

WATER LAW AND ITS ROLE IN CLOSING THE NUCLEAR FUEL CYCLE

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I. INTRODUCTION

Ultimately, Federal supremacy will prevail and the State of Nevada will be the home of the nation's first deep geologic repository for high-level radioactive waste.¹ Pursuant to the Nuclear Waste Policy Act of 1982, the Department of Energy (DOE) has been studying Yucca Mountain, Nevada, for the past twenty years in an attempt to close the nuclear fuel cycle.² Reacting to the DOE's interest in Yucca Mountain, Nevada has waged an intense political battle in an effort to resist becoming the country's dumping ground. Nevada's weak political stature has prompted the state to take its fight to the courts. Nevada, acting through its state officers, has unsuccessfully attacked the Nuclear Waste Policy Act on the grounds that it violates the Federal Enclave Clause, the Equal Footing Doctrine, the Privileges and Immunities Clause, the Tenth Amendment, and even the Port Preference Clause.³ However, the State has successfully pestered the Department of Energy over water rights. Nevada, the driest state in the nation,⁴ has played a significant role in developing water law doctrines that have shaped federal versus state sovereignty in the western United States.⁵ Nevada is currently pitting more than a century's worth of congressional deference to state water law against America's national, energy, and homeland security policies, as well as the nation's need to protect

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¹ Admittedly this note addresses only one area of controversy between the State of Nevada and the United States Department of Energy. However, while this statement may be overbroad when considering other litigation over Yucca Mountain, the author believes that the statement is nonetheless correct.

² See *Nevada v. Watkins*, 914 F.2d 1545, 1549 (9th Cir. 1990). The court provides the following summary of the nuclear fuel cycle:

Although the AEC, and its successor agency, the Nuclear Regulatory Commission (NRC), were largely successful in promoting the construction of commercial nuclear reactors, these agencies were not successful in resolving the need for safe disposal of the by-products of the generation of nuclear energy.

³ *Id.* at 1554-57.

⁴ Senator Harry Reid, Homepage, Interesting Facts, available at <http://reid.senate.gov/nvfacts.cfm> (last visited May 12, 2004); Sylvia Harrison, *The Historical Development of Nevada Water Law*, 5 U. DENV. WATER L. REV. 148 (2001).

⁵ Harrison, *supra* note 4, at 178-80.

the environment through safe underground storage of nuclear waste. While Nevada may be able to use water rights to delay and harass the Department of Energy's work at Yucca Mountain, the federal government will ultimately prevail. The Department of Energy has three legal theories, all tied to preemption, by which to defeat Nevada's delay tactics.

Part II of this Note briefly discusses the events leading up to Nevada's conflict with the Department of Energy over water. Part III reviews water rights litigation between Nevada and the Department of Energy, as well as changes in Yucca Mountain's status that foreshadow further litigation results. Part IV applies the federal reserved rights doctrine to Yucca Mountain and Part V addresses the applicability of the controversial federal non-reserved rights doctrine.

The final outcome of Yucca Mountain is inevitable. Until a dynamic and courageous political leader stands up and acknowledges what many Nevadans already know, Nevada will continue to waste taxpayer resources and miss opportunities to salvage benefits for the state.⁶

II. BACKGROUND

In 1982, Congress passed the Nuclear Waste Policy Act (NWPAct), which serves as the nation's long-term plan for nuclear waste disposal.⁷ When originally enacted, the NWPAct provided guidelines for the Secretary of Energy to select five potential locations for site characterization.⁸ In 1987, Congress amended the NWPAct to select Yucca Mountain, Nevada, as the sole site for characterization.⁹ This designation sparked intense opposition by the state.¹⁰

⁶ See, e.g., Keith Rogers, *Nuclear Waste: Making Deal on Yucca Gains Favor*, LAS VEGAS REV.-J., July 21, 2002, available at http://www.reviewjournal.com/lvrj_home/2002/Jul-21-Sun-2002/news/19219009.html (last visited May 12, 2004), quoting former Nevada Governor Robert List on results of opinion poll:

They are saying inevitability is coming into focus, and we think it is a mistake to waste our tax dollars by giving the money to attorneys. Let's get real . . . They're saying the time has come to be practical. Our state has tremendous needs. This is a massive project that could mean thousands of good jobs and put hundreds of millions of dollars into our economy. We're crazy if we get all of the bad and none of the good.

See also Jane Ann Morrison, *Yucca Mountain: Ex-Governor Promotes Nuke Dump*, LAS VEGAS REV.-J., Aug. 16, 2001, available at http://www.reviewjournal.com/lvrj_home/2001/Aug-16-Thu-2001/news/16781115.html (last visited May 12, 2004).

⁷ 42 U.S.C. §§ 10101-10270 (2000).

⁸ 42 U.S.C. § 10132(b)(1)(A) (2000).

⁹ 42 U.S.C. § 10133(c)(3)(A)-(F); 42 U.S.C. § 10101(21). The term "site characterization" means –

(A) siting research activities with respect to a test and evaluation facility at a candidate site; and
(B) activities, whether in the laboratory or in the field, undertaken to establish the geologic condition and the ranges of the parameters of a candidate site relevant to the location of a repository, including borings, surface excavations, excavations of exploratory shafts, limited subsurface lateral excavations and borings, and in situ testing needed to evaluate the suitability of a candidate site for the location of a repository, but not including preliminary borings and geophysical testing needed to assess whether site characterization should be undertaken.

