



BRITISH COLUMBIA OPERATORS DIGEST

A NEWSLETTER FOR WATER
AND WASTEWATER OPERATORS

DECEMBER 2002 • NUMBER 105

Board Members Attend National Workshop

The EOCP Board was well represented at a training, education and certification workshop held in Toronto, September 25-28, 2002, which was sponsored by Canadian Water and Waste Association (CWWA), Health Canada, Canadian Council of Ministers of the Environment (CCME), and the Ontario Ministry of the Environment. The goal of the workshop, which was attended by close to 50 representatives from federal, provincial, territorial, First Nations, and professional groups, was to develop a national path forward to ensure the consistency and adequacy of training programs for all of Canada. Since the recent incidents related to contaminated drinking water in Ontario and Saskatchewan, authorities across the country are reassessing their strategies for water and wastewater management. Part of this reassessment, is a review of certification requirements for water and wastewater operators country-



Mt. Washington Ski Resort

wide. Major issues and decisions at the workshop included the following:

- Certification, and issues surrounding it.
- Establishment of a Canadian Coordinating Committee to deal with certification. Jim Young from PEI was elected chairman.
- Retaining some form of linkage to Association of Boards of Certification (ABC)
- Need a funding source from Government for start-up, but develop a self-sustaining process
- Establish a nationally accessible databank that catalogues training materials and programs
- Recommendation that on-going training be a mandatory requirement for recertification
- Need for a made in Canada operator manual
- Canadian approach to exam development, with a base of exam questions to be national, and each exam to contain regional questions.

Since the workshop, a very positive response to the workshop results was received from a committee of CCME when they were presented early in October. The matter now goes to the CCME for further discussion.

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Environmental Operators Certification Program

The BC Operators Digest is the official newsletter of the Program. Submissions for publication in the Digest are welcome and may be sent to the Editor:

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Sechelt, BC V0N 3A0
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e-mail: dgare@eocp.org

Changes of address, annual dues, exam applications, as well as general inquiries about the program should be addressed to:

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219 – 3823 Henning Drive
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Fax: 604 874-4794
Toll Free: 1-866-552-3627
email: eocp@eocp.org
Web: www.eocp.org

Ms. Barbara Striegler, Executive Assistant

Business card sized advertisement space is available at \$50.00 per issue or \$175.00 for four issues. GST and PST included. For other sized advertisements, please contact the Editor.

The Environmental Operators Certification Program is a charter member of the Association of Boards of Certification, and is a Registered Society with over 2,100 active members.

2002/2003 BOARD OF DIRECTORS

- Joe McGowan** – Chairman
- Bill Hyslop** – Industrial Waste
- Bernie Taekema** – Secretary
- Kevin Ramsay** – BCWWA Liaison
- Leo Albrecht** – CEU Assessment
- Don Gare** – Digest Editor
- Eric Jackson** – Treasurer
- Al Lane** – Facilities Classification
- Kevin McLuskey** – Digest Coordinator



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Safety Competition

WHISTLER BCWWA CONFERENCE

1ST PLACE: Greater Vancouver Regional District



Left to right: Bernie Morris, Mike Berglund, Ken Johnson, Ian Shepherd

2ND PLACE: Resort Municipality of Whistler



Left to right: Bernie Morris, Shawn Rowley, Rankin Smith, Mark Caulton

3RD PLACE: City of Coquitlam



Left to right: Pete Browne, Dan Person, Brett Hobkirk

Other participants included:

CITY OF VANCOUVER: George Lawson, Brendan Jones, Paul Leblanc

CORPORATION OF DELTA: Ken Redman, Frank Sallas, Rick Bauer

CAPITAL REGIONAL DISTRICT WATER DEPARTMENT:

Greg Blundell, Trevor Wyatt, Dave Mullett

BOARD BUSINESS BRIEFS

- Recent business from the Board Meeting held at the EOCP Office in Burnaby on September 30, 2002:
- Directors present: Joe McGowan (Chair), Leo Albrecht, Eric Jackson, Al Lane, Bernie Taekema, Kevin Ramsay, Kevin McLuskey, Don Gare – Bill Hyslop (absent).
- Treasurer's Report
Eric Jackson, Treasurer, presented a financial yearly comparison report, monthly income and expense reports and net worth report as follows:

Cash and Bank Accounts	\$ 92,522.77
Canaccord Capital	\$ 10,195.97
Money Market Investment	\$ 56,974.54
Total Investments	\$ 67,170.51
Total Assets	\$ 159,693.28

