Appendix A

Workshop Agenda

Mackenzie Valley Resource Management Act Workshop

Katimavik Rooms, Explorer Hotel, Yellowknife
February 13-14, 2018

BACKGROUND

The Resource Co-Management Workshop is hosted by the Mackenzie Valley Review Board, the Land and Water Boards of the Mackenzie Valley, the Government of the Northwest Territories and the Government of Canada. The goals, delivery methods and setting for this workshop were based on feedback from participants who attended the MVRMA Workshops held in 2016 and 2017.

WORKSHOP GOALS

This will be a plain language workshop focused on the follow-up, monitoring and compliance of development projects in the Mackenzie Valley. The content of the workshop will focus on the stages of a project lifecycle after the environmental assessment is complete, including regulatory permitting, ongoing project monitoring and compliance, and closure and reclamation.

OPTIONAL PRE-WORKSHOP EVENT

Monday, February 12, 2018 **Location: Janvier Room Explorer Hotel**	
Reception and Registration (optional event) • An opportunity to pick up your registration package and meet other workshop participants.	5:00pm- 7:00pm

Agenda for Day 1 Tuesday, February 13, 2018

ARRIVAL TIME and Registration (coffee and light snack provided)	8:00am – 8:45am
Introductions and Opening Comments	8:45am – 9:00am
Keynote Speaker – Bill Ross	9:00am – 9:30am
Section 1 – EA is done. Now what? • Introduction	9:30am - 9:45am
BREAK	9:45am -10:00am
Section 1 – EA is done. Now what? • Panel discussion and Q and A	10:00am – 11:30
LUNCH (not provided)	11:30am-1:00pm
Section 2 – The project is authorized. Now what? • Introduction	1:00pm-1:15pm
Section 2 – The project is authorized. Now what? • Panel discussion and Q and A	1:15pm-2:45pm
Break	2:45pm-3:00pm
Section 3 – The project is closed. Now what? • Introduction	3:00pm-3:15pm
Section 3 – The project is closed. Now what? • Panel discussion and Q and A	3:15pm-4:45pm
Wrap-up of Day 1	4:45pm – 5:00pm

Agenda for Day 2 Wednesday, February 14, 2018

ARRIVAL TIME and Registration (coffee and light snack provided)	8:00am – 8:30am
Opening Comments and Recap of Day 1	8:30am – 8:45am
Section 1 – EA is done. Now what? Break-out sessions such as: 1. Public Input and Review 2. Wildlife Management and Monitoring Plans 3. How the regulatory process works 4. Follow-up measures	9:00am-10:15am (25 minutes per breakout session)
BREAK	10:15am-10:30am
Section 2 – The project is authorized. Now what? Break-out sessions such as: 1. Opportunities to engage in the process 2. How is traditional knowledge/community involvement and monitoring being considered in the life of the project and closure planning? 3. How inspectors enforce conditions (compliance)	10:30-11:45 am (25 minutes per breakout session)
Lunch (not provided)	11:45am-1:00pm
Section 3 – The project is closed. Now what? Break-out sessions such as: 1. What does long-term monitoring look like to you? 2. Contaminants and Remediation Division (INAC-CARD) 3. Securities	1:00pm-2:15pm
Plenary	2:15pm-3:45pm
Wrap-up and Closing Remarks	3:45pm – 4:00pm

Appendix B

List of Presenters

MVRMA Workshop Presenter Contact Information

Keynote Address: Principles and Practice of Environmental Impact Assessment		
Bill Ross	Emeritus Professor, University of Calgary	ross@ucalgary.ca

Section 1: Environmental Assessment is Done, now what?		
Presentation		
Alan Ehrlich	Manager of Environmental Impact Assessment, Mackenzie Valley Review Board	aehrlich@reviewboard.ca
Panel Discussion		
Natalie Plato	Deputy Director, Giant Mine Remediation Project	Natalie.Plato@aandc-aadnc.gc.ca
Bill Ross	Emeritus Professor, University of Calgary	ross@ucalgary.ca
Claudine Lee	Head of Environment, Dominion Diamond Ekati ULC	Claudine.Lee@ddcorp.ca
Stephanie Poole	Akaitcho IMA Implementation Office Coordinator, Treaty #8 Tribal Corporation	screeningofficer@eastarm.com

Section 2: The Project is Authorized, now what?		
Presentation		
Sarah Elsasser	Regulatory Manager, Wek'èezhìi Land and Water Board	selsasser@wlwb.ca
Panel Discussion		
Tim Byers	Board Member, Independent Environmental Monitoring Agency	byerses@mymts.net
Julian Kanigan	Manager, NWT Cumulative Impact Monitoring Program	julian_kanigan@gov.nt.ca
Scott Stewart	Regional Superintendent, North Slave	scott_stewart@gov.nt.ca
Zabey Nevitt	Senior Policy Advisor, Tłı̨chǫ Government	zabeynevitt@tlicho.com

Section 3: The Project is Closed, now what?		
Presentation		
Shelagh Montgomery	Executive Director, Mackenzie Valley Land and Water Board	smontgomery@mvlwb.com
Panel Discussion		
John McCullum	Executive Director, Environmental Monitoring Advisory Board	emab1@northwestel.net
Keith Cunningham	Senior Analyst, Saskatchewan Ministry of the Economy – Mineral Policy Branch	Keith.Cunningham@gov.sk.ca
Dwight Grabke	Environmental Manager – legacy sites in Canada, Newmont Mining Corporation	dwight.grabke@newmont.com

Section 1 Break Out Sessions: Environmental Assessment is Done, now what?		
1. Public Input and Review		
Jacqueline Ho	Regulatory Specialist, Mackenzie Valley Land and Water Board	jho@mvlwb.com
David Finch	Regulatory Officer, Mackenzie Valley Land and Water Board	dfinch@mvlwb.com
Chuck Hubert	Senior Environmental Assessment Officer, Mackenzie Valley Review Board	chubert@reviewboard.ca
2. Wildlife Management and Monitoring Plans		
Andrea Patenaude	Wildlife Biologist – Environmental Assessment/Habitat, GNWT Department of Lands	Andrea_Patenaude@gov.nt.ca
3. How the Regulatory System Works		
Tyree Mullaney	Regulatory Specialist, Mackenzie Valley Land and Water Board	tyree@mvlwb.com

Section 2 Break Out Sessions: The Project is Authorized, now what?		
1. Follow-up Measures		
Brett Wheler	Senior Environmental Assessment Policy Advisor, Mackenzie Valley Review Board	bwheler@reviewboard.ca
2. How is Traditional Knowledge/community involvement and monitoring being considered in the life of the project and closure planning?		
Nick Ballantyne	Permitting Specialist, Dominion Diamond Ekati Corporation	nicholas.ballantyne@ddcorp.ca
Mark Cliffe-Phillips	Executive Director, Mackenzie Valley Environmental Impact Review Board	mcliffephillips@reviewboard.ca
3. How Inspectors Enforce Conditions		
Trevor Bremner	Resource Management Officer, GNWT Department of Lands	Trevor_Bremner@gov.nt.ca

Section 3 Break Out Sessions: The Project is Closed, now what?		
1. What Does Long-Term Monitoring Look Like to You?		
Meghan Schnurr	Regulatory Specialist, Wek'èezhìi Land and Water Board	mschnurr@wlwb.ca
Anneli Jokela	Senior Technical Advisor, Wek'èezhìi Land and Water Board	ajokela@wlwb.ca
2. Post-Closure Management of Decommissioned Sites in Saskatchewan		
Keith Cunningham	Senior Analyst, Saskatchewan Ministry of the Economy – Mineral Policy Branch	Keith.Cunningham@gov.sk.ca
3. Closure Planning and Securities		
Nathen Richea	Manager – Water Regulatory, GNWT Department of Environment and Natural Resources	Nathen_Richea@gov.nt.ca
Lorraine Seale	Director – Securities and Project Assessment, GNWT Department of Lands	Lorraine_Seale@gov.nt.ca
Angela Plautz	Senior Regulatory Policy Advisor, Mackenzie Valley Land and Water Board	aplautz@mvlwb.com

Open House Displays		
Marc Casas	Executive Director, Independent Environmental Monitoring Agency	monitor1@monitoringagency.net
Ben Nind	Executive Director, Giant Mine Oversight Board	ed@gmob.ca
John McCullum	Executive Director, Environmental Monitoring Advisory Board	emab1@northwestel.net
Blair Carter	Water Stewardship Advisor – Watershed Programs and Partnerships, GNWT Department of Environment and Natural Resources	Blair_Carter@gov.nt.ca
Lubaki Zantoko	Environmental Monitoring Specialist – Cumulative Impact and Monitoring Program, GNWT Department of Environment and Natural Resources	Lubaki_Zantoko@gov.nt.ca
Westley Steed	Wildlife Risk Management Coordinator – Fire Operations, GNWT Department of Environment and Natural Resources	Westley_Steed@gov.nt.ca
Valerie Gordon	Project Manager – Resources and Development Information, GNWT Department of Industry, Tourism and Investment	Valerie_Gordon@gov.nt.ca

