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LAKE MICHIGAN BIBLIOGRAPHY

Volume 2: 1977-1986

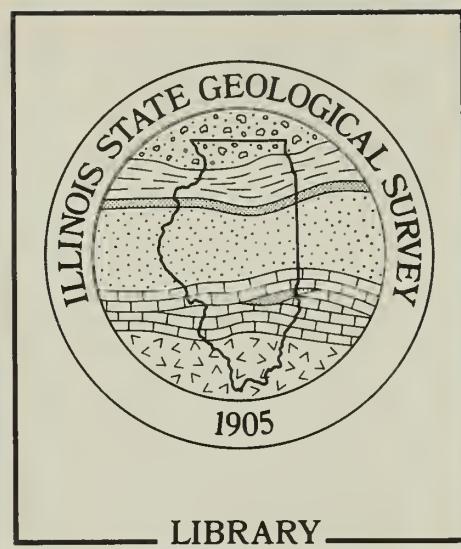
Nancy Peterson Holm and Beth McArdle Morgan



1989
ENVIRONMENTAL GEOLOGY NOTES 132

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Volume 2: 1977-1986

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1989
ENVIRONMENTAL GEOLOGY NOTES 132

ILLINOIS STATE GEOLOGICAL SURVEY

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We appreciate the contributions of Charles Collinson (ISGS), Robert Gorden (INHS), Donald Gatz (ISWS), and Peter Lamb (ISWS) to the initial three-survey Lake Michigan Scoping Study, sponsored by the Illinois Department of Energy and Natural Resources, Board of Natural Resources and Conservation. This bibliography is a continuation of the research inventory begun in 1984 as part of that scoping study.

INTRODUCTION

This bibliography was begun in 1984 as part of the Lake Michigan Scoping Study jointly undertaken by the three Illinois Scientific Surveys and sponsored by the Illinois Department of Energy and Natural Resources, Board of Natural Resources and Conservation. The purpose of the scoping study was to provide a basis for developing prioritized, coordinated programs and a long-term research agenda for the Illinois Scientific Surveys and other state agencies. An essential part of that study was to determine what research had been conducted previously on the lake; therefore, a bibliography was compiled of all research literature on Lake Michigan covering the subjects of biology, chemistry, geology, physical limnology, meteorology, hydrology, management, socio-economics, and recreation. Because of the enormity of the task and time constraints of the study, the literature search extended back only to 1960. Funding provided by The Joyce Foundation after the scoping study had ended allowed completion of the bibliography covering the time period 1960-86.

The bibliography, which contains approximately 5,000 entries, is divided into two volumes, Volume 1: 1960-76 and Volume 2: 1977-86, each with its own indexes. The references are arranged alphabetically by the last name of the principal author (except for a few late additions at the end of each volume). Indexes are given for author, subject, and area of the lake studied. For more discussion of the indexes, see Guide to the Indexes.

References for the bibliography were compiled from searches of online computer databases (Biological Abstracts, Chemical Abstracts, Dissertation Abstracts, Enviroline, GEOREF, NTIS, Pollution Abstracts, Selected Water Resources Abstracts, and University of Michigan DATRIX), Sea Grant publication listings, publication listings from the Department of Natural Resources of each surrounding state, International Joint Commission bibliographies, NOAA Great Lakes Environmental Research Laboratory reports, listings of U.S. Fish and Wildlife Service publications, and State Survey publication listings. Separate searches were also made of journals not covered adequately in the previous searches and many of the publications were checked for additional references. [The term publications, as used in this bibliography, includes journal articles, reports, and books.]

The references were entered into a computerized database (using a database management program on a PRIME 9955 computer system) allowing searching and sorting by author, title, date, keywords, and other terms. The database was divided into two sections (1960-76 and 1977-86) because of size limitations of the program. In order to identify more keywords than we could from just indexing the titles of the publications, we acquired copies or abstracts of as many publications as possible. To date, 67 percent of the publications listed in the bibliography have been collected. Keywords were entered by examining the actual publication when available, otherwise from the title; other important keywords were added to maintain uniformity for indexing. All publications were classified by one or more major subjects--biology, chemistry, geology, physical limnology, meteorology, hydrology, management, socio-economics/economics, or recreation--and then further subclassified.

An examination of the distribution of publications in the various classifications reveals some interesting shifts in research over the past 25 years (table 1). In this table, the specific subjects are organized roughly into four categories: biological, chemical, geological, and physical limnology. Because many of the publications cited cover more than one subject, the total percentages in table 1 for major subjects and for specific subjects exceed 100 percent.

Table 1. References on specific subjects as percentages of the total number of references in the bibliography.

| Major Subjects | 1960-76 (%) | 1977-86 (%) |
|--|-------------|-------------|
| Biology | 47 | 53 |
| Chemistry | 32 | 45 |
| Geology | 22 | 20 |
| Physical Limnology | 26 | 20 |
| Management | 17 | 22 |
| Meteorology | 12 | 10 |
| Socio-economics/Economics | 8 | 11 |
| Hydrology | 7 | 7 |
| Recreation | 5 | 5 |
| Specific Subjects | | |
| Fisheries | 25 | 30 |
| Phytoplankton | 11 | 11 |
| Zooplankton | 7 | 9 |
| Benthic Invertebrates | 7 | 7 |
| Bacteria | 5 | 4 |
| Wetlands | 1 | 4 |
| Human Health | 3 | 5 |
| Power Plants | 18 | 8 |
| Thermal Pollution | 11 | 3 |
| Water Quality/Pollution | 26 | 30 |
| Inorganics | 23 | 30 |
| Metals | 11 | 15 |
| Nutrients | 11 | 17 |
| Phosphorus | 8 | 12 |
| Eutrophication | 8 | 7 |
| Organics | 8 | 20 |
| Toxic Substances | 7 | 21 |
| Sediments | 16 | 22 |
| Erosion | 10 | 10 |
| Lake Levels | 10 | 8 |
| Geophysics | 1 | 1 |
| Glacial | 3 | 2 |
| Groundwater | 2 | 4 |
| Atmospheric Studies (excluding Meteorology) | 3 | 8 |
| Loading/Deposition | 10 | 15 |
| Transport | 6 | 9 |
| Precipitation | 6 | 5 |
| Currents/Circulation | 12 | 7 |
| Waves | 6 | 6 |
| Ice | 4 | 4 |
| Evaporation | 2 | 1 |
| Climate | 3 | 4 |
| Water Use | 4 | 4 |
| Diversion | 2 | 3 |
| Resuspension | 1 | 3 |
| Nepheloid Layer | 0 | 1 |

Our review of the literature showed that about 50 percent of the publications included in the bibliography deal with biological aspects of the Lake Michigan ecosystem. The most widely researched biological subject is fisheries, which constitutes 25 to 30 percent of the total publications. This percentage indicates the importance of fisheries to Lake Michigan and the Great Lakes states, and the extent of research by universities and state and federal fisheries agencies to restore fish populations, understand the effects of toxic substances on fish, and monitor changes in the abundance of fish populations.

The percentage of publications on chemistry increased from 32 percent of the total in the 1960-76 period to 45 percent in the 1977-86 period as interest increased in water quality, loading and cycling of inorganics and organics, and the effects of toxic substances on biota. Also, part of the increase in the percentage of publications on chemistry may have occurred because analytical techniques became sufficiently sensitive to detect more chemicals in the lake. It is of interest to note that although eutrophication has been less a topic in the news in recent years than in the 1960s and 1970s and toxic substances have become a main concern, the percentage of references on eutrophication has remained fairly constant while the percentages of references on nutrients and phosphorus have actually increased slightly. The percentage of publications on water quality as a general subject has increased just slightly from 26 to 30 percent of the papers. However, the percentage of publications on organics has increased from 8 to 20 percent and the percentage on toxic substances (encompassing some organics as well as toxic metals) increased from 7 to 21 percent. These percentages include references on organics and toxics related to water quality as well as references on organics or toxics and biota. Many new organic compounds now studied (e.g., dioxin) were not mentioned in earlier papers. The percentage of references on inorganic substances, which include both metals and nutrients, has also increased; most of this increase has been in the area of sediment chemistry.

The percentage of publications on geology (excluding the increase in sediment studies) remained relatively constant over the past 25 years. And although the percentage of references on meteorology also remained fairly constant, there was an increase in other atmospheric studies as the role of atmospheric loading of toxics and nutrients to Lake Michigan became better understood and interest in the air-water interface increased.

Fewer publications on power plants and thermal pollution are listed for the 1977-86 period than for the 1960-76 period. Many of the earlier publications were the result of preoperational and postoperational monitoring needed for environmental impact assessments of power plants. The percentage of publications on lake currents/circulation also has decreased, but interest in resuspension and the nepheloid layer has increased during the past 10 years.

In addition to indicating shifts in research interests over the years, our compilation of references also revealed changes in the total number of publications each year over time (figure 1). The graph shows a steady increase in the number of publications until the mid-1970s, then a plateau with a slight decrease in the last few years. However, the number of publications for 1987 (not shown in figure 1) increased to more than 250, so there is some year-to-year variation. The average now is about 200 to 300 publications per year. The number of publications in the early 1960s may actually be slightly higher than indicated in this figure because it was more difficult to compile papers from that time period. But the graph does show the surge in research on Lake Michigan that has occurred over the last 25 years.

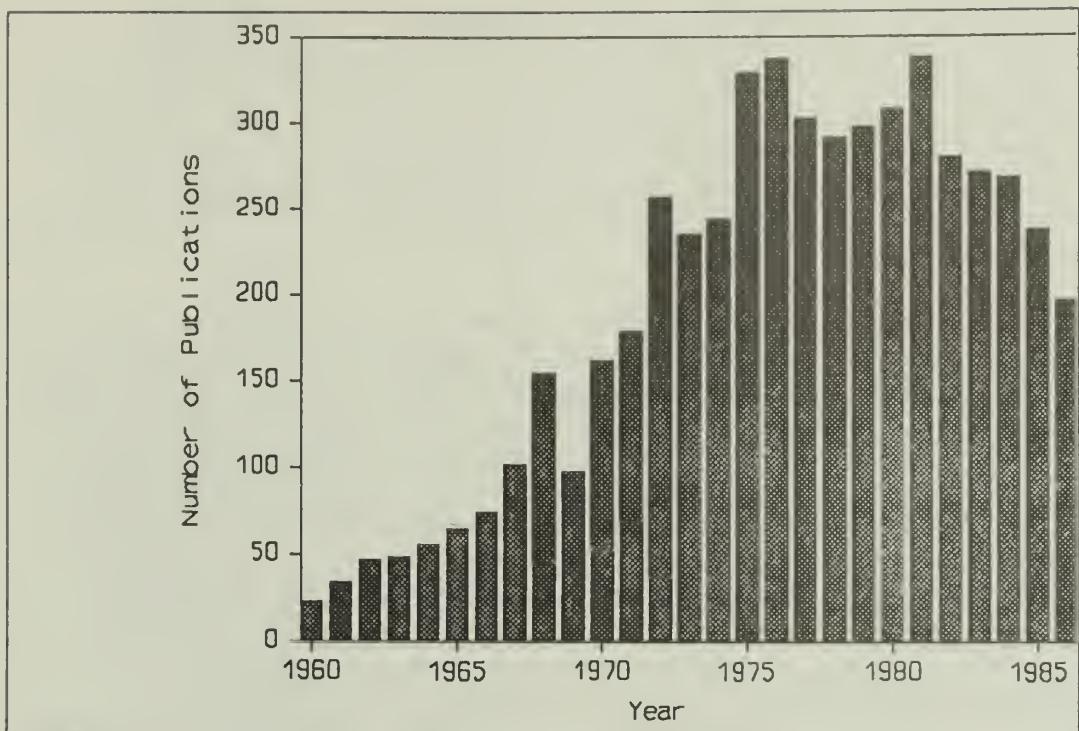


Figure 1. Number of research publications on Lake Michigan per year from 1960-86.

We hope that this bibliography will be useful to researchers and planners assessing past work and identifying research needs for future lake studies. The ISGS Lake Michigan Coast and Basin Studies Section would appreciate knowing about any errors that may have occurred in the references and any research publications that should have been included.

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GUIDE TO THE INDEXES

Publications in this bibliography are indexed by author, subject, and area of the lake studied. The author index lists all authors (principal and joint). Publications by the various boards of the International Joint Commission (e.g., Great Lakes Water Quality Board, Science Advisory Board) are all listed under International Joint Commission.

The subject indexes for Volumes 1 and 2 are not identical. Because of the size of the bibliography, not all species names and subjects could be included in the indexes. If a subject is not listed, there may be no references on that subject or the word may be classified under a broader term. Most individual species of invertebrates, phytoplankton, and zooplankton, for instance, are not included separately but rather grouped under broader classifications. Because the references listed under any one keyword are not inclusive, related and broader subjects should be examined.

Common names of fish are used in the indexes; the names follow those in "A List of Common and Scientific Names of Fishes from United States and Canada," Special Publication No. 12 of the American Fisheries Society (1980). The keyword INVERTEBRATES includes all zooplankton and benthic invertebrates as well as other invertebrates such as Mysis. There are also separate listings for ZOOPLANKTON and BENTHIC INVERTEBRATES.

The term METALS includes major metals (e.g., Ca) and trace metals; there is also a separate listing for TRACE METALS. The term HYDROLOGY covers river or tributary flow, groundwater, and water budget references. POLLUTION and WATER QUALITY are both listed as subjects, though there can be a great deal of overlap in the references indexed under each. Chlorinated hydrocarbons may be listed as specific compounds or included under ORGANICS; usually publications on nonchlorinated hydrocarbons are indexed under HYDROCARBONS. TOXICS is used as a broad term for organics and metals and other compounds that are toxic to biota. The keyword ATMOSPHERIC refers to atmospheric studies of physical and chemical processes such as atmospheric deposition, loading, or transport. Meteorological studies, although atmospheric in nature, are usually better identified under a more specific term (e.g., STORMS, PRECIPITATION, LAKE EFFECT). A list of additional specific terms is given under METEOROLOGY in the subject index.

HISTORY, REVIEW, and SUMMARY are used as keywords to help users identify publications that may provide background information or summarize a topic. Subjects having many references are often divided when possible into appropriate subdivisions. The term "general" may be used as a subdivision when some of the references do not fit into the other designated subdivisions.

In the subject index, two words joined by an underscore (e.g., LAKE LEVELS_HISTORY) indicate that both words are listed in the keywords for a publication but are not necessarily listed next to each other. The two words are associated in the index to define the subject more specifically and are used as subheadings. For example, LAKE LEVELS_HISTORY gives the numbers for references on history of lake levels whereas LAKE LEVELS_MANAGEMENT gives the numbers for references on management of lake levels.

If only a few references are given for a specific subject, more information can be found by looking under a broader subject that includes it. To direct the user to

other appropriate words, certain subjects are cross-referenced with the symbol SA: (meaning "see also"). SA: refers to another access point; it can be used in three ways:

- SA: can mean that additional references can be found under another related word, e.g., BIOACCUMULATION (SA: uptake).
- SA: can mean that this subject is also included under a broader category, e.g., BULKHEADS (SA: coastal structures), in which additional references are found as well as the present ones. This use of SA: is helpful when some references did not give specifics; it is meant to show that the index word is not inclusive. This is especially true for many of the biological papers where it is usually necessary to look at broader classifications such as DIATOMS or CLADOCERA in addition to the individual species, if listed.
- SA: can be used to indicate a more specific topic listed elsewhere for that word, such as DIVERSION (SA: history_diversion), if a further breakdown of the subject is desired.

The symbol S: (meaning "see") is used to refer the user to a different word in the index that has been used in place of another word, e.g., MARSHES (S: wetlands).

The area index lists references by area, if known more specifically than just Lake Michigan. Although all of the references are concerned with Lake Michigan, some may discuss the Great Lakes in general, not specifying a particular Great Lake, or may discuss one or more of the other Great Lakes in addition to Lake Michigan. Included in the area index are the other Great Lakes, large rivers in the region, and cities, states, bays, harbors, tributaries, and power plants around Lake Michigan. Because not all of the references could be examined to find the specific area studied, references listed under any one area do not necessarily cover all of the publications on that area.

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| PISTIS, C. | 1534, 1901 |
| PIWONI, M. D. | 1902 |
| POE, T. P. | 673, 674, 1903 |
| POFF, R. J. | 283, 1530, 2157 |
| POKOJOWCZYK, J. C. | 1707, 1708 |
| POLANDO, P. | 1904 |
| POLANSKI, P. E. | 808-811 |
| PONCE-CAMPOS, C. D. | 253-255 |
| PORE, N. A. | 708, 1905, 1906 |
| POTOK, A. J. | 537, 1907 |
| POULIN, K. A. | 1908 |
| POVILAITIS, S. J. | 1513 |
| POWERS, E. C. | 1909, 2244 |
| POWERS, W. F. | 329, 514 |
| POYNER, P. L. | 574, 575 |
| PRANGER, S. A. | 1910 |
| PRANSCHKE, F. A. | 1911 |
| PRATER, B. L. | 1027, 1394, 1395 |
| PRATT, G. | 2580 |

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| PRC HARRIS, INC. | 1830 |
| PREPEJCHAL, W. | 2020, 2021, 2290, 2292, 2293, 2300-2302 |
| PRESTON, C. N. | 1912 |
| PRICE, H. A. | 1913, 2175 |
| PRINCE, H. H. | 1914 |
| PRINGLE, C. M. | 1763, 1915 |
| PRINS, D. A. | 1599 |
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| PROUTY, R. M. | 1255 |
| PTAK, D. J. | 714 |
| PULLEY, S. | 487, 493 |
| PURDUE UNIVERSITY, GREAT LAKES COASTAL ENGIN. RES. LAB. | 1916 |
| PURINTON, J. | 1917 |
| PURVIS, H. A. | 1918 |
| PYCHA, R. L. | 1919 |
| QUIGLEY, M. A. | 777, 1755-1760, 1763, 1920, 1921, 2415 |
| QUINN, F. H. | 89-91, 523, 538, 539, 1899, 1922-1939 |
| QUINN, J. | 1213 |
| QUIRCK, B. | 2622 |
| R. B. DENUYL ASSOCIATES | 1940 |
| RACE, R. A. | 1349 |
| RACINE COUNTY PLANNING AND ZONING DEPT. | 1941 |
| RADES, D. L. | 1942 |
| RAGLAND, K. W. | 1943, 2069 |
| RAGO, P. J. | 1243, 1245 |
| RAGOTZKIE, R. A. | 1944-1946 |
| RAIDER, J. | 2212 |
| RANDALL, W. H. | 1947 |
| RANDOLPH, K. | 2198 |
| RAO, D. B. | 348, 1948 |
| RAPHAEL, C. N. | 1214-1218, 1949, 1950 |
| RAPHAELIAN, L. A. | 924 |
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| RAPPORT, D. J. | 1415 |
| RAQUET, C. A. | 1951 |
| RASCH, D. L. | 2359 |
| RAST, W. | 857, 1475, 1902, 1952 |
| RASTONIS, S. V. | 1953 |
| RATCLIFF, B. | 1376 |
| REA, D. K. | 926, 1954-1957, 2219 |
| REASONER, D. J. | 1958 |
| REBUFFONI, D. | 1508 |
| RECKHOW, K. H. | 364 |
| REDLIN, M. J. | 43 |
| REED, D. M. | 1959 |
| REGIER, H. A. | 737, 738, 1415, 1530-1532, 1960-1962, 2133, 2288 |
| REICHEL, W. L. | 933, 970, 1255 |
| REID, N. J. | 1431 |
| REID, R. | 1963 |
| REID, R. O. | 2088 |
| REIFEL, R. | 1964 |
| REINERT, R. E. | 2695 |
| REINERTSEN, D. L. | 1965 |
| REINHARD, C. | 1966, 1967 |
| REINHARD, S. A. | 1968 |
| REINHOLD, M. D. | 1383 |
| REINUMAGI, I. U. | 1969 |
| REMERMET, K. | 2000 |
| REMSEN, C. C. | 1538, 2226 |
| RENGAN, K. | 1786 |
| RENKIE, E. D. | 1060 |
| RESHKIN, M. | 1970, 1971, 2148 |
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| REZNICEK, A. A. | 1264, 1265 |
| RIBICK, M. A. | 1973, 2142 |
| RICE, C. P. | 611, 613, 614, 679, 1407, 1619, 1915, 1974-1979, 2596, 2597 |
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| RICHARDSON, B. | 1982 |
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| RIPPEN, T. E. | 1992 |
| RISTIC, J. | 1993 |
| ROARABAUGH, D. B. | 2783 |
| ROBBINS, J. A. | 612, 614, 631, 632, 719, 948, 1253, 1351, 1352, 1920, 1921, 1977, 1994-2000, 2123, 2466, 2621 |
| ROBBINS, R. L. | 2001 |
| ROBBINS, S. E. | 1988 |
| ROBERTS, E. | 2669, 2670 |
| ROBERTS, M. | 1864 |
| ROBERTSON, A. | 363, 608, 764, 1761, 1762, 2002-2005, 2023, 2279, 2280, 2441 |
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| ROBLEE, C. J. | 2006 |
| ROCHOW, J. J. | 2007, 2784 |
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| RODEN, R. W. | 2010 |
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| ROGGENBUCK, J. W. | 2015 |
| ROHE, R. E. | 2016 |
| ROHRER, T. K. | 2017 |
| ROMANO, R. R. | 2018 |
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| ROTHMAN, E. D. | 2122 |
| ROTTIERS, D. V. | 1504, 2037, 2038, 2344, 2695 |
| ROUDER, J. | 1967 |
| ROUSMANIERE, J. | 2039 |
| ROVEY, C. W., II | 2040 |
| ROWE, M. | 2041 |
| ROY F. WESTON, INC. | 2042 |
| ROY, S. D. | 2043 |
| ROYAL SOC. OF CANADA | 1767, 2044 |
| ROZNIK, F. D. | 914, 2045 |
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| RUKAVINA, N. A. | 2047, 2048 |
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| RUNBERG, E. G. S. | 522 |
| RUPP, E. M. | 2050 |
| RUTECKI, T. L. | 563, 1244, 1245, 1247, 1248, 1251, 2051 |
| RYAN, J. J. | 2052 |
| RYBICKI, R. W. | 283, 2053-2055 |
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| SALISBURY, D. K. | 2012, 2013 |
| SALZMAN, J. A. | 1951 |
| SAMPLES, K. C. | 188, 2065-2068 |
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| SANDERS, P. A. | 2383 |
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| SCHAEFER, W. F. | 2098 |
| SCHAEFFER, E. | 2099 |
| SCHAEFFER, J. | 426 |
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| SCHARF, W. C. | 2100, 2101 |
| SCHEEL, R. H. | 1913 |
| SCHEERER, P. D. | 2102, 2103 |
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| SCHEFLOW, D. J. | 955, 957, 958 |
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| SCHUH, J. A. | 1267 |
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| ATMOSPHERIC_LOADING (continued) | 2012, 2014, 2039, 2105, 2107, 2114, 2137, 2138, 2139, 2140, 2227, 2228, 2230, 2231, 2233, 2235, 2236, 2269, 2270, 2276, 2278, 2289, 2383, 2387, 2405, 2435, 2437, 2438, 2440, 2443, 2462, 2465, 2522, 2525, 2531, 2572, 2573, 2648 |
| ATMOSPHERIC POLLUTION | 6, 7, 11, 20, 21, 22, |
| (SA: dispersion_atmospheric_ pollution) | 23, 53, 54, 55, 56, 58, 59, 62, 64, 70, 94, 138, |
| (SA: model_atmospheric_pollution) | 143, 163, 170, 265, 273, 323, |
| (SA: power_plants_atmospheric_ pollution) | 338, 340, 342, 355, 366, 367, 376, 377, 381, 389, 414, 478, 482, 514, 532, 533, 545, 546, 551, 552, 565, 579, 631, 643, 645, 648, 649, 650, 651, 652, 719, 720, 743, 758, 804, 812, 862, 879, 953, 957, 975, 1000, 1008, 1052, 1106, 1110, 1124, 1125, 1127, 1128, 1132, 1142, 1154, 1127, 1176, 1182, 1183, 1185, 1186, 1187, 1188, 1189, 1193, 1195, 1197, 1225, 1233, 1239, 1267, 1326, 1332, 1333, 1449, 1458, 1473, 1474, 1499, 1500, 1567, 1592, 1613, 1642, 1643, 1700, 1701, 1702, 1704, 1705, 1709, 1710, 1725, 1729, 1733, 1735, 1736, 1741, 1742, 1743, 1744, 1745, 1767, 1809, 1828, 1839, 1849, 1902, 1943, 1978, 1979, 1984, 1996, 1997, 2007, 2024, 2039, 2042, 2069, 2085, 2128, 2129, 2138, 2202, 2230, 2235, 2276, 2278, 2324, 2362, 2363, 2383, 2391, 2443, 2466, 2518, 2522, 2525, 2615, 2648, 2669, 2670, 2696, 2698, 2772 |
| ATMOSPHERIC TRANSPORT | 6, 7, 20, 23, 24, 54, 55, 56, 57, 64, 67, 143, 319, 361, 389, 473, 533, 545, 546, 552, 565, 566, 567, 597, 648, 651, 879, 885, 974, 975, 1052, 1053, 1113, 1124, 1125, 1132, 1175, 1176, 1185, 1188, 1239, 1267, 1449, 1499, 1500, 1582, 1705, 1706, 1708, 1710, 1723, 1725, 1729, 1733, 1735, 1736, 1740, 1741, 1742, 1743, 1744, 1745, 1767, 1956, 1976, 1978, 1979, 1984, 1994, 2042, 2069, 2140, 2231, 2232, 2233, 2234, 2236, 2276, 2387, 2405, 2440, 2572, 2573, 2648, 2666, 2669, 2670, 2696, 2697, 2772 |
| ATRAZINE (SA: pesticides) | 1175, 1189 |
| BACILLAROPHYCEAE (S: diatoms) | |

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| BACTERIA (general) | 723, 1260, 1370, 1483, 1538, 1553, 1876, 2095 |
| BACTERIA_BIOACCUMULATION | 611, 1022, 1111, 1115, 1117, 1120, (S: bacteria_uptake) 1121, 1128, 1142, 1189, 2239, 2741 |
| BACTERIA_BIOTRANSFORMATION | 306, 1738, 1740, 2089 |
| BACTERIA_CLOSTRIDIUM_BOTULINUM | 244 |
| BACTERIA_COLIFORM | 49, 123, 126, 146, 147, 148, 224, 396, 398, 400, 401, 598, 735, 787, 911, 979, 1083, 1111, 1121, 1188, 1480, 1645, 1684, 1773, 1900, 1958, 2097, 2132, 2173, 2329, 2330, 2331, 2479, 2481, 2497, 2776 |
| BACTERIA_DEGRADATION | 47, 133, 306, 611, 714, 1420, 1422, 2239, 2478 |
| BACTERIA_DISTRIBUTION | 787, 1022, 1303, 1407, 1660, 1723, 1729, 2023, 2329, 2541 |
| BACTERIA_FOOD_CHAIN | 224, 611, 1723, 1729, 1738, 1740, 2022 |
| BACTERIA_GROUNDWATER | 49, 237, 911, 1083, 1115, 1127, 1128, 2216, 2554 |
| BACTERIA_HUMAN_HEALTH | 52, 397, 398, 399, 657, 721, 1018, 1022, 1097, 1100, 1111, 1115, 1117, 1120, 1121, 1127, 1128, 1188, 1480, 1513, 1773, 1864, 1958, 2330, 2331, 2572, 2573, 2630 |
| BACTERIA_METALS | 721, 1022, 2464, 2572, 2573, 2741 |
| BACTERIA_MONITORING | 123, 126, 224, 378, 396, 397, 398, 399, 400, 401, 598, 950, 1018, 1083, 1097, 1100, 1117, 1120, 1142, 1188, 1717, 1718, 1719, 1720, 1721, 1722, 1724, 1726, 1727, 1739, 2008, 2023, 2097, 2541, 2554 |
| BACTERIA_NUTRIENTS | 306, 1260, 1553, 1660, 2089, 2096, 2405, 2410, 2411, 2412 |
| BACTERIA_ORGANICS | 47, 611, 721, 723, 1420, 2239, 2396, 2478 |
| BACTERIA_PHYSIOLOGY | 244, 397, 398, 721, 1111, 1121, 1128, 2541, 2572, 2573 |
| BACTERIA_POLLUTION (S: pollution_bacteria) | |
| BACTERIA_POWER_PLANTS (S: power_plants, effects on bacteria) | |
| BACTERIA_SALMONELLA | 1100 |
| BACTERIA_SEASONAL_VARIATION | 123, 126, 244, 979, 1304, 1377, 1645, 1659, 1723, 1729, 1733, 1740, 2479, 2481, 2572, 2573 |

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| BACTERIA_SEDIMENTS | 47, 1420, 1422, 2096, 2330, 2396, 2464, 2478 |
| BACTERIA_STREPTOCOCCI | 123, 397, 979, 1645 |
| BACTERIA_TOXICS | 47, 611, 721, 1022, 2239, 2396, 2464, 2478, 2741 |
| BACTERIA_UPTAKE | 306, 770, 2405, 2410, 2411, 2412 (SA: <i>bacteria_bioaccumulation</i>) |
| BACTERIA_WATER QUALITY | 49, 52, 123, 126, 147, 224, (SA: <i>pollution_bacteria</i>) 306, 378, 396, 397, 398, 399, 400, 401, 598, 657, 721, 735, 787, 911, 950, 979, 1083, 1097, 1100, 1111, 1115, 1117, 1120, 1121, 1127, 1128, 1139, 1142, 1174, 1188, 1480, 1513, 1550, 1645, 1684, 1717, 1718, 1719, 1720, 1721, 1722, 1723, 1724, 1726, 1727, 1729, 1733, 1739, 1740, 1773, 1900, 2089, 2097, 2132, 2173, 2239, 2329, 2330, 2331, 2479, 2481, 2497, 2541, 2554, 2630, 2776 |
| BACTERIA_WATER SUPPLY | 237, 397, 398, 657, 1100, 1111, 1513, 1740, 1773, 1864, 2023, 2097 |
| BANGIA (SA: red algae) | 143, 198, 814, 1456, 1483, 2022, 2206, 2642, 2643 |
| BARIUM | 224, 399, 473, 879, 897, 1139, 1270, 1794, 1998, 2026, 2027, 2028, 2034, 2497 |
| BAROMETRIC PRESSURE | 18, 81, 147, 192, 221, 240, 243, 389, 583, 1014, 1015, 1440, 2154 |
| BASEMENT ROCKS | 700 |
| BASIN_MORPHOLOGY (SA: bathymetry; SA: hydrography; SA: morphometry) | 450, 984, 1369, 1944 |
| BASS (SA: specific species) | 120, 139, 261, 393, 426, 440, 517, 518, 532, 664, 696, 809, 811, 931, 1022, 1039, 1150, 1242, 1244, 1248, 1251, 1364, 1566, 1624, 2053, 2298, 2398, 2451, 2539, 2541, 2545, 2720, 2721, 2777 |
| BATHYMETRY (SA: hydrography) | 31, 32, 45, 91, 152, 507, (SA: mapping) 598, 633, 816, 894, 982, 1065, 1075, 1599, 1792, 1893, 1941, 2008, 2034, 2036, 2171, 2261, 2310, 2311, 2312, 2428, 2656, 2732, 2735, 2748 |
| BEACH NOURISHMENT | 158, 159, 582, 908, 1070, 1093, 1208, 1214, 1655, 1792, 1794, 2422, 2424, 2427, 2544, 2742, 2743, 2788 |
| BEACHES_BIOLOGY | 396, 1460, 2064, 2499 |

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| BENTHIC_INVERTEBRATES_BEHAVIOR | 246, 460, 466, 693, 721, 1128, 1213, 1292, 1368, 1797, 1914, 2051, 2432, 2687, 2709, 2779 |
| BENTHIC_INVERTEBRATES_BIOACCUMULATION .. (SA: benthic_invertebrates_uptake) | 24, 260, 531, 568, 576, 597, 605, 606, 607, 610, 611, 614, 679, 739, 747, 1022, 1128, 1332, 1380, 1381, 1382, 1383, 1451, 1505, 1605, 1606, 1630, 1688, 1725, 1730, 1735, 1736, 1741, 1742, 1743, 1744, 1745, 1886, 1995, 2295, 2305, 2432, 2434, 2435, 2443 |
| BENTHIC_INVERTEBRATESBIOMASS | 468, 588, 693, 776, 777, 1213, 1485, 1688, 1691, 1732, 1756, 1757, 1758, 1760, 1761, 2305, 2539, 2569, 2678, 2704 |
| BENTHIC_INVERTEBRATES_DEPTH | 246, 1043, 1345, 1347, 1350, 1368, 1403, 1723, 1732, 1757, 1758, 1831, 2677, 2703, 2704 |
| BENTHIC_INVERTEBRATES_DIET | 50, 246, 460, 464, 466, 468, 505, 605, 730, 776, 1209, 1212, 1213, 1292, 1345, 1347, 1408, 1575, 1606, 1608, 1691, 1762, 1797, 1840, 1884, 1886, 2096, 2295, 2432, 2434, 2548, 2731 |
| BENTHIC_INVERTEBRATES_DISTRIBUTION | 50, 141, 200, 246, 382, 460, 505, 585, 587, 588, 597, 693, 763, 1022, 1212, 1213, 1248, 1345, 1347, 1350, 1351, 1368, 1403, 1404, 1406, 1408, 1517, 1551, 1688, 1691, 1723, 1729, 1756, 1757, 1759, 1760, 1762, 1797, 1831, 2003, 2023, 2051, 2180, 2181, 2312, 2443, 2539, 2540, 2541, 2544, 2545, 2548, 2569, 2678, 2687, 2703, 2704, 2705, 2706, 2707, 2708, 2709, 2710, 2711, 2712, 2713, 2778, 2779 |
| BENTHIC_INVERTEBRATES_GROWTH | 468, 505, 1213, 1408, 1451, 1733, 2112, 2541, 2545, 2710, 2711 |
| BENTHIC_INVERTEBRATES_HABITAT | 246, 302, 460, 464, 466, 468, 587, 588, 795, 1213, 1248, 1291, 1292, 1304, 1347, 1368, 1404, 1408, 1517, 1578, 1608, 1688, 1914, 1942, 2051, 2181, 2311, 2312, 2540, 2541, 2545, 2548, 2630, 2678, 2687, 2703, 2704, 2709 |
| BENTHIC_INVERTEBRATES_LIFE_HISTORY | 2544, 2703, 2710, 2778, 2779 |
| BENTHIC_INVERTEBRATES_METABOLISM | 776, 1408, 1757, 2295, 2539, 2540 |
| BENTHIC_INVERTEBRATES_METALS | 24, 126, 260, 361, 382, 531, 576, 614, 721, 763, 911, 1021, 1022, 1027, 1068, 1083, 1128, 1332, |

BENTHIC_INVERTEBRATES_METALS 1351, 1395, 1505, 1723, 1725, 1729,
(continued) 1730, 1732, 1733, 1735, 1736, 1738,
1740, 1741, 1742, 1743, 1744, 1745,
2180, 2295, 2432, 2464, 2539, 2540,
2541, 2630

BENTHIC_INVERTEBRATES_MODEL
(S: model_benthic_invertebrates)

BENTHIC_INVERTEBRATES_MONITORING 126, 351, 680, 725, 785, 1083,
1242, 1332, 1406, 1691, 1886, 2023,
2180, 2181, 2305, 2539, 2540, 2541,
2545, 2548, 2569

BENTHIC_INVERTEBRATES_MORTALITY 141, 693, 1027, 1350, 1395, 1452,
1467, 1691, 2548, 2678

BENTHIC_INVERTEBRATES_NUTRIENTS 126, 260, 302, 576, 713, 721,
763, 777, 778, 1043, 1395, 1451,
1551, 1725, 1753, 1754, 1755, 1763,
1914, 1915, 1920, 1921, 2000, 2096,
2112, 2180, 2181, 2185, 2198, 2630,
2712

BENTHIC_INVERTEBRATES_ORGANICS
(S: organics_benthic_invertebrates)
(S: toxics_benthic_invertebrates)

BENTHIC_INVERTEBRATES_PHYSIOLOGY 721, 776, 815, 1027, 1128, 1368,
1380, 1605, 1755, 2295, 2522, 2540,
2541, 2544, 2545, 2548

BENTHIC_INVERTEBRATES_POLLUTION
(S: pollution_benthic_invertebrates)

BENTHIC_INVERTEBRATES_POPULATIONS 200, 505, 588, 680, 763, 1213,
1242, 1248, 1291, 1406, 1452, 1485,
1517, 1575, 1691, 1733, 1738, 1756,
1759, 1762, 2051, 2112, 2180, 2181,
2539, 2540, 2541, 2545, 2548, 2675,
2677, 2687, 2703, 2704, 2708, 2710,
2711, 2712, 2713, 2779

BENTHIC_INVERTEBRATES_POWER_PLANTS
(S: power_plants, effects on
benthic_invertebrates)

BENTHIC_INVERTEBRATES_SEASONAL 126, 141, 200, 680, 693, 730,
776, 1304, 1723, 1729, 1733, 1740,
1762, 1884, 1914, 2539, 2544, 2687,
2703, 2704, 2708, 2710, 2779

BENTHIC_INVERTEBRATES_TAXONOMY 302, 303, 1517, 1756, 1757, 2676,
2707

BENTHIC_INVERTEBRATES_TEMPERATURE 200, 246, 302, 464, 468, 588,
(SA: power_plants, effects on
benthic_invertebrates) 597, 676, 693, 776, 777, 1291,
1332, 1381, 1550, 1551, 1723, 1729,
(SA: thermal_pollution, effects on
benthic_invertebrates) 1732, 1733, 1736, 1738, 1740, 1755,
1758, 2023, 2029, 2185, 2544, 2545,
2704, 2708, 2710, 2779

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| BENTHIC_INVERTEBRATES_UPTAKE | 739, 747, 1381, 1551, 1740 |
| (SA: benthic_invertebrates_ bioaccumulation) | |
| BENTHIC_INVERTEBRATES_WATER_QUALITY (S: water_quality_benthic_ invertebrates) | |
| BENTHIC_TOPOGRAPHY (S: topography_benthic) | |
| BENZENE (S: chlorobenzenes) | |
| BENZO-A-ANTHRACENE (SA: PAHs) | 184, 597, 1125, 1669 |
| BENZO-A-PYRENE (SA: PAHs) | 441, 597, 609, 610, 651, 739, 1098, 1113, 1125, 1132, 1382, 1445, 1669, 1729, 1732, 1733, 1738, 1740, 2438 |
| BERYLLIUM | 224, 399, 612, 879, 948, 979, 1729, 1730, 1733, 1735, 1740, 1977, 2027 |
| BHC (SA: lindane; SA: organochlorine pesticides) | 261, 517, 518, 532, 888, 1487, 2276 |
| BIBLIOGRAPHY | 213, 710, 741, 949, 1175, 1198, 1517, 1565, 1731, 1816, 1818, 1908, 1966, 2197, 2518, 2523, 2542, 2547, 2561, 2565, 2630, 2738 |
| BICARBONATE | 472, 2445 |
| BIDDULPHIA (SA: diatoms) | 2761 |
| BIOACCUMULATION (SA: uptake) (SA: bacteria_bioaccumulation) (SA: benthic_invertebrates_ bioaccumulation) (SA: birds_bioaccumulation) (SA: fish_bioaccumulation) (SA: invertebrates_bioaccumulation) (SA: phytoplankton_bioaccumulation) (SA: zooplankton_bioaccumulation) | |
| BIOACCUMULATION_INORGANICS | 24, 52, 94, 143, 224, 260, 261, 323, 404, 495, 509, 531, 576, 614, 655, 659, 679, 933, 968, 969, 990, 1022, 1098, 1109, 1111, 1115, 1117, 1120, 1124, 1128, 1132, 1134, 1137, 1140, 1142, 1143, 1145, 1150, 1175, 1189, 1255, 1332, 1451, 1487, 1505, 1531, 1564, 1576, 1652, 1676, 1701, 1702, 1706, 1725, 1730, 1735, 1736, 1741, 1742, 1743, 1744, 1745, 1777, 1786, 1816, 1883, 1992, 2017, 2019, 2020, 2057, 2142, 2190, 2211, 2281, 2282, 2295, 2301, 2315, 2378, 2432, 2439, 2521, 2532, 2540, 2541, 2545, 2673, 2741, 2774 |

BIOACCUMULATION_METALS
(S: metals_bioaccumulation)

BIOACCUMULATION_ORGANICS 24, 52, 94, 117, 143, 224,
(SA: toxics; SA: toxicity) 260, 261, 287, 288, 323, 404,
(SA: organics_uptake) 439, 440, 485, 486, 495, 509,
516, 517, 518, 519, 520, 521,
522, 531, 532, 568, 570, 576,
597, 605, 606, 607, 610, 611,
614, 649, 650, 654, 655, 670,
679, 706, 707, 720, 739, 747,
793, 806, 871, 886, 887, 888,
933, 968, 969, 971, 990, 994,
1001, 1003, 1025, 1038, 1056, 1057,
1094, 1098, 1109, 1111, 1115, 1117,
1120, 1121, 1124, 1128, 1132, 1142,
1145, 1150, 1175, 1189, 1203, 1222,
1223, 1254, 1255, 1319, 1332, 1362,
1363, 1364, 1379, 1380, 1381, 1382,
1383, 1411, 1445, 1451, 1487, 1501,
1503, 1504, 1505, 1507, 1515, 1516,
1531, 1592, 1593, 1605, 1606, 1630,
1652, 1653, 1676, 1706, 1707, 1711,
1725, 1730, 1735, 1736, 1741, 1742,
1743, 1744, 1745, 1772, 1786, 1816,
1883, 1886, 1913, 1973, 1975, 1992,
2014, 2017, 2019, 2020, 2021, 2037,
2050, 2052, 2141, 2142, 2163, 2175,
2190, 2208, 2210, 2212, 2239, 2250,
2264, 2281, 2282, 2283, 2301, 2305,
2308, 2309, 2315, 2317, 2361, 2367,
2378, 2391, 2432, 2433, 2434, 2435,
2439, 2443, 2521, 2524, 2532, 2536,
2537, 2540, 2541, 2545, 2580, 2647,
2648, 2673, 2689, 2692, 2693, 2694,
2695, 2729, 2751, 2774, 2786

BIOACCUMULATION_RADIOACTIVITY 1134, 1137, 1140, 1143

BIOACCUMULATION_RADIONUCLIDES 1134, 1137, 1140, 1143, 1725, 1730,
1735, 1736, 1741, 1742, 1743, 1744,
1745, 1777, 1816, 2432

BIOACCUMULATION_TOXICS 24, 52, 94, 117, 143, 224,
(SA: uptake_toxics) 260, 261, 287, 288, 323, 404,
439, 440, 485, 486, 495, 509,
517, 518, 519, 520, 521, 522,
531, 532, 568, 570, 576, 597,
605, 607, 610, 611, 614, 650,
654, 655, 659, 670, 679, 706,
707, 720, 739, 747, 793, 798,
806, 871, 886, 887, 888, 933,
968, 969, 971, 990, 994, 1001,
1003, 1022, 1025, 1038, 1056, 1057,
1094, 1098, 1109, 1111, 1117, 1120,
1121, 1124, 1128, 1132, 1142, 1145,
1150, 1175, 1189, 1203, 1222, 1223,

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| BIOACCUMULATION_TOXICS | 1254, 1255, 1319, 1332, 1362, 1363, |
| (continued) | 1364, 1379, 1380, 1381, 1383, 1411, |
| | 1451, 1487, 1501, 1503, 1504, 1505, |
| | 1507, 1515, 1516, 1531, 1564, 1576, |
| | 1592, 1593, 1605, 1606, 1630, 1652, |
| | 1653, 1676, 1688, 1706, 1707, 1711, |
| | 1725, 1730, 1735, 1736, 1741, 1742, |
| | 1743, 1744, 1745, 1772, 1786, 1883, |
| | 1886, 1913, 1973, 1975, 1992, 1995, |
| | 2014, 2017, 2019, 2021, 2037, 2050, |
| | 2057, 2141, 2142, 2163, 2175, 2190, |
| | 2208, 2210, 2211, 2212, 2239, 2250, |
| | 2281, 2282, 2283, 2295, 2301, 2305, |
| | 2308, 2309, 2315, 2317, 2361, 2367, |
| | 2378, 2391, 2432, 2433, 2434, 2435, |
| | 2439, 2443, 2521, 2524, 2532, 2536, |
| | 2537, 2540, 2541, 2545, 2580, 2647, |
| | 2648, 2673, 2689, 2692, 2693, 2694, |
| | 2695, 2729, 2741, 2751, 2774, 2786 |
| BIOASSAY | 24, 236, 279, 287, 288, 322, |
| | 387, 485, 486, 515, 519, 520, |
| | 576, 597, 670, 723, 787, 788, |
| | 805, 923, 1027, 1060, 1147, 1394, |
| | 1395, 1417, 1451, 1457, 1501, 1502, |
| | 1504, 1555, 1556, 1557, 1562, 1821, |
| | 1845, 1846, 1847, 1973, 1975, 2111, |
| | 2122, 2187, 2330, 2355, 2378, 2415, |
| | 2545, 2548, 2554, 2782 |
| BIOAVAILABILITY | 24, 69, 552, 670, 771, 886, |
| | 1159, 1189, 1190, 1379, 1383, 1735, |
| | 1741, 1742, 1743, 1744, 1745, 2268, |
| | 2269, 2270, 2276, 2548 |
| BIOCHEMICAL OXYGEN DEMAND | 123, 313, 502, 979, 1141, 1144, |
| | 1481, 1492, 1513, 2046, 2497, 2554, |
| | 2648 |
| BIOCHEMISTRY | 228, 244, 447, 771, 772, 776, |
| | 815, 934, 935, 949, 970, 1086, |
| | 1087, 1094, 1237, 1365, 1501, 1661, |
| | 1678, 1853, 1854, 1857, 1885, 2017, |
| | 2038, 2156, 2197, 2332, 2694, 2736, |
| | 2763 |
| BIOENERGETICS (S: fish_bioenergetics) | |
| BIOTRANSFORMATION | 306, 739, 1230, 1380, 1381, 1730, |
| (SA: organics_degradation) | 1738, 1740, 2089 |
| BIOTURBATION | 24, 361, 380, 382, 446, 612, |
| | 627, 631, 720, 739, 761, 776, |
| | 777, 778, 815, 1022, 1350, 1351, |
| | 1352, 1381, 1383, 1578, 1612, 1688, |
| | 1725, 1729, 1733, 1735, 1736, 1738, |
| | 1740, 1741, 1742, 1743, 1744, 1745, |

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| BIOTURBATION (continued) | 1753, 1754, 1763, 1921, 1956, 1999, 2000, 2089, 2096, 2241, 2464, 2674 |
| BIRDS (SA: specific species; SA: ducks; SA: geese; SA: gulls; SA: terns) | |
| BIRDS_ABUNDANCE | 298, 821, 917, 919, 922, 933, 970, 986, 1359, 1376, 1488, 1790, 2045, 2368, 2474, 2536, 2623 |
| BIRDS_BACTERIA | 244 (infected with <i>Clostridium botulinum</i>) |
| BIRDS_BEHAVIOR | 298, 477, 721, 917, 922, 970, 1128, 1359, 1885, 1914, 2045, 2220, 2221, 2368, 2474, 2623 |
| BIRDS_BIOACCUMULATION | 24, 654, 798, 887, 888, 933, 968, 971, 1022, 1121, 1128, 1132, 1142, 1145, 1150, 1255, 1706, 1886, 1975, 2239, 2283, 2308, 2309, 2361, 2536, 2537, 2673 |
| BIRDS_DIET | 244, 888, 968, 1594, 1884, 1886, 2459, 2474, 2536, 2537, 2623, 2673 |
| BIRDS_DISEASE | 244, 2623 |
| BIRDS_DISTRIBUTION | 298, 476, 821, 915, 919, 922, 970, 986, 1022, 1359, 1376, 1488, 1790, 1809, 2220, 2536, 2623 |
| BIRDS_EGGS | 609, 888, 917, 923, 933, 968, 970, 1132, 1138, 1150, 1799, 1886, 2673 |
| BIRDS_GROWTH | 917, 2405 |
| BIRDS_HABITAT | 476, 477, 915, 1215, 1217, 1359, 1376, 1594, 1623, 1914, 1982, 2045, 2056, 2101, 2368, 2421, 2459, 2474, 2536, 2537, 2538, 2623 |
| BIRDS_HISTORY | 914, 986, 1215, 1790, 2039, 2056 |
| BIRDS_MIGRATION | 1594, 1790, 2100, 2368, 2623 |
| BIRDS_MONITORING | 798, 821, 888, 970, 1132, 1138, 1142, 1145, 1150, 1158, 1376, 1809, 1886, 1975, 2549 |
| BIRDS_MORPHOLOGY | 721, 1885 |
| BIRDS_MORTALITY | 244, 922, 971, 1121, 1255, 1359, 1488, 1790, 2045, 2283, 2536, 2673 |
| BIRDS_ORGANICS | 24, 609, 654, 721, 821, 887, 888, 917, 923, 933, 968, 970, 971, 1121, 1128, 1132, 1138, 1142, 1145, 1150, 1158, 1255, 1359, 1706, 1799, 1809, 1886, 1975, 2039, 2056, 2239, 2283, 2308, 2309, 2361, 2474, 2492, 2536, 2537, 2564, 2623, 2673 |

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| BIRDS_PHYSIOLOGY | 244, 721, 821, 917, 922, 933, 968, 970, 1121, 1128, 1132, 1138, 1158, 1359, 1706, 1885, 1887, 2220, 2308, 2361, 2536, 2537, 2623, 2673 |
| BIRDS_POPULATIONS | 476, 917, 923, 985, 986, 1376, 1488, 1790, 2045, 2101, 2368, 2474, 2536, 2673 |
| BIRDS_REPRODUCTION | 476, 477, 917, 922, 923, 933, 970, 971, 1142, 1145, 1359, 1360, 1376, 1488, 1706, 1799, 1885, 2045, 2100, 2101, 2220, 2221, 2285, 2308, 2368, 2421, 2474, 2623, 2673 |
| BIRDS_SURVIVAL | 917, 923, 2673 |
| BIRDS_TOXICS (S: toxics_birds) | |
| BISMUTH | 2027 |
| BLOATER (SA: chub) | 36, 42, 43, 224, 261, 283, 397, 457, 460, 464, 465, 466, 467, 505, 532, 576, 623, 665, 670, 683, 931, 988, 992, 993, 994, 995, 999, 1132, 1142, 1213, 1229, 1243, 1248, 1249, 1251, 1576, 1595, 1694, 1730, 1797, 1980, 1981, 2014, 2038, 2097, 2179, 2180, 2262, 2295, 2308, 2309, 2314, 2325, 2391, 2418, 2420, 2435, 2437, 2451, 2540, 2541, 2545, 2548, 2560, 2583, 2585 |
| BLUE PIKE | 811, 2255 |
| BLUE-GREEN ALGAE | 65, 129, 131, 136, 224, 230, 350, 397, 492, 821, 1022, 1304, 1337, 1377, 1535, 1536, 1537, 1703, 1733, 1989, 1990, 2030, 2031, 2051, 2093, 2105, 2107, 2110, 2347, 2350, 2357, 2410, 2414, 2455, 2456, 2522, 2529, 2572, 2573, 2575, 2640 |
| BLUEGILL (SA: sunfish) | 426, 468, 517, 518, 809, 811, 1022, 1150, 1242, 1244, 1251, 1821, 2276, 2451 |
| BLUFFS (general) | 405, 581, 901, 1393, 2259 |
| BLUFFS_EROSION | 4, 72, 73, 74, 154, 155, 157, 158, 161, 181, 182, 249, 251, 252, 254, 292, 293, 294, 371, 406, 435, 487, 493, 582, 633, 634, 635, 636, 637, 638, 704, 718, 742, 800, 818, 880, 881, 889, 892, 894, 895, 908, 909, 1065, 1070, 1072, 1075, 1079, 1176, 1215, 1274, 1275, 1276, 1317, 1318, 1390, 1620, 1626, 1632, 1635, 1638, 1639, 1775, 1792, 1793, 1875, |

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| BLUFFS_EROSION (continued) | 1879, 1880, 1881, 1888, 1916, 1941, 1956, 1965, 2043, 2047, 2048, 2064, 2145, 2146, 2159, 2336, 2337, 2338, 2424, 2427, 2484, 2486, 2496, 2509, 2565, 2566, 2567, 2568, 2658, 2726, 2745, 2747, 2749, 2765, 2788, 2790 |
| BLUFFS RECESSION | 4, 72, 73, 154, 155, 158, 161, 181, 182, 249, 251, 252, 254, 292, 293, 294, 371, 406, 435, 582, 633, 634, 635, 636, 638, 704, 800, 818, 889, 892, 895, 908, 909, 1065, 1070, 1072, 1075, 1274, 1275, 1276, 1318, 1626, 1632, 1775, 1793, 1879, 1880, 1881, 1888, 1916, 1941, 2047, 2146, 2159, 2336, 2337, 2338, 2424, 2484, 2486, 2509, 2566, 2568, 2726, 2747, 2749, 2765, 2788 |
| BLUFFS SLUMPING | 4, 155, 157, 161, 251, 292, 293, 371, 406, 487, 493, 582, 633, 634, 637, 638, 880, 881, 1072, 1075, 1079, 1215, 1317, 1620, 1632, 1635, 1638, 1775, 1793, 1875, 1881, 1941, 2043, 2048, 2145, 2146, 2336, 2496, 2726, 2745, 2765 |
| BOATING | 217, 509, 510, 542, 748, 749, 750, 824, 856, 987, 991, 1066, 1093, 1534, 1603, 1656, 1657, 1697, 1713, 1714, 1901, 2372, 2373, 2374, 2375, 2376, 2425, 2486, 2498, 2518, 2637, 2754, 2755, 2756, 2757, 2758 |
| BOGS (S: wetlands) | |
| BORON | 52, 339, 399, 420, 473, 788, 879, 910, 979, 1083, 1139, 1270, 1998, 2295, 2466, 2497, 2696 |
| BOSMINA | 50, 246, 583, 680, 681, 682, 689, 690, 692, 693, 761, 1248, 1560, 1759, 2178, 2199, 2545 |
| BOWFIN | 139, 393, 426, 696, 809, 811, 1244, 1248 |
| BREAKWATERS (SA: coastal structures) ... | 72, 168, 182, 249, 251, 252, 254, 255, 330, 416, 582, 633, 1072, 1075, 1214, 1626, 1632, 1655, 1656, 1657, 1916, 2306, 2424, 2427, 2484, 2486, 2487, 2499, 2505, 2506, 2507, 2511, 2744, 2765, 2788 |
| BROMINE | 163, 316, 317, 719, 869, 1456, 1794 |
| BROOK LAMPREY | 527, 811, 1541, 2584 |

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| BROOK TROUT | 120, 197, 261, 426, 527, 528, 701, 702, 779, 811, 904, 905, 1150, 1242, 1248, 1354, 1355, 2298, 2309, 2584 |
| BROWN ALGAE | 2136 |
| BROWN TROUT (SA: trout) | 50, 177, 195, 196, 197, 261, 397, 399, 426, 527, 528, 540, 541, 701, 702, 809, 811, 905, 987, 991, 998, 1037, 1150, 1223, 1244, 1248, 1355, 1468, 1606, 1696, 2019, 2020, 2021, 2156, 2296, 2298, 2300, 2301, 2302, 2308, 2418, 2420, 2435, 2451, 2477, 2522, 2583, 2584, 2585, 2586, 2720, 2724 |
| BRYOPHYTA | 2349 |
| BRYOZOA | 1404, 2051 |
| BULKHEADS (SA: coastal structures) | 908, 909, 1072, 1075, 2427, 2499, 2505, 2765, 2788 |
| BULLHEAD | 42, 116, 190, 261, 393, 426, 468, 517, 518, 527, 696, 809, 811, 923, 1150, 1242, 1244, 1251, 1363, 1364, 1566, 2451, 2720 |
| BURBOT | 116, 190, 200, 247, 418, 426, 457, 527, 809, 811, 1243, 1244, 1248, 1292, 1314, 1466, 1468, 1545, 1791, 2053, 2286, 2310, 2312, 2321, 2420, 2451, 2560, 2585, 2720, 2724 |
| CADDISFLY (S: Trichoptera) | |
| CADMIUM | 6, 7, 22, 26, 27, 54, 65, 67, 123, 184, 211, 224, 260, 261, 355, 385, 399, 420, 441, 555, 644, 659, 660, 662, 663, 728, 758, 804, 821, 879, 897, 933, 950, 957, 1068, 1083, 1113, 1124, 1125, 1128, 1148, 1180, 1181, 1207, 1330, 1332, 1394, 1555, 1556, 1557, 1558, 1560, 1561, 1562, 1563, 1564, 1576, 1601, 1676, 1698, 1699, 1700, 1701, 1702, 1794, 1807, 1828, 1835, 1846, 1847, 1848, 1849, 1855, 1998, 2018, 2027, 2039, 2057, 2132, 2140, 2222, 2231, 2235, 2236, 2276, 2281, 2295, 2301, 2330, 2331, 2381, 2438, 2444, 2464, 2465, 2469, 2497, 2535, 2696, 2771 |
| CALCITE | 946, 1148, 2034 |
| CALCITE WHITINGS (S: calcium carbonate) | |

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| CALCIUM | 6, 7, 20, 26, 146, 147, 148, 163, 224, 346, 374, 399, 420, 472, 473, 502, 596, 598, 644, 647, 660, 717, 719, 763, 774, 821, 910, 979, 1113, 1124, 1125, 1270, 1412, 1414, 1440, 1448, 1496, 1519, 1520, 1704, 1823, 1825, 1828, 1955, 1998, 2007, 2025, 2026, 2028, 2034, 2115, 2138, 2139, 2180, 2199, 2231, 2232, 2233, 2235, 2237, 2370, 2371, 2445, 2463, 2466, 2469, 2572, 2573, 2644, 2775 |
| CALCIUM CARBONATE | 472, 473, 596, 717, 1448, 1823, 1955, 2199, 2370, 2371, 2463, 2572, 2573, 2775 |
| CALUMET STAGE (S: lake stages) | |
| CARBOHYDRATES | 368 |
| CARBON DIOXIDE | 54, 136, 290, 421, 594, 1337 |
| CARBON-14 (SA: carbon uptake) | 425, 1370, 1738, 2061 |
| (SA: dating) | |
| CARBON INORGANIC (S: inorganic carbon) | |
| CARBON_ORGANIC (S: organic carbon) | |
| CARBON UPTAKE | 277, 1551, 1661, 1740, 2120, 2199, 2405, 2522, 2529 |
| CARBONATE | 49, 156, 472, 473, 596, 717, 759, 926, 1448, 1823, 1954, 1955, 1956, 1957, 2199, 2370, 2371, 2463, 2572, 2573, 2775 |
| CARP | 42, 116, 139, 190, 261, 391, 393, 426, 517, 518, 527, 559, 664, 696, 809, 811, 821, 931, 1022, 1150, 1243, 1244, 1248, 1251, 1314, 1363, 1364, 1468, 1574, 1624, 1791, 2143, 2298, 2308, 2309, 2418, 2420, 2435, 2451, 2541, 2560, 2583, 2720, 2724 |
| CASPIAN TERNS (SA: birds) | 476, 477, 1488, 2221 |
| CATFISH | 116, 139, 426, 468, 664, 696, 809, 811, 931, 1022, 1150, 1244, 1251, 1363, 1364, 2451, 2720, 2721, 2777 |
| CATOSTOMIDS (SA: sucker) | 1566 |
| CERIODAPHNIA | 682, 689, 690, 692, 872, 1451, 1560, 1562 |
| CERIUM | 9, 1794, 1825, 1826, 1998 |

