



ᐱᓕᓕᓕᓕᓕᓕᓕ
LAND FOR HOMES
IGLUQPIURVIKHAT

CLYDE RIVER NU

COMMUNITY SUMMARY

DRAFT

DRAFT January 2025

CLYDE RIVER NU

Community Summary



ᐱᓕᓕᓕᓕᓕᓕᓕ
LAND FOR HOMES
IGLUQPIURVIKHAT

CONTENTS

COMMUNITY EXECUTIVE SUMMARY	2
COMMUNITY LAND GAP ASSESSMENT	4
COMMUNITY - PLANNING AND LANDS	5
COMMUNITY - GENERAL	5
COMMUNITY - TECHNICAL	7
COMMUNITY - INFRASTRUCTURE	8
NEIGHBOURHOOD 'A' - PLANNING AND LANDS	10
NEIGHBOURHOOD 'A' - GENERAL	10
NEIGHBOURHOOD 'A' - TECHNICAL	11
NEIGHBOURHOOD 'A' - INFRASTRUCTURE	12
NEIGHBOURHOOD 'B' - PLANNING AND LANDS	14
NEIGHBOURHOOD 'B' - GENERAL	14
NEIGHBOURHOOD 'B' - TECHNICAL	15
NEIGHBOURHOOD 'B' - INFRASTRUCTURE	16
PHOTOGRAPHS	18
APPENDICES	19

CLYDE RIVER NU

Community Summary



ᐱᓕᓕᓕᓕᓕᓕᓕ
LAND FOR HOMES
IGLUQPIURVIKHAT

COMMUNITY EXECUTIVE SUMMARY



Figure 1: COMMUNITY MAP

Clyde River, located on the northeast coast of Baffin Island and also known as Kangiqtugaapik ("Nice Little Inlet"), has a population of 1,181 as of the 2021 Census.

The community, situated on a flood plain on the shores of Patricia Bay, has a rich history. Historically, the Clyde River region was irregularly populated as people moved throughout the area taking advantage of the local resources. The Vikings were the first Europeans to visit over 1000 years ago. In 1924, the Hudson's Bay Company established a trading post, and during World War II, a US Coast Guard weather station was built nearby.

A federal school was constructed in 1960, prompting the community to relocate for better water supply and airstrip location.

The geography of Clyde River includes hilly terrain, tundra, beaches, ocean, and mountains. The flora and fauna are characterized by sparse vegetation and sea mammals, including whales. The community offers scenic views of the ocean and mountains.

Housing in Clyde River consists of single-family homes and rowhouses (4-6 units), typically 1-3 storeys high. However, the community faces significant challenges with drainage, permafrost, and snow accumulation, which affect land suitability for development.

CLYDE RIVER NU

Community Summary



ᐱᓄᐅᐅᐅᐅᐅᐅᐅᐅ
LAND FOR HOMES
IGLUQPIURVIKHAT

Infrastructure development is ongoing, with roads and drainage infrastructure not yet extended to new neighborhoods. Wastewater and water services are operating at capacity, necessitating additional trucks and drivers. Power distribution infrastructure is planned but not yet extended.

Neighborhood 'A' is not being prioritized for development by the community. It features a mix of hilly, tundra, flat terrain, and watercourses. It requires significant infrastructure development, including roads and drainage systems. The geotechnical characteristics include a mix of tundra, small boulders, and sand/granular mix, with some lots unsuitable for development due to drainage and permafrost issues.

Neighborhood 'B' is being prioritized for development by the municipality. It has similar challenges, with hilly and flat terrain, tundra, and sandy areas with scattered boulders. Infrastructure development is needed, particularly for roads and drainage systems. The geotechnical conditions include poor soil, potential sinkholes, and seasonal flooding.

Overall, the risks to planning, design, or construction in Clyde River are medium to high due to drainage, permafrost, snow accumulation, and infrastructure limitations.

In summary, though Clyde River has a substantial inventory of surveyed land, this is impacted by significant suitability challenges and a need for infrastructure such as roads, drainage and power. Without action, a lack of suitable land is expected to be a risk to new housing within the next two to three years. Risks can be mitigated by responsive design, infrastructure investment, utilizing redevelopment sites, and efficient use of land.

