

**The Europeanization of the
Great Lake States' Wetlands Laws & Regulations**©

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Prepared for

Clare County, Michigan Farm Bureau

Legislative Breakfast

June 26, 2017

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 1. Obama White House Council on Environmental Quality Final Recommendations of Interagency Ocean Policy Task Force
 2. Obama White House, Presidential Executive Order 13547 – Stewardship of the Ocean, Our Coasts and the Great Lakes

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1. George H.W. Bush 1988 Speech Declaring “No-Net-Loss-Of-Wetlands Goal”
2. Bush (‘41’) Administration EPA-U.S. Army Corps of Engineers Memorandum of Agreement Concerning the Determination of Mitigation Under [CWA] Section 404(b)(1) Guidelines
3. Clinton Administration “No-Overall-Net-Loss-Of-Wetlands Interim Policy Goal
4. Bush (‘43’) Administration “No-Net-Loss-Of-Wetlands” Policy
5. Obama Administration “No-Net-Loss-Of-Natural-Resources Goal” – Presidential Memorandum: Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment
6. U.S. No-Net-Loss-Of-Wetlands “Strong” Sustainability Theory Entails European Strict Liability Regulatory Regime
7. Legal Commentators Have Concluded the Following CWA Section 404 Subsections Incorporate Precautionary Action

VI. U.S. EPA Review of Michigan NREPA Calls for More Aggressive Implementation of CWA Section 404 Provisions, Consistent With Great Lakes Agreements

1. Michigan Legislature Passed the Geomare-Anderson Wetlands Protection Act (PA 203, Part 303, Wetlands Protection, of NREPA) in 1979, and MDEQ has Since Adopted Implementing Regulations and Administrative Guidance
2. Michigan and USEPA Executed their first Memorandum of Agreement (“MOA”) Approving Michigan Assumption of EPA 404 Program in 1983, and Executed an MOA Providing Michigan With Authorization to Administer the CWA Section 404 Program in 1984
3. Michigan Was the First State, and is Only One of Two States (New Jersey is the Other State), Authorized to Administer Federal Clean Water Section 404, Vesting It With Full State Control Over CWA Dredge-and-Fill Permitting Decisions
4. The Michigan Environmental Council (“MEC”), a Nonprofit 501(c)(3) Environmental Group and MEC Member Lone Tree Council of Bay City, MI Petitioned USEPA in 1997 to Perform a Comprehensive Review of Michigan’s 404 Program to Ensure Reform of the Program or its Withdrawal
5. USEPA Region 5’s Final 2008 Report Reviewing MDEQ’s 404 Program Found Several Jurisdictional and Non-Jurisdictional Deficiencies Requiring Corrective Actions, But Did Not Withdrawal Necessary
6. Michigan and USEPA Executed an MOA Setting Forth Details Regarding Michigan’s Implementation of CWA Section 404 in 2011
7. Michigan’s Legislature Enacted and Governor Signed Public Act (“PA”) 98 in 2013, Significantly Amending NREPA in Response to EPA’s Identification of 22 Inconsistencies With Federal CWA Section 404
8. In 2013, MDEQ Water Resources Division Chief William Creal Requested USEPA Review of NREPA Act 98 Amendments to Ensure They Did Not Alter Michigan’s Ability to Administer the USEPA 404 Program
9. In 2016, USEPA Chicago Regional Office Wrote to MDEQ WRD Chief, Teresa Seidel Re Federal Register Notice of Completion of EPA’s Review and Approval of NREPA Act 98 Amendments
10. USEPA Approved of Most NREPA Act 98 Revisions, But Rejected Some Important NREPA Act 98 Provisions

Detailed Presentation

- I. Michigan and Other Farmers Suffer Harmful Impacts of U.S. Federal and State EPA Clean Water Act Sec. 404 Wetlands Enforcement Policies that Weaken Private Property Rights
1. Private Farmlands Designated as Public “Waters of the United States” -Related Wetlands Without Compensation Page | 4
- a. [United States v. Brace](#) (30-Year-Old EPA Case Against Pennsylvania Farmer)
- i. Case Dockets
- [No. 1:90-cv-00229-SPB](#)
 - [No. 1:17-cv-00006-BR](#)
- ii. Media Reports
- [Erie County Farmer Continues Fight Over Wetlands Issue - United States Goes to Court, Again, Against Robert Brace](#), (Erie Times, January 12, 2017)
 - [Erie County Farmer’s Case Headed for Mediation – A Waterford Area Farmer’s Legal Battle with the U.S. Government Continues](#), (Erie Times, March 2, 2017)
 - I Know How Robert Brace Feels; What’s Your Opinion? What Can You Do?, Editorial, (Farmshine, [p. 4](#) and [p. 7](#), March 24, 2017)
 - [Erie Farmer Fights EPA Over Water Ruling](#), (Lancaster Farming (April 14, 2017)
 - [Mediation Fails to End Fed Case Against Waterford Farmer](#), (Erie Times, March 22, 2017)
 - [US Food Security and Farmers’ Livelihoods at Stake in “Waters of the US” Rule Rewrite](#), (The WLF Legal Pulse, April 20, 2017)
 - [EPA Disregard for "WOTUS" Prior Converted Cropland Exclusion Kills Ag Jobs and Contributes to National Security Risk](#), (Canada Free Press, April 29, 2017)
 - [US v. Brace, the 30 Year Battle](#) (Farm and Dairy, May 4, 2017)
- b. [Duarte Nursery, Inc. v. U.S. Army Corps of Engineers](#), Case 2:13-cv-02095-KJM-AC (E.D. Ca 2017) (2-Year-Old Case Against California Farmer)
- i. [Case Filed by Duarte Against Army Corps](#)
- ii. Media Reports
- [A Land-Use Case That’s Enough to Furrow a Farmer’s Brow](#) (LA Times, Jan. 15, 2016)
 - [Duarte Nursery: Farm Families ‘Should be Scared’ About Lawsuit](#) (AgWeb, Sept. 27, 2016)
 - [Farmer Faces \\$2.8 Million Fine After Plowing Field](#), (Record Searchlight, May 22, 2017)
 - [California Farmer Fined \\$2.8M for Plowing His Own Field](#), (Breitbart, May 23, 2017)
 - [He Plowed His Field; Now He Faces a \\$2.8 Million Fine](#), (USA Today, May 24, 2017)
 - [Feds Fine Farmer \\$2.8 Million For ‘Deep Ripping’ Of Farmland](#), (Daily Caller, May 24, 2017)
 - [Trump’s Regulatory Rollback No Help for Farmer Facing \\$2.8M Fine for Plowing Own Land](#), (Fox News U.S., May 31, 2017)

c. [Other Farmers](#)

II. U.S. Federal and Michigan State Clean Water Act Section 404 Wetlands Enforcement Policies Based on European/International U.N. Sustainable Development (“SD”) Law

1. SD Law Reflects Compromise of Capitalism and Marxism:
 - a. Lawrence Kogan, [Local Sustainability Movement Rides Wave of Evolving Federalism to ‘Axe’ Private Property Rights](#) (Kentucky J. of Equine, Agriculture & Nat’l Res. Law, Summer 2015) (pp. 470-471):
 - i. “Those unfamiliar with [sustainable development] SD may not realize that it is **rooted in an uneasy late twentieth century political and philosophical compromise between Marxism and capitalism.**”
 - b. George Liodakis, [Material, Social and Theoretical Aspects of Sustainable Development](#), at the World Economics Association Sustainability Conference 7-10 (Sept. 24-Oct. 21, 2012) (pp. 7, 10)
 - A. Liodakis noted how: “**Marx’s fruitful insight led him to depict the relation between nature and society as a metabolic relation increasingly disrupted by the development of capitalism**, both in agriculture and industry [...] This insight has served as the basis for a considerable recent literature concerning this growing metabolic rift and its implications for a sustainable and ecologically compatible development. [...] **As argued throughout this paper, however, due to the essential features of capitalism, it is impossible to have reforms of capitalism adequate to the task of creating conditions of social and ecological sustainability, not to speak of a truly sustainable human development.**”
2. SD Referred to as European “Third Way” and American Center-Left Movement:
 - a. Anthony Giddens, [The Third Way: The Renewal of Social Democracy](#) (1998);
 - b. Economist, [The Third Way Revealed](#) (Sept. 17, 1998) (critiquing weakness of sustainable development/social democracy as compared to socialism);
 - c. Anne Bartlett, [Greening London: Sustainability, Politics and the Third Way](#), Chap. 14 in “Human Settlement Development” – Vol. IV, Encyclopedia of Life Support Systems (United Nations Educational Scientific and Cultural Organization (UNESCO 2003) (p. 4).
 - i. Barlett noted that: “[F]or many of the [...] architects of the Third Way, sustainability [...] demands a more flexible and in some respects syncretic approach, often bringing together apparently incongruous themes or groups all in the name of **political compromise. Sustainability...requires an accommodation between the traditionally opposed factions of capitalism and environmentalism** in an attempt to achieve a modus vivendi in which all sets of actors can pursue their agendas. It requires a ‘meeting of minds’ – a reinvigoration of the sustainability agenda – in which business, environmental requisites and consumer demand can be harnessed in a mutually beneficial relationship.”)
 - d. James Sloam, [Blair, the Third Way and European Social Democracy: A New Political Consensus?](#), Paper Presented to “Britain After Blair” Conference (Chicago, IL, 29 August 2007) (p. 2).