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| CESIUM | 10, 381, 382, 386, 525, 612, 627, 719, 974, 975, 1253, 1351, 1492, 1729, 1730, 1732, 1733, 1735, 1736, 1740, 1794, 1977, 1996, 1997, 1998, 1999, 2000, 2176, 2432, 2614, 2734 |
| CESTODA | 36, 37 |
| CHEMICAL OXYGEN DEMAND | 103, 146, 148, 260, 261, 737, 766, 767, 1532, 2497 |
| CHEMISTRY (S: geochemistry, inorganics, metals, nutrients, organics, sediments, or water quality) | |
| CHESTNUT LAMPREY | 2451 |
| CHICAGO OUTLET (SA: lake outlets) | 899, 900, 901 |
| CHINOOK SALMON (SA: salmon) | 39, 261, 287, 332, 333, 334, 335, 337, 397, 426, 527, 528, 570, 573, 779, 780, 793, 809, 811, 821, 904, 905, 940, 987, 991, 998, 1037, 1057, 1060, 1223, 1244, 1248, 1354, 1355, 1414, 1468, 1605, 1606, 1696, 1800, 1802, 1891, 1913, 2017, 2066, 2067, 2251, 2262, 2305, 2341, 2418, 2420, 2435, 2451, 2477, 2584, 2585, 2586, 2724, 2729, 2730, 2777 |
| CHIRONOMIDS (SA: Diptera) | 50, 777, 778, 796, 1304, 1406, 1445, 1452, 1550, 1732, 1736, 1738, 1753, 1755, 1756, 1757, 1758, 1762, 1763, 2134, 2678, 2687, 2703, 2706, 2707, 2708, 2709, 2711, 2712, 2713, 2731 |
| CHLAMYDOMONAS (SA: green algae) | 236, 387, 1730, 1736, 2093, 2579 |
| CHLORDANE | 261, 399, 404, 473, 517, 518, 532, 679, 729, 740, 793, 968, 969, 971, 994, 1060, 1094, 1098, 1148, 1180, 1181, 1189, 1254, 1255, 1332, 1364, 1487, 1676, 1794, 1838, 1913, 2097, 2142, 2276, 2304, 2378, 2541, 2580, 2581, 2648, 2724, 2729 |
| CHLORIDE | 6, 123, 143, 147, 148, 163, 224, 281, 306, 339, 346, 361, 397, 398, 399, 400, 401, 472, 473, 514, 598, 600, 647, 719, 735, 763, 821, 897, 911, 950, 979, 1027, 1083, 1089, 1113, 1124, 1125, 1127, 1139, 1142, 1145, 1155, 1159, 1160, 1161, 1189, 1248, 1270, 1287, 1337, 1344, 1374, 1384, 1386, 1394, |

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| CHLORIDE (continued) | 1414, 1440, 1451, 1660, 1662, 1729, 1733, 1915, 2007, 2008, 2026, 2028, 2046, 2097, 2120, 2121, 2132, 2151, 2195, 2275, 2276, 2277, 2278, 2329, 2330, 2331, 2378, 2381, 2382, 2383, 2386, 2439, 2466, 2497, 2522, 2529, 2644 |
| CHLORINATED HYDROCARBONS (S: organics) (S: specific compounds) | |
| CHLORINE | 7, 129, 184, 263, 277, 279, 657, 1125, 1155, 2186, 2187, 2378, 2782 |
| CHLOROBENZENES | 24, 729, 2598 |
| (SA: specific compounds) | |
| CHLOROPHYLL (SA: plant pigments) | 101, 129, 131, 224, 225, 227, 228, 229, 277, 278, 280, 308, 346, 350, 359, 362, 445, 547, 660, 697, 698, 763, 857, 872, 911, 918, 920, 923, 979, 1142, 1145, 1303, 1338, 1397, 1399, 1433, 1436, 1437, 1440, 1450, 1660, 1661, 1662, 1703, 1723, 1729, 1733, 1844, 1846, 1861, 1990, 1993, 2008, 2012, 2013, 2030, 2031, 2032, 2039, 2061, 2094, 2104, 2109, 2120, 2121, 2122, 2132, 2162, 2199, 2329, 2330, 2331, 2370, 2395, 2405, 2415, 2522, 2526, 2529, 2574, 2762, 2780, 2781 |
| CHLOROPHYTA (S: green algae) | |
| CHLOROPHYLL_SEASONAL DISTRIBUTION | 278, 280, 445, 2031 |
| CHROMIUM | 45, 54, 260, 261, 316, 317, 346, 399, 415, 473, 555, 600, 644, 659, 718, 719, 804, 821, 858, 869, 879, 897, 950, 979, 1148, 1180, 1181, 1332, 1394, 1395, 1794, 1825, 1955, 2025, 2026, 2027, 2028, 2034, 2138, 2140, 2236, 2295, 2330, 2444, 2466, 2469, 2497, 2535, 2771 |
| CHRYSENE (SA: PAHs) | 610 |
| CHRYSOPHYCEAE | 1535, 1703, 1993, 2350 |
| CHRYSOPHYTA (S: Chrysophyceae; S: diatoms) | |
| CHUB (SA: bloater) | 110, 116, 186, 190, 261, 418, 426, 460, 468, 527, 670, 809, 811, 848, 849, 850, 989, 994, 1022, 1220, 1229, 1312, 1314, 1363, 1468, 1528, 1624, 1694, 1786, 1797, |

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| CHUB (continued) | 1856, 2014, 2177, 2180, 2181, 2182, 2262, 2305, 2391, 2451, 2471, 2472, 2522, 2539, 2655, 2663, 2724, 2777 |
| CHUBSUCKER | 2451 |
| CIRCULATION (general) | 1894, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081 |
| CIRCULATION_AERIAL PHOTOGRAPHY | 1681 |
| CIRCULATION_DISCHARGE | 864, 1923, 2173, 2762 |
| CIRCULATION_HARBORS | 924, 1369, 2173, 2306, 2538 |
| CIRCULATION_LAKE BREEZE | 1267, 2059 |
| CIRCULATION_MODEL | 28, 29, 31, 32, 33, 152, (SA: model_currents) 884, 924, 1267, 1438, 1448, 1604, 1679, 1680, 1683, 1723, 1733, 1736, 1738, 1740, 1832, 1892, 1923, 1994, 2164, 2165, 2166, 2168, 2173, 2306 |
| CIRCULATION_POLLUTION | 230, 864, 924, 1267, 1288, 1418, (SA: circulation_water quality) 1432, 1438, 1439, 1449, 1583, 1584, 1679, 1733, 1736, 1984, 2028, 2031, 2168, 2173, 2306, 2538, 2570, 2762 |
| CIRCULATION_POWER PLANTS | 230, 864, 2028, 2031, 2059, 2306, 2570, 2762 |
| CIRCULATION_REMOTE SENSING | 28, 326, 1681, 1895, 2370 |
| CIRCULATION_RESEARCH NEEDS | 916, 924, 1448, 1449, 1681, 1723, 1733, 1740 |
| CIRCULATION REVIEW (S: review_circulation/currents) | |
| CIRCULATION_SEASONAL VARIATION | 33, 267, 1005, 1644, 1680, 1681, 1723, 1733, 1740, 1923, 2059, 2088, 2617 |
| CIRCULATION_SEDIMENTS | 44, 150, 582, 884, 1418, 1432, 1439, 1448, 1449, 1604, 1723, 1733, 1736, 1738, 1740, 1832, 1994, 2348, 2538, 2589, 2745, 2746 |
| CIRCULATION_TEMPERATURE | 29, 33, 44, 92, 150, 230, 471, 864, 924, 1005, 1288, 1439, 1644, 1680, 1681, 1723, 1733, 1736, 1738, 1740, 2028, 2031, 2059, 2071, 2088, 2232, 2306, 2570, 2617, 2762 |
| CIRCULATION_TRANSPORT | 152, 884, 916, 1267, 1418, 1432, 1438, 1439, 1448, 1449, 1583, 1584, 1596, 1604, 1679, 1680, 1681, 1712, 1723, 1733, 1736, 1740, 1832, 1984, 1994, 2173, 2232, 2666, 2746 |
| CIRCULATION_WATER QUALITY | 916, 924, 1288, 1679, 1723, 1733, (SA: circulation_pollution) 1736, 1740, 1984, 2173, 2348 |

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| CIRCULATION_WAVES | 31, 32, 470, 471, 569, 751, 1369, 1432, 1439, 1448, 1449, 1596, 1644, 1680, 1683, 1723, 1733, 1736, 1738, 1740, 1832, 1948, 2088, 2173, 2306, 2589, 2745 |
| CISCO | 110, 116, 457, 460, 468, 505, 532, 809, 811, 1209, 1227, 1312, 1856, 2256, 2471, 2472, 2540, 2721 |
| CLADOCERA (SA: specific species) | 50, 114, 231, 236, 246, 322, 468, 481, 583, 584, 677, 678, 680, 681, 682, 683, 685, 687, 689, 690, 691, 692, 693, 699, 761, 762, 763, 768, 872, 923, 943, 1006, 1022, 1026, 1209, 1210, 1248, 1395, 1445, 1451, 1555, 1556, 1557, 1560, 1561, 1562, 1563, 1600, 1729, 1730, 1732, 1733, 1736, 1738, 1756, 1757, 1758, 1759, 1762, 1797, 1821, 1989, 2093, 2094, 2112, 2162, 2178, 2199, 2276, 2545 |
| CLADOPHORA | 95, 96, 97, 100, 143, 198, (SA: green algae) (SH: periphyton) |
| CLAMS | 788, 814, 960, 981, 1404, 1455, 1483, 1684, 2022, 2023, 2051, 2237, 2347, 2348, 2522, 2642, 2643, 2738 |
| CLAY | 109, 117, 261, 576, 730, 796, 1292, 1404, 1517, 1688, 1757, 1758, 1760, 1762, 2676, 2706, 2707, 2708, 2779 |
| CLIMATE (SA: history_climate) | 5, 156, 158, 160, 167, 183, 249, 316, 317, 319, 320, 349, 374, 388, 405, 406, 555, 629, 634, 653, 669, 742, 869, 870, 894, 898, 901, 902, 926, 1318, 1333, 1459, 1551, 1599, 1604, 1610, 1655, 1663, 1664, 1793, 1794, 1795, 1955, 1957, 2034, 2036, 2147, 2203, 2240, 2311, 2312, 2445, 2448, 2594, 2612, 2654, 2683, 2686, 2746 |
| CLIMATE (SA: history_climate) | 2, 16, 17, 18, 35, 76, 78, 79, 80, 81, 82, 83, 86, 88, 89, 90, 93, 111, 112, 113, 118, 119, 155, 156, 192, 221, 240, 241, 242, 243, 268, 269, 290, 305, 352, 353, 354, 355, 356, 421, 422, 423, 523, 535, 594, 633, 641, 651, 711, 737, 781, 782, 783, 825, 897, 912, 1012, 1014, 1015, 1046, 1068, 1085, 1125, 1168, 1169, 1170, 1279, 1280, 1281, 1288, 1297, 1300, 1390, 1428, 1532, 1554, 1566, 1666, 1690, 1713, 1733, 1734, 1737, 1852, |

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| CLIMATE (continued) | 1858, 1922, 1929, 1930, 1933, 1934, 1936, 1939, 1961, 2005, 2059, 2070, 2133, 2153, 2154, 2155, 2174, 2245, 2246, 2271, 2272, 2284, 2369, 2460, 2559a, 2259b, 2575, 2622, 2654, 2700, 2788 |
| CLIMATE_LAKE LEVELS | 17, 155, 192, 269, 290, 354, 423, 535, 633, 737, 825, 897, 1068, 1168, 1169, 1170, 1390, 1532, 1554, 1733, 1734, 1737, 1930, 1933, 1934, 2174, 2272, 2284, 2559a, 2559b, 2788 |
| CLOUDS | 2, 111, 112, 113, 207, 241, 243, 352, 356, 711, 1014, 1279, 1280, 2085 |
| COAL | 300, 829, 860, 861, 879, 910, 972, 973, 1473, 1474, 1633, 2518 |
| COASTAL_MANAGEMENT | 4, 46, 72, 73, 74, 157, 180, 187, 192, 239, 252, 291, 311, 328, 330, 357, 359, 371, 403, 431, 435, 487, 493, 494, 497, 498, 507, 512, 582, 694, 803, 819, 823, 824, 827, 829, 830, 835, 880, 881, 908, 909, 960, 1064, 1065, 1067, 1070, 1071, 1072, 1074, 1075, 1079, 1091, 1092, 1093, 1184, 1214, 1215, 1216, 1273, 1276, 1291, 1297, 1317, 1318, 1371, 1372, 1373, 1493, 1496, 1497, 1620, 1622, 1626, 1629, 1632, 1635, 1638, 1650, 1654, 1655, 1657, 1679, 1738, 1770, 1775, 1796, 1863, 1875, 1914, 1916, 1941, 1959, 2023, 2042, 2099, 2145, 2146, 2159, 2303, 2329, 2330, 2331, 2364, 2423, 2424, 2427, 2428, 2480, 2484, 2485, 2486, 2487, 2487, 2496, 2498, 2499, 2500, 2501, 2502, 2503, 2505, 2506, 2507, 2518, 2541, 2565, 2722, 2726, 2742, 2743, 2744, 2745, 2747, 2752, 2765, 2788, 2789 |
| COASTAL_MAPPING (S: mapping_coastal) | |
| COASTAL_STRUCTURES | 4, 72, 74, 154, 157, 158, 162, 168, 181, 182, 239, 249, 251, 252, 254, 255, 257, 286, 328, 330, 371, 403, 416, 428, 430, 431, 435, 493, 494, 507, 524, 582, 633, 742, 880, 881, 908, 909, 1064, 1070, 1071, 1072, 1073, 1074, 1075, 1208, 1214, 1232, 1330, 1371, 1372, 1373, 1404, 1466, 1626, 1629, 1632, 1638, 1650, 1654, 1655, 1656, 1657, 1713, 1775, 1792, |

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| COASTAL_STRUCTURES (continued) | 1793, 1819, 1863, 1873, 1875, 1908, 1916, 2006, 2145, 2146, 2174, 2252, 2303, 2306, 2364, 2422, 2423, 2424, 2426, 2427, 2483, 2484, 2486, 2487, 2487, 2491, 2496, 2499, 2505, 2506, 2507, 2511, 2512, 2513, 2565, 2636, 2743, 2744, 2745, 2752, 2755, 2756, 2758, 2760, 2765, 2788, 2789 |
| COBALT | 224, 399, 415, 473, 719, 758, 1139, 1148, 1825, 1998, 2026, 2027, 2028, 2034, 2222, 2295 |
| COD | 139 |
| COELENTERATA (S: Hydrozoa) | |
| COHO SALMON (SA: salmon) | 24, 39, 50, 116, 177, 195, (SA: salmonid) 196, 197, 224, 261, 279, 336, 397, 399, 404, 426, 468, 519, 520, 527, 528, 532, 570, 573, 576, 701, 702, 779, 809, 811, 821, 904, 905, 934, 935, 940, 987, 991, 998, 999, 1022, 1037, 1039, 1060, 1142, 1145, 1150, 1223, 1237, 1244, 1248, 1312, 1353, 1354, 1355, 1411, 1412, 1413, 1414, 1466, 1468, 1605, 1606, 1652, 1676, 1677, 1678, 1696, 1730, 1860, 1913, 2017, 2038, 2066, 2067, 2097, 2156, 2181, 2186, 2251, 2262, 2276, 2295, 2305, 2308, 2341, 2378, 2418, 2420, 2435, 2451, 2477, 2522, 2583, 2584, 2585, 2586, 2724, 2729, 2730, 2777 |
| COLEOPTERA (SA: insects) | 1404 |
| COLIFORM_BACTERIA (S: bacteria) | |
| COMMERCIAL FISHING | 34, 103, 116, 166, 176, 185, 186, 188, 190, 195, 214, 276, 283, 284, 285, 310, 331, 407, 408, 419, 426, 458, 505, 510, 527, 528, 529, 570, 571, 617, 620, 640, 655, 671, 673, 674, 734, 832, 839, 841, 842, 843, 845, 846, 847, 848, 849, 850, 859, 866, 904, 905, 913, 921, 923, 930, 931, 932, 983, 988, 989, 990, 994, 995, 996, 997, 999, 1039, 1058, 1061, 1167, 1205, 1206, 1215, 1217, 1220, 1227, 1229, 1234, 1249, 1260, 1284, 1285, 1290, 1307, 1336, 1346, 1356, 1409, 1424, 1443, 1490, 1527, 1528, 1530, 1574, 1575, 1623, 1624, 1647, 1691, 1692, 1694, 1695, 1806, 1850, 1859, 1860, 1914, 1960, 2039, 2041, 2050, 2052, |

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| COMMERCIAL FISHING (continued) | 2054, 2055, 2065, 2067, 2103, 2112, 2149, 2150, 2157, 2161, 2163, 2182, 2209, 2248, 2253, 2257, 2262, 2291, 2305, 2343, 2398, 2399, 2400, 2515, 2582, 2606, 2660, 2664, 2667, 2720, 2723, 2724, 2774 |
| CONDUCTIVITY | 122, 123, 146, 147, 148, 149, 172, 183, 224, 238, 296, 346, 373, 374, 398, 473, 600, 658, 660, 763, 797, 807, 855, 897, 911, 979, 1043, 1089, 1270, 1288, 1423, 1440, 1451, 1553, 1610, 2008, 2028, 2040, 2115, 2120, 2132, 2329, 2330, 2331, 2416, 2554, 2719 |
| CONNECTING CHANNELS | 44, 45, 85, 88, 143, 146, (SA: waterways) 192, 209, 290, 344, 451, 538, 539, 808, 810, 811, 966, 981, 985, 1013, 1138, 1161, 1169, 1170, 1188, 1427, 1464, 1493, 1494, 1495, 1496, 1723, 1729, 1730, 1732, 1733, 1736, 1738, 1740, 1749, 1789, 1790, 1873, 1923, 1924, 1925, 1931, 1932, 1938, 1950, 2086, 2087, 2121, 2125, 2127, 2189, 2350, 2489, 2490, 2491, 2495, 2513, 2514, 2520, 2539, 2540, 2541, 2544, 2548, 2637, 2760 |
| CONSUMPTIVE USE (S: water use) | |
| COPEPODA (SA: specific species) | 50, 114, 133, 225, 228, 229, 231, 232, 246, 279, 466, 480, 678, 680, 681, 682, 685, 686, 687, 688, 689, 690, 691, 692, 693, 712, 714, 730, 761, 762, 763, 765, 872, 928, 929, 943, 1006, 1026, 1209, 1560, 1561, 1562, 1563, 1600, 1601, 1723, 1729, 1730, 1732, 1733, 1736, 1740, 1752, 1756, 1757, 1758, 1759, 1762, 1797, 1988, 1989, 2004, 2094, 2104, 2162, 2178, 2199, 2334, 2576, 2578, 2579, 2632, 2633, 2634 |
| COPPER | 6, 7, 24, 26, 45, 54, 67, 68, 69, 224, 260, 261, 270, 316, 317, 346, 355, 399, 415, 555, 576, 600, 644, 659, 660, 662, 663, 717, 718, 719, 728, 758, 804, 821, 869, 870, 879, 933, 950, 957, 979, 1068, 1083, 1113, 1124, 1125, 1128, 1148, 1150, 1159, 1160, 1161, 1199, 1332, 1394, 1395, 1519, 1520, 1618, 1619, 1676, 1794, 1828, 1829, 1849, 1855, 1998, 2025, 2026, 2028, 2034, 2039, |

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| COPPER (continued) | 2057, 2138, 2139, 2222, 2231, 2235, 2236, 2258, 2276, 2281, 2295, 2301, 2381, 2444, 2465, 2466, 2468, 2469, 2497, 2771 |
| COREGONINES (SA: specific species) | 110, 1243, 1251, 2181, 2286, 2470, 2471, 2472 |
| CORING (S: sediment cores) | |
| CORIOLIS FORCE | 1282, 1682, 2263, 2369 |
| CORMORANTS (SA: birds) | 968, 2101, 2308 |
| CORYDALIDAE (S: Megaloptera) | |
| COTTIDS (SA: sculpin) | 102 |
| CRAPPIES | 261, 391, 393, 426, 468, 517, 518, 809, 811, 1150, 1242, 1248, 1251, 1364, 1468, 2451 |
| CRAYFISH | 1213, 1605, 1606, 2051, 2311, 2312, 2662, 2678, 2704 |
| CREEL CENSUS (SA: fish_monitoring) | 904, 987, 1037, 1354, 1489, 1696, 1697, 2477, 2584, 2586 |
| CRUSTAL MOVEMENTS | 1463, 1464 |
| (SA: isostatic rebound) | |
| CRYPTOPHYTA | 1993 |
| CURRENTS | 28, 29, 30, 31, 32, 33, 61, 147, 150, 152, 159, 213, 234, 292, 293, 315, 319, 326, 346, 347, 349, 371, 375, 428, 470, 471, 569, 641, 699, 702, 751, 908, 916, 924, 925, 926, 951, 1005, 1024, 1047, 1214, 1231, 1237, 1248, 1288, 1297, 1318, 1331, 1349, 1418, 1432, 1439, 1441, 1442, 1448, 1449, 1467, 1469, 1472, 1514, 1535, 1550, 1553, 1582, 1596, 1644, 1674, 1679, 1680, 1683, 1684, 1717, 1718, 1719, 1720, 1721, 1722, 1723, 1724, 1726, 1727, 1729, 1732, 1733, 1734, 1735, 1736, 1738, 1739, 1740, 1762, 1819, 1832, 1833, 1875, 1888, 1892, 1893, 1894, 1895, 1914, 1916, 1923, 1948, 1957, 1984, 2023, 2036, 2048, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2086, 2087, 2088, 2097, 2104, 2120, 2164, 2165, 2166, 2168, 2173, 2199, 2218, 2261, 2262, 2303, 2306, 2310, 2311, 2312, 2351, 2366, 2370, 2422, 2423, 2426, 2447, 2458, 2461, 2484, 2486, 2492, 2568, 2589, 2612, 2651, 2653, 2669, 2747 |

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| CURRENTS_DISPERSION (S: dispersion_currents) | |
| CURRENTS_EFFLUENT | 315, 925, 1684, 1833, 2097 |
| CURRENTS_HABITAT | 699, 702, 1248, 1914, 2310, 2311, 2312, 2458 |
| CURRENTS_HISTORY | 702, 924, 925, 1231, 1248, 1535, 1550, 1875, 1916, 2023, 2048, 2351, 2426, 2484, 2486, 2747 |
| CURRENTS_MODEL (S: model_currents) | |
| CURRENTS_POLLUTION | 234, 924, 925, 1288, 1418, 1432, (SA: currents_water quality) 1439, 1449, 1514, 1550, 1679, 1684, 1729, 1733, 1735, 1736, 1833, 1984, 2023, 2082, 2097, 2104, 2120, 2168, 2173, 2199, 2306, 2492, 2669 |
| CURRENTS_REMOTE SENSING | 28, 292, 293, 326, 1024, 1875, 1895, 2023, 2218, 2370 |
| CURRENTS_RESEARCH NEEDS (S: research_needs_currents) | |
| CURRENTS REVIEW (SA: review_circulation/currents) | |
| CURRENTS_SEASONAL VARIATION | 33, 346, 347, 926, 1005, 1024, 1644, 1680, 1723, 1729, 1733, 1740, 1762, 1893, 1914, 1923, 2082, 2086, 2088, 2104, 2120, 2199, 2262, 2351, 2653 |
| CURRENTS_TRANSPORT | 152, 234, 292, 293, 315, 319, 346, 347, 349, 428, 916, 926, 1231, 1297, 1331, 1418, 1432, 1439, 1442, 1448, 1449, 1582, 1596, 1679, 1680, 1684, 1723, 1729, 1732, 1733, 1735, 1736, 1740, 1819, 1832, 1875, 1888, 1916, 1957, 1984, 2036, 2082, 2173, 2199, 2303, 2366, 2423, 2484, 2612, 2669, 2747 |
| CURRENTS_WATER QUALITY | 61, 147, 213, 375, 916, 924, (S: currents_pollution) 925, 1248, 1288, 1349, 1679, 1684, 1717, 1718, 1719, 1720, 1721, 1722, 1723, 1724, 1726, 1727, 1729, 1733, 1735, 1736, 1739, 1740, 1984, 2097, 2104, 2173, 2458, 2492 |
| CYANAZINE | 473 |
| CYANIDE | 261, 399, 401, 473, 950, 1089, 1150, 1394, 1395, 2097, 2497 |
| CYANOPHYTA (S: blue-green algae) | |
| CYCLOPS | 50, 133, 680, 681, 682, 689, 690, 692, 693, 872, 1560, 1562, 1723, 2178, 2334, 2634 |

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| CYCLOTELLA (SA: diatoms) | 1031, 1337, 1401, 1407, 1457, 1535, 2199, 2223, 2350, 2355, 2357, 2453, 2456, 2457, 2640 |
| CYMBELLA (SA: diatoms) | 1302, 2350 |
| DACE | 50, 259, 426, 809, 811, 1251, 1418, 2420, 2451, 2583, 2585 |
| DAPHNIA | 236, 246, 308, 322, 468, 481, 583, 677, 680, 681, 682, 683, 689, 690, 691, 692, 693, 768, 872, 923, 1022, 1209, 1210, 1395, 1445, 1451, 1555, 1556, 1557, 1560, 1562, 1729, 1730, 1732, 1733, 1736, 1738, 1821, 1989, 2093, 2112, 2199, 2276, 2545 |
| DARTER | 168, 200, 201, 391, 393, 426, 457, 559, 809, 811, 1242, 1243, 1244, 1251, 1292, 1468, 1524, 1791, 2143, 2418, 2420, 2451, 2720 |
| DATABASE_ICE | 82, 83, 84, 213, 1729, 1740, 1922 |
| DATABASE_LAKE LEVELS | 213, 837, 1170, 1729, 1740, 1750, 1938 |
| DATABASE_PRECIPITATION | 1170, 1729, 1740, 1938, 1939 |
| DATABASE_TEMPERATURE | 82, 83, 84, 213, 979, 1729, 1740, 1922 |
| DATABASE_WATER QUALITY (S: water quality_database) | |
| DATABASE_WATER USE | 837, 1740 |
| DATING | 71, 156, 160, 379, 381, 382, (SA: carbon-14; SA: lead-210) 384, 386, 411, 412, 425, 525, 630, 899, 901, 902, 1253, 1343, 1389, 1390, 1566, 1814, 1815, 1954, 1955, 1956, 1966, 1994, 2123, 2176, 2259, 2448, 2462 |
| DDD (SA: TDE) | 261, 339, 404, 651, 679, 888, (SA: organochlorine pesticides) 969, 1113, 1125, 2276 |
| DDE | 165, 261, 404, 532, 651, 679, (SA: organochlorine pesticides) 732, 740, 793, 888, 933, 968, 971, 979, 1001, 1057, 1113, 1125, 1154, 1254, 1364, 1487, 1501, 1503, 1504, 1506, 1794, 1886, 2019, 2021, 2037, 2190, 2648, 2673, 2693, 2695 |
| DDT | 24, 71, 94, 170, 224, 261, (SA: organochlorine pesticides) 297, 323, 324, 339, 396, 397, 399, 404, 419, 473, 518, 521, 522, 532, 576, 595, 611, 612, 639, 651, 655, 670, 679, 740, 793, 888, 911, 933, 968, 969, |

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| DDT (continued) | 979, 996, 1001, 1002, 1057, 1060, 1068, 1113, 1121, 1124, 1125, 1132, 1138, 1142, 1145, 1148, 1154, 1158, 1160, 1161, 1180, 1181, 1185, 1188, 1189, 1254, 1330, 1332, 1448, 1487, 1508, 1531, 1605, 1606, 1619, 1652, 1653, 1676, 1692, 1695, 1705, 1706, 1707, 1711, 1730, 1732, 1738, 1794, 1838, 1853, 1855, 1961, 1973, 1974, 2017, 2019, 2039, 2097, 2141, 2142, 2177, 2178, 2180, 2281, 2282, 2304, 2315, 2317, 2378, 2522, 2529, 2539, 2541, 2545, 2560, 2580, 2581, 2586, 2648, 2693, 2724, 2729, 2730, 2774 |
| DECAPODA (SA: crayfish and other specific species) | 1688, 2704 |
| DEGRADATION_BACTERIAL (S: bacteria_degradation) | |
| DEMOGRAPHICS (SA: sociology) | 121, 275, 422, 442, 705, 1817, 1965, 2023, 2024, 2482, 2486, 2487 |
| DEPOSITION_ATMOSPHERIC (S: atmospheric_deposition) | |
| DEPOSITION_HISTORY (S: history_deposition) | |
| DEPOSITION_INORGANICS | 6, 7, 26, 54, 56, 58, 62, 63, 64, 67, 71, 151, 156, 163, 224, 273, 316, 317, 318, 320, 366, 367, 370, 379, 380, 383, 385, 425, 473, 533, 551, 552, 553, 599, 612, 627, 631, 632, 643, 644, 645, 646, 647, 648, 653, 655, 658, 660, 663, 709, 743, 758, 804, 861, 870, 879, 885, 910, 957, 974, 1008, 1021, 1109, 1113, 1125, 1128, 1142, 1185, 1197, 1226, 1253, 1332, 1448, 1473, 1474, 1619, 1700, 1701, 1702, 1704, 1706, 1723, 1725, 1735, 1741, 1742, 1743, 1744, 1745, 1779, 1780, 1809, 1815, 1822, 1828, 1839, 1849, 1902, 1943, 1955, 1956, 1996, 1997, 2007, 2017, 2085, 2123, 2137, 2138, 2139, 2140, 2202, 2227, 2229, 2231, 2232, 2233, 2234, 2236, 2276, 2438, 2442, 2462, 2465, 2467, 2563, 2617, 2618, 2665, 2696, 2698, 2699, 2734 |
| DEPOSITION_METALS | 6, 7, 26, 54, 56, 58, (includes trace metals) 62, 63, 67, 151, 156, 163, 224, 316, 317, 318, 320, 379, 383, 385, 425, 473, 533, 551, |

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645, 646, 647, 655, 658, 660,
663, 709, 743, 758, 804, 861,
870, 879, 910, 957, 974, 1021,
1113, 1125, 1128, 1142, 1185, 1226,
1253, 1332, 1473, 1474, 1619, 1700,
1701, 1702, 1704, 1706, 1723, 1725,
1735, 1741, 1742, 1743, 1744, 1745,
1779, 1780, 1809, 1815, 1822, 1828,
1839, 1849, 1955, 1956, 1996, 1997,
2017, 2123, 2137, 2138, 2139, 2140,
2231, 2232, 2233, 2236, 2276, 2438,
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2696, 2698, 2699, 2734

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170, 366, 367, 380, 389, 473,
533, 567, 627, 631, 649, 650,
651, 879, 884, 894, 944, 1008,
1021, 1125, 1231, 1448, 1515, 1639,
1700, 1701, 1702, 1725, 1735, 1741,
1742, 1743, 1744, 1745, 1943, 1955,
1979, 1996, 1997, 2011, 2014, 2139,
2140, 2229, 2259, 2387, 2435, 2438,
2440, 2465, 2618, 2649, 2650, 2653,
2697

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(S: nutrients_deposition)

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320, 473, 612, 647, 653, 660,
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56, 57, 59, 70, 71, 170,
224, 473, 565, 567, 568, 612,
613, 627, 643, 645, 646, 649,
650, 651, 652, 655, 720, 740,
743, 870, 883, 886, 910, 972,
973, 1109, 1113, 1125, 1128, 1142,
1185, 1197, 1332, 1420, 1421, 1448,
1449, 1515, 1567, 1568, 1592, 1613,
1619, 1630, 1705, 1706, 1707, 1708,
1709, 1710, 1723, 1725, 1735, 1741,
1742, 1743, 1744, 1745, 1809, 1828,
1974, 1975, 1978, 1979, 2011, 2014,
2017, 2202, 2240, 2241, 2276, 2363,
2387, 2435, 2438, 2440, 2442, 2443,
2563, 2648, 2649, 2650

DEPOSITION_PCBS (S: PCBs_deposition)

DEPOSITION_PHOSPHORUS
(S: phosphorus_deposition)

DEPOSITION_RADIONUCLIDES 71, 151, 318, 320, 380, 425,
599, 612, 627, 630, 632, 804,

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| DEPOSITION_RADIONUCLIDES (continued) ... | 910, 974, 1185, 1253, 1725, 1735, 1741, 1742, 1743, 1744, 1745, 1779, 1780, 1815, 1822, 1996, 1997, 2438, 2617, 2618, 2734 |
| DEPOSITION_SEDIMENTS (S: sediments_deposition) | |
| DESMIDS (SA: green algae) | 350 |
| DESORPTION | 47, 629, 720, 1729, 1781, 1788, 2391, 2437 |
| DETritus | 562, 676, 714, 725, 776, 1298, |
| (SA: organic matter) | 1593, 1612, 1752, 1757, 1758, 1762, |
| (SA: particles) | 1840, 1846, 1848, 2062, 2112, 2199, 2458, 2459, 2576, 2579 |
| DIACYCLOPS | 1026, 1752 |
| DIAGENESIS (SA: geochemistry) | 222, 612, 1420, 1421, 1422, 1732, (SA: sediments) 1825, 1826, 1956, 2036, 2464, 2478 |
| DIAPHANOSOMA | 682, 690, 692, 693 |
| DIAPTONUS | 133, 225, 228, 229, 232, 680, 681, 682, 689, 690, 691, 692, 693, 872, 1560, 1562, 1723, 1729, 1730, 1732, 1733, 1736, 1740, 1989, 2576, 2578, 2579, 2634 |
| DIATOMA (SA: diatoms) | 1295, 1296, 1401, 2022, 2456, 2640 |
| DIATOMS (SA: specific species) | 19, 45, 65, 66, 94, 101, 104, 105, 106, 107, 129, 131, 136, 142, 225, 226, 230, 281, 350, 368, 394, 397, 398, 399, 446, 492, 628, 697, 712, 788, 801, 821, 926, 946, 1031, 1294, 1295, 1296, 1302, 1303, 1304, 1305, 1306, 1324, 1325, 1337, 1348, 1401, 1404, 1407, 1408, 1457, 1483, 1535, 1536, 1537, 1597, 1601, 1651, 1661, 1703, 1738, 1777, 1841, 1842, 1849, 1920, 1955, 1990, 1993, 2022, 2030, 2031, 2032, 2033, 2035, 2051, 2093, 2109, 2110, 2112, 2113, 2114, 2116, 2117, 2118, 2119, 2120, 2121, 2123, 2124, 2185, 2195, 2198, 2199, 2200, 2223, 2225, 2339, 2340, 2345, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2357, 2410, 2414, 2415, 2429, 2430, 2431, 2453, 2454, 2455, 2456, 2457, 2522, 2529, 2563, 2572, 2573, 2575, 2640, 2761, 2763 |
| DIELDRIN | 224, 261, 339, 396, 397, 399, (SA: organochlorine pesticides) 404, 473, 517, 518, 521, 522, 531, 532, 576, 679, 729, 793, 888, 968, 970, 971, 979, 990, |

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| DIELDRIN (continued) | 994, 996, 1002, 1068, 1094, 1124, 1132, 1138, 1142, 1145, 1148, 1180, 1181, 1189, 1254, 1255, 1332, 1487, 1506, 1605, 1653, 1676, 1692, 1694, 1695, 1794, 1838, 1961, 2017, 2019, 2039, 2097, 2141, 2142, 2177, 2276, 2281, 2304, 2315, 2378, 2539, 2541, 2545, 2581, 2586, 2724, 2729, 2730, 2774 |
| DIFFUSION | 71, 361, 380, 382, 720, 1492, (SA: <u>model_diffusion</u>) 1519, 1520, 1582, 1684, 1712, 1999, 2120 |
| DIFFUSIVITY | 1553, 2405, 2697 |
| DINOFLAGELLATES (SA: <u>flagellates</u>) | 746, 1535, 1703, 1993, 2350 (SA: <u>phytoflagellates</u>) |
| DIOXINS | 24, 94, 323, 324, 482, 485, 486, 516, 532, 871, 917, 923, 1025, 1101, 1111, 1132, 1138, 1148, 1158, 1188, 1330, 1799, 1945, 1973, 2052, 2308, 2309, 2361, 2536, 2537, 2564, 2725 |
| DIPTERA (SA: chironomids and other species) | 1292, 1404, 1550, 1688, 1760, 1821, 2687, 2703, 2711, 2712, 2713 |
| DIRECTORY | 213, 828, 853, 1168, 1634, 1991 |
| DISCHARGE (SA: effluent) | |
| DISCHARGE_GROUNDWATER | 49, 343, 373, 436, 473, 980, 1033, 2040, 2202, 2207 |
| DISCHARGE_HARBORS | 143, 729, 2173, 2439, 2524 |
| DISCHARGE_INORGANICS | 49, 143, 184, 262, 346, 396, (SA: <u>inorganics_loading</u>) 397, 398, 399, 472, 473, 500, 600, 729, 923, 1022, 1134, 1137, 1140, 1141, 1143, 1144, 1155, 1176, 1182, 1183, 1187, 1193, 1195, 1332, 2018, 2097, 2173, 2202, 2439, 2522, 2525, 2526, 2529, 2630, 2631, 2719, 2762 |
| DISCHARGE_METALS (S: <u>metals_discharge</u>) | |
| DISCHARGE_NUTRIENTS | 49, 143, 262, 346, 396, 397, 398, 399, 472, 473, 500, 600, 923, 1141, 1144, 1176, 1182, 1183, 1187, 1193, 1195, 2097, 2202, 2522, 2525, 2526, 2529, 2630, 2631, 2719, 2762 |
| DISCHARGE_ORGANICS | 143, 184, 346, 396, 397, 398, (SA: <u>organics_loading</u>) 399, 473, 729, 923, 1141, 1144, 1155, 1176, 1182, 1183, 1187, 1193, 1195, 1332, 1444, 1709, 2021, 2097, |

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| | 2202, 2379, 2435, 2439, 2443, 2522, 2524, 2529, 2630 |
| DISCHARGE_PCBS | 184, 346, 396, 397, 399, 473, (SA: PCBs_loading) 729, 923, 1332, 1709, 2021, 2379, 2435, 2439, 2443, 2522, 2524, 2529 |
| DISCHARGE_PHOSPHORUS (S: phosphorus_discharge) | |
| DISCHARGE_POLLUTION | 49, 111, 112, 113, 143, 164, (SA: discharge_water_quality) 184, 396, 397, 398, 436, 500, 544, 578, 600, 656, 687, 729, 864, 923, 1007, 1131, 1141, 1144, 1176, 1182, 1183, 1187, 1193, 1195, 1332, 1377, 1444, 1658, 1709, 1813, 2018, 2021, 2023, 2097, 2173, 2202, 2290, 2292, 2439, 2443, 2522, 2525, 2526, 2529, 2630, 2631, 2708, 2728, 2762, 2784 |
| DISCHARGE_POWER_PLANTS (S: power_plants_discharge) | |
| DISCHARGE_RADIOACTIVITY | 396, 1134, 1137, 1140, 1143, 1182, 1183, 1187, 1193, 1195 |
| DISCHARGE_RADIONUCLIDES | 1134, 1137, 1140, 1143 |
| DISCHARGE_SEWAGE | 143, 396, 729, 1182, 1183, 1187, 1193, 1195, 1658, 2526, 2630 |
| DISCHARGE_THERMAL_POLLUTION | 111, 112, 113, 164, 396, 544, (SA: temperature) 687, 864, 1007, 1332, 1377, 1833, (SA: thermal_plume) 2021, 2290, 2292, 2708, 2728, 2762, (SA: thermal_pollution) 2784 |
| DISCHARGE_TRIBUTARIES (S: tributaries_discharge) | |
| DISCHARGE_WASTE | 143, 436, 500, 729, 1022, 1176, 1658, 2443, 2524 |
| DISCHARGE_WASTEWATER | 49, 184, 262, 399, 923, 1182, 1183, 1187, 1193, 1195, 1947, 2202, 2630, 2631 |
| DISCHARGE_WATER_BUDGET (S: water_budget) | |
| DISCHARGE_WATER_QUALITY | 49, 143, 184, 262, 396, 397, (SA: discharge_pollution) 398, 399, 436, 500, 578, 600, 656, 729, 923, 1131, 1134, 1137, 1140, 1141, 1143, 1144, 1155, 1182, 1183, 1187, 1193, 1195, 1332, 1444, 1658, 1813, 2018, 2097, 2173, 2202, 2379, 2439, 2522, 2524, 2525, 2526, 2529, 2630, 2631, 2719 |
| DISCHARGE_WATER_SUPPLY | 343, 397, 398, 473, 784, 1033, 1155, 2023, 2097 |

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| DISPERSION_ATMOSPHERIC_POLLUTION | 381, 545, 546, 1239, 1267 |
| DISPERSION_CIRCULATION | 470, 924, 1267, 1432, 1583, 1584, 1681, 2173 |
| DISPERSION_CURRENTS | 470, 924, 926, 1231, 1432, 1514, 1684, 2082, 2173 |
| DISPERSION_EFFLUENT (S: effluent dispersion) | |
| DISPERSION_FISH | 279, 1545, 1684, 1860 |
| DISPERSION_HYDROCARBONS | 924, 1583, 1584, 1617, 1828 (not chlorinated) |
| DISPERSION_INORGANICS | 279, 381, 545, 555, 926, 1583, 1584, 1684, 1828, 1829, 2012, 2173 |
| DISPERSION_MODEL (S: model dispersion) | |
| DISPERSION_ORGANICS | 924, 1583, 1684, 1828 |
| DISPERSION_POLLUTION (S: pollution dispersion) | |
| DISPERSION_SEDIMENTS | 381, 555, 926, 1231, 1432, 1514, 1684, 2082 |
| DISPERSION_THERMAL_POLLUTION | 854, 1545 |
| DISSOLVED_OXYGEN (SA: oxygen) | 44, 103, 121, 123, 141, 146, 147, 148, 261, 313, 362, 368, 393, 473, 547, 598, 600, 735, 821, 911, 923, 979, 1083, 1089, 1094, 1132, 1139, 1142, 1145, 1188, 1288, 1337, 1349, 1394, 1440, 1451, 1481, 1513, 1539, 1550, 1551, 1553, 1561, 1562, 1914, 1999, 2028, 2060, 2097, 2201, 2330, 2381, 2464, 2479, 2481, 2482, 2492, 2497, 2526, 2538, 2554, 2572, 2573, 2718, 2719 |
| DISSOLVED_SOLID | 44, 60, 123, 146, 148, 152, 224, 261, 339, 368, 374, 397, 472, 473, 598, 728, 735, 736, 821, 897, 910, 1142, 1176, 1180, 1188, 1270, 1394, 1451, 1519, 1520, 1531, 1776, 1915, 2087, 2097, 2133, 2151, 2330, 2381, 2386, 2497, 2554, 2572, 2573, 2575, 2592, 2654 |
| DIVERSION (SA: history_diversion) | 77, 127, 132, 140, 167, 192, 193, 213, 271, 272, 290, 313, 343, 390, 392, 427, 436, 442, 453, 511, 589, 590, 715, 737, 790, 791, 824, 837, 838, 867, 1013, 1034, 1068, 1069, 1076, 1077, 1078, 1163, 1164, 1165, 1166, 1167, 1184, 1224, 1268, 1269, 1271, 1272, 1293, 1310, 1322, 1344, 1361, 1405, |

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| DIVERSION (continued) | 1419, 1482, 1512, 1513, 1532, 1539, 1540, 1542, 1570, 1573, 1602, 1625, 1740, 1751, 1863, 1865, 1924, 1930, 1938, 1960, 1969, 2099, 2130, 2151, 2260, 2267, 2307, 2313, 2392, 2452, 2479, 2481, 2482, 2494, 2497, 2504, 2514, 2565, 2600, 2671, 2714 |
| DOLOMITE | 235, 296, 374, 1286, 1966, 2034, 2040, 2064, 2216, 2445, 2592 |
| DOWNWELLING | 1683 |
| DRAINAGE (SA: runoff) | 142, 215, 267, 411, 537, 803, 900, 982, 1566, 1632, 1751, 1871, 2207, 2588, 2622, 2740 |
| DRAINAGE BASIN (SA: watershed) | 7, 102, 450, 561, 957, 984, 1189, 1269, 2323, 2554, 2654 |
| DREDGING | 121, 135, 143, 260, 261, 403, 509, 598, 600, 670, 736, 737, 821, 838, 885, 918, 921, 978, 1000, 1027, 1074, 1092, 1127, 1132, 1135, 1136, 1147, 1158, 1171, 1176, 1185, 1199, 1214, 1332, 1375, 1394, 1395, 1417, 1418, 1514, 1532, 1577, 1655, 1910, 1917, 1932, 1949, 2023, 2099, 2207, 2276, 2378, 2439, 2491, 2492, 2513, 2518, 2524, 2538, 2545, 2548, 2715 |
| DRY DEPOSITION | 26, 53, 54, 55, 58, 59, 63, 163, 273, 389, 473, 533, 551, 552, 643, 648, 649, 651, 709, 758, 879, 1008, 1021, 1113, 1125, 1515, 1613, 1700, 1704, 1705, 1706, 1710, 1902, 1974, 1978, 1979, 2085, 2138, 2139, 2140, 2202, 2227, 2229, 2231, 2232, 2233, 2236, 2387, 2435, 2465, 2666 |
| DUCKS (SA: birds) | 918, 933, 970, 1215, 1217, 1594, 1623, 1884, 1885, 1886, 1887, 1975, 1982, 2405, 2459, 2492, 2673 |
| DUNES (S: sand dunes) | |
| ECONOMICS (SA: management_economics) ... (SA: research needs_economics) (SA: socio-economics) | 1, 8, 9, 34, 46, 72, 73, 92, 116, 121, 143, 159, 166, 177, 182, 185, 186, 187, 188, 189, 192, 193, 195, 196, 197, 239, 249, 252, 255, 271, 272, 273, 274, 275, 283, 285, 311, 323, 331, 338, 343, 344, 355, 357, 366, 367, 390, 407, 408, 416, 419, 427, 431, 436, 442, 453, 474, 478, 491, 497, 498, 499, 500, 501, 509, 510, |

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| ECONOMICS (continued) | 511, 514, 524, 542, 556, 571, 572, 577, 615, 624, 642, 657, 664, 673, 674, 705, 737, 748, 749, 750, 779, 789, 793, 820, 821, 822, 824, 825, 826, 829, 832, 839, 844, 845, 848, 849, 850, 859, 863, 866, 867, 904, 908, 913, 923, 930, 932, 960, 963, 964, 978, 987, 989, 990, 995, 998, 999, 1009, 1018, 1037, 1061, 1064, 1068, 1070, 1071, 1072, 1077, 1078, 1080, 1082, 1115, 1128, 1155, 1167, 1169, 1175, 1181, 1189, 1215, 1217, 1229, 1232, 1234, 1238, 1240, 1260, 1261, 1270, 1271, 1272, 1284, 1285, 1293, 1322, 1323, 1327, 1336, 1339, 1346, 1354, 1361, 1391, 1415, 1427, 1443, 1447, 1477, 1482, 1532, 1533, 1534, 1542, 1574, 1624, 1633, 1640, 1647, 1648, 1650, 1654, 1655, 1656, 1657, 1696, 1713, 1764, 1767, 1768, 1783, 1789, 1813, 1834, 1871, 1872, 1890, 1901, 1914, 1917, 1930, 1940, 1950, 1960, 1961, 1982, 2039, 2042, 2055, 2065, 2066, 2067, 2068, 2084, 2112, 2125, 2126, 2242, 2244, 2252, 2253, 2267, 2268, 2279, 2280, 2282, 2287, 2291, 2313, 2321, 2336, 2359, 2365, 2373, 2374, 2375, 2376, 2397, 2398, 2399, 2400, 2401, 2424, 2425, 2426, 2427, 2452, 2458, 2479, 2481, 2482, 2483, 2484, 2486, 2487, 2490, 2495, 2496, 2498, 2518, 2520, 2538, 2550, 2552, 2558, 2559a, 2559b, 2563, 2565, 2582, 2600, 2606, 2624, 2635, 2641, 2656, 2657, 2672, 2680, 2682, 2714, 2730, 2738, 2756, 2766, 2777, 2784 |
| EEL | 139, 664, 811 |
| EFFLUENT (SA: discharge) | |
| EFFLUENT_CURRENTS (S: currents_effluent) | |
| EFFLUENT_DISPERSION | 279, 854, 1584, 1684 |
| EFFLUENT_HYDROCARBONS | 52, 1584 |
| (not chlorinated) | |
| EFFLUENT_INORGANICS | 52, 279, 359, 363, 390, 397, 500, 502, 657, 736, 821, 911, 925, 927, 1000, 1101, 1108, 1109, 1113, 1115, 1124, 1125, 1141, 1144, 1155, 1451, 1584, 1684, 2060, 2097, 2198, 2378, 2526, 2719 |

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| EFFLUENT_ORGANICS | 52, 117, 390, 397, 736, 821, 911, 972, 973, 1101, 1108, 1109, 1113, 1115, 1124, 1125, 1141, 1144, 1155, 1451, 1684, 1709, 2097, 2198, 2304, 2378, 2379 |
| EFFLUENT_POWER_PLANTS (S: power plants_effluent) | |
| EFFLUENT_RADIONUCLIDES (S: radionuclides_effluent) | |
| EFFLUENT_WASTE | 52, 275, 359, 363, 500, 657, 973, 1147, 1584, 1658, 1684, 2378, 2654 |
| EFFLUENT_WASTEWATER | 502, 925, 927, 1125, 1684, 2378, 2654 |
| EH (S: redox) | |
| EMERALD SHINER (SA: shiner) | 426, 457, 1251, 1791, 2182, 2420, 2435, 2451, 2540, 2663 |
| ENDOSULFAN | 261, 473, 532, 740, 1098, 1176 |
| ENDRIN | 261, 399, 404, 473, 517, 518, (SA: organochlorine pesticides) 740, 968, 969, 979, 1180, 1181, 1254, 1332, 1487, 1883, 1886, 2097, 2141, 2142, 2378 |
| ENGINEERING | 44, 154, 157, 158, 167, 217, 249, 253, 254, 271, 272, 294, 309, 321, 325, 371, 402, 403, 430, 431, 442, 479, 484, 487, 489, 490, 491, 493, 494, 581, 582, 598, 704, 726, 736, 737, 797, 803, 822, 880, 881, 890, 891, 908, 909, 921, 1072, 1073, 1074, 1075, 1080, 1081, 1082, 1084, 1085, 1095, 1147, 1208, 1228, 1317, 1318, 1330, 1387, 1415, 1463, 1532, 1610, 1625, 1638, 1649, 1650, 1654, 1655, 1657, 1713, 1751, 1789, 1792, 1793, 1873, 1875, 1908, 1916, 2006, 2042, 2071, 2145, 2146, 2252, 2422, 2425, 2426, 2427, 2428, 2479, 2481, 2483, 2485, 2491, 2498, 2505, 2508, 2512, 2518, 2538, 2568, 2636, 2726, 2743, 2744, 2745, 2747, 2752, 2753, 2754, 2755, 2756, 2758 |
| ENTRAINMENT (SA: impingement) | |
| ENTRAINMENT_BENTHIC_INVERTEBRATES | 50, 351, 588, 680, 693, 1007, 1242, 1452, 1467, 2029, 2678, 2704, 2708, 2710, 2778 |
| ENTRAINMENT_FISH | 50, 173, 258, 314, 351, 444, 737, 1007, 1224, 1241, 1242, 1243, 1244, 1247, 1250, 1285, 1465, 1467, |

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| ENTRAINMENT_FISH (continued) | 1468, 1523, 1525, 1532, 1545, 1586, 1640, 1671, 1716, 1791, 2029, 2039, 2143, 2182, 2291, 2299, 2393, 2628, 2629, 2783, 2784, 2785 |
| ENTRAINMENT_PHYTOPLANKTON | 104, 105, 106, 107, 108, 129, 350, 351, 444, 1007, 2029, 2030, 2031, 2032, 2033, 2035, 2780, 2781, 2784 |
| ENTRAINMENT_ZOOPLANKTON | 50, 351, 680, 682, 687, 690, 691, 692, 693, 1007, 1247, 1452, 2029, 2708, 2710, 2784 |
| ENVIRONMENTAL IMPACT (general) | 1259, 2742 |
| ENVIRONMENTAL IMPACT_DISPOSAL | 135, 345, 1027, 1147, 1417, 1418, 2042, 2492, 2538, 2715 |
| ENVIRONMENTAL IMPACT_DIVERSION | 167, 590, 1224, 1293, 1482, 1542, 1625, 2151, 2313, 2482 |
| ENVIRONMENTAL IMPACT_DREDGING | 135, 403, 1027, 1147, 1417, 1418, 1655, 2439, 2492, 2513, 2518, 2538, 2715 |
| ENVIRONMENTAL IMPACT_ENGINEERING | 167, 403, 822, 1080, 1081, 1082, 1147, 1625, 1654, 1655, 1657, 1789, 1908, 2042, 2498, 2508, 2518, 2538 |
| ENVIRONMENTAL IMPACT_EUTROPHICATION | 45, 628, 2202, 2492, 2563 |
| ENVIRONMENTAL IMPACT_FISH | 52, 134, 258, 314, 344, 510, 628, 795, 1007, 1147, 1224, 1243, 1285, 1468, 1525, 1542, 1546, 1640, 1671, 1772, 1915, 2029, 2042, 2052, 2142, 2201, 2264, 2291, 2379, 2432, 2439, 2492, 2518, 2538, 2563 |
| ENVIRONMENTAL IMPACT_HARBORS | 403, 1654, 1655, 1657, 2498, 2513 |
| ENVIRONMENTAL IMPACT_INORGANICS | 45, 52, 230, 510, 628, 659, 833, 1027, 1255, 1915, 2028, 2034, 2142, 2151, 2278, 2432, 2439, 2467, 2482, 2538, 2563, 2771 |
| ENVIRONMENTAL IMPACT_NAVIGATION | 167, 344, 510, 1293, 1482, 1789, 2482, 2489, 2490, 2495, 2513, 2518, 2520 |
| ENVIRONMENTAL IMPACT_POWER PLANTS | 52, 189, 230, 258, 314, 413, 443, 510, 690, 693, 822, 1007, 1088, 1224, 1243, 1285, 1468, 1482, 1525, 1640, 1671, 2028, 2029, 2031, 2034, 2201, 2291, 2518, 2677, 2678, 2780, 2781 |
| ENVIRONMENTAL IMPACT_RECREATION | 510, 593, 1055, 1908, 2042, 2498 |
| ENVIRONMENTAL IMPACT_WATER QUALITY (SA: water quality) | 45, 52, 60, 189, 345, 413, 443, 628, 833, 1147, 1293, 1417, 1915, 2024, 2029, 2042, 2151, 2278, |

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| ENVIRONMENTAL IMPACT_WATER QUALITY | 2379, 2439, 2482, 2492, 2508, 2563, |
| (continued) | 2725 |
| ENVIRONMENTAL IMPACT_WATER USE | 510, 1088, 1278, 1542, 1926, 2482 |
| ENZYMES | 174, 1086, 1087, 1455, 1502, 1538, |
| | 1854, 1855, 2539, 2575 |
| EPHEMEROPTERA | 260, 796, 1027, 1213, 1395, 1404, |
| | 1451, 1608, 1688, 2548 |
| EPILIMNION (SA: stratification) | 150, 770, 1436, 2026, 2413 |
| EPISCHURA | 680, 682, 686, 689, 690, 692, |
| | 693 |
| EROSION | 4, 68, 72, 73, 74, 109, |
| (SA: beaches_erosion) | 124, 125, 154, 155, 157, 158, |
| (SA: bluffs_erosion) | 159, 161, 162, 167, 181, 182, |
| (SA: history_erosion) | 187, 192, 213, 239, 249, 250, |
| (SA: lake levels_erosion) | 251, 252, 253, 254, 286, 292, |
| (SA: model_erosion) | 293, 294, 311, 328, 357, 371, |
| (SA: monitoring_erosion) | 376, 388, 397, 406, 416, 425, |
| (SA: shoreline_erosion) | 428, 429, 430, 431, 433, 435, |
| | 472, 473, 487, 493, 494, 506, |
| | 507, 512, 555, 580, 582, 599, |
| | 602, 633, 634, 635, 636, 637, |
| | 638, 653, 704, 718, 726, 741, |
| | 742, 800, 803, 818, 819, 821, |
| | 823, 824, 827, 830, 834, 835, |
| | 836, 838, 869, 880, 881, 889, |
| | 890, 891, 892, 893, 894, 895, |
| | 896, 908, 909, 926, 974, 975, |
| | 978, 1013, 1021, 1064, 1065, 1068, |
| | 1070, 1071, 1072, 1073, 1074, 1075, |
| | 1079, 1083, 1084, 1085, 1093, 1142, |
| | 1147, 1158, 1159, 1171, 1172, 1174, |
| | 1175, 1176, 1189, 1208, 1214, 1215, |
| | 1228, 1252, 1274, 1275, 1276, 1293, |
| | 1297, 1317, 1318, 1323, 1330, 1331, |
| | 1332, 1389, 1390, 1419, 1461, 1462, |
| | 1518, 1620, 1624, 1626, 1629, 1632, |
| | 1635, 1636, 1638, 1639, 1650, 1654, |
| | 1657, 1700, 1729, 1733, 1749, 1765, |
| | 1770, 1774, 1775, 1792, 1793, 1794, |
| | 1804, 1819, 1875, 1879, 1880, 1881, |
| | 1888, 1909, 1916, 1941, 1955, 1956, |
| | 1965, 1966, 2010, 2029, 2036, 2042, |
| | 2043, 2047, 2048, 2064, 2097, 2099, |
| | 2140, 2145, 2146, 2159, 2174, 2199, |
| | 2203, 2205, 2244, 2272, 2276, 2303, |
| | 2310, 2311, 2336, 2337, 2338, 2364, |
| | 2382, 2383, 2402, 2422, 2423, 2424, |
| | 2425, 2426, 2427, 2428, 2444, 2448, |
| | 2458, 2465, 2480, 2482, 2483, 2484, |
| | 2485, 2486, 2487, 2496, 2499, 2505, |
| | 2506, 2507, 2508, 2509, 2512, 2518, |
| | 2538, 2545, 2565, 2566, 2567, 2568, |

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| EROSION (continued) | 2588, 2589, 2652, 2654, 2658, 2716, 2726, 2734, 2743, 2744, 2745, 2746, 2747, 2748, 2749, 2750, 2752, 2760, 2765, 2788, 2789, 2790 |
| ESTERS | 261 |
| ESTUARY (S: wetlands) | |
| EUBOSMINA | 583, 680, 681, 682, 689, 690, 691, 692, 693, 1560, 1562 |
| EUROPIUM | 1794, 1825, 1998 |
| EURYCERCUS | 680, 689, 690 |
| EURYTEMORA | 680, 681, 682, 689, 691, 692, 693, 1560, 1562, 1759 |
| EUTROPHIC | 1109, 1142, 1154, 1158, 1758, 1760, (SA: trophic conditions) 1921, 2062, 2350, 2522, 2529 |
| EUTROPHICATION | 8, 45, 63, 94, 101, 129, (SA: trophic conditions) 131, 136, 142, 143, 218, 224, (SA: history_eutrophication) 262, 280, 281, 297, 358, 359, (SA: pollution_eutrophication) 362, 363, 365, 370, 390, 399, (SA: review_eutrophication) 401, 492, 502, 547, 556, 576, (SA: summary_eutrophication) 628, 689, 735, 737, 753, 760, 761, 762, 765, 775, 783, 820, 832, 857, 918, 920, 923, 927, 953, 979, 983, 1031, 1043, 1048, 1049, 1068, 1104, 1115, 1128, 1132, 1138, 1174, 1188, 1260, 1301, 1324, 1325, 1397, 1399, 1403, 1408, 1415, 1433, 1434, 1436, 1437, 1440, 1454, 1475, 1480, 1531, 1532, 1535, 1536, 1537, 1550, 1662, 1684, 1723, 1729, 1733, 1737, 1814, 1841, 1842, 1896, 1902, 1945, 1952, 1960, 1961, 1966, 1986, 1987, 1989, 1990, 2001, 2012, 2013, 2060, 2061, 2063, 2089, 2104, 2105, 2107, 2108, 2109, 2110, 2112, 2116, 2117, 2120, 2123, 2124, 2149, 2150, 2198, 2200, 2202, 2269, 2270, 2272, 2279, 2280, 2315, 2329, 2330, 2331, 2346, 2348, 2351, 2354, 2355, 2357, 2395, 2412, 2458, 2492, 2526, 2548, 2556, 2563, 2569, 2575, 2631, 2640, 2703, 2712, 2719, 2734, 2738, 2766 |
| EVAPORATION (SA: water budget) | 17, 58, 192, 193, 290, 454, 455, 534, 535, 536, 784, 867, 1013, 1708, 1723, 1740, 1907, 1923, 1924, 1934, 1936, 1938, 1944, 2654 |
| EXOTICS (SA: specific fish species, e.g., alewife, sea lamprey, etc.) | 331, 458, 664, 737, 783, 821, 845, 983, 1234, 1260, 1357, 1532, 2149, 2150, 2560 |

