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An Indexed Bibliography of Toxic Contaminant
Concentrations in Water, Sediments, and Biota of
the Laurentian Great Lakes

By:
A. J. Ball

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**AN INDEXED BIBLIOGRAPHY OF
TOXIC CONTAMINANT CONCENTRATIONS IN
WATER, SEDIMENTS, AND BIOTA
OF THE LAURENTIAN GREAT LAKES**

A. J. Ball

**Lakes Research Branch
National Water Research Institute
Canada Centre for Inland Waters
Burlington, Ontario L7R 4A6
Canada**

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ABSTRACT

This report consists of a compilation of reference material pertaining to toxic chemicals in water, suspended solids, sediment, and biota of the Great Lakes, connecting channels and tributaries.

The sections of the report are: (1) references and index terms, (2) an author index, (3) a subject index, (4) geographical, chemical, biological and related subject headings and (5) journal title abbreviations.

TABLE OF CONTENTS

PREFACE **iii**

REFERENCES **1**

AUTHOR INDEX **115**

SUBJECT INDEX **126**

GEOGRAPHICAL SUBJECT HEADINGS **151**

CHEMICAL SUBJECT HEADINGS **152**

BIOLOGICAL SUBJECT HEADINGS **155**

RELATED SUBJECT HEADINGS **159**

JOURNAL TITLE ABBREVIATIONS **160**

PREFACE

Scope:

The main criteria for inclusion of a reference in this bibliography was the discussion of toxic chemical concentrations in the water, suspended solids and/or sediment of the Great Lakes and their connection channels and tributaries. Publications about toxic chemical concentrations in biota were included but to a lesser extent. Some papers dealing specifically with eutrophication, physical properties and processes, analytical techniques, or sampling techniques have been included.

References:

The documents included in this bibliography were journal articles, journal issues, reports, conferences papers and proceedings, dissertations, monographs, chapters, and unpublished manuscripts. The emphasis was on primary sources but some secondary and tertiary publications were also included.

The references are in alphabetical order by first author. For most references, there is a Notes section which lists:

- 1) the testing date(s), which is the year(s) the data was collected. A question mark before the date indicates that a specific date was not given in the text;
- 2) the number of references or the number of pages of references;
- 3) the number of tables; and
- 4) the number of figures.

Index Terms:

The Index Terms section of each reference lists the headings applied to that publication. These are the same terms used in the Subject Index. Most of the terms included in the Related Subject Headings section were derived from the ASFIS Thesaurus. The Biological Subject Headings section contains lists of both common and scientific names.

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Notes: 20 ref.; 11 tables; 13 figs.
Index terms: PCBs/LITERATURE REVIEWS.
2. Allan, R.J. 1982. Dealing with toxic contamination in aquatic ecosystems: The Niagara River - Lake Ontario example. National Water Research Institute Report. 32 pp.
Notes: 16 figs.
Index terms: NIAGARA RIVER/LAKE ONTARIO/INDUSTRIAL WASTES/WASTE DISPOSAL SITES/BIOCONCENTRATION/BIOACCUMULATION/Mirex/2,3,7,8-TCDD/HCB.
3. Allan, R.J. 1986. The limnological units of the lower Great Lakes - St. Lawrence River corridor and their role in the source and aquatic fate of toxic contaminants. Water Poll Res Can 21(2): 168-186.
Notes: 26 ref.; 18 figs.
Index terms: LAKE ST. CLAIR/ST. CLAIR RIVER/DETROIT RIVER/LAKE ERIE/NIAGARA RIVER/LAKE ONTARIO/ST. LAWRENCE RIVER/SEDIMENT ANALYSIS/SEDIMENTATION.
4. Allan, R.J. 1986. The role of particulate matter in the fate of contaminants in aquatic ecosystems. Environment Canada, Inland Waters Directorate. Scientific Series 142. 128 pp.
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Part I: 25 tables; 58 figs.
Part II: 14 tables; 40 figs.
Index terms: SEDIMENT ANALYSIS/NIAGARA RIVER/LAKE ONTARIO/SORPTION/SUSPENDED PARTICULATE MATTER/Heavy Metals/Pesticide/PCBs.
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Index terms: Ring-billed Gulls/Larus delawarensis/LAKE ERIE/LAKE HURON/LAKE MICHIGAN/LAKE ONTARIO/LAKE SUPERIOR/ST. LAWRENCE RIVER/DETROIT RIVER/NIAGARA RIVER/LITERATURE REVIEWS.
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Index terms: PCBs/LAKE SUPERIOR/ATMOSPHERIC PRECIPITATIONS/AIR TRANSPORTATION/AIR-WATER INTERFACE/AIR-WATER EXCHANGES/LITERATURE REVIEWS/MASS BALANCE APPROACH.
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Index terms: ATMOSPHERIC PRECIPITATIONS/LAKE ERIE/LAKE HURON/LAKE MICHIGAN/LAKE ONTARIO/LAKE SUPERIOR/ATMOSPHERIC CIRCULATION/PCBs/DDT/a-BHC/Endosulfan/Methoxychlor/PAHs/Phthalate Esters.
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Index terms: Mirex/Waterfowl/Fish/Mammals/BIOACCUMULATION/LITERATURE REVIEWS/LAKE ERIE/LAKE HURON/LAKE MICHIGAN/LAKE ONTARIO/LAKE SUPERIOR.
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Index terms: LAKE ERIE/LAKE HURON/LAKE MICHIGAN/LAKE ONTARIO/LAKE SUPERIOR/Humans.
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Notes: 11 ref.; 2 tables; 3 figs.
Index terms: PCBs/Humans/LAKE MICHIGAN.

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Index terms: Humans/LAKE MICHIGAN/PCBs/DDE/DDT/PBBs/HCB/a-BHC/Chlordane/Heptachlor epoxide/Dieldrin/Mirex/Fish.
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319. International Joint Commission. 1978. Great Lakes Water Quality Agreement of 1978.
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Index terms: LAKE ERIE/LAKE HURON/LAKE MICHIGAN/LAKE ONTARIO/LAKE SUPERIOR/ST. MARYS RIVER/ST. CLAIR RIVER/LAKE ST. CLAIR/DETROIT RIVER/NIAGARA RIVER/ST. LAWRENCE RIVER/Phosphorus/INTERNATIONAL AGREEMENTS/WATER COLUMN/DOMESTIC WASTES/INDUSTRIAL WASTES/Heavy Metals/NON-POINT SOURCES/Pesticide/SEDIMENT ANALYSIS/WASTE DISPOSAL SITES/ATMOSPHERIC PRECIPITATIONS/AGRICULTURAL RUNOFF/DOMESTIC WASTES/PCBs/Lead/DDT/Aldrin/Dieldrin/Chlordane/Heptachlor/Heptachlor epoxide/Atrazine/HCB/Mirex/Mercury.
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Index terms: LAKE ERIE/LAKE HURON/LAKE MICHIGAN/LAKE ONTARIO/LAKE SUPERIOR/LITERATURE REVIEWS.
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Index terms: LAKE ERIE/LAKE HURON/LAKE MICHIGAN/LAKE ONTARIO/LAKE SUPERIOR/ Zinc/Amphipods/Pontoporeia hoyi.
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Index terms: NIAGARA RIVER/INDUSTRIAL WASTES/LAKE ONTARIO/Fish/MASS BALANCE APPROACH/SEDIMENT TRANSPORT/SEDIMENT-WATER INTERFACE/BIOACCUMULATION/BERGHOLTZ CREEK/Chlorobenzenes/Chlorotoluenes/a-BHC/Mirex/PCBs/2,3,7,8-TCDD.
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Index terms: LAKE ONTARIO/NIAGARA RIVER/Fish/SEDIMENT ANALYSIS/PCBs.
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Notes: Testing date: 1984; 18 ref.; 3 tables; 3 figs.
Index terms: LAKE ONTARIO/NIAGARA RIVER/BUFFALO RIVER/TWELVE MILE CREEK, NY/EIGHTEEN MILE CREEK/GENESEE RIVER/OSWEGO RIVER/ST. LAWRENCE RIVER/BLACK RIVER, NY/a-BHC/Lindane/Dacthal/Heptachlor epoxide/Chlordane/Endosulfan/Dieldrin/Mirex/DDE/DDD/TCB/HCB/OCS/PCBs/Fish/BERGHOLTZ CREEK.
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Notes: Testing date: 1983; 26 ref.; 2 tables; 1 fig.
Index terms: Fish/AU SABLE RIVER, MI/SAGINAW BAY/SAGINAW RIVER/TITTABAWASSEE RIVER/ST. MARYS RIVER/LAKE SUPERIOR/LAKE HURON/TeCB/Mono-cyclic aromatics/a-BHC/HCB/Heptachlor epoxide/Chlordane/Dieldrin/DDE/DDD/DDT/PCBs/OCS/PBBs/Dacthal.
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Index terms: ST. LAWRENCE RIVER/SEDIMENT ANALYSIS/Nickel/Cobalt/Chromium/Vanadium/Lead/Zinc/Mercury/Arsenic/HCB/DDE/PCBs.
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Notes: 33 ref.
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Index terms: LAKE ONTARIO/BAY OF QUINTE/Phosphorus/Phytoplankton/Zooplankton/Fish/POINT SOURCES.
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Notes: Testing dates: 1976-82; 15 ref.; 3 tables
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Notes: Testing dates: 1982-1984; 30 ref.; 3 tables; 2 figs.
Index terms: LAKE ONTARIO/SEDIMENT ANALYSIS/Ruthenium Isotopes/Antimony Isotopes/Cesium Isotopes/Cerium Isotopes/Lead Isotopes/Manganese Isotope/Cobalt Isotope/Zinc Isotope/Europium Isotope/Bismuth Isotope/Americium Isotope.
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Index terms: LAKE ERIE/LAKE HURON/LAKE MICHIGAN/LAKE ONTARIO/LAKE SUPERIOR/PCBs/SEDIMENT ANALYSIS/Fish/Birds/LITERATURE REVIEWS.

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Index terms: WELLAND RIVER/NIAGARA RIVER/Halogenated aliphatic hydrocarbons/WATER COLUMN.
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Notes: Testing date: 1984; 20 ref.; 1 table; 9 figs.
Index terms: ST. CLAIR RIVER/LAKE ST. CLAIR/Volatile halogenated aliphatic hydrocarbons/RIVER PLUMES/WATER COLUMN/TEMPERATURE CHARTS.
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Notes: Testing date: 1985; 4 ref.; 2 tables; 7 figs.
Index terms: ST. CLAIR RIVER/Volatile halogenated aliphatic hydrocarbons/WATER COLUMN/INDUSTRIAL WASTES.
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Notes: Testing date: 1981; 19 ref.; 2 tables; 7 figs.
Index terms: LAKE ONTARIO/NIAGARA RIVER/WATER COLUMN/Volatile halogenated aliphatic hydrocarbons/WELLAND CANAL/BLACK RIVER, NY/HUMBER RIVER/DON RIVER/ROUGE RIVER, ON/POINT SOURCES.
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Notes: Testing dates: 1985-86; 17 ref.; 3 tables; 4 figs.
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Index terms: BENTHOS/LAKE ERIE/LAKE HURON/LAKE MICHIGAN/LAKE ONTARIO/LAKE SUPERIOR/BIOACCUMULATION/BIOTURBATION/Amphipods/Pontoporeia hoyi/Freshwater shrimp/Mysis relicta/Mayfly/Hexagenia/Oligochaetes/PCBs/DDE/DDD/Dieldrin/Chlordane/HCB/OCS/B(a)P/PAHs/LITERATURE REVIEWS.
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Index terms: LAKE ONTARIO/Phosphorus/Nitrates/SEASONAL VARIATIONS/WATER COLUMN.

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Notes: Testing date: 1984; 25 ref.; 3 tables; 16 figs.
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Notes: Testing dates: 1968-1984; 40 ref.; 2 tables; 5 figs.
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Notes: Testing dates: 1970s; 54 ref.; 3 tables
Index terms: LAKE ONTARIO/DDT/Mirex/PCBs/Dieldrin/Aldrin/Lindane/a-BHC/ Chlorobenzenes/Toxaphene/2,3,7,8-TCDD/Volatile halogenated aliphatic hydrocarbons/Fish/WATER COLUMN/LITERATURE REVIEWS.
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Notes: Testing dates: 1975-1976; 36 ref.; 5 tables; 1 fig.
Index terms: ATMOSPHERIC PRECIPITATIONS/LAKE ERIE/LAKE HURON/LAKE ONTARIO/LAKE SUPERIOR/PCBs/Lindane/a-BHC/DDT/Endosulfan/Dieldrin/Methoxychlor/HCB.
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Notes: Testing date: 1983; 64 ref.; 7 tables; 1 fig.
Index terms: Herring Gull/Larus argentatus/LAKE ERIE/LAKE HURON/LAKE ONTARIO/LAKE SUPERIOR/Liver/Kidneys/Bones/Aluminum/Cadmium/Chromium/Copper/Iron/Mercury/Manganese/Phosphorus/Lead/Strontium/Zinc/HAMILTON HARBOUR.
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Index terms: DETROIT RIVER/NIAGARA RIVER/SAGINAW BAY/Herring Gull/Larus argentatus/Eggs/DDE/Lipids/DDD/DDT/Dieldrin/Chlordane/TCB/TeCB/QCB/HCB/Endrin/Heptachlor epoxide/Mirex/Methoxychlor/a-BHC/PCBs/Mercury.
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Notes: Testing dates: 1976-1981; 17 ref.; 1 table; 2 figs.
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AUTHOR, EDITOR AND INSTITUTE INDEX

