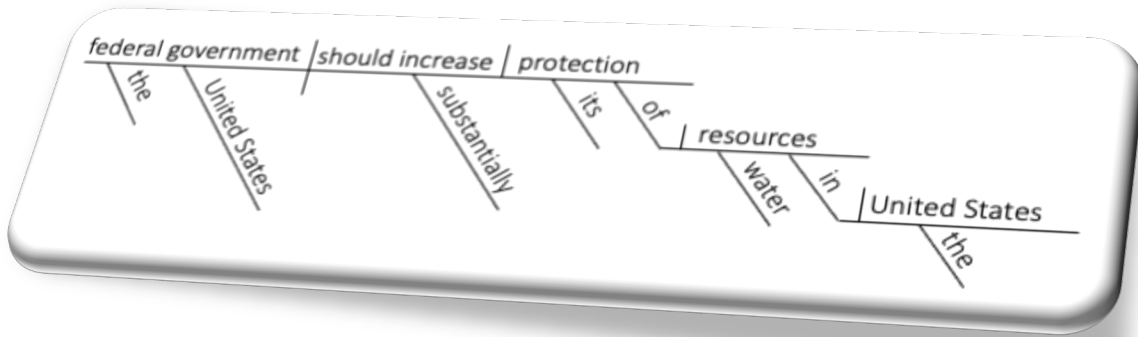


DEFINITIONS OF TERMS ON THE WATER RESOURCES TOPIC

Dr. Rich Edwards
Professor of Communication Studies
Baylor University
National Policy Topic 2021-22

The 2021-22 Interscholastic Debate Resolution: *The United States federal government should substantially increase its protection of water resources in the United States.*



The resolution on the water resources topic originated with a proposal submitted by Peter Crevoiserat, Luke Brinker-Lev, and Pam McComas. Peter Crevoiserat is the forensics coach at Wichita Northwest High School in Wichita, Kansas; Luke Brinker-Lev is a former debater at Topeka High School in Topeka, Kansas; and Pam McComas, now retired, was the director of forensics at Topeka High School in Topeka, Kansas. The topic authors and the members of the Topic Selection Committee Wording Committee jointly wrote a topic paragraph for inclusion on the ballot. The paragraph for the water policy topic follows:

TOPIC PARAGRAPH AS INCLUDED ON THE 2021-22 BALLOT: A useful index of the intent of the topic framers is provided by the paragraph which is sent along with the topic selection ballot. The authors of the topic proposal and the members of the Wording Committee jointly wrote this paragraph.

The paragraph on the ballot for the water resources topic follows:

In Erin Brokovich's new book, *Superman's Not Coming: Our National Water Crisis and What We The People Can Do About It* (2020), she clearly articulates the depth of this issue in America, "We are amid a major water crisis that is beyond anything you can imagine. We are at a turning point where we all need to fight before there's not a drop of water left to drink." Access to clean water is key to our lives, but we regularly ignore debates regarding it. The problems of Flint, Michigan are neither isolated nor far from our own homes. We are at a cross-road to ensuring that water is clean, accessible, and secure for our use and consumption.

In order to advocate for substantial protection of water resources, affirmative teams can point to a wide range of problems in the status quo: pollutants and contaminants present in many community water systems, woefully outdated water infrastructure and a lack of federal spending, increasing water scarcity issues, deficits in rural water quality due to agricultural practices, inadequate security protection for critical water systems, inequities in protection for under-served or economically disadvantaged communities, and poor federal management of rules and regulations aimed at protecting water resources. Plans might include, but not be limited to adopt laws that increase the standards for water quality, fund water infrastructure creation or renewal, increase funding and/or regulation to address disparities in access to water resources, regulate agricultural use of water, fund development of innovative technologies for water filtration, fund and/or regulate to address security of water resources from cyber/terror threats, address environmental justice concerns, and increase enforcement of water resource standards.

Negative approaches to the topic would include both traditional and progressive debate arguments. Disadvantages, such as spending, federalism, politics, and trade-offs will be the source of offense for traditional debaters. Critical arguments like anthropocentrism, feminism, securitization, or environmental racism will be employed by debaters who prefer a theory-based debate. Case arguments may focus on a lack of federal resources available to fully fund water infrastructure, federal mismanagement as a source of circumvention, whether a national policy would be feasible to address the diverse water needs of the United States, and how under-served communities could still be left behind due to structural racism. Counterplans could claim that states or localities will solve more directly or that a different actor would be more reasonable (i.e. EPA, Army Corp of Engineers, Bureau of Land Management, Courts, etc.).

This topic allows debaters access to a broad literature base for both the affirmative and the negative. Research is easily accessible to all students. This topic engages debaters, judges, and the general public. Coaches will have an opportunity to make novices feel comfortable about the topic because it is relevant to every citizen. At the same time, coaches can focus on more critical arguments for advanced debaters. As the COVID-19 pandemic continues to highlight the need for a reset on environmental issues, particularly water resources, this topic and the robust exchange of ideas it will ignite will be a critical part of beginning that reset.

Usually, the topic paragraph has very little influence on topicality debates – such matters are typically left to the arguments made by debaters in each individual round of policy debate. However, it may be significant to note that the topic authors and the members of the Wording Committee interpreted “water resources” as applying to matters of water quantity (scarcity) as well as water quality.

TOPICALITY VIOLATIONS THAT SHOULD BE ANTICIPATED:

Note: Below is the list of topicality violations supported with evidence and argument in Volume 3 of the Baylor Briefs “Topicality Casebook” prepared by Dr. Ryan Galloway of Samford University. If you wish to explore the evidence and brief structure supporting each of the following topicality violations, consult the Topicality Casebook.

1. *“Protection of water resources” requires legal regulations on actors to protect water.*

This Topicality argument states that the word “protection” in the resolution means the affirmative plan must use legal regulations to specify what actors can and cannot do to water resources. Many teams may be tempted to take actions that indirectly deal with water resources like funding efforts to stop climate change or funding incentives for companies to not pollute water. According to this definition, such cases would be not topical.

2. *“Protection of water resources” requires protection from water pollution.*

This Topicality argument states that the affirmative plan must deal with the prevention of water pollution. Many teams may be tempted to deal with other threats to water, like the threat that climate change poses in terms of drying up sources of water, or may try to protect species within water, such as plans to prevent overfishing. This interpretation says that the affirmative case must deal with pollution in water, not any threat posed to water.

3. *“Protection of water resources” is distinct from water purification.*

This Topicality argument states that the affirmative plan must prevent pollution of water in the first place, and not clean up water after the fact. Water protection deals with protecting water resources from the initial threat, not merely purifying or treating the water after it has already been polluted.

