ENVIRONMENTAL SERVICES ASSOCIATION OF ALBERTA

ESAA Weekly News

An Information Service for Alberta's Environment Industry — *The Week Ending March 6th, 2015*

Inside this Issue:

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Comments & submissions are welcome!

Please submit your announcement via e-mail to: weeklynews@esaa.org

...environmental integrity through innovative business solutions

WaterTech 2015 - 20 Delegate Spots Remaining

April 20-22, 2015
Delta Lodge at Kananaskis

Water Technologies Symposium

WaterTech Starts in 7 Weeks

New Location - Same Great Conference

Lower Delegate Conference Fee
Lower Room Rates
Free Outdoor Parking
No Park Pass Required

With the smaller venue for 2015, there are now only 20 spots remaining for *WaterTech 2015*. ***Have you registered?***

ESAA is pleased to announce that the program for ***WaterTech 2015*** is now available online: www.esaa.org/watertech. The 2015 program includes 53 technical presentations that include

- Special Oil Sands Session
- 12 other technical sessions focusing on *Pipelines, Wetlands, Groundwater, Municipal, Water Management, Modelling, Wastewater, and more.*

WaterTech 2015 will also feature three keynote presentations:

Opening Keynote

"Hydroclimatic Change"
Robert Sandford
Director of the Western Watersheds Research Collaborative, and an associate of the Centre for Hydrology at the University of Saskatchewan

Tuesday Lunch Keynote

Bob McDonald
Host of CBC's *Quirks and Quarks*

Wednesday Lunch Keynote

Philippe Cousteau
Co-Founder and President, EarthEcho International

Sponsorship Opportunities: A limited number of sponsorship opportunities are still available. For additional details visit: http://www.esaa.org/watertech/sponsors/

Registration: To register visit: www.esaa.org/watertech/ *Only 20 Spot Left.*

AER Bulletin 2015-10: Joint Operating Procedures for First Nations Consultation on Energy Resource Activities – Delay in Implementing New Application Requirements

Bulletin 2015-04: Release of the Joint Operating Procedures for First Nations Consultation on Energy Resource Activities [Procedures]*, Including New Application Requirements* set out a requirement for the completion and submission of a First Nations consultation declaration form to the Alberta Energy Regulator (AER) as part of any application under the specified enactments (*Mines and Minerals Act* [Part 8], *Public Lands Act*, *Water Act*, and *Environmental Protection and Enhancement Act*) for which First Nations consultation was required. This declaration requirement was originally to be in effect as of March 2, 2015, as were the application requirements set out in the *Procedures*. The AER, however, is delaying implementation of the declaration requirement and the application requirements in the *Procedures* until further notice.

Applications submitted to the AER under the specified enactments must still meet the requirements for aboriginal consultation, as outlined in *The Government of Alberta's Guidelines on Consultation with First Nations on Land and Natural Resource Management.*

The AER will also continue to require the report by the Aboriginal Consultation Office (ACO) containing the ACO's findings on consultation adequacy before issuing a decision on a specified enactment application.

Alberta plans huge lease sale on caribou range

(Source: Global News) EDMONTON – The Alberta government is selling off more energy leases on endangered caribou habitat and this sale is more than 10 times the size of previous ones.

Bidding is to close next Wednesday on 21,000 hectares in an area of northwest Alberta that is home to the Red Rock-Prairie Creek herd.

That's one of the herds that both the federal and provincial governments have promised to protect.

At least half the range for that herd is already disturbed — well over federal guidelines.

It's the latest in a series of sales of caribou habitat, although previous offerings have been smaller than 2,000 hectares.

LEDUC COUNTY TO FIGHT ORDER TO CLEAN UP FORMER LANDFILL

(Source: Edmonton Journal) Leduc County says it is appealing an environmental protection order to clean up an old rural dump closed in the early 1970s.

In a news release issued Tuesday, the county said it will fight the Alberta Environment citation "to ensure the county is afforded a reasonable opportunity to continue examining the historical information and issues relating to the former Kavanagh landfill."

The order followed a provincial site inspection that found rusted car parts, wire, glass, tires and other assorted waste coming to the surface of the ground.

The province said Leduc County received a grant in 1976 to perform reclamation of four properties, including the Kavanagh landfill, but no record has been found that the work was actually carried out.

County officials believe the reclamation was completed to the standards of the day, but need more opportunity to track down relevant documents, if they still exist.

