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The Recreation Rationing Spectrum: A Planning Principle for the Fair Distribution of Scarce Recreation Resources

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ABSTRACT

Providing a diversity of opportunities has long been a key tenet of recreation planning. This principle was codified through the Recreation Opportunity Spectrum. Yet this globally-popular framework fails to extend the concept of diversity it applied from *types* of recreation opportunities to *how* opportunities are rationed. Reflecting on foundational research that contributed to the formation of the Recreation Opportunity Spectrum and our understanding of distributive justice in outdoor recreation, we suggest the adoption of a new principle that extends the core contributions of this research to how we allocate scarce recreation resources (e.g., campsites, trails, or permits) in an age of increasing demand. We present the Recreation Rationing Spectrum (RRS) as an upshot of this reflection. The RRS is simply a principle, or notion, that beckons us to pause and consider how we can fairly and more equitably distribute recreation access (i.e., campsites) on the basis of distributive justice.

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For those of us who research and teach outdoor recreation management, there exist few *vade mecum* that rival the importance of Clark and Stankey's (1979) foundational *The Recreation Opportunity Spectrum: A Framework for Planning, Management, and Research*. It is difficult to overstate the impact of this rather unassuming U.S. Forest Service Technical Report on global protected area management. The Recreation Opportunity Spectrum (ROS) is "the most widely recognized concept in wildland recreation planning around the globe" (McCool et al., 2007, p. 57). Whether mentioned by name or not, its underlying management principle of offering diverse opportunities for diverse preferences contributes to what we now think of as the basics of recreation planning. Yet when we consider the present state of global outdoor recreation demand and the challenges currently faced by planners of established recreation areas, primary management questions are less likely to center around which types of opportunities to provide but, rather, how these opportunities should be *rationed* among the recreating public.

Rationing of recreation opportunities significantly increased after an explosion of demand in the 1970s; wherein, for example, approximately 1,067 people floated the

Colorado River through the Grand Canyon in 1966, versus 16,432 in 1972 (Nash, 1977). Research in the late 1970s and early 1980s looked to resolve emerging questions concerning how to ration scarce opportunities in the face of increased demand, namely investigating user perceptions of these different rationing and allocation mechanisms (e.g., McCool & Utter, 1981a, 1981b; Shelby et al., 1982; Stankey, 1977). Agencies imposed various mechanisms where they saw fit (Utter, 1979), however demand grew at a rate that outpaced research productivity on the subject; and thus limited guidance could be provided as to how to fairly allocate use in increasingly dynamic recreation environments. Since then, scant research has been published regarding how rationing affects the recreation experience or equitable distribution of recreation opportunities. Thus, in the face of a new wave of recreation demand today, we are left with little science-based guidance concerning how to fairly ration recreation opportunities.

Through a reflection on the available research, we (the authors) propose that researchers and managers turn to the same basic principle, formalized through the ROS, that's guided our planning efforts in outdoor recreation management at large for the last sixty years: provide diverse opportunities. Here, however, we propose furthering the application of this principal to how we ration outdoor recreation resources, with the goal of more equitably rationing resources. What follows is a reflection on six decades of recreation research—including the literature concerned with ROS and distributive justice—which concludes with the presentation of a new recreation planning principle, or notion: the Recreation Rationing Spectrum.

The recreation opportunity spectrum

As noted by McCool and colleagues (2007), ROS is both a concept and a planning process. Conceptually, ROS manifests as a union between the concepts of the “spectrum of recreation opportunities” and the “opportunity setting” (Clark & Stankey, 1979; McCool et al., 2007). The spectrum concept as applied to recreation opportunities derives from Wagar (1963), generally described as a “diversity of opportunities that can be described as a continuum, roughly from developed to undeveloped” (McCool et al., 2007, p. 50). As posited by Brown et al. (1978), this spectrum of recreation opportunities is dependent upon the opportunity setting. The opportunity setting is the “combination of physical, biological, social, and managerial conditions that give value to a place” (Clark & Stankey, 1979, p. 1). As a planning process, in short, ROS provides “a framework within which to explicitly vary situational attributes (access, density, etc.) to produce different recreation opportunity settings. From these opportunity settings, recreationists participating in different kinds and styles of activities derive different satisfactions and experiences and, ultimately, benefits” (Clark & Stankey, 1979, p. 7). These opportunity settings are formalized into a number of opportunity classes which characterize the distinct typologies of zoned recreation settings (originally conceived as a spectrum ranging across modern, semimodern, semiprimitive, and primitive) based on the conditions of the managerial, biophysical, and social components of the larger recreation setting (McCool et al., 2007). The separation of incompatible

or conflicting activities through zoning is perhaps the most widely-cited conceptual contribution of ROS (McCool et al., 2007).

