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# PROTECTION OF THE GEOTHERMAL RESOURCE OF YELLOWSTONE NATIONAL PARK—A CASE STUDY

David Ness

## INTRODUCTION

Paradise Valley is a 50 mile stretch of prairie, which lies between the Gallatin and the Absaroka Mountain ranges. The natural beauty of this valley is enhanced by the Yellowstone River, which flows north out of Yellowstone National Park towards Livingston, Montana. Yellowstone National Park lies at the southern end of the valley. Consequently, Paradise Valley occupies a very important niche in Yellowstone's ecological system.

The Valley's proximity to water sources and its relatively mild winters make it an ideal locality for raising cattle and sheep. In recent years, however, this traditional use of the valley has begun to change. Paradise Valley has become the home of several celebrities and millionaires who have been attracted by the beautiful and healthful environment.

One new resident, however, has stirred up much controversy in this peaceful valley. This resident is The Church Universal and Triumphant (CUT), which recently moved from southern California to a ranch on the northern boundary of Yellowstone Park.<sup>1</sup>

The heart of this controversy concerns CUT's plans to utilize naturally occurring underground reserves of hot water at LaDuke Hot Springs to heat its buildings and to fill a proposed swimming pool. Due to the close proximity of LaDuke Hot Springs to the Mammoth Geysers Basin in Yellowstone National Park, park officials are concerned that tapping into these underground reserves may disrupt Yellowstone's world famous geysers.

The National Park Service has been directed, through its Organic Act, "to conserve the scenery and the natural and historic objects. . . and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for future generations."<sup>2</sup> Despite this Congressional direction, the National Park Service is largely impotent to deal with threats that arise on private properties bordering the Park. Congress has not given the Service explicit authority to control such activities. This hesitancy seems to arise from Congress' underlying concern

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1. Since buying the Forbes ranch in 1981, CUT has continued to buy property in the valley and is now the second largest landowner in Park County, second only to Burlington Northern Railroad. CUT plans to develop its 30,000 acre land holdings into a spiritual community which will last for the next millennia.

2. 16 U.S.C. § 1 (1982). Passed in 1916, the Organic Act established the National Park Service.

that it does not have the Constitutional authority to exert control over private lands.<sup>3</sup> This comment seeks to dispel such concerns by exploring a number of alternatives which could be used to halt private activities which severely threaten park resources. These alternatives will be explored in the context of the CUT controversy.

### THE SETTING

The controversy surrounding CUT's plans to drill geothermal wells at LaDuke Hotsprings raises a number of important issues. At the forefront of this controversy, is the disagreement between scientists employed by the Church and those representing the National Park Service.

CUT plans to utilize water located near LaDuke Hotsprings, which is about ten miles north of Yellowstone Park's Mammoth Geyser Basin.<sup>4</sup> Park officials worry that the drilling of these geothermal wells may disrupt the balance of heat, pressure and water upon which the Mammoth Geysers depend.

CUT officials, however, maintain that there is no need to worry about adverse affects to the Yellowstone Geyser system. They rely primarily on a report prepared for them by a hydrology firm from Helena, Montana.<sup>5</sup> The Church also maintains that LaDuke Hotsprings naturally discharges as much as 500 gallons of water a minute. CUT plans to use this same amount of water. Therefore, they contend, their proposed utilization should have no effect on the Mammoth Geysers.<sup>6</sup>

The problem however, is that LaDuke's point of discharge is located inconveniently across the Yellowstone River. Therefore, there is a need for a 458' well to draw water from the aquifer that feeds LaDuke. CUT maintains that its relatively minor use of the water will not affect the Yellowstone geyser system.<sup>7</sup>

The National Park Service disagrees. According to John Varley, Yellowstone's Chief of Research, evidence exists that Mammoth and LaDuke Hotsprings connect to the same "plumbing system." The waters of LaDuke and Mammoth Hotsprings apparently share a common chemical signature. This "common chemical signature" indicates that

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3. See generally Sax, *Helpless Giants: The National Parks & the Regulation of Private Lands*, 75 MICH. L. REV. 234 (1976).

