundaries of the protected area comprise a smaller area than what is protected under Zone 65 Proposed Conservation Initiative, the SLUPB must rezone both the lands within the protected area, and the lands left outside the protected area through an amendment to the SLUP.

Section 2.2 of the SLUP (as updated in the 5-Year Review Amendment Application currently awaiting approval) provides guidance on how the Plan applies to Protected Areas. Relevant sections follow (Sahtú Land Use Planning Board, 2020):

## Other Protected Areas

While lands within protected areas are legally subject to the Plan, once established they are zoned in the Plan as Established Protected Areas (EPAs). In these areas, the legis/ation and, in many cases, management plans and/or management agreements, provide management direction. To avoid potential for conflict or duplication, the Plan will provide no further management direction to EPAs. The SLUPB may provide applicable expertise and advice if requested by a protected area management board or body.

Change in Boundary or Status
A change in boundary of an established national park, national historic site, or protected area, or change in status of an area being proposed for protection, affects the Plan's zoning and will require a Plan amendment, as per section 4.7. Once established, if the final boundary of a national park, national historic site or protected area is different than that of the associated PCI boundary in the Plan, the SLUPB will engage the approving parties to discuss zoning options for the portions of the PCI excluded from the final boundary. Information documented on the values of the PCI during the establishment process should be used to set out CRs for these excluded portions of the PCI. Since this process can take a considerable amount of time, discussions with the SLUPB should occur as early as possible to ensure that any Plan amendment can be considered and approved at the same time as establishment or soon thereafter.

The final boundaries of the Ts'udé Nılľné Tuyeta Protected Area comprise an area of approximately $10,007 \mathrm{~km}^{2}$, which includes the areas of highest ecological and cultural importance (Government of the Northwest Territories, 2017). As the Ts'udé Nolíné Tuyeta Protected Area will have its own management plan and board, it is the Board's intention, as per S. 2.2 of the SLUP, to rezone lands within the boundary of the new protected area to the "Established Protected Area" (EPA) designation, to avoid potential conflict or duplication with direction under the regulations and the protected area's eventual management plan. Once the lands are re-designated as an EPA, the SLUP will provide no further management direction within that area, though the Board may provide applicable expertise and advice if requested by a protected area management board or body. That change in zone designation will be reflected in the Board's final Zone 65 amendment application.

The original (current) Zone 65 Ts'udé Nllíné Tuyeta PCI totals approximately $14,630 \mathrm{~km}^{2}$, meaning that the remnants of the zone outside the protected area's final boundaries is approximately $4,623 \mathrm{~km}^{2}$. These are the lands that need further consideration to determine the most appropriate zone designation(s) based on the different values identified (e.g. social, cultural, ecological, economical, etc.).

These SLUP zone changes, both within the newly established protected area and the areas left out, can only be made through a plan amendment process as defined in the SLUPB's Rules of Procedure "Part 6 Amendments to the Plan". Until such time as the Board has completed and adopted a plan amendment application, and that application has been approved by the SSI, GNWT, and Government of Canada as per S. 43 of the MVRMA, the zoning will remain as a PCI under the SLUP. The SLUPB and GNWT are therefore coordinating their respective processes, to align timing as much as possible.

Map 1 shows the areas to be re-zoned through this amendment process. The zone designation of the protected area will be changed to Established Protected Area through the Zone 65 Amendment process. That zone designation change is a stated requirement in S.2.2 of the SLUP. The focus of this Background Report, and the amendment process to follow, is to solicit input into how the areas left out of the protected area will be zoned, and what $C R(s)$ may be required to manage land use within those areas.

The remainder of this document details the values known to exist within these areas, to assist the Board and its planning partners make informed decisions on the future of these areas.

As efforts to protect Ts'udé Nllíné Tuyeta have spanned decades, there are plenty of reports on the area and records of engagement and public input (GNWT, 2020). This Background Report attempts to gather, update and summarize key information pertaining to Zone 65 that is available to the SLUPB. Maps are presented as a means to visualise the distribution of important values and features within Zone 65 PCl lands, especially for lands left outside of the final boundaries of the protected area, where a range of rezoning options exist.

Following the release of this document, the Board will provide a 60-day comment period. The SLUPB will be looking to planning partners to provide input on how the lands omitted from the final protected area should be zoned, and what CR(s) may be required to manage land use within those areas. The Board will consider this input before publishing an amendment application for Zone 65 of the SLUP for review and approval.

The research that was compiled for the Ts'udé Nllíné Tuyeta area identified the need for protection of important traditional and cultural values of the K'asho Got'„nę Dene and Métis, important wildlife areas, as well as areas of potential economic importance. These were considered when formulating the final boundaries of the Ts'udé Nolĺné Tuyeta protected area, as recommended by the TTWG.

The Ramparts River and wetlands are the defining feature of this protected area. Therefore, it is important to identify the watersheds within the SLUP's Zone 65 PCl , as shown on Map 3. With this, it is possible to analyse what parts of the area fall within the same watershed and would merit protection to assure the integrity of the legislated protected area.


MAP 3. MAJOR WATERSHEDS AROUND THE TS'UDÉ NILĹ̨NÉ TUYETA PROTECTED AREA
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM: COMMUNITY CATCHMENTS, NATIONAL HYDROGRAPHIC NETWORK (NHN), NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2018; DIGITAL ELEVATION MODEL, CDEM, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA; RIVERS AND LAKES, CANVEC 1:1,000,000, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; SAHTÚ SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS ADMINISTRATIVE BOUNDARY (CLAB) LEVEL 1, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; TS'UDÉ NإLíNÉ TUYETA PROTECTED AREA, TTWG.

NOTE: SHADING INCLUDES ALL AREAS THAT FALL OUTSIDE OF THE BOUNDARIES OF SLUP ZONE 65 TS'UDÉ NLlıínÉ TUYETA PCI. UNSHADED AREAS OUTSIDE OF THE TS'UDÉ NILLíNÉ TUYETA PROTECTED AREA ARE THE LANDS THAT NEED TO BE CONSIDERED FOR RE-ZONING.

Ecoregions and glacial refugia are also important to consider. Ecoregions are classified based on their climate attributes, surficial geology, surface material, landform, surface form, permafrost form, soil development, and land cover (vegetation) (GNWT, ENR, 2013). Areas with similar attributes are classified together to form one region, as displayed on Map 4. Ecoregions are often used as zone boundaries as they represent distinct changes in the ecological and geological environment. Glacial refugia, which was the maximum extent of ice during the last ice age, also affects the landscape. While most of Canada was covered by ice during the last ice age, there were parts of the Sahtú Settlement Area that remained icefree during the maximum extent of glaciation. Glacial refugia may be associated with rare or unique plant species. Glacial refugia are shown on Map 5. The southern part of SLUP Zone 65 PCI was ice free during the period of maximum glaciation ( 17350 calendar years before present).


