

Gravel Pit Workshop
Bow River Basin Council
March 12, 2021

Responses to Participant Questions (Alberta Environment and Parks)

Question	AEP Response
<p>Regulatory Assurance Framework</p> <p>To Terrina – in the RAF shift coming this year: how will cumulative effects be considered? And what will be the public disclosure compared to today of these stages: discovery, application notice, decision and reporting?</p>	<ul style="list-style-type: none"> • The strategic shift to new Regulatory Assurance Framework (RAF) develops an emphasis on clear operating standards, policies, and guidelines that are tied to environmental and regulatory outcomes, and by continuously assessing to those guidelines when operations are active. • When issues arise, our ongoing regulatory focus is first on working with proponents to adjust and mitigate environmental impacts, then more overt compliance responses if needed. • Although still in development, the RAF intent is to establish clear accountability throughout the lifecycle of an activity. • Rules related to public disclosure now and in the future adhere to Government of Alberta and Freedom of Information and Protection of Privacy (FOIPP) requirements. Public Notice is a requirement under the legislation that the application is being made and legislative change is not proposed. • Items that are routinely disclosed under FOIPP such as applications and reports may be more transparent and accessible through the developing electronic and web based systems. Today, these can be obtained directly from the regional office that is responsible for managing the area in which an application or authorization is being managed, without the need to use formal FOIPP procedures. • For additional information, please refer to the Disclosure of Information Regulation.
<p>Groundwater</p> <p>Groundwater fluctuates throughout the year depending on season. How is this addressed?</p>	<ul style="list-style-type: none"> • In addition to the Code of Practice for Pits (COP) requirement to identify and measure the depth to groundwater in any test holes in any submitted activity plan, registration holders that are required to obtain a <i>Water Act</i> authorization for activities that will impact groundwater may be required monitor groundwater quantity/quality both on and off site.

	<ul style="list-style-type: none"> • It is typical that such monitoring is required to be undertaken at different times of the year to account for seasonal variability.
How can it be possible to have a non-active area in alluvial flood plain where all the shallow groundwater and surface water are intrinsically connected- recharge discharge?	<ul style="list-style-type: none"> • Active channel: the portion of a surface water body that is largely un-vegetated, at least for some portion of the year, and inundated at times of high discharge. (Alberta Public Lands Glossary of Terms) • Aquifers are not treated as “public lands” under the <i>Public Lands Act</i>. • The term “water body” is not defined in the <i>Public Lands Act</i>, but there is no indication that the Act intended to include aquifers. • The inclusion of aquifers in this definition would be highly problematic from a <i>Law of Property Act</i> perspective, because it would conflict with any provisions of that Act that deal with subsurface material. • Accordingly, the province owns the water under the <i>Water Act</i>, but not the physical aquifer.
How can the discharge/recharge area that are groundwater stream links (integral part of the surface water) be mined out when they are absolutely part of the river.	<ul style="list-style-type: none"> • Please refer to the answer above. • Additionally, groundwater disturbance requires approval under the <i>Water Act</i>. Authorizations under the <i>Water Act</i> are required regardless of the size of the pit. Any proposed activity is based on a site-specific review of: <ul style="list-style-type: none"> ○ assessment of impacts to water quality and quantity; ○ any potential impacts to other water and land users; ○ potential ecological impacts to fish, wildlife and plants, and the hydrological and hydrogeological processes that support them.
Understand that operator's only have to report to AEP ground water levels if known and there is no requirement for the operator to establish high water table levels or information on aquifers. Is this correct?	In addition to the COP requirement to identify and measure the depth to groundwater in any test holes in any submitted activity plan, registration holders that are required to obtain a <i>Water Act</i> authorization for activities that will impact groundwater, and may be required monitor groundwater quantity/quality both on and off site where there is the potential to impact the groundwater resource or others.
Monitoring and Reporting Requirements	
Does dewatering, trigger requirement to monitor adjacent landowners wells? springs? Does AEP circulate to adjacent landowners to see if there are concerns? Does AEP just rely on applicant experts? Is there any third party review?	<ul style="list-style-type: none"> • A diversion of water for the purpose of dewatering a sand and gravel site is exempt from requiring a <i>Water Act</i> authorization if the water diverted is moved into and retained on an on-site pit without a consumptive use of the water or if it is moved back into a water body that is hydraulically connected without using the water, if the water is equal or of the same quality