4. CUT has drilled two wells at Corwin Springs. Currently, however, the wells are not being pumped. Interview with Ron Russell, Regional Hydrologist, United States Forest Service (June, 10, 1988).

5. This report was prepared by Hydrometrics Inc., a research firm based in Helena, Montana.

6. *Geothermal Development outside of Yellowstone National Park, 1987: Hearings on S. 1006 before the Subcomm. on Mineral Resource Development and Production*, 100th Cong., 1st Sess. 31 (1987) [hereinafter *Hearings*] (statement of Edward L. Francis, Vice President CUT).

7. *Id.*

they might originate from a common aquifer.<sup>8</sup>CUT's hydrology report, meanwhile, states that because the well is about ten miles from Yellowstone's geysers and five hundred feet lower in elevation, it is quite unlikely that hydraulic impacts from pumping could be transmitted to Yellowstone Park. The report also states that the geological structure makes it "highly improbable" that there is any connection with Mammoth.<sup>9</sup>

Again, the Park Service disagrees. The Service is not so sure that five hundred feet in elevation and ten miles of distance make it "unlikely" that Mammoth and LaDuke connect. According to John Varley, there is evidence that Mammoth and Norris Geyser Basins are connected by underground faults. Mammoth is 22 miles north of Norris and 1,000 feet lower.<sup>10</sup>

The disagreement between CUT and the National Park Service probably cannot be finally resolved unless CUT drills and pumps from the wells at LaDuke Hotsprings. This dilemma creates a catch-22 situation because the effects of drilling and pumping may not show up unless the Church actually utilizes the geothermal waters. This utilization, however, may destroy or damage irreparably the surrounding geyser basin.

#### THE CONFLICT

No one fully understands the "complex plumbing system" which makes up the geyser system in Yellowstone Park. This is why there is a difference of opinion among hydrologists concerning the danger of drilling at LaDuke Hotsprings. Yet to comprehend fully this controversy, one needs a working knowledge of the mechanics of geyser operation.

Most of Yellowstone national park lies within a volcanic caldera<sup>11</sup> that was formed about 600,000 years ago. Hot molten lava flowed intermittently in this area until the glaciers moved down from the north, about 60,000 years ago. When they melted, the glaciers left the gravel and debris that they had pushed along. The gravel insulated the hot lava and kept it from cooling too rapidly. A number of cracks, fissures and porous alluvial deposits within this gravel efficiently collect water from rain and snowfall.<sup>12</sup>

This collected water percolates downward, often hundreds of meters where it is heated by the super hot magma. As the water is heated, its buoyancy drives it to the surface to heat hot pools and geyser reservoirs or

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8. Telephone interview with John Varley on November 10, 1987. [hereinafter Varley].

9. *Hearings*, *supra* note 6, at 31.

10. Varley, *supra* note 8.

11. A caldera is a crater of a volcano that is formed by a collapse of the cone or by a great explosion. WEBSTER'S NEW INTERNATIONAL DICTIONARY 377 (2d ed. 1961)

12. J. S. RHINEHART, GEYSERS AND GEOTHERMAL ENERGY 31 (1980).

to escape from the earth as steam. Some collected water, however, stays close to the surface. This water fills geyser basins and hot springs after being only somewhat heated.<sup>13</sup>

The mechanics of geyser operation are best understood through the utilization of a specific example. For the purposes of discussion, the author will describe how Old Faithful, which is perhaps the most famous geyser in Yellowstone Park, works. All geysers work basically along the same lines.