- i. “The Third Way movement was developed by the centre-left in the US [during the Clinton administration], and then the UK [the Blair administration], as a response to new challenges.”
 - ii. Sloam described how: “Labour’s Third Way has provided a coherent political philosophy that has been enacted in government. Its central aims of have been to promote the primacy of the economy, and to **concentrate spending priorities on social investment within the context of an active welfare state.**”

3. SD/Third Way Movement Engenders Europe’s Social Market Economy, Continental Welfare State and ‘New Keynesian’ (State-Intervention) Economics:
 - a. Christian Joerges and Florian Rodl, [*‘Social Market Economy’ as Europe’s Social Model?*](#), European University Institute Working Paper LAW No. 2004/8 (2004);
 - b. Jurgen Jeske, [*The ‘Third Way’ Between State Intervention and the Free Market*](#), Taipei Times (March 3, 2015);
 - c. Jochen Clasen and Daniel Clegg, [*Does the Third Way Work? The Left and Labour Market Policy Reform in Britain, France, and Germany*](#), in Jane Lewis and Rebecca Surender, “Welfare State Change: Towards a Third Way?” (Oxford Univ. Press 2005) (p. 89)
 - i. These authors noted how “in more scholarly debates about welfare states and their reform, the term [“Third Way”] is also increasingly employed as shorthand for the policy mix perceived to be best suited to **reconciling economic performance and social justice in a transformed international economy.**”)
 - d. Philip Arestis, [*New Consensus, New Keynesianism, and the Economics of the ‘Third Way.’*](#) Levy Economics Institute of Bard College, Working Paper No. 364 (2002) (“argu[ing] that the ideas of the ‘third way’ are closely related with ‘new Keynesian’ economics”).

4. SD Clinton Administration Policies Updated FDR’s New Deal Policies & “Reinvented” Government
 - a. Margaret Weir, [*The Collapse of Bill Clinton’s Third Way*](#), in *New Labour*, edited by Stuart White and Susan Giaimo (MacMillan Publ. (2000)) (pp. 2-4, 7);
 - i. Weir noted how such policies “envisioned a different relationship between government and the market than traditional New Deal policies”). Clinton SD policies “**embraced activist government**” by “**reinvent[ing] government,**” and “**adopted an aggressive market-oriented internationalism evidenced in [] support for [...] NAFTA**” and ultimately “**WTO.**”
 - ii. Weir concluded that Clinton’s effort then suffered from: 1) lack of American institutions “from which to launch active and intelligent state action;” 2) a difficult national political system then incapable “of striking the kinds of legislative bargains that third way approaches often entail;” and 3) “uncertain power of public opinion [...] the lack of a natural constituency, much less a universal agent [...] very little organization infrastructure for mobilizing grass roots constituencies of any kind.”
 - b. Lawrence Kogan, [*The European Strategy to Become the New Global Standards-Setter*](#), (Presentation at U.S. [*Agricultural Export Development Council’s Fiscal Year 2011 Annual Workshop*](#), Baltimore, MD, Nov. 2010).

- 5. SD Obama Administration Policies Harnessed Community Activism and Public Opinion:
 - a. William Schneider, [Clinton, Obama and the Third Way](#), the Atlantic (Dec. 2006);
 - b. David Moberg, Obama’s Third Way, National Housing Institute (Spring 2007)
 - i. “Now, as he campaigns for the Democratic presidential nomination, Barack Obama is drawing on his community-organizing experience, comparing his candidacy to a grass-roots project and frequently referring to lessons he learned as an organizer. [...] When Obama ran for his first elected post in the Illinois state Senate, he laid out a vision of the politician as political organizer, an expression of his hope in a political ‘third way.’”
 - c. Michelle Diggles, [The New Electorate and the Future of the Democratic Party](#), Third Way (Sept. 19, 2013);
 - d. Jonathan Cowan, Jim Kessler, Gabor Horwitz and Joon Suh, [Ready for the New Economy](#), Third Way (Oct. 28, 2015);
 - e. The *Obama* administration drove Clinton administration SD policies into the 21st Century via the internet, and:
 - i. Provided the grass roots constituency and public opinion in favor of bigger government and progressive regulatory (e.g., Clean Water Act, Clean Air Act, Endangered Species Act) reform at Federal, State & Local levels;
 - ii. Ensured CWA/CAA regulatory reforms enacted were consistent with European/International SD Law;
 - iii. [President Obama’s Advisory Council on Faith-based and Neighborhood Partnerships \(2017\)](#):
 - A. **“WE RECOMMEND THAT THE PRESIDENT LEAD THE IMPLEMENTATION OF THE SUSTAINABLE DEVELOPMENT GOALS IN AMERICA”:**
 - I. “The world as a whole is making dramatic progress against hunger, poverty, and disease. The nations of the world recently committed themselves to the Sustainable Development Goals (SDGs), which begin with commitments to end poverty and hunger by 2030. **The global goals also address the issues of inequality and environmental sustainability.**
 - II. **We commend the President for affirming that the new global goals apply to all countries, including the United States.”** (pp. 26-27, 43);
 - B. **“COUNCIL MEMBERS**
 - I. Lanae Erickson Hatalsky **Third Way”** (p. 8);
 - II. “[...] **Lanae Erickson Hatalsky is Vice President for Social Policy and Politics at Third Way**, a position she has held since September 2015. Ms. Erickson Hatalsky has served in a number of roles at Third Way since 2008, including Policy Counsel, Senior Policy Counsel, Deputy Director, and Director. [...]” (p. 66).

III. Michigan is a Party to Three (3) Canada-U.S. (International) Agreements Incorporating European/International SD Law, Especially the Precautionary Principle

1. **The Canada-US Great Lakes Water Quality Protocol of 2012:**
 - a. Supersedes the Great Lakes Water Quality Agreement of 1978, as amended (Art. 13).
 - b. **The State Governments of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Wisconsin and the Commonwealth of Pennsylvania**, in cooperation with the Governments of the United States and Canada, “shall develop and implement programs and other measures to fulfill the purpose of this Agreement, in accordance with the Principles and Approaches set forth in Article 2, and to achieve the General and Specific Objectives set forth in Article 3.” (Art. 4(1)).
 - i. These programs and other measures shall include, but are not limited to:
 - A. pollution abatement, control, and prevention programs;
 - B. aquatic invasive species programs and other measures;
 - C. conservation programs;
 - D. enforcement actions and other measures to ensure the effectiveness of the programs described above;
 - E. research and monitoring programs to support the commitments made in this Agreement. (Arts. 4(2)(a)-(e)).
 - c. The United States commits itself, in the implementation of this Agreement, to seek [...] the enactment of any legislation that may be necessary to implement programs and other measures developed pursuant to Article 4, [...] the cooperation of State Governments [...]and] input and advice from **downstream jurisdictions** on matters relating to this Agreement, as appropriate. (Arts. 4(3)(c),(d) and (f)).
 - d. The Protocol imposes directly upon the U.S., and indirectly upon **State Governments:**
 - i. The general obligation to “support healthy and productive wetlands and other habitats to sustain resilient populations of native species” (Art. 3.1(a)(v));
 - ii. The directive to employ the [ecosystem \[-based management \(precautionary\)\] approach](#) – taking management actions that integrate the interacting components of air, land, water, and living organisms, including humans (Preambular Par. 6; Arts. 2(4)(b) and (f));
 - iii. The directive to employ the European ([Precautionary Principle](#)) “**precautionary approach** [...] as set forth in the Rio Declaration on Environment and Development [...] in order to achieve the purpose of this Agreement” (Art. 2.4(i));
 - A. ““Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation;””
 - iv. The directive to employ the European “[‘polluters-pay’ principle](#), as set forth in the Rio Declaration on Environment and Development, ‘that [the polluter should, in principle, bear the cost of pollution](#).’” (Art. 2(4)(h));
 - v. The directive to employ “best available [precautionary] science”, subject to the three parameters of sustainable development (social, economic and environmental); (Arts. 2(4)(l) and (m)).
 - vi. The directive to employ “tributary management” focused on restoration of surface waters flowing into the “Waters of the Great Lakes” (Art. 1(j) – e.g., tributaries with a substantial nexus to “Water of the U.S.”, including wetlands. (Art. 2(4)(n));

