都市山地景观的
多中心治理与韧性构建：
美国圣莫妮卡山案例

POLYCENTRIC GOVERNANCE
AND RESILIENCE
ENHANCEMENT
FOR MOUNTAIN LANDSCAPES
IN METROPOLITAN AREAS:
THE CASE OF THE SANTA
MONICA MOUNTAINS, THE USA

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摘要

随着全球城市化进程的加快，越来越多的山地景观被纳入都市圈的水源地、居住用地或娱乐空间。都市山地景观往往具有极为多元的治理主体，其可持续发展很大程度上取决于是否能建立有效的机制协调集体行为。本文以美国加利福尼亚州圣莫妮卡山为研究案例，通过分析相关口述历史、法规条例、研究报告、规划方案和地理信息数据，系统性地探究了其合作规划与管理的演变过程。研究发现，圣莫妮卡山多中心治理模式是在自然资源不断破坏和户外娱乐需求与日俱增等城市化背景下出现的，其中加州政府主要采取制定海岸区保护导则、建立保护协会等策略，联邦政府则通过设立国家游憩区与地方政府和社区合作。这些策略帮助相关治理主体有效地应对了房地产开发热潮、政治气候变化、财政拨款减少、土地价格上涨、环保理念转变等变化。这一模式还被推广到圣莫妮卡山周边其他山区，以构建区域尺度的韧性景观。作者指出，圣莫妮卡山案例揭示了多中心治理与韧性景观之间的紧密关系，其经验对当代中国有重要启示意义。

关键词

都市山地景观；多中心治理；合作规划与管理；韧性

ABSTRACT

Globally, accelerated urbanization has wrapped more and more mountain landscapes into metropolitan areas as water sources or residential and recreational spaces. Such mountain landscapes are usually governed by multiple agencies, which means that its sustainable development largely depends on the effectiveness of the collective actions among these agencies. This paper examines the case of the Santa Monica Mountains in California, the United States by analyzing relevant oral histories, acts and ordinances, study reports, planning documents, and GIS data to depict the whole picture of the evolution of its cooperative planning and management. It is found that the polycentric governance in the Santa Monica Mountains emerged as a response to the deterioration of natural resource and the increasing outdoor recreation needs against the backdrop of urbanization. The California State government developed coastal zone protection guidelines and established conservancies, while the federal government cooperated with local governments and communities by forming a national recreation area. These methods helped the governing agencies tactically cope with the real estate development, changing political climate, shrinking financial allocation, rising land prices, and conceptual shifts in environmental protection. This polycentric governance mode was also applied to other mountain areas in the vicinity to form a regional-scale resilient landscape. The authors argue that the case of the Santa Monica Mountains reveals how the polycentric governance works on strengthening landscape resilience, which shows an important reference for contemporary China.

KEY WORDS

Mountain Landscape in Metropolitan Area; Polycentric Governance; Cooperative Planning and Management; Resilience

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1 引言

城市化带来的人口聚集及相关的生产、消费活动已对城市周边山地资源和环境造成了持续而深远的影响^[1]。随着世界各大城市不断扩张,越来越多的山地——尤其是可达性较好的浅山地带——已成为都市区内的自然资源获取地、风景游憩地或建设用地^{[2]-[5]}。都市山地景观是由作用于城市与山地之间的各种要素共同塑造的,治理主体包括各级政府、公共及私营机构、民间组织及当地居民^[6]。虽然不同治理主体普遍将维护美学价值、公共安全,以及环境品质作为山地管理目标,但他们对于这些目标及相关策略的优先级却难以达成一致^[7];关于山地在城市形象构建中的意义,不同治理主体的认识也各有不同^{[8][9]}。由此,有学者呼吁重构城市与山地的关系,用一种基于平等交换和互惠合作关系的概念框架取代“中心/边缘”或“自然/文化”等传统二元概念,并通过新的治理模式加以实现^[10]。

重构这一关系的关键在于协调集体行为,增强都市山地景观的韧性——即其中的物质基础设施或人类组织面对冲击、干扰或压力时的自我恢复能力^[11]。目前学界普遍认为,较之单一化集权体制,多中心治理更能促进各主体间知识、行动的相互融合,以及社会和生态层面的和谐统一,并建立信任和共识,使治理主体做出恰当的适应性调整^[12]。在由多个相对独立的治理主体构成的组织结构中,各主体往往有更高的能动性,且能够在面对挑战时找到更多确保生态系统服务持续发挥效益的方法^[13]。近年来,基于多中心治理的韧性景观概念已被应用于诸多研究领域。例如,在自然资源保护研究中,卡瑞娜·韦伯恩^[14]及凯斯·卡莱尔等^{[15][16]}呼吁建立包括政府、个人和民间团体在内的多中心网络,激发自组织能力,协调集体行为;在城市绿地管理研究中,马修·丹尼斯等^[17]发现核心利益相关者的创新能力是构建社会-生态系统韧性的关键,而多中心治理则有助于激发多元化创新;在城市水利系统研究

1 Introduction

Globally, the population aggregation and human production and consumption boosted by urbanization have seen a lasting and far-reaching impact on the natural resources and environment of the mountain areas adjacent to the expanding cities^[1]. More and more mountain areas, especially the foothills with good accessibility, have become the places whose natural resource, scenic value, and development potential can be utilized for urban growth^{[2]-[5]}. In metropolitan areas, mountain landscape is reshaped by various interactions between the city and the mountain and governed by all levels of governments, public and private agencies, NGOs, and local residents^[6]. Although all the governing entities recognize the significance of maintaining the landscape aesthetics, public security, and environmental qualities of mountain areas, it is difficult for them to reconcile with each other to the priorities of development or conservation goals and strategies^[7], or share a common understanding of the role of mountains to the image of a city^{[8][9]}. Given this, scholars focus on the reconstruction of the relationship between urban areas and mountains, with an ideological shift from the traditional dualistic notions like “center vs. edge” or “nature vs. culture” toward a new conceptual framework upon equal exchange and mutually-beneficial cooperation, as well as the application of new governance modes^[10].