All geysers have four essential elements—a source of heat, an adequate supply of water, a reservoir, and a plumbing system in which water can be stored and heated.<sup>14</sup> Old Faithful is believed to be a “standpipe” geyser, which means that its reservoir is basically a long tube which descends vertically down in the earth.<sup>15</sup>

During an eruption, Old Faithful’s reservoir empties. Soon thereafter, super heated water rises from the earth to begin filling the tubular reservoir from the bottom up. As the water fills the tube, it moves up and cools. Soon a column of water develops which is cooler on top than at the bottom. As water continues to fill the tube, a few steam bubbles develop at those locations in the column where the temperature of the upward moving water is higher than the ambient boiling point. At first, the bubbles ascend rapidly, but eventually they are cooled in the overlying water. Eventually, as the pressure and heat build, a metastable energy state<sup>16</sup> develops within the tube. This is relieved by an ensuing eruption.<sup>17</sup>

Geyser systems depend upon very fragile physical geological conditions. For this reason, drilling wells around a geyser field is very hazardous. Drilling wells can disrupt the crack and fissure systems which deliver water and heat to geyser reservoirs. This disruption can effectively “shut off” the geysers and hot pools in the surrounding areas.<sup>18</sup>

Drawing from experiences in other parts of the world, the National Park Service is very concerned that CUT’s utilization of geothermal waters could irreparably damage the geysers in Yellowstone Park.<sup>19</sup> For this

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13. It is interesting to note that the speed of movement of this deeply circulating water is very slow. Scientists believe that it can take a few decades or even longer for the water to complete its course. See RHINEHART, *supra* note 12, at 31.

14. RHINEHART, *supra* note 12, at 49.

15. *Id.* at 50.

16. Metastable energy state refers to the state of the water within the reservoir. The condition of the water is changed to a highly volatile and hot energy state which is relieved only after the resulting eruption. RHINEHART, *supra* note 12, at 61.

17. RHINEHART, *supra* note 12, at 62.

18. Internal memorandum of the Department of the Interior from Irving Friedman to Lorraine Mintzmyer (Jan. 13, 1986) (discussing threats associated with drilling around Yellowstone National Park).

19. There are many examples of how man’s tampering with geothermal areas has destroyed entire geyser basins. Perhaps the most infamous example of man’s destruction has occurred in New

reason, the Service feels compelled to halt any further exploitation of this resource. As stated earlier, however, Congress has not given the Service explicit authority to control such activities.

#### POSSIBLE SOLUTIONS

The lack of authority to control activities which occur on bordering private properties seriously undermines the ability of the Service to carry out fully its duties under the Organic Act.<sup>20</sup> However, several alternatives could be used by either Congress or the National Park Service to halt private activities that severely threaten park resources.

##### A. *The Federal Reserved Water Rights Doctrine*

The Federal Reserved Water Rights Doctrine has its origins in the Property Clause<sup>21</sup> and the Commerce Clause<sup>22</sup> of the United States Constitution. The United States Supreme Court first recognized the doctrine in the *Winters*<sup>23</sup> case in 1908. In that case, irrigators were enjoined from diverting water upstream from the Ft. Belknap Indian Reservation. The upstream diversions left insufficient water for the Indians to adequately irrigate their crops.<sup>24</sup> The Court held that when the Federal Government reserves land, by implication it reserves sufficient water rights necessary to accomplish the purposes of the reservation.<sup>25</sup>

In determining whether there is a federally reserved water right implicit in the Federal reservation, the court must determine whether the Government intended to reserve unappropriated water.<sup>26</sup> Intent is inferred if the unappropriated water is necessary to fulfill the purposes of the reservation.<sup>27</sup>

In 1962, the Supreme Court extended the doctrine to encompass all Federal Reservations.<sup>28</sup> In *Arizona v. California*, the Court held that the doctrine applied to National Forests, Wildlife Refuges and National Recreation Areas.<sup>29</sup>

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Zealand. There, the development of the Wairakei geothermal electric power plant has obliterated all geyser activity through its extensive extraction of hot fluids. In addition to New Zealand, geysers in Beowawe and Steamboat Springs, Nevada have been tampered with and are now inactive. RHINEHART, *supra* note 12, at 143.

20. See *supra* text accompanying note 2.

21. U.S. CONST. art. IV, § 3.

22. *Id.* art. I, § 8.

23. *United States v. Winters*, 207 U.S. 564 (1908).