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| FALLFISH | 811 |
| FATHEAD MINNOWS | 532, 1022, 1150, 1451, 2276 |
| FATTY ACIDS | 1422, 1612, 1613, 1614, 1615, 1616, 1617, 1618, 1619 |
| FECAL PELLETS | 133, 679, 712, 713, 714, 946 |
| FECUNDITY FISH | 102, 259, 505, 541, 665, 678, (SA: fish_reproduction) 949, 1017, 1328, 1541, 1546, 1677, 1678, 2197, 2664 |
| FELDSPAR | 926, 1957 |
| FERROMANGANESE NODULES | 1226 |
| FERTILIZER (SA: agriculture) | 13, 1159, 1175, 1805, 2202, 2271 |
| FIELD EQUIPMENT | 26, 30, 31, 76, 138, 205, 235, 410, 414, 504, 553, 588, 619, 672, 685, 725, 760, 1019, 1113, 1125, 1220, 1284, 1441, 1524, 1559, 1587, 1698, 1761, 1785, 1794, 1836, 1850, 1900, 2158, 2170, 2196, 2215, 2221, 2314, 2316, 2318, 2319, 2320, 2515, 2612, 2613, 2616, 2696, 2698, 2699, 2769, 2770 |
| FISH (SA: specific species) | |
| FISH_ABUNDANCE | 36, 50, 116, 141, 168, 173, 176, 177, 200, 201, 245, 246, 247, 256, 283, 310, 391, 393, 407, 408, 410, 419, 426, 458, 459, 460, 463, 464, 467, 484, 528, 559, 564, 617, 619, 620, 621, 623, 640, 664, 671, 673, 675, 678, 683, 696, 730, 734, 763, 793, 809, 811, 821, 848, 849, 850, 904, 907, 928, 931, 938, 939, 940, 941, 967, 983, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1005, 1007, 1019, 1040, 1059, 1062, 1063, 1205, 1213, 1224, 1227, 1242, 1243, 1244, 1247, 1248, 1249, 1250, 1251, 1284, 1312, 1314, 1315, 1336, 1345, 1354, 1357, 1408, 1409, 1466, 1489, 1490, 1491, 1506, 1524, 1525, 1527, 1528, 1542, 1545, 1546, 1574, 1581, 1668, 1673, 1691, 1692, 1694, 1695, 1791, 1797, 1859, 1860, 1868, 1869, 1870, 1874, 2041, 2051, 2053, 2054, 2055, 2094, 2102, 2103, 2149, 2150, 2157, 2161, 2162, 2178, 2179, 2180, 2181, 2182, 2188, 2190, 2201, 2251, 2255, 2256, 2262, 2288, 2290, 2291, 2299, 2310, 2314, 2325, 2326, 2344, 2394, 2418, 2419, |

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| FISH_ABUNDANCE (continued) | 2420, 2449, 2450, 2451, 2473, 2539, 2540, 2541, 2544, 2545, 2548, 2583, 2584, 2585, 2586, 2587, 2601, 2602, 2604, 2605, 2606, 2608, 2624, 2660, 2661, 2663, 2664, 2717, 2720, 2770 |
| FISH AGE | 75, 505, 706, 877, 1006, 1328, 1691, 1692, 1918, 2050, 2054, 2102, 2103, 2434, 2624, 2664 |
| FISH_BEHAVIOR | 166, 170, 171, 175, 176, 177, 201, 245, 246, 247, 256, 283, 310, 426, 434, 460, 462, 465, 466, 469, 484, 559, 564, 621, 664, 671, 673, 674, 675, 683, 721, 732, 733, 734, 793, 794, 811, 845, 907, 928, 934, 935, 940, 941, 949, 990, 993, 994, 995, 997, 1006, 1023, 1035, 1036, 1039, 1128, 1213, 1237, 1247, 1249, 1292, 1299, 1312, 1313, 1316, 1501, 1511, 1528, 1541, 1545, 1693, 1797, 1853, 1860, 1914, 1918, 1919, 2051, 2055, 2143, 2150, 2156, 2157, 2178, 2187, 2188, 2197, 2212, 2247, 2248, 2253, 2279, 2280, 2291, 2294, 2296, 2297, 2299, 2302, 2315, 2344, 2432, 2433, 2606, 2607, 2661, 2663, 2694, 2695 |
| FISH_BIOACCUMULATION | 24, 52, 94, 117, 143, 224, (SA: fish_uptake) 260, 261, 287, 288, 323, 404, 439, 440, 485, 486, 495, 509, 516, 517, 518, 519, 520, 521, 522, 531, 532, 570, 576, 597, 611, 614, 649, 650, 654, 655, 670, 679, 706, 707, 793, 806, 871, 886, 888, 968, 990, 994, 1001, 1022, 1025, 1038, 1056, 1057, 1094, 1115, 1117, 1120, 1121, 1124, 1128, 1132, 1134, 1137, 1140, 1142, 1143, 1145, 1150, 1203, 1222, 1223, 1254, 1332, 1362, 1363, 1364, 1411, 1445, 1451, 1487, 1501, 1503, 1504, 1505, 1507, 1531, 1576, 1592, 1593, 1605, 1606, 1630, 1652, 1653, 1676, 1706, 1707, 1711, 1730, 1736, 1772, 1786, 1816, 1883, 1886, 1913, 1973, 1975, 1992, 2014, 2017, 2019, 2020, 2021, 2037, 2050, 2052, 2141, 2142, 2163, 2175, 2190, 2208, 2210, 2211, 2212, 2239, 2250, 2264, 2281, 2282, 2283, 2295, 2301, 2305, 2308, 2309, 2315, 2317, 2361, 2367, 2378, 2391, 2432, 2433, 2434, 2435, 2439, 2443, 2521, 2524, 2532, 2537, 2540, 2541, |

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| FISH_BIOACCUMULATION (continued) | 2545, 2580, 2647, 2648, 2673, 2689, 2692, 2693, 2694, 2695, 2729, 2741, 2751, 2774, 2786 |
| FISH_BIOENERGETICS | 245, 246, 248, 439, 468, 540, 541, 670, 724, 731, 1006, 1223, 1312, 1313, 1314, 1315, 1316, 1595, 2179, 2294, 2300, 2301, 2341, 2342, 2343, 2344, 2433, 2434 |
| FISH BIOMASS | 120, 176, 245, 310, 404, 468, 617, 620, 621, 623, 628, 678, 683, 839, 848, 849, 850, 905, 937, 938, 939, 942, 988, 993, 994, 997, 999, 1006, 1213, 1221, 1224, 1249, 1476, 1542, 1691, 1859, 2017, 2041, 2067, 2102, 2178, 2182, 2297, 2298, 2299, 2305, 2341, 2342, 2343, 2344, 2539, 2583, 2584, 2585, 2586 |
| FISH_DEPTH | 245, 246, 248, 623, 920, 1005, 1345, 1347, 1874, 2098, 2133, 2262, 2290, 2292, 2314, 2461, 2583, 2585 |
| FISH_DIET | 39, 50, 75, 117, 168, 177, 178, 201, 245, 246, 247, 248, 259, 392, 419, 439, 440, 457, 459, 460, 462, 464, 465, 466, 467, 468, 469, 481, 505, 541, 572, 573, 623, 670, 678, 683, 701, 702, 724, 730, 731, 744, 882, 888, 928, 929, 940, 968, 990, 996, 997, 1006, 1023, 1026, 1057, 1209, 1210, 1211, 1212, 1213, 1292, 1315, 1316, 1328, 1329, 1345, 1347, 1366, 1408, 1411, 1503, 1511, 1527, 1543, 1574, 1575, 1595, 1606, 1691, 1692, 1695, 1797, 1860, 1883, 1886, 1980, 2014, 2020, 2050, 2096, 2098, 2162, 2262, 2295, 2300, 2301, 2325, 2341, 2342, 2344, 2367, 2432, 2434, 2537, 2548, 2572, 2573, 2583, 2587, 2608, 2635, 2662, 2673, 2695, 2731, 2768 |
| FISH_DISEASE | 39, 134, 331, 616, 1018, 1408, 1414, 1546, 2243, 2541 |
| FISH_DISPERSION (S: dispersion_fish) | |
| FISH DISTRIBUTION | 34, 36, 38, 40, 41, 50, 102, 110, 116, 139, 141, 168, 173, 176, 177, 178, 200, 245, 246, 247, 248, 256, 257, 259, 283, 287, 288, 310, 337, 391, 393, 407, 408, 419, 426, 460, 463, 467, 484, 505, 559, 564, |

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| FISH_DISTRIBUTION (continued) | 597, 617, 619, 620, 621, 623, 640, 664, 671, 673, 675, 683, 696, 702, 734, 744, 756, 757, 763, 799, 811, 821, 866, 877, 907, 928, 930, 931, 937, 938, 939, 941, 942, 949, 986, 987, 988, 989, 990, 991, 993, 994, 995, 996, 997, 998, 999, 1005, 1019, 1022, 1035, 1036, 1087, 1212, 1213, 1220, 1243, 1245, 1248, 1249, 1250, 1251, 1284, 1312, 1328, 1336, 1345, 1347, 1354, 1355, 1357, 1408, 1409, 1466, 1487, 1491, 1506, 1511, 1527, 1529, 1542, 1545, 1546, 1566, 1569, 1574, 1581, 1673, 1674, 1691, 1692, 1694, 1695, 1696, 1791, 1797, 1802, 1809, 1816, 1857, 1860, 1874, 1960, 2023, 2041, 2051, 2054, 2055, 2098, 2103, 2149, 2150, 2157, 2161, 2162, 2177, 2178, 2179, 2180, 2181, 2183, 2201, 2251, 2261, 2262, 2288, 2290, 2291, 2292, 2296, 2299, 2310, 2312, 2314, 2326, 2344, 2418, 2419, 2420, 2443, 2461, 2473, 2539, 2540, 2541, 2544, 2545, 2548, 2583, 2585, 2586, 2587, 2595, 2601, 2602, 2604, 2605, 2606, 2608, 2660, 2661, 2663, 2664, 2724 |
| FISH_EGGS | 50, 102, 103, 115, 164, 173, 174, 175, 176, 256, 259, 287, 288, 393, 395, 407, 408, 457, 481, 485, 486, 559, 564, 639, 665, 673, 725, 745, 779, 780, 793, 864, 871, 888, 904, 906, 923, 1007, 1025, 1224, 1242, 1243, 1244, 1250, 1251, 1312, 1354, 1356, 1504, 1506, 1523, 1524, 1525, 1543, 1605, 1606, 1676, 1678, 1791, 1802, 1859, 1870, 1874, 1946, 2055, 2177, 2181, 2247, 2299, 2312, 2315, 2317, 2319, 2321, 2343, 2539, 2540, 2541, 2545, 2548, 2603, 2605, 2606, 2607, 2626, 2662, 2693, 2695, 2783 |
| FISH_ENTRAINMENT (S: entrainment_fish) | |
| FISH_EXPLOITATION | 34, 407, 408, 640, 832, 845, 866, 983, 987, 988, 995, 1221, 1366, 1859, 1860, 1961, 2054, 2055, 2149, 2150, 2161, 2279, 2280, 2288, 2660, 2720, 2723 |
| FISH_FOOD_CHAIN | 224, 247, 310, 439, 440, 460, 463, 466, 467, 531, 611, 621, 628, 675, 683, 775, 888, 916, |

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| FISH_FOOD CHAIN (continued) | 920, 923, 928, 931, 1006, 1068, 1222, 1312, 1313, 1315, 1445, 1592, 1593, 1605, 1606, 1630, 1740, 1797, 1816, 2094, 2112, 2288, 2295, 2305, 2321, 2367, 2432, 2433, 2434, 2663, 2673 |
| FISH_GENETICS | 41, 166, 282, 617, 673, 674, 721, 839, 949, 1016, 1062, 1063, 1086, 1087, 1204, 1357, 1358, 1366, 1367, 1409, 1410, 1891, 2197, 2286, 2288, 2302, 2472, 2539, 2540, 2541, 2548 |
| FISH_GROWTH | 43, 75, 164, 165, 259, 283, 310, 334, 335, 336, 337, 407, 419, 426, 463, 468, 505, 541, 617, 622, 623, 670, 702, 724, 734, 744, 793, 839, 865, 877, 882, 905, 941, 949, 966, 990, 994, 996, 997, 999, 1025, 1026, 1035, 1036, 1058, 1205, 1213, 1221, 1223, 1227, 1250, 1312, 1314, 1315, 1316, 1328, 1408, 1412, 1451, 1466, 1529, 1544, 1574, 1581, 1595, 1692, 1695, 1786, 1854, 1918, 1981, 2041, 2053, 2054, 2098, 2102, 2103, 2112, 2157, 2186, 2190, 2197, 2248, 2288, 2294, 2297, 2300, 2341, 2342, 2344, 2418, 2420, 2433, 2461, 2473, 2518, 2541, 2545, 2583, 2586, 2660, 2663, 2664, 2694, 2695, 2720 |
| FISH_HABITAT | 103, 143, 168, 177, 178, 245, 246, 247, 248, 257, 310, 330, 334, 337, 391, 393, 418, 419, 426, 434, 460, 461, 464, 465, 466, 467, 468, 469, 484, 558, 559, 563, 564, 620, 664, 670, 673, 674, 675, 701, 702, 734, 775, 795, 809, 810, 811, 907, 931, 941, 1122, 1147, 1213, 1215, 1216, 1217, 1246, 1248, 1291, 1292, 1313, 1347, 1353, 1366, 1408, 1466, 1511, 1529, 1531, 1541, 1542, 1545, 1574, 1623, 1624, 1628, 1673, 1795, 1870, 1903, 1914, 1946, 1950, 2051, 2055, 2056, 2149, 2150, 2160, 2177, 2178, 2179, 2181, 2247, 2248, 2279, 2280, 2310, 2311, 2312, 2450, 2451, 2458, 2537, 2538, 2540, 2541, 2545, 2548, 2571, 2605, 2606, 2607, 2608, 2630, 2660, 2663, 2721, 2740, 2770 |
| FISH_HARVEST (SA: commercial fishing) .. | 859, 1206, 1307, 1574, 1859, 1860, 2067, 2103, 2149, 2548, 2660 |

FISH HISTORY
(S: history_fish/fisheries)

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| FISH_HOMING | 166, 171, 176, 282, 332, 333, 419, 674, 733, 734, 935, 1039, 1237, 1671, 1693, 1860, 2156, 2157, 2178, 2315, 2540, 2541, 2548 |
| FISH_IMPRINTING | 166, 734, 934, 935, 1039, 1237, 1693, 2156, 2157 |
| FISH_LARVAL | 37, 102, 165, 173, 256, 287, 288, 334, 336, 351, 391, 392, 393, 395, 426, 457, 481, 561, 564, 725, 745, 752, 780, 794, 799, 928, 929, 1004, 1005, 1007, 1025, 1026, 1035, 1036, 1204, 1224, 1242, 1243, 1244, 1245, 1247, 1250, 1251, 1292, 1468, 1502, 1504, 1506, 1507, 1523, 1524, 1525, 1541, 1544, 1545, 1605, 1609, 1674, 1791, 1802, 1856, 1859, 1874, 1918, 1980, 1981, 2037, 2055, 2143, 2179, 2182, 2190, 2247, 2287, 2299, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2343, 2420, 2461, 2471, 2473, 2539, 2540, 2541, 2544, 2545, 2548, 2595, 2605, 2606, 2607, 2628, 2629, 2695, 2770, 2783 |
| FISH_LIFE HISTORY | 171, 178, 179, 259, 457, 526, (S: fish_reproduction) 623, 701, 702, 745, 934, 935, 949, 1035, 1036, 1328, 1541, 1544, 1546, 1574, 1868, 1869, 2544 |
| FISH_MANAGEMENT | 8, 34, 120, 139, 141, 143, 164, 166, 171, 175, 176, 177, 178, 213, 214, 219, 224, 261, 274, 276, 283, 310, 324, 330, 331, 351, 390, 392, 419, 458, 461, 463, 484, 488, 505, 508, 527, 528, 529, 564, 570, 572, 573, 617, 619, 620, 621, 670, 671, 696, 716, 737, 775, 779, 786, 789, 794, 810, 821, 824, 827, 832, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 852, 859, 866, 904, 905, 916, 920, 921, 923, 931, 932, 939, 949, 966, 967, 988, 992, 993, 995, 997, 1058, 1059, 1068, 1083, 1115, 1117, 1122, 1128, 1150, 1167, 1205, 1206, 1215, 1216, 1221, 1229, 1233, 1234, 1238, 1247, 1284, 1285, 1291, 1292, 1301, 1312, 1313, 1336, 1346, 1354, 1355, 1356, 1357, 1358, 1366, 1367, 1395, 1415, |

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| FISH MANAGEMENT (continued) | 1460, 1477, 1490, 1506, 1527, 1528, 1530, 1531, 1532, 1541, 1574, 1586, 1609, 1624, 1647, 1668, 1684, 1691, 1692, 1694, 1695, 1696, 1697, 1740, 1818, 1859, 1870, 1874, 1914, 1946, 1960, 1961, 1962, 2023, 2042, 2054, 2065, 2066, 2067, 2084, 2089, 2094, 2098, 2103, 2112, 2133, 2141, 2142, 2149, 2150, 2160, 2161, 2177, 2178, 2179, 2180, 2181, 2186, 2197, 2243, 2251, 2257, 2279, 2280, 2286, 2287, 2325, 2326, 2341, 2343, 2359, 2378, 2397, 2399, 2471, 2472, 2473, 2518, 2525, 2538, 2539, 2540, 2541, 2544, 2546, 2548, 2552, 2583, 2584, 2585, 2624, 2625, 2630, 2645, 2654, 2660, 2680, 2720, 2721, 2723, 2724, 2730 |
| FISH MAPPING (S: mapping_fish) | |
| FISH METABOLISM | 447, 540, 541, 654, 724, 1223, 1408, 1411, 1412, 1501, 1503, 1529, 1595, 1853, 1857, 2037, 2288, 2295, 2297, 2308, 2344, 2539, 2540, 2695, 2768 |
| FISH METALS | 24, 52, 143, 213, 224, 260, 261, 323, 324, 396, 397, 399, 404, 531, 576, 614, 639, 655, 721, 763, 821, 923, 968, 990, 996, 1021, 1022, 1068, 1083, 1101, 1115, 1117, 1120, 1124, 1128, 1132, 1142, 1145, 1150, 1158, 1332, 1395, 1412, 1414, 1487, 1505, 1576, 1676, 1692, 1695, 1706, 1730, 1736, 1740, 1786, 1809, 1816, 1853, 1855, 1857, 1883, 2017, 2039, 2056, 2097, 2142, 2177, 2180, 2204, 2211, 2262, 2276, 2281, 2295, 2301, 2315, 2378, 2432, 2437, 2521, 2525, 2539, 2540, 2541, 2563, 2572, 2573, 2630, 2673, 2741 |
| FISH MIGRATION | 171, 245, 256, 337, 617, 811, 877, 935, 949, 1212, 1237, 1328, 1543, 1581, 1671, 1860, 1874, 1918, 2041, 2156, 2157, 2158, 2162, 2188, 2212, 2341, 2461, 2544, 2768 |
| FISH MODEL (S: model_fish) | |
| FISH MONITORING | 94, 213, 224, 324, 351, 395, (SA: creel census) 396, 397, 399, 404, 426, 495, 519, 520, 521, 522, 527, 570, 619, 670, 672, 725, 775, 821, 888, 907, 931, 987, 988, 989, 990, 991, 992, 993, 994, 996, 997, 999, 1018, 1019, 1037, 1083, 1094, 1101, 1117, 1120, 1132, 1134, |

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| FISH_MONITORING (continued) | 1137, 1138, 1140, 1142, 1143, 1145, 1150, 1158, 1242, 1247, 1250, 1332, 1354, 1400, 1414, 1424, 1425, 1426, 1468, 1476, 1487, 1489, 1490, 1491, 1524, 1545, 1574, 1576, 1640, 1691, 1692, 1694, 1695, 1696, 1697, 1716, 1809, 1818, 1886, 1973, 1975, 2017, 2019, 2023, 2053, 2054, 2055, 2097, 2141, 2142, 2158, 2177, 2178, 2179, 2180, 2181, 2184, 2204, 2208, 2210, 2211, 2212, 2213, 2292, 2293, 2294, 2296, 2297, 2301, 2305, 2314, 2316, 2318, 2320, 2321, 2393, 2418, 2419, 2449, 2521, 2525, 2539, 2540, 2541, 2545, 2548, 2549, 2583, 2584, 2585, 2586, 2587, 2601, 2602, 2603, 2604, 2605, 2693, 2694, 2717, 2720, 2785 |
| FISH_MORPHOLOGY | 36, 51, 282, 464, 721, 949, 1016, 1035, 1036, 1086, 1299, 1413, 2472, 2539, 2595, 2664 |
| FISH_MORTALITY | 134, 141, 165, 173, 175, 258, (SA: fish_survival) 283, 287, 310, 314, 334, 337, 407, 408, 488, 529, 564, 617, 620, 621, 622, 639, 675, 683, 732, 745, 780, 793, 796, 877, 904, 906, 931, 940, 941, 949, 1005, 1026, 1058, 1121, 1205, 1220, 1221, 1222, 1243, 1285, 1299, 1308, 1313, 1314, 1328, 1335, 1354, 1356, 1395, 1465, 1467, 1468, 1476, 1502, 1504, 1506, 1542, 1544, 1546, 1580, 1586, 1668, 1677, 1691, 1802, 1850, 1859, 1980, 2041, 2054, 2055, 2102, 2103, 2182, 2186, 2190, 2197, 2201, 2247, 2283, 2299, 2315, 2316, 2317, 2318, 2320, 2341, 2344, 2450, 2451, 2548, 2587, 2603, 2605, 2624, 2626, 2628, 2629, 2661, 2664, 2673, 2695, 2720, 2723, 2782 |
| FISH_MOVEMENT | 334, 336, 337, 665, 916, 966, 1212, 1237, 1860, 2156 |
| FISH_ORGANICS | 8, 24, 52, 77, 94, 117, (SA: fish_PCBs) 134, 143, 165, 170, 174, 190, (SA: toxics_fish) 213, 224, 260, 261, 287, 288, 323, 324, 390, 396, 397, 399, 404, 419, 439, 440, 485, 486, 495, 509, 510, 516, 517, 518, 519, 520, 521, 522, 531, 532, 570, 576, 597, 611, 614, 628, 639, 640, 649, 650, 654, 655, 670, 674, 679, 706, 707, 721, 732, 737, 793, 795, 805, 806, 821, 871, 886, 888, 904, 916, |

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| FISH_ORGANICS (continued) | 923, 968, 990, 994, 996, 1001, 1002, 1009, 1025, 1038, 1056, 1057, 1060, 1068, 1083, 1094, 1101, 1115, 1117, 1120, 1121, 1124, 1128, 1132, 1138, 1142, 1145, 1150, 1155, 1158, 1203, 1222, 1223, 1254, 1301, 1332, 1345, 1346, 1354, 1362, 1363, 1364, 1411, 1412, 1414, 1445, 1451, 1487, 1501, 1503, 1504, 1505, 1506, 1507, 1527, 1531, 1532, 1592, 1593, 1605, 1606, 1630, 1652, 1653, 1676, 1684, 1692, 1694, 1695, 1706, 1707, 1711, 1730, 1736, 1740, 1772, 1786, 1802, 1809, 1816, 1821, 1838, 1853, 1854, 1855, 1856, 1883, 1886, 1913, 1961, 1973, 1975, 1985, 1992, 2014, 2017, 2019, 2020, 2021, 2037, 2039, 2050, 2052, 2056, 2097, 2141, 2142, 2163, 2175, 2177, 2178, 2179, 2180, 2190, 2204, 2208, 2209, 2210, 2212, 2213, 2239, 2250, 2264, 2276, 2279, 2280, 2281, 2282, 2283, 2301, 2304, 2305, 2308, 2309, 2315, 2317, 2332, 2359, 2361, 2367, 2378, 2379, 2391, 2399, 2432, 2433, 2434, 2435, 2437, 2439, 2443, 2492, 2521, 2522, 2524, 2529, 2532, 2537, 2539, 2540, 2541, 2543, 2544, 2545, 2548, 2560, 2561, 2563, 2564, 2580, 2581, 2582, 2586, 2630, 2635, 2647, 2648, 2655, 2673, 2689, 2690, 2691, 2692, 2693, 2694, 2695, 2724, 2729, 2730, 2751, 2774, 2786 |
| FISH_PARASITES (SA: sea lamprey which are not included here) | 36, 37, 38, 39, 40, 41, 42, 43, 194, 200, 1018, 1260, 1408, 1546, 2418 |
| FISH_PCBS | 8, 24, 52, 94, 117, 134, 165, 174, 190, 224, 260, 261, 287, 288, 323, 324, 396, 397, 399, 404, 419, 439, 440, 517, 518, 519, 520, 521, 522, 531, 532, 570, 576, 611, 614, 639, 649, 650, 654, 655, 670, 679, 706, 707, 732, 793, 871, 888, 904, 923, 968, 990, 994, 996, 1001, 1002, 1009, 1025, 1038, 1056, 1057, 1060, 1068, 1094, 1101, 1117, 1121, 1124, 1132, 1138, 1142, 1145, 1158, 1203, 1222, 1223, 1254, 1332, 1345, 1346, 1354, 1364, 1411, 1412, 1414, 1487, 1501, 1503, 1504, 1505, 1506, 1507, 1527, 1531, 1592, 1593, 1605, 1606, 1630, 1652, 1653, 1692, 1694, 1695, 1706, 1707, 1711, 1730, 1736, 1740, 1772, 1802, 1809, 1838, |

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| FISH_PCBS (continued) | 1855, 1856, 1883, 1886, 1913, 1961, 1973, 1985, 2014, 2017, 2019, 2021, 2037, 2039, 2050, 2141, 2142, 2163, 2175, 2177, 2178, 2179, 2180, 2190, 2208, 2209, 2210, 2212, 2239, 2250, 2276, 2279, 2280, 2281, 2282, 2283, 2301, 2304, 2305, 2308, 2309, 2315, 2317, 2359, 2367, 2378, 2379, 2391, 2399, 2432, 2433, 2434, 2435, 2437, 2439, 2443, 2492, 2522, 2524, 2529, 2537, 2539, 2540, 2541, 2545, 2560, 2561, 2563, 2564, 2580, 2581, 2582, 2586, 2635, 2647, 2648, 2673, 2689, 2690, 2691, 2693, 2695, 2724, 2729, 2730, 2751, 2774, 2786 |
| FISH_PHYSIOLOGY | 39, 117, 134, 164, 174, 248, 288, 324, 390, 393, 397, 447, 540, 541, 564, 616, 673, 674, 721, 724, 733, 734, 780, 793, 806, 809, 821, 865, 886, 905, 934, 935, 949, 968, 1001, 1004, 1016, 1017, 1023, 1121, 1124, 1128, 1132, 1138, 1158, 1221, 1237, 1251, 1299, 1308, 1316, 1365, 1409, 1410, 1411, 1412, 1413, 1414, 1502, 1503, 1504, 1507, 1529, 1546, 1569, 1580, 1605, 1652, 1653, 1676, 1677, 1678, 1706, 1786, 1853, 1854, 1855, 1857, 1913, 1918, 1973, 2037, 2050, 2143, 2156, 2163, 2187, 2190, 2197, 2212, 2250, 2264, 2295, 2297, 2298, 2300, 2308, 2317, 2342, 2344, 2361, 2472, 2522, 2529, 2537, 2540, 2541, 2544, 2545, 2548, 2572, 2573, 2582, 2635, 2664, 2673, 2691, 2694, 2695 |
| FISH_POPULATIONS (SA: fisheries) | 34, 40, 41, 75, 103, 110, 115, 116, 130, 134, 165, 171, 173, 176, 177, 188, 200, 214, 247, 256, 257, 258, 283, 310, 314, 324, 334, 337, 391, 392, 410, 419, 447, 457, 458, 459, 463, 484, 488, 505, 527, 528, 529, 559, 570, 617, 618, 620, 621, 622, 640, 665, 670, 671, 673, 674, 675, 678, 683, 696, 733, 734, 744, 763, 783, 793, 799, 808, 809, 811, 840, 841, 842, 843, 846, 847, 848, 849, 850, 866, 877, 882, 907, 923, 928, 931, 932, 937, 938, 939, 940, 941, 942, 966, 983, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 996, 997, 999, |

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| FISH_POPULATIONS (continued) | 1005, 1019, 1036, 1040, 1058, 1059, 1062, 1063, 1086, 1087, 1204, 1205, 1206, 1213, 1219, 1220, 1221, 1224, 1242, 1244, 1245, 1247, 1248, 1249, 1250, 1251, 1260, 1284, 1290, 1291, 1312, 1315, 1321, 1328, 1335, 1336, 1346, 1356, 1357, 1358, 1365, 1367, 1409, 1410, 1413, 1425, 1426, 1443, 1466, 1468, 1489, 1490, 1491, 1525, 1527, 1528, 1531, 1542, 1543, 1545, 1546, 1569, 1575, 1581, 1586, 1593, 1640, 1647, 1673, 1674, 1691, 1692, 1694, 1695, 1716, 1800, 1859, 1868, 1869, 1870, 1874, 1891, 1919, 1960, 1980, 2041, 2051, 2053, 2054, 2055, 2065, 2067, 2094, 2102, 2103, 2112, 2149, 2150, 2157, 2158, 2177, 2178, 2179, 2180, 2181, 2182, 2184, 2188, 2190, 2201, 2243, 2251, 2261, 2262, 2288, 2290, 2291, 2292, 2294, 2296, 2297, 2299, 2325, 2341, 2344, 2394, 2418, 2419, 2420, 2449, 2450, 2451, 2470, 2475, 2476, 2515, 2518, 2539, 2540, 2541, 2545, 2546, 2548, 2583, 2584, 2585, 2586, 2605, 2608, 2624, 2625, 2645, 2660, 2661, 2663, 2673, 2680, 2720, 2721, 2724, 2730, 2785 |
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FISH_POWER_PLANT_EFFECTS

(S: power plants, effects on fish)

(S: fish_thermal pollution)

(S: entrainment fish)

(S: impingement)

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| FISH_PREDATION | 103, 166, 186, 246, 247, 248, (SA: sea lamprey) (Some sea lamprey ones are included here) |
| | 310, 419, 440, 457, 458, 459, 460, 461, 462, 463, 465, 466, 467, 468, 469, 540, 571, 572, 573, 621, 622, 623, 628, 671, 672, 675, 678, 683, 701, 702, 730, 744, 763, 799, 844, 848, 849, 850, 882, 928, 929, 940, 941, 949, 967, 1006, 1023, 1026, 1209, 1210, 1211, 1212, 1213, 1227, 1249, 1260, 1299, 1308, 1312, 1313, 1314, 1315, 1345, 1347, 1501, 1511, 1528, 1544, 1546, 1595, 1609, 1668, 1980, 2039, 2051, 2065, 2067, 2094, 2162, 2197, 2251, 2287, 2295, 2310, 2311, 2312, 2321, 2325, 2341, 2342, 2343, 2344, 2432, 2434, 2539, 2540, 2541, 2544, 2545, 2548, 2563, 2583, 2584, 2585, 2586, 2587, 2607, 2625, 2661, 2663, 2731 |

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| FISH_PRODUCTIVITY | 116, 190, 196, 197, 334, 407, 408, 622, 789, 877, 920, 931, 1007, 1058, 1206, 1221, 1307, 1542, 2133, 2253, 2458, 2544 |
| FISH_RECRUITMENT | 256, 620, 1205, 1221, 1980, 2624 |
| FISH REHABILITATION | 175, 176, 282, 407, 408, 419, (SA: lake trout_rehabilitation) 570, 673, 716, 733, 737, 846, 847, 848, 849, 921, 940, 997, 1040, 1063, 1122, 1158, 1357, 1358, 1366, 1415, 1476, 1531, 1532, 1647, 1919, 1946, 2055, 2056, 2178, 2179, 2247, 2248, 2286, 2394, 2399, 2540, 2541, 2548, 2552, 2587, 2624, 2693, 2695, 2724 |
| FISH_REPRODUCTION | 50, 102, 115, 164, 166, 171, (SA: fecundity_fish) (SA: fish_spawning) 173, 175, 176, 178, 200, 259, 324, 332, 333, 334, 336, 337, 391, 392, 393, 395, 407, 408, 418, 419, 434, 457, 481, 485, 486, 505, 529, 541, 558, 559, 563, 564, 570, 573, 617, 618, 620, 639, 665, 731, 733, 734, 744, 752, 780, 808, 809, 810, 811, 840, 864, 877, 904, 906, 907, 923, 931, 934, 935, 940, 941, 949, 1016, 1017, 1018, 1025, 1039, 1040, 1058, 1062, 1063, 1086, 1142, 1145, 1203, 1204, 1221, 1245, 1246, 1251, 1328, 1356, 1358, 1412, 1414, 1451, 1489, 1490, 1491, 1501, 1504, 1506, 1529, 1541, 1542, 1543, 1544, 1545, 1546, 1569, 1574, 1593, 1595, 1605, 1606, 1671, 1673, 1674, 1676, 1677, 1678, 1691, 1692, 1693, 1695, 1706, 1795, 1800, 1802, 1820, 1854, 1859, 1860, 1867, 1868, 1869, 1870, 1874, 1903, 1946, 2055, 2102, 2103, 2149, 2150, 2156, 2157, 2158, 2177, 2180, 2181, 2188, 2190, 2197, 2247, 2248, 2251, 2287, 2290, 2308, 2310, 2311, 2312, 2315, 2317, 2319, 2321, 2420, 2461, 2475, 2476, 2539, 2540, 2541, 2543, 2545, 2546, 2586, 2603, 2605, 2606, 2607, 2608, 2624, 2660, 2664, 2673, 2690, 2691, 2694, 2695, 2720, 2723 |
| FISH REVIEW (S: review_fish) | |
| FISH_SEASONAL DISTRIBUTION | 38, 1243, 1251, 1284, 2461, 2548 (SA: fish_distribution) |
| FISH_SEASONAL VARIATION | 42, 75, 141, 200, 391, 393, 559, 622, 623, 665, 672, 683, |

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| FISH_SEASONAL VARIATION (continued) | 724, 730, 731, 737, 937, 939, 942, 1005, 1006, 1227, 1250, 1314, 1468, 1529, 1532, 1595, 1740, 1874, 1914, 2038, 2201, 2262, 2290, 2294, 2302, 2341, 2342, 2450, 2539, 2544, 2572, 2573, 2584, 2586, 2768, 2784 |
| FISH_SIZE | 39, 246, 248, 905, 967, 1581, 2143, 2461, 2548 |
| FISH SONAR | 245, 246, 410, 2292, 2314 |
| FISH SPAWNING | 50, 102, 115, 166, 171, 175, (SA: fish_reproduction) 176, 177, 178, 200, 259, 332, 333, 334, 336, 337, 391, 392, 393, 418, 419, 426, 434, 481, 484, 559, 563, 564, 570, 617, 620, 670, 674, 724, 731, 733, 734, 752, 793, 794, 808, 809, 810, 811, 904, 907, 923, 931, 934, 935, 940, 941, 949, 1018, 1025, 1058, 1086, 1204, 1237, 1242, 1245, 1246, 1251, 1291, 1292, 1312, 1328, 1356, 1408, 1410, 1412, 1490, 1506, 1527, 1541, 1542, 1543, 1545, 1546, 1605, 1606, 1671, 1673, 1674, 1678, 1691, 1692, 1693, 1695, 1795, 1820, 1867, 1868, 1870, 1903, 1946, 2041, 2054, 2055, 2103, 2157, 2158, 2183, 2188, 2197, 2247, 2248, 2251, 2287, 2288, 2290, 2310, 2311, 2312, 2315, 2319, 2539, 2540, 2541, 2544, 2545, 2548, 2586, 2605, 2606, 2607, 2608, 2664, 2720, 2723 |
| FISH_STATISTICS | 116, 283, 521, 522, 617, 620, 877, 1058, 1220, 1251, 1284, 1525, 1575, 2515 |
| FISH_STOCKING | 175, 176, 177, 190, 282, 407, 408, 419, 434, 527, 528, 529, 564, 570, 573, 664, 673, 674, 716, 793, 839, 840, 841, 842, 843, 846, 847, 848, 849, 850, 851, 988, 990, 1246, 1312, 1313, 1336, 1354, 1355, 1356, 1357, 1490, 1506, 1527, 1795, 1860, 1870, 1919, 2054, 2055, 2103, 2157, 2161, 2257, 2262, 2286, 2288, 2344, 2359, 2394, 2398, 2471, 2548, 2585, 2586, 2587, 2603, 2605, 2606, 2607, 2624, 2717, 2730 |
| FISH_STRAINS | 282, 335, 419, 617, 620, 839, 1035, 1036, 1039, 1062, 1063, 1086, 1087, 1204, 1357, 1358, 1367, 1409, 1410, 2102, 2103, 2178, 2286, 2288, 2548 |

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| FISH_SUCCESSION | 2051 | |
| FISH_SUMMARY (S: summary_fish/fisheries) | | |
| FISH_SURVIVAL | 103, 115, 287, 407, 419, 481, 732, 745, 780, 793, 882, 923, 1025, 1026, 1243, 1335, 1504, 1506, 1544, 1574, 1676, 1677, 1678, 1791, 1946, 1980, 2055, 2188, 2247, 2315, 2316, 2317, 2318, 2320, 2321, 2543, 2603, 2626, 2673, 2693, 2694, 2695, 2782 | |
| FISH_TAXONOMY | 36, 43, 102, 139, 178, 194, 561, 752, 808, 1211, 1566, 2595 | |
| FISH_TEMPERATURE | 103, 115, 164, 168, 200, 213, (SA: fish_thermal_pollution; this includes some of those) 224, 245, 246, 248, 279, 334, 337, 344, 391, 392, 393, 396, 397, 464, 467, 468, 469, 540, 541, 559, 597, 621, 623, 675, 724, 780, 783, 799, 821, 864, 865, 992, 1005, 1026, 1150, 1243, 1247, 1250, 1251, 1284, 1285, 1291, 1314, 1316, 1328, 1332, 1335, 1476, 1503, 1511, 1529, 1541, 1543, 1545, 1580, 1674, 1706, 1736, 1740, 1874, 2019, 2021, 2023, 2029, 2039, 2094, 2097, 2133, 2162, 2186, 2261, 2262, 2290, 2292, 2293, 2294, 2296, 2297, 2298, 2300, 2302, 2341, 2418, 2420, 2450, 2451, 2461, 2472, 2544, 2545, 2583, 2584, 2626, 2720, 2784 | |
| FISH_TELEMETRY | 2293, 2296, 2301 | |
| FISH_THERMAL_POLLUTION | 164, 173, 396, 540, 541, 675, 737, 864, 865, 1007, 1150, 1243, 1247, 1285, 1332, 1525, 1532, 1545, 2019, 2020, 2021, 2029, 2039, 2056, 2181, 2290, 2292, 2294, 2296, 2297, 2298, 2300, 2301, 2302, 2420, 2450, 2451, 2782, 2784 | |
| FISH_TOXICS (S: toxics_fish) | | |
| FISH_TRIBUTARIES (S: tributaries_fish) | | |
| FISH_UPTAKE | 287, 288, 440, 1001, 1222, 1223, (SA: fish_bioaccumulation) 1802, 2391 | |
| FISH_WATER_QUALITY (S: water_quality_fish) | | |
| FISH_WEIGHT | 2298 | |
| FISH_YEAR-CLASS_STRENGTH | 745, 1335, 2149 | |
| FISH_YIELD (SA: commercial_fishing) | 276, 407, 408, 529, 617, 618, (SA: fish_harvest) 620, 789, 923, 987, 989, 991, | |

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| FISH_YIELD (continued) | 995, 1037, 1061, 1219, 1240, 1328, 1574, 1575, 1692, 1696, 1859, 2041, 2133, 2475, 2476, 2477, 2545 |
| FISHERIES | 166, 185, 186, 190, 197, 274, (SA: fish_management) 276, 282, 324, 670, 789, 827, (SA: fish_populations) 832, 845, 930, 932, 1007, 1068, (SA: history_fisheries) 1233, 1234, 1240, 1339, 1357, 1415, (SA: review_fish/fisheries) 1477, 1527, 1530, 1789, 2023, 2065, (SA: summary_fish/fisheries) 2067, 2177, 2178, 2179, 2180, 2181, 2257, 2381, 2398, 2400, 2515, 2560, 2667, 2680, 2720, 2724, 2777 |
| FISHING (S: commercial fishing) (S: sport fishing) | |
| FLAGELLATES | 350, 397, 746, 1294, 1324, 1337, (SA: dinoflagellates) 1661 (SA: phytoflagellates) (SA: Protozoa) |
| FLATWORMS (S: Turbellaria) | |
| FLOODING | 187, 192, 309, 355, 411, 479, 491, 590, 704, 833, 834, 838, 889, 891, 1084, 1025, 1264, 1265, 1293, 1332, 1496, 1579, 1594, 1628, 1684, 1723, 1729, 1733, 1740, 1966, 2062, 2289, 2313, 2479, 2481, 2482, 2487, 2488, 2496, 2508, 2518, 2556, 2588, 2654, 2726, 2740 |
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| FLOW_ATMOSPHERIC | 545, 546 |
| FLOW_GROUNDWATER | 49, 63, 237, 296, 373, 374, 377, 420, 473, 797, 803, 807, 910, 980, 1033, 1269, 1610, 1675, 1751, 2040, 2207, 2336, 2337, 2416, 2445, 2556, 2588, 2589, 2787 |
| FLOW_MODEL | 49, 237, 296, 377, 473, 537, 538, 545, 546, 589, 797, 807, 1539, 1540, 1579, 1610, 1751, 1803, 1923, 1932, 2040, 2207, 2306 |
| FLOW_TRIBUTARIES | 49, 122, 124, 126, 315, 377, 473, 537, 1032, 1033, 1269, 1579, 1674, 1803, 1863, 2205 |
| FLUORANTHENE (SA: PAHs) | 597, 609, 610 |
| FLUORIDE | 52, 224, 420, 472, 473, 657, 879, 897, 910, 950, 979, 1083, 1180, 1181, 1188, 1270, 2097, 2497 |
| FLY ASH | 52, 804, 910 |
| FOOD CHAIN | 95, 128, 153, 224, 232, 247, 280, 281, 310, 361, 364, 439, 440, 460, 463, 466, 467, 531, |

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| FORAGE BASE (SA:.fish_predation) | 393, 462, 465, 621, 622, 670, 931, 939, 1248, 1249, 2067, 2177, 2179, 2181, 2302, 2326, 2341, 2343, 2539, 2540, 2541, 2663 |
| FORESTS | 121, 424, 783, 1171, 1300, 1389, (SA: history_forests) 1453, 1462, 1497, 1665, 1940, 2007, 2016, 2064, 2403, 2518 |
| FOSSIL FUEL (SA: coal) | 59, 62, 290, 597, 804, 822, 861, 862 |
| FOSSILS | 45, 109, 424, 727, 901, 902, 1201, 1388, 1566, 2117, 2668 |
| FRAGILARIA (SA: diatoms) | 101, 492, 1337, 1401, 1407, 1535, 1537, 1777, 2185, 2199, 2223, 2350, 2355, 2454, 2456, 2640 |
| FRESHWATER DRUM | 139, 426, 809, 811, 1150, 1251, 1364, 1546, 2177, 2451, 2540, 2541, 2777 |
| FUNGI | 103, 398, 1128, 1341, 2554, 2741 |
| FURANS | 324, 482, 516, 871, 917, 923, 1025, 1101, 1117, 1120, 1138, 1945, 1973, 2052, 2308, 2309, 2536, 2537, 2564, 2725 |
| GABIONS (SA: coastal structures) | 909 |
| GALLIUM | 316, 317, 1794 |
| GAMMARUS | 260, 261, 322, 588, 1209, 2276, 2678, 2704, 2708 |
| GAR | 139, 811, 2451 |
| GASTROPODA (S: snails) | |
| GEESE | 918, 1217 |
| GEOCHEMISTRY | 10, 11, 12, 45, 124, 125, (SA: inorganics; SA: metals) 222, 223, 316, 317, 339, 644, (SA: sediments_chemistry) 736, 774, 869, 870, 1258, 1421, (SA: trace metals) 1422, 1473, 1474, 1518, 1615, 1682, 1700, 1794, 1825, 1826, 1956, 1966, |

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2444, 2467, 2614, 2615, 2616, 2619,
2686, 2763, 2771

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GEOLOGY

(S: history_geology)
(S: mapping_geology)
(S: review_geology)
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726, 742, 818, 880, 881, 889,
890, 891, 893, 894, 895, 896,
900, 902, 908, 909, 1011, 1065,
1070, 1074, 1079, 1214, 1275, 1276,
1297, 1317, 1323, 1632, 1637, 1641,
1682, 1875, 1879, 1880, 1881, 1941,
1966, 2043, 2047, 2048, 2064, 2145,
2146, 2174, 2203, 2219, 2259, 2336,
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2744, 2745, 2747, 2748, 2749, 2750,
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1389, 1390, 1392, 1393, 1459, 1636,
1637, 1639, 1663, 1664, 1769, 1875,
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| GLACIAL (continued) | 2259, 2566, 2568, 2592, 2658, 2683, 2746 |
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| GLOEOCYSTIS (SA: green algae) | 2350, 2355, 2357 |
| GLUCOSE | 368 |
| GOLDFISH | 426, 809, 811, 1022, 1244, 1251, 1364, 2451 |
| GOLDEN REDHORSE | 2451 |
| GRAIN SIZE_BEACHES (S: beaches_grain size) | |
| GRAIN SIZE_PARTICLES | 15, 22, 26, 68, 69, 122, 212, 608, 802, 944, 946, 947, 1052, 1326, 1350, 1519, 1520, 1562, 1615, 1723, 1955, 1956, 2576, 2579 |
| GRAIN SIZE_SAND | 156, 158, 159, 160, 167, 182, 260, 349, 555, 742, 894, 1350, 1610, 1641, 1793, 1794, 1966, 2034, 2219, 2259, 2593, 2709 |
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| GRAVEL | 159, 260, 349, 374, 405, 737, 1147, 1532, 1599, 1663, 1664, 1768, 1795, 2656, 2657 |
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| (SA: hydrology_groundwater) | 374, 376, 377, 420, 427, 436, |
| (SA: metals_groundwater) | 473, 524, 636, 638, 642, 666, |
| (SA: model_groundwater) | 715, 759, 790, 797, 803, 807, |
| (SA: monitoring_groundwater) | 820, 821, 825, 833, 834, 897, |
| (SA: pollution_groundwater) | 910, 911, 980, 1010, 1033, 1050, |
| (SA: research needs_groundwater) | 1051, 1068, 1083, 1085, 1094, 1098, |
| (SA: water quality_groundwater) | 1115, 1116, 1127, 1128, 1132, 1175, |
| | 1197, 1269, 1270, 1271, 1272, 1310, |
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| (SA: water quality_groundwater) | 339, 374, 376, 377, 420, 473, |
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| | 910, 911, 1033, 1083, 1094, 1098, |
| | 1115, 1116, 1127, 1128, 1132, 1175, |
| | 1197, 1270, 1333, 1611, 1621, 1767, |
| | 2040, 2140, 2202, 2416, 2445, 2518, |
| | 2534, 2554, 2556, 2588, 2591, 2592, |
| | 2654, 2686 |
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| | 968, 1022, 1132, 1138, 1142, 1145, |
| | 1150, 1594, 1706, 1790, 1799, 1809, |
| | 2220, 2221, 2239, 2285, 2308, 2309 |
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| HARBORS | 143, 147, 154, 198, 217, 260, |
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| (SA: pollution_harbors) | 560, 729, 736, 742, 750, 829, |
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| (SA: water quality_harbors) | 1027, 1041, 1065, 1073, 1074, 1162, |
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| | 2491, 2492, 2498, 2510, 2513, 2518, |
| | 2524, 2528, 2535, 2538, 2584, 2632, |
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| | 2755, 2756, 2757, 2758 |
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| (SA: water quality_monitoring) | |

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| HCB (SA: organochlorine pesticides) | 261, 532, 679, 729, 793, 888, 968, 969, 1098, 1138, 1148, 1174, 1189, 1254, 1364, 1487, 1732, 2580 |
| HEAT (SA: temperature) | 2, 33, 118, 119, 423, 1008, (SA: thermal pollution) 1014, 1015, 1024, 1723, 1934, 1944, (SA: waste_heat) 2697 |
| HEAT BUDGET | 33, 118, 119, 423, 1008, 1014, (SA: temperature) 1015, 1723, 1944 |
| HEMIPTERA | 1404 |
| HEPTACHLOR | 261, 399, 473, 531, 532, 740, (SA: organochlorine pesticides) 793, 888, 968, 969, 971, 979, 996, 1180, 1181, 1189, 1254, 1332, 1487, 1794, 2097, 2142, 2276 |
| HEPTACHLOR EPOXIDE | 261, 473, 532, 740, 793, 888, (SA: organochlorine pesticides) 968, 969, 979, 996, 1189, 1254, 1487, 2097, 2142 |
| HEPTADECANE (SA: alkanes) | 2655 |
| HERBICIDES (S: pesticides) | |
| HERRING (S: lake herring) | |
| HERRING GULLS (SA: birds) | 24, 244, 609, 798, 887, 888, 968, 1022, 1132, 1138, 1142, 1145, 1150, 1706, 1799, 1809, 2220, 2221, 2239, 2285, 2308, 2309 |
| HETEROTROPHY | 1659 |
| HIRUDINEA | 36, 796, 1404, 1760, 2778 |
| HISTORY (general) | 666, 754, 1259 |
| (SA: glacial; SA: paleoecology) | |
| HISTORY_ARCHAEOLOGY (S: archaeology) | |
| HISTORY_BIRDS (S: birds_history) | |
| HISTORY_CLIMATE | 80, 81, 86, 89, 90, 156, 242, 290, 353, 356, 737, 782, 783, 897, 1068, 1300, 1390, 1532, 1666, 1934, 1939, 2559b, 2575 |
| HISTORY_COASTAL | 45, 215, 255, 405, 429, 430, (SA: history_shoreline) 497, 914, 924, 986, 1075, 1092, 1215, 1248, 1378, 1389, 1493, 1494, 1495, 1820, 1875, 1879, 1881, 1916, 1950, 2023, 2042, 2048, 2064, 2424, 2426, 2428, 2484, 2486, 2518, 2658, 2746, 2747 |
| HISTORY_CONTAMINANTS | 24, 45, 381, 382, 419, 737, 758, 831, 924, 925, 950, 1056, 1068, 1098, 1456, 1532, 1767, 2011, 2056, 2106, 2208, 2346, 2359, 2387, 2524, 2544, 2644, 2695, 2730 |
| HISTORY_CURRENTS (S: currents_history) | |

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|------------------------------|---|
| HISTORY_DEPOSITION | 156, 668, 727, 758, 870, 884, 1231, 1390, 1392, 1473, 1474, 1639, 1815, 2011, 2147, 2259, 2387, 2417, 2462, 2563 |
| HISTORY_DIVERSION | 77, 127, 290, 313, 436, 737, 1068, 1271, 1513, 1532, 1602, 1865, 1960, 2392, 2479, 2481, 2514, 2600 |
| HISTORY_EROSION | 109, 250, 388, 429, 430, 892, 1068, 1075, 1215, 1389, 1390, 1636, 1639, 1875, 1879, 1881, 1916, 1965, 1966, 2042, 2048, 2064, 2424, 2426, 2428, 2484, 2486, 2518, 2658, 2746, 2747 |
| HISTORY_EUTROPHICATION | 45, 136, 142, 365, 576, 737, 783, 979, 983, 1068, 1260, 1415, 1440, 1532, 1535, 1536, 1537, 1550, 1945, 1960, 1966, 2012, 2060, 2112, 2116, 2117, 2149, 2150, 2279, 2280, 2346, 2348, 2351, 2563, 2575, 2703 |
| HISTORY_FISH/FISHERIES | 77, 110, 116, 130, 139, 214, 247, 282, 283, 407, 408, 418, 419, 463, 464, 510, 573, 576, 664, 737, 783, 921, 931, 983, 986, 997, 1068, 1233, 1234, 1260, 1313, 1346, 1415, 1443, 1477, 1532, 1609, 1820, 1950, 1960, 2023, 2039, 2056, 2065, 2067, 2112, 2149, 2150, 2197, 2208, 2243, 2251, 2279, 2280, 2359, 2420, 2560, 2660, 2663, 2695, 2724, 2730 |
| HISTORY_FORESTS | 121, 783, 1300, 1389, 2016, 2064, 2518 |
| HISTORY_GEOLOGY | 5, 45, 109, 130, 142, 156, 199, 222, 250, 255, 302, 325, 381, 382, 388, 405, 411, 412, 429, 430, 449, 484, 497, 548, 549, 668, 727, 755, 870, 892, 897, 898, 899, 900, 901, 902, 903, 986, 1068, 1075, 1215, 1231, 1233, 1257, 1262, 1263, 1271, 1313, 1388, 1389, 1390, 1392, 1422, 1446, 1473, 1474, 1493, 1494, 1572, 1636, 1639, 1767, 1875, 1879, 1881, 1890, 1916, 1945, 1954, 1965, 1966, 2023, 2048, 2064, 2147, 2148, 2259, 2279, 2280, 2387, 2417, 2424, 2426, 2428, 2479, 2481, 2484, 2486, 2524, 2563, 2658, 2735, 2746, 2747 |
| HISTORY_INVERTEBRATES | 24, 45, 109, 142, 177, 302, 382, 457, 463, 464, 484, 576, 745, 986, 1068, 1248, 1260, 1550, |

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| HISTORY_INVERTEBRATES (continued) | 1672, 1752, 2003, 2023, 2056, 2112, 2279, 2280, 2341, 2544, 2563, 2575, 2695, 2703, 2710, 2778, 2779 |
| HISTORY_LAKE LEVELS (S: lake levels_history) | |
| HISTORY_LAND USE | 45, 121, 430, 783, 1068, 1092, 1389, 1415, 1666, 1817, 1966, 2023, 2518 |
| HISTORY_PHYTOPLANKTON | 45, 136, 142, 463, 484, 576, 1068, 1260, 1535, 1536, 1537, 2012, 2023, 2060, 2106, 2112, 2116, 2117, 2279, 2280, 2346, 2348, 2351, 2544, 2563, 2575 |
| HISTORY_POLLUTION (S: pollution_history) | |
| HISTORY_PRECIPITATION | 242, 290, 353, 356, 737, 897, 1068, 1532, 1728, 1912, 1927, 1934, 1939, 2039, 2259, 2387, 2479, 2481, 2514, 2559b |
| HISTORY_SEDIMENTS | 5, 24, 45, 109, 222, 255, 302, 381, 382, 388, 405, 412, 430, 482, 548, 549, 668, 727, 737, 870, 884, 892, 898, 901, 902, 921, 986, 1075, 1231, 1248, 1262, 1263, 1389, 1422, 1473, 1474, 1494, 1532, 1636, 1639, 1752, 1815, 1875, 1879, 1881, 1916, 1954, 1966, 2023, 2042, 2048, 2116, 2117, 2348, 2387, 2417, 2424, 2426, 2428, 2462, 2484, 2486, 2524, 2658, 2703, 2735, 2746, 2747 |
| HISTORY_SHIPPING | 121, 510, 710, 1068, 1391, 1446, 1633, 2518 |
| HISTORY_SHORELINE (S: shoreline_history) | |
| HISTORY_TEMPERATURE | 80, 81, 86, 89, 90, 91, 290, 302, 464, 623, 782, 783, 897, 924, 950, 979, 1042, 1300, 1328, 1440, 1535, 1537, 1541, 1550, 1752, 1934, 2023, 2039, 2341, 2351, 2420, 2479, 2481, 2544, 2575, 2710, 2779 |
| HISTORY_URBAN | 121, 130, 353, 356, 436, 482, 1387, 1602, 1817, 2042, 2359 |
| HISTORY_WATER QUALITY (S: water quality_history) | |
| HISTORY_WETLANDS | 215, 737, 914, 986, 1215, 1248, 1263, 1309, 1396, 1493, 1494, 1495, 1532, 1950, 1960, 1966, 2056, 2064, 2518, 2684 |

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| HOLOCENE (SA: glacial) | 109, 222, 318, 382, 411, 425, 429, 430, 653, 727, 897, 903, 1388, 1389, 1390, 1420, 1814, 2417, 2431, 2594 |
| HOLOPEDIUM | 682, 689, 690, 692, 693, 1560, 1562 |
| HORMONES | 447, 1414, 1678 |
| HUMAN HEALTH | 9, 13, 52, 143, 213, 263, (SA: toxics_human health) 275, 323, 325, 390, 397, 398, (SA: water quality_human health) 399, 404, 414, 419, 436, 491, 510, 514, 655, 657, 706, 707, 721, 729, 758, 779, 821, 858, 878, 885, 886, 916, 923, 974, 975, 978, 1009, 1018, 1021, 1022, 1056, 1057, 1060, 1068, 1094, 1096, 1097, 1098, 1099, 1100, 1101, 1107, 1108, 1109, 1111, 1113, 1114, 1115, 1116, 1117, 1119, 1120, 1121, 1124, 1125, 1127, 1128, 1132, 1136, 1138, 1148, 1155, 1158, 1181, 1185, 1188, 1203, 1222, 1375, 1387, 1395, 1400, 1411, 1480, 1484, 1513, 1631, 1707, 1711, 1764, 1767, 1773, 1783, 1807, 1809, 1851, 1864, 1878, 1883, 1913, 1958, 1975, 1992, 2014, 2017, 2050, 2163, 2175, 2209, 2250, 2279, 2280, 2282, 2283, 2305, 2330, 2331, 2359, 2361, 2389, 2391, 2435, 2522, 2524, 2529, 2532, 2534, 2561, 2564, 2572, 2573, 2582, 2586, 2630, 2635, 2725, 2729, 2730, 2774, 2786 |
| HUMIC ACID | 222, 223, 769, 773, 1383, 1732, 1736, 1954, 2775 |
| HYALELLA | 322, 1022, 1451, 2678, 2704, 2708 |
| HYDRA (S: Hydrozoa) | |
| HYDRACARINA (S: Acari) | |
| HYDRAULICS | 167, 313, 1170, 1427, 1463, 1464, 1579, 2189, 2313, 2514 |
| HYDROCARBONS (not chlorinated) (general) | 1614, 1616, 2736 |
| (SA: oil; SA: petroleum) | |
| (For chlorinated hydrocarbons, S: organics or specific compounds) | |
| HYDROCARBONS_DISPERSION | 924, 1583, 1584, 1617 |
| HYDROCARBONS_EFFLUENT (S: effluent_hydrocarbons) | |
| HYDROCARBONS_POLLUTION | 52, 234, 261, 568, 598, 737, (SA: water quality_hydrocarbons) 804, 862, 924, 979, 1083, 1094, 1132, 1146, 1180, 1181, 1200, 1258, |

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| HYDROCARBONS_POLLUTION (continued) | 1273, 1330, 1395, 1532, 1583, 1584, 1611, 1613, 1616, 1618, 1642, 1733, 1827, 1828, 1878, 2168, 2669 |
| HYDROCARBONS_SEDIMENTS | 260, 261, 568, 598, 735, 737, 804, 860, 861, 862, 972, 1083, 1132, 1258, 1330, 1395, 1421, 1422, 1611, 1612, 1613, 1615, 1619, 1733, 1740, 2735 |
| HYDROCARBONS_TRANSPORT | 234, 1132, 1422, 1583, 1584, 1611, 1615, 1618, 1733, 1740, 2126, 2669 |
| HYDROCARBONS_WATER_QUALITY (S: water_quality_hydrocarbons) | |
| HYDRODYNAMICS (S: circulation) | |
| HYDROELECTRIC (S: power_plants_hydroelectric) | |
| HYDROGRAPHY | 154, 432, 434, 562, 574, 575, (SA: bathymetry) 1599, 1792, 1793, 1794, 1916, 2743, 2747 |
| HYDROLOGY | 48, 49, 58, 63, 117, 122, 123, 124, 125, 183, 187, 192, 193, 213, 235, 237, 269, 273, 296, 306, 307, 313, 325, 343, 354, 372, 373, 374, 376, 377, 411, 420, 436, 450, 451, 454, 455, 472, 473, 491, 524, 537, 604, 636, 641, 642, 657, 666, 667, 737, 759, 784, 790, 803, 807, 821, 833, 834, 869, 897, 911, 977, 980, 986, 1010, 1013, 1032, 1033, 1050, 1051, 1083, 1084, 1085, 1094, 1098, 1116, 1120, 1169, 1170, 1175, 1184, 1268, 1269, 1289, 1298, 1333, 1446, 1458, 1463, 1464, 1509, 1532, 1591, 1610, 1611, 1627, 1632, 1675, 1680, 1682, 1723, 1729, 1731, 1732, 1733, 1736, 1737, 1740, 1751, 1803, 1804, 1805, 1890, 1914, 1924, 1932, 1935, 1936, 1937, 1938, 1950, 1951, 1961, 1967, 1982, 1983, 2040, 2046, 2072, 2097, 2099, 2104, 2130, 2140, 2151, 2189, 2205, 2207, 2216, 2242, 2268, 2272, 2273, 2337, 2416, 2445, 2458, 2479, 2481, 2484, 2500, 2501, 2502, 2503, 2508, 2514, 2518, 2534, 2535, 2551, 2554, 2555, 2556, 2557, 2563, 2588, 2589, 2590, 2591, 2592, 2622, 2630, 2654, 2684, 2685, 2686, 2714, 2719, 2765, 2787 |
| HYDROLOGY_GROUNDWATER | 48, 49, 63, 183, 192, 213, 235, 237, 273, 296, 325, 343, 372, 373, 374, 376, 377, 420, |