One of the keys to the reconstruction is to coordinate collective actions and strengthen the resilience of the mountain landscapes in metropolitan areas — here, resilience refers to the self-recovering ability of physical infrastructure or human organizations to impacts, interference, or stress^[11]. Today, academia agrees on that polycentric governance, compared with the centralized single-pole mode, can greatly help integrate knowledge and coordinate actions among various agencies, harmonize social and ecological systems, build mutual trust, reach consensus, and then help governing agencies make proper adjustments^[12]. In an organizational structure consisting of multiple independent governing agencies, each of them plays a more dynamic role and is more capable of ensuring and maintaining the effectiveness of ecosystem services in the face of challenges^[13]. In recent years, resilient landscapes built upon polycentric governance have been studied through different disciplinary lenses. For example, in terms of the research on natural resource conservation, Carina Wyborn^[14], as well as Keith Carlisle et al.^{[15][16]}, advocated for establishing a polycentric network that includes governmental institutions, individuals, and NGOs, in order to stimulate their self-organization ability and coordinate the collective actions. In respect of urban green space management, Matthew Dennis et al.^[17]

中，萨拉·沃德等^[18]发现，基础设施研发者与其他组织之间的互动有助于扩大技术创新成果对政府决策者和终端使用者的影响力；但针对都市山地景观的多中心治理与韧性景观关系的探讨仍相对缺乏。

对于都市山地景观这类社会 - 生态系统而言，多方参与和多目标决策能否有助于区域尺度的物质空间和社会关系更好地适应充满不确定性的当代城市发展？本研究以美国加利福尼亚州圣莫妮卡山为例，探讨都市山地景观韧性构建的特殊性。圣莫妮卡山紧邻大洛杉矶都市区，自20世纪中叶以来，各级政府及民间组织在这个世界第三大都市区内共同开创了一种多中心治理模式，主体数量之多及合作尺度之大在世界范围内均属罕见^[19]。面对政治气候变化、财政拨款减少、土地价格上涨等冲击，这些治理主体相互协作，持续稳步地推进自然资源与开放空间保护，在不确定的城市发展挑战面前表现出极强的适应性。本文通过辨析圣莫妮卡山多中心治理模式的形成和演变过程，探究多中心治理对韧性构建的促进作用，以期为类似的都市山地景观治理提供参考。

2 研究区域与研究方法

2.1 研究区域

圣莫妮卡山隶属于南加州横向山脉群，南临太平洋，北至101号国道，东麓伸入洛杉矶市中心，西至穆古角州立公园，总面积约910km²（图1）。在行政区划上，圣莫妮卡山横跨洛杉矶郡与文图拉郡，其中大部分中高海拔区域是郡直辖区，一些浅山区是洛杉矶、比佛利山、马里布、阿古拉山、卡拉巴斯、千橡、卡马里奥、西湖村等市的市政府辖区。

2.2 资料获取及分析

本研究采用定性研究中的文本分析法，通过整理和归纳以下4类资料来厘清圣莫妮卡山相关治理主体的互动关系：1）圣莫妮卡山治理参与者的口述历史^[20]；2）政府颁布的法规条例、规划方案和研究报告；3）当地报刊文章；4）前人著述。其中，口述历史提供了贯穿整个系统发展过程的脉络，将核心人物和事件连在一起。为减少研究者偏见的影响，笔者对口述历史和其他文本进行三角矫正，通过比较不同来源的资料来确定各种现象或结果的成因^[21]。为直观理解圣莫妮卡山多中心治理机制的空间分布特征，本研究还利用相关政府机构和组织网站的GIS数据进行了可视化分析。

found that the innovation capability of core stakeholders defines the resilience of the social-ecological system of a society, while polycentric governance encourages diversified innovation. Among the studies of urban water systems, Sarah Ward et al.^[18] found that the interaction between infrastructure research institutes and other organizations helps magnify the influence of technological innovations on government decision-makers and terminate users. However, there is still less discussion on the relationship between polycentric governance and the resilience of mountain landscapes in metropolitan areas.

For social-ecological systems including mountain landscapes in metropolitan areas, can multi-participation and multi-objective decision-making contribute to regional physical environment and social relationships better adapting to the quasi uncertain future of contemporary urban development? This paper studies the Santa Monica Mountains in California, the United States to explore the characteristics of the resilience building of mountain landscapes in metropolitan areas. The Santa Monica Mountains neighbors on the Los Angeles metropolis. Since the mid-20th century, authorities and NGOs have jointly established a polycentric governance mode for this world’s third largest metropolitan area, which is a rare case around the globe for both the huge number of governing agencies and the extreme wide-reaching collaborative network^[19]. Challenged by issues like political climate changes, shrinking financial allocation, and rising land price, these governing agencies have collaborated to continuously and steadily promote the natural conservation and the protection of open spaces. This mode has shown a great adaptability faced with the uncertainty of urban development. By examining the formation and evolution of the polycentric governance model of the Santa Monica Mountains, this paper explores the role of polycentric governance in resilience building and attempts to provide a reference for similar cases.

2 Study Area and Research Method

2.1 Study Area

The Santa Monica Mountains is part of the Transverse Ranges in Southern California, with the Pacific Ocean to the south, National Highway 101 to the north, inserting its eastern foot to the city center of Los Angeles and reaching the Point Mugu State Park in the west, covering a total area of around 910 km² (Fig. 1). It stretches across Los Angeles County and Ventura County, with most middle-high elevation area designated as unincorporated areas while some foothills — including Los Angeles, Beverly Hills, Malibu, Agoura Hills, Carabas, Thousand Oaks, Camarillo, and Westlake Village — designated as incorporated areas administrated by city governments.

1. 圣莫妮卡山及其周边状况（数据来源：OpenStreepMap）
1. The Santa Monica Mountains and the vicinity [source: OpenStreepMap]

3 研究发现

研究运用文本分析法对14个主要立法、规划和治理事件进行了整理，涉及3类市民组织形式、6级政府及其相互之间组成的4个联合权力体（图2）。下文将首先梳理当地市民、加州政府和联邦政府如何推动圣莫妮卡山区域内的景观保护和利用工作，而后分析这些治理主体在圣莫妮卡山以外区域的拓展活动。

3.1 草根环保运动与州立公园

早期的圣莫妮卡山以农牧业景观为主，最先是印第安人建造的村落、坟场和岩画场，1830年后出现西班牙移民者的牧场，1862年后，来自美国东部的移民开始在此经营农场^[22]。自20世纪初以来，圣莫妮卡山逐渐开始建设矿场、高速公路、核电站、水库、垃圾填埋场、别墅等城市开发项目，削峰填谷屡见不鲜^[23]。据加州政府统计，截至1960年，位于洛杉矶市境内的圣莫妮卡山已经基本被城市化，在随后的10年间，洛杉矶郡和文图拉郡管辖范围内的圣莫妮卡山也出现了若干斑

2.2 Data Acquisition and Analysis

This study used content analysis method in qualitative research to review the interaction between the governing agencies of the Santa Monica Mountains by sorting and summarizing four types of data: 1) the oral history materials by those who had participated in the governance process^[20]; 2) official regulations, planning schemes, and research reports; 3) local newspaper articles; and 4) existing literature. Among them, the records of oral history form the venation of the whole development process of the study area, interweaving key figures and episodes. In order to avoid researchers' bias, the authors employed triangulation on the oral segments and compared the data from different sources to trace the story lines of various phenomena and outcomes^[21]. Visualization of the GIS data sourced from official websites of related government offices and organizations was used to describe the spatial distribution characteristics of the polycentric governance mechanism of the study area.