The former landfill is also the subject of a lawsuit launched by a couple who have been living on part of the site for decades but claim they were kept in the dark about the property's former use. The county is fighting the lawsuit.

ALBERTA'S LEVIES ARE CRUSHING US, SMALL OIL AND GAS PRODUCERS SAY

(Source: Financial Post) CALGARY – Rick Nixon, president and CEO of Midlake Oil and Gas Ltd., has a board meeting scheduled for Monday where directors will decide whether or not to dissolve his company and sell its assets.

Like many of Alberta's small-cap oil and gas producers, nine-year-old Midlake has struggled amid the dramatic collapse in energy prices over the last eight months. But the existential question of whether Midlake has any future in the province became that much more pressing after a decision Friday by the Alberta Energy Regulator (AER) to stick with its costly levy on small energy producers.

Despite the outrage of Alberta's small energy entrepreneurs, the charge is being imposed to fund the clean-up cost for any abandoned oil and gas wells — and the province is charging more to the very companies it considers the weakest.

"I don't need the province of Alberta putting me out of business," Mr. Nixon said Friday. "This isn't working. Why can't we change it?"

Mr. Nixon said his company has paid $800,000 into the fund since October; it has another $90,000 due next month. He said Midlake is losing money right now — but believes it wouldn't be if he didn't have to pay into the fund.

The fund isn't new, but the cost of it has not relented despite the pressures squeezing the industry. Last year, the AER hiked the fund from $12 million to $15 million; it will be $15 million again this year. But many producers expect the levy to rise higher, ironically, as more companies face insolvency and the risk of abandoned wells rises.

Not all companies pay the same rate: the regulator tries to estimate the risk of which companies are likeliest to stick the province with a clean-up tab for an abandoned oil or gas well using a calculation called the licensee liability rating (LLR). The AER demands additional payments from companies with a low LLR score. And, as with the rising recovery levy, the LLR ratings standards have only gotten tougher as the survival picture for small firms becomes more fragile.

Midlake's LLR score for the month of February is 0.99 — just 0.01 point shy of compliance with the AER, putting it into a high-risk, and high-payment category. The company has abandoned 22 uneconomic wells, and cleaned up eight of them, while the other 14 are still compliant with the regulator's inactive-well standards.

Mr. Nixon, and a handful of his small-cap peers, have taken issue with the way the provincial regulator calculates the LLR because it measures a company's production level as a way to assess its strength — the very standard the ratio has gotten tougher on — but only counts production the company owns entirely, and not production from

whatever wells a company may have a partnership interest in, making companies look like smaller producers than they may really be.

Saudi Arabia and its OPEC cohorts may have abandoned their role as market stabilisers, but they are taking the fight with their rivals downstream and locking in market share in oil-thirsty Asia.

And the tightening LLR standards have had a ripple effect when it comes to companies' access to credit, said Kelly Bourassa, a partner at Blake, Cassels & Graydon LLP in Calgary, and the head of the law firm's insolvency practice. Her firm handled the 2013 insolvency of Tallgrass Energy Corp., which she said could not stay afloat given the costs Tallgrass had to pay for the province's orphan-well levy.

"What has added additional stress is that the calculation changed and the security that is demanded to be posted has increased," Ms. Bourassa said. "It's causing lenders to reconsider what would have been in their enforcement toolbox."

However, Gary Leach, president of the Explorers and Producers Association of Canada, an oil and gas industry group, said LLR is designed to be an early warning system.

"The LLR parameters have been toughened up in the last number of years; that's been a good thing," Mr. Leach said. "This is a volatile industry with some rapid swings in natural gas and oil prices that can dramatically affect the financial picture of licensed oil and gas producers in Alberta."

He said the recent collapse in energy prices could cause more companies to fall under the acceptable LLR ratio.

AER spokesperson Peter Murchland said Friday there were 600 orphan wells in Alberta that required abandonment and reclamation work at the end of last year.

RADIOCARBON DATING OF ELEPHANT IVORY TUSKS LEADS TO CONVICTION OF TORONTO-BASED COMPANY

Auction and appraisal company convicted under federal wildlife legislation

Toronto-based Five Star Auctions and Appraisals, and its Director, Mrs. Chun Al Jin, pleaded guilty on February 27, 2015, to charges under the Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act (WAPPRIITA). The company and its Director were fined $9,375 each for a total penalty of $18,750 and ordered to forfeit two elephant ivory tusks to authorities.