- e. The U.S. agrees to receive (take) advice and recommendations from the International Joint Commission (“IJC”) established by the [Boundary Waters Treaty](#) executed by the U.S. and Canada in 1909 (Arts. 1(d), 3(6), 7(1)), which covers water quality issues arising in [shared waterways and related watersheds along the entire Canada-U.S. border](#). The IJC is [authorized by the Boundary Waters Treaty and the \(former\) Great Lakes Water Quality Agreement of 1978 to provide independent third-party oversight of the activities of USEPA](#) (directly) and State Governments (indirectly) in the Great Lakes. IJC oversight extends to the following matters:
- i. IJC-analyzed, -verified and -disseminated data and information received from the U.S. and State Governments relating to Great Lakes **water quality and transboundary pollution from tributary waters and other sources** (Art. 7(1)(a));
 - ii. The social, economic and environmental aspects of current and emerging Great Lakes water quality-related issues including specific IJC **recommendations concerning the revision of the General Objectives, Lake Ecosystem Objectives and Substance Objectives, legislation, standards and other regulatory requirements, programs, and other measures**, and intergovernmental agreements relating to Great Lakes water quality (Art. 7(1)(c)(i));
 - iii. Scientific matters related to the Great Lakes Basin Ecosystem, including:
 - A. Identification of objectives for scientific activities; and
 - B. Scientific advice and recommendations to the U.S. and State Governments (Art. 7(1)(e)).
 - iv. The U.S., directly, and State Governments, indirectly, are obliged to provide the IJC with any available Great Lakes water quality-related data or information if so requested. (Art. 7(2)).
 - v. The IJC is charged *inter alia* to fulfill its obligations under Science Annex 10. (Art. 7(5). Annex 10 obliges the U.S., directly, and State Governments, indirectly, to:
 - A. Use adaptive (ecosystem-based) science management techniques (Annex 10.B.1);
 - B. “Review available [precautionary] scientific information to inform management actions and policy development” and consider IJC/Great Lakes Science Advisory Board advice (Annex 10.C.1), and “identify science priorities [employing IJC] recommendations (Annex 10.C.2).
 - C. “[E]stablish and maintain comprehensive [precautionary] science-based ecosystem indicators to assess the state of the Great Lakes, and to anticipate emerging threats...” (Annex 10.D).
 - f. The 2012 Protocol Implements Findings of a 1994 IJC Report Recommending Application Of [“Weight-Of-The-Evidence” \(“WOE”\) Approach](#):
 - i. Although WOE is focused primarily on identification of “substances suspected of being persistent and toxic,” it has since been employed far more widely as a process to ensure restoration of the Great Lakes Waters:
 - A. *The IJC introduced this concept as part of its call for a precautionary set of environmental policies, including the use of the ‘reverse onus’ approach to chemical regulations.* The IJC and governments must now more fully define the use and meaning of the term ‘weight of evidence approach’ as it is used in this context. We would like to share some thoughts on the use of a ‘weight of evidence’ approach for evaluating scientific information in a precautionary policy

- setting...” (emphasis added) (p. 20);
- B. “...In defining a ‘weight of evidence’ or ‘precautionary’ approach to environmental policy, the proper role of science is to generate theories and evidence, to suggest how these can inform public policy, and to evaluate the validity and relevance of cited scientific information to the policy matter under consideration...” (emphasis added) (p. 21);
- C. “Weighing evidence in order to decide upon a course of action under circumstances of uncertainty is not a value-neutral exercise. The loving parent does not conclude, ‘Odds are that the kid won’t fall.’ The prudent physician does not decide, ‘Statistical considerations favor a diagnosis of pneumonia.’ *Precaution must be built into the rules of inference. [...] When the harm is large, the uncertainty is great, and our ability to predict the future is limited, we adopt a precautionary standard to judgment and inference. [...] Somehow, society has decided that it prefers to err on the side of pollution and disease rather than to err on the side of a clean environment and health. This principle, however, derives neither from scientific principles nor from some thoughtful consideration of public ethics and morality. It originated at a time when the potential for toxic pollution to harm public health and the environment was still poorly understood. [...] The IJC proposes to change this situation with the principles of reverse onus. This means that when applying the weight of evidence approach in deciding when to act, the burden of proof should not be on society but rather, on the producers and users of synthetic chemicals*” (emphasis added). (p. 23);
- D. “**The Precautionary Principle** [...] Some argue that the IJC’s ‘weight of evidence approach’ is weaker than the ‘precautionary principle.’ This interpretation is false, however, and in sharp conflict with the IJC’s usage. *The weight of evidence approach does not simply involve weighing positive against negative or inconclusive evidence according to traditional standards of proof. The Commission, rather, has called precaution the ‘basic under-pinning’ of their strategy. The use of a precautionary context changes both the purpose and the practice of weighing evidence. The issue now being explored is the development of a methodology for weighing evidence in a precautionary framework -- or what might be called ‘precautionary inference’*” (boldfaced emphasis in original; italicized emphasis added). (p. 24);
- E. “[...] **Precautionary Inference** *Two of the most important applications of the precautionary principle are zero discharge for persistent toxic substances and reverse onus for synthetic chemicals. Even after these principles are adopted, however, weighing evidence in a precautionary framework is still required. There will be policy decisions to make, and these will be based in part on scientific information that remains, as always, incomplete, inconclusive, or indeterminate. There must be some method of evaluating evidence that is consistent with a precautionary standard. This method can be termed precautionary inference*” (boldfaced emphasis in original; italicized emphasis added). (p. 24);