- Two applicants have been selected as recipients of the Okanagan University College EOCP bursaries.
- BCWWA moved in July to their new office at 221 – 8671 Greenall Avenue in Burnaby. BCWWA has been very busy this past year, putting on 65 courses. BCWWA offers 29 different training courses.
- Kevin McLuskey, the co-editor will gather information for the next newsletter including taking photographs.
- Bernie Taekema reported that there are many water distribution classification applications being received – about 50% of those are Small Water Systems.
- The U.S. Water Act requires ongoing training of operators. The U.S. is taking a pro-active role. Canada would be negligent if we do not follow the U.S. The implementation of the CEU requirement should go through the B.C. government. We should start with water operators through the Ministry of Health's legislation of mandatory water certification and classification. We need to dialogue with the government regarding CEU requirement. By implementing this requirement, we are protecting municipalities.
- Within the next six months we will have a better idea regarding the drinking water legislation and continuing education requirement as to how many operators we will have and how much more office space we will require.
- Al Lane will attend the upcoming ABC Conference on January 21–24, 2003 in Albuquerque, New Mexico on Advancing Certification – The Next Step.
- Al Lane's responsibility has been changed to Facilities Director and Bernie Taekema will become Secretary. Kevin McLuskey will be the co-editor and photographer for the Digest.
- It was decided that the dates for the Strategic Planning Meetings will be February 2nd and 3rd, 2003 on Vancouver Island.
- Water treatment operators require 50% of their experience in water treatment and the other 50% may be related experience such as water distribution.



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UTILITY PROFILE: Mt. Washington Alpine Resort

Mt. Washington Alpine Resort is located 30 km west of Courtenay B.C. on Vancouver Island and bordering on the oldest Provincial Park in British Columbia (Strathcona). The resort is home to many ski and snowboard enthusiasts and is rated third in the province for skier visits behind Whistler/Blackcomb and Big White. In the Fall of 2001, Mt. Washington received government approval that will allow for expansion from the present 750 units to 2,200 with a mix of high density and single family dwellings. Mt. Washington experiences extreme climatic conditions with summer temperatures reaching 30 c and winter seeing snow depth in excess of 1,000 cm.

RAW WATER COLLECTION

- 5 licences
- Total quantity draw of 472,000m³ per year
- 4 artesian wells with surface storage
- 1 mountain lake
- Quality tested 2x per month
- FC<1 TC<10
- 1820 m³ untreated storage
- Automated system control (SCADA) installed 2001
- Remote system operation
- Gravity feed to treatment plant

WATER TREATMENT

- Unclassified
- 2270 m³ treated water storage
- Filling capacity 36 L/sec
- Sodium hypochlorite injected

DISTRIBUTION

- Class III system
- 3 pressure zones
- 25 hydrants
- 10 km of pipe - C900 some Ductile
- 100-300mm in size
- Presently 350 connections
- C12 levels monitored daily at beginning and end of system
- Extremities tested bi-weekly

WASTEWATER COLLECTION

- Class II
- 500 meter drop in elevation
- Minimal infiltration
- 3 single pump lift stations, 2 dual
- Video inspected 1998

WATER RECLAMATION FACILITY

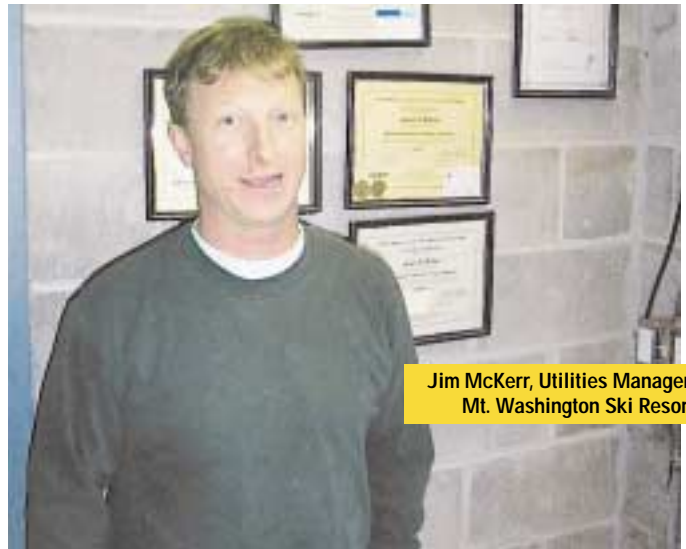
- Commissioned December 1996
- Class II facility
- 18 x 30 M footprint
- Completely enclosed
- Design capacity 2700 m³ per day
- Present operating capacity 1020 m³ per day
- Peak flow period Dec. thru April
- Zenon membrane technology
- Direct discharge to fish bearing stream
- Discharge parameters continually BOD<5
TSS<1 FC<1 PO₄ < 5
- LC50 results = Mortality rate 0 at 100% concentration
- SCADA control
- Priority alarm condition starts auto dialer sequencing
- Remote plant operation
- Reclaimed water used for flushing and irrigation



Jim McKerr, Utilities Manager, Mt. Washington Ski Resort

Prior to his present position as Utilities Manager for the Mt. Washington Ski Resort, Jim spent 20 years in the glass container manufacturing industry as quality control technician and product improvement facilitator. He followed this up with private business ventures in swimming pool and satellite T.V. systems installation and a lawn and garden care business.

His passion for skiing brought him to Vancouver Island's Mt. Washington Ski Resort in 1997, where he became a member of the ski patrol team – first voluntarily and later professionally. In 1999, he was appointed Utility Manager, administering to the water and wastewater systems for the Ski Resort and area.



Jim McKerr, Utilities Manager, Mt. Washington Ski Resort

Jim is married with 2 children. His educational history includes studies in psychology and law.