4. *“Protection of water resources” is distinct from the use of such resources.*

This Topicality argument states that the affirmative plan must protect water resources, and not use them for some purpose. Some teams may be tempted to desalinate water, use water resources for hydroelectricity, or use water resources to fuel ocean technology as a renewable energy resource. However, the topic asks that the affirmative protect water resources and not use them.

5. *“Water resources” deals with freshwater resources.*

This Topicality argument states that the affirmative plan must deal with freshwater resources in the United States and not saltwater resources such as those found in coastal areas. Many teams may be tempted to turn this topic into an oceans topic by dealing with coastal areas or any activity that occurs in the 200 nautical mile Exclusive Economic Zone surrounding the United States. This interpretation argues that the affirmative must be limited to dealing with freshwater resources.

6. *“Its” protection means belonging to the federal government, not the states or localities..*

This Topicality argument states that the affirmative plan must provide protections of water resources that belong to the federal government and not states or localities. Many affirmative teams may be tempted to provide incentives or grants to states or localities to protect water resources. However, those protections would belong to the states or localities and not the federal government.

7. *“Substantially” means dealing with substance and not procedure.*

This Topicality argument states that the affirmative plan must deal with substantive law, or actual protections of water rights, and not the means by which those protections are put into place. Substantive law deals with the effect of the law, whereas procedural law deals with the steps to reach the substantive conclusion. Many teams may be tempted to deal with the procedures by which clean water laws are put into place, like the procedures by which the National Environmental Protection Act (NEPA) informs and engages the public before providing clean water protections.

8. *“Substantially” means across the board—cases dealing with individual instances of water resources are not topical.*

This Topicality argument states that the affirmative plan must deal with water resources across the United States, and not in an isolated area. Some affirmative teams may be tempted to run tiny affirmative cases that deal with one lake, one stream, or one river. Such cases violate the term substantially in the resolution. The negative should rely on three standards when defending this violation.

9. *“Substantially:” means at least a 31% increase.*

This topicality argument states that the affirmative plan must increase federal funding for clean water by 31% to be topical. Many teams may be tempted to deal with the most minor of water protections, ones that affect one city, town, or locality. They would do so to avoid core disadvantages like EPA overstretch and business confidence disadvantages by essentially saying they are too small to make a difference. This violation is essential to keep such “squirrel” cases under control.

10. *“Increase:” The affirmative plan must increase existing protection of water resources.*

This argument states that the affirmative plan must increase presently existing regulations and/or funding for water resources, and not come up with a new regulation or funding for a new protection. Many affirmative teams may argue that existing programs are inadequate for reasons that have nothing to do with the size or funding of the program itself. These affirmatives do not “increase” protection of water resources.

11. *“Increase” means a “net increase:” plans which improve protection of water resources are not topical.*

This argument states that the affirmative plan must increase the overall funding or regulations for protection of water resources, not merely trade-off with existing funding or regulations. For example, the affirmative team might claim that the amount of funding for water protection is fine, it just must be distributed equitably among cities in the United States. Alternatively, the affirmative team may claim that overall funding for water protection is fine, it is just that more funding must be designated for mercury pollution rather than lead pollution. However, this violation is designed to argue that increase means to make a net increase in funding or regulation, denying the affirmative team the ability to make such an argument.

UNITED STATES FEDERAL GOVERNMENT

Federal government means the central government in Washington, D.C.

Amy Blackwell, (J.D., Staff, U. Virginia Law Library), THE ESSENTIAL LAW DICTIONARY, 2008, 187. Federal: Relating to the central government of a union of states, such as the national government of the United States.

Carol-June Cassidy, (Editor), CAMBRIDGE DICTIONARY OF AMERICAN ENGLISH, 2nd Ed., 2008, 308. Federal government: of or connected with the central government

Maurice Waite, (Editor), OXFORD DICTIONARY & THESAURUS, 2007, 377. Federal government: relating to the central government of a federation.

Michael Agnes, (Editor), WEBSTER'S NEW WORLD DICTIONARY, 4th College Edition, 2007, 290. Federal government: Of the central government.

Susan Spitz, (Sr. Editor), AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE, 4th Ed., 2006, 647. Federal: The central government of the United States.

SUBSTANTIAL

“Substantially” means “important.”

Amy Blackwell, (J.D., Staff, U. Virginia Law Library), THE ESSENTIAL LAW DICTIONARY, 2008, 477. Substantial: Important, large, considerable, valuable.

Christine Lindberg, (Editor), OXFORD COLLEGE DICTIONARY, 2nd Ed., 2007, 1369. Substantially: Important in material or social terms.

Elizabeth Jewell, (Editor), THE OXFORD DESK DICTIONARY AND THESAURUS, 2nd Ed., 2007, 835. Substantially: Of real importance, value, or validity.

Elizabeth Jewell, (Editor), THE OXFORD DESK DICTIONARY AND THESAURUS, 2nd Ed., 2007, 835. Substantially: Essential; true in large part.

Maurice Waite, (Editor), OXFORD DICTIONARY & THESAURUS, 2007, 1032. Substantially: of great importance, size, or value.

“Substantially” means “large in size.”

Carol-June Cassidy, (Editor), CAMBRIDGE DICTIONARY OF AMERICAN ENGLISH, 2nd Ed., 2008, 873. Substantially: large in size, value, or importance

“Substantially” means “to a large degree.”

Carol-June Cassidy, (Editor), CAMBRIDGE DICTIONARY OF AMERICAN ENGLISH, 2nd Ed., 2008, 873. Substantially: to a large degree

Michael Agnes, (Editor), WEBSTER'S NEW WORLD DICTIONARY, 4th College Edition, 2007, 780. Substantial: Material, strong, large.

“Substantially” means “essential.”

Christine Lindberg, (Editor), OXFORD COLLEGE DICTIONARY, 2nd Ed., 2007, 1369. Substantially: Concerning the essentials of something.

Elizabeth Jewell, (Editor), THE OXFORD DESK DICTIONARY AND THESAURUS, 2nd Ed., 2007, 835. Substantially: Essentially, at bottom, fundamentally, basically, in essence, intrinsically.

Maurice Waite, (Editor), OXFORD DICTIONARY & THESAURUS, 2007, 1032. Substantially: concerning the essential points of something

Maurice Waite, (Editor), OXFORD DICTIONARY & THESAURUS, 2007, 1032. Substantially: in essence, basically, fundamentally

Michael Agnes, (Editor), WEBSTER'S NEW WORLD DICTIONARY, 4th College Edition, 2007, 780. Substantial: In essentials.

“Substantially” means “real and not imaginary.”

Christine Lindberg, (Editor), OXFORD COLLEGE DICTIONARY, 2nd Ed., 2007, 1369. Substantially: Of considerable importance, size, or worth.

Christopher Leonesio, (Managing Editor), AMERICAN HERITAGE HIGH SCHOOL DICTIONARY, 4th Ed., 2007, 1376. Substantial: True or real; not imaginary.