	<p>as the water that was originally diverted. (Water (Ministerial) Regulations Schedule 1</p> <ul style="list-style-type: none"> • If the diversion is not an exempted activity, the proponent is obligated to obtain a <i>Water Act</i> authorization. • Depending upon circumstances, that authorization may require the registration holder employ competent technical experts to monitor adjacent surface and/or groundwater sources and provide that information to AEP for further review.
<p>Does AEP require pits to test water chemistry and quality? Discharge water quality? Water ponds for collected dewater? Is the data public? What changes/impacts (ie. flow rates, pressure, quantity, quality) to an adjacent landowners water is considered significant enough (is this quantified anywhere?) for AEP to require a stop order to gravel operations? Who is responsible to monitoring these changes in water wells or nearby surface water bodies?</p>	<ul style="list-style-type: none"> • In addition to the answer above, the COP requires that samples of pit water that is being discharged be collected and analyzed for pH, total suspended solids (TSS) and hydrocarbons. The COP identifies the volume of discharge water, sampling methodology, limits that must be met and monitoring frequency that a registration holder must adhere to. • The COP also requires that the registration holder establish a program to ensure that there are no adverse effects of the discharge on the receiving environment and a contingency plan in case an adverse effect is discovered. • Any additional monitoring required related to potential adverse effects is the responsibility of the party deemed to be the “person responsible” at the direction of the AEP. Once that information has been submitted it is classified as “routinely releasable” and will be provided to the public upon request. • AEP does not have a regulatory tool termed as a “stop order”. However AEP Environmental Protection and Enforcement Orders can order the person to whom it is directed to take any measures that the Director considers necessary to take any action specified by the Director to prevent a release including the stopping or shutting down of any activity or thing either permanently or for a specified period.
<p>The West Cochrane Burnco project pit is the largest to ever be applied for in Rocky view. It will intersect Grand Valley Creek and Beaupre Creek, and sits right along the Bow River. It also plans on dewatering and exploit below the water table. Will this imply more scrutiny as part of the application and tighter monitoring for the creeks levels and water quality</p>	<p>As this question is related to a specific project that is currently subject to regulatory review, a response cannot be provided.</p>
<p>Reclamation</p>	
<p>Is there any requirement to limit the timeframe of the aggregate pit? Has the government required bonds to ensure reclamation? AER currently is establishing liability as many orphan wells are being reclaimed by government and taxpayers.</p>	<ul style="list-style-type: none"> • The Registration does not stipulate a timeframe for final reclamation to occur. However, Public Lands authorizations may. • Operators are required to provide full-cost security to ensure that the government has access to enough funds that it could reclaim if