Appendix C

Presenter Bios

Presenter Biographies	
Presentation: Principles and Practice of Environmental Impact Assessment	
Bill Ross	Dr. Bill Ross has been a professor with the Faculty of Environmental Design since 1973 (now Emeritus). His scholarly expertise is in the professional practice of impact assessment. He has taught impact assessment since 1973: both academic and professional practice courses around the world. In 2009, he was awarded the lifetime achievement award from the International Association for Impact assessment. Dr. Ross served on eight environmental assessment panels for the Government of Canada starting in the 1970s and finished the last pane in 2015. He also served on the Independent Environmental Monitoring Agency (IEMA), overseeing the Ekati Mine from its inception in 1997 to 2015. He was chair of IEMA from 2003 to 2015.
Panel Discussion: Environmental Assessment is Done, now what?	
Natalie Plato	Natalie Plato is the Giant Mine Remediation Project Deputy Director based out of Indigenous and Northern Affairs Canada INAC's Yellowknife Office where she has been since 2014. Ms. Plato has a passion for the North that has kept her North of 60° for close to 20 years. Prior to joining the Giant Mine Remediation Project, Ms. Plato served as Director of the INAC Lands and Contaminated Sites directorate in the Nunavut Regional Office. Her experience in environmental and land stewardship spans both the public and private sector, where she was formerly the district manager of UMA Engineering and worked internationally for the British Antarctic Survey. Ms. Plato has a Bachelor of Science (w/Honours) in Engineering Chemistry from Queen's University.
Claudine Lee	Claudine Lee is the Head of Environment for Dominion Diamond Ekati ULC, Canada's largest independent diamond producer and one of the world's largest producers and supplies of premium rough diamonds. Claudine oversees the company's environmental compliance, environmental initiatives, permitting, and community engagement activities. She joined the company in 2011 as part of the Environmental Team working out of the Ekati Diamond Mine, moving through a number of progressively senior roles, and has been the Head of the Department since 2015. Claudine holds a M.Sc. from Queen's University in Geology and started her career in exploration in the north, working in the Northwest Territories, Nunavut and Greenland. She has seen the company through an exciting time in the growth and expansion of the mine, overseeing the Environmental Assessment and Water Licence permitting for a new Jay pipe.
Stephanie Poole	Stephanie Poole is a member of the Łutsel K'e /Kache Dene First Nation and lives in the community of Łutsel K'e, NWT. For the past 10 years she has worked as the Treaty #8 Tribal Council, Akaitcho Interim Measures Agreement (IMA) Implementation Officer Coordinator.
Panel Discussion: The Project is Authorized, now what?	
Tim Byers	Tim Byers is a Board member for the Independent Environmental Monitoring Agency (IEMA), the oversight body for the Ekati Diamond Mine. He has served since 2001 when he was appointed by Akaitcho Treaty 8 First Nations (YK Dene and Łutsel K'e Dene). He served as the IEMA Vice-Chair from 2004-2014. Tim is an independent consultant living in Manitoba who has worked on projects in

	the Canadian Arctic since 1980, specializing in fish, seabirds and marine invertebrates. Through his work, he has assisted Indigenous communities in documenting their traditional indigenous environmental knowledge. He would like to see more Indigenous youth engaged in environmental sciences and see TK used more effectively in environmental monitoring, research and impact assessments.
Julian Kanigan	Julian Kanigan is a northern environmental scientist who currently manages the NWT Cumulative Impact Monitoring Program (CIMP) and the NWT Environmental Audit. He works with Indigenous governments, researchers and decision makers to design and implement environmental monitoring and research that is relevant to the NWT. Julian represents the Government of the Northwest Territories as a Board member for the Environmental Monitoring Advisory Board (EMAB) for the Diavik Diamond Mine, and the Canadian Council of Ministers of the Environment (CCME) Cumulative Effects Working Group. He has co-authored several papers on the links between changing climate and permafrost conditions in the NWT and has been an invited presenter at several northern and national workshops on cumulative effects.
Scott Stewart	Scott Stewart is a life-long northerner who works in the GNWT Department of Lands as the Regional Superintendent for the North Slave Region. He has held this position since Devolution in 2014. Prior to that, from 2012 to 2014, he was the District Manager for the South Mackenzie District of the NWT. His career began in Iqaluit in 2003 where he was a Water Resource Officer (WRO) through to 2005, when he relocated to Yellowknife. He continued working as a WRO until 2012.
Zabey Nevitt	Zabey Nevitt is a Senior Policy Advisor with the Tłı̨chǫ Government. Prior to this, Zabey spent ten years as the Executive Director of the Mackenzie Valley Land and Water Board and the Wek'èezhìi Land and Water Board. Before he joined the WLWB, he held the position of Executive Director of the Dogrib Treaty 11 Council and, on establishment of the Tłı̨chǫ Government, worked as the Acting Director of the Tłı̨chǫ Lands Protection Department. Zabey has also worked as the Manager of the Independent Environmental Monitoring Agency—the public watchdog for the Ekati Diamond Mine. Zabey has a degree in Civil and Environmental Engineering and twenty years' experience working in northern communities and with the people of the North.
Panel Discussion: The Project is Closed, now what?	
John McCullum	John McCullum has been a proud NWT resident since 1980. He has worked in a variety of capacities in the environmental field for Indigenous organizations, co-management organizations, and multi-stakeholder boards as well as governments and industry on projects throughout the NWT. Currently he is the Executive Director of the Environmental Monitoring Advisory Board (EMAB). Past responsibilities include: Executive Director of the Wek'èezhìi Renewable Resources Board, Team Lead for Northern Environmental Services for Stantec and Executive Director of the West Kitikmeot / Slave Study. He spent three years in Africa as Project Manager and co-author of the State of the Environment Report for Southern Africa based in Zimbabwe. He has also worked with Indigenous organizations and federal and territorial governments and as Principal of his own consulting firm.

Keith Cunningham	Keith Cunningham is a Senior Analyst specializing in the uranium industry and Manager of the Institutional Control Program with the Mineral Lands and Resource Policy division of Saskatchewan's Ministry of Energy and Resources. Keith is a graduate of the University of Saskatchewan and a Professional Engineer with the Association of Professional Engineers and Geoscientists of Saskatchewan. Keith has over 30 years' experience in the petroleum and mining sectors, both in private industry and in government.
Dwight Grabke	Dwight Grabke, born and raised in Yellowknife, NWT, graduated from the Bisset School of Business in Calgary, AB with a diploma in Business Administration, as well as a Marketing Management Certificate. He subsequently completed the Environmental Systems Engineering Program at the University of Regina, SK. Since returning to the North, Dwight has been responsible for the supervision of the environment department at the Diavik Mine site, and was involved in several mine site remediation projects throughout the north as a field engineer, project manager, and in his current role as the Environmental Manager, legacy sites Canada for the Newmont Mining Corporation based at the Con Mine site in Yellowknife.

Appendix D

PowerPoint Presentations

Principles and Practice of EIA
Follow Up

Bill Ross

Emeritus Professor University of Calgary

MVRMA Practitioners' Workshop

Yellowknife

2018-02-13

Principles and Practice of EIA Follow Up

Definition of Follow up

- Follow up studies are the environmental studies undertaken during the implementation phase of a given activity, after the decision to proceed has been taken
- Follow up studies are also called “monitoring”. The better term is monitoring, evaluation, and management.

Theme 1

The EA is done. Now what?

Purposes of Follow Up Studies (1)

A Environmental Management of the Activity

1. To monitor compliance with the agreed conditions set out in construction permits and operating licenses.
2. To review predicted impacts for proper management of risks and uncertainties.
3. To modify the activity or develop mitigation measures in case of unpredicted harmful effects on the environment.

Purposes of Follow Up Studies (2)

B EIA Process Development

4. To determine the accuracy of past impact predictions and the effectiveness of mitigation measures in order to transfer this experience to future activities of the same type.
5. To review the effectiveness of environmental management for the activity

Follow Up Study Management

- As a tool for managing follow up studies, advisory boards consisting of industry, government, contractors, independent experts, and public representatives should be used. Such boards with well defined terms of reference increase the credibility and quality of the follow up study.
- Public participation in the follow up study should be encouraged.
- Follow up study reports should be made public.
- UNECE, 1990 Report conclusions

The Principles and Practice of EIA Follow-up

Presentation deals with (principles)

- Guiding principles for follow-up studies in environmental impact assessment
- Professional practice and not academic studies
- Conditions of approval for projects
- And (practice): Contributions of Independent Environmental Monitoring Agency

Principles of EIA Follow Up

- Management oriented
- Related to information gaps identified in an EIA document
- Limitations on follow-up studies
- Undertaken, not for all impacts, but only for impacts that are important and about which we do not know enough
- Designed for action, to manage impacts

Management Oriented

- Get information needed to manage project
- May get information from one project for application to other projects
- Cost considerations (proponent (project) vs government (other projects) funds???)

Information Gaps

- Purpose of including information gaps is for deciding about the proposed project
  - Not about science
- Information gaps may lead to necessary follow-up studies to fill the gaps
  - enable better environmental management

Limitations on Follow-up Studies

- Not useful for project management if the impacts cannot be managed
  - If monitoring leads to detection after impact occurs, it may be too late
  - If monitoring identifies impact for which mitigation is too costly, it is too late

Do Follow-up Studies for Selected Impacts

- Impacts that are important AND
- Impacts about which enough information is not available

- Such impacts are determined in environmental impact assessment

Design Follow-up Studies to Manage Impacts

- Project impacts vs EIA development
- Critical importance of early warning indicators (adaptive environmental management)
- Responsibilities of the various participants (proponent, government, community, etc.) need to be developed and well understood as soon as possible

Theme 2

The project is authorized. Now what?