Addison, E.	681	Becking, G.C.	101
Addison, R.F.	686	Beeton, A.M.	41 765
Afghan, B.K.	1 718	Beland, P.	42 469 470 471 472 473
Aldous, K.M.	689	Belisle, A.	43 126 520 619
Allan, L.	255	Bell, G.L.	159
Allan, R.J.	2 3 4 5 6 7 8 9 10 11 802	Benda, A.	237 239
Allen, H.E.	12	Bengert, G.A.	96 97 98
Allred, P.M.	408	Bennett, E.B.	44
Amundson, T.	726	Berg, M.	313
Anderka, F.	215	Berner, D.	501
Anderlini, V.C.	121	Berst, A.H.	45
Anderson, D.	13	Bertrand, F.	597
Anderson, J.	14	Besser, J.M.	204
Anderson, L.E.	609	Betteridge, J.S.	480
Anderson, M.L.	15	Biberhofer, J.	46 401 544 545
Anderson, T.W.	378	Biddinger, G.R.	47
Andren, A.W.	16 17 669 688	Billington, J.	454
Anghern, P.A.	18 617	Binda, G.G.	48
Anthony, D.H.	545	Birchall, T.	463 464
Arafat, N.	259	Bird, P.M.	49
Armstrong, D.	471	Bistricki, T.	510
Armstrong, D.E.	19 294 724 732 733 734 772	Black, J.J.	50 51 52 53
Armstrong, R.W.	20 528	Blamich, M.J.	313
Arndt, T.	68	Bleavins, M.R.	637
Arnold, E.P.	100	Blokpoel, H.	18 54 55 56 125 784
Ashworth, W.	21	Blomme, C.	57
Askins, G.R.	564	Bobba, A.G.	604
Astle, J.W.	22	Boersma, D.	58
Aubert, E.J.	23 24	Booth, G.	788
Aulerich, R.J.	25 26 27 28 29 304 637 638	Booty, W.	645
Ayers, R.J.	206	Borgmann, U.	59 300 444
Bagley, G.	520	Botts, L.	60
Bahnick, D.A.	30	Boudou, A.	9
Baise, M.	727	Bourbonniere, R.A.	61 490 571
Baker, J.E.	31 32 33	Bowden, R.	103
Baker, R.A.	167	Bowen, V.T.	64
Ball, A.J.	10	Boyce, F.M.	62
Barr, J.	225	Boyd, D.	63 599 643
Barres, J.	654	Bradlaw, J.	81
Barton, D.R.	615	Branson, D.	53
Basu, D.K.	34	Braun, H.E.	222 225 227 228 230 231 232 681
Batcheller, G.	212	Braune, B.M.	778 783 786
Batelle Press	50 154	Brecher, R.W.	270
Batterson, T.	145	Breitenbach, G.	117 118
Baumann, P.C.	35 36 37 38 39 40 203	Breslin, W.	25
Beamer, P.	67 69	Breteler, R.J.	64
		Britton, A.	497
		Bro, K.	65

Brock University	60	
Brooksbank, M.G.	66	271
Brotea, G.	621	
Brown, E.R.	67	68 69
Brown, G.S.	634	
Brown, M.	213	
Brownlee, L.J.	189	
Brumbaugh, W.	429	
Bryan, A.	70	
Buelow, C.	725	
Bunck, C.M.	618	794 795
Bursian, S.	25	
Burt, A.J.	771	
Buser, H.R.	702	
Butkas, S.A.	710	
Butterworth, B.C.	394	
Byrd, M.	795	
Cahill, R.A.	71	72
Cain, B.	73	
Cairns, V.W.	74	487 643
Callaghan, M.	437	
Callaghan, O.	69	
Camanzo, J.	75	
Canadian Wildlife Service	55	610 774
	779	784
Canale, R.P.	693	
Canuel, G.	598	
Capel, P.D.	77	164
Capobianco, J.	511	
Carey, J.H.	78	79 217 218 534 535
	705	
Carothers, A.	80	
Carroll, T.R.	254	661
Carter, D.S.	233	
Carter, J.C.	278	
Casterline, J.	81	
Chamberlain, D.J.	662	
Chambers, R.L.	82	106
Chambers, R.W.	83	
Champoux, L.	344	
Chan, C.H.	84	85 86 87 88 769 770
Chan, K.W.	301	
Chan, W.H.	257	
Chapman, J.A.	564	
Chapra, S.C.	89	90
Charles, M.J.	91	
Charlton, M.N.	92	93 366 572 573
Chau, Y.K.	94	95 96 97 98 300
Choudhary, G.	658	757
Christensen, E.R.	99	
Chu, I.	100	101
Ciborowski, J.	102	
Claff, R.E.	386	
Clark, J.	103	139
Clark, K.	104	
Clark, T.P.	104	105 553 554 555
Clegg, D.J.	100	
Clement, R.	730	
Cline, J.T.	106	
Coakley, J.P.	107	
Coates, J.T.	192	
Cobb, C.E.	108	
Coker, R.D.	563	
Colburn, T.	109	
Colin, D.	100	
Comba, M.E.	110	111 112 113 114 115
	272	273 359 360 361 362 363 364 438
	442	557 606
Comite d'etude sur le fleuve Saint-Laurent (CESL)	116	
Congdon, J.	117	118
Connell, D.W.	119	
Connolly, J.P.	120	743 744
Connors, P.G.	121	
Cooke, M.	50	154
Coon, F.B.	297	
Cooper, K.	122	
Corkum, L.	102	
Cossa, D.	123	
Couillard, D.	124	
Couillard, Y.	344	
Courtney, P.A.	18	125
Craig, G.R.	728	
Cranbrook Institute of Science	207	
	208	
Crane, T.	287	
Crawford, G.	728	729 730 731
CCREM	76	
Cromartie, E.	43	126 370 520 619
Curry, C.	731	
Custer, T.W.	778	
Czuczwa, J.M.	127	128 129 130
D'Itri, F.	131	
Daly, H.	132	
Damiani, V.	229	
Dave, M.	680	
Davies, T.T.	227	
Davis, M.	296	
Davis, T.	547	
Dawson, D.R.	228	231 232
Day, H.J.	283	
DeBarros, C.	516	

Delfino, J.J. 133 134 725
 Dennis, A.J. 50 154
 DePinto, J.V. 645
 Dermott, R. 135
 Desjardins, C. 469 470
 DeVault, D.S. 103 136 137 138 139
 140 141
 DeWolf, R. 43
 Diamond, A. 216
 Dickman, M. 142
 Dickson, K. 53
 DiToro, D.H. 120 143
 Dobson, H.F. 144
 Docherty, D. 302 393
 Dolske, D.A. 680
 Donelan, M.A. 62
 Dossett, D.A. 601
 Dressman, R.C. 422
 Duffy, W. 145
 Duncan, G.A. 512
 Dunn, J.L. 96 97
 Duran, P.B. 388
 Durham, R.W. 146 147 148 149 150 151
 573
 Durhan, E. 394
 Dymerski, P. 53
 Eadie, B.J. 82 83 152 153 154 155
 156 157 158 159 220 491 501
 Eaton, J.G. 766
 Edsall, C. 446 447
 Edwards, C.J. 334 629 715 805
 Eichelberger, J.W. 422
 Eisenreich, S.J. 16 17 19 22 31 32
 33 77 91 157 158 159 160 161 162 163
 164 165 166 167 168 169 170 171 192
 375 452 454 527 570 624 634 636 644
 680 684 716 745 750 772
 Eisler, R. 172 173 174 175 176 177
 178 179 180 181 182 183 184
 Eitzer, B. 343
 El-Shaarawi, A.H. 185 186 187
 Elder, F.C. 718
 Elder, J.B. 704
 Elder, V.A. 188
 Ellenton, J.A. 58 189 190 191 495
 Elliott, J.E. 617 720
 Elzerman, A.W. 192
 Engel, J. 456

Environment Canada 4 46 48 49 60 66
 84 85 86 88 109 116 193 194 195 196
 197 198 199 200 395 396 397 398 399
 400 401 404 478 486 542 544 545 546
 597 643 675 740 741 758 763 764 770
 773 798
 Erdman, T. 292 393
 Esterby, S.R. 186 187
 Evans, E. 201
 Evans, J. 167
 Evans, M.S. 202 234 248 281 285 538
 630 633 667 678 791 797
 Evans, S.M. 210 555 596
 Fabacher, D.L. 203 204
 Fahnensteil, G.L. 667
 Fallon, M. E. 205
 Fannin, T. 419
 Faust, W. 153 154 155
 Fehring, N.V. 206
 Ferguson, H. 287
 Fiandt, J.T. 609
 Fillion, F. 216
 Filkins, J.C. 207 208 690 739
 Fimreite, N. 209
 Fingleton, D. 756
 Fischer, J.D. 478 479
 Fischer, K. 801
 Fisheries and Oceans Canada 246 279
 523 686 755 792
 Fitchko, J. 210 211 327 771
 Fitzsimons, J.D. 74 487 793
 Foley, R.E. 212 213
 Forney, J. 648
 Forsyth, D.S. 214
 Fox, G.A. 105 215 216 249 254 255
 256 495 497 595 596
 Fox, M.E. 78 217 218 219 352 705
 Frank, A.P. 220
 Frank, R. 221 222 223 224 225 226
 227 228 229 230 231 232 303 681 750
 Franzen, A. 768
 Fraser, J. 795
 Frawley, N.N. 406
 Frei, R.W. 558
 Frez, W.A. 157
 Furlong, E.T. 233
 Gammon, K.L. 439
 Gannon, J.E. 234 284 751
 Gardner, W.S. 153
 Garling, D. 238
 Gatz, D.F. 235
 Gerould, S. 236

Gervais, A. 659
Giesy, J.P. 236 237 238 239 408 419
Gilbert, F.F. 240
Gilbertson, M. 121 241 242 243 244
245 246 247 248 249 250 251 252 253
787
Gilman, A.P. 215 254 255 256 553 554
556 779 783
Glass, G.E. 257 258 424 608 609 766
Glen, B. 97
Glooschenko, W.A. 259 260
Gloss, S.P. 47
Gobas, F.A. 22
Goetz, R.H. 99
Goldberg, E.D. 261
Gooch, J.W. 262
Gouin, D. 592
Goulden, P.D. 545 758
Gramlich, F. 795
Graney, R.L. 237 239
Gray, A.P. 702
Great Lakes National Program Office
761
Great Lakes Basin Commission 727
Great Lakes Institute 762
Great Lakes United 263
Greenspan, I. 67
Gregory, M.L. 381
Griffin, J.J. 261
Gross, D.L. 227
Gruchy, I.M. 209
Gschwend, P.M. 264
Hale, E.J. 458
Hale, R. 250 251
Halfman, B.M. 33
Halfon, E. 265 266 267
Hallett, D.J. 255 256 268 269 270
271 272 273 274 299 300 495 556 557
558 559 722 779 781 783
Halley, M.A. 12
Hamblin, P.F. 62
Hamdy, Y.S. 275 374 477
Hamilton, R.D. 276
Hang, W.L. 277
Hanson, M.E. 65
Hardy, J.A. 657
Hare, L. 278
Harfenist, A. 56
Harlow, H.E. 279
Harper, N. 561
Harris, G. 280
Harris, H. 392 393

Harris, H.J. 281 282 283 688
Harris, V.A. 282
Harshbarger, J. 38
Hart, D.R. 771
Hart, J.H. 79 534 535
Hartig, J.H. 284 648 751
Hartman, W.L. 285 627
Haseltine, S. 286 292
Hassett, J.P. 505
Hawley, N. 159
Hayes, M. 287
Haymes, G.T. 254 502
Hays, H. 121
Hazdra, J.J. 67 68 69
Heath, R. 288 289 790
Heathcote, I.W. 614
Heberger, R.F. 290
Hebert, P.D. 620
Heinz, G. 286 291 292 293
Helfrich, J. 294
Hemphill, D. 600
Henderson, R. 64
Hennes, S. 295
Henry, M. 296
Hensel, R. 796
Herbert, P.D. 621
Hesselberg, R. 141 446 672
Hetling, L.J. 303
Hickey, J.J. 13 297
Hicks, B. 287
Higgins, R. 471
Hilker, D.R. 689
Hill, G. 726
Hill, K. 513
Hill, S. 288
Hiltunen, J. 298
Hites, R.A. 22 91 127 128 129 130
158 163 188 192 233 264 339 340 341
342 343 371 372 483 570 735 736
Hodge, V.F. 261
Hodson, P.V. 279 299 300 444
Hoek, W. 674
Hoff, R.M. 301
Hoffman, D. 302
Hogan, J.W. 702
Holdrinet, M.V. 222 223 229 230 231
232 303 499 681
Hollebone, B.R. 189
Hollod, G.J. 165 166 167 168
Holsworth, W.N. 209
Hornshaw, T.C. 304
Horvath, F.J. 205 237 239

