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Summary

Required mitigation of wetlands impacts is a mandatory feature of many Clean Water Act §404 permits. In Koontz v. St. Johns River Water Management District, the Supreme Court held that government agencies must show a relationship between a proposed permit condition and the adverse environmental effects that the condition proposes to mitigate. The permit condition also must be proportional to the scope of the proposed project regardless of whether the permit condition is a demand for money or property. Current permitting practices tend to identify the nexus between the permit conditions and to be proportional. Still, to be prepared for future lawsuits by property owners asserting their private property rights under the Takings Clause of the Fifth Amendment, existing compensatory mitigation guidelines should be amended to set forth more strict guidelines on how mitigation requirements are quantified and how mitigation is measured against the proposed development’s impact.

I. Introduction

Historically, wetlands have been viewed as wasted land, which could only be put to productive use such as farming or development (industrial, commercial, or residential), after draining and earth filling. As a result, over one-half of the original 215 million acres of wetlands in the lower 48 states have been drained and converted to other uses. Only recently have the importance and value of wetlands become evident. Wetlands provide benefits that no other ecosystem can provide. Wetlands provide necessary habitats for a disproportionately high percentage of endangered and threatened species; help with flood mitigation, storm abatement, and aquifer recharge; maintain water and air quality; provide opportunities for recreation and aesthetic appreciation; and constitute a significant factor in the global cycles of nitrogen, sulfur, and carbon. The importance of protecting wetlands is clear, yet governmental regulation of wetlands is not so simple. Over 75% of wetlands in the United States are privately owned; as a result, environmental regulation comes into conflict with fundamental constitutional rights to private property and economic liberty. The extent to which the government may regulate private land use to enhance environmental objectives is limited by the Takings Clause of the Fifth Amendment.

Currently, no comprehensive national wetland law exists. The primary vehicle for wetlands protection and regulation is Clean Water Act (CWA) §404, which imposes a permitting requirement on development of property classified as wetlands. The U.S. Army Corps of Engineers (the Corps) considers multiple factors when deciding whether to issue a §404 permit, but most importantly, the Corps weighs the potential environmental damage against the proposed development’s benefits and any efforts to mitigate or offset potential loss of natural resources. Section 404 has been construed to encompass a duty to mitigate the impact of the proposed project, “not only through proper management of the filling itself but also by compensating

2. Id.
8. Mitigation of Impacts, supra note 7, at 49.
for wetlands destroyed by filling.”

Compensatory mitigation measures may take different forms (in-lieu fees, mitigation bank credits, or permittee-responsible mitigation), and the Corps has the right to require developers to mitigate any unavoidable impact on wetlands as a condition of a $404 permit.

The Takings Clause provides that private property shall not “be taken for public use, without just compensation.” The Clause secures compensation when proper government regulation amounts to a taking of private property. Regulatory actions taken by the government can potentially constitute a taking of private property even if no physical property was taken. Requiring land use permits for development does not in and of itself constitute a regulatory taking. However, the government may not condition approval of permits upon conditions that deny an individual a constitutional right to just compensation for land taken.

In 2013, the U.S. Supreme Court issued its decision in Koontz v. St. Johns River Water Management District, which further expands a property owner’s ability to challenge land use regulations and fees under the Takings Clause. In Koontz, the Court held that government agencies must show a relationship between the proposed permit condition and the adverse environmental effects that the condition proposes to mitigate. The permit condition also must be proportional to the scope of the proposed project regardless of whether the permit condition is a demand for money or property.

This Article explores some of the potential implications that Koontz may have for the permitting process under §404, which functions as the primary regulatory tool used to manage our nation’s wetlands. Specifically, the focus will be on how the Court’s extension of “nexus” and “rough proportionality” requirements to monetary exactions may affect the use of mitigation bank credits and in-lieu fee credits as compensatory mitigation measures. Part II of the Article establishes the value provided by wetlands, and the federal government’s response to their deteriorating condition. Part III gives an overview of the CWA and the §404 permitting process. Part IV provides a review of takings law prior to Koontz and summarizes that decision. Part V examines what Koontz may mean for mitigation banks and in-lieu fees as conditions for §404 permits. Part VI concludes with a suggestion that Koontz might not result in drastic changes to §404 permits or wetland management.

II. The Current State of Wetlands

Wetlands are found in all 48 states and in every physiographic region of the country. Generally, wetlands are defined as “areas that are periodically or permanently inundated by surface or ground water and support vegetation adapted for life in saturated soil.”

A. The Value of Wetlands

“Far from being useless, disease-ridden places, wetlands provide values that no other ecosystem can.” Wetlands provide value to the public through flood mitigation, storm abatement, aquifer recharge, water quality improvement, aesthetics, and general subsistence. Wetlands play a critical role in regulating the movement of water within watersheds (defined as “a land area that drains to a common waterway, such as a stream, lake, estuary, wetland, or ultimately the ocean”), as well as in the global water cycle. Wetlands store stormwaters and intercept storm runoff, thus reducing the risks of flooding. Man-made flood and storm-abatement measures do not compare to this natural ecosystem: The Corps deemed floodplain wetlands so effective for flood control that it chose to purchased riverine wetlands on the Charles River in Massachusetts instead of building expensive flood-control structures as a means to protect the city of Boston from flooding.

Wetlands also function as sinks for chemicals, exerting a major influence on naturally added or artificially applied chemicals that flow through them. For example, wetlands play an important part in returning “excess” nitrogen from fertilizer-rich agricultural runoff to the atmosphere through denitrification. Wetlands aid in sulfur and carbon cycles, which have been significantly altered by humans through activities such as the increased

10. Id. at 92.
11. U.S. Const. amend. V.
17. Koontz, 133 S. Ct. at 2603.

21. Mitsu & Gosselink, supra note 4, at 519.
23. Mitsu & Gosselink, supra note 4, at 519.
24. Id. at 524.
burning of fossil fuels. Wetlands provide additional value through groundwater recharge and have also been shown to improve water quality by removing organic and inorganic nutrients and toxic materials from water that flows across them.

