# THE GEOLETTER



GEOADVICE ENGINEERING INC.

# GEOADVICE AWARDED 2009 **B.C. ENTREPRENEUR**

On May 12, 2010, GeoAdvice will be awarded the 2009 B.C. New Canadian Entrepreneur Award in the category of Environmental Technology.

This award is presented annually to the business who best demonstrates operating success, innovation, community involvement and the ability to overcome unique challenges.

**More Information:** See page 3

# **GEOADVICE DEVELOPS** MODEL COMPARATOR

The GeoAdvice Model Comparator is an easy-to-use Excel tool which compares two models for all data differences. The Comparator will assist in tracking model changes and assuring model quality.

**More Information:** See page 4



# GEOADVICE TRAVELS TO WHISTLER, BC AND TUCSON, ARIZONA

2010 BCWWA Annual Conference & Trade Show

When: May 1-5, 2010

Where: Whistler, British Columbia, Canada www.bcwwa.org/annual conference/2010/home.php

http://www.whistlerblackcomb.com/

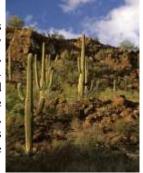
GeoAdvice will proudly travel to Whistler this year to attend the BCWWA Annual Conference. This is a five day event on May 1-5, 2010, focused on water and waste water industries. Dr. Werner de Schaetzen, P.Eng. will give a presentation on the liabilities of un-calibrated models and touch base on the ten lessons learned from the hydrant testing program while calibrating the CRD water model.

12th Annual Water Distribution Systems Analysis Conference

When: September 12-15, 2010 Where: Tucson, Arizona, USA

www.wdsa2010.org/

For the 2010 Water Distribution Systems Analysis International Specialty Conference in Tucson, Arizona, USA, GeoAdvice president and CEO Dr. Werner de Schaetzen has been appointed to the International Advisory Committee to provide input on the conference focus, session topics and technical programs. As part of the Advisory Committee Dr. de Schaetzen will be endorsing upcoming conference as well as using his Saguaro



expertise to review papers to be presented and act as conference moderator. GeoAdvice

has been a part of past WDSA conferences as INSIDE THE GEOLETTER well as several others and looks forward to making this another great success!

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### Testimonial of the month!

"Very well done! Kept tight schedule, covered all topics requested, engaging presentation style, good mix of slides, discussions and tutorials. It was the best training course I attended!"

Kevin Dolishny, P.Eng. Senior Project Engineer - Servicing and Development Planning Water Services



#### What We Do...

GeoAdvice offers advanced hydraulic network modeling expertise for water, wastewater, and stormwater systems.

#### **New Clients**

Stantec (Kitchener Office), ON

City of Calgary, AB

City of Abbotsford, BC

City of Port Coquitlam, BC

City of Surrey, BC

City of Hamilton, ON

Central Valley Engineering Ltd.

Redekop Kroeker Development Inc.

# Before you waste another cent on modeling that does not work read this...

Find out how GeoAdvice's modeling experts can make your project a success!

Click Here.

#### **GeoAdvice training courses:**

### Setting a Precedent in Superior Hydraulic Modeling

Whether you are a seasoned modeler or new to the industry, get educated by the leaders in hydraulic network modeling! Click <a href="here">here</a> for GeoAdvice training benefits.

# WELCOME ABOARD MR. JONATHAN HUNG, E.I.T.



GeoAdvice is proud to announce the most recent addition to their superb team of experts: Mr. Jonathan Hung, E.I.T. He brings several years of multidisciplinary experience with him in hydraulic modeling, water distribution systems and drainage systems. Recently he completed his B.A.Sc. at the reputed Simon Fraser University in Systems Engineering. His experience with water distribution systems and sewer collection systems will allow GeoAdvice to bring greater knowledge to every project and provide even better service to all of its clients in the water and wastewater industry.

"It's exciting being on the cutting edge of the industry. It opens up opportunities for creativity and innovation!"

- Jonathan Hung, E.I.T.