Though ROS as a formal planning framework was originally presented by Clark and Stankey in 1979, it builds heavily upon earlier concepts and research including Wagar's (1963) *Campgrounds for many tastes*, Shafer's (1969) *The average camper who doesn't exist*, and Brown et al. (1978) *Recreation Opportunity Resource and Classification System* (Manning, 1985; McCool et al., 2007). The general theme of providing diverse recreation opportunities for diverse needs and preferences is a clear line through this research. In introducing the concept of the spectrum, Wagar (1963) writes, "If campgrounds are to provide maximum benefits and enjoyment, land managers must recognize that campers have an extremely wide variety of needs and that the camping facilities suited to these needs will vary accordingly" (p. 1). "By establishing and managing different types of campgrounds within an overall plan, those who provide campgrounds might more fully meet the full spectrum of camping needs" (Wagar, 1963, p. 10). Clark and Stankey (1979) underscore the importance of diversity as a core tenet of the spectrum concept in recreation planning: "The basic rationale underlying the outdoor recreation opportunity spectrum is that providing diversity is the best way to assure quality outdoor recreation" (p. 4). Importantly, however, the authors take this statement further to codify diversity's importance to not just the efficient provisioning of varying recreation experiences, but also as a requisite for equitable provisioning of these experiences. "Diversity represents an important characteristic of any recreation system. Managing opportunities for recreation to promote a diversity of experiences is crucial for social equity (Watt, 1972). Failing to provide diversity of opportunity invites charges of favoritism, elitism, and discrimination" (Clark & Stankey, 1979, p. 5).

Yet, to be clear, when Wagar (1963) writes about campgrounds for many tastes, he is referring to a spectrum of amenity offerings ranging from "all the conveniences of home" to "truly wild surroundings" (p. 1). Similarly, when Clark and Stankey (1979) write about diverse opportunities they are referring to varying settings. For instance, in the case of "access within recreation areas" they provide the following spectrum of diverse opportunities "well-developed, paved roads, to gravel roads, to trails, to cross-country travel" (p. 9). They do *not* address how the supply of these campsites, trails, and other recreation resources are *rationed* or *distributed* among users in the face of increasing demand. Therefore, the tenet of diversity is not extended to the rationing of finite campsites or parking spaces at a trailhead on any given day. ROS guides the *types of campsites* that might exist across a campground, or the *types of campgrounds* that might exist across a recreation area, but not the *types of rationing mechanisms*, or strategies, that distribute those campsites among visitors (e.g., reservations, first-come first-served systems, lotteries, etc.).

Rationing under use limits

McCool and Utter (1981b) break the issue of allocation into two components (allotment and rationing), where *allotment* looks at private and commercial users separately and apportions use allotments to each group, and *rationing* refers to the distribution

of individual use opportunities. Common rationing mechanisms studied are reservation, lottery, merit, pricing, and queuing, each of which comes with its own set of legal, public acceptance, and administrative feasibility issues (Wikle, 1991). Many early studies of rationing mechanisms focused on user preference and the perceived ability to obtain recreation opportunities. Different user groups were found to prefer different rationing mechanisms; in one study, commercial boaters on the Middle Fork of the Salmon River in Idaho were found to prefer an advanced reservation system, while private boaters were found to prefer a lottery system (McCool & Utter, 1981a). Other studies have investigated the differences in rationing preferences between recreational users and managers, one of which found a significant difference in preference between users and managers for river use rationing policies (Wikle, 1991); the author suggests this may be due to administrative difficulties from the management perspective, and familiarity and willingness to pay from the user perspective (Wikle, 1991). Still others have studied the preferences of different user groups (backpackers and river runners) for permit rationing mechanisms in different recreation areas, finding river users more supportive of reservation and lottery systems than backpackers, which the authors posit to be due to the fact that boaters may plan further in advance than hikers and are more familiar with a specific rationing system (Shelby et al., 1982).