	<p>the registration holder is unable or unwilling to carry out their reclamation obligations.</p> <ul style="list-style-type: none"> • When the pit is fully reclaimed and has obtained a Reclamation Certificate, the security is no longer required and is returned to the registration holder
<p>Why is gravel exploitation not considered/requiring Industrial status? It has all the trucks, noise, pollution and visual impact of it.</p>	<ul style="list-style-type: none"> • AEP does not classify activities specifically as industrial, but focuses on the primary operational impacts associated with each activity. • In the case of sand and gravel extraction, the AEP focus is on the conservation and reclamation of specified land. • Additionally, the <i>Environmental Protection and Enhancement Act (EPEA)</i> prohibits the release of any substance that causes an adverse effect. • The noise and visual impact of a proposed activity is outside the jurisdiction of AEP, and is addressed through the land use decision processes by the local municipality.
<p>What if anything is AEP doing to ensure phased reclamation? In our situation it appears AEP is allowing a new pit without a reclamation completed by operator on the existing pits (Understand all pits being treated/amalgamated under one registration). Additionally, what is any consequence is there for operators that expand their pit sizes without the proper prior AEP approvals?</p>	<ul style="list-style-type: none"> • Although not stipulated directly in the COP, registration holders are actively encouraged to progressively reclaim their sites and to identify that intent in their activity plan(s). • When updated activity plans confirm that progressive reclamation has been undertaken, a registration holder may be entitled to a reduction in the amount of security associated with the site. • In the example, expansion of the activity without an updated activity plan would be deemed a contravention of the COP. • If an operation does not adhere to EPEA, including the COP, the registration holder may be subject to an enforcement action. Enforcement responses can range from a warning letter, a civil penalty or a prosecution with fines for a corporation up to \$500,000.
<p>Surface Water Body Aggregate Policy (SWBAP)</p>	
<p>What is the status of SWBAP?</p>	<p>The SWBAP is a provincial policy that was approved in 2010. AEP is working on finalizing the guide for its implementation. The guide will provide operational direction on information requirements to assess, identify and mitigate risk when application is being made to site a pit in the 1:100 year floodplain.</p>
<p>An alluvial flood plain is part of the surface water body providing the reservoir storage that recharges the surface water body- therefore is part of that water body- If SWBAP states that there is no mining of an active channel i.e. surface water body river- how can there be mining out of areas that are just not visible?</p>	<ul style="list-style-type: none"> • The SWBAP defines a surface water body as defined in the <i>Water Act</i>, excluding wetlands. • It further divides a surface water body into an active channel and non-active areas to regulate aggregate extraction in these areas. • Active channel is defined as “those parts of the bed and banks of a water body that are without terrestrial vegetation, excluding wetland”.

	<ul style="list-style-type: none"> • Non-active areas are defined as “any area of a surface water body that is not included in the active channel”. • It prohibits mining in active channels, but allows it to be considered within non-active areas, including floodplains, following a risk-based approach intended to identify and mitigate potential significant effects of these operations. • Aquifers are not treated as “public lands” under the <i>Public Lands Act</i>. • The term “water body” is not defined in the <i>Public Lands Act</i>, but there is no indication in that Act that it was intended to include aquifers. • The inclusion of aquifers in this definition would be highly problematic from a <i>Law of Property Act</i> perspective, because it would conflict with any provisions of that Act that deal with subsurface material. • Accordingly, the province owns the water under the <i>Water Act</i>, but not the physical aquifer.
<p>Gravel operations alter the 1:100 year floodplain. Will AEP delineate the altered flood hazard area after</p>	<p>If alteration of the 1:100 floodplain is identified during the application process for a pit operation, potential impacts must be assessed and managed, including:</p> <ul style="list-style-type: none"> • river structure; • water • fisheries and aquatic communities • infrastructure and others <ul style="list-style-type: none"> • Where floodplain mapping is not available and/or if there is a discrepancy between the operator and the department subject matter expert on the determination of the 1:100 floodplain, additional expertise may be required to delineate the current 1:100 year floodplain. • It is applicants' responsibility to delineate the 1:100 floodplain where provincial mapping is not available, and this may be required where changes have occurred to the river system. This may be required when: <ul style="list-style-type: none"> ○ Authorizations are renewed ○ Events have occurred that altered the river system. • Under EPEA (Section 76), the Public Lands Act (Section 15), and the Water Act (Section 42-43), the director has the discretion to re-evaluate the environmental risk at any time and, the director has the discretion to modify conditions or authorization of previously authorized activities. • An authorization holder is accountable for reporting, monitoring and addressing potential adverse effects based on the authorized activity throughout the lifetime of the authorization.

