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Takings Clause and Integrated Sustainability Policy and Regulation: The Proportionality of the Burdens of Exercising Property Rights and Paying Just Compensation

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TAKINGS CLAUSE AND INTEGRATED SUSTAINABILITY POLICY AND REGULATION: THE PROPORTIONALITY OF THE BURDENS OF EXERCISING PROPERTY RIGHTS AND PAYING JUST COMPENSATION*

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American takings jurisprudence provides much insight into interpretations of the Takings Clause by United States Supreme Court. These takings interpretations will be applied to takings claims to decide whether business and land developers and owners do not bear the public burdens or obligations of integrated development and environmental sustainability policy and regulation. Economic, social, global and environmental forces create an imminent need for the integration of traditional and future regulatory schemes, which provide development and environmental sustainability for current and future generations. Traditional and future regulatory schemes are regulatory strands of an integrated development and environmental sustainability policy and regulation. These regulatory strands include, among others, environmental quality, land use management, climate change, energy sources and other matters. Some strands impose old and new obligations on exercises of private property rights but constitutional equity must exist between public and private burdens borne by govern-

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ment and landowners, respectively. However, public burdens cannot be disproportionately borne by business, land developers and landowners under the guarantee of the Takings Clause. When land developers and owners are forced to bear public burdens or obligations that should be borne by government, the guarantee of the Takings Clause requires government to pay just compensation for a taking of private property for public use.

TABLE OF CONTENTS

I.	INTRODUCTION		2
II.	Critical Elements of Conflict between		
	Development and Environment		12
	А. В.	Development and Environmental Sustainability Property Rights under the Common Law and	13
	2.	Regulation	19
	C.	Takings Clause and Public Burdens to Be Borne.	23
III.	TAKINGS THEORIES UNDER THE TAKINGS CLAUSE		27
	A.	Regulatory Takings Analysis with Deference to Sustainability	28
	В.	Regulatory Takings Tests with Less Deference for Sustainability	29
	C.	Physical Takings Analysis with a Duty to Pay for Sustainability	33
IV.	Impact of Takings Clause on Strands of		
	INTEGRATED SUSTAINABILITY REGULATION		35
	A.	Conditional Demands to Manage Social and	
		Ecological Impact	36
	B.	Land Use Management of Urban and Rural	
		Land	4
	С.	Preservation and Conservation of Natural	
		Resources	44
V.		/ J	
		AUSES AS LIMITATIONS	46
	А.	0	
		Sustainability	47
	B.	Public Use or Purpose as a Limitation on	
	_	Integrated Sustainability	50
	C.	Just Compensation as a Limitation on Integrated	.
		Sustainability	5
VI.	Co	NCLUSION	55

I. INTRODUCTION

Business and land development rights are economic forces in conflict with rapidly emerging social, production and environmental policy concerns, thus driving the need for an inclusive national policy strategy and integrated national regulatory approach for sustainable development and environment for current and future generations.1 Sustainable development and environmental interests include interdependent and codependent economic, social, natural, global, and environmental forces.² These interests can be furthered by regulating land, industrial, business, and other development to produce environmentally sensitive and efficient land and business products.³ Regulated development and its sensitivity and efficiency must further sustainable development and environmental interests by establishing an integrated development and environmental sustainability policy and regulatory framework.⁴ An integrated sustainability regulation treats current and future regulatory schemes as interdependent or codependent regulatory strands regulating environmental quality, natural resources, land use management, energy sources, social needs, and economic welfare.⁵ National policy-making must respond to the need to integrate interdependent and codependent economic productivity, social

^{1.} See Meyer Robinson, The Standing Rock Sioux Claim Victory and Vindication in Court, THE ATLANTIC (June 14, 2017), https://www.theatlantic.com/science/archive/2017/06/dakota-access-standing-rock-sioux-victory-court/530427/ (not-ing "A federal judge rules that the Dakota Access pipeline did not receive an ade-quate environmental vetting."). The Standing Rock Sioux pipeline and other pipeline protests demonstrate a public policy concern that points to the need to balance the exercise of private development rights and sustainable development and environment interests. *Id.*

^{2.} See Report of the World Commission on Environment and Development: Our Common Future, Ch. 1, ¶47, ¶47, THE WORLD COMM'N ON ENV'T AND DEV. (Mar. 30, 1987) (Gro Harlem Brundtland, Chairman, The World Commission on Environment and Development), http://www.un-documents.net/our-common-future.pdf (hereinafter Brundtland Report) (finding in Brundtland Report "[w]hat is required is a new approach in which all nations aim at a type of development that integrates production with resource conservation and enhancement, and that links both to the provision for all of an adequate livelihood base and equitable access to resources.").

^{3.} Brundtland Report, *supra* note 2, at Ch. 1, $\P47$ (recognizing development and environmental sustainability includes economic, social, and environmental interests).

^{4.} See id. (recognizing regulation of development must be efficient to adapt to development restrictions and costs and sensitive to environmental, social, and other needs of integrated sustainability policy).

^{5.} *See id.* (recognizing integrated development and sustainability policy and regulation must further both production and environmental policies).

conditions, and environmental resources.⁶ Specifically, these interdependent or codependent interests include land use management, environmental quality, social welfare, business and industrial growth, energy exploration, and real estate development.⁷ National policy-making for integrated sustainability has shown little deference to, if not summarily dismissed, need for integrated policy and regulation. Further it has relegated this policy to traditional regulatory treatment by some state and federal policy-makers as land use or environmental regulation.⁸

Little deference by politicians and reliance on traditional regulation will continue to delay the entry of the federal judiciary in deciding whether an integrated development and environmental sustainability policy and regulation are constitutionally valid.⁹ The federal judiciary cannot address the constitutional validity of the new burdens that will be added to the current burdens borne by landowners and government. These owners already comply with a

8. See Michael D. Shear, Trump Will Withdraw U.S. From Paris Climate Agreement, N.Y. TIMES (June 1, 2017), https://www.nytimes.com/2017/06/01/climate/trump-paris-climate-agreement.html ("President Trump announced on Thursday that the United States would withdraw from the Paris climate accord, weakening efforts to combat global warming and embracing isolationist voices in his White House who argued that the agreement was a pernicious threat to the economy and American sovereignty.").

9. See James R. May, Not at All: Environmental Sustainability in the Supreme Court, 10 SUSTAINABLE DEV. L. & POL'Y 20, 21 (2009) (finding Court has not addressed sustainability but has addressed environmental, land use and other issues furthering development and environmental sustainability). Professor May reviewed environmental cases and concluded that "unless and until parties amass the courage of their conviction and infuse 'sustainability' into litigative lexicon and strategy, sustainability will continue to matter to the U.S. Supreme Court not at all." *Id.* at 21.

Development and environmental sustainability issues may be raised as climate change, growth management, or other activities. These issues may eventually require the federal judiciary to decide whether government is permitting business development, industrial growth and land uses to threaten the survival of current and future generations. *See* Juliana v. U.S., 217 F. Supp. 3d 1224, 1240 (D. Or. 2016), motions adopted and denied, 2017 U.S. Dist. Lexis 89000 (D. Or. 2017). In *Juliana*, several plaintiffs brought an action against the U.S. government alleging that the government had prior knowledge of the harm to atmosphere caused by CO-2 omissions. *Id.* at 1234. The district court also concluded that several plaintiffs who were children and youth had standing to join the litigation against the U.S. government, but decided to wait until summary judgment to decide to make a final decision. *Id.* at 1244. However, the district court recognized that the constitutional claim was substantive due process with caution and restraint in finding that the government had knowingly furthered climate change and failed to act to stop it. *Id.* at 1252.

^{6.} *Id.* (recognizing integrated sustainability approach includes decision-making or policy-making to broadly connect economic, social, and environmental forces).

^{7.} *Id.* (recognizing integrated sustainability approach includes decision-making or policy-making to connect legislative and regulatory fields, such as land environment, natural resources, land use management, and social needs).

traditional, well-established patchwork of independent regulatory schemes addressing past local, state, and national problems, such as water pollution, toxic land, and growth management.¹⁰ If federal, state, and local policy-makers do not respond to sustainable development and environmental needs, federal and state policy-makers will not be able to respond under current regulatory schemes. Current land use management and other policies or lack thereof were not designed to address interrelated economic, environmental and social harm caused by land development, energy production, climate change, and other activities.

Integrated development and environmental sustainability regulation that adds more development and environmental obligations will include bans, restrictions, conditional demands, and other mandates on current and new exercises of constitutionally protected private property rights. Objectively, business, land developers, and landowners are entitled to constitutional equity and are only obligated to bear equitable burdens that are proportional to the harmful impact of their land and business developments on land use management, natural resources, environmental quality, social growth, and other conditions and needs.¹¹ Later, these obligations may be increased by integrated development and

^{10.} See Sustainability and the U.S. EPA, 25 COMM. ON INCORPORATING SUS-TAINABILITY IN THE U.S. ENVIL. PROT. AGENCY (2011), https://www.nap.edu/read/ 13152/chapter/1 (last visited July 18, 2017) (hereinafter Committee on Incorporating Sustainability) (finding "[m]any of the key principles and concepts in sustainable development are rooted in, or similar to, concepts in U.S. conservation and environmental law . . . [T]he United States has not used a national strategy or sustainability 'indicators'"). Id. at 25; see U.N. Conference on Environment and Development (UNCED), AGENDA 21, ch. 8.14 (1992), https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf (last visited July 28, 2017), (hereinafter AGENDA 21) (stating "[t]o effectively integrate environment and development in the policies and practices of each country, it is essential to develop and implement integrated, enforceable and effective laws and regulations that are based upon sound social, ecological, economic and scientific principles.") *Id.*

^{11.} See Armstrong v. United States, 364 U.S. 40, 49 (1960) ("The Fifth Amendment's guarantee that private property shall not be taken for a public use without just compensation was designed to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole."). *Id.*

In a footnote in Penn Central Transp. Co. v. City of New York, 438 U.S. 104 (1978), the Court referred to future uses that could be considered by government in making regulation that was challenged as a regulatory taking by stating that "[i]t is, of course, irrelevant that appellees interfered with or destroyed property rights that Penn Central had not yet physically used. The Fifth Amendment must be applied with reference to the uses for which the property is suitable, having regard to the existing business or wants of the community, or such as may be reasonably expected in the immediate future." *Id.* at 109 n.6 (citing Boom Co. v. Patterson, 98 U.S. 403, 408 (1879) (emphasis added)).

environmental sustainability regulations. These regulations add more obligations to save environmental, natural, social, and other resources and provide environmental and natural qualities, human growth, and social benefits to untold future generations.¹² We treat constitutional equity as fairness and justice of the Takings Clause guarantee¹³ to protect landowners against disproportionate regulatory burdens or unfairly sharing public burdens.¹⁴ Thus, constitutional equity must be in the design of integrated development and environmental sustainability policy and regulation by weighing coindependent and interdependent regulatory strands. This will ensure numerous obligations that further environmental, social, and productivity needs do not unknowingly impose public burdens on land and business developers and owners.

Integrated development and environment sustainability regulation can be expected to impose restrictive mandates, make substantial conditional demands, and provide meaningful offsetting benefits. These integrated mandates and demands increase private and public burdens and eventually alter the current proportionality of these burdens borne by government and landowners. Federal constitutional issues regarding the validity of changes to the current proportionality best fit the limitation of the Takings Clause.¹⁵ This proportionality was established by the Court's application of the Takings Clause to permanent and temporary bans, uses restrictions, conditional demands and offsetting benefits that were imposed by federal, state, and local governments as they accepted their public burdens or obligations with and without payment of just compensa-

^{12.} See Armstrong, 364 U.S. at 49 (concluding government cannot impose public's burdens on landowners); see Committee on Incorporating Sustainability, supra note 10, at 41 & 41 n.1 (explaining each generation has obligations to future generation and should preserve quality of and preserve access to environment).

^{13.} See Armstrong, 364 U.S. at 49 (concluding government cannot mandate landowners to bear public burdens); see Committee on Incorporating Sustainability, supra note 10, at 41 & 41 n.1 (finding need for intergenerational and intragenerational in development and environmental sustainability).

^{14.} See Armstrong, 364 U.S. at 49 (guaranteeing fairness and justice by prohibiting disproportionate burden on landowners); see Committee on Incorporating Sustainability, supra note 10, at 41 & 41 n.1 (recognizing need for current generational equity in implementing sustainable development and environment).

^{15.} U.S. CONST. AMEND. V, CL. 4. (requiring government to pay just compensation for taking private property for public use). The Takings Clause of the Fifth Amendment of the United States Constitution applies to the federal government. *Id.* The United States Supreme Court has made the Takings Clause applicable to the States by incorporating the Takings Clause in the Due Process Clause of Fourteenth Amendment. Chicago, Burlington and Quincy R.R. Co. v. City of Chicago, 166 U.S. 226, 239 (1897).

tion.¹⁶ Any new proportionality must not make regulatory burdens too great for land and business developers and owners to bear. Still the proportionality must include regulatory burdens or obligations to address harm caused by land and business development and other activities that include construction, energy, industries, institutions, and commerce.¹⁷ Federal and state policy-makers eventually must decide to design and implement an integrated development¹⁸

^{16.} See, e.g., Pennsylvania Coal Co. v. Mahon, 260 U.S. 393 (1922) (showing public burden imposed on landowner by the Kohler Act, anti-subsidence legislation, and need to pay just compensation); Penn Central Transp. Co. v. City of New York, 438 U.S. 104 (1978) (detailing no public burden imposed on landowners under historical preservation regulation and no just compensation); Lucas v. South Carolina Coastal Council, 505 U.S. 1003 (1992) (describing public burden imposed on landowner by coastal zone management regulation and just compensation must be paid); Dolan v. City of Tigard, 512 U.S. 372 (1994) (stating public burden imposed on landowners by land dedication conditions and just compensation must be paid); Koontz v. St. Johns River Water Management District, 133 S. Ct. 2586 (2013) (showing public burden imposed on landowner by monetary exactions and just compensation must be paid).

^{17.} See Carl J. Circo, Using Mandates and Incentives to Promote Sustainable Construction and Green Building Projects in the Private Sector: A Call for More State Land Use Policy Initiatives, 112 PENN ST. L. REV. 731, 733 (2008) (hereinafter Circo-Green Building) (citing Charles J. Kibert, Green Buildings: An Overview of Progress, 19 J. LAND USE & ENVIL. L. 491, 493-94 (2004); Pekka Huovila et al., Buildings and Climate Change: Status, Challenges and Opportunities, U.N. ENV'T PROGRAMME (2007); Mara Baum, Green Building Research Funding: An Assessment of Current Activity in the United States, U.S. GREEN BUILDING COUNCIL (2007) (footnotes omitted) (providing report prepared for U.S. Green Building Council Research Committee), https:// www.usgbc.org/sites/default/files/Green-Building-Research-Funding.pdf; Stephen T. Del Percio, Comment, The Skyscraper, Green Design, & The LEED Green Building Rating System: The Creation of Uniform Sustainable Standards for the 21st Century or the Perpetuation of an Architectural Fiction?, 28 ENVIRONS ENVIL. L. & POL'Y J. 117, 125-26 (2004) (arguing for private and public sectors to support green building and adoption of green construction and design practices).

^{18.} See Brundtland Report, supra note 2, at Ch. 1, ¶30 (stating that "sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs."). An enormous sustainability policy concern is caused the impact of harmful but productive land and business development projects and practices on communities and their environmental, natural resources, land use management, and social resources and by new construction generating a tremendous amount of waste. See Carl J. Circo, Should Owners and Developers of Low-Performance Buildings Pay Impact or Mitigation Fees to Finance Green Building Incentive Programs and Other Sustainable Development Initiatives?, 34 WM. & MARY ENVTL. L. & PoL'y Rev. 55, 55-57 (2009) (hereinafter Circo-Impact Fees) (citing Mara Baum, Green Building Research Funding: An Assessment of Current Activity in the United States 7, U.S. GREEN BUILDING COUNCIL (2007), https://www.usgbc.org/sites/default/files/ Green-Building-Research-Funding.pdf) (recognizing development sustainability includes design of buildings and costs and investments in making building greens).

and environmental¹⁹ sustainability policy and regulation.²⁰ The newly enacted integrated sustainability regulation may have little effect on proportionality of public and private burdens under current regulatory schemes. These current public and private burdens of environmental, natural resources, social, and other regulatory schemes²¹ should not change and remain public and private burdens of the regulatory strands²² of the newly enacted integrated development and sustainability policy and regulation. Initially, business and land developers and owners will face only a change in the form of regulation that is an integrated sustainability regulation with current substantive obligations. This initial integrated sus-

Integrated planning for, and implementation of, national sustainable development strategies has remained challenging. Member States noted this challenge by recognizing in the Rio+20 Outcome Document the inadequacy of sector-based strategies by calling for "holistic and integrated approaches to sustainable development" (paragraph 40) and the "need for more coherent and integrated planning and decision-making at the national . . . level" (paragraph 101).

Id. at 5 (citing ¶ 40, "The Future We Want," Resolution adopted by the General Assembly on 27 July 2012, UNITED NATIONS (Sept. 11, 2012)).

