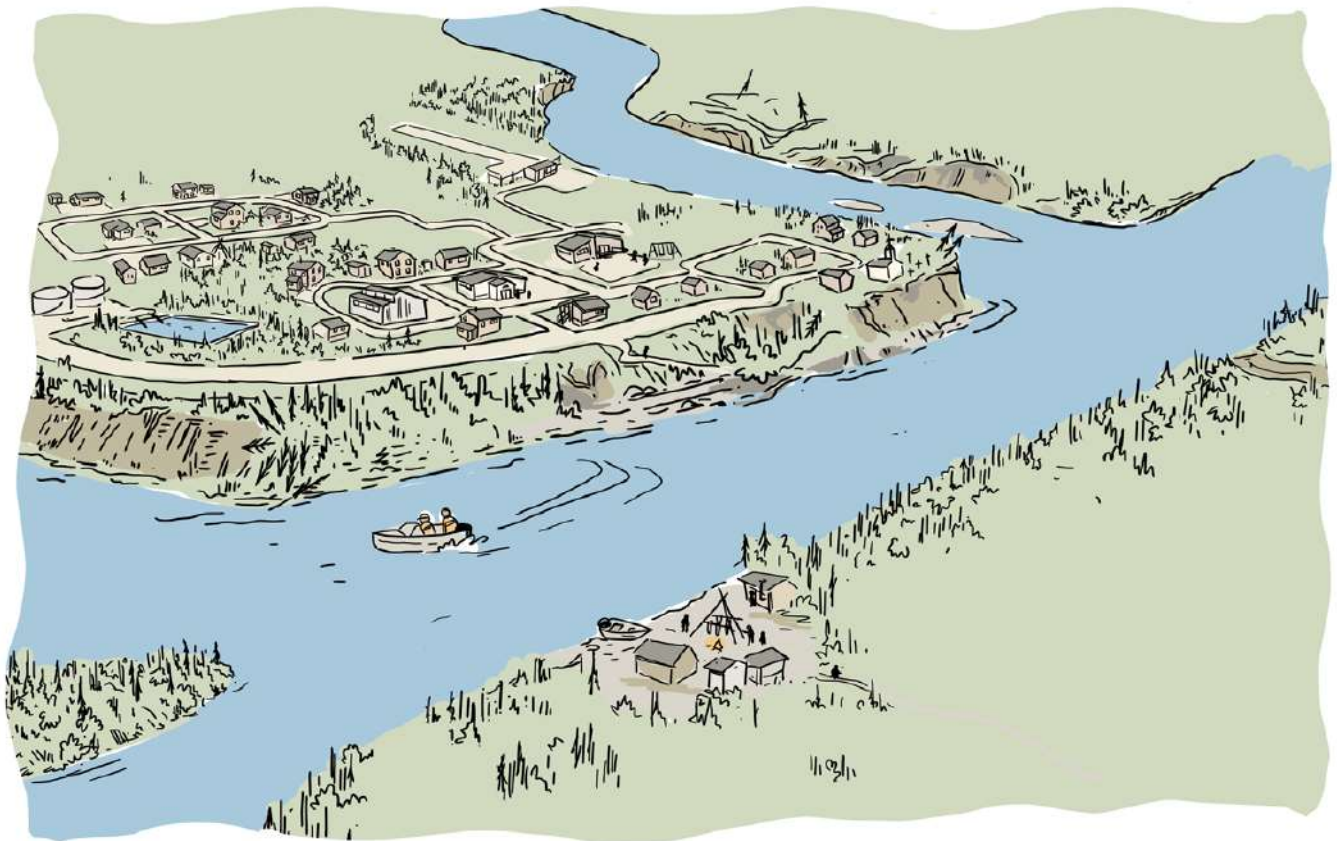




NWT RIVERBANK EROSION WORKSHOP 2025

DEC 2-4 | CHATEAU NOVA HOTEL | YELLOWKNIFE



Visual Summary by Alison McCreesh

PLEASE NOTE : This summary is "What Alison heard". Please contact the NWTAC for other follow-up reports and Riverbank Erosion materials.

Rivers and Communities, some context.



Still today, rivers play an important role.
They are lifelines for these communities.