CLYDE RIVER NU

Community Summary



ᐱᓕᓕᓕᓕᓕᓕᓕ
LAND FOR HOMES
IGLUQPIURVIKHAT

COMMUNITY LAND GAP ASSESSMENT

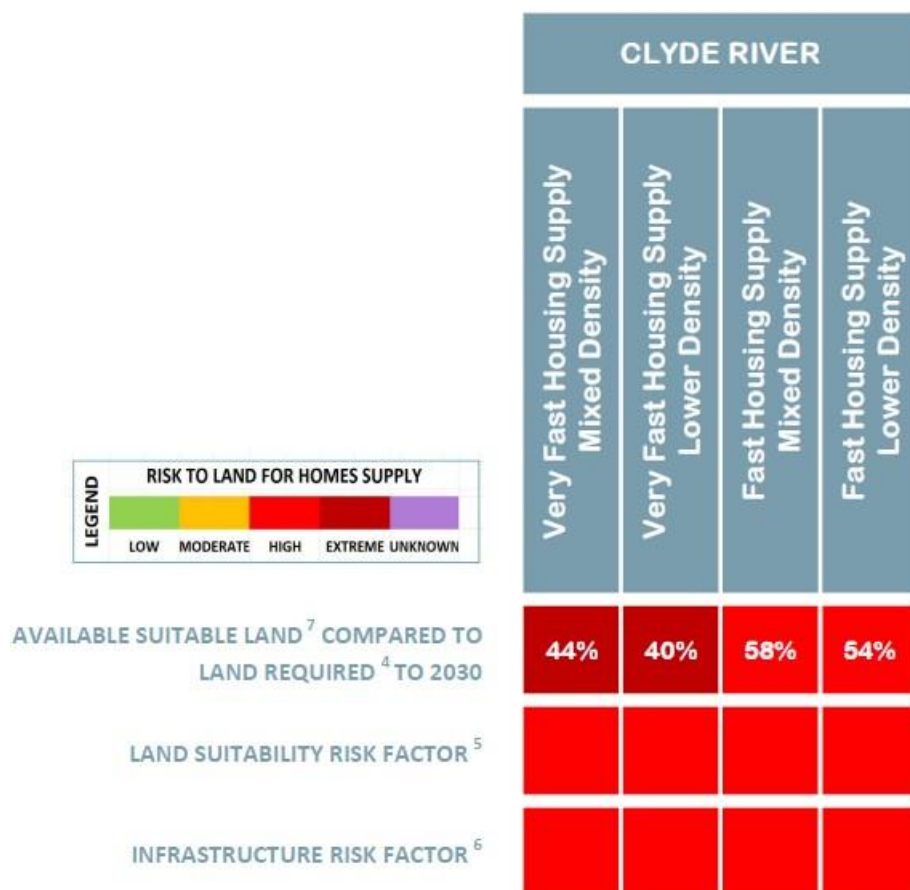


Figure 2: LAND SUPPLY RISK TO 2030 (existing infrastructure only)

Overview

For more information, see L4H Nunavut Land Gap Assessment charts and L4H Guides.

The Community Land Gap Assessment chart estimates the risk for a shortage of suitable land prior to 2030. L4H extracted the GN's land inventory (legally surveyed, vacant, and greater than 500m² in area), and adjusted for lots known to be already reserved or leased. Infrastructure Risk and a Land Suitability Risk factors were applied to arrive at an estimate of suitable, build-ready land, which was compared to estimated land needs.

Housing Supply and Density Scenarios

Risk assessment scenarios allow for variables in the rate of new home supply ("Very Fast" assumes Nunavut 3000 targets; "Fast" assumes 75% Nunavut 3000 targets) and the amount of

CLYDE RIVER NU

Community Summary



ᐱᓕᓕᓕᓕᓕᓕᓕ
LAND FOR HOMES
IGLUQPIURVIKHAT

land required for each new home ("Mixed Density" assumes public housing at 275m² per unit and other housing at 675m² per unit; "Lower Density" assumes all housing averaging 675m² per unit).

Land Suitability Risk Factor

An overall Land Suitability Risk Factor was applied based upon social-cultural, legal, technical, environmental, and constructability characteristics. A High-risk assessment was assumed to reduce available lots by 40%; a Moderate risk assessment was assumed to reduce available lots by 20%.