House, R.	290	Kaiser, K.L.	110 111 112 113 114 115
Hrudey, S.E.	408		142 353 354 355 356 357 358 359 360
Huang, G.L.	454		361 362 363 364 365 366 367 368 369
Hubschman, J.H.	305		372 441 442 569 574 606 631
Huckins, J.A.	306	Kaiser, T.	126 370 619
Huehn, J.	643	Kaiser, T.E.	564
Hummel, R.A.	406	Kaminsky, R.	371 372
Humphrey, H.E.	307 308 309 310 311	Kane, D.	429
Huneault, H.	362 717 718	Karim, R.	480
Hunsinger, R.B.	641	Karstad, L.H.	607 681
Hunter, H.	363 631	Katsma, D.	293
Hunter, R.A.	252 503	Kauss, P.B.	373 374 375
Hurlbert, S.H.	312	Kearney, J.P.	554
Hurley, D.A.	347	Keating, M.	376
Huson, P.	296	Keith, J.A.	209 297 377
Hutchinson, T.C.	210 211 555 596	Keith, L.	67 68 69
Hutzinger, O.	313 558	Keith, L.H.	658 757
Ibrahim, K.A.	314 477	Kemp, A.L.	222 230 231 378 379 380
International Association for Great Lakes Research	31 95 132 135 258 290 296 434 505 739		381 561 753
International Joint Commission	1 12 120 143 169 269 310 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 387 448 449 482 629 632 645 706 716	Kennedy, S.	596
Irwin, R.J.	679	Khan, M.	637
Iwamoto, S.	28	Kim, H.	382
Jackling, J.	213	Kim, J.	382 383
Jacknow, J.	184	Kim, K.	382 383
Jaffe, R.	338 339 340 341 342 343	King, L.	384
Jaquet, J-M	222 752 753 754	Kirby, M.K.	385
Jarry, V.	344	Kiviat, E.	710
Jarv, T.	684	Kizlauskas, A.G.	386
Jaskot, C.	440	Klaas, E.E.	704
Jeffrey, D.	553	Klaverkamp, J.F.	276
Jenkins, C.F.	345	Kocal, T.	287
Johansen, P.	159	Kocher, C.W.	406
Johnson, A.F.	375	Koffyberg, A.	440
Johnson, H.E.	304	Kohil, J.	86
Johnson, J.	600	Kohli, B.	614
Johnson, J.L.	702	Koide, M.	261
Johnson, M.G.	346 347	Kokotich, E.	438
Johnson, T.C.	33 165 166 167	Konasewich, D.	387
Johnson, T.M.	804	Koszalka, E.J.	388
Jones, J.J.	690	Kozara, R.J.	206
Joshi, S.R.	146 147 148 149 150 219 348 349 350 351 352 514 604 605	Kreis, R.G.	237 239 389
Jude, D.J.	75 493 667	Krezoski, J. R.	390
		Krieger, K.A.	391
		Krishnappan, B.G.	411
		Krumbein, W.E.	428
		Krushelnicki, B.	60
		Krynitsky, A.J.	370 794
		Ku, Y.	81
		Kubiak, T.	302 392 393 726
		Kuehl, D.W.	394 766
		Kuntz, K.W.	186 187 395 396 397 398 399 400 401 402 458 479 741

Kurita, H. 403 433
 Kwapinski, J.P. 67
 Kwasniewska, K. 367
 Kwiatkowski, R.E. 404
 Lagace, A. 469 470 471 472
 Lagerroos, D. 679
 Lahvis, G. 139
 Lake Ontario Toxics Management
 Committee 405
 Lake, B. 501
 Lam, D.C. 693 705
 Lamont, T. 43 126 370 520 619 795
 Lamparski, L.L. 406
 Landrum, J.P. 419
 Landrum, P.F. 154 155 156 159 220
 236 407 408 409 501 538
 Lang, H. 643
 Lau, B.P.-Y. 657 658 659
 Lau, Y.L. 87 410 411
 Lavoie, F. 344
 Lawrence, J. 412
 Leach, J.T. 456
 Leacock, J.R. 758
 Leany-East, A. 516
 Learning, W. 255
 Leatherland, J.F. 413 414 415 416
 417 498 499 504 692
 Lech, J. 484
 Lee, M. 788
 Leenheer, M.J. 491
 Legault, J. 418
 Lehman, J. T. 667
 Leinonen, P.J. 450
 Leonard, E.N. 257 609
 Leslie, J.K. 443
 Leversee, G.J. 419
 Levy, E.M. 420
 Lewis, C.F. 753
 Lewis, D. 658 659
 Lewis, T.W. 421
 Lichtenberg, J.J. 422
 Lick, W. 693
 Liebenstein, L. 423
 Ligas, F. 796
 Lind, A.E. 424
 Linn, D. 394
 Liu, D. 425
 Locke, L. 43 126 370 520 565 619
 Lockhart, W.L. 276
 Loftus, K.H. 426
 Logan, I. 224
 Logan, T.J. 427

Lomas, T. 515 516 599
 Longbottom, J.E. 422
 Looney, B.B. 164 168 169 170
 Loring, D.H. 428
 Lough, R. 101
 Lowe, T. 429
 Ludwig, C.E. 434
 Ludwig, J.P. 403 430 431 432 433 434
 435
 Ludwig, M. 403
 Lum, K.R. 364 365 436 437 438 439
 440 441 442 443 463 464 480 615
 Lumsden, H. 225
 Luxon, P.L. 444
 Maack, L. 445
 Mac, H.J. 204 446 447 448 672
 MacDonald, R.R. 480
 Machta, L. 802
 Mackay, D. 16 19 22 104 157 164 168
 375 449 450 451 452 453 454 455 634
 636 644 684 693 718 745 750 772
 MacLaren, J.W. 597
 MacMillan 376
 Madsen, C.R. 456
 Maguire, R.J. 94 115 363 457 458 459
 460 461 462 606
 Makarewicz, J.C. 421
 Manning, P.G. 463 464 465
 Manny, B. 296
 Marchand, D. 665
 Markee, T.P. 30
 Marsalek, J. 410 466 467 468
 Marshall, W.D. 214
 Martineau, D. 42 469 470 471 472 473
 Martini, R. 726
 Mason, S. 685
 Masse, R. 472 473
 Mathai, S. 599
 Mathisen, J. 796
 Matsumura, F. 262
 Maule, S.J. 491
 Maus, K. 191
 May, T. 429 474
 Mayer, T. 61 465
 Mayfield, C.I. 475
 McBride, A.C. 476
 McCormick, M.J. 159
 McCorquodale, J.A. 314 477
 McCoy, J.W. 406
 McCoy, P. 680
 McCrea, R.C. 478 479
 McIsaac, B. 480

McKee, P.M. 523 771
 McKinney, G. 474
 McLeod, H. 659
 McMillan, R.K. 226 232
 McNabb, C. 145
 McNaught, D.C. 202 481 482
 McNicol, D. 596
 McPherson, M. 190 191
 McQuarrie, P.M. 620 665
 McRae, G. 337
 McVeety, B.D. 130 483 736
 Melancon, H. 484
 Meldrum, J. 485
 Merian, E. 558
 Merrill, C. 803
 Merriman, J.C. 486
 Metcalfe, C.D. 487
 Metzger, N.A. 171 488
 Meyers, P.A. 489 490 491 589 634
 Michigan Department of Natural
 Resources 201 723 763 764
 Michigan Department of Public Health
 309 492
 Miller, D.L. 406
 Miller, T.J. 493
 Miller, T.S. 388
 Millyard, K. 122
 Mineau, J. 779
 Mineau, P. 274 494 495 496 617 722
 780 781 782 783 784
 Minnesota Department of Natural
 Resources 295
 Minns, C.K. 347 693
 Moccia, R.D. 497 498 499
 Moon, T.W. 698
 Moore, F.R. 500
 Moore, J. 286
 Morehead, N.R. 154 501
 Morin, M. 472
 Morris, R.D. 252 502 503
 Morrison, P.R. 504
 Mudambi, A.R. 505
 Mudroch, A. 11 334 344 378 506 507
 508 509 510 511 512 513 514 515 516
 517 521 522 523 536 588 629 666 754
 755
 Mudroch, P. 536
 Mueller, J.A. 745
 Muhlbaier, J. 518
 Muir, T. 519
 Mulhern, B. 43 126 370 520 619 796
 Mullin, M.D. 739

Mulvihill, M.J. 558
 Munawar, I.F. 521
 Munawar, M. 475 521 522 523
 Murphy, T.J. 524 525 526 527 643
 Murthy, C.R. 62 705
 N.Y. Department of Environmental
 Conservation 20 200 528 529 530
 531 532 533
 N.Y. Public Interest Research Group
 277
 Nagy, E. 534 535 536
 Nair, V. 69
 Nakamura, A. 100
 Nalepa, T.F. 153 156 537 538
 National Academy of Science 256
 National Oceanic & Atmospheric
 Administration 23 24 159 345
 National Research Council, U.S.A.
 539
 National Research Council of Canada
 540
 National Water Research Institute 2
 10 61 62 78 107 113 115 144 217 265
 438 460 467 468 480 510 513 514 516
 535 573
 Neely, W.B. 541
 Neilson, M.A. 542 543 544 545 707
 708
 Nestruck, T.J. 406
 Newsted, J.L. 237 238 239
 Newton, J.R. 120
 Ng, H.Y. 467
 Niagara River Data Interpretation Group
 200
 Niagara River Toxics Committee 546
 Nicholls, K.H. 347
 Nicol, K.D. 366 575 576 577
 Niemi, G. 547
 Niimi, A.J. 548 549 550 551 578 579
 Noguchi, G. 635
 Norstrom, R.J. 104 105 256 272 273
 495 552 553 554 555 556 557 558 559
 700 701 779 783
 Northwestern University 60
 Norwood, W. 522
 Nriagu, J.O. 72 152 202 234 248 270
 281 285 299 300 436 489 495 524 538
 560 561 562 563 589 590 630 633 663
 669 678 682 696 699 715 756 791 797
 O'Brien, J.E. 689
 O'Keefe, P.W. 689
 O'Shea, T.J. 564

Obal, T.W. 621
 Ogger, J.D. 206
 Ohio State University, Center for Lake
 Erie Area Research 625
 Ohlendorf, H.M. 565 704
 Okoniewski, J. 711 712
 Olafsson, P. 70
 Olie, K. 313
 Oliver, B.G. 87 93 151 218 366 411
 550 551 566 567 568 569 570 571 572
 573 574 575 576 577 578 579 580
 Olson, B. 25 804
 Olson, G.F. 609
 Olson, L. 726
 Ontario Ministry of Natural Resources
 and Canadian 584 773
 Ontario Ministry of the Environment
 14 63 194 195 196 197 198 199 200
 385 581 582 583 584 585 586 587 599
 614 643 683 730 731 763 764
 Onuska, F.I. 272 273 557 588
 Oris, J.T. 408
 Orr, D.B. 257
 Osborne, J. 728
 Owen, R.M. 589
 Painter, S. 643
 Palabrica, V.S. 364 365
 Paolucci, G. 527
 Pariso, M.E. 590 699
 Parland, W.K. 39
 Paschal, J.E. 388
 Passino, D.R. 591
 Pastel, M. 383
 Paterson, S. 16 19 104 157 164 168
 375 451 452 453 454 634 636 644 684
 745 750 772
 Paul, M. 592
 Peakall, D.B. 215 254 255 256 593
 594 595 596 698
 Pearce, P.A. 209
 Pearse, P.H. 597
 Pederson, C.J. 120
 Pelletier, E. 598
 Perkins, L.H. 88
 Persaud, D. 599
 Peterman, P. 701
 Peters, T.L. 406
 Petty, J.D. 306 600 702
 Pickett, R.L. 159 601
 Pillepich, J.L. 406
 Pilon, J.C. 658 659
 Pils, C. 602
 Pippard, L. 603
 Platford, R.F. 115 363 604 605 606
 Platonow, N.S. 607
 Pocchiari, F. 558
 Poldoski, J.E. 608 609
 Pollution Probe 122
 Post, L. 275
 Postupalsky, S. 610 611 612 796
 Poulet, S.A. 123
 Poulton, D.J. 613 614 615
 Prescott, C. 142
 Price, I. 616
 Proctor, B.L. 188
 Proulx, G. 617
 Prouty, R. 43 126 289 370 520 618
 619
 Puglisi, F.A. 766
 Pugsley, C.W. 580 620 621 685
 Puma, B. 81
 Quebec Environmental Protection Service
 116
 Quinn, F.H. 622
 Ragotzkie, R.A. 623 688
 Rao, D.B. 82
 Rapaport, R.A. 624
 Rapp, G. 258
 Rappe, C. 658 702 757
 Rappport, D.J. 49 282
 Rasper, J. 228
 Ratcliff, B. 784
 Rathke, D.E. 337 625
 Rattner, B. 302
 Rees, G.A. 728 731
 Regier, H.A. 282 626 627
 Reichel, W. 43 126 286 370 520 619
 Reinert, K.H. 628
 Reynolds, L.M. 253 779 783
 Reynoldson, T. 334 629
 Rhee, G-Y 630
 Ribeyre, F. 9
 Ribick, M. 671
 Ribo, J.M. 367 631
 Rice, C.P. 75 157 159 389 632 633
 634 635
 Richards, T.L. 24
 Richardson, W.L. 636 693
 Ringer, R.K. 25 26 27 28 29 637 638
 Risebrough, R.W. 121
 Robards, F. 796
 Robbins, J.A. 158 159 171 390 639
 640
 Roberts, K.J. 641