<p>To Terrina Perley – please explain the risk assessment for SWBAP that you described as commissioning third party recommendations, internal experts and reports to assess the criteria for SWBAP. Where would the public get to access the SWBAP criteria you detailed? - it should have to be publically available because the public paid for it</p>	<ul style="list-style-type: none"> • The SWBAP is not under review, it is the implementation guide that is currently being reviewed. • AEP hired a third party through an RFP to review the 2017 draft guide for accuracy and scientific validity. Feedback received was addressed in the guide, to the extent feasible. • The draft guide was also reviewed by AEP subject matter experts and experts from Alberta Transportation. • The SWBAP criteria is listed as follows: <ul style="list-style-type: none"> ○ Fish and wildlife, including aquatic species, terrestrial species, and species at risk ○ Land, including vegetation and soils ○ Hydrogeology and hydrology, including flood risk and base flow ○ River engineering, including channel morphology and bank stability ○ Water quality and impact on biota ○ Wetlands ○ <i>Water Act</i> and EPEA requirements and factors the Director must consider when making a decision
<p>Since 2010 some AEP staff have used, and still do use, SWBAP as their excuse for actively promoting mining in water bodies, floodplains, aquifers, wetlands, etc., when it is so badly written as to allow for multiple conflicting interpretations, crucial elements such as risk assessment criteria have STILL not been released, it has never received ministerial approval, and other AEP staff correctly and publicly admit that the so called policy is NOT official policy; WHY are some AEP staff still determined to use such illegitimate non policy to undermine legitimate legislation, and degrade and destroy public water resources?</p>	<p>Likely should be moderated out and not included- it is an opinion.</p>
<p>To Terrina -Where was SWBAP ever deemed legitimate in legislation? We are aware that the policy was kick started by the removal of the Federal Fishery and Fishery Habitat acts - Does it not follow that the reintroduction of said Federal Acts would alter SWBAP?</p>	<ul style="list-style-type: none"> • The SWBAP was approved in 2010. • The vision and outcomes for the policy are attached, here, as Attachment 1. • Applicants are required to follow all relevant provincial, federal and municipal requirements. • AEP is accountable for legislation under delegated authority, including the <i>Public Lands Act</i>, the <i>Water Act</i> and <i>EPEA</i>. The federal government is the accountable party for any federal legislation, and AEP will make referrals where there is question that the application may require federal approval. • The province meets regularly on a committee with the federal government and participates in the decision-making process to manage and protect the resource and its habitat. In Alberta, the provinces manages and license freshwater species.

Post-approval Variances

Please address "variances" that the pit owners can apply for after the approval and development stages. Are there any places where adjacent impacted landowners are made aware of these variances or limits to those variances?

Municipal response may also be required here.

- AEP- the registration holder must apply to the Director to make changes to the Activities Plan information contained in Part 2 of Schedule 2 in the Code of Practice (Section 4.1.2). The Director must authorize the change that is applied for before the change can be implemented.
- Once the Director has authorized the change, it becomes part of the "most recent Activities Plan" for the purposes of compliance with Section 4.1.1.
- Similar processes apply on Public Lands.
- Section 2(d) of the *Water Act*, recognizes the shared responsibility of all Alberta citizens for the environment, and the opportunities made available through the respective Acts to participate in decisions.
- A Statement of Concern (SOC) is one mechanism by which a person who is directly affected may participate in the regulatory process.
- Public notification is a mandatory step of the application process under the *Water Act*.
- The *Water Act* requires the applicant for an approval, license or preliminary certificate and for amendment of an approval or license or preliminary certificate shall provide notice of application or decision, in accordance with the applicable regulation, policies and guidelines.
- The *Water Act* provides mechanisms for a person who is directly affected to provide input into regulatory decisions. Any "person" who is "directly affected by the application amendment may submit "a written SOC" to the Director, setting out that person's concerns.
- The purpose of an SOC is to notify the Director and the project proponent of the person's concerns and to preserve the person's right to file an appeal following the Director's decision on the application or proposed amendment.
- Each submission is reviewed on its own merits in the context of the regulatory application before the Director, and a decision made in accordance with this policy and the legislation.
- The Director has the discretion to waive notice of application and provide notice of decision as per as per s.108 (6)(b) of *Water Act* where the activity will result in a minimal or no adverse effect on:
 - the aquatic environment
 - other land and water users (s.108)