Contributions of Independent Environmental Monitoring Agency

- Ability to revise monitoring programs at Ekati
  - Annual workshop to discuss results and adjust monitoring programs (both additions and reductions)
  - Longer term changes (both additions and reductions) as mine impacts become better known

Theme 3

The project is closed. Now what?

Contributions of Independent Environmental Monitoring Agency

- Closure planning contributions
  - Expectations for closure
    - Interim closure plans
    - Closure criteria (measurable outcomes)
  - Monitoring during and before closure
    - Reclamation research
    - Measurements to determine when closure criteria have been met

Contributions of Independent Environmental Monitoring Agency

- Need to improve and revise monitoring programs
- Need to involve affected communities
- Closure improvements

Section 2: The project is authorized. Now what?

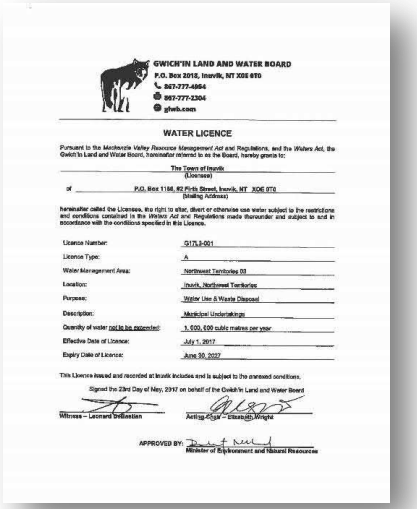
Sarah Elsasser

Acting Executive Director, Wek'èezhìi Land and Water Board

Integrated and Coordinated Land and Water Management

- *Under direction of Mackenzie Valley Resource Management Act, the Land and Water Boards regulate the use of land and water, and deposit of waste through the issuance of land use permit and water licences*

Land Use Permits and Water Licences



GWICH'IN LAND AND WATER BOARD
P.O. Box 2018, Inuvik, NT X0E 0T0
867-777-4864
867-777-2304
gwb.com

WATER LICENCE

Pursuant to the Mackenzie Valley Resource Management Act and Regulations, and the Waters Act, the Gwich'in Land and Water Board, hereinafter referred to as the Board, hereby grants to:

The Town of Inuvik
(Licensee)

of P.O. Box 1168, 87 Firth Street, Inuvik, NT X0E 0T0
(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water subject to the restrictions and conditions contained in the Waters Act and Regulations made thereunder and subject to and in accordance with the conditions specified in this Licence.

Licence Number:	G17L3-001
Licence Type:	A
Water Management Area:	Northwest Territories 03
Location:	Inuvik, Northwest Territories
Purpose:	Water Use & Waste Disposal
Description:	Municipal Undertakings
Quantity of water not to be exceeded:	1,000,000 cubic metres per year
Effective Date of Licence:	July 1, 2017
Expiry Date of Licence:	June 30, 2027

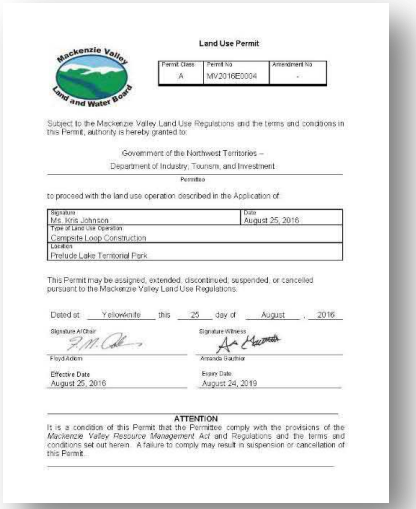
This Licence issued and recorded at Inuvik includes and is subject to the annexed conditions.

Signed the 23rd Day of May, 2017 on behalf of the Gwich'in Land and Water Board

Witness – Leonard Selleslan

Acting Chair – Elizabeth Wright

APPROVED BY:
Minister of Environment and Natural Resources



Land Use Permit

Mackenzie Valley Land and Water Board

Permit Class	Permit No	Amendment No
A	MV2016E0004	-

Subject to the Mackenzie Valley Land Use Regulations and the terms and conditions in this Permit, authority is hereby granted to:

Government of the Northwest Territories –
Department of Industry, Tourism, and Investment
Permittee

to proceed with the land use operation described in the Application of

Signature	Date
Mr. Kris Johnson	August 25, 2016
Type of Land Use Operation	
Campsite Loop Construction	
Location	
Prelude Lake Territorial Park	

This Permit may be assigned, extended, discontinued, suspended, or cancelled pursuant to the Mackenzie Valley Land Use Regulations.

Dated at Yellowknife this 25 day of August , 2016

Signature A/Chair — Floyd Adam

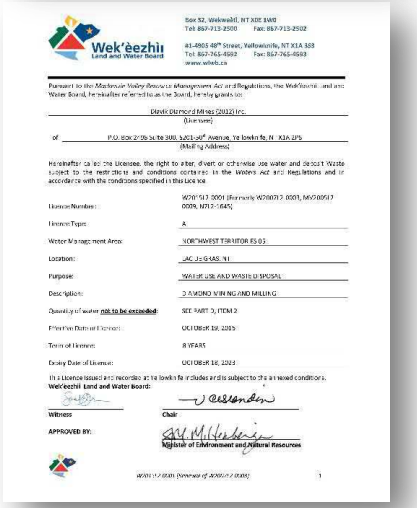
Signature Witness — Amanda Gauthier

Effective Date: August 25, 2016

Expiry Date: August 24, 2019

ATTENTION

It is a condition of this Permit that the Permittee comply with the provisions of the Mackenzie Valley Resource Management Act and Regulations and the terms and conditions set out herein. A failure to comply may result in suspension or cancellation of this Permit.



Wek'èezhìi Land and Water Board

Box 32, Wekweètì, NT X0E 1W0
Tel: 867-713-2500 Fax: 867-713-2502

#1-4905 48th Street, Yellowknife, NT X1A 3S3
Tel: 867-765-6992 Fax: 867-765-6993
www.wlwb.ca

Pursuant to the Mackenzie Valley Resource Management Act and Regulations, the Northwest Territories Water Act and Water Board, hereinafter referred to as the Board, hereby grants to:

Diavik Diamond Mines (2012) Inc.
(Licensee)

of P.O. BOX 2778 Suite 300, 5201-50th Avenue, Yellowknife, N.W.T. X1A 2P5
(Mailing Address)

Hereinafter called the Licensee, the right to alter, divert or otherwise use water and deposit Waste subject to the restrictions and conditions contained in the Waters Act and Regulations and in accordance with the conditions specified in this Licence.

Licence Number:	W2007L2-0001 (formerly W2007L2-0001, MV2007L2-0009, N7L2-1645)
Licence Type:	A
Water Management Area:	NORTHWEST TERRITORIES 05
Location:	LAC DE GRAS, NT
Purpose:	WATER USE AND WASTE DISPOSAL
Description:	DIAMOND MINING AND MILLING
Quantity of water not to be exceeded:	SEE PART D, ITEM 2
Effective Date of Licence:	OCTOBER 19, 2015
Term of Licence:	8 YEARS
Expiry Date of Licence:	OCTOBER 18, 2023

It is Licence issued and recorded at Yellowknife includes and is subject to the annexed conditions.

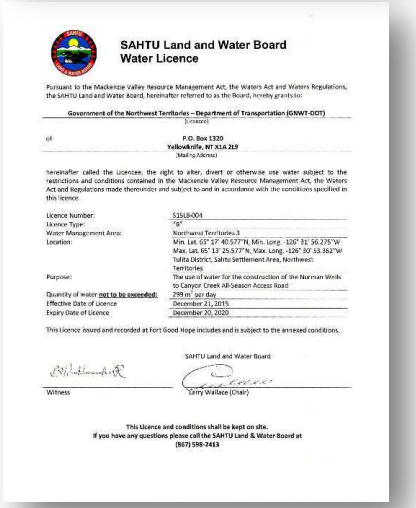
Wek'èezhìi Land and Water Board:

Witness

Chair

APPROVED BY:
Minister of Environment and Natural Resources

W2007L2-0001 (Renewal of W2007L2-0001) 1



SAHTU Land and Water Board
Water Licence

Pursuant to the Mackenzie Valley Resource Management Act, the Waters Act and Waters Regulations, the SAHTU Land and Water Board, hereinafter referred to as the Board, hereby grants to:

Government of the Northwest Territories – Department of Transportation (GNWT-DOT)
(Licensee)

of P.O. Box 1320
Yellowknife, NT X1A 2L9
(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water subject to the restrictions and conditions contained in the Mackenzie Valley Resource Management Act, the Waters Act and Regulations made thereunder and subject to and in accordance with the conditions specified in this licence.

Licence Number:	S15L8-004
Licence Type:	"B"
Water Management Area:	Northwest Territories 3
Location:	Min. Lat. 65° 17' 40.577"N, Min. Long. -126° 31' 50.275"W Max. Lat. 65° 13' 25.577"N, Max. Long. -126° 30' 53.362"W Tulita District, Sahtu Settlement Area, Northwest Territories
Purpose:	The use of water for the construction of the Norman Wells to Canyor Creek All-Season Access Road
Quantity of water not to be exceeded:	299 m³ per day
Effective Date of Licence	December 21, 2015
Expiry Date of Licence	December 20, 2020

This Licence issued and recorded at Fort Good Hope includes and is subject to the annexed conditions.