- I. “...Precautionary inference provides a method for making scientific judgments based on incomplete, inconclusive or indeterminate data in a field in which significant harm may occur from a false negative judgment. *Unlike the current scientific and policy framework, this approach reverses the burden of proof, framing the question with the null hypothesis: ‘What evidence must we IGNORE to conclude that a causal relationship does not exist?’*” (italized emphasis added). (p. 25);
 - II. “[...] Precautionary inference in this field relies on a holistic evaluation of an integrated body of evidence from laboratory experiments, wildlife studies and epidemiological investigations. *The focus shifts from whether or not causal relationships have been definitively proven to considering whether a body of direct and/or circumstantial evidence suggests a plausible hypothesis that harm has occurred.*” (p. 26);
- F. **Conclusion** *Precautionary inference is a method for evaluating scientific evidence within a precaution-based policy framework. It is a system for considering scientific evidence when a ‘false negative’ judgment would in significant harm and when there is uncertainty in our predictive ability. The burden of proof rests on the producer and/or user of the chemicals. Shifting the burden of proof from society to those who advocate the production and use of chemicals not only changes the standard for policy decisions but has implications for the method by which evidence is weighed. Precautionary inference requires a holistic consideration of an integrated body of direct and circumstantial evidence. The central question of precautionary inference is, ‘What information must be ignored to conclude that there is no danger to health and the environment?’*” (emphasis added). (p. 26).
- g. The 1994 IJC Report Ignores the Nuanced Distinctions Between Europe’s More Stringent Precautionary Principle and the UN SD Precautionary Approach Which Have Serious Consequences:
 - i. Lawrence Kogan, [Revised U.S. Deep Seabed Mining Policy Reflects UNCLOS and Other International Environmental Law Obligations](#), LexisNexis Emerging Issues 6893 (2013) (pp. 14-17);
 - ii. Jale Tosun, [Risk Regulation in Europe: Assessing the Application of the Precautionary Principle](#) (Springer 2012) (pp. 41-42);
 - iii. Noah Sachs, [Rescuing the Strong Precautionary Principle From Its Critics](#), 2011 U. Ill. L. Rev. 1285 (pp. 1290, 1293-1294, 1305, 1307, 1315);
 - iv. Miriam Haritz, [An Inconvenient Deliberation: The Precautionary Principle’s Contribution to the Uncertainties Surrounding Climate Change Liability](#), (Kluwer Law Int’l 2011) (p. 77);
 - v. Milieu Law & Policy Consulting, Ltd., the T.M.C. Asser Institute, and PACE, [Considerations on the Application of the Precautionary Principle in the Chemicals Sector](#), Final Report prepared for the European Commission (Aug. 2011) (p. 15);
 - vi. Lawrence Kogan, [What Goes Around Comes Around: How UNCLOS Ratification Will Herald Europe’s Precautionary Principle as U.S. Law](#), 7 Santa Clara J. Int’l L. 23 (2009);

- vii. Lawrence Kogan, [*The Extra-WTO Precautionary Principle: One European 'Fashion' Export the United States Can Do Without*](#), 17 TEMP. POL. & Civ. RTS. L. REV. (Spring 2008);
 - viii. Marko Ahteensuu, [*IN DUBIO PRO NATURA? A Philosophical Analysis of the Precautionary Principle in Environmental and Health Risk Governance*](#), 20 Rep. from the Dept of Phil, University of Turku, Finland (2008) (p. 1);
 - ix. Geert van Calster, [*Risk Regulation, EU Law and Emerging Technologies: Smother or Smooth?*](#), 2 Journal of NanoEthics 61 (Springer Publ. April 2008)
 - x. Maria Vittoria Lumetti, [*Brief Note on Precautionary Principle in Common Law and Civil Law*](#), Abstract of Presentation at the International Commission for Electromagnetic Safety Conference: “The Precautionary EMF Approach: Rationale, Legislation and Implementation” (Feb. 2006). Full Presentation Translated from Italian [here](#).
 - xi. Lawrence Kogan, [*Exporting Precaution: How Europe’s Risk-Free Regulatory Agenda Threatens American Free Enterprise*](#), Washington Legal Foundation Monograph (Nov. 2005).
 - xii. Rolando Castro, [*Protection of Sea Turtles: Putting the Precautionary Principle into Practice*](#), in “Biodiversity and the Precautionary Principle: Risk and Uncertainty in Conservation and Sustainable Use” (Eds. Cooney and Barney Dickinson, Earthscan Publ. 2005) (p. 117);
 - xiii. Theofanis Chrisotoforou, [*The Precautionary Principle in European Community Law and Science*](#), Chap. 16, in “Precaution: Environmental Science and Preventive Public Policy” (Joel A. Tickner, ed., Island Press 2002) (p. 249);
 - iv. François Ost, [*The Philosophical Foundation of Environmental Law: An Excursion Beyond Descartes*](#), Facultes Universitaires Saint-Louis, Bruxelles, Human Rights and Intellectual Dialogue (Oct. 2001);
 - h. Governments Often Use More Stringent European Precautionary Principle, Not U.N. Precautionary Approach, to Implement Federal, State SD Laws and Policies
 - A. Europe’s Precautionary Principle, has substantially transformed the modern empirical science paradigm to one of nonreproducible computer models and imposed unnecessarily high costs upon farmers and other landowners if their activities are only possibly harmful to the environment.
 - i. Lucas Bergkamp and Lawrence Kogan, Trade, [*The Precautionary Principle and Post-Modern Regulatory Process: Regulatory Convergence in the Transatlantic Trade and Investment Partnership*](#), European Journal of Risk Regulation, Vol. 4, Issue 4 (2013) (pp. 493-507)
2. [**International Great Lakes—St. Lawrence River Basin Sustainable Water Resources Agreement**](#) (Dec. 13, 2005);
- a. Agreement Parties include: the States of Illinois, Indiana, **Michigan**, Minnesota, New York, Ohio and Ontario, the Commonwealth of Pennsylvania, the Province of Ontario and the Government of Quebec. (Preamble).
 - b. Agreement Presumptions:
 - i. These States shall enact concurrent CWA-related legislation to implement Compact (Preamble, Sec. 1);

- ii. “The Waters of the Basin [...] are interconnected and form a single hydrologic system (Preambular Paras. 1-2);
- iii. **“Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation”** (Preambular Para. 9);
- iv. **“Sustainable development and harmony with nature** and among neighbors require cooperative arrangements for the **development and implementation of watershed protection approaches** in the Basin” (Preamble, Sec. 1, Para. 10);
- c. Agreement Reaffirms: Findings and Principles of **Great Lakes Charter** and Commitments and Directives of **Great Lakes Charter Annex 2001** (Preamble, Sec. 2):
 - i. **The Great Lakes Charter – Principles for Management of Great Lakes Water Resources** (Feb. 11, 1985) –
 - A. Findings:
 - I. The multiple uses of Great Lakes natural resources “for municipal industrial and **agricultural water supply**; mining; navigation; **hydroelectric power and energy production**; recreation; and maintenance of fish and wildlife habitat and a balanced ecosystem are interdependent.” (Findings Para. 3);
 - II. **Deference to IJC Studies** – “Studies conducted by the [IJC] the Great Lakes States and Provinces, and other agencies have found that without careful and prudent management, the future development of diversions and consumptive uses of the waters resources of the Great Lakes Basin may have significant adverse impacts on the environment, economy, and welfare of the Great Lakes region.” (Findings, Para. 4).
 - B. Principles:
 - I. Integrity of the Great Lakes Basin
 - 1. Treats water resources of the Basin as a single hydrologic system, managing natural resources and ecosystem of Basin as a unified whole;
 - II. Cooperation Among Jurisdictions;
 - III. Protection of the Water Sources of the Great Lakes
 - 1. Requires implementation of legislation establishing programs to manage and **regulate diversion and consumptive use of Basin water resources**;
 - IV. Prior Notice and Consultation;
 - V. Cooperative Programs and Practices;
 - C. Implementation of Principles:
 - I. A Basin Water Resources Management Program should include:
 - 1. “An identification and assessment of existing and future demands for diversions into as well as out of the Basin, withdrawals, and consumptive uses for municipal, domestic, **agricultural**, manufacturing, mining, navigation, **power production**, recreation, fish and wildlife, and other uses and ecological considerations.
 - 2. “Consultation Procedures [...] 2. The permitting State or Province will solicit and carefully consider the comments and concerns of the other Great Lakes States and Provinces, and where applicable, the [IJC], prior to rendering a decision on an application;”