	<ul style="list-style-type: none"> • Where notice of decision is completed, any one directly affected has the right to appeal.
Municipal Process to Approve Pits	
<p>Permanent loss of very limited agricultural lands seem to be ignored in terms of lost economic benefit for the foreseeable future where as aggregate exploitation is immediate profit taking with a permanent loss of agricultural loss as an outcome. Does any municipality that you know of include that perpetual economic loss of agricultural land in their decision making.</p>	<p>No AEP response as these considerations are addressed through the land use decision process by the local municipality.</p>
<p>In our experience the municipality is stating that AEP is responsible for water. If municipalities stating in gravel extraction permits that operations are to remain above the water table. What if anything is AEP doing to ensure that the high water table levels are known and that operators remain above this level? Concern is it appears municipalities state operators have to stay above water table, put water responsibilities onto AEP and it seems AEP only addresses this matter once water table encountered (damage done - rely on operator to self report) and an application under water act received. Thank you.</p>	<p>AEP - see answers to questions related to groundwater above.</p>
<p>I have read that it is the right of the landowner to extract gravel, therefore an application can not be denied - is this true?</p>	<ul style="list-style-type: none"> • Applications must be accepted. All applications receive a complete review. Legislation allows for rejection of an application that is incomplete or the Director can refuse to issue an approval, based on the legislation under which the application was made. • Sand and gravel is considered a surface material and it is the right of the landowner to extract the resource. • Banning gravel extraction or not allowing full removal of economically viable deposits (i.e. no end pit lakes), clearly infringes on property rights. Common law clearly states that property rights can only be taken away by lawful process through a valid enactment (legislation).
<p>If an amendment to the Land Use Bylaw is conducted in a manner that fails to follow the municipalities Municipal Development Plan (MDP) or has procedural fairness issues and there is no appeal option. Is an adjacent impacted landowners only option to file an originating application (within 60 days of the land use decision) for a judicial review?</p>	<p>No AEP response as these considerations addressed through the land use decision process by the local municipality.</p>
<p>How can landowners ensure that an AEP assessment of potential harm has occurred before a municipality issues a land use re-designation or a development permit?</p>	<ul style="list-style-type: none"> • The AEP authorization process and that of a local municipality are separate statutory decisions under different legislation and authority. There is no clear statement in legislation that requires one authorization must come before the other.

	<ul style="list-style-type: none"> • In general, municipalities and the province communicate with one another on applications to ensure transparency and that concerns are heard and addressed by the appropriate regulatory body.
<p>AEP Approval Process for Pits</p>	
<p>In the AEP side of the assessment/approval process at what point is there opportunity for statement of concerns to be submitted and does it require an official call for these statements?</p>	<ul style="list-style-type: none"> • Notice is published in newspapers in the area of activity and, as of February 16, 2017, the department has online notification on the notification tab of our authorization viewer at https://avw.alberta.ca/ApprovalViewer.aspx. The correspondent is encouraged to check both regularly. • There are strict timelines for the submission of statements of concern in response to a posted public notice under the Water Act. The Water Act requires that a statement of concern must be submitted within 7 days after the last providing of the notice or any other longer period specified by the Director. The time frame will be clear in the notice. • Section 2(d) of the <i>Water Act</i>, recognizes the shared responsibility of all Alberta citizens for the environment, and the opportunities made available through the respective Acts to participate in decisions. • A Statement of Concern (SOC) is one mechanism by which a person who is directly affected may participate in the regulatory process. • Public notification is a mandatory step of the application process under the <i>Water Act</i>. • The <i>Water Act</i> requires that the applicant for an approval, license or preliminary certificate and for amendment of an approval or license or preliminary certificate shall provide notice in accordance with the applicable regulation, policies and guidelines. • The <i>Water Act</i> provides mechanisms for a person who is directly affected to provide input in regulatory decisions. Any "person" who is "directly affected" by the application amendment may submit "a written SOC" to the Director, setting out that person's concerns. • The purpose of an SOC is to notify the Director and the project proponent of the person's concerns and to preserve the person's right to file an appeal following the Director's decision on the application or proposed amendment. • Each submission is reviewed on its own merits in the context of the regulatory application before the Director and a decision made in accordance with this policy and the legislation. • To be considered a SOC, the submission must relate to the application or proposed

