

## Terms of Reference

### Official Name

GoA Water Body Aggregate Extraction Policy Committee

### Members/Composition

1.	Alberta Sand & Gravel Association	Kevin John	role?
2.	AAMD&C	Dwight Oliver	
3.	DFO	Tom Olson	
4.	SRD – Public Lands)	Gerry Haekel	
5.	Alberta Transportation	Bruce Blue	
6.	AENV – Regional Services	Neil Hollands	
7.	AENV – River Forecasting	Pat Stevenson	
8.	AENV – Groundwater Policy	Robert George	
9.	AENV – Regional	Larry Kuchmak	
10.	AENV – Water Policy Branch	A. Archampong	
11.	AENV – Reclamation Approvals	Ryan Puhlmann	

### Term of Membership

Six months to 1 year

### Formation Details

- How – by appointment
- Why – stakeholder interest rep and Knowledge area rep
- When – now?
- Purpose – policy to determine where applications for aggregate approvals in non-active areas of water bodies may be accepted for review.
- Response to priority? – AENV Minister request, W4L – healthy aquatic ecosystem.

### Milestones/Goals/Deliverables

- Complete policy draft by September 2010.
- Minister's report – September 2010
- Input to consultation?
- Progress Report to Minister – May 28, 2010 to include:
  - Committee struck
  - a couple meetings held
  - second/third draft of policy completed - June
- Progress Report to Minister – June to September 2010 to include:
  - Submit penultimate draft to Minister

### Jurisdiction

- Federal and provincial legislation
- Appropriate content of policy,
- Can decide on policy content but need senior management input
- Scope: Technical content and alignment with legislation.

## Resources and Budget

- Mostly within existing budget.
- Consultation cost?

## Governance

- Team reports to Senior management, deputy Minister
- 50 % of membership but if we must meet deadlines people present may need to proceed with the business at hand.
- Consensus

## Communications

- Communication by phone, meetings, email, mailing lists etc. How quickly should people respond
- Short timeline for this assignment; set response dates.

## Relationships to other groups

- This committee is not part of the Joint Technical Issues Working Group

## Related policies / By-laws

- Land Use Framework
- Water for Life strategy

## Terry Kosinski

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**From:** Terry Kosinski  
**Sent:** Thursday, June 10, 2010 4:16 PM  
**To:** Deryl Empson  
**Cc:** Sue Cotterill  
**Subject:** RE: Aggregate Extraction in Water Bodies Policy

Deryl:

Heard about the work but have not seen the document. We were trying to understand what commitment the Minister / Department might have made to participate in development of the material. Have seen the more recent e-mail from Sue with directions for a review and joint response. I had a call from Gerry Haekel in Lands this morning and will work with him to develop response from the department (due June 22).

Terry

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**From:** Deryl Empson  
**Sent:** Wednesday, June 09, 2010 10:32 AM  
**To:** Terry Kosinski  
**Cc:** Sue Cotterill  
**Subject:** FW: Aggregate Extraction in Water Bodies Policy

Terry, have you seen this? I took a quick look and would appreciate your advice before responding - the plan is to have an SRD response, rather than one from Lands and one from FWD. Thanks.

Deryl J. Empson  
Acting Assistant Deputy Minister  
Fish and Wildlife Division  
Alberta Sustainable Resource Development  
11th Floor, Petroleum Plaza, South Tower  
9915 - 108 Street  
Edmonton, AB , T5K 2G8  
Phone: 780 422-0044  
Cell: 780 991-8441  
Fax: 780 427-8884  
Email: Deryl.Empson@gov.ab.ca

Duplicate of email dated June 8, 2010 10:46AM, removed as non-responsive.



## Terry Kosinski

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**From:** David Park  
**Sent:** Friday, June 11, 2010 10:49 AM  
**To:** Terry Kosinski  
**Subject:** RE: Aggregate Extraction in Water Bodies Policy

Terry,

It's been my approach from the start that once the distinction between active channel and beyond is made as the basis for a defined approach in that zone, that terrestrial values are integrated in agg. extraction policy development more broadly. Brett should definitely be involved.

I look forward to seeing how this progresses.

Dave

Duplicate of email dated June 10, 2010 4:18PM & June 9, 2010 10:47AM, removed as non-responsive.

**From:** Terry Kosinski  
**Sent:** Monday, June 21, 2010 2:59 PM  
**To:** Gerry Haekel  
**Cc:** David Park; Sue Cotterill; Ron Bjorge  
**Subject:** FW: Aggregate Extraction in Water Bodies Policy

**Attachments:** Gravel Extraction in Rivers Policy - Draft - June-10 (2)- DJP comments.doc  
Hi Gerry:

Dave and I both called this morning about the meeting at 9:30. I guess you were delayed or had to change plans.

I added my comments to the document that Dave sent you. A number of questions, suggestions and clarifications.

This policy has significant implications to SRD given department's mandate for management and conservation of public land and resources. Role of SRD needs to be clarified; seems "down-played" at times. Also need to acknowledge that aggregate extraction in non-active areas of water bodies (would include floodplains by my understanding) can have significant effects on wildlife and wildlife habitat; include more reference to wildlife and terrestrial species.

Good to see the support for no aggregate extraction from the active channel but more details on the risk-based approach are needed to evaluate the draft policy. See the comments in the document about the flow chart. Process should have AENV, SRD, DFO approval before municipal government approval of development. Can see the situation developing where applicants expectations will be raised considerably if they receive approval from the municipal government then go to GoA for approval of the operation.

I'll let you take a stab at the consolidated response from SRD. If I'm around I'll review the letter before it goes to the ADMs. Dave will be out of the office until Thursday. I'm here tomorrow, out on Wed, and back on Thursday.

Terry

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**From:** David Park  
**Sent:** Monday, June 21, 2010 12:15 PM  
**To:** Terry Kosinski  
**Cc:** Gerry Haekel  
**Subject:** RE: Aggregate Extraction in Water Bodies Policy

Terry,  
I've inserted comments in the attached.



Gravel Extraction in  
Rivers Po...

Dave



## Section A: Policy Context

### Purpose

- Develop GoA guidelines to support the regulatory approval processes for aggregate extraction operations in active and non-active areas of water bodies.

**Comment [DJP1]:** If occurring on public land, should SRD not be the lead agency in developing policy and process?

**Comment [T2]:** Definition of waterbodies is so broad that this policy will have far-reaching consequences

### Policy Issue

- There is a need to clarify the position of the GoA on the management and regulation of existing and future aggregate extraction operations located within surface water bodies and adjacent floodplains so that existing, new, and undeveloped aggregate extraction operations are dealt with in a fair and consistent manner across the province.

**Comment [DJP3]:** Is management in scope for this exercise, or is it really about regulation? For example, if management is in scope, then the policy should contain some coverage of pit operations that pertain to wise-use of the resource, such as completely mining out and reclaiming a site, as opposed to only partially mining it out and leaving it in a semi-mined and unreclaimed state for years

### Explanation of Problem

- Aggregate extraction within the active and non-active areas of surface water bodies has occurred in the province for several decades. The ease of access to the aggregate and associated low development cost may have influence on this choice. Aggregate extraction is an important contributor to economic activity in Alberta.
- Aggregate extraction is a concern as the associated operations have been shown to have significant adverse effects on aquatic species and habitat, water quality, and the configuration of the bed, banks and shores of water bodies. Physical changes to a water body, as a result of extraction operations, have also been shown to have an adverse effect on adjacent lands and infrastructure upstream and downstream of the operation location.
- Another problem is multi-agency involvement in regulation and management.

**Comment [T4]:** Flood plains adjacent to rivers will be included. Potential implications for considerable areas of public lands throughout this province. SRD needs larger role in development and implementation

**Comment [T5]:** Impacts on wildlife habitat also needs to be added to the list. Potential for considerable conflict between sand and gravel resources and wildlife habitat, especially in river valleys and riparian areas

**Comment [DJP6]:** Not just changes to the waterbody proper need to be considered, but also changes to the adjacent lands that relate to the waterbody (e.g. changes to drainage, riparian habitat, potential sediment intrusion, road building, etc.)

### Background/Current State

- Aggregate extraction operations on public and private lands in Alberta are regulated under three provincial enactments: the *Water Act* (Alberta Environment), the *Public Lands Act* (Alberta Sustainable Resource Development), and the *Environmental Protection and Enhancement Act* (Alberta Environment). These have separate and distinct regulatory processes that are not

well integrated, which sometimes has led to differing approval terms, conditions and requirements.

- The *Municipal Government Act* (Municipal Affairs) authorizes municipal governments to create bylaws. Through these bylaws some municipalities have a development approval process and require a development permit for aggregate extraction. Provincial ministries, including Alberta Transportation, are not bound by this *Act* or the regulations or bylaws it enables.
- Aggregate extraction operations situated in or adjacent to water bodies must also meet federal regulatory requirements under the *Fisheries Act* (Department of Fisheries and Oceans), the *Navigable Waters Protection Act* (Transportation Canada), and possibly the *Canadian Environmental Assessment Act* (Environment Canada) or the *Species at Risk Act* (Environment Canada). Meeting provincial standards and requirements (including the Code of Practice for Pits with respect to species at risk and rare plants) does not ensure that federal regulatory requirements will be met.
- In the past 10 years, DFO has declined issuing authorizations under the *Fisheries Act (Canada)* and AENV has declined issuing approvals under the *Water Act* for aggregate extraction related activities; potentially SRD may also exercise the option to decline issuing a mineral surface lease in support of SRD fisheries objectives.
- An activity that causes sediment transport in active areas of water bodies is considered an act of harmful alteration, destruction, disruption of fish habitat, and requires authorization under the *Fisheries Act*. DFO does not issue such authorizations for aggregate extraction on a routine basis. Prior to issuing the authorization, the potential impacts of the project pursuant to the *Canadian Environmental Assessment Act* may be assessed.
- DFO recommends against water body aggregate extraction in general (including in the non-active portion) until more substantive work on its effects can be completed. Until such time, DFO recommends we err on the side of caution and adopt a guideline that allows us to be more restrictive in sensitive areas yet is still flexible enough to allow extraction in areas of little or no concern.
- This approach is consistent with the objectives of SRD, under the *Public Lands Act*, and AENV, under the *Water Act* and the *Environmental Protection and Enhancement Act*, who are required to consider the protection of aquatic environment when issuing approvals.
- There is an increasing demand for aggregate resources. This demand is countered by public opposition to allowing aggregate extraction operations in water bodies.



- Current policy prohibits gravel extraction from treed islands (have significant wildlife and public interest values)
- Review by the Joint Technical Issues Working recommends extending the moratorium on aggregate extraction from the active channel.

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Comment [T7]: We have to sort out the process for moving this recommendation up in SRD and AENV

#### Work to Date

- Numerous attempts have been made at a GoA Water Body Aggregate Extraction policy. Due to the number of parties involved, it has been difficult to obtain consensus. AENV has decided that it is time to take the lead on the development of the GoA's interim position on water body aggregate extractions until a GoA-Canada policy can be negotiated.
- The Joint Technical Issues Working Group (JTIWG) has provided recommendations for aggregate extraction in the active area of water bodies. Their consensus is not to permit any extraction in any active area of any water body at any time. The Group proposes that this be adopted by the GoA and Canada.

Comment [T8]: So is this work to develop an interim policy or a more 'final' policy

#### Drivers for Project and Key Decision Maker

- There is no formal provincial policy on water body aggregate extraction. The approach to water body aggregate extraction requires clarity, as requests from the public are increasing and the GoA requires a consistent and fair course of action.
- In recent years there has been increased demand from some counties (Brazeau/Wetaskiwin) to extract aggregate from the active portion of river systems. This increased demand comes from a shortfall in the counties' resource ownership and the significant costs associated with buying aggregate privately. Additionally, the counties are dealing with rising development pressures, resistance to aggregate extraction operations close to current residential developments. Counties also want to develop consistent bylaws and area structural plans and have requested GoA presence to discuss aggregate extraction, both in active and non-active areas of water bodies.
- Clear and consistent guidelines for both new and existing aggregate extraction operations will ensure a higher level of protection for the environment.
- Key decision-makers: Alberta's Minister of ENV, Minister of SRD
  - For this interim GoA policy, the Minister of AENV would be the principal decision-maker

#### Relationship to Wider GoA Priorities

- *Land-Use Framework*
  - Strategy 1: Develop seven regional land-use plans based on seven new land-use regions.



- Need to provide guidance to LUF regional plans as to where aggregate extraction from water bodies may be acceptable.
    - Would enable 'place-based' responses to aggregate extraction approval applications, but provide a provincially consistent policy to determine whether or not it would be acceptable in the provincial policy and regulatory contexts.
  - Strategy 3: Cumulative effects management will be used at the regional level to manage the impacts of development on land, water, and air.
    - Need to have a consistent policy so that the cumulative effects of aggregate extraction are considered and managed.
  - Strategy 4: Develop a strategy for conservation and stewardship on private and public lands
    - Aggregate extraction policy would be applicable to public and private lands. Environmental impacts would be the primary focus of the risk assessments required for proponents to obtain approvals.
- *Water for Life Strategy*
  - Supports Healthy Aquatic Ecosystems outcome through the required risk assessments that would ensure the maintenance and preservation of natural habitat.
    - Action 2.1: Enforce protection of known critical aquatic ecosystems using existing legislation
    - Action 2.6: Implement aquatic restoration plan and conserve key aquatic ecosystems through regional land-use approaches and identified partnerships
- **Alberta's Fish Conservation and Management Strategy 2011-2015 (draft – update to the previous Fish Conservation Strategy for Alberta: 2006-2010):**
  - **Fish and Ecosystem Conservation Aim - Wild fish species are maintained in a healthy, biologically diverse ecosystem to optimize and sustain environmental, economic and social benefits to Albertans**
- **Regulatory Alignment Project**
  - Would clarify the regulatory process for aggregate extraction operations, supporting the initiative of this project.