In November 2013, Environment Canada enforcement officers learned that two carved elephant ivory tusks—measuring 78 cm and weighing 1.7 kg each—were being offered for sale by a Toronto-based auction house, which claimed the tusks were "antique". Acting on legal authority, officers temporarily detained the tusks and, using radiocarbon dating technology, both were analyzed by experts at Université Laval and Columbia University. The forensic report revealed that the tusks were from animals killed in 1977 and 1978. While this age may qualify as "antique" in the auction house world, a person who is knowingly in possession of elephant ivory for the purpose of offering it for sale is in contravention of WAPPRIITA, unless they can establish that the animal was taken from the wild before July 3, 1975, or that the elephant ivory was legally imported into Canada. Elephant ivory legally imported into Canada is exempt from the prohibition. In this case, the offenders pleaded guilty to possessing and offering prohibited ivory for sale.

The case against Five Star Auctions and Appraisals is the first time that radiocarbon dating technology has been used to obtain a conviction under wildlife law in Canada, and one of only a half dozen cases where this technique has been successfully used worldwide.

Quick Facts

- The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an international agreement to regulate, or in some cases to prohibit, trade in specific species of wild animals and plants, as well as their respective parts and derivatives. Environment Canada is the lead agency responsible for CITES implementation in Canada. WAPPRIITA is the legislation used to implement CITES in Canada.

- Annually, international wildlife trade is estimated to be worth billions of dollars and to include hundreds of millions of plant and animal specimens. The existence of an agreement to ensure the sustainability of trade is an important part of safeguarding these resources for the future.
- Radiocarbon dating measures the continuous decay of the radioactive isotope of carbon, 14C, in order to determine when an animal died.
- Elephant poaching and ivory trafficking impacts conservation efforts, as well as threatening social and economic security in many parts of central and eastern Africa. According to the CITES Secretariat, 15,000 elephants were illegally killed during 2012 for their ivory. The Government of Canada is currently implementing $2 million in emergency aid to counter wildlife trafficking in Eastern Africa.

Additional Links

- Convention on International Trade in Endangered species of Wild Fauna and Flora
- Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act

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SMUGGLING PROTECTED SPECIES INTO CANADA RESULTS IN FINES FOR HERBAL SUPPLY COMPANY

Toronto-based company convicted under federal wildlife legislation

Carbo Herbal Supplies Inc., and its Director, Mrs. Qin Zhou, pleaded guilty on February 27, 2015, to six counts under the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act (WAPPRIITA),* for unlawfully importing protected species of turtles and tortoises without the proper permits. The company and its Director were fined $12,500 and $6,250 respectively, for a total penalty of $18,750 and ordered to forfeit all items seized during the investigation.

Two sea containers originating from Hong Kong were imported by Carbo Herbal Supplies Inc. in October 2013 and July 2014. Upon their arrival into Canada, the containers were inspected by Environment Canada enforcement officers in Vancouver and Toronto. The first shipment contained 945 turtle plastrons (bottom part of the shell), 2,454 turtle shells and 52 bags of turtle shell fragments, concealed within 815 cartons. Similarly, upon inspection of the second sea container, there were 224 bags of turtle shell fragments among 842 cartons. The invoices accompanying the shipments did not list any of the animal parts. With the assistance of the Royal Tyrrell Museum of Palaeontology, located in Drumheller, Alberta, parts were identified as belonging to five species of turtles and three species of tortoise, all of which are listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora(CITES).

Quick Fact

- There are over 350 species of turtles and tortoises in the wild. Of this number, trade in 123 species of turtles and 48 species of tortoise are regulated by the CITES. Parts and derivatives of these animals are often sought after for use in art or as an ingredient in traditional medicine, while live specimens are used in the pet and

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ONTARIO HAZMAT WASTE CARRIER FINED $120K

(Source: HazMat Magazine) Peterborough-based hazardous waste carrier Buckham Transport Ltd. has been fined $120,000 following a guilty plea to three 2011 offences under Ontario's Environmental Protection Act.

It is alleged that the company provided false or misleading information to a provincial officer following a July 2011 fire that started in a bin used to store solid hazardous waste. The comp
any also failed to transport waste to the receiving facility named on the company manifest, and failed to comply with a ministerial order.

On or near Sept. 7, 2011, Buckham employees violated the order when they regrouped bulk solid hazardous wastes consisting of paint cans in the mixing of hazardous solid waste tray where the fire started in July 2011. The waste was left in the tray until Sept. 12, when they were discovered by ministry staff during an inspection.