21. See AGENDA 21, supra note 10, ch. 8.13 (finding national law or legislation is piecemeal and lacks enforcement to further development and environmental sustainability policies). As early as 1992, AGENDA 21 found grounds to revise legal or regulatory framework to further development and environmental sustainability policy-making, though much regulation and law was being made to protect the environment and natural resources. *Id.* AGENDA 21 recognized that each county is unique with special conditions and needs and found that "although the volume of legal texts in this field is steadily increasing, much of the law-making in many countries seems to be ad hoc and piecemeal, or has not been endowed with the necessary institutional machinery and authority for enforcement and timely adjustment." *Id.*

22. See also AGENDA 21, supra note 10, ch. 8.13 (using Agenda 21 findings to treat national and state regulatory or legislative fields as interdependent or codependent regulatory strands of a single body of integrated sustainability policy and regulation rather than as single independent regulatory schemes). *Id.*

^{19.} Brundtland Report, *supra* note 2, at Ch. 1, $\P40$ (stating that "[e]nvironment and development are not separate challenges; they are inexorably linked. Development cannot subsist upon a deteriorating environmental resource base; the environment cannot be protected when growth leaves out of account the costs of environmental destruction. These problems cannot be treated separately by fragmented institutions and policies.").

^{20.} Brundtland Report, *supra* note 2, at Ch. 1, ¶48 (recognizing that "[t]he concept of sustainable development provides a framework for the integration of environment policies and development strategies.... But the integration of environment and development is required in all countries, rich and poor."). *Report of the Capacity Building Workshop and Expert Group Meeting on Integrated Approaches to Sustainable Development Planning and Implementation* 5, UNITED NATIONS, DEP'T OF ECON. AND SOC. AFFAIRS DIVISION FOR SUSTAINABLE DEV. (July 3, 2015), https://sus tainabledevelopment.un.org/content/documents/8506IASD%20Workshop%20 Report%2020150703.pdf (hereinafter UN DESA Report) (exploring opportunities and actions to advance integrated development sustainability). In 2015, the UN DESA Report finds that:

tainability regulation will be short-lived as natural events and manmade development threaten to impose greater harm on environmental, social and economic resources.

9

The public burdens of an integrated sustainability regulation will increase as federal, state and local governments impose mandates, request conditional demands and provide offsetting benefit to land and business developers and owners and business organizations. Such owners must bear an equitable portion of the burdens caused by manmade and natural harm and harmful effects on degradable and nonrenewable land, natural, social, and environmental resources. The United States Supreme Court has concluded that takings claims challenge the proportionality of the burdens borne by government and landowners.²³ These claims challenging proportionality arose under federal and state environmental and natural resources regulation and state and municipal land use and growth management regulation to provide distinct public needs.²⁴ These regulatory schemes or regulation had not been coordinated or made comprehensive enough to fully integrate economic, social, global, and environmental needs of sustainable development and environment for current and future generations.²⁵ The Court has yet to review a takings challenge to

25. See Brundtland Report, supra note 2, at Ch. 1, ¶47 (finding current regulatory schemes, such land use and environmental protection, may not be effective and need for integrative approach to design and implement sustainable development and environmental policy); AGENDA 21, supra note 10, at ch. 8.1.a & 8.1.c. Chapter 8 of Agenda 21 explains integration of environmental and development decision-making or policy-making and identifies several program areas that included "[i]ntegrating environment and development at the policy, planning and management levels . . . [and] [p]roviding an effective legal and regulatory framework." *Id.*

As early as 1992, AGENDA 21 found that "[p]revailing systems for decisionmaking in many countries tend to separate economic, social and environmental factors at the policy, planning and management levels. This influences the actions of all groups in society, including Governments, industry and individuals, and has important implications for the efficiency and sustainability of development." *Id.* at ch. 8.2. AGENDA 21 also concluded that the "adjustment or even a fundamental

^{23.} See Armstrong, 364 U.S. at 49 (concluding personal and real property owners should not bear public burdens that should be borne solely by government through paying just compensation).

^{24.} *See e.g.*, Pennsylvania Coal Co. v. Mahon, 260 U.S. 393 (1922) (detailing anti-subsidence legislation); Penn Central Transp. Co. v. City of New York, 438 U.S. 104 (1978) (explaining origin of historical preservation regulation); Agins v. City of Tiburon, 447 U.S. 255 (1980) (discussing land use controls); Lucas v. South Carolina Coastal Council, 505 U.S. 1003 (1992) (explaining coastal zone management regulation); Dolan v. City of Tigard, 512 U.S. 374 (1994) (discussing land dedication conditions); Koontz v. St. Johns River Water Management District, 133 S. Ct. 2586 (2013) (detailing adjudicated monetary exactions of land use regulatory scheme); Murr v. Wisconsin, 137 S. Ct. 1933 (2017) (examining merger provision of land use regulatory scheme).

10 VILLANOVA ENVIRONMENTAL LAW JOURNAL [Vol. XXIX: p. 1

integrated development and environmental sustainability policy and regulation that fully integrated the inter-dependent or codependent patchwork of land use, environmental, social, energy and other regulation.²⁶ Generally, this lack of review by the Court should be short-lived as state and local governments rather than the federal government recognize the need to enact and enforce integrated sustainability policy and regulation to protect their natural resources, business and industrial productivity and citizens.

As states and their counties and municipalities suffer more harm to or harmful effects on environmental, natural, economic, social, and other resources, a few states will eventually need to respond by rethinking their patchwork of regulatory schemes. These states must strongly consider an integrated policy and regulatory approach that by design reflects constitutional equity to development and environmental sustainability policy goals, objectives, and regulation.²⁷ Some states may need to allow county and municipal governments to take a greater role in sustainable development and environment and develop a regulatory approach to integrated sustainability policy-making.²⁸ At the state or local governmental levels, federal and state policy-making for integrated sustainability policy and regulation must retain much old, consistent land use, environmental quality, and other regulatory goals and objectives. This policy-making must also add new and different development

27. See, Embedding the Environment in Sustainable Development Goals, UNITED NA-TION ENV'T PROGRAMME, UNEP Post-2015 Discussion Paper 1, Version 2 (July 19, 2013) (hereinafter UNEP), https://sustainabledevelopment.un.org/content/doc uments/2037embedding-environments-in-SDGs-v2.pdf (detailing how United Nations Environmental Programme (UNEP) sets forth "a framework [that] is suggested for embedding environmental sustainability into [Sustainable Developments Goals] (SDGs)) *Id.* at 2. UNEP established "an integrated approach for embedding the environment in goals and targets" *Id.*

28. AGENDA 21, *supra* note 10, ch. 28.1 (recognizing need to involve more than federal and state governments in integrating policy, planning and management of implementing sustainable development and environment). *Id.; see* Robert R. M. Verchick, *Can Local Government Save the Global Commons? Lessons from the Johannesburg Summit,* 4 STAN. AGORA 4, 2 (2003) ("examin[ing] how the efforts of local government can best be marshaled to achieve sustainable development on the local and the international levels - to "save," in the words of the title, "the global commons"). *Id.* at 3.

reshaping of decision-making, in the light of country-specific conditions, may be necessary if environment and development is to be put at the centre of economic and political decision-making, in effect achieving a full integration of these factors." *Id.*

^{26.} May, *supra* note 9, at 21 (finding development and environmental sustainability are not issues before United States Supreme Court); *see also* AGENDA 21, *supra* note 10, ch. 8.13 (recognizing much "law-making in many countries . . . has not been endowed with the necessary institutional machinery and authority for enforcement and timely adjustment." AGENDA 21, *supra* note 10, ch. 8.13).

and environmental sustainability goals and objectives, such as regulating disposal construction and development waste materials.²⁹ Past takings challenges lead us to conclude that the impact of codependent and interdependent regulatory strands on the exercise of property rights will eventually lead some land and business developers and owners to challenge new development bans, costly construction practices, and other mandates as unconstitutional takings of private property for public use without the payment of just compensation.³⁰ Thus, federal and state governments can avoid some of these challenges by designing integrated development and environmental sustainability policy and legislation. The integrated development and environmental sustainability policy and legislation will recognize, weigh and equitably address the burdens imposed on landowners and the public in responding to the harm or harmful effects of climate change, energy production and consumption, social welfare needs, and environment resources.

Business and land developers and owners can depend on the Takings Clause to ensure government does not disproportionately impose unjustified obligations or burdens on them to further integrated sustainability policy goals and objectives for current and future generations. This article consists of an introduction and five other parts. Part I is the Introduction immediately above and sets forth an argument for integrated development and environmental sustainability policy and regulation that must survive constitutional muster under the Takings Clause based on the proportionality of the burdens borne by the public and landowners. Part II discusses

^{29.} See Circo-Green Building, supra note 17, at 733 (citing Mara Baum, Green Building Research Funding: An Assessment of Current Activity in the United States, U.S. GREEN BUILDING COUNCIL 1 (2007) (footnotes omitted) (a report prepared for U.S. Green Building Council Research Committee), https://www.usgbc.org/sites/ default/files/Green-Building-Research-Funding.pdf (recognizing environmental harm caused by development and construction industries and its impact on sustainable development and environment); see Committee on Incorporating Sustainability, supra note 10, at 25. "U.S. conservation and environmental law has advanced sustainability in some areas. Nonetheless, the United States has not used a national strategy or sustainability 'indicators.'" Id. Moreover, "U.S. environmental and conservation laws . . . includ[e] protection of human health, preservation for aesthetics or recreation, biocentrism, sustainability of the resource base, environmental justice, efficiency, pursuit of scientific knowledge and technology, intergenerational equity, and community stability. Id. (citing Campbell-Mohn, C., Sustainable Environmental Law: Integrating Natural Resource and Pollution Abatement Law from Resources to Recovery, ST. PAUL, MN: WEST PUBL'G CO. (1993)).

^{30.} See infra Part IV and accompanying notes (discussing various constitutional claims that landowners and developers can bring under Takings, Public Use and Just Compensation Clauses of Fifth Amendment for exercises of eminent domain, police and other powers to take ownership of or acquire benefits for public use from an interest in real or personal property).

12 VILLANOVA ENVIRONMENTAL LAW JOURNAL [Vol. XXIX: p. 1]

the interrelated natures, ongoing conflict, and public-private connection among the Takings Clause, private property rights, and sustainable development and environment. Part III explains federal takings theories applied by the Court to limit government policy and regulation of land use and other regulation to protect the environmental quality and natural resources and control land use and growth management. Part IV explains how the Takings Clause could limit or prohibit land use, environmental, and other regulation that could eventually be regulatory strands mandating obligations under an integrated approach to sustainable development and environment to restrict exercises of private property rights. Part V explains the scope and nature of the Fifth Amendment's guarantee consisting of three constitutional provisions to make certain that public burdens are not borne by landowners under government regulatory schemes. In the conclusion or Part VI, we argue integrated development and environmental sustainability policy and regulation must eventually be enacted by federal, state and local governments. This integrated sustainability policy and regulation are needed to further development and environmental sustainability objectives and goals and impose obligations and benefits on exercises of private property and business development interests. Thus, government policy-makers must ascertain and weigh obligations or burdens imposed on land and business developers and owners by regulatory restrictions, demands, and offsetting benefits to design and implement integrated development and environmental sustainability policy and regulation in accordance with the guarantee and principles of the Takings Clause.

II. CRITICAL ELEMENTS OF CONFLICT BETWEEN DEVELOPMENT AND ENVIRONMENT

The Takings Clause, private property rights, and sustainable development and environmental interests are interrelated by the proportionality of the burdens borne by government and landowners. This proportionality affects the design of integrated development and environmental sustainability policy and regulation to address harm and harmful effects of natural events and manmade activities on American land, population and society. Federal integrated sustainability policy and regulation must further sustainable development and environment goals and objectives to protect specific economic, social, and environmental interests. In furtherance of proportional burdens, integrated sustainability regulation must be valid under the Takings Clause that addresses burdens or obligations borne by the public and landowners to implement sustainable development and environment. Thus, the Court must eventually determine the constitutional protection provided by the Takings Clause to protect private property rights and advance sustainable development and environmental interests under integrated development and environmental sustainability policy and regulation schemes.

A. Development and Environmental Sustainability

Sustainable development and environment is more than natural and manmade harm to natural resources, social welfare and environmental quality and must include the production of essential products and services needed by humans, communities, and future generations. Globally, in 1972, the United Nations Conference on the Human Environment (Stockholm Convention) recognized that "humans [can] 'do massive and irreversible harm to the earthly environment on which our life and well-being depend'"31 and produced the "Declaration of the United Nations Conference on the Human Environment (commonly called the Stockholm Declaration)"32 The Stockholm Declaration "intended to respond to concerns about 'dangerous levels of pollution in water, air, earth and living beings; major and undesirable disturbances to the ecological balance of the biosphere; destruction and depletion of irreplaceable resources."33 The Stockholm Convention did not mention sustainable development and environment; it "laid the foundation for integrated consideration of environment and development issues."34 In 1987, the Brundtland Report was issued by The World Commission on Environment and Development (World Commission) that met "to re-examine the critical environment and development issues and to formulate realistic proposals for dealing

^{31.} Rebecca M. Bratspies, *Sustainability: Can Law Meet The Challenge*?, 34 SUFFOLK TRANSNAT'L L. REV. 283, 284 (2011) (recognizing harm done to environment by humans).

^{32.} *Id.* at 285 (recognizing efforts by United Nations to address harm to environment by humans).

^{33.} Id. (stating purpose of Stockholm Convention).

^{34.} Id. (finding Stockholm Convention introduced need to integrate development and environmental sustainability). An enormous sustainability policy concern is raised by harmful but productive land and business development projects and practices on communities and their environmental, natural, land and social resources. See Circo-Impact Fees, supra note 18, at 56-57 (citing Mara Baum, Green Building Research Funding: An Assessment of Current Activity in the United States 7, U.S. GREEN BUILDING COUNCIL (2007), https://www.usgbc.org/sites/default/files/ Green-Building-Research-Funding.pdf).

with them "35 The World Commission was also mandated to establish proposals "to propose new forms of international cooperation on these issues . . . and to raise the levels of understanding and commitment to action "36 Other commissions and programs have been established and implemented by the United Nations to study and report on sustainable development and environment.³⁷ Each country must establish policy objectives and regulatory mechanisms to further sustainable environment and development resulting from the catastrophic impact of the "current ecological footprint . . . [of] 1.5 planets - half a planet more than earth."38 Thus, the Stockholm Declaration and Brundtland Report are the grounds and support for the integration of development and environmental sustainability policy and regulation among economic, social, and environmental needs. These needs encompass the environment and its impact on public welfare and its effects on the exercise of private property rights.

America's sustainable development and environment concerns may be confounded or divided by distinct government policies protecting land use, natural resources, and environmental quality. These policies impose restrictive obligations, conditional demands, temporary or permanent moratoria on development, and grant social and other program benefits to the public and landowners. These distinct policies do not focus public consciousness on the

36. Brundtland Report, supra note 2, at 12.

37. See Main Milestones, Sustainable Development Knowledge Platform, https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=972 &menu=35 (last visited July 18, 2017) (listing World Commission on Environment and Development (1987), United Nations Conference on Environment and Development: Agenda 21 (1992), Commission on Sustainable Development (1993), Global Conference on Sustainable Development of SIDS (1994), etc.).

^{35.} Brundtland Report, *supra* note 2, at 12 (stating one of fundamental objectives of World Commission to address global concerns regarding environmental sustainability, poverty and inequality). The impact of land and business development will require extremely diligent policy efforts to mandate and urge land and business developers to work harmoniously with government policy-makers on the best solutions to reduce harm on land natural, environmental and social resources. *See* Circo-Green Building, *supra* note 17, at 733 (citing Charles J. Kibert, *Green Buildings: An Overview of Progress*, 19 J. LAND USE & ENVTL. L. 491, 493-94 (2004); Pekka Huovila et al., *Buildings and Climate Change: Status, Challenges and Opportunities*, U.N. ENV'T PROGRAMME (2007); Mara Baum, *Green Building Research Funding: An Assessment of Current Activity in the United States* 1, U.S. GREEN BUILDING COUNCIL (2007) (footnotes omitted) (report prepared for U.S. Green Building Council Research Committee), https://www.usgbc.org/sites/default/files/Green-Building-Research-Funding.pdf; Stephen T. Del Percio, Comment, *The Skyscraper, Green Design, & The LEED Green Building Rating System: The Creation of Uniform Sustainable Standards for the 21st Century or the Perpetuation of an Architectural Fiction*?, 28 ENVI-RONS ENVIL. L. & POL'Y J. 117, 125-26).

^{38.} Bratspies, *supra* note 29, at 284-85.

American development and environmental sustainability³⁹ needs created by the success of economic, technological and social growth.⁴⁰ American policy-makers must accept and build on the fact that "the 'environment' is where we all live; and 'development' is what we all do in attempting to improve our lot within that abode. The two are inseparable⁴¹ The United States is no

Id. (citing G. P. Marsh, Man and Nature; or, Physical Geography as Modified by Human Action, CAMBRIDGE, MA.: BELKNAP PRESS OF HARVARD UNIV. PRESS (1864)).