MAP 4. ECOREGIONS
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM: DIGITAL ELEVATION MODEL, CDEM, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA; ECOREGIONS, department of environment and natural resources, government of the northwest territories, 2013; rivers and lakes, canvec 1:1,000,000, natural RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; SAHTÚ SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS ADMINISTRATIVE BOUNDARY (CLAB) level 1, natural resources canada, government of Canada, 2017; Ts'udé nllíné tuyeta protected area, ttwg.

NOTE: SHADING INCLUDES ALL AREAS THAT FALL OUTSIDE OF THE BOUNDARIES OF SLUP ZONE 65 TS'UDÉ NILĹNÉ TUYETA PCI. UNSHADED AREAS OUTSIDE OF THE TS'UDÉ NIlLíné TUYETA PROTECTED AREA ARE THE LANDS THAT NEED TO BE CONSIDERED FOR RE-ZONING.


MAP 5. GLACIAL REFUGIA AND KARST
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM: DIGITAL ELEVATION MODEL, CDEM, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA; GLACIAL REFUGIA, DYKE, A.S.,MOORE, A., ROBERTSON, L., DEGLACIATION OF NORTH AMERICA OPEN FILE 1574, GEOLOGICAL SURVEY OF CANADA, GOVERNME NT OF CANADA, 2003 KARST, FORD, D., HAMILTON, J., KEARNEY, S. (DIGITISING), MAPPING KNOWN AND POTENTIAL KARST AREAS IN THE NORTHWEST TERRITORIES, DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES, GOVERNMENT OF THE NORTHWEST TERRITORIES, 1996 (DATA) AND 2007 (DIGITISED); KARST, DUK-RODKIN, A., HUGHES, O.L., KEARNEY, S. (DIGITISING), SURFICIAL GEOLOGY, MAPS 1989A, 1741A, 1784A, 1783A, 1788A, GEOLOGICAL SURVEY OF CANADA, 1989-2000 (REPORTS) AND 2007 (DIGITISED); RIVERS AND LAKES, CANVEC $1: 1,000,000$, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; SAHTÚ SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS administrative boundary (CLAb) level 1, natural resources canada, government of canada, 2017; Ts'udé nllíné tuyeta protected area, ttwg.

NOTE: SHADING INCLUDES ALL AREAS THAT FALL OUTSIDE OF THE BOUNDARIES OF SLUP ZONE 65 TS'Udé NLlíné TUYETA PCI. UNSHADED AREAS OUTSIDE OF THE TS'UDÉ nllíné tuyeta protected area are the lands that need to be considered for re-zoning

A cultural assessment of Ts’udé Nllĺ̨né Tuyeta was completed in 2009, which was a compilation of existing information and new information gathered through 16 interview sessions with community members in Fort Good Hope. This cultural assessment concluded that protection of Ts'udé Nillíné Tuyeta "is essential to preserving their very identity" (Ts'ude niline Tu'eyeta Candidate National Wildlife Area Working Group, 2012). The cultural importance of this area to the K'asho Got'ınę Dene and Métis must be recognised. This section presents a series of maps and descriptions showing which areas of SLUP Zone 65 PCI have the highest use by the K'asho Got'ı̨ę Dene and Métis, which is one element in determining their cultural importance. Map 2 (shown earlier) also identifies areas of cultural importance within SLUP Zone 65 PCl.


MAP 6. ARCHAEOLOGICAL SITES
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM: KNOWN ARCHAEOLOGICAL SITES, PRINCE OF WALES NORTHERN hERITAGE CENTRE, GOVERNMENT OF THE NORTHWEST TERRITORIES; DIGITAL ELEVATION MODEL, CDEM, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA; RIVERS AND LAKES, CANVEC 1:1,000,000, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; SAHTÚ SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS ADMINISTRATIVE BOUNDARY (CLAB) level 1, natural resources canada, government of Canada, 2017; Ts'udé nilíné tuyeta protected area, ttwg

NOTE: SHADING INCLUDES ALL AREAS THAT FALL OUTSIDE OF THE bOUNDARIES OF SLUP ZONE 65 TS'UDÉ NILİNÉ TUYETA PCI. UNSHADED AREAS OUTSIDE OF THE TS'UDÉ nllíné tuyeta protected area are the lands that need to be considered for re-zoning. known archaeological sites are only shown for areas within the SAHTÚ SETTLEMENT AREA.

Map 6 represents a count of known archaeological sites per $10 \mathrm{~km}^{2}$ grid in and around the area of Ts'udé Nllíné Tuyeta. The sites are gridded to mask the exact location of sites, as they are sensitive features. Enquiries regarding these sites should be directed to the Prince of Wales Northern Heritage Centre, Government of the Northwest Territories, which provided this data.

Most archaeological sites fall in the Mackenzie River valley, along the eastern edge of the Ts’udé Nllíné Tuyeta Protected Area. One site exists in the wetlands that are part of the protected area, and no known sites have been documented in the remnants of SLUP Zone 65 that fall outside the protected area. This is consistent with what is expected, as the Mackenzie River is the main travel corridor through the region. It is important to note that archaeological sites are not burial sites, which are displayed on Map 7.


MAP 7. BURIAL SITES, CAMPS, AND MAJOR TRAILS
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM: BURIAL SITES, FORT GOOD HOPE CHEVRON STUDY, 1988; BURIAL SITES, CAMPS, AND MAJOR TRAILS, TS'UDÉ NILÍNÉ TUYETA TK STUDY UNDERTAKEN BY JOHN T’SELEIE, 2019 (SEE MAP FOR DOWNLOAD ON SLUPB WEBSITE OR CONTACT YAMOGA LAND CORPORATION FOR DETAILS); digital elevation model, cdem, natural resources canada, government of canada; rivers and lakes, canvec 1:1,000,000, natural resources canada, GOVERNMENT OF CANADA, 2017; SAHTÚ SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS ADMINISTRATIVE BOUNDARY (CLAB) LEVEL 1, NATURAL resources canada, government of canada, 2017; Ts'udé nllíné tuyeta protected area, ttwg.