SAHTU Land and Water Board

Witness

Larry Wallace (Chair)

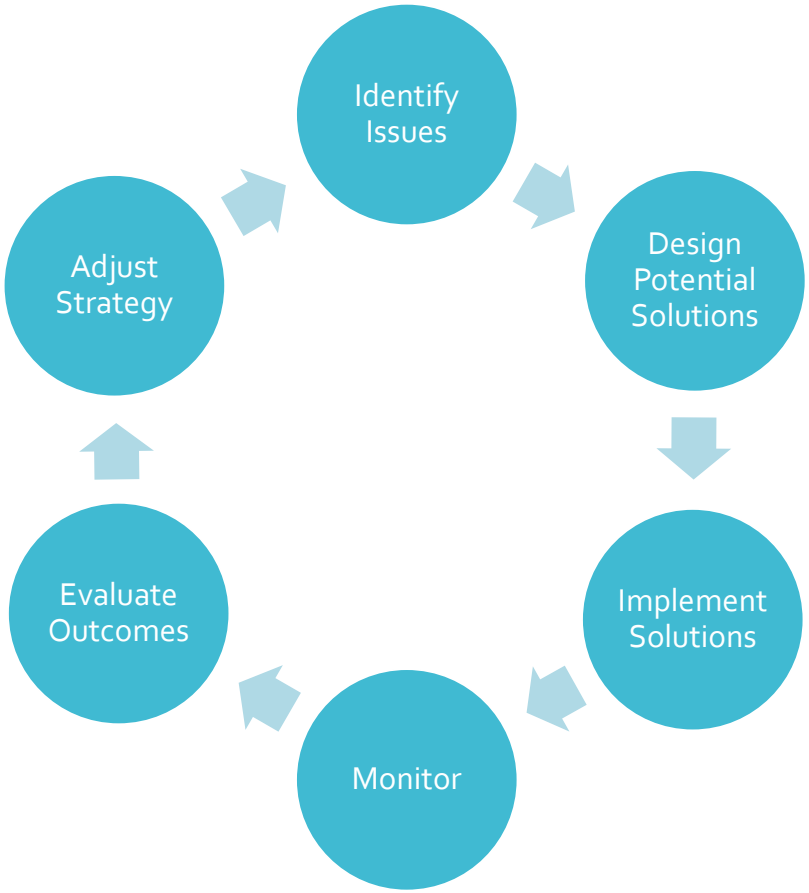
This Licence and conditions shall be kept on site.
If you have any questions please call the SAHTU Land & Water Board at (867) 598-2413

Land Use Permit and Water Licence Conditions

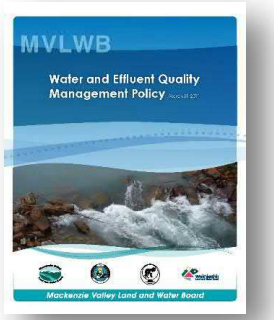
Ongoing management of project

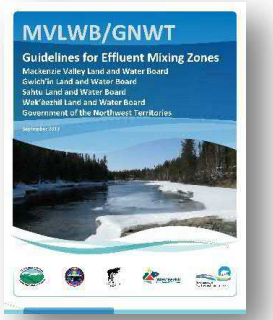
- Designs
  - Engineered drawings, AEMP
- Management Plans
  - Engagement, Waste, Water, Contingency, Closure
- Reporting
  - Annual Report, SNP, AEMP
- Enforcement
  - Federal/Territorial Inspectors

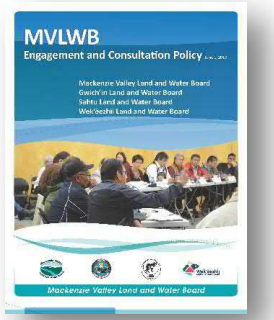
Adaptive Management

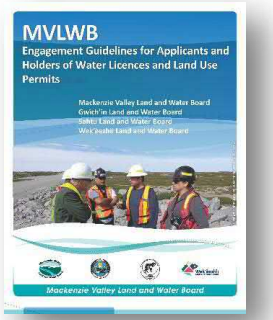


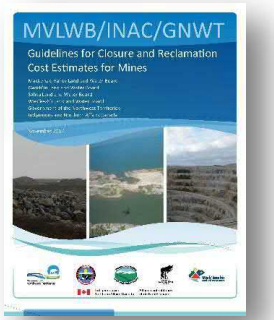
Policies and Guidelines assist the Boards in fulfilling their mandates

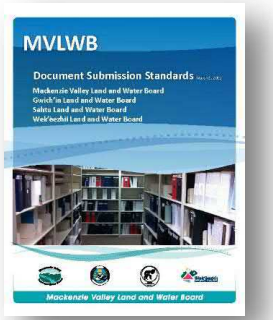


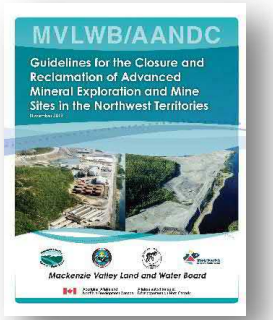


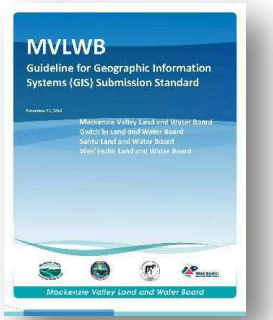


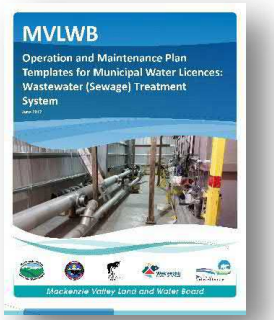


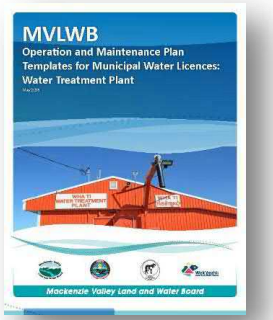


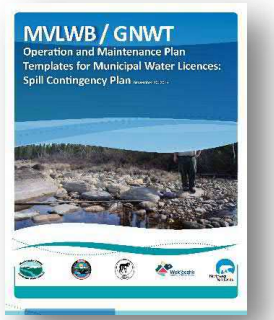


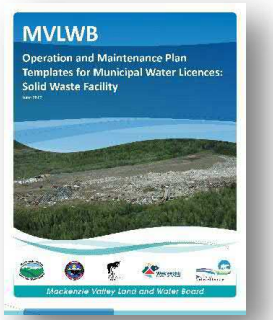












Mandate of the LWBs

- Provide for the conservation, development and utilization of land and water resources in a manner that will provide optimum benefit
- Must consider the importance of conservation to well-being and way of life to Aboriginal peoples of Canada
- Traditional knowledge and scientific information

Section 2: Panel, Q&A

Panel participants:

- Zabey Nevitt, Senior Advisor, Tlicho Government
- Tim Byers, Board Member, Independent Environmental Monitoring Agency
- Scott Stewart, Regional Superintendent, GNWT-Lands
- Julian Kanigan, Manager, Cumulative Impact Monitoring Program

Section 3: The project is closed. Now what?

MACKENZIE VALLEY RESOURCE MANAGEMENT ACT WORKSHOP

February 13-14, 2018
Yellowknife, NT

Shelagh Montgomery, MVLWB

Mackenzie Valley Land and Water Board
GWICH'IN LAND AND WATER BOARD
SAHTU LAND & WATER BOARD
Wek'èezhìi Land and Water Board
Mackenzie Valley Environmental Impact Review Board
Government of Northwest Territories
Indigenous and Northern Affairs Canada
Affaires autochtones et du Nord Canada