* Representatives from 14 NWT communities participated in the Riverbank Erosion Workshop.

Changing rivers and their impact

It is natural for rivers and riverbanks to evolve over time, but many of the changes are intensified by climate change.

The changes are impacting river communities at many levels.

TRAVEL AND ACCESS TO THE LAND is now less safe.

LOW WATER LEVELS

NEW SAND BARS

CHANGES TO ICE

TRANSPORTATION OF GOODS is more unreliable.

LOW WATER IMPEDES BARGE DELIVERIES

SHORTER ICE ROAD SEASON

COMMUNITY INFRASTRUCTURE is threatened by riverbank instability.

What is contributing to this instability?

Here are some examples of common factors...

LIMITED BANK VEGETATION

SANDY OR SILTY SOIL

GROUNDWATER FLOW

THAWING PERMAFROST

TOE EROSION

OVERLAND FLOW

HUMAN ACTIVITIES

STEEP BANK

WATER TRAVELLING WITH FORCE

SAND BARS

FLOODS DRIVEN BY ICE JAMS

POSITION ALONG THE RIVER

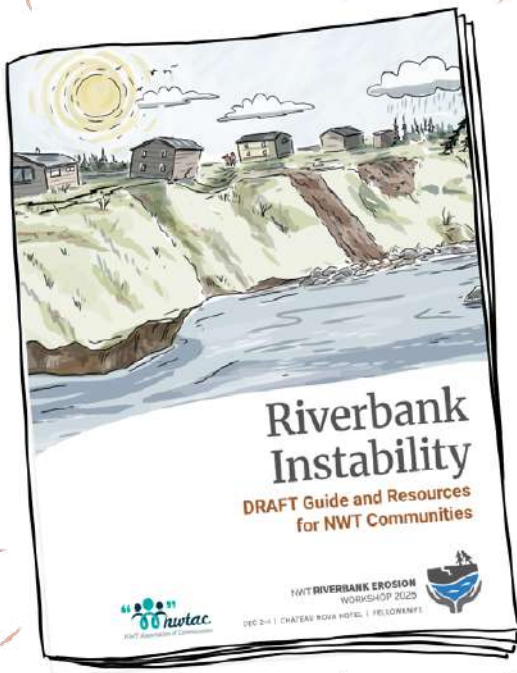
- At a confluence
- Outer side of a bend
- Downstream end of river confinement

WE ARE VERY CONCERNED ABOUT THIS!

Note: A combination of these factors can be observed in many communities!

Communities addressing riverbank instability

The NWTAC has created a guide to offer **NEUTRAL GUIDANCE** on the different phases involved in addressing riverbank erosion and instability.



1. RECOGNIZE THE PROBLEM \$



2. MANAGE THE THREAT RIGHT AWAY \$\$



3. GATHER AND ASSESS INITIAL INFORMATION \$\$\$



4. EVALUATE OPTIONS MAKE A PLAN \$\$\$



5. TAKE ACTION! \$\$\$

✓ GIVING THE RIVER SPACE
✓ ADDRESSING THE ISSUE
✓ PROTECTING STRUCTURES

Note: the phases are not linear and often overlap.

YOU CAN BE IN MANY PHASES AT ONCE!
AND MONITORING SHOULD BE ONGOING!

IT'S AN ONGOING PROCESS - AND IT WILL LOOK DIFFERENT FOR EVERYONE

Some communities have already taken several steps to address the threats...

... While others are earlier in their journey.

FOR EXAMPLE: FORT GOOD HOPE

WE NOW HAVE AN EMERGENCY PLAN.

THE STUDY SHOWED THAT SEVERAL HOUSES WILL NEED TO BE MOVED.

AND WE HAVE IDENTIFIED FOUR THAT ARE THE TOP PRIORITY.

WE ARE CHANGING OUR COMMUNITY PLAN TO GUIDE FUTURE DEVELOPMENT AWAY FROM THE RIVER.

FOR EXAMPLE: WRIGLEY

SOME PEOPLE'S HOUSES ARE REALLY CLOSE TO THE EMBANKMENT.

AND SO ARE THE FUEL TANKS.