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| HYDROLOGY_GROUNDWATER (continued) | 436, 473, 524, 636, 642, 666, 759, 790, 803, 807, 821, 833, 834, 897, 911, 980, 1010, 1033, 1050, 1051, 1083, 1085, 1094, 1098, 1116, 1175, 1269, 1333, 1610, 1611, 1675, 1751, 2040, 2072, 2130, 2140, 2207, 2216, 2242, 2337, 2416, 2445, 2518, 2534, 2551, 2554, 2556, 2588, 2589, 2590, 2591, 2592, 2654, 2686, 2765, 2787 |
| HYDROLOGY_LAKE LEVELS | 187, 192, 193, 213, 269, 307, 343, 354, 411, 420, 451, 537, 667, 737, 790, 821, 833, 897, 986, 1010, 1013, 1032, 1169, 1170, 1184, 1269, 1289, 1298, 1463, 1464, 1532, 1632, 1680, 1723, 1729, 1733, 1736, 1737, 1740, 1751, 1914, 1924, 1932, 1935, 1937, 1938, 1967, 2072, 2099, 2189, 2216, 2242, 2272, 2479, 2481, 2514, 2588, 2630, 2686 |
| HYDROLOGY_MODEL (S: model_hydrology) | |
| HYDROLOGY_PRECIPITATION | 58, 63, 192, 193, 235, 269, 343, 354, 454, 455, 473, 537, 641, 737, 784, 821, 897, 1013, 1085, 1170, 1333, 1458, 1532, 1723, 1729, 1732, 1733, 1740, 1804, 1924, 1935, 1936, 1938, 2479, 2481, 2514, 2556, 2588, 2654 |
| HYDROLOGY_SUMMARY (S: summary_hydrology) | |
| HYDROLOGY_TRIBUTARIES (S: tributaries_hydrology) | |
| HYDROLOGY_WATER BUDGET (S: water_budget) | |
| HYDROLOGY_WATER SUPPLY | 193, 237, 269, 325, 343, 473, 642, 657, 784, 803, 821, 1033, 1116, 1169, 1740, 1751, 2097, 2242, 2590, 2591, 2654, 2787 |
| HYDROZOA | 1404, 2051, 2687, 2778 |
| HYPOLIMNION (SA: stratification) | 362, 547, 766, 767, 1005, 1553, 2026 |
| ICE | 78, 80, 81, 82, 83, 84, (SA: mapping_ice) 85, 86, 87, 88, 90, 91, (SA: model_ice) 92, 93, 145, 182, 203, 204, 206, 207, 208, 209, 213, 233, 344, 412, 444, 523, 535, 536, 538, 539, 564, 591, 694, 737, 782, 855, 897, 903, 912, 1012, 1037, 1202, 1291, 1428, 1429, 1430, 1431, 1433, 1434, 1436, 1532, 1554, |

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| ICE (continued) | 1655, 1656, 1663, 1680, 1681, 1713, 1723, 1729, 1730, 1733, 1734, 1736, 1737, 1738, 1740, 1789, 1873, 1892, 1922, 1924, 1934, 1944, 2005, 2006, 2012, 2013, 2029, 2049, 2094, 2177, 2178, 2192, 2245, 2246, 2252, 2422, 2424, 2450, 2460, 2482, 2489, 2490, 2495, 2520, 2539, 2540, 2541, 2544, 2559b, 2753, 2754, 2755, 2756, 2757, 2758, 2759, 2767, 2773 |
| IMPINGEMENT | 258, 314, 351, 559, 737, 1007, (SA: entrainment) 1224, 1241, 1247, 1285, 1465, 1525, 1532, 1586, 1640, 1671, 1716, 2029, 2182, 2201, 2291, 2299, 2393, 2450, 2451, 2628, 2629, 2704, 2784, 2785 |
| INDUSTRY | 45, 52, 60, 121, 122, 130, (SA: power plants) 141, 149, 184, 189, 219, 297, 343, 384, 387, 417, 436, 533, 578, 609, 648, 655, 705, 804, 825, 829, 837, 856, 913, 964, 972, 973, 978, 1084, 1125, 1127, 1131, 1146, 1171, 1182, 1183, 1187, 1188, 1193, 1195, 1332, 1386, 1387, 1405, 1444, 1514, 1567, 1611, 1650, 1813, 1897, 1898, 1926, 1928, 1940, 1992, 2005, 2016, 2023, 2024, 2125, 2141, 2217, 2244, 2267, 2278, 2365, 2378, 2413, 2439, 2443, 2452, 2518, 2646 |
| INORGANIC CARBON | 657, 979, 1954, 1998, 2034, 2463, 2554 |
| INORGANICS (general, no specific inorganics named) | 133, 510, 853, 1484, 1621 (SA: specific inorganic elements) (SA: metals, nutrients, radionuclides, or trace metals) |
| INORGANICS_ANALYTICAL METHODS (S: analytical methods_inorganics) | |
| INORGANICS_ATMOSPHERIC DEPOSITION/TRANSPORT | 6, 7, 11, 15, 20, 21, 22, 23, 24, 26, 54, 56, 58, 62, 63, 64, 67, 94, 138, 143, 163, 213, 224, 273, 319, 323, 355, 361, 366, 367, 376, 377, 381, 385, 414, 473, 478, 513, 514, 533, 545, 551, 552, 553, 599, 631, 632, 643, 644, 645, 646, 647, 648, 658, 660, 661, 662, 663, 709, 719, 743, 758, 771, 804, 879, 885, |

INORGANICS_ATMOSPHERIC
DEPOSITION/TRANSPORT (continued) 910, 953, 957, 974, 975, 1000,
1008, 1021, 1022, 1052, 1110, 1113,
1124, 1125, 1127, 1128, 1132, 1138,
1142, 1154, 1175, 1176, 1182, 1183,
1185, 1186, 1187, 1188, 1189, 1193,
1195, 1197, 1332, 1333, 1473, 1474,
1500, 1582, 1619, 1642, 1643, 1700,
1701, 1702, 1704, 1706, 1723, 1725,
1729, 1730, 1733, 1735, 1736, 1740,
1741, 1742, 1743, 1744, 1745, 1767,
1809, 1828, 1839, 1849, 1902, 1943,
1953, 1956, 1994, 1996, 1997, 2007,
2012, 2017, 2039, 2085, 2105, 2107,
2114, 2137, 2138, 2139, 2140, 2202,
2227, 2229, 2231, 2232, 2233, 2234,
2235, 2236, 2269, 2270, 2276, 2278,
2289, 2383, 2405, 2437, 2438, 2462,
2465, 2466, 2522, 2525, 2531, 2563,
2572, 2573, 2615, 2618, 2665, 2669,
2670, 2696, 2698, 2699, 2772

INORGANICS_BIOACCUMULATION
(S: bioaccumulation_inorganics)

INORGANICS_CYCLING 14, 27, 65, 278, 308, 358,
392, 445, 446, 603, 614, 629,
659, 679, 713, 758, 771, 801,
821, 1006, 1277, 1298, 1311, 1325,
1386, 1440, 1521, 1522, 1582, 1682,
1685, 1723, 1725, 1729, 1730, 1732,
1733, 1735, 1736, 1737, 1740, 1741,
1742, 1743, 1744, 1745, 1755, 1763,
1780, 1787, 1798, 1809, 1822, 1842,
1843, 1904, 1914, 1915, 1920, 1921,
1956, 1998, 1999, 2000, 2012, 2063,
2089, 2090, 2096, 2104, 2185, 2199,
2274, 2289, 2404, 2407, 2411, 2412,
2458, 2459, 2463, 2541, 2544, 2573,
2615, 2617, 2618, 2621, 2763, 2771

INORGANICS_DEPOSITION
(S: deposition_inorganics)

INORGANICS_DISCHARGE
(S: discharge_inorganics)

INORGANICS_DISPERSION
(S: dispersion_inorganics)

INORGANICS_DISTRIBUTION 10, 11, 71, 100, 151, 160,
212, 216, 230, 278, 316, 317,
319, 382, 393, 415, 438, 445,
463, 555, 640, 717, 718, 763,
765, 769, 821, 926, 946, 990,
996, 1022, 1031, 1248, 1294, 1325,
1343, 1351, 1404, 1456, 1487, 1494,
1496, 1551, 1558, 1607, 1660, 1661,

INORGANICS_DISTRIBUTION (continued) 1674, 1685, 1692, 1695, 1700, 1703,
1723, 1729, 1794, 1809, 1816, 1828,
1842, 1857, 1955, 1987, 1990, 1998,
2030, 2034, 2104, 2149, 2150, 2162,
2177, 2178, 2179, 2180, 2181, 2195,
2199, 2262, 2329, 2346, 2348, 2350,
2357, 2386, 2444, 2539, 2540, 2541,
2544, 2545, 2548, 2614, 2617, 2712,
2738

INORGANICS_EFFLUENT
(S: effluent_inorganics)

INORGANICS_FLUX
(SA: inorganics_cycling)
(SA: resuspension) 12, 54, 66, 339, 361, 370,
385, 386, 392, 552, 599, 603,
614, 631, 643, 645, 661, 769,
1113, 1125, 1277, 1298, 1352, 1492,
1519, 1520, 1553, 1701, 1702, 1706,
1725, 1729, 1730, 1733, 1735, 1740,
1741, 1742, 1743, 1744, 1745, 1754,
1763, 1780, 1781, 1815, 1921, 1955,
1956, 1998, 2000, 2062, 2096, 2119,
2138, 2140, 2199, 2229, 2231, 2232,
2233, 2235, 2386, 2405, 2407, 2439,
2462, 2467, 2469, 2618, 2665, 2771

INORGANICS_LOADING 6, 7, 11, 15, 24, 26,
56, 58, 62, 63, 66, 68,
69, 94, 122, 123, 124, 126,
143, 184, 273, 323, 346, 358,
359, 363, 370, 376, 377, 385,
397, 398, 415, 472, 473, 513,
514, 533, 550, 551, 552, 599,
600, 632, 643, 646, 647, 648,
658, 660, 662, 663, 670, 709,
735, 737, 743, 771, 879, 918,
923, 927, 953, 954, 955, 957,
960, 962, 975, 1000, 1008, 1021,
1022, 1098, 1103, 1110, 1113, 1118,
1125, 1132, 1136, 1138, 1141, 1142,
1144, 1145, 1151, 1158, 1173, 1174,
1175, 1176, 1179, 1182, 1183, 1185,
1186, 1187, 1188, 1189, 1190, 1193,
1194, 1195, 1295, 1323, 1333, 1384,
1385, 1386, 1433, 1434, 1435, 1436,
1437, 1440, 1461, 1462, 1475, 1519,
1520, 1531, 1532, 1582, 1618, 1619,
1666, 1684, 1700, 1701, 1702, 1703,
1706, 1723, 1725, 1729, 1730, 1732,
1733, 1735, 1736, 1738, 1740, 1741,
1742, 1743, 1744, 1745, 1774, 1803,
1804, 1805, 1809, 1825, 1826, 1849,
1861, 1863, 1902, 1909, 1915, 1952,
1956, 1990, 1997, 2012, 2018, 2039,
2046, 2056, 2097, 2104, 2105, 2107,
2109, 2114, 2121, 2137, 2138, 2139,

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| INORGANICS_LOADING (continued) | 2140, 2149, 2150, 2176, 2198, 2205, 2227, 2231, 2233, 2235, 2236, 2268, 2269, 2270, 2271, 2275, 2276, 2277, 2278, 2289, 2356, 2382, 2383, 2405, 2412, 2437, 2438, 2439, 2441, 2442, 2462, 2465, 2522, 2525, 2526, 2529, 2531, 2545, 2548, 2572, 2573, 2617, 2644, 2718 |
| INORGANICS_MASS_BALANCE (S: mass_balance) | |
| INORGANICS_METALS (S: metals) (S: trace metals) | |
| INORGANICS_MODEL (S: model_inorganics) | |
| INORGANICS_MONITORING (S: monitoring_inorganics) (S: nutrients_monitoring) (S: radionuclides_monitoring) | |
| INORGANICS_NUTRIENTS (S: nutrients) | |
| INORGANICS_POWER_PLANTS (S: power_plants_inorganics) | |
| INORGANICS_RADIONUCLIDES (S: radionuclides) | |
| INORGANICS_RESIDENCE_TIME | 67, 644, 660, 661, 771, 926, 1108, 1902, 1956, 1997, 2138, 2437 |
| INORGANICS_SEDIMENTS (general, no specific inorganics named) (For specific inorganics_sediments, S: metals_sediments; S: nutrients_sediments or S: radionuclides_sediments or S: trace metals_sediments) | 653, 926, 946, 1349, 1439, 1448, 1954, 2282, 2328, 2386, 2439, 2538, 2868 |
| INORGANICS_SOLUBILITY (S: solubility_inorganics) | |
| INORGANICS_SUMMARY (S: summary_inorganics) | |
| INORGANICS_TRANSPORT | 6, 7, 10, 14, 20, 23, 24, 54, 56, 64, 66, 67, 68, 69, 71, 143, 184, 307, 319, 346, 361, 397, 441, 473, 533, 545, 552, 600, 614, 627, 648, 659, 821, 879, 885, 916, 926, 974, 975, 1052, 1107, 1108, 1109, 1113, 1124, 1125, 1132, 1175, 1176, 1185, 1188, 1252, 1253, 1351, 1352, 1384, 1438, 1439, 1448, 1500, 1582, 1583, 1584, 1598, 1618, 1684, 1706, 1723, 1725, 1729, 1732, 1733, 1735, 1736, 1740, 1741, 1742, 1743, |

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| INORGANICS_TRANSPORT (continued) | 1744, 1745, 1767, 1803, 1804, 1805, 1829, 1842, 1846, 1955, 1956, 1977, 1994, 2062, 2089, 2113, 2115, 2140, 2173, 2199, 2205, 2231, 2232, 2233, 2234, 2236, 2268, 2274, 2276, 2386, 2405, 2413, 2439, 2442, 2497, 2572, 2573, 2669, 2670, 2696, 2734, 2771, 2772 |
| INORGANICS_UPTAKE | 306, 1519, 1520, 1740, 2061, 2091, (SA: bioaccumulation_inorganics) 2093, 2222, 2237, 2258, 2410, 2411, 2412, 2414, 2453, 2454, 2457 |
| INORGANICS_WATER_QUALITY (S: water_quality_inorganics) | |
| INSECTICIDES (S: pesticides) | |
| INSECTS | 260, 261, 777, 778, 795, 796, (SA: specific species or taxa) 1150, 1213, 1395, 1404, 1585, 1608, 1688, 1736, 1740, 1821, 1911, 1914, 2276, 2609, 2678, 2711, 2713, 2778 |
| INSTITUTIONS | 143, 275, 341, 357, 448, 453, (SA: management_institutions) 499, 554, 592, 615, 822, 824, (SA: research_needs_institutions) 828, 832, 833, 1068, 1070, 1085, (SA: water_quality_institutions) 1126, 1159, 1170, 1177, 1309, 1447, 1458, 1571, 1687, 1889, 1908, 1953, 1991, 2272, 2506, 2531, 2552, 2722, 2726, 2766 |
| INVENTORY | 213, 291, 435, 578, 703, 984, 1090, 1092, 1160, 1161, 1178, 1621, 2378, 2403 |
| INTERNATIONAL_RELATIONS | 132, 193, 338, 342, 343, 475, (SA: policy) 483, 554, 592, 845, 963, 1034, 1068, 1077, 1102, 1107, 1110, 1115, 1130, 1133, 1136, 1163, 1164, 1165, 1166, 1167, 1182, 1183, 1187, 1191, 1192, 1193, 1194, 1195, 1196, 1198, 1233, 1301, 1415, 1458, 1463, 1571, 1687, 1766, 1767, 1961, 1962, 1969, 2388, 2550, 2552, 2565 |
| INVERTEBRATES (This includes benthic invertebrates and zooplankton and any other invertebrates. For narrower terms, SA: specific species or taxa; SA: benthic invertebrates; SA: zooplankton) | |
| INVERTEBRATES_ABUNDANCE | 36, 50, 114, 126, 141, 177, 200, 226, 231, 245, 246, 302, 460, 463, 464, 484, 583, 584, 585, 586, 587, 588, 675, 676, 677, 678, 680, 681, 682, 683, 684, 685, 687, 689, 690, 692, |

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| INVERTEBRATES_ABUNDANCE (continued) | 693, 730, 761, 762, 763, 765, 821, 875, 911, 928, 943, 986, 1007, 1043, 1213, 1242, 1247, 1248, 1312, 1315, 1324, 1325, 1345, 1368, 1404, 1406, 1408, 1452, 1485, 1517, 1528, 1551, 1558, 1560, 1600, 1608, 1672, 1688, 1691, 1692, 1738, 1752, 1756, 1757, 1758, 1759, 1760, 1761, 1797, 2003, 2004, 2051, 2094, 2104, 2162, 2178, 2180, 2181, 2194, 2333, 2334, 2335, 2350, 2539, 2540, 2541, 2544, 2545, 2548, 2569, 2577, 2583, 2609, 2633, 2675, 2678, 2687, 2703, 2704, 2705, 2706, 2707, 2709, 2712, 2713, 2778, 2779 |
| INVERTEBRATES_BEHAVIOR | 144, 177, 228, 231, 245, 246, 460, 462, 465, 466, 484, 675, 683, 693, 699, 721, 928, 1006, 1128, 1213, 1247, 1292, 1312, 1368, 1528, 1797, 1914, 1988, 2051, 2178, 2187, 2279, 2280, 2432, 2576, 2633, 2687, 2695, 2709, 2779 |
| INVERTEBRATES_BENTHIC (S: benthic_invertebrates) | |
| INVERTEBRATES_BIOACCUMULATION | 24, 117, 224, 260, 261, 323, (SA: invertebrates_uptake) 439, 495, 531, 568, 576, 597, 605, 606, 607, 610, 611, 614, 654, 679, 739, 747, 1022, 1115, 1121, 1128, 1332, 1379, 1380, 1381, 1382, 1383, 1445, 1451, 1505, 1564, 1592, 1593, 1605, 1606, 1630, 1688, 1701, 1702, 1725, 1730, 1735, 1736, 1741, 1742, 1743, 1744, 1745, 1886, 1975, 1995, 2239, 2295, 2305, 2432, 2434, 2435, 2443, 2673, 2695, 2741 |
| INVERTEBRATESBIOMASS | 226, 231, 245, 308, 468, 588, 628, 678, 682, 683, 690, 692, 693, 776, 777, 943, 1006, 1213, 1485, 1521, 1522, 1600, 1601, 1688, 1691, 1732, 1756, 1757, 1758, 1760, 1761, 2093, 2178, 2194, 2305, 2341, 2539, 2569, 2575, 2583, 2678, 2704 |
| INVERTEBRATES_DEPTH | 681, 687, 920, 1043, 1350, 1368, 1403, 1450, 1600, 1752, 1757, 1758, 1831, 2677, 2703, 2704 |
| INVERTEBRATES_DIET | 39, 50, 117, 144, 177, 225, 226, 228, 229, 231, 232, 236, 245, 246, 439, 457, 460, 462, 464, 465, 466, 468, 481, 505, 605, 678, 681, 683, 699, 730, 744, 776, 872, 873, 874, 928, 929, 1006, 1026, 1209, 1210, 1212, |

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| INVERTEBRATES_DIET (continued) | 1213, 1292, 1315, 1345, 1347, 1408, 1575, 1601, 1606, 1608, 1691, 1692, 1762, 1797, 1840, 1884, 1886, 2092, 2096, 2162, 2225, 2295, 2334, 2335, 2341, 2432, 2434, 2459, 2548, 2572, 2573, 2576, 2577, 2579, 2583, 2632, 2633, 2634, 2662, 2673, 2695, 2731, 2768 |
| INVERTEBRATES_DISTRIBUTION | 36, 38, 40, 50, 114, 141, 177, 200, 225, 226, 245, 246, 382, 460, 463, 484, 505, 583, 584, 585, 587, 588, 597, 675, 681, 682, 683, 684, 687, 690, 693, 699, 744, 761, 762, 763, 765, 799, 821, 928, 986, 1022, 1212, 1213, 1248, 1312, 1325, 1345, 1347, 1350, 1351, 1368, 1403, 1404, 1406, 1408, 1450, 1517, 1551, 1558, 1585, 1600, 1672, 1688, 1691, 1692, 1723, 1729, 1756, 1757, 1759, 1760, 1762, 1797, 1809, 1831, 1842, 1987, 2003, 2004, 2023, 2051, 2104, 2162, 2178, 2180, 2181, 2194, 2199, 2312, 2333, 2335, 2350, 2443, 2539, 2540, 2541, 2544, 2545, 2548, 2569, 2577, 2583, 2609, 2632, 2633, 2678, 2687, 2703, 2704, 2705, 2706, 2707, 2708, 2709, 2710, 2711, 2712, 2713, 2778, 2779 |
| INVERTEBRATES_GROWTH | 43, 236, 463, 468, 505, 697, 744, 770, 1026, 1213, 1312, 1315, 1325, 1408, 1451, 1560, 1692, 1733, 2112, 2334, 2341, 2541, 2545, 2583, 2695, 2710, 2711 |
| INVERTEBRATES_HABITAT | 142, 177, 245, 246, 302, 460, 464, 465, 466, 468, 484, 587, 588, 675, 688, 699, 795, 1213, 1248, 1291, 1292, 1304, 1347, 1368, 1394, 1404, 1408, 1517, 1578, 1585, 1587, 1608, 1688, 1914, 1942, 2051, 2056, 2178, 2181, 2279, 2280, 2311, 2312, 2458, 2459, 2540, 2541, 2545, 2548, 2630, 2678, 2687, 2703, 2704, 2709 |
| INVERTEBRATES_HISTORY (S: history_invertebrates) | |
| INVERTEBRATES_LIFE HISTORY | 457, 745, 1672, 1752, 2544, 2703, 2710, 2778, 2779 |
| INVERTEBRATES_MAPPING (S: mapping_invertebrates) | |

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| INVERTEBRATES_METABOLISM | 654, 682, 776, 1408, 1757, 2295, 2539, 2540, 2695, 2768 |
| INVERTEBRATES_METALS | 24, 45, 126, 213, 224, 260, (includes trace metals) 261, 323, 361, 382, 531, 576, 614, 721, 763, 821, 911, 1021, 1022, 1027, 1068, 1083, 1115, 1128, 1332, 1351, 1394, 1395, 1505, 1555, 1556, 1557, 1558, 1560, 1561, 1562, 1563, 1564, 1601, 1692, 1701, 1702, 1723, 1725, 1729, 1730, 1732, 1733, 1735, 1736, 1738, 1740, 1741, 1742, 1743, 1744, 1745, 1809, 1851, 1911, 2056, 2180, 2199, 2276, 2295, 2381, 2432, 2464, 2539, 2540, 2541, 2563, 2572, 2573, 2630, 2673, 2741 |
| INVERTEBRATES_MONITORING | 126, 213, 224, 351, 437, 495, 680, 684, 685, 687, 725, 760, 785, 821, 1083, 1242, 1247, 1332, 1406, 1587, 1691, 1692, 1717, 1718, 1719, 1720, 1721, 1722, 1724, 1726, 1727, 1739, 1809, 1886, 1975, 2023, 2178, 2180, 2181, 2305, 2539, 2540, 2541, 2545, 2548, 2554, 2569, 2583 |
| INVERTEBRATES_MORPHOLOGY | 36, 114, 228, 464, 677, 721, 1558, 1990, 2226, 2333, 2539, 2609, 2709 |
| INVERTEBRATES_MORTALITY | 141, 322, 675, 682, 683, 687, 690, 691, 692, 693, 745, 796, 1026, 1027, 1121, 1350, 1394, 1395, 1452, 1467, 1555, 1556, 1557, 1561, 1672, 1691, 2341, 2548, 2578, 2633, 2673, 2678, 2695, 2769 |
| INVERTEBRATES_NUTRIENTS | 126, 142, 260, 302, 308, 364, 437, 576, 628, 713, 721, 753, 763, 765, 768, 777, 778, 920, 1006, 1043, 1260, 1395, 1451, 1521, 1522, 1551, 1684, 1717, 1718, 1719, 1720, 1721, 1722, 1723, 1724, 1725, 1726, 1727, 1729, 1730, 1732, 1733, 1735, 1736, 1737, 1738, 1739, 1740, 1753, 1754, 1755, 1763, 1842, 1845, 1914, 1915, 1920, 1921, 1987, 2000, 2056, 2089, 2091, 2092, 2093, 2094, 2096, 2104, 2112, 2162, 2185, 2198, 2199, 2225, 2279, 2280, 2350, 2381, 2395, 2411, 2412, 2458, 2459, 2563, 2575, 2630, 2712 |
| INVERTEBRATES_ORGANICS (S: organics_invertebrates) (S: toxics_invertebrates) | |
| INVERTEBRATES_PHYSIOLOGY | 39, 117, 228, 688, 721, 768, 776, 815, 821, 1027, 1121, 1128, |

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| INVERTEBRATES_PHYSIOLOGY (continued) ... | 1368, 1380, 1557, 1558, 1605, 1755, 1851, 1989, 2091, 2187, 2295, 2333, 2522, 2529, 2540, 2541, 2544, 2545, 2548, 2572, 2573, 2609, 2673, 2695 |
| INVERTEBRATES_POPULATIONS | 40, 177, 200, 231, 308, 457, 463, 484, 505, 588, 675, 678, 680, 681, 683, 684, 690, 699, 744, 763, 765, 770, 799, 875, 928, 986, 1213, 1242, 1247, 1248, 1260, 1291, 1312, 1315, 1325, 1406, 1452, 1485, 1517, 1528, 1555, 1556, 1557, 1559, 1561, 1563, 1564, 1575, 1587, 1593, 1600, 1672, 1691, 1692, 1733, 1738, 1756, 1759, 1762, 1845, 1987, 2004, 2051, 2094, 2112, 2178, 2180, 2181, 2196, 2334, 2335, 2341, 2539, 2540, 2541, 2545, 2548, 2575, 2583, 2609, 2632, 2633, 2673, 2675, 2677, 2687, 2703, 2704, 2708, 2710, 2711, 2712, 2713, 2779 |
| INVERTEBRATES_POWER_PLANTS . (S: power plants, effects on invertebrates) | |
| INVERTEBRATES_PREDATION | 144, 231, 763, 776, 872, 873, (SA: zooplankton_grazing) 874, 928, 929, 1404, 1840, 2051, 2162, 2311, 2312, 2334, 2577, 2633 |
| INVERTEBRATES REVIEW (S: review_invertebrates) | |
| INVERTEBRATES_SEASONAL_VARIATION | 42, 126, 141, 200, 231, 583, 586, 677, 680, 681, 682, 683, 684, 687, 688, 693, 730, 762, 776, 874, 943, 1006, 1304, 1324, 1325, 1723, 1729, 1733, 1740, 1752, 1762, 1884, 1914, 2104, 2199, 2334, 2341, 2539, 2544, 2572, 2573, 2575, 2576, 2634, 2687, 2703, 2704, 2708, 2710, 2768, 2779, 2784 |
| INVERTEBRATES_SURVIVAL | 236, 481, 745, 1026, 2673, 2695 (SA: invertebrates_mortality) |
| INVERTEBRATES_TAXONOMY | 36, 43, 114, 194, 302, 303, 480, 677, 764, 876, 1517, 1585, 1756, 1757, 2004, 2333, 2609, 2676, 2707 |
| INVERTEBRATES_TEMPERATURE | 144, 200, 213, 224, 228, 229, (SA: thermal pollution, effects on invertebrates) 245, 246, 279, 302, 308, 437, 464, 468, 583, 588, 597, 675, 676, 681, 682, 684, 686, 687, 688, 690, 691, 692, 693, 697, 776, 777, 799, 821, 872, 943, 1026, 1247, 1291, 1332, 1381, 1450, 1550, 1551, 1723, 1729, 1732, 1733, |

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| INVERTEBRATES_TEMPERATURE | 1734, 1736, 1737, 1738, 1740, 1752, 1755, 1758, 2023, 2029, 2094, 2104, 2162, 2185, 2199, 2341, 2544, 2545, 2575, 2576, 2583, 2632, 2704, 2708, 2710, 2779, 2784 |
| (continued) | |
| INVERTEBRATES_TRIBUTARIES (S: tributaries_invertebrates) | |
| INVERTEBRATES_TOXICS (S: toxics_invertebrates) | |
| INVERTEBRATES_UPTAKE | 739, 747, 1381, 1551, 1740 |
| (SA: invertebrates_bioaccumulation) | |
| INVERTEBRATES_WATER_QUALITY (S: water_quality_invertebrates) | |
| IODINE | 1414, 1652 |
| IRON | 6, 7, 20, 22, 26, 63, 65, 67, 156, 160, 163, 260, 261, 307, 339, 397, 398, 399, 473, 502, 553, 555, 600, 603, 612, 644, 660, 717, 718, 719, 804, 861, 897, 910, 950, 979, 1052, 1083, 1089, 1113, 1124, 1125, 1150, 1181, 1226, 1270, 1394, 1395, 1519, 1520, 1618, 1619, 1641, 1704, 1723, 1730, 1825, 1826, 1828, 1829, 1955, 1998, 2018, 2025, 2026, 2027, 2028, 2034, 2097, 2138, 2231, 2232, 2233, 2235, 2236, 2445, 2466, 2468, 2469, 2482, 2497, 2541, 2572, 2573, 2696, 2734 |
| ISOPODA | 177, 260, 1213, 1292, 1395, 1404, (SA: specific species) 1406, 1608, 1688, 1760, 2051, 2704, 2708 |
| ISOSTATIC REBOUND | 903, 1214, 1388, 1390, 2493 |
| (SA: crustal movements) | |
| JETTIES (SA: coastal structures) | 154, 257, 286, 428, 1074, 1214, 1466, 1655, 1657, 1792, 1793, 1875, 1916, 2483 |
| KILLIFISH | 139, 393, 696, 811, 1244 |
| KIYI | 457, 2435 |
| KOKANEE SALMON | 532, 811 |
| (SA: salmon; SA: salmonid) | |
| LAKE ALGONQUIN (S: lake stages) | |
| LAKE BREEZE | 111, 112, 113, 389, 1052, 1266, 1267, 2059, 2638, 2700 |
| LAKE CHICAGO (SA: lake stages) | 424, 430, 898, 2148 |
| LAKE CHIPPEWA (SA: lake stages) | 549, 2448 |

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| LAKE EFFECT | 2, | 16, | 17, | 18, | 35, | 79, |
| (SA: model_lake effect) | 89, | 90, | 118, | 119, | 220, | 221, |
| (SA: precipitation_lake effect) | 240, | 242, | 243, | 352, | 354, | 356, |
| | 389, | 545, | 711, | 1014, | 1015, | 1044, |
| | 1045, | 1046, | 1068, | 1279, | 1280, | 1281, |
| | 1282, | 1283, | 1690, | 1852, | 1929, | 1934, |
| | 1972, | 2005, | 2152, | 2153, | 2154, | 2155, |
| | 2369, | 2452, | 2638, | 2700 | | |
| LAKE HERRING | 116, | 139, | 418, | 426, | 457, | 671, |
| | 931, | 1150, | 1251, | 1528, | 1624, | 1791, |
| | 2177, | 2181, | 2182, | 2367, | 2451, | 2471, |
| | 2539, | 2540, | 2541, | 2548, | 2560, | 2583, |
| | 2721 | | | | | |
| LAKE LEVELS | 17, | 31, | 32, | 155, | 157, | 181, |
| | 182, | 187, | 192, | 193, | 213, | 215, |
| | 251, | 267, | 269, | 271, | 272, | 290, |
| | 292, | 293, | 302, | 307, | 311, | 312, |
| | 343, | 354, | 371, | 391, | 392, | 393, |
| | 406, | 411, | 420, | 423, | 429, | 433, |
| | 449, | 451, | 456, | 470, | 476, | 477, |
| | 507, | 511, | 535, | 536, | 537, | 538, |
| | 539, | 574, | 575, | 582, | 590, | 592, |
| | 633, | 667, | 704, | 737, | 790, | 800, |
| | 820, | 821, | 823, | 824, | 825, | 833, |
| | 836, | 837, | 838, | 867, | 889, | 891, |
| | 892, | 893, | 894, | 895, | 896, | 897, |
| | 899, | 900, | 901, | 902, | 903, | 908, |
| | 914, | 915, | 924, | 951, | 985, | 986, |
| | 1010, | 1013, | 1032, | 1042, | 1052, | 1068, |
| | 1077, | 1167, | 1168, | 1169, | 1170, | 1184, |
| | 1214, | 1218, | 1231, | 1263, | 1264, | 1265, |
| | 1269, | 1271, | 1274, | 1276, | 1278, | 1289, |
| | 1293, | 1298, | 1322, | 1369, | 1388, | 1389, |
| | 1390, | 1463, | 1464, | 1482, | 1493, | 1494, |
| | 1495, | 1496, | 1532, | 1554, | 1570, | 1594, |
| | 1625, | 1632, | 1636, | 1644, | 1655, | 1656, |
| | 1657, | 1670, | 1680, | 1723, | 1729, | 1730, |
| | 1733, | 1734, | 1736, | 1737, | 1738, | 1740, |
| | 1746, | 1747, | 1748, | 1750, | 1751, | 1792, |
| | 1863, | 1875, | 1879, | 1880, | 1881, | 1899, |
| | 1914, | 1916, | 1924, | 1926, | 1927, | 1928, |
| | 1930, | 1931, | 1932, | 1933, | 1934, | 1935, |
| | 1937, | 1938, | 1954, | 1960, | 1962, | 1965, |
| | 1967, | 2043, | 2045, | 2048, | 2062, | 2072, |
| | 2086, | 2087, | 2099, | 2166, | 2174, | 2189, |
| | 2216, | 2242, | 2252, | 2267, | 2272, | 2284, |
| | 2313, | 2322, | 2384, | 2422, | 2424, | 2448, |
| | 2479, | 2481, | 2482, | 2483, | 2487, | 2488, |
| | 2493, | 2496, | 2505, | 2507, | 2514, | 2516, |
| | 2517, | 2559, | 2565, | 2588, | 2630, | 2653, |
| | 2671, | 2686, | 2745, | 2746, | 2747, | 2748, |
| | 2749, | 2757, | 2788 | | | |
| LAKE LEVELS_EROSION | 155, | 157, | 181, | 182, | 187, | 192, |
| | 213, | 251, | 292, | 293, | 311, | 371, |

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| LAKE LEVELS_EROSION (continued) | 406, 429, 433, 507, 582, 633, 704, 800, 821, 823, 824, 836, 838, 889, 891, 892, 893, 894, 895, 896, 908, 1013, 1068, 1214, 1274, 1276, 1293, 1389, 1390, 1632, 1636, 1657, 1729, 1733, 1792, 1875, 1879, 1880, 1881, 1916, 1965, 2043, 2048, 2099, 2174, 2272, 2422, 2424, 2448, 2482, 2483, 2496, 2505, 2507, 2565, 2588, 2745, 2746, 2747, 2748, 2749, 2788 |
| LAKE LEVELS_GEOMORPHOLOGY | 155, 157, 181, 182, 251, 292, 293, 371, 406, 411, 429, 433, 507, 574, 575, 582, 633, 704, 889, 891, 893, 894, 895, 896, 900, 902, 908, 1214, 1276, 1632, 1875, 1879, 1880, 1881, 2043, 2048, 2174, 2422, 2424, 2448, 2483, 2496, 2588, 2653, 2745, 2747, 2748, 2749 |
| LAKE LEVELS_HISTORY | 215, 290, 302, 411, 429, 449, 451, 592, 737, 892, 897, 899, 900, 901, 902, 903, 914, 924, 986, 1068, 1231, 1263, 1271, 1388, 1389, 1390, 1463, 1493, 1494, 1495, 1532, 1636, 1748, 1750, 1875, 1879, 1881, 1916, 1927, 1934, 1954, 1960, 1965, 2048, 2424, 2479, 2481, 2514, 2559b, 2746, 2747 |
| LAKE LEVELS_MANAGEMENT | 157, 187, 192, 213, 311, 371, 392, 456, 507, 582, 590, 667, 737, 821, 823, 824, 825, 833, 836, 838, 867, 908, 1068, 1077, 1167, 1170, 1184, 1214, 1271, 1276, 1293, 1463, 1482, 1493, 1496, 1532, 1570, 1632, 1655, 1657, 1733, 1734, 1737, 1738, 1740, 1751, 1863, 1875, 1899, 1914, 1916, 1930, 1931, 1932, 1933, 1935, 1960, 1962, 2099, 2272, 2322, 2424, 2479, 2481, 2487, 2496, 2505, 2507, 2565, 2630, 2671, 2745, 2747, 2788 |
| LAKE LEVELS_MODEL | 31, 32, 537, 538, 539, 633, 667, 790, 894, 895, 896, 924, 951, 1010, 1231, 1264, 1293, 1388, 1389, 1482, 1494, 1495, 1496, 1655, 1680, 1723, 1729, 1730, 1733, 1734, 1736, 1738, 1740, 1751, 1879, 1880, 1881, 1924, 1932, 2043, 2166, 2189, 2313, 2482, 2653 |
| LAKE LEVELS_MONITORING | 213, 538, 821, 1168 |
| LAKE LEVELS_PRECIPITATION (S: precipitation_lake levels) | |

LAKE LEVELS REVIEW(S: review_lake levels)

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| LAKE LEVELS_SEASONAL VARIATION | 17, 155, 182, 192, 193, 267, 269, 354, 391, 393, 535, 536, 737, 894, 1013, 1264, 1274, 1289, 1493, 1532, 1594, 1644, 1680, 1723, 1729, 1733, 1740, 1914, 1927, 2045, 2062, 2086, 2174, 2479, 2481, 2653, 2748, 2749 |
| LAKE LEVELS_SEICHE | 393, 470, 914, 951, 1264, 1289, (SA: <u>seiche</u>) 1644, 1680, 1723, 1733, 1740, 2045, 2062, 2087, 2189 |

LAKE LEVELS_SUMMARY(S: summary_lake levels)

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| LAKE LEVELS_WETLANDS | 215, 307, 391, 392, 393, 420, 737, 820, 821, 833, 914, 915, 985, 986, 1214, 1218, 1263, 1264, 1265, 1289, 1298, 1493, 1494, 1495, 1496, 1532, 1594, 1863, 1914, 1960, 2045, 2062, 2322, 2384, 2482, 2630, 2686 |
| LAKE LEVELS_WIND | 17, 31, 155, 182, 192, 193, 292, 293, 536, 633, 800, 821, 838, 951, 1013, 1052, 1168, 1231, 1274, 1554, 1644, 1657, 1680, 1723, 1729, 1733, 1736, 1737, 1738, 1740, 1916, 1934, 2048, 2252, 2482, 2483, 2514, 2653, 2745, 2746, 2747, 2749, 2757, 2788 |
| LAKE MICHIGAN FORMATION | 549, 1911, 2683 |
| LAKE OUTLETS | 899, 900, 901, 902, 1388 |
| LAKE STAGES | 5, 109, 302, 388, 411, 424, 430, 898, 899, 900, 901, 902, 903, 1257, 1263, 1388, 1389, 1390, 1392, 1636, 1663, 1664, 1769, 1954, 2144, 2147, 2148, 2448, 2658, 2683, 2746 |

LAKE STURGEON (S: sturgeon)

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| LAKE TROUT | 39, 50, 94, 116, 120, 165, (SA: <u>salmonid</u>) 166, 174, 175, 176, 186, 194, 195, 196, 197, 224, 247, 261, 282, 284, 285, 287, 288, 397, 399, 407, 408, 418, 419, 434, 439, 440, 457, 460, 463, 521, 522, 527, 529, 531, 532, 563, 564, 570, 576, 621, 622, 623, 639, 655, 670, 671, 673, 674, 716, 733, 734, 779, 789, 805, 806, 809, 841, 844, 846, 847, 848, 849, 850, 851, 882, 904, |
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LAKE TROUT (continued) 905, 931, 940, 941, 949, 967,
987, 988, 990, 991, 992, 993,
994, 995, 996, 997, 998, 999,
1001, 1002, 1022, 1035, 1036, 1037,
1039, 1040, 1057, 1060, 1062, 1063,
1122, 1132, 1138, 1142, 1145, 1150,
1211, 1222, 1223, 1227, 1242, 1244,
1246, 1248, 1249, 1251, 1284, 1291,
1299, 1312, 1313, 1314, 1336, 1353,
1354, 1356, 1357, 1358, 1363, 1364,
1366, 1415, 1466, 1468, 1476, 1501,
1502, 1503, 1504, 1506, 1507, 1528,
1565, 1569, 1575, 1576, 1605, 1624,
1647, 1668, 1696, 1697, 1730, 1786,
1795, 1797, 1802, 1818, 1853, 1855,
1857, 1867, 1868, 1869, 1870, 1883,
1903, 1913, 1919, 1946, 2037, 2038,
2051, 2054, 2055, 2056, 2067, 2097,
2112, 2156, 2177, 2178, 2179, 2180,
2181, 2190, 2197, 2247, 2248, 2251,
2262, 2286, 2287, 2295, 2298, 2305,
2308, 2309, 2310, 2311, 2312, 2315,
2316, 2317, 2318, 2319, 2320, 2321,
2341, 2343, 2344, 2367, 2391, 2394,
2418, 2420, 2433, 2434, 2435, 2451,
2477, 2524, 2539, 2540, 2541, 2543,
2544, 2545, 2548, 2552, 2560, 2583,
2584, 2585, 2586, 2587, 2603, 2605,
2606, 2607, 2624, 2625, 2647, 2655,
2661, 2689, 2690, 2691, 2693, 2694,
2695, 2724, 2729, 2777

LAKE TROUT_REHABILITATION 175, 176, 282, 407, 408, 419,
570, 673, 716, 733, 846, 847,
848, 849, 940, 997, 1040, 1063,
1122, 1357, 1358, 1366, 1415, 1476,
1647, 1919, 1946, 2055, 2056, 2178,
2179, 2247, 2248, 2286, 2394, 2540,
2541, 2548, 2552, 2587, 2624, 2693,
2695, 2724

LAKE WHITEFISH (S: whitefish)

LAMPREY (S: sea lamprey)
(S: specific species)

LAMPRICIDES (S: sea lamprey_lampricides)

LAND USE 1, 45, 49, 68, 69, 121,
(SA: history_land_use) 123, 125, 126, 143, 273, 341,
(SA: mapping_land_use) 343, 355, 359, 376, 377, 390,
(SA: model_land_use) 430, 473, 555, 580, 705, 783,
(SA: review_land_use) 824, 845, 916, 953, 954, 1064,
(SA: summary_land_use) 1067, 1068, 1079, 1091, 1092, 1159,
(SA: water_quality_land_use) 1171, 1172, 1173, 1174, 1175, 1176,
1177, 1188, 1189, 1190, 1232, 1235,
1289, 1323, 1333, 1372, 1373, 1389,

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| LAND USE (continued) | 1415, 1461, 1462, 1571, 1665, 1666, 1765, 1774, 1775, 1803, 1804, 1805, 1817, 1909, 1966, 1967, 2010, 2023, 2024, 2202, 2205, 2271, 2313, 2382, 2383, 2482, 2498, 2518, 2550, 2565, 2622, 2726 |
| LANDFILL (S: waste) | |
| LANTHANUM | 316, 317, 1825, 1998 |
| LARGEMOUTH BASS | 261, 393, 426, 1150, 1242, 1248, 1364 |
| LARVAL FISH (S: fish_larval) | |
| LEAD | 6, 7, 20, 22, 26, 54, 58, 62, 67, 68, 69, 122, 123, 126, 163, 224, 260, 261, 316, 317, 346, 355, 385, 386, 399, 473, 553, 555, 576, 600, 603, 612, 631, 644, 659, 660, 662, 663, 717, 728, 735, 758, 821, 858, 869, 870, 879, 897, 911, 923, 933, 950, 957, 979, 1021, 1052, 1068, 1101, 1111, 1113, 1124, 1125, 1128, 1136, 1148, 1158, 1159, 1160, 1161, 1173, 1174, 1176, 1180, 1181, 1189, 1255, 1330, 1332, 1333, 1394, 1395, 1487, 1576, 1676, 1706, 1730, 1738, 1794, 1815, 1827, 1828, 1855, 1883, 1994, 1998, 2018, 2027, 2034, 2039, 2057, 2097, 2123, 2132, 2139, 2140, 2231, 2232, 2233, 2235, 2236, 2262, 2276, 2301, 2330, 2331, 2381, 2442, 2444, 2465, 2466, 2468, 2469, 2497, 2563, 2696, 2741, 2771 |
| LEAD-210 | 66, 71, 151, 318, 320, 361, (SA: dating; SA: radionuclides) 380, 381, 382, 425, 525, 612, 627, 661, 804, 1253, 1343, 1492, 1729, 1730, 1733, 1740, 1814, 1815, 1904, 1994, 1998, 2000, 2199, 2572, 2573 |
| LEECHES (S: Hirudinea) | |
| LEGAL ASPECTS | 120, 127, 132, 180, 193, 218, 219, 271, 272, 275, 276, 311, 312, 331, 338, 341, 343, 357, 416, 427, 453, 554, 556, 670, 715, 754, 821, 908, 932, 1064, 1068, 1069, 1071, 1076, 1077, 1078, 1085, 1163, 1165, 1196, 1216, 1229, 1233, 1271, 1272, 1278, 1297, 1301, 1309, 1342, 1396, 1458, 1461, 1462, 1480, 1508, 1570, 1609, 1629, 1640, 1684, 1687, 1766, 1767, 1813, 1834, |

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| LEGAL ASPECTS (continued) | 1872, 1908, 1947, 1962, 1969, 1982, 1986, 2010, 2039, 2160, 2518, 2524, 2526, 2565, 2600, 2630, 2654, 2667, 2714, 2722, 2739, 2740, 2766 |
| LEPIDOPTERA | 2609 |
| LEPTODIAPTONUS | 2199 |
| LEPTODORA | 682, 690, 692, 693 |
| LIGHT | 20, 98, 100, 144, 204, 209, (SA: radiation) 394, 596, 698, 802, 1212, 1291, 1660, 1661, 1821, 2162, 2199, 2340, 2393 |
| LIMESTONE | 759, 2592 |
| LIMNOCALANUS | 133, 232, 680, 682, 688, 690, 691, 692, 763, 872, 1601, 2199, 2632, 2633, 2634 |
| LINDANE | 261, 473, 532, 979, 1120, 1121, (SA: organochlorine pesticides) 1180, 1181, 1188, 1332, 1487 |
| LIPIDS | 724, 739, 772, 776, 793, 969, 1002, 1420, 1421, 1615, 1616, 1617, 2038, 2212 |
| LITTORAL DRIFT | 72, 73, 154, 157, 158, 159, (SA: sediments_transport) 249, 252, 253, 254, 255, 371, 1065, 1073, 1074, 1075, 1228, 1274, 1297, 1514, 1626, 1654, 1655, 1657, 1792, 1793, 1796, 1875, 1916, 1941, 2043, 2047, 2048, 2082, 2336, 2366, 2422, 2424, 2426, 2428, 2483, 2486, 2505, 2509, 2511, 2652, 2745, 2747, 2748, 2749 |
| LOADING_ATMOSPHERIC (S: atmospheric_loading) | |
| LOADING_POLLUTION (S: pollution_loading) (S: specific_compound_loading) | |
| LOADING_TOXICS (S: toxics_loading) | |
| LOADING_TRIBUTARIES (S: tributaries_loading) | |
| LOCKS (S: hydraulics) | |
| LOGPERCH | 426, 257, 1244, 1251, 2541 |
| LOONS (SA: birds) | 244 |
| MACROINVERTEBRATES (S: invertebrates) | |
| MACROPHYTES | 61, 262, 359, 393, 424, 576, 721, 722, 796, 819, 835, 872, 897, 914, 918, 1090, 1248, 1264, 1265, 1277, 1289, 1341, 1408, 1494, 1496, 1498, 1914, 1964, 1982, 2023, |

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| MACROPHYTES (continued) | 2064, 2096, 2178, 2179, 2258, 2269, 2270, 2289, 2322, 2384, 2459, 2541, 2544, 2554, 2643, 2684, 2741, 2784 |
| MADTOM | 644, 811, 1244, 1248, 2451 |
| MAGNESIUM | 7, 26, 45, 146, 147, 148, 224, 260, 261, 346, 374, 399, 472, 473, 598, 647, 660, 719, 763, 774, 879, 979, 1113, 1125, 1270, 1412, 1414, 1440, 1455, 1496, 1828, 1955, 1998, 2025, 2026, 2028, 2034, 2115, 2139, 2180, 2232, 2233, 2445 |
| MAGNETIC DATA (SA: geomagnetism) | 548, 549, 816, 1262, 1263, 1811, 1812, 2594, 2734 |
| MAGNETITE | 182, 1473, 1474 |
| MAMMALS (SA: wildlife) | 344, 654, 721, 821, 985, 986, 1022, 1038, 1121, 1128, 1217, 1259, 1478, 1624, 1950, 2239, 2283, 2285, 2323, 2361, 2459, 2668 |
| MANAGEMENT_COASTAL (S: coastal_management) | |
| MANAGEMENT_DIVERSION | 192, 213, 313, 390, 392, 453, 589, 590, 737, 791, 824, 838, 867, 1034, 1068, 1069, 1076, 1077, 1078, 1163, 1164, 1165, 1166, 1167, 1184, 1271, 1272, 1293, 1310, 1361, 1405, 1482, 1513, 1532, 1539, 1540, 1570, 1573, 1740, 1751, 1863, 1865, 1930, 1960, 2099, 2130, 2260, 2452, 2479, 2481, 2504, 2565, 2671, 2714 |
| MANAGEMENT_ECONOMICS | 8, 9, 34, 46, 72, 73, 121, 143, 166, 177, 187, 192, 239, 252, 274, 275, 283, 311, 331, 357, 366, 367, 390, 419, 431, 453, 497, 498, 499, 500, 501, 556, 572, 577, 642, 737, 779, 789, 821, 824, 825, 829, 832, 839, 844, 845, 848, 849, 850, 859, 866, 867, 904, 908, 923, 932, 960, 978, 995, 1064, 1068, 1070, 1071, 1072, 1077, 1078, 1115, 1128, 1167, 1181, 1189, 1215, 1229, 1234, 1238, 1271, 1272, 1284, 1285, 1293, 1323, 1336, 1346, 1354, 1361, 1415, 1477, 1482, 1532, 1574, 1624, 1633, 1647, 1650, 1654, 1655, 1657, 1696, 1767, 1813, 1834, 1871, 1872, 1914, 1930, 1960, 1961, 1982, 2042, 2065, 2066, 2067, 2084, 2112, 2244, 2268, 2279, 2280, 2287, 2359, 2397, 2399, 2424, 2427, 2452, 2479, |

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| MANAGEMENT_ECONOMICS (continued) | 2481, 2484, 2486, 2487, 2496, 2498, 2518, 2538, 2550, 2552, 2565, 2624, 2680, 2682, 2714, 2730, 2766 |
| MANAGEMENT_FISH (S: fish_management) | |
| MANAGEMENT_INSTITUTIONS | 143, 275, 341, 357, 448, 453, 499, 554, 824, 832, 833, 1068, 1070, 1085, 1159, 1170, 1177, 1458, 1991, 2272, 2506, 2531, 2552, 2722, 2726, 2766 |
| MANAGEMENT_LAKE LEVELS (S: lake_levels_management) | |
| MANAGEMENT_POLLUTION (S: pollution_management) | |
| MANAGEMENT_POWER PLANTS (S: power_plants_management) | |
| MANAGEMENT_RECREATION | 8, 143, 187, 192, 219, 390, 431, 497, 572, 737, 821, 824, 832, 867, 931, 978, 1029, 1065, 1067, 1068, 1077, 1084, 1085, 1093, 1167, 1215, 1234, 1346, 1460, 1462, 1527, 1532, 1696, 1697, 1733, 1737, 1775, 1866, 1961, 2023, 2042, 2066, 2067, 2160, 2249, 2272, 2359, 2397, 2452, 2484, 2486, 2498, 2508, 2518, 2721, 2730 |
| MANAGEMENT_WASTE (S: waste_management) | |
| MANAGEMENT_WATER QUALITY (S: water_quality_management) | |
| MANAGEMENT_WATER SUPPLY | 180, 642, 803, 821, 1069, 1076, 1077, 1163, 1271, 1272, 1310, 1482, 1513, 1570, 1740, 1751, 1773, 2023, 2042, 2590, 2654 |
| MANAGEMENT_WATER USE | 121, 192, 390, 453, 589, 590, 642, 791, 821, 824, 825, 827, 836, 845, 867, 916, 961, 1034, 1069, 1076, 1077, 1078, 1084, 1163, 1164, 1165, 1166, 1167, 1177, 1271, 1272, 1310, 1361, 1405, 1573, 1740, 1773, 1865, 1899, 1930, 2001, 2023, 2130, 2238, 2452, 2481, 2504, 2518, 2590, 2654, 2671, 2714 |
| MANAGEMENT_WETLANDS | 72, 73, 392, 737, 821, 833, 919, 920, 1091, 1189, 1214, 1215, 1216, 1375, 1493, 1496, 1497, 1532, 1622, 1650, 1863, 1914, 1959, 1960, 1966, 1982, 2160, 2322, 2518, 2540, 2630, 2654, 2722, 2739 |

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| MANGANESE | 20, 22, 67, 156, 163, 224, |
| (SA: ferromanganese nodules) | 260, 261, 316, 317, 339, 399, |
| | 415, 420, 555, 600, 612, 644, |
| | 717, 718, 719, 758, 804, 858, |
| | 879, 897, 910, 979, 1052, 1083, |
| | 1124, 1139, 1226, 1394, 1519, 1520, |
| | 1618, 1619, 1723, 1730, 1825, 1826, |
| | 1829, 1955, 1998, 2025, 2026, 2027, |
| | 2028, 2034, 2097, 2231, 2232, 2233, |
| | 2235, 2330, 2466, 2469, 2497, 2696, |
| | 2734 |
| MAPPING (SA: bathymetry) | |
| (SA: hydrography) | |
| MAPPING_COASTAL | 4, 154, 155, 215, 432, 433, |
| | 435, 493, 574, 575, 704, 880, |
| | 881, 960, 1065, 1074, 1092, 1275, |
| | 1317, 1320, 1493, 1494, 1495, 1497, |
| | 1554, 1622, 1638, 1749, 1775, 1792, |
| | 1793, 1796, 1916, 2023, 2064, 2145, |
| | 2146, 2424, 2487, 2487, 2518, 2541, |
| | 2553, 2734, 2747 |
| MAPPING_FISH | 418, 434, 696, 808, 811, 1903, |
| | 2023, 2310, 2311, 2312, 2518, 2541 |
| MAPPING_GEOLOGY | 4, 109, 154, 155, 161, 309, |
| | 316, 317, 374, 412, 432, 433, |
| | 434, 435, 493, 574, 575, 700, |
| | 704, 740, 816, 880, 881, 1065, |
| | 1074, 1275, 1317, 1320, 1493, 1494, |
| | 1498, 1554, 1604, 1638, 1665, 1749, |
| | 1769, 1775, 1792, 1793, 1796, 1811, |
| | 1812, 1916, 1965, 1967, 2023, 2064, |
| | 2144, 2145, 2146, 2259, 2310, 2311, |
| | 2312, 2402, 2416, 2424, 2445, 2487, |
| | 2487, 2541, 2553, 2588, 2734, 2747 |
| MAPPING_HYDROGRAPHY | 154, 432, 434, 574, 575, 1792, |
| (SA: hydrography) | 1793, 1916, 2747 |
| MAPPING_ICE | 82, 91, 412, 523, 1430, 1554, |
| | 2424, 2541 |
| MAPPING_INVERTEBRATES | 109, 2023, 2311, 2312 |
| MAPPING_LAND USE | 1092, 1665, 1775, 1967, 2023, 2518 |
| MAPPING_NAVIGATION | 1427, 1749 |
| MAPPING_PHYTOPLANKTON/ALGAE | 96, 2023 |
| MAPPING_REEFS | 418, 434, 808, 1065, 1903, 2310, |
| | 2311, 2312, 2518 |
| MAPPING_REMOTE SENSING | 154, 161, 523, 816, 1048, 1049, |
| | 1082, 1320, 1397, 1398, 1399, 1430, |
| | 1453, 1454, 1493, 1495, 1497, 1498, |
| | 1500, 1554, 1665, 1967, 2023, 2518 |

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| MAPPING_SEDIMENTS | 109, 154, 316, 317, 374, 412, 434, 704, 740, 1065, 1074, 1120, 1494, 1554, 1604, 1792, 1793, 1796, 1916, 2023, 2145, 2146, 2416, 2424, 2541, 2561, 2734, 2747 |
| MAPPING_SEISMIC | 309, 700, 2416, 2734 |
| MAPPING_SHORELINE | 4, 154, 161, 242, 309, 312, 432, 433, 435, 450, 493, 722, 880, 881, 1074, 1092, 1275, 1317, 1554, 1638, 1775, 1796, 1858, 1916, 2064, 2144, 2145, 2146, 2171, 2402, 2403, 2424, 2487, 2487, 2734, 2747 |
| MAPPING_STRATIGRAPHY | 4, 109, 412, 493, 700, 880, 881, 1317, 1554, 1638, 1769, 2144, 2145, 2146, 2734 |
| MAPPING_TEMPERATURE | 523, 1397, 1398, 1399, 1453, 1454, (SA: mapping_thermal_pollution) 1833, 2023 |
| MAPPING_THERMAL_POLLUTION | 1397, 1398, 1399, 1454, 1833 (SA: mapping_temperature) |
| MAPPING_WATER_QUALITY | 960, 1048, 1049, 1120, 1168, 1397, 1399, 1453, 1454, 2023, 2380, 2588 |
| MAPPING_WATER_USE | 2023, 2130, 2518 |
| MARINAS | 750, 1603, 2374, 2425, 2757, 2758 |
| MARSHES (S: wetlands) | |
| MASS_BALANCE_FISH | 621, 1313 |
| MASS_BALANCE_INORGANICS | 99, 306, 323, 381, 513, 514, (SA: metals_mass_balance) 627, 659, 833, 1021, 1148, 1176, (SA: nutrients_mass_balance) 1434, 1438, 1440, 1582, 1700, 1701, 1702, 1706, 2046, 2089, 2114, 2151, 2231, 2274, 2277, 2386, 2405, 2437, 2438, 2462, 2469 |
| MASS_BALANCE_ORGANICS | 53, 170, 323, 597, 627, 650, (SA: PCBs_mass_balance) 868, 1148, 1176, 1438, 1515, 1706, 1771, 1772, 2274, 2386, 2437, 2438, 2648, 2681 |
| MASS_BALANCE_WATER_BUDGET | 454, 455, 833 |
| MAYFLY (S: Ephemeroptera) | |
| MELOSIRA (SA: diatoms) | 101, 492, 1337, 1401, 1535, 1993, 2199, 2223, 2350, 2354, 2640 |
| MERCURY | 24, 260, 261, 316, 317, 323, 324, 346, 384, 399, 404, 531, 576, 612, 659, 717, 719, 728, 758, 821, 870, 879, 897, 933, 968, 969, 979, 990, 996, 1068, 1124, 1132, 1142, 1145, 1148, 1160, 1161, 1174, 1180, 1181, 1185, 1188, 1189, 1330, 1332, 1394, 1395, 1487, |

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| MERCURY (continued) | 1505, 1576, 1676, 1692, 1695, 1730, 1794, 1853, 1855, 1857, 1961, 2017, 2027, 2132, 2177, 2180, 2211, 2222, 2262, 2276, 2281, 2295, 2315, 2330, 2331, 2378, 2442, 2444, 2469, 2497, 2535, 2539, 2541, 2673, 2734, 2774 |
| MERGANSERS (SA: birds; SA: ducks) | 933, 970, 2673 |
| MESOCYCLOPS | 690, 692, 1560, 1562 |
| METALS (These subdivisions include both metals and trace metals. For narrower terms, SA: specific elements or SA: trace metals) | |
| METALS_ANALYTICAL METHODS | 184, 709, 774, 1020, 1343, 1590, 1598, 1698, 1699, 1782, 1786, 1823, 1835, 1851, 2468 |
| METALS_ATMOSPHERIC DEPOSITION/ LOADING/POLLUTION | 6, 7, 11, 15, 20, 22, 23, 24, 26, 54, 56, 58, 62, 63, 67, 143, 163, 213, 224, 319, 323, 355, 361, 376, 377, 381, 385, 473, 533, 551, 553, 631, 643, 644, 645, 646, 647, 658, 660, 661, 662, 663, 709, 719, 743, 758, 804, 879, 910, 957, 974, 975, 1021, 1022, 1052, 1113, 1124, 1125, 1127, 1128, 1132, 1142, 1175, 1176, 1185, 1189, 1332, 1333, 1473, 1474, 1619, 1700, 1701, 1702, 1704, 1706, 1723, 1725, 1729, 1730, 1733, 1735, 1736, 1740, 1741, 1742, 1743, 1744, 1745, 1809, 1828, 1839, 1849, 1956, 1994, 1996, 1997, 2017, 2039, 2137, 2138, 2139, 2140, 2231, 2232, 2233, 2235, 2236, 2276, 2437, 2438, 2462, 2465, 2466, 2525, 2563, 2572, 2573, 2615, 2696, 2698, 2699, 2772 |
| METALS_BACTERIA (S: bacteria_metals) | |
| METALS_BENTHIC_INVERTEBRATES (S: benthic_invertebrates_metals) | |
| METALS_BIOACCUMULATION | 24, 52, 143, 224, 260, 261, (SA: metals_uptake) 323, 404, 531, 576, 614, 655, 659, 933, 968, 969, 990, 1022, 1098, 1111, 1115, 1117, 1120, 1124, 1128, 1132, 1142, 1145, 1150, 1175, 1189, 1255, 1332, 1487, 1505, 1564, 1576, 1676, 1701, 1702, 1706, 1725, 1730, 1735, 1736, 1741, 1742, 1743, 1744, 1745, 1777, 1786, 1816, 1883, 2017, 2057, 2142, 2211, 2281, 2295, |

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| METALS_BIOACCUMULATION (continued) | 2301, 2315, 2378, 2432, 2521, 2540, 2541, 2673, 2741 |
| METALS_COMPLEXATION | 2026, 2028 |
| METALS_CYCLING | 14, 27, 65, 603, 614, 629, 659, 758, 821, 1440, 1723, 1725, 1729, 1730, 1732, 1733, 1735, 1736, 1740, 1741, 1742, 1743, 1744, 1745, 1780, 1787, 1809, 1822, 1904, 1956, 1998, 2199, 2274, 2463, 2541, 2573, 2615, 2617, 2621, 2771 |
| METALS_DEPOSITION (S: deposition_metals) | |
| METALS_DISCHARGE | 143, 184, 346, 396, 397, 398, 399, 472, 473, 600, 729, 923, 1022, 1141, 1144, 1176, 1332, 2018, 2097, 2525, 2630 |
| METALS_FERROMANGANESE NODULES (S: ferromanganese nodules) | |
| METALS_FISH (S: fish_metals) | |
| METALS_GROUNDWATER | 156, 339, 374, 376, 377, 420, (SA: groundwater_chemistry) 473, 821, 897, 910, 911, 1083, 1098, 1115, 1127, 1128, 1132, 1175, 1270, 1333, 2140, 2445 |
| METALS_INVERTEBRATES (S: invertebrates_metals) | |
| METALS_LOADING | 6, 7, 11, 15, 24, 26, 56, 58, 62, 63, 66, 68, 69, 122, 123, 124, 126, 143, 184, 323, 346, 376, 377, 385, 397, 398, 415, 472, 473, 533, 551, 600, 643, 646, 647, 658, 660, 662, 663, 709, 735, 743, 879, 923, 957, 962, 975, 1021, 1022, 1098, 1113, 1125, 1132, 1136, 1141, 1142, 1144, 1145, 1158, 1173, 1174, 1175, 1176, 1185, 1189, 1333, 1385, 1440, 1519, 1520, 1618, 1619, 1700, 1701, 1702, 1706, 1723, 1725, 1729, 1730, 1732, 1733, 1735, 1736, 1738, 1740, 1741, 1742, 1743, 1744, 1745, 1809, 1825, 1826, 1849, 1956, 1997, 2018, 2039, 2056, 2097, 2109, 2137, 2138, 2139, 2140, 2231, 2233, 2235, 2236, 2276, 2356, 2437, 2438, 2442, 2462, 2465, 2525, 2572, 2573, 2617, 2644 |
| METALS_MASS BALANCE | 306, 323, 381, 627, 659, 1021, 1148, 1176, 1438, 1440, 1700, 1701, 1702, 1706, 2231, 2274, 2437, 2438, 2462, 2469 |
| METALS_MODEL (S: model_metals) | |

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| METALS_ORGANIC CARBON/ ORGANIC MATTER | 24, 27, 65, 68, 69, 146, 148, 210, 211, 212, 307, 316, 317, 319, 320, 346, 415, 600, 603, 612, 614, 647, 660, 869, 979, 1124, 1199, 1253, 1258, 1607, 1618, 1776, 1822, 1825, 1828, 1829, 1956, 1998, 2034, 2139, 2199, 2222, 2573 |
| METALS_PHYTOPLANKTON (S: phytoplankton_metals) | |
| METALS_POLLUTION | 6, 7, 11, 12, 20, 22, (SA: metals_water quality) 23, 25, 45, 52, 54, 56, 58, 62, 63, 66, 68, 69, 122, 123, 124, 126, 143, 163, 184, 261, 318, 323, 324, 355, 376, 377, 381, 382, 384, 386, 396, 397, 398, 441, 502, 530, 531, 533, 551, 555, 576, 598, 600, 627, 631, 643, 645, 655, 719, 728, 729, 743, 758, 774, 788, 804, 821, 858, 869, 879, 911, 923, 950, 957, 962, 968, 969, 975, 1020, 1052, 1083, 1089, 1098, 1101, 1115, 1117, 1120, 1124, 1125, 1127, 1128, 1132, 1136, 1141, 1142, 1144, 1145, 1150, 1158, 1159, 1173, 1174, 1175, 1176, 1181, 1185, 1189, 1199, 1207, 1258, 1332, 1333, 1334, 1375, 1395, 1412, 1414, 1438, 1440, 1473, 1474, 1555, 1558, 1560, 1563, 1583, 1584, 1598, 1618, 1676, 1700, 1701, 1702, 1704, 1725, 1729, 1733, 1735, 1736, 1741, 1742, 1743, 1744, 1745, 1786, 1788, 1807, 1808, 1809, 1815, 1816, 1824, 1825, 1826, 1827, 1828, 1829, 1839, 1849, 1853, 1857, 1883, 1996, 1997, 2018, 2027, 2028, 2039, 2056, 2097, 2120, 2132, 2138, 2142, 2199, 2204, 2222, 2235, 2274, 2276, 2295, 2301, 2315, 2330, 2331, 2356, 2378, 2466, 2467, 2469, 2479, 2481, 2482, 2497, 2525, 2535, 2541, 2614, 2615, 2630, 2644, 2696, 2698, 2771, 2772 |
| METALS_RADIONUCLIDES (S: radionuclides) | |
| METALS_RESIDENCE TIME | 67, 644, 660, 661, 1956, 1997, 2138, 2437 |
| METALS REVIEW (S: review_metals) | |
| METALS_SEDIMENTS | 10, 11, 12, 24, 25, 45, 54, 62, 63, 65, 66, 68, 69, 124, 143, 146, 148, 151, |

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| METALS_SEDIMENTS (continued) | 213, 224, 260, 261, 306, 307, 316, 317, 318, 319, 320, 323, 339, 346, 361, 374, 376, 377, 379, 381, 382, 383, 384, 385, 386, 397, 399, 415, 425, 441, 472, 531, 555, 598, 600, 603, 612, 614, 625, 627, 629, 631, 645, 659, 717, 718, 735, 736, 769, 804, 861, 869, 870, 911, 923, 974, 1020, 1021, 1022, 1027, 1083, 1115, 1117, 1120, 1128, 1132, 1136, 1142, 1145, 1150, 1158, 1159, 1173, 1174, 1175, 1176, 1189, 1199, 1253, 1258, 1330, 1332, 1333, 1343, 1351, 1375, 1385, 1394, 1395, 1473, 1474, 1492, 1496, 1505, 1519, 1520, 1598, 1619, 1701, 1702, 1723, 1725, 1729, 1730, 1732, 1733, 1735, 1736, 1738, 1740, 1741, 1742, 1743, 1744, 1745, 1776, 1778, 1780, 1781, 1788, 1794, 1809, 1815, 1816, 1822, 1824, 1825, 1826, 1846, 1848, 1893, 1911, 1955, 1956, 1994, 1998, 2018, 2025, 2034, 2097, 2123, 2199, 2222, 2274, 2276, 2281, 2330, 2378, 2381, 2437, 2438, 2442, 2444, 2462, 2463, 2464, 2467, 2482, 2497, 2525, 2535, 2541, 2573, 2619, 2621, 2734 |
| METALS_SOILS | 68, 156, 160, 555, 1333, 1641, 2235 |

METALS_SOLUBILITY

(S: solubility_metals)

METALS_TOXICS

(S: toxics_metals)

METALS_TRANSPORT ...