In December, a provincial officer contacted the agent to promote regulatory compliance Buckham who confirmed that all historical waste had been removed from the site. This statement was false and misleading. As of Nov. 29, 2011, Buckham placed historical waste in five trailers and transported it to different locations.

HUNDREDS OF ILLICIT OIL WASTEWATER PITS FOUND IN CALIFORNIA

(Source: LA Times) Survey reveals more than 300 unlined oil wastewater pits operating in Kern County without permits. Water officials in Kern County discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits.

Inspections completed this week by the Central Valley Regional Water Quality Control Board revealed the existence of more than 300 previously unidentified waste sites. The water board's review found that more than one-third of the region's active disposal pits are operating without permission.

The pits raise new water quality concerns in a region where agricultural fields sit side by side with oil fields and where California's ongoing drought has made protecting groundwater supplies paramount.

Clay Rodgers, assistant executive officer of the water board's Fresno office, called the unregulated pits a "significant problem" and said the agency expects to issue as many as 200 enforcement orders.

State regulators face federal scrutiny for what critics say has been decades of lax oversight of the oil and gas industry and fracking operations in particular. The Division of Oil, Gas and Geothermal Resources has admitted that for years it allowed companies to inject fracking wastewater into protected groundwater aquifers, a problem they attributed to a history of chaotic record-keeping.

"The state doesn't seem to be willing to put the protection of groundwater and water quality ahead of the oil industry being able to do business as usual," said Andrew Grinberg of the group Clean Water Action.

The pits — long, shallow troughs gouged out of dirt — hold water that is produced from fracking and other oil drilling operations. The water forced out of the ground during oil operations is heavily saline and often contains benzene and other naturally occurring but toxic compounds.

Regional water officials said they believe that none of the pits in the county have linings that would prevent chemicals from seeping into groundwater beneath them. Some of the pits also lack netting or covers to protect migrating birds or other wildlife.

Currently, linings for pits are not required, though officials said they will consider requiring them in the future. Covers are mandated in some instances.

The pits are a common site on the west side of Bakersfield's oil patch. In some cases, waste facilities contain 40 or more pits, arranged in neat rows. Kern County accounts for at least 80% of California's oil production.

The facilities are close to county roads but partially hidden behind earthen berms. At one pit this week, waves of heat rose from newly dumped water, and an acrid, petroleum smell hung in the air.

Rodgers said Thursday that the agency's review found 933 pits, or sumps, in Kern County. Of those, 578 are active

Of the active pits, 370 have permits to operate and 208 do not. All of the pits have now been inspected, he said.

The possible existence of hundreds of unpermitted pits came to light when regional water officials compared their list of pit operators to a list compiled by the Division of Oil, Gas and Geothermal Resources. The oil regulator's list contained at least 300 more waste pits than water officials had permitted, Rodgers said.

His staff began inspecting the wastewater sites in April. Initial testing of water wells has not revealed any tainted water, he said.

The pits are an inexpensive disposal method for an enormous volume of water that is forced out of the ground during drilling or other operations, such as fracking. Rodgers said that just one field, the McKittrick Oil Field, produces 110,000 barrels of wastewater a day. According to figures from 2013, oil operations in Kern County produce 80 billion gallons of such wastewater — an amount that if clean would supply nearly a half-million households for a year.

More than 2,000 pits have been dredged over decades of oil operations in Kern County, according to water board records. Oil field companies have not always properly disposed of water, Rodgers said. As recently as the 1980s, it was customary to dump wastewater into drainage canals that line the San Joaquin Valley's agricultural fields.

But using unlined pits to dispose of wastewater is becoming less common. Some states ban the practice, and many in the oil and gas industry do not consider it effective.

The water board's long-term plan to address the problem includes requiring remediation of some abandoned pits so that contaminants left behind don't pollute the air, Rodgers said.

In pits located near clean water sources, Rodgers said, operators will be required to install monitor wells to test water quality. The companies will pay for the testing and provide the results to water officials.

The water board will publish a series of general orders that he said will more tightly control the operation of wastewater pits.

"Our goal is to protect water quality," Rodgers said. "Our goal is not to shut anybody down, but by the same token, they do not own the waters beneath them. Those waters are for the public good."