NOTE: SHADING INCLUDES ALL AREAS THAT FALL OUTSIDE OF THE BOUNDARIES OF SLUP ZONE 65 TS'UDÉ NLlı́íNÉ TUYETA PCI. UNSHADED AREAS OUTSIDE OF THE TS'UDÉ NILİNÉ TUYETA PROTECTED AREA ARE THE LANDS THAT NEED TO BE CONSIDERED FOR RE-ZONING. KNOWN ARCHAEOLOGICAL SITES ARE ONLY SHOWN FOR AREAS WITHIN THE SAHTÚ SETTLEMENT AREA.

The area of Ts'udé Nllľné Tuyeta has many burial and culturally sensitive sites. It is of great importance to the K'asho Got'ınę Dene and Métis, and has been their home since time immemorial. The map above identifies the number of documented burial sites, masked in a $10 \mathrm{~km}^{2}$ grid to protect their location. Camps are shown using points, and the major trails are identified. This information comes from multiple many studies that have been done in the area for various cultural or development projects in past years.

All recorded burial sites in SLUP Zone 65 PCI fall within the established Ts'udé Nllíné Tuyeta Protected Area. Most camps and important trails also fall within the protected area, with very few camps recorded in Zone 65 PCl outside the protected area. There are camps along the Ontaratue River to the north of the protected area, and one near the headwaters of the Hume River to the south of the protected area.

Map 8 displays trails as recorded by the Dene Nation Traditional Trails Mapping project completed in 1982. This mapping project showcases some of the most complete information that exists regarding traditional trails through the area. Similar to the previous map, most traditional trails fall within the Ts'udé Nllı́né Tuyeta Protected Area. There are a few trails continuing north of the protected area but within Zone 65 PCl that follow the Ontaratue River and then branch off further. Community members requested that special consideration be given to trails that lead from Fort Good Hope to Mayo, Yukon, as the families from these two communities are related. Historically they would winter together in the mountains that separate the two communities, and travel down the rivers to their communities in the spring after breakup. These trails run to the south-west corner of the Ts'udé $N$ llíné Tuyeta Protected Area, then extend outside the SSA, following the Arctic Red River to its source, crossing the mountains into the Yukon.


MAP 8. TRADITIONAL TRAILS
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM:TRADITIONAL TRAILS, DENE NATION TRADITIONAL TRAILS MAPPING, 1982; DIGITAL ELEVATION MODEL, CDEM, natural resources canada, government of canada; rivers and lakes, canvec 1:1,000,000, natural resources canada, government of canada, 2017 ; SAhtú SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS ADMINISTRATIVE BOUNDARY (CLAB) LEVEL 1, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; TS' UDÉ NILLínÉ TUYETA PROTECTED AREA, TTWG.
 nilíné tuyeta protected area are the lands that need to be considered for re-zoning. known archaeological sites are only shown for areas within the SAHTÚ SETTLEMENT AREA.

## WILDLIFE AND ECOLOGICAL IMPORTANCE

The area that comprises Ts'udé Nllíné Tuyeta includes a number of values of ecological significance, supporting several species at-risk as listed by the Committee on the Status of Endangered Wildlife in Canada (Canadian Wildlife Service, 2007). It is a key migratory bird terrestrial habitat site in the Northwest Territories, and the area is the water source for important drainages in the Sahtú region (Canadian Wildlife Service, 2007), providing clean water for people living downstream (AMEC, INAC, \& CWS, 2011). Furthermore, core representative area analysis indicates that the area comprised by Ts'udé Nillíné Tuyeta "contains several highly representative or unique areas which likely cannot be found elsewhere in any of the ecoregions within it" and "is also effective in capturing the range of biodiversity within 100 km around it" (Canadian Wildlife Service, 2007).

The following maps show important wildlife habitat within the boundaries of SLUP Zone 65 Ts'udé Nاľ́né Tuyeta PCl , overlaid with the boundary of the Ts’udé Nllíné Tuyeta Protected Area, to illustrate which features fall outside the protected area and should be considered in rezoning decisions through the upcoming SLUP amendment process. It is important to note that there are no recorded mineral licks, ice patches, or hot or warm springs within the boundaries of SLUP Zone 65 Ts'udé Nalíné Tuyeta PCI.

Furthermore, as wildlife is sensitive to disturbances to the land, Map 14 was produced to show the fire history for the area around Ts'udé Nllíné Tuyeta. Large tracts of land have been burnt over many decades. Although some traces of the oldest fires (1960s) are still visible today, vegetation has mostly come back in these areas.


MAP 9. BEAVER IMPORTANT WILDLIFE AREA
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM: BEAVER IWA, IMPORTANT WILDLIFE AREAS IN THE NWT, ENVIRONMENT AND NATURAL RESOURCES, GOVERNMENT OF THE NORTHWEST TERRITORIES, 2012; DIGITAL ELEVATION MODEL, CDEM, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA; RIVERS AND LAKES, CANVEC 1:1,000,000, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; SAHTÚ SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS ADMINISTRATIVE BOUNDARY (CLAB) LEVEL 1, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; TS'UDÉ NILL(NÉ TUYETA PROTECTED AREA, TTWG.

NOTE: SHADING INCLUDES ALL AREAS THAT FALL OUTSIDE OF THE BOUNDARIES OF SLUP ZONE 65 TS'UDÉ NILĹ̨NÉ TUYETA PCI. UNSHADED AREAS OUTSIDE OF THE TS'UDÉ Nilí́NÉ TUYETA PROTECTED AREA ARE THE LANDS THAT NEED TO BE CONSIDERED FOR RE-ZONING.


MAP 10. DALL'S SHEEP IMPORTANT WILDLIFE AREA
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM: DALL’S SHEEP IWA, IMPORTANT WILDLIFE AREAS IN THE NWT, ENVIRONMENT AND NATURAL RESOURCES, GOVERNMENT OF THE NORTHWEST TERRITORIES, 2012; DIGITAL ELEVATION MODEL, CDEM, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA; RIVERS AND LAKES, CANVEC 1:1,000,000, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; SAHTÚ SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS administrative boundary (CLAb) level 1, natural resources canada, government of canada, 2017; Ts'udé nliliné tuyeta protected area, tTwg.

Note: Shading includes all areas that fall outside of the boundaries of slup zone 65 Ts'udé nllíné tuyeta pci. unshaded areas outside of the ts'udé NIL LíNÉ TUYETA PROTECTED AREA ARE THE LANDS THAT NEED TO BE CONSIDERED FOR RE-ZONING.


