IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF ARIZONA

River Runners for Wilderness, <i>et al.</i> ,	
) No. CV-0600894 PCT-DGC
Plaintiffs,)
) DECLARATION
V.) OF DONALD W. WALLS
) IN SUPPORT OF PLAINTIFFS'
Joseph F. Alston, et al.,) MOTION FOR SUMMARY
Federal Defendants; and) JUDGMENT
Grand Canyon River Outfitters)
Association; Grand Canyon Private	
Boaters Association,	
Defendant-Intervenors.)

I, Donald W. Walls, hereby declare as follows:

1. I am an economist and the President of Walls & Associates, an economic consulting firm that maintains the National Establishment Time-Series (NETS) Database which tracks over 33 million business establishments between 1990 and 2006. My educational background includes a Ph.D. in Economics from Harvard University and masters degrees in Business Economics from UCLA and Public Administration from Harvard's Kennedy School of Government. I was an Assistant Professor and Head Tutor of the Harvard Economic Department where I taught microeconomics and the theory of demand analysis. I also taught applied principles of demand estimation and, in public finance courses, taught the application of demand analysis to environmental policy. Subsequently, as the Senior Vice President and Chief Regional Economist of DRI/McGraw-Hill, I supervised Ph.D. economists in the estimation of demand for public and private

goods and services and forecasted economic activity for all regions and sectors of the U.S. economy. In addition, I have been asked to testify before the California Air Resources Board and the California Energy Commission on proposed environmental policies and before the California and New York Public Utility Commissions on the impacts of expanded pipeline capacity and co-generation construction. My background, training and experiences all qualify me to discuss the National Park Service's approach to allocating access to a limited national resource. Attached as Exhibit A is my resume.

- 2. The Plaintiffs in this case asked me to explain in simple economic terms how use can be allocated when a resource is scarce and to discuss the role that demand for access plays in allocating access when use must be limited to protect the resource. I have reviewed the arguments in this case and the relevant pages in the Colorado River Management Plan Final Environmental Impact Statement, which explain how the National Park Service ("NPS") allocated use in its preferred alternative.
- 3. In a world in which NPS attempts to equitably allocate the use of a limited national resource like access to the "wilderness river experience" on the Colorado River, it must first determine the *demand* for that resource. A simple example explains why. What if the Colorado River could accommodate 50 thousand visitors each year and maintain the "wilderness river experience;" but, on average, there were only 30 thousand Americans who demanded such access in any year? Then any reasonable process that made the access available would

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conform to the need for equitable allocation because there is an <u>excess</u> of opportunities to enjoy the river and no reason to ration them. Alternatively, if more people demand access to the Colorado River (say 100 thousand annually) than can be accommodated and still sustain the "wilderness river experience," then the NPS must determine an equitable process for allocating access. Thus, the need for an allocation process is determined by the <u>demand</u> for access to the Colorado River.

- 4. In the face of excess demand for the "Colorado wilderness river experience," there are at least two economic solutions to this classic allocation problem (both have flaws):
 - a. NPS could simply *auction* the access permits to the River to the highest bidders, setting the price per permit that exhausts the available allotment¹; or
 - b. NPS could use a *lottery system* to give all citizens who demand a Colorado River experience an equal chance and then charge a reasonable administrative fee for the service.

Both approaches are economically "fair" only if they give citizens, of equal means, "equal access" to the ColoradoRiver experience.

This solution is for illustrative purposes only given that NPS is prohibited by the Organic Act from selling access, other than a reasonable administrative fee, to public lands. In economic terms, the public policy behind protecting free public access recognizes that when people have different incomes, those with the higher incomes would be able to outbid people with lower incomes and thereby have greater access opportunities than other members of the public.