Aside from skiing, Jim's other hobbies include ice hockey and water sports. He is a Certified Operator holding WDI and WWT Level I certificates and he presently serves on the BCWWA Operation Education Committee.

**MERRY CHRISTMAS
FROM THE EOCP
BOARD AND STAFF**

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BCWWA VICTOR M. TERRY AWARD

This year's award is presented to Jim McQuarrie for his exceptional efforts as an operator and supervisor of the Annacis Wastewater Treatment Plant while it was undergoing conversion from primary to secondary treatment. The \$450 million upgrade took 4 years. As the Operation's Supervisor, Jim was responsible for 26 plant operations personnel and was involved with the operation from the planning stages. With his patience and perseverance, he was successful in bringing his operational staff to operate this complex wastewater treatment system.

Jim graduated from the Malaspina Water and Wastewater Treatment Program in 1982. He started his career at the Iona Wastewater Treatment Plant in 1982 and became certified as a Level I Wastewater Treatment operator the same year. He upgraded to Level II in 1984 and was certified as a Level III operator in 1987.

In 1994, Jim moved to Lulu Island Wastewater Plant as Operations Foreman. In 1996, he moved to the Annacis Island Wastewater Treatment Plant as Operations Supervisor where he spent the next 5 years. In 1997, he became certified as a Level IV Wastewater Treatment operator. In June 2001, Jim returned



Left: Joe McGowan, EOCP Chairman
Right: Jim McQuarrie, IONA WWT Plant

to Iona By the Sea (affectionately named by its operators) as Plant Superintendent.

Jim is married to Nancy and has a son and daughter. He coaches a girl's softball team and we are told that he was one of the best players for the GVRD ball team called "The Crows" a few years ago.



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OLD CLARIFIERS?

Do you have an old clarifier? Tired of putting on the rubber boots and scrubbing the effluent trough (laundry)? Well this might give you some ideas. Why not attach brushes to the skimmer arm and make it easy on yourself. This can be done by using aluminum (expensive), I recommend using telspar, bungee cords and old fittings for weight to hold the brushes down. This will make you and the manager happy (low cost). Any interesting tips for fellow operators email them to <kevinmcluskey@shaw.ca> —Submitted by Kevin McLuskey

FRONT VIEW



REAR VIEW



TOPVIEW



WORD GAMES – BC TOWNS AND CITIES

Unscramble the clue to find a BC town or city and win a prize. Mail or fax your answers to the EOCP Board Office, by January 15, 2003.

- | | |
|--------------------------------------|--------------------------------------|
| 1. Unseasoned timber _____ | 14. A praiseworthy feature _____ |
| 2. Bill's water _____ | 15. Magnificent cutlery _____ |
| 3. A path in the woods _____ | 16. Underground water supply _____ |
| 4. Go to first base _____ | 17. Fishy part of the body _____ |
| 5. A great Queen _____ | 18. A monk's car _____ |
| 6. Type of lock _____ | 19. A New England pub _____ |
| 7. _____ Impossible | 20. _____ and pins |
| 8. Very possible _____ | 21. Exchanging moccasins _____ |
| 9. What a blacksmith needs _____ | 22. A cold slap _____ |
| 10. A bird's home _____ | 23. Raised level ground _____ |
| 11. Springs eternal _____ | 24. Charles' weight _____ |
| 12. A feline carpet _____ | 25. Ice cream and fix the fire _____ |
| 13. Newly wedded female's town _____ | |

NEW MEMBERS AND UPGRADES

Congratulations to the following new operators and those operators who have upgraded their certification level.