Infrastructure Risk Factor

An overall Infrastructure Risk Factor was applied based upon the general status, condition, and capacity of the roads and drainage, power and water/wastewater services to development areas and lots. A High-risk assessment was assumed to reduce available lots by 40%; a Moderate risk assessment was assumed to reduce available lots by 20%. Timely infrastructure improvements can be expected to reduce the overall risk of land shortages.

COMMUNITY - PLANNING AND LANDS

Community Name

Clyde River

Community Identifier Number

215

Demographic Characteristics

Current Population: 1,181 (2021 Census)

COMMUNITY - GENERAL

Community geographic and historical context

Gov.nu.ca: Clyde River, located on the northeast coast of Baffin Island, is sometimes called the "Gateway to the Great Fiords." It also has the Inuktitut name, Kangiqtugaapik, which means "Nice Little Inlet".

The community is situated on a flood plain on the shores of Patricia Bay at the entrance to Clyde Inlet, a fiord which extends over 100km inland, almost to the tip of the Barnes

CLYDE RIVER NU

Community Summary



ᐱᓄᐸᐸᐸᐸᐸᐸᐸᐸ
LAND FOR HOMES
IGLUQPIURVIKHAT

ice cap. It is believed that the Vikings were the first Europeans to visit the Clyde River area over 1000 years ago.

In 1924, the Hudson's Bay Company opened a trading post was established at Clyde River. During World War II, a US Coast Guard weather station was built at Cape Christian near Clyde River.

A federal school was built in 1960, and the community moved to a new site across Patricia Bay to take advantage of a better water supply and good airstrip location.

Community Input - Development Priorities or Concerns

2024 L4H Tour: DSAO/LPA indicate need help with developing land, some lots identified not feasible. No staff housing. PLA indicated land files in poor state, working to get them better organized. Noted feasibility study for new COOP store complete. Need to remove buildings from proposed location.

2023 NHC Tour: Hamlet advised that some subdivisions are being resurveyed to respond to technical and climate characteristics. Administration in transition- may affect community capacity with respect to housing roles.

Risk to planning, design or construction: Medium

Local or Traditional Knowledge - Land Suitability (technical)

L4H 2024 Tour: Hamlet staff noted that the number of available lots may be far smaller than currently indicated due to poor soil conditions due to numerous drainageways and permafrost conditions. DSAO noted some concerns about unsuitable lots for snow and drainage Priorities may be changing as they were just coming out of administration during L4H visit.

Risk to planning, design or construction: Medium

Common Residential Building Forms

- single family
- rowhouse (4 to 6 units)
- 2 to 3 storeys
- 1 storey

Notable Land Form Characteristics

- Hilly
- Tundra
- Beach

CLYDE RIVER NU

Community Summary



ᐱᓄᓕᐅᓐᐱᓐᓴᓐ
LAND FOR HOMES
IGLUQPIURVIKHAT

- Ocean (tides 1.2 to 3m)
- Mountains

Risk to planning, design or construction: Medium

Notable Flora/Fauna Characteristics

- Sea mammals
- Whales

Stantec 2020 Technical Report: Sparse vegetation cover of mixed herbs, shrubs and mosses.

Risk to planning, design or construction: Low

Notable Views and Vistas

- Ocean
- Mountains

Risk to planning, design or construction: Low

COMMUNITY - TECHNICAL

Geotechnical Characteristics

2020 Stantec Technical report: significant challenges with drainage, permafrost, snow accumulation in existing and new development areas.

Risk to planning, design or construction: Medium

Surface Drainage Characteristics

2020 Stantec Technical report: significant challenges with drainage, permafrost, snow accumulation in existing and new development areas.

Risk to planning, design or construction: Medium

Permafrost Characteristics

2020 Stantec Technical report: The presence of ice-rich permafrost does represent a constraint to land development. The risk for thermal degradation and ground subsidence can be reduced or removed through appropriate planning and engineering.

Risk to planning, design or construction: Medium

CLYDE RIVER NU

Community Summary



ᐱᓄᓕᐅᐸᐱᓐᓴᐸ
LAND FOR HOMES
IGLUQPIURVIKHAT

Climate Characteristics

2020 Stantec Technical report: significant challenges with drainage, permafrost, snow accumulation in existing and new development areas.