- 5. Solution 1 has the advantage that those who place the highest value on the Colorado River experience can bid more, express their preferences, and increase their chance of getting access to the river. Those willing to pay the most for the experience would be rewarded with access and the NPS would capture the "economic rents" associated with fees that were higher than the NPS's costs of running the auction and providing the river access. An "economic rent" is the return that an asset earns because of its scarcity. The return can be a financial or non-financial benefit. Any time a resource is scarce and has significant demand, it earns an economic rent because it cannot be reproduced elsewhere. These "economic rents" exist here because there is less "Colorado River experience" than is demanded. Thus, the market-clearing price for this experience exceeds the cost of providing it. In an economically competitive world, the supply would simply expand until the market-clearing price fell to the supply cost. But, with a fixed amount of "Colorado River experience," that is not possible. As a consequence, "economic rents" arise.
- 6. However, how *equitable* Solution 1's outcome is depends crucially on the underlying *income distribution*. If there are significant income differences between bidders for the Colorado River experience, then high income bidders (with the same preferences for the experience) would consistently outbid low income bidders. The net effect would be that the Colorado River experience would become a higher income patron activity.

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- 7. Solution 2 solves this inequity by giving all citizens with demand for the Colorado River experience an <u>equal chance</u> at access. By only charging a nominal administrative fee, NPS would forego the "economic rents" that it could charge for access.
- 8. The National Park Service, recognizing that some of those who demand a Colorado river experience need outfitters, has decided to allocate use evenly between the concessionaires user-days (and thus indirectly commercial users) and NPS's estimate of user-days to be used by the noncommercial boating public. Under what circumstances would this allocation scheme be equitable, like Solutions 1 or 2? Only if those demanding a Colorado River experience, on average, had an underlying demand for outfitter services that would result in their using the outfitter's user-days one-half of the time would this scheme be as equitable. To determine such a result, NPS must have determined the *joint demand* for both a Colorado River experience and outfitter services.
- 9. If NPS did <u>not</u> determine the joint demand, then arbitrarily splitting the access 50-50 between commercial and noncommercial user-days has two

This only evaluates the basic issue of overall access levels and assumes that all other factors are equal, such as seasonal allocations and other trip limitations. In addition, this declaration does not address the potential inequities involved in using user-days as the measure of use, over other relevant factors such as number of launches, number of people, group size or trip length.

deleterious outcomes. NPS could be either (a) severely limiting the use of outfitters (because, for instance if 90% of potential river users would--after gaining access permits--desire to hire an outfitter, there would <u>not</u> be enough commercial permits) or (b) arbitrarily increasing the unnecessary use of commercial outfitters with an overabundance of user-days at the expense of noncommercial users. In either case, NPS is transferring the "economic rents" associated with limited access to the Colorado River experience <u>to commercial outfitters.</u>

10. For example, assume that State public university admittance was meant to be fairly available to all qualified students but there were only enough admissions to serve 25% of those eligible each year. If the University gave half of the available admission slots to those who could bid the most for tuition and the other half to winners of a lottery, would that be consistent with making education "fairly available to all qualified students?" Obviously it would not. What if, in addition, the University let an outside commercial organization sell one-half of the admissions and keep all proceeds above the normal tuition paid by all students? This is analogous to what the commercial outfitters are allowed to do with Colorado River access. They can charge whatever the market will bear for not only their services but for "access" to the river they provide that is only available in limited quantities elsewhere. For those who just want access and do not want the services of the concessionaires, they are harmed further by being forced to pay the cost of a guide service when they do not need it.

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- wilderness river experience really does not change the basic challenge. In that case NPS could simply allocate wilderness river access based upon a fair scheme (e.g., a lottery system) and let those desiring to combine that access with outfitter services separately contract for such services. The economic advantage of that approach would be that, regardless of the demand for the "wilderness river experience," outfitters would compete on the basis of their services and not capture the "economic rents" associated with these limited national resources that belong to all of us.
- 12. In summary, allocating a scarce national resource among competing uses of its citizens requires the National Park Service to either (1) determine the underlying demand for the use of the resource or (2) design a system of access allocation that—in the absence of such demand analysis—would give every citizen the same opportunity to benefit from the scarce national resource.

I declare under penalty of perjury under the laws of the United States that, to the best of my knowledge, the foregoing is true and correct.

Executed on this 3rd day of September, 2007

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Donald W. Walls