Furthermore, wetlands provide a necessary habitat for a vast array of animal and plant species. Not only do wetlands house a disproportionately high percentage of endangered and threatened species, the species also provide commercial benefits and are an integral part of the U.S. economy. Mammals such as the muskrat and reptiles such as alligators are harvested for their pelts and hides, and over 95% of the fish and shellfish species harvested commercially within the United States depend on wetlands. Timber and other herbaceous vegetation found throughout wetlands are also commercially harvested. In addition, the recreational hunting industry relies heavily on the waterfowl and other birds that depend on wetlands. This industry brings in millions of dollars to local economies through the sale of hunting equipment, food, travel expenses, and lodging. Wetlands also attract visitors for the recreational, cultural, aesthetic, and research value they provide. According to the U.S. Fish and Wildlife Service’s (FWS’) 2006 national survey, 87.5 million individuals participated in wildlife-related recreation, spending over $122 billion. Simply put, wetlands provide immense value and are essential to the environmental and economic well-being of the United States.

B. Wetlands Regulation and Management

Despite their importance, wetlands are disappearing at an alarming rate. Over one-half of the nation’s wetlands have been drained and converted to other uses and continue to be lost at a rate that far exceeds the rate at which they are reestablished. In recent years, the federal government has recognized the ecological significance of the nation’s wetlands, as well as the rapid rate at which they are disappearing, and has taken measures to retard this loss. “No net loss” of wetlands has become the guiding policy for wetland regulation and preservation at the federal level. No net loss means that for every wetland lost, another will be restored or created. First set in place by President George H.W. Bush, successive administrations have affirmed and enhanced President Bush’s commitment to no net loss of wetlands. In 1990, the Corps and the U.S. Environmental Protection Agency (EPA) clarified this goal in a Memorandum of Agreement as “no overall net loss of values and functions.”

Currently, there is no specific or comprehensive national wetland law. Federal wetland protection efforts occur through regulations (CWA §404), economic incentives and disincentives (tax deductions for selling or donating wetlands to qualified organizations), and acquisition (establishing national wildlife refuges). Wetland protection and management has been primarily a national initiative, but individual states have also begun to assist in the effort by enacting laws to regulate activities in the wetlands. Some local governments have decided to take wetland management even further by adopting local wetland protection ordinances and requiring more stringent standards for development permits of wetlands. Federal, state, and local government regulatory or permitting programs have become essential tools in the nationwide effort to protect wetlands.

I. Land Use Regulation

Wetlands law operates at the junction of private property rights and natural resource protection. As development pressure emerges as the largest cause of wetland loss, regulation of land use in the wetlands becomes the main mechanism used to protect this natural resource. However, the vast majority of U.S. wetlands are on private property; therefore, regulating development and land use clashes with individuals’ ability to convert their land to more economically profitable purposes.

There is no legal restriction against owning wetlands or buying and selling wetland property, but federal law (and some state and/or local law) restricts a person’s ability to freely alter wetlands. In order to develop land classified as wetlands, private landowners must apply for a permit under CWA §404 as well as any state and/or local land use permits. Individuals who fail to acquire these development permits or fail to comply with the terms of a valid permit could face stiff penalties, including fines and/or requirements to restore the area.

26. Id. at 525-26.
27. Id. at 522-23.
28. Id. at 517.
29. Id. at 508.
30. Id. at 514.
31. Id. at 516-17.
32. Id. at 510.
36. U.S. EPA, Wetlands Status and Trends, http://water.epa.gov/type/wetlands/vital_status.cfm (last updated Jan. 24, 2013). 37. FWS estimated that the rate of wetland loss increased 140%, while the rate of wetland reestablishment increased by 17%, from their previous study period. See FWS, REPORT TO CONGRESS, supra note 18, at 16.
38. RANDOLPH, supra note 1, at 542.
39. See id.
42. MITSCHE & GOSSELINK, supra note 4, at 542.
45. Over 75% of the wetlands are privately owned. See U.S. EPA, Wetlands Protection, supra note 5.
46. MITSCHE & GOSSELINK, supra note 4, at 6.
47. See U.S. Army Corps of Eng’rs, Regulatory Program FAQs, supra note 19.
III. The CWA and §404 Permits

The primary vehicle for wetland protection and regulation in the United States is CWA §404. The CWA is divided into two major sections. One part consists of the provisions that authorize federal assistance for municipal sewage treatment plant construction; the second part consists of regulatory requirements that apply to industrial and municipal dischargers.

The U.S. Congress’ main objective in the CWA is to “restore and maintain the chemical, physical and biological integrity of the Nation’s waters.” To achieve this objective, the statute functions under the concept that “all discharges into the nation’s waters are unlawful, unless specifically authorized by a permit.” Section 404 authorizes the Corps, subject to and using EPA’s environmental guidance, to establish a permit program to regulate the discharge of dredged and fill material into the waters of the United States. This permit, often referred to as a §404 permit, restricts individuals’ ability to freely alter wetlands.

The CWA preserves state authority and does not preempt state law regarding the discharge of fill material. Courts have confirmed that the §404 program does not preempt state law and, as a result, most states have created their own wetlands permit programs. In cases where an individual is subject to both state and federal regulation, the Corps and the state will typically administer their authorities through a joint application process (using a single application form), to facilitate coordination for the agencies and the applicants.

A. Section 404 Permits

The phrase “waters of the United States” defines the extent of geographic jurisdiction of the §404 permit program. Congress left it to the Corps and EPA to provide a regulatory definition for the term “waters of the United States.” Current Corps and EPA regulations define the term to encompass “all traditionally navigable waters; all interstate waters, including interstate wetlands; all waters, including wetlands, the use, degradation, or destruction of which could affect interstate commerce; the territorial seas; and wetlands adjacent to, and tributaries and . . . other waters within the definition.”