Though, as illustrated above, limited research exists on recreation rationing mechanisms, there remains a heavily disproportionate focus of research on *determining* use limits (or capacities) compared to *rationing* use under use limits. Considerable research (e.g., Lawson et al., 2003; Manning, 2007; Pettebone et al., 2013) has been conducted—and a variety of frameworks (a recent, prominent example being the U.S. *Interagency Visitor Use Management Council* (2019) *Visitor Capacity Guidebook*), have been proposed and implemented—to inform defining numeric thresholds for limiting visitor use, however very little research has been conducted and no frameworks have been proposed to guide the rationing of use after a visitor use limit is decided upon. Further, the sparse research that exists in this area of study includes very few contemporary contributions (Fleming & Manning, 2015; Lepp & Herpy, 2015; Rice et al., 2022). The implications of this imbalance of research are multifold, as managers are left to allocate use on an ad hoc basis with little science to guide their planning efforts. Primary among these implications is the lack of a framework to guide rationing decisions. At a unique interagency conference on recreation allocation in 1981, Shelby addressed this need, noting that:

While allocation systems must recognize specific needs, it is important to avoid the temptation to refer the entire problem back to the local level. A number of issues are common to most situations, and these need to be met squarely. Area-specific issues can then be resolved around a common framework of policy directives. It seems clear that we can do better than we are at present. p. 50

McCool and Utter (1981b) underscored this need at the same conference: “How managers go about allocating scarce recreation opportunities in face of ever increasing demand still needs direction and a framework for solutions” (p. 60). Forty years later, a common framework for rationing opportunities is still lacking. At present, more research is needed to design a framework. However, principles—which might eventually be included in a framework—can be adopted based on existing theory. In the face of

ever-increasing demand, a diversity of allocation mechanisms will be critical to equitably distribute these resources. McCool and Utter (1981b) go on to propose adopting a diversity of rationing mechanisms, stating, “In fact, it may be beneficial to have a mixture of allotment techniques on any given river so that the weaknesses of one technique are balanced by the strengths of another” (p. 76).

The need for diversity in distribution

Given recent documented heightened levels of global outdoor recreation demand, especially in iconic or already popular recreation areas, the stated need to conduct research on rationing of scarce recreation resources has reemerged in the literature (e.g., Rice et al., 2022; Walls et al., 2018). The need for this research is typified by a statistic released through a Recreation.gov (2021)—the website where reservations can be made and lotteries can be entered for U.S. federal recreation resources (e.g., campsites, managed access passes, tours, river permits, etc.)—newsletter in 2021: “A popular campground with 57 campsites can see close to 19,000 people all trying to reserve the same campsites for the same dates immediately after they’re released for reservation” (para. 8)¹. In other words, a 0.3% chance of success may (in some cases) exist for those individuals who are able, or willing, to be on Recreation.gov as soon as reservations become available for a given day 6-, or perhaps 2-, months-in-advance. Importantly, this calculation does not include those who have jobs or family care needs that prevent them from logging onto Recreation.gov the moment reservations become available for their hopeful trip. Nor does it include those with lower internet literacies or language barriers that cannot navigate the reservation process, those who do not attempt reservations that far in advance due to work schedules that prevent long-term planning, or those who do not attempt reservations for this popular campground because of the dire odds (Rice et al., 2022). Further, data from the University of California Santa Barbara’s *Outdoor Equity App* (https://shinyapps.bren.ucsb.edu/oe_app/), which combines data from Recreation.gov with census data, demonstrates that booking windows vary based on median household income for many popular campgrounds (see Figure 1), thus hinting at a link between longer booking windows and equity concerns.

Meanwhile, in campgrounds at least, the diversity of rationing mechanisms appears to be declining as reservation systems become more widespread. Based on data from the Recreation.gov Recreation Information Database, the number of campsites listed on Recreation.gov increased from 86,179 at the end of 2014 to 112,301 by the end of 2021. During this same period, also in the U.S., multiple iconic national parks—including Acadia, Arches, Glacier, Rocky Mountain, Yosemite, among others—have implemented “advance reservation requirements” during peak seasons as a means of allocating visitor entry (Hartman et al., 2021). It should be noted, however, that these “managed access” reservation systems honor the need for diverse rationing offerings by nearly

¹It is possible that some of these “people” represent individuals from the same party or individuals using multiple computers.