AND WE'VE LEARNED THERE IS AN UNDERGROUND WATER SYSTEM UNDER THE COMMUNITY, AND THAT COULD CONTRIBUTE TO LANDSLIDES.

BUT WE HAVEN'T DONE ANY STUDIES OR ANYTHING LIKE THAT YET.

The urgency varies from community to community, but all are (or will be!) impacted.

Addressing riverbank erosion and instability is challenging

Communities want to keep their residents safe, but there are a lot of challenges! Here are some examples:

WE CAN'T CONTROL THE RIVER

We can take measures to reduce erosion to buy time, but there are no permanent solutions.

WE NEED TO BE MAINTAINED!
WE WILL DEGRADE OVER TIME!
i.e. RIPRAP
WE ARE A TEMPORARY SOLUTION.

\$\$\$ FUNDING! \$\$\$

There is no funding specifically dedicated to managing riverbank erosion. There is money for emergencies, but not to be pro-active.

THANK YOU, BUT WE NEEDED MONEY BEFORE!!!

= CAPACITY =

People are wearing a lot of hats and juggling a lot. It's hard to dedicate enough time to this.

RIVER BANK EROSION

CONTINUITY

There is a lot of turnover with council, leadership, SAOs. It's hard to keep this issue front of mind.

HI!
BYE!

RIVER BANK EROSION

EXISTING INFRASTRUCTURE

We can identify setback zones, but critical infrastructure, cultural sites, cemeteries, and homes are already in those at-risk areas.

... AND IT'S EXPENSIVE AND COMPLICATED TO MOVE US!

♥ IT'S SENSITIVE ♥♥

These are emotional and sensitive situations! Moving homes and cemeteries is hard to process.

WE WILL NEED TIME TO ADJUST TO THIS IDEA...

TRADE-OFFS

The issues are complex and multi-faceted and, generally, THERE ISN'T ONE CLEAR SOLUTION.

REVEGETATION HELPS WITH EROSION...
... BUT GOES AGAINST FIRE-SMARTING!
WE CAN REDUCE THE EROSION HERE...
... BUT THAT WILL LEAD TO MORE EROSION THERE!

?? THE FUTURE UNKNOWNNS ??

What will it cost? Especially in small communities - so much has to be brought in! What will the river do in the long-term?

Especially with climate change!