Once determined that the land qualifies as wetlands regulated under §404, it must then be determined whether the activity proposed is also subject to regulation. Section 404 regulates a broad range of activities. Generally, placing any material, particularly solid materials, into the wetlands will be considered a discharge of a pollutant covered under §404. The Corps’ regulations specifically use the terms “dredged” and “fill” material to describe the type of material that when discharged into the wetlands requires a §404 permit. Dredged material is defined as “material that is excavated or dredged from waters of the United States.” Fill material is defined as material placed in the waters of the United States that changes the elevation of a water area or converts a portion of water of the United States into dry land. Examples of fill material include rock, sand, clay, plastic, construction debris, wood chips, overburden from excavation activities, and materials used to create any structure or infrastructure. However, some discharge of dredge or fill material incidental to activities, such as, farming, ranching, and forestry practices, are exempt from §404 permit requirements.

B. The Permitting Process

Proposed development projects are regulated through a permit review process conducted by the Corps. Minor activities may fall under general permits, which are issued on a nationwide, regional, or state basis for particular categories of activities. Otherwise, an individual permit is required. Individual permits are reviewed by the Corps under a public interest review and may be conditioned or denied based on the substantive standards found in EPA §404(b)(1) guidelines and policy memoranda of the two agencies.

These §404(b)(1) guidelines have been described as the cornerstone of the §404 permit process, yet the process inherently requires the exercise of judgment and the balancing of a multitude of factors by the reviewing Corps’ district engineer. The foundation of the permitting program is that a permit for the discharge of dredged or fill material will not be issued if a less environmentally damaging practicable alternative exists, or the nation’s waters would be sig-

58. Id. at 57-8.
60. Id. 61.
62. Id.
64. As Peggy Strand and Lowell Rothschild explain:
65. Id. at 84.
significantly degraded. According to the Corps, the agency weighs the reasonably foreseeable benefits and detriments of proposed projects and makes permit decisions in light of the "essential values of the Nation’s aquatic ecosystems to the general public, as well as the property rights of private citizens who want to use their land." 

Mitigation of the impact of filling is another important part of the permitting consideration. Section 401(b)(1) subpart H sets forth a number of possible steps to “minimize potential adverse impact of the discharge on the aquatic ecosystem.” Permit applicants must show that they have: (1) taken steps to avoid adverse impact to wetlands where practicable; (2) minimized potential impacts of rough project modifications; and (3) provided compensation for all remaining unavoidable impact. If all practicable project modifications have been accomplished and the project still results in the loss of wetlands, the applicant is required to compensate for this loss. Compensation can take several forms using the methods of restoration, enhancement, establishment, and preservation. The three primary mechanisms used to achieve this compensatory mitigation include permittee-responsible mitigation, mitigation banks, and in-lieu fee mitigation.

I. Section 404 Permits Compensatory Mitigation Measures

Permit applicants must propose compensatory mitigation options as part of their development proposal. Mitigation measures are negotiated by the Corps on an individual basis; historically, the Corps has maintained great flexibility in their mitigation allowances. With increasing frequency, permit applicants place greater emphasis on compensating for impacts of their proposed development rather than avoiding them in the first place. Mitigation also appeals to the Corps because it offers an alternative to the difficult choice between denying a major development project or sacrificing valuable wetland resources. These compensatory mitigation measures become indispensable conditions of a §404 permit.

On March 31, 2008, EPA and the Corps issued revised regulations governing compensatory mitigation for offsetting impacts to wetlands, streams, and other waters of the United States authorized under the CWA permitting program. These regulations establish equivalent standards and criteria for the three primary mitigation mechanisms available. In addition, the regulations expand public participation in compensatory mitigation decisionmaking and increase the efficiency and predictability of the mitigation project review process. The new regulations also adopt a watershed-based approach to mitigation, emphasizing the importance of addressing the needs of specific aquatic ecosystems. Under this final rule, all mitigation plans must address the following 12 elements: “Objectives; site selection criteria; site protection instruments (e.g., conservation easements); baseline information (for impact and compensation sites); credit determination methodology; mitigation work plan; maintenance plan; ecological performance standards; monitoring requirements; long-term management plan; adaptive management plan; and financial assurances.”

This rule maintains a flexible preference for in-kind mitigation (the replacement is of the same ecological type as the impacted resource) and favors the purchase of mitigation bank credits or in-lieu fee program credits over “on-site” (located close to the impact) mitigation efforts. In evaluating whether an applicant’s mitigation measures provide for the required compensatory mitigation under the 2008 Compensatory Mitigation Regulations, Corps district engineers must consider the type of mitigation options, location of the mitigation site, and amount of mitigation.

Compensatory mitigation under §404 can be accomplished either by third-party, market-based compensation providers (mitigation banks and in-lieu fees) or permittee-responsible mitigation. In order to promote predictability, reduce risk, and help ensure that the required compensation is provided, the rule establishes a preference for the use of mitigation bank credits and in-lieu fee program credits. A wetlands mitigation bank is a wetland that has been restored, established, enhanced, or preserved to compensate for future conversions of wetlands for development activities. Permittees can purchase credits from mitigation banks as a compensatory mitigation measure. In-lieu fee mitigation occurs when a permittee pays a monetary sum to an in-lieu fee sponsor (a public agency or nonprofit organization).