	<p>amendment and must identify specific concern(s) with the application or proposed amendment.</p> <ul style="list-style-type: none"> • Section 111 (2)(b) of the <i>Water Act</i> require the Director to provide notice of the decision on the approval/licence application in accordance with the regulations to all persons submitting a valid SOC. • A person who previously submitted a statement of concern and is directly affected by the decision may submit a notice of appeal to the Environmental Appeal Board. • The Director has the discretion to waive notice of application and provide notice of decision as per as per s.108)(6)b of <i>Water Act</i> where the activity will result in a minimal or no adverse effect on: <ul style="list-style-type: none"> ○ the aquatic environment ○ other land and water users (s.108) • Where notice of decision is completed, any one directly affected has the right to appeal.
<p>Why is consultation after the fact? Is 7 days notice in a paper that is not circulated in the area in which the pit is located reasonable?</p>	<ul style="list-style-type: none"> • Public notice is the requirement under the <i>Water Act</i>. It can occur at the time of application, before a statutory decision has been made, or at the discretion of the Director at the time of decision where the activity will result in a minimal or no adverse effect on: <ul style="list-style-type: none"> ○ the aquatic environment ○ other land and water users (s.108) • The timing associated with the public notice of an application being received can also be extended to 30 days and can be advertised in a broader area beyond where the pit is located. • Any additional valid “Statements of Concern” can be raised through the Environmental Appeals Board. • Please also see the answer above.
<p>Where is the environmental and social cumulative impact assessment addressed? did not hear those words</p>	<p>This response requires Municipal input, as well.</p> <p>AEP:</p> <ul style="list-style-type: none"> • The department has a number of tools that support management of cumulative effects. These include, for example, water management plans, sub-regional plans and disturbance limits, and environmental management frameworks for surface water and groundwater, and air. Policy considerations include social, economic and environmental outcomes. • Additional management, including establishing limits and thresholds, falls under Regional Planning and the <i>Alberta Land Stewardship Act</i>. • In a <i>Water Act</i> application review, proponents are required to identify existing and approved operations that may contribute to cumulative

	<p>effects. Proponents are to consider how these cumulative impacts could occur and how they could be mitigated.</p> <ul style="list-style-type: none"> • The implementation guide for the SWBAP, currently being developed, requires applicants consider local cumulative effects as part of their application process.
Does AEP set performance standard to set timeframe? Current Burnco pit was approved based on applicant saying 10 years. 10 years later still on phase 1. Now they want total 1200 acres. Given current use 125,000 then 15M tons would take 100 years! Does AEP view needs and set timeframes?	This question is related to a specific project that is currently subject to regulatory review, and is out of scope for this workshop.
Are performance measures and monitoring visible to public, especially adjacent landowners? Those most impacted?	<ul style="list-style-type: none"> • Information related to activities regulated by AEP is available to the public either as routinely releasable information or through a formal Freedom of Information request. Contact your local AEP office to determine whether a formal request is required. Information such as application content and routine reports are routinely disclosed and can be obtained from your local office without a formal request. • As RAF evolves, more information will be made routinely available on line.
Who pays for the cost of preparing baseline studies that can be used later to assess changes/damages that were unforeseen at the time of approval?	All required environmental assessments are the responsibility of the regulated party. This may include the need for qualified professionals who must follow a code of conduct or ethics, as applicable, and this is reviewed and confirmed by the department.
We were advised by an AEP compliance officer that Pit dewatering permitted under the Code of Practice of Pits without Water Act approvals as long as the dewatering is included in the operator's site plans. Can you please expand on this/explain.	<ul style="list-style-type: none"> • Please also see the previous answer to a very similar question. • In addition, EPEA, through the COP, requires that samples of pit water that is being discharged be collected and analyzed for pH, total suspended solids (TSS) and hydrocarbons. The COP identifies the sampling methodology, limits that must be met and monitoring frequency that a registration holder must adhere to.
Is trenching to allow pit water to flow out of a pit considered diversion of water? Does this require a Water Act Authorization? If this is done without Water Act Approvals what is the consequence?	<ul style="list-style-type: none"> • Dewatering a pit offsite requires approval under the <i>Water Act</i>, unless exempt under the Water (Ministerial) Regulation. • Generally, trenching would require authorization. • Pit water quality is also strictly regulated through the Code of Practice for Pits. • Enforcement and consequences were discussed in a previous response.