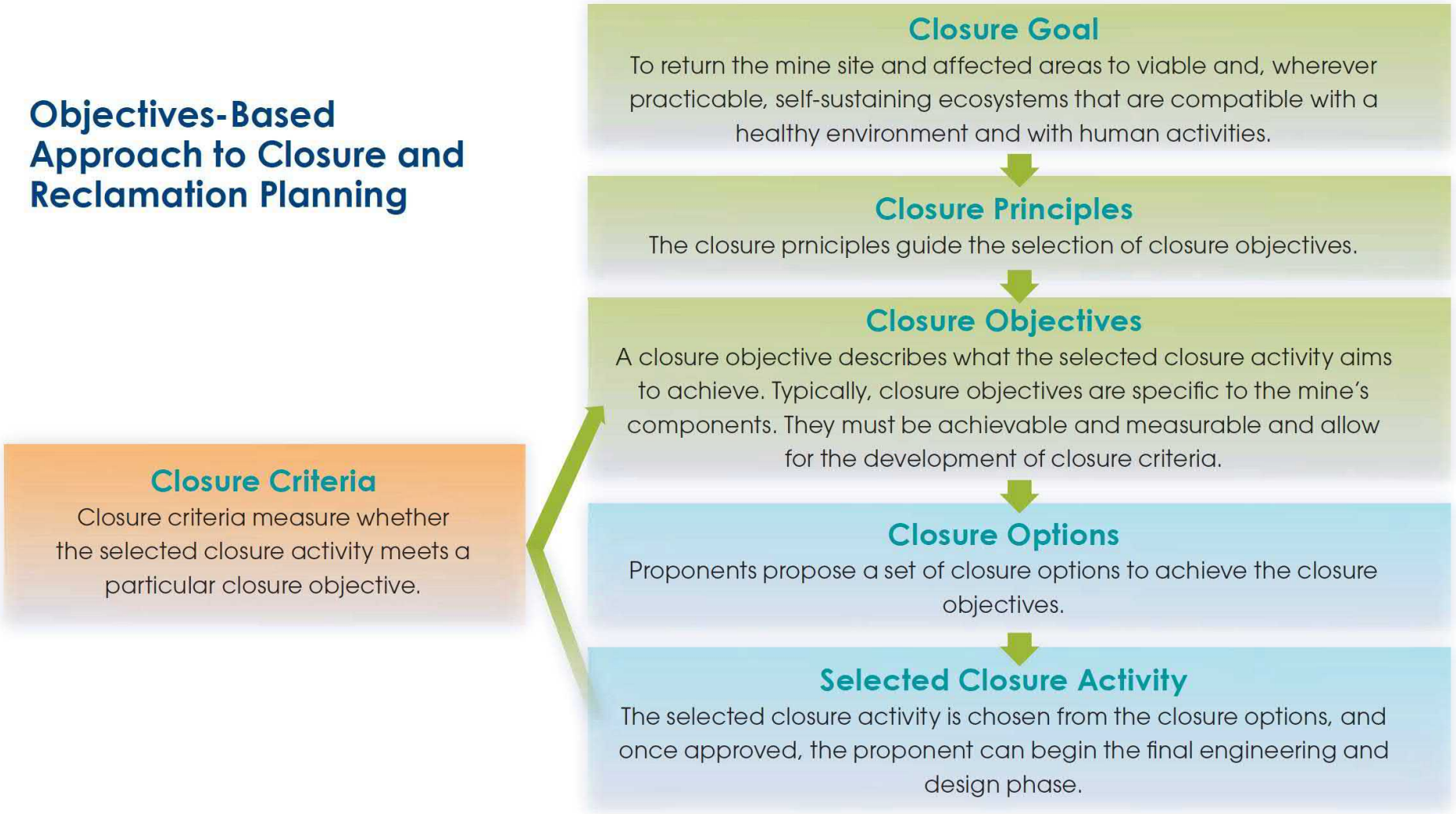
The Regulatory Process
(for Land Use Permits & Water Licences)

Overview

What is closure planning?

- Needs to start very early during project planning.
  - For a project that goes to EA – Conceptual Closure & Reclamation Plan
  - Where no EA – For a Water Licence - often preliminary, interim and final Closure and Reclamation Plans required
  - For a Land Use Permit – Final Closure Plan due before end of the project

Objectives-Based Approach to Closure and Reclamation Planning



Site Closure & Reclamation

- Proponents are legally responsible for undertaking closure and reclamation in an environmentally responsible manner, as set out in permits, licences, leases and associated management plans



Importance of closure planning

- Many past examples across the North where some operations closed without adequately addressing their clean-up and reclamation responsibilities
- Our co-management system in the Mackenzie Valley provides many opportunities for residents to participate in the closure planning and security determination process, which makes it more robust and transparent.

Are there other approaches?

- In 2005, Saskatchewan started to develop a framework for the long-term management of decommissioned mine and mill sites on Crown land.
- Through legislation and regulations:
  - framework for returning Crown land held under surface lease back to the Province
  - BUT only when site reclamation is to acceptable standards
  - establishes clear oversight and funding responsibility for the long-term monitoring and management of the rehabilitated site

Section 3: Panel, Q&A

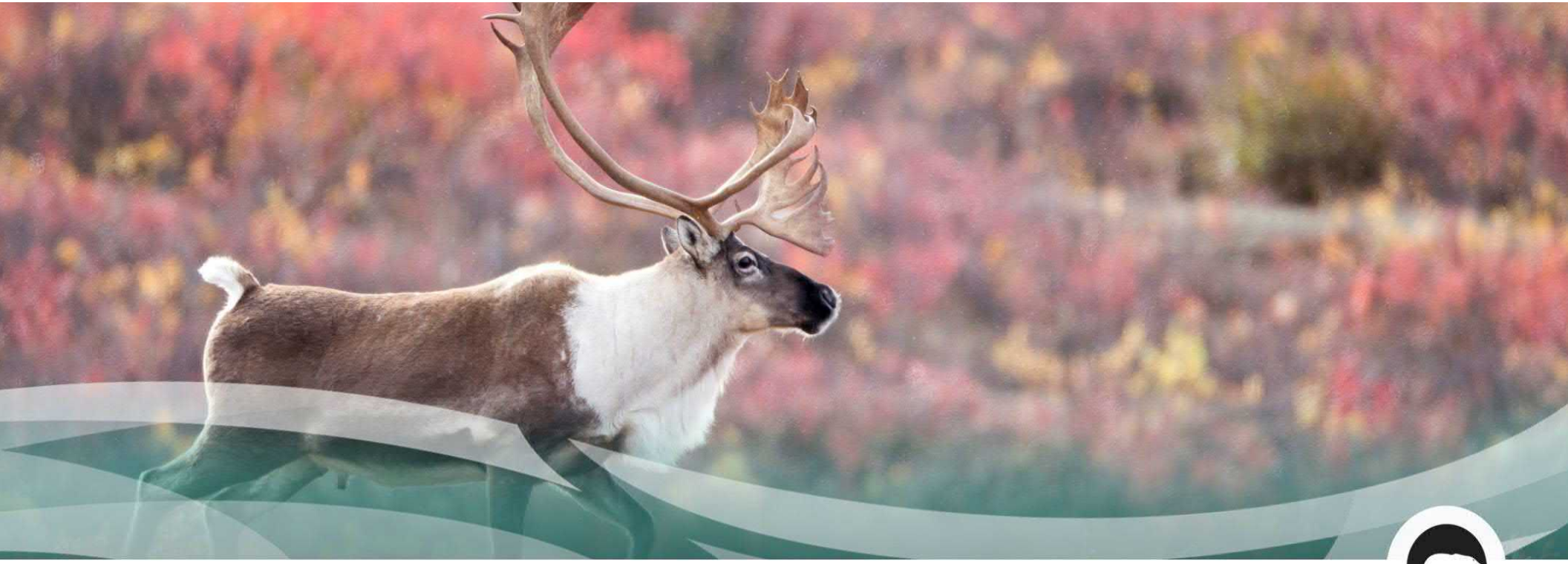
Closure Panel Participants:

- Dwight Grabke, Environment Manager, Newmont Mining
- Keith Cunningham, Institutional Control Program, Government of Saskatchewan
- John McCullum, Environmental Monitoring Advisory Board

Policies and Guidelines

- INAC Mine Site Reclamation Policy for the Northwest Territories (2002)
- INAC - Cold Regions Cover System Design Technical Guidance Document (2012)
- MVLWB/INAC Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories (2013)
- MVLWB/INAC/GNWT Guidelines for Closure and Reclamation Cost Estimates for Mines (2017)
- GNWT - RECLAIM 7.0 Model for Estimating Costs - User Manual: Oil and Gas Version (2017)
- GNWT - RECLAIM 7.0 Model for Estimating Reclamation Costs - User Manual: Mining Version (2017)
- MVLWB Engagement and Consultation Policy (2013)
- MVLWB Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits (2013)

On to the Panel.....



Wildlife Management & Monitoring Plans

Andrea Patenaude, Wildlife Division, ENR

MVRMA Co-Management Workshop

February 14, 2018

Government of
Northwest Territories

Wildlife Act Requirement

Under Section 95 (1), The Minister can require that a WMMP be produced by developers of existing or proposed developments or other activities if those activities are likely to:

> "(a) result in a significant disturbance to big game or other prescribed wildlife;
>
> (b) substantially alter, damage or destroy habitat;
>
> (c) pose a threat of serious harm to wildlife or habitat; or
>
> (d) significantly contribute to cumulative impacts on a large number of big game or other prescribed wildlife, or on habitat."

WMMP related regulations

To enable s95, ENR is developing regulations:

- WMMPs would apply to territorially managed wildlife (not migratory birds or fish) assessed or legally listed as species at risk under federal or NWT legislation
- The Minister would have to inform a person or developer requiring a WMMP of the reasons why
- The development, proposed development, or activity must wait until the WMMP is approved by the Minister
- The development must comply with an approved WMMP or could face penalties under the *Wildlife Act*

WMMP Guidelines in 2 Parts

1) WMMP Process Guideline:
   - When is a WMMP required
   - Interpretation and definition of criteria
   - Process for submission, review and approval

2) WMMP Content Guideline:
   - Key components and concepts
   - Scaled tiers of WMMP
   - Annotated Table of Contents
   - Resources (templates, data sheets etc)

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   - Resources (templates, data sheets etc)

Do You Require a WMMP?

- **<u>Short Answer</u>: If the Minister is satisfied that a development is likely to meet at least one of the criteria under Section 95(1)(a-d), then a WMMP is required.**

Best Practice	Resource
1) Submit a basic WMMP with a preliminary screening application	1) Basic WMMP Template - App 2 of Content Guidelines
2) Engage with ENR early in the process	2) WMMP Screening Questionnaire - App 1 of Process Guidelines

Do You Require a WMMP?

