

Assiniboine Watershed Stewardship Association (AWSA)

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LID Conference Planner

Low Impact Development (LID) Conference Recap

The Assiniboine Watershed Stewardship Association (AWSA) in partnership with the Saskatchewan Watershed Authority (SWA) hosted a Saskatchewan **Low Impact Development (LID) Conference** Friday March 18th, 2011 from 9am – 4pm at the Gallagher Convention Center in Yorkton, SK. Seventy Five individuals from various Urban and Rural Municipalities from across Saskatchewan and Western Manitoba attended the one day conference.

Background

In light of the record amounts of rainfall Saskatchewan received in 2010 and the widespread flooding that ensued, the Saskatchewan Watershed Authority (SWA) had initiated drought and flooding preparedness planning for various pilot site watersheds across the province. The AWSA was chosen to work with SWA to develop such a plan in the east-central area of Saskatchewan (Yorkton Creek Sub-basin of the Assiniboine River Watershed).

The conference was created as part of SWA's planning initiative to facilitate an understanding regarding the use of **Low Impact Development (LID)** to manage stormwater runoff. Simply put, LID is the term given to a whole suite of **innovative stormwater management** practices that use planning, engineering, and landscape design to naturally manage and treat stormwater. LID application can range from the community level, right down to individual homeowners. Examples include such things as permeable paving surfaces, rain gardens, green roofs, bioswales (vegetated ditches), bioretention

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ponds, rain catchments, innovative landscape architecture, etc., all of which are aimed at reducing the quantity and improving the quality of stormwater runoff by preserving the infiltration, storage, and evaporation of water within its natural environment.

Conference invites were extended to city planners, engineers, water and environmental managers from all 15 cities within the Saskatchewan and all towns and villages within the Assiniboine River Watershed. Cities and Conservation Districts in Manitoba were also invited. In addition, conference invites included an amalgamation of government, non-profits, consultants, rural municipality representatives, and other professionals invited from across Saskatchewan. The idea was to bring together a broad array of individuals involved with water management in their respective positions, and introduce the concept of LID to them with the aim that they will be able to take this diverse information away from the conference and apply it in their own undertakings.

In putting together a speaker line-up for the conference, we tried to get the “who’s who” of LID in Canada, and were fully successful in doing so. We wanted the presentations to provide attendees with a thorough understanding of the basics of LID as well as some more specific applications of it. The conference featured the following renowned keynote speakers:

Dr. Jiri Marsalek, Environment Canada Head of Urban Water Management (Burlington, ON)

- Dr. Jiri Marsalek is a research scientist and the Head of the Urban Water Management Section in the Aquatic Ecosystem Management Research Division, Water Science and Technology Directorate, Environment Canada, in Burlington, Ontario. His research interests, including sustainable stormwater management, drainage adaptation in a changing climate, and control and treatment of combined sewer overflows, are documented in a large number of his publications. On the international scene, he serves as secretary of the International Association for Hydro-Environment Engineering and Research (IAHR) & International Water

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Association (IWA) Joint Committee on Urban Drainage (a specialist group with > 700 members worldwide) and has worked extensively with UNESCO and NATO on urban water management. His recent awards include Environment Canada's Citation for Excellence (2005), two honorary doctorates from Sweden (2006) and Denmark (2008), sharing the 2009 Canadian Society for Civil Engineering Award for the best paper in environmental engineering (2010), and the International Water Association's Honorary Membership Award (2010) for outstanding contribution to the Association and to the water sector.

Dr. Dave Sauchyn, Prairie Adaptive Research Collaborative Senior Research Scientist (Regina, SK)

- Dr. Sauchyn is a Research Professor at the Prairie Adaptation Research Collaborative (PARC) at the University of Regina. His main research interests are the climate and hydrology of the past millennium in Canada's western interior and how knowledge of the past can inform scenarios of future climate and water supplies. Dave has been an invited expert witness on climate change in the Canadian Senate and House of Commons, and at forums hosted by provincial premiers and environment ministers. He is senior editor and co-author of the book *The New Normal: The Canadian Plains in a Changing Climate* published in fall, 2010.

Bert van Duin (P.Eng.), Alberta LID Partnership President (Calgary, AB)

- Bert van Duin, a senior development engineer with the City of Calgary Water Resources, is passionate about water. A graduate of Delft University in the Netherlands, Bert's focus has been stormwater: where it comes from, where it goes, how we use it, why we waste it and how its presence, absence and quality affect our lives and our surroundings. Bert joined the City of Calgary in 2009 after spending over 20 years in consulting. At the City, his duties include facilitating the practical implementation of sustainable drainage practices, the evolution of Calgary's drainage design practice as well as internal and external training associated with these activities. In addition to his daily duties at the City

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of Calgary, he also dabbles at the University of Calgary, and is one of the founding members and current president of the Alberta Low Impact Development Partnership.

Leta van Duin, Alberta LID Partnership Coordinator (Calgary, AB)

- As a gardener in Calgary for the past 20 years, Leta knows which plants are survivors. When not working on behalf of the Alberta Low Impact Development Partnership, she still fits in the occasional landscape design project. She negotiated the installation of one of the first rain gardens on public school grounds in Calgary, and advised on bioretention plants for a University of Calgary project. She grows her own native plants and is set to start design on another schoolyard naturalization project this spring. With a first career as a GIS Analyst specializing in Water Resources, Leta now enjoys connecting other specialists together to advance the implementation of LID practice on the prairies. No stranger to the Assiniboine Watershed, Leta lived for several years downstream – in both Brandon and Winnipeg.