Much inconsistency exists in defining sustainability under international and domestic law. Gerlinde Berger-Walliser & Paul Shrivastava, *Beyond Compliance: Sustainable Development, Business, and Proactive Law,* 46 Geo. J. INT'L L. 317, 417, 425 (2015). "[T]he [sustainability] movement extends sustainability to include social concerns over how environmentally sensitive development can be managed to enhance global equity and equality of material well-being. Sustainability also incorporates political and cultural concerns in economic development[.]" *Id.* at 417 (citing *Our Creative Diversity* 48, WORLD COMM'N ON CULTURE AND DEV. (1996), http://unesdoc.unesco.org/images/0010/001055/105586e.pdf). Furthermore, development and environmental sustainability has critics on legal, political, institutional and other concerns. *See* Robin Kundis Craig & Melinda Harm Benson, *What Has Changed in Forty Years And What Needs to Change as a Result: Replacing Sustainability*, 46 AKRON L. REV. 841, 853-857 (2013) (Symposium: The Next Generation of Environmental And Natural Resources Law).

40. Committee on Incorporating Sustainability, *supra* note 10, at 25 (recognizing conservation and environmental further many development and environmental sustainability goals and objectives). "Many of the key principles and concepts in sustainable development are rooted in, or similar to, concepts in U.S. conservation and environmental law. Generally, U.S. conservation and environmental law has advanced sustainability in some areas." *Id.*

Development and environmental sustainability policy and regulation must be designed to impose mandates and conditional demands that require or urge land developers and owners to adopt or comply with new construction and other practices. *See* Circo-Impact Fees, *supra* note 18, at 60-61 (finding federal, municipal, and state governments support building green programs, proposing use of impact fees or exactions to finance the cost of constructing green buildings, and exploring constitutional limitations on state efforts to support green buildings).

41. Brundtland Report, *supra* note 2, at 13 (giving Chairman's Forward). Professor Circo states that "the environmental costs extend well beyond energy for building operations." As one recent report explains:

Building operation accounts for 40% of U.S. energy use; this number increases to an estimated 48% when the energy required to make building materials and construct buildings are included. Building operations alone contribute over 38% of the U.S.'s carbon dioxide emissions and

^{39.} Committee on Integrating Sustainability, *supra* note 10, at 15 (recognizing United States depends on environmental, natural resources and land use policies and regulation to protect environment and restrict development). The Committee on Incorporating Sustainability gives the grounds for development and environmental sustainability by stating that:

Sustainability is based on a simple and long-recognized factual premise: Everything that humans require for their survival and well-being depends, directly or indirectly, on the natural environment (Marsh 1864). The environment provides the air we breathe, the water we drink, and the food we eat. It defines in fundamental ways the communities in which we live and is the source for renewable and nonrenewable resources on which civilization depends. Our health and well-being, our economy, and our security all require a high quality environment.

exception.⁴² We must begin to rethink our national and state patchwork of natural resources, environmental, social welfare, and land use management policies and regulation to create an integrated approach to development and environmental sustainability policy and regulation for current and future generations.⁴³ This integrated approach that adjusts burdens and benefits of American society will trigger the need to consider fairness and justice in proportioning the burdens imposed by integrated sustainability policy and regulation. An integrated approach may include mandating green buildings, forcefully responding to coastal degradation, and addressing other natural and manmade harm or harmful effects.⁴⁴

Circo-Green Building, supra note 17, at 733 (quoting Mara Baum, Green Building Research Funding: An Assessment of Current Activity in the United States 1, THE GREEN BUILDING COUNCIL (2007) (footnotes omitted) (report prepared for U.S. Green Building Council Research Committee), https://www.usgbc.org/sites/default/ files/Green-Building-Research-Funding.pdf).

42. Brundtland Report, *supra* note 2, at Ch. 1, ¶52 (explaining "[n]o country can develop in isolation from others. Hence the pursuit of sustainable development requires a new orientation in international relations. Long term sustainable growth will requi[r]e [sic] far-reaching changes to produce trade, capital, and technology flows that are more equitable and better synchronized to environmental imperatives").

43. Committee on Incorporating Sustainability, *supra* note 10, at 25 (recognizing United States is taking different approach by currently using environmental and conservation policies to achieve development and environmental sustainability). The United States has not fully developed a national strategy for sustainability or established sustainability indicators to implement and enforce sustainability. *Id.* After 2008, the United States began to recognize the importance of green industry that included jobs and green businesses as a part of sustainable development and environment. *See id.*

In June 2009, the United States and other members of the Organisation for Economic Co-operation and Development (OECD) adopted a Declaration on Green Growth that identified a number of policy instruments to encourage green investment to enable long-term sustainable development and environment. *Id.* at 27 (citing *Declaration on Green Growth, Organisation for Economic Co-operation and Development* (June 25, 2009)).

44. Brundtland Report, *supra* note 2, at Ch. 1, ¶51 (explaining "[n]o single blueprint of sustainability will be found, as economic and social systems and ecological conditions differ widely among countries. Each nation will have to work out its own concrete policy implications. Yet irrespective of these differences, sustainable development should be seen as a global objective.").

Greening policy and regulation are regulatory means to begin and initiate development and environmental sustainability by regulating or controlling the construction of building and other space. See, e.g., Michael Burger, It's Not Easy Being Green: Local Initiatives, Preemption Problems, and the Market Participant Exception, 78 U. CIN. L. REV. 835, 839 (2010) (examining whether "municipalities attempts to brand themselves 'green' to increase their competitiveness in the interlocal market for residents, businesses, and capital warrant a revised application of the [market-place participant exception] (MPE) to federal ceiling preemption."). Id.; Circo-Impact Fees, supra note 18, at 61 (examining policy concerns and legal issues, constitutional and land use law, and making policy recommendations on state and

over 12% of its water consumption. Waste from demolition, construction and remodeling makes up over 35% of all non-industrial waste (1996).

Furthermore, looking beyond its boundaries, federal policy-makers must recognize that "the development decisions of these. . . [developed] countries, because of their great economic and political power, will have a profound effect upon the ability of all peoples to sustain human progress for generations to come."⁴⁵ The Federal Constitution and its limitations and rights must be carefully weighed in designing and implementing an integrated development and environmental sustainability policy and regulation.

As government recognizes and accepts greater public burdens under an integrated sustainability policy and regulation, the private burdens will not remain the same or be absorbed entirely by the public and government to make markets work or allow business organizations to increase wealth. Beyond the public burdens, the private burdens or regulatory obligations of business and land developers and business organizations that must reduce harm and harmful effects on society and its natural, social and environmental resources will increase to address environmental and development sustainability concerns.⁴⁶ Federal, state, and local governments must eventually design and implement an integrated development and environment sustainability policy and regulation⁴⁷ by exercis-

46. *See* Long, *supra* note 45, at 1 (recognizing impediments to creating and maintaining development and environmental sustainability in western communities).

47. See Brundtland Report, supra note 2, at Ch. 1, ¶47 (concluding integrative approach to designing and implementing sustainable development and environmental policy is needed). In the 1990s, the coordination of federal farmland policies required the cross compliance of farmland preservation (land use), farm management (production), environmental (wetland), and natural resources (soil and water conservation) policies. See James E. Holloway & Donald C. Guy, Rethinking Local and State Agricultural Land Use and Natural Resource Policies: Coordinating Programs to Address the Interdependency and Combined Losses of Farms, Soils, And Farmland, 5 J. LAND USE & ENVIL. L. 379, 378-445 (1990) (examining coordination of federal agricultural policies for farmland preservation, farm management, wetland

local green building programs at state and local government levels, highlighting most significant policy and legal regulations and incentives); Circo-Green Buildings, *supra* note 17, at 732-33 ("argu[ing] that timely, meaningful progress toward sustainability in the U.S. building industry requires state-level legislation that promotes, and sometimes even mandates, green building standards at the regional and local levels."). *Id.*

^{45.} Brundtland Report, *supra* note 2, at 13 (Chairman's Forward) (recognizing effects of development and environmental sustainability decisions of developed countries on other nations). Commentators believe that sustainability starts with county and municipal governments. *See* Jerrold A. Long, *Sustainability Starts Locally: Untying the Hands of Local Governments to Create Sustainable Communities*, 10 WYO. L. REV. 1 (2010) ("argu[ing] that over the coming century, creating and maintaining sustainable western communities will require a changed focus onto the West's *private* lands [and giving] . . . the legal impediments that might exist to creating sustainable western communities, with suggestions for how to overcome those impediments"). *Id.* at 4.

ing well-established federal and state powers, such as police power,⁴⁸ Commerce Clause,⁴⁹ and federal and state taxes.⁵⁰ These exercises of federal and state powers make legislation and regulations to recognize and impose private burdens by establishing mutual sustainability practices for, imposing restrictive obligations on, requesting conditional demands from, granting offsetting benefits to, and strongly urging innovative design and construction methods.⁵¹ While the public and government are waiting to make legislation and regulation, American business and real estate developers and other business organizations will continue to meet consumer, commercial, industrial and institutional demands by increasing

The nature and level of integration of national policies and their coordination have been recognized as a challenge in less developed nations in finding solutions agreeable to all governments, developers and business organizations. *See* George William Mugwanya, *Global Free Trade Vis-a-Vis Environmental Regulation and Sustainable Development: Reinvigorating Efforts Towards a More Integrated Approach*, 14 J. ENVTL. L. & LITIG. 401, 402-05 (1999) (recognizing impact of integrating fee trade, environmental protection and social welfare in less developed nations and difficulty of findings policy solution agreeable to all parties). However, we expect that developed nations will not be much less contentious in that governments, developers and business organizations will easily agree on integrating sustainable development and environment policy and regulation; *see also* Robinson, *supra* note 1 (stating Standing Rock Sioux protests installation of pipeline); *see also* Shear, *supra* note 8 (stating President withdraws U.S. from climate agreement).

48. *See* Village of Euclid v. Ambler Realty Co., 272 U.S. 365, 381 (1926) (recognizing use of police power to create zoning regulation).

49. U.S. CONST. ART. 1, CL. 9 (identifying Commerce Clause as source of government power).

50. See Brundtland Report, supra note 2, at Ch. 1, \P (30) (stating "[w]e do not pretend that the process is easy or straightforward. Painful choices must be made. Thus, in the final analysis, sustainable development must rest on political will."). *Id.*; see Bratspies, supra note 29, at 304. Professor Bratspies describes the problems that must be addressed and solved by government to develop an effective regulatory approach to development and environmental sustainability. Professor Bratspies recognizes the limitations on an integrated approach by stating that:

The first is the belief that we can achieve sustainability by tinkering at the margins of the existing social, economic, and legal systems (the Marginal Fallacy). The second is the tendency to splinter each problem into discrete pieces to be dealt with one at a time (the Splintered Fallacy). The Marginal Fallacy limits our vision . . . The Splintered Fallacy creates a multitude of legal fiefdoms Both of these fallacies are deeply embedded in legal thinking, and legal systems are routinely deployed in their service.

Bratspies, supra note 29, at 304.

51. Committee on Incorporating Sustainability, *supra* note 10, at 25 (recognizing many sustainability goals and objectives can further my American environmental and conservation law).

protection, and soil and water conversation); James E. Holloway & Donald C. Guy, *Policy Coordination and the Takings Clause: The Coordination of Natural Resource Programs Imposing Multiple Burdens on Farmers and Landowners*, 8 J. LAND USE & ENVTL. L. 175, 175-233 (1992) (examining whether coordinated regulatory scheme imposes great burdens on farmers or landowners under Takings Clause, U.S. CONST. AMEND. V, CL. 4.).

land and business development projects to provide beneficial houses, offices, services, jobs, and other products. However, increasing development is simply an exercise of private property rights, which, in turn, increases much unintended but unwanted effects on land, natural resources, social welfare, and environmental quality driving the need for integrated sustainability policy and regulation with codependent and interdependent regulatory strands controlling development and protecting the environment.

B. Property Rights under the Common Law and Regulation

Land, real estate and business development and its wealth and poverty receive much protection from federal constitutional guarantees protecting the exercise of private property rights of state common law. "Not only was owning one's own land an indication of social standing, it was considered essential to reach one's 'happiest and most productive potential.'⁵² The existence and importance of property rights in American business and government are not new as "[1]and ownership has thus been part of the American dream since colonial Jamestown and Plymouth."⁵³ "As the American common law of property developed, the individual rights of the property owner have remained strong" under American common and Federal constitutional principles and, "[0]ne . . . own[s] . . . to the center of the earth and as high as the heavens above."⁵⁴ Land developers and owners exercise private property rights of real and personal properties to provide both personal happiness⁵⁵ and eco-

^{52.} Steve P. Calandrillo, Chryssa V. Deliganis & Andrea Woods, *Making "Smart Growth" Smarter*, 83 GEO. WASH. L. REV. 829, 835-36 (2015) (finding ownership of land necessity to achieve success in many American community). The sanctity of private property rights has been watched over by courts and other branches of government, but when the earth or survival of the planet is threatened, government may need to rethink our property regime. *See* Carl J. Circo, *Does Sustainability Require a New Theory of Property Rights?*, 58 KAN. L. REV. 91 (2009) (hereinafter Circo-Property Rights) (stating "the extent to which sustainability requires a new theory of property rights for the United States depends both on what model of sustainability ultimately prevails in this country and on the degree to which property rights doctrine clings to traditional and economic notions."). *Id.* at 92.

^{53.} Calandrillo, *supra* note 52, at 836 (finding ownership of property has been importance since America was colony).

^{54.} *Id.* (finding property has value other than as economic benefit to American landowners).

^{55.} Circo-Green Building, *supra* note 17, at 734 (citing Cesar Pelli, *Observations for Young Architects* 9 (1999)) (recognizing social utility of buildings); *see also* Alberto Perez-Gomez, *Built upon Love: Architectural Longing After Ethics and Aesthetics* 4-5 (2006) (espousing theory of architecture in which building practices "pursue a functionalist utopia" marked by "seductive projects").

20 VILLANOVA ENVIRONMENTAL LAW JOURNAL [Vol. XXIX: p. 1]

nomic benefits⁵⁶ to the American public as well as the world. The economic benefits are tremendous throughout the world and United States in the construction and building industries account for "5-10% of employment at [the] national level and normally generates 5-15% of the . . . [Gross Domestic Product (GDP)]."⁵⁷ Although, the exercise of private property rights causes harm to natural resources, environmental quality, land and social conditions,⁵⁸ this exercise also offers tremendous social and economic benefits to society and must be treated in accordance with the fairness and justice required of the Federal Constitution.

Although private property rights are established by state common law, the Federal Due Process,⁵⁹ Takings Clause and other provisions of the Federal Constitution protect private property rights from unreasonable and confiscatory invasions and interferences by governments. Accordingly, federal and state governments must weigh the constitutional protection granted the exercise of private property rights in designing and implementing significant changes re-proportioning the regulatory burdens of American government and landowners under the design and implementation of sustainable development and environmental goals, objectives and mandates.⁶⁰ This constitutional protection includes limitations on

58. See Brundtland Report, *supra* note 2, at Ch. 1, ¶40 (stating "[d]evelopment cannot subsist upon a deteriorating environmental resource base; the environment cannot be protected when growth leaves out of account the costs of environmental destruction."). *Id.*

59. U.S. CONST., AMEND. 5 & 14 (stating due process clauses of U.S. Constitution).

60. See Pennsylvania Coal Co. v. Mahon, 260 U.S. 393 (1922); see infra Parts III and IV and accompanying notes (discussing application of Takings Clause to land use and other regulation). After deciding *Pennsylvania Coal Co.*, the Court held that a comprehensive zoning ordinance that reduced the value and marketability of private property did not offend the United States Constitution. See Village of Euclid v. Ambler Realty Co., 272 U.S. 365, 397 (1926). In *Village of Euclid*, the Court stated that the issue "is the ordinance invalid in that it violates the constitutional protection 'to the right of property in the appellee by attempted regulations under the guise of the police power, which are unreasonable and confiscatory?'" *Id.* at 381.

In *Village of Euclid*, the Court decided whether modern cities could address the impact of technology, business development and industrial growth on neighborhoods and other facilities by enacting a comprehensive zoning regulation. *Id.* at 387. The constitutional challenge was caused by need of state and local governments to extend the boundary of exercises of police power to enact comprehensive zoning regulations to address the impact of technology, business growth and in-

^{56.} Circo-Green Building, *supra* note 17, at 734 (citing Pekka Huovila et al., *Buildings and Climate Change: Status, Challenges and Opportunities* 1, U.N. ENV'T PRO-GRAMME (2007)) (stating impact construction and real estate industries on national economy).

^{57.} *Id.* (giving findings showing real estate and construction industries have tremendous economic impact on U.S. economy).

exercises of eminent domain and regulatory powers by federal, state and local governments that enact regulatory schemes to control land use, preserve natural resources, and protect environmental quality by restricting, prohibiting, or making demands of land and business development projects and practices.⁶¹ Thus, integrated development and environment sustainability regulation that substantially alters the current proportionality of public and private burdens implicates the protection of private property rights under the Takings Clause.