- ii. [The Great Lakes Charter Annex – A Supplementary Agreement to the Great Lakes Charter](#) (June 18, 2001) –
- A. **“DIRECTIVE #1: Develop a new set of binding agreement(s).** The Governors and Premiers agree to **immediately prepare a Basin-wide binding agreement(s) such as an interstate compact and such other agreements, protocols or other arrangements between the States and Provinces as may be necessary to creating the binding agreement(s) within three years of the effective date of the Annex.** The purpose of the agreement(s) will be to further the Governors’ and Premiers’ objective to protect, conserve, restore, improve, and manage use of the Waters and Water-Dependent Natural Resources of the Great Lakes Basin;”
 - B. **“DIRECTIVE # 3: Establish a new decision making standard.** The new set of binding agreement(s) will **establish a decision making standard that the States and Provinces will utilize to review new proposals to withdraw water from the Great Lakes Basin as well as proposals to increase existing water withdrawals or existing water withdrawal capacity.**” The new standard shall be based upon the following principles:
 - I. “[...] environmentally sound and economically feasible water conservation measures;”
 - II. **“No significant adverse individual or cumulative impacts** to the quantity or quality of the Waters and Water-Dependent Natural Resources of the Great Lakes Basin;”
 - III. [...] **Compliance with** the applicable state, provincial, federal, and **international laws and treaties;”**
 - C. **“DIRECTIVE # 6: Further commitments.** The Governors and Premiers [...] also commit to:
 - I. **Develop guidelines regarding the implementation of mutually agreed upon measures** to promote the efficient use and conservation of the Waters of the Great Lakes Basin within their jurisdictions [...];
 - II. [...] **improve the sources and applications of scientific information** regarding the Waters of the Great Lakes Basin and the impacts of withdrawals from various locations and water sources on the ecosystem [...].”
 - d. **The primary objective of the Great Lakes—St. Lawrence River Basin Sustainable Water Resources Agreement is to implement Europe’s Precautionary Principle:**
 - i. **“To act together to conserve and restore the Waters of the Great Lakes-St. Lawrence River Basin because *current lack of scientific certainty should not be used as a reason for postponing measures to protect the Basin Ecosystem*”** (Chap. 1, Art. 100.a);
 - ii. **“To promote an Adaptive Management approach to the conservation and management of Basin Water resources”** (Chap. 1, Art. 110.h).
3. [St. Lawrence River Basin Water Resources Compact \(Implementing Agreement\):](#)
- a. The States of **Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Wisconsin, and the Commonwealth of Pennsylvania** are Parties to this [Interstate Compact](#) (Preamble, Sec. 1);

- i. **These States enacted concurrent legislation to implement the Compact with approval from the U.S. Congress on Dec. 13, 2005.**
 - ii. Senate Joint Resolution 45, a Resolution Consenting to and Approving the Great Lakes-St. Lawrence River Basin Compact in [P.L. 110-342](#), 122 Stat 3739 (Oct. 3, 2008).
 - iii. Michigan’s Governor, as Are the Governors of All Parties, Are [Members](#) of the [Conference of Great Lakes and St. Lawrence Governors and Premiers](#);
- b. Includes geographically “the watershed of the Great Lakes and the St. Lawrence River upstream from Trois-Rivieres, Quebec within the jurisdiction of the Parties.” (Art. 1, Sec.1.2);
- c. Based, in part, on the [Protection of the Waters of the Great Lakes – Final Report to the Governments of Canada and the United States](#) (Feb. 22, 2000) (p. 4).
- d. The Compact is Intended Primarily Intended:
 - i. “[T]o protect, conserve, restore, improve and effectively manage the Waters and Water Dependent Natural Resources of the Basin under appropriate arrangements for intergovernmental cooperation and consultation.” (Art. 1, Sec. 1.3.2.a);
 - ii. Implement the Great Lakes—St. Lawrence River Basin Sustainable Water Resources Agreement. (Arts. 1, Sec. 1.2 (“Agreement,” “Regional Body”); 3.4.1 (“Program Review and Findings”); 4.2.2 (“Water Conservation and Efficiency Programs”); 4.5 (“Regional Review”).
- e. The Compact Purposes of Protection/Restoration Are Subject to the International European Union **Precautionary Principle**:
 - i. “[C]urrent lack of full scientific certainty should not be used as a reason for postponing measures to protect the Basin Ecosystem.” (Art. 1, Sec. 1.3.2.a).
 - ii. “The Parties in cooperation with the Provinces shall collectively conduct within the Basin, on a Lake watershed and St. Lawrence River Basin basis a periodic assessment of the Cumulative Impacts of Withdrawals, Diversions and Consumptive Use from the Waters of the Basin [...]” (Art. 4, Sec. 4.15.1);
 - iii. “This Assessment shall [...] take into account **the current state of scientific knowledge, or uncertainty, and appropriate Measures to exercise caution in cases of uncertainty if serious damage may result;**” (Art. 4, Sec. 4.15.1.b);
 - iv. This Assessment also shall “[c]onsider **adaptive management principles and approaches, recognizing, considering and providing adjustments for the uncertainties in, and evolution of science** concerning the Basin’s water resources, watersheds and ecosystems, including potential changes to Basin-wide processes, such as lake level cycles and climate.” (Art. 4, Sec. 4.15.1.c.)
- f. At least one legal commentator has noted how a [2000 IJC report](#) had influenced the development of this Compact and its adoption of Europe’s more aggressive Precautionary Principle.
 - i. The 2000 IJC report refers to the Precautionary Principle on pp. 5, 29, 42, 46 and 50;
 - ii. A. Dan Tarlock, [The International Joint Commission and Great Lakes Diversions: Indirectly Extending the Reach of the Boundary Waters Treaty](#), 54 Wayne L. Rev. 1661 (2008). According to this commentator:
 - A. “[T]he Compact adopts, with little fanfare, directly and indirectly several contested key principles of international environmental law such as *precaution*

and the recognition that the Lakes are a common heritage of humankind” (emphasis added). (p. 1677);

- B. “[...] The [IJC] Report blended a synthesis of the available science of the Lake’s hydrology with *the emerging, and much contested, international environmental law precautionary principle* in order to counsel that the Great Lakes states and Canadian provinces were a strong anti-diversion regime” (emphasis added). (p. 1685).

4. **Great Lakes Regional Collaboration Strategy to Restore and Protect the Great Lakes** (Dec. 2005)

- a. “This Strategy is intended to build upon the extensive regional efforts to date, working together toward a common goal of restoring and protecting the Great Lakes ecosystem for this and future generations.” (Exec. Summ. P. 4);
- b. The GLRC Strategy focuses on:
- i. Stopping the introduction of aquatic invasive species; (Exec. Summ., p. 4; 17-22);
 - ii. Ensuring significantly more habitat conservation and species management by **restoring wetlands and creating habitat conservation programs**; (Exec. Summ., p. 4; pp. 23-28);
 - iii. Cleaning up areas of pollution concern identified by U.S.EPA to minimize risk to human health (Exec. Summ., p. 4; pp. 36-40);
 - iv. Restoring coastal health and drinking water quality by monitoring waste (Exec. Summ., p. 4; 29-35);
 - v. Addressing **non-point sources of pollution**, by undertaking actions to ensure:
 - A. Restoration of wetlands;
 - B. Restoration of buffer strips;
 - C. **Improvement of cropland soil management**;
 - D. **Implementation of comprehensive nutrient and manure management plans for livestock operations**; and
 - E. **Improvements to the hydrology in wetlands**
 - F. Goals and Milestones: (pp. 42-46);
 - I. **“By 2010, restore, recover, and protect a net increase of 550,000 acres of wetlands within Great Lakes Basin;”**
 - II. **“By 2015, restore, recover and protect a net increase of 1,000,000 acres (450,000 additional) of wetlands within the Great Lakes basin;”**
 - III. **“Measurably reduce at least hundreds of thousands of tons of sediment, pounds of phosphorous loading and pounds of nitrogen loading to the Great Lakes basin;”** (pp. 42)
 - IV. **“By 2010, have 2,000,000 new acres of Great Lakes basin cropland under appropriate residue management,”** corresponding to a “40 percent decrease in soil loss;”
 - V. **“By 2015, extend to 2,800,000 new acres (800,000 additional new acres) of Great Lakes basin cropland under appropriate residue management;”**
 - VI. **“By 2008, 70 percent of all livestock farmers will attend education programming regarding nutrient management;”**