Maurice Waite, (Editor), OXFORD DICTIONARY & THESAURUS, 2007, 1032. Substantially: real and tangible rather than imaginary.

“Substantially” means more than 25%.

Federal Tax Regulation, Section 1.409A-3(j)6, INCOME TAX REGULATIONS (Wolters Kluwer Business Publication), 2008, 723. For this purpose, a reduction that is less than 25% of the deferred amount in dispute is not a substantial reduction.”

“Substantially” means more than 5%.

Law Insider, 2020. Retrieved May 21, 2020 from <https://www.lawinsider.com/dictionary/substantial-amount>. Substantial Amount means any securities of the Corporation having a then fair market value of more than 5% of the Corporation's consolidated capital accounts as of the end of the then preceding fiscal year.

“Substantially” means “without material qualification.”

BLACK’S LAW DICTIONARY, Feb. 5, 2014. Retrieved May 10, 2017 from <https://www.novoco.com/notes-from-novogradac/close-enough-how-measure-substantially-similar-under-fasbs-new-lihtc-investment-guidance>. Substantially: Essentially; without material qualification; in the main; in substance, materially; in a substantial manner

“Substantially” means “having substance.”

Christopher Leonesio, (Managing Editor), AMERICAN HERITAGE HIGH SCHOOL DICTIONARY, 4th Ed., 2007, 1376. Substantial: Of, relating to, or having substance.

“Substantially” means “valuable.”

Christopher Leonesio, (Managing Editor), AMERICAN HERITAGE HIGH SCHOOL DICTIONARY, 4th Ed., 2007, 1376. Substantial: Considerable in importance, value, degree, amount, or extent.

Daniel Oran, (Assitant Dir., National Paralegal Institute & J.D., Yale Law School), ORAN’S DICTIONARY OF THE LAW, 4th Ed., 2008, 510. Substantial: Valuable, real, worthwhile.

“Substantially” means “a lot.”

Daniel Oran, (Assitant Dir., National Paralegal Institute & J.D., Yale Law School), ORAN’S DICTIONARY OF THE LAW, 4th Ed., 2008, 510. Substantial: “A lot,” when it’s hard to pin down just how much “a lot” really is. For example, substantial evidence is more than a mere scintilla or evidence but less than a full preponderance of evidence.

“Substantially” means “major.”

Maurice Waite, (Editor), OXFORD DICTIONARY & THESAURUS, 2007, 1032. Substantially: real, significant, important, major, valuable.

“Substantially” means “fundamental.”

Maurice Waite, (Editor), OXFORD DICTIONARY & THESAURUS, 2007, 1032. Substantially: fundamental, essential, basic.

“Substantially” means “large.”

Michael Agnes, (Editor), WEBSTER’S NEW WORLD DICTIONARY, 4th College Edition, 2007, 780. Substantial: Material, strong, large.

“Substantially” means “socially important.”

Christine Lindberg, (Editor), OXFORD COLLEGE DICTIONARY, 2nd Ed., 2007, 1369. Substantially: Important in material or social terms.

“Substantial” means “in substance” rather than “procedure.”

Merriam-Webster, 2020. Retrieved May 21, 2020 from <https://www.merriam-webster.com/legal/substantial%20right>. Legal Definition of substantial right : an important or essential right that merits enforcement or protection by the law : a right related to a matter of substance as distinguished from a matter of form

SUBSTANTIAL IS CONTEXTUALLY DEFINED

Reforming agricultural irrigation systems would be substantial.

Hala Alskaf, (JD Candidate, U. of San Diego School of Law), JOURNAL OF ENVIRONMENT LAW & LITIGATION, 2016, 224. In terms of changing irrigation systems, the inefficient and wasteful use of flood irrigation by farmers on nearly half of the United States' 60 million irrigated acres must change. Alternatively, micro-irrigation emits a precise quantity of water to each plant, and subsurface drip irrigation provides a slow drip on plants throughout an extended period of time. Both irrigation systems produce a higher yield and use substantially less water.

Resolving the problem of algal blooms would be substantial.

Benjamin Bryce, (JD Candidate, Arizona State U. College of Law), UNIVERSITY OF DENVER WATER LAW REVIEW, Fall 2017, 16. Toxic blooms, often referred to as harmful algal blooms, are an exceptionally pernicious problem that can pose significant threats to human and animal health. The recent water crisis in Toledo was not the first time this hazardous type of algal bloom has imposed substantial adverse impacts on a local economy. The dangers of algal blooms have been known for over 100 years, with extreme cases causing thousands of animal deaths from ingestion of algae-poisoned water. In some cases, large animals have died within minutes of exposure to cyanotoxins produced by algal blooms.

Resolving overuse of fertilizer would be substantial.

Andrew Dzurik, et al., (Prof., Emeritus, Environmental Engineering, Florida State U.), WATER RESOURCES PLANNING: FUNDAMENTALS FOR AN INTEGRATED FRAMEWORK, 2019, 215. The use of fertilizers and pesticides will continue to be substantial, and thus the runoff of such nutrients to waterways can be expected to continue as a major water quality problem.

Aquaculture is a substantial issue.

Matthew Bowen, (JD), OCEAN & COASTAL LAW JOURNAL, Jan. 2019, 63. As an industry, aquaculture is expected to experience substantial growth. While aquaculture has existed on some level for centuries, its existence as an industry has largely been localized and unconnected to the global economy. An increase in the demand for seafood, coupled with technological change, has afforded the aquaculture industry the potential to grow substantially in the years to come.

Robin Kundis Craig, (Prof., Law, U. of Utah School of Law), PUBLIC LANDS AND RESOURCES LAW REVIEW, 2018, 74. Globally, marine aquaculture - the controlled and generally confined raising of marine plants, shellfish, and fish, usually for food, in ocean waters - continues to grow substantially. NOAA attributes this increase to three factors: the overall growth in human population and corresponding increase in demand for sources of protein; the plateauing of wild-caught marine fish and shellfish globally; and a desire to reduce the impacts from land-based agriculture, particularly meat production. Indeed, NOAA considers the "stagnation" in wild-caught marine fisheries a particularly good reason to expand marine aquaculture in the United States.

Promotion of renewables is a substantial issue.

Bill Gates, (Co-Founder of Microsoft & Co-Chair, Bill & Melinda Gates Foundation), HOW TO AVOID A CLIMATE DISASTER, 2021, 81. Just to be clear: Variable energy sources like solar and wind can play a substantial role in getting us to zero. In fact, we need them to. We should be deploying renewables quickly wherever it's economical to do so. It's amazing how much the costs of solar and wind power have dropped in the past decade: Solar cells, for example, got almost 10 times cheaper between 2010 and 2020, and the price of a full solar system went down by 11 percent in 2019 alone.