3 Research Findings

The content analysis goes through the review of 14 major legislative, planning, and governance episodes, which involve three types of citizen organizations, six levels of government hierarchy, and four joint powers (Fig. 2). The following will first sort out the landscape protection and utilization efforts focusing only on the Santa Monica Mountains by local citizens, the California government, and the federal government, and then analyze their out-reaching activities outside the Santa Monica Mountains.

3.1 Grassroots Environmental Movement and State Parks

In early recorded years, the Santa Monica Mountains was dominated by husbandry landscapes. The first human footprints included Indian-built villages, cemeteries, and rock paintings. After 1830, the ranches of Spanish immigrants appeared. After 1862, immigrants from the eastern United States began to operate farms in this area^[22]. Since the beginning of the 20th century, the Santa Monica Mountains has been gradually occupied as urban development sites such as mining fields, highways, nuclear power plants, reservoirs, landfills, and villas. More and more peaks were cut and valleys were filled^[23]. According to the statistics from the California government, as of 1960, the part of the Santa Monica Mountains extended in the urban area of Los Angeles had been entirely urbanized. In the following decade, urbanized patches appeared in the mountainous area within Los Angeles County and Ventura

块状的城市化区域^[24]。据圣莫妮卡山保护协会（SMMC）首任会长约瑟夫·T·埃德米斯顿回忆，出现该现象很大程度上是由于地方政府的不作为，集中体现在土地懒政上，例如洛杉矶郡出于税收考虑，允许每户坡地住宅占地高达1hm²，导致山地景观急剧碎片化^[20]。地方政府虽然曾于1920年聘请小弗雷德里克·劳·奥姆斯特德规划洛杉矶地区公园系统，但最终又因担心激起民权运动而搁置，因此并未在实质上推进开放空间保护^[25]。截至20世纪中叶，圣莫妮卡山上的公共开放空间仅有格里菲斯公园、威尔罗杰斯州立历史公园和利奥卡里略州立公园，且土地多为私人捐赠。

County^[24]。According to Joseph T. Edmiston, the first chair of the Santa Monica Mountains Conservancy (SMMC), the urbanization was largely due to the inaction of local governments, which was also evidenced by the sluggish land policies at that time. For example, for a higher tax revenue, the Los Angeles County allowed an area of up to one hectare for each household on slopes, resulting in a rapid and severe fragmentation of the mountain landscape^[20]. Although the local governments once commissioned Frederick Law Olmsted Jr. to plan the Los Angeles regional park system in 1920, which was soon dropped to avoid arousing civil right movements, they had played a negative role in the protection of open space^[25]. As of the middle of the 20th century, the only public open spaces on the Santa Monica Mountains were Griffith Park, Will Rogers State Historic Park, and Leo Carrillo State Park, with most of the park lands donated by private owners.

2. 圣莫妮卡山的联合立法、规划与管理活动。
2. Cooperative legislation, planning, and management efforts in the Santa Monica Mountains.

首先开始抵制山地开发的是当地市民，包括担心其房地产贬值的私人业主和渴望户外休闲机会的广大市民^{[26][27]}。20世纪20年代，一位名为西尔维娅·莫里森的业主劝说政府，成功制止了开发商开采圣莫妮卡山东南麓石灰岩的行为。1963年，开发商又试图打造一个占地4 500hm²、可容纳6万人的居住、办公、教育综合体，但因当地业主自发组成的托潘加风景社区协会的抵制而作罢。同一时期，圣莫妮卡山公园与海滩之友和塞拉俱乐部圣莫妮卡山工作组成立，劝说议会叫停各种山地开发项目，并呼吁建设公园。

在这些团体的持续推动下，加州政府于1964年颁布了《州立公园债券法》，以为征地提供专项资金支持，并陆续建成了穆古角（1967年）、托潘加（1974年）、马里布溪（1976年）三个大型州立公园。在外部的资本和政治压力下，这种自下而上的自组织运动试图为圣莫妮卡山的景观赋予一种新的韧性。但是，这些州立公园相互分散，未能与圣莫妮卡山上的其他自然和文化资源形成一个相互联系的体系。加州公园管理局（CSP）的管理权限仅限于公园范围内，未能与其他治理主体之间建立协调机制，也无法约束公园外围地区的土地利用活动。

3.2 加州政府主导的合作规划与治理

3.2.1 基于土地利用规划的海岸区保护

在联邦政府的政策和资金支持下，加州政府于1972年颁布了《加利福尼亚州海岸区保护法》，将圣莫妮卡山南部划作海岸区，要求协调各级政府的资源保护、交通建设及娱乐开发政策。该法案批准成立加州海岸委员会（CCC），负责区内的开发项目审批，下设6个分会，其中圣莫妮卡山分会成员包括加州政府、文图拉郡政府、洛杉矶郡政府、洛杉矶市政府、南加州政府联合会代表各一人及8位当地居民代

The development in the mountainous areas was first resisted by local citizens, including private owners who worried about the depreciation of their real estates, and the public who were eager for outdoor leisure opportunities^{[26][27]}. In the 1920s, an owner named Sylvia Morrison successfully lobbied the government to stop developers mining limestone in the southeastern part of the Santa Monica Mountains. In 1963, a development ambition to build a complex, covering an area of 4,500 hm², that would integrate residential, office, and educational uses and accommodate 60,000 people was halted due to the fight of the Topanga Association for a Scenic Community, a spontaneous organization formed by local owners. During the same period, Friends of the Santa Monica Mountains Park and Seashore and Sierra Club's Santa Monica Mountains Task Force were established, who lobbied the parliament to call off all kinds of development projects in the mountainous areas and appealed for the introduction of more parks.

The continuous efforts of these groups made the California government enacted the State Park Bond Act in 1964 to provide financial funds for land acquisition, promoting the construction of three large state parks, namely Point Mugu (1967), Topanga (1974), and Malibu Creek (1976). This bottom-up spontaneous movement helped strengthen the landscape resilience of the Santa Monica Mountains to cope with and adapt to external capital and political pressure. However, these parks were scattered and failed to form a contacted system with other natural and cultural resources of the Santa Monica Mountains. The California State Parks (CSP) could only manage the park areas, resulting in a failure of establishing a coordination mechanism with other governing agencies and a jurisdiction limit to the land developments in the surroundings.