61. See Calandrillo, supra note 52, at 837 (explaining use of smart growth as regulatory scheme to manage and control land use and growth and their impact on land, natural resources and environmental quality).

Other regulatory schemes design to implement sustainability raise or implicate legal and constitutional concerns. See, e.g., Adam Soliman, Achieving Sus-tainability Through Community Based Fisheries Management Schemes: Legal and Constitutional Analysis, 26 GEO. INT'L ENVTL. L. REV. 273 (2014) (examining "some of legal requirements for implementing successful community-based fisheries management (CBFM) capability within a management regime based on individual transferable quotas (ITQs)"). Id. at 274; Juli Ponce, Urban Planning and Legal Framework for Sustainable Communities: Affordable Housing, Social Cohesion and Ghettos, 42 INT'L J. LEGAL INFO. 75 (2014) (examining "an important aspect associated to land use regulations: direct or indirect discrimination in the use of land, urban segregation and creation of ghettos This is, obviously, an issue of the greatest interest all around the world."). Id. at 78; Richard Grosso, Regulating for Sustainability: The Legality of Carrying Capacity-Based Environmental and Land Use Permitting Decisions, 35 Nova L. Rev. 711 (2011) (concluding that "Florida can only sustain itself and avoid economic and ecological crisis if its policies and laws respect and reflect realities of the laws of nature, the finite (and shrinking) amount of land in this peninsula, and its ability to pay for more growth "). Id. at 775; Karl S. Coplan, Public Trust Limits on Greenhouse Gas Trading Schemes: A Sustainable Middle Ground?, 35 COLUM. J. ENVTL. L. 287 (2010) (explaining cap-and-trade system of regulating greenhouse gas emissions has advantages and disadvantages and public trust to federal legislation); Tom Pierce, Comment, A Constitutionally Valid Justification for the Enactment of No-Growth Ordinances: Integrating Concepts of Population Stabilization and Sustainability, 19 U. HAW. L. REV. 93 (1997) ("conclud[ing] that no-growth ordinances enacted to implement sustainability goals are constitutional . . . , [but] municipalities must create an irrefutable link between land use management and science of sustainability [and] . . . must overcome entrenched and unrealistic judicial assumptions regarding population growth."). Id. at 96.

dustry on local populations, facilities and institutions. *Id.* at 392 (quoting City of Aurora v. Burns, 149 N.E. 784, 787-88 (1925)). The Court highlighted the need to address this impact by quoting the Supreme Court of Illinois that had stated that "[t]he constantly increasing density of our urban populations, the multiplying forms of industry, and the growing complexity of our civilization make it necessary for the State, either directly or through some public agency by its sanction, to limit individual activities to a greater extent than formerly." *Id.* at 392 (quoting *City of Aurora*, 149 N.E. at 788). Almost a century later, federal, state and local governments are confronted with a more challenging need to address the threat to the earth and humankind survival by harmful impact of business development, climate change and energy consumption. This harmful impact on the environment, population and social welfare requires federal and state policy-makers to extend farther the boundaries of police power and federal power, respectively, to enact integrated sustainability regulation subject to the Takings Clause.

22 VILLANOVA ENVIRONMENTAL LAW JOURNAL [Vol. XXIX: p. 1]

Integrated sustainability policy and regulation must be developed by federal and state legislatures. Federal, state and local legislative bodies continue to make traditional land use, environmental and natural resources regulation that may unintentionally achieve a few sustainability objectives and goals.⁶² Congress and state legislatures must eventually face the ultimate question to enact integrated sustainability policy. Simply, this question is whether integrated sustainability regulation that must include traditional and eventually impose new regulatory mandates on business, organizations, land development, energy exploration, and commercial activities can withstand constitutional muster under the Takings Clause to protect current and future generations. Of future challenges to integrated sustainability regulation, the takings analysis will review one or more inseparable regulatory strands that impose both traditional and new obligations.63 The numerous strands cannot impose public burdens that should be borne by government on landowners under the Takings Clause guarantee of fairness and justice. Throughout the 20th century, the Court reviewed land use, natural resources, environmental, social and other policy and regulation under the Takings Clause. Principally, the Court was requested to decide whether business developers and landowners should be protected from burdensome land use and other public obligations by giving more protection to the right to receive just compensation, which, in turn, gives more protection to private property rights.⁶⁴ Development and environmental sustainability is a set of new circumstances subject to takings jurisprudence that contains mostly objective standards of review and principles of law. From that perspective, the Court's takings decisions offer insight on whether integrated sustainability policy and regulation enacted as a bundle of traditional and new regulatory strands to broadly effect environ-

^{62.} See Committee on Incorporating Sustainability, *supra* note 10, at 25 (recognizing federal government had no sustainability goals and objectives could be measured by federal standards).

^{63.} See also Brundtland Report, supra note 2, at Ch. 1, ¶40 (recognizing policymakers and other government institutions should not treat "[e]nvironment and development [as] . . . separate challenges," and concluding "[t]hese problems cannot be treated separately by fragmented institutions and policies"). *Id.*

^{64.} See, e.g., Lucas v. South Carolina Coastal Council, 505 U.S. 1003 (1992) (limiting coastal zone management regulation that take all beneficial use of property); Dolan v. City of Tigard, 512 U.S. 374 (1994) (restricting use of land dedication conditions by requiring a justifiable need); Koontz v. St. Johns River Water Management District, 133 S. Ct. 2586 (2013) (restricting use adjudicated monetary exactions of land use regulatory schemes to mitigate environmental harm); Horne v. United States Department of Agriculture, 135 S. Ct. 2419 (2015) (restricting farm subsidy programs required farmers to give surplus crops to government to stabilize market).

ment, social and economic change on private property and business interests can withstand constitutional muster under the Takings Clause. Thus, takings theories will decide whether the burden borne by landowners under integrated development and environmental sustainability regulation is a public burden that should be borne by government.

Takings issues that normally involve more immediate exercises of private property rights must eventually weigh the need to consider the environmental and development sustainability interests of future generations. The Takings Clause guarantees fairness and justice by proportioning burdens or obligations borne by landowners and community to address more immediate economic, social, and environmental needs.65 This fairness and justice, as constitutional equity, may not include intergenerational equity among present and future generations of Americans.⁶⁶ Of future generations, the Court may as usual leave any policy concerns solely to Congress and state legislatures or consider its past interpretations to contain inter-generational equity sustaining our American capitalism and constitutionalism.67 However, the Court may still be faced with the question of whether the state has sufficient interest and power to protect unborn generations by preserving the earth and its environment and resources. We will not make an argument here but make the readers aware of the need to consider future generations in integrated development and environmental sustainability policymaking.

C. Takings Clause and Public Burdens to Be Borne

Government provides public needs and must do so with fairness and justice to landowners and the whole community who should be required to bear requisite public burdens guaranteed by the Takings Clause. The Takings Clause guarantee is that government cannot take land or its benefits by imposing public burdens on landowners and developers.⁶⁸ The Court stated that the Taking

^{65.} Armstrong, 364 U.S. at 40 (guaranteeing real and personal property owners do not pay for public needs or responsibilities of government).

^{66.} See Penn Central Transp. Co. v. City of New York, 438 U.S. 109, 109 at n.6 (citing Boom Co. v. Patterson, 98 U.S. 403, 408 (1878)) (emphasis added) (noting "[t]he Fifth Amendment must be applied with 'reference to the uses for which the property is suitable, having regard to the existing business or wants of the community, or such as may be reasonably expected in the immediate future'"). *Id.*

^{67.} *See id.* (recognizing Takings Clause could consider immediate future but not several generation of intragenerational equity).

^{68.} *Id.* (concluding land and personal property owners cannot be required to bear burdens or obligations of government).

Clause "was designed to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole."⁶⁹ The Takings Clause imposes a condition on the exercise of eminent domain and regulatory powers and when the condition is triggered by a condemnation under eminent domain or an unintended taking by regulation for a public use, the Takings Clause mandates for landowners and other holders of property rights⁷⁰ the right to receive just compensation for the land or other property taken by government.⁷¹ Thus, the exercise of eminent domain to take real and personal property by condemnation may raise a few issues regarding the constitutionality of the takings or condemnation.

Government must exercise regulatory power to further public needs and objectives by restricting or limiting the exercises of private property rights, though government is not exercising eminent domain power. A government regulation that severely limits the exercise of property rights can amount to a takings of private property for public use under regulatory takings theory of *Pennsylvania Coal Co. v. Mahon (Mahon)*.⁷² In *Mahon*, the Court was asked to

For an analysis of Horne I that was a physical takings decided after Koontz that was regulatory takings, see James E. Holloway & Donald C. Guy, The Aftermath of Koontz and Conditional Demands: A Per Se Test, Personal Property and Another Conditional Demand, 23 WIDENER L. REV. 37 (2016) (stating "[t]his article examines the expansion of Takings Clause jurisprudence by the Roberts Court in the immediate aftermath of Koontz by analyzing how the Roberts Court decided that a condition of a regulatory scheme was so intrusive that a standard of review exceeding that of Nollan [v. California Coastal Commission, 483 U.S. 825 (1987)] and Dolan [v. City of Tigard, 512 U.S. 374 (1994)] would always be appropriate to determine the validity of the condition."). Id. at 39.

71. *Mahon*, 260 U.S. at 415 (concluding government can take by eminent domain and regulatory powers).

^{69.} Id. (stating purpose of Takings Clause).

^{70.} See, e.g., Armstrong, 364 U.S. at 40 (deciding whether U.S. Navy had taken personal property for public use); Brown v. Legal Foundation of Washington, 538 U.S. 216 (2003) (deciding whether small amounts of money collected from law-yer's trust accounts taking of personal property); *Koontz*, 133 S. Ct. at 2586 (deciding whether adjudicated money exaction or fee in lieu of dedication imposed on development permit was taking of personal property); Horne v. United States Department of Agriculture, 135 S. Ct. 2419 (2015) (Horne II) (deciding whether transfer of raisins to government facility was physical takings of personal property).

^{72. 260} U.S. 393 (1922) (establishing regulatory takings theory). The Court decided *Pennsylvania Coal Co.* during the substantive due process era when the Court was applying much closer scrutiny of regulation restricting or limiting private property rights and economic rights. *See* Lochner v. New York, 198 U.S. 45, 64 (1905) (regarding state interference with contract rights of employment); *But see* Nebbia v. New York, 291 U.S. 502, 539 (1934) (holding no unreasonable state interference with economic rights by imposing price controls). The Court signaled the close of the *Lochner* era in 1937 when the Court decided to not closely scrutinize legislatures on enacting economic regulation. West Coast Hotel Co. v. Parrish, 300 U.S. 379, 398 (1937) (explaining state interference with contract

determine whether an exercise of state police power to enact legislation was a taking of private property for a public use.⁷³ The state of Pennsylvania had required the Pennsylvania Coal Co. to leave a pillar of coal under Mahon's house to prevent subsidence, but Mahon had purchased the house without acquiring the subsurface rights immediately below the residence.74 The Court concluded that a government regulation can go too far by taking private property for a public use,⁷⁵ though the regulation may further a legitimate government need to protect the welfare of state citizens.⁷⁶ However, the Court found that legislation was giving Mahon a right that he had not acquired under the contract in the purchase of the house.⁷⁷ The Court chose not to apply a general proposition and relied on an objective test to determine whether the burdens that required the landowner to leave profitable coal in the ground amounts to a government takings of private property by regulation.⁷⁸ Regulatory takings theory protects the right to receive just compensation by objectively scrutinizing the effects of regulation on real and personal property interests of landowners who were exercising private property rights.⁷⁹ Thus, regulatory takings theory has developed since Mahon to limit burdensome regulatory inva-

West Coast Hotel Co., 300 U.S. at 398.

However, one commentator suggests that our property rights regime may not permit the optimum solution to sustainable development and environment. *See* Circo-Property Rights, *supra* note 52, at 115 (finding "[t]he net result may well be that U.S. concepts of private property cannot fully conform to sustainability without a distinct shift to relational perspectives that currently exist only at the fringes of property theory as applied in this country."). *Id.* at 92.

rights of economic relationship by imposing minimum wage for women). In *West Coast Hotel Co.*, the Court stated that:

[[]T]hat times without number we have said that the legislature is primarily the judge of the necessity of such an enactment, that every possible presumption is in favor of its validity, and that, though the court may hold views inconsistent with the wisdom of the law, it may not be annulled unless palpably in excess of legislative power.

^{73.} See Mahon, 260 U.S. at 413 (recognizing Mahon was novel issue under Takings Clause).

^{74.} See id. at 412 (recognizing Mahon was novel issue under Takings).

^{75.} See id. at 415 (concluding regulation can amount to taking of private property).

^{76.} See id. at 416 (concluding regulation can amount to taking of private property though government furthers legitimate state need).

^{77.} See id. (recognizing government cannot use regulation to grant public benefit that should have been acquired as contractual right).

^{78.} *Pennsylvania Coal Co.*, 260 U.S. at 416 (applying objective standard rather than bright line test).

^{79.} *Id.* (explaining purpose of regulatory takings theory under Takings Clause of Fifth Amendment).

26 VILLANOVA ENVIRONMENTAL LAW JOURNAL [Vol. XXIX: p. 1]

sions of, interferences with, and demands on exercises of private property right under the Takings Clause.⁸⁰

Today, the federal, state and local policy-makers are facing an intractable public policy concern that demands Congress and state legislatures fully recognize the need to advance sustainable development and environmental interests. Congress and state legislatures must design and implement integrated sustainability policy and legislation to address a mounting policy conflict between sustainable environmental and development interests and business and land development rights. This need for policy and legislation that has yet to be fully developed still leads one to ask whether the Takings Clause will permit government to add development and environmental sustainability policy and regulation to existing traditional land use, environmental, and other legislation imposed on business and land developers and owners to preserve and protect environmental, economic, social, and other resources for current and future generations.⁸¹ The Takings Clause ensures business and land developers and owners do not unfairly or unjustly bear the public burdens for sustainable development and environment.⁸² These public burdens are imposed by federal and state legislative acts, administrative regulations and local ordinances demanding property interests from, imposing restrictions on, and granting benefits and incentives to business and land developers and owners.83 The Court must decide whether the burdens of integrated sustainability policy borne by these developers and owners are proportional to the impact of the harm of business and land development on the community, state, or nation. Local, state and federal governments must set forth a specific set of public goals and objectives to address

^{80.} See Penn Central Transp. Co., 478 U.S. at 124 (setting forth a three-prongs test deciding whether government regulation amounts to taking of private property by land use and other regulations).

^{81.} See Dawn Jordan, Exploring How Today's Development Affects Future Generations Around the Globe: In This Issue: Sustainable Development in the Urban Environment: Standing on Their Own: The Parallel Rights of Young People to Participate in Planning Processes and Defend Those Rights, 11 SUSTAINABLE DEV. L. & POL'Y, 41, 41-42 (2010) (noting need for intergenerational equity in addressing impact of sustainable development and environment on future generations). Sustainable development and environment must include future generations. Id. Consequently, the government and public consider and the Court may need to decide whether past and current generations are obligated by the Federal Constitution to protect future generations so they inherit more than mismanaged land use, degraded natural resources, polluted water and air and poor social conditions.

^{82.} *See Armstrong*, 364 U.S. at 49 (stating purpose of Takings Clause to protect private property).

^{83.} *See id.* (stating legislative and regulatory sources of government's burdens imposed on real and personal property owners).

social, economic and environmental harm to sustainable development and environmental interests, such as environmental quality. Depending on takings theory, the Court may need to analyze means-ends relationship to determine whether integrated sustainability regulation furthers its legislative purpose and is justified by public needs.⁸⁴ Yet when the interference with private property rights raises no issues regarding means-ends relationship, the Court analyzes the nature of the interference and the economic and financial effects of regulation on exercises of private property rights.⁸⁵ Although, federal and state governments have not fully integrated the traditional and new regulatory strands to establish integrated sustainability policy and regulation, the Court's takings jurisprudence provides much insight into how the Court might review an integrated environmental and development sustainability policy and regulation⁸⁶ under takings theories. Such a ruling would provide fairness and justice to business and land developers and owners engaged in business and land development or another activity related to a property interest.

III. TAKINGS THEORIES UNDER THE TAKINGS CLAUSE

Taking theories and principles determine whether government can impose restrictions on, request conditional demands of, and provide offsetting benefits to business and real estate development solely to protect land use, natural resources, and environmental quality. Regulatory takings theory provides much deference to the land use and growth management objectives that are furthered by zoning and other land use regulation. On one hand, regulatory takings theory can treat highly burdensome restrictions on development as unlawful interferences with private property rights to further legitimate public objectives. On the other hand, physical takings theory imposes a per se or categorical duty on government to not take private property, both personal and real property, by occupying the land, permitting others to occupy the land, or tak-

^{84.} *See* Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 441 (1982) (concluding Court need not make means-ends analysis since ends or objectives of regulation are weighed in applying physical takings theory).