Fracking is a substantial issue.

Andrew Dzurik, et al., (Prof., Emeritus, Environmental Engineering, Florida State U.), WATER RESOURCES PLANNING: FUNDAMENTALS FOR AN INTEGRATED FRAMEWORK, 2019, 216. Another substantial threat to water quality occurs in fracking and mining areas. Acid drainage from both surface and deep mines may produce crystal clear water but only because of the absence of any aquatic organisms—such organisms are decimated by the high acidity of the water as associated with mining operations.

Yosra Abid, (Attorney, JD, NYU School of Law, WASHINGTON JOURNAL OF ENVIRONMENTAL LAW AND POLICY, Sept. 2020, 9. A 2011 study, conducted at Cornell University, "found a higher incidence of methane contamination in drinking-water wells located close to natural gas wells." In 2012, with the goal of quantifying the risks relating to groundwater contamination, researchers at the State University of New York enumerated a variety of accidents that "could result in a spill, and extrapolat[ed] from those probabilities to produce projected volumes of fracking wastewater that might find their way into groundwater or surface waters in the Marcellus Shale." The results of the study show that risks are substantial.

Daniel Raimi, (Prof., Energy Policy, U. of Michigan Energy Institute), THE FRACKING DEBATE: THE RISKS, BENEFITS, AND UNCERTAINTIES OF THE SHALE REVOLUTION, 2018, 47. A more complex issue relates to handling oil and gas wastewater. Water used in fracking that returns to the surface is called "flowback," and the naturally occurring water that flows up with oil and gas is called "produced water." Produced water can contain brine, radioactive elements, and all sorts of other toxic stuff that occurs naturally thousands of feet underground. When this water comes to the surface, handling it, treating it, and disposing of it can cause some substantial problems.

Use of bottled water is a substantial issue.

Hannah Ford-Stille, (Editor), SANTA CLARA LAW REVIEW, 2020, 355. Lax state and federal regulations have allowed bottled water companies to obtain permits to extract groundwater at an alarming rate, which in turn causes substantial environmental problems to local areas. The GAO determined that even though the amount of extracted groundwater that is used for bottling is small relative to other uses across the country, the extraction can have significant impacts on local groundwater availability, surface flows, and dependent resources. Municipal water sources, though at times guilty of the same sins as bottled water such as over-extraction, have greater diversity in their water sourcing, including pulling from surface water rivers, lakes, reservoirs, or even from the ocean through desalination plants. This diversity can spread negative impacts across multiple areas, minimizing the effects and ensuring a more stable water management portfolio, rather than with bottled water where the impacts are larger and localized as the sources are less diverse.

Hannah Ford-Stille, (Editor), SANTA CLARA LAW REVIEW, 2020, 347. Second, lax state regulations and outdated groundwater pumping legal frameworks allow bottled water companies to prey on low income areas in order to gain bottled water permitting. The failure of federal, state, and local governments to limit groundwater pumping must be addressed in order to prevent destruction of local water systems. If this does not occur, these areas will become reliant on the good that caused the issue in the first place, bottled water. The continued unsustainable pumping of groundwater resources will cause substantial impacts to the environment unless sustainability is promoted. As climate change progresses and water becomes a more valuable resource, litigation concerning pumping rights will increase. Furthermore, lax and inconsistent groundwater regulations combined with FDA's dereliction of enforcement will ultimately converge into a larger issue - health effects.

Dam Removal is a substantial issue.

Kim Evans, (Science Journalist), WATER: A LIMITED RESOURCE, 2018, 14-15. Building dams also interferes with the hydrologic cycle and may promote water pollution. The huge dams built in the United States just before and after World War II have substantially changed the natural flow of rivers. By reducing the amount of water that is available downstream and slowing streamflow, a dam not only affects a river but also the river's entire ecological system. For example, wetlands have the ability to clean water by trapping and filtering pollutants. This water-cleansing process can be reduced or stopped if dams cause wetlands to dry up.

E-waste is a substantial issue.

Meghan McEllicott, (JD Candidate, U. Buffalo School of Law), OIL & GAS NATURAL RESOURCES ND ENERGY JOURNAL, Jan. 2020, 478. In the United States, e-waste is a substantial problem without an effective solution. The average American family of four disposes of 176 pounds of ewaste each year. Electronics are increasingly becoming integral to life in the United States, and by 2016, almost every American owned a cell phone. Additionally, the prices of electronics have been decreasing over the years, making it more affordable for Americans to buy electronics and purchase new electronics as technology updates and improves. It is difficult to know how much of America's e-waste is transported overseas to developing countries, but a 2016 study suggests that this is the fate of about a third of all e-waste generated in the United States.

Lead pollution of water is a substantial issue.

Cara Cunningham Warren, (Prof., Law, Detroit Mercy School of Law), DUKE ENVIRONMENTAL LAW AND POLICY FORUM, Fall 2016, 80. Lead is a possible carcinogen that "can affect almost every organ and system in your body. Children six years old and younger are most susceptible to the effects of lead." "Even at very low levels once considered safe, lead can cause serious, irreversible damage to the developing brains and nervous systems of babies and young children." Lead poisoning in these children can have long-term health and behavioral consequences, including lower IQ, hyperactivity, slowed growth, hearing problems, and anemia. It can even cause seizures, coma, and death in rare cases. Sadly, the EPA acknowledges that nation-wide "a substantial portion of the sensitive population already exceeds acceptable blood lead levels."

Pollution from oil spills is a substantial issue.

Nenibarini Zabbey & Gustaf Olsson, (Prof., Agriculture, U. of Port Harcourt/Prof., Biomedical Engineering, Lund U.), GLOBAL CHALLENGES, Aug. 15, 2017. Retrieved March 19, 2021 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6607187/> In most cases the consequences of spills are directly observed in the water resources. Here we have described some specific episodes of oil accidents and spills in order to illustrate the impact on water quality and ecology. The economic and social aftermaths are often substantial. Transportation of oil via tankers or pipelines presents still another challenge.

Green infrastructure would substantially reduce salt pollution of water resources.

David Strifling, (Director, Water Law and Policy Initiative, Marquette University Law School), ENVIRONMENTAL LAW, Winter 2018, 205. Expanded use of two specific green infrastructure practices - permeable pavement and bioswales - would substantially reduce road salt application levels and costs, and corresponding loads of chlorides to waterways. Once salt is applied, it is difficult to prevent its movement to waterways; green infrastructure is valuable because it reduces the application requirement in the first place. When water quickly infiltrates, it does not pool (and then ice) on the surface.

INCREASE

"Increase" is defined quantitatively.

Jean McKechnie, (Sr. Editor), WEBSTER'S NEW TWENTIETH CENTURY DICTIONARY, UNABRIDGED, 2nd Ed., 1979, 926. Increase: To become greater in size, quantity, value, degree, etc.

