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ECOSYSTEM-BASED MANAGEMENT OF TERRESTRIAL AND COASTAL WATER RESOURCES: CAN *RAPANOS* TEACH US ANYTHING ABOUT THE FUTURE OF INTEGRATED WATER MANAGEMENT?

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Introduction

Although a plurality opinion, there was a discernable ruling under *Rapanos*: The Clean Water Act extends to those waters that have a *significant nexus* to *waters of the United States*. *Rapanos v. United States*, 547 U.S. ___, 126 S. Ct. 2208, 165 L. Ed. 2d 159 (2006). However, when looking closely at the “*significant nexus*” test, as discussed by Justice Kennedy, we see it is imbued with ecosystem-based principles. The implications for federal water management are interesting, as at least one recent court decision following *Rapanos* has embraced these ecosystem-based principles. For example, *see, Northern California River Watch v. City of Healdsburg*, 457 F.3d 1023 (9th Cir. 2006) (citing *Rapanos* in upholding Army Corps of Engineers jurisdiction based, in part, on ecological connections between an abandoned pit and the Russian River).

The main issue, for federal jurisdiction purposes, has been what specifically constitutes *waters of the United States*. As touched upon by Justice Kennedy in his *Rapanos* concurrence, uncertainty over ecosystem-based principles has left the United States Environmental Protection Agency (EPA) and the Army Corps of Engineers developing administrative rules that do not show a significant connection between regulated water bodies. The result has been a strain on the limits of federal jurisdiction over terrestrial bodies of water. *Rapanos*, at 2248.

There is another interesting component to the *Rapanos* decision. The implications of *Rapanos* suggest the

EPA/Corps will now have judicial discretion to determine “federal jurisdiction” over water bodies based on an ecosystem assessment. This has a further implication as applied to federal control of *coastal resources*.

Recent reports have suggested the federal government change its policy towards coastal management to incorporate greater principles of ecosystem-based management. Two questions arise in response to this suggested policy change. First, does the federal government have the power to regulate coastal/terrestrial water connection on “ecosystem-based” principles? Second, what deference will the judiciary give to such an attempt of regulation by the federal government? *Rapanos* seems to offer at least some evidence as to the judicial acceptance of extending federal jurisdiction to such a hydrologic spatial scale, which will undoubtedly lead to interconnected management of terrestrial and coastal water resources.

The purpose of this short article is to describe certain aspects of the *Rapanos* decision, focusing on the Kennedy concurrence, and then suggesting its connection to the ongoing policy debate regarding coastal resource management, and how it may offer a sign of the judicial will to accept an expanding federal role over centralized water management, regardless of spatial location.

***Rapanos* and the Kennedy Concurrence**

A Short History Prior to Rapanos

Prior to the *Rapanos* ruling, the status of “connections” between water bodies had been in flux. A series of cases, beginning with *United States v. Riverside Bayview Homes Inc.*, 474 U.S. 121, 106 S. Ct. 455 (1985); and ending with *Solid Waste Agency of Northern Cook County v. United States*, 531 U.S. 159, 121 S. Ct. 675 (2001) (hereinafter “*SWANNC*”) brought the issue of “federal jurisdiction,” and what constitutes waters of the United States, to a proverbial head.

In summary, these cases helped to establish a limit on federal authority over “isolated” water bodies.

Although, the cases did little to clearly identify what “isolated” bodies constituted United States waters and were, therefore, subject to federal jurisdiction. The term “isolated” under *Riverside Bayview* and *SWANNC* seems to focus on a physical connection, and is, therefore, based on spatial relevance, rather than any other connections found to be ecologically significant. Under the *Rapanos* decision, the criteria for determining whether a water body is “isolated” seems to now focus more on ecological criteria, rather than solely a physical or spatial relationship.

The Kennedy Concurrence

As Justice Kennedy notes in *Rapanos*, the nexus required must be assessed in terms of the act’s goals and purposes. He notes Congress enacted the CWA to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters,” *Rapanos*, at 2248; quoting 33 U.S.C. § 1251(a), and it pursued that objective by restricting dumping and filling in “waters of the United States...” *Id.*; quoting 33 U.S.C. §§ 1131(a), 1362(12).

Justice Kennedy indicates the rationale behind the CWA’s wetlands regulation (bodies generally not navigable, nor subject to the ebb and flow of tides), is that these wetlands “can perform critical functions related to the integrity of other waters—such as pollutant trapping, flood control, and runoff storage.” *Id.*; citing 33 C.F.R. § 320.4(b)(2). Accordingly, Kennedy states, “. . . wetlands possess the requisite nexus, and thus come within the statutory phrase “navigable waters,” if the wetlands, *alone or in combination with similarly situated lands in the region*, significantly affect the chemical, physical, and biological integrity of other covered waters understood as navigable in the traditional sense.” *Id.* (emphasis added).