- VII. **By 2010, all acreage utilized for livestock production in a major phosphorous-impaired Great Lakes watershed in each Great Lakes State will be covered by certified CNMPs;**
- IX. **By 2010, triple the number of certified CNMP providers in the basin that directly assist farmers;**
- X. **By 2015, 70 percent of all livestock production in the U.S. portion of the Great Lakes basin will be covered by certified, phosphorous-based CNMPs.** (p. 43)
- vi. Reducing and eliminating toxic pollutants from the Great Lakes ecosystem; (Exec. Summ., p. 5; 47-52)
- c. **GLRC-Driven Sustainable Development**
- i. The GLRC Strategy aims to Promote Bottom-Up Local Sustainable Development-focused Practices/Behaviors in the Great Lakes Basin (p. 59);
- A. For example, amend “federal agricultural price supports [that] tend to discourage conservation tillage practices;” (p. 60)
- B. Enhance capacity of local and regional organizations (e.g., soil and water conservation districts) to inform, promote and implement sustainability; (p. 62)
- C. [Sustainable Development Appendix](#) (138 pages)
- I. Sustainable Agriculture – satisfies human food and fiber needs, while: enhancing environmental quality and the natural resources base; making the most efficient use of nonrenewable resources and on-farm resources, integrating natural biological cycles and controls; sustaining the economic viability of farm operations; and enhancing farmers’ and society’s quality of life. (p. 4);
- II. Status and Trends in Agricultural Practices
1. 65% of Great Lakes basin farmland is cropland, and approx. 35% of cropland grows corn;
 2. As of 1996, 2/3 of farmland in Great Lakes basin was located within 31 miles of medium and large cities;
 3. **“Farmland loss in the U.S. portion of the Great Lakes basin between 1982 and 1997 was more than 4,000,000 acres, representing nearly 49% of the total farmland loss for the eight Great Lakes states during this period.”**
 4. **“The Census of Agriculture shows the trend of loss of farmland continuing between 1997 and 2002 in the Great Lakes basin States of Indiana, Michigan, Minnesota, Ohio and Wisconsin.”** (p. 5)
 5. Small farms (10-49 acres) and large farms (1,000 acres+) increased, while mid-sized farms (501-999 acres) decreased in number.
 6. Small farms are more likely to use organic farming techniques, which use fewer chemical pesticides and fertilizers for crops, and to use grazing and small-scale animal operations.
 7. The number of acres of irrigated land increased between 1997 and 2002, but the percentage of irrigated farms is just over 2% of all acres farmed. (p. 6).

5. [Michigan's Great Lakes Plan](#) Calls for MDEQ's Aggressive Implementation of the Great Lakes Regional Strategy (Jan. 2009)
- a. The "GLRC Strategy [...] became the basis for the framework of the MI-Great Lakes Plan." (p. 13)
 - b. "Michigan's Great Lakes provide: [...] Water for an agriculture and food industry that is now the state's second largest industry;" (Exec. Summ., p. 1)
 - c. Highlights and extols Michigan's signing of the Great Lakes Compact and development of the GLRC Strategy. (p. 13)
 - d. "A key theme expressed by the public in the Saginaw Bay Watershed area was the importance of controlling pollutants, such as phosphorous, to Saginaw Bay from sources such as combined sewage overflows, **agriculture**, and on-site septic systems. [...] **The public Wetlands must be protected as a means of sustaining water quality.**" (p. 19);
 - e. "Michigan has lost approximately half of its original wetlands." (p. 28);
 - f. Recommendations:
 - i. "Michigan should continue to evaluate wetland protection methods and explore opportunities to work with other agencies to protect these investments."
 - ii. "Michigan should continue to improve and expand coordination and funding opportunities through the Michigan Wetland Working Group to accelerate wetland restoration efforts and achieve wetland restoration goals." (p. 30);
 - iii. "**When wetland mitigation is necessary, the MDEQ should make connections between regulatory actions and mitigation efforts to improve restoration efforts**, including partnering with land conservancies and land trust to identify potential mitigation sites."
 - iv. "Michigan should complete the update of the National Wetland Inventory (NWI) data using 1998 and 2005 aerial imagery." (p. 30);
 - v. "**Michigan should work with the USEPA to mandate incorporation of wetland Best Management Practices (BMP) into watershed planning and implementation efforts.**" (p. 30);
 - vi. "**Michigan should encourage the voluntary removal of dams where they serve little or no purpose and there is a reasonable expectation that removal will improve overall ecological function and improve the health of aquatic resources.**" (See also MDNR, [Tittabawassee River Assessment](#) (Special Report 52, Sept. 2009) (re dam removal, pp. 47, 81-82, 85-86, 89, 93-95);
 - A. Should "[t]rack dam locations and functions for use in providing recommendations for dam retention or removal";
 - B. Should "[c]onsider developing **prioritization tool for dam removal and river restoration**, including fisheries management";
 - C. Should "[c]onsider developing **a river restoration team comprised of representatives from the MDEQ and the MDNR** that could facilitate outreach and information exchange for dam owners wishing to remove a dam." (p. 31);
 - D. Should "[a]ssist[] **local communities in assessment of dams** as part of a comprehensive watershed management and recreational plan[]";
 - E. Should "[c]ontinu[e] to disseminate information on dam removal as part of routine dam safety correspondence";

- F. Should “[c]ontinu[e] to develop, test, and encourage dam operations that mimic natural riverine conditions and temperatures, protect and maintain desired aquatic communities, protect recreational uses, and where possible, rehabilitate natural resources degraded by the dam.”
- G. Should conduct “[r]esearch on the effects of timing and duration of impoundment drawdowns is needed to help minimize adverse effects to wildlife species that use impounded areas.” (p. 32);
- vii. **“Michigan should take full advantage of the Farm Bill programs and other USDA conservation programs to address working lands resource concerns that impact all wetlands (both restored and intact). Additionally, the USDA Environmental Quality Incentives Program (EQIP), Wildlife Habitat Incentives Program, Continuous Conservation Reserve Program (CRP) should be used to assist in protecting wetlands through establishment of conservation measures and in the case of Continuous CRP, restoration of wetlands.”** (p. 33)
- viii. Michigan needs additional funding to meet its obligations under the Great Lakes Regional Strategy to restore wetlands –
- A. **“Michigan should permanently protect 50,000 acres of high quality wetlands and 100,000 acres of associated upland buffers at a rate of at least 1,000 acres of high quality wetland and 2,000 acres of associated upland per year through the establishment of conservation easements or fee simple purchase.”** (p. 33)
- B. “Michigan should take steps to enhance the state’s partnership with the federal Farm Service Agency (FSA) [Conservation Reserve Enhancement Program] CREP by [...c]ompleting Michigan’s current CREP agreement which calls for a total of 85,000 acres of conservation practices [...and] to [w]ork[] with the FSA to expand areas [...] eligible for funding” beyond the limited number of areas (scope) covered by the current [Michigan – USDA Commodity Credit Corporation CREP](#) executed in 2000.
- C. “Michigan’s Wetland Working Group should create a restoration tracking system [...] limited to information that does not violate federal Farm Bill privacy provisions (i.e., limited to acreage of wetlands restored, town, range and section information, etc.) to protect the interests of private landowners.” (p. 33);
- D. **“The MDEQ should secure long-term stable funding for wetlands and lakes and streams regulatory programs, including monitoring** to enable programs to more fully protect Michigan’s Great Lakes resources.” (p. 37).
- ix. Recommendations Requiring Additional Funding to Achieve
- A. **“Michigan should encourage the reduction of agricultural NPS pollutants and flow regime alterations in priority agricultural watersheds.** This effort should include implementation of practices such as: **filter strips, cover crops, tile line management, no-till, manure/nutrient management, wetland restoration, etc.** This would be accomplished by **expanding CREP into additional agricultural watersheds**, further promoting and implementing the Michigan Agriculture Environmental Assurance Program (MAEAP) and by **targeting state dollars toward local Conservation District technical staff to work with landowners.**” (p. 52)

- B. “Michigan should endure that livestock operations are not a source of environmental impairment. Comprehensive Nutrient Management Plan (CNMP) implementation and enforcement should be pursued, when needed. Michigan should also encourage the use of watershed management plans or similar tools to target nutrient reduction activities at high priority locations [...]” (p. 53)
- C. **“Michigan should work with the Great Lakes Congressional Delegation to develop and seek new authorization for a Great Lakes Program in the Farm Bill similar in magnitude to the Chesapeake Bay and Upper Mississippi River programs.”**
- D. “Michigan should work with the Great Lakes Congressional Delegation to initiate and support Great Lakes Strategy and Council of Great Lakes Governors Priorities,” including:
 - I. **“Additional funding for conservation tillage through the USDA EQIP to reduce pollutants in impaired waters or to protect high quality waters in Michigan.”** (p. 53)
 - II. “New funding to develop and implement CNMPs on livestock farms” including for “technical assistance through the USDA Natural Resource Conservation Service.” (p. 54)