Erin McKean, (Sr. Editor), THE OXFORD AMERICAN DICTIONARY AND THESAURUS, 2003, 751. Increase: Advance in quality, attainment, etc.

Erin McKean, (Sr. Editor), THE OXFORD AMERICAN DICTIONARY AND THESAURUS, 2003, 751. Increase: To make or become greater in size, amount, etc., or more numerous.

Ian Brookes, (Sr. Editor), THE CHAMBERS DICTIONARY, 10th ed., 2006, 754. Increase: To grow in size or number.

Anne Soukhanov, (Editor), ENCARTA WORLD ENGLISH DICTIONARY, 1999, 912. Increase: The amount by which something is increased.

Carol-June Cassidy, (Editor), CAMBRIDGE DICTIONARY OF AMERICAN ENGLISH, 2nd Ed., 2008, 441. Increase: to become or make something larger or greater

Christopher Leonesio, (Managing Editor), AMERICAN HERITAGE HIGH SCHOOL DICTIONARY, 4th Ed., 2007, 702. Increase: To become greater or larger.

Elizabeth Jewell, (Editor), THE OXFORD DESK DICTIONARY AND THESAURUS, 2nd Ed., 2007, 415. Increase: Make or become greater or more numerous.

Frederick Mish, (Editor), WEBSTER'S COLLEGIATE DICTIONARY, 1998, 589. Increase: To become progressively greater (as in size, amount, number, or intensity).

Mairi Robinson, (Editor), CHAMBERS 21ST CENTURY DICTIONARY, 1996, 685. Increase: The amount by which something increases or is increased.

Bryan Garner, (Editor), BLACK'S LAW DICTIONARY, 2009, 835. Increase: The extent of growth or enlargement.

“Increase” can be from zero (meaning it can be new).

WORDS AND PHRASES, Vol. 20B, 2008, 265. Increase: Salary change of from zero to \$12,000 and \$1,200 annually for mayor and councilmen respectively was an "increase" in salary, and not merely the "fixing" of salary; thus, in absence of compliance with Home Rule Act provisions concerning increase in compensation of elected members of governing authority, mayor and councilmen were properly enjoined from receiving further compensation. Code, § 69-1019; Laws 1967, p. 3323. —King v. Herron, 243 S.E.2d 36, 241 Ga. 5

“Increase” can also be defined qualitatively.

Frank Abate, (Editor-in-Chief), THE OXFORD AMERICAN DICTIONARY AND LANGUAGE GUIDE, 1999, 496. Increase: Advance in quality, attainment, etc.

Frank Abate, (Editor-in-Chief), THE OXFORD AMERICAN DICTIONARY AND LANGUAGE GUIDE, 1999, 496. Increase: Intensify a quality

Anne Soukhanov, (Editor), ENCARTA WORLD ENGLISH DICTIONARY, 1999, 912. Increase: The make something or become larger in number, quantity, or degree.

Christine Lindberg, (Editor), OXFORD COLLEGE DICTIONARY, 2nd Ed., 2007, 687. Increase: Become or make greater in size, amount, intensity, or degree.

Elizabeth Jewell, (Editor), THE OXFORD DESK DICTIONARY AND THESAURUS, 2nd Ed., 2007, 415. Increase: Advance in quality, attainment, etc.

Stephen Bullon, (Editor), LONGMAN DICTIONARY OF CONTEMPORARY ENGLISH, 4th Ed., 2003, 824. Increase: If you increase something, or if it increases, it becomes bigger in amount, number, or degree.

“Increase” can mean to reproduce.

Christopher Leonesio, (Managing Editor), AMERICAN HERITAGE HIGH SCHOOL DICTIONARY, 4th Ed., 2007, 702. Increase: To multiply; reproduce.

Christopher Leonesio, (Managing Editor), AMERICAN HERITAGE HIGH SCHOOL DICTIONARY, 4th Ed., 2007, 702. Increase: To multiply; reproduce.

“Increase” means to enlarge, expand, or grow.

Bryan Garner, (Editor), BLACK’S LAW DICTIONARY, 2009, 835. Increase: The extent of growth or enlargement.

Sidney Landau, (Sr. Editor), CAMBRIDGE DICTIONARY OF AMERICAN ENGLISH, 2nd ed., 2008, 440. Increase: To become or make something larger or greater.

Ian Brookes, (Sr. Editor), THE CHAMBERS DICTIONARY, 10th ed., 2006, 754. Increase: Growth; increment; addition to the original stock.

Elizabeth Jewell, (Editor), THE OXFORD DESK DICTIONARY AND THESAURUS, 2nd Ed., 2007, 415. Increase: Build up, enlarge, amplify, expand

Sandra Anderson et al., (Editors), COLLINS ENGLISH DICTIONARY, 8TH Ed., 2006, 824. Increase: To make or become greater in size, degree, frequency, etc.; grow or expand.

“Increase” can refer to intensity.

Erin McKean, (Sr. Editor), THE OXFORD AMERICAN DICTIONARY AND THESAURUS, 2003, 751. Increase: Intensify a quality.

Maurice Waite, (Editor), OXFORD DICTIONARY & THESAURUS, 2007, 526. Increase: Become or make greater in size, amount, or intensity.

Mairi Robinson, (Editor), CHAMBERS 21ST CENTURY DICTIONARY, 1996, 685. Increase: To make or become greater in size, intensity, or number..

“Increase” means to extend.

Elizabeth Jewell, (Editor), THE OXFORD DESK DICTIONARY AND THESAURUS, 2nd Ed., 2007, 415. Increase: Build up, enlarge, amplify, expand

Maurice Waite, (Editor), OXFORD DICTIONARY & THESAURUS, 2007, 526. Increase: Intensify, strengthen, extend.

“Increase” means make bigger or greater.

Frank Abate, (Editor-in-Chief), THE OXFORD AMERICAN DICTIONARY AND LANGUAGE GUIDE, 1999, 496. Increase: To make or become greater in size, amount, etc.

Carol-June Cassidy, (Managing Editor), CAMBRIDGE DICTIONARY OF AMERICAN ENGLISH, 2d Ed., 2008, 441. Increase: To make something larger or greater.

Carol-June Cassidy, (Editor), CAMBRIDGE DICTIONARY OF AMERICAN ENGLISH, 2nd Ed., 2008, 441. Increase: to become or make something larger or greater

Christine Lindberg, (Editor), OXFORD COLLEGE DICTIONARY, 2nd Ed., 2007, 687. Increase: Become or make greater in size, amount, intensity, or degree.

Christopher Leonesio, (Managing Editor), AMERICAN HERITAGE HIGH SCHOOL DICTIONARY, 4th Ed., 2007, 702. Increase: To become greater or larger.