Robertson, A.	642	Shear, H.	274 523
Rockwell, D.C.	386	Sheffield, A.	675 676
Rodgers, J.H.	628	Sheffy, T.B.	590 699 725
Rodgers, K.	643	Sheikh, Y.M.	758
Rodgers, P.W.	644 645 646	Sheldrake, T.J.	456
Rogers, G.K.	647	Sherbin, G.	384
Rohrer, T.	648	Shimp, N.F.	72
Rood, S.G.	208	Shiu, W-Y	22 454
Rosiu, C.J.	237 239	Shugart, G.W.	668 677
Ross, P.	344	Shugart, L.	471
Rossmann, R.	75 159 649 650 651 652	Sicko-Goad, L.	678
	653 654 655	Sierra Club	679
Rukavina, N.A.	656	Sievering, H.	680
Russell, D.	729 730	Sileo, L.	302 393 681
Ryan, J.J.	657 658 659	Simmons, M.S.	16 19 72 152 157 159
Ryder, J.P.	660 661 662		164 168 270 299 300 375 452 454 489
Rygwelski, K.R.	663		495 524 562 589 590 633 634 636 644
Rzeszutko, C.P.	526 527		663 669 682 684 694 696 699 715 745
Safe, S.	664		750 756 772
Sage, M.	684	Simon, M.	558 700 701
Sager, P.E.	283	Simons, T.J.	62
Saitoh, H.	95	Simpson, K.J.	614 615 683
Salvo, J.P.	277	Simser, L.	643
Sampson, P.J.	635	Sinclair, T.	69
Sampson, R.C.	260 273	Sindelar, C.	795
Sanderson, M.E.	94 665	Singer, E.	684
Sandilands, R.G.	666	Sirons, G.J.	226
Sarazin, L.	515 516	Sklash, M.	685
Sartor, D.L.	462	Slawcki, T.A.	645
Saxena, J.	34	Sloan, R.J.	20 213 528 529 530 533
Scavia, D.	409 667 693	Sloterdijk, H.	344 686
Scharf, W.C.	668	Sly, P.G.	687
Schertzer, W.M.	718	Smith, I.	287
Schierow, L-J	703	Smith, J.M.	420
Schinsky, A.	527	Smith, L.	393 600 701
Schloesser, D.	298	Smith, L.M.	306 700 702
Schmidt, J.A.	669	Smith, P.	788
Schmidtke, N.W.	131 156 670 751	Smith, P.L.	688
Schmitt, C.J.	204 671	Smith, R.M.	689
Schneider, D.L.	64	Smith, S.B.	591
Schneider, L.F.	206	Smith, V.	693
Schroeder, W.H.	453	Smith, V.E.	207 636 690
Schroeter, H.O.	468	Smith, W.D.	39
Schwartz, T.	393	Smith, W.E.	406
Schwartz, T.R.	306	Sonstegard, R.A.	413 414 415 416 417
Scott, S.	685		498 499 504 559 691 692
Scudato, R.J.	505	Sonzogni, W.C.	65 90 445 693 694 695
Seagran, H.L.	29		696 703
Secours, V.E.	100	Sorensen, J.A.	258
Seelye, J.	447 672	Southern, W.E.	697
Selby, C.	643	Spangler, G.R.	45
Sergeant, D.E.	673 674	Spear, P.A.	698

Sprague, J.B. 436
 Spurr, J.M. 690
 St. Amant, J.R. 590 699
 Stafford, C. 292 370
 Stalling, D.L. 393 600 700 701 702
 Stanton, R. 637
 Steinhart, C.E. 703
 Stemmler, E. 343
 Stendell, R.C. 704
 Stepian, I. 705
 Stevens, R.J. 46 543 544 545 706 707
 708
 Stoermer, E.F. 678 709
 Stokes, P.H. 801
 Stone, W.B. 70 382 383 657 710 711
 712
 Strachan, W.M. 260 693 713 714 715
 716 717 718
 Strain, P.M. 719
 Strand, J.W. 17
 Struger, J. 720 721 722 779 782 783
 785
 Stuht, J. 723
 Suda, P. 223
 Sudar, A. 11 519
 Sullivan, J.R. 724 725 726
 Sullivan, R.A. 727
 Suns, K. 375 728 729 730 731
 Swackhammer, D.L. 19 732 733 734 735
 736 772
 Swain, W.R. 646 695 696 737 738 739
 Swineford, D. 126 293 370 565 619
 Sylvestre, A. 740 741
 Takenchi, N. 490
 Teeple, S.M. 254 617 742 779 783 784
 786 787
 Terry, K.A. 588
 Tessier, G. 55 56
 Thomann, R. 743 744 745
 Thomas, N.A. 744
 Thomas, R.L. 222 226 227 228 229 230
 231 232 300 303 378 379 380 381 521
 522 523 536 746 747 748 749 750 751
 752 753 754 755
 Thomson, K. 425
 Thornton, J.D. 169 170
 Tinkle, D. 117 118
 Tissue, G.T. 518
 Tissue, T. 756
 Tkacz, R.J. 115 363 459 460 461 462
 606
 Tobey, S.W. 406

Tomoff, C.S. 435
 Tosine, H. 757
 Tosune, H. 728
 Townsend, J.M. 208
 Traversy, W.J. 387 758
 Treese, T. 655
 Tremblay, L. 473
 Trick, J. 393
 Tucker, R.E. 702
 U.S. Environmental Protection Agency
 60 136 137 140 141 200 386 635 639
 759 760 761 763 764 768
 U.S. Fish and Wildlife Service 36 37
 145 172 173 174 175 176 177 178 179
 180 181 182 183 184 392 446 456
 Universite du Quebec 418
 University of Indiana 338
 University of Michigan 15 389 649
 650 651 652 655
 University of Minneapolis. 162
 University of Minnesota 488
 University of Windsor 762
 University of Wisconsin, Sea Grant
 Institute 724
 Upper Great Lakes Connecting Channel
 Study 763 764
 Urban, N.R. 171
 Vajdic, A.H. 641
 Valdmanis, I. 368 369
 Vallentyne, J.R. 765
 Valli, V.E. 100
 Van Loben Sels, R. 117 118
 Vandermeulen, J.H. 408
 VanSickle, B.L. 61
 Veith, G.D. 547 766
 Vezina, A. 42
 Vieux, B. 547
 Vigod, T. 767
 Villeneuve, D.C. 100 101
 Vincent, J. 768
 Vogt, J. 643
 Voice, T. 159
 Wagemann, R. 276
 Wagner, T. 802
 Wahle, M.H. 406
 Waid, J.S. 744
 Walters, S.M. 206
 Warry, N.D. 187 402 741 769 770
 Warwick, W.F. 771
 Wasslen, J. 98
 Weiler, R.R. 614
 Weininger, D. 772

Weishaar, J. 103 139 140
 Wells, P.G. 686
 Weseloh, D.V. 216 274 495 496 555
 616 617 720 721 722 773 774 775 776
 777 778 779 780 781 782 783 784 785
 786 787
 West, W. 788
 Wethington, R. 636
 White, D. 789 790
 White, D.S. 791
 Whittle, D.M. 40 59 299 300 751 792
 793
 Wiemeyer, S.N. 794 795 796
 Willford, W.A. 141 448 797
 Williams, D.J. 517 751 798
 Williams, J.D. 381
 Williams, R.M. 799
 Wingender, R.J. 799
 Wisconsin Department of Natural
 Resources 423 602 800
 Wise, P.L. 802
 Won, H.T. 105 553
 Wong, H.K. 464 561 563
 Wong, P.T. 94 96 97 98 300
 Wood, G.W. 621
 Wren, C.D. 801
 Yagminas, A. 58
 Yarbrough, C.J. 283
 Yeo, S. 484
 Yeun, A.T. 455
 Youakim, P.R. 437 438
 Youatt, W.G. 29
 Young, A.L. 702
 Young, J.W. 802
 Zabik, M. 638 803 804
 Zajicek, J. 671
 Zapisek, W. 53
 Zar, H. 387
 Zaruk, B.M. 631
 Zarull, M.A. 805

SUBJECT INDEX

2,3,7,8-TCDD 2 10 47 58 81 122 127 128 130 178 189 190 200 206 244 268 271 337
 338 394 405 406 476 519 558 584 657 658 659 689 698 700 701 715
 730 757 761

2,3,7,8-TCDF 10 127 128 130 658 700

AEROSOLS 161 168

AGRICULTURAL RUNOFF 10 316 317 318 320 427

AIR TRANSPORTATION 127 128 129 130 163 264 270 301 488 633 635 732 799

AIR-WATER EXCHANGES 16 17 130 159 163 450 453 455 566 570 736

AIR-WATER INTERFACE 9 24 161 163 454 481

ALDRIN 14 47 63 76 85 138 195 196 200 223 260 275 316 320 373 374 376 385 389
 395 396 398 399 402 450 460 461 468 478 479 486 544 585 590 643
 706 707 715 728 740 769 770 787

ALEWIFE 13 285 290 552 559 579 667 699

ALKYLATED LEAD 96 97 98 214

ALKYLATED TINS 457 462

Alosa pseudoharengus 13 285 290 552 559 579 699

ALUMINUM 12 71 76 84 160 195 196 200 373 380 385 398 400 405 585 625 639 649 650
 651 652 654 680 683 687 706 719 720 741

AMERICIUM ISOTOPE 350 351 605

AMPHIPODS 154 158 218 278 332 334 337 407 409 537 538 579 586 614 687 793

Amploplites rupestris 138 209 429 659 671

Anas platyrhynchos 73 109 286 288 289 291 618 704 762 789 790

Anas rubripes 73 109 286 288 289 618 789 790

ANTHRACENE 236 407 408 409

ANTIMONY 72 76 200 205 639 652 653 654 672

ANTIMONY ISOTOPES 149 150 350

Aplodinotes grunniens 51

AQUATIC INSECTS 102 182 183 283 312 408 585 586 614 791

Ardea herodias 109 293 565

ARSENIC 10 12 39 63 71 72 76 84 101 147 182 195 196 200 205 259 276 279 286 316
317 318 337 344 373 381 385 395 397 398 399 400 401 418 429 468
474 515 516 521 542 582 586 587 590 609 625 639 643 649 650 651
652 654 672 706 716 754 755 758 793

ASHTABULA RIVER 131 138 211

ATMOSPHERIC CHEMISTRY 270 524 560 684

ATMOSPHERIC CIRCULATION 169 724

ATMOSPHERIC PARTICULATES 17 127 128 129 166 235 264 300 301 328 488 524 560 757

ATMOSPHERIC PRECIPITATIONS 9 10 12 16 17 21 22 24 88 90 104 122 129 152 160 161
162 163 165 166 167 168 169 170 171 235 257 259 279 299 316 317
318 320 337 349 376 389 453 483 488 518 524 525 526 527 539 540
541 562 632 633 665 669 679 680 706 713 714 716 717 718 732 736
744 756 758 799 802

ATRAZINE 119 221 224 226 320

AU SABLE RIVER, MI 211 343

AU SABLE RIVER, ON 48 211 226 232

Aythya affinis 690

Aythya marila 690

B(a)P 17 32 38 39 40 51 53 115 119 152 153 154 156 158 170 200 203 204 205 220
233 236 264 270 294 301 389 398 405 408 419 444 471 483 501 535
538 540 614 706 716 788

BACTERIA 210 316 317 318 327 365 367 385 408 540

BALD EAGLE 43 109 126 201 370 456 520 610 619 795 796

BARIUM 12 72 316 639 652 654

BASELINE STUDIES 61 88 195 316 317 318 365 598

BASS 306 658

BAY OF QUINTE 10 48 219 229 232 244 268 347 352 353 355 658

BELUGA WHALES 8 42 80 109 122 442 469 470 471 472 473 592 603 673 674

BENTHOS 83 109 153 156 159 198 199 210 220 278 316 317 318 327 334 337 391 425
523 537 538 586 614 615 620 640 687 791

BENZENE 65 76 114 187 200 205 384 450 451 455 706

BERGHOLTZ CREEK 338 339 341 342 689

BERYLLIUM 71 72 76 205 380 651 652 654

BERYLLIUM ISOTOPES 146 149 158 719

a-BHC 10 14 46 63 65 75 76 84 85 86 87 88 103 115 138 139 161 169 195 196 200
274 275 311 337 338 339 341 343 357 364 368 374 385 389 395 396
398 399 402 404 458 460 461 468 478 479 486 544 556 559 576 579
580 585 587 590 613 624 643 671 683 706 707 713 714 715 716 717
718 722 728 735 737 740 777

BIBLIOGRAPHIES 48 485 655

BIOACCUMULATION 2 9 47 59 119 131 139 153 154 155 156 172 174 184 193 202 218
270 279 338 413 415 416 446 448 523 538 540 552 570 579 672 678
690 696 735 743 751

BIOASSAYS 204 237 239 365 367 374 487 591 726

BIOCONCENTRATION 2 98 154 155 220 236 270 297 407 409 419 481 559 567 570 578

BIOTURBATION 156 158 390 538 570 640

BIRDS 40 109 172 173 175 182 183 184 210 246 248 281 312 325 327 355 356 482 519
539 540 633 696 704 724

BISMUTH 652 653 654

BISMUTH ISOTOPE 350 605

BLACK BULLHEAD 109 306 484

BLACK CRAPPIE 306 658 659

BLACK DUCK 73 109 286 288 289 618 789 790

BLACK RIVER, NY 341 342 362 405

BLACK RIVER, OH 38 39 131 138 203 204 788

BLACK RIVER, ON 48

BLACK-BACKED GULL 18

BLACK-CROWNED NIGHT HERON 252 292 565 700 704 777 786

BLOATER CHUBS 29 131 158 285 429 600 646 671 699 700 702 766
 BLUEGILL 138 408
 BONES 121 720
 BORON 316 652 654
 BRAIN 126 225 383 435 520 553 565 681 711 742 801
 BROOK TROUT 528 529 531 533 702
 BROWN BULLHEAD 38 39 50 51 109 138 203 219 337 421 658 659 788
 BROWN TROUT 20 97 131 429 551 700
Bubo virginianus 109 711
Bubulcus ibis 292 565
Bucephala clangula 109 212 690
 BUFFALO RIVER 53 341 342 394
Butorides striatus 292 565
 CADMIUM 8 10 12 14 39 63 71 72 76 84 99 101 106 116 121 123 160 161 172 195 196
 200 205 211 235 275 276 279 286 316 337 373 379 380 381 385 395
 397 398 399 400 401 427 429 436 437 438 439 441 443 463 467 468
 474 475 480 511 515 516 518 522 542 561 563 585 586 587 589 590
 598 599 608 613 614 615 620 625 639 643 649 650 651 652 653 654
 663 665 669 678 683 687 694 706 716 719 720 741 754 755 756
 CANADIAN OTTER 109 213 533 602 801
Carassius auratus 51
 CARP 96 97 109 113 131 138 429 484 600 671 690 700 702 725 803
 CARP GOLDFISH HYBRID 51
Casmerodius albus 704
 CASPIAN TERN 403 721 780
Catostomus spp. 285
Catostomus catostomus 354 766 804
Catostomus commersoni 20 51 74 96 97 109 138 287 306 337 354 421 429 528 548 659
 804