February 1, 2002 to June 30, 2002

CERT. NO.	NAME	CITY	CERT. NO.	NAME	CITY
3348	Ackerman, Robert	CH <i>Richmond, BC</i>	1372	Craig, Randy	CH <i>Penticton, BC</i>
3408	Agecoutay, Eva	WWC I <i>Port Coquitlam, BC</i>	3888	Cross, Dale	WWC I <i>Nanaimo, BC</i>
3920	Aie, Edwin	WD I <i>Ashcroft, BC</i>	3510	Cusano, Nick	CH <i>North Vancouver, BC</i>
3856	Alexander, Vernon	CH <i>Sechelt, BC</i>	3941	Dame, Lyle	WD I <i>Port Alberni, BC</i>
3914	Allman, Sid	MWWT I <i>Powell River, BC</i>	3997	Danroth, Allan	SWS <i>Prince George, BC</i>
1787	Amaral, Marco	WD II <i>Victoria, BC</i>	1016	Davidson, Ian	WWC II <i>Vancouver, BC</i>
3931	Anderson, Michael	WWC I <i>Nanaimo, BC</i>	3273	Davis, Gordon	OIT WT <i>Revelstoke, BC</i>
3894	Anderson, Ross	SWS <i>Burnaby, BC</i>	3872	Deck, Greg	SWS <i>Radium, BC</i>
1484	Anderson, Stephen	WWC I <i>Penticton, BC</i>	3995	Derksen, George	SWS <i>Ceardale, Alberta</i>
3989	Anthony, Gordon	SWS <i>Chase, BC</i>	3362	Duch, Michael	WD II <i>Victoria, BC</i>
1890	Armitage, Robert	WWC II <i>Victoria, BC</i>	3589	Ellendt, Nelson	WD II <i>Chilliwack, BC</i>
3903	Armsworthy, Neil	IWWT II <i>Prince George, BC</i>	1553	Evanchu, David	WT III <i>Penticton, BC</i>
3903	Armsworthy, Neil	WT II <i>Prince George, BC</i>	3863	Evans, Roy	SWS <i>Boswell, BC</i>
3940	Arsenault, Ernest	WD I <i>Surrey, BC</i>	3895	Farmer, George	SWS <i>North Vancouver, BC</i>
3967	Atherton, Howard	SWS <i>Woss, BC</i>	1948	Ferguson, Stan	WWC II <i>Parksville, BC</i>
3137	Baird, Kenneth	WWC I <i>Delta, BC</i>	3937	Ferraro, Domenico	WWC I <i>Vancouver, BC</i>
3371	Baker, Steve	WD II <i>Langley, BC</i>	3942	Fitzgerald, Dwayne	WD I <i>Surrey, BC</i>
903	Bartch, David	SWS <i>Radium Hot Springs,</i>	3943	Floyd, Randall	WD I <i>North Vancouver, BC</i>
3919	Battel, Oscar	WD I <i>Ashcroft, BC</i>	3908	Fraser, Alan	WWC I <i>Chilliwack, BC</i>
3857	Bay, Bruce	SWS <i>Fairmont, BC</i>	3908	Fraser, Alan	WD I <i>Chilliwack, BC</i>
3918	Beauchamp, Paul	WD I <i>Vernon, BC</i>	3930	Gaber, Troy	WWC I <i>Kamloops, BC</i>
3858	Beebe, Dale	SWS <i>Canyon, BC</i>	3905	Gailey, Neil	WD I <i>Surrey, BC</i>
3975	Behm, Terry	SWS <i>Prince George, BC</i>	3130	Gehrer, Christopher	MWWT II <i>Surrey, BC</i>
3996	Belbeck, Brian	SWS <i>Prince George, BC</i>	2056	Geiger, Dean	WD I <i>Langley, BC</i>
1328	Benjamin, Mark	CH <i>Chilliwack, BC</i>	1817	George, David	OIT WT <i>Invermere, BC</i>
3283	Bennett, Darrell	WT II <i>Kamloops, BC</i>	1202	Getman, Paul	MWWT I <i>Coal Harbour, BC</i>
3440	Bernier, Harley	WD II <i>Surrey, BC</i>	3252	Gibb, David	WD II <i>Duncan, BC</i>
3859	Bjarnason, Donald	SWS <i>Creston, BC</i>	3862	Giesbrecht, George	SWS <i>Williams Lake, BC</i>
3173	Blackwell, Warren	WD II <i>Victoria, BC</i>	3536	Giroux, Daniel	CH <i>Richmond, BC</i>
1792	Bloomfield, Darren	WD II <i>Victoria, BC</i>	1978	Gold, David	CH <i>Naramata, BC</i>
3616	Bloski, Marvin	WD II <i>Kamloops, B.C</i>	3864	Gold, James	SWS <i>Boswell, BC</i>
3969	Bodewitz, Harry	SWS <i>Prince George, BC</i>	731	Graham, Robert	WWC II <i>Coquitlam, BC</i>
3860	Boe, Clinton	SWS <i>Lister, BC</i>	3464	Grant, James	WWC II <i>Victoria, BC</i>
3907	Boros, John	WD I <i>Langley, BC</i>	1858	Grant, Richard	WWC II <i>Mission, BC</i>
3861	Botterill, Patrick	SWS <i>Cranbrook, BC</i>	3964	Grill, Martin	OIT WWT <i>Nelson, BC</i>
1867	Boyles, Terence	WWC I <i>Cobble Hill, BC</i>	3965	Grove-White, Stanley	OIT WT <i>Kamloops, BC</i>
3970	Breen, Terry	SWS <i>Prince George, BC</i>	3977	Hadikin, John	SWS <i>Prince George, BC</i>
3917	Brown, Iain	WD I <i>Quesnel, B.C</i>	3978	Haidish, Stan	SWS <i>Prince George, BC</i>
3871	Burford, Gary	SWS <i>Invermere, BC</i>	3165	Halladay, Steven	WWC I <i>Kamloops, BC</i>
3149	Burkowsky, Curtis	MWWT II <i>Chilliwack, BC</i>	3921	Hammermeister, John	OIT WWC <i>Vancouver, BC</i>
3906	Campbell, Gordon	WD I <i>Port Coquitlam, BC</i>	745	Hankey, Thomas	WD III <i>Chemainus, BC</i>
1964	Caulton, Mark	WWC II <i>Garibaldi Highlands,</i>	3891	Harford, Kenneth	SWS <i>Coquitlam, BC</i>
3938	Causier, Brian	WWC I <i>Surrey, BC</i>	3166	Harvey, David	WWC II <i>Kamloops, BC</i>
1865	Cleaver, Carey	WD II <i>Victoria, BC</i>	3037	Heibert, Timothy	CH <i>Osoyoos, BC</i>
3287	Cochran, Kenneth	WWC I <i>Kamloops, BC</i>	3936	Henderson, Cyril	WWC I <i>Richmond, BC</i>
3508	Coles, Vincent	WD I <i>Mission, BC</i>	3433	Heska, Grant	CH <i>Surrey, BC</i>
3915	Conrad, Jeffrey	MWWT I <i>Kelowna, BC</i>	3944	Hightower, John	WD I <i>Coquitlam, BC</i>
3928	Cook, Bruce	WWC I <i>Fort Langley, BC</i>	1601	Hildred, Richard	MWWT II <i>Kelowna, BC</i>
3491	Cootes, Daniel	WWC II <i>Ucluelet, BC</i>	3280	Hill, Brian	MWWT I <i>Enderby, BC</i>
3976	Couch, Gary	SWS <i>Prince George, BC</i>	3280	Hill, Brian	CH <i>Enderby, BC</i>
3893	Cowley, David	SWS <i>North Vancouver, BC</i>	3279	Hill, Ian	WT I <i>Revelstoke, BC</i>