#### Key Stakeholders

- Proponents – mostly commercial users of aggregate, including Alberta Ministry of Transportation
- Municipalities – create bylaws with respect to aggregate extraction
- AENV – Approvals
  - Issues approvals under the *Water Act* for aggregate extraction
  - Approvals assess water quantity impacts, as well as potential water quality impacts for both surface and ground water
  - As part of the approvals process, the River Forecasting Section (formerly River Engineering) may assess impacts on river morphology through the AENV approval process
- AENV – EPEA

- Identifies conservation and reclamation requirements
- Administers Guide to the Code of Practice for Pits
- **SRD** –
  - Defines fisheries and habitat conservation objectives
  - Defines / confirms (?) wildlife and wildlife habitat values and issues.
  - Note – need a bullet that defines SRD role in the regulatory side of aggregate extraction. Seems to be major oversight from this section.
  - Delineates non-active areas of water bodies where extraction could be considered
  - Defines the acceptable periods of time for extraction activities
  - Reviews proponent’s approval application for effects on habitat; provides recommendations / direction / advice on appropriate mitigation.
- **DFO** –
  - Reviews proponent’s authorization application for HADD of fish habitat
- First Nations – both a proponent and affected by environmental outcomes
- Public – affected by environmental outcomes

**Comment [DJP9]:** SRD also has an approvals role under the Public Lands Act, which may well be more pertinent than Water Act approval

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**Comment [DJP10]:** DFO also has an approvals role, which may be the most pertinent

**Consultation Plan**

Sector	When consultation should occur	Group needs/special requirements	Desired outcome of consultation	Appropriate methods of consultation
AENV	Immediately	Consider regions, EPEA and WA approvals	Aggregate Extraction Policy	Meetings
SRD	Immediately	Require instructions from Minister of SRD to participate	Approval of proposed policy. Agreement to develop a ToR.	Meetings
DFO	Immediately		Acceptance of proposed policy. Agreement to develop a ToR.	Meetings
Municipal and Local Govts	Following approval of proposed policy. Before approval of final policy.	Particularly Alberta Association of Municipal Districts & Counties	Acceptance of proposed policy. Awareness of policy changes & understanding of required process.	Focus groups
Proponents	Following approval of proposed policy. Before approval of final policy.	Particularly Alberta Sand & Gravel Association; Alberta Ministry of Transportation	Awareness of policy changes & understanding of required process.	Focus groups
First	Following	First Nations has	Awareness of	Meetings –



Nations	approval of proposed policy. (Consider 'engagement' or 'consultation'.) Before approval of final policy.	the ability to have Sand & Gravel development adjacent to their reservations. However, we also need to be cognizant of how to deal with proposed Sand & Gravel operations by First Nations involving water bodies.	policy changes & understanding of required process.	likely require presence of our FN advisors/consultation specialists.
Public	Following approval of proposed policy. Before approval of final policy.	Level of consultation should reflect level of policy and degree of changes	Awareness of policy changes.	Internet-based questionnaire

## Section B: Proposed Policy

### Vision and Outcomes

- Water body aggregate extraction operations are carried out responsibly to ensure the maintenance and protection of the natural morphology of water body systems, including aquifers, and the quality of water they contain (natural habitat for terrestrial and aquatic species).
  - Water body aggregate extraction is permitted to occur only in areas where it would not adversely impact the environment or aquatic ecosystems
  - The GoA has a common and consistent approach to requests for water body aggregate extraction
  - The roles and responsibilities of regulators are clearly defined

### Assumptions and Principles

- This policy promotes a risk-based approach to water body aggregate extraction
- Water body aggregate extraction in any active area of a water body will have adverse impacts
- Water body aggregate extraction in a non-active area of a water body is an important economic opportunity
- All water body aggregate extraction applications will be processed according to the guidance outlined in this policy (which considers all regulatory mandates)
- Re: jurisdiction and inter-agency function

**Comment [T11]:** Need definition of risk-based approach prior to finalizing policy

**Comment [T12]:** Aggregate extraction in non-active area (e.g. flood plain) can also have adverse impacts on species and habitat (terrestrial species)

**Comment [DJP13]:** I argue that this document assumes an order of regulatory review and process that places the lowest level of government first in order (e.g. municipal development permit is obtained without any GoA or GoC approval)

A key matter is which agency has regulatory primacy, and when? E.g. when public land is involved, does Water Act or PL Act have primacy? This will define regulatory role and process

**Policy Guidelines**

**I. New Aggregate Extraction Operations**

- o For proposed operations located within the active area of a water body no approvals are permitted.
- o For proposed operations located within the non-active area of a water body approvals will only be considered when:
  - A risk assessment of the environmental and third-party impacts is completed by a qualified third party and is submitted with the approval application to AENV.
    - Any adverse effects on the land and/or aquatic environment (including but not limited to fisheries and wildlife resources, water quality, groundwater and river dynamics) resulting from the aggregate extraction operations must be identified.
    - The proponent must demonstrate the ability to mitigate or compensate for the above effects in a manner acceptable to AENV.
  - All municipal bylaws and provincial and federal regulations, statutes, and policies have been met.

**Comment [DJP14]:** Good Consistent with JIIWG

**Comment [DJP15]:** The devil's in the details here Where will risk factors be outlined?

**Comment [T16]:** SRD will also have a role in review and approval along with AENV

**Comment [DJP17]:** Must go beyond this The proponent must commit to a mitigation, compensation and reclamation plans related to their activity, not just demonstrate the ability Regulators must agree to these plans

**II. Existing Aggregate Extraction Operations**

- o Will be allowed to continue for the remaining term of the *Public Lands Act*, *Environmental Protection and Enhancement Act*, or *Water Act* approvals, subject to the requirements under the *Fisheries Act*. After this time, a renewal of an authorization (including an approval and/or registration) will include a plan to bring the existing operation into compliance with the requirements outlined for new aggregate operations.

**III. Undeveloped Aggregate Extraction Operations**

- o Undeveloped aggregate extraction operations that have a *Public Lands Act* approval but no *Environmental Protection and Enhancement Act* or *Water Act* approvals will be considered a new operation and are subject to similar classifications and requirements.

**IV. Emergency Situations**

- o Applications will be reviewed and approved by AENV regional staff on a case-by-case basis. The above guidelines may not be applicable.

**Tools and Responsibilities**

The following table indicates how the above guidelines will be implemented by identifying the organization, the tool used, and the organization's role in the water body aggregate extraction authorization process.

Organization	Tools	Roles
Local Govt.	Bylaws Land zoning	Continue with existing programs; some fine tuning in



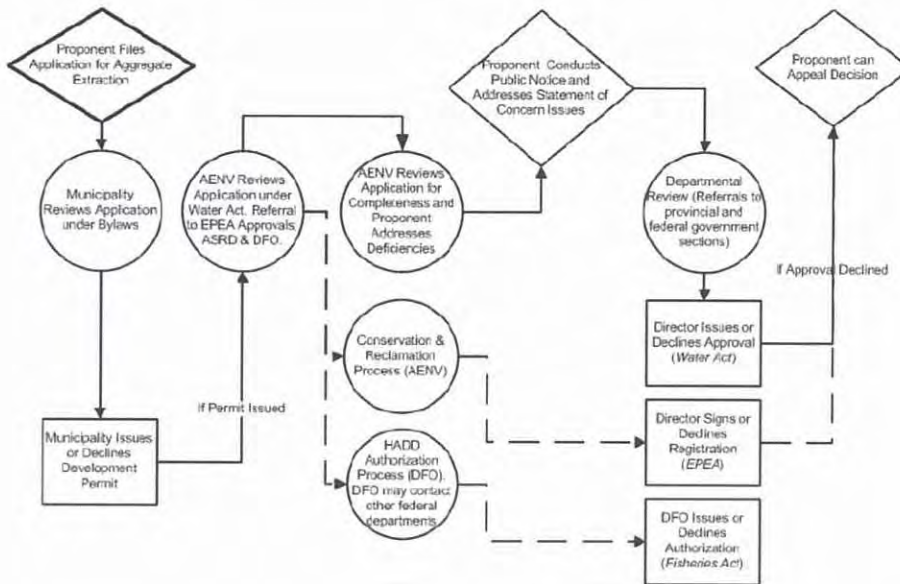
	Development permits	land zoning may be desirable.
AENV	<i>Water Act</i> Approvals Compliance programs	Regional Services will support policy through existing programs using existing approval review process
AENV	<i>EPEA</i> Conservation & Reclamation Regulation and Program CoP for Pits – Registration C&R Plan	C & R will support policy through existing programs, registration under the CoP, normal administration of security
SRD	<i>Public Lands Act</i> Fisheries objectives Fish & Wildlife objectives; <u>species at risk</u> Surface Materials Lease	Support with existing programs <u>Regulatory role under Public Lands Act.</u>
DFO	<i>Fisheries Act</i> authorizations	Support with existing programs
Environment Canada	<i>Canadian Environmental Assessment Act</i> assessments <i>Species At Risk Act</i> assessments	Support with existing programs
Transport Canada	<i>Navigable Waters Protection Act</i> authorizations	Support with existing programs
First Nations	Alberta First Nations Policy for Consultation	Support with existing programs

#### Application Approval Process

Currently applications for water body aggregate extraction may be reviewed by various municipal governments, provincial and federal regulatory bodies (outlined in the Tools & Responsibilities section). The flow chart below is intended to show the interactions between these regulatory bodies and the review processes that are triggered within each department. It is not intended to illustrate the details of each departmental review process.

**Comment [T18]:** Agree with comment below from Dave Park: Approval by municipal government should not be the first step; will create problems if regulators review recommends refusal. Need some revisions to the process including demonstration of improved integration of the process.

**Comment [DJP19]:** But it does illustrate the order, which puts local government approval before provincial or federal approval. This is a problematic matter for both the proponent and regulators. The local government gives approvals sans environmental review, which gives the proponent expectations of moving forward before the real regulators are dealt with. The order should be from highest to lowest government.



In order for the proponent to be able to initiate water body aggregate extraction, several applications for authorization may be required (depending on which organizations and which tools are triggered). The list below details the required provincial and federal regulatory applications. It is recommended that these applications be integrated into a single 'Water Body Aggregate Extraction Application Package'. Since municipal development permits are not required in all cases, they are excluded from this list.

**Documents Required for Submission by Proponent:**

- Surface Materials Lease, Disposition Reservation, and Conservation & Reclamation Business Plan (to be discussed further)
- AENV *Water Act* approval and/or licence application
  - Environmental and Third Party risk assessment
- AENV *EPEA* Code of Practice for Pits registration form
  - Conservation & Reclamation Plan
  - Security form
- SRD authorization application
- DFO and/or Navigable Waters authorization application

**Comment [DJP20]:** Why Nav Waters, if there's no in-water/channel activity?

**Implementation Plan**

- Policy would be effective immediately following Ministerial approval.
- No legislative changes are required.
- Terms of Reference for joint review of risk assessments and applications among municipal, provincial and federal departments will be drafted immediately

**Comment [DJP21]:** This is a GoA policy, so more than AENV Minister needs to approve!

**Comment [T22]:** Need to develop risk assessment guidelines and process before policy signed-off



following approval of this policy. It is suggested a one-window approach for submission of approval applications be developed.

#### Monitoring and Evaluation Plan

- Adaptive management approach. Suggest policy review every 10 years, which is compatible with the Regional Planning process.

#### Working Definitions

- **Active area of a water body:** Area lying between the ordinary high water marks on each bank.
- **Aggregate:** Any sand, gravel, clay or marl that is excavated from a pit, whether in a processed or unprocessed form, but does not include reject.
- **Emergency Situation:** Any situation that may jeopardize human life or infrastructure
- **Extraction:** Includes the stripping and stockpiling of soil, overburden, and aggregate materials and the transport of said materials within the site.
- **Non-active area of a water body:** Any area of a water body that is not included in the definition of an active area.
- **Ordinary high water mark:** The usual average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land. In flowing waters (rivers, streams) this refers to the "active area of a water body/bank-full level" which is often the 1:2 year flood flow return level.
- **Reject:** Aggregate that is expected to be unsuitable for use as a product, or for blending with other aggregate to form a product, and is therefore expected to be used for reclamation of the pit.
- **Water body (*Water Act*):** Any location where water flows or is present, whether or not the flow or the presence of water is continuous, intermittent or occurs only during a flood, and includes but is not limited to wetlands and aquifers but does not include except for clause (nn) and section 99 "water body" that is part of an irrigation works if the irrigation works is subject to a licence and the irrigation works is owned by the licensee, unless the regulations specify that the location is included in the definition of water body.

Comment [DJP23]: Really? That's pretty much everywhere...

This also has a flowing water smell to it. Should be more explicit about relevance to standing water

#### Attachments

- Diagram of active area of a water body and non-active area of a water body
- Map of areas where aggregate extraction in the non-active area of a water body would be considered and list of acceptable times of year (from SRD)
- Requirements for 'qualified third party' designation for completion of risk assessments and/or reclamation

Comment [T24]: Like to see attachments

**Terry Kosinski**

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**From:** Gerry Haekel  
**Sent:** Monday, June 21, 2010 3:17 PM  
**To:** Terry Kosinski  
**Cc:** David Park; Sue Cotterill; Ron Bjorge  
**Subject:** Re: Aggregate Extraction in Water Bodies Policy

Sorry, I had to do a presentation at the national land directors conference this morning. I will try to phone shortly.

*Duplicate of email dated June 21, 2010 2:59PM, removed as non-responsive.*  
Sent from Gerry Haekel's Blackberry




## Terry Kosinski

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**From:** Gerry Haekel  
**Sent:** Thursday, June 24, 2010 2:22 PM  
**To:** Donna Goertzen  
**Cc:** Trisha Chieng; Sue Cotterill; Annette Krumm; Jeff Reynolds; Todd Letwin; Glenn Selland; Terry Kosinski  
**Subject:** RE: Aggregate Extraction in Water Bodies Policy

Thanks Donna. We were waiting for this and I will be advising both Doug Knight and Augustus (Archie) Archampong of AENV's policy group, that we will be participating more directly now.

Gerry Haekel, P.Biol.  
Head, Riparian Land Management & Water Boundaries Unit  
Land Management Branch, Lands Division  
Alberta Sustainable Resource Development  
3rd Floor, South Petroleum Plaza  
9915-108 Street  
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**From:** Donna Goertzen  
**Sent:** Thursday, June 24, 2010 1:33 PM  
**To:** Gerry Haekel  
**Cc:** Trisha Chieng; Sue Cotterill; Annette Krumm; Jeff Reynolds; Todd Letwin; Glenn Selland; Terry Kosinski  
**Subject:** RE: Aggregate Extraction in Water Bodies Policy  
**Importance:** High

Hi Gerry,  
Todd has just advised that we will need to be engaged in this policy development (MO is expecting this) and he will follow up further for our go-forward involvement (F&W and Lands). For now, to respond to Ernie by tomorrow, can you please provide the concerns you have already identified.

Thanks Duplicate of email dated June 9, 2010 10:47AM, removed as non-responsive.