68. Compensatory mitigation for unavoidable development impact may be required to ensure the land use complies with §404(b)(1) guidelines. 40 C.F.R. §230.91 (2014).
70. U.S. EPA, Section 404 Permitting, supra note 63.
71. 33 C.F.R. §332.3 (2014).
73. 33 C.F.R. §332.3 (2014).
74. SANDERSON & ROTHSCHELD, supra note 9, at 93; 33 C.F.R. §332.3 (2014).
75. See Mitigation of Impacts, supra note 7.
76. Id.
tion). Funds from permittees are then pooled to create and maintain a mitigation site.83

In general, the site of the compensatory mitigation “should be located within the same watershed as the impact site, and should be located where it is most likely to successfully replace lost functions and services, taking into account . . . watershed scale features. . . .”84 However, these are not mandatory standards, as suggested by the use of discretionary language (should rather than must). Locational factors (the surrounding landscape) may influence the success of the compensatory mitigation and “may lead to siting of such mitigation away from the project area.”85 Nonetheless, functions and services at the impacted site will also need to be considered.86 On-site, off-site, or a combination may be required to replace the impact of development.87

When a permittee chooses to mitigate their development’s impact through the use of mitigation banks or in-lieu fee programs, the site of mitigation’s location is restricted by the geographic service areas of mitigation banks and in-lieu fee programs. Geographic service areas delineate the trading zones where mitigation banks and in-lieu fee programs may sell credits.88 Trading is normally limited to a localized geographic region based on the Corps hydrologic unit designations.89

Compensatory mitigation measures must also be “commensurate with the amount and type of impact” associated with the proposed development.90 In regard to mitigation bank credits and in-lieu fee credits, the Corps determines the number and type of credits necessary to offset permitted impact during the evaluation of the permittee’s mitigation proposal.91 When a “suitable metric is not used, a minimum one-to-one acreage or linear foot compensation ratio must be used.”92 While this statutory language is used as general guidance, there is no standardized and uniform method for quantifying credits.93 As a result, differing methods have been adopted across the different Corps districts within the United States. A “majority of bank credits are based on: acreage, a functional assessment method, a combination of acreage and functional assessment, or some measure of functionality combined with best professional judgment.”94

Differing methods make it impossible to compare credits nationally.95 Also, “the availability and price of land suitable for bank development and the cost to create an acre of wetland compensation within a given region” has led to a large disparity in the prices paid for mitigation bank credits and in-lieu fee credits.96 In 2008, mitigation bank credit prices ranged nationally from $3,000-$653,000, with the average price of $74,535.97

Even though the Corps has authority to require developers to mitigate unavoidable impact to wetlands as a condition of a §404 permit, the government’s ability to regulate development in the wetlands through §404 permits is not without constraints. The Takings Clause of the Fifth Amendment limits the extent to which government regulation can promote environmental gains by imposing costs on individual property owners.98 Therefore, the continued evolution of the takings doctrine impacts how federal and state regulations of wetlands on private property may operate.

IV. Takings Law

A. Takings Jurisdiction Prior to Koontz

The nation’s core environmental laws and ability to regulate land use are founded on Congress’ authority under the Commerce Clause,99 which states: “Congress shall have the power . . . [t]o regulate Commerce . . . among the several states.”100 Authority for local agencies to regulate land use arises from the police power reserved to the states by the Tenth Amendment.101 The police power allows for the enactment of regulations designed to preserve and protect the health, safety, and morals of the community, as well as to promote public convenience and the general welfare.102

The Takings Clause of the Fifth Amendment, made applicable to the states through the Fourteenth Amendment, functions as a constraint on these regulatory powers.103 The Takings Clause provides that private property shall not “be taken for public use, without just compensation.”104 The Clause is not intended to limit government regulation of property rights, but rather to secure compensation when proper government action amounts to a taking.
of private property.\textsuperscript{105} A principal purpose of the Takings Clause is to prevent the government from forcing some people alone to bear public burdens that the public as a whole should bear.\textsuperscript{106}

The transfer of property to the state or to another private party by eminent domain defines a taking in the classical sense.\textsuperscript{107} However, takings jurisprudence reveals that the Clause also applies to other government actions that have the same result.\textsuperscript{108} The doctrine of regulatory takings defines certain regulatory actions taken by the government as functionally equal to classical takings.\textsuperscript{109} Land use exactions that do not show a “nexus” or “rough proportionality” between the concession and the social costs of the application may allege the occurrence of a “physical” taking, a “regulatory taking,” or a land use exaction violating the standards required by \textit{Nollan} and \textit{Dolan}.\textsuperscript{110}

Within the context of land use permitting, property owners are seen as required to internalize the negative externalities of their conduct.\textsuperscript{111} Exactions have consequently become the important tool used by permitting agencies to enforce this idea of landowner responsibility. Exactions are the concessions that government permitting agencies require of property owners as conditions for the issuance of land use permits.\textsuperscript{112} Balancing the necessity of governmental regulation of land use for the preservation of natural resources against property owners’ fundamental constitutional rights under the Fifth Amendment has led the Supreme Court to develop constraints on these exactions. The Court’s decisions in \textit{Nollan} and \textit{Dolan} established that exactions must demonstrate both an “essential nexus” and “rough proportionality” to the expected harms that the new use would cause. Failure to meet these require-

\begin{thebibliography}{117}
\bibitem{105} First English Evangelical, 482 U.S. at 315.
\bibitem{106} Armstrong v. United States, 364 U.S. 40, 49 (1960).
\bibitem{107} Stop the Beach Renourishment, Inc. v. Florida Dept of Envtl. Prot., 560 U.S. 702, 713, 40 ELR 20160 (2010).
\bibitem{108} Id.
\bibitem{109} Id. The Supreme Court has recognized two types of regulatory actions that generally constitute per se takings: (1) government action, which causes a permanent physical invasion of private property; or (2) government regulation that completely deprives an owner of all economically beneficial use of his or her property. Lingle v. Chevron U.S.A. Inc., 544 U.S. 528, 538, 35 ELR 20106 (2005). Beyond these two categories, the Supreme Court has not developed a set formula, but has identified a number of factors that should be significant considerations in the regulatory taking analysis. Lingle, 544 U.S. at 538-39.
\bibitem{110} Nollan v. California Coastal Cmty., 483 U.S. 825, 837, 17 ELR 20918 (1987).
\bibitem{111} Dolan v. City of Tigard, 512 U.S. 374, 385, 24 ELR 21083 (1994).
\bibitem{112} Lingle, 544 U.S. at 548.
\bibitem{113} Id.
\bibitem{114} Id.
\bibitem{115} Koontz, 133 S. Ct. at 2595.
\bibitem{116} Mark Fenster, Takings Formalism and Regulatory Formulas: Exactions and the Consequences of Clarity, 92 CAL. L. REV. 609, 611 (2004).
\bibitem{117} Nollan, 483 U.S. at 837.
\bibitem{118} Dolan, 512 U.S. at 391.
\end{thebibliography}