NEW MEMBERS AND UPGRADES (Continued)

CERT. NO.	NAME		CITY	CERT. NO.	NAME		CITY
3432	Holmstrom, Michael	WD II	<i>Langley, BC</i>	3007	Marr, Andrew	MWWT III	<i>Vernon, BC</i>
3020	Hopson, Bruce	WWC II	<i>Kamloops, BC</i>	3901	Marr, Douglas	WD I	<i>Abbotsford, BC</i>
1759	Horin, Jerry	WWC II	<i>Sardis, BC</i>	3453	Marsden, Gary	MWWT II	<i>Summerland, BC</i>
3924	Horne, Lonny	WWC I	<i>Vancouver, BC</i>	3866	Marta, Arsenius	SWS	<i>Boswell, BC</i>
682	Houghton, Robert	WD III	<i>Surrey, BC</i>	3877	Martin, John	SWS	<i>Invermere, BC</i>
3873	Hounjet, Daniel	SWS	<i>Fairmont Hot Springs, BC</i>	3947	Massie, Colin	WD I	<i>North Vancouver, BC</i>
3412	House, Mark	WWC II	<i>Richmond, BC</i>	3948	Matsos, Thomas	WD I	<i>Surrey, BC</i>
3113	Hunt, Paul	WWC I	<i>North Saanich, BC</i>	3992	Mayell, Wayne	SWS	<i>Fort St. John, BC</i>
917	Hutchison, John	CH	<i>Delta, BC</i>	3563	McAllister, Robert	WWC I	<i>Stewart, BC</i>
3024	Indyk, Peter	WD I	<i>Delta, BC</i>	3134	McBride, Douglas	WD II	<i>Kamloops, BC</i>
1837	Ingram, William	WD III	<i>Vernon, BC</i>	3991	McCauley, Timothy	SWS	<i>Taylor, BC</i>
918	James, Robert	WWC I	<i>Duncan, BC</i>	1533	McCorkindale, Neil	WD III	<i>Maple Ridge, BC</i>
3039	Johnson, Ian	SWS	<i>Fernie, BC</i>	1111	McCurrach, Raymond	WWC III	<i>Port Coquitlam, BC</i>
3886	Johnston, Brian	WD I	<i>North Saanich, BC</i>	553	McDonell, Ken	WT I	<i>Radium Hot Springs,</i>
3087	Jones, Brian	WD II	<i>Langley, BC</i>	3900	McKeigan, Bruce	WD I	<i>Surrey, BC</i>
3240	Jones, Terry	WWC II	<i>Victoria, BC</i>	1378	McLean, Colin	OIT WT	<i>Abbotsford, BC</i>
3998	Jurista, Thomas	SWS	<i>Prince George, BC</i>	1470	McNeil, Jason	WWC I	<i>Salmo, BC</i>
3446	Kanda, Ajay	WD I	<i>Surrey, BC</i>	364	Meyer, Glenn	CH	<i>Chilliwack, BC</i>
3875	Keith, Jarold	SWS	<i>Fairmont Hot Springs, BC</i>	3867	Miller, Carl	SWS	<i>Sparwood, BC</i>
989	Kelder, Mike	WWC I	<i>Surrey, BC</i>	3095	Miller, Parrish	MWWT I	<i>Terrace, BC</i>
3637	Kelly, Paul	SWS	<i>Kaslo, BC</i>	3982	Miller, Patricia	MWWT I	<i>Sun Peaks, BC</i>
3923	Kelly, Shawn	WWC I	<i>Burnaby, BC</i>	3725	Mills, Philip	MWWT I	<i>Edgewater, BC</i>
3985	Kilby, Fred	WWC I	<i>Surrey, BC</i>	2092	Milne, Robert	WD II	<i>Victoria, BC</i>
3971	King, Keith	SWS	<i>Prince George, BC</i>	3373	Mitchell, Gregory	WD II	<i>Surrey, BC.</i>
3874	Kitching, Brad	SWS	<i>Windermere, BC</i>	3887	Mitchell, Wayne	WD I	<i>Courtenay, BC</i>
1210	Klein, Ted	WWC II	<i>Port Coquitlam, BC</i>	3868	Mitchell, William	SWS	<i>Nelson, BC</i>