IV. Obama Administration U.S. Oceans Policy Covering Great Lakes Incorporated European Precautionary Principle

1. Obama White House Council on Environmental Quality [*Final Recommendations of Interagency Ocean Policy Task Force*](#) (July 19, 2010)
 - a. Calls for substantial reform in U.S. oceans policy consistent with international environmental law:
 - i. “[I]t is the policy of the United States to ensure: 1) “Healthy and Resilient Ocean, Coasts, and *Great Lakes*” (e.g., “Protect, maintain, and restore the health and biological diversity of ocean, coastal, and Great Lakes ecosystems and resources”); 2) “Safe and Productive Ocean, Coasts, and Great Lakes” (e.g., “*Exercise rights and jurisdiction and perform duties in accordance with applicable international law*, including respect for and preservation of navigational rights and freedoms...”); and 3) [Understanding of] Treasured Ocean, Coasts, and *Great Lakes*” (emphasis added). (Sec. III, pp. 14-15);
 - ii. “Decisions affecting the ocean, our coasts, *and the Great Lakes*...will...be guided by a ***precautionary approach*** as reflected in the Rio Declaration of 1992” (emphasis added). (p. 16);
 - iii. “Actions taken to protect the ocean, our coasts, *and the Great Lakes* should endeavor to promote the principles that environmental damage should be avoided wherever practicable and that environmental costs should be internalized, *taking into account the approach that those who cause environmental damage should generally bear the cost of that damage [polluters pay principle]*” (emphasis added) (Sec. IV.1.b-c, p. 16);

- iv. “Human activities that may affect ocean, coastal *and Great Lakes ecosystems* should be managed using *ecosystem-based management* and adaptive management...” (emphasis added). (Sec. IV.2, p. 16);
 - v. The “United States should cooperate and provide *leadership internationally* in the protection, management, and sustainable use of the worlds’ oceans, coastal regions *and Great Lakes in keeping with the applicable conventions and agreements, and with customary international law*, as reflected in the Law of the Sea Convention” (emphasis added). (Sec. IV.7, p. 17)
 - b. George Mannina, Jr., [*Precautionary Ocean Policy Order Will Impact Land-Based Activity*](#), WLF Legal Opinion Letter (Aug. 6, 2010).
2. Obama White House, [*Presidential Executive Order 13547 – Stewardship of the Ocean, Our Coasts and the Great Lakes*](#) (July 19, 2010)
 - a. [Betsy Baker, *International Law & New U.S. Ocean Policy*](#), IntLawGrrls Blog (Aug. 25, 2010):
 - i. **“The Executive Order** states that it is U.S. policy to ‘support sustainable, safe, secure and productive access to, and uses of the ocean, our coasts, and the Great Lakes’ and to ‘exercise rights and jurisdiction and perform duties in accordance with applicable international law.’ The United States is to promote this policy by ‘pursuing ... accession to the Law of the Sea Convention.’ **The order doesn’t mention the precautionary approach. But the Final Recommendations of the Interagency Ocean Policy Task Force, which the order adopts, do.** Specifically, **the Recommendations list the precautionary approach as one of the ‘Principles’ that will guide ‘management decisions and actions affecting the ocean’** (p. 15) and planning for achieving coastal and marine spatial planning (p. 49). [...] **Appendix C of the Recommendations summarizes public comments about the “precautionary approach” and “precautionary principle”** (prior IntLawGrrls posts), the latter of which the United States has consistently declined to apply.”
- V. Michigan DEQ Aggressively Enforces Natural Resources and Environmental Protection Act (“NREPA”) Consistent With U.S. Federal “No-Net-Loss-Of-Wetlands” Policy Incorporating “Strong” Sustainable Development Theory
1. George H.W. Bush 1988 Speech Declaring “No-Net-Loss-Of-Wetlands Goal”
 - a. Keith Schneider, [*The Nation: The Environmental Impact of President Bush*](#), New York Times (Aug. 25, 1991);
 2. Bush (‘41’) Administration EPA-U.S. Army Corps of Engineers [*Memorandum of Agreement Concerning the Determination of Mitigation Under \[CWA\] Section 404\(b\)\(1\) Guidelines*](#) (Feb. 6, 1990) (p. 2);
 3. Clinton Administration “No-Overall-Net-Loss-Of-Wetlands Interim Policy Goal”
 - a. The White House Office on Environmental Policy, [*Protecting America’s Wetlands: A Fair, Flexible, and Effective Approach*](#) (Aug. 24, 1993) (Sec. IV., p. 3);

4. Bush ('43') Administration "No-Net-Loss-Of-Wetlands" Policy
 - a. U.S. Army Corps [Regulatory Guidance Letter 02-2](#) "clarifies and supports the national policy for 'no overall net loss' of wetlands and reinforces the Corps' commitment to protect Waters of the United States, including wetlands." (Dec. 24, 2002) (pp. 1-2);

5. Obama Administration "No-Net-Loss-Of-Natural-Resources Goal" – [Presidential Memorandum: Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment](#), Memorandum for the Secretary of Defense, the Secretary of the Interior, the Secretary of Agriculture, the Administrator of the Environmental Protection Agency and the Administrator of the National Oceanic and Atmospheric Administration (Nov. 3, 2015)
 - a. Directed federal agencies to ensure that their mitigation policies "establish a net benefit goal or, at a minimum, a no net loss goal for natural resources the agency manages that are important, scarce, or sensitive, or wherever doing so is consistent with agency mission and established natural resource objectives." (Sec. 3(b)).

6. U.S. No-Net-Loss-Of-Wetlands "Strong" Sustainability Theory Entails European Strict Liability Regulatory Regime:
 - a. Imposes regulatory permitting obligations upon the mere technical violation of a statute without federal or state government proof of environmental harm;
 - b. Reverses the burden of proof, placing it upon the property owners to show their activities do not harm the environment;
 - c. Lowers the scientific evidentiary thresholds serving as the trigger for finding environmental harm from probable risk to possible hazard (e.g., the dredge and fill of sand, soil, rocks, gravel, woodchips indigenous to the ecosystem being regulated); and
 - d. Dispenses with economic cost-benefit analysis and replaces it with cost-effectiveness analysis based on predetermined (default) environmental goals (benefits).
 - i. U.S. EPA, [Watershed Academy Web - Distance Learning Modules on Watershed Management: The Economics of Sustainability](#) (1997) (pp. 5-6, 12, 21, 23-25).
 - e. "Strong" Sustainability Theory Engenders Application of Precautionary Principle-Based Safe Minimum Standard
 - i. Steven C. Hackett, [Environmental and Natural Resources Economics: Theory, Policy, and the Sustainable Society](#), Fourth Edition (©2011 M.E. Sharpe, Inc.) (Chap. 14, p. 366).

7. Legal Commentators Have Concluded the Following CWA Section 404 Subsections Incorporate Precautionary Action:
 - a. **CWA Section 404(a)** - Kathryn J. Mengerink, [The Deep Ocean: Advancing a Stewardship of the Earth's Largest Living Space, in Science, Technology, and New Challenges to Ocean Law](#) (Harry N. Scheiber, James Kraska, and Moon-Sang Kwon, Eds.) (Brill Nijhoff 2013) (pp. 205-206);
 - b. **CWA Section 404(b)** - Alyson C. Flournoy & Allison Fischman, [Wetlands Regulation in an Era of Climate Change: Can Section 404 Meet the Challenge?](#), J of Energy &

Environmental Law (Summer 2013) (pp. 77-78); Alyson C. Flournoy, [Supply, Demand, and Consequences: The Impact of Information Flow on Individual Permitting Decisions Under Section 404 of the Clean Water Act](#), 83 Ind. L.J. 537, 544 (2008);

- c. **CWA Section 404(c)** – David A. Wilkinson, [Using Section 404\(c\) of the Clean Water Act to Prohibit the Unacceptable Environmental Impacts of the Proposed Pebble Mine](#), 2 Seattle Journal of Environmental Law 181 (2012) (pp. 194-195, 210).