^{85.} See infra Part IV and accompanying notes (explaining how interpretations of Takings Clause could affect making and implementation of integrated development and environment sustainability policy and regulation).

^{86.} May, *supra* note 9, at 21. Professor May reviewed environmental cases and concluded that "[n]one of the environmental cases decided thus far during the tenure of Chief Justice Roberts engage sustainability I conclude that factors having little or nothing to do with sustainability per se are at the heart of these results.").

ings an ownership interest in the property under a regulatory scheme.

A. Regulatory Takings Analysis with Deference to Sustainability

It would take a few decades for the Court to develop Mahon's objective test that would analyze the effects of government regulation on private property rights and its economic and financial effects. In 1978, the Court developed and applied a much broader regulatory takings analysis in Penn Central Transp. Co. v. City of New York (Penn Central)87 to decide whether the City of New York's historic preservation regulation imposed public burdens on the landowner, the petitioner, by restricting the development of its private property.88 The Court established a three-prong test to determine whether the City of New York committed a regulatory takings by applying three factors: (1) character of regulation, (2) economic impact of regulation, and (3) interference with investment-backed expectations by the regulation.⁸⁹ These factors are the Penn Central inquiry and were applied to determine whether the historic preservation regulation that restricted the development of Penn Central Station amounted to a taking of private property for public use.⁹⁰ The Court concluded that the historic preservation regulation did not amount to a taking of private property for public use.⁹¹ The first test on the Penn Central inquiry is the character of government regulation that examines the interference of the regulation with private property rights in furtherance of public policies or government needs.⁹² The Court must determine whether sustainability regulation are overly burdensome interference with private property rights and the benefits of this regulation can further sustainable development and environmental objectives without the payment of just compensation.

The Court often defers to state and municipal government policy-makers on the purposes and needs for land use and other regulatory schemes to further legitimate state objectives. In Penn

^{87.} Penn Central Transp. Co., 438 U.S. 104, 131 (1978) (applying regulatory taking theory to historic district regulation under objective standard of *Mahon*). 88. See id. at 123 (setting forth regulatory taking issue).

^{89.} Id. at 124-25 (listing three factors of Penn Central inquiry that are applied to determine regulatory takings).

^{90.} Id. at 123 (stating primary issue that must be decided to determine regulatory takings under *Penn Central* inquiry).

^{91.} Id. at 138 (stating conclusion to application of Penn Central inquiry to historic preservation regulation).

^{92.} Penn Central Transp. Co., 438 U.S. at 124 (stating first factor of Penn Central inquiry).

Central, the Court noted that *Mahon* was decided under the interference with investment-backed expectations principle.⁹³ This Court also recognized that an ad hoc, factual inquiry had been applied to determine whether a government regulation imposes public burdens on land-owners by denying the right to receive just compensation.⁹⁴ The Court had granted much deference to government to impose land use regulation that did not impose public burdens on business and real estate developers to require government to pay just compensation.⁹⁵ Still, these burdens continued to raise the question whether the right to receive just compensation gave enough protection to private property rights from restrictive land use, environmental and other regulation that deny landowners the right to receive just compensation. The Rehnquist Court provided an answer in the negative.

B. Regulatory Takings Tests with Less Deference for Sustainability

The Rehnquist Court imposed limits on the deference that could be accorded under the Takings Clause to specific kinds of environmental and land use regulation. The Court imposed heightened scrutiny on two classes of regulation to determine whether government land use, environmental and other regulation amounts to a regulatory takings in *Lucas v. South Carolina Coastal Council (Lucas)*⁹⁶ and *Dolan v. City of Tigard (Dolan)*.⁹⁷ In *Lucas*, the Court established a per se test for a category of government regula-

^{93.} *Id.* at 127 (recognizing *Mahon* was decided under third factor and not first factor that address level of interference with property rights).

^{94.} See id. at 124 (noting Court in Penn Central Transp. Co. applied three factors of Penn Central inquiry that is an objective standard). "[T]his Court, quite simply, has been unable to develop any 'set formula' for determining when 'justice and fairness' require that economic injuries caused by public action be compensated by the government, rather than remain disproportionately concentrated on a few persons." See id. (citing Goldblatt v. Hempstead, 369 U.S. 590, 594 (1962)).

^{95.} Penn Central Transp. Co., 438 U.S. at 131; see City of Monterey v. Del Monte Dunes at Monterey, 526 U.S. 687 (1999) (refusing to apply rough proportionality test to application for land use permit that has been delayed by local government); see Keystone Bituminous Coal Ass'n v. Debendictis, 480 U.S. 470 (1987) (agreeing with facial takings challenge to constitutionality of Pennsylvania's Subsidence Act that was similar to the Kohler Act that had been regulatory takings of private property by regulation in Mahon).

^{96. 505} U.S. 1003, 1030-31 (1992) (applying per se test or categorical rule to determine whether government had taken property by regulation).

^{97. 512} U.S. 3724, 385 (1994) (applying intermediate scrutiny test to determine whether government had taken private property by adjudicatory decision in land use management scheme).

tion that denies all economically viable use⁹⁸ of private ocean front property that could have been developed under the land title or deed at common law.⁹⁹ The Court applied common law background doctrine to firmly justify the per se test that declares a class of environmental, land use and other regulation a regulatory takings when the landowner is totally prohibited from using the land for economic uses¹⁰⁰ such as land development, that would have been permitted under the deed or title to the land at common law.¹⁰¹ In *Lucas*, the Court applied a per se test that is a higher standard of review to determine if government denies all economically viable use of private property.¹⁰² *Lucas* established a categorical duty or per se test that was absolutely not deferential to government policy-makers when compared to the reasonableness test of *Penn Central Transp. Co.* and earlier decisions.¹⁰³

Many kinds of land use regulation did not need a means-ends analysis as strict as the per se test to scrutinize the relationship between the impact of development on the community and the government justifications for the regulation. The Court needed to

100. Id. at 1028-29; But see Tahoe-Sierra Pres. Council v. Tahoe Reg'l Planning Agency, 535 U.S. 302, 342 (2002) (permitting government agency to impose interim development control or land use moratorium, subject to review under *Penn Central* inquiry and not per se test of *Lucas*).

101. Lucas, 505 U.S. at 1028-29 (noting land development had been permitted at common law under terms and conditions of deed or title).

102. *Id.* (applying a per se takings to determine if land use and other regulation deny all economically beneficial use of the land). However, in Lingle v. Chevron U.S.A., Inc., the Court concluded that a rent control statute was not subject to heightened scrutiny and that the substantially advances a legitimate state interest language of Agins v. City of Tiburon, was not heightened scrutiny. *See* Lingle v. Chevron U.S.A., Inc., 545 U.S. 528, 548 (2005) (citing Agins v. City of Tiburon, 447 U.S. 255, 260 (1980)).

103. See Penn Central Transp. Co., 438 U.S. at 131 (finding Lucas' per se test does not defer to policy-makers in making environmental, land use and other regulation). The Court stated that "[a]ppellants concede that the decisions sustaining other land use regulations, which, like the New York City law, are reasonably related to the promotion of the general welfare, uniformly reject the proposition that diminution in property value, standing alone, can establish a 'tak-ing[.]'" *Id.* (citing Euclid v. Ambler Realty Co., 272 U.S. 365 (1926)) (illustrating 75% diminution in value caused by zoning law); Hadacheck v. Sebastian, 239 U.S. 394 (showing 87 1/2% diminution in value); Eastlake v. Forest City Enterprises, Inc., 426 U.S. at 674 n.8).

^{98.} Lucas, 505 U.S. at 1027 (explaining "[w]here the State seeks to sustain regulation that deprives land of all economically beneficial use, we think it may resist compensation only if the logically antecedent inquiry into the nature of the owner's estate shows that the proscribed use interests were not part of his title to begin with."). *Id.; But see* Palazzolo v. Rhode Island, 533 U.S. 606, 632 (2002) (holding wetland regulations were not takings of all economically viable use if regulations permitted landowners to build one or more houses on tract of land).

^{99.} *Lucas*, 505 U.S. at 1027-28 (noting Court did not allow government to terminate property rights that permitted owner to develop land).

establish an intermediate standard of review that has a level of scrutiny between the strict per se test and deferential reasonable test to analyze the relationship between the impact of development and community needs for the regulation. In Dolan, the Court established an intermediate standard of review that examined the relationship between public needs and an adjudicatory decision to impose land dedication conditions on issuance of a development permit that requested a right-of-way in the expansion of a retail business.¹⁰⁴ The Court recognized that land dedication conditions are adjudicatory decisions and require the landowner to give an interest in land to receive government benefits, and were a part of lawful land use regulation.¹⁰⁵ The Court, however, concluded that the land dedication conditions were not justified by the impact of the development, expanding the retail business, on the community.¹⁰⁶ The Court applied the unconstitutional conditions doctrine that prohibits government from imposing an unlawful condition on the exercise of fundamental right to justify intermediate scrutiny or rough proportionality test to scrutinize the connection between the land dedication conditions and community needs.¹⁰⁷ In contrast to a deferential standard permitting a lesser connection, the rough proportionality test requires government to establish a closer connection between land dedication conditions and community's needs to justify imposing these conditions.¹⁰⁸ Lucas and Dolan depended on common law and constitutional doctrines, respectively, to justify higher standards of review for government regulation that is challenged as a takings of private property for public use without the payment of just compensation.

^{104.} See Dolan, 512 U.S. at 391 (stating "[w]e think a term such as 'rough proportionality' best encapsulates what we hold to be the requirement of the Fifth Amendment. No precise mathematical calculation is required, but the city must make some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development.").

^{105.} See id. at 385 (recognizing use and purposes of land dedication conditions in land use management regulatory scheme).

^{106.} Id. (concluding relationship or connection did not exist between land dedication conditions and impact of development on community).

^{107.} *Id.* (explaining "[u]nder well-settled doctrine of 'unconstitutional conditions,' the government may not require a person to give up a constitutional right here the right to receive just compensation when property is taken for a public use—in exchange for a discretionary benefit conferred by the government where the benefit sought has little or no relationship to the property.") (citing Perry v. Sindermann, 408 U.S. 593 (1972); Pickering v. Board of Ed. of Township High School Dist. 205, Will Cty., 391 U.S. 563, 568 (1968)).

^{108.} See Dolan, 512 U.S. at 391 (contrasting rough proportionality test with rational basis test that is more deferential).

32 VILLANOVA ENVIRONMENTAL LAW JOURNAL [Vol. XXIX: p. 1]

Government regulation and decisions can take private property for public use, amounting to an extremely burdensome interference with the landowner's control of a specific private property right. Government actions that can severely limit the right to exclusive use of the bundle of property rights may effect a regulatory takings by permitting others to invade the private property.¹⁰⁹ In Kaiser Aetna v. United States (Kaiser Aetna),¹¹⁰ a landowner that connected its pond to navigable waters was required to give access to this pond to the public, even though the landowner had relied on the government's consent in connecting the pond to the navigable waters.¹¹¹ The Court held that the navigable servitude imposed by the government was a taking of private property for public use and interfered with the right to exclude others was a physical invasion of the property under regulatory takings theory.¹¹² The Court concluded that government actions can amount to a burdensome regulatory takings by severely restricting the right to exclude others that permits the owners to demand the removal of uninvited persons.¹¹³ The physical invasion did not require government to take an interest in land or occupy the fast land that is located above high water edge of navigable waters.¹¹⁴ Although the regulation or decision does not deny all beneficial use or demand an interest in land, this

^{109.} Kaiser Aetna v. United States, 444 U.S. 164, 178-79 (1979) (concluding Court should treated government decisions as more intrusive on use of property right than mere interference with property right under first factor of *Penn Central* inquiry).

^{110. 444} U.S. 164 (1979) (establishing regulatory takings by physical invasion rather than *Penn Central* inquiry or physical takings test).

^{111.} Id. at 167-69 (stating relevant facts).

^{112.} *Id.* at 179-80 (finding right to exclude others is important property right that should be protected as physical invasion). "[W]e hold that the 'right to exclude,' so universally held to be a fundamental element of the property right, falls within this category of interests that the Government cannot take without compensation." *Id.*

^{113.} See id. at 178-79 (stating Court's conclusion on effect of government decision on exercise private property rights). "This is not a case in which the Government is exercising its regulatory power in a manner that will cause an insubstantial devaluation of petitioners' private property; rather, the imposition of the navigational servitude in this context will result in an actual physical invasion of the privately owned marina." *Id.* at 180.

^{114.} *Kaiser Aetna*, 444 U.S. at 176 (concluding government was not taking fast land requiring it to exercise eminent domain power and pay just compensation). In *Kaiser Aetna*, the Court found that the government decision requiring public access to private land that was connected to navigable waters was unique. *Id.* at 178. "Here, the Government's attempt to create a public right of access to the improved pond goes so far beyond ordinary regulation or improvement for navigation as to amount to a taking under the logic of Pennsylvania Coal Co. v. Mahon, 260 U.S. 393 (1922)." *Kaiser Aetna*, 444 U.S. at 178.

regulation or decision can effect a regulatory takings by being an extremely burdensome interference with private property rights.

Some takings precedents would allow much less deference to integrated development and environmental sustainability regulation and deny government the power to increase the private burdens already borne by business and land developers without paying just compensation. Lucas, Dolan and Kaiser Aetna are lines of regulatory takings cases that do not rely on the *Penn Central* inquiry and allow government to increase the burdens borne by landowners in limited circumstances. Foremost, Lucas and Dolan show the Court is unwilling to allow government to rely entirely on deference when state and local land use and environmental regulation permits government to deny all economically beneficial uses or request an interest in land, respectively. In addition, Kaiser Aetna demonstrates that the Court is unwilling to permit government to rely on deference when landowners are forced to share the use of private property with the public, though government had provided a noncompensatory permit to make private property more accessible to the landowner. In Lucas, Dolan and Kaiser Aetna, the Court narrows the Penn Central inquiry by deciding that government is not owed deference to forceful regulation and conditional demands to avoid paying just compensation for acquiring public benefits. This lack of deference requires environmental, land use and natural resources planners and managers to fully establish purpose and needs to create each strand of an integrated development and environmental sustainability regulation. Thus, these planners and managers must thoroughly examine and respond to financial, investment, and economic burdens suffered by business developers and landowners in complying with various regulatory strands of an integrated sustainability regulation.

C. Physical Takings Analysis with a Duty to Pay for Sustainability

Government may need to occupy or cause the occupation of private property to further legitimate government objectives that provide social and other benefits to the public under integrated sustainability regulation. The government's need to impose the regulation is not a question but only the means of occupying or causing an occupation of the land that leads to a takings claim as a physical takings.¹¹⁵ In *Loretto v. Teleprompter Manhattan CATV Corp.*

^{115.} Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 426 (1982) (stating Court "conclude[d] that a permanent physical occupation author-

34 VILLANOVA ENVIRONMENTAL LAW JOURNAL [Vol. XXIX: p. 1]

(Loretto),¹¹⁶ the New York state legislature enacted a statute permitting cable television companies to install antennas on rooftops of private buildings and prohibiting landlords from interfering with these installations.¹¹⁷ The appellants, who were owners of these buildings, challenged this state statute as an unwarranted interference with their rooftops.¹¹⁸ The Court held that the statute that permitted the cable television companies to attach an antenna to the rooftop was a permanent physical occupation that effected a physical takings of private property for public use.¹¹⁹ The Court reasoned that government cannot allow the public, individual, or agency to occupy private property to achieve a public goal or objective.¹²⁰ Moreover, the Court does not review public interests to decide whether a government regulation or decision amounts to a physical takings.¹²¹ Thus, Loretto does not permit government to occupy private property and does not consider public ends for making regulation when government occupies private property.

Integrated development and environmental sustainability policy goals and objectives do not matter to the Court in a physical takings. The Court analyzes whether integrated sustainability regulation permits government to increase the owner's burdens by occupying the land of business and land developers and avoid paying just compensation. *Loretto* is one of a line of takings cases that limit the *Penn Central* inquiry by not broadly allowing government to justify its objectives when the government occupies land.¹²² Simply,

117. Id. at 423 (reviewing relevant facts of Loretto).

118. Id. at 424 (reviewing relevant facts setting forth physical takings claim).

119. *Id.* at 441 (stating Court's holding on physical takings issue in *Loretto*). The Court stated, "Our holding today is very narrow. We affirm the traditional rule that a permanent physical occupation of property is a taking. In such a case, the property owner entertains a historically rooted expectation of compensation, and the character of the invasion is qualitatively more intrusive than perhaps any other category of property regulation." *Id.*

120. *Id.* at 426 (recognizing Takings Clause does not permit government to occupy private property to further public interest). "The historical rule that a permanent physical occupation of another's property is a taking has more than tradition to commend it. Such an appropriation is perhaps the most serious form of invasion of an owner's property interests." *Id.* at 435.

121. See Loretto, 458 U.S. at 426 (recognizing Court does not consider public interests in deciding physical takings by stating "our cases uniformly have found a taking to the extent of the occupation, without regard to whether the action achieves an important public benefit or has only minimal economic impact on the owner."). *Id.* at 434-35.