Risk to planning, design or construction: Medium

General Comment - Technical

2024 L4H Tour: DSAO indicated permafrost limits the number of developable lots available

Risk to planning, design or construction: Medium

COMMUNITY - INFRASTRUCTURE

Roads

2024 L4H Tour: Road infrastructure has not been extended to most of the new neighbourhood.

Risk to planning, design or construction: Medium

Drainage

2024 L4H Tour: Drainage infrastructure has not been extended to most of the new neighbourhood.

Risk to planning, design or construction: Medium

General Comment - Wastewater Infrastructure

2024 L4H Tour: Had issues with pumps, trying to drain sewer lagoons now. Trucked service running 7 days a week. Operating license being renewed.

2024 L4H Tour: Trucked services are operating at capacity, which could affect ability to service new homes. Hamlet identified a need for additional trucks and drivers.

Risk to planning, design or construction: Medium

General Comment - Water Infrastructure

2024 L4H Tour: Operating license being renewed. Been having issues with treatment plant, new one planned in next 5 years. Trucks running 7 days a week.

Trucked services are operating at capacity, which could affect ability to service new homes. Hamlet identified a need for additional trucks and drivers.

Risk to planning, design or construction: Medium

CLYDE RIVER NU

Community Summary



ᐱᓄᓕᐅᓐᐱᓐᓴᓐ
LAND FOR HOMES
IGLUQPIURVIKHAT

General Comment - Aggregate or Granular Supply

2024 L4H Tour: No crusher at moment. Have agreement with contractor to produce 3,000 cu meters for hamlet. Hamlet controls resource, hoping to do granular study.

2023 NHC Tour: Hamlet indicated that gravel was not a problem.

General Comment - Power Infrastructure Readiness

2024 L4H Tour: Power distribution infrastructure has not been extended to most of the new neighbourhood.

Risk to planning, design or construction: Low

CLYDE RIVER NU

Community Summary



ᐱᓕᓕᓕᓕᓕᓕᓕ
LAND FOR HOMES
IGLUQPIURVIKHAT

NEIGHBOURHOOD 'A'- PLANNING AND LANDS

Plan Number: 3926

Block Number: 2

General Description: West Area (Block 2 Plan 3926)



Figure 2: NEIGHBOUHOOD 'A' MAP

NEIGHBOURHOOD 'A' - GENERAL

Local Input Development Priorities or Concerns - Neighbourhood

2023 NHC Tour: The intention of community to develop in this area should be confirmed. DSAO indicated drainage and permafrost concerns in this area. Some of the lots may not be suitable to build on as a result.

Risk to planning, design or construction: Medium

Current Land Uses and Activities - Neighbourhood

- Vacant land
- Residential

Largely vacant. Some 4-plexes and SUDs located on surrounding roads.

Page 11

CLYDE RIVER NU

Community Summary



ᐱᓄᓕᐅᐸᐱᓐᓴᐸ
LAND FOR HOMES
IGLUQPIURVIKHAT

Surface Drainage Characteristics - Neighbourhood

2024 L4H Desktop review: Approximately one third of the surveyed lots appear to be in zones identified as unsuitable to development. Watercourses about the neighbourhood on two sides which make for unfavorable building conditions on some lots

Risk to planning, design or construction: Medium

Topography Characteristics - Neighbourhood

2024 L4H Tour: Parts of neighborhood on moderate slope

Risk to planning, design or construction: Medium

Permafrost Characteristics - Neighbourhood

2024 L4H Tour: Potential drumlins present on parts of the neighborhood

Risk to planning, design or construction: Medium

Climate Characteristics - Neighbourhood

2024 L4H Tour: Evidence of periodic flooding in parts of neighborhood, potential for permafrost degradation

Risk to planning, design or construction: Medium

NEIGHBOURHOOD 'A' - INFRASTRUCTURE

Road Infrastructure - Neighbourhood

- Planned

2024 L4H Tour: Road infrastructure has not been extended to most of this neighbourhood. Roads will be needed to support construction in parts of the neighborhood

Risk to planning, design or construction: High

Drainage Infrastructure - Neighbourhood

- Partially Complete

2024 L4H Tour: Partially complete. Drainage infrastructure has not been extended to most of this neighbourhood. Culvert at downstream end of watercourses when it meets existing road. Road cross culvert at road south of neighbourhood where watercourses meet existing road. No culverts or ditches observed in neighbourhood.