## Terry Kosinski

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**From:** Gerry Haekel  
**Sent:** Friday, June 25, 2010 10:00 AM  
**To:** Terry Kosinski; David Park  
**Subject:** Draft 3 of the Aggregate Extraction Policy

**Importance:** High

**Attachments:** Aggregate Extraction Policy\_v3\_20100621(GH).doc

Gentleman, I received a more recent copy of the draft policy Environment has been working on late yesterday. I reviewed last night and made some comments (see attached).




Aggregate  
xtraction Policy\_v3..

There are still some issues that I have. We need to see the risk based approach more defined as well as what constitutes a "qualified third party". The implementation plan needs to reside outside the Policy. The policy needs to provide staff direction and anything relating to future work has no place in that policy.

I know our response is due today, but I thought we should comment on the latest version. Have a quick look and let me know what you think.

Gerry Haekel, P.Biol.  
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**GoA Water Body Aggregate Extraction Policy**  
**(Operational approval procedures)**  
**Draft 3**

**Purpose**

Develop GoA guidelines to support the regulatory approval processes for aggregate extraction operations in active and non-active areas of water bodies.

**Vision and Outcomes**

aggregate extraction operations in proximity to water bodies are carried out responsibly to ensure the maintenance and protection of the natural morphology of water body systems, including aquifers, and the quality of water they contain (natural habitat).

- aggregate extraction proximal to water bodies is permitted to occur only in areas where it would not adversely impact the environment or aquatic ecosystems
- The GoA has a common and consistent approach to requests for water body aggregate extraction
- The roles and responsibilities of regulators are clearly defined

**Assumptions and Principles**

1. This policy promotes a risk-based approach to aggregate extraction within or in proximity to water bodies.
2. aggregate extraction in any active area of a water body will have adverse impacts
3. aggregate extraction in proximity to a non-active area of a water body may have an adverse impact
4. All aggregate extraction applications related to a water body or in proximity to a water body will be processed according to the guidance outlined in this policy (which considers all regulatory mandates)

**Policy Direction**

1. **New Aggregate Extraction Operations**
  - 1.1. For proposed operations located within the active area of a water body, no approvals will be issued.
  - 1.2. For proposed operations located in proximity to a water body, approvals will only be considered when:
    - 1.2.1. A risk assessment of the environmental and third-party impacts is completed by a qualified third party.

**Comment [MoD1]:** Not a ENV policy so it needs to meet all AB regulators needs.

**Comment [MoD2]:** Although premised on WA definition, confusing for other regulators as well as public as it implies policy for in-water extraction.

**Comment [MoD3]:** Is this policy meant to apply to other water body types? If not, can we just say watercourses?

**Comment [MoD4]:** Implies on any upland! This should mean in immediate proximity to a water body.

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**Comment [MoD5]:** Does not speak to wildlife management objectives relating to floodplains as wildlife corridors

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**Comment [MoD6]:** Would this apply to islands?

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**Comment [MoD7]:** define

**Comment [MoD8]:** define

**Comment [MoD9]:** define

- Any adverse effects on the land and/or aquatic environment (including but not limited to fisheries and wildlife resources, water quality, groundwater and river dynamics) resulting from the aggregate extraction operations must be identified.
  - The proponent must demonstrate the ability to mitigate or compensate for the above effects in a manner acceptable to all regulatory mandates.
- 1.2.2. The proponent demonstrates how all municipal bylaws and provincial and federal regulations, statutes, and policies will be met.

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2. Existing Aggregate Extraction Operations

2.1. Will be allowed to continue for the remaining term of the *Public Lands Act*, *Environmental Protection and Enhancement Act*, or *Water Act* authorizations, subject to the requirements under the *Fisheries Act*. After this time, a renewal of an authorization will include a plan, where necessary, to bring the existing operation into compliance with the requirements outlined for new aggregate operations.

3. Undeveloped Aggregate Extraction Operations

3.1. Undeveloped aggregate extraction operations that have a *Public Lands Act* approval but no *Environmental Protection and Enhancement Act* or *Water Act* approvals will be considered a new operation and are subject to similar classifications and requirements.

4. Emergency Situations

4.1. Applications will be reviewed and approved by regulatory authorities on a case-by-case basis. The above guidelines may not be applicable.

**Tools and Responsibilities**

The following table indicates how the above direction will be implemented by the parties to this agreement, the tools used, and the party's role in the water body aggregate extraction authorization process.

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Organization	Tools	Roles/Activities
AENV	<i>Water Act &amp; EPEA</i> authorizations	(i) assess application for: - water quantity impacts, including on upstream and downstream users - water quality impacts for both surface and ground water - impact on river morphology, including bed and bank stability <u>upstream and downstream of the site</u> - impact on riparian areas <u>-delineate non-active areas of water bodies where extraction could be considered</u>



	<p>Compliance programs (<i>Water Act &amp; EPEA</i>)</p> <p>Alberta First Nations Policy for Consultation</p> <p><i>Conservation &amp; Reclamation Regulation</i>, including Code of Practice for Pits (and Guide) and registrations, Conservation &amp; Reclamation plan and program</p>	<p>(ii) enforce authorizations with compliance programs</p> <p>(iii) may require First Nations consultation</p> <p>(iv) use the Regulation to: -administer securities -identify conservation and reclamation requirements</p>
SRD	<p><i>Public Lands Act</i></p> <p>Fish &amp; Wildlife objectives</p> <p>Guidelines for Acquiring Surface Material Dispositions on Public Land</p> <p><i>Disposition &amp; Fees Regulation</i></p> <p>Compliance???</p> <p>Policy???</p>	<p>(i) no dispositions will be issued within the active area of a water body</p> <p>(ii) delineate non-active areas in proximity to water bodies where extraction could be considered</p> <p>(ii) assess application for effects on habitat using Fish &amp; Wildlife objectives.</p> <p>(iii) assess application for ???</p> <p>(iv) identify conservation and reclamation requirements</p> <p>(v)</p> <p>(vi) may require First Nations consultation</p>
DFO	<i>Fisheries Act</i> authorizations	(i) assess application for HADD of fish habitat

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Comment [MoD10]: This should be defined as a setback from a water body

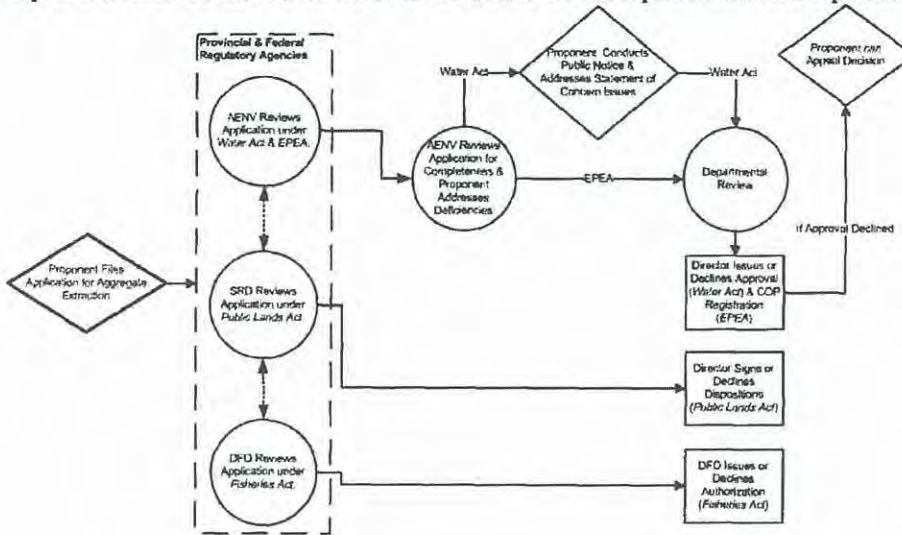
Proponents may also need to consider the following (and associated regulatory requirements):

- Species at Risk (*Species at Risk Act*, Environment Canada)
- Navigability (*Navigable Waters Act*, Environment Canada)
- Land Use Regulations (*Alberta Land Stewardship Act*, Sustainable Resource Development)
- Local Land Use Restrictions (Bylaws, Local Municipalities)
- Cultural and Archaeological Sensitivities (Regulation?, Department?)

- Traditional Use (Regulation?, Department?)

### Application Approval Process

The flow chart below is intended to show the interactions between the regulatory bodies that are party to this agreement and the review processes that are triggered within each department. It is not intended to illustrate the details of each departmental review process.



In order for the proponent to be able to initiate water body aggregate extraction, several applications for authorization may be required (depending on which organizations and which tools are triggered). The list below details the required provincial and federal regulatory applications. Note that regulatory requirements external to the three parties to this agreement are excluded.

#### Documents Required for Submission by Proponent:

- SRD *Public Lands Act* dispositions
- AENV *Water Act* approval and/or licence application
- AENV *EPEA* Code of Practice for Pits application
- DFO authorization application

**Comment [MoD11]:** All these required for which approval? This reads like its for a WA approval, yet is supposed to be for GoA. I suggest reframe documentation required to satisfy the primary regulators – a more one-window approach.

#### Implementation Plan

Policy would be effective immediately following Ministerial approval. No legislative changes are required.

**Comment [LB12]:** Do we require an appendix that outlines anticipated timelines and resource requirements?

**Comment [MoD13]:** A policy document should not contain an implementation plan. This should be separate. It is not policy. Policy needs to stand on its own and give the guidance for decision making.

1. Develop a strategy to coordinate regulatory review.



- 1.1. Establish a consistent referral process.
  - 1.2. Streamline review process.
  - 1.3. Clarify roles of regulatory agencies, particularly with respect to emergency procedures.
  - 1.4. Consider developing a single 'Water Body Aggregate Extraction Application Package'.
2. Develop a strategy for sharing and educating on the Water Body Aggregate Extraction Policy.
    - 2.1. GoA Departments;
    - 2.2. Partners & public;
    - 2.3. Proponents.
  3. Develop guidance around the required Risk Assessment.

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**Monitoring and Evaluation Plan**

- Adaptive management approach. Suggest policy review every 10 years, which is compatible with the Regional Planning process.

Comment [MoD14]: How will application of policy be evaluated?

**Attachments**

- Diagram of active area of a water body and non-active area of a water body
- Requirements for 'qualified third party' designation for completion of risk assessments and/or reclamation

Comment [MoD15]: Both of these need to be in place as part of policy. Suggest onus be on professional reliance and that qualified 3<sup>rd</sup> party and sign-off be from a member of a professional regulated organization

**Endorsement**

The following parties agree to adhere to the principles and process outlined above. These guidelines are effective from the date of signature. Amendments may be made at any time by mutual consent and sign-off of the parties below.

Signatures: Participating Organizations

**Government of Canada: Fisheries and Oceans Canada**

\_\_\_\_\_

XXXX

\_\_\_\_\_

Date

**Government of Alberta: Alberta Sustainable Resource Development**

\_\_\_\_\_

\_\_\_\_\_  
, Minister

\_\_\_\_\_  
Date

**Government of Alberta: Alberta Environment**

\_\_\_\_\_  
, Minister

\_\_\_\_\_  
Date



## Appendix 1: Explanation of Problem & Current Policy Context

### Explanation of Problem

Aggregate extraction within the active and non-active areas of surface water bodies has occurred in the province for several decades. The ease of access to the aggregate and associated low development cost may have influence on this choice. Aggregate extraction is an important contributor to economic activity in Alberta.

Aggregate extraction is a concern as the associated operations have been shown to have significant adverse effects on aquatic species and habitat, water quality, and the configuration of the bed, banks and shores of water bodies. Physical changes to a water body, as a result of extraction operations, have also been shown to have an adverse effect on adjacent lands and infrastructure upstream and downstream of the operation location.

### Background/Current Regulatory State

#### *Provincial:*

Aggregate extraction operations on public and private lands in Alberta are regulated under three provincial enactments: the *Water Act* (Alberta Environment), the *Public Lands Act* (Alberta Sustainable Resource Development), and the *Environmental Protection and Enhancement Act* (Alberta Environment). These have separate and distinct regulatory processes that are not well integrated, which sometimes has led to differing approval terms, conditions and requirements.

#### *Municipal:*

The *Municipal Government Act* (Municipal Affairs) authorizes municipal governments to create bylaws. Through these bylaws municipalities may have a development approval process and require a development permit for aggregate extraction. Provincial ministries, including Alberta Transportation, are not bound by this *Act* or the regulations or bylaws it enables.

#### *Federal:*

Aggregate extraction operations situated in or adjacent to water bodies must also meet federal regulatory requirements under the *Fisheries Act* (Department of Fisheries and Oceans), the *Navigable Waters Protection Act* (Transportation Canada), and possibly the *Canadian Environmental Assessment Act* (Environment Canada) or the *Species at Risk Act* (Environment Canada). Meeting provincial standards and requirements (including the Code of Practice for Pits with respect to species at risk and rare plants) does not ensure that federal regulatory requirements will be met.

In the past 10 years, DFO has declined issuing authorizations under the *Fisheries Act (Canada)* for extraction within the active channel of fish bearing watercourses and AENV has declined issuing approvals under the *Water Act* for aggregate extraction related activities; potentially SRD may also exercise the option to decline issuing a surface materials lease in support of SRD fisheries objectives.

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Any work or undertaking that causes the harmful alteration, disruption or destruction (HADD) of fish habitat is prohibited unless authorized under the Federal *Fisheries Act*. DFO will review proposed works or undertakings using the Risk Management Framework as outlined in the Practitioners Guide to the Risk Management Framework for DFO Habitat Management Staff. DFO may choose not to issue an authorization where:

- the magnitude and duration of the HADD is unacceptable;
- the fish habitat affected is critical to the maintenance of fish populations;
- the works or undertakings would result in the deposit of a deleterious substance into fish bearing habitat;
- no acceptable compensation to replace affected fish habitat, can be achieved.

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Prior to issuing any authorization, the potential environmental effects of the project must also be assessed pursuant to the *Canadian Environmental Assessment Act* and a determination of 'no significant adverse environmental effects' be made.

This approach is consistent with the objectives of SRD, under the *Public Lands Act*, and AENV, under the *Water Act* and the *Environmental Protection and Enhancement Act*, who are required to consider the protection of aquatic environment when issuing approvals.

#### Work to Date

Numerous attempts have been made at a GoA Water Body Aggregate Extraction policy. Due to the number of parties involved, it has been difficult to obtain consensus. AENV has decided that it is time to take the lead on the development of the GoA's interim position on water body aggregate extractions until a GoA-Canada policy can be negotiated.

Comment [MoD16]: Or working agreement

The Joint Technical Issues Working Group (JTIWG) has provided recommendations for aggregate extraction in the active area of water bodies. Their consensus is not to permit any extraction in any active area of any water body at any time. The Group proposes that this be adopted by the GoA and Canada.