CATTLE EGRET 292 565
 CERIUM ISOTOPES 149 150 350 639 719
 CESIUM ISOTOPES 148 149 150 158 348 349 350 352 639 719
 CHANNEL CATFISH 109 131 529 533 659
 CHANNEL FLOW 622
Chelydra serpentina 70 109 657 710
 CHEMICAL SPECIATION 579
 CHEQUAMEGON RIVER 131 138
 CHINOOK SALMON 20 109 131 238 421 498 499 528 529 533 648 699
 CHIRONOMIDS 135 153 154 219 236 237 278 391 537 614 687 771
 CHLORDANE 14 39 46 47 63 65 73 75 76 85 86 103 105 115 126 138 139 187 189 190
 191 195 196 200 221 222 224 227 228 230 231 232 238 260 275 286
 292 293 311 316 317 318 320 341 343 357 366 368 370 373 374 376
 385 389 396 398 399 402 405 411 458 460 461 468 478 479 486 493
 499 531 538 544 548 556 559 565 571 572 576 579 580 585 587 590
 618 619 643 671 678 683 694 706 707 713 722 728 729 730 735 740
 769 770 777 789 793 795
 CHLOROBENZENES 10 61 76 151 188 195 196 200 272 316 317 318 334 337 338 339 363
 372 402 404 444 460 461 544 546 566 567 569 570 571 572 573 575
 576 577 578 579 580 588 606 705 706 707 715 735 740
 CHLOROPHENOLS 14 30 63 76 115 188 193 198 200 219 268 363 376 385 425 585 590
 676 686 706 730 757
 CHLOROSTYRENES 79 372 588 706
 CHLOROTOLUENES 63 151 188 195 338 339 366 372 374 546 567 568 572 576 577 579
 706
 CHROMIUM 12 14 63 71 72 76 84 101 106 116 121 161 176 187 195 196 200 205 211
 235 275 279 286 344 373 381 385 395 397 398 399 400 401 428 439
 440 463 468 480 506 508 509 511 512 514 515 516 521 542 582 585
 586 587 590 598 599 609 614 615 625 639 649 650 651 652 653 654
 669 672 683 687 706 719 720 741 754 755
 CHROMIUM ISOTOPES 146
 CLINTON RIVER 429 671
 COBALT 12 71 72 106 121 160 196 211 279 334 344 381 385 398 428 439 443 463 467
 468 480 508 509 511 512 514 614 639 650 651 652 654 687 719 754

COBALT ISOTOPE 350

COHO SALMON 20 27 29 103 109 131 139 140 306 337 414 415 416 417 421 498 499 504
528 529 531 533 551 559 579 633 646 648 692 699 700 793

COMMON GOLDENEYE 109 212 690

COMMON LOON 109 225 295

COMMON TERN 56 109 121 125 242 252 253 292 503 547 704 778

COPPER 12 14 63 71 72 76 101 106 116 121 160 161 187 195 196 200 205 211 235 275
279 286 334 373 379 380 381 385 395 397 398 399 400 401 428 429
438 439 440 443 463 467 468 480 488 506 508 509 510 511 512 514
515 516 521 522 542 561 563 582 585 586 587 589 590 598 599 608
609 613 614 615 625 639 643 650 651 652 653 654 663 669 678 683
687 694 706 719 720 741 751 754 755 793

Coregonus culpeaformis 131 285 357 429 671 699 766

Coregonus hoyi 29 131 158 285 429 600 646 671 699 700 702 766

Cottus cognatus 579

CREDIT RIVER 48 211 226 232 499

CRUSTACEANS 119 182 183 237 312 408 540 791

CURIUM ISOTOPES 605

CUYAHOGA RIVER 204

Cyprinus carpio 96 97 109 113 131 138 429 484 600 671 690 700 702 725 803

DACTHAL 75 103 138 139 341 343 735

Daphnia magna 419

DCB 10 61 76 86 115 151 199 200 218 334 339 366 402 444 460 461 468 566 567 568
570 572 575 576 578 580 588 606 706 707 740

DDD 14 43 63 75 103 105 126 187 195 196 223 253 254 260 274 275 288 289 293 297
341 343 366 368 373 374 377 385 402 411 435 460 461 469 478 499
520 538 544 556 559 571 579 580 585 587 617 619 671 706 707 713
714 722 737 740 742 754 769 770 787 789 790 795 796 803

DDE 10 13 14 33 43 58 61 63 65 73 75 85 86 103 104 105 126 167 187 188 189 190
 191 195 196 212 213 222 223 228 238 241 242 249 253 254 255 260
 274 275 286 288 289 292 293 297 311 337 341 343 344 354 357 366
 368 370 373 374 377 382 383 385 395 396 398 402 404 411 435 444
 447 458 460 461 469 478 479 486 494 499 520 531 538 547 548 553
 555 556 559 565 567 569 571 572 576 577 579 580 585 587 594 595
 617 618 619 660 671 672 681 706 707 710 711 713 714 722 735 737
 740 742 754 769 770 777 780 787 789 790 793 795 796 803

DDT 10 13 14 20 39 40 43 46 47 59 63 65 73 75 76 85 86 88 91 103 104 113 115 119
 122 126 131 134 138 139 158 161 169 170 187 189 190 191 192 195
 196 200 202 221 222 224 225 227 230 231 232 238 240 253 254 260
 274 275 276 286 288 289 292 293 297 311 316 317 318 320 324 328
 337 343 357 364 366 368 370 373 374 376 377 385 389 396 398 399
 402 405 411 427 435 444 447 450 458 460 461 468 469 471 473 478
 479 486 493 499 520 528 529 530 533 539 544 547 548 556 565 567
 571 572 573 576 577 579 580 585 590 591 594 617 619 624 643 648
 671 672 678 683 686 694 706 707 713 714 715 716 717 718 719 722
 728 729 730 737 740 742 754 755 763 764 766 769 770 787 789 790
 793 795 796 798 804

Delphinapterus leucas 42 80 109 442 469 470 471 472 473 603 673 674

DETROIT RIVER 3 10 48 55 58 86 87 94 97 102 103 112 115 189 190 191 205 211 222
 226 232 233 237 239 252 265 267 275 296 320 324 330 331 337 363
 374 376 411 439 457 462 467 494 509 522 569 571 582 584 606 620
 621 622 626 631 641 648 665 690 707 716 722 729 730 752 763 764
 777 782

DIELDRIN 10 14 39 43 46 47 58 63 65 73 75 76 85 86 87 88 103 104 105 113 115 119
 122 126 131 138 139 161 170 187 189 190 191 195 196 212 221 222
 223 224 225 227 228 230 231 232 238 241 242 249 253 254 260 274
 275 286 288 289 292 293 311 316 317 318 320 324 341 343 357 364
 368 370 373 376 385 389 395 396 398 399 402 405 435 447 450 458
 460 461 468 478 479 486 493 494 499 520 529 530 531 533 538 539
 544 548 555 556 559 565 585 587 590 594 617 618 619 643 648 660
 671 681 683 694 706 707 710 711 713 714 715 716 717 718 722 728
 735 737 740 742 766 769 770 777 787 789 790 795 796 798 804

DISSOLVED OXYGEN 625

DOMESTIC WASTES 10 21 107 116 146 258 263 279 283 316 317 318 320 324 333 405
 466 467 539 541 546 575 585 613 643 675 676

DON RIVER 48 63 211 232 362 405 459 599 706

DOUBLE-CRESTED CORMORANT 57 109 292 337 403 431 610 611 616 668 700 773 775 787

ECORSE RIVER 275 439 462

EELS 8 285 442 528 529 533 592 657 658 659

EGGS 58 70 104 121 190 191 225 238 241 242 249 250 251 252 253 254 255 272 274
286 292 302 324 337 389 435 447 494 504 547 548 553 556 557 558
595 660 701 704 721 722 773 774 777 778 779 780 783 786 787 794
795 796

EIGHTEEN MILE CREEK 341 342 405

Elliptio complanata 374

ENDOSULFAN 14 47 63 75 76 85 86 115 161 169 170 187 195 196 200 221 222 224 227
228 230 231 232 238 260 275 316 317 318 341 373 385 389 396 398
399 402 404 458 460 461 468 478 479 486 544 548 587 613 643 683
706 707 717 718 740 769 770

ENDRIN 14 46 47 63 75 76 85 86 103 115 138 139 187 195 196 223 227 228 238 260
275 286 292 293 357 368 370 373 396 398 399 402 458 460 461 468
478 479 486 544 548 565 585 587 590 643 671 683 694 706 707 713
714 722 728 740 769 770 787 789

ENVIRONMENTAL CHARTS 60 144 329 345 719 727

ESCANABA RIVER 75

Esox lucius 96 97 131 138 209 353 429 671

Esox masquinongy 131

EUROPIUM ISOTOPE 350

EUTROPHICATION 23 45 89 122 144 194 202 283 316 317 318 328 337 376 427 539 693

Falco peregrinus 712

FATHEAD MINNOW 446 694

FISH 9 14 20 21 28 35 36 37 40 49 52 53 59 65 67 68 69 75 81 97 104 109 113 119
122 124 131 132 133 134 136 137 138 172 173 174 175 178 182 183
184 193 198 199 202 206 210 213 245 258 266 268 270 271 279 283
285 297 299 300 304 306 311 312 316 317 318 324 325 327 334 337
338 340 341 342 343 346 347 348 355 356 376 385 389 405 423 426
445 446 474 476 481 482 492 519 523 539 540 541 549 550 551 562
575 584 590 591 592 625 627 633 643 658 664 667 671 682 688 691
696 706 715 724 725 744 751 758 761 766 792 797 798 801

FLUVIAL DEPOSITS 294

FLUVIAL TRANSPORT 421 622

FORSTER'S TERN 109 292 302 392 393 700 777

FOX RIVER 134 138 204 283 590 688 725

FRENCH RIVER 584
 FRESHWATER CLAM 374
 FRESHWATER DRUM 51
 FRESHWATER SHRIMP 538
Gavia immer 109 225 295
 GENESEE RIVER 211 341 342 405 429 671 746
 GEOLOGICAL SURVEYS 107 316 317 318 379 506 507 508 509 655 656 719 748
 GEORGIAN BAY 10 90 107 211 226 231 232 241 260 278 317 349 584 730 780 787
 GILLS 119
 GOLDEN SHINER 113
 GOLDFISH 51
 GRAND RIVER, MI 75 211 518 648
 GRAND RIVER, ON 48 211 221 224 226 232 575 581 584
 GREAT BLUE HERON 109 293 565
 GREAT EGRET 704
 GREAT HORNED OWL 109 711
 GREATER SCAUP 690
 GREEN BAY 10 90 227 283 286 292 297 302 377 392 393 446 590 688 725
 GREEN-BACK HERON 292 565
 GROUNDWATER POLLUTION 107 197 199 328 329 388 539 604 685
Haliaeetus leucocephalus 43 109 126 370 456 520 610 619 795 796
 HALOGENATED ALIPHATIC HYDROCARBONS 47 65 79 87 111 187 188 195 196 198 199 205
 272 359 384 385 455 466 493 580 588 591 706
 HAMILTON HARBOUR 121 242 252 253 279 376 405 468 480 487 613 614 615 643 720

HCBD 2 10 14 33 46 58 61 63 65 73 76 79 85 86 87 93 102 103 104 105 115 122 126
131 138 139 151 156 161 170 187 195 196 197 198 199 200 212 218
232 238 241 242 249 253 254 255 272 274 275 286 292 293 311 316
317 318 320 334 337 339 341 343 344 357 366 368 370 372 373 374
384 385 389 394 395 396 398 399 402 405 411 444 458 460 461 466
467 468 478 486 494 529 530 531 533 538 544 547 548 556 559 565
566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 585
587 588 590 606 613 617 619 624 643 671 686 706 707 711 713 714
716 717 722 735 737 740 742 762 777 787 789 795

HCBD 10 61 65 76 79 86 87 93 115 151 197 198 199 200 218 366 372 374 411 460 461
466 567 568 571 572 574 576 577 578 579 580 588 706 737

HEAVY METALS 4 6 10 14 47 48 106 121 123 131 156 160 161 194 210 211 235 261
316 317 318 320 337 376 385 398 404 427 504 519 523 542 546 549
560 561 562 594 613 614 643 683 706 723 727 763 764

HEPTACHLOR 14 47 63 65 75 76 85 86 103 113 115 131 138 192 195 196 200 205 223
260 275 320 373 385 395 396 398 399 402 468 478 486 544 585 643
671 683 706 707 728 740 769 770 787

HEPTACHLOR EPOXIDE 14 43 46 63 73 75 76 85 103 115 126 139 187 189 190 191 195
196 200 212 221 222 223 227 228 231 232 238 249 253 254 260 274
275 286 292 293 311 316 317 318 320 341 343 357 370 373 385 396
398 399 402 404 458 468 478 479 486 520 544 548 556 559 565 585
613 618 619 643 683 706 707 711 713 714 722 728 735 737 740 742
769 770 777 787 789 795 796

HERONS 565

HERRING GULL 13 58 104 105 109 189 190 191 214 215 241 244 249 250 251 252 254
255 256 268 270 271 272 273 274 292 297 299 324 337 377 389 405
434 435 494 495 496 497 500 502 547 552 553 554 555 556 557 558
559 562 595 600 660 661 677 682 698 700 701 702 720 722 742 774
775 776 777 779 780 781 782 783 785

Hexagenia spp. 283 296 298 538

HUMANS 49 65 122 175 182 183 269 271 277 300 307 308 309 310 311 321 323 325 327
334 405 519 539 562 643 646 679 695 696 744