<p>So if water from a neighboring wetland and/or wetland overflow is used for dust suppression is a licence required?</p>	<p>A <i>Water Act</i> Temporary Diversion Licence is typically the regulatory tool employed to authorize the allocation of water from a water body for dust suppression.</p>
<p>If an operation will be with 80m of a residential water well will the operations require a groundwater assessment? Where do we find information on the requirements for a groundwater assessment? Why are hydrogeological assessments not required unless an application is made under the Water Act and why is this discretionary if required by a municipality?</p>	<ul style="list-style-type: none"> • Under the <i>Water Act</i>, an authorization is required for any activities that may affect the aquifer (including hydraulic characteristics and the water availability of the aquifer). • If a proposed COP activity has been assessed to require a <i>Water Act</i> authorization, a field verification of all groundwater users within a specified radius (usually 1.6KM) is required. • The verification focus is on all wells, springs, and dugouts and includes water quality, well depth, depth to water, well completion details and pump intake depth for each well. Distance alone does not indicate that there may be a potential impact. • Additional information on water wells is available through Alberta Environment and Parks Ground Water Information System at http://environment.alberta.ca/apps/GOWN/
<p>Depreciating Land Value of Adjacent Residents</p>	
<p>For ASGA, what are the requirements, or responsibilities, to address the imposed impact of a pit to immediate adjacent land owners as far as depreciating land value?</p>	<p>ASGA</p>
<p>The largest impact for gravel pits is on adjacent land values, which decreases most for the closest properties. Researches shows 30 to 40% decreases in resale value. And that's for the one who successfully sell! WHERE does that sit into the process?</p>	<p>ASGA</p>
<p>HADD</p>	
<p>What changes to applications has the newly reinstated Federal Fishery Habitat Act triggered?</p>	<ul style="list-style-type: none"> • No changes triggered. • The SWBAP ensures risks to fish and aquatic communities are identified and mitigated. • Applicants are required to follow all relevant provincial, federal and municipal requirements. • Where an application review identifies that federal authorization may be required, the application will be referred.
<p>Why does AEP totally ignore federal HADD prohibitions or requirements for conservation of species at risk, along with various provincial protections to public health, public water resources, etc.?</p>	<ul style="list-style-type: none"> • Under Section 92 of the <i>Constitution Act</i>, 1867, provinces have exclusive jurisdiction over matters dealing with "property and civil rights" and the "management of public lands" and generally all matters of a merely local or private nature in the Province. <ul style="list-style-type: none"> • The province meets regularly on a committee with the federal government and participates in the decision-making process to manage and protect the