3.2 Collaborative Planning and Governance Led by the California State Government

3.2.1 Coastal Protection Based on Land Use Planning

With the federal government's policy and financial supports, the California government enacted the California Coastal Zone Conservation Act in 1972 that designated the southern part of the Santa Monica Mountains as a coastal area, requiring all levels of governments to coordinate with each other in policies of resource protection, transportation construction, and entertainment development. The act also approved the establishment of the California Coastal Commission (CCC), which had the authority for the approval of development projects in the region and constituted six branch offices. The Santa Monica Mountains Branch consisted of the California State government, the Ventura County government, the Los Angeles County government, the Los

表。1976年出台的《加利福尼亚州海岸法》将具体项目的审批权下放至郡市政府，CCC仅负责审批区域尺度的当地海岸计划。为给地方海岸计划提供示范，州政府联合相关郡市一同编制了《圣莫妮卡山综合规划》，该规划内容后被融入各郡市的当地海岸计划中，以协调圣莫妮卡山南部地区的土地利用管控政策。文图拉郡当地海岸计划始于1980年，由《文图拉郡海岸区规划》和《文图拉郡海岸分区条例》组成；一年后，洛杉矶郡当地海岸计划启动，包括《圣莫妮卡山土地利用规划》以及含《圣莫妮卡山当地实施计划》在内的一系列实施方案。两郡均将当地海岸计划作为其总体规划的组成部分，规定当计划与其他专项规划内容冲突时享有优先效力，确保海岸区土地利用模式以开放空间和低密度居住区为主（图3）。自20世纪90年代以来，上述土地利用规划导则也被用于管控海岸区以外的圣莫妮卡山开发活动，如2000年洛杉矶郡出台了《圣莫妮卡山北区规划》，明确要求圣莫妮卡山北区采取与海岸区一致的政策法规。

3.2.2 保护协会与联合权力机构

1980年，加州政府成立了SMMC，负责在圣莫妮卡山及其周边山地上征收土地，并移交给合适的公园管理部门。协会董事会包括：1）8名投票成员，包括美国国家公园管理局（NPS）、洛杉矶市政府、洛杉矶郡政府、文图拉郡政府、加州自然资源局（CNRA）代表各一人及三位当地居民代表；2）两名顾问成员，分别来自CCC和州立海岸保护协会；3）一个顾问委员会。SMMC的具体决策不受CNRA干预或限制，并可与其他职能部门签署协议合作征收公园与游憩用地，以及为各级政府和非营利组织提供环保基金和无息贷款等资金支持。

Angeles City government, and the Southern California Government Federation, each represented by one person, plus 8 local community members. The California Coast Act, issued in 1976, devolved the approval authority of local-scale projects to the county and city governments, while the CCC remained the authority to regional-scale coastal planning cases. To build a demonstration for the local planning practice, the state government, jointly with county and city authorities, formulated the Santa Monica Mountains Comprehensive Plan which was later integrated into other county- or city-scale coastal plans to coordinate the land use control policy in the southern part of Santa Monica Mountains. In particular, Ventura County Local Coastal Program was launched in 1980 and consisted of the Ventura County Coastal Area Plan and the Ventura County Coastal Zoning Ordinance; the Los Angeles County Local Coastal Program began in 1981, constituting the Santa Monica Mountains Land Use Plan and a series of implemental actions such like the Santa Monica Mountains Local Implementation Program. Both counties used the local coastal programs as part of their master plans, which enjoyed a priority when conflicting with other plans, so as to ensure that the coastal land can mostly accommodate open spaces and low-density residential areas (Fig. 3). Since the 1990s, the above land use planning guidelines have also been used to control the development of the non-coastal areas in the Santa Monica Mountains. For example, the Los Angeles County’s Santa Monica Mountains North Area Plan, enacted in 2000, explicitly adopted the same policies and regulations as the coastal areas.

3.2.2 Conservancies and Joint Authorities

In 1980, the California State government established the SMMC for the land acquisition around the Santa Monica Mountains and its surroundings. The land acquired would be further managed

3. 洛杉矶郡和文图拉郡海岸区内的土地利用模式（信息来源：加州政府、洛杉矶郡政府和文图拉郡政府）

3. Land use pattern in the coastal area of Los Angeles County and Ventura County (sources: California State government, Los Angeles County government, and Ventura County government)

4. SMMC和MRCA所持有或管理的土地（信息来源：加州自然资源局）
4. Lands owned or managed by SMMC and MRCA (source: California Natural Resources Agency)

据SMMC的洛杉矶市政府代表安顿·卡利亚回忆，该协会成立的初衷是帮助NPS和CSP尽快征地以防地价上涨，但后者往往因经费不足而无力接管，迫使SMMC转而与当地社区合作成立联合机构^[20]。例如，山地亚憩与保护局（MRCA）由SMMC、康乔游憩与公园区、兰乔西米游憩与公园区三方于1985年合作成立，负责管理圣莫妮卡山及其周边地区的已征土地。据2004年修订的《山地亚憩与保护机构联合执法协议》，该机构是一个独立法人实体，董事会对机构事务享有完全决策权，由三方代表及一个共同指定的中立代表组成。机构年度经费预算由三方共同审批和拨付，用于设立发展基金、雇佣管理人员、制定教育及培训计划等。这种模式激发了当地其他社区的兴趣，纷纷与SMMC联合成立了更多类似机构（图4）。

3.3 圣莫妮卡山国家游憩区

3.3.1 介入模式之争

20世纪70年代，美国联邦政府也开始关注圣莫妮卡山的环境危机，但就如何介入当地保护工作一度存在分歧。据前文图拉郡众议员罗伯特·J·拉戈马西诺和圣莫妮卡山国家游憩区（SMMNRA）首任主管罗伯特·钱德勒回忆，当时有议员提议将圣莫妮卡山与海峡岛合并设立一个国家公园，但不少人反对建立这种当地政府无权治理的飞地，并成功阻止该提案举行听证^[20]。同时，由于圣莫妮卡山的大量土地皆为私有，建设国家公园成本过于高昂，于是美国户外游憩局建议联邦政府采取“绿线公园”模式，即以现有的4个州立公园为核心划定管

by related park departments. The eight voting members in the SMMC board included five official representatives from the National Park Service (NPS), the Los Angeles City, the Los Angeles County, the Ventura County, and the California Natural Resources Agency (CNRA), respectively, and three local community members. The board also consists of two advisory members (from CCC and the State Coastal Protection Association) and an advisory committee. SMMC was independent from CNRA and had contracted and collaborated with other authorities in land acquisition for parks and recreational sites, while providing environmental funds or interest-free loans to governments and NPOs.

According to Anton Calleia, the representative of Los Angeles City in SMMC, the council was conceived to help NPS and CSP acquire land as fast as possible, considering that the land price kept rising. However, the both park authorities often faced a fund shortage and could not manage the lands well. SMMC had to cooperate with local communities and jointly established implementing agencies^[20]. For example, the Mountains Recreation and Conservation Authority (MRCA) was established in 1985 by SMMC, Conejo Recreation and Park District, and Rancho Simi Recreation and Park District, to manage the acquired land of the Santa Monica Mountains and its surrounding areas. According to the Mountains Recreation and Conservation Authority Joint Exercise of Powers Agreement, revised in 2004, the MRCA is an independent legal entity. The board has the full decision-making power and includes representatives of the three parties, and another neutral party designated by the three. MRCA's annual budget for the establishment of development funds, the employment costs, and educational or training plans is approved and disbursed by the three parties. This model sets up an example for its reaching, inspiring many other local communities to form similar agencies (Fig. 4).