24. *Id.*

25. *Id.* at 577.

26. *Cappaert v. United States*, 426 U.S. 128 (1976).

27. *Id.* at 139.

28. *Arizona v. California* 373 U.S. 546 (1962).

29. *Id.* at 601.

Finally, in *Cappaert v. United States*,<sup>30</sup> the Court held that the doctrine applied to ground water as well as surface water. In *Cappaert*, the Court found that a nearby rancher's pumping of his wells had lowered the water level in Devil's Hole, a component of Death Valley National Monument.<sup>31</sup> A rare, prehistoric species of fish lives in this hole and the lowered water level threatened its existence.<sup>32</sup> The Court held that since preservation of the "pupfish" was one of the primary purposes behind the reservation, the Government could claim a reserved water right.<sup>33</sup>

The CUT situation is very similar to that of *Cappaert*. Both cases involve the pumping of ground water on private land which is outside a federal reservation. Moreover, like *Cappaert*, the ground water in the CUT situation may be necessary to fulfill the purposes of a National Park. The Yellowstone National Park Organic Act<sup>34</sup> directs the Secretary of the Interior to "preserve, from injury or spoilation, all. . . natural curiosities, or wonders, within the park, and their retention in their natural condition."<sup>35</sup> Given this direction, Congress apparently intended to protect geysers and hotpools when it reserved the lands within Yellowstone Park.

Due to the similarities between the two situations, *Cappaert* provides an ideal analogy to the CUT situation. In *Cappaert*, the Court held that the priority date for a federal reserved water right is the date of the establishment of the federal reservation, or the date on which a new purpose was created for the reservation.<sup>36</sup> Using this reasoning, it is clear that the Park has a priority date that is superior to that of CUT, because Yellowstone National Park was established on March 1, 1872. CUT, meanwhile can establish a priority date of 1894.<sup>37</sup> Therefore, by applying the *Cappaert* rationale, the United States would hold a superior right to utilize these waters.

These two cases have significant differences, however. In *Cappaert*, the Government proved that the rancher's pumping of ground water significantly effected the water level of Devil's Hole. In the present situation, no one actually knows if LaDuke Hotsprings connects to the Mammoth geysers. Furthermore, any connection may not become appar-

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30. 426 U.S. 128 (1976).

31. *Id.* at 133.

32. *Id.* at 134.

33. *Id.* at 142.

34. 16 U.S.C. §§ 21-40c (1982).

35. *Id.* § 22.

36. 426 U.S. at 138.

37. The Church's right to the use of waters of LaDuke Hotsprings can be traced back to a large hotel and resort which was located at Corwin Springs. When CUT purchased this property, it also acquired the water rights. Using basic principles of western water law, the Church's water right is inferior to that of the park. The first in time, first in right doctrine grants superiority to Yellowstone Park because its utilization of the water was prior to that of CUT's predecessors.

ent until irreparable damage has already occurred.

The Federal Reserved Water Rights Doctrine has other weaknesses which may prevent a successful claim by the Government for geothermal waters at LaDuke Hotsprings. In the years following the *Winters* case, the Supreme Court expanded the doctrine and its application.<sup>38</sup> Recent decisions by the Court have limited the doctrine, however.<sup>39</sup> This limitation has served to weaken the doctrine and its applications. Because the doctrine has been robbed of much of its strength, the courts may be unwilling to apply it to a situation where no one knows whether or not utilization of the waters in question will have any effect on the Yellowstone geysers. The government will have difficulty in successfully asserting a claim for the waters when no one actually knows whether the waters of LaDuke Hotsprings are the same waters which comprise the geysers of Mammoth. The courts may require some proof of connection and without such proof they may deny the United States any relief.

Although the Doctrine has its weaknesses when applied to the present dilemma, the government may be able to assert a successful claim for geothermal waters at LaDuke Hotsprings. The success of such a claim, however, would probably depend upon an extension of the Federal Reserved Water Rights Doctrine. Given the weaknesses of the government's case, however, it is doubtful that the courts would be willing to extend the doctrine to the facts of the CUT situation.