CLYDE RIVER NU

Community Summary



ᐱᓄᓕᐅᓐᐱᓐᓴᓐ
LAND FOR HOMES
IGLUQPIURVIKHAT

Infrastructure needed to mitigate soil and drainage conditions before housing construction can begin in parts of the neighbourhood.

Risk to planning, design or construction: High

Wastewater Utilidor Infrastructure (if applicable) - Neighbourhood

2024 L4H Tour: Trucked services are operating at capacity, which could affect ability to service new homes. Hamlet identified a need for additional trucks and drivers.

Water Infrastructure - Neighbourhood

2024 L4H Tour: Trucked services are operating at capacity, which could affect ability to service new homes. Hamlet identified a need for additional trucks and drivers.

Power Distribution Infrastructure - Neighbourhood

- Planned

2024 L4H Tour: No power infrastructure planned. Poles located at start of future roads into neighbourhood.

Risk to planning, design or construction: Medium

CLYDE RIVER NU

Community Summary



ᐱᓄᓕᐅᓐᐱᓐᓴᓐ
LAND FOR HOMES
IGLUQPIURVIKHAT

NEIGHBOURHOOD 'B' - PLANNING AND LANDS

Plan Number: 3919

Block Number: 3 and 4

General Description: North Area

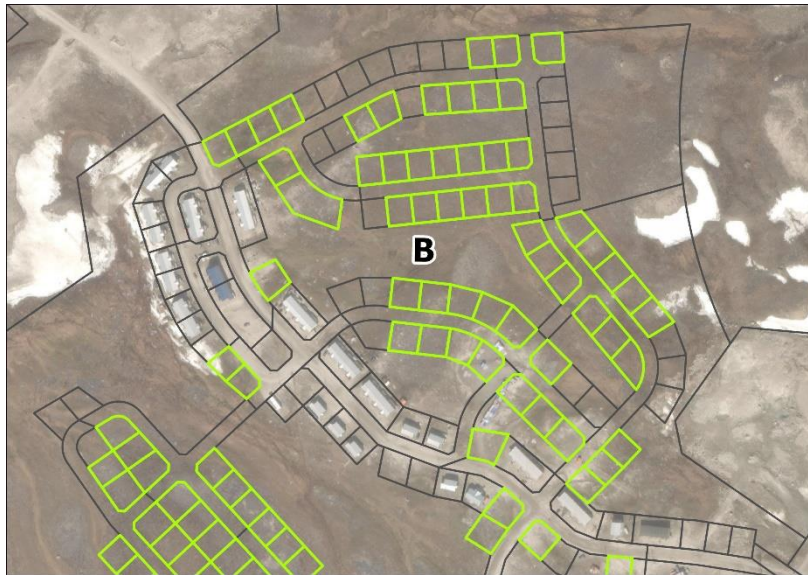


Figure 3: Neighbourhood B Map

NEIGHBOURHOOD 'B' - GENERAL

Local Input Development Priorities or Concerns - Neighbourhood

2023 NHC Tour note: Hamlet is prioritizing this area

Land Form Characteristics - Neighbourhood

- Hilly
- Flat
- Tundra

Sandy terrain with scattered boulders

Risk to planning, design or construction: Low

CLYDE RIVER NU

Community Summary



ᐱᓄᐸᐸᐸᐸᐸᐸᐸᐸ
LAND FOR HOMES
IGLUQPIURVIKHAT

Built Form Characteristics - Neighbourhood

- Mostly 1 storey

2024 L4H Tour: Mainly 4-plexes, some single unit dwellings. Existing homes in abutting neighbourhood mix of multiplexes and single unit dwellings

Risk to planning, design or construction: Low

Important Flora/Fauna - Neighbourhood

- Not Known

Risk to planning, design or construction: Not known

Views and Vistas - Neighbourhood

- Mountains
- Ocean
- Tundra

Risk to planning, design or construction: Low

NEIGHBOURHOOD 'B' - TECHNICAL

Geotechnical Characteristics - Neighbourhood

2024 L4H Tour: noted that the neighbourhood exhibited poor soil conditions similar to that indicated by Hamlet staff.

These observations are consistent with a 2023 geotechnical and drainage report prepared by Nunami Stantec Ltd.