HUMBER RIVER 48 63 211 226 232 362 405 459 599 706

Hyaella azteca 409

Ictalurus melas 109 306 484

Ictalurus natalis 138

Ictalurus nebulosus 38 39 50 51 109 138 203 219 337 421 659 788

Ictalurus punctatus 109 131 529 533 659

INCINERATION 127 128 130 757

INDUSTRIAL WASTES 2 9 10 11 14 21 66 79 98 107 108 111 112 116 122 135 142 147
153 193 197 199 204 224 258 263 267 277 279 283 316 317 318 320
324 338 339 354 361 365 384 385 388 405 406 410 428 466 467 476
477 532 534 539 541 546 560 574 580 581 582 583 585 613 643 647
675 676 685 688 689 706 746 757 767 771 788

INTERNATIONAL AGREEMENTS 10 23 194 247 263 315 319 320 324 328 329 333 336 346
539 592 626 643

IODINE ISOTOPES 146

IRON 12 63 71 76 84 101 116 160 161 195 196 200 279 373 380 385 398 399 400 405
467 522 582 585 586 587 589 609 614 625 639 643 649 650 652 654
672 680 683 687 706 719 720 741 755

KALAMAZOO RIVER 75 211 518

KEPONE 119 192

KIDNEYS 121 225 469 720 801

KINNICKINNIC RIVER 131 138 484 590

LAKE CURRENTS 10 24 62 601 705

LAKE ERIE 3 5 9 10 12 15 18 20 21 23 29 34 35 37 40 41 49 51 52 53 54 55 56 58
60 62 65 88 89 90 91 95 103 107 108 122 125 128 129 133 134 136
137 139 143 150 152 153 154 156 158 159 161 162 169 170 174 194
206 208 209 210 211 214 216 222 225 226 232 234 241 243 246 248
249 252 254 256 263 269 270 272 274 281 282 284 285 299 300 304
305 308 309 315 319 320 321 322 323 324 325 326 327 328 329 330
331 332 334 335 336 337 346 348 356 369 375 376 378 379 380 387
391 414 415 418 422 424 426 427 429 430 431 432 433 436 439 443
448 452 456 457 468 479 481 492 494 495 496 497 498 499 500 502
504 507 508 510 516 519 523 524 525 528 529 533 535 536 538 539
548 554 555 558 561 562 571 575 582 584 591 595 600 611 617 623
625 626 627 629 630 632 633 642 651 654 658 664 668 669 670 671
677 678 679 682 691 692 693 694 695 700 701 702 703 707 709 716
717 718 720 721 724 727 730 731 738 744 745 748 750 752 753 755
758 761 765 776 778 779 781 782 783 786 791 793 797 798 802

LAKE HURON

5 9 10 12 15 18 21 23 35 37 40 41 45 49 52 54 55 57 58 60 61 62 65
 88 89 90 91 95 103 107 108 122 127 128 129 131 133 134 136 137 139
 141 143 148 150 152 154 158 161 162 169 170 174 189 190 191 194
 206 207 208 209 210 211 214 216 225 226 231 232 234 243 246 248
 252 254 256 260 263 269 270 272 274 281 282 284 285 299 300 304
 308 309 315 316 317 319 320 321 322 323 324 325 326 327 328 329
 330 331 332 334 335 336 337 343 346 348 349 356 357 375 376 378
 379 380 381 387 389 422 424 426 429 430 431 432 433 436 444 447
 452 456 457 468 481 490 492 495 496 497 498 499 500 516 519 523
 524 525 527 535 538 539 544 554 555 558 562 571 575 582 584 591
 595 600 609 611 623 626 629 630 632 633 639 640 642 649 650 654
 655 664 668 669 670 671 677 678 679 682 691 692 693 695 700 701
 702 703 707 709 716 717 718 720 721 724 727 730 731 738 744 745
 747 748 750 755 758 761 765 776 778 779 780 781 783 784 786 787
 791 797 798 799 802 804

LAKE MICHIGAN

5 9 10 12 13 15 16 17 18 19 21 23 27 29 35 37 40 41 49 52 54 55
 58 60 62 65 71 72 75 83 89 90 91 99 103 106 108 117 122 128 129
 131 133 134 136 137 139 141 143 150 152 154 155 156 157 158 159
 160 161 162 169 170 171 174 178 194 206 208 210 211 214 216 220
 227 234 235 238 243 246 248 254 256 261 262 263 269 270 272 274
 281 282 283 284 285 286 292 294 297 299 300 304 308 309 310 311
 315 319 320 321 322 323 324 325 326 327 328 329 330 331 332 334
 335 336 337 346 356 357 375 376 377 387 390 392 393 408 414 415
 422 424 426 429 430 431 432 433 434 435 436 445 447 452 456 457
 481 491 492 495 496 497 498 499 500 501 504 516 518 519 523 524
 525 526 527 535 537 538 539 541 554 555 558 562 584 589 590 591
 595 600 611 623 624 626 629 630 632 633 634 635 642 644 646 651
 654 664 667 668 669 670 671 677 678 679 680 682 688 691 692 693
 694 695 699 700 701 702 703 709 716 721 724 727 730 731 732 733
 734 738 743 744 745 748 750 755 756 758 761 765 772 776 779 781
 783 786 791 797 798 802 804

LAKE ONTARIO

2 3 4 5 9 10 11 12 15 18 20 21 23 24 35 37 40 41 46 49 52 53 54
 55 56 58 59 60 61 62 63 65 74 78 88 89 90 91 92 95 103 104 107 108
 110 111 113 120 122 125 128 132 133 134 136 137 139 143 144 147
 149 150 151 152 156 158 159 161 162 169 170 174 178 189 190 191
 194 206 208 210 211 213 214 215 216 217 218 225 226 230 232 234
 241 243 246 247 248 249 250 251 252 253 254 255 256 263 266 269
 270 271 272 273 274 279 280 281 282 284 285 287 290 299 300 303
 304 308 309 315 319 320 321 322 323 324 325 326 327 328 329 330
 331 332 334 335 336 337 338 340 341 345 346 347 348 350 351 355
 356 362 368 371 372 375 376 378 379 380 383 386 405 414 415 421
 422 424 425 426 429 430 431 432 433 436 442 444 448 449 452 456
 457 459 463 464 465 468 475 479 481 487 492 495 496 497 498 499
 500 504 505 506 516 519 521 523 524 525 528 529 530 531 533 535
 536 538 539 542 543 548 550 551 554 555 556 557 558 559 562 563
 566 567 568 570 572 573 575 578 579 582 584 588 591 595 599 600
 601 604 605 611 614 615 616 623 624 626 629 630 632 633 642 643
 645 654 658 659 664 666 668 669 670 671 677 678 679 682 684 687
 691 692 693 695 700 701 702 703 705 706 707 708 709 710 711 712
 715 716 717 718 720 721 724 727 730 731 738 742 744 745 746 748

749 750 751 755 758 761 765 771 775 776 778 779 781 783 786 791
793 797 798 802

LAKE ST. CLAIR 3 10 86 93 94 133 135 209 222 226 232 265 267 314 320 324 330 331
337 360 367 429 468 489 511 513 516 536 571 580 584 591 620 621
626 653 665 671 704 707 729 730 754 755 763 764 777

LAKE SUPERIOR 5 9 10 12 14 15 18 21 23 30 31 32 33 35 37 40 41 44 49 52 54 55
58 60 62 65 77 85 88 89 90 91 95 103 108 122 131 133 134 136 137
139 141 143 150 152 161 162 163 164 165 166 167 168 169 170 174
189 190 191 194 206 208 210 211 214 216 225 228 232 234 243 246
248 254 256 257 258 260 263 264 269 270 272 274 281 282 284 285
299 300 304 308 309 315 316 318 319 320 321 322 323 324 325 326
327 328 329 330 331 332 334 335 336 337 343 346 348 354 356 375
376 381 385 387 422 424 426 429 430 431 432 433 436 444 445 447
452 456 457 468 481 485 492 495 496 497 498 500 516 519 523 524
525 535 538 539 547 554 555 558 562 575 582 584 590 591 595 600
608 609 611 612 623 624 626 629 630 632 633 642 652 654 660 661
664 668 669 670 671 677 678 679 682 683 691 692 693 695 700 701
702 703 707 709 713 714 716 717 718 720 721 724 727 730 731 737
738 739 744 745 748 750 755 758 761 765 766 776 778 779 781 783
785 786 791 792 797 798 802 804 805

LAKE TROUT 20 109 131 141 262 285 337 429 444 447 528 529 531 533 551 575 579
591 600 633 646 671 699 700 702 735 737 739 743 766 793

Larus argentatus 13 58 104 105 109 190 191 214 215 241 244 249 250 251 252 254
255 256 268 270 271 272 273 274 292 297 299 324 337 377 389 405
434 435 494 495 496 497 500 502 547 552 553 554 555 556 557 558
559 562 595 600 660 661 677 682 698 700 701 702 720 722 742 774
775 776 777 779 780 781 782 783 785

Larus delawarensis 55 109 252 292 297 430 547 660 662 681

Larus minutus 292

LEAD 8 10 12 14 39 63 71 72 76 84 97 99 101 116 121 122 123 160 161 171 183 187
195 196 200 205 211 235 261 275 276 279 286 300 320 334 337 344
370 373 376 379 380 381 385 395 397 398 399 400 401 427 428 429
438 439 440 443 463 464 467 468 474 475 480 488 506 508 509 510
511 512 514 515 516 521 522 561 562 563 582 585 586 587 589 590
599 608 609 613 614 615 620 624 625 639 643 649 650 652 653 654
663 665 666 669 672 678 680 683 687 694 706 716 719 720 748 751
754 755

LEAD ISOTOPES 148 158 349 350 352 605

Lepistosteus osseus 353

Lepomis gibbosus 209 659 671

Lepomis macrochirus 138

LESSER SCAUP 690

Limnodrilus hoffmeisteri 153 567 615 640

LIMNOLOGICAL SURVEYS 24 62 116 280 316 317 318 345 397 614 625 655 706 727 741

LINDANE 10 14 46 63 65 76 78 84 85 86 87 88 103 105 139 170 192 195 196 200 221
224 260 266 274 275 316 317 318 337 341 364 368 374 385 389 395
396 398 399 402 450 458 468 478 479 486 544 548 572 576 579 580
585 590 613 671 683 706 707 713 714 715 716 717 718 740 769 770
787

LIPIDS 212 272 374 429 435 447 528 529 530 531 533 547 548 559 618 657 658 659
671 690 710 722 728 729 735 737 804

LITERATURE REVIEWS 1 7 10 12 18 20 35 40 47 55 60 61 91 104 109 119 128 131 133
156 158 163 166 172 173 174 176 177 178 179 180 181 182 183 192
193 210 235 244 247 268 269 270 271 279 285 300 312 313 322 327
356 375 389 408 436 457 495 515 516 519 523 538 540 549 552 555
562 594 595 628 630 633 642 669 675 678 682 694 696 706 709 715
727 744 748 750 751 787 791 797 798

LITHIUM 652 654

LITTLE GULL 292

LITTLE MANISTEE RIVER 499 648

LIVER 38 39 74 121 189 203 225 249 287 383 469 487 553 565 657 698 710 720 762
777 788 801

LONGNOSE SUCKER 354 766 804

Lutra canadensis 109 213 533 602 801

MAGNETAWAN RIVER 211

MALLARD 73 109 286 288 289 291 618 704 762 789 790

MAMMALS 109 172 173 174 175 182 183 184 210 246 248 281 299 325 327 482 519 696
724

MANGANESE 84 106 123 160 161 195 196 200 211 380 398 399 400 522 589 609 613 614
615 625 639 643 649 650 652 654 680 687 706 719 720 741 755

MANGANESE ISOTOPE 350

MANISTEE RIVER 75

MANISTIQUE RIVER 75

MASS BALANCE APPROACH 89 90 163 167 271 300 316 317 318 338 436 442 483 518 541
566 636 646 669 716 736 751 756

MATHEMATICAL MODELS 22 48 89 90 104 120 143 158 159 265 266 267 314 335 449 451
477 483 539 541 601 635 644 645 655 693 703 705 743 744 745 772

MAUMEE RIVER 211

MAYFLY 156 283 296 298 538

MENOMINEE RIVER 131 138 204 211 590

MERCURY 8 10 12 14 20 39 43 59 63 64 71 72 76 84 95 101 103 116 121 122 131 134
180 196 199 201 205 211 213 223 225 242 253 254 257 258 275 276
279 286 288 291 292 295 316 317 318 320 334 337 344 373 376 378
379 380 381 385 395 397 399 400 401 405 427 428 429 446 448 450
467 468 474 475 493 506 513 514 515 516 521 528 531 533 542 548
584 585 586 587 590 592 594 598 599 613 625 639 643 648 649 650
652 654 660 672 678 683 686 687 694 704 706 716 719 720 722 729
730 742 746 747 748 749 751 752 754 755 787 793 795 796 798 801
804

METHOXYCHLOR 46 75 85 86 88 115 131 138 161 169 170 187 200 221 223 224 227 238
260 316 317 318 385 389 396 398 399 402 458 468 478 479 486 544
590 643 671 706 707 713 714 717 718 722 740 769 770 787