122. See id. at 441 (distinguishing nature of takings in *Loretto* from regulatory takings of *Penn Central Transp. Co.*).

ized by government is a taking without regard to the public interests that it may serve.").

^{116.} Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419 (1982).

the objectives are not relevant when government occupies private property. *Loretto* is a physical takings case that shows the Court is totally unwilling to allow government or the public to occupy private property under a government mandate providing a needed public benefit.¹²³ Therefore, the Court is unwilling to allow government to obligate landowners and developers by a physical occupation as a strand of regulation in an integrated sustainability regulation that ultimately denies these developers the right to receive just compensation when complying with several strands or kinds of regulation.

IV. IMPACT OF TAKINGS CLAUSE ON STRANDS OF INTEGRATED SUSTAINABILITY REGULATION

Integrated development and environment sustainability regulation restricts the exercise of private property rights by limiting the qualities and characteristics of business and land development projects and construction practices and methods to protect land uses, natural resources, environmental quality, social welfare, climate change and other public needs. Impact exactions, land use and zoning controls, coastal zone environmental management and other strands of integrated sustainability regulation have been successfully and unsuccessfully challenged as burdensome restrictions on the exercise of private property rights to develop and use land and natural resources. These challenges to a distinct stand-alone strand offer much insight into how the Court must respond to integrated development and environmental sustainability regulation that will limit or restrict land and business development projects and construction practices to provide or establish a sustainable development and environment. We do not think the Federal Constitution or Court will permit regulation to prohibit or highly restrict business and land development but may permit restrictions on development and construction characteristics, such as social impact, energy use, waste production, and location. Assuredly, business and land development will not cease, but the question is what kinds of restrictions are too burdensome to be borne by land and business developers and should be borne by the public by paying just compensation.

^{123.} Id. at 434-35 (concluding physical takings theory does not allow government to occupy private property).

- 36 VILLANOVA ENVIRONMENTAL LAW JOURNAL [Vol. XXIX: p. 1]
- A. Conditional Demands to Manage Social and Ecological Impact

The Court must decide whether adjudicated conditional demands imposed by an integrated development and environmental policy and regulation are less offensive to the Takings Clause than adjudicated conditional demands imposed by a single regulatory strand that had been found unconstitutional earlier. In Nollan v. California Coastal Commission (Nollan),¹²⁴ the Court applied the Takings Clause to a land dedication condition that was imposed on a development permit to grant an easement to allow the public access to the beach by allowing them to walk across private beachfront property.¹²⁵ The Court concluded that the relationship between the land dedication condition and its public objective or purpose did not establish the appropriate connection.¹²⁶ The Court established an essential nexus test to determine whether the land dedication condition was sufficiently related to its government objective of public access along the beach shoreline.¹²⁷ It did not stop there. In Dolan, the Takings Clause was applied to two land dedication conditions that were adjudicatory decisions requesting easements to establish bicycle pathway and drainage right-of-way.¹²⁸ The land dedication conditions requested a bicycle path right-of-way and drainage easement on a retail development site.¹²⁹ According to the Court, these dedication conditions sought to further a recreational or social purpose by allowing citizens to move freely through retail business site.¹³⁰ The Court was not willing to conclude that the impact of retail business development on Fanno Creek justified the community need for the land dedication conditions and estab-

^{124.} Nollan v. California Coastal Commission, 483 U.S. 825 (1987).

^{125.} Id. at 827 (stating relevant facts setting forth regulatory takings claims).

^{126.} Id. at 837 (concluding lack of sufficient relationship between land dedi-

cation condition and its purpose to further access to beach). "In short, unless the permit condition serves the same governmental purpose as the development ban, the building restriction is not a valid regulation of land use, but 'an out-and-out plan of extortion.'" *Id.*

^{127.} Nollan, 483 U.S. at 837 (establishing standard of review to determine connection between land dedication and its public purpose). "Similarly here, the lack of nexus between the condition and the original purpose of the building restriction converts that purpose to something other than what it was. The purpose then becomes, quite simply, the obtaining of an easement to serve some valid governmental purpose, but without payment of compensation." *Id.*

^{128.} Dolan, 512 U.S. at 388-89 (stating relevant facts that were the grounds for takings claims).

^{129.} *Id.* at 380 (reviewing relevant facts identifying land dedication conditions imposed on Mrs. Dolan's retail site).

^{130.} Id. at 394-95 (reviewing relevant facts to set forth takings claim under burdensome land dedication conditions).

lished the rough proportionality test to determine the connection between the land dedication condition and public need for this condition.¹³¹ The Court concluded the connection was not sufficient to justify the land dedication conditions by applying the rough proportionality test to determine whether the public need for the land dedication conditions were justified in extent and degree to the impact of development on a site.¹³² Thus, the Court sought to establish a means-ends analysis to ensure that government objectives and needs were sufficiently related to the specific regulation providing public benefits without the payment of just compensation.

The Court was silent for almost twenty years on whether *Nollan* and *Dolan* applied to monetary exactions and fees in lieu of dedication that were imposed by an adjudicatory decision-making process. The Court answered this question in *Koontz v. St. Johns River Water Management District* (*Koontz*)¹³³ and did so in the affirmative. The

132. *Id.* at 394-95 (finding city did not set forth public needs that were caused by impact of development).

Cities have long engaged in the commendable task of land use planning, made necessary by increasing urbanization, particularly in metropolitan areas such as Portland. The city's goals of reducing flooding hazards and traffic congestion, and providing for public greenways, are laudable, but there are outer limits to how this may be done.

Id. at 396.

133. Koontz v. St. Johns River Water Management District, 133 S. Ct. 2586 (2013). For an analysis of Koontz, see, e.g., James E. Holloway & Donald C. Guy, Extending Regulatory Takings Theory by Applying Constitutional Doctrine and Elevating Takings Precedents to Justify Higher Standards of Review in Koontz, 22 WIDENER L. REV. 33 (2016) (examining Court's use of constitutional doctrine to justify higher standards of review for conditional demands that require payment of money); Theodore Lynch, Rise of the Super-Legislature: Demanding a More Exacting Monetary Exaction, 21 J. ENVTL. & SUSTAINABILITY L. 275, 275-76 (2015) (noting that "[t]hough not all consequences are known at this time, the instant decision seems to give further power to the individual landowner, who may now have an easier time ignoring the negative externalities that his developments have on the surrounding community."); Colin W. Maguire, Koontz And The End Of Justice Stevens' Private Property Regulation Policy, 63 CLEV. ST. L. REV. 777, 778-79 (2015) ("This analysis will attempt to show that the environmental aspect of these cases is often incidental to the majority of the Court. This makes the impact no less real, but Koontz also may force us as a country to embrace environmental impact. This analysis will first focus on sustainable water resource policies-including the CWA-as a conduit for aggressive government action towards property owners.").

^{131.} Id. at 395-96 (concluding land dedication conditions are not justified by impact of development).

We think a term such as "rough proportionality" best encapsulates what we hold to be the requirement of the Fifth Amendment. No precise mathematical calculation is required, but the city must make some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development.

Id. at 391.

38 VILLANOVA ENVIRONMENTAL LAW JOURNAL [Vol. XXIX: p. 1]

Court established a closer connection between adjudicated monetary exactions including fees in lieu of dedication and public need for imposing these kinds of exactions on or off the tract of land.¹³⁴ The Court applied the rough proportionality test to determine the existence of a sufficient relationship between adjudicated money exactions to protect water resources of the drainage district and environmental impact of land development project on the drainage district.¹³⁵ The impact of the land development must cause the need for the adjudicated money exactions or fees in lieu of a land dedication condition.¹³⁶ The land development project must create a regional or district need for a monetary exaction to finance mitigation and other work that was offsite of petitioner's development project.¹³⁷ The Court extended Nollan's essential nexus and Dolan's rough proportionality tests to cover adjudicated monetary exactions and fees in lieu of dedications that were attached to an identifiable property interests in Koontz.

An integrated sustainability regulation that includes conditional demands among its regulatory strands must have a sufficient relationship to a public purpose and need on or off the tract or site to survive constitutional scrutiny under the Takings Clause. This sufficient relationship requires integrated sustainability policy to give valid environmental and other purposes and show the community needs were harms or harmful effects caused by land and business development. In *Nollan*, the Court was also not willing under

134. *Koontz*, 133 S. Ct. at 2599 (noting Court determined relationship between adjudicated money exactions and public needs justifying these exactions). 135. *Id.* (measuring relationship between regulation and need for this regula-

tion by community).

Such so-called "in lieu of" fees are utterly commonplace . . . and they are functionally equivalent to other types of land use exactions. For that reason and those that follow, we reject respondent's argument and hold that so-called "monetary exactions" must satisfy the nexus and rough proportionality requirements of *Nollan* and *Dolan*.

Koontz, 133 S. Ct. at 2599 (citing Ronald H. Rosenberg, *The Changing Culture of American Land Use Regulation: Paying for Growth with Impact Fees*, 59 S.M.U. L. REV. 177, 202-03 (2006)).

136. *Koontz*, 133 S. Ct. at 2595 (stating that impact of land development must cause need for regulation). "*Nollan* and *Dolan* accommodate both realities by allowing the government to condition approval of a permit on the dedication of property to the public so long as there is a 'nexus' and 'rough proportionality' between the property that the government demands and the social costs of the applicant's proposal." *Id.* (citing *Dolan*, 512 U.S. at 391 and *Nollan*, 483 U.S. at 837).

137. *Koontz*, 133 S. Ct. at 2593 ("In the alternative, the District told petitioner that he could proceed with the development as proposed, building on 3.7 acres and deeding a conservation easement to the government on the remainder of the property, if he also agreed to hire contractors to make improvements to District-owned land several miles away.").

the essential nexus test to conclude that a social or recreational purpose or objective to establish public access across private property to get to the beach had a sufficient connection to the grant of an easement under a land dedication condition.¹³⁸ In Dolan, the Court was even less willing under the rough proportionality test to conclude that recreational or social needs for two land dedication conditions were a sufficient connection to justify a grant of an easement based upon the impact of business or land development on the community.¹³⁹ Finally, in Koontz, the Court went even further by extending the rough proportionality test to cover money exactions and fees in lieu of dedications made by adjudicatory decisions but remained tentative on whether the rough proportionality test applies to legislated conditional demands or exactions.¹⁴⁰ The Court was not willing under the rough proportionality test to conclude that the environmental impact of land development justified the need for a money exaction to mitigate offsite environment harm in the drainage district and remanded the case to the lower court.141 The Court applied a means-ends analysis to limit the use of an adjudicatory conditional demand by requiring closer connection between the regulation and its purpose and justification that are set forth in policy purposes and substantive obligations of adjudicatory decisions.¹⁴² Furthermore, the Court buttressed the closer connection between means and ends of conditional demands by concluding that the right to receive just compensation is significant enough to be protected by a higher standard of review under the unconstitutional conditions doctrine.143 Thus, integrated sustainability regulation that contains a strand of adjudicatory condi-

^{138.} Nollan, 483 U.S. at 837 (noting essential nexus must exist between land dedication condition and its public purpose).

^{139.} Dolan, 512 U.S. at $\overline{3}94-95$ (noting rough proportionality must exist between land dedication condition and impact of land development project on community).

^{140.} *Koontz*, 133 S. Ct. at 2599 (applying rough proportionality test to adjudicatory decisions but not clarifying whether test applies to legislative exactions).

^{141.} Id. at 2603 (noting that Court did not apply rough proportionality test).

^{142.} Id. at 2595 (recognizing Court concluded rough proportionality test applies to money exactions).

^{143.} Id. at 2594-95 (finding unconstitutional condition doctrine protects fundamental constitutional rights by establishing higher standards of review). "Nollan and Dolan 'involve a special application' of th[e] [unconstitutional conditions] doctrine that protects the Fifth Amendment right to just compensation for property the government takes when owners apply for land-use permits." Id. at 2594 (citing Lingle v. Chevron U.S.A., Inc., 544 U.S. 528, 547 (2005)) (stating unconstitutional conditions doctrine do not require individual to give up right to just compensation to receive discretionary government benefit); Dolan, 512 U.S. at 385 (invoking "the well-settled doctrine of 'un-constitutional conditions'").

tional demands will not be held to a lesser standard of review, so environmental sustainability and other planners must establish a proportional relationship between each regulatory strand and its purpose and justifications.

Integrated sustainability regulation will need to impose conditional demands or mandates that require business and land developers to internalize the operational and other costs of doing business. *Nollan*, *Dolan* and *Koontz* recognize that government uses adjudicated and legislative monetary exactions and fees in lieu of dedications to demand developers internalize onsite and offsite costs of constructing and managing business and land development projects.¹⁴⁴ Yet, *Koontz, Dolan* and *Nollan* were not explicitly applied by the Court to legislated money exactions and other conditional demands.¹⁴⁵ Nevertheless, *Koontz* could be easily extended to cover legislated demands that disproportionately imposed burdens on land developers and owners to further unjustified public ends and that diminished the value of development projects.¹⁴⁶ When condi-

Because of that direct link [between the government's demand and a specific parcel of real property], this case implicates the central concern of *Nollan* and *Dolan*: the risk that the government may use its substantial power and discretion in land-use permitting to pursue governmental ends . . . thereby diminishing without justification the value of the property.

^{144.} *Koontz*, 133 S. Ct. at 2595 (finding Court recognizes use of land dedication conditions and money exactions to force real estate and other developers to internalize the cost of development rather than pass this cost onto public).

In *Koontz*, the Court recognized but did not apply a per se test to examine burdensome financial and other obligations and therefore, chose not to categorized money exactions as per se takings. *See Koontz*, 133 S. Ct. at 2600. However, *Koontz* may apply to a class of legislated monetary exactions that would create an extremely burdensome financial obligation and thinly justifying a public need to avoid the payment of just compensation. *See id.* If so, this application of *Nollan*, *Dolan* and *Koontz* would limit regulatory efforts to force land developers and owners to internalize the cost of harm or harmful impact of business and land development on the community and its human, natural and environmental resources. *See id.* at 2595. The Court found that:

Id. at 2600. If the government goes beyond reducing the value and "commands the relinquishment of funds linked to a specific, identifiable property interest such as a bank account or parcel of real property, a 'per se [takings] approach' is the proper mode of analysis under the Court's precedent." *Id.* at 2600 (citing Brown v. Legal Foundation of Wash., 538 U.S. 216, 235 (2003)).

^{145.} *Koontz*, 133 S. Ct. at 2603 (holding the decision in *Koontz* only applies to *Nollan* and *Dolan* that involved only adjudicatory decisions); *see also Koontz*, 133 S. Ct. at 2608 (Keagan, J., dissenting) (noting much uncertainty exists regarding application of *Koontz* to legislative determinations).

^{146.} *Koontz*, 133 S. Ct. at 2600 (recognizing "the risk that the government may use its substantial power and discretion in land-use permitting to pursue governmental ends that lack an essential nexus and rough proportionality to the effects of the proposed new use of the specific property at issue, thereby diminishing without justification the value of the property.").

tional demands are legitimately used to acquire money or land, American business and land developers can be forced to internalize the impact of business and land development projects on the community and its social, natural, and environmental resources.¹⁴⁷ Both adjudicated and legislated conditional demands can be a regulatory strand of an integrated development and environmental sustainability regulation to force land and business developers and owners to internalize unwanted or unforeseen development costs rather than passing these costs onto the community or public.¹⁴⁸ In the absence of deference, integrated sustainability policy and regulation will be most successful if it includes public goals and objectives and specific public needs based on the fiscal, social, economic, and environmental analyses of the impact of land, retail, commercial, industrial, or other development on the environment, community, social, and other resources.

B. Land Use Management of Urban and Rural Land

Integrated sustainability regulation raises the question of whether the Court will limit land and other property development to protect historic and cultural assets that could be threatened by climate change, business development, and natural and manmade activities. To do so, integrated sustainability regulation will need regulatory strands, such as historic preservation regulation, and pollution controls to protect natural, cultural, historical, and heritage sites from harmful natural and manmade effects, such as business and land development or climate change or combinations thereof. In Penn Central Transp. Co., the Court decided whether the City of New York's (City) historic preservation regulation was too burdensome on the landowner by restricting the development of private property to preserve a historic site.¹⁴⁹ Specifically, the Court decided whether the historic preservation regulation that restricted the development of air space over the Penn Central Station amounted to a taking of private property for public use by City's

^{147.} Id. at 2595 (recognizing land dedication conditions and money exactions have legitimate purpose in land use management schemes).