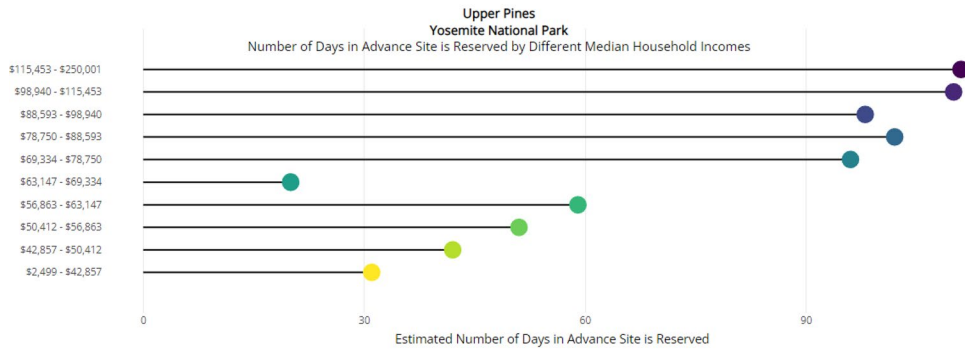


Figure 1. Variation in campsite booking windows in 2018 across the median household incomes of campers' home zip codes for Upper Pines Campground in Yosemite National Park (California, USA; Image used with permission from *The Outdoor Equity App*).

universally offering multiple reservation windows. Movement toward reservation requirements, given their possible unintended consequences on equity, raises serious concerns regarding environmental justice as it relates to access to high quality outdoor recreation opportunities (Floyd & Johnson, 2002). While placing *all* campsites or park entrance passes on a reservation system like Recreation.gov is economically efficient approach to distribute access to recreation, we must consider the more general warning of Floyd and Johnson (2002): “Advances along this line would have clear implications for environmental justice, particularly distributive justice” (p. 70).

Distributive justice

The application of the concept of distributive justice (Rogers, 1918; Homans, 1961) in outdoor recreation management owes its origins to Krutilla and Knetsch (1970), however it was championed primarily by Dr. Bo Shelby (Shelby, 1981; Shelby et al., 1989a, 1989b). In short, distributive justice is “an ideal whereby individuals obtain what they ‘ought’ to have based on criteria of fairness” (Shelby et al., 1989b, p. 62). These criteria include the following four, often competing, concepts or goals that are meant to guide the rationing of recreation resources: equality, equity, need, and efficiency (Shelby, 1981; Shelby et al., 1989b). Each of these goals contributes uniquely to larger aspiration of distributive justice. *Equality*—based on the principle that “individuals have the same right to certain benefits” (Shelby, 1981, p. 42)—is achieved when resources are divided equally among individuals or all individuals have an equal chance to obtain a scarce resource. An allocation that achieves equality might be a non-weighted lottery for park entrance permits that is free to enter, is tightly controlled so that only one person per household can enter, and provides a sufficient entry window for all of those interested in entering. *Equity*—based on the principle that everyone, assuming equal contributions, should have access to the same opportunities for obtaining benefits—is achieved when individuals' contributions are balanced with their opportunities for obtaining a scarce resource (Shelby et al., 1989b). An allocation that achieves equity might be a weighted lottery for hunting permits that favors residents over nonresidents. In this case, “this unequal treatment may be fair because residents often make greater contributions

(through taxes)” (Shelby, 1981, p. 42) to wildlife conservation and incur more costs through crop damage, vehicle collisions, etc. Allocation mindful of *need* “recognizes that individuals or groups may have requisites which are indispensable for normal functioning” (Shelby et al., 1989b, p. 62). An allocation that emphasizes need might ensure that accessible, universally-designed campsites within a campground are made available only to those who require them (not to individuals who may prefer their attributes). Finally, *efficiency*—defined in this context as a state where “a resource is put to its most highly valued use” (Shelby, 1981, p. 42)—is achieved when resources are obtained by those who value them the most. An allocation that emphasizes efficiency might rely on a pricing scheme that ensures river permits go to those with the highest willingness-to-pay. More likely under this allocation mechanism, however, the permits will go to those with the highest ability-to-pay. Thus, a tradeoff between efficiency and equity is revealed—along with an illustration of the often competing nature of the distributive justice criteria (equality, equity, need and efficiency).