Dr. Darryl Dormuth, National Research Council Centre for Sustainable Infrastructure (Regina, SK)

- Darryl began his career as a research scientist, in 1997, with Atomic Energy of Canada Limited working on the development of computer models for the coolant systems in CANDU reactors. In 2005, he joined the National Research Council of Canada and initiated a research program to look at the sustainable management of urban stormwater systems. His current research interests are the thermal effects of urban stormwater runoff on water bodies, sediment transport in stormwater systems, implementation of Low Impact Development technologies on the Canadian prairies, and studying the use of stormwater runoff to reduce the consumption of other water supplies. He has a B.Sc. in Mathematics, a M.Sc. in Operations Research, and a Ph.D. in Industrial Engineering, all from the University of Manitoba.

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The conference was very well attended. We had over 75 people in attendance, representing 10 cities and various other professional organizations across Saskatchewan and Manitoba. Attendee feedback was gathered using an optional questionnaire and word-of-mouth comments. Overall, feedback was very positive, with people saying they appreciated seeing such an initiative, found the information to be very informative, and found the speaker's topics to be quite educational. Any less favorable feedback came from more of the rural representatives that expressed that they felt the conference did not really apply to situations they're facing and that the conference was really tailored towards the urban populations. This was in fact, expected criticism from those attendees. LID, by its very nature, almost exclusively applies to urban populations and their stormwater. Rural invites were made aware of this fact when asked to attend the conference. The decision to invite rural attendees stemmed from the request of the AWSA's board that we extend invites out to the association's rural membership. As such, it was not surprising that the individuals that left the most positive feedback and took the most away from the day were the representatives from the cities and various other professional organizations dealing with urban water issues. (See attached questionnaire with average response values and direct quotes from individuals).

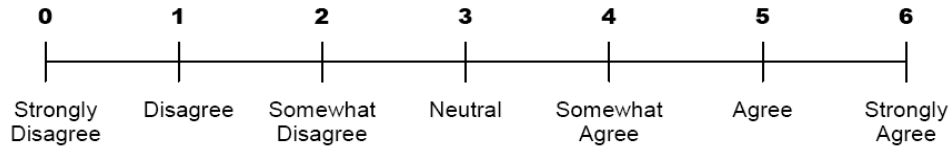
Overall, the conference was a great success with the majority of attendees expressing that they had learnt many new practices and ideas they never before thought of and that they'll take away the information gathered over the day and try to incorporate it into their own ventures. Several attendees expressed that they would like to see such a conference be a regular annual event as the increasing urban growth in Saskatchewan is placing more and more stress on current stormwater infrastructure and receiving water ways. New and innovative methods are needed in order for stormwater management to keep up with this rapid growth and to do so in a manner that is not only practical and feasible, but contributes to the overall sustainability and natural aesthetic appeal of our urban development. As we heard first hand at the conference, LID is one such tool at achieving such goals.

2011 Low Impact Development (LID) Conference Attendee Questionnaire

Please take a minute to give your feedback regarding today's conference. Please do not write your name on this sheet. Leave the sheet on your table and it will be collected at the end of the day. We hope you enjoyed the conference and found it informative and beneficial.

Thank you for attending!

Instructions: Indicate your responses to the following by printing on the line, the number that best represents your feelings towards a particular aspect of today's conference. Use the following ranking scale:



- 1) I found the conference to be educational and informative. 5.22
- 2) I found the speakers topics interesting. 5.15
- 3) I feel I will be able to utilize information gathered at the conference in my profession. 4.85
- 4) I was familiar with the topic of LID prior to attending the conference. 3.56
- 5) I am interested to learn more regarding the topic of LID. 4.85
- 6) I would attend a conference on LID or a similar subject again in the future. 4.62
- 7) I found the speakers presentations simple to understand and not too technical. 4.62
- 8) I found the length of presentations to be sufficient. 4.54
- 9) I was satisfied with the variety of content in the presentations. 4.77
- 10) I found the conference to be worthwhile and am pleased to have attended. 5.23

The presentation I enjoyed the most was by: Dr. Dave Sauchyn (speaker's name), when they spoke about _____ (speaker's topic).

The presentation I least enjoyed was by: Dr. Jiri Marsalek (speaker's name), when they spoke about _____ (speaker's topic).

27 Attendees Completed Questionnaire

General Comments: "Great lunch!" "1.5 hr maximum between breaks should be targeted" "Very good. Well done on taking the initiative." "Well done - good representation of speakers. Also, Dr. Sauchyn is a very engaging speaker. I would make an effort to hear him speak again." "Very good presenters and presentations." "Good job. Thanks!" "Very good conference. Very good lunch! Definitely come back next time." "Quality issue to be more discussed." "Good initiative by AWSA. Continue organizing this types of conferences. Excellent!!" "Very good conference. Food was amazing. Speakers were very knowledgeable. Very well coordinated." "Good conference that needs to happen on a regular basis with developers, government, municipal leaders and technical folks invited. Personally enjoy the topics covered at the conference as the all focus on alternative solutions to standard practices." "In general the scope of presentations were directed towards larger urban municipalities and with an emphasis on environmental protection - in reality the majority of attendees are from small urban & rural municipalities and are seeking more utilitarian "Best Practices" in order to address flooding & high water table issues. Perhaps a shift to "small town" Saskatchewan scenarios in the next conference."