MAP 11. MIGRATORY BIRD KEY TERRESTRIAL HABITAT SITES
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM: MIGRATORY BIRD KEY TERRESTRIAL HABITAT SITES, KEY MIGRATORY BIRD TERRESTRIAL AND MARINE HABITAT SITES IN THE NORTHWEST TERRITORIES AND NUNAVUT, CANADIAN WILDLIFE SERVICE, GOVERNMENT OF CANADA, 2008; DIGITAL ELEVATION MODEL, CDEM, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA; RIVERS AND LAKES, CANVEC 1:1,000,000, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; SAHTÚ SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS ADMINISTRATIVE BOUNDARY (CLAB) LEVEL 1, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; TS'UDÉ NILLíNÉ TUYETA PROTECTED AREA, TTWG.

NOTE: SHADING INCLUDES ALL AREAS THAT FALL OUTSIDE OF THE BOUNDARIES OF SLUP ZONE 65 TS'UDÉ NLlı́NÉ TUYETA PCI. UNSHADED AREAS OUTSIDE OF THE TS'UDÉ N Llíné tuyeta protected area are the lands that need to be considered for re-zoning.


MAP 12. MOOSE IMPORTANT WILDLIFE AREA
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM: MOOSE IWA, IMPORTANT WILDLIFE AREAS IN THE NWT, ENVIRONMENT AND NATURAL RESOURCES, government of the northwest territories, 2012; digital elevation model, cdem, natural resources canada, government of canada; rivers and lakes, CANVEC $1: 1,000,000$, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; SAHTÚ SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS administrative boundary (clab) level 1, natural resources canada, government of canada, 2017; Ts'udé nllíné tuyeta protected area, ttwg.

NOTE: SHADING INCLUDES ALL AREAS THAT FALL OUTSIDE OF THE BOUNDARIES OF SLUP ZONE 65 TS'UDÉ NILĹ̨NÉ TUYETA PCI. UNSHADED AREAS OUTSIDE OF THE TS'UDÉ Nilíné tuyeta protected area are the lands that need to be considered for re-zoning.


MAP 13. NORTHERN MOUNTAIN WOODLAND CARIBOU IMPORTANT WILDLIFE AREAS
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM: NORTHERN MOUNTAIN WOODLAND CARIBOU IWA AND REDSTONE HERD ANNUAL RANGE, IMPORTANT WILDLIFE AREAS IN THE NWT, ENVIRONMENT AND NATURAL RESOURCES, GOVERNMENT OF THE NORTHWEST TERRITORIES, 2012; DIGITAL ELEVATION MODEL, CDEM, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA; RIVERS AND LAKES, CANVEC 1:1,000,000, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; SAHTÚ SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS ADMINISTRATIVE BOUNDARY (CLAB) LEVEL 1, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; TS' UDÉ NإLíNÉ TUYETA PROTECTED AREA, TTWG.
 Nillíné TUYETA Protected area are the lands that need to be considered for re-zoning

Most of the important wildlife areas in SLUP Zone 65 PCI fall within the final boundaries of the Ts'udé Nllíné Tuyeta Protected Area. The wetlands provide important habitat for multiple species of animals, and they were captured within the established protected area's boundaries. It is also possible to see the correlation between the important wildlife areas and the important cultural areas of the K'asho Got'ıne Dene and Métis in this area, both of which are centred around the wetlands of Ts'udé Nolíné Tuyeta.


MAP 14. FIRE HISTORY
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM: DIGITAL ELEVATION MODEL, CDEM, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA; FIRE HISTORY, department of environment and natural resources - Forest management division, government of the northwest territories, 2019; rivers and lakes, CANVEC 1:1,000,000, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; SAHTÚ SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS administrative boundary (clab) level 1, natural resources canada, government of canada, 2017; Ts'udé nllíné tuyeta protected area, ttwg.

NOTE: SHADING INCLUDES ALL AREAS THAT FALL OUTSIDE OF THE bOUNDARIES OF SLUP ZONE 65 TS'UDÉ NILLínÉ TUYETA PCI. UNShaded AREAS OUTSIDE OF THE TS'UDÉ nilíné tuyeta protected area are the lands that need to be considered for re-zoning.

## ECONOMICIMPORTANCE

Both current and potential development opportunities are considered in this summary of the area's economic importance. A study conducted in 2008 stated that there were 76 active trappers in Fort Good Hope (AMEC, INAC, \& CWS, 2011). Ts'udé Nllíné Tuyeta contains a high number of furbearers, which provides trappers with the opportunity to earn an income. Subsistence harvesting (e.g. moose, beaver, fish) is another common activity in the area, providing meat for personal consumption and materials for traditional crafts by the K'asho Got'ınę Dene and Métis. In 2018, 91.8\% of the Sahtú population living outside Norman Wells (including Fort Good Hope) have consumed country foods during the year, with $50.4 \%$ of households of Fort Good Hope consuming $75 \%$ or more of the meat or fish obtained through hunting or fishing (NWT Bureau of Statistics, 2018). Country foods provide an economic benefit to residents of Fort Good Hope by offsetting the need to purchase meat from a store.

Traditional arts and crafts also bring income into Fort Good Hope (AMEC, INAC, \& CWS, 2011). Raw materials for arts and crafts include "bones and antlers, feathers, fur, animal hair and hides, porcupine quills, sinew, birch bark, plants used for dyes, wood from trees, and stones" (AMEC, INAC, \& CWS, 2011). The materials used to produce arts and crafts in Fort Good Hope may not necessarily come from the Ts'udé Nllíné Tuyeta area, although it is likely that at least some does. According to the 2018 community survey of Fort Good Hope, 128 people representing $30.7 \%$ of the population produced arts and crafts (NWT Bureau of Statistics, 2018).

The area is an important carbon sink. Its forests, wetlands, peatlands, tundra, shrub and grassland both sequester and store carbon dioxide. For the period from 2000 to 2003, available information suggests
that Ts’udé Nllíné Tuyeta has been sequestering carbon at a rate of 159,080 tonnes per year (AMEC, INAC, \& CWS, 2011). With a price of $\$ 30$ per tonne of carbon dioxide in 2020 , total carbon sequestration of Ts'udé Nilíné Tuyeta could be valued at $\$ 4.77$ million using the carbon sequestration rate from the 2000 to 2003 study. That being said, the carbon sequestration rate may vary over time due to forest fires. Forest fires release carbon, thus lowering the amount of carbon sequestered.