Elizabeth Jewell, (Editor), THE OXFORD DESK DICTIONARY AND THESAURUS, 2nd Ed., 2007, 415. Increase: Make or become greater or more numerous.

Maurice Waite, (Editor), OXFORD DICTIONARY & THESAURUS, 2007, 526. Increase: Make bigger, augment, supplement

Michael Agnes, (Editor), WEBSTER'S NEW WORLD DICTIONARY, 4th College Edition, 2007, 396. Increase: To make or become greater, larger.

Frederick Mish, (Editor), WEBSTER'S COLLEGIATE DICTIONARY, 1998, 589. Increase: The make greater.

“Increase” means to make more frequent.

Sandra Anderson et al., (Editors), COLLINS ENGLISH DICTIONARY, 8TH Ed., 2006, 824. Increase: To become more frequent.

ITS

Augustus Stevenson, (Editor), NEW OXFORD AMERICAN DICTIONARY, 3rd Ed., 2010, 924. Its: Belonging to or associated with a thing previously mentioned or easily identified.

Carol-June Cassidy, (Managing Editor), CAMBRIDGE DICTIONARY OF AMERICAN ENGLISH, 2nd Ed., 2008, 464. Its: Belonging to or connected with the thing or animal mentioned; the possessive form of it.

Frederick Mish, (Editor-in-chief), WEBSTER'S COLLEGIATE DICTIONARY, 10th ed., 1993, 623. Its: Of or relating to it or itself, esp. as possessor.

J Carol-June Cassidy, (Managing Editor), CAMBRIDGE DICTIONARY OF AMERICAN ENGLISH, 2nd Ed., 2008, 464. Its: Belonging to or connected with the thing or animal mentioned; the possessive form of it.

J Frederick Mish, (Editor-in-chief), WEBSTER'S COLLEGIATE DICTIONARY, 10th ed., 1993, 623. Its: Of or relating to it or itself, esp. as possessor.

Jean McKechnie, (Sr. Editor), WEBSTER'S NEW TWENTIETH CENTURY DICTIONARY, UNABRIDGED, 2nd Ed., 1979, 977. Its: Of, or belonging to, or done by it.

Justin Crozier, (Editor), COLLINS DICTIONARY AND THESAURUS, 2005, 448. Its: Of or belonging to it.

Sandra Anderson, (Editor), COLLINS ENGLISH DICTIONARY, 8th Ed., 2006, 867. Its: Belonging to, or associated in some way with.

Stuart Flexner, (Editor-in-chief), RANDOM HOUSE DICTIONARY OF THE ENGLISH LANGUAGE, UNABRIDGED, 2nd Ed., 1987, 1017. Its: The possessive form of it.

J Sandra Anderson, (Editor), COLLINS ENGLISH DICTIONARY, 8th Ed., 2006, 867. Its: Belonging to, or associated in some way with.

PROTECTION

“Protection” refers to quantity as well as quality.

Washington State University Department of Ecology, PROTECTING AQUIFERS, Sept. 29, 2020. Retrieved Mar. 22, 2021 from <https://ecology.wa.gov/Water-Shorelines/Water-quality/Groundwater/Protecting-aquifers>. Aquifers are underground areas of groundwater that provide water for drinking, agriculture use, and industrial use. Protecting aquifers is important. The water supply gets polluted when contaminants — like chemicals or manure — seep into groundwater. The quantity of groundwater needs protection too. Groundwater levels can decline if too much water is pumped from an aquifer.

“Protection” means to keep safe.

Frank Abate, (Editor-in-Chief), THE OXFORD AMERICAN DICTIONARY AND LANGUAGE GUIDE, 1999, 800. Protect: Keep (a person, thing, etc.) safe; defend; guard.

“Protection” means to shield from competition.

Frank Abate, (Editor-in-Chief), THE OXFORD AMERICAN DICTIONARY AND LANGUAGE GUIDE, 1999, 800. Protect: Shield (domestic industry) from competition by imposing import duties on foreign goods.

Mairi Robinson, (Editor), CHAMBERS 21ST CENTURY DICTIONARY, 1996, 1114. Protect: to shield (home industries) from foreign competition by taxing imports.

Stephen Bullon, (Editor), LONGMAN DICTIONARY OF CONTEMPORARY ENGLISH, 4th Ed., 2003, 1318. Protect: To help the industry and trade of your own country by taxing or restricting foreign goods.

“Protection” refers to the act of protecting.

Frank Abate, (Editor-in-Chief), THE OXFORD AMERICAN DICTIONARY AND LANGUAGE GUIDE, 1999, 800. Protection: The act or an instance of protecting; defense.

“Protection” means to preserve from harm.

Anne Soukhanov, (Editor), ENCARTA WORLD ENGLISH DICTIONARY, 1999, 1445. Protection: The act of preventing somebody or something from being harmed or damaged, or the state of being kept safe.

Carol-June Cassidy, (Managing Editor), CAMBRIDGE DICTIONARY OF AMERICAN ENGLISH, 2d Ed., 2008, 686. Protect: To keep someone or something safe from injury, damage, or loss.

Erin McKean, (Editor), THE NEW OXFORD AMERICAN DICTIONARY, 2nd Ed., 2005, 1362. Protect: Keep safe from harm or injury.

Sandra Anderson et al., (Editors), COLLINS ENGLISH DICTIONARY, 8TH Ed., 2006, 1301. Protect: To defend from trouble, harm, attack, etc.

Stephen Bullon, (Editor), LONGMAN DICTIONARY OF CONTEMPORARY ENGLISH, 4th Ed., 2003, 1318. Protect: To keep someone or something safe from harm, damage, or illness.

“Protection” means to guard from destruction.

Frederick Mish, (Editor), WEBSTER’S COLLEGIATE DICTIONARY, 1998, 938. Protect: To cover or shield from exposure, injury, or destruction.

Mairi Robinson, (Editor), CHAMBERS 21ST CENTURY DICTIONARY, 1996, 1114. Protect: To shield someone or something from danger; to guard them or it against injury, destruction, etc.; to keep safe.

“Protection” means to insure.

Mairi Robinson, (Editor), CHAMBERS 21ST CENTURY DICTIONARY, 1996, 1114. Protect: To cover against loss, etc. by insurance.

“Protection” means to preserve in its natural state.

Erin McKean, (Editor), THE NEW OXFORD AMERICAN DICTIONARY, 2nd Ed., 2005, 1362. Protect: Restrict by law or access to or development of (land) so as to preserve its natural state.

“Protection” includes “marine protected areas.”