# AN INTERVIEW WITH MR. JONATHAN HUNG, E.I.T.

- Q: Why did you decide to join the GeoAdvice team of professionals?
- A: GeoAdvice being a young company, offers many opportunities for me to develop my professional backbone and develop personal relationships with colleagues and clients.
- Q: What is the most rewarding part of your position?
- A: Building and calibrating an accurate model which the client and I are both satisfied with and confident in is not an easy task. However, my reward comes with the knowledge that this model will be an instrumental and integral part of future planning and design for a town, city or region.
- Q: What is your view on the economics of the water industry?
- A: With increasing demand due to population growth and urbanization and aging infrastructure, the market for modeling and consulting will expand. I believe this expansion will be expedited by the addition of new environmental regulations and the increasing cost of water.
- Q: What opportunities will this create for GeoAdvice?
- A: Trends toward comprehensive models and the application of modeling standards and best practices have become increasingly apparent in North America. Cities are realizing that the cost of building accurate models is easily compensated for by reduced future planning, design and infrastructure costs.
- Q: What are your long term goals?
- A: To take on the responsibility of managing and directing GeoAdvice to new heights and success.

Connect with Jonathan on <u>LinkedIn</u> or email him at <u>jonathan@geoadvice.com</u>





# Test Your Hydraulic and Modeling Knowledge!

#### True or False:

- Pressure readings at multiple junctions cannot be compared without the elevations they were recorded at.
- 2. Simplified hydraulic models cannot represent water systems adequately.
- 3. The complexity of a model is a function of the number of pressure zones.
- 4. Pump flows add up when the pumps are arranged in parallel.
- 5. All flows are pushed by gravity in a sewer system.

# ARE YOU UP TO PAR WITH YOUR MODEL?

GeoAdvice offers customized modeling standards, best practices and conventions to clients to build and maintain their models.

Some of the benefits that will be obtained by adopting modeling standards, best practices and conventions include the following:

- to reduce the effort needed to modeling and training
- to enhance the accuracy of the models
- to help formalize modeling expectations and promote consistency between models
- to enable the use of automated tools and checks with minimal potential for modeling error
- to enhance clarity in cases of potential modeling ambiguity or inaccuracy
- to enhance the aesthetic and professional appearance of models
- ♦ to help avoid "GIS-Model collisions" that might occur when data from different sources are combined
- to provide meaningful modeling data to be used in projects
- to provide better understanding in case of reuse of models after long duration of time

Need Modeling Standards, Best Practices and Conventions for your modeling building and maintenance? Click <a href="here">here</a> to consult with GeoAdvice now!

#### (Geo)Advice of the Month:

"Field measurements at key points in the system are required for model calibration. The boundary conditions during the field tests are just as important as the tests itself. Be sure that the boundary conditions are recorded during the field tests."

#### GEOADVICE RECEIVES 2009 B.C. NEW CANADIAN ENTREPRENEUR AWARD

On May 12, 2010, GeoAdvice will be awarded the 2009 B.C. New Canadian Entrepreneur Award in the category of Environmental Technology. The award program is run by the <a href="Ethno Business Council of BC">Ethno Business Council of BC</a>. The awards are meant to commemorate the great value of small businesses in British Columbia and to acknowledge the contribution of multicultural businesses to the B.C. economy.



#### Candidates for this award are judged on the following criteria:

- Operating Success sales, profitability, employment creation and acceptance in the marketplace
- Innovation the company's product, service, production process, marketing strategy or other aspects of business
- ♦ **Community Involvement** the participation of the entrepreneur in charitable work, service club and raising awareness of entrepreneurship
- ♦ **Special Factors** unique challenges which were overcome, success in a specialized niche market and personal contribution to the business community

We will be very pleased to accept this award, and would like to thank our GeoAdvice employees as well as all of our clients in B.C. and across Canada and the U.S.A. for their support.





# Using the Model Comparator is quick and easy!

Step 1: Select two models to compare



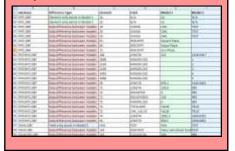
Step 2: Select data to compare



Step 3: Select scenarios to compare



Step 4: Review the model differences



"Working with hydraulic models for over a decade, I've used different methods for tracking our 30,000+ pipe model in the past without success. The Comparator is truly innovative and fast, with an interface that is clear and easy to use. I use it all the time to validate changes made to our models. Thank you!"

-Imran Motala, Region of Peel, ON

# GEOADVICE DEVELOPS A MODEL TRACKING TOOL

GeoAdvice has developed a modeling tool that allows a modeler to efficiently and systematically track changes to a model. The modeler is able to track changes in the macro level, as well as in the macro level.

#### **Macro Level Model Tracking**

• For tracking modeling scenarios

#### Micro Level Model Tracking

- For tracking changes made to the model.
- ◆ E.g. Adding new facilities, changing pipe diameter, updating pump curve, etc.