The area around Ts'udé Nllíné Tuyeta also has extensive non-renewable resources that have yet to be discovered. It is estimated that there are 20 million barrels of undiscovered recoverable oil (Drummond Consulting, 2010), 213 billion cubic feet of undiscovered recoverable natural gas (Drummond Consulting, 2010), a high potential for lead-zinc deposits, moderate potential for sediment hosted copper and SEDEX zinc-lead deposits, and low to moderate diamond potential along the northern edge and through the south-central portion of the area identified (AMEC, INAC, \& CWS, 2011). Interest in exploring these nonrenewable resources would depend on the world price of the commodity and the ease of access to the area at the timing of exploration and development (AMEC, INAC, \& CWS, 2011). These would determine whether it would be viable to get the commodities to market.

It is important to note that the above quantities for non-renewable resources were calculated for the entire land withdrawal area of Ts'udé Nelľ́né Tuyeta, with the final boundary of the protected area being much smaller. As such, using data from the Quantitative Hydrocarbon Assessment (Drummond Consulting, 2010), the SLUPB estimates that there are approximately 3.5 million barrels of undiscovered recoverable oil and 51 billion cubic feet of undiscovered recoverable gas in the areas left outside the final boundaries of Ts'udé Nllíné Tuyeta, within the areas to be rezoned.

As of July 2020, there are no valid prospecting permits or mineral claims or oil and gas rights within Zone 65 Ts'udé Nollíné Tuyeta PCl , although this does not mean that there is no potential for these resources to be explored. Any existing permits, claims, or rights expired and were not renewed, and the interim land withdrawal and the SLUP's PCI designation did not allow for new areas to be staked.

In terms of mineral resources and geological studies conducted through Natural Resources Canada, there were Geo-Mapping for Energy and Minerals (GEM) studies that have encompassed areas further south in the Mackenzie Mountains, as well as in the Colville Lake Area. Other areas within the Sahtú have been reviewed through the Mineral and Energy Resource Assessment (MERA), conducted by Natural Resources Canada as well. However, these were only done in areas with a national park establishment process in the Yukon or Northwest Territories (Natural Resources Canada, 2015). That being said, a non-renewable resource assessment for minerals was done when Ts’udé Nllíné Tuyeta was still a candidate protected area (Ozyer, 2010). From this, mineral potential in the area around Ts'udé Nillíné Tuyeta was evaluated, as presented on Map 15.


MAP 15. MINERAL POTENTIAL
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM: MINERAL POTENTIAL, DIGITIZED BY THE SAHTÚ LAND USE PLANNING BOARD (2020) USING TS'UDE NILINE TU'EYETA (RAMPARTS RIER AND WETLANDS) CANDIDATE PROTECTED AREA PHASE II NON-RENEWABLE RESOURCE ASSESSMENT - MINERALS NWT OPEN FILE 2010-07, northwest territories geoscience office, government of the northwest territories, 2010); Digital elevation model, cdem, natural resources canada, GOVERNMENT OF CANADA; RIVERS AND LAKES, CANVEC 1:1,000,000, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; SAHTÚ SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS ADMINISTRATIVE BOUNDARY (CLAB) LEVEL 1, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; TS'UDÉ NIlĹNÉ TUYETA PROTECTED AREA, TTWG.

NOTE: SHADING INCLUDES ALL AREAS THAT FALL OUTSIDE OF THE BOUNDARIES OF SLUP ZONE 65 TS' UDE NLLLINE TUYETA PCI. UNSHADED AREAS OUTSIDE OF THE TS'UDE NILíné TUYETA PRotected area are the lands that need to be considered for re-zoning

There is high oil and gas potential through much of the northern half of Zone 65 Ts'udé Nllíné Tuyeta PCI, with low to moderate potential in the south (Northwest Territories Geoscience Office, 2005), which is mountainous and the source of multiple rivers. The definitions of oil and gas potential rankings are provided in Table 1 below, and the potential for the area is shown on Map 16.

TABLE 1. OIL \& GAS POTENTIAL RANKING CRITERIA

| Very High | Geological environment is favourable for oil and/or gas. Multiple plays, at least <br> one is established. Closures identified and mapped. Significant accumulations are <br> known. |
| :--- | :--- |
| High | Geological environment is favourable for oil and/or gas. Multiple plays. Closures <br> identified and mapped. Known hydrocarbon occurrences. |
| Moderate to High | Geological environment is favourable for oil and/or gas. At least three plays. <br> Closures identified and mapped for at least one play. |
| Moderate | Geological environment is favourable for oil and/or gas. One or two plays. High <br> probability of blind structural/stratigraphic closures. |
| Low to Moderate | Geological environment is mainly favourable for oil and/or gas. At least one <br> conceptual play. High probability of blind structural/stratigraphic closures. |
| Low | Some aspects of geological environment are favourable for oil and/or gas. <br> Significant probability of blind structural/stratigraphic closures. |
| Very Low | Unfavourable geological environment. |

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MAP 16. OIL \& GAS POTENTIAL
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM: OIL \& GAS POTENTIAL, NWT OPEN REPORT 2005-004 (COMPILED HYDROCARBON PLAY POLYGONS FOR MAINLAND NORTHWEST TERRITORIES, NORTHWEST TERRITORIES GEOSCIENCE OFFICE, GOVERNMENT OF THE NORTHWEST TERRITORIES, 2005); DIGITAL ELEVATION MODEL, CDEM, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA; RIVERS AND LAKES, CANVEC 1:1,000,000, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; SAHTÚ SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS ADMINISTRATIVE BOUNDARY (CLAB) LEVEL 1, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; TS' UDÉ NإLínÉ TUYETA PROTECTED AREA, TTWG.

NOTE: SHADING includes all areas that fall outside of the boundaries of slup zone 65 Ts'udé nllíné tuyeta pci. unshaded areas outside of the ts'udé nilíné tuyeta protected area are the lands that need to be considered for re-zoning.

As displayed on Map 16, most of SLUP Zone 65 PCI has "moderate to high" and "high" oil \& gas potential, with the exception of the area to the south of the protected area. This area is the source of both the Ramparts and Hume rivers, and is topographically different than the rest of SLUP Zone 65 PCI. It is the edge of the Mackenzie Mountains, whereas the rest of the area is mostly flat.