	<p>resource and its habitat. In Alberta, the provinces manages and license freshwater species.</p> <ul style="list-style-type: none"> • The SWBAP prohibits mining in the active channel and requires risks to rivers structure, water quality/quantity, fish and aquatic communities and critical infrastructure (which includes resources pertaining to water and public health) be identified and mitigated in non-active areas of a surface water body. • In the floodplain, authorizations are required regardless of the size of the pit and include: <ul style="list-style-type: none"> ○ the assessment of impacts to water quality and quantity; ○ any potential impacts to other users and critical infrastructure such as water intakes, bridges and roads, and; ○ potential ecological impacts to fish, wildlife, plants and the hydrological and hydrogeological processes that support them.
<p>Complaints re Operations</p>	
<p>If an adjacent landowner has issue, with a gravel operation who does the landowner contact the municipality or AEP, given there are two levels of government involved in the pit approval? Or should the landowner contact both?</p>	<ul style="list-style-type: none"> • If the issue that landowner is concerned about is due to operator's contravention of a municipal land use by law or permit condition, the landowner needs to contact the municipality that granted the permit. • If the issues is due to the operator's contravention of the provincial legislation, policies or code of practice, the landowner needs to contact the provincial government (AEP) • If an individual calls the AEP 1 800 number, we refer it to the municipalities where needed.
<p>Are AEP staff required to ensure complaints verbally or in writing reported to them are forwarded to the appropriate departments or are these complaints not considered unless the 1-800 complaint line is called?</p>	<p>All public complaints made to AEP are valid and will be forwarded internally to an appropriate Environmental Protection Officer. However, the most expedient and timely manner to ensure a concern is addressed is through the 1-800 number and so its use should be encouraged.</p>
<p>Pits in the Flood Hazard Area</p>	
<p>Is pit development activity allowed to alter AEP 1:100 year flood hazard delineations, and what happens if due to AEP updating of this delineation a pit location becomes over time to be located in increased flood risk area?. For example Pit moves from being located in flood fringe to a floodway.</p>	<ul style="list-style-type: none"> • No, a pit development activity is not allowed to alter AEP 1:100 year flood hazard delineations. • Authorization holders are required to address emerging risks, under existing legislative requirements (<i>Water Act</i> section 42 & 43; <i>EPEA</i> section 70, 71, 76; <i>Public Lands Act</i> section 15)
<p>Could you please provide a clear definition of active channel and explain why that terminology is used instead of floodway?</p>	<ul style="list-style-type: none"> • The SWBAP used the terminology surface water body and delineated into 'active' and 'non-active' areas. "Active channel" means those parts of the bed and banks of a water body that are without terrestrial vegetation, excluding wetlands; non-active includes any area of a

	<p>surface water body that is not included in the active</p> <ul style="list-style-type: none">• The intent was to prohibit instream mining while considering activities in proximity using a risk-based approach• The use of the 1:100 Year floodplain is used in the draft guide to put bounds around and clarify “non-active” area referred to in SWBAP.• Floodway is terminology used in flood hazard mapping. <p>Flood Hazard Maps Flood hazard maps define floodway and flood fringe areas for the 1:100 design flood. These maps are typically used for long range planning and to make local land use decisions, and are available to all levels of government and the public to help build resilient communities.</p> <p>Flood Hazard Area The flood hazard area is the area of land that will be flooded during the 1:100 design flood. The flood hazard area is typically divided into two zones, the floodway and the flood fringe.</p> <p>Floodway The portion of the flood hazard area where flows are deepest, fastest and most destructive. The floodway typically includes the main channel of a stream and a portion of the adjacent overbank area. New development is typically discouraged in the floodway.</p> <p>Flood Fringe The portion of the flood hazard area outside of the floodway. Water in the flood fringe is generally shallower and flows more slowly than in the floodway. New development in the flood fringe may be a permitted land use in some communities by a municipality.</p> <p>Design Flood The minimum design standard in Alberta is the 1:100 flood, which is defined as a flood whose magnitude has a, roughly, 1% chance of being equalled or exceeded in any year. The design flood can also reflect 1:100 ice jam flood levels or be based on a historical flood event.</p>
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Attachment 1

A. Explanation of Problem & Drivers (Surface Water Body Aggregate Policy, 2010)

Aggregate operations, which includes extraction and redistribution, within the active and non-active areas of surface water bodies has occurred in the province for decades; the apparent ease of access to the aggregate may have influenced this choice. Aggregate operations are an important contributor to economic activity in Alberta and there is an increasing demand from local governments and industry to extract aggregate resources from surface water bodies for commercial purposes. Occasionally there may be demand from local governments to redistribute aggregate within surface water bodies as a preventative or mitigative measure, or in emergency situations.

This demand is often countered by public concern about allowing aggregate operations in surface water bodies, which is why authorizations have not been issued for the past ten years. Although this approach protected the aquatic environment, the public was not given any guidance as to where they can access aggregate resources.

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

Depending on proximity, aggregate operations in areas outside the active channel could have an effect on fish and fish habitat. Operational procedures and best management practices are required to mitigate such possible impacts.

There is no formal provincial policy on aggregate operations within a surface water body. A clear and consistent policy to guide review of applications for regulatory authorizations will provide greater clarity for proponents of aggregate operations. The approach adopted by this policy will lead to broader environmental protection.