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| 6, 7, 10, 14, 20, 23, 24, 54, 56, 66, 67, 68, 69, 143, 184, 307, 319, 346, 361, 397, 441, 473, 533, 600, 614, 627, 659, 821, 879, 974, 975, 1052, 1113, 1124, 1125, 1132, 1175, 1176, 1185, 1253, 1351, 1438, 1583, 1584, 1598, 1618, 1706, 1723, 1725, 1729, 1732, 1733, 1735, 1736, 1740, 1741, 1742, 1743, 1744, 1745, 1829, 1846, 1955, 1956, 1994, 2115, 2140, 2199, 2231, 2232, 2233, 2236, 2274, 2276, 2442, 2497, 2572, 2573, 2696, 2734, 2771, 2772 |
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METALS_TRIBUTARIES

(S: tributaries_metals)

METALS_UPTAKE

(SA: metals_bioaccumulation)

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 1124, 1125, 1127, 1128, 1132, 1136,
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 1174, 1180, 1181, 1185, 1199, 1207,
 1270, 1330, 1332, 1333, 1334, 1375,
 1385, 1440, 1562, 1564, 1590, 1706,
 1723, 1725, 1729, 1733, 1735, 1736,
 1740, 1741, 1742, 1743, 1744, 1745,
 1788, 1807, 1808, 1809, 1849, 1862,
 1883, 2018, 2026, 2027, 2028, 2039,
 2056, 2097, 2132, 2138, 2204, 2262,
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 2381, 2437, 2479, 2481, 2482, 2497,
 2525, 2535, 2540, 2541, 2563, 2630,
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METALS_ZOOPLANKTON
(S: zooplankton_metals)

METEOROLOGY (S: air_temperature, climate,
 clouds, evaporation, ice, lake breeze,
 lake effect, power_plants_meteorology,
 precipitation, research_needs, storms,
 summary_meteorology, or wind)

METHOXYCHLOR 261, 473, 740, 979, 1148, 1180,
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 946, 1532, 1875, 1954, 1957, 1965,
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 1148, 1150, 1160, 1161, 1174, 1176,
 1185, 1188, 1189, 1412, 1414, 1531,

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| MIREX (continued) | 1653, 1676, 1730, 1883, 1945, 2442, 2648 |
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| MODEL_ATMOSPHERIC_POLLUTION | 6, 7, 53, 56, 62, 63, 170, 366, 367, 376, 377, 389, 514, 533, 545, 546, 631, 649, 650, 651, 879, 953, 975, 1008, 1125, 1128, 1132, 1175, 1267, 1333, 1642, 1643, 1700, 1701, 1702, 1725, 1729, 1733, 1735, 1736, 1741, 1742, 1743, 1744, 1745, 1767, 1943, 1979, 1996, 1997, 2039, 2128, 2129, 2278, 2670 |
| MODEL_BENTHIC_INVERTEBRATES | 351, 361, 382, 468, 611, 614, 1021, 1043, 1351, 1575, 1725, 1735, 1741, 1742, 1743, 1744, 1745, 2000, 2432, 2434, 2435 |
| MODEL_CIRCULATION | 28, 29, 31, 32, 33, 152, 884, 924, 1267, 1438, 1448, 1604, 1679, 1680, 1683, 1723, 1733, 1736, 1738, 1740, 1832, 1892, 1923, 1994, 2164, 2165, 2166, 2168, 2173, 2306 |
| MODEL_CURRENTS | 28, 29, 31, 32, 33, 152, 234, 375, 924, 951, 1231, 1349, 1441, 1442, 1448, 1469, 1679, 1680, 1683, 1684, 1723, 1729, 1732, 1733, 1734, 1735, 1736, 1738, 1740, 1832, 1892, 1923, 2082, 2164, 2165, 2166, 2168, 2173, 2306, 2653 |
| MODEL_DEPOSITION (S: deposition_model) | |
| MODEL_DIFFUSION | 361, 380, 382, 1492, 1684 |
| MODEL_DISPERSION | 545, 546, 924, 1231, 1267, 1684, 2012, 2082, 2173 |
| MODEL_EROSION | 73, 253, 376, 473, 580, 633, 638, 894, 895, 896, 975, 1021, 1175, 1293, 1389, 1639, 1700, 1729, 1733, 1774, 1804, 1879, 1880, 1881, 1955, 2043, 2140, 2382, 2465, 2482, 2508, 2545, 2658 |

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| MODEL_FISH | 164, 170, 188, 276, 324, 351, 407, 408, 439, 440, 458, 462, 468, 528, 529, 540, 541, 611, 614, 617, 620, 621, 649, 650, 672, 789, 859, 877, 923, 931, 939, 1006, 1018, 1021, 1058, 1086, 1115, 1120, 1128, 1132, 1205, 1206, 1217, 1221, 1222, 1223, 1224, 1229, 1245, 1312, 1313, 1314, 1315, 1316, 1335, 1336, 1356, 1415, 1468, 1529, 1575, 1595, 1647, 1684, 1730, 1736, 1740, 1772, 1859, 2014, 2039, 2041, 2065, 2067, 2068, 2084, 2089, 2279, 2280, 2282, 2283, 2287, 2291, 2298, 2299, 2341, 2342, 2343, 2344, 2397, 2432, 2433, 2434, 2435, 2437, 2439, 2545, 2548, 2624, 2625, 2661 |
| MODEL_FLOW (S: flow_model) | |
| MODEL_GROUNDWATER | 49, 63, 237, 296, 376, 377, 473, 638, 790, 797, 807, 1010, 1115, 1128, 1132, 1175, 1333, 1610, 1751, 1767, 2040, 2130, 2140, 2207, 2313 |
| MODEL_HYDROLOGY | 49, 63, 237, 296, 313, 376, 377, 454, 455, 473, 537, 667, 784, 790, 807, 1010, 1120, 1175, 1268, 1333, 1591, 1610, 1680, 1723, 1729, 1732, 1733, 1736, 1740, 1751, 1803, 1804, 1805, 1890, 1924, 1932, 1936, 2040, 2130, 2140, 2189, 2207, 2273, 2508, 2622 |
| MODEL_ICE | 80, 86, 88, 204, 538, 539, 1433, 1434, 1436, 1655, 1680, 1723, 1729, 1730, 1733, 1734, 1736, 1738, 1740, 1892, 1924, 2012, 2013, 2049, 2192, 2482, 2759 |
| MODEL_INORGANICS | 6, 7, 19, 49, 56, 62, 63, 95, 98, 99, 101, 169, 308, 313, 324, 351, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 376, 377, 380, 382, 441, 473, 514, 525, 533, 545, 614, 627, 631, 661, 879, 923, 953, 954, 955, 956, 960, 962, 975, 979, 1006, 1008, 1021, 1043, 1048, 1049, 1115, 1118, 1120, 1125, 1128, 1132, 1175, 1217, 1324, 1325, 1333, 1349, 1351, 1385, 1415, 1433, 1434, 1435, 1436, 1437, 1438, 1440, 1448, 1475, 1481, 1492, 1494, 1496, 1539, 1598, 1642, 1643, 1661, 1684, 1700, 1701, 1702, 1723, 1725, 1729, |

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| MODEL_INORGANICS (continued) | 1730, 1732, 1733, 1735, 1736, 1738, 1740, 1741, 1742, 1743, 1744, 1745, 1767, 1774, 1776, 1803, 1804, 1805, 1814, 1861, 1943, 1953, 1955, 1994, 1996, 1997, 2000, 2012, 2013, 2039, 2089, 2090, 2105, 2107, 2115, 2117, 2139, 2140, 2173, 2176, 2229, 2269, 2270, 2274, 2278, 2279, 2280, 2282, 2382, 2386, 2395, 2432, 2436, 2437, 2438, 2439, 2453, 2454, 2465, 2482, 2545, 2548, 2618, 2670, 2718 |
| MODEL_INSTITUTIONS | 448, 1953 |
| MODEL_LAKE EFFECT | 18, 35, 118, 119, 164, 220, 221, 389, 545, 711, 1014, 1015, 1044, 1045, 1046, 1881, 1972, 2012 |
| MODEL_LAKE LEVELS | 31, 32, 537, 538, 539, 633, 667, 790, 894, 895, 896, 924, 951, 1010, 1231, 1264, 1293, 1388, 1389, 1482, 1494, 1495, 1496, 1655, 1680, 1723, 1729, 1730, 1733, 1734, 1736, 1738, 1740, 1751, 1879, 1880, 1881, 1924, 1932, 2043, 2166, 2189, 2313, 2482, 2653 |
| MODEL_LAND USE | 1, 49, 359, 376, 377, 473, 580, 953, 954, 1175, 1235, 1333, 1389, 1415, 1774, 1803, 1804, 1805, 2313, 2382, 2482, 2622 |
| MODEL_METALS | 6, 7, 56, 62, 63, 324, 361, 376, 377, 382, 441, 473, 533, 614, 627, 631, 661, 879, 923, 962, 975, 979, 1021, 1115, 1120, 1125, 1128, 1132, 1175, 1333, 1351, 1385, 1438, 1440, 1492, 1496, 1598, 1700, 1701, 1702, 1723, 1725, 1729, 1730, 1732, 1733, 1735, 1736, 1738, 1740, 1741, 1742, 1743, 1744, 1745, 1776, 1955, 1994, 1996, 1997, 2039, 2115, 2139, 2140, 2274, 2432, 2437, 2438, 2465, 2482 |
| MODEL_NUTRIENTS | 7, 19, 49, 63, 95, 98, 99, 101, 169, 308, 351, 358, 359, 360, 362, 363, 364, 365, 366, 367, 376, 377, 473, 514, 879, 923, 953, 954, 955, 956, 960, 979, 1006, 1043, 1048, 1049, 1118, 1125, 1128, 1132, 1175, 1217, 1324, 1325, 1333, 1415, 1433, 1434, 1435, 1436, 1437, 1438, 1440, 1475, 1481, 1494, 1496, 1661, 1684, 1723, 1725, 1729, 1730, 1732, 1733, 1735, 1736, 1738, 1740, 1767, 1774, 1803, 1804, 1805, 1861, 1953, 2000, 2012, |

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| MODEL_NUTRIENTS (continued) | 2013, 2039, 2089, 2090, 2105, 2107, 2115, 2117, 2269, 2270, 2278, 2279, 2280, 2382, 2395, 2453, 2454, 2482, 2545, 2548, 2670, 2718 |
| MODEL_ORGANICS | 6, 7, 53, 56, 57, 170, 237, 304, 324, 361, 376, 377, 439, 440, 441, 473, 567, 595, 611, 614, 627, 649, 650, 651, 923, 924, 979, 1115, 1120, 1125, 1128, 1132, 1175, 1222, 1223, 1333, 1385, 1438, 1448, 1515, 1684, 1723, 1725, 1729, 1730, 1732, 1733, 1734, 1735, 1736, 1738, 1740, 1741, 1742, 1743, 1744, 1745, 1767, 1772, 1979, 2011, 2014, 2039, 2274, 2279, 2280, 2282, 2283, 2386, 2387, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2545, 2548, 2598, 2649, 2650, 2670, 2681 |
| MODEL_PHOSPHORUS (S: phosphorus_model) | |
| MODEL_PHYTOPLANKTON | 19, 98, 101, 226, 229, 308, 351, 359, 362, 364, 439, 611, 614, 923, 1115, 1128, 1312, 1324, 1325, 1338, 1437, 1448, 1661, 1723, 1729, 1733, 1736, 1738, 1740, 1844, 1955, 1989, 2012, 2013, 2089, 2105, 2107, 2117, 2279, 2280, 2395, 2432, 2434, 2453, 2454, 2545, 2548 |
| MODEL_POLLUTION (S: pollution_model) | |
| MODEL_PRECIPITATION | 7, 35, 57, 63, 88, 118, 119, 220, 221, 454, 455, 473, 533, 537, 543, 567, 651, 711, 784, 787, 1014, 1015, 1044, 1046, 1125, 1333, 1700, 1723, 1729, 1732, 1733, 1740, 1804, 1907, 1923, 1924, 1936, 1943, 1979, 1996, 2039, 2105, 2107, 2259, 2306, 2387, 2482, 2548, 2764 |
| MODEL_RECREATION | 188, 217, 931, 1028, 1175, 1217, 1733, 2067, 2397, 2482, 2508 |
| MODEL_RUNOFF | 49, 361, 366, 367, 454, 455, 473, 537, 580, 954, 960, 1021, 1175, 1217, 1235, 1268, 1333, 1475, 1539, 1540, 1700, 1723, 1729, 1730, 1732, 1733, 1736, 1740, 1751, 1767, 1774, 1803, 1804, 1805, 1923, 1924, 2140, 2278, 2382, 2387 |
| MODEL_SEDIMENTS | 62, 63, 73, 237, 253, 255, 351, 359, 361, 375, 376, 377, 380, 382, 441, 525, 580, 614, |

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| MODEL_SEDIMENTS (continued) | 627, 631, 638, 650, 807, 884, 894, 895, 896, 923, 944, 945, 1021, 1043, 1115, 1120, 1128, 1132, 1175, 1231, 1333, 1349, 1351, 1385, 1389, 1441, 1442, 1448, 1492, 1494, 1496, 1598, 1604, 1639, 1655, 1684, 1701, 1702, 1723, 1725, 1729, 1730, 1732, 1733, 1734, 1735, 1736, 1738, 1740, 1741, 1742, 1743, 1744, 1745, 1776, 1803, 1804, 1805, 1814, 1832, 1879, 1881, 1955, 1994, 2000, 2040, 2043, 2082, 2089, 2105, 2107, 2117, 2176, 2269, 2270, 2274, 2282, 2382, 2386, 2387, 2434, 2435, 2437, 2438, 2439, 2440, 2482, 2508, 2548, 2593, 2598, 2618, 2649, 2650, 2653, 2658, 2681 |
| MODEL_TEMPERATURE | 18, 29, 33, 63, 80, 86, 118, 119, 164, 204, 220, 229, 308, 362, 389, 454, 455, 468, 473, 540, 541, 544, 545, 621, 711, 787, 924, 979, 1008, 1014, 1015, 1046, 1314, 1316, 1335, 1440, 1469, 1470, 1529, 1645, 1680, 1723, 1729, 1732, 1733, 1734, 1736, 1738, 1740, 1907, 1955, 2039, 2105, 2107, 2192, 2298, 2306, 2341, 2482, 2545, 2697, 2718 |
| MODEL_THERMAL_POLLUTION | 63, 164, 540, 541, 544, 2039, 2298, 2306 |
| MODEL_TRANSPORT | 6, 7, 56, 57, 88, 152, 234, 237, 361, 389, 441, 473, 533, 545, 546, 567, 614, 627, 651, 879, 884, 895, 944, 945, 975, 1125, 1132, 1175, 1231, 1267, 1351, 1438, 1442, 1448, 1598, 1604, 1655, 1679, 1680, 1684, 1723, 1725, 1729, 1732, 1733, 1735, 1736, 1740, 1741, 1742, 1743, 1744, 1745, 1767, 1772, 1803, 1804, 1805, 1832, 1879, 1881, 1955, 1979, 1994, 2040, 2043, 2049, 2082, 2089, 2115, 2140, 2173, 2274, 2386, 2387, 2439, 2440, 2670, 2697 |
| MODEL_VEGETATION | 976, 1010, 1264, 1494, 1496, 2482 |
| MODEL_WATER_BUDGET | 454, 455, 667, 784, 1723, 1729, 1730, 1733, 1736, 1738, 1740, 1907, 1924, 1925, 1936, 2278 |
| MODEL_WATER_QUALITY | 49, 63, 97, 99, 101, 169, (SA: pollution_model) 304, 313, 358, 359, 360, 362, 363, 365, 366, 367, 375, 376, 377, 441, 448, 514, 580, 649, |

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| MODEL_WATER_QUALITY (continued) | 651, 787, 790, 879, 923, 924, 952, 953, 954, 955, 956, 959, 960, 962, 975, 979, 1043, 1048, 1049, 1115, 1118, 1120, 1125, 1128, 1132, 1235, 1236, 1293, 1333, 1349, 1385, 1415, 1433, 1434, 1435, 1436, 1437, 1440, 1441, 1481, 1513, 1539, 1540, 1645, 1658, 1679, 1684, 1723, 1725, 1729, 1733, 1735, 1736, 1740, 1741, 1742, 1743, 1744, 1745, 1767, 1803, 1804, 1805, 1844, 1861, 1953, 2012, 2013, 2039, 2089, 2090, 2105, 2107, 2173, 2269, 2270, 2273, 2274, 2278, 2279, 2280, 2282, 2283, 2327, 2382, 2395, 2436, 2437, 2439, 2482, 2508, 2548, 2622, 2718 |
| MODEL_WATER_SUPPLY | 237, 473, 784, 1163, 1217, 1482, 1513, 1740, 1751 |
| MODEL_WATER_USE | 589, 1163, 1165, 1610, 1723, 1740, 2130, 2482 |
| MODEL_WAVES | 31, 32, 255, 375, 633, 638, 895, 951, 1231, 1440, 1442, 1448, 1469, 1470, 1471, 1655, 1680, 1683, 1723, 1729, 1732, 1733, 1736, 1738, 1740, 1832, 1879, 1881, 1905, 2043, 2049, 2139, 2167, 2169, 2173, 2306, 2446, 2653 |
| MODEL_WIND | 35, 305, 708, 1972, 2263, 2759 |
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| MOLLUSCA (S: clams; S: snails) | |
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| MONITORING_BIRDS (S: birds_monitoring) | |
| MONITORING_EROSION | 124, 125, 213, 376, 397, 821, 1071, 1083, 1084, 1142, 1158, 1332, 1419, 2097, 2382, 2427, 2485, 2545 |
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| MONITORING_INVERTEBRATES | |
| (S: invertebrates_monitoring) | |
| MONITORING_LAKE_LEVELS | |
| (S: lake_levels_monitoring) | |
| MONITORING_NUTRIENTS | |
| (S: nutrients_monitoring) | |
| MONITORING_ORGANICS | |
| (S: organics_monitoring) | |
| MONITORING_PHOSPHORUS | |
| (S: phosphorus_monitoring) | |
| MONITORING_PHYTOPLANKTON | |
| (S: phytoplankton_monitoring) | |
| MONITORING_POLLUTION | |
| (S: pollution_monitoring) | |
| MONITORING_RADIOACTIVITY | 378, 396, 1134, 1137, 1140, 1143, 1182, 1183, 1187, 1188, 1193, 1195, 2554, 2619 |
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| MONITORING_TEMPERATURE | 63, 86, 92, 131, 213, 224, (SA: monitoring_thermal_pollution) 396, 397, 437, 544, 598, 684, |

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| MONITORING_TEMPERATURE | 687, 821, 950, 992, 1089, 1150, |
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| | 1545, 1833, 2008, 2019, 2023, 2028, |
| | 2030, 2032, 2097, 2292, 2293, 2294, |
| | 2296, 2297, 2418, 2545, 2570, 2583, |
| | 2584, 2617, 2720 |
| MONITORING_THERMAL POLLUTION | 63, 396, 544, 687, 1150, 1247, |
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| | 2294, 2296, 2297, 2301, 2570 |
| MONITORING_TOXICS | 26, 55, 58, 59, 94, 126, |
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| | 401, 404, 414, 417, 495, 513, |
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| | 651, 670, 798, 821, 888, 950, |
| | 970, 990, 994, 996, 1000, 1083, |
| | 1094, 1097, 1098, 1100, 1101, 1103, |
| | 1113, 1117, 1120, 1125, 1132, 1136, |
| | 1138, 1142, 1145, 1148, 1150, 1151, |
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| | 1195, 1197, 1319, 1332, 1354, 1386, |
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| | 1979, 2017, 2018, 2019, 2027, 2097, |
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| | 2204, 2208, 2210, 2211, 2212, 2213, |
| | 2301, 2305, 2521, 2527, 2531, 2534, |
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| | 2554, 2586, 2693, 2694, 2696 |
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| MULLET | 2774 |
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| NAPHTHALENE (SA: PAHs) | 473, 597, 972, 973, 2598, 2775 |
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| NAVIGATION | 82, 88, 91, 92, 93, 130, (SA: mapping_navigation) (SA: shipping) |
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| NET BASIN SUPPLY (S: water budget) | |
| NICKEL | 7, 26, 67, 224, 260, 261, 346, 399, 415, 420, 473, 555, 600, 644, 758, 804, 858, 870, 879, 910, 923, 950, 979, 1027, 1098, 1113, 1124, 1125, 1148, 1150, 1160, 1161, 1332, 1394, 1395, 1618, 1619, 1794, 1829, 1998, 2026, 2027, 2028, 2034, 2132, 2140, 2235, 2236, 2330, 2331, 2444, 2466, 2468, 2469, 2497 |
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| NITZSCHIA (SA: diatoms) | 1401, 1535, 2093, 2355, 2456 | | | | | |
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(S: phytoplankton_nutrients)

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| | 123, | 124, | 126, | 136, | 143, | 163, |
| | 169, | 218, | 261, | 273, | 297, | 359, |
| | 366, | 367, | 376, | 377, | 390, | 396, |
| | 397, | 398, | 400, | 500, | 501, | 502, |
| | 514, | 550, | 552, | 555, | 556, | 576, |
| | 577, | 598, | 600, | 628, | 645, | 648, |
| | 657, | 737, | 765, | 775, | 788, | 820, |
| | 821, | 832, | 857, | 863, | 879, | 911, |
| | 918, | 923, | 925, | 927, | 950, | 953, |
| | 954, | 956, | 957, | 958, | 960, | 1043, |
| | 1048, | 1049, | 1052, | 1083, | 1089, | 1101, |
| | 1104, | 1107, | 1108, | 1109, | 1110, | 1118, |
| | 1125, | 1127, | 1128, | 1132, | 1136, | 1141, |
| | 1142, | 1144, | 1145, | 1151, | 1154, | 1158, |
| | 1159, | 1174, | 1175, | 1176, | 1179, | 1181, |
| | 1182, | 1183, | 1185, | 1186, | 1187, | 1188, |
| | 1189, | 1190, | 1193, | 1194, | 1195, | 1197, |
| | 1199, | 1258, | 1301, | 1333, | 1337, | 1384, |
| | 1386, | 1395, | 1397, | 1399, | 1415, | 1433, |
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| | 1767, | 1774, | 1783, | 1803, | 1804, | 1805, |
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| | 1909, | 1945, | 1952, | 1961, | 2028, | 2030, |
| | 2039, | 2046, | 2056, | 2097, | 2104, | 2106, |
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| | 2198, | 2199, | 2202, | 2205, | 2235, | 2271, |
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| | 2347, | 2356, | 2382, | 2383, | 2413, | 2469, |
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| | 2526, | 2529, | 2535, | 2541, | 2548, | 2550, |
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| NUTRIENTS_SEASONAL VARIATION | 7, | 100, | 122, | 123, | 126, | 131, |
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| | 446, | 603, | 647, | 737, | 879, | 979, |
| | 1006, | 1031, | 1089, | 1125, | 1324, | 1325, |
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| | 397, | 399, | 438, | 445, | 446, | 472, |
| | 515, | 555, | 598, | 600, | 603, | 628, |
| | 645, | 713, | 735, | 737, | 769, | 771, |

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| PARTICLES (continued) | 1113, 1125, 1189, 1326, 1350, 1351, 1352, 1384, 1420, 1432, 1439, 1519, 1520, 1562, 1613, 1615, 1617, 1618, 1619, 1643, 1700, 1704, 1707, 1710, 1711, 1723, 1729, 1730, 1732, 1733, 1735, 1736, 1737, 1738, 1740, 1741, 1742, 1743, 1744, 1745, 1776, 1779, 1780, 1781, 1822, 1829, 1846, 1848, 1893, 1904, 1955, 1956, 1976, 1977, 1990, 1997, 2012, 2025, 2046, 2057, 2062, 2089, 2113, 2137, 2138, 2139, 2140, 2168, 2199, 2205, 2228, 2229, 2231, 2232, 2235, 2236, 2362, 2386, 2432, 2435, 2438, 2440, 2443, 2462, 2463, 2468, 2524, 2573, 2576, 2579, 2596, 2597, 2614, 2617, 2618, 2619, 2666, 2696, 2697, 2712 |
| PARTICLES_FLUX | 53, 54, 55, 57, 59, 60, 66, 150, 347, 361, 375, 599, 602, 603, 613, 614, 643, 651, 661, 802, 862, 1113, 1125, 1352, 1519, 1520, 1729, 1730, 1733, 1735, 1740, 1741, 1742, 1743, 1744, 1745, 1780, 1781, 1955, 1956, 1976, 2062, 2138, 2140, 2199, 2229, 2231, 2232, 2235, 2386, 2440, 2462, 2524, 2618, 2666, 2697 |
| PARTICLES_TRANSPORT | 24, 54, 55, 56, 57, 66, 67, 68, 69, 152, 347, 361, 409, 566, 602, 614, 627, 651, 884, 944, 1052, 1053, 1113, 1125, 1350, 1351, 1352, 1384, 1432, 1439, 1615, 1618, 1710, 1723, 1729, 1732, 1733, 1735, 1736, 1740, 1741, 1742, 1743, 1744, 1745, 1829, 1846, 1955, 1956, 1976, 1977, 2062, 2089, 2113, 2140, 2199, 2205, 2231, 2232, 2236, 2386, 2440, 2524, 2573, 2666, 2696, 2697 |
| PARTICLE SIZE (S: grain size) | |
| PARTITION COEFFICIENTS | 53, 71, 304, 566, 595, 597, 611, 650, 651, 948, 1113, 1125, 1256, 1516, 1614, 1669, 1723, 1725, 1729, 1730, 1732, 1733, 1735, 1736, 1738, 1741, 1742, 1743, 1744, 1745, 1809, 1975, 1976, 2011, 2057, 2386, 2435, 2438, 2440, 2596, 2597, 2598, 2751 |
| PATHOLOGY | 36, 37, 38, 39, 42, 43, 134, 194, 244, 324, 616, 848, 849, 850, 917, 949, 970, 1018, 1222, 1308, 1408, 1502, 1652, 1653, |

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| PATHOLOGY (continued) | 1851, 1864, 2197, 2243, 2250, 2264, 2283, 2623, 2694 |
| PBBS | 821, 933, 968, 1057, 1148, 1255, 2241, 2305 |
| PCBS (general) | 813, 831, 1099, 1181, 1330, 1516, 1548, 1549, 1764, 1784, 2265, 2360, 2530 |
| PCBS_ATMOSPHERIC_DEPOSITION/LOADING | 6, 7, 24, 53, 54, 55, 56, 57, 70, 94, 224, 323, 361, 414, 473, 532, 565, 566, 567, 613, 643, 645, 649, 650, 651, 652, 720, 910, 1113, 1124, 1125, 1132, 1138, 1142, 1154, 1185, 1188, 1189, 1332, 1449, 1515, 1567, 1568, 1592, 1619, 1630, 1705, 1706, 1707, 1708, 1709, 1710, 1711, 1723, 1725, 1729, 1730, 1735, 1736, 1740, 1741, 1742, 1743, 1744, 1745, 1809, 1974, 1976, 2014, 2017, 2039, 2276, 2387, 2391, 2435, 2437, 2438, 2440, 2443, 2522, 2563, 2648 |
| PCBS BIOTA (SA: fish_PCBs) | 8, 24, 47, 52, 94, 117, 126, 134, 165, 174, 190, 224, 237, 260, 261, 287, 288, 297, 323, 324, 346, 361, 378, 387, 396, 397, 399, 400, 401, 404, 419, 439, 440, 517, 518, 519, 520, 521, 522, 531, 532, 570, 576, 612, 614, 639, 649, 650, 654, 655, 670, 679, 706, 707, 732, 735, 793, 871, 888, 904, 911, 917, 923, 933, 968, 969, 970, 971, 979, 990, 994, 996, 1001, 1002, 1009, 1025, 1038, 1056, 1057, 1060, 1068, 1094, 1100, 1101, 1108, 1109, 1117, 1121, 1124, 1125, 1132, 1138, 1142, 1145, 1158, 1174, 1188, 1189, 1203, 1222, 1223, 1254, 1255, 1319, 1332, 1345, 1346, 1354, 1364, 1383, 1411, 1412, 1414, 1448, 1449, 1457, 1487, 1501, 1503, 1504, 1505, 1506, 1507, 1508, 1527, 1531, 1592, 1593, 1605, 1606, 1630, 1652, 1653, 1692, 1694, 1695, 1706, 1707, 1710, 1711, 1723, 1725, 1729, 1730, 1735, 1736, 1738, 1740, 1741, 1742, 1743, 1744, 1745, 1772, 1802, 1809, 1838, 1855, 1856, 1883, 1886, 1913, 1945, 1961, 1973, 1985, 2014, 2017, 2019, 2021, 2037, 2039, 2050, 2132, 2141, 2142, 2163, 2175, 2177, 2178, 2179, 2180, 2190, 2208, 2209, 2210, 2212, 2239, 2250, 2276, 2279, 2280, |

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| PCBS_BIOTA (continued) | 2281, 2282, 2283, 2301, 2304, 2305, 2308, 2309, 2315, 2317, 2330, 2331, 2359, 2367, 2378, 2379, 2381, 2391, 2399, 2432, 2433, 2434, 2435, 2437, 2439, 2443, 2492, 2522, 2524, 2529, 2536, 2537, 2539, 2540, 2541, 2545, 2560, 2561, 2563, 2564, 2580, 2581, 2582, 2586, 2635, 2644, 2646, 2647, 2648, 2673, 2674, 2689, 2690, 2691, 2693, 2695, 2724, 2725, 2729, 2730, 2751, 2774, 2786 |
| PCBS_CYCLING | 53, 55, 611, 613, 614, 679, 1515, 1592, 1593, 1630, 1708, 1723, 1725, 1729, 1730, 1735, 1736, 1740, 1741, 1742, 1743, 1744, 1745, 1771, 1772, 1809, 1976, 2011, 2541, 2648 |
| PCBS_DEPOSITION | 6, 7, 47, 53, 54, 55, 56, 57, 70, 71, 224, 473, 565, 567, 612, 613, 643, 645, 649, 650, 651, 652, 655, 720, 740, 870, 910, 1109, 1113, 1125, 1142, 1185, 1332, 1448, 1449, 1515, 1567, 1568, 1592, 1619, 1630, 1705, 1706, 1707, 1708, 1709, 1710, 1723, 1725, 1735, 1741, 1742, 1743, 1744, 1745, 1809, 1974, 2011, 2014, 2017, 2240, 2276, 2387, 2435, 2438, 2440, 2442, 2443, 2563, 2648, 2649, 2650 |
| PCBs_DISCHARGE (S: discharge_PCBs) | |
| PCBS_LOADING | 6, 7, 24, 53, 55, 56, 57, 70, 94, 126, 184, 323, 346, 397, 473, 532, 611, 643, 651, 652, 670, 720, 735, 740, 923, 1098, 1113, 1125, 1132, 1138, 1142, 1145, 1158, 1174, 1185, 1188, 1189, 1319, 1531, 1567, 1568, 1619, 1630, 1706, 1707, 1709, 1711, 1723, 1725, 1729, 1730, 1735, 1736, 1738, 1740, 1741, 1742, 1743, 1744, 1745, 1809, 2011, 2014, 2039, 2276, 2304, 2387, 2435, 2437, 2438, 2439, 2440, 2442, 2443, 2522, 2524, 2529, 2545, 2644, 2648, 2649, 2650 |
| PCBS_MASS BALANCE | 53, 323, 650, 1148, 1515, 1706, 1771, 1772, 2386, 2437, 2438, 2648, 2681 |
| PCBS_MODEL | 6, 7, 53, 56, 57, 237, 304, 324, 361, 439, 440, 473, 567, 611, 614, 649, 650, 651, 923, 979, 1125, 1132, 1222, 1223, 1448, 1515, 1723, 1725, 1729, 1730, 1735, 1736, 1738, 1740, 1741, 1742, |

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| PCBS_MODEL (continued) | 1743, 1744, 1745, 1772, 2011, 2014, 2039, 2279, 2280, 2282, 2283, 2386, 2387, 2432, 2433, 2434, 2435, 2437, 2438, 2439, 2440, 2545, 2598, 2649, 2650, 2681 |
| PCBS_SEDIMENTS | 24, 25, 47, 54, 70, 71, 94, 117, 224, 237, 260, 261, 323, 346, 361, 386, 397, 399, 531, 532, 612, 613, 614, 645, 650, 720, 735, 740, 870, 871, 911, 923, 978, 1057, 1117, 1121, 1132, 1138, 1142, 1145, 1158, 1174, 1189, 1319, 1330, 1332, 1375, 1448, 1449, 1505, 1593, 1605, 1619, 1630, 1723, 1725, 1729, 1730, 1735, 1736, 1738, 1740, 1741, 1742, 1743, 1744, 1745, 1794, 1809, 1838, 2239, 2240, 2276, 2281, 2282, 2304, 2330, 2378, 2379, 2381, 2385, 2386, 2387, 2434, 2435, 2437, 2438, 2439, 2440, 2442, 2443, 2492, 2524, 2535, 2541, 2561, 2598, 2649, 2650, 2674, 2681, 2725 |
| PCBS_TRANSPORT | 6, 7, 24, 54, 55, 56, (SA: organics_transport) 57, 71, 184, 237, 346, 361, 397, 473, 565, 566, 567, 614, 651, 978, 1108, 1109, 1113, 1124, 1125, 1132, 1185, 1188, 1448, 1449, 1705, 1706, 1708, 1710, 1723, 1725, 1729, 1735, 1736, 1740, 1741, 1742, 1743, 1744, 1745, 1772, 1976, 2239, 2276, 2308, 2386, 2387, 2439, 2440, 2442, 2524, 2561, 2648 |
| PCBs_TRIBUTARIES (S: tributaries_PCBs) | |
| PCDD (SA: dioxins) | 482, 516, 871, 923, 1111, 1973, 2308, 2536, 2537, 2564, 2725 |
| PCDF (SA: furans) | 482, 516, 871, 923, 1120, 2308, 2536, 2537, 2564, 2725 |
| PCSS (SA: styrenes) | 968 |
| PEAT | 742 |
| PELECYPODA (S: clams) | |
| PERCH | 50, 102, 116, 139, 168, 173, 177, 186, 190, 248, 279, 391, 393, 399, 418, 426, 440, 457, 461, 467, 527, 532, 558, 559, 576, 664, 671, 678, 683, 691, 696, 809, 811, 859, 923, 928, 931, 988, 989, 992, 993, 995, 999, 1022, 1037, 1150, 1213, 1224, 1242, 1243, 1244, 1248, 1249, 1251, |

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| PERCH (continued) | 1284, 1291, 1292, 1316, 1327, 1335, 1346, 1365, 1408, 1410, 1443, 1466, 1468, 1511, 1525, 1542, 1546, 1581, 1624, 1647, 1691, 1692, 1695, 1696, 1716, 1786, 1791, 1795, 1797, 1850, 1874, 2051, 2098, 2143, 2178, 2179, 2180, 2181, 2182, 2187, 2253, 2262, 2286, 2288, 2291, 2299, 2367, 2398, 2418, 2420, 2435, 2451, 2539, 2540, 2541, 2545, 2548, 2560, 2571, 2583, 2585, 2660, 2662, 2663, 2664, 2720, 2721, 2723, 2724, 2777, 2783 |
| PERCHLOROETHYLENE | 2534 |
| PERIPHYTON (SA: benthic algae) | 100, 198, 562, 721, 725, 814, |
| (SA: specific species, i.e., Cladophora) | 911, 981, 1291, 1292, 1303, 1304, 1306, 1445, 1915, 2022, 2051, 2135, 2136, 2206, 2289, 2340, 2348, 2554, 2642, 2738 |
| PERYLENE (SA: PAHs) | 597 |
| PESTICIDES | 8, 24, 47, 70, 71, 94, |
| (SA: organochlorine pesticides) | 165, 170, 224, 261, 297, 323, |
| (SA: specific pesticides) | 324, 339, 396, 397, 399, 404, 419, 473, 517, 518, 519, 520, 521, 522, 531, 532, 576, 595, 611, 612, 614, 639, 651, 655, 670, 674, 679, 721, 729, 732, 735, 740, 793, 805, 806, 820, 863, 888, 911, 933, 968, 969, 970, 971, 990, 994, 996, 1001, 1002, 1057, 1060, 1068, 1083, 1094, 1098, 1100, 1101, 1108, 1109, 1113, 1117, 1120, 1121, 1124, 1125, 1127, 1132, 1136, 1138, 1139, 1142, 1145, 1148, 1150, 1154, 1158, 1159, 1160, 1161, 1174, 1175, 1176, 1180, 1181, 1185, 1188, 1189, 1223, 1254, 1255, 1330, 1332, 1364, 1412, 1414, 1448, 1449, 1461, 1462, 1487, 1501, 1503, 1504, 1506, 1508, 1531, 1605, 1606, 1619, 1652, 1653, 1676, 1692, 1694, 1695, 1705, 1706, 1707, 1711, 1730, 1732, 1738, 1786, 1794, 1809, 1838, 1853, 1855, 1883, 1886, 1909, 1913, 1945, 1961, 1973, 1974, 1975, 1978, 1979, 1992, 2017, 2019, 2021, 2037, 2039, 2097, 2132, 2141, 2142, 2177, 2178, 2180, 2190, 2271, 2276, 2281, 2282, 2304, 2315, 2317, 2330, 2331, 2377, 2378, 2438, 2442, 2522, 2527, 2529, 2539, 2541, 2545, 2554, 2560, 2564, 2580, 2581, 2586, 2623, 2648, 2655, 2673, 2690, 2691, 2693, 2695, 2724, 2729, 2730, 2774 |

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| PETROLEUM | 568, 972, 1146, 1273, 1611, 1827, 1828, 2126 |
| (SA: oil; SA: hydrocarbons) | |
| PH | 103, 146, 147, 148, 156, 160, 163, 318, 397, 398, 473, 508, 598, 600, 647, 658, 763, 821, 897, 950, 979, 1089, 1101, 1180, 1181, 1188, 1258, 1270, 1337, 1344, 1414, 1440, 1451, 1455, 1506, 1822, 1839, 2008, 2028, 2097, 2120, 2121, 2151, 2201, 2237, 2259, 2381, 2456, 2463, 2464, 2497, 2554, 2572, 2573, 2610, 2611, 2719 |
| PHAEOPHYTA (S: brown algae) | |
| PHAEOPHYTIN (SA: plant pigments) | 129, 350, 872, 1440, 2030, 2031, 2032, 2199, 2780, 2781 |
| PHENANTHRENE (SA: PAHs) | 597, 610, 739, 972, 973, 1669, 1740 |
| PHENOLS | 24, 117, 261, 397, 398, 532, 729, 950, 979, 1083, 1089, 1098, 1100, 1101, 1111, 1141, 1144, 1148, 1188, 1258, 1973, 2097, 2132, 2330, 2331, 2378, 2396, 2497 |
| PEROMONES | 734, 1237, 2548 |
| PHOSPHORUS_BACTERIA | 306, 1260, 1553, 1660, 2089, 2096, 2405, 2410, 2411, 2412 |
| PHOSPHORUS_CLADOPHORA | 95, 100, 143, 788, 960, 1455, 1684, 2347, 2522 |
| PHOSPHORUS_CYCLING | 65, 308, 358, 445, 603, 771, 1277, 1298, 1311, 1325, 1386, 1440, 1521, 1522, 1582, 1723, 1730, 1732, 1733, 1736, 1740, 1755, 1763, 1798, 1914, 1921, 1998, 2012, 2089, 2090, 2096, 2104, 2199, 2289, 2404, 2407, 2411, 2412 |
| PHOSPHORUS_DEPOSITION | 7, 26, 58, 63, 224, 366, 367, 473, 647, 648, 660, 879, 957, 1109, 1113, 1125, 1142, 1185, 1706, 1723, 1839, 1849, 1902, 2123, 2202, 2231, 2236, 2276 |
| PHOSPHORUS_DISCHARGE | 143, 346, 396, 397, 398, 399, 472, 473, 500, 600, 923, 1141, 1144, 1176, 1182, 1183, 1187, 1193, 1195, 2097, 2202, 2522, 2525, 2526, 2529, 2719 |
| PHOSPHORUS_INVERTEBRATES (S: invertebrates_nutrients) (S: phosphorus_zooplankton) | |
| PHOSPHORUS_LOADING | 7, 26, 58, 63, 68, 69, 94, 122, 123, 126, 143, 346, |

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| PHOSPHORUS_LOADING (continued) | 358, 473, 648, 918, 957, 1132, 1145, 1179, 1188, 1295, 1434, 1531, 1582, 1723, 1740, 1902, 2056, 2114, 2269, 2289, 2441, 2548, | 359, 513, 660, 923, 960, 1136, 1151, 1182, 1189, 1323, 1435, 1582, 1666, 1730, 1803, 1952, 1990, 2097, 2121, 2198, 2270, 2356, 2382, 2522, 2644, | 363, 514, 670, 927, 953, 1138, 1158, 1183, 1190, 1333, 1436, 1437, 1684, 1732, 1804, 1990, 2012, 2104, 2198, 2271, 2382, 2525, 2718 | 397, 550, 735, 953, 954, 1113, 1141, 1174, 1185, 1384, 1437, 1440, 1703, 1736, 1805, 1849, 2039, 2105, 2107, 2231, 2235, 2405, 2526, 2529, 2531, | 398, 600, 771, 954, 955, 1118, 1142, 1175, 1186, 1386, 1440, 1475, 1706, 1738, 1849, 1861, 2046, 2107, 2109, 2236, 2278, 2412, 2529, 2531, | 472, 647, 879, 955, 1125, 1144, 1176, 1187, 1195, 1433, 1475, 1706, 1738, 1861, 2046, 2109, 2236, 2278, 2412, 2529, 2531, | | |
| PHOSPHORUS_MODEL | | | 7, 101, 362, 514, 956, 1132, 1433, 1440, 1475, 1732, 1733, 1803, 1804, 2039, 2269, 2454, | 19, 169, 363, 879, 960, 979, 1175, 1324, 1496, 1733, 1736, 1805, 1805, 2089, 2270, 2482, | 63, 308, 365, 923, 979, 1043, 1325, 1436, 1684, 1738, 1740, 1767, 1861, 2012, 2013, 2105, 2278, 2548, | 98, 359, 366, 953, 954, 1118, 1333, 1437, 1723, 1738, 1740, 1767, 2012, 2013, 2107, 2395, 2718 | 99, 360, 473, 955, 1125, 1415, 1438, 1730, 1733, 1740, 1767, 2013, 2013, 2117, 2453, 2718 | |
| PHOSPHORUS_MONITORING | | | 26, 126, 399, 550, 1089, 1138, 1151, 1158, 1193, 1195, 1703, 2181, 2531, | 58, 131, 400, 598, 670, 775, 950, 1103, 1141, 1142, 1144, 1145, 1148, 1158, 1182, 1183, 1333, 1386, 2008, 2200, 2275, 2357, 2382, 2550, | 63, 224, 401, 501, 513, 514, 550, 598, 670, 775, 950, 1083, 1113, 1125, 1132, 1136, 1145, 1148, 1187, 1188, 1440, 1582, 2028, 2030, 2097, 2357, 2382, 2525, 2554 | 122, 397, 501, 513, 514, 550, 598, 670, 775, 950, 1083, 1113, 1125, 1132, 1136, 1145, 1148, 1187, 1188, 1440, 1582, 2028, 2030, 2097, 2357, 2382, 2525, 2554 | 123, 398, 513, 514, 550, 598, 670, 775, 950, 1083, 1113, 1125, 1132, 1136, 1145, 1148, 1187, 1188, 1440, 1582, 2028, 2030, 2097, 2357, 2382, 2525, 2554 | |
| PHOSPHORUS_PHYTOPLANKTON | (SA: phosphorus_Cladophora) | | 19, 131, 346, 397, 504, 775, 1031, 1260, | 65, 136, 350, 398, 515, 788, 1068, 1295, | 94, 142, 359, 399, 576, 857, 1083, 1296, | 98, 224, 400, 401, 628, 918, 1138, 1324, | 101, 230, 394, 401, 670, 920, 1142, 1325, | 129, 308, 396, 445, 771, 923, 1145, 1337, |

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| PHOSPHORUS_PHYTOPLANKTON | 1437, 1457, 1521, 1522, 1536, 1660, 1703, 1723, 1733, 1736, 1738, 1740, 1798, 1839, 1845, 1849, 1851, 1902, 1914, 1990, 2008, 2012, 2013, 2025, 2030, 2060, 2061, 2089, 2091, 2092, 2093, 2094, 2096, 2104, 2105, 2107, 2108, 2109, 2110, 2112, 2114, 2116, 2117, 2118, 2120, 2121, 2122, 2123, 2124, 2181, 2195, 2198, 2199, 2200, 2330, 2331, 2346, 2347, 2350, 2351, 2355, 2356, 2357, 2395, 2405, 2410, 2411, 2412, 2414, 2415, 2453, 2454, 2455, 2456, 2457, 2522, 2526, 2529, 2548, 2554, 2575, 2640, 2736 |
| PHOSPHORUS_POLLUTION | 7, 58, 63, 68, 69, 94, |
| (SA: phosphorus_water quality) | 95, 101, 121, 122, 123, 126, 136, 143, 169, 218, 261, 297, 359, 366, 367, 390, 396, 397, 398, 400, 500, 501, 502, 514, 550, 555, 576, 577, 598, 600, 628, 648, 657, 775, 788, 857, 879, 911, 918, 923, 927, 950, 953, 954, 956, 957, 958, 690, 1043, 1052, 1083, 1089, 1107, 1108, 1109, 1118, 1125, 1127, 1132, 1136, 1141, 1142, 1144, 1145, 1151, 1154, 1158, 1159, 1174, 1175, 1176, 1179, 1181, 1182, 1183, 1185, 1186, 1187, 1188, 1189, 1190, 1193, 1194, 1195, 1199, 1258, 1301, 1333, 1337, 1384, 1386, 1395, 1415, 1433, 1434, 1435, 1436, 1437, 1438, 1440, 1451, 1454, 1475, 1508, 1536, 1666, 1667, 1684 1703, 1733, 1736, 1767, 1803, 1804, 1805, 1839, 1849, 1871, 1872, 1902, 1952, 1961, 2028, 2030, 2039, 2046, 2056, 2097, 2104, 2110, 2120, 2132, 2151, 2198, 2199, 2202, 2235, 2271, 2276, 2278, 2329, 2330, 2331, 2346, 2347, 2356, 2382, 2383, 2413, 2482, 2497, 2522, 2525, 2526, 2527, 2535, 2548, 2550, 2644 |
| PHOSPHORUS_POLLUTION_ABATEMENT | 95, 218, 359, 366, 367, 500, 501, 502, 577, 775, 927, 956, 957, 958, 960, 1118, 1125, 1127, 1159, 1175, 1179, 1181, 1185, 1190, 1194, 1301, 1386, 1415, 1475, 1508, 1667, 1767, 1871, 1872, 1902, 1961, 2198, 2271, 2331, 2382, 2383, 2526, 2550 |
| PHOSPHORUS_SEDIMENTS | 63, 65, 68, 69, 94, 143, 146, 148, 224, 260, 261, 306, 307, 346, 359, 397, 399, 445, |

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| PHOSPHORUS_SEDIMENTS (continued) | 472, 515, 555, 598, 600, 603, 628, 735, 769, 771, 777, 778, 911, 923, 1043, 1083, 1132, 1136, 1138, 1142, 1145, 1158, 1159, 1174, 1175, 1176, 1189, 1199, 1258, 1298, 1323, 1330, 1333, 1384, 1395, 1451, 1496, 1553, 1684, 1723, 1730, 1732, 1733, 1736, 1738, 1740, 1753, 1754, 1755, 1763, 1803, 1804, 1805, 1914, 1921, 1998, 2025, 2034, 2089, 2096, 2097, 2105, 2107, 2114, 2116, 2117, 2123, 2124, 2199, 2269, 2270, 2276, 2289, 2330, 2381, 2382, 2383, 2482, 2497, 2525, 2535, 2548, 2554 |
| PHOSPHORUS_TRANSPORT | 7, 68, 69, 143, 307, 346, 397, 473, 600, 648, 879, 916, 1052, 1107, 1108, 1109, 1113, 1125, 1132, 1175, 1176, 1185, 1188, 1384, 1438, 1582, 1684, 1706, 1723, 1732, 1733, 1736, 1740, 1767, 1803, 1804, 1805, 2062, 2089, 2199, 2231, 2236, 2276, 2405, 2413, 2497 |
| PHOSPHORUS_TRIBUTARIES | 58, 68, 69, 122, 123, 126, 143, 218, 224, 260, 261, 306, 346, 397, 398, 472, 473, 500, 501, 513, 514, 515, 550, 555, 600, 603, 608, 735, 769, 771, 777, 778, 911, 923, 954, 957, 1089, 1138, 1142, 1158, 1175, 1176, 1186, 1188, 1189, 1194, 1260, 1323, 1333, 1337, 1384, 1451, 1475, 1660, 1666, 1723, 1730, 1732, 1733, 1736, 1738, 1740, 1753, 1767, 1803, 1804, 1805, 1845, 1861, 1871, 1872, 1921, 1990, 2025, 2028, 2046, 2060, 2097, 2104, 2105, 2107, 2114, 2118, 2120, 2198, 2199, 2202, 2269, 2270, 2271, 2275, 2276, 2278, 2289, 2382, 2383, 2409, 2457, 2522, 2525, 2526, 2529, 2535, 2554, 2718 |
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| | 2046, | 2089, | 2097, | 2173, | 2268, | 2269, |
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| | 1180, | 1181, | 1191, | 1192, | 1194, | 1196, |
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| | 126, | 143, | 184, | 273, | 323, | 359, |
| | 376, | 377, | 397, | 398, | 514, | 532, |
| | 533, | 550, | 551, | 552, | 578, | 579, |
| | 580, | 600, | 604, | 643, | 648, | 651, |
| | 652, | 720, | 737, | 743, | 879, | 918, |
| | 923, | 927, | 953, | 954, | 957, | 960, |
| | 962, | 975, | 1000, | 1008, | 1098, | 1110, |
| | 1116, | 1118, | 1125, | 1132, | 1136, | 1141, |
| | 1142, | 1144, | 1145, | 1151, | 1158, | 1171, |
| | 1173, | 1174, | 1175, | 1176, | 1179, | 1182, |
| | 1183, | 1185, | 1186, | 1187, | 1188, | 1189, |
| | 1190, | 1193, | 1194, | 1195, | 1233, | 1235, |
| | 1333, | 1384, | 1386, | 1433, | 1434, | 1435, |
| | 1436, | 1437, | 1440, | 1461, | 1462, | 1475, |
| | 1532, | 1567, | 1618, | 1666, | 1684, | 1700, |
| | 1701, | 1702, | 1703, | 1709, | 1725, | 1729, |
| | 1733, | 1735, | 1736, | 1741, | 1742, | 1743, |
| | 1744, | 1745, | 1765, | 1774, | 1803, | 1804, |
| | 1805, | 1809, | 1825, | 1826, | 1849, | 1902, |
| | 1909, | 1952, | 1978, | 1979, | 1997, | 2018, |
| | 2039, | 2046, | 2056, | 2083, | 2097, | 2104, |
| | 2138, | 2149, | 2150, | 2198, | 2205, | 2230, |
| | 2235, | 2244, | 2268, | 2271, | 2276, | 2278, |
| | 2304, | 2356, | 2382, | 2383, | 2439, | 2443, |
| | 2522, | 2525, | 2526, | 2529, | 2548, | 2644, |
| | 2648, | 2649, | 2650 | | | |
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| | 359, | 366, | 367, | 376, | 377, | 390, |
| | 400, | 475, | 499, | 500, | 501, | 502, |
| | 530, | 533, | 556, | 577, | 580, | 651, |
| | 729, | 737, | 775, | 821, | 823, | 824, |
| | 827, | 832, | 845, | 904, | 918, | 923, |
| | 927, | 953, | 954, | 956, | 957, | 958, |
| | 959, | 960, | 961, | 962, | 1043, | 1083, |
| | 1084, | 1098, | 1102, | 1104, | 1107, | 1110, |
| | 1112, | 1115, | 1117, | 1118, | 1123, | 1125, |
| | 1127, | 1128, | 1131, | 1146, | 1149, | 1150, |
| | 1151, | 1152, | 1156, | 1159, | 1162, | 1163, |
| | 1165, | 1174, | 1177, | 1179, | 1181, | 1182, |
| | 1183, | 1187, | 1188, | 1189, | 1190, | 1193, |
| | 1194, | 1195, | 1200, | 1215, | 1233, | 1234, |
| | 1235, | 1236, | 1273, | 1301, | 1333, | 1375, |
| | 1386, | 1395, | 1415, | 1458, | 1461, | 1462, |
| | 1475, | 1513, | 1527, | 1532, | 1539, | 1540, |
| | 1577, | 1598, | 1649, | 1650, | 1667, | 1679, |
| | 1684, | 1733, | 1735, | 1737, | 1766, | 1767, |
| | 1773, | 1790, | 1801, | 1810, | 1813, | 1834, |
| | 1871, | 1872, | 1900, | 1902, | 1961, | 1962, |
| | 1966, | 2001, | 2023, | 2024, | 2042, | 2083, |
| | 2099, | 2141, | 2142, | 2149, | 2150, | 2160, |
| | 2186, | 2191, | 2202, | 2244, | 2268, | 2272, |