Given the area's remoteness and that efforts to protect it have spanned the past few decades, there has been no recent exploration or development initiatives within Ts'udé Nllíné Tuyeta. While Map 17 shows existing seismic lines and infrastructure, it is all decades old, stemming from old exploration projects. Most seismic lines in the Ts'udé Nllíné Tuyeta area, as shown on Map 17, were cut in the 1965 by PetroCanada Inc. (in the northern part) and the 1988-89 by Chevron Canada Resources Ltd. (the ones further south within the boundaries of the protected area). Other smaller projects in the area included seismic lines cut by Sigma Explorations (1978) Ltd. in 1985, and Amoco Canada Petroleum Company Ltd. in 1990. It is likely that most seismic lines would not be visible on the ground today due to regrowth, though some may have remained open if they are frequently used by snow machines for access to the area for traditional use. Also shown are the locations of runways in the area. Their current condition is unknown although they are assumed to be abandoned and unusable. Most modern-day exploration work is done by helicopter; therefore, airstrips are no longer required. These are therefore merely shown as a historical record of infrastructure in the area.


MAP 17. SEISMIC LINES AND OTHER INFRASTRUCTURE
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM: RUNWAYS, CANVEC 1:250,000 TRANSPORT DATA, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; SEISMIC LINES, SEISMIC LINES NORTH OF 60, NATIONAL ENERGY BOARD, 2012; DIGITAL ELEVATION MODEL, CDEM, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA; RIVERS AND LAKES, CANVEC $1: 1,000,000$, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; SAHTÚ SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS ADMINISTRATIVE BOUNDARY (CLAB) LEVEL 1, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; TS'UDÉ NLLLíNÉ TUYETA PROTECTED AREA, TTWG.

NOTE: SHADING INCLUDES ALL AREAS THAT FALL OUTSIDE OF THE BOUNDARIES OF SLUP ZONE 65 TS'UDÉ NILĹNÉ TUYETA PCI. UNSHADED AREAS OUTSIDE OF THE TS'UDÉ NIllị́NÉ TUYETA PROTECTED AREA ARE THE LANDS THAT NEED TO BE CONSIDERED FOR RE-ZONING.

The following Map 18 shows granular aggregate potential for the area. The area around Fort Good Hope is known for its gravel deposits, which are needed for the construction of infrastructure projects such as local roads, the proposed Mackenzie Valley Highway extension, or any other infrastructure projects that may arise in the future. On Map 18, the darker the colour shading is, the thicker the gravel deposits are expected to be. The thickest gravel deposits are located around Fort Good Hope (outside zone SLUP Zone 65 PCI ), and within the Ts'udé Nllíné Tuyeta Protected Area. There are not many locations of deep gravel deposits outside the boundary of the Protected Area that fall within the remnants of SLUP Zone 65 PCI .


MAP 18. GRANULAR AGGREGATE POTENTIAL
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM: GRANULAR AGGREGATE POTENTIAL, DRIFT ISOPACH DATA, NORTHWEST TERRITORIES OPEN FILE 6046, geological survey of canada, natural resources canada, government of canada, 2009; digital elevation model, cdem, natural resources canada, GOVERNMENT OF CANADA; RIVERS AND LAKES, CANVEC 1:1,000,000, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; SAHTÚ SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS ADMINISTRATIVE BOUNDARY (CLAB) LEVEL 1, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; TS'UDÉ NILLINÉ TUYETA PROTECTED AREA, TTWG.

NOTE: SHADING INCLUDES ALL AREAS THAT FALL OUTSIDE OF THE BOUNDARIES OF SLUP ZONE 65 TS'UdÉ Nllíiné TUYETA PCI. UNSHADEd AREAS OUTSIDE OF THE TS'UDÉ nllíné tuyeta protected area are the lands that need to be considered for re-zoning.

## CONSIDERATIONS FOR RE-ZONING

Future engagement will focus on zoning options for the lands of SLUP Zone 65 PCI that were left outside of the Ts'udé Nllíné Tuyeta Protected Area's final boundaries. Zoning decisions need to consider the social, cultural, ecological, and economical values within the region. Community organisations within the K'asho Got'ınę District need to have significant input in this re-zoning process.

The SLUP uses the following zone designations:

- General Use Zones (GUZs)- allow all land use except bulk water removal, subject to the general CRs (Conformity Requirements) outlined in the SLUP.
- Special Management Zones (SMZs)- allow all land use except bulk water removal, subject to the general CRs and special management CRs outlined in the SLUP. Special management CRs may differ between special management zones; some are limited in application to specified zones.
- Conservation Zones (CZs)- are significant traditional, cultural, heritage, and ecological areas in which specified land uses are prohibited. Permitted land uses (anything not prohibited, or grandfathered uses) are subject to the general CRs and applicable special management CRs outlined in the SLUP.

When considering zoning for this area, it is important to consider the zone designation of areas that share a boundary with SLUP Zone 65 PCl . This includes evaluating adjacent zones of the SLUP, as well as zones in the adjacent Gwich'in Settlement Area that are part of the Gwich'in Land Use Plan. Transboundary
planning is important to maintain landscape and ecological connectivity, to avoid fragmenting large contiguous areas needed to manage transboundary values such as wildlife habitat or watersheds into smaller areas unsuitable for the needs of the species that inhabit them. Transboundary planning also contributes to more consistent regulatory responses to projects occurring across separate zones/regions but having similar environmental conditions by providing a similar management regime across zones and jurisdictions.

The area to the west of SLUP Zone 65 PCI in the Gwich'in Settlement Area, is designated as a Conservation Zone to protect the headwaters of the Arctic Red River. Similarly, the Ts'udé Nllíné Tuyeta Protected Area was established to protect the headwaters of the Ramparts and Hume Rivers. If landscape connectivity is a goal, then the area between them should be designated as a Conservation Zone. In contrast, the areas to the north of the Ts'udé Nllíné Tuyeta Protected Area, are surrounded by special management and general use zone designations. Map 19 shows zones from the Sahtú and Gwich'in Land Use Plans that are adjacent to the Ts'udé Nllíné Tuyeta Protected Area. Zone numbers are included for areas immediately adjacent to the protected area, with a description of these in Table 2.


MAP 19. LAND USE PLAN ZONING
SOURCE: SAHTU LAND USE PLANNING BOARD, WITH DATA FROM: RIVERS AND LAKES, CANVEC 1:1,000,000, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; SAHTÚ SETTLEMENT AREA BOUNDARY, NATIONAL FRAMEWORK CANADA LANDS ADMINISTRATIVE BOUNDARY (CLAB) LEVEL 1, NATURAL RESOURCES CANADA, GOVERNMENT OF CANADA, 2017; TS' UDÉ NإLínÉ TUYETA PROTECTED AREA, TTWG.