Although not stated explicitly, it is obvious Justice Kennedy is referring to an ecological connection between the wetland, and larger water systems. If such a connection can be made, it is quite logical to assume the wetland is significantly connected to the larger, *navigable* water body, and, therefore, subject to federal regulation. If such ecosystem connections can be made to terrestrial water systems, it is certainly

arguable those same legal arguments can impact federal control of coastal water systems. This is especially the case where the federal government has historically maintained an important role in coastal waters, directly related to the regulation of commerce.

Rapanos’s Connection to Policy Suggestions in Coastal Management

Current Policy of Coastal Management

The current state of coastal policy in the United States is defined by the Coastal Zone Management Act, 16 U.S.C.A. § 1451 (CZMA). The purpose of the act is to integrate coastal management through a program of federal incentives given to states. Each state is given a financial “carrot” to develop a state plan in accordance with federal guidelines. The “carrot” comes in the form of funding to the states to help implement the plan. A second “carrot” seen by some is the federal consistency requirement. § 1456(c)(1)(A). This ensures states a direct say in actions that have an impact on state coastal resources. In essence, a state is given a “trump card” in situations where it feels federal, or other coastal state activities, are having a negative impact of the coastal state plan. In all, the CZMA creates a federally guided plan of state regulation of coastal resources, where coastal states are significant participants in the development, and implementation, of coastal policy.

Proposals for Change

In 2003 and 2004 respectively, two independent reports on the state of U.S. ocean resources was released for publication (*see*, Pew Oceans Commission. *America’s Living Oceans: Charting a Course for Sea Change* (2003); U.S. Commission on Ocean Policy. *An Ocean Blueprint for the 21st Century* (2004)). In addition to many general recommendations, these reports concluded the United States must take a more active role in ocean resource management. More importantly, both reports called for new policies emphasizing ecosystem-based management principles. More recently, in 2006, a unified report from these two entities was submitted reinforcing ecosystem management (*see*, Joint Ocean Commission Initiative (JOICI), *From Sea to Shining*

Seas: Priorities for Ocean Policy Reform 8-10 (2006)). Assuming the political will to adopt such principles, a question of constitutional limitation arises. Specifically, whether the federal government could effectively control all important water resources, as defined by ecosystem principles, under the restraints of the commerce clause. In looking to the judiciary for guidance, *Rapanos* offers a glimpse into how far federal jurisdiction could be extended under ecosystem-based principles. While not fully answering the question, we can see the Court's willingness to accept ecosystem-like standards as the basis for federal jurisdiction creating a promising avenue for further, holistic control over important water resources.

Implications of the Rapanos Decision

The implications of this analysis are substantial as it relates to the proposed ecosystem management of coastal areas. Most importantly, the *Rapanos* decision evidences a judicial willingness to find that there is a Congressional aim toward extending federal jurisdiction over heretofore "physically isolated" water bodies that might otherwise have considerable ecological connections to larger bodies of water. This kind of judicial acceptance of ecological connections is precisely what is needed to properly regulate coastal zones, as recommended by the JOCI group. Without taking proper account of the entire geologic/hydrologic cycle, there is little hope to properly understand, and, therefore, manage coastal resources. At some level, this will have to include a degree of centralized control over coastal resources, up to and including terrestrial areas that have a major impact on coastal resources. Without such an integrative management scheme, it seems doubtful that any meaningful progress can be made in U.S. water quality: terrestrial, coastal, or otherwise.

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NORTHERN EVERGLADES AND ESTUARY PROTECTION ACT

John J. Fumero, Esquire

The 2007 Florida Legislative Session witnessed passage of the Northern Everglades and Estuary Protection Act (NEEPA) as an amendment to, and expansion of, the Lake Okeechobee Protection Act of 2000 (LOPA). The "Northern Everglades" is defined by this legislation to include the Lake Okeechobee, the Caloosahatchee River, and the St. Lucie River Watersheds. Following this definition, the legislation is comprised of three distinct, yet related, components—one relates to Lake Okeechobee while the other two components relate to the Caloosahatchee and St. Lucie Rivers/Estuaries. While this legislation builds upon the LOPA passed in 2000, one of the most noteworthy aspects is inclusion of the St. Lucie and Caloosahatchee Watersheds.

Key Intent and Findings

An overall thread throughout the extensive legislative findings and intent found in NEEPA is the recognition that water quality and quantity problems exist within the Lake Okeechobee, Caloosahatchee, and St. Lucie Watersheds. Expedient development and implementation of watershed protection plans to improve the quality, quantity, timing, and distribution of surface waters within these watersheds is deemed by the Legislature to be priorities. Achievement of total maximum daily load requirements and state water quality standards are the overreaching goals of the watershed-based protection plans.

Lake Okeechobee Protection Program

Most of the provisions relating to Lake Okeechobee and LOPA remain intact with the inclusion of "phase 2" provisions. By Feb. 1, 2008, the South Florida Water Management District (SFWMD) is required to develop a "detailed technical plan" that addresses the quality and quantity of discharges into, and from, Lake Okeechobee. Measures such as voluntary water storage and quality improvements on private lands, as well as Best Management Practices (BMP)-based