"Mainly tundra intermixed with pockets of fractured rocks. Signs of potential sink holes that were filled with larger rocks. Further assessment may be required. Generally, sand/granular mix, some tundra. Appears stable in areas away from drainageways that pass through the neighbourhood."

Risk to planning, design or construction: Medium

Surface Drainage Characteristics - Neighbourhood

2024 L4H Tour: Approximately one third of the surveyed lots appear to be in zones identified as unsuitable to development. Several drainageways cross neighbourhood. Municipal staff indicate several lots may not be suitable for development as a result. Understand neighbourhood will be resurveyed.

CLYDE RIVER NU

Community Summary



ᐱᓄᓕᐅᓐᐱᓐᓴᓐ
LAND FOR HOMES
IGLUQPIURVIKHAT

Risk to planning, design or construction: High

Topography Characteristics - Neighbourhood

2024 L4H Tour: Generally flat with some hilly sections

Risk to planning, design or construction: Medium

Climate Characteristics - Neighbourhood

2024 L4H Tour: Potential for seasonal flooding due to drainage ways

Risk to planning, design or construction: Medium

NEIGHBOURHOOD 'B' - INFRASTRUCTURE

Road Infrastructure - Neighbourhood

- Planned

2024 L4H Tour: Road infrastructure has not been extended to most of this neighbourhood. No road access to most of the remaining undeveloped lots in the neighbourhood. Access may be problematic to some due to soil conditions related to drainage.

Risk to planning, design or construction: High

Drainage Infrastructure - Neighbourhood

2024 L4H Tour: Drainage infrastructure has not been extended to most of this neighbourhood. No ditches or culverts observed.

Risk to planning, design or construction: High

Wastewater Utilidor Infrastructure (if applicable) - Neighbourhood

2024 L4H Tour: Trucked services are operating at capacity, which could affect ability to service new homes. Hamlet identified a need for additional trucks and drivers.

Risk to planning, design or construction: n/a

Water Infrastructure - Neighbourhood

2024 L4H Tour: Trucked services are operating at capacity, which could affect ability to service new homes. Hamlet identified a need for additional trucks and drivers.

Risk to planning, design or construction: n/a

CLYDE RIVER NU

Community Summary



ᐱᓄᐱᓄᐱᓄᐱᓄᐱᓄ
LAND FOR HOMES
IGLUQPIURVIKHAT

Power Distribution Infrastructure - Neighbourhood

2024 L4H Tour: No power infrastructure. Power infrastructure only extended to service existing homes.

2023 NHC Tour: All sites are powered, simplifying infrastructure requirements for development.

Risk to planning, design or construction: Medium

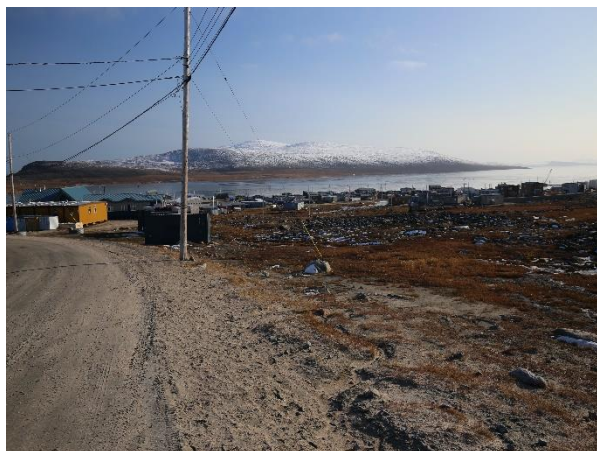
CLYDE RIVER NU Community Summary



ᐱᓄᓕᐅᐸᐱᓐᓴᐸ
LAND FOR HOMES
IGLUQPIURVIKHAT

PHOTOGRAPHS

(From 2023 NHC and 2024 L4H Community Tour)



CLYDE RIVER NU

Community Summary



ᐱᓄᓕᐅᓐᐱᓐᓴᓐ
LAND FOR HOMES
IGLUQPIURVIKHAT

APPENDICES



ԱՆՇՐՎԱԲԻԿ

LAND FOR HOMES

IGLUQPIURVIKHAT