#### **Tracking Tool Benefits:**

- Easily document changes to model
- Standardize documentation process
- Standardize documentation process
   Shown above is the Scenario Manager module

   Can be used by both modelers and non- from the Model Tracking Tool.
   modelers
- Allows to chronologically track model modifications for review when transferring the model
- Superior quality assurance and quality control

Click <u>here</u> to find out more about the Model Tracking Tool!

"Very useful tools for saving time and maintaining model accuracy!"

-Nass Diallo, P.E. Las Vegas Valley Water District, NV, USA

### GEOADVICE DEVELOPS THE MODEL COMPARATOR

The GeoAdvice Model Comparator is an easy-to-use Excel tool which compares two models for all data differences.

#### **Comparator Benefits:**

#### **Review Models**

Comparing models is an effective way of quickly determining why two models produce different results. It is also useful when validating changes made to the model by another party.

#### **Track Model Changes**

The Comparator is a 100% accurate model tracking system (physical, non-physical, simulation and scenario data). Compare old and new models to quickly find differences that would affect the results of a hydraulic simulation.

#### **Synchronize Models**

Having more than one party working on a model can result in multiple copies of the same model. Compare models for missing or changed information, such as after GIS updates.

#### **Use Excel For Everything**

The Comparator runs in Excel 2007 with no additional modeling software required, and results are compiled in easy-to-use spread-sheets with tools available for sorting, filtering, copying and editing.

Click here to find out more about the Model Comparator!







# **GEOADVICE SPOTLIGHTS**

#### **CRD** IN THE SPOTLIGHT

GeoAdvice was chosen by CRD to build and calibrate their water distribution model. After six months of work and cooperation with the CRD, GeoAdvice has successfully built and calibrated the CRD water model with a total of 306 calibration points with an average accuracy of about 2.7 %. This is a phenomenal achievement considering the model has about 46 pressure zones.

"Our hydraulic water model is very complex with over 30 pressure zones and 36 pump stations. GeoAdvice did an excellent job of rebuilding and calibrating the model. The project was very well managed with constant updates, good budget control and well timed progress meetings. GeoAdvice also perceived a number of value added items for the project, which improved the end product. I would highly recommend GeoAdvice for any hydraulic modelling."

-Craig Gottfred, P.Eng. **Capital Regional District** Victoria, BC

#### Another satisfied trainee!

"It was great to meet a water modeling expert like you. I have learned a lot from your course.

Thank you very much."

-David Deng, City of Calgary, AB

#### PORT COQUITLAM IN THE **SPOTLIGHT**

GeoAdvice has successfully written a customized model update manual for the City of Port Coquitlam, BC. This document provides instructions and guidelines for the modelers at the City to update their WaterCAD model.

#### ABBOTSFORD IN THE SPOTLIGHT

GeoAdvice was chosen by the City of Abbotsford to develop customized modeling standards, best practices and conventions for their water distribution system and sewer collection system models.

# **EDUCATIONAL SERVICES**

#### **Upcoming Training Opportunities**

The Association of Professional Engineers and Geoscientists of British Columbia has contracted Dr. Werner de Schaetzen, P.Eng. to conduct a series of hydraulic modeling training sessions for engineers across the province. A total of four sessions are being offered:

#### **Hydraulic Network Modeling of Water Distribution Systems**

- May 7, 2010 in Vancouver, BC
- June 4, 2010 in Prince George, BC
- June 18, 2010 in Fort St. John, BC

#### Hydraulic Network Modeling of Sanitary Sewer Collection Systems

June 11, 2010 in Victoria, BC

Every training session is worth **7.5 Professional Development Hours**. Space is limited so click on the link above to register and guarantee your spot today!

#### "If you don't pass, you don't pay!"\*

GeoAdvice provides training courses on Water Distribution Systems, Sewer and Storm Collection Systems Modeling. More than 300 people in Canada and USA have been trained since the inception of GeoAdvice in 2006. An extensive range of water modeling training programs offered by GeoAdvice include:

- ◆ InfoWater
- WaterCAD
- **♦** EPANET
- ♦ Plus many more...

Click here for information on GeoAdvice training services. \*This is GeoAdvice's training quality guarantee or your training will be delivered at no cost!

Test your Hydraulic and Modeling Knowledge Answers:  $1)\ T\quad 2)\ F\quad 3)\ T\quad 4)\ T\quad 5)\ F$ 