3.3 Santa Monica Mountains National Recreation Area

3.3.1 Intervention Mode Dispute

In the 1970s, the US federal government also began to address the environmental crisis in the Santa Monica Mountains, but there was not a common ground about how to intervene the local protection efforts. According to Robert J. Lagomarsino, a former representative of Ventura County and Robert Chandler, the first chair of the Santa Monica Mountains National Recreation Area (SMMNRA), congressmen once proposed to merge the Santa Monica Mountains with the Channel Island to form a new national park. This proposal was opposed for the worries that the park would become an enclave

控边界，通过一系列土地保护策略对边界内的非州立公园用地进行管控，允许私人业主、非营利组织及企业以环境友好型方式继续利用土地。国会未能支持这项提案，因为对于联邦政府而言，虽然这种模式的财政成本远低于传统国家公园，但政府无法获得土地所有权，难以确保原土地所有者的行为符合公园管理目标^[20]。

联邦政府最终采取了一个折中方案。1978年，吉米·卡特总统签署了《国家公园及游憩法》，拟拨款10.2亿美元支持百余个公园改建、扩建和新建项目，其中1.25亿美元用于设立SMMNRA（约600km²），项目由NPS牵头。该法案禁止NPS强行征收已有的独栋单户住宅或农用地产，只能购买自愿出售的私人土地，或从其他职能部门处获捐公共土地。法案要求确保州政府及地方政府的治理权，并提出4种具体措施：1）联邦政府为加州政府提供3 000万美元基金；2）美国内政部可与州政府、地方政府就营救、防火和执法等事项签署合作协议；3）州政府为内政部提供关于土地征收等方面的规划建议，确保州政府和地方政府拥有必要的实施权力；4）加州州长、洛杉矶市长、洛杉矶郡政府和文图拉郡政府各指派一名代表，内政部长指派5名代表，共同组成顾问委员会。

3.3.2 边界划定过程

《国家公园及游憩法》中规定的SMMNRA边界，是通过叠加加州政府和圣莫妮卡山公园与海滩之友各自绘制的地图，根据两者意欲征收的地块整合而成的外轮廓线^[20]。埃德米斯顿指出，NPS早期主要基于风景视觉美感来判断征地对象，后来意识到生态问题的严峻性，特别是需要防止由于一些位于食物链顶端的野生动物无法自由迁徙而导致其捕食对象在局部区域过度繁衍的现象^[20]。为保护圣莫妮卡山与西米山之间山猫、獾和美洲狮等野生动物的迁徙廊道，2001年出台的《SMMNRA边界调整法》将原游憩区向北拓展了15km²，其中约75%的

out of the governance by local government. The proposal's hearing was then canceled^[20]. Meanwhile, a large territory of the Santa Monica Mountains were private-owned land, which made building a traditional national park a financially impracticable mission. The Bureau of Outdoor Recreation conceptualized a Greenline Park mode for the federal government: the park's core was four existing state parks and the remaining area was to be protected by a wide array of land protection techniques, allowing private owners, NPOs, and corporations to utilize the land in an environmental-friendly way. The Congress rejected the proposal because of the fact that the federal government would still have no ownership of the lands and hardly ensure land owners' actions or performance under this management mode, though it enjoyed a much lower cost than that of building a traditional park^[20].

At last, the federal government suggested a reconcilable plan. In 1978, President Jimmy Carter issued the National Parks and Recreation Act, according to which USD 1.02 billion would be granted to over 100 park reconstruction, expansion, and new construction projects. Particularly, the SMMNRA project, covering an area of 600 km², was granted with 125 million dollars and led by NPS. The act prohibited NPS from forcible land acquisition of single-family residential plots or agricultural properties; instead, legal purchases of private lands and acceptance of donated public lands from other agencies were allowed. The act also ensured the governance of state and local governments with four major measures: 1) the federal government was asked to grant the California State government with USD 30 million; 2) Ministry of the Interior could work with the state and local governments on rescue, fire prevention, and law enforcement through contracted collaborations; 3) The state government would provide planning suggestions to the Ministry of the Interior on land acquisition and other aspects and ensure that the state and local governments have the necessary implementing power; 4) An advisory committee shall be formed, consisting of representatives appointed by California Governor, Los Angeles Mayor, Los Angeles County government, and Ventura County government each, and five representatives appointed by Minister of the Interior.

3.3.2 Boundary Determination

The border of SMMNRA defined by the National Parks and Recreation Act was determined by overlapping the two maps drawn respectively by the California government and the Friends of the Santa Monica Mountains Park and Seashore, covering the lands the two intended to obtain^[20]. Edmiston pointed out that, in its early years, NPS identified the inventory

土地由SMMC捐赠，10%为在萨拉托加山地、萨拉托加牧场和自由谷业主协会的支持下由阿古拉和卡拉巴斯两市出让的建成居住区，15%为洛杉矶郡所有的开放空间。

3.3.3 征地标准及方法

据国会众议员安东尼·C·贝伦森回忆，NPS一开始希望在5年内获得1.25亿美元拨款，以尽快购买土地以防房价上涨，但除了在最初两年获得了3 500~4 000万美元，后续资金供给持续乏力，直至第18年才获得了全部拨款^[20]。这迫使NPS必须识别保护对象的优先级别，并采取最节约成本的介入策略。在1979年加州政府递交的《圣莫妮卡山综合规划》征地建议的基础上，NPS于1984年编制完成《SMMNRA土地保护规划》，并于1998年修编，最终确定公园用地占SMMNRA的三分之二，其余用地为私人所有。征地过程中用到的方法主要有两种：一是完全征收，即政府按照公平市价向私人业主购得土地完整产权；二是部分征收，即允许私人业主继续以符合要求的方式利用土地，政府仅通过获取保护地役权来保护风景特征或获取通行权。除此之外，还运用了合作协议、转移开发权、公私联合规划、资源保护银行等非征地方法。由于政府拨款有限、地产价格高昂及政治气候多变，征地过程中多采用获取保护地役权和非征地方法，仅对那些具有突出保护价值的土地进行完全征收。

3.3.4 管理目标及策略

在征地的同时，NPS也对SMMNRA的管理框架进行了优化。1982年制定的《SMMNRA总体管理规划》中明确要求NPS与其他部门和私人业主展开合作，协调冲突诉求，共同促进土地可持续利用、公众游憩和资源保护。该方案在20年后进行了修编，进一步明确了以NPS、CSP及

of land acquisition by visual landscape aesthetics; later they had to face more and more severe ecological challenges, especially the oversized population of preys in certain areas resulting from the loss of predator migration paths due to the development^[20]. To protect the migration corridors between the Santa Monica Mountains and the Simi Mountains for wild animals like bobcats, lynxes, and cougars, in 2001 the SMMNRA Boundary Adjustment Act extended the territory by 15 km² to its north, of which about 75% was donated by SMMC, 10% was built-up residential areas acquired from Agoura and Karabas with the help from the local property owners' association Saratoga Hills, Saratoga Ranch and Liberty Canyon Homeowners Associations, and the rest was the open space owned by the Los Angeles County.