MFO 58 189 203 204 270 444

Micropterus dolomieu 20 96 421 429 528 529 533 548

Micropterus spp. 306 658

MILWAUKEE RIVER 131 138 211 445 518 590

MINK 25 26 27 28 29 109 213 223 240 304 533 564 607 617 637 638 682 801

MIREX 2 6 8 10 14 20 58 61 63 65 73 75 84 85 86 103 104 105 115 122 126 132
139 151 174 187 188 189 190 191 195 196 200 227 228 254 255 266
271 273 274 275 276 286 292 293 303 311 320 334 337 338 339 341
353 355 364 366 368 370 372 373 376 382 383 385 396 398 399 402
405 413 421 442 451 468 478 479 486 499 505 528 529 530 531 533
539 544 548 556 557 559 565 567 572 573 576 577 579 580 584 585
595 601 617 618 619 643 658 671 683 686 706 711 713 715 716 722
728 730 735 740 748 749 751 769 770 777 780 789 795

MOLLUSKS 119 182 183 391 540 585 586 614 620 621 687 791

MOLYBDENUM 71 72 639 651 652 654 680 754

MONO-CYCLIC AROMATICS 46 47 79 113 126 131 138 139 187 188 217 343 363 372 384
450 580

Morone chrysops 209 548

Moxostoma erythruran 51 671 804

MUSCLE 121 223 242 383 435 444 547 551 710 801 804

MUSKEGON RIVER 75 211 518

MUSKELLUNGE 131

MUSKRAT 109 762

Mustela vison 27 29 109 213 223 533 564 617 637 638 682 801

MYSID 579 793

Mysis relicta 297 337 538 579 640 793

NEPTUNIUM ISOTOPES 605

NIAGARA RIVER 2 3 4 10 11 48 51 53 55 58 64 65 66 78 92 111 151 185 186 187
188 195 196 200 212 217 218 226 232 247 266 268 271 277 301 303
320 324 330 331 337 338 339 340 341 351 355 359 362 371 372 373
375 376 383 388 395 396 397 398 400 401 402 404 405 458 460 461
468 475 479 512 517 521 532 546 566 569 570 572 575 576 583 584
588 626 687 689 705 706 707 716 722 728 730 749 757 768 769 770
774 782

NICKEL 12 14 63 71 72 76 84 101 106 116 121 161 187 195 196 200 205 211 235 275
279 344 373 381 385 395 397 398 399 400 401 428 439 440 443 463
467 468 480 488 506 508 509 510 511 512 514 515 516 521 522 542
563 582 586 587 599 609 613 614 615 625 639 643 649 650 652 653
654 669 672 678 683 687 706 719 741 754 755

NIOBIUM ISOTOPES 146

NIPIGON RIVER 48 211 354 584

NITRATES 12 44 63 76 84 113 144 147 186 284 337 380 400 401 438 488 543 585 599
683 708 741

NON-POINT SOURCES 9 10 90 112 131 197 263 279 316 317 318 320 325 333 405 421
427 750

NORACHLOR 126

NORTHERN LONGNOSE GAR 353

NORTHERN PIKE 96 97 131 138 209 353 429 671

Notemigonus crysoleucas 113

Notropis hudsonius 109 196 337 398 728 729 730 731

NUCLEAR POWER PLANTS 147 150

Nycticorax nycticorax 252 292 565 700 704 777 786

OCS 10 61 63 79 86 87 91 93 102 105 115 151 197 198 316 317 318 341 343 366 371
372 374 405 411 466 467 538 567 568 569 571 572 573 574 577 579
580 621 665 706 711 729 735 762

OLD-SQUAW DUCKS 297

OLIGOCHAETES 153 154 158 218 220 278 390 391 446 537 538 567 570 579 614 615 687
690 791

Oncorhynchus kisutch 20 27 29 103 109 131 139 140 306 337 414 415 416 417 421
498 499 504 528 529 531 533 551 559 579 633 646 648 692 699 700
793

Oncorhynchus tshawytscha 20 109 131 238 421 498 499 528 529 533 648 699

Ondatra zibethica 109 762

ORGANOTIN 459

Osmerus mordax 285 290 337 528 529 559 579 659 766 793

OSPREY 109 612 794

OSWEGO RIVER 211 303 341 342 355 386 405 442 505 746

OTTER 723

PAHS 8 17 30 31 32 34 38 39 40 47 50 51 53 76 88 91 113 115 122 138 152 153 154
155 156 158 161 169 170 181 188 198 199 200 203 204 205 220 233
264 270 276 279 294 301 316 317 318 334 337 363 376 384 389 394
398 405 408 419 420 444 467 468 471 483 487 501 534 535 538 539
540 546 562 588 591 606 613 614 631 643 678 686 706 719 740 763
764 788

Pandion haliaetus 109 612 794

PBBs 292 311 316 317 318 343 370 493 637 686

PCBs 1 4 6 8 10 13 14 15 16 19 20 23 25 27 30 31 32 33 39 40 43 46 47 48 58
59 61 65 70 73 75 76 77 81 84 85 86 87 88 91 93 102 103 104 110
112 113 115 116 119 120 122 124 126 131 132 134 138 139 143 151
156 157 158 161 163 164 165 166 167 168 169 170 179 187 188 189
190 191 192 194 195 196 197 200 202 205 210 212 213 218 221 222
223 224 225 227 228 229 230 231 232 233 238 241 242 248 249 252
253 254 255 258 260 269 271 273 274 275 276 279 283 286 288 292
293 302 304 306 307 308 310 311 316 317 318 320 324 325 328 334
335 337 338 340 341 342 343 344 353 354 356 357 363 364 366 368
370 373 374 375 376 382 383 385 389 395 396 398 399 402 404 405
411 413 427 444 445 446 447 448 449 450 451 452 454 458 460 461
467 468 469 473 479 481 482 486 493 494 499 516 519 524 526 527
528 529 530 531 533 538 539 541 544 546 547 548 550 551 552 555
556 559 562 564 565 567 568 569 571 572 573 576 577 579 580 584
585 587 590 592 593 594 599 606 607 613 617 618 619 621 624 631
632 634 636 637 638 643 644 645 646 648 658 659 660 665 671 672
674 678 681 682 683 684 686 688 690 694 696 699 702 706 707 710
711 713 714 715 716 717 718 719 722 723 725 727 728 729 730 732
733 734 735 736 737 742 743 744 745 748 749 750 751 754 755 762
763 764 766 769 770 772 777 780 787 789 790 793 794 795 796 798
799 803 804

PCDD 10 22 39 40 91 127 128 129 130 137 178 187 197 198 199 271 276 279 283 302
313 337 376 451 529 539 588 600 657 675 676 700 701 702 706 726
728 757 759 760 777

PCDF 10 39 40 91 127 128 129 130 137 197 198 199 271 276 279 283 302 313 337 372
376 394 588 600 657 675 676 696 700 702 706 726 730

PCS 292

PEAT 624

PERC 79 197 198 199 267 384 410 466 477 580 647 767

Perca falvenscens 20 29 97 131 219 285 306 354 429 548 659 671 672

PEREGRINE FALCON 712

PESTICIDE 4 10 23 26 43 46 48 85 113 119 124 126 131 138 139 187 194 210 221 224
279 289 312 320 376 422 434 479 519 523 546 549 573 584 594 596
628 641 671 678 706 712 727 730 794

PETROLEUM HYDROCARBONS 135 197 276 296 298 384 489 536 562 678 719

Petromyzon marinus 357 368

Phalacrocorax auritus 57 109 292 337 403 431 616 668 700 773 775 787

PHENOL 116 188 195 196 205 279 316 317 318 389 399 467 546 582 683

PHOSPHORUS 12 14 63 71 84 89 90 92 113 144 186 280 284 316 317 318 320 324 337
347 373 378 380 381 397 399 400 401 427 439 463 464 465 467 508
509 522 543 582 585 586 599 623 625 639 666 667 683 687 706 708
720 727 741 755

PHOTOCHEMICAL REACTIONS 408

PHTHALATE ESTERS 76 169 200 205 301 316 317 318 546 591 694

PHYTOPLANKTON 21 182 183 210 219 312 316 317 318 325 327 337 347 389 408 443 475
482 521 522 540 579 630 631 643 666 678 682 706 709 791

Pimephales promelas 446

PLATT RIVER 65 648

POINT SOURCES 9 10 90 111 112 113 128 142 197 263 267 277 279 316 317 318 325
333 337 347 362 384 405 410 477 546 580 581 583 585 643 734 750
767

POLITICAL ASPECTS 11 23 243 247 424 679 695 738 765

POLONIUM ISOTOPES 605

POLYCHAETES 119 791

Pontoporeia affinis 297

Pontoporeia hoyi 154 155 156 332 334 407 538 615 640

PORE WATER 155 157 237 239 363 606

Poxomis annularis 306

Poxomis nigromaculatus 306

Prosopium cylindraceum 493

PROTACTINIUM ISOTOPES 605

PUMPKIN SEED 209 659 671

QCB 10 61 63 76 79 86 87 93 115 151 197 198 200 218 272 334 339 366 372 374 402
411 460 461 466 468 544 566 567 568 569 570 571 572 573 574 575
576 578 579 580 588 606 706 707 722 735 740 762

QSAR 358 628

RADIONUCLIDES 146 158 276 316 317 318 337 351 582 719

RADIUM ISOTOPES 147 148 149 348 352 604 605 719 771

RADON ISOTOPES 605
 RAINBOW SMELT 285 290 337 528 529 559 579 659 766 793
 RAINBOW TROUT 20 131 413 487 528 529 530 531 533 548 551 578 579 600
 RAISON RIVER 153 211
 REDHORSE SUCKER 51 671 804
 RING-BILLED GULLS 55 109 252 292 297 430 547 660 662 681
 RIVER PLUMES 10 78 111 112 217 360 570 705
 ROCK BASS 138 209 429 659 671
 ROUGE RIVER, MI 112 211 275 363 439 462
 ROUGE RIVER, ON 226 232 362
 ROUND WHITEFISH 493
 RUBIDIUM ISOTOPES 146 639
 RUTHENIUM ISOTOPES 149 350 719
 SAGINAW BAY 10 58 81 90 127 131 189 190 191 206 211 260 268 317 343 429 489 493
 636 663 672 722 745 780 803
 SAGINAW RIVER 211 343 780
 SAGUENAY RIVER 123 420 428 598 719
Salmo gairdneri 20 131 413 487 528 529 530 531 533 548 551 578 579 600
Salmo trutta 20 97 131 429 528 529 531 533 551 700
 SALMONIDS 45 499 550
Salvelinus namaycush 20 109 131 141 262 285 337 429 444 447 528 529 531 533 551
 575 579 591 600 633 646 671 699 700 702 737 739 743 766 793
Salvelinus tontinalis 702
 SANDUSKY RIVER 211
 SAUGEEEN RIVER 48 211 221 224 226 232 499 584
 SEA LAMPREY 357 368
 SEASONAL VARIATIONS 92 93 158 226 242 400 407 443 444 483 507 542 543 756

SEDIMENT ANALYSIS 3 4 6 10 14 15 19 22 30 32 38 48 51 53 61 64 71 72 92 95 96
 97 99 104 106 113 115 116 127 128 129 130 133 135 143 148 151 152
 153 155 156 157 158 159 165 167 182 187 188 195 196 197 199 200
 202 204 205 211 218 219 222 227 228 229 230 231 233 239 260 261
 264 271 275 279 294 297 299 300 303 306 316 317 318 320 328 330
 331 333 334 337 339 340 342 344 349 350 351 352 356 366 371 372
 373 378 379 380 381 386 389 390 394 398 399 402 405 411 418 420
 425 427 428 436 439 440 444 446 448 452 457 459 462 463 464 465
 468 475 476 477 483 486 487 489 490 506 508 509 510 511 512 513
 514 515 516 517 518 521 522 523 534 535 536 539 561 562 563 566
 567 568 570 571 572 573 575 579 580 585 586 587 588 590 592 598
 599 606 613 614 615 620 621 625 629 633 639 643 647 653 656 682
 686 687 688 689 690 694 706 719 725 732 734 736 744 746 747 748
 749 750 752 753 754 755 758 763 764 766 767 772 788

SEDIMENT DISTRIBUTION 10 93 599 601 716

SEDIMENT TRANSPORT 329 334 338 410 615 688

SEDIMENT-WATER INTERFACE 9 32 83 154 156 158 338 541 666

SEDIMENTATION 3 9 10 32 48 90 334 540 563 566

SELENIUM 63 71 72 76 84 101 175 200 205 259 276 299 399 418 429 468 474 562 625
 649 650 651 652 654 672 678 706 719 755 758 793

SELENIUM ISOTOPES 146

SEWAGE TREATMENT PLANTS 63 112 146 405 467 599

SHEBOYGAN RIVER 65 81 103 131 134 138 139 211 293 429 445 590 671

SILVER 12 63 71 72 76 106 121 205 211 542 649 651 652 654 678 754

SISKIWIIT LAKE 22 128 129 130 167 262 264 483 735 736 737

SLIMY SCULPIN 579

SMALLMOUTH BASS 20 96 421 429 528 529 533 548

SMELTS 658

SNAPPING TURTLE 70 109 117 657 710

SORPTION 4 9 10 32 111 159 192 540 566 568 705

SPANISH RIVER 48 584

SPOTTAIL SHINERS 109 196 337 398 728 729 730 731

ST. CLAIR RIVER 3 10 48 79 86 87 94 97 98 102 114 135 197 198 199 209 211 226
232 265 267 296 317 320 324 330 331 337 360 361 374 376 384 410
411 412 457 462 466 467 468 477 513 534 569 571 574 580 581 582
620 621 626 641 647 656 685 707 729 730 762 763 764 767 777 782

ST. JOSEPH RIVER 65 75 103 211 518 648

ST. LAWRENCE RIVER 3 8 10 20 42 48 55 84 96 98 110 116 123 124 320 324 326 330
331 337 341 342 344 364 365 366 399 404 420 428 429 436 437 440
441 442 468 469 471 473 479 486 514 528 529 533 581 582 584 585
586 587 592 603 671 673 674 686 710 719 730 741