3983	Koshey, Daryl	MWWT I	<i>Powell River, BC</i>	3949	Moilliet, Jim	WD I	<i>Parksville, BC</i>
3945	Kowalski, Bryan	WD I	<i>Richmond, BC</i>	3950	Montague, Eli	WD I	<i>Richmond, BC</i>
3999	Krauss, Les	SWS	<i>Prince George, BC</i>	3979	Morgan, Brian	SWS	<i>Prince George, BC</i>
3946	Laidlaw, Scott	WD I	<i>Richmond, BC</i>	3898	Morton, Robert	SWS	<i>Whistler, BC</i>
3963	Lamb, Russell	OIT WD	<i>Smithers, BC</i>	3307	Mossop, Scott	CH	<i>Westbank, BC</i>
3910	Lamorie, Ralph	WT I	<i>Masset, BC</i>	3541	Moxin, Greg	CH	<i>Richmond, BC</i>
3799	Lapointe, Mike	MWWT I	<i>Logan Lake, BC</i>	3962	Munroe, James	SWS	<i>Williams Lake, BC</i>
3865	Latham, Dean	SWS	<i>Baynes Lake, BC</i>	3142	Murduff, Gordon	WD III	<i>Cumberland, BC</i>
3935	Laurence, Mike	WWC I	<i>Coquitlam, BC</i>	1834	Neufeld, David	WD II	<i>Surrey, BC</i>
4000	Law, Daniel	SWS	<i>Prince George, BC</i>	3005	Newton, Grenville	WWC II	<i>New Westminster, BC</i>
3904	Legroulx, Denis	WD I	<i>Surrey, BC</i>	3422	Nicholson, Stephen	WWC II	<i>Chilliwack, BC</i>
3972	Lepetich, Egan	SWS	<i>Prince George, BC</i>	1903	Nickurak, Brian	MWWT IV	<i>Kaleden, BC</i>
873	Lewis, John	WD III	<i>Ladysmith, BC</i>	1903	Nickurak, Brian	CH	<i>Kaleden, BC</i>
1366	Livingston, Randy	MWWT II	<i>Terrace, BC</i>	4002	Norcorss, James	SWS	<i>Prince George, BC</i>
4001	Loewen, Marcus	SWS	<i>Dease Lake, BC</i>	747	Nugent, James	WD III	<i>Duncan, BC</i>
1782	Lofgren, Bradley	WD III	<i>Surrey, BC</i>	1703	Nuttall, Steven	CH	<i>Agassiz, BC</i>
3139	Longworth, Michael	OIT WD	<i>North Burnaby, BC</i>	3913	Olinyk, Michael	MWWT I	<i>Kelowna, BC</i>
3927	Lopes, Antonio	WWC I	<i>Surrey, BC.</i>	3926	Oliver, Brian	WWC I	<i>Vancouver, BC</i>
3636	Lucht, Luke	WD I	<i>Salmo, BC</i>	3951	O'Malley, Creighton	WD I	<i>Surrey, BC</i>
1082	Lyseng, Greg	WWC II	<i>Victoria, BC</i>	3892	O'Neill, Ron	SWS	<i>North Vancouver, BC</i>
3876	Macala, Anthony	SWS	<i>Canal Flats, BC</i>	3934	Orr, Richard	WWC I	<i>Richmond, BC</i>
1505	Mandryk, Bob	WD I	<i>Kelowna, BC</i>	4003	Osnes, Philip	SWS	<i>Vanderhoof, BC</i>
3961	Mang, Arley	SWS	<i>Nakusp, BC</i>	1806	Ostler, Steve	SWS	<i>Campbell River, BC</i>
3987	Manuel, Daniel	SWS	<i>Merritt, BC</i>	3521	Otsig, Neil	MWWT I	<i>Heffly Creek, BC</i>
3345	Marietta, Helen	MWWT II	<i>Richmond, BC</i>	3802	Ough, Jason	WD II	<i>Kelowna, BC</i>
3902	Mark, Philip	WD I	<i>Surrey, BC</i>	3952	Oviedo, Jose	WD I	<i>Richmond, BC</i>
1628	Marleau, Lyle	WD III	<i>Terrace, BC</i>	3968	Pabin, Kevin	SWS	<i>Langley, BC</i>

NEW MEMBERS AND UPGRADES (Continued)