#### Drivers for Project and Key Decision Maker

There is no formal provincial policy on water body aggregate extraction. The approach to water body aggregate extraction requires clarity, as requests from the public are increasing and the GoA requires a consistent and fair course of action.

Clear and consistent guidelines for both new and existing aggregate extraction operations will ensure a higher level of protection for the environment.

There is an increasing demand for aggregate resources. This demand is countered by public opposition to allowing aggregate extraction operations in or near water bodies.

In recent years there has been increased demand from some counties (Brazeau/Wetaskiwin) to extract aggregate from the active portion of river systems. This increased demand comes from a shortfall in the counties' resource ownership and the



significant costs associated with buying aggregate privately. Additionally, the counties are dealing with rising development pressures and resistance to aggregate extraction operations close to current residential developments. Counties also want to develop consistent bylaws and area structural plans and have requested GoA presence to discuss aggregate extraction, both in active and non-active areas of water bodies.

Occasionally there may be demand from local governments to extract aggregate for the purposes of River Training.

**Comment [MoD17]:** Or move?

**Comment [MoD18]:** River re-alignment?

Key decision-makers: Alberta's Minister of ENV, Minister of SRD

- For this interim GoA policy, the Minister of AENV would be the principal decision-maker

**Comment [MoD19]:** Why interim? What are we waiting for that's still to come?

### Relationship to Wider GoA Priorities

#### Competitiveness Act

##### *Land-Use Framework*

- Strategy 1: Develop seven regional land-use plans based on seven new land-use regions.
  - Need to provide guidance to LUF regional plans as to where aggregate extraction from water bodies may be acceptable.
  - Would enable 'place-based' responses to aggregate extraction approval applications, but provide a provincially consistent policy to determine whether or not it would be acceptable in the provincial policy and regulatory contexts.
- Strategy 3: Cumulative effects management will be used at the regional level to manage the impacts of development on land, water, and air.
  - Need to have a consistent policy so that the cumulative effects of aggregate extraction are considered and managed.
- Strategy 4: Develop a strategy for conservation and stewardship on private and public lands
  - Aggregate extraction policy would be applicable to public and private lands. Environmental impacts would be the primary focus of the risk assessments required for proponents to obtain approvals.

##### *Water for Life Strategy*

- Supports Healthy Aquatic Ecosystems outcome through the required risk assessments that would ensure the maintenance and preservation of natural habitat.
  - Action 2.1: Enforce protection of known critical aquatic ecosystems using existing legislation
  - Action 2.6: Implement aquatic restoration plan and conserve key aquatic ecosystems through regional land-use approaches and identified partnerships

**Appendix 2: Key Stakeholders & Consultation Plan**

**Key Stakeholders**

- Proponents – Commercial users of aggregate
  - Alberta Ministry of Transportation
  - Municipalities
  - First Nations
- Regulatory Agencies –
  - Municipalities
  - AENV – Approvals (WA & EPEA)
  - SRD –
  - DFO –
- Affected by environmental outcomes –
  - First Nations
  - Public

**Consultation Plan**

Sector	When consultation should occur	Group needs/special requirements	Desired outcome of consultation	Appropriate methods of consultation
AENV	Policy Development	Consider regions, EPEA and WA approvals	Water Body Aggregate Extraction Policy	Committee Representation
SRD	Policy Development		Approval of proposed policy. Agreement to develop a ToR.	Committee Representation
DFO	Policy Development		Acceptance of proposed policy. Agreement to develop a ToR.	Committee Representation
Municipal and Local Govts	Policy Development	Particularly AAMD&C, AUMA	Awareness of policy changes & understanding of required process.	Committee Representation
	Communications Phase			Membership Poll
Proponents	Policy Development	Particularly Alberta Sand & Gravel Association; Alberta Ministry of Transportation	Awareness of policy changes & understanding of required process.	Committee Representation
	Communications Phase			Notification & Review; Letter to all registered pit owners

**Comment [MoD20]:** This should come first!



First Nations	Communications Phase	Both a Proponent and an Affected Party	Awareness of policy changes & understanding of required process.	Meetings – likely require presence of our FN advisors/consultation specialists. TBD
Partners	Communications Phase	Alberta Water Council; WPACs	Awareness of policy changes & understanding of required process.	Internet-based questionnaire
Public	Communications Phase	Level of consultation should reflect level of policy and degree of changes	Awareness of policy changes.	Internet-based questionnaire

### Appendix 3: Glossary

**Active area of a water body:** Area lying between the ordinary high water marks on each bank.

**Comment [MoD21]:** As defined, this would not include islands as they would have an OHWM or banks themselves. Is this intended or is it intended that all islands be excluded from extraction?

**Aggregate:** Any sand, gravel, clay or marl that is excavated from a pit, whether in a processed or unprocessed form, but does not include reject.

**Comment [MoD22]:** This is definition of surface materials.

**Emergency Situation:** Any situation that may jeopardize human life or infrastructure

**Comment [MoD23]:** Any or just significant? Needs additional definition.

**Extraction:** The removal of aggregate resources. Includes the stripping and stockpiling of soil, overburden, and aggregate materials and the transport of said materials within the site.

**Non-active area of a water body:** Any area in proximity to a water body that is not included in the definition of an active area.

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**Comment [MoD24]:** This is awkward

**Ordinary high water mark:** The usual average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land. In flowing waters (rivers, streams) this refers to the "active area of a water body/bank-full level" which is often the 1:2 year flood flow return level.

**Comment [MoD25]:** This is not the common law definition. Also a return period is a statistical outcome and not all water bodies have flow gauged to allow its determination.

**Qualified third party:**

**Reject:** Aggregate that is expected to be unsuitable for use as a product, or for blending with other aggregate to form a product, and is therefore expected to be used for reclamation of the pit.

**Water body (Water Act):** Any location where water flows or is present, whether or not the flow or the presence of water is continuous, intermittent or occurs only during a flood, and includes but is not limited to wetlands and aquifers but does not include except for clause (nn) and section 99 "water body" that is part of an irrigation works if the irrigation works is subject to a licence and the irrigation works is owned by the licensee, unless the regulations specify that the location is included in the definition of water body.

**Comment [MoD26]:** For this to apply to GoA, we need a definition that is clearer. This one implies the entire floodplain whether small or large.



**From:** Todd Aasen  
**Sent:** Friday, June 25, 2010 10:39 AM  
**To:** Meghan Soehn  
**Subject:** FW: Aggregate Extraction Policy

**Attachments:** Aggregate Extraction Policy\_v3\_20100623.doc

Todd Aasen P.Eng.,  
District Approval Manager  
Central Region, Environmental Management  
Alberta Environment  
304, 4920 - 51 Street (Provincial Building)  
Red Deer, AB T4N 6K8  
phone: 403-340-7782, fax: 403-340-5022

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**From:** Augustus Archampong  
**Sent:** Wednesday, June 23, 2010 3:09 PM  
**To:** Angela Fulton; Anil Gupta; Carmen delaChevrotiere; Claude Eckert; Craig Melin; Dale Adams; Donna McColl [AENV]; Guy Hancock; Helen Maczala; Jeff Gutsell; Kevin Nipp; Larry Kuchmak; Matthew Otto; Mohammad Shoaib; Patrick Murray; Pauline Scoffield; Peter Pui; Randy Poon; Stephen Mathyk; Todd Aasen  
**Subject:** FW: Aggregate Extraction Policy

See attached draft policy document as discussed during our last PWQCT meeting. Please provide a coordinated response (one response per region) by 11 am - June 30, 2010.

Thanks for your cooperation, and cheers, Archie.



Aggregate  
traction Policy\_v3

**GoA Water Body Aggregate Extraction Policy  
(Operational approval procedures)  
Draft 3**

**Purpose**

Develop GoA guidelines to support the regulatory approval processes for aggregate extraction operations in active and non-active areas of water bodies.

**Vision and Outcomes**

Water body aggregate extraction operations are carried out responsibly to ensure the maintenance and protection of the natural morphology of water body systems, including aquifers, and the quality of water they contain (natural habitat).

- Water body aggregate extraction is permitted to occur only in areas where it would not adversely impact the environment or aquatic ecosystems
- The GoA has a common and consistent approach to requests for water body aggregate extraction
- The roles and responsibilities of regulators are clearly defined

**Assumptions and Principles**

1. This policy promotes a risk-based approach to water body aggregate extraction.
2. Water body aggregate extraction in any active area of a water body will have adverse impacts
3. Water body aggregate extraction in a non-active area of a water body may have an adverse impact
4. All water body aggregate extraction applications will be processed according to the guidance outlined in this policy (which considers all regulatory mandates)

**Policy Guidelines**

1. **New Aggregate Extraction Operations**
  - 1.1. For proposed operations located within the active area of a water body no approvals will be issued.
  - 1.2. For proposed operations located within the non-active area of a water body approvals will only be considered when:
    - 1.2.1. A risk assessment of the environmental and third-party impacts is completed by a qualified third party [For 'qualified third party requirements']



see: <http://environment.alberta.ca/documents/Reclamation-Certificates-Professional-Declaration-Requirements.pdf>

- Any adverse effects on the land and/or aquatic environment (including but not limited to fisheries and wildlife resources, water quality, groundwater and river dynamics) resulting from the aggregate extraction operations must be identified.
  - The proponent must demonstrate the ability to mitigate or compensate for the above effects in a manner acceptable to all regulatory mandates.
- 1.2.2. All municipal bylaws and provincial and federal regulations, statutes, and policies have been met.

2. Existing Aggregate Extraction Operations

2.1. Will be allowed to continue for the remaining term of the *Public Lands Act*, *Environmental Protection and Enhancement Act*, or *Water Act* authorizations, subject to the requirements under the *Fisheries Act*. After this time, a renewal of an authorization will include a plan, where necessary, to bring the existing operation into compliance with the requirements outlined for new aggregate operations.

3. Undeveloped Aggregate Extraction Operations

3.1. Undeveloped aggregate extraction operations that have a *Public Lands Act* approval but no *Environmental Protection and Enhancement Act* or *Water Act* approvals will be considered a new operation and are subject to similar classifications and requirements.

4. Emergency Situations

4.1. Applications will be reviewed and approved by regulatory authorities on a case-by-case basis. The above guidelines may not be applicable.

**Tools and Responsibilities**

The following table indicates how the above guidelines will be implemented by the parties to this agreement, the tools used, and the party's role in the water body aggregate extraction authorization process.

Organization	Tools	Roles/Activities
AENV	<i>Water Act</i> & <i>EPEA</i> authorizations	(i) assess application for: - water quantity impacts, including on upstream and downstream users - water quality impacts for both surface and groundwater - impact on river morphology, including bed and bank stability - impact on riparian areas
	Compliance programs ( <i>Water</i>	(ii) enforce authorizations with

	<i>Act &amp; EPEA)</i> Alberta First Nations Policy for Consultation  <i>Conservation &amp; Reclamation Regulation, including Code of Practice for Pits (and Guide) and registrations, Conservation &amp; Reclamation plan and program</i>	appropriate action/tools through compliance programs (iii) may require First Nations consultation  (iv) use the Regulation to: - administer securities - identify conservation and reclamation requirements
SRD	<i>Public Lands Act</i>  Fish & Wildlife objectives  Guidelines for Acquiring Surface Material Dispositions on Public Land  <i>Disposition &amp; Fees Regulation</i>  Compliance???  Policy	(i) delineate non-active areas of water bodies where extraction could be considered  (ii) assess application for effects on habitat using Fish & Wildlife objectives.  (iii) assess application for ... (looking for input from SRD)  (iv) identify conservation and reclamation requirements  (v) assess application for ... (looking for input from SRD)  (vi) may require First Nations consultation

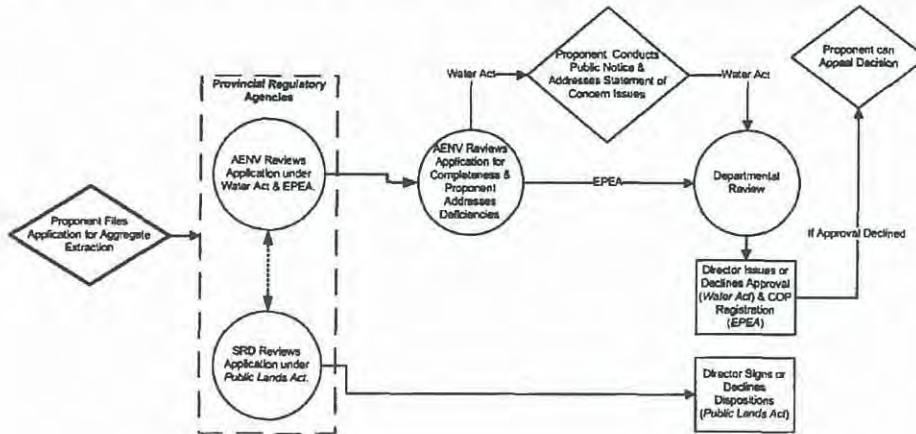
Proponents may also need to consider the following (and associated regulatory requirements):

- Species at Risk (*Species at Risk Act*, Environment Canada)
- Fisheries (*Fisheries Act* – Environment Canada)
- Migratory Birds (*Migratory Birds Convention Act* – Environment Canada)
- Navigability (*Navigable Waters Protection Act*, Environment Canada)
- Wildlife (*Alberta Wildlife Act* – Sustainable Resources Development)
- Land Use Regulations (*Alberta Land Stewardship Act*, Sustainable Resource Development)
- Local Land Use Restrictions (Bylaws, Local Municipalities)
- Cultural and Archaeological Sensitivities – See the *Historical Resources Act*, Department of Culture and Community Spirit)
- Traditional Use – See the *Historical Resources Act*; also see the *Alberta 2006 Consultation Policy*, Department of Culture and Community Spirit)



### Application Approval Process

The flow chart below is intended to show the interactions between the regulatory bodies that are party to this agreement and the review processes that are triggered within each department. It is not intended to illustrate the details of each departmental review process.



In order for the proponent to be able to initiate water body aggregate extraction, several applications for authorization may be required (depending on which organizations and which tools are triggered). The list below details the required provincial regulatory applications. Note that regulatory requirements external to the two parties to this agreement are excluded.

#### Documents Required for Submission by Proponent:

- SRD *Public Lands Act* dispositions
- AENV *Water Act* approval and/or licence application
- AENV *EPEA* Code of Practice for Pits application

### Implementation Plan

Policy would be effective immediately following Ministerial approval of the participating departments. No legislative changes are required.