REMEDIATION TECHNOLOGY NEWS AND RESOURCES

(The following are selected items from the US EPA's Tech Direct - http://clu-in.org/techdirect/)

Upcoming Live Internet Seminars

ITRC Mining Waste Treatment Technology Selection - March 12, 2015, 1:00PM-3:15PM EDT (17:00-19:15 GMT). ITRC's Mining Waste Team developed the ITRC Web-based Mining Waste Technology Selection site to assist project managers in selecting an applicable technology, or suite of technologies, which can be used to remediate mine waste contaminated sites. Decision trees, through a series of questions, guide users to a set of treatment technologies that may be applicable to that particular site situation. Each technology is described, along with a summary of the applicability, advantages, limitations, performance, stakeholder and regulatory considerations, and lessons learned. Each technology overview links to case studies where the technology has been implemented. In this associated Internet-based training, instructors provide background information then take participants through the decision tree using example sites. Project managers, regulators, site owners, and community stakeholders should attend this training class to learn how to use the ITRC Web-based Mining Waste Technology Selection site to identify appropriate technologies, address all impacted media, access case studies, and understand potential regulatory constraints. For more information and to register, see http://www.itrcweb.org or http://clu-in.org/live.

ITRC Integrated DNAPL Site Strategy - March 17, 2015, 1:00PM-3:15PM EDT (17:00-19:15 GMT). The ITRC Integrated Dense Nonaqueous Phase Liquid Site Strategy (IDSS-1, 2011) technical and regulatory guidance document will assist site managers in development of an integrated site remedial strategy. This course highlights five important features of an IDSS including: a conceptual site model (CSM) that is based on reliable characterization and an understanding of the subsurface conditions that control contaminant transport, reactivity, and distribution; remedial objectives and performance metrics that are clear, concise, and measurable; treatment technologies applied to optimize performance and take advantage of potential synergistic effects; monitoring based on interim and final cleanup objectives, the selected treatment technology and approach, and remedial performance goals; and reevaluating the strategy repeatedly and even modifying the approach when objectives are not being met or when alternative methods offer similar or better outcomes at lower cost. For more information and to register, see http://www.itrcweb.org or http://clu-in.org/live.

ITRC Biochemical Reactors for Treating Mining Influenced Water - March 19, 2015, 1:00PM-3:15PM EDT (17:00-19:15 GMT). Mining influenced water (MIW) includes aqueous wastes generated by ore extraction and processing, as well as mine drainage and tailings runoff. MIW handling, storage, and disposal is a major environmental problem in mining districts throughout the U.S. and around the world. Biochemical reactors

(BCRs) are engineered treatment systems that use an organic substrate to drive microbial and chemical reactions to reduce concentrations of metals, acidity, and sulfate in MIWs. The ITRC Biochemical Reactors for Mining-Influenced Water technology guidance (BCR-1, 2013) and this associated Internet-based training provide an in-depth examination of BCRs; a decision framework to assess the applicability of BCRs; details on testing, designing, constructing and monitoring BCRs; and real world BCR case studies with diverse site conditions and chemical mixtures. At the end of this training, you should be able to complete the following activities: describe a BCR and how it works; identify when a BCR is applicable to a site; use the ITRC guidance for decision-making by applying the decision framework; improve site decision-making through understanding of BCR advantages, limitations, reasonable expectations, regulatory and other challenges; and navigate the ITRC Biochemical Reactors for Mining-Influenced Water technology guidance (BCR-1, 2013). For more information and to register, see http://www.itrcweb.org or http://clu-in.org/live.

New Documents and Web Resources

Combining Remedies for More Effective Site Cleanup. These case studies provide examples of the use of multiple technologies to develop remedial approaches that address contamination resulting from the release to the subsurface of non-aqueous phase liquids (NAPLs) and other chemical species. Combining remedy approaches can be a two-part process. The first part ensures that the chosen technology or technologies are the ones best suited for the problem both initially and as the cleanup process evolves. The second part of the process is observational. It recognizes that the continued application of a cleanup technology in and of itself changes the subsurface conditions from the conditions that were present when the technology was first applied. Monitoring data need to be evaluated periodically to ensure that the original technology is still the most effective option for the current conditions and is not simply operating as designed. Combined remedies and/or treatment trains are deployed most effectively when the hydrogeological and chemical contaminant conditions in the subsurface are well defined. EPA has developed the Triad approach to gather data more cost effectively and recommends using tools that provide for high-resolution site characterization. View the case studies at http://clu-in.org/products/combinedremedies/.