111 That test requires a government exaction of private property to which the bike/pedestrian path would offset increased hazards and traffic congestion created by the expansion of the store and simultaneously to create public greenways.\textsuperscript{128} The Supreme Court found that while there was some theoretical relationship between the goals of the city, the condition in question was excessive in comparison to the impact expected to be caused by the project.\textsuperscript{129} The Court stated that even though a greenway would help to reduce flooding, the city failed to explain the necessity of a public, rather than private, greenway to accomplish the goal.\textsuperscript{130} The Court also noted that the city failed to quantify the extent to which the bike/pedestrian path would offset increased

In \textit{Nollan}, the Court held that the government could condition the granting of a permit if the condition passed the “essential nexus” test.\textsuperscript{118} That test requires a government agency to establish that the condition imposed advances the same government interest that would have supported a total ban of the proposed construction.\textsuperscript{119} The California Coastal Commission approved the Nollans’ building permit to replace their existing beach bungalow with a three-bedroom house, subject to the condition that the Nollans dedicate an easement allowing the public to pass across the beachfront behind their home.\textsuperscript{121} The commission asserted that the Nollans’ new house would interfere with the public’s “visual access” to the beach as the reason for conditioning the building permit upon a public access easement.\textsuperscript{122} The Supreme Court concluded that while such public beach access might be a desirable goal, the public access easement did not serve to further the public’s ability to see the beach or realize beach access existed from the street;\textsuperscript{123} therefore, there was no nexus between the goal and the regulation. The condition imposed by the commission failed the essential nexus test and constituted a taking under the Fifth Amendment.\textsuperscript{124}

The Court’s subsequent decision in \textit{Dolan} expanded on \textit{Nollan}, requiring not only an essential nexus between the condition required for permit approval and the purported state interest, but also a “rough proportionality” between the amount of the exaction or dedication requested and the impact of the project.\textsuperscript{119} In \textit{Dolan}, the owner of a store applied for a permit to expand and build an adjacent parking lot.\textsuperscript{126} The city planning commission conditioned approval on the dedication of a portion of the relevant property to a public “greenway,” including a pedestrian/bicycle path.\textsuperscript{127} The dedication of property was intended to reduce flooding hazards and traffic congestion created by the expansion of the store and simultaneously to create public greenways.\textsuperscript{128} The Supreme Court found that while there was some theoretical relationship between the goals of the city, the condition in question was excessive in comparison to the impact expected to be caused by the project.\textsuperscript{129} The Court stated that even though a greenway would help to reduce flooding, the city failed to explain the necessity of a public, rather than private, greenway to accomplish the goal.\textsuperscript{130} The Court also noted that the city failed to quantify the extent to which the bike/pedestrian path would offset increased
sive, considering the proposed environmental effects of his easement to the Water Management District as a mitigation to the demand for a monetary payment that is directly linked to the property from the landowner to the government and consequently “amount[s] to a per se taking similar to the taking of an easement or a lien.”153

Further adding to the takings jurisprudence surrounding exactions, the Supreme Court in Koontz addressed whether the requirements set forth in Nollan and Dolan apply to monetary exactions and to conditional permit denials.144 These previous decisions involved exactions that required the property owners to dedicate real property in exchange for approval of a permit.145 The Court declined to confine the application of these decisions to similar situations146 and instead expanded the scope of these decisions. The Court held that the government’s conditions imposed on land use permit applicants “must satisfy the requirements of Nollan and Dolan even when the government denies the permit and even when its demand is for money.”147

Under the unconstitutional conditions doctrine, the government cannot condition an individual’s receipt of a governmental benefit (such as a land use permit) on the waiver of a constitutionally protected right (in this context, the right to just compensation under the Fifth Amendment).148 The Court stressed that extortionate demands for property in the land use permitting context run afoul of the Takings Clause because they impermissibly burden the right not to have property taken without just compensation, not because the property is taken.149 The Court consequently concluded that the application of the constitutional standards established in Nollan and Dolan, as a special application of the unconstitutional conditions doctrine, applies “whether the government approves a permit on the condition that the applicant turn over property or denies a permit because the applicant refuses to do so.”150 Conditions in every stage of the permitting process must have a “nexus” and “rough proportionality” to the development’s effect and impact; evaluation of the validity of the conditions themselves is the heart of the takings analysis in the land use exaction context.151

The Court then addressed whether a demand for money as a condition of permitting a specific parcel of property must satisfy the nexus and rough proportionality standards of Nollan and Dolan. The Court found that monetary exactions are functionally equivalent to other types of land use exactions.152 The Court explained that a government’s demand for a monetary payment that is directly linked to a specific parcel of real property transfers an interest in property from the landowner to the government and consequently “amount[s] to a per se taking similar to the taking of an easement or a lien.”153

As a result of this decision, government agencies will be required to consider both nexus and proportionality when placing conditions on land development permits, whether the conditions require the dedication of interests in land or payments of money.154 This is true whether the condition is precedent (the applicant must agree to the condition or be denied the permit) or subsequent (the applicant is offered the permit, but only on the following conditions).155 The main practical problems arise from the application of the standards of Nollan and Dolan to permit conditions requir-