3.3.3 Land Acquisition Standards and Methods

According to congressman Anthony C. Beilenson, since the land price kept rising, NPS expected to receive all the USD 125 million in the first five years. However, except for a fraction of fund (35 to 40 million) in the first two years, the funding spanned 18 years^[20]. This forced NPS to identify the priority in its protection inventory and employ the most cost-effective intervention strategies. Based on the land acquisition proposal of the Santa Monica Mountains Comprehensive Plan, drawn by the California State government in 1979, NPS completed the Land Protection Plan: SMMNRA in 1984 and revised it in 1998, which stipulated that park land accounted for two-thirds of the total area of SMMNRA, with the rest privately owned. Two methods were employed in the land acquisition: 1) complete expropriation, meaning the government obtained the complete property rights of land from private owners at a fair market price; 2) partial expropriation, under which mode private owners could continue to use land in a regulated manner, while the government protected the landscape quality or gains access by acquiring conservation easements. In addition, non-land-acquisition methods such as contracted cooperation, development right transfer, public-private joint planning, and resource protection banks were also used. Due to the limited funds, high land prices, and the changing political climate, conservation easement acquiring and non-land-acquisition were recommended in the practice. Complete expropriation only happened in the cases involving the lands of outstanding protection values.

3.3.4 Management Objectives and Strategies

Apart from land acquisition, NPS also attempted to improve SMMNRA's management framework. According to the General

5. SMMNRA的边界、土地权属、风景公路与游憩步道（信息来源：CNRA和NPS）
5. Boundary, land ownership, scenic drive, and recreational trails in SMMNRA (sources: CNRA and NPS)

SMMC三方为主导的合作管理模式。通过定期的跨部门会议，NPS就私人业主的土地开发许可证审批向相关政府部门提出建议，参与郡市政府的公共用地分区和发展规划的评审，并为地方政府提供公共设施建设基金及技术支持。

在各项管理内容中，享有最高优先级且尤其需要多方协调的是风景道建设（图5）。一类是以穆赫兰道为代表的风景公路，管理目标是限制交通量和车速，改善观景点、驳接步道、野餐地、解说性展览、厕所等服务设施，避免公路养护破坏自然地形，以及增加公共交通服务。NPS在其中主要发挥辅助作用，如帮助地方政府和私人业主对风景公路游憩和视觉品质进行判断和保护，或敦促地方政府出台土地分区条例和设计评审程序来降低公路沿线的开发密度。另一类是适用于徒步、骑车、骑马等活动的游憩步道，管理目标是以拜克伯恩步道等现有的东西向步道为主干，以诸多南北向步道为次干，使各种资源和活

Management Plan: SMMNRA, developed in 1982, NPS was required to work and coordinate with other departments and private owners to together promote the sustainability of land use, increase public recreational opportunities, and enhance resource conservation. The plan was revised 20 years later to further strengthen the cooperative management mode led by NPS, CSP, and SMMC. In particular, through regular cross-department meetings, NPS was asked to make recommendations to relevant authorities on the land development license approval to private owners, review land zoning and development plans of county- or city-owned public lands, and provide local governments with funds and technical roadmaps in the construction of public facilities.

The construction of landscape drives or trails has enjoyed the highest management priority and the most extensive coordination (Fig. 5). The management goals of landscape drives, represented by Mulholland Drive, include to limit traffic volume and speed; improve tourist services and facilities such as scenic lookouts, docking trails, picnic sites, interpretative exhibitions, and toilets; avoid damage to the natural terrain

动场地相连，并最终与更大区域建立联系。为此，NPS会同各方于1997年完成了《圣莫妮卡山地区游憩步道协调项目》，从2014年开始与SMMC及MRCA合作编制《SMMNRA跨机构步道管理规划》，目前仍在进行中。

3.4 更大范围的合作规划与管理

20世纪末，为了应对更大范围内的生物栖息地和开放空间破碎化等问题，圣莫妮卡山的合作规划与管理模式逐渐被拓展到周边其他山区。在当地环保志愿者的倡议推动下，SMMC于1990年完成了《山谷边缘步道走廊总体规划》，拟在圣莫妮卡山、圣苏珊娜山和圣盖博山脚下构建一个由环形步道及沿线野生动物栖息地和公园组成的廊道，以提升区域系统的连续性、多样性和可达性。该规划并未试图划定征地边界，而是就栖息地、步道、场地、活动等制定了灵活务实的规划目标和标准。SMMC可向土地所有者购买土地，也与感兴趣的职能部门和非营利组织签署协议或为他们提供资助。2001年，SMMC又协助河山保护协会（RMC）编制了针对圣盖博河和洛杉矶河流域的《共识：从山脉到海洋》，其中提出了一系列关于土地保护、水系改善和规划协调的指导原则作为项目经费申请的评价标准，并鼓励相关部门开展多目标规划。

与此同时，NPS致力于拓展SMMNRA的范围，基于资源重要性、管理可行性和必要性等标准来判断区域外潜在的保护对象。2013年，NPS与RMC共同完成了《圣盖博流域与山地特殊资源研究》，建议在圣盖博山西部设立一个新的国家游憩区。2016年发布的《山谷边缘廊道特

from road maintenance; and enhance the connection with public transportation. In most cases, NPS played a supporting role by helping local governments and private owners define and protect landscape drives' recreational opportunities and visual quality, or urging local governments to reduce the development density along the roads through land zoning regulations and plan review procedures. The management goals of landscape trails (recreational trails for hiking, cycling, horse riding, etc.) is to link up various resources and places and to eventually contact with larger-scale areas by taking the existing west-east trails such as the Backbone Trail as the skeleton and the north-south ones as the secondary. To this end, NPS and other parties completed the Santa Monica Mountains Area Recreational Trails Coordination Project in 1997 and has cooperated with SMMC and MRCA since 2014 to prepare the SMMNRA Interagency Trail Management Plan, which is still in progress.