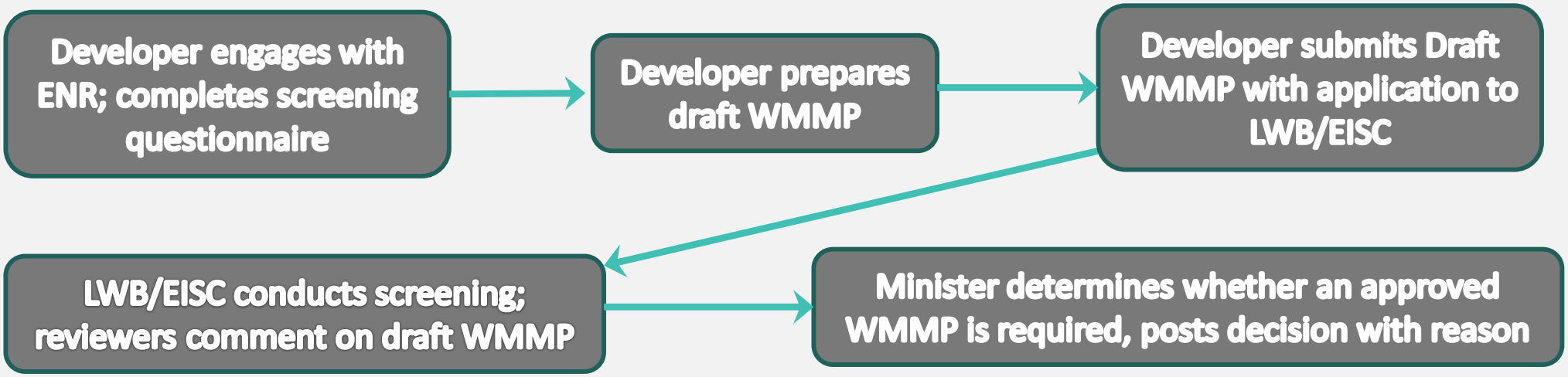
"Always"	• Developments referred to EA for wildlife reasons • Usually need Type "A" water license • Larger-scaled, more intensive developments
"Likely"	• Screened on-project-by-project basis against criteria in Section 95(1) using questions outlined in Section 3.2.1
"Might"	• Will not be automatically screened against criteria • Only screened if reviewers identify key wildlife concern that cannot be addressed through permitting in PS
"Likely Do Not"	• Projects that do not require a screening as per MVRMA Exemption List and IFA Exclusion List Appendix C of the EISC • Type B LUP or Class C permit • Within municipal boundaries, excluding waste facilities
***NOTE: Minister of ENR has discretion More details in Section 3.1 and Table 1 (p.7) of the Process Guidelines	

Submission, review and approval
(no EA/EIR)

Submission, review and approval

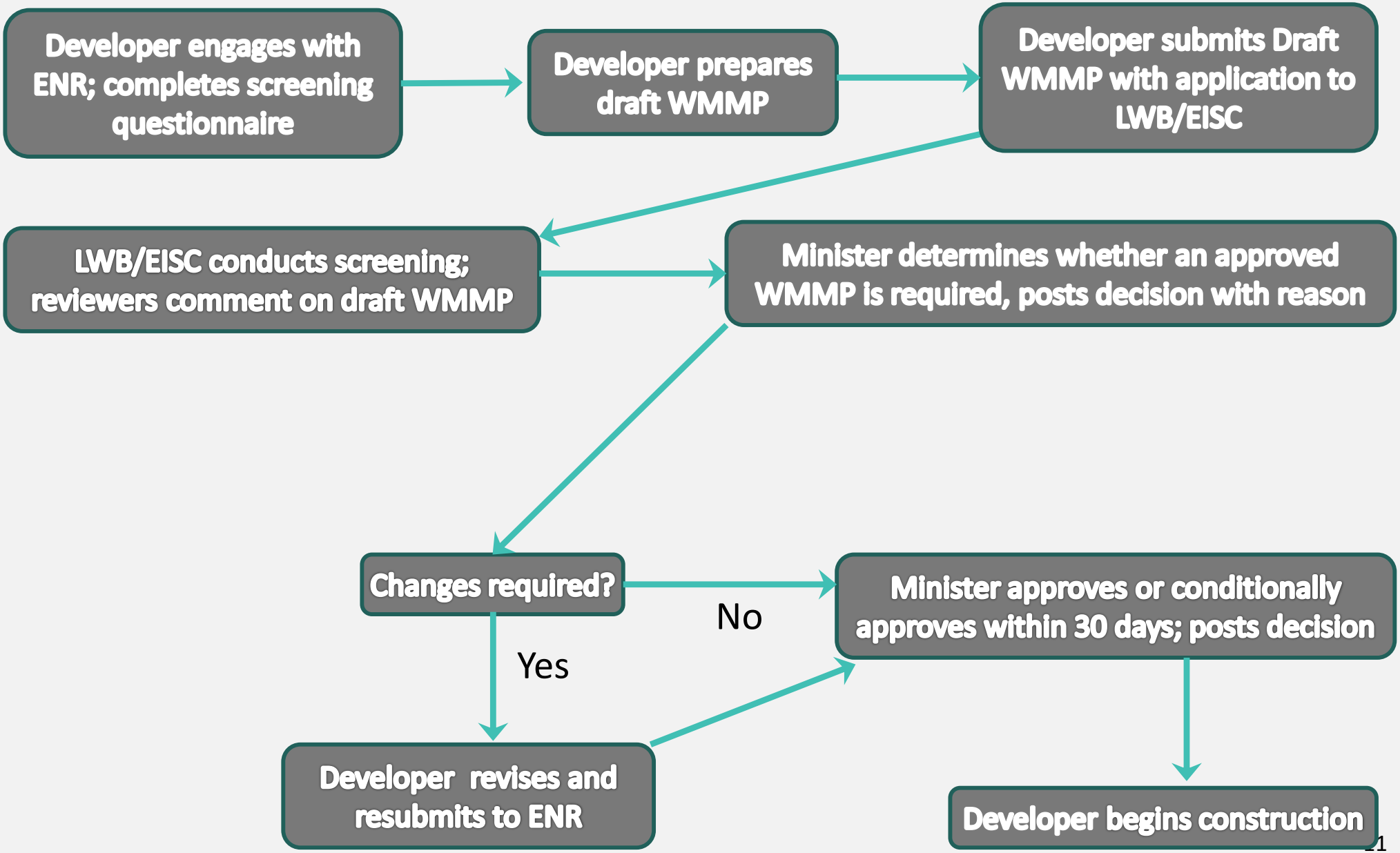
(no EA/EIR)

Submission, review and approval
(no EA/EIR)



Submission, review and approval

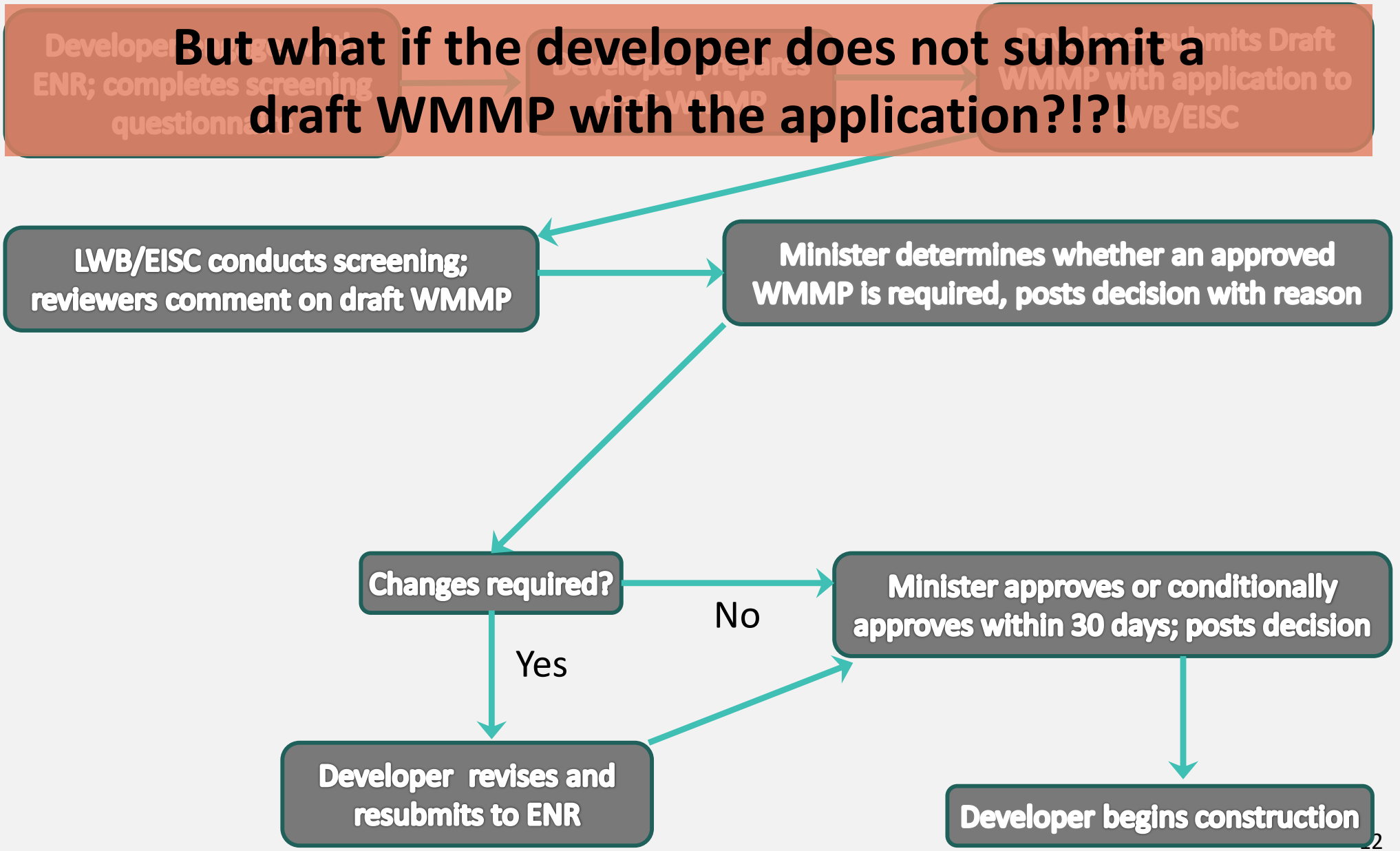
(no EA/EIR)



Submission, review and approval

(no EA/EIR)

But what if the developer does not submit a draft WMMP with the application?!?!