## B. *The Property Clause*

### a) *Traditional Property Clause Analysis*

On several occasions, the United States has relied upon the Property Clause to control activities on non-federally owned lands. Indeed, the Supreme Court has upheld the constitutionality of a statute which expressly regulates conduct upon privately owned lands adjacent to Federal reserves. In *United States v. Alford*,<sup>40</sup> the Supreme Court upheld a

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38. See *Arizona*, 373 U.S. 546; see also *Cappaert*, 426 U.S. 128.

39. See *United States v. New Mexico*, 438 U.S. 696 (1978). In *New Mexico*, the Court, by narrowly reading the Organic Act of 1897, denied Forest Service claims for waters which were necessary to fulfill the purposes of the Multiple Use Sustained Yield Act (MUSYA). It held that the National Forests were reserved only for the purposes which are stated in the Organic Act. These purposes are "to improve and protect the forest, or for the purpose of securing favorable conditions of water flows, and to furnish a continuous supply of timber." Any claim, therefore, for a federal reserved water right for national forests could only be based upon these three purposes. The purposes which are stated in MUSYA were regarded as supplemental. Therefore, any claim for water based upon these principles has a priority date of 1961—the year of MUSYA's passage. The *New Mexico* decision indicates a departure from the liberal expansion of the reserved water rights doctrine that was accomplished by earlier Court's decisions. It has served to limit the doctrine's applications and seems to indicate that new claims under this doctrine will be closely scrutinized.

40. 274 U.S. 264 (1927).

conviction under a criminal statute that prohibited the burning of fires on private lands which bordered a national forest. In commenting upon the statute, Justice Holmes observed that "Congress may prohibit the doing of acts upon privately owned lands that imperil the publicly owned forests."<sup>41</sup>

In recent years, the federal government's right to protect its land through the Property Clause has been given even larger scope. In *Kleppe v. State of New Mexico*,<sup>42</sup> the Court held that the Property Clause gives Congress the power to protect wildlife on public lands. While this case specifically dealt with the regulation of wild animals, the Court also held that Congress has the power, under the Property Clause, to determine what are "needful" rules "respecting" the public lands.<sup>43</sup>

This power is not limited to regulation required to "protect the public lands from damage."<sup>44</sup> Congress may, in fact, enact a statute designed to "achieve and maintain a thriving natural ecological balance on the public lands."<sup>45</sup> The Court went on to state that "[w]hile the farthest reaches of the Property Clause have not been definitely resolved, we have repeatedly observed that the power over the public lands thus entrusted to Congress is without limitations."<sup>46</sup>

In other recent cases, courts have upheld the right of the Federal government to control activities on state lands which affected Federal Reservations. In *Minnesota ex rel. Alexander v. Block*,<sup>47</sup> the Court of Appeals for the Eighth Circuit held that Congress has the power to enact Federal controls on the use of motor boats and snowmobiles that were not operated on Federal property. In this case, Minnesota and several intervening plaintiffs maintained that Congress exceeded its powers under the Property Clause by curtailing the use of motorized vehicles on lands and waters owned by the state that were within the Boundary Waters Canoe Area Wilderness. The Court rejected this argument and noted that Congress has the power to dedicate federal land for a particular purpose.<sup>48</sup> As a necessary incident to this power, Congress must have the authority to insure that these lands are protected against interference with their intended purposes. This authority must extend to regulation of conduct which occurs off the federal reservation, if that conduct would threaten the designated purpose of the federal lands.<sup>49</sup> Since Congress specifically

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41. *Id.* at 267.

42. 426 U.S. 529 (1976).

43. *Id.* at 536.

44. *Id.* at 537.

45. *Id.* at 535.

46. *Id.* at 539.

47. 660 F.2d 1240 (8th Cir. 1981), *cert. denied*, 455 U.S. 1007 (1982).

48. *Id.* at 1249.