131. Id. at 395-96.
132. See id. at 394-96.
133. Id. at 386.
134. Lingle, 544 U.S. at 548.
135. See Koontz, 133 S. Ct. at 2592.
136. Id.
137. Id.
139. Id. at 2592-93.
140. Id. at 2593.
141. Id.
142. Id.
143. See Koontz, 133 S. Ct. at 2593.
144. Id. at 2603.
145. See Dolan, 512 U.S. at 379-80; Nollan, 483 U.S. at 827.
146. Koontz, 133 S. Ct. at 2591.
147. Id. at 2603 (emphasis added).
149. Koontz, 133 S. Ct. at 2595.
150. Id. at 2596.
151. See Koontz, 133 S. Ct. at 2594-96.
152. Id. at 2599.
153. Id. at 2600.
154. Id. at 2603.
155. Id.
ing monetary payments, because the Court provided no express limitation or guidance on the application.

C. Defining Nexus and Proportionality

The Supreme Court’s decision in Koontz arose under the regulation of a private owner’s ability to alter and develop wetlands in Florida. Although the facts of the case did not involve the purchase of mitigation bank credits or in-lieu fees specifically, the decision addressed mitigation conditions requiring the payment of money in general, and as a result, the decision has implications for compensatory mitigation measures involving §404 that utilize mitigation bank credits and in-lieu fee credits.

The Court in Koontz refrained from determining whether the Water Management District’s conditions were in and of themselves valid. “The Court expresses no view on the merits of petitioner’s claim that respondent’s actions here failed to comply with the principles set forth in this opinion and those two cases.” Instead, the Court remanded the case to state court for factual determination of whether the required mitigation conditions comport with Nollan and Dolan. Because the Supreme Court declined to explain how the nexus and proportionality requirements for monetary fees are met, and the case has yet to be decided by the Florida courts on remand, there is little guidance as to how the requirements can be sufficiently satisfied. Moreover, since the Koontz decision, courts have not analyzed the extension of nexus and proportionality requirements to monetary exactions. None of the cases that cite Koontz deal with factual scenarios involving monetary exactions.

Consequently, it is not clear how or what “nexus” means in terms of compensatory mitigation measures involving mitigation banks or in-lieu fee programs under §404. Does it suffice that the proposed offsite work will alleviate virtually the same kind of existing harm that future development will cause? Or is direct specific causation required? Does the nexus test turn on a physical proximity of the mitigation bank or in-lieu fee program to the development’s impact? What constitutes “proportionality” between the amount of credits or fees paid to the development project? Must it be a simple comparison of acreage totals (the acres of wetlands harmed by development project versus the amount of acres of wetlands improved by payment of fees or purchase of credits)?

V. The Future for §404 Permits

Will the Koontz decision impact what type of mitigation requirements the Corps can require of private landowners when issuing §404 permits? How will proportionality and nexus be analyzed in determining appropriate compensatory mitigation for in-lieu fees and mitigation banking?

Although the Court’s extension of Nollan and Dolan scrutiny to monetary exactions has been heralded by some as having far-reaching negative implications for environmental protection and land use permitting, the requirements set forth in Nollan and Dolan may be entirely consistent with the concept of mitigation embodied in CWA §404. Mitigation refers to activities and efforts to offset the adverse impact or environmental effects caused by a land use activity. However, the difficulty arises in defining how mitigation bank credits and in-lieu fee credit calculations will be interpreted by courts as being sufficiently tied to the proposed project’s impact in nature and extent.

Currently, as part of the §404 permitting process, compensatory mitigation measures undergo an evaluation by the Corps district engineer. This evaluation considers the type, location, and amount of compensatory mitigation. Even though no mandatory standard exists to evaluate compensatory mitigation, the Corps follows the guidance provided by the 2008 Compensatory Mitigation Regulations. Ultimately, each Corps district adopts their own method of determining the impact and offset requirements. Therefore, it is relevant to consider the language set forth in the 2008 Compensatory Mitigation Regulations and the current practice of district engineers in light of possible interpretations of proportionality and nexus requirements.

A. The Proportionality Requirement

In Dolan, the Supreme Court held that dedications must be roughly proportional in nature and extent to the impact of the proposed development. It is unclear how future courts will interpret the proportionality requirement of mitigation bank credits or in-lieu fee credits. However, district engineers may already be assessing the purchasing of mitigation credits and paying of in-lieu fees in proportion to the develop-

156. Id.
157. Id.
158. See, e.g., Cerajaski v. Zoeller, 735 F.3d 577, 579 (7th Cir. 2013) (concerning the constitutionality of the Indiana Unclaimed Property Act where it authorized the state to confiscate private property without compensation); Hotze v. Sebelius, 4:13-CV-01318, 2014 WL109407, at *1-2 (S.D. Tex. Jan. 10, 2014) (concerning the constitutionality of the Patient Protection and Affordable Care Act under the Origination Clause and the Takings Clause); Powell v. Canty, of Humboldt, A137238, 2014 WL 171483, at *11 (Cal. Ct. App. Jan. 16, 2014) (concerning the dedication of an overflight easement as a condition for the issuance of a building permit); City of Perris v. Stamper, 160 Cal. Rptr. 3d 635, 639-41 (Cal. Ct. App. 2013) (concerning acquisition of land by the city for a truck route); Lemma, 509 P.3d at 397 (concerning an administrative order directing a landowner to take steps to curb pollution of a creek that runs through his property); Cedar River Water & Sewer Dist. v. King Cnty., 315 P.3d 1065, 1069-73 (Wash. 2013) (concerning facts involving two utility districts that contracted with the county for sewage treatment and view the contracted mitigation package as excessive).
159. In a New York Times editorial, Vermont Law School Prof. John D. Echeverria argued: [T]he decision will very likely encourage local government officials to avoid any discussion with developers related to permit conditions that, in the end, might have let both sides find common ground on building projects that are good for the community and environmentally sound. Rather than risk a lawsuit through an attempt at compromise, many municipalities will simply reject development applications outright—or, worse, accept development plans they shouldn’t.
160. Ecosystem Marketplace, Offset and Compensatory Programs, supra note 93.
161. Lingle, 544 U.S. at 547.
opment’s impact in two ways: (1) by aligning the same credit types to ensure that the impact and the mitigation bank or in-lieu fee program is like-for-like; and (2) by comparing acres of wetlands harmed by the proposed development to the amount of acres restored, enhanced, established, and/or preserved by the purchase of mitigation bank credits or in-lieu fee payments.