**Comment [G1]:** May develop an appendix that outlines anticipated timelines and resource requirements

1. Develop a strategy to coordinate regulatory review.
  - 1.1. Establish a consistent referral process.
  - 1.2. Streamline review process.
  - 1.3. Clarify roles of regulatory agencies, particularly with respect to emergency procedures.
  - 1.4. Consider developing a single 'Water Body Aggregate Extraction Application Package'.

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  - 2.1. GoA Departments;
  - 2.2. Partners & public;
  - 2.3. Proponents.
3. Develop guidance around the required Risk Assessment.

**Monitoring and Evaluation Plan**

- Adaptive management approach. Suggest policy review every 10 years, which is compatible with the Regional Planning process.

**Appendices**

- Explanation of Problem & Current Policy Context
- Key Stakeholders & Consultation Plan
- Glossary
- Diagram of active area of a water body and non-active area of a water body

**Endorsement**

- The following parties agree to adhere to the principles and process outlined above.
- These guidelines are effective from the date of signature. Amendments may be made at any time by mutual consent and sign-off of the parties below.

**Signatures: Participating Organizations**

**Government of Alberta: Alberta Sustainable Resource Development**

\_\_\_\_\_  
Minister

\_\_\_\_\_  
Date

**Government of Alberta: Alberta Environment**

\_\_\_\_\_  
Minister

\_\_\_\_\_  
Date



## Appendix 1: Explanation of Problem & Current Policy Context

### Explanation of Problem

Aggregate extraction within the active and non-active areas of surface water bodies has occurred in the province for several decades. The ease of access to the aggregate and associated low development cost may have influence on this choice. Aggregate extraction is an important contributor to economic activity in Alberta.

Aggregate extraction is a concern as the associated operations have been shown to have significant adverse effects on aquatic species and habitat, water quality, and the configuration of the bed, banks and shores of water bodies. Physical changes to a water body, as a result of extraction operations, have also been shown to have an adverse effect on adjacent lands and infrastructure upstream and downstream of the operation location.

### Background/Current Regulatory State

#### *Provincial:*

Aggregate extraction operations on public and private lands in Alberta are regulated under three provincial enactments: the *Water Act* (Alberta Environment), the *Public Lands Act* (Alberta Sustainable Resource Development), and the *Environmental Protection and Enhancement Act* (Alberta Environment). These have separate and distinct regulatory processes that are not well integrated, which sometimes has led to differing approval terms, conditions and requirements.

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The *Municipal Government Act* (Municipal Affairs) authorizes municipal governments to create bylaws. Through these bylaws municipalities may have a development approval process and require a development permit for aggregate extraction. Provincial ministries, including Alberta Transportation, are not bound by this *Act* or the regulations or bylaws it enables.

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Aggregate extraction operations situated in or adjacent to water bodies must also meet federal regulatory requirements under the *Fisheries Act* (Department of Fisheries and Oceans), the *Navigable Waters Protection Act* (Transportation Canada), and possibly the *Canadian Environmental Assessment Act* (Environment Canada) or the *Species at Risk Act* (Environment Canada). Meeting provincial standards and requirements (including the Code of Practice for Pits with respect to species at risk and rare plants) does not ensure that federal regulatory requirements will be met.

In the past 10 years, DFO has declined issuing authorizations under the *Fisheries Act* (Canada) and AENV has declined issuing approvals under the *Water Act* for aggregate extraction related activities; potentially SRD may also exercise the option to decline issuing a surface materials lease in support of SRD fisheries objectives.

Any work or undertaking that causes the harmful alteration, disruption or destruction (HADD) of fish habitat is prohibited unless authorized under the *Federal Fisheries Act*.



DFO will review proposed works or undertakings using the Risk Management Framework as outlined in the Practitioners Guide to the Risk Management Framework for DFO Habitat Management Staff. DFO may choose not to issue an authorization where:

- the magnitude and duration of the HADD is unacceptable;
- the fish habitat affected is critical to the maintenance of fish populations;
- the works or undertakings would result in the deposit of a deleterious substance into fish bearing habitat;
- no acceptable compensation, to replace affected fish habitat, can be achieved.

Prior to issuing any authorization, the potential environmental effects of the project must also be assessed pursuant to the *Canadian Environmental Assessment Act* and a determination of 'no significant adverse environmental effects' be made.

This approach is consistent with the objectives of SRD under the *Public Lands Act*, and AENV under the *Water Act* and the *Environmental Protection and Enhancement Act*. These provincial agencies are required to consider the protection of aquatic environment when issuing approvals.

#### Work to Date

In the past decade, numerous attempts have been made to develop a water body aggregate extraction policy that, at least works for Alberta. Due to the number of parties involved, it has been difficult to obtain consensus. AENV has decided that it is time to coordinate the knowledge gained and to conclude the development of a GoA position on water body aggregate extraction until a GoA-Canada policy can be negotiated.

The Joint Technical Issues Working Group (JTIWG), a federal-provincial working group, has provided recommendations for aggregate extraction in the active area of water bodies. Their consensus is not to permit any extraction in any active area of any water body at any time. The Group proposes that this be adopted by the GoA and Canada.

#### Drivers for Project and Key Decision Maker

There is no formal provincial policy on water body aggregate extraction. The approach to water body aggregate extraction requires clarity, as requests from the public are increasing and the GoA requires a consistent and fair course of action.

Clear and consistent guidelines for both new and existing aggregate extraction operations will ensure a higher level of protection for the environment.

There is an increasing demand for aggregate resources. This demand is countered by public opposition to allowing aggregate extraction operations in water bodies.

In recent years there has been increased demand from some counties (Brazeau/Wetaskiwin) to extract aggregate from the active portion of river systems. This increased demand comes from a shortfall in the counties' resource ownership and the significant costs associated with buying aggregate privately. Additionally, these counties are dealing with rising development pressures and resistance to aggregate extraction



operations close to current residential developments. Counties also want to develop consistent bylaws and area structural plans and have requested GoA presence to discuss aggregate extraction, both in active and non-active areas of water bodies.

Occasionally there may be demand from local governments to extract aggregate for the purposes of River Training.

Key decision-makers: Alberta's Minister of ENV, Minister of SRD

- For this interim GoA policy, the Minister of AENV would be the principal decision-maker

### Relationship to Wider GoA Priorities

#### *Land-Use Framework*

- Strategy 1: Develop seven regional land-use plans based on seven new land-use regions.
  - Need to provide guidance to LUF regional plans as to where aggregate extraction from water bodies may be acceptable.
  - Would enable 'place-based' responses to aggregate extraction approval applications, but provide a provincially consistent policy to determine whether or not it would be acceptable in the provincial policy and regulatory contexts.
- Strategy 3: Cumulative effects management will be used at the regional level to manage the impacts of development on land, water, and air.
  - Need to have a consistent policy so that the cumulative effects of aggregate extraction are considered and managed.
- Strategy 4: Develop a strategy for conservation and stewardship on private and public lands
  - Aggregate extraction policy would be applicable to public and private lands. Environmental impacts would be the primary focus of the risk assessments required for proponents to obtain approvals.

#### *Water for Life Strategy*

- Supports Healthy Aquatic Ecosystems outcome through the required risk assessments that would ensure the maintenance and preservation of natural habitat.
  - Action 2.1: Enforce protection of known critical aquatic ecosystems using existing legislation
  - Action 2.6: Implement aquatic restoration plan and conserve key aquatic ecosystems through regional land-use approaches and identified partnerships

**Appendix 2: Key Stakeholders & Consultation Plan**

**Key Stakeholders**

- Proponents – Commercial users of aggregate
  - Alberta Ministry of Transportation
  - Municipalities
  - First Nations
- Regulatory Agencies –
  - Municipalities
  - AENV – Approvals (WA & EPEA)
  - SRD –
  - DFO –
- Affected by environmental outcomes –
  - First Nations
  - Public

**Consultation Plan**

<b>Sector</b>	<b>When consultation should occur</b>	<b>Group needs/special requirements</b>	<b>Desired outcome of consultation</b>	<b>Appropriate methods of consultation</b>
AENV	Policy Development	Consider regions, EPEA and WA approvals, Environmental Law Section	Water Body Aggregate Extraction Policy	Committee Representation/Referral
SRD	Policy Development		Approval of proposed policy. Agreement to develop a ToR.	Committee Representation
DFO	Policy Development		Acceptance of proposed policy. Agreement to develop a ToR.	Committee Representation
Municipal and Local Govts	Policy Development	Particularly AAMD&C, AUMA	Awareness of policy changes & understanding of required process.	Committee Representation
	Communications Phase			Membership Poll
Proponents	Policy Development	Particularly Alberta Sand & Gravel	Awareness of policy changes & understanding of	Committee Representation



	Communications Phase	Association; Alberta Ministry of Transportation	required process.	Notification & Review; Letter to all registered pit owners
First Nations	Communications Phase	Both a Proponent and an Affected Party	Awareness of policy changes & understanding of required process.	Meetings – likely require presence of our FN advisors/consultation specialists. TBD
Partners	Communications Phase	Alberta Water Council; WPACs	Awareness of policy changes & understanding of required process.	Internet-based questionnaire
Public	Communications Phase	Level of consultation should reflect level of policy and degree of changes	Awareness of policy changes.	Internet-based questionnaire

### Appendix 3: Glossary

**Active area of a water body:** Area lying between the ordinary high water marks on each bank.

**Aggregate:** Any sand, gravel, clay or marl that is excavated from a pit, whether in a processed or unprocessed form, but does not include reject.

**Emergency Situation:** Any situation that may jeopardize human life or infrastructure

**Extraction:** Includes the stripping and stockpiling of soil, overburden, and aggregate materials and the transport of said materials within the site.

**Non-active area of a water body:** Any area of a water body that is not included in the definition of an active area.

**Ordinary high water mark:** The usual average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land. In flowing waters (rivers, streams) this refers to the "active area of a water body/bank-full level" which is often the 1:2 year flood flow return level.

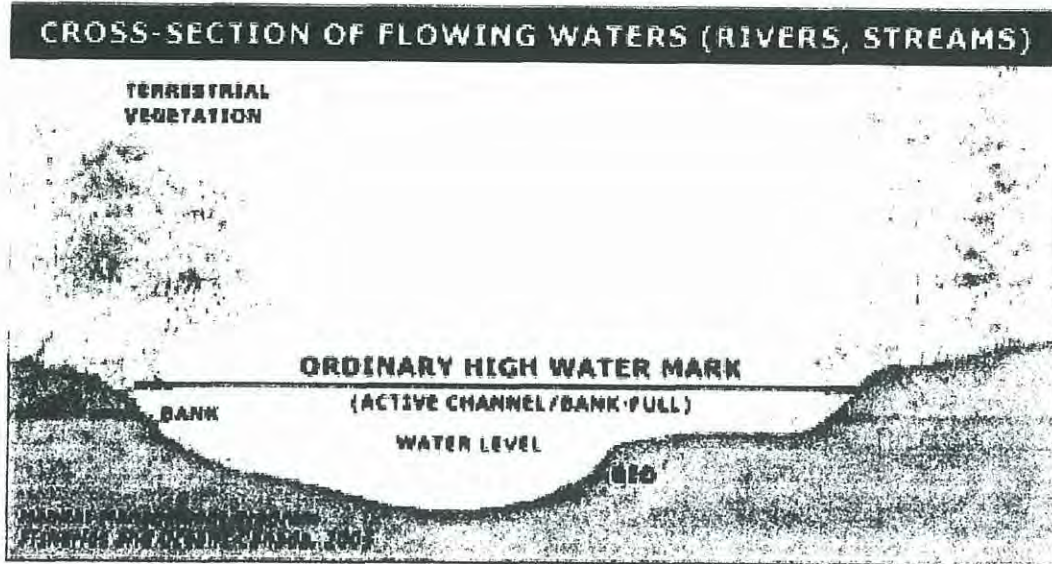
**Reject:** Aggregate that is expected to be unsuitable for use as a product, or for blending with other aggregate to form a product, and is therefore expected to be used for reclamation of the pit.

**Water body (*Water Act*):** Any location where water flows or is present, whether or not the flow or the presence of water is continuous, intermittent or occurs only during a flood, and includes but is not limited to wetlands and aquifers but does not include except for clause (nn) and section 99 "water body" that is part of an irrigation works if the irrigation works is subject to a licence and the irrigation works is owned by the licensee, unless the regulations specify that the location is included in the definition of water body.



**Appendix 4: Active and non-active area of a water body**

*Ordinary high water mark* – The usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land. In flowing waters (rivers, streams) this refers to the “active channel/bank-full level” which is often the 1:2 year flood flow return level.



## Terry Kosinski

---

**From:** David Park  
**Sent:** Friday, June 25, 2010 11:54 AM  
**To:** Gerry Haekel; Terry Kosinski  
**Cc:** Dave Walty  
**Subject:** RE: Draft 3 of the Aggregate Extraction Policy

**Attachments:** Aggregate Extraction Policy\_v3\_20100621(GH, DP).doc

Thanks Gerry,  
I've inserted some comments as well (attached). While I would echo most of the point you made, I didn't indicate that specifically.

I have to wonder why DFO would endorse or enter into an agreement based on this 'policy'. Perhaps Tom would comment on this aspect, but if I was DFO, I'd tell GoA to do whatever they want policy and operations-wise, but DFO reserves the right to raise a stink when it sees the need.

As always, the 'devil's in the details'. The factors and threshold for risk determination are key things to be resolved. I think it's reasonable to say that they would need to be clearly presented and agreeable to SRD in order for us to endorse the approach. Consequently, until that work is done, agreement would be premature.



Aggregate  
xtraction Policy\_v3.

Dave

Regards,

*David Park, M. Sc.*

Fisheries Biologist / Provincial Aquatic Habitat Specialist  
Alberta Sustainable Resource Development  
Fisheries Management  
Edmonton

phone: 1.780.427-8347

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Duplicate of email dated June 25, 2010 10:00AM, removed as non-responsive.

GoA Water Body Aggregate Extraction Policy  
(Operational approval procedures)  
Draft 3

**Purpose**

Develop GoA guidelines to support the regulatory approval processes for aggregate extraction operations in active and non-active areas of water bodies.

**Vision and Outcomes**

aggregate extraction operations in proximity to water bodies are carried out responsibly to ensure the maintenance and protection of the natural morphology of water body systems, including aquifers, and the quality of water they contain (natural habitat).