TABLE 2. LAND USE PLANNING ZONES ADJACENT TO PROTECTED AREA

| Land | Zone | Zone Name | Zone <br> Type | Reasons for Establishment |
| :--- | :--- | :--- | :--- | :--- |
| Use Plan | Number |  | Arctic Red River | SMZ | | To protect fish and heritage resources by applying |
| :--- |
| conditions to activities. There are many archaeological |
| and heritage sites along the entire Arctic Red River that |
| the Gwich'in would like to see protected. |


| Land Use Plan | Zone Number | Zone Name | Zone <br> Type | Reasons for Establishment |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | important role in maintaining the overall quality of water in the Arctic Red River. |
| Sahtú | 1 | Behsele Nllı̊né (Ontaratue River) | SMZ | To protect fish, water quality, riparian habitat/shorelines, archaeological and burial sites while maintaining access for recreational and subsistence uses. |
| Sahtú | 2 | Óhdarah Túé (Marion Lakes) | SMZ | Marion Lake and adjacent fish lakes have important subsistence use and wildlife habitat values. The zone is an important heritage location with a number of burial and archaeological sites. |
| Sahtú | 15 | Fossil Lake | CZ | The lake is a treasured recreational and camping area and of cultural significance due to the peculiarity of its karst landscape. |
| Sahtú | 38 | Mackenzie Mountains | SMZ | Stories, trails, cultural/heritage sites and subsistence use areas are located throughout as the Mountain Dene travelled between the valley and the mountains. The mountains offer unique habitat that includes calving/lambing, overwintering, and general range for a number of wildlife species that inhabit the area such as Dall's sheep, mountain goat, and mountain woodland caribou. <br> A number of mineral deposits have been identified in the Mackenzie Mountains, with the SMZ designation allowing for the exploration and development of these and other mineral deposits. |
| Sahtú | 42 | Fahfą́ Nllíné (Mountain River Extension) | CZ | The Mountain River is a traditional trail. There are many named places, camping, hunting, fishing locations, and stories associated with the river. It is an important moose hunting area and is known as the shortest route to the highest mountains and sheep hunting areas. |
| Sahtú | 63 | Deh Cho (Mackenzie River) | SMZ | To protect the water quality, riparian habitat, cultural/heritage sites, areas that are important for wildlife and wildlife harvesting. The zone is an important regional and territorial transportation corridor (barge traffic, landing sites, winter road). |
| Sahtú | 64 | Mackenzie River Islands | CZ | The islands are used for hunting, fishing, trapping, and for recreational and cultural activities. They provide critical domestic fisheries, are important moose and waterfowl hunting areas, and are associated with numerous legends including stories of Yamoria, a Dene culture hero. |

Another zoning consideration is to look at what adjacent uses may be compatible or incompatible with the intent of the protected area. Adjacent land uses may impact the ecological integrity of the protected area if they add to fragmentation issues, generate noise or light pollution, or require land clearing that can result in erosion and sedimentation problems, affecting wildlife movement and migration (AMEC, INAC, \& CWS, 2011). If there are particularly sensitive areas for the species being protected through Ts'udé Nılı́né Tuyeta along the border of the new protected area, then it may be appropriate to consider creating a buffer (through zoning and CRs) immediately adjacent to that sensitive area to provide appropriate management direction.

Land ownership is another consideration. There are Sahtú Settlement Lands adjacent to, but outside of SLUP Zone 65 Ts’udé Nollíné Tuyeta PCI. These parcels include surface and subsurface rights and are currently zoned as "General Use Zones". There are Sahtu Settlement Land parcels with surface rights covering the entire SLUP Zone 15 Fossil Lake CZ. More broadly speaking, the entire Ts'udé Nolíné Tuyeta area lies within the Fort Good Hope-Colville Lake Group Trapping Area (GTA). The GTA was negotiated to protect the land and way of life of the K'asho Got'ınę. It still exists under the NWT Wildlife Act (Trapping Regulations) and reaffirmed under S. 13.9.4(c) of the SDMCLCA. As stated in S. 1.6.2 of the SLUP, while the GTA was legally established to provide exclusive trapping rights to residents of Fort Good Hope and Colville Lake, to the two communities it represents much more than a trapping area - it is their traditional territory, it is the basis for the K'asho Got'ine District Boundary, and they view it as their land, for their use and management.

Finally, it is important to consider the work of the TTWG and the reasons why they chose the final reduced boundary. The Final TTWG Recommendation report states: "the Government of the Northwest Territories recommend[ed] a reduced final boundary excluding areas of highest mineral potential, minimizing the inclusion of high oil and gas potential, and maintaining existing outfitter areas of operation, while still retaining the key water and wildlife habitat values, and the protection of key cultural and spiritual areas" (Ts'ude niline Tu'eyeta Candidate National Wildlife Area Working Group, 2012). They were drawn by the TTWG, "taking into account the MARXAN conservation solution, the distribution of economic potential, significant features of the area, and the location of Sahtú settlement lands" (Ts'ude niline Tu'eyeta Candidate National Wildlife Area Working Group, 2012). The report mentions that the Association of Mackenzie Outfitters supported the final recommended boundary option for the protected area (Ts'ude niline Tu'eyeta Candidate National Wildlife Area Working Group, 2012).

Different zone designations may be considered for different parts of the area to be rezoned, in recognition of the values present in each location. The Board will seek the most appropriate zoning to protect and promote the social, cultural and economic well-being of the residents and communities of the planning area, having regard to the interests of all Canadians.

## DEVELOPMENT OF NEW CONFORMITY REQUIREMENTS

Section 2.2. of the SLUP states: "Information documented on the values of the PCI during the establishment process should be used to set out CRs for these excluded portions of the PCI." Depending on the zone designation(s) chosen, there may be a need to provide a combination of zoning and new management direction through a Conformity Requirement (CR). The SLUPB is therefore also soliciting
input into the types of management direction that, together with zoning, will provide a suitable management framework for the conservation, use or development of the land, water and resources in the area. In doing so, please keep in mind that all general CRs already in the SLUP will apply to whichever zoning is chosen for the areas to be rezoned so there is no need to duplicate those. Further, if Special Management Zone is the chosen designation, CR \#14 - Protection of Special Values, would also apply. A new $C R$ would need to set out direction specific to the areas to be rezoned only.

## SLUP AMENDMENT PROCESS

The proposed amendment process was developed to be consistent with the SDMCLCA S. 25.2.7, the MVRMA S. 48, the SLUP (2013) S. 5.7, and Part 6 of the SLUP Rules of Procedure (2014), following steps used in previous SLUP amendment processes. The steps and timelines are illustrated in FIGURE 1, and described in greater detail below. Once the amendment application is adopted, it will be submitted for sequential approval by the SLUP's 3 Approving Parties in accordance with S. 43 of the MVRMA.