CERT. NO.	NAME		CITY	CERT. NO.	NAME		CITY
3922	Pagdin, Ross	WWC I	<i>Courtenay, BC</i>	3909	Simpkins, Lee	WD I	<i>Deroche, BC</i>
1175	Paice, Reginald	SWS	<i>Prince George, BC</i>	3870	Simpson, George	SWS	<i>Cranbrook, BC</i>
3114	Parker, David	WD II	<i>Crofton, BC.</i>	3955	Slater, Garry	WD I	<i>North Vancouver, BC</i>
2009	Parker, Grant	MWWT I	<i>MacKenzie, BC</i>	3062	Smerychynski, Anthony	MWWT III	<i>Richmond, BC.</i>
3368	Parker, Robert	WD II	<i>Sidney, BC</i>	1608	Smith, Donald	WWC I	<i>Salmon Arm, BC</i>
3896	Pasch, Robert	SWS	<i>Whistler, BC</i>	1498	Smith, Gary	WD I	<i>Fraser Lake, BC</i>
3911	Pavitt, Kevin	OIT WT	<i>Maple Ridge, BC</i>	3916	Smith, Larry	WD I	<i>Salmon Arm, BC</i>
3043	Pecsi, Laszlo	WD II	<i>Port Moody, BC</i>	3994	Smith, Scott	SWS	<i>Chetwynd, BC</i>
3526	Person, Dan	WWC II	<i>Port Coquitlam, BC</i>	4004	Snel, Hans	SWS	<i>Prince George, BC</i>
1774	Peters, Michael	MWWT I	<i>Langley, BC</i>	93	Soares, Joe	WWC I	<i>Pender Island, BC</i>
3912	Philip, Norman	MWWT I	<i>Powell River, BC</i>	3939	Soong, George	OIT WWT	<i>Vancouver, BC</i>
1500	Phillips, William	WD II	<i>Sicamous, BC</i>	3988	Sparks, Donald	SWS	<i>Spences Bridge, BC</i>
3879	Pickering, Lorne	SWS	<i>Golden, BC</i>	1436	Spender, Brad	WD I	<i>Genelle, BC</i>
3588	Piguët, Kevin	WWC II	<i>Surrey, BC</i>	1961	Startup, Jason	CH	<i>Fruitvale, BC</i>
3953	Pinder, Kenwood	WD I	<i>Delta, BC</i>	4005	Stauffer, Dale	SWS	<i>Prince George, BC</i>
1405	Pineau, Mario	MWWT I	<i>Mackenzie, BC</i>	3966	Steinhammer, Jimmy	WT I	<i>Logan Lake, BC</i>
1984	Popp, Brian	WWC II	<i>Kamloops, BC</i>	1790	Stewart, Larry	WD II	<i>Victoria, BC</i>
3954	Pritchard, Shawn	WD I	<i>Surrey, BC</i>	3956	Stewart, Mark	WD I	<i>North Vancouver, BC</i>
3503	Purcell, Grant	WWC II	<i>Surrey, BC</i>	3169	Stickland, Bruce	CH	<i>Penticton, BC</i>
1216	Radford, Chris	WD II	<i>Golden, BC</i>	4011	Stretch, Joseph	IWWT I	<i>Armstrong, BC</i>
3878	Rae, David	SWS	<i>Fairmont Hot Springs, BC</i>	4006	Strom, David	SWS	<i>Prince George, BC</i>
3993	Rehmeier, Gary	SWS	<i>Fort St. John, BC</i>	1881	Swindells, Robert	WWC II	<i>Victoria, BC</i>
1936	Reid, Andrew	MWWT III	<i>Summerland, BC</i>	3980	Szerencsi, Les	SWS	<i>Prince George, BC</i>
4009	Reimer, Gil	OIT WWT	<i>Terrace, BC</i>	3487	Szikora, Susan	WWC I	<i>Victoria, BC</i>
3605	Richardson, Gordon	WWC I	<i>Surrey, BC</i>	1654	Thomas, Brad	WD II	<i>Sidney, BC</i>
3605	Richardson, Gordon	WD II	<i>Surrey, BC</i>	3060	Thomas, John	WT I	<i>Kelowna, BC</i>
3889	Roberts, Brian	MWWT I	<i>Maple Ridge, BC</i>	673	Tooms, Roger	MWWT II	<i>Terrace, BC</i>
3880	Roggeman, Paul	SWS	<i>Fairmont Hot Springs, BC</i>	4007	Turner, Marvin	SWS	<i>Prince George, BC</i>
3881	Routledge, Ronald	SWS	<i>Fairmont Hot Springs, BC</i>	1187	Valcourt, Maurice	WWC II	<i>Kelowna, BC</i>
1293	Rowley, Shawn	WD III	<i>Whistler, BC</i>	3957	Van De Leur, David	WD I	<i>Richmond, BC</i>
3890	Royer-Collard, Graham	OIT WD	<i>Victoria, BC</i>	3929	van der Walle, Rudy	SWS	<i>Chase, BC</i>
1648	Sainsbury, Kenneth	WD II	<i>Sidney, BC</i>	3294	Van Iterson, Ron	WWC I	<i>Kamloops, BC</i>
3851	Salisbury, Ken	WD II	<i>Westbank, BC</i>	500	Van Leersum, Rick	WWC II	<i>Aldergrove, BC</i>
3984	Sallows, Shannon	MWWT I	<i>Burnaby, BC</i>	3981	van Noort, Bernard	SWS	<i>Prince George, BC</i>
3933	Santos, Victor	WWC I	<i>Richmond, BC</i>	1127	Wardlaw, Alistair	WT III	<i>Penticton, BC</i>
3990	Saul, Francis	SWS	<i>Chase, BC</i>	1127	Wardlaw, Alistair	WT IV	<i>Penticton, BC</i>
3869	Savoy, Kenneth	SWS	<i>Elkford, BC</i>	3958	Watson, Robert	WD I	<i>Mission, BC</i>
1974	Sayewich, Douglas	MWWT II	<i>Heffley Creek, BC</i>	3959	Weber, Christopher	WD I	<i>Delta, BC</i>
1485	Scaber, Todd	WD III	<i>Victoria, BC</i>	3374	Weber, Paul	WD II	<i>Surrey, BC</i>
3542	Schenderling, Paul	WWC I	<i>Abbotsford, BC</i>	3587	Welz, David	WD I	<i>Parksville, BC</i>
1046	Scheuer, Darren	WWC III	<i>Victoria, BC</i>	942	White, Ken	WD II	<i>Dawson Creek, BC</i>
1730	Schimek, Peter	WWC II	<i>Pemberton, BC</i>	3882	Wiebe, Robert	SWS	<i>Golden, BC</i>
3973	Schlogl, Christopher	SWS	<i>Prince George, BC</i>	3282	Wightman, Ronald	MWWT I	<i>Enderby, BC</i>
3932	Scott, Jason	WWC I	<i>Richmond, BC</i>	3883	Wilder, Michael	SWS	<i>Fairmont Hot Springs, BC</i>
3974	Scully, Lorne	SWS	<i>Prince George, BC</i>	3884	Wodniakowski, Heinz	SWS	<i>Fairmont Hot Springs, BC</i>
3925	Serena, Frank	WWC I	<i>Burnaby, BC</i>	3897	Wolfe, Michael	SWS	<i>Mount Currie, BC</i>
3474	Setter, Bruce	WD II	<i>Kamloops, BC</i>	3899	Wright, Clinton	WD I	<i>Surrey, BC</i>
3986	Setter, Ross	WD I	<i>Kamloops, BC</i>	1659	Youell, Gary	WWC II	<i>Saanichton, BC</i>
3805	Shafer, Gerald	WD II	<i>Delta, BC</i>	4008	Young, Brett	SWS	<i>Prince George, BC</i>
3727	Shaw, Kevin	MWWT I	<i>Invermere, BC</i>	3960	Young, Brian	WD I	<i>Richmond, BC</i>
1595	Shea, Sean	WT I	<i>Tumbler Ridge, BC</i>	3328	Ziefflie, Brent	WWC I	<i>Mission, BC</i>
3091	Simmons, Jerry	CH	<i>Slocan, BC</i>				