VI. U.S. EPA Review of Michigan NREPA Calls for More Aggressive Implementation of CWA Section 404 Provisions, Consistent With Great Lakes Agreements

1. Michigan Legislature Passed Geomare-Anderson Wetlands Protection Act (PA 203, Part 303, Wetlands Protection, of NREPA) in 1979, and MDEQ has Since Adopted [Implementing Regulations and Administrative Guidance](#).
2. Michigan and USEPA Executed their first Memorandum of Agreement (“MOA”) [Approving Michigan Assumption of EPA 404 Program](#) in 1983, and Executed an MOA Providing Michigan With Authorization to Administer the CWA Section 404 Program in 1984.
3. Michigan Was the First State, and is Only One of Two States (New Jersey is the Other State), Authorized to Administer Federal Clean Water Section 404, Vesting It With Full State Control Over CWA Dredge-and-Fill Permitting Decisions
 - a. Leah Stetson, [Expanding the States’ Role in Implementing CWA § 404 Assumption](#), Association of State Wetland Managers (Nov. 18, 2010) (p. 1);
 - b. Brenda Zollitsch and Jeanne Christie, [Status and Trends Report on State Wetland Programs in the United States](#), Association of State Wetland Managers (March 3, 2016) (p. 27).
4. The [Michigan Environmental Council \(“MEC”\)](#), a Nonprofit 501(c)(3) Environmental Group and MEC Member [Lone Tree Council of Bay City, MI](#) Petitioned USEPA in 1997 to Perform a Comprehensive Review of Michigan’s 404 Program to Ensure Reform of the Program or its Withdrawal.
5. [USEPA Region 5’s Final 2008 Report Reviewing MDEQ’s 404 Program](#) Found Several Jurisdictional and Non-Jurisdictional Deficiencies Requiring Corrective Actions, But Did Not Withdrawal Necessary (May 2008) (pp. 1, 3):
 - a. USEPA found that “State exemptions for farming and other activities (horticulture, silviculture, or ranching) [were] broader in scope than the exemptions in the federal regulations,” and that “State regulations relating to agricultural drainage [...] appear[ed] to exempt discharges associated with bringing a wetland into farming use as long as the wetland is owned by a person engaged in farming.” (p. 96)
 - b. USEPA directed Michigan’s legislature to amend NREPA as follows:
 - i. § 324.30305(2)(e) Farming Exemptions should “apply only to discharges that occur in an area which, at the time of the discharge, already is part of an established and ongoing farming, silvicultural, or ranching operation, consistent with the CWA, applicable federal regulations, and relevant federal case law;”

- ii. § 324.30305(2)(e) should not authorize “discharges which would allow an area to be converted from one exempted use to another exempted use;”
 - iii. §324.30305(2)(j)’s permit exemption for agricultural drainage should be deleted, and, accepted MDEQ recommendations to ensure the permit provisions relating to improvements of drains and construction of some types of drains should be made stricter consistent with CWA federal law;
 - iii. Have Michigan Attorney General’s Office issue an “opinion stating that the § 324.30305(2)(e) [farming, horticulture, silviculture, lumbering, and ranching] exemptions, as amended, as well as the other exemptions established by Michigan law (whether by Part 303, Part 301, or another statute), **shall be interpreted and applied by MDEQ to be as stringent as the comparable federal exemptions;**” (pp. 97-98).
6. Michigan and USEPA Executed an [MOA Setting Forth Details Regarding Michigan’s Implementation of CWA Section 404](#) in 2011. (Nov. 2011)
 - a. “The MDEQ shall administer and enforce the 404 Program in accordance with those state laws and administrative rules that the USEPA has defined as components of the federally authorized 404 Program in the State of Michigan” (Sec. 1);
 - b. “The *MDEQ has primary responsibility for compliance monitoring and enforcement provisions of the State 404 Program, and shall take timely and appropriate enforcement action against persons in violation of permit conditions* for all permits issued under the State 404 Program, and against persons conducting unauthorized discharges of dredge or fill materials into waters of the United States over which the MDEQ has assumed jurisdiction under the State 404 Program” (emphasis added). (Sec. 2(a));
 - c. MDEQ is required to submit annual reports to USEPA to notify of status of compliance and of enforcement actions initiated. (Sec. 2(b));
 - d. MDEQ must provide USEPA with opportunity to review consent agreements reached in settlement of compliance or enforcement actions. (Sec. 2(f));
 - e. MDEQ cannot waive from Federal review certain permit applications. (Sec. 3).
 7. Michigan’s Legislature Enacted and Governor Signed Public Act (“PA”) 98 in 2013, Significantly Amending NREPA in Response to EPA’s Identification of 22 Inconsistencies With Federal CWA Section 404
 - a. Michael H. Perry, [2013 Public Act 98 Significantly Changes Michigan’s Wetlands Protection Program](#), Fraser Trebilcock Davis and Dunlap P.C. (Aug. 16, 2013).
 8. In 2013, [MDEQ Water Resources Division Chief William Creal Requested USEPA Review of NREPA Act 98 Amendments](#) to Ensure They Did Not Alter Michigan’s Ability to Administer the USEPA 404 Program.
 9. In 2016, [USEPA Chicago Regional Office Wrote to MDEQ WRD Chief, Teresa Seidel Re Federal Register Notice of Completion of EPA’s Review and Approval of NREPA Act 98 Amendments](#) (Dec. 13, 2016)

- a. The EPA letter to MDEQ noted how USEPA had considered the comments Michigan Office of Attorney General Schuette had provided in response to EPA's 2014 correspondence seeking the AG's interpretation of four NREPA Act 98 revisions:
- i. State of Michigan Department of Attorney General, Bill Schuette Attorney General, [Letter Correspondence to Tinker Hyde, Director, USEPA Water Division Region 5 Re: Clean Water Act Section 404 Program Revisions Related to Enactment of Public Act 98](#) (May 27, 2015)
 - ii. AG Schuette's May 27, 2015 response provided its interpretation of Act 98's:
 - A. "Exemptions from permitting for maintenance of agricultural drains [Sections 30103(1)(d)(i) and (ii), and 30305(2)(h)]";
 - B. "Exemptions from permitting for maintenance of drains [Sections 30103(1)(g), and 30305(2)(i)]";
 - C. "Modified exemption from permitting for farming, horticulture, agriculture, lumbering and ranching [Section 30305(2)(e)] (Michigan's analogue to the CWA 404(f)(2) recapture provision); and
 - D. "Excluding incidentally created wetlands from jurisdiction [Section 30305(4)]."
10. USEPA Approved of Most NREPA Act 98 Revisions, But Rejected Some Important NREPA Act 98 Provisions
- a. U.S.EPA, [Supporting Document for EPA Decision to Approve/Deny Revisions to Michigan's CWA Section 404 Program Resulting from Enactment of Michigan Public Act 98](#) (July 2, 2013), Docket No. EPA-HQ-OW-2013-0710 (Dec. 13, 2016)
- i. Rejected the Act 98-revised NREPA Section 30305(2)(o)'s exemption for "biological materials" placed in wetlands (pp. 3, 22):
 - A. Stated that wood chips are considered "fill" relying on EPA Regulation 40 CFR 232.2 (although there is no reference to "wood chips" as "fill" in the EPA regulations);
 - B. Included wood chips as falling within the much broader definition of "pollutant" contained in 40 CFR 122.2 which includes "biological materials" (applicable to the NPDES program that does NOT include coverage of CWA Section 404);
 - C. Cited the 1983 case of *Avoyelles Sportsmen's League v. Marsh*, 715 F.2d 897 (5th Cir. 1983) as support for the proposition that "the 'discharge' of woody wetland vegetation into a jurisdictional wetland in the course of land clearing [i]s a Section 404-regulated discharge;"
 - D. The NREPA exemption from permitting for grinded wood chips derived from biological materials already present within designated wetlands no longer applies.
 - ii. Noted the NREPA 30305(4)(a) permitting exemption for wetlands incidentally created as the result of commercial sand, gravel or mineral mining would apply only

if the property “[i]s no longer used for excavation as part of commercial sand, gravel or mineral mining,” AND [i]s being used for another purpose unrelated to excavation as part of commercial sand, gravel or mineral mining [i.e., the excavation operation was abandoned].” (p. 24)

A. Determined to the extent this provision “*would not allow for any case-by-case analysis of jurisdiction based on the characteristics of the wetland [...]* it is *inconsistent with the federal provision*” (emphasis in original) (p. 25). Page | 26