PREPARATION OF BACKGROUND REPORT (MAY- JULY 2020)
The SLUPB has reviewed available information relevant to SLUP Zone 65 PCI and has synthesised the information as presented in this Background Report. This Background Report serves to:

- Define the scope of the amendment,
- Describe the process to be followed,
- Describe existing information, and
- Identify zoning considerations and options.


## ENGAGEMENT ON BACKGROUND REPORT (JULY-SEPTEMBER 2020)

Following the release of this Background Report, Planning Partners will have 60 days to review it and submit comments. Planning Partners may identify other values, information and rezoning considerations, along with their vision and recommendations for the re-zoning of Zone 65 lands that have been left outside the Protected Area.

Responses to the Board may be presented in a variety of medium, such as scientific and traditional knowledge studies/reports, maps (digitally produced or hand-drawn), spatial data, etc. These will be reviewed and considered by the SLUPB when developing the subsequent SLUP Ts'udé Nllíné Tuyeta Zone 65 amendment application.

At the same time, the SLUPB will be consulting with community organisations for input. The Board will engage directly with the K'asho Got'ınę Foundation, which includes representation from the land corporations, renewable resources councils, and Dene Bands in the K'asho Got'ı̨nę District. These organisations encompass all community organisations of Fort Good Hope and Colville Lake. Additional community meetings will be arranged with organizations in both Fort Good Hope and Colville Lake to provide the opportunity for direct engagement with them, ideally through an open public meeting in each community with all interested organizations invited. The SLUPB strives to meet with leadership from these organisations, as well as other interested residents to solicit their input into the plan amendment, and identify an acceptable path forward together.

Community members from Mayo, Yukon, as well as Tulita and Norman Wells have also been identified as having a special cultural interest in parts of the area to be rezoned, which falls within their traditional territories. Meetings will be arranged with organisations from these communities to solicit their input with respect to amendments within their traditional territories. They will also be invited to submit comments on the Background Report and the subsequent amendment application.

Given the current restrictions on indoor and outdoor gatherings related to the COVID-19 Pandemic, the Board will be working directly with each organisation it needs to engage to determine how best to "meet" to adhere to current GNWT guidelines and public health orders, and accommodate varying comfort levels. Process delays may be expected while the Board works with each organization to find ways to meaningfully engage them while protecting everyone's health and safety.

## FIRST TRIPARTITE MEETING (OCTOBER 2020)

Following the engagement period, and review of the written comments received on the Background Report, the SLUPB proposes to hold a Tripartite meeting with Approving Parties to confirm the scope of the amendments, the process to be followed, and the approach to the amendments based on the feedback received. The objective of this meeting is to build consensus on a path forward to re-zone the lands of Zone 65 left outside the final protected area's boundaries and discuss any $C R(s)$ or other planning direction that may be needed. The results of this meeting will guide the Board's work in developing the Draft Amendment Application.

## DRAFT AMENDMENT APPLICATION (OCTOBER-NOVEMBER 2020)

The SLUPB will start preparing the draft amendment application based on input received from Planning Partners on the Background Report as well as through engagement with Fort Good Hope and Colville Lake community organisations. Areas of consensus built at the Tripartite Meeting will help to further refine the Draft Amendment Application. Information and comments from all sources will help the SLUPB create a Draft Amendment Application that uses the most up-to-date information while balancing all interests and concerns.

The interests of the residents and communities of the K'asho Got'ınę District (Fort Good Hope and Colville Lake) as determined through engagement, will be the most important factor guiding the amendment application. The amendments must be acceptable to the leaders of K'asho Got’ınę District community organisations (including the land corporations, bands, and renewable resources councils), as well as the

SLUP's Approving Parties (SSI, GNWT, Canada). The Board welcomes input from other interested and affected planning partners as well.

The Draft Amendment Application, once developed, will be released along with a public notice for a 60day public comment period.

## PUBLIC ENGAGEMENT ON DRAFT AMENDMENT APPLICATION (DECEMBER 2020FEBRUARY 2021)

Similar to the first round of engagement, the SLUPB will engagement directly with the K'asho Got'ıne Foundation and community organisations within the K'asho Got'ınę District, as well as those within Tulita, Norman Wells and Mayo, Yukon on the Draft Amendment Application to present and answer questions on the proposed amendments, and solicit input into potential revisions. This will be carried out during the 60-day comment period, to inform their written comments (should they choose to, in addition to verbal feedback provided during the engagement sessions). Engagement sessions would include meeting with leadership of affected communities (e.g. land corporations, renewable resources council, Dene Band), as well as with residents / general public to keep them apprised of the work the SLUPB is undertaking on this amendment to the SLUP.

## SECOND TRIPARTITE MEETING (FEBRUARY 2021)

Following completion of engagement and review of written comments received on the Draft Amendment Application, the SLUPB will hold a second Tripartite Meeting to review feedback received and build consensus on final revisions to be made to the Amendment Application. This meeting is essential for the timely completion and approval of the Amendment Application by the Approving Parties, as it helps to identify and address outstanding issues between the SLUPB and the Parties, that must be resolved before the Amendment Application can be approved.

## ADOPTION AND SUBMISSION OF FINAL AMENDMENT APPLICATION (MARCH 2021)

After implementing recommendations from the public comments, engagement sessions, and the Second Tripartite Meeting, the SLUPB will finalize the Amendment Application. The SLUPB will meet once the application is complete to review and adopt the Final Amendment Application, at which time it will be submitted to the Approving Parties for sequential approval (starting with SSI, then GNWT, then Canada). The timelines for the approval process are unknown, and outside the SLUPB's control.

## ADDITIONAL INFORMATION

All information pertaining to this amendment to the SLUP will be posted to the SLUPB's website's Registry. This includes documents, future amendment applications, public comments, and Approving Party comments and/or approvals. Interested parties are invited to check the SLUPB's website regularly, at www.sahtulanduseplan.org. Questions should be directed to the Project Manager, Heidi Wiebe, at heidi.wiebe@gmail.com, or by phone at 867-447-0961.

Submissions of written comments on this Background Report may be done by email, post, or fax. The deadline for submitting comments is 5:00 PM on Friday, October 9, 2020. These comments should be addressed using the following.

Heather Bourassa, Chair<br>Sahtu Land Use Planning Board<br>P.O. Box 235<br>Fort Good Hope, NT XOE OHO<br>Email: chair@sahtulanduseplan.org

Fax: 867-598-2545

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[^0]:    Source: (Northwest Territories Geoscience Office, 2005)