Natalie Ban et al. (School of Environmental Studies, University of Victoria), CONSERVATION FOR THE ANTHROPOCENE OCEAN, 2017, 149. Land and water protection also encompasses site and area protection (i.e., national parks, town wildlife sanctuaries, private reserves, tribal-owned hunting grounds), and resource and habitat protection (i.e., easements, development rights, water rights, instream flow rights, wild and scenic river designation, securing resource rights). Most relevant in the ocean are MPAs, “a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.”

Natalie Ban et al. (School of Environmental Studies, University of Victoria), CONSERVATION FOR THE ANTHROPOCENE OCEAN, 2017, 149. MPAs are effective marine conservation tools, with strong evidence that well-enforced no-take MPAs increase biomass, abundance, and diversity of targeted species compared to areas without protection. A recent review of MPA ecological effectiveness showed that areas that are no-take, adequately enforced, old, large, and isolated are most effective. MPAs that offer only partial protection (i.e., IUCN categories III–VI) have been shown to be less successful for biodiversity values than no-take areas. Well-managed MPAs are generally considered to be effective at protecting against fishing pressures and other extractive activities inside their boundaries by supporting population and species regeneration.

Natalie Ban et al. (School of Environmental Studies, University of Victoria), CONSERVATION FOR THE ANTHROPOCENE OCEAN, 2017, 150. Climate change adds a layer of nuance to the sustainability goals of MPAs: there is some evidence that MPAs can build ecological resilience to large-scale stressors, including climate change and disease.

WATER

“Water” refers to a colorless liquid composed of oxygen and hydrogen.

Frank Abate, (Editor-in-Chief), THE OXFORD AMERICAN DICTIONARY AND LANGUAGE GUIDE, 1999, 1143. Water: A colorless, transparent, odorless, tasteless liquid compound of oxygen and hydrogen.

Anne Soukhanov, (Editor), ENCARTA WORLD ENGLISH DICTIONARY, 1999, 2005. Water: the clear liquid essential for all plant and animal life, that occurs as rain, snow, and ice, and forms rivers, lakes, and seas.

Carol-June Cassidy, (Managing Editor), CAMBRIDGE DICTIONARY OF AMERICAN ENGLISH, 2d Ed., 2008, 987. Water: A clear, colorless liquid that falls from the sky as rain and is necessary for animal and plant life.

Stephen Bullon, (Editor), LONGMAN DICTIONARY OF CONTEMPORARY ENGLISH, 4th Ed., 2003, 1860. Water: The clear liquid without color, smell, or taste that falls as rain and that is used for drinking, washing, etc.

“Water” includes seas (oceans).

Frank Abate, (Editor-in-Chief), THE OXFORD AMERICAN DICTIONARY AND LANGUAGE GUIDE, 1999, 1143. Water: A liquid found in seas, lakes, and rivers, in rain, and in secretions of organisms.

Frank Abate, (Editor-in-Chief), THE OXFORD AMERICAN DICTIONARY AND LANGUAGE GUIDE, 1999, 1143. Water: An expanse of water: a sea, lake, river, etc.

Mairi Robinson, (Editor), CHAMBERS 21ST CENTURY DICTIONARY, 1996, 1601. Water: A colorless, odorless, tasteless liquid that freezes to form ice at zero degrees Celsius and boils to become steam at 100 degrees Celsius at normal atmospheric pressure; an expanse of this with varying degrees of impurity: a sea, lake, or river, etc.

RESOURCES

“Resources” refers to a supply that can be drawn on.

Frank Abate, (Editor-in-Chief), THE OXFORD AMERICAN DICTIONARY AND LANGUAGE GUIDE, 1999, 853. Resources: A stock or supply that can be drawn on.

Frederick Mish, (Editor), WEBSTER’S COLLEGIATE DICTIONARY, 1998, 997. Resource: A source of supply.

“Resources” refers to something that can be used to help you.

Carol-June Cassidy, (Managing Editor), CAMBRIDGE DICTIONARY OF AMERICAN ENGLISH, 2d Ed., 2008, 733. Resource: Something that can be used to help you.

“Resources” refers to something that can be used to increase wealth.

Sandra Anderson et al., (Editors), COLLINS ENGLISH DICTIONARY, 8TH Ed., 2006, 1377. Resources: A source of economic wealth, esp. of a country (mineral, land, labor, etc.) or business enterprise (capital, equipment, personnel, etc.).

Stephen Bullon, (Editor), LONGMAN DICTIONARY OF CONTEMPORARY ENGLISH, 4th Ed., 2003, 1401. Resources: Something such as useful land, or minerals, such as oil or coal, that exists in a country and can be used to increase its wealth.

“Resources” refers to something that is of use to people.

Mairi Robinson, (Editor), CHAMBERS 21ST CENTURY DICTIONARY, 1996, 1190. Resource: Anything that can be of use to people, either a non-renewable or a renewable resource.

WATER RESOURCES (AS A CONTEXTUAL PHRASE)

“Water resources” are impacted by oil exploration and transport.

Nenibarini Zabbey & Gustaf Olsson, (Prof., Agriculture, U. of Port Harcourt/Prof., Biomedical Engineering, Lund U.), GLOBAL CHALLENGES, Aug. 15, 2017. Retrieved March 19, 2021 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6607187/> Water resources and water quality are closely related to oil exploration, refining and distribution. Since oil products provide over 90% of transport energy in almost all countries it is apparent that any oil operation is an inherent risk for water resources. Since water supplies will be increasingly stressed as a consequence of climate change and population increase the environmental risks associated with oil exploration may intensify. Thus, there are more reasons than CO2 emissions and climate change to cut down on oil production and consumption. In this paper water related risks are discussed from two aspects: (1) water use and water pollution as a result of normal exploration, refining and distribution, (2) water and marine life contamination caused by accidents. It will be exemplified by some major oil accidents, too often caused by human errors or negligence.

Nenibarini Zabbey & Gustaf Olsson, (Prof., Agriculture, U. of Port Harcourt/Prof., Biomedical Engineering, Lund U.), GLOBAL CHALLENGES, Aug. 15, 2017. Retrieved March 19, 2021 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6607187/> When oil is explored in water scarce areas the water resources become stressed. Off-shore oil exploration creates risks for the marine life while oil distribution and transportation will generate increasing risk for the ecology in case of leakages or accidents.

Nenibarini Zabbey & Gustaf Olsson, (Prof., Agriculture, U. of Port Harcourt/Prof., Biomedical Engineering, Lund U.), GLOBAL CHALLENGES, Aug. 15, 2017. Retrieved March 19, 2021 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6607187/> Water is needed for the extraction of oil from underground sources as well as for the refining of the crude oil. Most new commercial oil and gas wells are initially free flowing, so that the underground pressures drive the liquid and gas up the well bore to the surface. To drill wells requires water for preparing drilling fluid: cleaning and cooling of the drill bit, evacuation of drilled rocks and sediments, and providing pressure to avoid collapse of the well. Drilling fluid contains potential contaminants.