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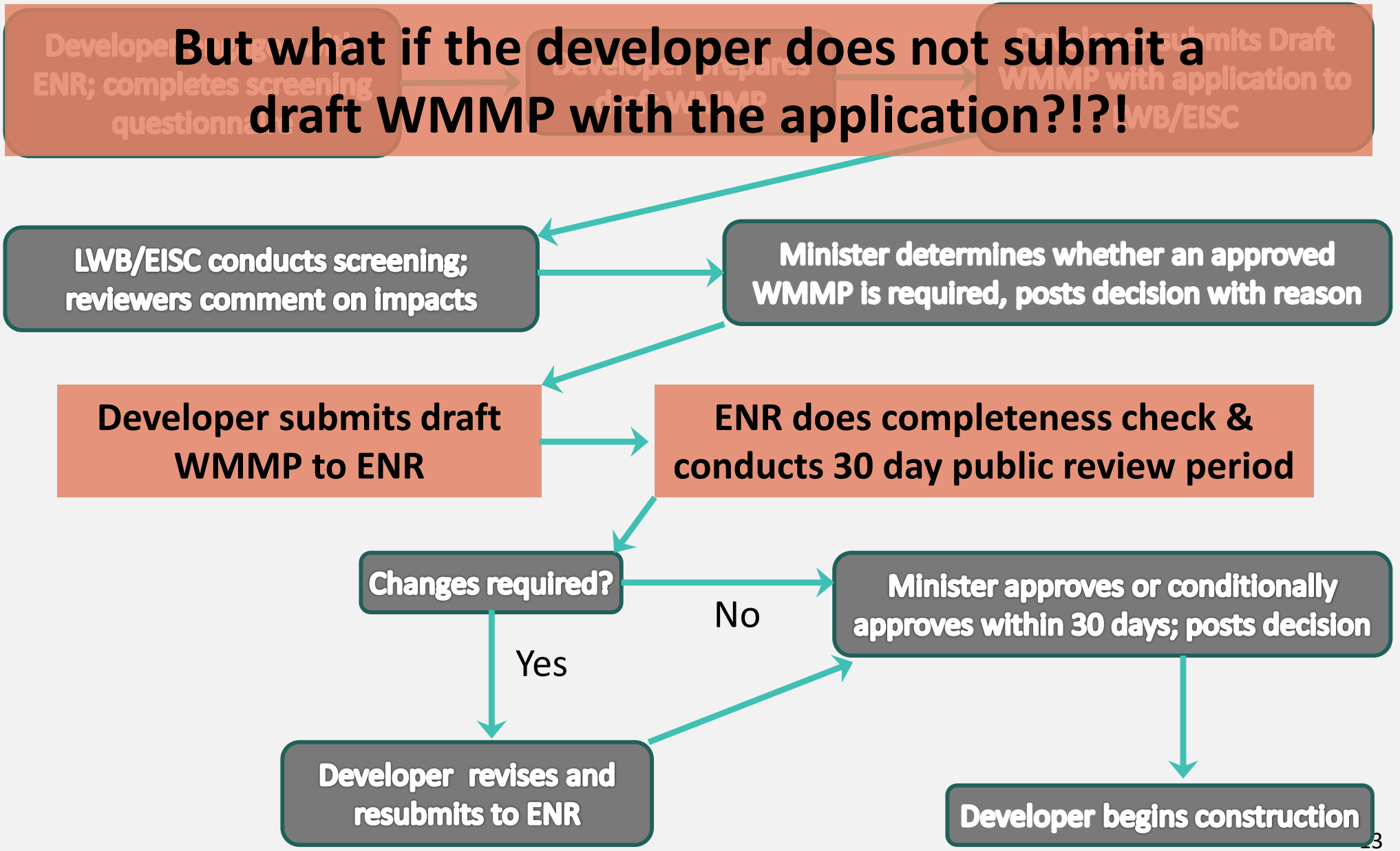
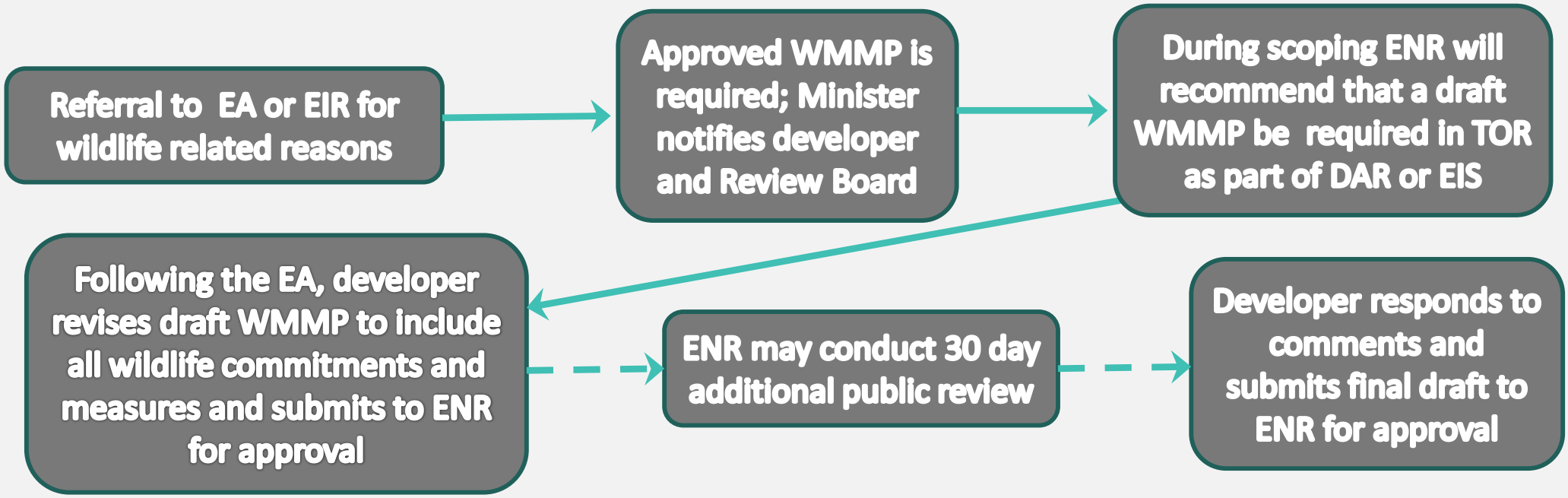
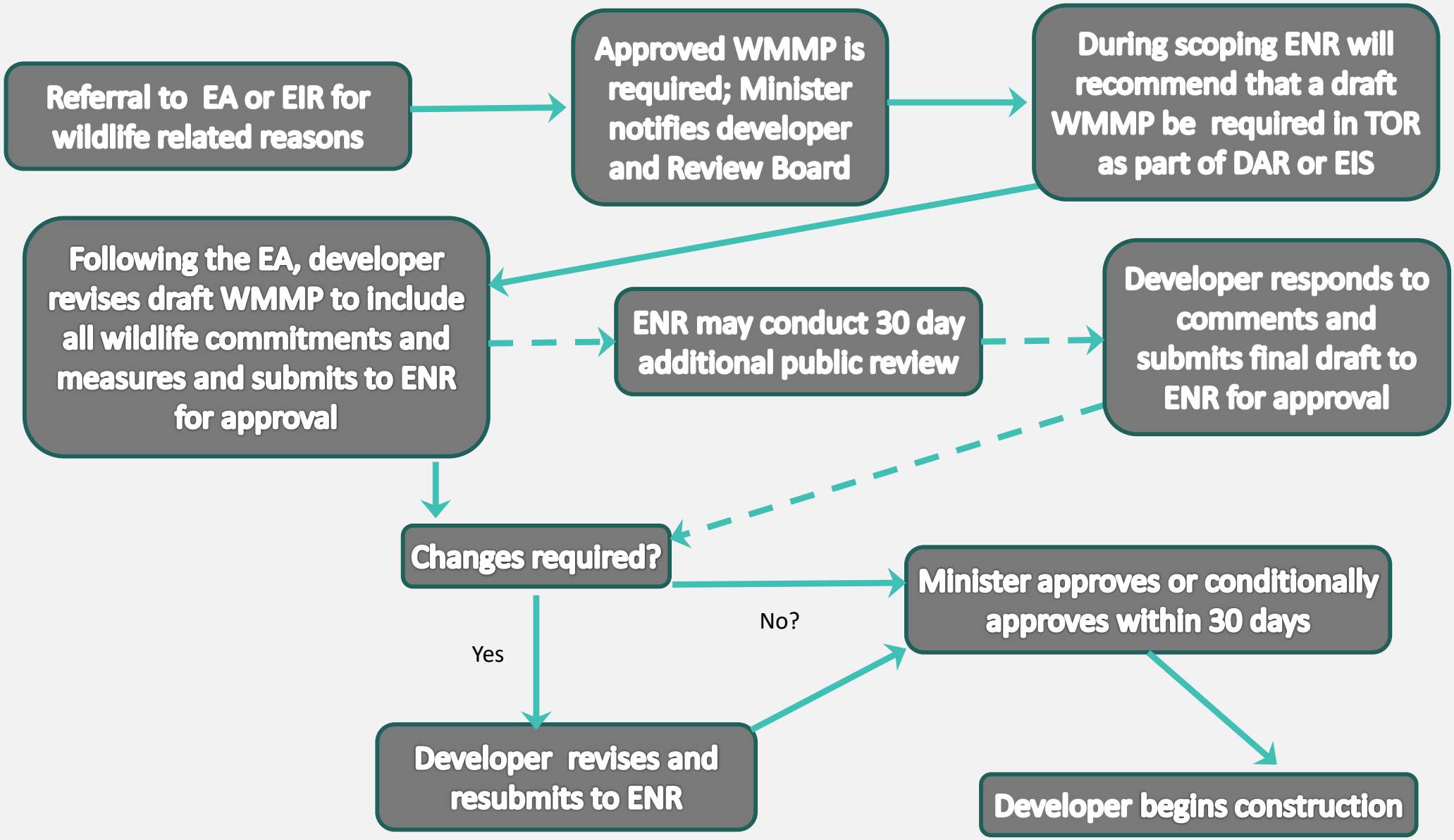