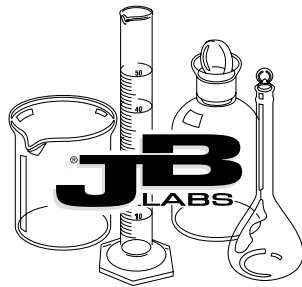
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UPCOMING EVENTS

BC WATER & WASTE ASSOCIATION 2003 CALENDAR

DATE	COURSE	LOCATION	DURATION	COST
January 13-17	Water Distribution III	GVRD	Five days	\$530.00
January 20-31	Wastewater Collection II	GVRD	10 1/2 days	\$530.00
March 10-11	Small Water Systems	Penticton	Two days	\$378.52
March 10-11	Source Water Protection	Penticton	Two days	\$378.52
March 10-14	Water Treatment I	Penticton	Five days	\$530.00
March 10-14	Wastewater Treatment I	Penticton	Five days	\$530.00
March 10-14	Water Distribution I	Penticton	Five days	\$530.00
March 31-April 1	Small Water Systems	Kamloops	Two days	\$378.52
March 31-April 1	Small Wastewater Systems	Kamloops	Two days	\$378.52
March 31-April 4	Water Treatment I	Kamloops	Five days	\$530.00
March 31-April 4	Water Distribution I	Kamloops	Five days	\$530.00
March 31-April 4	Wastewater Treatment I	Kamloops	Five days	\$530.00
March 31-April 4	Chlorine Handling	Kamloops	Five days	\$530.00
April 14-15	Source Water Protection	Grandforks	Two days	\$378.52
UBC OPERATOR SYMPOSIUM				
May 12-16	Water Treatment I	UBC	Five days	\$530.00
May 12-16	Water Treatment II	UBC	Five days	\$530.00
May 12-16	Water Distribution I	UBC	Five days	\$530.00
May 12-16	Water Distribution II	UBC	Five days	\$530.00
May 12-16	Water Collection III	UBC	Five days	\$530.00
May 12-16	Wastewater Treatment I	UBC	Five days	\$530.00
May 12-16	Cross Connection Control	UBC	Five days	\$530.00
May 12-16	Chlorine Handling	UBC	Five days	\$530.00
June 2-3	Confined Space	Cranbrook	Two days	\$378.52
June 2-6	Water Distribution III	Cranbrook	Five days	\$530.00
June 2-6	Wastewater Collection II	Cranbrook	Five days	\$530.00
June 2-6	Wastewater Treatment II/III	Cranbrook	Five days	\$530.00

Please phone BCWWA @ 604 540-0111 for information on the above courses or check their website at www.bcwwa.org.

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