49. *Id.*

found that motorized vehicles significantly interfered with the purposes of the wilderness, the Court concluded that it acted within its Constitutional powers to pass needful regulations respecting the public lands.<sup>50</sup>

A similar result was reached in *United States v. Lindsey*.<sup>51</sup> In *Lindsey*, the appellee was charged with violating regulations issued by the Secretary of Agriculture by camping and building a fire without a permit.<sup>52</sup> Although surrounded by national forests, the campsite was located on dry land below the river's high water mark, which was legally part of the river bed. Title to the river bed was held by the state.<sup>53</sup> Therefore, the appellees maintained, the activities occurred on State property beyond the jurisdiction of the United States. The Ninth Circuit Court of Appeals rejected this argument. This court held that the Property Clause grants power to the United States to regulate conduct on non-federal land when reasonably necessary to protect adjacent federal property.<sup>54</sup>

These cases clearly establish that Congress has the authority to control activity on non-federal land. In asserting this authority, Congress must demonstrate a nexus between the regulated conduct and the federal land which establishes that the regulations are necessary to protect federal property.<sup>55</sup> This nexus is easily established in the context of geothermal development outside of Yellowstone Park.

This development presents a significant threat to the geysers and hotpools within the Park. As stated earlier, Yellowstone Park was established, in a significant part, to protect these features.<sup>56</sup> Any damage to the geysers would seriously interfere with this purpose. Therefore, any regulation by Congress which is designed to protect this resource would probably be upheld as reasonably necessary to protect the federal land.

#### b) *Traditional Nuisance Analysis*

Under the Property Clause, the Federal Government also has the power to control activities on private lands through traditional nuisance law.<sup>57</sup> The Second Restatement of Torts defines a public nuisance as "an unreasonable interference with a right common to the public."<sup>58</sup> This theory provides ideal authority for the government to bring a lawsuit to

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50. *Id.*

51. 545 F.2d 5 (9th Cir. 1974).

52. *Id.* at 6.

53. *Id.*

54. *Id.*

55. *Camfield v. United States*, 167 U.S. 518 (1897).

56. Yellowstone National Park Organic Act, 16 U.S.C. § 22 (1982).

57. See Comment, *Protecting National Parks from Developments Beyond Their Borders*, 132 U. PA. L. REV. 1189 (1984).

58. RESTATEMENT (SECOND) OF TORTS § 821B (1965).

protect the geothermal resources of the Yellowstone Park from outside interference.

Indeed, the government has successfully asserted this theory on a number of occasions.<sup>59</sup> Perhaps the best example of its successful assertion occurred in *Camfield v. United States*.<sup>60</sup> In *Camfield*, a proprietor who had been granted odd numbered sections of land, carefully fenced his property so as to also enclose the even numbered sections owned by the federal government. He achieved this result by placing the fence posts on his own property, alongside the boundary lines of the federal land. The United States sued under a statute which prohibited the enclosure of federal lands. The defendant maintained that the statute must be declared unconstitutional if it was interpreted to prohibit the building of fences upon private lands.<sup>61</sup>

The Supreme Court rejected this argument and held the fence to be nothing less than a nuisance under the general principles of common law. Using this theory the Court ordered its abatement. The Court also held that the Government has the same rights with respect to its lands as a private individual. Therefore, the government may protect Federal lands from unreasonable interference.<sup>62</sup>

Using the rationale of *Camfield*, it seems obvious that the Government can regulate activities of private holdings when these activities unreasonably interfere with the public use and enjoyment of federal land. By drilling wells and pumping geothermal waters, the Church may significantly interfere with the public's right to fully "use and enjoy" Yellowstone National Park. Such an interference would definitely constitute a nuisance under its common law definition.