The Corps requires that the amount of mitigation credits purchased “to the extent practicable, [be] sufficient to replace lost aquatic resource functions.” Determining the type and number of credits needed to sufficiently replace lost resource functions is done at the regional level. Each district office may employ the method of assessment they see fit. The guidelines state that when appropriate and practicable “functional or condition assessment methods” should be used, but if unavailable “a minimum one-to-one acreage or linear foot compensation ratio must be used.”

Therefore, at a minimum, for every one acre of impacted wetland, the permit applicant must “pay” to restore one acre of wetland. This mitigation ratio of one-to-one must be increased “where necessary to account for the method of compensatory mitigation, . . . differences between the functions lost at the impact site and the functions expected to be produced by the compensatory mitigation project . . . .” Consequently, when proposed development threatens to create extensive impact on the wetlands, more mitigation credits will be required.

The guidelines currently governing compensatory mitigation conditions of §404 permits provide strong evidence that some proportionality analysis is already being conducted by district engineers when they negotiate and set mitigation conditions on §404 permits. Nonetheless, as a result of the Koontz decision, the guidelines may need to be amended to set forth a strict mandatory proportionality analysis to meet the new requirement. Also, the standardization of a method of assessment such as functional or a combination of functional and acreage-based methods may be necessary to ensure consistency throughout the district offices. Use of a functional assessment where the ecological function lost and replaced becomes the main focus of compensatory mitigation assessment rather than physical size (acre-to-acre) may increase the likelihood that the impact and compensation are proportional even if different area measurements result. The best method of assessment would most likely be a combination of functional and acreage to ensure that the nature and extent of the impact of the proposed development are roughly proportional to the mitigation condition.

Another aspect of the proportionality analysis that may need to be considered is the disparity in price of mitigation bank credits and in-lieu fees across the nation. Even if the proportionality analysis rests on an acreage comparison, how may the amount paid for credits or in-lieu fees factor in? Or is the variety in market value of credits an inherent part of wetland mitigation (i.e., certain locations are more expensive to develop land including the mitigation measures required as a condition for a §404 permit)? The extreme variability in the market value of §404 credits reflects the availability and price of land suitable for bank development and in-lieu fee programs and the cost to create an acre of wetland compensation within a given region. For example, in-lieu fees in North Carolina vary by type of wetland restored or preserved. In-lieu fees range from $24,000-$46,000 per acre of non-riparian wetland to $156,000 per acre of costal wetland. This price disparity within one state reflects the difference in market value of credits and fees across types of wetlands. Fees also vary greatly across states. In-lieu fees in Oregon are about $84,500 per acre of wetland, while the fee is $400,000-$653,000 per acre of tidal wetland in Virginia.

The differences among how much each permit applicant must pay in fees or credits may in fact be determined by the economic market and development of areas that promise to have a higher economic return (e.g., coastal wetlands as compared to non-riparian wetlands) may cost more in higher in-lieu fees and higher price for mitigation bank credits. The cost of credits and fees is determined by third-party actors in the economic market and is not set by government agencies. As a result, the price of in-lieu fees and mitigation bank credits may not be part of the proportionality analysis conducted by courts and left to be determined by the free market.

B. The Nexus Requirement

The nexus requirement could also be sufficiently satisfied by current §404 permitting procedures. Nollan held that the exaction must “substantially advance the same government interest that would furnish a valid ground for denial of the permit.” The permitting program under §404 is guided by two national goals: (1) the stated purpose of the CWA to “restore and maintain the chemical, physical and biological integrity of the Nation’s waters”; and (2) the national goal of “no net loss” of wetlands, which underscores the importance of “compensatory mitigation to replace lost wetland acres and functions and prevent overall wetland losses.” Also, 40 C.F.R. §230.10 states that no permit will be issued if there is a practicable alternative to the development that has less environmental impact or if the nation’s waters would be significantly degraded. Therefore, a “government interest that would furnish a valid ground for denial of the permit” could be the existence of a practicable alter-

162. 33 C.F.R. §332.3 (2014).
163. Id.
164. Ecosystem Marketplace, Offsets and Compensation Programs, supra note 93.
165. 33 C.F.R. §332.3 (2014).
166. See generally id.
native that has less environmental impact, extreme degradation of wetlands, and/or a failure to adequately mitigate the loss of wetlands due to development. Both mitigation banks and in-lieu fee programs focus on replacing and restoring wetlands; therefore, if the nexus requirement is interpreted to mean that the mitigation condition must substantially reduce wetland loss in general, the requirement may likely be satisfied by the utilization of either method.

On the other hand, if the nexus requirement is construed more narrowly to require mitigation measures to substantially reduce wetland loss within the same physical locality, the test may still be met. The 2008 Compensatory Mitigation Regulations state that, generally, the site of the compensatory mitigation “should be located within the same watershed as the impact site, and should be located where it is most likely to successfully replace lost functions and services, taking into account . . . watershed scale features. . . .”174 These are not required standards, but rather function as guidelines for district engineers. However, the guidelines give evidence that the mitigation measure should be located relatively near the impact site and replace similar functions and services lost by development.