“Water resources” includes wetlands.

U.S. Environmental Protection Agency, CLEAN WATER RULE, May 28, 2017. Retrieved Mar. 17, 2021 from <https://archive.epa.gov/epa/cleanwaterrule/what-clean-water-rule-does.html> EPA and the U.S. Army Corps of Engineers finalized the Clean Water Rule to clearly protect the streams and wetlands that form the foundation of the nation’s water resources.

UNESCO, WATER RESOURCES AN ESSENTIAL PART OF THE SOLUTION TO CLIMATE CHANGE, MAR. 21, 2020. Retrieved Mar. 17, 2021 from <https://en.unesco.org/news/water-resources-essential-part-solution-climate-change> Climate change will affect the availability, quality and quantity of water needed for basic human needs, thus undermining enjoyment of the basic rights to safe drinking water and sanitation for billions of people, warns the latest UN World Water Development Report. The authors call on States to make more concrete commitments to address the challenge.

“Water resources” are directly connected to climate change.

Robert Daguillard & Moira Kelley, (U.S. Environmental Protection Agency), CLEAN WATER RULE PROTECTS STREAMS AND WETLANDS CRITICAL TO PUBLIC HEALTH, Apr. 21, 2020. Retrieved Mar. 17, 2021 from <https://www.nrcs.usda.gov/wps/portal/nrcs/az/newsroom/releases/NRCSEPRD358025/#> Impacts from climate change like drought, sea level rise, stronger storms, and warmer temperatures threaten the quantity and quality of America’s water.

Protection of “water resources” implies protection for all of nature, not just humans.

Carla Galizia, (Analyst, IMR Group), INDUSTRIAL AND MUNICIPAL WASTEWATER TREATMENT PLANT, Feb. 2016. Retrieved Mar. 17, 2021 from https://www.fondazioneinternazionale.org/wp-content/uploads/2016/02/IMR_Presentation_PlantOverview.pdf The protection of water resources means also the protection of wildlife, habitats and ecosystems.

Richard Pearson, (Dir., Australian Centre for Tropical Freshwater Research), WATER RESOURCES: HEALTH, ENVIRONMENT, AND DEVELOPMENT, 1999, 13. While The term 'resource' suggests human utility, it is assumed here that water has worthwhile values whether or not it is used directly by humans. For example, conservation of water bodies for wildlife may have tremendous benefits to plant and animal communities, but may not always have any direct benefit to humans; however, even in these situations there are likely to be indirect benefits to human well-being.

Protection of “water resources” includes pollution runoff.

James Laughlin, (Editor, WaterWorld), EPA DRAFT STRATEGY OUTLINES STEPS TO PROTECT WATER RESOURCES, Oct. 1, 2010. Retrieved Mar. 17, 2021 from <https://www.waterworld.com/environmental/article/16194054/epa-draft-strategy-outlines-steps-to-protect-water-resources> Of course one key to protecting watersheds is to reduce the amount of pollutants discharged by our modern society. One of the steps outlined in the strategy is requiring publicly owned treatment works to further limit sanitary sewer overflows and the release of partially treated wastewater from treatment facilities. Potential regulatory approaches include additional reporting and public notice when overflows occur, increased responsibilities for properly operating and maintaining sewer systems, clarifying the requirements for satellite collection systems, and addressing peak wet weather flows at the treatment plant.

Protection of “water resources” includes drinking water.

South Carolina Department of Health and Environmental Control, PROTECTING YOUR DRINKING WATER, Sept. 30, 2018. Retrieved Mar. 17, 2021 from <https://scdhec.gov/environment/your-home/drinking-water-concerns/protecting-your-drinking-water> Whether your drinking water comes from a lake, river, reservoir, or groundwater, it is important to protect the source from contamination. One of the best ways to protect your drinking water is to prevent pollution from getting into your drinking water source. Your drinking water can become polluted with animal waste, fertilizer, pesticides, herbicides, motor oil, gasoline, and other substances as they get carried to the source by runoff pollution.

Protection of “water resources” includes bottled water.

Alex Brown, (Staff, Washington Post), STATES LOOK AT BANNING, RESTRICTING BOTTLING FIRMS FROM TAPPING LOCAL GROUNDWATER, Feb. 17, 2020. Retrieved Mar. 17, 2021 from https://www.washingtonpost.com/science/states-look-at-banning-restricting-bottling-firms-from-tapping-local-groundwater/2020/02/14/5f16568e-4e7f-11ea-b721-9f4cdc90bc1c_story.html Washington state, land of sprawling rainforests and glacier-fed rivers, might soon become the first in the nation to ban water bottling companies from tapping spring-fed sources. The proposal is one of several efforts at the state and local level to fend off the fast-growing bottled water industry and protect local groundwater. Local activists throughout the country say bottling companies are taking their water virtually for free, depleting springs and aquifers, then packaging it in plastic bottles and shipping it elsewhere for sale.

Protection of “water resources” includes desalination.

Suez Group, CREATING NEW WATER RESOURCES, Oct. 8, 2018. Retrieved Mar. 17, 2021 from <https://www.suez.com/en/who-we-are/innovating-for-the-future/create-new-water-resources> As the population grows and urbanization continues, the pressure on water resources is increased. We’re addressing this by developing innovative solutions, like the artificial aquifer recharge, desalination and the reuse of waste water technology.

Protection of “water resources” includes conservation measures.

SurfRider Foundation, WATER CONSERVATION: A BETTER CHOICE THAN DESALINATION, Apr. 25, 2017. Retrieved Mar. 17, 2021 from <https://www.surfrider.org/coastal-blog/entry/water-conservation-a-better-choice-than-desalination> The urbanization of our coasts has altered and polluted the natural water cycle. Rooftops, pavement and other impervious surfaces in urban and residential areas prevent rain from soaking into the ground and instead direct polluted runoff straight towards the ocean. At the same time, we are wasting valuable freshwater by using it once, mixing it with our waste, and then discharging it, partially treated, into the ocean. This is threatening the long-term security of our water supply and polluting our coastal waters.

“Water resources” includes all forms of water, including surface, groundwater, and even clouds.

James Symons et al. (American Water Works Association). THE DRINKING WATER DICTIONARY, 2001, 129. Water resources: Water in various forms – such as groundwater, surface water, rain, snow, ice, clouds, and reclaimed or reused water – that is potentially useful for some purpose.

“Water resources” includes matters involving the “use” of water.

Alexander Lane et al., (Water Planning Consultant), WATER RESOURCES: A NEW WATER ARCHITECTURE, 2018, 10. Where there is a stock or supply of freshwater that can be drawn on by individuals, companies or water authorities, that water is termed a ‘water resource.’ The term ‘resource’ implies use, that is use to maintain life and to support standards of living, as well as use through agriculture and other activities.