Technology Innovation News Survey Corner. The Technology Innovation News Survey contains market/commercialization information; reports on demonstrations, feasibility studies and research; and other news relevant to the hazardous waste community interested in technology development. Recent issues, complete archives, and subscription information is available at http://clu-in.org/products/tins/ . The following resources were included in recent issues:

- An Evaluation of Remote Sensing Technologies for the Detection of Residual Contamination at Ready-for-Anticipated-Use Sites
- Decision Making at Contaminated Sites: Issues and Options in Human Health Risk Assessment
- Biodegradation and Bioremediation of Oiled Beaches: A Primer for Planners and Managers
- Subsurface Oil Detection and Delineation in Shoreline Sediments, Phase 2: Final Report
- Enhanced Amendment Delivery to Low Permeability Zones for Chlorinated Solvent Source Area Bioremediation
- Optimized Enhanced Bioremediation Through 4D Geophysical Monitoring and Autonomous Data Collection, Processing and Analysis
- New Approaches to Evaluate the Biological Degradation of RDX in Groundwater
- Proof-of-Concept Study: Novel Microbially Driven Fenton Reaction for In Situ Remediation of Groundwater Contaminated with 1,4-Dioxane, Tetrachloroethene (PCE) and Trichloroethene (TCE): Phase I
- Bioavailability and Methylation Potential of Mercury Sulfides in Sediments
- Operation and Maintenance of Passive Acid Mine Drainage Treatment Systems: A Framework for Watershed Groups
- 3PE: A Tool for Estimating Groundwater Flow Vectors

EUGRIS Corner. New Documents on EUGRIS, the platform for European contaminated soil and water information. More than 18 resources, events, projects and news items were added to EUGRIS in February. These can be viewed at http://www.eugris.info/whatsnew.asp . Then select the appropriate month and year for the updates in which you are interested. The following resource was posted on EUGRIS:

Phyto2Enegy Phytoremediation Driven Energy Crops. The scientific and technological goal of the project is to develop and validate a novel approach combining phytoremediation and biomass production on heavy metal contaminated (HMC) sites which could be then safely used as local energy carrier. The innovation is to demonstrate a complex solution which will cover the whole value chain: from setting the brownfield management target through successful crops production, biofuel feedstock preparation up to conversion to energy in a local small scale gasification installation. View more information about this project at http://www.phyto2energy.eu/.

New ESAA Member

ESAA's Board of Directors and staff would like to welcome the following new member:

Full Member:

Cascade Geotechnical Inc.
15620 – 121A Avenue
Edmonton, AB T5V 1B5
Phone: (780) 454-2400
Fax: (780) 451-0911
Web: www.cascade.ca

Gil Barber, Sales Manager
e-mail: gbarber@cascade.ca

Profile:
Founded in 1981, we have grown to become Western Canada's leading independent distributor of: North American & European Manufactured Geotextiles, Erosion & Sediment Control Products, Plastic Snow Fence Materials, and Wire Gabion Baskets.

As well as the servicing the Construction, Forestry, Oil sands and Pipeline industries for the last 25 years, Cascade is proud to be the original developer, and exclusive manufacturer of the "EnviroBerm" permeable membrane runoff control system.

Teaming up with Industry, Government, Engineers, Contractors, and Manufacturers we have been instrumental in helping to develop and update the Best Management Practices for erosion control in Alberta throughout the last decade.

Upcoming Events

An Evening with Dr. Jane Goodall, DBE

Wednesday, September 9th, 2015
Winspear Centre, Edmonton

The Environmental Services of Association of Alberta (ESAA) is pleased to announce ***An Evening with Dr. Jane Goodall, DBE*** in support of the **Jane Goodall Institute of Canada (JGI Canada)** and the **Ilsa Mae Research Fund at Muscular Dystrophy Canada**.

Full proceeds from the event will be split between JGI Canada and the Ilsa Mae Research Fund. ESAA is making no proceeds from this event and donating all time and efforts to both causes.

The event will include a presentation by Dr. Jane Goodall, followed by a Q & A session with the audience, and a book signing in the Winspear Lobby. Ticket prices start at $41 (incl. GST) and will go on sale via the Winspear Centre website and box office at **10 am on January 5th, 2015**.

A limited number of VIP Tickets will also be available and will include a private meet and greet with Dr. Goodall and wine & cheese reception.

Full event details also available online at: http://www.esaa.org/events/#id=163&wid=401&cid=153 or https://tickets.winspearcentre.com/event/performance/4693