Submission, review and approval
(with EA/EIR)

Submission, review and approval
(with EA/EIR)



Submission, review and approval
(with EA/EIR)



Existing developments

- A permit that comes up for renewal or amendment will be screened against the s.95(1) criteria if it is a type of project that is “always” or “likely” to require a WMMP
- S.95(3) of the Act allows other plans to be accepted in lieu of a WMMP if the contents of the plan meet the requirements

Your thoughts?

Credit: Carl Donohue

Credit: Robert Mulders


Thank you
Mársı
Kinanāskomitin
Merci
Hąį’
Quana
Qujannamiik
Quyanainni
Máhsı
Máhsì
Mahsì
Respect.
Tradition.
Share.
Use Wildlife Wisely
Government of Northwest Territories

Photo credits

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Slide 5: Polar bears in dump: https://wattsupwiththat.files.wordpress.com/2015/04/polarbear-eat-garbage.jpg

Slide 6: Nest: Jason Simpson, Pickerel Lake NT https://mapcarta.com/24553856/Gallery/14459403949

Slide 6: Raptor nest in quarry wall: https://www.google.ca/search?q=peregrine+falcon+nest&source=lnms&tbm=isch&sa=X&ved=0ahUKEwjIrqTPhZrZAhVSIqwKHdSCCDYQ_AUICigB&biw=1670&bih=790#imgrc=oOMQPY_pmH-mSM:&spf=1518220910944


Government of
Northwest Territories

Intentions behind WMMP Guidelines

- Principles:
  - Align with the spirit of the provision;
  - Integrate with existing regulatory process;
  - Balance certainty with flexibility;
  - Scale requirements to size and nature of development;
  - Retain opportunities for meaningful input;
  - Provide tools for ease of implementation.
  - Standardize quality of WMMPs

- To be recognized in regulation

What goes in a WMMP?

Section 95 (2) of the *Wildlife Act* stipulates that WMMPs must include:

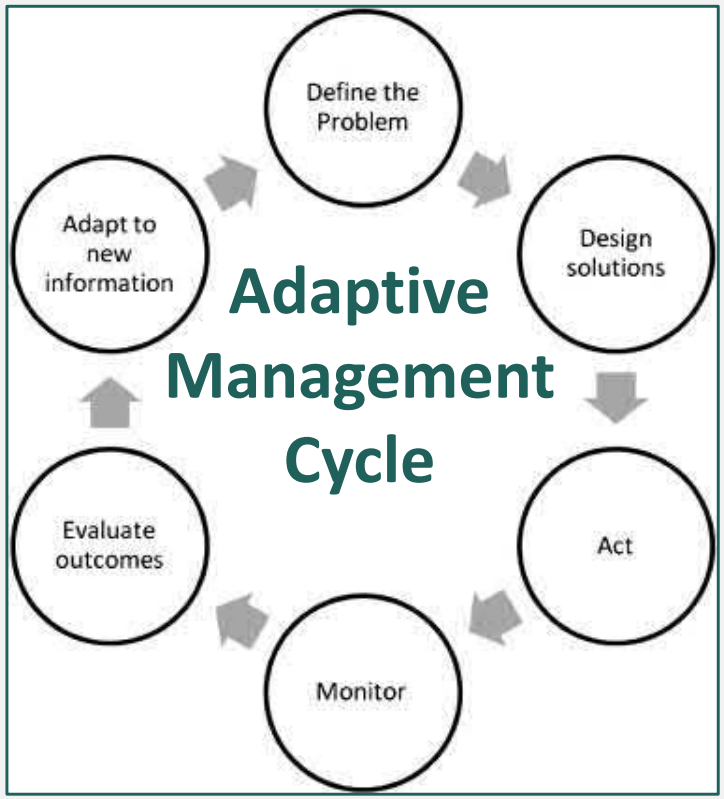
(a) a description of potential disturbance to big game and other wildlife included in the regulations, potential harm to wildlife and potential impacts on habitat;

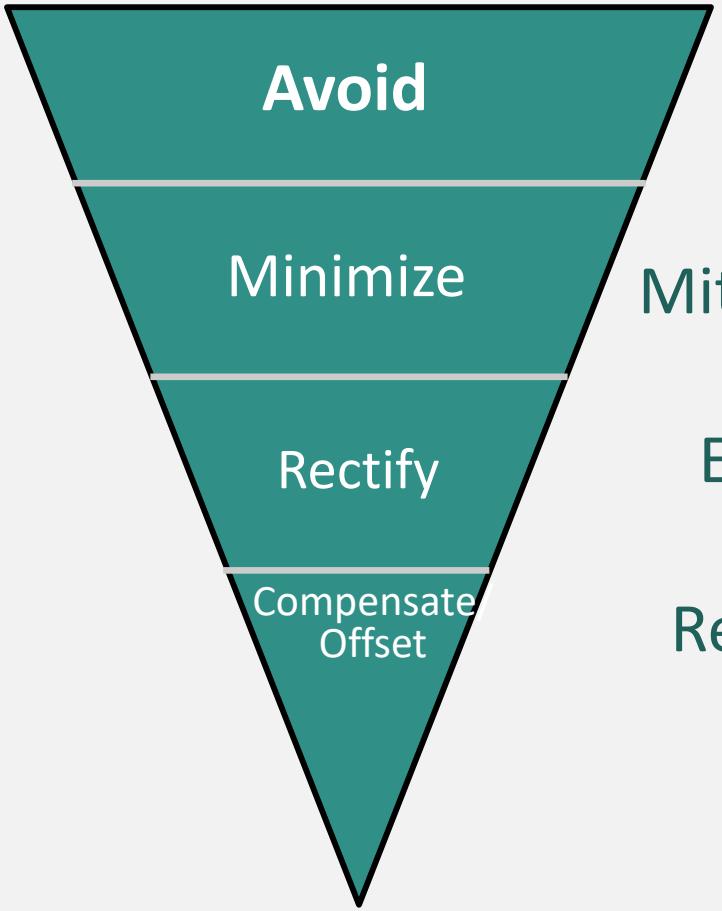
(b) a description of measures to be implemented for the mitigation of potential impacts;

(c) the process for monitoring impacts and assessing whether mitigative measures are effective; and

(d) other requirements that are outlined in the regulations.

Key Components of a WMMP





Mitigation monitoring
vs.
Effects monitoring
vs.
Regional monitoring

Tiers of WMMP

		Mitigation Monitoring	Effects monitoring	Regional monitoring &/or CE contribution
TIER 1 (Basic)	• meets 1 or more of criteria a-c • impacts well understood • greater certainty in mitigations • usually not referred to EA • Template in Appendix 2	X		
TIER 2	• meets 1 or more of criteria a-c • impacts less well understood • less certainty in mitigations • usually referred to EA	X	X	
TIER 3	• Similar to Tier 2 + criterion d (cumulative effects) • Considered a full-scale WMMP	X	X	X

Resources

- Template for Basic WMMP
- Annotated Table of Contents of a full-scale WMMP
- ENR contact information
- Examples of data sheets and SOPs
- Camp waste and Wildlife attraction manual
- Reporting protocols
- Links to key online resources.