3.4 Cooperative Planning and Management at a Greater Scale

At the end of the 20th century, the cooperative planning and management mode employed in the Santa Monica Mountains case was adopted in the surrounding mountains to respond to the fragmentation of habitats and open spaces at a larger scale. Propelled by local conservationists, SMMC completed the Rim of the Valley Trail Corridor Master Plan in 1990, which conceived a corridor at the foot of the Santa Monica Mountains, Santa Susana Mountains, and San Gabriel Mountains, consisting of a trail loop and the surrounding wildlife habitats and parks, in order to enhance the regional continuity, diversity, and accessibility. Instead of making rigid land acquisition boundaries, the plan set elastic and practical planning objectives and standards for habitats, trails, sites, activities, etc. SMMC was allowed for land purchase from the owners, or to establish contracted cooperation with, or to fund, interested agencies and NPOs. In 2001, SMMC assisted Rivers and Mountains Conservancy (RMC) in the preparation of Common Grounds, From Mountain to the Sea for the San Gabriel River and the Los Angeles River watersheds, which includes a series of guidelines on land protection, water system improvement, and planning coordination that can be used as evaluation criteria of projects' funding application, as well as recommendations of multi-objective planning practices among relevant departments.

NPS was committed to enlarging SMMNRA's territory, identifying the inventory of potential protection targets outside the area according to resource importance, management feasibility and necessity, etc. In 2013, NPS and RMC together completed the San Gabriel Watershed and Mountains Special Resource Study and proposed to set up a new national

殊资源研究》则建议直接调整SMMNRA的边界，通过合并圣盖博山、圣拉斐尔山、佛杜构山、圣苏珊娜山、西米山、康乔山等地，形成一个连续的公园体系。两份报告均仅划定了研究区域，区域内原有机构和组织继续保有治理权，NPS负责提供公众游憩和资源保护的技术支持。

4 讨论与结论

4.1 都市山地景观的独特性

都市山地景观是一种复杂的社会 - 生态系统。一方面，都市山地有着和其他山地类似的生态特性，例如：易发生滑坡和泥石流等地质灾害，不易进行人类聚落建设和维护；植被破坏将造成水土流失，直接威胁山脚附近居民的生产生活等。因此，山区的城市化程度往往远低于平原地区，这也使它们成为了野生动植物的庇护所。但另一方面，山地的自然景观激发了人们亲近自然的渴望，其中山脊和山谷更是房地产和旅游开发的热门对象。综合以上两个方面，山地较适合作为开放空间进行管理，以兼顾生态与风景游憩功能。

此外，都市山地又有一些不同于荒野或乡村山区的社会特性。由于临近中心城市，都市山地不可避免会受到周边大量游憩、居住、交通等非农业活动的干扰，因而治理主体往往涉及多个政府层级和职能部门类型。由于土地权属复杂、治理主体多元、土地价格高昂等原因，都市山地如若采用一刀切的传统保护地管理模式，将遭遇极大的财政和社会阻力。因此，都市山地治理尤为需要建立有效的机制来协调各治理主体的集体行为，以较低的成本和灵活的方式保护开放空间。

4.2 多中心治理之于都市山地景观的适用性

自20世纪60年代以来，圣莫妮卡山的各个治理主体之间逐渐达成一种共识：虽然存在意见分歧和利益冲突，但会为了更大的公共目

recreation area in the west of the San Gabriel Mountains. In 2016, the Rim of the Valley Corridor Special Resources Study suggested that the territory of SMMNRA be enlarged through an integration with the San Gabriel Mountains, San Rafael Mountains, Verdugo Mountains, Santa Susana Mountains, Simi Hills, Conejo Mountain, etc. to form a continuous park system. Since the both studies only delineated the study area, the existing agencies remain their governance rights and NPS is expected to provide technical support for public recreation and resource protection.

4 Discussion and Conclusion

4.1 The Uniqueness of Mountain Landscapes in Metropolitan Areas

Mountain landscapes in metropolitan areas are complex social-ecological systems. On one hand, such areas share the same ecological characteristics with other mountainous regions. For example, they are all vulnerable to landslides, mudslide, or other geological disasters, which makes the construction and maintenance of human settlements difficult; vegetation damage would cause soil erosion, which badly threatens human's production and living activities around foothills. Therefore, mountainous areas are often much less urbanized than plains, while becoming sanctuaries for wildlife. On the other hand, the stunning natural landscape of mountainous areas excites people's desire to be close to nature. Ridges and valleys are particularly popular in real estate and tourism development. Thus, in sum, mountainous areas are suitable to be managed as open spaces with ecological, aesthetic, and recreational services.

Besides, the social attributes of mountain landscapes in metropolitan areas distinguish themselves from the wilderness or rural mountains. Inevitably, the proximity to metropolises makes such areas often disturbed by non-agricultural activities, be it recreational, housing, or mobility, and the governing agencies include multi-leveled governments and different departments. Considering the complex land ownership, diversified governance agencies, and high land prices, the practice of traditional one-size-fits-all management to mountain landscapes in metropolitan areas would face financial limits and stir public resistance. It is particularly necessary for such areas to establish effective mechanisms to coordinate the collective actions among multiple governing agencies and to protect open spaces at a lower cost and in a more flexible way.

4.2 The Applicability of Polycentric Governance in Mountain Landscapes in Metropolitan Areas

Since the 1960s, it has reached a consensus among the various governing agencies of the Santa Monica Mountains: despite

标而相互妥协。基于此，后来介入的加州政府和联邦政府均未试图接管一切，而是允许当地政府和私有业主继续保有治理权，经由多方合作完成了一系列立法、规划和管理工作。在这种多中心治理模式中，各级政府拥有不同形式的治理权：郡市政府掌握土地利用规划编制权和开发许可证审批权；州政府通过审批土地利用规划、设立环保基金和贷款等手段引导郡市政府土地政策的制定与实施，并以独立或联合方式将重要开放空间征收为保护地；联邦政府则采用征地、获取保护地役权等方式保护重要开放空间，并通过合作协议、转移开发权、公私联合规划、资源保护银行等方式协调州及地方政府的管理目标和策略。各级政府之间又形成保护委员会、保护协会、联合权力机构等多种合作模式，相互制约、协作和补充。市民和自发组织可发起倡议和游说政府，或作为政府顾问委员会成员提出建议，又或作为联合权力机构的董事会成员享有决策权。

上述治理模式使圣莫妮卡山在面对房地产开发热潮、政治气候变化、财政拨款减少、土地价格上涨、环保理念转变等冲击时表现出较强的韧性，具体作用机制包括：

1) 多中心治理有助于动员各治理主体为共同目标而努力。这体现为当地草根环保主义者面对山地开发压力时的自组织现象，也可见于SMMC在NPS遭遇经费困难时主动开展的征地工作中。

2) 多中心治理有助于在治理主体之间建立共识，积极调和决策者、治理目标和服务对象的矛盾。该作用机制体现在对联邦政府介入模式的争论中、国家游憩区边界的划定和调整中、游憩步道的规划及管理，以及圣莫妮卡山的合作规划与管理模式在周边其他山区的推广中。

of different opinions and interest conflicts, they have to compromise with each other for a greater goal of public well-being. Upon this consensus, neither the state nor the federal government attempted to take over everything; instead, the local government and private owners retained their governance rights and were encouraged to take collaborative efforts in legislation, planning, and management. In this polycentric governance mode, governments at all levels own different sorts of governance rights: the county and city governments have the power to approve land development plans and development licensing; the state government guides the county and city governments to develop and implement land policies through land use approval, establishment of environmental funds or granting loans, and expropriates and protects important open spaces in their own or by collaborative actions; the federal government protects key open spaces through land acquisition, conservation easement acquiring, etc. and coordinate the management objectives and strategies between state and local governments by means of contracted cooperation, development right transfer, public-private joint planning, resource conservation banks, etc. Different kinds of cooperation, such as protection committees, associations, and joint authorities, have emerged across the governments to restrict, reconcile, and supplement with each other. Citizens and spontaneous organizations can propose initiatives, lobby the government, play a role in government advisory committees, or participate in decision-making processes as a board member of the joint powers.