^{148.} *Id.* (concluding money exactions, land dedication conditions, and other exactions can be essential regulatory strand to design and implement development and environmental sustainability policy). The Court stated that "[o]ur precedents thus enable permitting authorities to insist that applicants bear the full costs of their proposals while still forbidding the government from engaging in 'out-and-out . . . extortion' that would thwart the Fifth Amendment right to just compensation." *Id.*

^{149.} Penn Central Transp. Co. v. City of New York, 438 U.S. 104, 122 (1978) (stating general takings issue Court must decide).

historic preservation regulation.¹⁵⁰ In deciding this issue, the Court formulated and applied the three-factor Penn Central inquiry to examine the interference with private property rights by, the economic impact of, and denial of reasonable investment-backed expectations by the City's historic preservation regulation on private property to further government needs to preserve cultural assets.¹⁵¹ The Court concluded that historic preservation regulation did not impose too much of a regulatory, economic or financial investment burden on landowners that would require the City to pay them just compensation.¹⁵² The Court held that the City's historic preservation regulation did not amount to a regulatory taking of private property for public use by the City¹⁵³ and permitted the City to use transferable development rights (TDRs) as an offsetting benefit to the restrictions.¹⁵⁴ The Penn Central inquiry is an ad hoc, objective takings principle that would permit integrated development and environmental sustainability regulation to consider future generations in that Penn Central Transp. Co. dealt with a historic preservation regulation that by its very nature, preserved cultural value for future generations.

The Court has shown a willingness to allow state and local governments to extend the exercise of police power to protect the social welfare that is threatened by the impact of business and land development projects on community resources, services, and facilities. Government will need integrated sustainability regulation that will include regulatory strands currently used to protect the public

151. See Penn Central Transp. Co., 438 U.S. at 124 (applying Penn Central inquiry to preserve historic or cultural assets).

152. *Id.* at 138 (concluding historic preservation regulation does not interfere with investment-backed expectations of landowner).

^{150.} Id. (stating specific takings issue based upon facts and law). The intersection of property rights, police power and Takings Clause will continue to greatly impact land use management across rural and urban America and its response to development and environmental sustainability policy and regulation. See Robert F. Pecorella, Property Rights, State Police Powers, and the Takings Clause: The Evolution Toward Dysfunctional Land-Use Management, 44 FORDHAM URB. L.J. 59, 61-64 (2017) (explaining that "the underlying values and the political processes which define land-use management in the United States act as major impediments to any form of sustainable land-use development," and that private property rights and government decisions "push the land-use management system to emphasize individual market values, rather than the social implications of market transactions.").

^{153.} *Id.* (concluding historic preservation regulation is not takings). The Court has recognized the use of transferable development rights (TDRs) in a regulatory scheme to adjust the benefits and burdens of land development in rural area with a limited market. *See* Suitum v. Tahoe Regional Planning Agency, 520 U.S. 725, 741 (1997).

^{154.} Penn Central Transp. Co., 438 U.S. at 131 (concluding TDRs can be granted to mitigate economic impact of historic preservation regulation).

welfare from the harmful effects of the development on natural resources.¹⁵⁵ In *Keystone Bituminous Coal Ass'n v. Debendictis (Keystone*),¹⁵⁶ the Court reviewed a regulatory takings claim challenging the constitutionality of Pennsylvania's Bituminous Mine Subsidence and Land Conservation Act¹⁵⁷ (Subsidence Act) that serves similar objectives to the Kohler Act that was held by the Court to be a takings of private property for public use by regulation in *Mahon*.¹⁵⁸ Although this takings claim was a facial takings claim and not an applied takings,¹⁵⁹ the Court concluded that the Subsidence Act was not a regulatory takings because the new legislation protected the public welfare and did not interfere with taking prof-

The Supreme Court of Illinois, in City of Aurora v. Burns . . . in sustaining a comprehensive building zone ordinance dividing the city into eight districts, including exclusive residential districts for one and two-family dwellings, churches, educational institutions and schools, said:

The constantly increasing density of our urban populations, the multiplying forms of industry, and the growing complexity of our civilization make it necessary for the State, either directly or through some public agency by its sanction, to limit individual activities to a greater extent than formerly. With the growth and development of the state the police power necessarily develops, within reasonable bounds, to meet the changing conditions.

Village of Euclid, 272 U.S. at 392 (quoting *City of Aurora*, 319 III. at 93-95). Today, a much greater challenge that is caused by the harmful impact of business and land development on land use management, natural resources and environmental quality and the detrimental interaction of this development with population, social welfare and culture demand an integrated sustainability policy and regulation. *See* Brundtland Report, *supra* note 2, at Ch. 1, ¶47 (recognizing development and environmental sustainability includes economic, social and environmental interests).

156. Keystone Bituminous Coal Ass'n v. Debendictis, 480 U.S. 470 (1987).

157. 52 P.S. §§ 1406.1 et seq. (2017).

158. Keystone Bituminous Coal Ass'n, 480 U.S. at 481-85 (reviewing relevant facts and their similarity to Mahon).

159. *Id.* at 495-96 (recognizing that petitioners filed facial takings challenge, Court stated that "petitioners have not claimed, at this stage, that the Act makes it commercially impracticable for them to continue mining their bituminous coal interests in western Pennsylvania. Indeed, petitioners have not even pointed to a single mine that can no longer be mined for profit.").

^{155.} See Village of Euclid v. Ambler Realty Co., 272 U.S. 365, 397 (1926) (concluding that need classify land uses to protect public welfare justified modern zoning mandates). The Village of Euclid is not a regulatory takings decision. Village of Euclid, 272 U.S. at 397. This case illustrates that modern cities were facing sustainability policy concerns that were an entirely different need to change to protect the public welfare. Id. at 392. The Court described how modern cities responded to the impact of technology, business development and growth on neighborhoods and facilities by enacting a comprehensive land use regulatory scheme. See id. at 392 (quoting City of Aurora v. Burns, 319 Ill. 84, 93-95 (1925)). In the Village of Euclid, the Court quoted language of the Supreme Court of Illinois that aptly described a past challenge causing state and local governments to extend the exercise of police power to address concurrent changes in technology, business growth, industry and population by enacting comprehensive zoning regulations. See id. at 392 (quoting City of Aurora v. Burns, 319 Ill. 84, 93-95 (1925)). The Court stated that:

its from the mines.¹⁶⁰ The Court concluded that the Subsidence Act was designed to protect the public welfare whereas the Kohler Act was designed to protect the houses of private landowners who had taken risk by purchasing only surface rights under a contract.¹⁶¹ Integrated sustainability regulation must be mindful of well-established contractual bargains but must willingly obligate or forcefully urge business and land developers to avoid harmful practices creating new or expanding old public needs. Environmental, natural resource, and land use planners must understand the economics of integrated development and environmental sustainability regulation to know when well-established legal relationships should be challenged as detrimental by making new policy and regulation to save the planet.

C. Preservation and Conservation of Natural Resources

Integrated sustainability regulation will include a regulatory strand that severely limits use or bans all use of the land to protect the public from the harmful effects of land development, business expansion, and construction projects. The Court has not permitted land use or environment regulation, such as coastal zone management,¹⁶² to deny all beneficial use of the land, though the land-owner was still permitted to use the property for leisure or recreation.¹⁶³ In *Lucas*, the Court established a per se test to deny deference to a coastal zone management regulation and gave more protection to common law land uses by not permitting the state legislature to totally deny land development (or uses) permitted at common law.¹⁶⁴ *Lucas* uses common law background doctrine to

^{160.} See id. at 506 (stating Court's conclusion that gave deference to state need to protect public welfare).

^{161.} See id. (contrasting purposes of legislative acts in Mahon and Keystone Bituminous Coal Ass'n).

^{162.} For an explanation of coastal zone management regulation to further sustainability, *see* Sam Kalen, *The Coastal Zone Management Act of Today: Does Sustainability Have a Chance*?, 15 SE. L.J. 191, 196 (2006) (discussing use of public trust doctrine to make coastal zone management act further sustainability).

^{163.} Lucas v. South Carolina Coastal Council, 505 U.S. at 1027 (recognizing denial of economical viable use does not deny noneconomical uses, such as recreation). The Court stated that "[i]t seems unlikely that common-law principles would have prevented the erection of any habitable or productive improvements on petitioner's land; they rarely support prohibition of the 'essential use' of land" *Lucas*, 505 U.S. at 1031 (citing Curtin v. Benson, 222 U.S. 78, 86 (1911)).

^{164.} Lucas, 505 U.S. at 1030-31 (denying government power to prohibit all economical uses that existed at common law). The Court established a narrow takings inquiry or analysis by limiting it to nuisance law that existed at common law. *Id.* The Court stated that:

firmly justify the per se test.¹⁶⁵ Lucas established a per se test to protect the right to receive just compensation when the government takes all economic use of private property, notwithstanding any recreational and other beneficial uses.¹⁶⁶ Lucas established a per se test for a category of government regulation that denies all economically viable use of private property where such use had been protected under the land title at common law.¹⁶⁷ Integrated sustainability regulation that includes regulatory strands prohibiting or banning total economic or development uses needs to include sufficient economic incentives, benefits and subsidies, pay just compensation or permit some economically beneficial use of a portion of the tract of land if this land is suitable for business or land development.

Lucas' per se test for a denial of all economically viable use may not prohibit a regulatory strand of integrated sustainability regulation prohibiting or banning use of land or business development. The economic or beneficial use of a portion of a tract of land regulated by highly restrictive land use or environmental regulation that prohibits some but not all uses may remove the whole of the tract from coverage under the strict *Lucas* per se test and subject this tract to the more deferential *Penn Central* inquiry. In *Palazzolo v. Rhode Island* (*Palazzolo*),¹⁶⁸ the Court reviewed three issues that included a ripeness issue that required the owner to submit a plan of lesser land development, a post-dated acquisition of a tract of land already subject to land use or environmental regulation, and a takings issue regarding a denial of all economically viable use of this tract by requiring the owner to make a smaller development.¹⁶⁹ First of all, the Court addressed the ripeness issue and decided that

167. Id. (establishing a category of per se takings based on the use of land under the title at common law).

168. Palazzolo v. Rhode Island, 533 U.S. 606 (2002).

When, however, a regulation that declares "off-limits" all economically productive or beneficial uses of land goes beyond what the relevant background principles would dictate, compensation must be paid to sustain it. The "total taking" inquiry we require today will ordinarily entail (as

the application of state nuisance law ordinarily entails) analysis of, among other things, the degree of harm to public lands and resources, or adjacent private property, posed by the claimant's proposed activities . . .

Id. (footnote omitted) (citing Restatement (Second) of Torts, §§ 826, 827, 827(e), 828(a), (b), and (c), 830 and 831 (Am. Law Inst. 1979)).

^{165.} See Lucas, 505 U.S. at 1027 (creating common law doctrine to protect right to develop land).

^{166.} *Id.* at 1030-31 (establishing category of takings that deny all economically viable use).

^{169.} *Id.* at 616 (listing three issues addressed by Supreme Court of Rhode Island).

the takings claim was ripe for review by the state trial court in that the petitioner had complied with all processes and exhaustion of remedies.¹⁷⁰ The Court addressed the post-acquisition issue as to whether the grantee who acquired the tract of land after the wetland regulations were imposed could file a regulatory takings claim under *Lucas* and concluded that the petitioner could.¹⁷¹ Simply, common law background principles under the title did not terminate future takings claims under environment regulation that had been enacted before the acquisition.¹⁷² Finally, the Court held that the wetland regulations did not violate the Takings Clause by denying all economically viable use to the petitioner if these regulations permitted the owners to construct one or more houses on the 18 acre tract of land.¹⁷³ Furthermore, the Court remanded the case to the Rhode Island Supreme Court and instructed it to apply the Penn Central inquiry.¹⁷⁴ Therefore, Palazzolo can limit Lucas to integrated development and environmental sustainability regulation that does not permit business and land developers to use any portion of the tract subject to burdensome land use or environmental restrictions that would not have existed on the title at common law.

V. TAKINGS, PUBLIC USE, AND JUST COMPENSATION CLAUSES AS LIMITATIONS

The Fifth Amendment states that "[n]or shall private property be taken for public use, without just compensation."¹⁷⁵ This constitutional statement is referred to as the Takings Clause, Just Com-

173. Palazzolo, 533 U.S. at 632.

174. *Id.* (refusing to apply per se test of *Lucas* and remanding for lower court to apply *Penn Central* inquiry).

175. U.S. CONST., AMEND. V (stating limitations on exercises of eminent domain, police, and other government powers taking private property for public use).

^{170.} *Id.* at 625-26. The Court stated that its ripeness doctrine permits federal, state, county and municipal agencies to exercise discretion, such as variances, in imposing land use regulation. *See id.* The Court stated that:

Under our ripeness rules a takings claim based on a law or regulation which is alleged to go too far in burdening property depends upon the landowner's first having followed reasonable and necessary steps to allow regulatory agencies to exercise their full discretion in considering development plans for the property, including the opportunity to grant any variances or waivers allowed by law.

Id. at 620-21.

^{171.} Id. at 629-30 (identifying other issues Court had to address to reach takings issue).

^{172.} *Id.* (refusing to apply background principles of *Lucas* to takings issue in *Palazzolo*). The Court stated that "[i]t suffices to say that a regulation that otherwise would be unconstitutional absent compensation is not transformed into a background principle of the State's law by mere virtue of the passage of title." *Id.*

pensation Clause, or Public Use Clause, depending on the constitutional challenge to a government regulation or condemnation of private property.¹⁷⁶ Each Clause grants the landowners a unique right to assert a constitutional challenge to protect his or her private property rights of personal and real property.¹⁷⁷ Foremost, the Takings Clause governs exercises of eminent domain power to take or condemn property and exercises of regulatory powers to severely limit or interfere with the use of private property.¹⁷⁸ Next, the Public Use Clause governs the use and purpose of private property taken by the government to provide services and other benefits to the public.¹⁷⁹ Finally, the Just Compensation Clause governs the payment of compensation or public funds by the government to the landowner for a taking of private property by eminent domain and regulation.¹⁸⁰ Thus, business and land developers and owners can raise constitutional claims under these Clauses to address interferences with exercises of private property rights by making and implementing integrated development and environmental sustainability policy and regulation.

A. Takings Clause as a Limitation on Integrated Sustainability

Government regulation or decisions challenged as takings must further legitimate public objectives. The taking theory that is applied to government regulation and decisions will determine the weight courts must give to these objectives in the takings analysis.¹⁸¹ A physical takings is a per se analysis or categorical rule that deter-

^{176.} See Penn Central Transp. Co., 438 U.S. at 123-24 (setting forth Takings Clause to protect private property from burdensome regulation); Kelo v. New London, 545 U.S. 469, 480-81 (2005) (setting forth Public Use Clause to protect private property from exercise of eminent domain power); see Horne v. United States Department of Agriculture, 135 S. Ct. 2419, 2431-32 (2015) (setting forth Just Compensation Clause to protect landowner from taking of private property without payment of just compensation).

^{177.} See Penn Central Transp. Co., 438 U.S. at 123-24 (raising takings claims under Takings Clause); Kelo v. New London, 545 U.S. 469, 480-81 (2005) (raising public use claim under Public Use Clause); Horne v. United States Department of Agriculture, 135 S. Ct. 2419, 2431-32 (2015) (addressing just compensation argument raised under Just Compensation Clause).

^{178.} See Penn Central Transp. Co., 438 U.S. at 123-24 (explaining purpose and use of Takings Clause).

^{179.} See Kelo, 545 U.S. at 480-81 (explaining purpose and use of Takings Clause).

^{180.} *See* Horne v. United States Department of Agriculture, 135 S. Ct. 2419, 2431-32 (2015) (explaining principles applied to determine payment of just compensation).

^{181.} *See* Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 426 (1982) (confirming public interest is given no weight in the determination of physical occupation).

mines whether a government regulation allowed a person to physically occupy land and government's only course of action is to pay just compensation.¹⁸² In *Loretto*, the Court concluded that a state statute permitting cable television companies to install antennas on rooftops of private buildings was a physical occupation that amounted to a physical takings of private property for public use.¹⁸³ The Court also concluded that public interests were not to be considered in the takings analysis for the physical takings theory.¹⁸⁴ Thus, the application of a physical takings analysis to review regulatory strands of development and environmental sustainability regulation gives no weight to development and environmental sustainability objectives and needs.

Other government actions have resulted in classifying and finding a takings that gave greater protection to private property rights under regulatory takings theory. Regulatory takings giving greater protection to property rights requires a closer connection between means and ends of adjudicatory conditional demands. In *Dolan* and *Nollan*, the Court sought to limit the use of land dedication conditions, and in *Koontz*, the Court sought to limit the use of adjudicated money exactions and fees in lieu of land dedications.¹⁸⁵ Simply, the petitioner, Koontz, was asked to pay a mitigation fee to reduce the offsite impact of development rather than grant government a right to use the land.¹⁸⁶ *Nollan*, *Dolan* and *Koontz* were the Court's application of constitutional doctrine to justify a closer connection between the means and ends of regulation by analyzing the purpose of and need for impact exactions by the community.¹⁸⁷ If the government had taken an easement by regulation in *Dolan*, "it

^{182.} Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 426-27 (1982) (stating physical takings theory applied to determine if occupation of private property by government amounts to physical takings).

In *Loretto*, the Court noted two precedents to explain its application of physical takings theory rather than a physical invasion. *See* Pumpelly v. Green Bay Co., 80 U.S. 166 (1871) (concluding that dam permanently flooding plaintiff's land was physical takings of private property); Northern Transp. Co. v. City of Chicago, 99 U.S. 635 (1879) (distinguishing regulatory takings from physical takings when land is flooded).