IT'S SO LABORIOUS

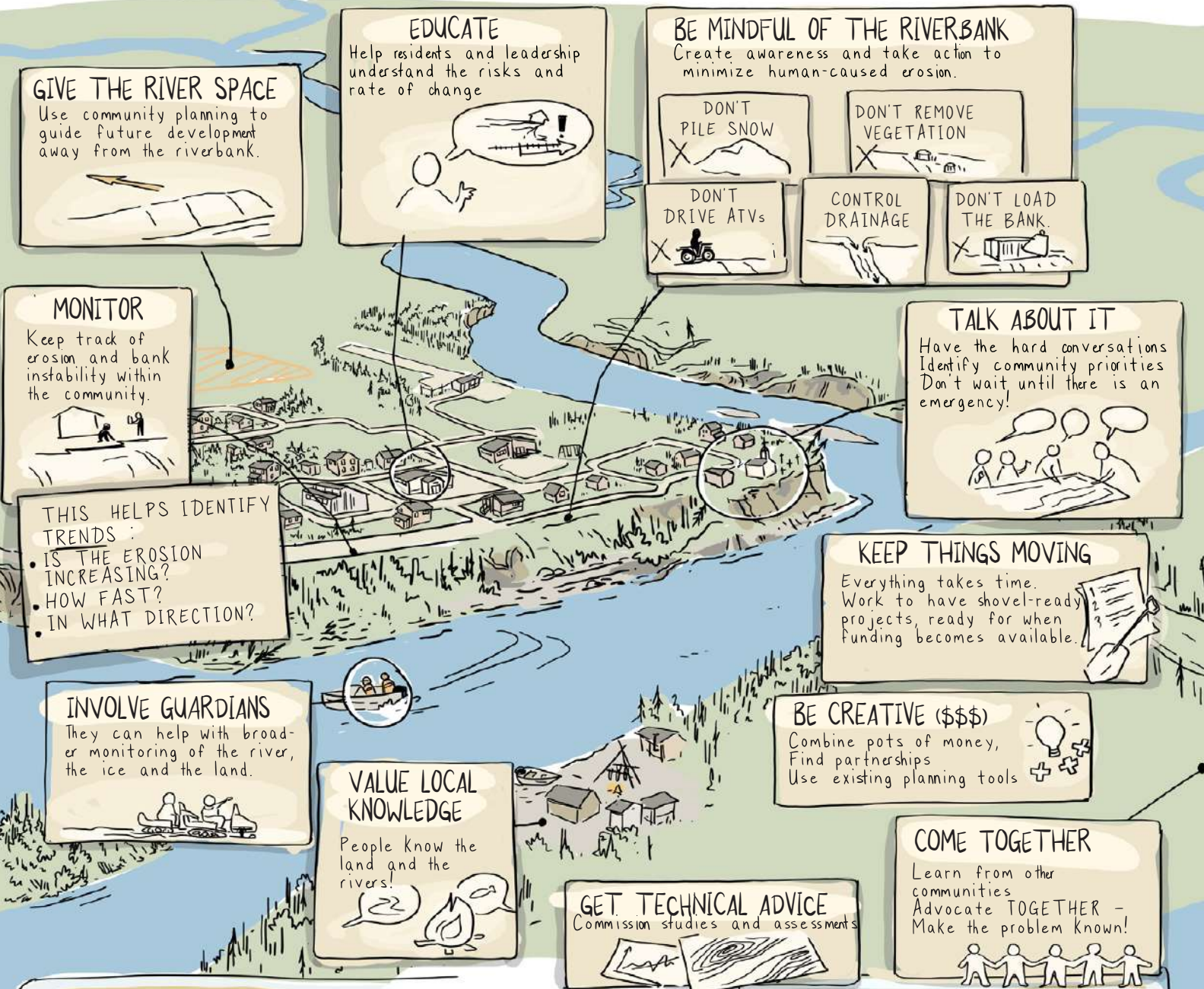
Chasing funding, knocking on doors, jumping through hoops, commissioning studies, understanding the reports... needing more studies!

WE WANT ACTION

→ It all takes TIME, but the erosion keeps happening!! ←

What can we do?

The river will do what the river will do! It can all feel **OVERWHELMING**.
 Breaking things down into smaller, more manageable actions can help.



ABOUT STUDIES

ASK FOR WHAT YOU NEED!

(Scoping)

- i.e.
 - ✓ Plain language summaries
 - ✓ Identify next steps
 - ✓ Solutions that consider what is locally available
 - ✓ Specific recommendations and estimated costs
 - etc.

It can be frustrating: it often feels like studies just lead to more studies, but it's necessary. Funders will require these technical reports and assessments to provide larger amounts of funding, sooner.



Moving forward!

INITIATIVES MUST BE COMMUNITY-LED

Be in the drivers' seat. Local and Indigenous Knowledge is key! Centre the community and the people - it isn't just about \$\$\$ and infrastructure.



COMMUNICATION IS CRUCIAL

Use plain-language. Keep everyone engaged and part of the conversation: ELDERS, YOUTH, RESIDENTS, LEADERSHIP, LOCAL KNOWLEDGE HOLDERS, TECHNICAL EXPERTS.



TAKE A HOLISTIC APPROACH

This is the Indigenous way. See the whole picture, not just the riverbank instability in a silo.



WE ARE STRONGER TOGETHER

Riverbank Erosion Partnership Table! Learn from other communities, in the in the NWT, Alaska, and across the north. Support one another. OUR VOICES ARE STRONGER TOGETHER.



That's all great, but these are real threats and we need to take action quickly!

We have so much on our plates already!

There are gaps in funding.

Funding pots change with political cycles

These are complex issues - it's complicated!

It's A LOT of work!

We have to knock on so many doors for funding, expertise and support.

We aren't technical specialists!

Our community only has 105 residents!

Communities NEED support to manage their unique threats...

THE DREAM

One-Window access to support

Dedicated position

Funding for every step of the process

From procurement, to assessment, to engagement, to action!



...and to keep their residents safe and thriving.