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960, 962, 975, 1008, 1043, 1048,
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1132, 1163, 1165, 1175, 1235, 1236,
1267, 1333, 1415, 1433, 1434, 1435,
1436, 1437, 1438, 1440, 1475, 1513,
1539, 1540, 1598, 1642, 1643, 1658,
1679, 1684, 1700, 1701, 1702, 1725,
1729, 1733, 1735, 1736, 1741, 1742,
1743, 1744, 1745, 1767, 1774, 1803,
1804, 1805, 1943, 1979, 1996, 1997,
2039, 2082, 2128, 2129, 2168, 2173,
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950, 970, 1000, 1083, 1084, 1089,
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1120, 1125, 1132, 1136, 1141, 1142,
1144, 1145, 1150, 1151, 1156, 1157,
1158, 1182, 1183, 1187, 1188, 1193,
1195, 1197, 1225, 1332, 1333, 1386,
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(S: water quality organics)

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(S: phosphorus_pollution)

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(S: power_plants)
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1172, 1175, 1176, 1189, 1194, 1235,
1333, 1374, 1384, 1386, 1461, 1475,
1480, 1539, 1540, 1611, 1700, 1729,
1733, 1736, 1765, 1767, 1774, 1803,
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645, 650, 720, 737, 766, 767,
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1020, 1043, 1083, 1084, 1115, 1117,
1120, 1121, 1128, 1132, 1136, 1142,
1145, 1150, 1158, 1159, 1162, 1171,
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1340, 1375, 1384, 1395, 1403, 1418,
1432, 1439, 1449, 1451, 1462, 1473,
1474, 1514, 1532, 1598, 1611, 1613,
1650, 1684, 1688, 1701, 1702, 1725,
1729, 1733, 1735, 1736, 1737, 1741,
1742, 1743, 1744, 1745, 1765, 1788,
1803, 1804, 1805, 1809, 1815, 1816,
1824, 1825, 1826, 1909, 1949, 1966,
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2199, 2205, 2222, 2240, 2274, 2276,
2304, 2330, 2378, 2382, 2383, 2439,
2443, 2467, 2482, 2492, 2497, 2525,
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| POLLUTION_WASTE (S: waste) | |
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| POWER PLANTS_ATMOSPHERIC_POLLUTION | 63, 76, 910, 974, 1106, 1127, 1332, 1643, 1943, 2007, 2039, 2058, 2059, 2518 |
| POWER PLANTS_DISCHARGE | 111, 112, 113, 164, 396, 544, (SA: power plants_effluent) 557, 588, 656, 687, 864, 867, (SA: power plants_radioactivity) 1007, 1134, 1137, 1140, 1143, 1241, (SA: power plants_radionuclides) 1332, 1377, 1715, 1833, 1947, 2021, (SA: thermal_plume) 2023, 2290, 2292, 2708, 2728, 2762, (SA: thermal_pollution) 2784 |
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| POWER PLANTS, EFFECTS ON INVERTEBRATES | 50, 200, 351, 583, 584, 585, 587, 588, 675, 676, 678, 680, 682, 683, 687, 688, 690, 691, 692, 693, 785, 928, 929, 943, 1007, 1242, 1247, 1248, 1332, 1350, 1368, 1404, 1452, 1467, 1587, 1688, 2023, 2029, 2051, 2056, 2181, 2196, 2548, 2675, 2677, 2678, 2687, 2703, 2704, 2705, 2706, 2707, 2708, 2710, 2711, 2769, 2778, 2779, 2784 |
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| POWER PLANTS_EFFLUENT | 52, 544, 693, 854, 1715, 1833 |
| (SA: power_plants_discharge) | 2300 |
| POWER PLANTS_ENGINEERING | 797, 822, 1095, 1610 |
| POWER PLANTS_HYDROELECTRIC | 1077, 2559b |
| POWER PLANTS_INORGANICS | 52, 63, 230, 350, 351, 396, 509, 510, 737, 820, 910, 974, 1127, 1134, 1137, 1140, 1143, 1150, 1248, 1332, 1337, 1397, 1399, 1404, 1454, 1457, 1532, 1643, 1943, 2007, 2019, 2020, 2026, 2028, 2030, 2034, 2039, 2056, 2124, 2181, 2186, 2301, 2479, 2481, 2548, 2738, 2762 |
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| | 2548, 2599, 2720, 2727, 2785 |
| POWER PLANTS_MONITORING_CURRENTS | 1833, 2023 |
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| | 1143, 1150, 1242, 1247, 1250, 1332, |
| | 1468, 1524, 1545, 1640, 1716, 2019, |
| | 2023, 2181, 2292, 2294, 2296, 2297, |
| | 2301, 2393, 2418, 2419, 2548, 2720, |
| | 2785 |
| POWER PLANTS_MONITORING_INORGANICS | 351, 396, 1134, 1137, 1140, 1143, |
| | 1150, 1332, 2019, 2028, 2030, 2181, |
| | 2301, 2548 |
| POWER PLANTS_MONITORING_INVERTEBRATES .. | 351, 680, 687, 785, 1242, 1247, |
| | 1332, 1587, 2023, 2181, 2548 |
| POWER PLANTS_MONITORING_PHYTOPLANKTON .. | 104, 105, 106, 107, 351, 396, |
| | 1332, 2023, 2030, 2032, 2033, 2035, |
| | 2181, 2548 |
| POWER PLANTS_MONITORING_TEMPERATURE | 63, 396, 544, 687, 1150, 1247, |
| (SA: power plants monitoring_ | 1250, 1332, 1545, 1833, 2019, 2023, |
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| | 2297, 2418, 2570, 2720 |
| POWER PLANTS_MONITORING_THERMAL_ | |
| POLLUTION | 63, 396, 544, 687, 1150, 1247, |
| (SA: power plants monitoring_ | 1332, 1545, 1833, 2019, 2181, 2292, |
| temperature) | 2294, 2296, 2297, 2301, 2570 |
| POWER PLANTS_MONITORING_WATER_QUALITY .. | 63, 396, 443, 656, 1134, 1137, |
| | 1140, 1143, 1150, 1332, 2028, 2548, |
| | 2599, 2727 |
| POWER PLANTS_MONITORING_ZOOPLANKTON | 351, 680, 687, 1247, 1332, 1587, |
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| POWER PLANTS_REGULATIONS | |
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| | 559, 583, 588, 675, 676, 682, |
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| | 854, 864, 865, 943, 1042, 1088, |
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| | 1285, 1328, 1332, 1337, 1377, 1397, |

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| POWER PLANTS WATER QUALITY | 52, 63, 189, 200, 396, 413, 443, 656, 737, 820, 824, 910, 974, 1106, 1127, 1134, 1137, 1140, 1143, 1150, 1248, 1332, 1337, 1397, 1399, 1454, 2026, 2028, 2029, 2039, 2056, 2124, 2479, 2481, 2548, 2599, 2672, 2727 |
| POWER PLANTS WATER USE | 193, 509, 510, 824, 825, 837, 867, 1077, 1088, 1167, 1405, 1610, 2023, 2481, 2518, 2672 |
| PRECIPITATION (SA: snow) | 7, 17, 26, 35, 54, 57, 58, 63, 88, 92, 93, 111, 112, 113, 118, 119, 155, 192, 193, 202, 205, 220, 221, 235, 240, 242, 243, 267, 268, 269, 290, 343, 352, 353, 354, 355, 356, 423, 454, 455, 473, 533, 535, 536, 537, 543, 567, 641, 647, 648, 651, 711, 737, 784, 787, 821, 825, 838, 855, 867, 897, 1013, 1014, 1015, 1044, 1046, 1068, 1085, 1113, 1125, 1168, 1170, 1188, 1274, 1279, 1280, 1281, 1283, 1332, 1333, 1458, 1532, 1554, 1613, 1619, 1670, 1690, 1700, 1707, 1708, 1709, 1710, 1711, 1723, 1728, 1729, 1732, 1733, 1740, 1804, 1839, 1849, 1852, 1907, 1912, 1923, 1924, 1927, 1929, 1933, 1934, 1935, 1936, 1938, 1939, 1941, 1943, 1978, 1979, 1996, 2007, 2039, 2085, 2105, 2107, 2152, 2153, 2154, 2198, 2202, 2252, 2259a, 2269b, 2306, 2369, 2371, 2387, 2479, 2481, 2482, 2514, 2548, 2556, 2588, 2654, 2665, 2700, 2764 |
| PRECIPITATION DISTRIBUTION | 202, 205, 1927 |
| PRECIPITATION HISTORY (S: history_precipitation) | |
| PRECIPITATION LAKE EFFECT | 17, 35, 118, 119, 220, 221, 240, 242, 243, 352, 354, 356, |

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| PRECIPITATION_LAKE EFFECT (continued) .. | 711, 1014, 1015, 1044, 1046, 1068, 1279, 1280, 1281, 1283, 1690, 1852, 1929, 1934, 2152, 2153, 2154, 2369, 2700 |
| PRECIPITATION_LAKE LEVELS | 17, 155, 192, 193, 267, 269, 290, 343, 354, 423, 535, 536, 537, 737, 821, 825, 838, 867, 897, 1013, 1068, 1168, 1170, 1274, 1532, 1554, 1670, 1723, 1729, 1733, 1740, 1924, 1927, 1933, 1934, 1935, 1938, 2252, 2479, 2481, 2482, 2514, 2559a, 2559b, 2588 |
| PRECIPITATION_MODEL (S: model_precipitation) | |
| PRECIPITATION_SEASONAL VARIATION | 7, 17, 155, 192, 193, 235, 267, 269, 354, 356, 535, 536, 647, 651, 1013, 1274, 1283, 1923, 1927, 1929, 1939, 1978, 2369, 2479, 2481, 2665 |
| PRECIPITATION_WATER BUDGET | 267, 269, 290, 454, 455, 535, 536, 784, 1170, 1723, 1729, 1733, 1740, 1907, 1924, 1935, 1936, 1938, 2479, 2481 |
| PRIMARY PRODUCTION | 98, 128, 224, 306, 308, 362, (SA: phytoplankton_growth) 463, 547, 1450, 1582, 1660, 1661, 1703, 1729, 1733, 1738, 1740, 1839, 1842, 1845, 1846, 1847, 1987, 1990, 2031, 2061, 2112, 2118, 2119, 2123, 2198, 2289, 2340, 2405, 2522, 2526, 2554, 2574, 2640, 2762, 2780, 2781 |
| PROTOZOA | 686, 688 |
| PTELEA | 1588, 1589 |
| PYRENE (SA: PAHs) | 610, 739, 1382, 1445, 1669, 1738, 2775 |
| QUARTZ | 804, 926, 1955, 1957 |
| QUATERNARY (SA: Pleistocene) | 222, 591, 668, 695, 870, 900, 901, 902, 903, 1300, 1393, 1814, 2203, 2668, 2683 |
| QUILLBACK | 809, 1243, 1244, 1251, 1791, 2420, 2451 |
| RADIATION (SOLAR) (SA: light) | 204, 207, 265, 1500, 1645, 1661, 1944 |
| RADIOACTIVITY | 9, 378, 396, 413, 630, 1106, (SA: discharge_radioactivity) (SA: effluent_radioactivity) (SA: power_plants_radioactivity) 1134, 1137, 1140, 1143, 1182, 1183, 1187, 1188, 1193, 1195, 1448, 1779, 1851, 2330, 2396, 2554, 2614, 2619 |
| RADIOCARBON (S: carbon-14) | |

RADIONUCLIDES

(SA: specific radionuclides)

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| RADIONUCLIDES_BIOACCUMULATION | 1134, 1137, 1140, 1143, 1725, 1730, 1735, 1736, 1741, 1742, 1743, 1744, 1745, 1777, 1816, 2432 |
| RADIONUCLIDES_CYCLING | 14, 629, 630, 1682, 1725, 1729, 1730, 1732, 1733, 1735, 1736, 1740, 1741, 1742, 1743, 1744, 1745, 1780, 1822, 1904, 1998, 1999, 2000, 2199, 2274, 2573, 2615, 2617, 2618, 2621 |
| RADIONUCLIDES_DEPOSITION | 71, 151, 318, 320, 380, 425, 599, 612, 627, 630, 632, 804, 910, 974, 1185, 1253, 1725, 1735, 1741, 1742, 1743, 1744, 1745, 1779, 1780, 1815, 1822, 1996, 1997, 2438, 2617, 2618, 2734 |
| RADIONUCLIDES_DISCHARGE | 1134, 1137, 1140, 1143 |
| RADIONUCLIDES_DISPERSION | 381, 1583, 1584 |
| RADIONUCLIDES_EFFLUENT | 1584 |
| RADIONUCLIDES_LOADING | 11, 15, 66, 599, 632, 975, 1151, 1185, 1188, 1385, 1725, 1729, 1730, 1732, 1733, 1735, 1736, 1740, 1741, 1742, 1743, 1744, 1745, 1997, 2056, 2176, 2437, 2438, 2572, 2573, 2617 |
| RADIONUCLIDES_MONITORING | 414, 1134, 1137, 1140, 1143, 1148, 1151, 1188, 1584, 1998, 2617, 2618, 2619, 2620, 2621 |
| RADIONUCLIDES_POWER_PLANTS | 910, 974, 1134, 1137, 1140, 1143, 2056 |
| RADIONUCLIDES_RESIDENCE_TIME | 661, 1997, 2437 |
| RADIONUCLIDES REVIEW (S: review_radionuclides) | |
| RADIONUCLIDES_SEASONAL_VARIATION | 66, 1294, 1729, 1733, 1740, 1822, 1846, 1848, 1893, 2199, 2572, 2573, 2615, 2617 |
| RADIONUCLIDES_SEDIMENTS | 10, 11, 12, 66, 71, 151, 318, 320, 361, 380, 381, 382, 386, 425, 441, 525, 599, 612, 625, 626, 627, 629, 630, 632, 804, 974, 1253, 1343, 1351, 1352, 1385, 1492, 1725, 1729, 1730, 1732, 1733, 1735, 1736, 1740, 1741, 1742, 1743, 1744, 1745, 1776, 1778, 1780, 1781, 1794, 1814, 1815, 1816, 1822, 1846, 1848, 1893, 1977, 1994, 1998, 1999, 2000, 2176, 2199, 2222, 2274, |

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| RADIONUCLIDES_SEDIMENTS (continued) | 2437, 2438, 2573, 2618, 2619, 2621, 2734 |
| RADIONUCLIDES_TRACE METALS | 9, 10, 11, 12, 13, 14, 15, 66, 151, 318, 320, 361, 381, 382, 386, 425, 441, 612, 625, 627, 629, 661, 804, 910, 948, 974, 975, 1148, 1181, 1185, 1253, 1343, 1351, 1385, 1492, 1561, 1583, 1584, 1725, 1729, 1730, 1732, 1733, 1735, 1736, 1740, 1741, 1742, 1743, 1744, 1745, 1776, 1777, 1778, 1779, 1780, 1781, 1782, 1794, 1815, 1816, 1822, 1823, 1835, 1846, 1848, 1851, 1893, 1904, 1994, 1996, 1997, 1998, 2199, 2222, 2274, 2432, 2437, 2438, 2572, 2573, 2610, 2611, 2614, 2615, 2617, 2619, 2620, 2621, 2734 |
| RADIONUCLIDES_TRANSPORT | 10, 14, 66, 71, 361, 441, 627, 974, 975, 1185, 1188, 1253, 1351, 1352, 1583, 1584, 1725, 1729, 1732, 1733, 1735, 1736, 1740, 1741, 1742, 1743, 1744, 1745, 1846, 1977, 1994, 2199, 2274, 2572, 2573, 2734 |
| RADIONUCLIDES_UPTAKE | 1740, 2061, 2091, 2199, 2222, 2414 (SA: radionuclides_bioaccumulation) |
| RADIONUCLIDES_WATER QUALITY | 9, 13, 14, 15, 441, 910, 974, 975, 1134, 1137, 1140, 1143, 1148, 1151, 1153, 1181, 1185, 1188, 1385, 1725, 1729, 1733, 1735, 1736, 1740, 1741, 1742, 1743, 1744, 1745, 2056, 2274, 2437 |
| RADIUM | 9, 1148, 2572, 2573 |
| RAIN (S: precipitation) | |
| RAINBOW SMELT (SA: smelt) | 38, 42, 43, 50, 173, 248, 279, 399, 426, 457, 460, 467, 468, 527, 532, 540, 559, 576, 622, 623, 664, 671, 730, 809, 811, 864, 939, 940, 1022, 1037, 1132, 1138, 1150, 1224, 1242, 1243, 1244, 1248, 1249, 1251, 1292, 1468, 1528, 1546, 1791, 1797, 2038, 2053, 2143, 2149, 2150, 2179, 2182, 2186, 2262, 2286, 2291, 2325, 2343, 2418, 2420, 2435, 2451, 2461, 2540, 2541, 2544, 2545, 2548, 2583, 2663, 2724, 2783 |
| RAINBOW TROUT (SA: trout) | 50, 120, 137, 171, 177, 195, 196, 197, 279, 336, 397, 399, 426, 457, 460, 467, 468, 485, 486, 527, 528, 532, 540, 576, 622, 623, 664, 671, 779, 809, |

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| RAINBOW TROUT (continued) | 811, 904, 905, 940, 987, 991, 998, 1022, 1037, 1132, 1138, 1150, 1242, 1244, 1248, 1249, 1251, 1308, 1354, 1355, 1412, 1468, 1501, 1528, 1606, 1696, 1797, 1800, 2038, 2157, 2179, 2262, 2286, 2294, 2297, 2298, 2343, 2418, 2420, 2435, 2451, 2477, 2540, 2541, 2544, 2545, 2548, 2583, 2584, 2586, 2724, 2782 |
| RECEDITION | |
| (S: bluffs_recession) | |
| (S: erosion) | |
| (S: shoreline_recession) | |
| RECHARGE | 235, 237, 273, 374, 473, 715, 797, 807, 821, 2040, 2787 |
| RECREATION | 8, 143, 158, 159, 161, 187, 188, 190, 192, 193, 195, 196, 197, 199, 217, 219, 284, 343, 390, 398, 431, 474, 478, 497, 509, 510, 542, 572, 593, 624, 705, 737, 748, 749, 750, 820, 821, 824, 832, 834, 856, 867, 897, 931, 978, 987, 991, 998, 1028, 1029, 1030, 1037, 1054, 1055, 1065, 1066, 1067, 1068, 1077, 1084, 1085, 1093, 1121, 1167, 1171, 1175, 1176, 1215, 1217, 1234, 1240, 1261, 1309, 1339, 1346, 1378, 1446, 1460, 1462, 1486, 1527, 1532, 1533, 1534, 1603, 1628, 1656, 1696, 1697, 1713, 1733, 1737, 1775, 1783, 1800, 1866, 1908, 1950, 1958, 1961, 2023, 2042, 2066, 2067, 2160, 2249, 2272, 2359, 2372, 2373, 2374, 2375, 2376, 2397, 2401, 2425, 2426, 2452, 2482, 2483, 2484, 2486, 2492, 2498, 2508, 2512, 2518, 2519, 2526, 2549, 2558, 2588, 2635, 2637, 2721, 2730 |
| RED ALGAE | 143, 198, 814, 1456, 1483, 2022, 2206, 2642, 2643 |
| REDHORSE | 261, 426, 517, 518, 809, 811, 1244, 1251, 1364, 2435, 2451, 2774 |
| REDOX | 11, 12, 15, 146, 148, 318, 653, 771, 1258, 2464, 2610, 2620 |
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| REEFS (continued) | 2321, 2398, 2518, 2571, 2605, 2606, 2607 |
| REEFS_ARTIFICIAL | 168, 177, 330, 484, 1291, 1466, 1868, 1869, 2051, 2398, 2571 |
| REGULATIONS_ATMOSPHERIC_POLLUTION | 342, 414, 1110, 1185, 1188, 1458, 1902 |
| REGULATIONS_FISH | 120, 219, 276, 283, 285, 310, 407, 408, 737, 932, 987, 989, 990, 991, 993, 995, 996, 997, 998, 999, 1018, 1150, 1215, 1229, 1284, 1313, 1336, 1415, 1476, 1531, 1532, 1542, 1640, 1697, 1962, 1992, 2050, 2054, 2141, 2150, 2160, 2209, 2279, 2280, 2286, 2359, 2361, 2524, 2563, 2654, 2661, 2729, 2786 |
| REGULATIONS_INSTITUTIONS | 275, 341, 499, 1458, 1908, 2272, 2726, 2766 |
| REGULATIONS_LAKE_LEVELS | 192, 193, 272, 704, 737, 908, 1013, 1278, 1464, 1532, 1570, 1625, 1962, 2242, 2272, 2479, 2481 |
| REGULATIONS_NAVIGATION | 1714, 1968 |
| REGULATIONS_POWER_PLANTS | 193, 737, 1150, 1532, 1640, 2479, 2481 |
| REGULATIONS_SHORELINE | 73, 908, 927, 1071, 1215, 2010, 2160, 2303, 2427, 2726, 2765 |
| REGULATIONS_WATER_QUALITY | 219, 275, 341, 342, 417, 499, 500, 577, 657, 737, 831, 863, 978, 1110, 1111, 1119, 1131, 1139, 1141, 1144, 1150, 1151, 1152, 1180, 1181, 1185, 1188, 1198, 1270, 1415, 1461, 1462, 1480, 1508, 1531, 1540, 1766, 1788, 1813, 1902, 1962, 1982, 2150, 2272, 2279, 2280, 2327, 2382, 2388, 2479, 2481, 2524, 2526, 2563, 2646, 2654, 2766 |
| REGULATIONS_WATER_USE | 192, 193, 272, 657, 791, 1270, 1278, 1542, 2242, 2481, 2654 |
| REGULATIONS_WETLANDS | 1, 73, 1215, 1542, 1982, 2160, 2654, 2739 |
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| REMOTE SENSING | 16, 18, 28, 78, 81, 85, 87, 88, 138, 145, 154, 161, 203, 204, 205, 209, 221, 240, 241, 243, 292, 293, 326, 340, |

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| REMOTE SENSING (continued) | 356, 377, 410, 507, 523, 534, |
| (SA: thermal_pollution_remote sensing) | 596, 711, 784, 816, 986, 1014, |
| (SA: water_quality_remote sensing) | 1024, 1048, 1049, 1082, 1170, 1274, |
| | 1279, 1280, 1282, 1283, 1320, 1397, |
| | 1398, 1399, 1428, 1429, 1430, 1431, |
| | 1453, 1454, 1493, 1495, 1496, 1497, |
| | 1498, 1500, 1554, 1665, 1681, 1765, |
| | 1852, 1875, 1895, 1934, 1951, 1953, |
| | 1967, 2023, 2049, 2101, 2152, 2153, |
| | 2154, 2172, 2218, 2219, 2370, 2371, |
| | 2428, 2518, 2622, 2773 |
| REPTILES | 969, 985, 986, 1479 |
| RESEARCH NEEDS_BIOLOGY | 52, 94, 143, 189, 218, 273, |
| | 289, 307, 323, 324, 390, 461, |
| | 497, 509, 510, 775, 916, 1022, |
| | 1058, 1084, 1108, 1109, 1110, 1111, |
| | 1114, 1117, 1119, 1120, 1125, 1126, |
| | 1127, 1139, 1188, 1189, 1197, 1234, |
| | 1264, 1298, 1387, 1448, 1449, 1477, |
| | 1527, 1688, 1691, 1692, 1694, 1695, |
| | 1717, 1718, 1719, 1720, 1721, 1722, |
| | 1723, 1724, 1725, 1726, 1727, 1730, |
| | 1732, 1733, 1734, 1735, 1737, 1739, |
| | 1740, 1809, 1854, 1890, 1945, 1961, |
| | 2003, 2024, 2060, 2112, 2272, 2282, |
| | 2286, 2357, 2389, 2400, 2411, 2542, |
| | 2547, 2560, 2562, 2564, 2584, 2585, |
| | 2586, 2625 |
| RESEARCH NEEDS_CHEMISTRY | 52, 94, 143, 218, 262, 273, |
| | 289, 307, 323, 324, 376, 390, |
| | 497, 509, 510, 651, 775, 813, |
| | 853, 916, 924, 1000, 1022, 1098, |
| | 1107, 1108, 1109, 1110, 1111, 1113, |
| | 1114, 1117, 1119, 1120, 1125, 1126, |
| | 1127, 1139, 1188, 1189, 1197, 1234, |
| | 1298, 1387, 1448, 1449, 1527, 1681, |
| | 1688, 1692, 1694, 1695, 1717, 1718, |
| | 1719, 1720, 1721, 1722, 1723, 1724, |
| | 1725, 1726, 1727, 1730, 1732, 1733, |
| | 1734, 1735, 1737, 1739, 1740, 1784, |
| | 1809, 1854, 1890, 1945, 1961, 2060, |
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| | 2357, 2389, 2392, 2409, 2411, 2531, |
| | 2535, 2550, 2560, 2564, 2586 |
| RESEARCH NEEDS_CIRCULATION | 916, 924, 1448, 1449, 1681, 1723, |
| | 1733, 1740 |
| RESEARCH NEEDS_CURRENTS | 916, 924, 1448, 1449, 1717, 1718, |
| | 1719, 1720, 1721, 1722, 1723, 1724, |

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| RESEARCH NEEDS_CURRENTS (continued) | 1726, 1727, 1732, 1733, 1734, 1735, 1739, 1740 |
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| RESEARCH NEEDS_GROUNDWATER | 273, 376, 1098, 1127, 1197 |
| RESEARCH NEEDS_INSTITUTIONS | 143, 1126, 1170, 2272, 2531 |
| RESEARCH NEEDS_METEOROLOGY | 85, 88, 651, 1125, 1127, 1169, 1170, 1449, 1681, 1732, 1733, 1734, 1737, 1740, 1890, 1961, 2272, 2460 |
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| RESEARCH NEEDS_POLLUTION_ABATEMENT | 218, 775, 1125, 1127, 1945, 1961, 2001, 2272, 2550 |
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| RESEARCH NEEDS_TEMPERATURE | 924, 1111, 1127, 1681, 1723, 1732, 1733, 1734, 1737, 1740, 2460, 2584 |
| RESEARCH NEEDS_WATER_BUDGET | 1169, 1170, 1723, 1730, 1733, 1740 |
| RESEARCH NEEDS_WATER_QUALITY (S: water quality research needs) | |
| RESEARCH NEEDS_WATER_SUPPLY | 509, 510, 1111, 1169, 1740 |
| RESEARCH NEEDS_WATER_USE | 390, 509, 510, 916, 1084, 1723, 1740, 2001, 2392 |
| RESUSPENSION | 70, 150, 346, 347, 348, 375, 397, 409, 599, 600, 602, 603, 612, 613, 627, 650, 720, 769, 884, 972, 973, 974, 1021, 1175, 1197, 1199, 1385, 1432, 1439, 1441, 1442, 1448, 1519, 1520, 1612, 1615, 1617, 1700, 1723, 1732, 1735, 1736, 1738, 1740, 1741, 1742, 1743, 1744, 1745, 1754, 1763, 1765, 1780, 1824, 1826, 1893, 1921, 1956, 2011, 2012, 2025, 2027, 2036, 2085, 2089, 2097, 2113, 2199, 2274, 2276, 2387, 2391, 2437, 2438, 2439, 2440, 2442, 2463, 2465, 2524, 2572, 2573, 2612, 2621, 2674 |
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| | 2427, 2499, 2505, 2506, 2507, 2765, |
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| REVIEW_ATMOSPHERIC_DEPOSITION/LOADING .. | 26, 94, 205, 597, 644, 651, |
| | 758, 1113, 1125, 1127, 1142, 1186, |
| | 1593, 1706, 1828, 1975, 2039, 2139, |
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| | 1994, 2028, 2348 |
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| | 1415, 1531, 1550, 1684, 1952, 2089, |
| | 2149, 2348, 2351, 2412, 2738 |
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| | 190, 324, 392, 459, 464, 468, |
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| | 811, 866, 931, 983, 1101, 1234, |
| | 1243, 1260, 1336, 1366, 1415, 1531, |
| | 1546, 1593, 1609, 1816, 1854, 2039, |
| | 2149, 2182, 2204, 2239, 2251, 2281, |
| | 2283, 2435, 2525, 2660, 2741 |
| REVIEW_GEOLOGY | 250, 260, 375, 908, 1084, 1127, |
| | 1142, 1159, 1389, 1554, 1655, 1890, |
| | 1956, 1994, 2174, 2435, 2654, 2733, |
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| REVIEW_GREAT LAKES CONFERENCES | 1890 |
| REVIEW_INVERTEBRATES | 144, 260, 464, 468, 597, 654, |
| | 686, 690, 721, 765, 796, 874, |
| | 1022, 1260, 1550, 1593, 1684, 1975, |
| | 2003, 2089, 2239, 2411, 2412, 2435, |
| | 2630, 2678, 2741 |
| REVIEW_LAKE LEVELS | 307, 392, 820, 908, 1264, 1298, |
| | 1389, 1554, 1594, 1655, 1863, 2174, |
| | 2630, 2788 |
| REVIEW_LAND USE | 341, 1159, 1174, 1177, 1389, 1415, |
| | 2271, 2550 |
| REVIEW_METALS | 26, 184, 260, 307, 324, 625, |
| | 644, 721, 758, 1022, 1101, 1113, |
| | 1125, 1127, 1139, 1142, 1145, 1148, |
| | 1159, 1174, 1706, 1816, 1828, 1956, |
| | 1994, 2028, 2039, 2139, 2204, 2276, |
| | 2281, 2525, 2630, 2741 |
| REVIEW_ORGANICS | 77, 94, 134, 184, 260, 324, |
| | 510, 597, 651, 654, 721, 820, |
| | 1097, 1100, 1101, 1113, 1125, 1127, |
| | 1139, 1142, 1145, 1148, 1159, 1174, |

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| REVIEW_THERMAL_POLLUTION | 690, 820, 1127, 1243, 2028, 2031, 2039 |
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| REVIEW_WETLANDS | 307, 392, 820, 1264, 1298, 1594, 1863, 2630, 2654 |
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| | 473, | 489, | 490, | 491, | 537, | 580, |
| | 604, | 720, | 736, | 820, | 821, | 824, |
| | 838, | 863, | 867, | 897, | 911, | 927, |
| | 954, | 957, | 960, | 1013, | 1021, | 1033, |
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| | 1384, | 1386, | 1456, | 1461, | 1475, | 1480, |
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| | 1751, | 1765, | 1767, | 1774, | 1803, | 1804, |
| | 1805, | 1883, | 1902, | 1909, | 1915, | 1923, |
| | 1924, | 1931, | 1938, | 1982, | 2022, | 2097, |
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| | 616, | 664, | 671, | 701, | 702, | 756, |
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| | 821, | 840, | 848, | 849, | 904, | 905, |
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| | 1039, | 1057, | 1060, | 1142, | 1145, | 1150, |
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| | 1313, | 1336, | 1353, | 1354, | 1355, | 1411, |
| | 1412, | 1413, | 1414, | 1466, | 1468, | 1546, |
| | 1605, | 1606, | 1624, | 1652, | 1653, | 1676, |
| | 1677, | 1678, | 1693, | 1696, | 1697, | 1730, |
| | 1800, | 1802, | 1860, | 1891, | 1913, | 2017, |
| | 2038, | 2039, | 2066, | 2067, | 2068, | 2097, |
| | 2112, | 2156, | 2161, | 2181, | 2186, | 2251, |
| | 2262, | 2276, | 2286, | 2295, | 2305, | 2308, |
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| | 2420, | 2435, | 2451, | 2477, | 2522, | 2524, |
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| (SA: salmon; SA: trout) | 463, | 467, | 485, | 486, | 531, | 621, |
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| SEA LAMPREY_MONITORING | 527, 672, 821, 907, 931, 990, 996, 997, 999, 2158, 2177, 2178, 2179, 2180, 2181, 2184, 2539, 2540, 2541, 2545, 2548, 2583, 2584, 2585, 2586, 2587 |
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| SEA LAMPREY_REPRODUCTION | 102, 166, 752, 809, 811, 906, 907, 940, 941, 949, 1204, 1251, 1541, 1673, 1674, 2158, 2177, 2180, 2181, 2197, 2251, 2287, 2539, 2540, 2541, 2545 |
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1418, 1419, 1422, 1432, 1439, 1442,
1448, 1449, 1518, 1598, 1604, 1611,
1615, 1654, 1655, 1684, 1723, 1725,
1729, 1732, 1733, 1735, 1736, 1740,
1741, 1742, 1743, 1744, 1745, 1803,
1804, 1805, 1819, 1832, 1842, 1846,
1875, 1879, 1881, 1888, 1916, 1955,
1956, 1957, 1977, 1994, 2036, 2040,
2042, 2043, 2047, 2082, 2089, 2113,
2145, 2146, 2174, 2199, 2205, 2239,
2274, 2276, 2303, 2366, 2386, 2387,
2417, 2423, 2424, 2439, 2440, 2442,
2480, 2484, 2485, 2497, 2505, 2509,
2511, 2524, 2561, 2573, 2652, 2734,
2743, 2744, 2746, 2747, 2748, 2749,
2750, 2752, 2788

SEDIMENTS_TRIBUTARIES
(S: tributaries_sediments)

SEDIMENTS_WATER_QUALITY
(S: sediments_chemistry)

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| SEICHE | 61, 306, 315, 393, 470, 914, 951, 1264, 1289, 1644, 1680, 1681, 1683, 1723, 1733, 1740, 2045, 2062, 2087, 2189, 2199, 2754 |
| SEISMIC (SA: geophysics) | 172, 213, 296, 309, 700, 1966, 2416, 2657, 2683, 2732, 2733, 2734, 2735 |
| SELENIUM | 24, 52, 153, 236, 576, 659, (Note: selenium is not indexed with the metals or trace metals as it is a nonmetal) 719, 758, 821, 879, 897, 979, 1022, 1119, 1139, 1148, 1180, 1181, 1332, 1487, 1576, 1794, 1809, 2027, 2295, 2468, 2497, 2541, 2696 |
| SEWAGE | 52, 143, 219, 263, 313, 321, (SA: discharge_sewage) 396, 402, 417, 489, 491, 581, (SA: waste) 582, 657, 723, 729, 787, 878, (SA: wastewater) 925, 957, 960, 965, 1175, 1182, 1183, 1187, 1193, 1195, 1271, 1340, 1342, 1349, 1387, 1480, 1539, 1540, 1550, 1602, 1645, 1658, 1667, 1684, 1767, 1773, 1834, 1902, 1958, 2022, 2198, 2244, 2378, 2526, 2630, 2654 |
| SHAD | 42, 391, 426, 664, 809, 1150, 1242, 1244, 1251, 1364, 1468, 1546, 1791, 2418, 2420, 2451, 2541, 2785 |
| SHEEPSHEAD | 116, 1022, 2720 |
| SHINER | 24, 42, 50, 173, 177, 248, 261, 279, 393, 426, 457, 461, 467, 468, 488, 527, 559, 809, 811, 929, 1150, 1242, 1243, 1244, 1249, 1251, 1292, 1364, 1466, 1468, 1524, 1543, 1791, 2051, 2143, 2182, 2186, 2418, 2420, 2435, 2451, 2540, 2662, 2663, 2720, 2770 |
| SHIPPING | 44, 121, 143, 299, 300, 344, (SA: navigation) 509, 510, 542, 710, 824, 826, (SA: history_shipping) 827, 829, 856, 963, 964, 1068, 1127, 1158, 1167, 1273, 1391, 1427, 1446, 1633, 1648, 1789, 1830, 1940, 1968, 2099, 2125, 2126, 2127, 2452, 2489, 2490, 2495, 2510, 2518, 2520, 2641, 2701, 2702, 2760 |
| SHORELINE (SA: coastal) | |
| SHORELINE_ATMOSPHERIC_POLLUTION | 545, 546, 812, 1239, 2042, 2276, 2669, 2670 |

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| SHORELINE_EROSION | 4, 159, 249, 293, 416, 435, 512, 638, 835, 893, 1064, 1074, 1214, 1297, 1629, 1657, 1880, 1966, 2146, 2336, 2423, 2448, 2487, 2716, 2747, | 73, 161, 250, 311, 425, 487, 582, 741, 838, 894, 1068, 1075, 1215, 1317, 1635, 1770, 1881, 2010, 2159, 2337, 2424, 2483, 2496, 2726, 2752, | 74, 162, 252, 357, 428, 493, 634, 800, 880, 895, 1070, 1079, 1228, 1318, 1638, 1775, 1888, 2042, 2174, 2338, 2425, 2483, 2499, 2734, 2760, | 154, 181, 253, 371, 430, 494, 635, 819, 881, 896, 1071, 1093, 1274, 1389, 1639, 1819, 1916, 2043, 2203, 2364, 2426, 2484, 2509, 2743, 2765, | 157, 182, 254, 388, 431, 506, 636, 824, 890, 908, 1072, 1176, 1275, 1390, 1650, 1875, 1941, 2064, 2276, 2402, 2427, 2485, 2512, 2744, 2788, 2799 | 158, 239, 292, 406, 433, 507, 637, 834, 892, 909, 1073, 1208, 1276, 1626, 1654, 1879, 1956, 2145, 2303, 2422, 2428, 2486, 2565, 2745, 2789, | |
| SHORELINE_HABITAT | 981, 1628, | 1010, 1650, | 1215, 2045, | 1217, 2064, | 1402, 2160 | 1608, | |
| SHORELINE_HISTORY | (SA: history_coastal) | 5, 405, 902, 1389, 1881, 2426, | 156, 430, 449, 755, 892, 902, | 242, 755, 1092, 1215, 1309, | 255, 892, 1215, 1309, 1389, | 388, 898, 1309, 1875, 1879, | |
| SHORELINE_LAKE_BREEZE | | 1881, 2426, | 1916, 2428, | 1966, 2484, | 2042, 2486, | 2064, 2684, 2747 | |
| SHORELINE_LAKE_LEVELS | | 243, | 1266, | 1852, | 2155 | | |
| SHORELINE_LAND_USE | | 17, 311, 507, 893, 1010, 1389, 1740, 2043, 2483, 2747, | 157, 312, 582, 894, 1068, 1390, 1554, 2045, 2487, 2496, 2788, | 181, 371, 800, 895, 1214, 1590, 1655, 2174, 2422, 2496, 2565, | 182, 406, 824, 896, 1264, 1655, 1657, 2424, 2484, 2565, 2686, | 292, 433, 838, 902, 1274, 1657, 1730, 2448, 2486, 2745, | 293, 449, 892, 908, 1276, 1730, 1916, 2448, 2745, |
| SHORELINE_MAPPING | (S: mapping_shoreline) | | | | | | |

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|------------------------------|-------|-------|-------|-------|-------|-------|
| SHORELINE RECESSION | 4, | 73, | 154, | 158, | 161, | 181, |
| (SA: bluffs_recession) | 182, | 249, | 252, | 254, | 292, | 293, |
| (SA: shoreline_erosion) | 371, | 406, | 428, | 435, | 582, | 634, |
| | 635, | 636, | 638, | 800, | 892, | 895, |
| | 908, | 909, | 1070, | 1071, | 1072, | 1073, |
| | 1074, | 1075, | 1274, | 1275, | 1276, | 1318, |
| | 1626, | 1775, | 1879, | 1880, | 1881, | 1888, |
| | 1916, | 1941, | 2146, | 2159, | 2336, | 2337, |
| | 2338, | 2422, | 2424, | 2428, | 2480, | 2483, |
| | 2484, | 2486, | 2509, | 2512, | 2726, | 2734, |
| | 2747, | 2765, | 2788 | | | |
| SHORELINE_RECREATION | 158, | 159, | 161, | 431, | 593, | 824, |
| | 834, | 1055, | 1067, | 1068, | 1093, | 1176, |
| | 1215, | 1217, | 1309, | 1460, | 1628, | 1775, |
| | 1866, | 2042, | 2160, | 2425, | 2426, | 2483, |
| | 2484, | 2486, | 2498, | 2512, | 2519 | |
| SHORELINE_STRATIGRAPHY | 4, | 5, | 156, | 388, | 405, | 406, |
| | 424, | 425, | 493, | 634, | 635, | 880, |
| | 881, | 898, | 902, | 1201, | 1317, | 1318, |
| | 1389, | 1393, | 1554, | 1638, | 1639, | 1641, |
| | 1875, | 1966, | 2144, | 2145, | 2146, | 2203, |
| | 2448, | 2592, | 2734 | | | |
| SHORELINE_URBAN | 46, | 498, | 1628, | 2042, | 2487, | 2636 |
| SHORELINE_VEGETATION | 156, | 424, | 425, | 722, | 741, | 812, |
| | 819, | 835, | 976, | 977, | 1010, | 1072, |
| | 1079, | 1201, | 1264, | 2045, | 2064, | 2174, |
| | 2403, | 2427, | 2499, | 2686, | 2688 | |
| SIDA | 690, | 699 | | | | |
| SILICA | 19, | 26, | 63, | 65, | 122, | 129, |
| | 131, | 146, | 147, | 148, | 163, | 224, |
| | 230, | 339, | 350, | 394, | 397, | 398, |
| | 438, | 446, | 472, | 473, | 504, | 598, |
| | 600, | 628, | 647, | 713, | 763, | 788, |
| | 801, | 861, | 910, | 979, | 1031, | 1068, |
| | 1089, | 1138, | 1142, | 1145, | 1258, | 1270, |
| | 1295, | 1296, | 1324, | 1325, | 1337, | 1440, |
| | 1457, | 1536, | 1553, | 1582, | 1597, | 1660, |
| | 1662, | 1684, | 1703, | 1733, | 1841, | 1842, |
| | 1843, | 1845, | 1849, | 1920, | 2000, | 2008, |
| | 2026, | 2028, | 2030, | 2039, | 2105, | 2107, |
| | 2109, | 2110, | 2112, | 2113, | 2114, | 2115, |
| | 2116, | 2117, | 2118, | 2119, | 2120, | 2121, |
| | 2122, | 2123, | 2124, | 2180, | 2181, | 2195, |
| | 2199, | 2200, | 2223, | 2276, | 2347, | 2351, |
| | 2405, | 2415, | 2453, | 2454, | 2455, | 2456, |
| | 2457, | 2469, | 2522, | 2529, | 2554, | 2563, |
| | 2644, | 2734, | 2762, | 2788 | | |
| SILT | 109, | 156, | 167, | 349, | 388, | 406, |
| | 409, | 428, | 555, | 634, | 742, | 869, |
| | 894, | 898, | 981, | 1074, | 1318, | 1389, |
| | 1390, | 1551, | 1599, | 1610, | 1624, | 1663, |

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| SILT (continued) | 1664, 1794, 1795, 2034, 2036, 2147, 2203, 2240, 2310, 2311, 2312, 2464, 2524, 2612, 2654, 2709 |
| SILVER | 224, 399, 415, 758, 879, 897, 979, 1083, 1120, 1139, 1150, 2027, 2469, 2497 |
| SILVER REDHORSE (S: redhorse) | |
| SILVERSIDE | 139, 391, 393, 426, 811, 1242, 1244, 1251 |
| SIMOCEPHALUS | 690 |
| SMALLMOUTH BASS | 426, 532, 931, 1150, 1248, 1364, 1566, 2298, 2777 |
| SMELT | 38, 42, 43, 50, 94, 116, 139, 173, 186, 190, 248, 279, 399, 419, 426, 457, 460, 461, 467, 468, 527, 532, 540, 559, 576, 622, 623, 664, 671, 691, 696, 730, 731, 809, 811, 864, 931, 938, 939, 940, 941, 988, 992, 993, 995, 999, 1022, 1037, 1132, 1138, 1150, 1224, 1242, 1243, 1244, 1248, 1249, 1251, 1292, 1312, 1363, 1364, 1466, 1468, 1528, 1542, 1546, 1691, 1786, 1791, 1797, 2038, 2053, 2143, 2149, 2150, 2178, 2179, 2181, 2182, 2186, 2262, 2286, 2291, 2295, 2299, 2325, 2343, 2418, 2420, 2435, 2451, 2461, 2524, 2540, 2541, 2544, 2545, 2548, 2583, 2585, 2663, 2720, 2724, 2783 |
| SNAILS | 261, 796, 1292, 1406, 1517, 1608, 1688, 1760, 1762, 1831, 2051, 2706, 2707, 2708, 2778 |
| SNAKES (SA: reptiles) | 969 |
| SNOW (SA: precipitation) | 17, 35, 88, 93, 118, 119, 205, 207, 209, 240, 242, 243, 651, 1014, 1015, 1044, 1046, 1113, 1125, 1168, 1279, 1280, 1281, 1283, 1554, 1613, 1690, 1707, 1709, 1711, 1852, 2152, 2153, 2154, 2252, 2259, 2369, 2654, 2665, 2700 |
| SOCIO-ECONOMICS (SA: economics) | 274, 275, 284, 285, 289, 789, 1037, 1061, 1169, 1240, 1339, 1986, 2125, 2365, 2559a, 2559b |
| SOCIOLOGY | 271, 272, 327, 475, 478, 624, 705, 783, 913, 932, 1037, 1155, 1175, 1233, 1240, 1259, 1309, 1572, 1631, 1687, 1817, 1863, 1982, 2005, |

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| SOCIOLOGY (continued) | 2272, 2373, 2397, 2486, 2518, 2636, 2667 |
| SODIUM | 6, 7, 26, 136, 143, 146, 147, 148, 224, 281, 316, 317, 339, 346, 399, 447, 472, 473, 598, 647, 660, 719, 763, 821, 979, 1113, 1125, 1270, 1414, 1440, 1998, 2008, 2025, 2026, 2028, 2034, 2139, 2235, 2644 |
| SOCKEYE SALMON (S: Kokanee salmon) | |
| SODIUM NITRILOTRIACETATE | 1108, 1109 |
| SOILS | 68, 156, 160, 249, 555, 580, 633, 954, 986, 1252, 1333, 1494, 1588, 1589, 1641, 1909, 1914, 1967, 1970, 2235, 2458, 2486, 2492, 2598, 2622, 2654, 2740 |
| SOLUBILITY_INORGANICS | 1008, 1776, 1778, 2138, 2464 |
| SOLUBILITY_METALS | 1776, 1778, 2138, 2464 |
| SOLUBILITY_ORGANICS | 597, 1256, 1516, 1772, 1975, 2360 |
| SORPTION (SA: absorption) (SA: adsorption) | 24, 65, 68, 69, 361, 441, 771, 945, 1516, 1562, 1614, 1669, 1723, 1725, 1733, 1735, 1740, 1741, 1742, 1743, 1744, 1745, 1776, 1777, 1778, 1788, 1846, 1848, 1904, 1956, 1977, 1997, 2026, 2089, 2205, 2237, 2269, 2270, 2408, 2596, 2597, 2598 |
| SPECIFIC CONDUCTANCE (S: conductivity) | |
| SPHAERIIDAE (SA: clams) | 1517, 1688, 1757, 1758 |
| SPLAKE | 120, 426, 532, 811, 840, 848, 849, 850, 904, 1022, 1354 |
| SPONGE (S: Porifera) | |
| SPORT FISHING | 8, 34, 120, 137, 141, 166, 177, 185, 186, 188, 190, 195, 196, 197, 214, 219, 284, 285, 310, 390, 407, 408, 419, 458, 474, 484, 510, 527, 528, 529, 570, 572, 640, 655, 664, 671, 673, 674, 749, 824, 832, 840, 845, 866, 904, 905, 923, 930, 931, 932, 983, 987, 990, 991, 996, 997, 998, 999, 1007, 1025, 1037, 1132, 1167, 1215, 1217, 1240, 1290, 1291, 1339, 1346, 1353, 1355, 1356, 1443, 1466, 1476, 1486, 1489, 1490, 1527, 1530, 1533, 1534, 1623, 1624, 1647, 1692, 1695, 1696, 1697, 1800, 1806, 1860, 1901, 1914, 1950, |

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| SPORT FISHING (continued) | 1960, 2039, 2050, 2052, 2054, 2055, 2065, 2066, 2067, 2068, 2112, 2149, 2150, 2161, 2177, 2178, 2179, 2180, 2181, 2257, 2305, 2344, 2359, 2365, 2397, 2398, 2399, 2400, 2401, 2477, 2483, 2558, 2587, 2606, 2635, 2660, 2664, 2720, 2723, 2724, 2729, 2730 |
| SPOTTAIL SHINER (SA: shiner) | 24, 42, 50, 173, 177, 248, 279, 393, 426, 457, 467, 468, 527, 559, 929, 1242, 1243, 1244, 1249, 1251, 1364, 1466, 1468, 1524, 1543, 1791, 2143, 2186, 2418, 2420, 2451, 2662, 2720, 2770 |
| STEELHEAD TROUT (SA: trout) | 137, 195, 779, 1468, 1800, 2188 |
| STEPHANODISCUS | 492, 1031, 1295, 1337, 1401, 1407, (SA: diatoms) |
| | 1457, 1535, 1537, 1597, 2121, 2199, 2223, 2350, 2352, 2355, 2414, 2429, 2430, 2431, 2456, 2522, 2529 |
| STEROLS | 1420, 1422, 1615 |
| STICKLEBACK | 139, 393, 426, 457, 468, 696, 809, 811, 1242, 1243, 1244, 1248, 1251, 1468, 1692, 1791, 2326, 2420, 2451 |
| STONECAT | 261, 426, 488, 811, 2451 |
| STONEROLLER | 811 |
| STORMS | 30, 31, 32, 182, 192, 221, 240, 241, 243, 350, 352, 353, 356, 375, 476, 542, 641, 751, 894, 1014, 1015, 1044, 1279, 1280, 1281, 1283, 1331, 1472, 1480, 1666, 1681, 1690, 1740, 1804, 1852, 1892, 1906, 1941, 2085, 2146, 2244, 2306, 2423, 2446, 2450, 2484, 2486, 2518, 2748, 2750, 2788 |
| STRATIFICATION (SA: thermocline) | 44, 131, 142, 229, 278, 280, 347, 350, 362, 397, 464, 466, 613, 653, 675, 681, 697, 766, 767, 926, 1089, 1440, 1450, 1644, 1660, 1680, 1681, 1682, 1683, 1833, 1948, 1955, 1993, 2028, 2039, 2088, 2097, 2104, 2105, 2107, 2124, 2199, 2351, 2370, 2371, 2462, 2575, 2617 |
| STRATIGRAPHY | 3, 4, 5, 88, 109, 156, (SA: mapping_stratigraphy) (SA: shoreline_stratigraphy) |
| | 160, 206, 388, 405, 406, 412, 415, 424, 425, 429, 493, 548, 549, 591, 634, 635, 653, 669, 695, 700, 727, 855, 861, 870, 880, 881, 898, 899, 901, 902, 1201, 1317, 1318, 1388, 1389, 1392, 1393, 1554, 1637, 1638, 1639, 1641, |

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| STRATIGRAPHY (continued) | 1663, 1664, 1723, 1729, 1733, 1769, 1875, 1911, 1954, 1966, 2048, 2116, 2144, 2145, 2146, 2147, 2203, 2245, 2246, 2448, 2592, 2594, 2658, 2683, 2732, 2734, 2735 |
| STREAM (S: tributaries) | |
| STREPTOCOCCI (S: bacteria) | |
| STRONTIUM | 14, 399, 420, 473, 612, 910, 974, 975, 1725, 1729, 1733, 1735, 1736, 1996, 2025, 2026, 2027, 2028, 2034, 2237, 2469, 2614 |
| STURGEON | 116, 120, 139, 418, 426, 481, 809, 811, 1025, 1244, 1251, 1453, 2449, 2451, 2560, 2626, 2721 |
| STYRENES | 933, 968, 1098, 1120 |
| SUBSTRATE | 558, 564, 665, 702, 722, 770, (SA: sediments) 923, 1065, 1246, 1284, 1303, 1353, (SA: specific taxa_habitat) 1368, 1402, 1753, 1942, 2310, 2311, 2312, 2348, 2606, 2607, 2708, 2778, 2779 |
| SUCKER | 50, 116, 139, 177, 190, 261, 393, 426, 457, 488, 517, 518, 532, 576, 696, 809, 811, 999, 1150, 1242, 1244, 1251, 1284, 1314, 1328, 1363, 1364, 1466, 1468, 1543, 1791, 2053, 2286, 2298, 2321, 2418, 2420, 2435, 2451, 2583, 2585, 2655, 2720, 2724 |
| SULFATE | 6, 7, 22, 26, 49, 64, 143, 146, 147, 148, 224, 339, 346, 397, 398, 400, 401, 420, 472, 473, 533, 598, 600, 647, 821, 910, 979, 1052, 1083, 1089, 1113, 1125, 1142, 1145, 1337, 1414, 1440, 1500, 1642, 1915, 1943, 2007, 2008, 2026, 2028, 2085, 2097, 2195, 2234, 2235, 2236, 2262, 2315, 2497, 2522, 2644 |
| SULFIDE | 103, 1150, 1258, 1451, 2464 |
| SULFUR | 20, 52, 163, 306, 374, 398, 399, 545, 657, 788, 897, 950, 1008, 1270, 1451, 1642, 1643, 1704, 1794, 1943, 2445, 2466, 2670 |
| SULFUR DIOXIDE | 374, 897, 1008, 1642, 1943, 2670 |
| SUMMARY (SA: review) | |
| SUMMARY_ATMOSPHERIC_DEPOSITION/ POLLUTION/TRANSPORT | 143, 213, 342, 376, 377, 414, 597, 609, 650, 660, 1110, 1124, |

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| SUMMARY_ATMOSPHERIC_DISTRIBUTION/ POLLUTION/TRANSPORT (continued) | 1132, 1154, 1185, 1188, 1197, 1332, 1333, 2435, 2522 |
| SUMMARY_EUTROPHICATION | 8, 142, 143, 735, 832, 1104, 1132, 1188, 1532, 1896, 1945, 1960, 1966, 1986, 2149, 2198, 2346, 2556 |
| SUMMARY_FISH/FISHERIES | 8, 116, 120, 130, 143, 461, 468, 488, 527, 531, 571, 573, 597, 650, 655, 670, 779, 808, 810, 821, 824, 832, 840, 985, 1120, 1121, 1124, 1132, 1158, 1213, 1335, 1532, 1889, 1960, 2149, 2177, 2178, 2179, 2180, 2201, 2210, 2211, 2262, 2296, 2311, 2522, 2539, 2540, 2541, 2544, 2545, 2546, 2548, 2560, 2625, 2695 |
| SUMMARY_GEOLOGY | 8, 130, 142, 213, 311, 377, 497, 598, 668, 821, 1132, 1171, 1317, 1390, 1627, 1916, 1945, 1966, 1986, 2005, 2198, 2311, 2382, 2426, 2427, 2428, 2435, 2486, 2496, 2533, 2654 |
| SUMMARY_HYDROLOGY | 376, 377, 666, 821, 1333, 1532, 1627, 2514, 2556, 2630, 2654 |
| SUMMARY_INORGANICS | 142, 143, 376, 377, 414, 530, 531, 598, 660, 729, 735, 821, 832, 853, 960, 1021, 1022, 1098, 1100, 1104, 1107, 1108, 1109, 1110, 1111, 1120, 1124, 1132, 1136, 1141, 1144, 1148, 1149, 1151, 1152, 1153, 1154, 1156, 1158, 1161, 1181, 1185, 1188, 1197, 1332, 1333, 1374, 1375, 1461, 1532, 1703, 1896, 2149, 2198, 2211, 2282, 2346, 2378, 2382, 2459, 2522, 2630 |
| SUMMARY_LAKE_LEVELS | 311, 592, 821, 824, 1390, 1916, 1934, 2496, 2514 |
| SUMMARY_LAND_USE | 143, 376, 377, 824, 1171, 1188, 1333, 1461, 1966, 2382 |
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| SUMMARY_ORGANICS | 8, 143, 376, 377, 414, 530, 531, 597, 609, 650, 655, 670, 729, 735, 821, 831, 853, 1096, 1098, 1100, 1104, 1107, 1108, 1109, 1111, 1120, 1121, 1124, 1132, 1136, 1141, 1144, 1148, 1149, 1151, 1152, 1153, 1154, 1156, 1158, 1161, 1181, 1185, 1188, 1197, 1332, 1333, 1375, 1461, 1532, 1945, 2198, 2210, 2282, |

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| SUMMARY_ORGANICS (continued) | 2361, 2378, 2435, 2522, 2530, 2560, 2630, 2695 |
| SUMMARY_PHYTOPLANKTON | 142, 213, 531, 821, 1022, 1332, 1703, 1896, 2198, 2346, 2522 |
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| SUMMARY_WATER_USE | 821, 824, 961, 1164, 1165, 2533, 2654 |
| SUMMARY_ZOOPLANKTON | 142, 213, 821, 1021, 1022, 1121, 1332, 2522 |
| SUNFISH (SA: bluegill) | 139, 177, 391, 393, 426, 468, 664, 696, 809, 811, 1150, 1242, 1244, 1248, 1251, 1364, 1566, 1821, 2451 |

SURFACE MICROLAYER

(S: air-water interface)

SURVEILLANCE (S: monitoring)

SUSPENDED SEDIMENTS

(S: suspended solids)

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| SUSPENDED SOLIDS | 44, 52, 53, 65, 66, 68, 69, 117, 122, 123, 126, 146, 148, 150, 152, 306, 315, 347, 349, 472, 473, 515, 555, 580, 598, 599, 602, 627, 658, 663, 735, 736, 884, 921, 926, 944, 945, 946, 947, 973, 1101, 1141, 1144, 1159, 1176, 1188, 1207, 1253, 1333, 1384, 1386, 1394, 1420, 1439, 1451, 1593, 1615, 1666, 1729, 1733, 1765, 1776, 1804, 1805, 1844, 1846, 1955, 1956, 1990, 2011, 2046, 2132, 2173, 2199, 2205, 2262, 2274, 2275, 2276, 2329, 2330, 2331, 2381, 2382, 2383, 2386, 2435, 2437, 2438, 2439, 2440, 2443, 2554, 2564, 2572, 2573, 2619, 2621 |
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| SYNEDRA (SA: diatoms) | 1295, 1401, 1457, 1535, 2350, 2355, 2454, 2456, 2640 |
| TABELLARIA (SA: diatoms) | 492, 1337, 1401, 1404, 1407, 1535, 1537, 1651, 1738, 2199, 2350, 2454, 2456, 2640 |
| TANTALUM | 1794 |
| TCBS | 871 |
| TCDD (SA: dioxins) | 485, 486, 923, 1799, 2052 |
| TCDF (SA: furans) | 923, 2052 |
| TDE (SA: DDD) | 740, 968 |
| TELEMETRY | 2293, 2296, 2301 |
| TEMPERATURE (general) | 44, 146, 147, 148, 155, 192, (SA: air_temperature) (SA: thermal_pollution) 471, 641, 735, 766, 767, 838, 1033, 1041, 1288, 1439, 1589, 1644, 1813, 1929, 2059, 2071, 2087, 2088, 2463, 2497 |
| TEMPERATURE_BENTHIC_INVERTEBRATES (S: benthic_invertebrates_temperature) | |
| TEMPERATURE DISTRIBUTION | 100, 149, 227, 245, 246, 248, 391, 393, 467, 675, 799, 821, 1005, 1243, 1250, 1251, 1450, 1529, 1537, 1552, 1660, 1993, 2023, 2296 |
| TEMPERATURE_FISH (S: fish_temperature) | |
| TEMPERATURE_HISTORY (S: history_temperature) | |
| TEMPERATURE_ICE | 78, 80, 81, 82, 83, 84, 86, 87, 90, 91, 92, 203, 204, 213, 344, 523, 535, 536, 782, 855, 897, 912, 1012, 1042, 1202, 1291, 1428, 1429, 1554, 1680, 1681, 1723, 1729, 1733, 1734, 1736, 1737, 1738, 1740, 1922, 1934, 1944, 2029, 2094, 2192, 2245, 2246, 2252, 2450, 2460, 2482, 2544, 2755, 2757 |
| TEMPERATURE_INVERTEBRATES (S: invertebrates_temperature) | |
| TEMPERATURE_MAPPING (S: mapping_temperature) | |
| TEMPERATURE_MODEL (S: model_temperature) | |
| TEMPERATURE_MONITORING (S: monitoring_temperature) | |
| TEMPERATURE_PHYTOPLANKTON (S: phytoplankton_temperature) | |