Although the government may regulate the use of private property, the regulation may go too far. If the regulation infringes too greatly upon a private right, a taking may be found and compensation may be due.<sup>63</sup> A "taking" may be found when governmental interference results in significant impairment of a person's use of his property right. Once regulation reaches a certain extreme, a taking has occurred and compensation must be paid to the injured party. Any attempt by the Government to prohibit CUT from utilizing its decreed water right may indeed be viewed as a "taking". In such a case, the government may be forced to exercise its power of eminent domain, condemn the water right, and to compensate

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59. See, e.g., *United States v. Luce*, 141 F. 385 (C.C.D. Del. 1905); *Cotton v. United States*, 52 U.S. 229 (1851); *United States v. Atlantic Richfield*, 478 F. Supp. 1215 (D.Mont. 1979).

60. 167 U.S. 518 (1897).

61. *Id.*

62. *Id.* at 525-526.

63. "[N]or shall private property be taken for public use without just compensation." U.S. CONST. amend. V.

CUT for the taking of its private property interest.<sup>64</sup>

Perhaps condemnation is the best course for the government to take. By condemning CUT's water right and compensating them for its use, the government could avert possible damage to the Yellowstone geysers and at the same time fairly compensate the Church for the loss of a valuable property right. Protection of the geysers is a necessity; however, fairness dictates that the government should pay for that protection if it results in the taking of CUT's water right.

### C. *The Commerce Clause*

The powers of Congress under the Commerce Clause<sup>65</sup> have greatly expanded during the course of the last half century. Indeed, with one exception, the Supreme Court has not struck down any Congressional exercise of power under the Commerce Clause in four decades.<sup>66</sup> This power has been interpreted to give Congress the power to promote the health, safety and welfare of the people throughout the nation.<sup>67</sup> Therefore, a broad reading of this power leads to the conclusion that, although Yellowstone National Park was established under the Property Clause, Congress could enact laws to protect its uses, which certainly involve interstate commerce, under the Commerce Clause.<sup>68</sup>

Any congressional act of power that is designed to protect the resources of Yellowstone Park would fit comfortably within the range of cases which have upheld regulations justified by the clause. Travel to and use of Yellowstone Park constitute interstate commerce. Past cases demonstrate that the Supreme Court will uphold commerce power legislation if there is any arguable connection between the regulation and commerce which touches two or more states.<sup>69</sup> The fact that the activity is

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64. See *United States v. County Board*, 487 F. Supp. 137 (E.D. Va. 1979). In this case, the government attempted, under federal nuisance law, to halt the construction of high rise towers in Arlington, West Virginia. The government alleged that the completed buildings "would be visual intrusions on the monumental core" of Washington D.C. The court held that the prevention of the building of the towers would constitute a "taking" under the fifth amendment. Such an interference with property rights would not be allowed without compensation.

65. U.S. CONST. art. I, § 8.

66. *National League of Cities v. Usery*, 426 U.S. 833 (1976). In this case, the Supreme Court ruled that the Commerce Clause does not empower Congress to enforce the minimum wage and overtime provisions of the Fair Labor Standards Act against the states "in areas of traditional governmental functions."

67. J. NOWAK, R. ROTUNDA, & J. YOUNG, *CONSTITUTIONAL LAW* § 4.1 (3d ed. 1986).

68. For an in-depth evaluation of how the Commerce Clause could be used to protect National Parks, see Sax, *Helpless Giants, The National Parks and the Regulation of Private Lands*, 75 MICH. L. REV. 239 (1976).

69. See *Heart of Atlanta Motel Inc. v. United States*, 379 U.S. 241 (1964). In this case, the Supreme Court upheld the constitutionality of the Civil Rights Act of 1964. This Act prohibited discrimination in places of public accommodation on the basis of an individual's race, religion or

local in nature or is even trivial, when viewed alone, will not invalidate an exercise of federal power.<sup>70</sup> Nor is any congressional act of power invalidated simply because it seems strained or doubtful. Indeed, the role of the courts in assessing the judgment of Congress is extraordinarily limited. The judiciary will intervene only where the legislative decision is regarded as irrational.<sup>71</sup>

