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THE "BACKGROUND PRINCIPLES" OF NATURAL CAPITAL AND ECOSYSTEM SERVICES—DID LUCAS OPEN PANDORA'S BOX?

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I. INTRODUCTION

*"When . . . a regulation . . . goes beyond what the relevant background principles would dictate, compensation must be paid to sustain it"*¹

What are the "relevant background principles" of natural capital and ecosystem services?² Although there is much yet to be learned about the ecology, geography, and economy of natural capi-

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1. Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1030 (1992).
 2. I am assuming readers have a working background understanding of the concepts of natural capital and ecosystem services. Briefly, ecosystem service, also known as environmental services, are non-commodity, economically valuable benefits humans derive from ecological resources directly, such as storm surge mitigation provided by coastal dunes and marshes, and indirectly, such as nutrient cycling that supports crop production. Natural capital consists of the ecological resources that produce these service values, such as forests, riparian habitat, and wetlands. Other articles in this symposium issue provide examples of natural capital and ecosystem services in specific ecological contexts. The primary aim of my contribution is to examine how the common law treats natural capital and ecosystem services in general. Portions of this work also appear in a more extensive examination of the status and future of natural capital and ecosystem services in law, J.B. RUHL, STEVEN KRAFT & CHRISTOPHER LANT, THE LAW AND POLICY OF ECOSYSTEM SERVICES (2007).