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| TEMPERATURE_REMOTE SENSING | 16, 18, 78, 81, 87, 203, 204, 240, 241, 243, 523, 534, 711, 1014, 1024, 1279, 1280, 1282, 1283, 1397, 1398, 1399, 1428, 1429, 1453, 1454, 1554, 1681, 1852, 1934, 2023, 2152, 2153, 2154, 2371 |
| TEMPERATURE_RESEARCH NEEDS (S: research needs_temperature) | |
| TEMPERATURE_SEASONAL VARIATION | 33, 100, 131, 155, 200, 203, 204, 227, 346, 368, 391, 393, 535, 536, 583, 596, 613, 681, 724, 979, 1005, 1012, 1024, 1041, 1089, 1283, 1377, 1529, 1644, 1645, 1680, 1681, 1752, 1922, 1929, 1944, 2059, 2088, 2120, 2121, 2290, 2294, 2302, 2341, 2450, 2784 |
| TEMPERATURE_SUMMARY (S: summary_temperature) | |
| TEMPERATURE_THERMAL POLLUTION (S: thermal_pollution) | |
| TEMPERATURE_ZOOPLANKTON (S: zooplankton_temperature) | |
| TERBIUM | 1794, 1998 |
| TERNS | 476, 477, 917, 922, 968, 1488, 1594, 2045, 2056, 2221, 2308, 2405, 2474 |
| TERPSINOE (SA: diatoms) | 2761 |
| THERMAL BAR | 681, 1024, 1089, 2028, 2105, 2107, 2351 |
| THERMAL PLUME | 540, 675, 682, 687, 692, 693, (SA: thermal_pollution) 854, 1337, 1833, 2019, 2021, 2294, 2296, 2297, 2570 |
| THERMAL POLLUTION (general) | 63, 413, 820, 1088, 2028, 2193, (SA: power plants) 2306, 2672 (SA: thermal_plume) (SA: temperature) |
| THERMAL POLLUTION DISPERSION (S: dispersion_thermal_pollution) | |
| THERMAL POLLUTION, EFFECTS ON BIOTA | 1088, 2728 (general, no specific taxa given) (SA: power plants, effects on biota) |
| THERMAL POLLUTION, EFFECTS ON BACTERIA | 396, 1127, 1377, 2479, 2481 |
| THERMAL POLLUTION, EFFECTS ON BENTHIC_INVERTEBRATES | 676, 693, 1007, 1332, 2029, 2181, 2704, 2708 |

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| THERMAL POLLUTION, EFFECTS ON FISH | 164, 173, 396, 540, 541, 675, 737, 864, 865, 1007, 1150, 1243, 1247, 1285, 1332, 1525, 1532, 1545, 2019, 2020, 2021, 2029, 2039, 2056, 2181, 2290, 2292, 2294, 2296, 2297, 2298, 2300, 2301, 2302, 2420, 2450, 2451, 2782, 2784 |
| THERMAL POLLUTION, EFFECTS ON INVERTEBRATES | 675, 676, 682, 687, 690, 691, 692, 693, 1007, 1247, 1332, 2029, 2056, 2181, 2704, 2708, 2784 |
| THERMAL POLLUTION, EFFECTS ON PHYTOPLANKTON (S: phytoplankton_thermal_pollution) | |
| THERMAL POLLUTION, EFFECTS ON ZOOPLANKTON (S: zooplankton_thermal_pollution) | |
| THERMAL POLLUTION MAPPING (S: mapping_thermal_pollution) | |
| THERMAL POLLUTION MODEL (S: model_thermal_pollution) | |
| THERMAL POLLUTION MONITORING (S: monitoring_thermal_pollution) | |
| THERMAL POLLUTION REMOTE SENSING | 1397, 1398, 1399, 1454 |
| THERMAL POLLUTION REVIEW (S: review_thermal_pollution) | |
| THERMOCLINE | 29, 131, 227, 245, 246, 346, (SA: stratification) 445, 467, 468, 471, 599, 916, 926, 1212, 1521, 1522, 1681, 2292 |
| THORIUM | 316, 317, 381, 719, 1779, 1780, 1794, 1998, 2611, 2614, 2619 |
| TIDES | 2045, 2087 |
| TILAPIA | 468 |
| TILL | 3, 5, 109, 182, 371, 388, 424, 591, 634, 635, 669, 695, 818, 898, 901, 902, 986, 1286, 1318, 1389, 1392, 1393, 1459, 1610, 1636, 1637, 1639, 1655, 1663, 1664, 1769, 1795, 1796, 1875, 1965, 1966, 2144, 2174, 2203, 2448, 2566, 2568, 2657, 2658, 2683, 2686, 2746 |
| TIN | 163, 1020, 1148, 2027, 2235, 2462, 2466, 2467, 2468, 2469 |
| TITANIUM | 20, 879, 2231, 2232, 2235, 2469 |

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| TOPOGRAPHY (LAND) | 156, 897, 986, 1275, 1775, 1965, 1967, 2064, 2553, 2750 |
| TOPOGRAPHY_BENTHIC | 30, 31, 471, 523, 893, 896, 1147, 1284, 1749, 1792, 1793, 2165, 2366, 2424, 2652, 2683, 2732, 2735, 2746, 2750 |
| TOTAL DISSOLVED SOLIDS | 261, 368, 1142, 1176, 1915, 2097, (SA: dissolved solids) 2133, 2330 |
| TOURISM | 187, 199, 343, 390, 624, 749, (SA: recreation) 867, 1028, 1030, 1066, 1309, 1534, 1866, 1901, 2015, 2372, 2518, 2635 |
| TOXAPHENE | 57, 324, 399, 404, 670, 793, (SA: organochlorine pesticides) 805, 806, 968, 969, 979, 1060, 1068, 1117, 1120, 1127, 1132, 1138, 1148, 1158, 1180, 1181, 1332, 1487, 1809, 1913, 1945, 1973, 1975, 1978, 1979, 2132, 2141, 2142, 2330, 2331, 2377, 2527, 2564, 2581, 2693 |
| TOXICITY | 143, 174, 236, 279, 322, 324, (SA: bioassay; SA: toxics) 387, 597, 659, 721, 796, 923, 1022, 1098, 1119, 1150, 1155, 1451, 1501, 1555, 1557, 1558, 1562, 1564, 1821, 1846, 1848, 1856, 1975, 2027, 2186, 2187, 2239, 2378, 2479, 2481, 2554, 2751 |
| TOXICS (SA: specific compounds) | |
| TOXICS_BACTERIA (S: bacteria_toxics) | |
| TOXICS_BIOACCUMULATION (S: bioaccumulation_toxics) | |
| TOXICS_BENTHIC_INVERTEBRATES | 24, 126, 260, 361, 382, 531, 568, 576, 597, 605, 607, 610, 611, 614, 679, 721, 739, 747, 795, 911, 1021, 1022, 1027, 1068, 1083, 1128, 1332, 1345, 1380, 1381, 1383, 1395, 1451, 1505, 1605, 1606, 1630, 1688, 1723, 1725, 1729, 1730, 1732, 1733, 1735, 1736, 1738, 1740, 1741, 1742, 1743, 1744, 1745, 1886, 1995, 2180, 2295, 2305, 2396, 2432, 2434, 2435, 2443, 2464, 2492, 2522, 2539, 2540, 2541, 2545, 2548, 2674 |
| TOXICS_BIRDS | 24, 244, 609, 654, 721, 798, 821, 887, 888, 917, 922, 923, 933, 968, 970, 971, 1022, 1121, 1128, 1132, 1138, 1142, 1145, 1150, 1158, 1255, 1359, 1706, 1790, 1799, 1809, 1886, 1975, 2039, 2239, 2283, 2308, 2309, 2361, 2474, 2492, 2536, 2537, 2564, 2623, 2673 |

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| TOXICS_CYCLING | 27, 53, 55, 597, 611, 613, 614, 629, 659, 679, 747, 758, 821, 886, 1386, 1515, 1592, 1593, 1630, 1708, 1723, 1725, 1729, 1730, 1732, 1733, 1735, 1736, 1737, 1740, 1741, 1742, 1743, 1744, 1745, 1771, 1772, 1809, 1822, 1976, 1984, 2011, 2241, 2274, 2396, 2541, 2573, 2596, 2648 |
| TOXICS_FISH | 8, 24, 52, 94, 117, 134, (SA: fish_organics) 143, 165, 170, 174, 190, 224, 260, 261, 287, 288, 323, 324, 390, 396, 397, 399, 404, 419, 439, 440, 485, 486, 495, 509, 517, 518, 519, 520, 521, 522, 531, 532, 570, 576, 597, 611, 614, 639, 640, 650, 654, 655, 670, 674, 679, 706, 707, 721, 732, 737, 793, 794, 795, 796, 805, 806, 821, 827, 832, 871, 886, 888, 904, 916, 921, 923, 968, 990, 994, 996, 1001, 1002, 1009, 1021, 1022, 1025, 1038, 1056, 1057, 1060, 1068, 1083, 1094, 1101, 1117, 1120, 1121, 1124, 1128, 1132, 1138, 1142, 1145, 1150, 1158, 1203, 1222, 1223, 1233, 1234, 1254, 1301, 1332, 1336, 1345, 1346, 1354, 1362, 1363, 1364, 1395, 1400, 1411, 1412, 1414, 1451, 1487, 1501, 1503, 1504, 1505, 1506, 1507, 1527, 1531, 1532, 1576, 1592, 1593, 1605, 1606, 1630, 1652, 1653, 1676, 1692, 1694, 1695, 1706, 1707, 1711, 1730, 1736, 1740, 1772, 1783, 1786, 1802, 1809, 1821, 1838, 1853, 1854, 1855, 1856, 1857, 1883, 1886, 1913, 1961, 1973, 1975, 1985, 1992, 2014, 2017, 2019, 2021, 2037, 2039, 2050, 2097, 2141, 2142, 2149, 2150, 2163, 2175, 2177, 2178, 2179, 2180, 2190, 2204, 2208, 2209, 2210, 2211, 2212, 2213, 2239, 2250, 2262, 2276, 2279, 2280, 2281, 2282, 2283, 2287, 2295, 2301, 2304, 2305, 2308, 2309, 2315, 2317, 2359, 2361, 2367, 2378, 2379, 2391, 2399, 2432, 2433, 2434, 2435, 2437, 2439, 2443, 2492, 2521, 2522, 2524, 2529, 2532, 2537, 2539, 2540, 2541, 2543, 2545, 2546, 2548, 2560, 2561, 2563, 2564, 2572, 2573, 2580, 2581, 2582, 2586, 2635, 2647, 2648, 2655, 2673, 2689, 2690, 2691, 2692, 2693, 2694, 2695, |

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| TOXICS_FISH (continued) | 2724, 2729, 2730, 2741, 2751, 2774, 2782, 2786 |
| TOXICS_HUMAN HEALTH | 52, 143, 323, 390, 397, 398, 399, 404, 414, 419, 514, 655, 706, 707, 721, 729, 758, 821, 885, 886, 916, 923, 978, 1009, 1021, 1022, 1056, 1057, 1060, 1068, 1094, 1096, 1097, 1098, 1099, 1100, 1101, 1107, 1108, 1109, 1111, 1113, 1114, 1116, 1117, 1119, 1120, 1121, 1124, 1125, 1127, 1128, 1132, 1136, 1138, 1148, 1158, 1181, 1185, 1188, 1203, 1222, 1375, 1387, 1395, 1400, 1411, 1484, 1631, 1707, 1711, 1764, 1767, 1783, 1807, 1809, 1878, 1883, 1913, 1975, 1992, 2014, 2017, 2050, 2163, 2175, 2209, 2250, 2279, 2280, 2282, 2283, 2305, 2330, 2331, 2359, 2361, 2391, 2435, 2522, 2524, 2529, 2532, 2534, 2561, 2564, 2572, 2573, 2582, 2586, 2635, 2725, 2729, 2730, 2774, 2786 |
| TOXICS_INVERTEBRATES | 24, 117, 126, 224, 236, 260, 261, 322, 323, 361, 382, 439, 495, 531, 568, 576, 597, 605, 607, 610, 611, 614, 654, 679, 721, 739, 747, 765, 795, 796, 821, 911, 1021, 1022, 1027, 1068, 1083, 1121, 1128, 1332, 1345, 1379, 1380, 1381, 1383, 1395, 1451, 1505, 1555, 1556, 1557, 1558, 1560, 1561, 1562, 1563, 1564, 1592, 1593, 1601, 1605, 1606, 1630, 1688, 1692, 1717, 1718, 1719, 1720, 1721, 1722, 1723, 1724, 1725, 1726, 1727, 1729, 1730, 1732, 1733, 1734, 1735, 1736, 1737, 1738, 1739, 1740, 1741, 1742, 1743, 1744, 1745, 1809, 1821, 1886, 1975, 1995, 2178, 2180, 2239, 2276, 2279, 2280, 2295, 2305, 2381, 2396, 2432, 2434, 2435, 2443, 2464, 2492, 2522, 2529, 2539, 2540, 2541, 2545, 2548, 2554, 2563, 2572, 2573, 2673, 2674, 2695, 2741 |
| TOXICS_LOADING | 6, 7, 15, 24, 26, 53, 55, 56, 58, 66, 70, 94, 126, 143, 184, 273, 295, 323, 346, 385, 397, 398, 415, 473, 513, 514, 532, 533, 578, 597, 601, 609, 611, 643, 651, 652, 662, 663, 670, 720, 735, 737, 740, 743, 879, 923, 1000, 1021, 1022, 1098, 1103, 1113, 1116, 1125, |

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| TOXICS_LOADING (continued) | 1132, 1136, 1138, 1142, 1145, 1151, 1158, 1173, 1174, 1175, 1182, 1183, 1185, 1187, 1188, 1189, 1193, 1195, 1233, 1319, 1386, 1531, 1532, 1567, 1568, 1618, 1619, 1630, 1700, 1706, 1707, 1709, 1711, 1723, 1725, 1729, 1730, 1732, 1733, 1735, 1736, 1738, 1740, 1741, 1742, 1743, 1744, 1745, 1809, 1849, 1863, 1975, 1978, 1979, 2011, 2014, 2018, 2039, 2097, 2149, 2150, 2276, 2278, 2304, 2383, 2387, 2435, 2437, 2438, 2439, 2440, 2442, 2443, 2522, 2524, 2529, 2531, 2545, 2548, 2572, 2573, 2644, 2648, 2649, 2650 |
| TOXICS_MAMMALS | 654, 721, 821, 1022, 1038, 1121, 1128, 2239, 2283, 2361 |
| TOXICS_METALS | 6, 7, 15, 24, 25, 26, (includes trace metals) 27, 52, 54, 56, 58, 66, 126, 143, 184, 224, 260, 261, 318, 319, 323, 324, 339, 346, 355, 361, 382, 384, 385, 386, 396, 397, 398, 399, 401, 404, 415, 441, 473, 530, 531, 533, 576, 612, 614, 625, 627, 629, 639, 643, 645, 655, 659, 662, 663, 719, 721, 728, 729, 735, 743, 758, 788, 804, 821, 870, 879, 910, 911, 923, 933, 950, 968, 969, 979, 990, 996, 1021, 1022, 1027, 1052, 1068, 1083, 1098, 1099, 1101, 1111, 1113, 1117, 1119, 1120, 1124, 1125, 1127, 1128, 1132, 1136, 1139, 1142, 1145, 1148, 1150, 1158, 1159, 1160, 1161, 1173, 1174, 1175, 1180, 1181, 1185, 1189, 1255, 1330, 1332, 1375, 1395, 1412, 1414, 1487, 1505, 1555, 1556, 1557, 1558, 1560, 1561, 1562, 1563, 1564, 1576, 1590, 1598, 1601, 1618, 1619, 1676, 1692, 1695, 1698, 1699, 1700, 1706, 1723, 1725, 1729, 1730, 1732, 1733, 1735, 1736, 1738, 1740, 1741, 1742, 1743, 1744, 1745, 1786, 1794, 1807, 1809, 1822, 1824, 1847, 1849, 1853, 1855, 1857, 1862, 1883, 1893, 2017, 2018, 2027, 2039, 2057, 2097, 2132, 2142, 2177, 2180, 2204, 2211, 2222, 2258, 2262, 2274, 2276, 2281, 2295, 2301, 2315, 2330, 2331, 2378, 2381, 2432, 2437, 2438, 2442, 2464, 2468, 2521, 2535, 2539, 2540, 2541, 2563, 2572, 2573, 2610, 2611, 2644, 2673, 2696, 2741, 2772 |

TOXICS_MONITORING
(S: monitoring_toxics)

TOXICS_ORGANICS 6, 7, 8, 24, 25, 47,
52, 53, 54, 55, 56, 59,
70, 71, 94, 117, 126, 134,
143, 165, 170, 174, 184, 190,
224, 237, 260, 261, 287, 288,
295, 297, 304, 323, 324, 329,
339, 346, 361, 378, 386, 387,
390, 396, 397, 398, 399, 400,
401, 404, 414, 417, 419, 439,
440, 441, 473, 485, 486, 495,
509, 517, 518, 519, 520, 521,
522, 530, 531, 532, 565, 566,
567, 568, 570, 576, 595, 597,
601, 605, 607, 609, 610, 611,
612, 613, 614, 627, 639, 640,
643, 645, 650, 651, 652, 654,
655, 670, 674, 679, 706, 707,
720, 721, 729, 732, 735, 737,
739, 740, 743, 747, 793, 795,
805, 806, 813, 820, 821, 831,
853, 868, 870, 871, 883, 886,
887, 888, 904, 910, 911, 916,
917, 923, 924, 933, 950, 968,
969, 970, 971, 972, 973, 978,
979, 990, 994, 996, 1001, 1002,
1003, 1009, 1025, 1038, 1056, 1057,
1060, 1068, 1083, 1094, 1096, 1097,
1098, 1099, 1100, 1101, 1103, 1104,
1107, 1108, 1109, 1111, 1113, 1117,
1119, 1120, 1121, 1124, 1125, 1127,
1128, 1129, 1132, 1136, 1138, 1139,
1142, 1145, 1148, 1150, 1151, 1152,
1153, 1154, 1158, 1159, 1160, 1161,
1162, 1174, 1175, 1180, 1181, 1182,
1183, 1185, 1187, 1188, 1189, 1193,
1195, 1197, 1203, 1222, 1223, 1254,
1255, 1301, 1319, 1330, 1332, 1345,
1346, 1354, 1359, 1362, 1363, 1364,
1375, 1379, 1380, 1381, 1383, 1411,
1412, 1414, 1416, 1444, 1448, 1449,
1451, 1457, 1484, 1487, 1501, 1503,
1504, 1505, 1506, 1507, 1508, 1515,
1516, 1527, 1531, 1532, 1548, 1549,
1567, 1568, 1592, 1593, 1605, 1606,
1619, 1621, 1630, 1652, 1653, 1669,
1676, 1692, 1694, 1695, 1705, 1706,
1707, 1708, 1709, 1710, 1711, 1717,
1718, 1719, 1720, 1721, 1722, 1723,
1724, 1725, 1726, 1727, 1729, 1730,
1732, 1733, 1734, 1735, 1736, 1737,
1738, 1739, 1740, 1741, 1742, 1743,
1744, 1745, 1764, 1767, 1771, 1772,

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| TOXICS_ORGANICS (continued) | 1784, 1786, 1794, 1799, 1802, 1809, 1821, 1838, 1853, 1854, 1855, 1856, 1863, 1877, 1878, 1883, 1886, 1893, 1913, 1945, 1961, 1973, 1974, 1975, 1976, 1978, 1979, 1984, 1985, 1992, 2011, 2014, 2017, 2019, 2021, 2037, 2039, 2050, 2097, 2131, 2132, 2141, 2142, 2163, 2175, 2177, 2178, 2179, 2180, 2190, 2204, 2208, 2209, 2210, 2212, 2213, 2239, 2240, 2241, 2250, 2254, 2265, 2274, 2276, 2279, 2280, 2281, 2282, 2283, 2301, 2304, 2305, 2308, 2309, 2315, 2317, 2329, 2330, 2331, 2359, 2360, 2361, 2362, 2367, 2377, 2378, 2379, 2381, 2385, 2386, 2387, 2390, 2391, 2392, 2396, 2399, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2442, 2443, 2474, 2478, 2492, 2521, 2522, 2524, 2527, 2529, 2530, 2532, 2534, 2535, 2536, 2537, 2539, 2540, 2541, 2543, 2545, 2548, 2554, 2560, 2561, 2563, 2564, 2580, 2581, 2582, 2586, 2596, 2597, 2598, 2623, 2635, 2644, 2646, 2647, 2648, 2649, 2650, 2655, 2673, 2674, 2681, 2689, 2690, 2691, 2692, 2693, 2694, 2695, 2724, 2725, 2729, 2730, 2751, 2774, 2775, 2786 |
| TOXICS_PHYTOPLANKTON | 66, 94, 224, 236, 323, 346, 387, 396, 397, 398, 399, 400, 401, 439, 531, 576, 611, 614, 670, 721, 788, 821, 923, 1022, 1068, 1083, 1128, 1138, 1142, 1145, 1332, 1448, 1449, 1457, 1560, 1593, 1601, 1717, 1718, 1719, 1720, 1721, 1722, 1723, 1724, 1726, 1727, 1729, 1733, 1736, 1738, 1739, 1740, 1821, 1847, 1849, 1975, 2239, 2279, 2280, 2330, 2331, 2432, 2434, 2522, 2529, 2539, 2540, 2541, 2545, 2548, 2554, 2563, 2572, 2573, 2775 |
| TOXICS_SEDIMENTS | 24, 25, 47, 54, 66, 70, 71, 94, 117, 143, 224, 237, 260, 261, 318, 319, 322, 323, 339, 342, 346, 361, 382, 384, 385, 386, 397, 399, 415, 441, 531, 532, 568, 597, 605, 609, 610, 612, 613, 614, 625, 627, 629, 645, 650, 659, 720, 735, 737, 739, 740, 794, 804, 868, 870, 871, 883, 911, 921, 923, 972, 973, 978, 1021, 1022, 1027, 1057, 1083, 1117, 1120, 1121, 1128, 1132, 1136, 1138, 1142, 1145, 1150, |

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| (SA: specific trace metals) | |
| (SA: metals) | |
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| DEPOSITION/POLLUTION | 6, 7, 11, 15, 20, 22, 23, 24, 26, 54, 56, 58, 62, 63, 67, 143, 163, 213, 224, 319, 323, 355, 361, 376, 377, 381, 385, 473, 533, 551, 553, 631, 643, 644, 645, 646, 647, 660, 661, 662, 663, 709, 719, 743, 758, 804, 879, 910, 957, 974, 975, 1021, 1022, 1052, 1113, 1124, 1125, 1127, 1128, 1132, 1142, 1176, 1185, 1189, 1332, 1333, |

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| TRACE METALS_BIOACCUMULATION | 24, 52, 143, 224, 260, 261, (SA: metals_bioaccumulation) (SA: metals_uptake) |
| | 323, 404, 531, 576, 614, 655, 659, 933, 968, 969, 990, 1022, 1098, 1111, 1115, 1117, 1120, 1124, 1128, 1132, 1142, 1145, 1150, 1189, 1255, 1332, 1487, 1505, 1564, 1576, 1676, 1701, 1702, 1706, 1725, 1730, 1735, 1736, 1741, 1742, 1743, 1744, 1745, 1777, 1786, 1816, 1883, 2017, 2057, 2142, 2211, 2281, 2295, 2301, 2315, 2378, 2432, 2521, 2540, 2541, 2673, 2741 |
| TRACE METALS BIOTA | 24, 45, 52, 65, 66, 123, (SA: bacteria_metals) (SA: benthic_invertebrates_metals) (SA: fish_metals) (SA: invertebrates_metals) (SA: phytoplankton_metals) (SA: zooplankton_metals) |
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| TRACE METALS_CYCLING | 14, 27, 65, 603, 614, 629, 659, 758, 821, 1723, 1725, 1729, 1730, 1732, 1733, 1735, 1736, 1740, 1741, 1742, 1743, 1744, 1745, 1780, 1787, 1809, 1822, 1904, 1956, 1998, 2199, 2274, 2541, 2573, 2615, 2617, 2621, 2771 |
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| TRACE METALS_DISTRIBUTION | 10, 11, 151, 160, 212, 316, 317, 319, 382, 415, 555, 717, 718, 821, 1022, 1343, 1351, 1558, 1607, 1700, 1794, 1809, 1816, 1828, 1857, 1955, 1998, 2034, 2199, 2444, 2614, 2617 |
| TRACE METALS_FERROMANGANESE NODULES (S: ferromanganese nodules) | |
| TRACE METALS_LOADING | 6, 7, 11, 15, 24, 26, 56, 58, 62, 63, 66, 68, 69, 122, 123, 124, 126, 143, 184, 323, 346, 376, 377, 385, 397, 398, 415, 472, 473, 533, 551, 600, 643, 646, 647, 660, 662, 663, 709, 735, 743, 879, 923, 957, 962, 975, 1021, 1022, 1098, 1113, 1125, 1132, 1136, 1141, 1142, 1144, 1145, 1158, 1173, 1174, 1176, 1185, 1189, 1333, 1385, 1519, 1520, 1618, 1619, 1700, 1701, 1702, 1706, 1723, 1725, 1729, 1730, 1732, 1733, 1735, 1736, 1738, 1740, 1741, 1742, 1743, 1744, 1745, 1809, 1825, 1826, 1849, 1956, 1997, 2018, 2039, 2097, 2109, 2137, 2138, 2139, 2140, 2231, 2233, 2235, 2236, 2276, 2437, 2438, 2442, 2462, 2465, 2525, 2572, 2573, 2617 |
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1022, 1027, 1083, 1115, 1117, 1120,
1128, 1132, 1136, 1142, 1145, 1150,
1158, 1159, 1173, 1174, 1176, 1189,
1199, 1253, 1258, 1330, 1332, 1333,
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1474, 1492, 1505, 1519, 1520, 1598,
1619, 1701, 1702, 1723, 1725, 1729,
1730, 1732, 1733, 1735, 1736, 1738,
1740, 1741, 1742, 1743, 1744, 1745,
1776, 1778, 1780, 1781, 1788, 1794,
1809, 1815, 1816, 1822, 1824, 1825,
1826, 1846, 1848, 1893, 1911, 1955,
1956, 1994, 1998, 2018, 2025, 2034,
2097, 2123, 2199, 2222, 2274, 2276,
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2442, 2444, 2462, 2464, 2467, 2482,
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614, 627, 659, 821, 879, 974,
975, 1052, 1113, 1124, 1125, 1132,
1176, 1185, 1253, 1351, 1438, 1583,
1584, 1598, 1618, 1706, 1723, 1725,
1729, 1732, 1733, 1735, 1736, 1740,
1741, 1742, 1743, 1744, 1745, 1829,
1846, 1955, 1956, 1994, 2140, 2199,
2231, 2232, 2233, 2236, 2274, 2276,
2442, 2497, 2572, 2573, 2696, 2734,
2771, 2772

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(S: tributaries_metals)

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362, 547, 583, 598, 692, 693,
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1440, 1453, 1551, 1736, 1990, 2008,
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1673, 1674, 1676, 1677, 1678, 1716,
1730, 1736, 1740, 1800, 1838, 1883,
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2041, 2097, 2149, 2150, 2157, 2158,
2180, 2183, 2188, 2210, 2212, 2213,
2250, 2251, 2276, 2304, 2309, 2326,
2361, 2378, 2379, 2397, 2435, 2443,
2449, 2473, 2522, 2524, 2525, 2529,
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2626, 2648, 2661, 2720, 2723

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| TRIBUTARIES_PHOSPHORUS (S: phosphorus_tributaries) | |
| TRIBUTARIES_PHYTOPLANKTON | 141, 224, 346, 397, 398, 515, 531, 771, 821, 923, 926, 1022, 1138, 1142, 1260, 1337, 1340, 1659, 1660, 1723, 1729, 1733, 1736, 1738, 1740, 1845, 1915, 1920, 1987, 1990, 2025, 2060, 2104, 2105, 2107, 2114, 2118, 2120, 2198, 2199, 2223, 2457, 2522, 2526, 2529, 2539, 2540, 2541, 2544, 2545, 2554, 2572, 2573 |
| TRIBUTARIES_POLLUTION | 49, 52, 55, 58, 59, 68, (SA: tributaries_water quality) 69, 122, 123, 124, 125, 126, 135, 139, 141, 143, 149, 191, 218, 261, 273, 275, 376, 377, 397, 398, 417, 499, 500, 501, 510, 514, 517, 518, 531, 550, 555, 579, 580, 600, 604, 650, 729, 765, 767, 774, 787, 820, 821, 863, 904, 911, 923, 954, 957, 965, 1089, 1142, 1158, 1171, 1175, 1176, 1186, 1188, 1189, 1194, 1254, 1333, 1337, 1340, 1359, 1364, 1375, 1384, 1412, 1418, 1444, 1451, |

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| TRIBUTARIES_POLLUTION (continued) | 1475, 1527, 1550, 1567, 1611, 1618, 1666, 1676, 1700, 1701, 1702, 1729, 1733, 1736, 1765, 1767, 1774, 1788, 1803, 1804, 1805, 1813, 1828, 1829, 1871, 1872, 1878, 1883, 1966, 2018, 2024, 2028, 2044, 2046, 2083, 2097, 2104, 2120, 2149, 2150, 2198, 2199, 2202, 2205, 2213, 2268, 2271, 2276, 2278, 2304, 2361, 2378, 2382, 2383, 2443, 2467, 2469, 2522, 2525, 2526, 2529, 2535, 2541, 2622, 2648, 2725 |
| TRIBUTARIES_RADIOACTIVITY | 1188, 2554 |
| TRIBUTARIES_RADIONUCLIDES | 1188, 1729, 1730, 1732, 1733, 1736, 1740, 2176, 2199, 2572, 2573, 2618 |
| TRIBUTARIES_RIVER_PLUME | 149, 346, 1337, 1617, 1618, 1829 |
| TRIBUTARIES_RUNOFF | 49, 52, 117, 122, 123, 126, 143, 218, 273, 346, 397, 398, 454, 455, 473, 537, 580, 604, 820, 821, 863, 897, 911, 954, 957, 1021, 1033, 1142, 1158, 1171, 1175, 1176, 1189, 1194, 1269, 1333, 1384, 1475, 1611, 1700, 1723, 1729, 1730, 1732, 1733, 1736, 1740, 1765, 1767, 1774, 1803, 1804, 1805, 1883, 1915, 1924, 1931, 2097, 2140, 2202, 2268, 2271, 2276, 2278, 2382, 2383, 2387, 2462, 2572, 2573, 2679 |
| TRIBUTARIES_SEA LAMPREY | 102, 139, 488, 508, 527, 696, 796, 809, 811, 821, 848, 849, 850, 906, 966, 967, 1059, 1204, 1227, 1254, 1260, 1609, 1668, 1673, 1674, 1918, 2149, 2150, 2158, 2180, 2183, 2251, 2473, 2539, 2540, 2541, 2544, 2545, 2595, 2625, 2661 |
| TRIBUTARIES_SEDIMENTS | 24, 68, 69, 103, 115, 117, 124, 125, 141, 143, 224, 260, 261, 306, 322, 344, 346, 370, 376, 377, 397, 472, 508, 515, 531, 555, 580, 600, 602, 603, 604, 650, 727, 735, 767, 769, 771, 773, 777, 778, 868, 871, 911, 921, 923, 926, 947, 965, 978, 986, 1021, 1022, 1033, 1138, 1142, 1158, 1171, 1175, 1176, 1189, 1231, 1242, 1319, 1323, 1333, 1340, 1375, 1384, 1418, 1451, 1519, 1520, 1551, 1605, 1611, 1612, 1615, 1701, 1702, 1723, 1729, 1730, 1732, 1733, 1736, 1738, 1740, 1752, 1753, 1756, 1757, 1758, 1759, 1761, 1765, 1788, 1803, 1804, 1805, 1838, 1920, 1921, 1956, 1966, 2018, 2025, 2097, 2105, |

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| TRIBUTARIES_SEDIMENTS (continued) | 2107, 2114, 2176, 2199, 2205, 2241, 2269, 2270, 2276, 2289, 2304, 2378, 2379, 2382, 2383, 2387, 2435, 2443, 2462, 2467, 2524, 2525, 2535, 2541, 2554, 2573, 2618, 2679, 2725 |
| TRIBUTARIES_TRACE METALS (S: tributaries_metals) | |
| TRIBUTARIES_WATER QUALITY | 49, 52, 55, 58, 59, 68, (SA: tributaries_pollution) 69, 103, 115, 117, 122, 123, 124, 125, 126, 141, 143, 149, 191, 218, 224, 273, 275, 295, 306, 334, 370, 376, 377, 397, 398, 417, 499, 500, 501, 513, 514, 531, 550, 555, 579, 580, 600, 604, 729, 735, 765, 787, 793, 820, 821, 868, 911, 921, 923, 954, 957, 965, 978, 1089, 1138, 1142, 1158, 1160, 1161, 1171, 1186, 1188, 1194, 1319, 1333, 1337, 1340, 1375, 1384, 1444, 1481, 1509, 1550, 1551, 1567, 1568, 1611, 1645, 1666, 1723, 1729, 1733, 1736, 1740, 1765, 1767, 1788, 1803, 1804, 1805, 1813, 1861, 1863, 1871, 1872, 1878, 1883, 1915, 1966, 2018, 2024, 2028, 2044, 2046, 2060, 2083, 2097, 2104, 2105, 2107, 2149, 2150, 2198, 2202, 2213, 2268, 2269, 2270, 2271, 2276, 2278, 2304, 2378, 2379, 2382, 2383, 2409, 2522, 2524, 2525, 2526, 2529, 2535, 2540, 2541, 2544, 2554, 2558, 2622, 2639, 2718, 2725 |
| TRIBUTARIES_WATERSHED | 49, 55, 58, 68, 69, 117, 122, 123, 125, 126, 275, 346, 376, 377, 472, 501, 537, 555, 820, 821, 911, 954, 1032, 1033, 1158, 1170, 1171, 1175, 1176, 1260, 1323, 1333, 1384, 1550, 1568, 1774, 1803, 1804, 1805, 1871, 2046, 2083, 2097, 2202, 2271, 2322, 2382, 2383, 2387, 2443, 2469, 2525, 2572, 2573, 2622, 2679 |
| TRIBUTARIES_WETLANDS | 215, 256, 306, 344, 393, 808, 809, 820, 821, 911, 985, 986, 1171, 1189, 1289, 1375, 1543, 1863, 1950, 1960, 1966, 2289, 2322, 2540, 2545, 2580 |
| TRICHLOROETHYLENE | 2534 |
| TRICHOPTERA | 1292, 1404, 1492, 1550, 1608, 1688, 1760 |
| TRITIUM | 9, 339, 612, 1148, 1730, 1733 |

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| TROPHIC CONDITIONS | 101, 689, 923, 1312, 1345, 1408, 1440, 1550, 1551, | 224, 753, 954, 960, 1175, 1185, 1252, 1660, 1662, 1688, 1703, 1989, 1990, | 362, 763, 1175, 1185, 1252, 1660, 1662, 1688, 1703, 1989, 1990, | 547, 775, 1185, 1252, 1660, 1662, 1688, 1703, 1989, 1990, | 628, 857, 1252, 1551, 1550, 1551, 1990, 2104, 2110, 2198, 2354, 2413, 2458, 2522, |
| (SA: eutrophic) | | | | | |
| (SA: eutrophication) | | | | | |
| (SA: oligotrophic) | | | | | |
| | 1660, 1662, 1688, 1703, 1989, 1990, 1993, 2008, 2031, 2062, 2063, 2104, 2110, 2198, 2354, 2413, 2458, 2522, 2611, 2619, 2640, 2703, 2712, 2719, 2779 | | | | |
| TROPHIC LEVEL (SA: food chain) | 310, 680, 682, 689, 690, 692, 693, | 2395 | | | |
| TROPOCYCLOPS | 1560, 1562 | | | | |
| TROUT (SA: specific species) | 39, 139, 176, 197, 224, 284, 285, 397, 399, 407, 426, 434, 463, 467, 521, 522, 532, 540, 572, 576, 655, 664, 696, 701, 734, 779, 811, 821, 847, 848, 904, 905, 967, 987, 993, 994, 999, 1001, 1036, 1037, 1062, 1063, 1145, 1150, 1242, 1244, 1284, 1291, 1314, 1336, 1357, 1358, 1415, 1466, 1503, 1504, 1569, 1575, 1647, 1668, 1795, 1855, 1857, 1883, 1903, 1913, 1919, 1946, 2020, 2021, 2037, 2054, 2055, 2056, 2097, 2112, 2156, 2178, 2179, 2180, 2181, 2188, 2197, 2247, 2248, 2251, 2253, 2262, 2286, 2287, 2294, 2295, 2296, 2297, 2298, 2300, 2301, 2302, 2305, 2308, | 171, 174, 194, 261, 279, 334, 397, 408, 440, 463, 468, 528, 541, 621, 670, 702, 789, 840, 849, 931, 988, 994, 995, 1002, 1039, 1122, 1211, 1244, 1291, 1336, 1358, 1466, 1506, 1576, 1605, 1696, 1797, 1800, 1867, 1913, 1919, 1946, 2038, 2057, 2157, 2161, 2181, 2188, 2190, 2247, 2248, 2251, 2253, 2262, 2286, 2287, 2294, 2295, 2296, 2297, 2298, 2300, 2301, 2302, 2305, 2308, | 116, 174, 195, 279, 334, 397, 408, 440, 463, 468, 528, 541, 622, 671, 716, 805, 841, 850, 940, 990, 996, 997, 1007, 1040, 1132, 1222, 1248, 1308, 1354, 1364, 1468, 1507, 1605, 1697, 1730, 1802, 1868, 1919, 1946, 2039, 2051, 2067, 2161, 2181, 2188, 2190, 2247, 2248, 2251, 2253, 2262, 2286, 2287, 2294, 2295, 2296, 2297, 2298, 2300, 2301, 2302, 2305, 2308, | 120, 174, 195, 279, 334, 397, 408, 440, 463, 468, 528, 541, 622, 671, 716, 805, 841, 850, 940, 990, 996, 997, 1007, 1040, 1132, 1222, 1248, 1308, 1354, 1364, 1468, 1507, 1605, 1697, 1730, 1802, 1868, 1919, 1946, 2039, 2051, 2067, 2161, 2181, 2188, 2190, 2247, 2248, 2251, 2253, 2262, 2286, 2287, 2294, 2295, 2296, 2297, 2298, 2300, 2301, 2302, 2305, 2308, | 137, 175, 196, 282, 336, 397, 419, 426, 434, 463, 468, 529, 531, 564, 570, 639, 674, 733, 806, 844, 846, 882, 941, 949, 991, 992, 998, 1035, 1060, 1142, 1227, 1249, 1251, 1312, 1313, 1355, 1356, 1412, 1501, 1502, 1565, 1624, 1786, 1853, 1870, 2019, 2051, 2068, 2177, 2262, 2297, 2308, |

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| TROUT (continued) | 2309, 2310, 2311, 2312, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2341, 2343, 2344, 2359, 2367, 2391, 2394, 2418, 2420, 2433, 2434, 2435, 2451, 2477, 2522, 2524, 2539, 2540, 2541, 2543, 2544, 2545, 2548, 2552, 2560, 2583, 2584, 2585, 2586, 2587, 2603, 2605, 2606, 2607, 2624, 2625, 2647, 2655, 2661, 2689, 2690, 2691, 2693, 2694, 2695, 2720, 2721, 2724, 2729, 2777, 2782 |
| TROUT-PERCH | 42, 139, 177, 200, 201, 248, 393, 426, 457, 468, 527, 559, 576, 696, 809, 811, 1242, 1243, 1244, 1248, 1251, 1524, 1791, 2143, 2418, 2420, 2451, 2662, 2720 |
| TUBIFICIDS (S: Oligochaeta) | |
| TUNGSTEN | 1794 |
| TURBELLARIA | 1762, 2687, 2706, 2708, 2778 |
| TURBIDITY | 44, 150, 224, 397, 398, 657, 737, 979, 1337, 1432, 1440, 1532, 2008, 2097, 2384, 2458, 2479, 2481, 2482, 2497, 2554 |
| TURBULENCE (S: mixing) | |
| ULOTHRIX (SA: green algae) | 100, 198, 814, 2022, 2642 |
| UPTAKE (S: specific compound or organism) (S: bioaccumulation) | |
| UPWELLING | 33, 44, 150, 230, 350, 471, 684, 687, 1005, 1024, 1250, 1284, 1291, 1485, 1553, 1735, 2028, 2031, 2193, 2261, 2262, 2306, 2351, 2450, 2451, 2762 |
| URANIUM | 1780, 1794, 1851, 1998, 2614, 2619 |
| URBAN | 20, 46, 49, 55, 121, 130, (SA: history_urban) 140, 143, 149, 264, 265, 266, 321, 352, 353, 354, 355, 356, 366, 367, 436, 482, 498, 555, 577, 578, 648, 825, 918, 923, 957, 972, 973, 1083, 1127, 1159, 1171, 1175, 1188, 1189, 1225, 1232, 1332, 1387, 1405, 1462, 1602, 1628, 1642, 1665, 1805, 1810, 1817, 1897, 1898, 1926, 1928, 2005, 2042, 2140, 2202, 2244, 2271, 2278, 2359, 2383, 2435, 2487, 2636 |
| VANADIUM | 224, 399, 719, 758, 804, 879, 1139, 2027, 2235, 2442, 2466, 2469 |

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| VEGETATION | 109, 128, 156, 306, 307, 391, |
| (SA: forests; SA: macrophytes) | 424, 425, 722, 741, 783, 812, |
| | 819, 835, 901, 915, 919, 976, |
| | 977, 985, 986, 1010, 1011, 1072, |
| | 1079, 1090, 1201, 1248, 1264, 1265, |
| | 1289, 1300, 1341, 1453, 1493, 1494, |
| | 1496, 1588, 1589, 1594, 1632, 1665, |
| | 1882, 1914, 2007, 2016, 2039, 2045, |
| | 2064, 2134, 2174, 2323, 2384, 2403, |
| | 2427, 2482, 2499, 2505, 2506, 2507, |
| | 2518, 2588, 2630, 2659, 2685, 2686, |
| | 2688 |
| VEGETATION_PHOSPHORUS | |
| (S: phosphorus_vegetation) | |
| VEGETATION_SUCCESSION | 425, 901, 915, 976 |
| VERTICAL MIGRATION | 144, 226, 229, 231, 245, 681, |
| | 872, 873, 1212, 1521, 1522, 1723, |
| | 1762, 1874, 2162, 2632, 2704 |
| VIRUS | 52, 878, 1018, 1480, 1684, 2554 |
| WALLEYE | 103, 115, 116, 120, 261, 393, |
| | 418, 426, 517, 518, 527, 532, |
| | 671, 779, 809, 811, 923, 931, |
| | 932, 1022, 1025, 1026, 1039, 1150, |
| | 1244, 1251, 1290, 1316, 1335, 1364, |
| | 1408, 1489, 1490, 1491, 1511, 1546, |
| | 1575, 1624, 1647, 2056, 2149, 2150, |
| | 2179, 2181, 2253, 2286, 2288, 2305, |
| | 2308, 2309, 2398, 2451, 2539, 2540, |
| | 2541, 2544, 2545, 2548, 2560, 2717, |
| | 2720, 2721, 2724, 2777 |
| WASTE | 9, 11, 45, 52, 121, 134, |
| (SA: pollution) | 135, 141, 143, 219, 260, 261, |
| (SA: sewage) | 275, 297, 309, 313, 321, 345, |
| | 359, 363, 376, 400, 402, 417, |
| | 436, 478, 490, 500, 509, 510, |
| | 576, 581, 582, 598, 650, 655, |
| | 657, 723, 729, 735, 737, 827, |
| | 833, 924, 950, 957, 960, 973, |
| | 978, 1022, 1027, 1084, 1098, 1116, |
| | 1147, 1152, 1171, 1175, 1176, 1177, |
| | 1185, 1188, 1189, 1200, 1258, 1293, |
| | 1301, 1342, 1349, 1386, 1387, 1395, |
| | 1416, 1417, 1418, 1461, 1462, 1480, |
| | 1508, 1532, 1567, 1577, 1583, 1584, |
| | 1602, 1611, 1658, 1684, 1767, 1773, |
| | 1801, 1851, 1861, 1865, 1871, 1883, |
| | 1910, 1949, 1958, 1966, 1992, 2024, |
| | 2042, 2099, 2141, 2244, 2378, 2413, |
| | 2443, 2492, 2524, 2538, 2556, 2561, |
| | 2614, 2619, 2654, 2718, 2725, 2776, |
| | 2782 |

WASTE_DISCHARGE (S: discharge_waste)

WASTE_DISPOSAL 135, 143, 260, 261, 275, 309,
321, 345, 376, 436, 478, 509,
581, 598, 827, 978, 1027, 1116,
1147, 1152, 1171, 1175, 1176, 1177,
1189, 1200, 1417, 1418, 1462, 1480,
1577, 1910, 1949, 1966, 2042, 2244,
2492, 2538, 2561

WASTE_EFFLUENT

(S: effluent_waste)

WASTE_LOADING 11, 143, 359, 363, 376, 735,
737, 957, 960, 1022, 1098, 1116,
1171, 1175, 1176, 1185, 1188, 1189,
1386, 1461, 1462, 1532, 1567, 1684,
1861, 2244, 2443, 2524, 2718

WASTE_MANAGEMENT 9, 121, 141, 143, 219, 261,
275, 313, 359, 363, 376, 400,
500, 582, 729, 737, 827, 833,
957, 960, 978, 1084, 1098, 1152,
1177, 1188, 1189, 1200, 1293, 1301,
1349, 1386, 1395, 1461, 1462, 1532,
1577, 1684, 1767, 1773, 1801, 1865,
1871, 1966, 2024, 2042, 2099, 2141,
2244, 2378, 2538, 2654, 2725, 2776

WASTE_TREATMENT 402, 581, 582, 657, 723, 833,
957, 960, 1098, 1342, 1387, 1684,
2782

WASTEWATER 49, 60, 63, 122, 184, 262,
(SA: discharge_wastewater) 263, 376, 399, 402, 499, 501,
(SA: effluent_wastewater) 502, 531, 532, 577, 868, 878,
923, 925, 927, 957, 1125, 1132,
1177, 1178, 1182, 1183, 1187, 1193,
1195, 1340, 1481, 1539, 1667, 1684,
1878, 1902, 1947, 1982, 2083, 2202,
2278, 2378, 2535, 2630, 2631, 2654

WATER ALLOCATION (S: water_use)

WATER_BUDGET 267, 269, 290, 454, 455, 456,
(SA: model_water_budget) 535, 536, 667, 784, 824, 833,
(SA: research_needs_water_budget) 1169, 1170, 1723, 1729, 1730, 1733,
1736, 1738, 1740, 1907, 1924, 1925,
1931, 1935, 1936, 1937, 1938, 2278,
2479, 2481

WATER CHEMISTRY

(S: specific_elements)

(S: water_quality)

WATER_DEPTH 920, 946, 1005, 1043, 1347, 1369,
(SA: bathymetry) 1403, 1450, 1600, 1612, 1723, 1732,
(SA: hydrography) 1752, 1757, 1758, 1863, 1874, 1893,
1944, 1990, 2133, 2262, 2290, 2292,

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| WATER DEPTH (continued) | 2461, 2583, 2585, 2617, 2677, 2703, 2704 |
| WATER DIVERSION (S: diversion) | |
| WATER LEVELS (S: lake levels) | |
| WATER MASSES | 1288, 2028, 2351 |
| (SA: water_movement) | |
| WATER MOVEMENT | 192, 908, 916, 1680, 1681, 1683, (SA: currents; SA: circulation; SA: seiche; SA: tides; SA: water masses) |
| 2086, 2087 | |
| WATER QUALITY_ANALYTICAL METHODS | 184, 504, 1399, 1417, 1590, 1844, 2200, 2282, 2404, 2406, 2407, 2408, 2409, 2575 |
| WATER QUALITY_BACTERIA (S: bacteria_water quality) | |
| WATER QUALITY_BENTHIC_INVERTEBRATES (SA: pollution_benthic_invertebrates) | 126, 141, 200, 531, 576, 597, 721, 763, 911, 1043, 1068, 1083, 1128, 1147, 1248, 1332, 1403, 1441, 1517, 1550, 1551, 1630, 1684, 1723, 1725, 1729, 1733, 1735, 1736, 1740, 1741, 1742, 1743, 1744, 1745, 1915, 1942, 2029, 2112, 2198, 2348, 2351, 2492, 2522, 2526, 2540, 2541, 2544, 2548, 2569, 2630, 2712, 2779 |
| WATER QUALITY_CIRCULATION (S: circulation_water quality) | |
| WATER QUALITY_CURRENTS (S: currents_water quality) | |
| WATER QUALITY_DATABASE | 213, 962, 979, 1729, 1740, 1983, 2254, 2554 |
| WATER QUALITY_DISCHARGE (S: discharge_water quality) | |
| WATER QUALITY_EUTROPHICATION (S: eutrophication) | |
| WATER QUALITY_FISH | 8, 52, 61, 77, 94, 103, (SA: toxics_fish) 115, 117, 141, 143, 200, 213, 219, 224, 323, 334, 390, 396, 397, 399, 419, 531, 576, 597, 628, 640, 649, 674, 721, 737, 763, 775, 793, 821, 824, 827, 832, 845, 886, 916, 921, 923, 983, 1068, 1083, 1094, 1101, 1115, 1117, 1120, 1121, 1122, 1124, 1128, 1132, 1134, 1137, 1138, 1140, 1142, 1143, 1145, 1147, 1150, 1155, 1158, 1233, 1234, 1248, 1301, 1332, 1415, 1506, 1531, 1630, 1684, 1706, 1736, 1740, 1783, 1809, 1854, 1883, 1915, |

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| WATER QUALITY_FISH (continued) | 1961, 1962, 2029, 2039, 2042, 2056, 2089, 2094, 2097, 2112, 2149, 2150, 2204, 2213, 2239, 2247, 2262, 2276, 2279, 2280, 2281, 2282, 2283, 2304, 2378, 2379, 2391, 2437, 2439, 2458, 2492, 2522, 2524, 2525, 2529, 2540, 2541, 2544, 2548, 2558, 2563, 2630, 2654, 2693, 2694, 2721, 2740, 2777 |
| WATER QUALITY FOOD CHAIN | 224, 280, 281, 531, 628, 761, (SA: food chain) 775, 916, 923, 1068, 1630, 1662, 1723, 1725, 1729, 1735, 1740, 1741, 1742, 1743, 1744, 1745, 2060, 2094, 2112, 2348, 2357, 2395 |
| WATER QUALITY GROUNDWATER | 49, 63, 213, 273, 376, 377, (SA: groundwater_chemistry) (SA: pollution_groundwater) 420, 436, 790, 820, 821, 833, 910, 911, 1068, 1083, 1085, 1094, 1098, 1115, 1116, 1127, 1128, 1132, 1197, 1270, 1333, 1447, 1611, 1621, 1767, 1966, 2202, 2534, 2551, 2554, 2556, 2588, 2592, 2654 |
| WATER QUALITY HARBORS | 143, 147, 729, 736, 878, 924, (SA: pollution_harbors) 978, 1162, 1199, 1481, 1548, 1549, 1564, 1645, 1684, 2132, 2173, 2329, 2330, 2331, 2439, 2492, 2524, 2528, 2535 |
| WATER QUALITY HISTORY | 45, 77, 121, 136, 142, 313, (SA: pollution_history) 365, 419, 436, 576, 592, 737, 831, 921, 924, 925, 950, 979, 983, 1068, 1098, 1126, 1233, 1234, 1248, 1387, 1415, 1440, 1513, 1535, 1536, 1548, 1550, 1602, 1666, 1767, 1773, 1834, 1945, 1966, 2012, 2039, 2042, 2056, 2060, 2106, 2112, 2116, 2149, 2150, 2273, 2279, 2280, 2346, 2348, 2351, 2392, 2479, 2481, 2524, 2544, 2563, 2575, 2639, 2644 |
| WATER QUALITY_HUMAN HEALTH | 9, 13, 52, 143, 213, 263, 275, 323, 390, 397, 398, 399, 419, 436, 491, 514, 657, 721, 729, 821, 858, 878, 885, 886, 916, 923, 974, 975, 978, 1068, 1094, 1096, 1097, 1098, 1099, 1100, 1101, 1107, 1108, 1109, 1111, 1113, 1114, 1115, 1116, 1117, 1119, 1120, 1121, 1124, 1125, 1127, 1128, 1132, 1136, 1138, 1148, 1155, 1158, 1181, 1185, 1188, 1375, 1387, 1480, 1513, 1631, 1767, 1773, 1783, 1807, 1809, 1878, 1883, 2279, 2280, 2282, 2283, 2330, 2331, 2389, 2391, 2522, 2524, 2529, 2534, 2630, 2725 |

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| WATER QUALITY_HYDROCARBONS | 52, | 598, | 735, | 737, | 924, | 979, |
| (not chlorinated) | 1083, | 1094, | 1132, | 1146, | 1180, | 1181, |
| (SA: hydrocarbons) | 1273, | 1330, | 1611, | 1733, | 1740 | |
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| (SA: specific elements) | 45, | 49, | 52, | 58, | 63, | 65, |
| (SA: metals_water quality) | 68, | 69, | 77, | 94, | 99, | 101, |
| (SA: nutrients_water quality) | 121, | 122, | 123, | 124, | 126, | 131, |
| (SA: trace metals) | 136, | 142, | 143, | 147, | 169, | 184, |
| | 213, | 218, | 224, | 236, | 262, | 273, |
| | 277, | 281, | 297, | 306, | 313, | 323, |
| | 329, | 358, | 359, | 360, | 362, | 363, |
| | 365, | 366, | 367, | 370, | 376, | 377, |
| | 378, | 390, | 396, | 397, | 398, | 399, |
| | 400, | 401, | 417, | 420, | 437, | 441, |
| | 478, | 500, | 501, | 502, | 504, | 513, |
| | 514, | 530, | 531, | 547, | 550, | 555, |
| | 556, | 576, | 577, | 598, | 600, | 628, |
| | 640, | 657, | 658, | 721, | 728, | 729, |
| | 735, | 736, | 737, | 753, | 763, | 765, |
| | 775, | 792, | 817, | 820, | 821, | 832, |
| | 833, | 857, | 858, | 863, | 879, | 885, |
| | 910, | 911, | 916, | 918, | 921, | 923, |
| | 925, | 950, | 953, | 954, | 955, | 956, |
| | 957, | 958, | 960, | 962, | 974, | 975, |
| | 979, | 1043, | 1048, | 1049, | 1068, | 1083, |
| | 1089, | 1097, | 1098, | 1099, | 1100, | 1101, |
| | 1103, | 1104, | 1107, | 1108, | 1109, | 1110, |
| | 1111, | 1113, | 1115, | 1117, | 1118, | 1119, |
| | 1120, | 1122, | 1124, | 1125, | 1127, | 1128, |
| | 1129, | 1132, | 1134, | 1136, | 1137, | 1138, |
| | 1139, | 1140, | 1141, | 1142, | 1143, | 1144, |
| | 1145, | 1148, | 1149, | 1150, | 1151, | 1152, |
| | 1153, | 1154, | 1155, | 1156, | 1158, | 1159, |
| | 1160, | 1161, | 1173, | 1174, | 1179, | 1180, |
| | 1181, | 1182, | 1183, | 1185, | 1186, | 1187, |
| | 1188, | 1190, | 1191, | 1192, | 1193, | 1194, |
| | 1195, | 1197, | 1199, | 1207, | 1248, | 1270, |
| | 1273, | 1277, | 1287, | 1301, | 1332, | 1333, |
| | 1334, | 1337, | 1344, | 1349, | 1374, | 1375, |
| | 1384, | 1385, | 1386, | 1397, | 1399, | 1415, |
| | 1416, | 1433, | 1434, | 1435, | 1436, | 1437, |
| | 1440, | 1454, | 1461, | 1462, | 1481, | 1508, |
| | 1531, | 1536, | 1539, | 1551, | 1562, | 1564, |
| | 1590, | 1621, | 1646, | 1662, | 1666. | 1667, |
| | 1684, | 1706, | 1717, | 1718, | 1719, | 1720, |
| | 1721, | 1722, | 1723, | 1724, | 1725, | 1726, |
| | 1727, | 1729, | 1733, | 1735, | 1736, | 1739, |
| | 1740, | 1741, | 1742, | 1743, | 1744, | 1745, |
| | 1767, | 1783, | 1788, | 1803, | 1804, | 1805, |
| | 1807, | 1808, | 1809, | 1849, | 1854, | 1861, |
| | 1862, | 1863, | 1871, | 1872, | 1883, | 1896, |
| | 1902, | 1909, | 1915, | 1945, | 1952, | 1953, |
| | 1961, | 1982, | 2009, | 2012, | 2013, | 2018, |
| | 2026, | 2027, | 2028, | 2039, | 2046, | 2056, |

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1118, 1122, 1123, 1125, 1127, 1128,
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1148, 1149, 1150, 1151, 1152, 1156,
1159, 1162, 1174, 1177, 1179, 1180,
1181, 1182, 1183, 1187, 1188, 1190,
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1773, 1784, 1801, 1810, 1813, 1834,
1863, 1871, 1872, 1900, 1902, 1961,
1962, 1966, 1982, 2001, 2009, 2024,
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2112, 2149, 2150, 2191, 2202, 2238,
2244, 2268, 2269, 2270, 2272, 2273,
2274, 2278, 2279, 2280, 2327, 2329,
2330, 2331, 2378, 2382, 2383, 2388,
2436, 2441, 2452, 2479, 2481, 2508,
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2551, 2630, 2631, 2654, 2682, 2719,
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WATER QUALITY MAPPING

(S: mapping_water quality)

WATER QUALITY METALS

(S: metals_water quality)

(S: water_quality_inorganics)

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(S: model_water quality)

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(SA: pollution_monitoring)

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1136, 1137, 1138, 1140, 1141, 1142,
1143, 1144, 1145, 1148, 1150, 1151,
1156, 1157, 1158, 1168, 1182, 1183,
1187, 1188, 1193, 1195, 1197, 1287,
1319, 1332, 1333, 1386, 1416, 1440,
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1107, 1108, 1109, 1111, 1113, 1115,
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1127, 1128, 1129, 1132, 1136, 1138,
1139, 1141, 1142, 1144, 1145, 1148,
1149, 1150, 1151, 1152, 1153, 1154,
1155, 1156, 1158, 1159, 1160, 1161,
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1185, 1187, 1188, 1191, 1192, 1193,
1195, 1197, 1301, 1319, 1330, 1332,
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1462, 1506, 1508, 1531, 1548, 1549,
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1684, 1706, 1717, 1718, 1719, 1720,
1721, 1722, 1723, 1724, 1725, 1726,
1727, 1729, 1733, 1735, 1736, 1739,
1740, 1741, 1742, 1743, 1744, 1745,
1767, 1784, 1809, 1854, 1863, 1878,
1883, 1909, 1945, 1961, 1984, 2039,
2056, 2097, 2104, 2131, 2132, 2198,
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2282, 2283, 2304, 2329, 2330, 2331,
2377, 2378, 2379, 2381, 2390, 2391,
2392, 2436, 2437, 2439, 2492, 2522,
2524, 2527, 2529, 2534, 2535, 2540,
2541, 2544, 2548, 2554, 2563, 2630,
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(S: pollution_abatement)

WATER QUALITY_POWER PLANTS
(S: power plants_water quality)

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(S: radioactivity)

WATER QUALITY_RADIONUCLIDES
(S: radionuclides_water quality)

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 1722, 1723, 1724, 1725, 1726, 1727,