The above-mentioned governance mode has reshaped and strengthened the Santa Monica Mountains' resilience in the context of real estate development, changing political climate, shrinking financial allocation, rising land prices, and conceptual shifts in environmental protection. It may be summarized as three working mechanisms include:

1) Polycentric governance helps activate all the agencies to work together for shared goals. This is evidenced by the emergence of the bottom-up movements by local environmentalists in front of the development pressure, as well as by the land acquisition initiated by SMMC when NPS was in short of funds.

2) Polycentric governance helps shape consensus among governing agencies, reconcile decision-makers, and coordinate governance objectives and service targets. This mechanism reflects in the defence against the federal government's intervention, the negotiation and adjustment on the territory of national recreation areas, the planning and management of recreational trails, as well as the collaborative practices in the Santa Monica Mountains and its surrounding areas.

3) 多中心治理有助于激发治理主体的创新能力,这既包括海岸委员会、保护协会、联合权力机构、国家游憩区等治理体制的创新,也包括获取保护地役权、合作协议、转移开发权、公私联合规划、资源保护银行等具体策略的创新。

4.3 圣莫妮卡山经验对当代中国的启示

中国人与自然的互动历史悠久,中国境内完全处于荒野状态的山地已经较为稀少,大多数山区的土地权属极为复杂。一方面,不同层级政府之间、相关职能部门之间缺乏有效的协调机制,自然保护区、风景名胜區、森林公园、地质公园、水利风景区等保护地类型分属不同部门^[28]。在邻近中心城市的山地中,园林、林业、水利、文物保护等职能部门的管辖范围存在交叉重叠,当管理范围和权属发生冲突时各方难以相互妥协^{[29]~[31]}。另一方面,各级政府与当地社区之间缺乏切实可行的共治机制,保护地划界时往往未充分征求原住民的意见,管理中也未能建立多元化的资金投入机制^[32]。为此,2017年中国中央政府颁布《建立国家公园体制总体方案》,提出“建立健全政府、企业、社会组织和公众共同参与国家公园保护管理的长效机制”,并已尝试通过制定协议促进武夷山等地的跨行政区划统一管理,以及通过保护地役权细化钱江源等地保护对象需求和原住民生产生活之间的关系^{[33][34]}。但目前这些工作仍处于试行阶段,存在诸多挑战。

圣莫妮卡山的经验对当代中国有着重要的启示意义。首先,高层级政府应该负责牵头,与地方政府和原住民就管理目标和原则进行广泛协商,划定弹性的保护边界和分区;其次,中央政府仅对具有突出

3) Polycentric governance helps inspire governing agencies' innovation capacity, which not only refers to the new governance mechanisms (coastal committee, conservation association, joint authority, national recreation areas, etc.), but also reflects in the tactic innovations (e.g., conservation easements acquiring, contracted cooperation, development right transfer, public-private joint planning, and resource conservation banks).

4.3 Inspirations of the Experience of the Santa Monica Mountains to Contemporary China

Historically, Chinese enjoyed the interaction with nature. In today's China, few mountainous areas remain a complete wilderness, and the land ownership in most mountainous areas is complicated. There is no effective coordination mechanism among different levels of governments and among different departments, and different types of protected areas such as nature reserves, scenic areas, forest parks, geological parks, and water conservancy scenic areas are managed by different authorities^[28]. To the mountains adjacent to major cities, although the jurisdictions of authorities in landscape, forestry, water conservancy, and heritage preservation often overlap each other, they tend to decline to compromise when an interest conflict happens^{[29]~[31]}. Furthermore, there sees an absence of polycentric governance mechanism between governments and local communities. Local residents had not participated in the process of protection areas identification, and a diversified capital investment mechanism is still required^[32]. In 2017, the Central Government of China promulgated the Overall Plan for Building a National Park System, proposing to “establish and improve a long-term mechanism for governments, enterprises, social organizations, and the public to work together for the protection and management of national parks.” The central government has also encouraged cross-administrative management of mountainous areas such as Wuyi Mountains through a series of contracted coordination, and refined the relationship between the protection demands and people's production and living activities in mountainous areas such as Qianjiangyuan region by defining conservation of easements^{[33][34]}. However, these projects are still in their pilot stages and facing a number of challenges.

The experience of the Santa Monica Mountains shines a reference to contemporary China. First, the higher government should take the lead and make local governments and residents participate in the decision-making processes of management objectives and principles, where flexible boundary determination and zoning principles should be adopted. Second, the central government can only acquire land, or relocate the people from

保护价值的土地进行收购或移民，对其他土地则尽量采用合作协议、获取保护地役权、环保基金、减税政策等方式进行管控，激励不同层级政府、相关职能部门与当地社区之间形成利益共同体。这种多中心治理模式能极大降低政府介入的财政压力和社会阻力，更好地调动各方的积极性、拓展资金渠道，从而用有限的资金推进更大范围的保护工作。但该模式在实际操作中较为复杂，需要精细化管理，如果高层级政府的工作不到位，其余各方很难自行组织。此外，圣莫妮卡山的文化历史和法律框架有其独特性，尤其有着很强的地方自治传统，因而其治理经验对中国都市山地景观的适用性有待实践验证。**LAF**

the areas with outstanding protection values; in most cases, land should be managed by means of contracted cooperation, conservation easements acquiring, environmental funds, tax policies, etc., to form a bonded system in which different governments, departments, and local communities share a common ground of interests. Such a polycentric governance mode can greatly contribute to fund saving, alleviate social resistance against governments’ interventional mode, activate all governing agencies, and open funding sources, realizing a broader and more effective protection with limited funds. However, in practice, this mode often faces more complicated situations and requires refined management methods. And, if higher governments fail to play a leading role, it is difficult to require other agencies to perform theirs. In addition, considering the uniqueness of the cultural and historical traditions and legal framework of the Santa Monica Mountains, especially its strong autonomy tradition, further studies on the applicability of its governance experience to China’s cases are needed. **LAF**

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