- aggregate extraction proximal to water bodies is permitted to occur only in areas where it would not adversely impact the environment or aquatic ecosystems
- The GoA has a common and consistent approach to requests for water body aggregate extraction
- The roles and responsibilities of regulators are clearly defined

**Assumptions and Principles**

1. This policy promotes a risk-based approach to aggregate extraction within or in proximity to water bodies.
2. aggregate extraction in any active area of a water body will have adverse impacts
3. aggregate extraction in proximity to a non-active area of a water body may have an adverse impact
4. All aggregate extraction applications related to a water body or in proximity to a water body will be processed according to the guidance outlined in this policy (which considers all regulatory mandates)

**Policy Direction**

1. **New Aggregate Extraction Operations**
  - 1.1. For proposed operations located within the active area of a water body, no approvals will be issued.
  - 1.2. For proposed operations located in proximity to a water body, approvals will only be considered when:
    - 1.2.1. A risk assessment of the environmental and third-party impacts is completed by a qualified third party

Comment [MoD1]: Not a ENV policy so it needs to meet all AB regulators needs.

Comment [MoD2]: Although premised on WA definition, confusing for other regulators as well as public as it implies policy for in-water extraction.

Comment [MoD3]: Is this policy meant to apply to other water body types? If not, can we just say watercourses?

Comment [MoD4]: Implies on any upland! This should mean in immediate proximity to a water body.

Deleted: Water body

Comment [MoD5]: Does not speak to wildlife management objectives relating to floodplains as wildlife corridors

Comment [DJP6]: Nor does it clearly speak to desire to maintain biological integrity of aquatic systems, which is ultimately important. For a vision statement, this is too narrowly focused. Specification of objectives can be presented subsequently.

Deleted: Water body

Comment [DJP7]: It will always adversely impact the environment. The honest statement is that decisions will be made based on a risk-management approach to achieve a fair trade between environmental risk and social benefit

Comment [DJP8]: What are these bullets? Are they alternative visions, more details?

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Comment [MoD9]: Would this apply to islands?

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Comment [MoD10]: define

Comment [MoD11]: define

Comment [MoD12]: define



- Any adverse effects on the land and/or aquatic environment (including but not limited to fisheries and wildlife resources, water quality, groundwater and river dynamics) resulting from the aggregate extraction operations must be identified and quantified.
  - The proponent must demonstrate the ability to mitigate or compensate for the above effects in a manner acceptable to all regulatory mandates.
- 1.2.2. The proponent demonstrates how all municipal bylaws and provincial and federal regulations, statutes, and policies will be met.

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2. Existing Aggregate Extraction Operations

2.1. Will be allowed to continue for the remaining term of the *Public Lands Act*, *Environmental Protection and Enhancement Act*, or *Water Act* authorizations, subject to the requirements under the *Fisheries Act*. After this time, a renewal of an authorization will include a plan, where necessary, to bring the existing operation into compliance with the requirements outlined for new aggregate operations.

3. Undeveloped Aggregate Extraction Operations

3.1. Undeveloped aggregate extraction operations that have a *Public Lands Act* approval but no *Environmental Protection and Enhancement Act* or *Water Act* approvals will be considered a new operation and are subject to similar classifications and requirements.

4. Emergency Situations

4.1. Applications will be reviewed and approved by regulatory authorities on a case-by-case basis. The above guidelines may not be applicable.

**Tools and Responsibilities**

The following table indicates how the above direction will be implemented by the parties to this agreement, the tools used, and the party's role in the water body aggregate extraction authorization process.

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Comment [DJP13]: what agreement? There is no MOU here, only an AENV policy document?

Organization	Tools	Roles/Activities
AENV	<i>Water Act &amp; EPEA</i> authorizations	(i) assess application for: - water quantity impacts, including on upstream and downstream users - water quality impacts for both surface and ground water - impact on river morphology, including bed and bank stability <u>upstream and downstream of the site</u> - impact on riparian areas <u>-delineate non-active areas of water bodies where extraction could be considered</u>

	<p>Compliance programs (<i>Water Act &amp; EPEA</i>)</p> <p>Alberta First Nations Policy for Consultation</p> <p><i>Conservation &amp; Reclamation Regulation</i>, including Code of Practice for Pits (and Guide) and registrations, Conservation &amp; Reclamation plan and program</p>	<p>(ii) enforce authorizations with compliance programs</p> <p>(iii) may require First Nations consultation</p> <p>(iv) use the Regulation to: -administer securities -identify conservation and reclamation requirements</p>
SRD	<p><i>Public Lands Act</i></p> <p>Fish &amp; Wildlife objectives</p> <p>Guidelines for Acquiring Surface Material Dispositions on Public Land</p> <p><i>Disposition &amp; Fees Regulation</i></p> <p>Compliance???</p> <p>Policy???</p>	<p>(i) <u>no dispositions will be issued within the active area of a water body</u></p> <p>(ii) <u>delineate non-active areas in proximity to water bodies where extraction could be considered</u></p> <p>(ii) assess application for effects on <u>fish and wildlife populations and habitat using Fish &amp; Wildlife objectives.</u></p> <p>(iii) <u>assess application for ???</u></p> <p>(iv) identify conservation and reclamation requirements</p> <p>(v)</p> <p>(vi) may require First Nations consultation</p>
DFO	<i>Fisheries Act</i> authorizations	(i) assess application for HADD of fish habitat

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Comment [MoD14]: This should be defined as a setback from a water body

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Proponents may also need to consider the following (and associated regulatory requirements):

- Species at Risk (*Species at Risk Act*, Environment Canada)
- Navigability (*Navigable Waters Act*, Environment Canada)
- Land Use Regulations (*Alberta Land Stewardship Act*, Sustainable Resource Development)
- Local Land Use Restrictions (Bylaws, Local Municipalities)
- Cultural and Archaeological Sensitivities (Regulation?, Department?)

Comment [DJP15]: Suggest this gets elevated in prominence as it could trump other legislation.

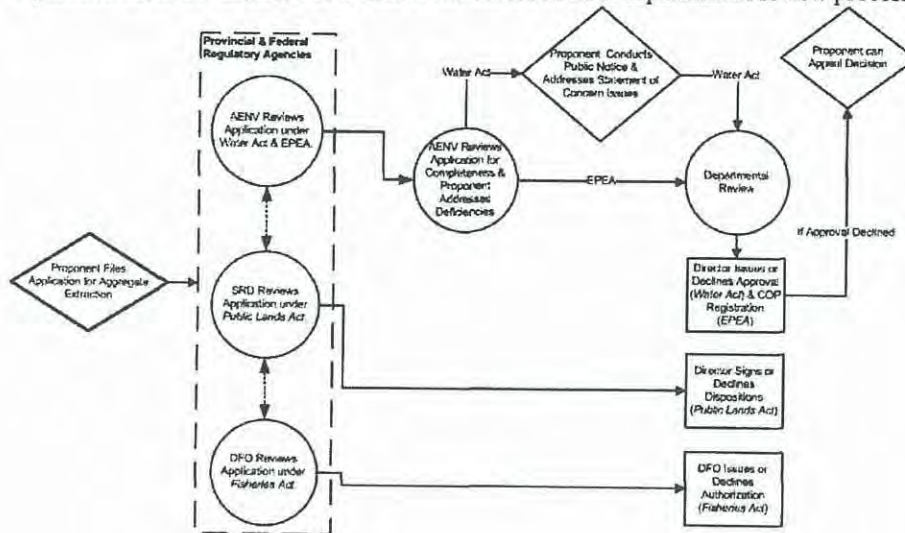
Comment [DJP16]: I can't think of any allowable circumstances where Navigable Waters would need to be considered.



• Traditional Use (Regulation?, Department?)

**Application Approval Process**

The flow chart below is intended to show the interactions between the regulatory bodies that are party to this agreement and the review processes that are triggered within each department. It is not intended to illustrate the details of each departmental review process.



In order for the proponent to be able to initiate water body aggregate extraction, several applications for authorization may be required (depending on which organizations and which tools are triggered). The list below details the required provincial and federal regulatory applications. Note that regulatory requirements external to the three parties to this agreement are excluded.

**Documents Required for Submission by Proponent:**

- SRD *Public Lands Act* dispositions
- AENV *Water Act* approval and/or licence application
- AENV *EPEA* Code of Practice for Pits application
- DFO authorization application

**Comment [MoD17]:** All these required for which approval? This reads like its for a WA approval, yet is supposed to be for GoA. I suggest reframe documentation required to satisfy the primary regulators – a more one-window approach.

**Implementation Plan**

Policy would be effective immediately following Ministerial approval. No legislative changes are required.

1. Develop a strategy to coordinate regulatory review.

**Comment [LB18]:** Do we require an appendix that outlines anticipated timelines and resource requirements?

**Comment [MoD19]:** A policy document should not contain an implementation plan. This should be separate. It is not policy. Policy needs to stand on its own and give the guidance for decision making.

- 1.1. Establish a consistent referral process.
  - 1.2. Streamline review process.
  - 1.3. Clarify roles of regulatory agencies, particularly with respect to emergency procedures.
  - 1.4. Consider developing a single 'Water Body Aggregate Extraction Application Package'.
2. Develop a strategy for sharing and educating on the Water Body Aggregate Extraction Policy.
    - 2.1. GoA Departments;
    - 2.2. Partners & public;
    - 2.3. Proponents.
  3. Develop guidance around the required Risk Assessment.

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**Monitoring and Evaluation Plan**

- Adaptive management approach. Suggest policy review every 10 years, which is compatible with the Regional Planning process.

Comment [MoD20]: How will application of policy be evaluated?

**Attachments**

- Diagram of active area of a water body and non-active area of a water body
- Requirements for 'qualified third party' designation for completion of risk assessments and/or reclamation

Comment [MoD21]: Both of these need to be in place as part of policy. Suggest onus be on professional reliance and that qualified 3<sup>rd</sup> party and sign-off be from a member of a professional regulated organization

**Endorsement**

The following parties agree to adhere to the principles and process outlined above. These guidelines are effective from the date of signature. Amendments may be made at any time by mutual consent and sign-off of the parties below.

Comment [DJP22]: Policy doc. and a supporting MOU should be separate documents.

Signatures: Participating Organizations

**Government of Canada: Fisheries and Oceans Canada**

\_\_\_\_\_ XXXX

\_\_\_\_\_ Date

**Government of Alberta: Alberta Sustainable Resource Development**

\_\_\_\_\_



## Appendix 1: Explanation of Problem & Current Policy Context

### Explanation of Problem

Aggregate extraction within the active and non-active areas of surface water bodies has occurred in the province for several decades. The ease of access to the aggregate and associated low development cost may have influence on this choice. Aggregate extraction is an important contributor to economic activity in Alberta.

Aggregate extraction is a concern as the associated operations have been shown to have significant adverse effects on aquatic species and habitat, water quality, and the configuration of the bed, banks and shores of water bodies. Physical changes to a water body, as a result of extraction operations, have also been shown to have an adverse effect on adjacent lands and infrastructure upstream and downstream of the operation location.

### Background/Current Regulatory State

#### *Provincial:*

Aggregate extraction operations on public and private lands in Alberta are regulated under three provincial enactments: the *Water Act* (Alberta Environment), the *Public Lands Act* (Alberta Sustainable Resource Development), and the *Environmental Protection and Enhancement Act* (Alberta Environment). These have separate and distinct regulatory processes that are not well integrated, which sometimes has led to differing approval terms, conditions and requirements.

#### *Municipal:*

The *Municipal Government Act* (Municipal Affairs) authorizes municipal governments to create bylaws. Through these bylaws municipalities may have a development approval process and require a development permit for aggregate extraction. Provincial ministries, including Alberta Transportation, are not bound by this *Act* or the regulations or bylaws it enables.

#### *Federal:*

Aggregate extraction operations situated in or adjacent to water bodies must also meet federal regulatory requirements under the *Fisheries Act* (Department of Fisheries and Oceans), the *Navigable Waters Protection Act* (Transportation Canada), and possibly the *Canadian Environmental Assessment Act* (Environment Canada) or the *Species at Risk Act* (Environment Canada). Meeting provincial standards and requirements (including the Code of Practice for Pits with respect to species at risk and rare plants) does not ensure that federal regulatory requirements will be met.

In the past 10 years, DFO has declined issuing authorizations under the *Fisheries Act* (Canada) for extraction within the active channel of fish bearing watercourses and AENV has declined issuing approvals under the *Water Act* for aggregate extraction related activities; potentially SRD may also exercise the option to decline issuing a surface materials lease in support of SRD fisheries objectives.

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Any work or undertaking that causes the harmful alteration, disruption or destruction (HADD) of fish habitat is prohibited unless authorized under the *Federal Fisheries Act*. DFO will review proposed works or undertakings using the Risk Management Framework as outlined in the Practitioners Guide to the Risk Management Framework for DFO Habitat Management Staff. DFO may choose not to issue an authorization where:

- the magnitude and duration of the HADD is unacceptable;
- the fish habitat affected is critical to the maintenance of fish populations;
- the works or undertakings would result in the deposit of a deleterious substance into fish bearing habitat;
- no acceptable compensation to replace affected fish habitat, can be achieved.

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Prior to issuing any authorization, the potential environmental effects of the project must also be assessed pursuant to the *Canadian Environmental Assessment Act* and a determination of 'no significant adverse environmental effects' be made.

This approach is consistent with the objectives of SRD, under the *Public Lands Act*, and AENV, under the *Water Act* and the *Environmental Protection and Enhancement Act*, who are required to consider the protection of aquatic environment when issuing approvals.

#### Work to Date

Numerous attempts have been made at a GoA Water Body Aggregate Extraction policy. Due to the number of parties involved, it has been difficult to obtain consensus. AENV has decided that it is time to take the lead on the development of the GoA's interim position on water body aggregate extractions until a GoA-Canada policy can be negotiated.

Comment [MoD23]: Or working agreement

The Joint Technical Issues Working Group (JTIWG) has provided recommendations for aggregate extraction in the active area of water bodies. Their consensus is not to permit any extraction in any active area of any water body at any time. The Group proposes that this be adopted by the GoA and Canada.

#### Drivers for Project and Key Decision Maker

There is no formal provincial policy on water body aggregate extraction. The approach to water body aggregate extraction requires clarity, as requests from the public are increasing and the GoA requires a consistent and fair course of action.

Comment [DJP24]: This is a project?

Clear and consistent guidelines for both new and existing aggregate extraction operations will ensure a higher level of protection for the environment.

There is an increasing demand for aggregate resources. This demand is countered by public opposition to allowing aggregate extraction operations in or near water bodies.

In recent years there has been increased demand from some counties (Brazeau/Wetaskiwin) to extract aggregate from the active portion of river systems. This increased demand comes from a shortfall in the counties' resource ownership and the



significant costs associated with buying aggregate privately. Additionally, the counties are dealing with rising development pressures and resistance to aggregate extraction operations close to current residential developments. Counties also want to develop consistent bylaws and area structural plans and have requested GoA presence to discuss aggregate extraction, both in active and non-active areas of water bodies.