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| WATER QUALITY TRIBUTARIES (S: tributaries water quality) | |
| WATER QUALITY VIRUS (S: virus) | |
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| WATER QUALITY WASTEWATER (S: wastewater) | |
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| WATER SUPPLY | 13, | 180, | 193, | 237, | 263, | 269, |
| (SA: water budget) | 325, | 343, | 397, | 398, | 422, | 427, |
| (SA: discharge_water supply) | 442, | 473, | 490, | 509, | 510, | 642, |
| (SA: hydrology_water supply) | 657, | 715, | 784, | 803, | 821, | 837, |
| (SA: management_water supply) | 858, | 1033, | 1069, | 1076, | 1077, | 1100, |
| (SA: model_water supply) | 1111, | 1116, | 1155, | 1163, | 1169, | 1217, |
| (SA: pollution_water supply) | 1270, | 1271, | 1272, | 1310, | 1482, | 1513, |
| (SA: research needs_water supply) | 1570, | 1625, | 1740, | 1751, | 1773, | 1807, |
| (SA: water quality_water supply) | 1864, | 1883, | 2023, | 2042, | 2097, | 2242, |
| | 2307, | 2590, | 2591, | 2654, | 2787 | |
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| | 402, | 577, | 657, | 723, | 736, | 833, |
| | 957, | 960, | 1098, | 1178, | 1342, | 1387, |
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| | 1269, | 1270, | 1271, | 1272, | 1278, | 1310, |
| | 1322, | 1361, | 1405, | 1447, | 1512, | 1542, |
| | 1573, | 1610, | 1628, | 1723, | 1740, | 1773, |
| | 1865, | 1897, | 1898, | 1899, | 1926, | 1928, |
| | 1930, | 2001, | 2023, | 2072, | 2130, | 2238, |
| | 2242, | 2267, | 2284, | 2307; | 2392, | 2452, |
| | 2481, | 2482, | 2497, | 2504, | 2518, | 2533, |
| | 2559a, | 2590, | 2592, | 2654, | 2671, | 2672, |
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| WATERSHED | 49, | 55, | 58, | 68, | 69, | 117, |
| (SA: drainage basin) | 122, | 123, | 125, | 126, | 192, | 193, |
| (SA: mapping_watershed) | 275, | 343, | 346, | 372, | 376, | 377, |
| | 390, | 472, | 501, | 537, | 555, | 641, |
| | 667, | 794, | 820, | 821, | 825, | 900, |
| | 911, | 954, | 1032, | 1033, | 1110, | 1158, |
| | 1170, | 1171, | 1173, | 1175, | 1176, | 1260, |
| | 1323, | 1333, | 1362, | 1384, | 1539, | 1540, |
| | 1550, | 1568, | 1639, | 1665, | 1774, | 1803, |
| | 1804, | 1805, | 1871, | 1923, | 1938, | 1975, |
| | 1996, | 2046, | 2083, | 2097, | 2202, | 2271, |
| | 2322, | 2382, | 2383, | 2387, | 2443, | 2469, |
| | 2518, | 2525, | 2572, | 2573, | 2622, | 2654, |
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1632, 1644, 1654, 1655, 1656, 1657,
1680, 1683, 1717, 1718, 1719, 1720,
1721, 1722, 1723, 1724, 1726, 1727,
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| | 143, 153, 169, 179, 185, 220, 233, 249, 271, 272, 286, 299, 310, 312, 326, 327, 328, 329, 332, 333, 338, 348, 358, 360, 364, 366, 367, 381, 409, 414, 421, 422, 423, 462, 475, 494, 495, 499, 511, 515, 526, 531, 532, 542, 554, 573, 578, 579, 580, 594, 606, 607, 630, 637, 640, 650, 652, 667, 686, 701, 710, 716, 738, 747, 753, 756, 757, 775, 786, 792, 795, 796, 798, 813, 819, 826, 830, 831, 835, 836, 839, 841, 842, 843, 844, 846, 847, 851, 852, 853, 855, 856, 864, 865, 886, 887, 893, 907, 949, 952, 955, 956, 957, 958, 959, 961, 963, 1003, 1038, 1040, 1114, 1123, 1129, 1135, 1136, 1146, 1150, 1156, 1157, 1182, 1183, 1186, 1187, 1191, 1193, 1195, 1200, 1211, 1216, 1218, 1230, 1235, 1236, 1252, 1264, 1308, 1311, 1316, 1320, 1362, 1369, 1379, 1382, 1391, 1398, 1416, 1423, 1431, 1445, 1449, 1462, 1475, 1477, 1498, 1511, 1516, 1529, 1530, 1532, 1547, 1569, 1570, 1576, 1577, 1586, 1626, 1627, 1630, 1631, 1633, 1634, 1650, 1665, 1670, 1689, 1712, 1713, 1717, 1719, 1720, 1721, 1722, 1724, 1725, 1726, 1727, 1728, 1731, 1735, 1739, 1741, 1742, 1743, 1744, 1745, 1746, 1747, 1748, 1750, 1755, 1763, 1765, 1766, 1781, 1784, 1808, 1816, 1817, 1819, 1824, 1827, 1830, 1836, 1862, 1873, 1882, |

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| GREAT LAKES (continued) | 1894, 1903, 1907, 1908, 1909, 1919, 1925, 1930, 1931, 1933, 1940, 1949, 1951, 1952, 1956, 1961, 1962, 1963, 1969, 1983, 1984, 1995, 2002, 2006, 2052, 2070, 2084, 2089, 2090, 2091, 2092, 2100, 2106, 2125, 2126, 2127, 2128, 2129, 2131, 2169, 2183, 2184, 2197, 2209, 2217, 2244, 2255, 2256, 2257, 2264, 2265, 2266, 2271, 2273, 2327, 2335, 2356, 2360, 2370, 2374, 2377, 2381, 2388, 2389, 2390, 2391, 2394, 2398, 2401, 2402, 2411, 2412, 2421, 2436, 2441, 2447, 2470, 2488, 2489, 2490, 2491, 2493, 2495, 2499, 2505, 2506, 2507, 2510, 2513, 2516, 2520, 2521, 2526, 2527, 2530, 2531, 2533, 2545, 2552, 2559, 2565, 2567, 2568, 2570, 2596, 2601, 2602, 2603, 2604, 2636, 2637, 2641, 2646, 2671, 2674, 2681, 2682, 2701, 2702, 2751, 2753, 2757, 2758, 2760, 2786 |
| GREAT LAKES BASIN | 6, 7, 64, 102, 163, 376, 390, 454, 455, 483, 524, 577, 641, 695, 827, 833, 834, 912, 1131, 1159, 1169, 1170, 1175, 1177, 1178, 1194, 1500, 1667, 1723, 1729, 1730, 1732, 1736, 1738, 1740, 1774, 1897, 1898, 1899, 1928, 1935, 2016, 2163, 2222, 2380, 2459, 2460, 2525, 2551, 2654 |
| GREAT LAKES HARBORS (general) | 2528 |
| (SA: specific harbors) | |
| GREAT LAKES NAVAL TRAINING BASE, IL | 154, 428, 1074, 1080, 1081, 1082, 1792, 1793, 1794, 1965 |
| GREEN BAY | 52, 61, 79, 80, 98, 99, 101, 103, 115, 116, 117, 122, 135, 141, 190, 191, 198, 215, 218, 237, 244, 260, 273, 275, 282, 295, 307, 315, 316, 317, 320, 322, 323, 363, 368, 370, 379, 380, 384, 385, 407, 408, 418, 437, 451, 481, 509, 510, 517, 518, 525, 527, 531, 576, 617, 619, 620, 626, 647, 671, 705, 729, 735, 737, 740, 762, 766, 767, 771, 781, 788, 789, 807, 809, 857, 859, 868, 870, 871, 877, 888, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 933, 951, 953, 954, 968, 970, 979, 1009, 1019, 1025, 1026, 1027, 1043, 1086, 1121, 1128, 1223, 1226, 1227, 1231, 1259, 1288, 1290, |

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| GREEN BAY (continued) | 1330, 1335, 1346, 1359, 1394, 1395, 1397, 1399, 1403, 1408, 1409, 1410, 1418, 1424, 1425, 1426, 1428, 1429, 1430, 1438, 1444, 1451, 1464, 1478, 1479, 1484, 1489, 1490, 1491, 1505, 1527, 1545, 1550, 1551, 1555, 1557, 1558, 1559, 1560, 1562, 1563, 1568, 1574, 1579, 1594, 1644, 1647, 1668, 1680, 1681, 1688, 1716, 1769, 1787, 1798, 1813, 1837, 1845, 1850, 1859, 1861, 1877, 1878, 1896, 1914, 1942, 1966, 1967, 1968, 1987, 1988, 1989, 1990, 2008, 2024, 2027, 2041, 2044, 2045, 2046, 2053, 2054, 2055, 2060, 2061, 2062, 2063, 2069, 2104, 2116, 2117, 2132, 2149, 2150, 2152, 2164, 2176, 2182, 2198, 2202, 2216, 2238, 2258, 2287, 2288, 2308, 2310, 2311, 2312, 2330, 2357, 2361, 2368, 2378, 2379, 2381, 2386, 2429, 2430, 2442, 2443, 2469, 2474, 2492, 2522, 2526, 2536, 2537, 2538, 2558, 2569, 2626, 2639, 2648, 2661, 2679, 2683, 2717, 2718, 2719, 2720, 2721, 2723, 2724, 2725, 2738, 2766, 2767 |
| GULL ISLAND, MI | 888 |
| HAMILTON REEF, MI | 1292 |
| HAMMOND, IN | 2069 |
| HAT ISLAND, MI | 476, 477 |
| HERSEY CREEK, MI | 1606 |
| HIGH ISLAND SHOAL, MI | 476 |
| HIGHLAND PARK, IL | 155, 158, 1270 |
| HOG ISLAND, MI | 970 |
| HORSESHOE REEF, WI | 2312 |
| ILE AUX GALETS, MI | 476, 477 |
| ILLINOIS | 2, 17, 22, 27, 31, 46, |
| (SA: specific cities, rivers, or power plants) | 79, 80, 109, 127, 132, 136, 154, 155, 156, 157, 158, 159, |
| (SA: Northeastern Illinois) | 161, 162, 167, 180, 187, 193, |
| (SA: Northern Illinois) | 198, 199, 211, 235, 244, 260, 262, 301, 309, 313, 321, 325, 343, 352, 353, 354, 355, 356, 357, 378, 395, 396, 397, 398, 399, 400, 401, 403, 404, 405, 406, 419, 425, 428, 429, 430, 431, 432, 433, 434, 435, 436, 442, 447, 451, 452, 478, 479, 489, 490, 491, 492, 498, 505, |

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| ILLINOIS BEACH STATE PARK, IL | 158, 187, 431, 936, 1067, 1073, 1075, 1208, 1654, 1655, 1656, 1657, 1965, 2422, 2425, 2426, 2428, 2484, 2485, 2486, 2588, 2752 |
| ILLINOIS RIVER, IL | 127, 167, 313, 590, 790, 869, 1293, 1344, 1419, 1751, 2151, 2307, 2313, 2482, 2494, 2497, 2504 |
| ILLINOIS SHORELINE | 17, 46, 154, 156, 157, 158, (SA: Illinois) 159, 161, 162, 309, 357, 403, 405, 406, 425, 428, 430, 431, 432, 433, 435, 498, 546, 581, |

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| ILLINOIS SHORELINE (continued) | 582, 898, 902, 1064, 1067, 1070, 1071, 1072, 1073, 1074, 1075, 1079, 1208, 1371, 1372, 1373, 1390, 1654, 1655, 1657, 1796, 1875, 2042, 2173, 2364, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2484, 2485, 2486, 2487, 2496, 2512, 2592, 2752 |
| ILLINOIS WATERS | 198, 244, 378, 395, 400, 401, (SA: Illinois) 419, 434, 490, 492, 574, 575, (SA: Southern Lake Michigan) 950, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1052, 1065, 1066, 1068, 1084, 1085, 1324, 1325, 1353, 1378, 1513, 1539, 1540, 1587, 1691, 1692, 1694, 1695, 1696, 1697, 1792, 1793, 1794, 1795, 1823, 2082, 2097, 2151, 2234, 2439, 2477, 2482, 2498, 2583, 2584, 2586, 2587, 2642, 2643, 2762 |
| ILLINOIS WATERWAY (S: Illinois River) (S: Chicago River) | |
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| INDIANA DUNES NATIONAL LAKESHORE, IN ... | 64, 298, 420, 449, 506, 741, 755, 797, 800, 812, 910, 911, 976, 977, 1010, 1055, 1201, 1509, 1610, 1866, 1916, 1970, 1971, 2015, 2207, 2448, 2519, 2651, 2653, 2659, 2684, 2685, 2686, 2688, 2742, 2743, 2747 |
| INDIANA DUNES STATE PARK, IN | 425, 1011 |
| INDIANA HARBOR, IN | 261, 729, 924, 1027, 1089, 1394, 1395, 1583, 2173, 2329, 2535, 2738 |
| INDIANA SHOALS | 1432, 1442, 2699 |

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| INDIANA SHORELINE (SA: Indiana) | 298, 424, 425, 449, 506, 507, 582, 741, 755, 812, 902, 976, 977, 1010, 1055, 1092, 1093, 1201, 1297, 1509, 1610, 1641, 1866, 1916, 1970, 1971, 2015, 2448, 2509, 2519, 2684, 2685, 2686, 2688, 2742, 2743, 2744, 2747 |
| INDIANA WATERS | 149, 761, 800, 1089, 1090, 1400, (SA: Indiana) 1460, 1581, 2480 (SA: Southern Lake Michigan) |
| J.H. CAMPBELL GENERATING STATION, IL ... | 76, 443, 444, 928, 1242, 1244, 1245, 1246, 1247, 1248, 1251, 1523, 1524, 1545, 1874, 1947, 2051, 2143, 2201, 2676, 2705, 2706, 2707, 2708, 2709, 2782, 2783, 2785 |
| JACKSONPORT REEFS, WI | 2311 |
| JORDAN RIVER, MI | 702 |
| JULIAN'S REEF, IL | 434 |
| KALAMAZOO RIVER, MI | 537, 702, 729, 1520, 1568, 2120, 2469 |
| KELLOGG CREEK, IL | 404 |
| KENILWORTH, IL | 155, 244 |
| KENOSHA, WI | 505, 665, 742, 1390, 1910, 2069, 2359, 2670 |
| KENOSHA COUNTY, WI | 909, 2145 |
| KEWAUNEE, WI | 1239, 1768, 1910, 2661, 2768 |
| KEWAUNEE COUNTY, WI | 487, 493 |
| KEWAUNEE HARBOR, WI | 1199, 1917 |
| KEWAUNEE NUCLEAR POWER PLANT, WI | 2201, 2780, 2781 |
| LAKE BELLAIRE, MI | 763 |
| LAKE BLUFF, IL | 159, 161, 1965 |
| LAKE CHARLEVOIX, MI | 763 |
| LAKE COUNTY, IL | 155, 235, 405, 1080, 1081, 1082, 1372, 1373 |
| LAKE COUNTY, IN | 2148 |
| LAKE ERIE | 1, 6, 7, 8, 9, 14, 24, 25, 26, 34, 40, 47, 54, 69, 77, 78, 79, 80, 81, 82, 83, 84, 86, 87, 89, 91, 92, 93, 94, 95, 96, 97, 100, 101, 102, 110, 114, 116, 120, 121, 130, 134, 142, 145, 152, 166, 171, 175, 176, 184, 192, 193, 194, 203, 204, 205, 206, 207, 208, 209, |

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734, 737, 748, 749, 750, 752,
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1122, 1124, 1125, 1126, 1127, 1128,
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1171, 1172, 1173, 1174, 1176, 1179,
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1384, 1386, 1408, 1411, 1412, 1413,
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2246, 2247, 2248, 2249, 2251, 2267,
2268, 2269, 2270, 2272, 2275, 2276,
2277, 2278, 2279, 2280, 2282, 2283,
2284, 2286, 2287, 2289, 2308, 2309,
2326, 2329, 2330, 2331, 2333, 2345,
2346, 2347, 2348, 2351, 2353, 2354,
2361, 2367, 2371, 2372, 2373, 2375,
2376, 2382, 2383, 2392, 2400, 2429,
2430, 2435, 2437, 2438, 2440, 2442,
2443, 2444, 2452, 2471, 2473, 2496,
2501, 2514, 2515, 2517, 2518, 2523,
2539, 2540, 2541, 2542, 2544, 2545,
2547, 2548, 2550, 2554, 2555, 2557,
2560, 2561, 2563, 2564, 2580, 2595,
2600, 2607, 2608, 2609, 2611, 2621,
2624, 2625, 2630, 2640, 2644, 2648,
2654, 2655, 2667, 2680, 2692, 2693,
2694, 2714, 2730, 2738, 2741, 2754,
2755, 2756, 2759, 2765, 2773, 2774,
2777

LAKE LEELANAU, MI 763

LAKE MACATAWA, MI 44, 45

LAKE MICHIGAN (includes all entries
except ones which are on Great Lakes
in general; if known for that publica-
tion, a more specific area is given,
i.e., Northern Lake Michigan, or
Eastern Lake Michigan, or Green Bay,
etc.)

LAKE MICHIGAN BASIN 3, 302, 412, 863, 889, 898
(SA: Great Lakes Basin) 901, 903, 1094, 1568, 1710, 2147
2323, 2623

LAKE MICHIGAN HARBORS
(S: specific harbors)

LAKE MICHIGAN SHORELINE 593, 2136, 2203, 2403
(SA: specific state's shoreline)

LAKE MICHIGAN TRIBUTARIES

(S: tributaries)

(S: specific rivers)

| | | | | | | |
|--------------------|-------|-------|-------|-------|-------|-------|
| LAKE ONTARIO | 6, | 7, | 8, | 9, | 14, | 24, |
| | 25, | 26, | 34, | 54, | 69, | 77, |
| | 78, | 79, | 80, | 81, | 82, | 83, |
| | 84, | 86, | 87, | 89, | 91, | 92, |
| | 93, | 94, | 95, | 96, | 97, | 100, |
| | 101, | 102, | 110, | 114, | 116, | 120, |
| | 121, | 130, | 134, | 142, | 145, | 152, |
| | 166, | 171, | 175, | 176, | 184, | 192, |
| | 193, | 194, | 203, | 204, | 205, | 206, |
| | 207, | 208, | 209, | 219, | 221, | 234, |
| | 247, | 251, | 267, | 268, | 269, | 284, |
| | 285, | 289, | 290, | 297, | 305, | 323, |
| | 324, | 331, | 341, | 342, | 343, | 344, |
| | 359, | 361, | 362, | 363, | 365, | 375, |
| | 392, | 404, | 427, | 441, | 448, | 450, |
| | 453, | 456, | 470, | 471, | 480, | 482, |
| | 488, | 504, | 519, | 520, | 523, | 533, |
| | 535, | 536, | 539, | 547, | 561, | 571, |
| | 572, | 592, | 597, | 598, | 605, | 609, |
| | 612, | 615, | 627, | 633, | 636, | 638, |
| | 641, | 644, | 645, | 651, | 655, | 662, |
| | 664, | 670, | 671, | 672, | 673, | 674, |
| | 694, | 704, | 705, | 708, | 721, | 729, |
| | 734, | 737, | 752, | 758, | 760, | 764, |
| | 771, | 781, | 782, | 783, | 784, | 808, |
| | 810, | 811, | 814, | 816, | 820, | 821, |
| | 822, | 823, | 824, | 825, | 828, | 832, |
| | 837, | 838, | 840, | 845, | 848, | 849, |
| | 850, | 857, | 866, | 867, | 876, | 883, |
| | 888, | 894, | 930, | 931, | 932, | 940, |
| | 941, | 945, | 960, | 962, | 964, | 967, |
| | 982, | 983, | 984, | 985, | 1006, | 1008, |
| | 1012, | 1013, | 1018, | 1021, | 1022, | 1034, |
| | 1042, | 1047, | 1059, | 1062, | 1063, | 1077, |
| | 1096, | 1097, | 1098, | 1099, | 1100, | 1101, |
| | 1102, | 1103, | 1104, | 1105, | 1106, | 1107, |
| | 1108, | 1109, | 1110, | 1111, | 1112, | 1113, |
| | 1115, | 1116, | 1117, | 1118, | 1119, | 1120, |
| | 1121, | 1122, | 1124, | 1125, | 1126, | 1127, |
| | 1128, | 1130, | 1132, | 1133, | 1134, | 1137, |
| | 1138, | 1139, | 1140, | 1141, | 1142, | 1143, |
| | 1144, | 1145, | 1147, | 1148, | 1149, | 1151, |
| | 1152, | 1153, | 1154, | 1155, | 1158, | 1161, |
| | 1162, | 1163, | 1164, | 1165, | 1166, | 1167, |
| | 1168, | 1171, | 1172, | 1173, | 1174, | 1176, |
| | 1179, | 1180, | 1181, | 1185, | 1188, | 1189, |
| | 1190, | 1192, | 1196, | 1197, | 1198, | 1202, |
| | 1227, | 1233, | 1234, | 1273, | 1278, | 1285, |
| | 1298, | 1299, | 1301, | 1312, | 1313, | 1314, |
| | 1322, | 1323, | 1330, | 1334, | 1336, | 1348, |
| | 1363, | 1364, | 1366, | 1367, | 1384, | 1386, |

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| LAKE ONTARIO (continued) | 1411, 1412, 1413, 1414, 1415, 1427, 1428, 1438, 1446, 1448, 1458, 1461, 1463, 1464, 1482, 1487, 1488, 1508, 1510, 1515, 1517, 1531, 1542, 1546, 1554, 1565, 1571, 1572, 1575, 1592, 1593, 1609, 1611, 1632, 1640, 1652, 1653, 1666, 1674, 1676, 1677, 1678, 1682, 1683, 1687, 1703, 1706, 1718, 1733, 1734, 1737, 1749, 1754, 1765, 1767, 1774, 1783, 1789, 1790, 1799, 1807, 1809, 1814, 1818, 1858, 1863, 1883, 1889, 1890, 1892, 1905, 1906, 1908, 1912, 1914, 1915, 1922, 1926, 1927, 1929, 1934, 1936, 1937, 1938, 1939, 1944, 1945, 1948, 1953, 1960, 1972, 1975, 1982, 1985, 1986, 1991, 1992, 1994, 1996, 1997, 2003, 2004, 2005, 2023, 2039, 2047, 2048, 2049, 2056, 2057, 2096, 2099, 2101, 2112, 2116, 2117, 2123, 2124, 2132, 2133, 2141, 2142, 2149, 2150, 2158, 2166, 2167, 2168, 2171, 2177, 2178, 2179, 2180, 2182, 2189, 2191, 2201, 2204, 2205, 2206, 2237, 2239, 2243, 2245, 2246, 2247, 2248, 2267, 2268, 2269, 2270, 2272, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2282, 2283, 2286, 2287, 2289, 2308, 2309, 2329, 2330, 2331, 2333, 2345, 2346, 2347, 2351, 2353, 2354, 2361, 2367, 2371, 2382, 2383, 2392, 2400, 2429, 2431, 2432, 2435, 2437, 2438, 2440, 2442, 2443, 2444, 2452, 2464, 2471, 2473, 2496, 2515, 2517, 2518, 2523, 2539, 2540, 2541, 2542, 2544, 2545, 2547, 2548, 2550, 2554, 2560, 2561, 2563, 2564, 2580, 2595, 2600, 2607, 2611, 2614, 2621, 2624, 2625, 2640, 2644, 2648, 2654, 2655, 2692, 2693, 2694, 2714, 2730, 2738, 2741, 2754, 2756, 2759, 2765, 2773, 2777 |
| LAKE ST. CLAIR | 1, 80, 82, 84, 87, 91, 92, 116, 262, 323, 343, 344, 392, 426, 523, 535, 536, 538, 539, 737, 752, 808, 810, 811, 932, 985, 1013, 1022, 1101, 1158, 1161, 1185, 1197, 1217, 1265, 1330, 1335, 1376, 1428, 1487, 1493, 1534, 1554, 1575, 1578, 1594, 1611, 1733, 1789, 1863, 1914, 1924, 1932, 1934, 1937, 1939, 1950, 1997, 2132, 2133, 2149, 2150, 2168, 2171, 2245, 2246, 2284, 2287, 2309, 2330, 2443, 2444, |

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| LAKE ST. CLAIR (continued) | 2471, 2514, 2539, 2540, 2541, 2544, 2739, 2740 |
| LAKE SUPERIOR | 1, 4, 8, 9, 24, 25, 26, 34, 54, 57, 69, 77, 78, 79, 80, 81, 82, 83, 84, 86, 87, 89, 91, 92, 93, 94, 95, 96, 97, 100, 101, 102, 110, 114, 116, 120, 121, 130, 134, 139, 142, 145, 152, 166, 170, 171, 175, 176, 184, 186, 192, 193, 194, 203, 204, 205, 206, 207, 208, 209, 214, 219, 221, 234, 251, 253, 254, 262, 267, 268, 269, 274, 276, 284, 285, 288, 289, 290, 297, 305, 323, 324, 331, 341, 342, 343, 344, 359, 362, 363, 365, 375, 392, 404, 410, 411, 412, 418, 426, 427, 441, 450, 451, 453, 456, 470, 471, 472, 474, 480, 482, 485, 486, 487, 488, 504, 512, 516, 517, 518, 521, 522, 523, 527, 533, 535, 536, 539, 547, 561, 571, 572, 592, 597, 598, 605, 609, 612, 615, 618, 624, 627, 633, 636, 638, 641, 644, 645, 649, 651, 655, 658, 664, 670, 671, 672, 673, 674, 694, 703, 704, 705, 708, 721, 725, 729, 733, 734, 737, 746, 748, 749, 750, 752, 758, 760, 764, 771, 781, 782, 783, 784, 794, 808, 810, 811, 814, 816, 820, 821, 822, 823, 824, 825, 828, 829, 832, 837, 838, 840, 845, 848, 849, 850, 857, 866, 867, 876, 880, 881, 888, 894, 904, 908, 913, 927, 930, 931, 932, 940, 941, 945, 950, 962, 964, 967, 982, 983, 984, 985, 1008, 1012, 1013, 1018, 1021, 1024, 1028, 1029, 1030, 1034, 1035, 1036, 1039, 1042, 1050, 1051, 1054, 1059, 1061, 1062, 1063, 1077, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1115, 1116, 1117, 1118, 1119, 1120, 1121, 1122, 1124, 1125, 1126, 1127, 1128, 1130, 1132, 1133, 1134, 1137, 1138, 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1147, 1148, 1149, 1151, 1152, 1153, 1154, 1155, 1158, 1161, 1162, 1163, 1164, 1165, 1166, 1167, |

LAKE SUPERIOR (continued) 1168, 1171, 1172, 1173, 1174, 1176,
1179, 1180, 1181, 1184, 1185, 1188,
1189, 1190, 1192, 1196, 1197, 1198,
1202, 1204, 1217, 1227, 1233, 1234,
1273, 1278, 1285, 1298, 1299, 1301,
1307, 1309; 1312, 1313, 1314, 1317,
1322, 1323, 1329, 1330, 1332, 1336,
1339, 1348, 1354, 1357, 1363, 1364,
1366, 1367, 1376, 1384, 1386, 1396,
1405, 1413, 1415, 1427, 1428, 1438,
1446, 1447, 1448, 1458, 1459, 1461,
1463, 1464, 1469, 1476, 1482, 1487,
1506, 1508, 1510, 1515, 1517, 1531,
1533, 1534, 1541, 1542, 1554, 1565,
1571, 1572, 1575, 1592, 1593, 1594,
1603, 1607, 1609, 1611, 1620, 1621,
1622, 1623, 1632, 1635, 1638, 1640,
1666, 1674, 1687, 1703, 1706, 1718,
1733, 1734, 1737, 1749, 1754, 1767,
1770, 1774, 1783, 1789, 1799, 1806,
1807, 1809, 1818, 1820, 1853, 1854,
1855, 1856, 1858, 1863, 1867, 1868,
1869, 1870, 1883, 1889, 1890, 1892,
1905, 1906, 1912, 1914, 1915, 1917,
1918, 1922, 1926, 1927, 1929, 1934,
1936, 1937, 1938, 1939, 1944, 1945,
1946, 1950, 1953, 1960, 1966, 1973,
1975, 1982, 1985, 1986, 1991, 1992,
1994, 1996, 1997, 2003, 2004, 2005,
2010, 2023, 2039, 2047, 2048, 2049,
2056, 2057, 2096, 2099, 2101, 2108,
2112, 2114, 2115, 2122, 2123, 2124,
2132, 2133, 2141, 2142, 2145, 2146,
2149, 2150, 2158, 2166, 2167, 2168,
2171, 2177, 2178, 2179, 2180, 2181,
2189, 2191, 2204, 2205, 2210, 2211,
2213, 2237, 2239, 2243, 2245, 2246,
2247, 2248, 2249, 2251, 2263, 2267,
2268, 2269, 2270, 2272, 2275, 2276,
2277, 2278, 2279, 2280, 2282, 2283,
2284, 2286, 2287, 2304, 2308, 2309,
2310, 2312, 2316, 2318, 2319, 2320,
2321, 2329, 2330, 2331, 2333, 2338,
2339, 2345, 2346, 2347, 2348, 2351,
2353, 2354, 2361, 2367, 2371, 2372,
2373, 2375, 2376, 2382, 2383, 2392,
2397, 2400, 2403, 2429, 2430, 2431,
2432, 2435, 2437, 2438, 2440, 2442,
2443, 2444, 2452, 2455, 2471, 2472,
2473, 2475, 2476, 2496, 2500, 2501,
2514, 2515, 2517, 2518, 2523, 2539,
2540, 2541, 2542, 2544, 2545, 2547,
2548, 2549, 2550, 2554, 2555, 2557,
2560, 2561, 2562, 2563, 2564, 2580,
2595, 2600, 2607, 2608, 2611, 2621,

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| LAKE SUPERIOR (continued) | 2624, 2625, 2630, 2640, 2644, 2648, 2654, 2655, 2667, 2692, 2693, 2694, 2714, 2715, 2716, 2722, 2726, 2730, 2739, 2740, 2741, 2754, 2755, 2756, 2759, 2765, 2773, 2774, 2777 |
| LAKE WINNEBAGO, WI | 1335, 1405, 1550 |
| (Note: only includes those also mentioning Green Bay) | |
| LAKESIDE GENERATING STATION, MI | 2201 |
| LAPORTE COUNTY, IN | 507 |
| LARSEN'S REEF, WI | 2312 |
| LEELANAU PENINSULA, MI | 2102 |
| LITTLE BAY DE NOC | 1863, 2053 |
| LITTLE CALUMET RIVER, IN | 1509 |
| LITTLE MANISTEE RIVER, MI | 171, 779, 780, 793, 1653, 1800, 2017, 2188 |
| LITTLE PIGEON CREEK, MI | 1543 |
| LITTLE SABLE POINT, MI | 349 |
| LITTLE TAIL POINT, WI | 2045 |
| LITTLE TRAVERSE BAY | 717, 718, 1518, 1825, 1826, 1957, 2053, 2240, 2241 |
| LUDINGTON, MI | 182, 256, 259, 1041, 1284, 2325 |
| LUDINGTON PUMPED STORAGE RESERVOIR, MI | 50, 75, 200, 201, 257, 258, 583, 584, 585, 586, 587, 588, 1328, 1406, 1452, 1465, 1466, 1467, 1468 |
| MANISTEE RIVER, MI | 702, 1520, 1568, 2120, 2469 |
| MANISTIQUE RIVER, MI | 729, 966, 2120, 2150, 2469 |
| MANITOU PASSAGE | 349, 1284 |
| MANITOWOC, WI | 1768, 1910, 2672 |
| MANITOWOC COUNTY, WI | 487, 493, 881, 909 |
| MANITOWOC RIVER, WI | 122, 696, 1666, 2120 |
| MARINETTE-MENOMINEE HARBOR, WI-MI | 260, 1027, 1394, 1395 |
| MARQUETTE, MI | 174, 781, 1413, 2321 |
| MARQUETTE HATCHERY, MI | 174, 1001, 1504, 1506, 1853, 2315, 2317 |
| MENOMINEE RIVER, WI-MI | 122, 215, 517, 518, 729, 787, 1520, 2046, 2149, 2449, 2469, 2522, 2679 |
| MENOMONEE RIVER, WI | 49, 55, 58, 68, 69, 123, 124, 125, 126, 376, 377, 555, |

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| MENOMONEE RIVER, WI (continued) | 1333, 1803, 1804, 1805, 2271, 2276, 2622, 2668 |
| MEQUON, WI | 296, 374, 2040, 2787 |
| MICHIGAN | 1, 10, 12, 15, 44, 45, |
| (SA: specific cities, rivers, or power plants) | 50, 64, 75, 76, 79, 80, 104, 105, 106, 107, 108, 111, 112, 113, 118, 119, 129, 133, 137, 140, 149, 150, 165, 173, 174, 181, 182, 193, 200, 201, 230, 231, 240, 242, 246, 250, 252, 255, 256, 257, 258, 259, 260, 261, 262, 291, 292, 306, 307, 334, 335, 336, 337, 343, 346, 347, 349, 350, 351, 391, 393, 404, 415, 426, 443, 444, 446, 451, 466, 467, 474, 508, 521, 537, 550, 557, 559, 560, 562, 563, 564, 583, 584, 585, 586, 587, 588, 600, 602, 603, 604, 608, 610, 613, 614, 622, 623, 624, 639, 663, 665, 668, 669, 675, 676, 678, 679, 680, 682, 683, 686, 687, 688, 689, 690, 691, 692, 693, 698, 702, 705, 706, 707, 712, 713, 714, 724, 727, 729, 739, 740, 748, 750, 763, 770, 772, 773, 774, 777, 778, 779, 780, 781, 793, 815, 818, 820, 821, 823, 824, 892, 895, 897, 906, 926, 927, 928, 929, 943, 947, 966, 1001, 1002, 1015, 1020, 1027, 1028, 1029, 1030, 1041, 1050, 1051, 1054, 1059, 1060, 1061, 1086, 1088, 1168, 1215, 1217, 1228, 1238, 1240, 1241, 1242, 1243, 1244, 1245, 1246, 1247, 1248, 1250, 1251, 1254, 1255, 1277, 1279, 1284, 1291, 1292, 1305, 1307, 1309, 1328, 1329, 1337, 1339, 1341, 1350, 1351, 1352, 1368, 1370, 1381, 1383, 1389, 1394, 1395, 1404, 1406, 1413, 1430, 1439, 1447, 1452, 1459, 1461, 1465, 1466, 1467, 1468, 1501, 1502, 1503, 1504, 1506, 1507, 1514, 1520, 1523, 1524, 1525, 1543, 1545, 1568, 1585, 1588, 1589, 1594, 1596, 1600, 1601, 1606, 1611, 1612, 1617, 1618, 1620, 1628, 1653, 1659, 1660, 1666, 1673, 1676, 1677, 1678, 1710, 1711, 1752, 1753, 1756, 1757, 1758, 1759, 1761, 1762, 1791, 1800, 1806, 1820, 1821, 1829, 1840, 1842, 1849, 1853, 1855, 1857, 1858, 1859, 1860, 1874, 1889, 1901, 1920, 1921, 1940, 1947, |

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| MICHIGAN (continued) | 1972, 1973, 1976, 1979, 1999, 2007, 2017, 2026, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2051, 2053, 2054, 2055, 2058, 2059, 2094, 2102, 2115, 2118, 2120, 2124, 2134, 2142, 2143, 2149, 2150, 2153, 2155, 2170, 2172, 2188, 2192, 2193, 2196, 2201, 2219, 2223, 2259, 2271, 2285, 2295, 2309, 2315, 2317, 2319, 2321, 2325, 2334, 2361, 2372, 2386, 2407, 2409, 2410, 2414, 2418, 2419, 2420, 2421, 2430, 2449, 2450, 2451, 2457, 2458, 2461, 2464, 2467, 2469, 2472, 2496, 2511, 2519, 2534, 2553, 2571, 2597, 2598, 2599, 2609, 2617, 2628, 2629, 2638, 2648, 2662, 2664, 2675, 2676, 2677, 2678, 2679, 2687, 2703, 2704, 2705, 2706, 2707, 2708, 2709, 2710, 2711, 2712, 2738, 2739, 2761, 2769, 2778, 2779, 2782, 2783, 2785 |
| MICHIGAN CITY, IN | 663, 1089, 1401, 1671, 2664, 2743, 2744 |
| MICHIGAN CITY GENERATING STATION, IN ... | 687, 1671, 2201 |
| MICHIGAN SHORELINE | 73, 118, 119, 181, 182, 242, 250, 252, 255, 291, 292, 293, 593, 895, 927, 1015, 1215, 1217, 1228, 1279, 1309, 1389, 1628, 2136, 2155, 2203, 2219, 2369, 2403, 2496, 2511, 2519, 2609 |
| MICHIGAN WATERS | 149, 415, 426, 559, 560, 562, (SA: Michigan) 563, 583, 584, 585, 587, 588, (SA: specific sections of Lake Michigan) 608, 610, 624, 679, 744, 815, 1028, 1029, 1030, 1054, 1061, 1086, 1291, 1329, 1339, 1447, 1596, 1806, 1859, 1901, 2054, 2055, 2143, 2193, 2285, 2325, 2334, 2372, 2373 |
| MILLER DUNES, IN | 2659 |
| MILWAUKEE, WI | 16, 18, 22, 49, 55, 58, 68, 79, 80, 123, 125, 126, 177, 265, 266, 277, 278, 279, 281, 376, 377, 402, 451, 505, 542, 555, 556, 566, 613, 663, 729, 730, 731, 740, 781, 787, 858, 872, 875, 1209, 1212, 1266, 1317, 1333, 1342, 1345, 1347, 1349, 1450, 1480, 1485, 1538, 1552, 1553, 1566, 1595, 1638, 1642, 1645, 1648, 1649, 1658, 1672, 1684, 1686, 1797, 1803, 1804, 1834, 1910, 1993, 2069, 2144, 2147, 2162, 2185, 2186, 2225, 2237, 2252, 2387, 2455, 2575, 2622, |

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| MILWAUKEE, WI (continued) | 2631, 2633, 2634, 2661, 2664, 2738, 2772, 2776 |
| MILWAUKEE COUNTY, WI | 909, 1318, 1393 |
| MILWAUKEE HARBOR, WI | 37, 198, 216, 227, 229, 386, 878, 1016, 1017, 1210, 1455, 1481, 1645, 1886, 2098, 2215, 2306, 2328, 2329, 2478, 2522, 2632, 2768 |
| MILWAUKEE RIVER, WI | 122, 787, 1340, 1568, 1645, 2120 |
| MINK RIVER, WI | 1289, 2322 |
| MINNESOTA | 193, 262, 343, 705, 729, 781, 820, 821, 823, 824, 1168, 1461, 1889, 2421 |
| MISSISSIPPI RIVER | 41, 728, 974, 975, 2100 |
| MISSOURI | 355, 356, 1978, 1979 |
| MOONLIGHT BAY | 617, 620, 877, 1058, 1086, 1964, 2384 |
| MUSKEGON, MI | 79, 80, 168, 182, 240, 639, 706, 707, 781, 1279, 1291, 1292, 1972, 2153, 2170, 2172, 2295, 2571 |
| MUSKEGON HARBOR, MI | 560 |
| MUSKEGON LAKE, MI | 729 |
| MUSKEGON RIVER, MI | 537, 702, 727, 729, 1520, 1568, 2120, 2149, 2150, 2469 |
| NEW BUFFALO, MI | 2664 |
| NEW BUFFALO HARBOR, MI | 1027, 1394, 1395 |
| NEW MISSION BAY | 1831 |
| NEW YORK | 193, 343, 404, 454, 455, 480, 705, 729, 781, 808, 810, 811, 820, 821, 823, 824, 978, 1077, 1168, 1223, 1422, 1461, 1676, 1677, 1678, 1889, 2214, 2309 |
| NIAGARA RIVER, NY | 192, 193, 343, 344, 808, 810, 811, 985, 1013, 1138, 1158, 1185, 1188, 1863, 1924, 1925, 1932, 2361 |
| NORTH BAY | 617, 620, 877, 1058, 1086, 1964, 2384 |
| NORTH CHICAGO, IL | 161, 1080, 1081, 1082 |
| NORTHEASTERN ILLINOIS | 156, 700, 2130, 2242, 2591, 2700 |
| NORTHEASTERN LAKE MICHIGAN | 2102, 2103, 2673 |
| NORTHERN ILLINOIS | 2553, 2592 |
| NORTHERN LAKE MICHIGAN | 52, 61, 98, 99, 103, 115, 141, 146, 148, 190, 191, 202, 215, 218, 237, 273, 275, 295, |

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| NORTHERN LAKE MICHIGAN (continued) | 322, 349, 370, 380, 384, 385, 415, 437, 487, 493, 509, 510, 617, 618, 744, 745, 766, 767, 859, 868, 871, 877, 914, 915, 916, 917, 918, 921, 923, 933, 951, 953, 954, 969, 979, 981, 1025, 1058, 1059, 1086, 1087, 1205, 1206, 1219, 1221, 1226, 1231, 1288, 1289, 1290, 1303, 1304, 1305, 1306, 1346, 1359, 1409, 1418, 1424, 1425, 1426, 1444, 1451, 1483, 1484, 1489, 1490, 1491, 1493, 1496, 1505, 1518, 1527, 1551, 1555, 1562, 1563, 1579, 1608, 1644, 1680, 1681, 1716, 1769, 1798, 1813, 1831, 1845, 1850, 1859, 1861, 1896, 1923, 1942, 1957, 1987, 1990, 2022, 2024, 2041, 2044, 2060, 2061, 2063, 2086, 2087, 2121, 2176, 2182, 2202, 2216, 2224, 2240, 2258, 2259, 2285, 2322, 2326, 2350, 2357, 2378, 2384, 2474, 2475, 2476, 2538, 2558, 2569, 2639, 2683, 2717, 2718, 2719, 2720, 2723, 2725, 2767 |
| NORTHWESTERN INDIANA | 356 |
| NORTHWESTERN LAKE MICHIGAN | 967 |
| OAK CREEK GENERATING STATION, WI | 2201 |
| OCONTO RIVER, WI | 1568, 2046, 2679 |
| OHIO | 193, 262, 343, 668, 705, 729, 781, 820, 821, 823, 824, 1168, 1461, 1858, 2309 |
| ONION RIVER, WI | 122 |
| OTTAWA COUNTY, MI | 1240 |
| OTTER CREEK, MI | 2115 |
| OZAUKEE COUNTY, WI | 4, 909 |
| PALISADES NUCLEAR POWER PLANT, MI | 76, 111, 112, 113, 687, 1545, 2007, 2058, 2059, 2201, 2628, 2629 |
| PENNSYLVANIA | 193, 343, 404, 705, 729, 820, 821, 823, 824, 1168, 1412, 1413, 1461, 1678, 2430 |
| PENTWATER, MI | 1277 |
| PENTWATER HARBOR, MI | 892 |
| PENTWATER MARSH, MI | 306, 307, 391, 393, 1277 |
| PERE MARQUETTE RIVER, MI | 137, 335, 1568, 1800, 2120 |
| PESHTIGO HARBOR WILDLIFE AREA, WI | 915 |
| PESHTIGO REEF, WI | 877 |

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| PESHTIGO RIVER, WI | 1520, 1568, 1668, 2046, 2469, 2661, 2679 |
| PETERS MARSH, WI | 915, 2045, 2062 |
| PIGEON LAKE, MI | 1242, 1245, 1248, 2785 |
| PIGEON RIVER, MI | 122, 1242 |
| PILOT ISLAND, WI | 969, 970 |
| PINE CREEK, MI | 334, 336, 337, 404, 1606 |
| PLATTE RIVER, MI | 171, 404, 779, 1412, 1800, 2017, 2435 |
| PLATTE RIVER HATCHERY, MI | 1413, 1676, 1677, 1678 |
| PLUM ISLAND, WI | 970 |
| POINT BEACH, WI | 2019 |
| POINT BEACH NUCLEAR POWER PLANT, WI | 540, 854, 1007, 2021, 2201, 2290, 2294, 2296, 2297, 2298, 2302, 2727, 2728 |
| POINT BEACH STATE FOREST, WI | 1675 |
| PORT SHELDON, MI | 563 |
| PORT WASHINGTON, WI | 217, 622, 730, 731, 2325, 2768 |
| PORT WASHINGTON GENERATING STATION, WI | 2201 |
| PORTAGE BAY | 2041 |
| PORTER COUNTY, IN | 424, 449, 1011 |
| PULLIAM GENERATING STATION, WI | 1716, 2201 |
| RACINE, WI | 505, 2359 |
| RACINE COUNTY, WI | 39, 909, 1274, 1275, 1276, 1941, 2146 |
| RACINE HARBOR, WI | 39 |
| RAWLEY POINT, WI | 1768 |
| ROOT RIVER, WI | 2083 |
| ROWLEY BAY | 2384 |
| SAUGATUCK, MI | 165, 521, 522, 564, 622, 623, 639, 665, 724, 1002, 1284, 1501, 1502, 1503, 1504, 1507, 1588, 1589, 1786, 1853, 1854, 1855, 1857, 1973, 2037, 2053, 2134, 2142, 2295, 2309, 2325, 2662, 2664 |
| SAULT STE. MARIE, MI | 781 |
| SEOUL CHOIX POINT, MI | 1086, 2115 |
| SHEBOYGAN, WI | 418, 729, 1486, 1973, 2019, 2142, 2301, 2393 |
| SHEBOYGAN COUNTY, WI | 880, 909, 2668 |

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| SHEBOYGAN HARBOR, WI | 1917 |
| SHEBOYGAN RIVER, WI | 122, 261, 404, 517, 518, 531, 696, 971, 1319, 1568, 2212, 2250 |
| SHOE ISLAND, MI | 476, 477 |
| SLEEPING BEAR BAY | 1284 |
| SLEEPING BEAR DUNES NATIONAL LAKESHORE, MI | 64, 897, 2259, 2519 |
| SLEEPING BEAR POINT, MI | 349, 415 |
| SOUTH FOX ISLAND, MI | 1302 |
| SOUTH HAVEN, MI | 740, 2472, 2664, 2738 |
| SOUTH MANITOU ISLAND (SA: Manitou Island) | 1376, 2285 |
| SOUTHEASTERN LAKE MICHIGAN | 109, 230, 244, 347, 460, 537, 564, 599, 602, 603, 608, 622, 623, 677, 680, 681, 682, 684, 685, 688, 690, 724, 727, 777, 778, 815, 818, 860, 861, 929, 943, 1004, 1037, 1243, 1246, 1325, 1457, 1502, 1506, 1526, 1544, 1599, 1612, 1659, 1660, 1688, 1752, 1757, 1761, 1829, 1874, 1920, 1954, 2025, 2026, 2028, 2029, 2031, 2032, 2033, 2034, 2035, 2095, 2192, 2334, 2418, 2419, 2420, 2617, 2676, 2677, 2678, 2687, 2712, 2731, 2748, 2783 |
| SOUTHEASTERN WISCONSIN | 372, 1499, 1639, 1959, 2203, 2700 |
| SOUTHERN LAKE MICHIGAN | 2, 11, 20, 22, 27, 31, 33, 35, 37, 46, 49, 55, 58, 59, 65, 68, 71, 104, 105, 106, 107, 108, 123, 124, 125, 126, 127, 129, 132, 136, 147, 149, 154, 156, 157, 158, 159, 161, 162, 163, 167, 173, 177, 187, 213, 227, 229, 235, 245, 246, 248, 265, 266, 277, 281, 298, 309, 313, 320, 321, 325, 339, 340, 345, 350, 351, 352, 353, 354, 355, 356, 357, 371, 376, 377, 378, 386, 395, 396, 397, 398, 399, 400, 401, 402, 403, 406, 417, 424, 425, 428, 429, 430, 431, 432, 433, 434, 435, 436, 442, 447, 449, 452, 478, 479, 489, 490, 491, 492, 496, 498, 506, 545, 546, 551, 552, 553, 555, 556, 557, 559, 562, 566, 574, 575, 581, 582, 589, 590, 644, 656, 657, 663, 675, 676, 678, 683, 686, |

SOUTHERN LAKE MICHIGAN (continued) 689, 691, 692, 693, 700, 709,
719, 720, 723, 736, 741, 742,
755, 761, 769, 773, 776, 790,
800, 802, 804, 812, 869, 872,
878, 885, 899, 900, 901, 902,
903, 910, 911, 924, 925, 936,
948, 950, 965, 972, 973, 976,
977, 987, 988, 989, 990, 991,
992, 993, 994, 995, 996, 997,
998, 999, 1010, 1011, 1015, 1016,
1017, 1031, 1047, 1052, 1053, 1055,
1064, 1065, 1067, 1068, 1069, 1070,
1071, 1072, 1073, 1074, 1075, 1076,
1078, 1079, 1080, 1081, 1082, 1083,
1085, 1088, 1089, 1090, 1091, 1092,
1093, 1201, 1208, 1210, 1212, 1225,
1228, 1241, 1250, 1266, 1268, 1269,
1271, 1272, 1286, 1293, 1294, 1297,
1300, 1310, 1318, 1326, 1333, 1340,
1342, 1344, 1345, 1347, 1349, 1350,
1353, 1368, 1371, 1372, 1373, 1375,
1378, 1400, 1401, 1410, 1439, 1509,
1513, 1535, 1536, 1537, 1538, 1539,
1540, 1548, 1549, 1552, 1553, 1556,
1561, 1564, 1566, 1581, 1587, 1590,
1598, 1600, 1601, 1602, 1610, 1641,
1642, 1643, 1645, 1648, 1654, 1655,
1656, 1657, 1658, 1669, 1671, 1684,
1686, 1691, 1692, 1693, 1694, 1695,
1698, 1699, 1700, 1701, 1702, 1704,
1751, 1753, 1756, 1758, 1760, 1762,
1773, 1779, 1791, 1792, 1793, 1794,
1795, 1796, 1797, 1801, 1805, 1810,
1821, 1823, 1834, 1839, 1840, 1842,
1844, 1846, 1847, 1848, 1849, 1865,
1866, 1875, 1886, 1900, 1901, 1911,
1916, 1921, 1970, 1971, 1993, 1998,
1999, 2008, 2015, 2018, 2036, 2040,
2042, 2071, 2072, 2074, 2075, 2076,
2088, 2097, 2130, 2144, 2151, 2162,
2185, 2190, 2193, 2199, 2207, 2214,
2228, 2231, 2232, 2233, 2234, 2235,
2260, 2306, 2313, 2328, 2358, 2404,
2413, 2422, 2424, 2425, 2426, 2427,
2428, 2439, 2448, 2454, 2455, 2462,
2463, 2466, 2467, 2477, 2478, 2479,
2481, 2482, 2483, 2484, 2485, 2486,
2487, 2494, 2497, 2498, 2504, 2508,
2509, 2512, 2524, 2535, 2575, 2583,
2584, 2585, 2586, 2587, 2588, 2590,
2591, 2592, 2612, 2613, 2614, 2622,
2631, 2632, 2633, 2642, 2643, 2649,
2650, 2651, 2653, 2664, 2675, 2683,
2684, 2685, 2686, 2688, 2696, 2699,
2700, 2703, 2704, 2710, 2711, 2742,

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| SOUTHERN LAKE MICHIGAN (continued) | 2743, 2744, 2745, 2746, 2747, 2749, 2750, 2752, 2761, 2762, 2766, 2769, 2772, 2776, 2778, 2779 |
| SOUTHWESTERN LAKE MICHIGAN | 36, 38, 42, 700, 1213, 1324, 1390, 1522, 1663, 1664, 1775, 1833, 1981, 2077, 2078, 2079, 2080, 2081, 2082, 2098, 2155, 2174, 2638, 2657, 2770 |
| SPIDER ISLAND, WI | 969, 970 |
| SPRING LAKE, MI | 45 |
| ST. CLAIR RIVER | 192, 193, 343, 344, 451, 538, 808, 810, 811, 985, 1013, 1138, 1158, 1185, 1188, 1264, 1733, 1924, 1925, 1932, 1950, 2548 |
| ST. JOSEPH, MI | 182, 815, 1611, 2334 |
| ST. JOSEPH RIVER, MI | 404, 537, 702, 1520, 1568, 1617, 1618, 1666, 1829, 2017, 2028, 2120, 2467, 2469 |
| ST. LAWRENCE RIVER | 130, 192, 193, 343, 344, 808, 810, 811, 964, 985, 1013, 1042, 1138, 1158, 1161, 1188, 1463, 1749, 1790, 1873, 2125, 2276, 2489, 2490, 2495, 2520, 2559, 2640 |
| ST. LAWRENCE RIVER BASIN | 1463 |
| ST. MARY'S RIVER | 146, 192, 193, 343, 344, 451, 808, 810, 811, 966, 985, 1013, 1138, 1158, 1185, 1733, 1924, 1925, 1950, 2539, 2540, 2541, 2544, 2548 |
| STATE LINE GENERATING STATION, IL | 2201 |
| STEVENSVILLE, MI | 1341 |
| STRAITS OF MACKINAC | 146, 209, 513, 514, 981, 1464, 1493, 1494, 1495, 1496, 1578, 1923, 2086, 2087, 2121, 2350, 2736 |
| STRAWBERRY CREEK, WI | 1891 |
| STURGEON BAY, WI | 1025, 1453, 1489, 1490, 1496, 1711, 2120, 2149, 2661 |
| SUTTONS POINT, MI | 1305 |
| TERRY ANDRAE STATE PARK, WI | 2366 |
| TORCH LAKE, MI | 763 |
| TRAIL CREEK, IN | 404, 1089, 1671 |
| TRAVERSE CITY, MI | 79, 80, 740, 781, 2124, 2599 |
| TRIBUTARIES (general) | 40, 139, 143, 178, 215, 306, (SA: specific rivers) 331, 488, 501, 513, 514, 515, |

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| TRIBUTARIES (continued) | 517, 518, 527, 550, 701, 771, 779, 787, 796, 848, 849, 850, 904, 911, 934, 935, 986, 1046, 1160, 1161, 1176, 1189, 1227, 1237, 1323, 1364, 1410, 1460, 1489, 1491, 1519, 1567, 1605, 1611, 1624, 1673, 1674, 1733, 1765, 1828, 1829, 1838, 1871, 1918, 1960, 2028, 2105, 2107, 2158, 2183, 2210, 2213, 2251, 2275, 2278, 2304, 2326, 2382, 2383, 2397, 2468, 2473, 2545, 2554, 2580, 2595, 2608, 2625, 2637 |
| TROUT ISLAND, MI | 1376 |
| TWIN RIVER, WI | 122, 696 |
| TWO RIVERS, WI | 505, 730, 731, 2768 |
| VAN BUREN COUNTY, MI | 473 |
| WALLOON LAKE, MI | 763 |
| WAUGOSHANCE POINT, MI | 1404, 1496 |
| WAUKEGAN, IL | 31, 109, 161, 428, 505, 545, 546, 720, 740, 742, 1080, 1081, 1082, 1390, 1711, 2295, 2386, 2585, 2657, 2664 |
| WAUKEGAN GENERATING STATION, IL | 395, 2201, 2290 |
| WAUKEGAN HARBOR, IL | 154, 260, 403, 729, 736, 870, 978, 993, 994, 995, 998, 1073, 1075, 1548, 1549, 1598, 1792, 1793, 1794, 2132, 2330, 2422, 2426, 2428, 2439, 2443, 2484, 2486, 2524, 2649, 2650 |
| WESTERN LAKE MICHIGAN | 17, 32, 373, 730, 731, 935, 1410, 1595, 1765, 1768, 1888, 1941, 2064, 2136, 2157, 2300, 2366, 2656 |
| WHISKEY ISLAND, MI | 1376 |
| WHITE LAKE, MI | 45, 729 |
| WHITEFISH BAY, WI | 480, 2774 |
| WHITEFISH POINT REEF, WI | 2310 |
| WHITEFISH RIVER, MI | 2469 |
| WILD ROSE STATE FISH HATCHERY, WI | 481 |
| WILMETTE HARBOR, IL | 1073 |
| WILMETTE REEF, IL | 434 |
| WIND POINT, WI | 2445 |
| WINNETKA, IL | 155, 244, 1075 |
| WINTHROP HARBOR, IL | 742, 1371, 1965 |

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| WISCONSIN | 4, | 5, | 16, | 17, | 18, | 22, |
| (SA: specific cities, rivers, or power plants) | 37, | 39, | 49, | 52, | 55, | 58, |
| | 68, | 69, | 70, | 79, | 80, | 103, |
| | 115, | 117, | 122, | 123, | 124, | 125, |
| | 126, | 135, | 139, | 141, | 149, | 177, |
| | 189, | 191, | 193, | 195, | 196, | 197, |
| | 198, | 199, | 215, | 216, | 217, | 218, |
| | 227, | 229, | 237, | 242, | 260, | 261, |
| | 262, | 265, | 266, | 273, | 275, | 277, |
| | 278, | 279, | 281, | 292, | 293, | 295, |
| | 296, | 311, | 315, | 322, | 343, | 370, |
| | 371, | 372, | 373, | 374, | 376, | 377, |
| | 386, | 388, | 402, | 404, | 418, | 446, |
| | 451, | 468, | 481, | 487, | 493, | 505, |
| | 509, | 510, | 512, | 517, | 518, | 521, |
| | 522, | 528, | 529, | 531, | 540, | 542, |
| | 555, | 556, | 566, | 613, | 615, | 622, |
| | 634, | 635, | 663, | 665, | 666, | 669, |
| | 696, | 700, | 703, | 705, | 715, | 722, |
| | 729, | 730, | 731, | 735, | 740, | 742, |
| | 744, | 767, | 781, | 787, | 807, | 820, |
| | 821, | 823, | 824, | 854, | 858, | 868, |
| | 870, | 871, | 872, | 875, | 878, | 880, |
| | 881, | 898, | 904, | 905, | 908, | 909, |
| | 915, | 918, | 921, | 923, | 933, | 935, |
| | 954, | 971, | 980, | 1007, | 1016, | 1017, |
| | 1025, | 1026, | 1027, | 1033, | 1035, | 1036, |
| | 1058, | 1086, | 1168, | 1199, | 1209, | 1210, |
| | 1212, | 1229, | 1231, | 1239, | 1255, | 1263, |
| | 1266, | 1274, | 1275, | 1276, | 1289, | 1317, |
| | 1318, | 1319, | 1327, | 1333, | 1340, | 1342, |
| | 1345, | 1347, | 1349, | 1354, | 1355, | 1356, |
| | 1359, | 1365, | 1389, | 1390, | 1392, | 1393, |
| | 1394, | 1395, | 1396, | 1418, | 1424, | 1425, |
| | 1426, | 1430, | 1444, | 1450, | 1451, | 1453, |
| | 1455, | 1461, | 1478, | 1480, | 1481, | 1484, |
| | 1485, | 1486, | 1489, | 1490, | 1491, | 1499, |
| | 1527, | 1538, | 1550, | 1551, | 1552, | 1553, |
| | 1566, | 1568, | 1579, | 1595, | 1603, | 1608, |
| | 1635, | 1637, | 1638, | 1639, | 1642, | 1645, |
| | 1648, | 1649, | 1658, | 1666, | 1668, | 1672, |
| | 1675, | 1680, | 1681, | 1684, | 1686, | 1711, |
| | 1716, | 1768, | 1769, | 1797, | 1803, | 1804, |
| | 1805, | 1813, | 1834, | 1837, | 1838, | 1845, |
| | 1858, | 1861, | 1871, | 1872, | 1877, | 1878, |
| | 1879, | 1880, | 1881, | 1886, | 1889, | 1891, |
| | 1910, | 1917, | 1941, | 1942, | 1946, | 1959, |
| | 1964, | 1966, | 1967, | 1968, | 1973, | 1987, |
| | 1993, | 2019, | 2020, | 2021, | 2024, | 2040, |
| | 2041, | 2044, | 2045, | 2046, | 2060, | 2062, |
| | 2064, | 2065, | 2066, | 2069, | 2082, | 2083, |
| | 2098, | 2104, | 2120, | 2142, | 2144, | 2145, |
| | 2146, | 2147, | 2157, | 2159, | 2160, | 2162, |
| | 2174, | 2185, | 2186, | 2198, | 2201, | 2202, |
| | 2203, | 2210, | 2211, | 2212, | 2215, | 2216, |

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| WISCONSIN (continued) | 2225, 2237, 2250, 2252, 2253, 2258, 2271, 2290, 2294, 2296, 2297, 2298, 2301, 2302, 2303, 2306, 2314, 2322, 2325, 2328, 2329, 2336, 2337, 2338, 2359, 2361, 2366, 2368, 2378, 2379, 2387, 2393, 2421, 2443, 2445, 2449, 2455, 2469, 2472, 2478, 2496, 2500, 2522, 2538, 2549, 2558, 2575, 2622, 2626, 2631, 2632, 2633, 2634, 2639, 2648, 2658, 2661, 2664, 2668, 2669, 2670, 2672, 2679, 2700, 2716, 2718, 2720, 2721, 2723, 2724, 2725, 2726, 2727, 2728, 2738, 2768, 2772, 2776, 2780, 2781, 2787 |
| WISCONSIN SHORELINE | 4, 5, 17, 242, 292, 293, (SA: Wisconsin) |
| | 311, 371, 388, 487, 493, 512, 634, 635, 880, 881, 898, 908, 909, 980, 1266, 1274, 1275, 1276, 1317, 1318, 1389, 1390, 1393, 1396, 1608, 1635, 1638, 1879, 1880, 1881, 2045, 2145, 2146, 2159, 2160, 2174, 2303, 2336, 2337, 2338, 2496, 2669, 2670, 2716, 2726 |
| WISCONSIN TRIBUTARIES | 904, 935, 1838, 1871 (SA: specific rivers) (SA: tributaries) |
| WISCONSIN WATERS | 149, 195, 196, 197, 198, 418, (SA: Wisconsin) (SA: Green Bay) (SA: specific sections of Lake Michigan) |
| | 528, 529, 731, 744, 905, 1058, 1086, 1231, 1289, 1354, 1355, 1356, 1455, 1603, 1675, 1872, 1946, 1964, 2065, 2082, 2211, 2306, 2325, 2328, 2366, 2478, 2724 |
| ZION, IL | 742, 1965, 2588 |
| ZION BEACH RIDGE, IL | 429 |
| ZION NUCLEAR POWER PLANT, IL | 395, 656, 1377, 1587, 1715, 1833, 2201, 2290, 2762 |