Shelby (1981) and Shelby et al. (1989b) assess the tradeoffs between the distributive justice criteria realized through various allocation mechanisms, including pricing schemes, reservations, lotteries, first-come first-serve, and merit systems—where “permits are distributed on the basis of some demonstrable skill, knowledge, or past behavior” (1981, p. 48). Shelby et al. (1989b) posit that, for instance, first-come first-serve mechanisms “may serve equality goals because theoretically everyone has an equal amount of time to spend in a line” (p. 63). “However, time may be more valued by those leading structured lives, and queuing may discriminate against them” (Shelby et al., 1989b, p. 63). Additionally, “those living far away may not be willing to spend the time and expense to get to the queue with failure still a possibility; locals may therefore have an advantage” (Shelby et al., 1989b, p. 63). Shelby et al. (1982) describe pricing as a method that encourages those who place a low value on a recreation resource to drop out of the market, which leads to market equilibrium, however social efficiency is not maximized due to discrimination against users unable (as well as unwilling) to pay. The authors contrast pricing with queuing, where time rather than money is traded for a specific recreation resource opportunity. Similarly, a merit-based allocation system is discussed as increasing social efficiency due to the time, effort and money spent acquiring the skills required to obtain a permit, but this system requires the agency to specify who is “worthy” of a permit (Shelby et al., 1982). Ultimately, in all of these allocation systems, users must give up a specific resource (whether it be time, money, etc.) to receive a specific opportunity (Loomis, 1980). From a management implication perspective, Shelby et al. (1989b) investigated the perceived fairness of these systems in the context of pragmatism in a study of river runners on the Snake River in Hells Canyon (Idaho and Oregon, USA), finding that users are most willing to try a system that will yield positive results for them specifically, but are also willing to accept any system which they perceive to be fair.

While the original notion of a distributive justice framework in outdoor recreation provides us with guidance on how to evaluate the tradeoffs between various rationing mechanisms, more recent policy (in the U.S. context) requires agencies to expand the relatively narrow definitions of equity and equality originally scoped out by Homans (1961). President Biden’s Executive Order 13985: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, notes that “because

advancing equity requires a systematic approach to embedding fairness in decision-making processes, executive departments and agencies must recognize and work to redress inequities in their policies and programs that serve as barriers to equal opportunity” (Executive Order 13985, 2021). This policy directive requires outdoor recreation researchers and agency managers in the U.S. to take a much deeper look at the equity of these rationing systems when making these implementation decisions.

Importantly, no allocation mechanism is immune from equity tradeoffs. Reservations, though perhaps efficient, are prone to failure concerning need and equity. Lotteries may fail to meet equity, need, or efficiency criteria. Therefore, a modest body of research has more recently examined the exact nature of these tradeoffs or visitor perceptions of these tradeoffs (e.g., Nyaupane et al., 2007; Park et al., 2010; Rice et al., 2022; Scott, 2021). However, this research is not sufficient for providing a wholistic understanding of the exact nature of these tradeoffs, especially given the lack of understanding on the managerial side of these tradeoffs. More research is critically needed in this area to help define the pros and cons of the various rationing mechanisms. Still, it is concluded that a mechanism that perfectly balances or maximizes each of the distributive justice criteria is not likely to exist. Yet, such a conclusion (i.e., that there is no, single perfect solution) is not unfamiliar to public land managers or outdoor recreation researchers. A national forest is valued for multiple potential uses (timber, recreation, air quality contributions, spiritual value, etc.). However, managers are not likely to place the entire forest under timber production—thus ignoring the wants and needs of other hopeful users. Rather, managers develop plans whereby various resources within the forest are allocated for specific uses. Clark and Stankey (1979) took this elementary management principle a step further by advising managers to zone recreation across protected areas in a similar manner—in other words, to manage for diverse preferences and needs by providing diverse opportunities.

However, this principle of diversity across a spectrum of opportunities has failed to permeate the processes used to ration scarce recreation resources *among* recreationists. We have spent considerable effort deciding what types of campsites, trails, and boat launches are built, where they are built, what types of use will be permitted within them—all with the goal of creating a spectrum of opportunities while balancing resource conservation with visitor outcomes. However, we have largely failed to design rationing mechanisms that harness a spectrum of opportunities—that is, opportunities for obtaining a permit, campsite, or entry pass. The basic principle of diversity set forth by Clark and Stankey (1979) has largely been disregarded in our search for the “right,” single allocation mechanism.