Also, mitigation banks and in-lieu fee programs may only sell credits in service areas that are in the immediate watershed or 6-digit Hydrologic Unit Code unless authorized to do otherwise.175 Consequently, the use of these compensatory mitigation methods is restricted by geographic service areas. However, it could be argued that large service areas may geographically separate the impact site from the compensation, which does not in fact lead to a replacement of the functional equivalent of wetland loss.

According to a press release by the National Mitigation Banking Association, the Koontz decision will promote the use of mitigation bank credits and in-lieu fee credits to avoid potential conflicts with the Nollan and Dolan rulings.176 Doug Lashley, president of the National Mitigation Banking Association, stated that “[m]itigation banks within the same watershed or geographic area as the proposed project should satisfy the nexus test. Further, given that mitigation banking is premised on the use of science-based credits to measure impact and related offsets, mitigation banks provide a clear pathway to a determination that the appropriate proportionality exists.”177

Courts remain highly deferential to the Corps’ judgment in assessing developers’ mitigation plans and have declined to overly involve themselves in evaluating the appropriateness of the mitigation efforts required for approval of §404 permits as long as the Corps adequately analyzed the issues presented prior to issuing the permit.178 A court is allowed only a narrow scope of review in evaluating the Corps’ actions, findings, and conclusions under the CWA.179 A court cannot overturn the Corps decision based on disagreement with that decision180; and the Corps decisions may only be set aside if the court finds them to be “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law” or “without observance of procedure required by law.”181 As a result, courts have declined to refine the appropriateness of mitigation measures and have left it to the legislature to determine. If more concrete and definitive standards must be created to sufficiently satisfy nexus and proportionality, this must be done through legislative measures.

C. Beyond Nexus and Proportionality

Another possible consequence of Koontz could be to incentivize district engineers to simply deny land use permits rather than to work cooperatively with permit applicants to create projects that make business sense and protect environmental interests of the community. As the Washington State supreme court has noted, Koontz “expands property owners’ ability to challenge local land use regulations and fees”182 and, therefore, instead of ensuring that mitigation conditions satisfy the requirements of Nollan and Dolan and opening the door to possible litigation, district engineers might choose to outright deny development permits.183 Nollan and Dolan place a greater burden on the government to justify the monetary exactions it attaches to development approval and conditional denials than would be required to justify the straightforward denial of land use without the proposal of conditions on land use. Consequently, district engineers may favor straightforward denials of permits.184

In Powell v. County of Humboldt, a California court of appeal clarified and reiterated that when the government demands the payment of money as an alternative to the dedication of a property interest in return for granting a land use permit, the threshold analysis is whether the condition would rise to the level of a compensable taking for Fifth Amendment purposes if applied to the landowner outside the permitting process.185 Next, an analysis of whether the requirements of Nollan and Dolan have been adequately applied can be conducted. A straightforward permit denial without any attempt to negotiate falls under the Supreme Court’s analysis in Penn Central Transportation Co. v. City of New York186 and does not require a

175. Ecosystem Marketplace, Offset and Compensation Programs, supra note 93.
177. Id.
179. 5 U.S.C. §706(2); National Mitigation Banking Ass’n, 2007 WL 495245 at *32.
182. Lenoir, 309 P.3d at 409.
183. See Koontz, 133 S. Ct. at 2610 (Kagan, J., dissenting, with whom Justices Ginsburg, Breyer, and Sotomayor join).
184. See id. at 2604.
showing of nexus or proportionality.\textsuperscript{187} The \textit{Penn Central} analysis, used to determine whether an invalid regulatory taking has occurred,\textsuperscript{188} focuses on the economic impact of the regulation on the property owner, “particularly the extent to which the regulation has interfered with distinct investment-backed expectations.”\textsuperscript{189}

Even though a consequence of the \textit{Koontz} decision could be an increase in $404$ permit denials, this does not seem likely. According to the Corps, less than $3\%$ of $404$ permits are denied. The Corps further states that typically the applicants who were denied permits refused “to change the design, timing, or location of the proposed activity.”\textsuperscript{190}

\section*{VI. Conclusion}

With growing awareness of the benefits of wetlands, the federal government has worked to develop policies and strategies to arrest the alteration, conversion, and destruction of wetlands.\textsuperscript{191} The main protection mechanism is regulation of land use conducted through CWA $404$. Generally, placing any material, particularly solid materials, into the wetlands will require a $404$ permit.\textsuperscript{192} A condition of virtually all permits is the use of compensatory mitigation measures to offset for adverse environmental impact caused by the proposed development site. The use of mitigation bank credits and in-lieu fee payments is often employed as part of these mitigation measures. \textit{Koontz} now requires that mitigation bank credits and in-lieu fees have a “nexus” and “rough proportionality” to the environmental impact of the proposed development. Even though the \textit{Koontz} decision does not provide definitive answers as to what, exactly, needs to be proportional or what satisfies the nexus requirement within this context, the district engineers’ current assessment of compensatory mitigation measures provides evidence that the nexus and proportionality requirements may already be met by current practice, and the \textit{Koontz} decision will not lead to a complete overhaul of the $404$ permitting process. To be prepared for future lawsuits by property owners asserting their private property rights under the Takings Clause of the Fifth Amendment, the compensatory mitigation guidelines should be amended to set forth more strict guidelines on how mitigation banks and in-lieu fees are quantified and how their mitigation is measured against the proposed development’s impact.

\begin{footnotes}
188. \textit{Lingle}, 544 U.S. at 538.
190. U.S. Army Corps of Eng’rs, Regulatory Program FAQs, supra note 19.
191. Randolph, supra note 1, at 542.
192. Strand & Rothschild, supra note 9, at 57-58.
\end{footnotes}