Occasionally there may be demand from local governments to extract aggregate for the purposes of River Training.

Comment [MoD25]: Or move?

Comment [MoD26]: River re-alignment?

Key decision-makers: Alberta's Minister of ENV, Minister of SRD

- For this interim GoA policy, the Minister of AENV would be the principal decision-maker

Comment [MoD27]: Why interim? What are we waiting for that's still to come?

### Relationship to Wider GoA Priorities

#### Competitiveness Act

##### *Land-Use Framework*

- Strategy 1: Develop seven regional land-use plans based on seven new land-use regions.
  - Need to provide guidance to LUF regional plans as to where aggregate extraction from water bodies may be acceptable.
  - Would enable 'place-based' responses to aggregate extraction approval applications, but provide a provincially consistent policy to determine whether or not it would be acceptable in the provincial policy and regulatory contexts.
- Strategy 3: Cumulative effects management will be used at the regional level to manage the impacts of development on land, water, and air.
  - Need to have a consistent policy so that the cumulative effects of aggregate extraction are considered and managed.
- Strategy 4: Develop a strategy for conservation and stewardship on private and public lands
  - Aggregate extraction policy would be applicable to public and private lands. Environmental impacts would be the primary focus of the risk assessments required for proponents to obtain approvals.

##### *Water for Life Strategy*

- Supports Healthy Aquatic Ecosystems outcome through the required risk assessments that would ensure the maintenance and preservation of natural habitat.
  - Action 2.1: Enforce protection of known critical aquatic ecosystems using existing legislation
  - Action 2.6: Implement aquatic restoration plan and conserve key aquatic ecosystems through regional land-use approaches and identified partnerships

**Appendix 2: Key Stakeholders & Consultation Plan**

**Key Stakeholders**

- Proponents – Commercial users of aggregate
  - Alberta Ministry of Transportation
  - Municipalities
  - First Nations
- Regulatory Agencies –
  - Municipalities
  - AENV – Approvals (WA & EPEA)
  - SRD –
  - DFO –
- Affected by environmental outcomes –
  - First Nations
  - Public

**Consultation Plan**

Sector	When consultation should occur	Group needs/special requirements	Desired outcome of consultation	Appropriate methods of consultation
AENV	Policy Development	Consider regions, EPEA and WA approvals	Water Body Aggregate Extraction Policy	Committee Representation
SRD	Policy Development		Approval of proposed policy. Agreement to develop a ToR.	Committee Representation
DFO	Policy Development		Acceptance of proposed policy. Agreement to develop a ToR.	Committee Representation
Municipal and Local Govts	Policy Development	Particularly AAMD&C, AUMA	Awareness of policy changes & understanding of required process.	Committee Representation
	Communications Phase			Membership Poll
Proponents	Policy Development	Particularly Alberta Sand & Gravel Association; Alberta Ministry of Transportation	Awareness of policy changes & understanding of required process.	Committee Representation
	Communications Phase			Notification & Review; Letter to all registered pit owners

**Comment [MoD28]:** This should come first!



First Nations	Communications Phase	Both a Proponent and an Affected Party	Awareness of policy changes & understanding of required process.	Meetings – likely require presence of our FN advisors/consultation specialists. TBD
Partners	Communications Phase	Alberta Water Council; WPACs	Awareness of policy changes & understanding of required process.	Internet-based questionnaire
Public	Communications Phase	Level of consultation should reflect level of policy and degree of changes	Awareness of policy changes.	Internet-based questionnaire

**Appendix 3: Glossary**

**Active area of a water body:** Area lying between the ordinary high water marks on each bank.

**Comment [MoD29]:** As defined, this would not include islands as they would have an OHWM or banks themselves. Is this intended or is it intended that all islands be excluded from extraction?

**Aggregate:** Any sand, gravel, clay or marl that is excavated from a pit, whether in a processed or unprocessed form, but does not include reject.

**Comment [MoD30]:** This is definition of surface materials.

**Emergency Situation:** Any situation that may jeopardize human life or infrastructure

**Comment [MoD31]:** Any or just significant? Needs additional definition.

**Extraction:** The removal of aggregate resources. Includes the stripping and stockpiling of soil, overburden, and aggregate materials and the transport of said materials within the site.

**Non-active area of a water body:** Any area in proximity to a water body that is not included in the definition of an active area.

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**Comment [MoD32]:** This is awkward

**Ordinary high water mark:** The usual average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land. In flowing waters (rivers, streams) this refers to the "active area of a water body/bank-full level" which is often the 1:2 year flood flow return level.

**Comment [MoD33]:** This is not the common law definition. Also a return period is a statistical outcome and not all water bodies have flow gauged to allow its determination.

**Qualified third party:**

**Reject:** Aggregate that is expected to be unsuitable for use as a product, or for blending with other aggregate to form a product, and is therefore expected to be used for reclamation of the pit.

**Water body (Water Act):** Any location where water flows or is present, whether or not the flow or the presence of water is continuous, intermittent or occurs only during a flood, and includes but is not limited to wetlands and aquifers but does not include except for clause (nn) and section 99 "water body" that is part of an irrigation works if the irrigation works is subject to a licence and the irrigation works is owned by the licensee, unless the regulations specify that the location is included in the definition of water body.

**Comment [MoD34]:** For this to apply to GoA, we need a definition that is clearer. This one implies the entire floodplain whether small or large.



**From:** Todd Aasen  
**Sent:** Friday, May 17, 2013 9:15 AM  
**To:** Carole-Anne Nielsen  
**Subject:** FW: Aggregate Extraction Policy

**Attachments:** Aggregate Extraction Policy\_v3\_20100623.doc

Todd Aasen P.Eng.,  
District Approval Manager  
Central Region, Environmental Operations  
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**From:** Todd Aasen  
**Sent:** Monday, June 28, 2010 9:28 AM  
**To:** Augustus Archampong  
**Cc:** Meghan Schmidt; Angela Fulton; Lesley Foy; Muhammad Aziz; Matthew Otto; Martin Paetz  
**Subject:** RE: Aggregate Extraction Policy

Central Regions comments



Aggregate  
traction Policy\_v3

Todd Aasen P.Eng.,  
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Duplicate of email dated June 23, 2010 3:09PM, removed as non-responsive.

June 28/10 9:28 AM  
CENTRAL REGIONS  
COMMENTS.

**GoA Water Body Aggregate Extraction Policy  
(Operational approval procedures)  
Draft 3**

**Purpose**

Develop GoA guidelines to support the regulatory approval processes for aggregate extraction operations in active and non-active areas of water bodies.

**Vision and Outcomes**

Water body aggregate extraction operations are carried out responsibly to ensure the maintenance and protection of the natural morphology of water body systems, including aquifers, and the quality of water they contain (natural habitat).

- Water body aggregate extraction is permitted to occur only in areas where it would not **significantly** adversely impact the environment or aquatic ecosystems.
- The GoA has a common and consistent approach to requests for water body aggregate extraction
- The roles and responsibilities of regulators are clearly defined

**Comment [G1]:** Should aquifers be removed as it is my understanding that this policy was to be for surface water (rivers and streams). Will lakes and sloughs be included.

**Assumptions and Principles**

1. This policy promotes a risk-based approach to water body aggregate extraction.
2. Water body aggregate extraction in any active area of a water body will have adverse impacts to the environment and aquatic ecosystems and existing users
3. Water body aggregate extraction in a non-active area of a water body may have an adverse impact to the environment and aquatic ecosystems and existing users
- 3.4 All water body aggregate extraction applications will be processed according to the guidance outlined in this policy (which considers all regulatory mandates)

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**Policy Guidelines**

**1. New Aggregate Extraction Operations**

- 1.1. For proposed operations located within the active area of a water body no approvals will be issued.
- 1.2. For proposed operations located within the non-active area of a water body approvals will only be considered when:
  - 1.2.1. A risk assessment of the environmental and third-party impacts is completed by a qualified **third-party professional** [For 'qualified third party professional requirements' see:

**Comment [G2]:** This statement appears to conflict with the rest of the policy in relation to not allowing mining within aquifers.



<http://environment.alberta.ca/documents/Reclamation-Certificates-Professional-Declaration-Requirements.pdf>

- Any significant adverse effects on the land and/or aquatic environment (including but not limited to fisheries and wildlife resources, water quality, groundwater and river dynamics) resulting from the aggregate extraction operations must be identified.
  - The proponent must demonstrate the ability to mitigate or compensate for the above effects in a manner acceptable to all regulatory mandates.
- 1.2.2. All municipal bylaws and provincial and federal regulations, statutes, and policies have been met.

**Comment [G3]:** Difficult to enforce on titled land.

2. Existing Aggregate Extraction Operations

2.1. Will be allowed to continue for the remaining term of the *Public Lands Act*, *Environmental Protection and Enhancement Act*, or *Water Act* authorizations, subject to the requirements under the *Fisheries Act*. After this time, a renewal of an authorization will include a plan, where necessary, to bring the existing operation into compliance with the requirements outlined for new aggregate operations.

**Comment [G4]:** This may have issues with relation to reclamation timelines. If no approvals will be renewed, are they required to reclaim within a specific timeframe?

3. Undeveloped Aggregate Extraction Operations

3.1. Undeveloped aggregate extraction operations that have a *Public Lands Act* approval but no *Environmental Protection and Enhancement Act* or *Water Act* approvals will be considered a new operation and are subject to similar classifications and requirements.

**Comment [G5]:** Should distinguish between green and white areas (see page 4)

4. Emergency Situations

4.1. Applications will be reviewed and approved by regulatory authorities on a case-by-case basis. The above guidelines may not be applicable.

**Comment [G6]:** Please provide example and what is permitted in these situations.

**Comment [G7]:** Clarify, create exemption, remove, or separate completely. (we do not want to issue approvals for emergencies)

**Tools and Responsibilities**

The following table indicates how the above guidelines will be implemented by the parties to this agreement, the tools used, and the party's role in the water body aggregate extraction authorization process.

Organization	Tools	Roles/Activities
AENV	<i>Water Act &amp; EPEA</i> authorizations	(i) assess application for: - water quantity impacts, including surrounding users on-upstream and downstream users  - water quality impacts for both surface and groundwater - impact on river morphology, including bed and bank stability - impact on riparian areas
	Compliance programs ( <i>Water Act &amp; EPEA</i> )	- Wetland Policies apply to any

**Comment [G8]:** Difficult to consider if on private land

	<p>Alberta First Nations Policy for Consultation</p> <p><i>Conservation &amp; Reclamation Regulation, including Code of Practice for Pits (and Guide) and registrations, Conservation &amp; Reclamation plan and program</i></p>	<p><u>potentially disturbed wetlands</u></p> <p>(ii) enforce authorizations with appropriate action/tools through compliance programs</p> <p>(iii) may require First Nations consultation</p> <p>(iv) use the Regulation to:</p> <ul style="list-style-type: none"> <li>- administer securities</li> <li>- identify conservation and reclamation requirements</li> </ul>
SRD	<p><i>Public Lands Act</i></p> <p>Fish &amp; Wildlife objectives</p> <p>Guidelines for Acquiring Surface Material Dispositions on Public Land</p> <p><i>Disposition &amp; Fees Regulation</i></p> <p><u>Compliance???</u></p> <p>Policy</p>	<p>(i) delineate non-active areas of water bodies where extraction could be considered</p> <p>(ii) assess application for effects on habitat using Fish &amp; Wildlife objectives.</p> <p>(iii) assess application for ...<u>(looking for input from SRD)</u></p> <p>(iv) identify conservation and reclamation requirements</p> <p>(v) assess application for ...<u>(looking for input from SRD)</u></p> <p>(vi) may require First Nations consultation</p>

Comment [G9]: Local authority division should be added as another row. (MGA)

Proponents may also need to consider the following (and associated regulatory requirements):

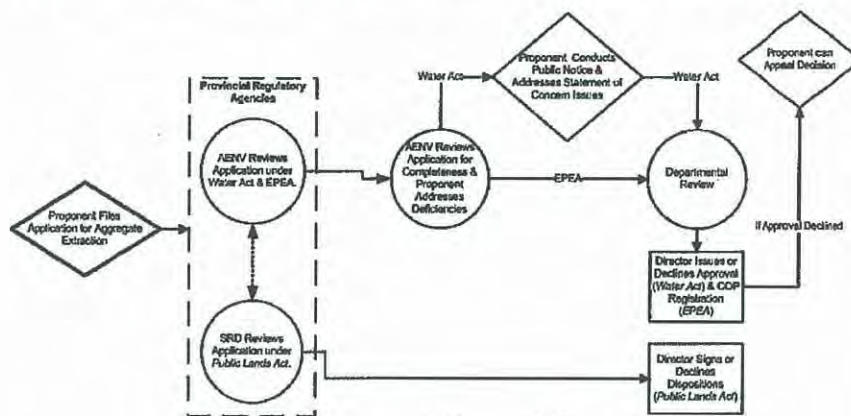
- Species at Risk (*Species at Risk Act*, Environment Canada)
- Fisheries (*Fisheries Act* – Environment Canada)
- Migratory Birds (*Migratory Birds Convention Act* – Environment Canada)
- Navigability (*Navigable Waters Protection Act*, Environment Canada)
- Wildlife (*Alberta Wildlife Act* – Sustainable Resources Development)
- Land Use Regulations (*Alberta Land Stewardship Act*, Sustainable Resource Development)
- Local Land Use Restrictions (Bylaws, Local Municipalities)
- Cultural and Archaeological Sensitivities – See the *Historical Resources Act*, Department of Culture and Community Spirit)



- Traditional Use – See the *Historical Resources Act*; also see the *Alberta 2006 Consultation Policy*, Department of Culture and Community Spirit)

### Application Approval Process

The flow chart below is intended to show the interactions between the regulatory bodies that are party to this agreement and the review processes that are triggered within each department. It is not intended to illustrate the details of each departmental review process.



In order for the proponent to be able to initiate water body aggregate extraction, several applications for authorization may be required (depending on which organizations and which tools are triggered). The list below details the required provincial regulatory applications. Note that regulatory requirements external to the two parties to this agreement are excluded.

Documents Required for Submission by Proponent:

- SRD *Public Lands Act* dispositions
- AENV *Water Act* approval and/or licence application
- AENV *EPEA* Code of Practice for Pits application

**Comment [G10]:** Delineate between Green and White zone. SRD should be responsible for referral to river engineering.

### Implementation Plan

Policy would be effective immediately following Ministerial approval of the participating departments. No legislative changes are required.