The recreation rationing spectrum

Thus, here we propose a new principle, or guideline, for outdoor recreation resource planning and management that stems from the defining tenet of ROS—“diversity represents an important characteristic of any recreation system” (Clark & Stankey, 1979, p. 5)—and the primary conclusion from distributive justice research—“there are tradeoffs in moving from one allocation criterion to another” (Shelby, 1981, p. 43). We call this principle the Recreation Rationing Spectrum (RRS), which advises applying the concept

of diverse recreation opportunities to the way campsites are rationed among the public to ensure that, where present, tradeoffs between rationing mechanisms are recognized and inform the implementation of *multiple* rationing mechanisms for similar campsites across a recreation area. At present, we recommend the application of the RRS in the context of campgrounds and campsites, but it is possible that it could be applied elsewhere (e.g., river permitting, parking spots, entrance into parks, etc.) if future evidence suggests the need for its application. In short, the RRS guides managers to—whenever possible—ensure that campsites are not allocated through just one mechanism (e.g., reservations-only – 6 months in advance), but instead through a spectrum (or diversity) of mechanisms (e.g., sites and entrance permits distributed through *multiple* rationing mechanisms). Thus, a campground may allocate sites across a temporal spectrum that includes batches of sites released for reservations 6-months-in-advance, reservations 2-months-in-advance, reservations 2-weeks-in-advance, a lottery 2-days-in-advance, and first-come first-served rationing on the day of arrival.

Certainly—all else being equal—more diversity in rationing mechanisms is likely to promote more equitable and socially efficient rationing (Shelby, 1981). Under such an assumption, a campground rationing strategy that boasts five mechanisms of claiming a campsite would be preferred to a strategy that offers two. However, future research which may apply the RRS notion should be careful to also consider the possibility of a correlation between the number of rationing mechanisms for a given campground and visitor confusion about the rationing of that resource. Future research and managerial application of RRS should also be mindful of the managerial constraints that may prohibit a RRS with more than two or three rationing mechanisms. Park and recreation agencies facing increasing fiscal constraints (Barrett et al., 2017) may find it difficult to organize and provide the necessary resources to implement a multiple-mechanism approach.

A hypothetical application

To illustrate how the notion of RRS might be applied, we present [Figure 2](#). Here, three maps of a popular national park campground are presented. The top map depicts the current diversity of campsite-types available across the campground's ROS. Four different site-types currently exist in the campground, arrayed across a standard spectrum from more developed to more primitive—each providing different opportunities in accordance to different campers' preferences or needs. Additionally, a portion of the campsites are situated in a “quiet area” where generators are not allowed—accommodating visitors seeking natural quietness. The middle map depicts the current rationing mechanism for campsites within the campground—a universal reservation requirement with a 6-month booking window across all site-types. The bottom map depicts a hypothetical application of the RRS, where sites become available through multiple mechanisms on a temporal spectrum ranging from 6-months-in-advance to the day of arrival. This hypothetical RRS design includes a tapered distribution of campsites within and outside of the quiet zone, and places the first-come first-served sites near the campground entrance to limit campsite-seeking traffic throughout the campground. In line with the goal of RRS, this design seeks to provide a diversity of mechanisms