Using the precedent established by the above cases, Congress could use the following rational to prohibit or regulate geothermal development at LaDuke Hotsprings: Yellowstone National Park was reserved due to its unique qualities, which, in a large part includes its geysers and hot pots.<sup>72</sup> Travel to the park constitutes substantial interstate commerce.<sup>73</sup> Furthermore, if the geysers were damaged or destroyed, a rational conclusion is that the quality of a Yellowstone visit would be greatly impaired. This in turn would probably affect the magnitude of the interstate travel to Yellowstone Park. Congress has the constitutional power to control both the quality and the magnitude of interstate commerce.<sup>74</sup>

Using the above rational, any enactment, justified by the Commerce Clause, that is designed to protect the quality of a Yellowstone visit will be upheld.<sup>75</sup> It is almost inconceivable that any court would strike down reasonable legislation that was designed to protect the geysers of Yellowstone Park from outside interference. Indeed, in dicta, the Court has hinted that the object of protecting federal lands, is sustainable under the Commerce Clause.<sup>76</sup>

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national origin. The court found that Congress had a rational basis for finding that racial discrimination by hotels affected commerce. Therefore, the Act was constitutional. *Id.* at 261-262.

70. *See Wickard v. Filburn*, 317 U.S. 111 (1942). In this case Supreme Court upheld a marketing quota that prevented a farmer from growing wheat for his own use. *Id.* at 129. The court found that home-consumed wheat would have a substantial effect upon price and market conditions. *Id.* at 128. Since Congress has the power to control commerce through the utilization of regulatory functions, the Act was deemed to be constitutional. *Id.* at 129.

71. *Heart of Atlanta Motel Inc. v. United States*, 379 U.S. 241, 262 (1964); *Katzenbach v. McClung*, 379 U.S. 294, 305 (1964); *see also Daniel v. Paul*, 395 U.S. 298 (1969).

72. *Yellowstone National Park Organic Act*, 16 U.S. C. § 22 (1982).

73. *See Katzenbach*, 379 U.S. 294; *Heart of Atlanta Motel Inc.*, 379 U.S. 241.

74. *See Berman v. Parker*, 348 U.S. 26 (1954). In this case the Court upheld the authority of Congress to sustain the quality of life in Washington D.C. by eliminating slum and substandard housing conditions under the power of eminent domain. Using the rational of this case, Congress would have the power to control private land use activities that affect the quality of a Yellowstone Park experience.

75. *See Berman*, 348 U.S. 26; *Heart of Atlanta Motel Inc.*, 379 U.S. 241.

76. In *Kleppe*, 426 U.S. at 535 n. 6 (1975), the Government argued that the Wild Free-Roaming Horses and Burrows Act, which was intended "to achieve and maintain a thriving natural ecological balance on the public lands" was sustainable under the Commerce Clause. The Court, however, found it unnecessary to reach this question because it sustained the Act under the Property Clause.

## CONCLUSION

This article lends support to the notion that Congress does have the power to control or even prohibit activities that threaten resources within National Parks. Any enactment passed by Congress to protect the geysers of Yellowstone Park can be justified in a number of ways. Therefore, Congress should not hesitate to pass such legislation, upon finding that the exploitation of this resource will adversely affect Yellowstone National Park.<sup>77</sup>

In the opinion of this author, the best and most equitable course of action for the United States, is to condemn the Church's water rights and to then compensate for their loss. In an era of ever increasing concern for fiscal belt tightening, the government may be hesitant to allocate funds for this purpose. However, the spectra of a Yellowstone Park without geysers is much too tragic to ignore. The government should act quickly to protect this resource in order to "conserve and protect the natural and historic objects. . .for future generations."<sup>78</sup>

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77. On February 2, 1988, Congress passed S.B. 1889. This Bill prohibits any production or drilling of the geothermal resource in Corwin Springs until the middle of 1991. During this interim period, the United States Geological Survey and the National Park Service will study the impact of present and potential geothermal development on the thermal features of Yellowstone Park. Section (c) of the Act directs the Secretary to provide recommendations regarding the acquisition of geothermal rights, if it is determined that such activities will adversely affect Yellowstone Park.

78. 16 U.S.C. § 1 (1982).