1. Develop a strategy to coordinate regulatory review.
  - 1.1. Establish a consistent referral process.
  - 1.2. Streamline review process.

**Comment [G11]:** May develop an appendix that outlines anticipated timelines and resource requirements. Expand on the One-Window Protocol.

- 1.3. Clarify roles of regulatory agencies, particularly with respect to emergency procedures.
- 1.4. Consider developing a single 'Water Body Aggregate Extraction Application Package'.

2. Develop a strategy for sharing and educating on the Water Body Aggregate Extraction Policy including fact sheets and communication plan.
  - 2.1. GoA Departments;
  - 2.2. Partners & public;
  - 2.3. Proponents.
3. Develop guidance around the required Risk Assessment.

#### **Monitoring and Evaluation Plan**

- Adaptive management approach. Suggest policy review every 10 years, which is compatible with the Regional Planning process.
- Update as required to reflect other interrelated policies (ie. wetland policy)

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#### **Appendices**

- Explanation of Problem & Current Policy Context
- Key Stakeholders & Consultation Plan
- Glossary
- Diagram of active area of a water body and non-active area of a water body

#### **Endorsement**

- The following parties agree to adhere to the principles and process outlined above.
- These guidelines are effective from the date of signature. Amendments may be made at any time by mutual consent and sign-off of the parties below.

Signatures: Participating Organizations

**Government of Alberta: Alberta Sustainable Resource Development**

\_\_\_\_\_  
, Minister

\_\_\_\_\_  
Date

**Government of Alberta: Alberta Environment**



\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
**, Minister**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
**Date**

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OFFICE OF THE  
ATTORNEY GENERAL

## Appendix 1: Explanation of Problem & Current Policy Context

**Comment [G12]:** Include explanation of how gravel is deposited and major economic factors.

### Explanation of Problem

Aggregate extraction within the active and non-active areas of surface water bodies has occurred in the province for several decades. The ease of access to the aggregate and associated low development cost may have influence on this choice. Aggregate extraction is an important contributor to economic activity in Alberta.

Aggregate extraction is a concern as the associated operations have been shown to have significant adverse effects on aquatic species and habitat, water quality, and the configuration of the bed, banks and shores of water bodies. Physical changes to a water body, as a result of extraction operations, have also been shown to have an adverse effect on adjacent lands and infrastructure upstream and downstream of the operation location.

**Comment [G13]:** Provide clarification between active (will be significant impact) and adjacent (may be significant impact).

### Background/Current Regulatory State

#### *Provincial:*

Aggregate extraction operations on public and private lands in Alberta are regulated under three provincial enactments: the *Water Act* (Alberta Environment), the *Public Lands Act* (Alberta Sustainable Resource Development), and the *Environmental Protection and Enhancement Act* (Alberta Environment). These have separate and distinct regulatory processes that are not well integrated, which sometimes has led to differing approval terms, conditions and requirements.

#### *Municipal:*

The *Municipal Government Act* (Municipal Affairs) authorizes municipal governments to create bylaws. Through these bylaws municipalities may have a development approval process and require a development permit for aggregate extraction. Provincial ministries, including Alberta Transportation, are not bound by this *Act* or the regulations or bylaws it enables.

#### *Federal:*

Aggregate extraction operations situated in or adjacent to water bodies must also meet federal regulatory requirements under the *Fisheries Act* (Department of Fisheries and Oceans), the *Navigable Waters Protection Act* (Transportation Canada), and possibly the *Canadian Environmental Assessment Act* (Environment Canada) or the *Species at Risk Act* (Environment Canada). Meeting provincial standards and requirements (including the Code of Practice for Pits with respect to species at risk and rare plants) does not ensure that federal regulatory requirements will be met.

In the past 10 years, DFO in Alberta has declined issuing authorizations under the *Fisheries Act (Canada)* and AENV has declined issuing approvals under the *Water Act* for aggregate extraction related activities; potentially SRD may also exercise the option to decline issuing a surface materials lease in support of SRD fisheries objectives.

Any work or undertaking that causes the harmful alteration, disruption or destruction (HADD) of fish habitat is prohibited unless authorized under the Federal *Fisheries Act*.



DFO will review proposed works or undertakings using the Risk Management Framework as outlined in the Practitioners Guide to the Risk Management Framework for DFO Habitat Management Staff. DFO may choose not to issue an authorization where:

- the magnitude and duration of the HADD is unacceptable;
- the fish habitat affected is critical to the maintenance of fish populations;
- the works or undertakings would result in the deposit of a deleterious substance into fish bearing habitat;
- no acceptable compensation, to replace affected fish habitat, can be achieved.

Prior to issuing any authorization, the potential environmental effects of the project must also be assessed pursuant to the *Canadian Environmental Assessment Act* and a determination of 'no significant adverse environmental effects' be made.

This approach is consistent with the objectives of SRD under the *Public Lands Act*, and AENV under the *Water Act* and the *Environmental Protection and Enhancement Act*. These provincial agencies are required to consider the protection of aquatic environment when issuing approvals.

#### Work to Date

In the past decade, numerous attempts have been made to develop a water body aggregate extraction policy that, at least works for Alberta. Due to the number of parties involved, it has been difficult to obtain consensus. AENV has decided that it is time to coordinate the knowledge gained and to conclude the development of a GoA position on water body aggregate extraction until a GoA-Canada policy can be negotiated.

The Joint Technical Issues Working Group (JTIWG), a federal-provincial working group, has provided recommendations for aggregate extraction in the active area of water bodies. Their consensus is not to permit any extraction in any active area of any water body at any time. The Group proposes that this be adopted by the GoA and Canada.

#### Drivers for Project and Key Decision Maker

There is no formal provincial policy on water body aggregate extraction. The approach to water body aggregate extraction requires clarity, as requests from the public are increasing and the GoA requires a consistent and fair course of action.

Clear and consistent guidelines for both new and existing aggregate extraction operations will ensure a higher level of protection for the environment.

There is an increasing demand for aggregate resources. This demand is countered by public opposition to allowing aggregate extraction operations in water bodies.

In recent years there has been increased demand from some counties (Brazeeau/Wetaskiwin) to extract aggregate from the active portion of river systems. This increased demand comes from a shortfall in the counties' resource ownership and the significant costs associated with buying aggregate privately. Additionally, these counties are dealing with rising development pressures and resistance to aggregate extraction

operations close to current residential developments. Counties also want to develop consistent bylaws and area structural plans and have requested GoA presence to discuss aggregate extraction, both in active and non-active areas of water bodies.

Occasionally there may be demand from local governments to extract aggregate for the purposes of River Training.

Key decision-makers: Alberta's Minister of ENV, Minister of SRD

- For this interim GoA policy, the Minister of AENV would be the principal decision-maker

#### Relationship to Wider GoA Priorities

##### *Land-Use Framework*

- Strategy 1: Develop seven regional land-use plans based on seven new land-use regions.
  - Need to provide guidance to LUF regional plans as to where aggregate extraction from water bodies may be acceptable.
  - Would enable 'place-based' responses to aggregate extraction approval applications, but provide a provincially consistent policy to determine whether or not it would be acceptable in the provincial policy and regulatory contexts.
- Strategy 3: Cumulative effects management will be used at the regional level to manage the impacts of development on land, water, and air.
  - Need to have a consistent policy so that the cumulative effects of aggregate extraction are considered and managed.
- Strategy 4: Develop a strategy for conservation and stewardship on private and public lands
  - Aggregate extraction policy would be applicable to public and private lands. Environmental impacts would be the primary focus of the risk assessments required for proponents to obtain approvals.

##### *Water for Life Strategy*

- Supports Healthy Aquatic Ecosystems outcome through the required risk assessments that would ensure the maintenance and preservation of natural habitat.
  - Action 2.1: Enforce protection of known critical aquatic ecosystems using existing legislation
  - Action 2.6: Implement aquatic restoration plan and conserve key aquatic ecosystems through regional land-use approaches and identified partnerships



**Appendix 2: Key Stakeholders & Consultation Plan**

**Key Stakeholders**

- Proponents – Commercial users of aggregate
  - Alberta Ministry of Transportation
  - Municipalities
  - First Nations
- Regulatory Agencies –
  - Municipalities
  - AENV – Approvals (WA & EPEA)
  - SRD –
  - DFO –
- Affected by environmental outcomes –
  - First Nations
  - Public

**Consultation Plan**

**Comment [G14]:** WPAC should be involved at the policy development level.

Sector	When consultation should occur	Group needs/special requirements	Desired outcome of consultation	Appropriate methods of consultation
AENV	Policy Development	Consider regions, EPEA and WA approvals, Environmental Law Section	Water Body Aggregate Extraction Policy	Committee Representation/ Referral
SRD	Policy Development		Approval of proposed policy. Agreement to develop a ToR.	Committee Representation
DFO	Policy Development		Acceptance of proposed policy. Agreement to develop a ToR.	Committee Representation
Municipal and Local Govts	Policy Development	Particularly AAMD&C, AUMA	Awareness of policy changes & understanding of required process.	Committee Representation
	Communications Phase			Membership Poll
Proponents	Policy Development	Particularly Alberta Sand & Gravel	Awareness of policy changes & understanding of	Committee Representation

	Communications Phase	Association; Alberta Ministry of Transportation	required process.	Notification & Review; Letter to all registered pit owners
First Nations	Communications Phase	Both a Proponent and an Affected Party	Awareness of policy changes & understanding of required process.	Meetings – likely require presence of our FN advisors/consultation specialists. TBD
Partners	Communications Phase	Alberta Water Council; WPACs	Awareness of policy changes & understanding of required process.	Internet-based questionnaire
Public	Communications Phase	Level of consultation should reflect level of policy and degree of changes	Awareness of policy changes.	Internet-based questionnaire



**Appendix 3: Glossary**

**Active area of a water body:** Area lying between the ordinary high water marks on each bank.

**Comment [G15]:** Include definition of Green Zone and White Zone

**Aggregate:** Any sand, gravel, clay or marl that is excavated from a pit, whether in a processed or unprocessed form, but does not include reject.

**Comment [G16]:** How does this work for aquifers?

**Emergency Situation:** Any situation that may jeopardize human life or infrastructure

**Extraction:** Includes the stripping and stockpiling of soil, overburden, and aggregate materials and the transport of said materials within the site.

**Non-active area of a water body:** Any area of a water body that is not included in the definition of an active area.

**Comment [G17]:** How does this work for aquifers?

**Ordinary high water mark:** The usual average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land. In flowing waters (rivers, streams) this refers to the "active area of a water body/bank-full level" which is often the 1:2 year flood flow return level.

**Comment [G18]:** Do we need to include water table?

**Reject:** Aggregate that is expected to be unsuitable for use as a product, or for blending with other aggregate to form a product, and is therefore expected to be used for reclamation of the pit.

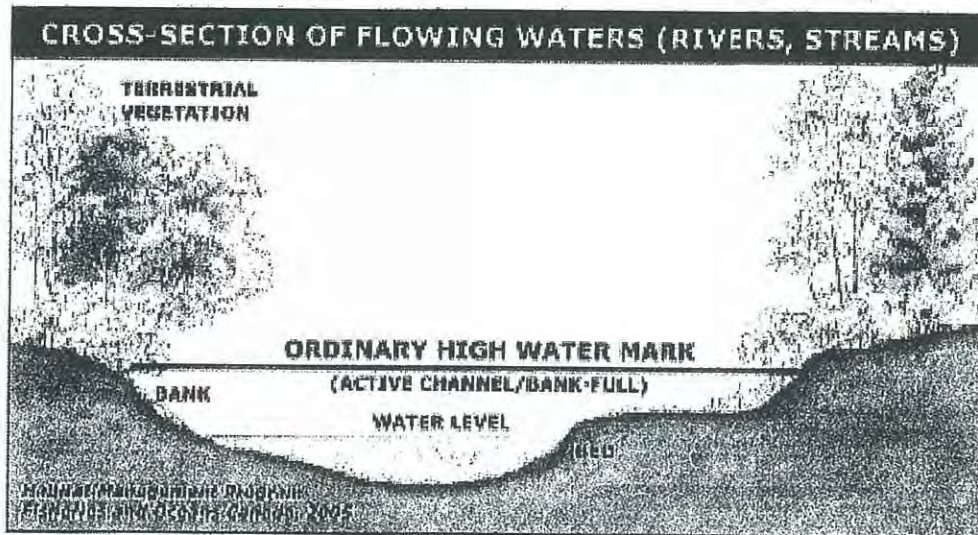
**Comment [G19]:** Clarify as recently some reject is now being used as product.

**Water body (Water Act):** Any location where water flows or is present, whether or not the flow or the presence of water is continuous, intermittent or occurs only during a flood, and includes but is not limited to wetlands and aquifers but does not include except for clause (nn) and section 99 "water body" that is part of an irrigation works if the irrigation works is subject to a licence and the irrigation works is owned by the licensee, unless the regulations specify that the location is included in the definition of water body.

**Comment [G20]:** For the purpose of this policy should we exclude aquifers?

**Appendix 4: Active and non-active area of a water body**

**Ordinary high water mark** - The usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land. In flowing waters (rivers, streams) this refers to the "active channel/bank-full level" which is often the 1:2 year flood flow return level.





## Terry Kosinski

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**From:** Sue Cotterill  
**Sent:** Wednesday, June 30, 2010 8:57 AM  
**To:** Terry Kosinski  
**Subject:** RE: Aggregate Extraction Response

Okay – thanks.

---

**From:** Terry Kosinski  
**Sent:** Wednesday, June 30, 2010 8:55 AM  
**To:** Sue Cotterill  
**Subject:** FW: Aggregate Extraction Response

FYI. Includes a copy of the draft response.

Terry

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**From:** Gerry Haekel  
**Sent:** Friday, June 25, 2010 1:55 PM  
**To:** Terry Kosinski  
**Cc:** David Park; Douglas Knight; Barb Grunau  
**Subject:** RE: Aggregate Extraction Response

Thanks Terry. We can address all your additional comments as the work progresses. I think it is warranted that F&W sit at the table to provide guidance to things like setbacks, buffers, biodiversity, etc.

I'll make sure Dave is listed as an additional SRD participant.

Gerry Haekel, P.Biol.  
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Land Management Branch, Lands Division  
Alberta Sustainable Resource Development  
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**From:** Terry Kosinski  
**Sent:** Friday, June 25, 2010 1:50 PM  
**To:** Gerry Haekel; Barb Grunau  
**Cc:** David Park  
**Subject:** RE: Aggregate Extraction Response