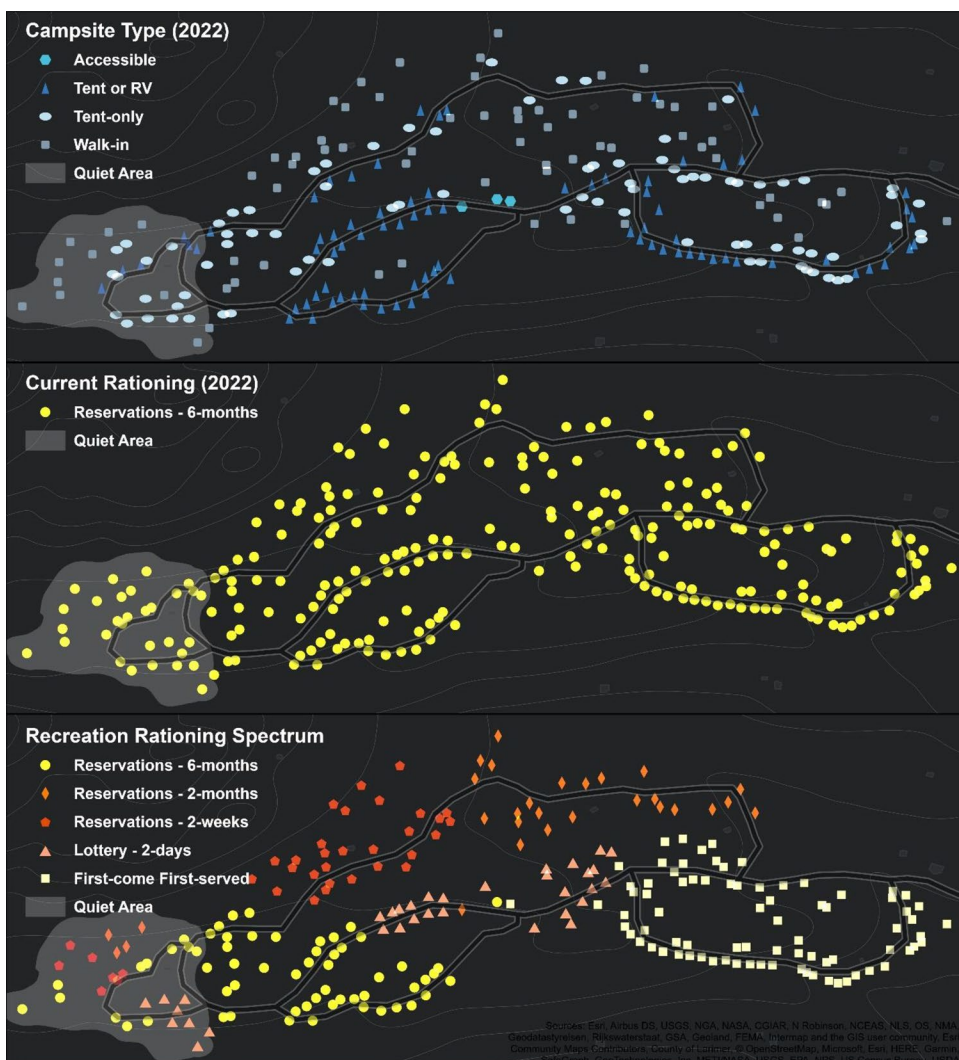


Figure 2. Three maps of Moraine Park Campground in Rocky Mountain National Park (Colorado, USA) depict 1) the current Recreation Opportunity Spectrum of campsite types, 2) the current, single-type rationing mechanism of campsites, and 3) a hypothetical Recreation Rationing Spectrum of campsites.

to obtain a campsite in recognition that park visitors are subject to various constraints (e.g., lack of high speed internet limiting their ability to book sites as soon as they become available, the ability to plan 6-months, 2-months, or 2-weeks-in-advance given work or family-care obligations, international travel plans that require campsite bookings 6-months in advance, etc.) and preferences (e.g., inclinations toward spontaneity, unscheduled road-trip behavior, or long-term planning, etc.). Importantly, this hypothetical application is not without precedent. Yosemite National Park (California, USA), one of *many* possible examples, currently offers an inter-campground RRS of sorts, where campgrounds vary in their rationing mechanisms, including reservations available two-months- and two-weeks-in-advance, reservations available four-days-in-advance, a

daily lottery, and first-come first-served. Further, recent technological advances in reservation and lottery platforms (e.g., ReserveAmerica, Recreation.gov, Parks Canada Reservation Service) create a capacity for agencies to, hopefully, more easily manage multiple rationing mechanisms within a RRS, while also more efficiently and transparently communicating the rationing mechanisms to visitors. In the present moment, we find ourselves with enviable, advanced tools which Stankey foretold of when writing on the subject in 1977: “Computers, sophisticated programming, and related electronic wizardry.... offer great promise in grappling with difficult resource [rationing] problems....[compared to 1977, when] the manager feels lucky to have a telephone and desk calculator” (p. 398).

Conclusion

For 60 years, outdoor recreation researchers have recognized the need for diverse offerings for recreation opportunities in parks and protected areas (Wagar, 1963). This recognition was formalized in the ROS (Clark & Stankey, 1979). Yet, insights from distributive justice research in outdoor recreation (Floyd & Johnson, 2002; Shelby, 1981; Shelby et al., 1989a, 1989b) reveal the need to extend this recognition and its underlying principle of diversity to the mechanisms we use to ration finite campsites among a growing public of outdoor recreationists. This insight is formalized in the RRS. The need for the RRS is underscored by current trends. As diversity of rationing mechanisms declines—and reservation-only policies increase—we find ourselves maximizing economic efficiency while failing to consider equity, equality, and need concerns that stem from a variety of constraints and preferences held among the recreating public. The RRS principle, or notion, simple beckons us to pause and consider how we can diversify the ways we allocate our scarce recreation resources in an age of increasing demand.

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