^{183.} *Loretto*, 458 U.S. at 441 (holding government had caused physical takings by mandating installation of antenna on petitioner's rooftop).

^{184.} *Id.* at 426 (confirming public interest of government regulation or decision was not factor in Court's determination of physical takings).

^{185.} Koontz v. St. Johns River Water Management District, 133 S. Ct. 2586, 2599 (2013) (identifying purposes of *Nollan, Dolan, and Koontz* in deciding constitutionality of impact exactions).

^{186.} Id. at 2593 (stating relevant facts).

^{187.} Id. at 2595-97 (applying unconstitutional conditions doctrine).

would have committed a per se taking."¹⁸⁸ A regulatory strand that consist of adjudicatory conditional demands to implement integrated sustainability regulation must comply with essential nexus and rough proportionality when federal, state, and local policymakers make adjudicatory land use and other decisions to further public objectives and needs by imposing conditional demands on a specific land or business development project.

Integrated development and environmental sustainability policy and regulation must be mindful of the severe limitations imposed by the per se test or categorical duty on the exercise of government powers severely interfering or totally denying the exercises of private property rights. Lucas established a per se test for a category of government regulation that was a denial of all economically viable use of private property to further coastal zone management objectives.¹⁸⁹ The Court gave no deference to government and relied on common law background principles to prohibit a state legislature from using a highly restrictive legislative scheme or ban on land development to protect coastal land.¹⁹⁰ However, Lucas is a narrow precedent that requires development and environmental planners and other managers to leave some beneficial development of a tract of land that must be regulated by a regulatory strand severely restricting or totally prohibiting land use under integrated development and environmental sustainability regulation.¹⁹¹ The Court's expansion or use of more common law and constitutional doctrines to establish more per se tests and heightened scrutiny standards of review may not be a narrow precedent of Lucas or narrow regulatory strand of Dolan. In the foreseeable future, Dolan and Lucas should not severely limit the use of integrated development and environmental sustainability regulation by totally denying the use of one or more regulatory strands to impose more reasonable regulatory restrictions and conditional demands on business and land development projects.

^{188.} *Id.* at 2598-99 (citing Dolan v. City of Tigard, 512 U.S. 372, 384 (1994) and Nollan v. California Coastal Commission, 483 U.S. 825, 831 (1987)) ("For that reason, we began our analysis in both *Nollan* and *Dolan* by observing that if the government had directly seized the easements it sought to obtain through the permitting process, it would have committed a *per se* taking.").

^{189.} Lucas, 505 U.S. at 1030-31 (applying per se takings to category of regulation that denies all economically viable use).

^{190.} See id. (finding the Court used common law background principles to limit deference to state legislature imposing ban on development).

^{191.} See Palazzolo v. Rhode Island, 533 U.S. 606, 629-30 (2002) (holding that per se test of *Lucas* did not apply when landowner could build on portion of tract).

- 50 VILLANOVA ENVIRONMENTAL LAW JOURNAL [Vol. XXIX: p. 1]
- B. Public Use or Purpose as a Limitation on Integrated Sustainability

Federal, state, and local governments may need to take or condemn land by an exercise of eminent domain to further development and environmental sustainability policy goals and objectives. This taking or condemnation raises the question whether the Public Use Clause permits an exercise of eminent domain power to take developable land solely to prevent land and business development from causing extreme ecological harm or social degradation mostly to future generations. The Court has given public use a broad interpretation that includes the exercise of eminent domain power by government to further public objectives.¹⁹² In Berman v. Parker (Berman),¹⁹³ the Court permitted the federal government to exercise eminent domain power to condemn and replace blighted areas with private commercial redevelopment.194 The Court allowed a government agency to take title to this area that could also be transferred to a private enterprise for redevelopment as a public use.195 In Berman, the Court did not address the question of whether government could take or condemn private property that was not in a blighted area solely to further economic development objectives.¹⁹⁶ The Court waited almost a half century to decide whether it would permit a takings solely for economic development as the public use.

The exercise of eminent domain power to further economic development policy is just the opposite of using it to prevent land and business development. Sustainable development and environment may require government to condemn land or its development solely to prevent ecological harm or economic distress to the community and its natural, economic or human resources. In *Kelo v. New London (Kelo)*,¹⁹⁷ the Court was given an opportunity to address the issue of a takings for public use by eminent domain solely for economic development.¹⁹⁸ In *Kelo*, New London created a redevel-

^{192.} Berman v. Parker, 348 U.S. 26, 32-33 (1954) (giving broad interpretation to public use).

^{193.} Berman v. Parker, 348 U.S. 26 (1954).

^{194.} Id. at 33 (concluding Court permitted exercise of eminent domain power to demolish blighted area).

^{195.} Id. (concluding Court permitted government to transfer blighted land that had been taken by eminent domain to private developer).

^{196.} See Kelo v. New London, 545 U.S. 469, 484 (2005) (finding Court did not address in *Berman* exercise of eminent domain power to condemn non-blighted property for transfer to private developer).

^{197.} Kelo v. New London, 545 U.S. 469 (2005).

^{198.} Id. at 484 (setting issue addressed by Court).

opment "plan that . . . was 'projected to create in excess of 1,000 jobs, to increase tax and other revenues, and to revitalize an economically distressed city, including its downtown and waterfront areas."¹⁹⁹ New London acquired the land to implement its plan by "purchas[ing] property from willing sellers and propos[ing] to use the power of eminent domain to acquire the remainder of the property from unwilling owners in exchange for just compensation."200 The Court concluded that whether New London had a requisite public use "turn[ed] on the question whether the City's development plan serves a 'public purpose.'"201 The Court noted that it had a "longstanding policy of deference to legislative judgments in this field"²⁰² and stated that "[f]or more than a century, our public use jurisprudence has wisely eschewed rigid formulas and intrusive scrutiny in favor of affording legislatures broad latitude in determining what public needs justify the use of the takings power."203 Thus, the Court's deference to federal and state policymakers under the Public Use Clause may broadly permit the integrated development and environmental sustainability policy and regulation to include eminent domain. This inclusion would permit the taking or condemning to further ecological and economic objectives to protect land, natural resources and environmental quality for future generations.

C. Just Compensation as a Limitation on Integrated Sustainability

The government may need to offer offsetting benefits and incentives as regulatory strands to implement integrated development and environmental sustainability policy and regulation to adjust the disproportionate burdens of other regulatory strands denying the

^{199.} Id. at 472 (reviewing relevant facts).

^{200.} Id. (reviewing relevant facts).

^{201.} Id. at 480 (reviewing relevant facts).

^{202.} *Kelo*, 545 U.S. at 480 (noting that "[i]n Berman v. Parker . . . this Court upheld a redevelopment plan targeting a blighted area of Washington, D.C., in which most of the housing for the area's 5,000 inhabitants was beyond repair.").

^{203.} *Kelo*, 545 U.S. at 483 (finding that Court has deferred to judgment of government on exercises of eminent domain power). Prior to *Kelo*, a few states had given narrow interpretations to public use and held that the exercise of eminent domain power for economic development was not a valid public use. *See*, *e.g.*, County of Wayne v. Hathcock, 684 N.W.2d 765, 770 (Mich. 2004) (concluding exercise of eminent domain power to condemn property for economic development project, namely industrial park, violated state constitution); Southwestern III. Dev. Auth. v. Nat'l City Envtl., 768 N.E.2d 1, 3 (III. 2002) (concluding exercise of eminent domain power for economic purpose and transfer of property to third party violated state constitution).

right to receive just compensation. The Court has yet to decide whether the mitigation of a regulatory takings by giving a valuable benefit means to reduce the amount of just compensation or reduce taking liability under the Takings Clause. In Penn Central, the Court chose not to decide "whether the transferable development rights afforded appellants constitute 'just compensation' within the meaning of the Fifth Amendment."204 The Court chose to decide the taking issue and not address the role of TDRs in deciding regulatory taking liability or valuing just compensation.²⁰⁵ The Court concluded that "[w]hile [transferable development] rights may well not have constituted 'just compensation' if a 'taking' had occurred, the rights nevertheless undoubtedly mitigate whatever financial burdens the law has imposed on appellants "206 Although the Court would consider the value of TDRs and other benefits in addressing the impact of land use and other regulation, the Court leaves much undecided about the value and role of TDRs and other benefits in takings jurisprudence.

Almost two decades later, the value of TDRs arose as an issue in another decision that was addressing a regulatory takings. The value and role of TDRs still remain an open question in determining liability or just compensation under the takings equation. In *Suitum v. Tahoe Regional Planning Agency* (*Suitum*),²⁰⁷ the Court recognized the use of TDRs in a regulatory scheme to restrict land development in some areas around Lake Tahoe where a limited market existed for the sale of TDRs.²⁰⁸ The dissent in *Suitum* would not agree that TDRs could be used to mitigate takings liability but favored the use of TDRs to mitigate just compensation once the Court concluded that a government regulation amounted to a regulatory takings with payment of just compensation.²⁰⁹ *Suitum* and *Penn Central* did not decide the role TDRs, government benefits and value added by regulation itself would play in the takings equation that permits offsetting benefits and value to fit on either liabil-

208. Id. at 741 (stating relevant facts).

^{204.} Penn Central Transp. Co. v. City of New York, 438 U.S. 104, 122 (1978) (footnote omitted) (finding Court chose not to decide whether transferable development rights (TDRs) always mitigate just compensation and had no need to address taking liability that was not found in *Penn Central Transp. Co.*).

^{205.} See id. at 137 (refusing to decide whether TDRs mitigate liability and just compensation).

^{206.} *Id.* at 137 (concluding TDRs can be applied to reduce financial burdens of just compensation) (citing Goldblatt v. Hempstead, 369 U.S. 590, 594 n.3 (1962)).

^{207.} Suitum v. Tahoe Regional Planning Agency, 520 U.S. 725 (1997).

^{209.} Id. at 747-48 (Scalia, J., dissenting) (concluding that TDRs mitigate just compensation and not liability).

ity or compensation side of the takings equation. Notwithstanding the uncertainty surrounding the role of offsetting benefits and value in the takings equation, an integrated development and environmental sustainability policy should include regulatory strands of benefits, subsidies, and incentives. Further the policy should be placed in the takings equation based upon intent of, need for, nature of, outcome with, and impact of the benefit on aiding land developers and owners to avoid or minimize the economic weight of bearing the public burdens, though government should not be allowed to avoid takings liability for unjustifiable needs for overly restrictive regulatory strands of integrated sustainability regulation. These factors favor mitigating just compensation and not allowing government to avoid takings liability under multiple strands of integrated sustainability policy and regulation.

The Court must eventually decide how government benefits, incentives, or other offsetting value affect the takings equation. A regulatory strand of an integrated sustainability regulation that provides subsidies and other benefits to land and business developers may still amount to physical takings. In Horne v. United States Department of Agriculture (Horne II),210 raisin growers and handlers filed a takings claim as a defense to avoid paying government fines and other fees that had been imposed for a violation of agricultural marketing regulations.²¹¹ The Court concluded that the United States Department of Agriculture (Department) had committed a physical takings and had to pay just compensation.²¹² The Court relied on the traditional rule that has been applied to determine just compensation for takings of private property for public use.²¹³ The Court would not permit government to mitigate takings liability or offset just compensation by providing benefits and services that had a measurable economic value.²¹⁴ The Department sought to mitigate compensation that could eventually eliminate any financial recovery for physical takings liability.²¹⁵ The Department ar-

214. Horne, 135 S. Ct. at 2432.

215. *Id.* (finding Department sought to eliminate just compensation when it was liable for physical takings).

^{210.} Horne v. U.S. Dept. of Agric., 135 S. Ct. 2419 (2015).

^{211.} Id. at 2425 (stating relevant facts).

^{212.} Id. at 2431 (finding Court concluded regulations of United States Department of Agriculture (Department) amounted to physical takings of petitioner's raisins).

^{213.} *Id.* at 2432 (citing United States v. 50 Acres of Land, 469 U.S. 24, 29 (1984)) (quoting Olson v. United States, 292 U.S. 246, 255 (1934)) ("Instead, our cases have set forth a clear and administrable rule for just compensation: 'The Court has repeatedly held that just compensation normally is to be measured by 'the market value of the property at the time of the taking.''").

54 VILLANOVA ENVIRONMENTAL LAW JOURNAL [Vol. XXIX: p. 1]

gued to make just compensation dependent on non-monetary benefits and services provided by the government to program participants.²¹⁶ The Court rejected the Department's approach to determining the amount of just compensation and referred to this approach as merely hypothetical.²¹⁷ The Court must eventually decide when government can use offsetting benefits to reduce the amount of just compensation. Although the Court accepted a physical takings as a defense, it rejected offsetting benefits and value added revenues as just compensation that would not be similar to a common law remedy awarded for an injury inflicted by a government wrong, namely a physical takings.²¹⁸ The Department argued that the Court should offset just compensation with the program and market benefits bestowed by the agricultural subsidy program, such as value added by participating in the price support program and increased market demand by consumer due to quality of the raisins.²¹⁹ The Department also argued that the Hornes were also not due just compensation because the program and market benefits would exceed the value of raisins taken, thus giving them a net gain.²²⁰ The Court did not find the Department's argument persuasive because it lacked support and was merely a hypotheticalbased approach to determine just compensation for a specific physical takings.²²¹ The Court chose not to decide the question of the role of government benefits and must eventually decide the role of offsetting benefits in the taking equation.²²² Therefore, regulatory uncertainty still exists regarding regulatory strands of an integrated sustainability regulation granting offering benefits and incentives and contributing to an increase in value of private property until the Court decides whether these benefits and value of regulatory strands mitigates takings liability or just compensation.

^{216.} *Id.* (finding the Court would not allow the Department to completely offset just compensation owed).

^{217.} Id. (choosing not to recognize respondent's argument on using setting benefits as just compensation).

^{218.} Horne, 135 S. Ct. at 2432 (finding respondent's argument on just compensation unpersuasive).

^{219.} Id. (reviewing relevant facts).

^{220.} *Id.* (finding Department argued market benefits and services eliminated recovery of just compensation).

^{221.} *Id.* (rejecting Department's argument to use market services and benefits to totally offset just compensation though finding physical takings).

^{222.} Id. (concluding Court refused again to decide where incentives and offsetting benefits and services fit in takings equation).

VI. CONCLUSION

The burdens of implementing sustainable development and environment will not be accepted by government and imposed on business, land developers and landowners until the federal, state, or local government enacts integrated development and environment sustainability policy and legislation to provide development and environmental benefits for current and future generations. Traditional land use, natural resources, environment quality, social welfare, and other regulatory schemes form regulatory strands that have imposed well-established burdens and obligations on landowners. However, emerging and future regulatory schemes to address the causes and harmful effects of climate change, energy development, social degradation, and other sustainability policy needs will form new regulatory strands. Both traditional and new strands create codependent and interdependent obligations of integrated sustainability policy and regulation to regulate business and land development and other industrial and commercial activities. These future regulatory strands and their interdependent and codependent obligations increase the public burdens to be borne by governments. The public burdens or obligations cannot be transferred or borne by landowners under the Takings Clause. When the public burdens fall principally on business and land developers and owners, a takings question will arise under integrated sustainability regulation regarding whether land and business owners and developers are bearing too much of the public burdens that should be borne by government by paying just compensation for taking of private property for public use under the Takings Clause. Thus, the public burdens cannot be disproportionately borne by land and business developers and owners where government is not willing to pay just compensation for overly burdensome regulation of development and environment denying exercises of private property rights to develop business and land.

The Court must decide whether codependent and interdependent regulatory strands of integrated sustainability regulation effect physical or regulatory takings of private property for public use under the Takings Clause. These strands allow government to avoid paying just compensation when government obligates land and business developers and owners to bear the public burdens to implement sustainable development and environment. Integrated development and sustainability regulation must comply with mostly objective takings standards and principles and a few bright line principles of the Takings Clause to avoid a physical or regulatory

55

56 VILLANOVA ENVIRONMENTAL LAW JOURNAL [Vol. XXIX: p. 1]

takings of private property by interfering with the use or exercise of private property rights. First, integrated sustainability regulation must have a legitimate government purpose and possess a sufficient connection to community needs under either deferential, intermediate, or strict scrutiny standard of review by courts. Second, integrated sustainability regulation must not occupy private property where such an occupation may affect a physical takings requiring a categorical duty to pay just compensation and must also avoid a per se takings by denying all beneficial use of a tract of land when any part of the tract of land is suitable for development. Third, integrated sustainability regulation is subject to the *Penn Central* inquiry to determine whether it amounts to a regulatory takings by interfering with an exercise of private property rights, causing too great an economic impact or denying investment-back expectations of the owner. Of course, the Court may avoid current takings law by fashioning an entirely new or extending a categorical duty or per se test. Alternatively, the Court may attempt again to advance judicial takings theory if integrated sustainability regulation requires federal or state courts to substantially deviate from established common law. Thus, environmental and land use planners and lawyers must be mindful and guard strongly against demanding or mandating that land and business developers and owners bear a disproportionate share of the public burdens that should always be government's burden under most circumstances.