ST. LOUIS RIVER 166 258 318

ST. MARYS RIVER 10 48 145 166 211 232 260 265 296 298 317 320 324 330 331 337
343 376 467 581 582 584 626 730 763 764 777 782

Sterna caspia 721 780

Sterna forsteri 109 292 302 392 393 700 777

Sterna hirundo 56 109 121 125 242 252 253 292 503 547 704 778

Stizostedion vitreum 20 97 131 138 209 285 337 429 591 600 671 699 700 702

STRONTIUM 72 651 652 654 687 720

STRONTIUM ISOTOPES 150

Stylodrilus heringianus 156 220 390 615 640

SUCKERS 285

SULPHATES 12 161 488 585

SURFACE FILMS 97 161 219 363 458 589 606 634

SUSPENDED PARTICULATE MATTER 4 10 22 30 31 32 33 48 63 77 82 83 87 92 93 95 104
110 115 123 148 152 157 158 159 167 192 195 196 200 218 232 266
271 316 317 318 331 334 337 363 364 373 396 398 411 436 437 440
443 452 458 479 486 491 501 505 507 510 546 562 563 566 569 572
573 574 579 582 585 592 606 615 634 636 649 650 651 652 654 663
666 672 688 705 716 719 740 744 750 751 763 764 769 770

TAWAS RIVER 648

TCB 10 46 61 63 76 78 86 115 151 198 199 200 217 218 272 334 339 341 366 372 402
411 444 460 461 468 544 566 567 568 569 570 571 572 573 575 576
578 579 580 588 705 706 707 722 740

TECB 10 61 63 76 78 79 103 115 151 198 200 217 218 272 334 339 343 366 372 402
 411 460 461 468 544 566 567 568 569 570 571 572 573 575 576 578
 579 580 588 606 705 706 707 722 740 777

TEMPERATURE CHARTS 62 144 280 345 360 688

TEMPORAL DISTRIBUTION 274 422

TEMPORAL VARIATIONS 10 13 44 62 88 139 144 150 186 230 261 296 316 317 318 337
 389 397 400 423 456 532 537 625 633 667 674 706 708 728 741 746
 751 783

THALLIUM 76 126

THAMES RIVER 48 224 226 584

THORIUM ISOTOPES 146 149 605 719

TIN 639

TITABAWASSEE RIVER 206 268 343 406

TOLUENE 76 114

TOXAPHENE 10 65 76 100 103 115 122 131 139 184 238 262 276 286 292 293 316 317
 318 370 376 389 531 562 565 584 591 619 624 633 635 671 683 694
 713 715 716 724 735 795

TRENT RIVER 48 211 219 226 232 405 584

TRIFLURALIN 221

Tubifex tubifex 567 615 640

TWELVE MILE CREEK, NY 341 342

TWELVE MILE CREEK, ON 48 113 226 405 438 706

URANIUM ISOTOPES 604 605 719 771

VANADIUM 12 71 72 344 380 428 514 625 649 650 651 652 654 748 754

VOLATILE ALIPHATIC HYDROCARBONS 113 114 200 369

VOLATILE HALOGENATED ALIPHATIC HYDROCARBONS 8 10 112 113 200 360 361 362 441 715

WALLEYE 20 97 131 138 209 285 337 429 591 600 671 699 700 702

WALLEYE PIKE 51

WASTE DISPOSAL SITES 2 107 265 320 339 405 689

WATER COLUMN 10 14 32 33 34 46 48 63 76 77 84 85 87 95 97 104 110 111 112 113
 114 115 116 133 143 144 147 149 150 152 159 164 167 182 185 186
 187 188 195 196 197 198 199 200 207 208 218 219 224 258 260 263
 266 270 279 300 316 317 318 320 323 324 328 330 331 333 334 337
 348 359 360 361 362 363 364 365 367 369 373 374 385 389 395 396
 398 402 404 405 406 411 422 436 437 438 440 441 443 447 452 457
 458 459 460 461 462 468 477 478 479 480 505 518 541 542 543 544
 545 546 562 566 569 572 574 575 576 577 579 585 589 592 605 606
 608 609 613 614 625 631 634 643 646 649 650 651 652 654 682 683
 690 694 705 706 707 715 716 719 724 733 737 740 744 751 758 763
 764 766 805

WATER TRANSPARENCY 83 92 408 625 666 667

WATER TREATMENT PLANTS 149 599

WATERFOWL 109 174 178 216 286 292 300 337 382 383 432 433 594 596 643 706 777
 784

WAUKEGAN HARBOR 306 734

WELLAND CANAL 111 113 226 232 362 405 438 658

WELLAND RIVER 113 142 359 438 584 706

WHITE BASS 209 548

WHITE CRAPPIE 306

WHITE PERCH 20 285 528 529 533 658 659

WHITE SUCKER 20 51 74 96 97 109 138 287 306 337 354 421 429 528 548 658 659 804

WHITEFISH 131 285 357 429 671 699 735 766

WOLF RIVER 131 138

YELLOW BULLHEAD 138

YELLOW PERCH 20 29 97 131 219 285 306 354 429 548 658 659 671 672

ZINC 12 14 63 71 72 76 84 99 101 106 113 116 121 123 160 161 187 195 196 200 205
 211 235 275 279 286 332 334 344 373 379 380 381 385 397 398 399
 400 401 428 429 438 439 440 443 463 467 468 475 480 488 506 508
 509 510 511 512 514 515 516 521 522 542 561 563 585 586 587 589
 598 599 613 614 615 624 625 639 643 649 650 651 652 653 654 663
 666 669 672 678 680 683 687 694 706 719 720 741 751 754 755 756

ZINC ISOTOPE 350

ZIRCONIUM 72 510

ZIRCONIUM ISOTOPES 146 149

ZOOPLANKTON 59 195 202 210 234 290 299 312 316 317 318 325 327 337 347 481 482
642 643 667 682 706 766 791

GEOGRAPHICAL SUBJECT HEADINGS

ASHTABULA RIVER
AU SABLE RIVER, MI
AU SABLE RIVER, ON
BAY OF QUINTE
BERGHOLTZ CREEK
BLACK RIVER, NY
BLACK RIVER, OH
BLACK RIVER, ON
BUFFALO RIVER
CHEQUAMEGON RIVER
CLINTON RIVER
CRÉDIT RIVER
CUYAHOGA RIVER
DETROIT RIVER
DON RIVER
ECORSE RIVER
EIGHTEEN MILE CREEK
ESCANABA RIVER
FOX RIVER
FRENCH RIVER
GENESEE RIVER
GEORGIAN BAY
GRAND RIVER, MI
GRAND RIVER, ON
GREEN BAY
HAMILTON HARBOUR
HUMBER RIVER
KALAMAZOO RIVER
KINNICKINNIC RIVER
LAKE ERIE
LAKE HURON
LAKE MICHIGAN
LAKE ONTARIO
LAKE ST. CLAIR
LAKE SUPERIOR
LITTLE MANISTEE RIVER
MAGNETAWAN RIVER
MANISTEE RIVER
MANISTIQUE RIVER
MAUMEE RIVER
MENOMINEE RIVER
MILWAUKEE RIVER
MUSKEGON RIVER
NIAGARA RIVER
NIPIGON RIVER
OSWEGO RIVER
PLATT RIVER
RAISON RIVER
ROUGE RIVER, MI
ROUGE RIVER, ON
SAGINAW BAY
SAGINAW RIVER
SAGUENAY RIVER
SANDUSKY RIVER
SAUGEEN RIVER
SHEBOYGAN RIVER
SISKIWIIT LAKE
SPANISH RIVER
ST. CLAIR RIVER
ST. JOSEPH RIVER
ST. LAWRENCE RIVER
ST. LOUIS RIVER
ST. MARYS RIVER
TAWAS RIVER
THAMES RIVER
TITABAWASSEE RIVER
TRENT RIVER
TWELVE MILE CREEK, NY
TWELVE MILE CREEK, ON
WAUKEGAN HARBOR
WELLAND CANAL
WELLAND RIVER
WOLF RIVER

CHEMICAL SUBJECT HEADINGS

2,3,7,8-TCDD - 2,3,7,8-Tetrachlorodibenzo-p-dioxin
2,3,7,8-TCDF - 2,3,7,8-Tetrachlorodibenzofuran
Aldrin
Alkylated Lead
Alkylated Tins
Aluminum
Americium Isotope
Anthracene - PAHs
Antimony
Antimony Isotopes
Arsenic
Atrazine
B(a)P - Benzo(a)pyrene, PAHs
Barium
Benzene
Beryllium
Beryllium Isotopes
a-BHC - alpha-BHC
BHC - Hexachlorocyclohexane - use for HCH
Bismuth
Bismuth Isotope
Boron
Butyltin - use Alkylated Tins
Cadmium
Cerium Isotopes
Cesium Isotopes
Chlordane
Chlorinated Bornane - use Toxaphene
Chlorobenzenes
Chlorophenols
Chlorostyrenes
Chlorotoluenes
Chromium
Chromium Isotopes
Cobalt
Cobalt Isotope
Copper
Curium Isotopes
Dacthal - Tetrachloroterephthalate
DCB - Dichlorobenzene
DDD - Dichlorodiphenyl dichloroethane, use for TDE
DDE - Dichlorodiphenyl dichloroethylene
DDT - Dichlorodiphenyl trichloroethane
Dieldrin - use for HEOD
Dissolved Oxygen
Endosulfans
Endrin
Europium Isotope
Halogenated aliphatic hydrocarbons

HCB - Hexachlorobenzene
HCBD - Hexachlorobutadiene
HCH - Hexachlorocyclohexane - use BHC
Heavy Metals
HEOD - use Dieldrin
Heptachlor epoxide
Heptachlor
Iodine Isotopes
Iron
Kepone - Mirex
Lead
Lead Isotopes
Lithium
Lindane - use for gamma-BHC
Manganese
Manganese Isotope
Mercury
Methoxychlor
MFO - Mixed Function Oxydase
Mirex
Molybdenum
Mono-cyclic aromatics
Neptunium Isotopes
Nickel
Niobium Isotopes
Nitrates
Norachlor
OCS - Octachlorostyrene
Organotin
PAHs - Polynuclear Aromatic Hydrocarbons
PBB - Polybrominated Biphenyls
PCBs - Polychlorinated Biphenyls
PCDD - Polychlorinated dibenzo-p-dioxin
PCDF - Polychlorinated dibenzofuran
PCS - Polychlorinated Styrenes
PERC - Perchloroethylene - use for Tetrachloroethene
Pesticide
Petroleum Hydrocarbons
Phenol
Phosphorus
Phthalate Esters
Polonium Isotopes
Protactinium Isotopes
QCB - Pentachlorobenzene
QSAR - Quantitative Structure-Activity Correlations
Radionuclides
Radium Isotopes
Radon Isotopes
Rubidium Isotopes
Ruthenium Isotopes
Selenium
Selenium Isotopes

Silver
Strontium
Strontium Isotopes
Sulphates
TCB - Trichlorobenzene
TDE - use DDD
TeCB - Tetrachlorobenzene
Thallium
Thorium Isotopes
Toluene
Toxaphene - use for Chlorinated Bornane
Trifluralin - Treflan
Uranium Isotopes
Vanadium
Volatile aliphatic hydrocarbons
Volatile halogenated aliphatic hydrocarbons
Zinc
Zinc Isotope
Zirconium
Zirconium isotopes

BIOLOGICAL SUBJECT HEADINGS

1. Body Parts

Bones
Brain
Eggs
Gills
Kidneys
Lipids
Liver
Muscle

2. Common Names

Alewife - Alosa pseudoharengus
Amphipods
Amphipods - Hyalella azteca
Amphipods - Pontoporeia affinis
Amphipods - Pontoporeia hoya
Aquatic Insects
Bacteria
Bald eagle - Haliaeetus leucocephalus
Bass - Micropterus spp.
Belted Kingfisher - Ceryle alcyon
Beluga Whales - Delphinapterus leucas, use for White Whales
Birds
Black Bullhead - Ictalurus melas
Black Crappie - Pomoxis nigromaculatus
Black Duck - Anas rupripes
Black-Backed Gull
Black-crowned Night Heron - Nycticorax nycticorax
Bloater Chubs - Coregonus hoyi
Bluegill - Lepomis macrochirus
Brook Trout - Salvelinus fontinalis
Brown Bullhead - Ictalurus nebulosus
Brown Trout - Salmo trutta
Canadian Otter - Lutra canadensis
Carp - Cyprinus carpio
Carp Goldfish Hybrid
Caspian Tern - Sterna caspia
Cattle Egret - Bubulcus ibis
Channel Catfish - Ictalurus punctatus
Chinook Salmon - Oncorhynchus tshawytscha
Chironomids
Coho Salmon - Oncorhynchus kisutch
Common Goldeneye - Bucephala clangula
Common Loon - Gavia immer
Common Tern - Sterna hirundo

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Canada Centre for Inland Waters

P.O. Box 5050
867 Lakeshore Road
Burlington, Ontario
L7R 4A6 Canada

National Hydrology Research Centre

11 Innovation Boulevard
Saskatoon, Saskatchewan
S7N 3H5 Canada

St. Lawrence Centre

105 McGill Street
Montreal, Quebec
H2Y 2E7 Canada

Place Vincent Massey

351 St. Joseph Boulevard
Gatineau, Quebec
K1A 0H3 Canada

Centre canadien des eaux intérieures

Case postale 5050
867, chemin Lakeshore
Burlington (Ontario)
L7R 4A6 Canada

Centre national de recherche en hydrologie

11, boul. Innovation
Saskatoon (Saskatchewan)
S7N 3H5 Canada

Centre Saint-Laurent

105, rue McGill
Montréal (Québec)
H2Y 2E7 Canada

Place Vincent-Massey

351 boul. St. Joseph
Gatineau (Québec)
K1A 0H3 Canada