¹⁰ See, e.g., Cinnamon Gilbreath, *Federalism in the Context of Yucca Mountain*: Nevada v. Department of Energy, 27 *ECOLOGICAL L.Q.* 577 (2000) ("[D]esignation of Yucca Mountain, Nevada as the sole site to be considered for a nuclear waste repository instigated a fierce and

In response to the 1987 NWPA amendment, the State enacted Nevada Revised Statute 459.910, prohibiting the storage of high level radioactive waste in Nevada.¹¹ Nevada claimed that this legislation was the equivalent of a legislative veto of the DOE's site characterization activities.¹² However, in *Nevada v. Watkins*, the Ninth Circuit held that "Nevada's attempted legislative veto of the Secretary's site characterization activities is preempted by the NWPA."¹³ The court further held that Nevada's legislation "stands as an obstacle to the accomplishment of the full purposes and objectives of Congress."¹⁴

This would not be the end of Nevada Revised Statute 459.910, however. Under Nevada water law, anyone trying to appropriate water in the state must apply to the State Engineer¹⁵ for a permit setting forth the uses of the water, the point of diversion, and the place of use.¹⁶ In February 2000, the Nevada State Engineer resurrected Nevada Revised Statute 459.910 by using it to deny the DOE's application for temporary water permits. The events preceding the application denial began in July 1997, when the DOE filed five applications with the State Engineer to replace existing temporary permits and to establish permanent uses should Congress and the President of the United States designate Yucca Mountain as a nuclear waste repository.¹⁷

Nevada law limits the State Engineer's discretion to deny an application for water to three criteria.¹⁸ A permit may be denied if: 1) no unappropriated water exists at the proposed supply source; 2) the use would conflict with existing rights; and 3) the proposed use threatens to be detrimental to the public interest.¹⁹ In extensive public hearings, both the State and the DOE stipulated that there was sufficient water to be appropriated.²⁰ Furthermore, no one presented a conflicting right.²¹ This left the State Engineer with one option to deny the water permits: the potential threat to the public interest.²² The State

continuing political war between the state of Nevada and the Department of Energy."); Martha Adams & Andrea Nichols, *The Yucca Mountain Fight Is Far from Over*, 10 NEV. LAW. 26 (2002) ("Perhaps it's time to remind the public that 'the opera ain't over 'til the fat lady sings.' With respect to a nuclear dump at Yucca Mountain, the fat lady hasn't sung and the decision is far from inevitable.").

¹¹ Gilbreath, *supra*, note 10, at 588; NEV. REV. STAT. 459.910 (2002) stating: "(1) It is unlawful for any person or governmental entity to store high-level radioactive waste in Nevada," and "(2) As used in this section, unless the context otherwise requires, 'high-level radioactive waste' has the meaning ascribed to that term in 10 C.F.R. § 60.2."

¹² *Nevada v. Watkins*, 914 F.2d 1545, 1560 (9th Cir. 1990).

¹³ *Id.*, at 1561.

¹⁴ *Id.*

¹⁵ NEV. REV. STAT. 532.010, 532.110 (Nevada uses a State Engineer to administer the state's water regulations).

¹⁶ NEV. REV. STAT. 534.080, 533.325, 533.335.

¹⁷ THIEL ENGINEERING CONSULTANTS, NUMERICAL MODELING OF GROUNDWATER FLOW IN THE DEATH VALLEY HYDROGRAPHIC REGION: BASINS 225-230 § 2.1.1 (2000).

¹⁸ NEV. REV. STAT. 533.370(3) (2002).

¹⁹ *Id.*; see also D. Craig Bell & Norman K. Johnson, *State Water Laws and Federal Water Uses: The History of Conflict, The Prospects for Accommodation*, 21 ENVTL. L. 1, 7 (1991) (stating that several states include mandatory public interest analysis in approving water rights).

²⁰ *United States v. Morros*, 268 F.3d 695, 698 (9th Cir. 2001).

²¹ *Id.*

²² *Id.*

Engineer argued that Nevada Revised Statute 459.910 was a legislative manifestation that the storage of high level nuclear waste in Nevada is detrimental to the public interest.²³ Once again, the State of Nevada attempted to veto the NWPAs through use of Revised Statute 459.910. Several recent developments signal that the state law will again be preempted.

Notably, the Department of Energy's position was strengthened in 2002 by presidential and congressional action. On February 14, 2002, the Secretary of Energy, Spencer Abraham, recommended Yucca Mountain to the President for development of a nuclear waste repository.²⁴ The next day, President George W. Bush recommended Yucca Mountain to Congress as the site for the nation's first geologic repository.²⁵ As expected, the Governor of Nevada submitted a notice of disapproval to Congress within sixty days of the President's recommendation.²⁶ On July 9, 2002, after four hours of debate, the United States Senate followed the lead of the House of Representatives and passed a joint resolution, which overrode (vetoed) Nevada's notice of disapproval.²⁷ On July 23, the President signed the bill into law, which officially designated Yucca Mountain as the location for a repository.²⁸

III. FEDERAL PREEMPTION

In March of 2000, the DOE filed a complaint in United States District Court for the District of Nevada. Similar to the argument made in *Watkins*, the complaint alleged that Nevada Revised Statute 459.910 "as applied by the State

²³ *Id.*

²⁴ Letter from Spencer Abraham, Secretary of Energy, to George W. Bush, President, United States of America (Feb. 14, 2002), at <http://www.ocrwm.doe.gov/ym/sr/salp.pdf> (last visited May 12, 2004).

²⁵ Letter from George W. Bush, President, United States of America, to Congress (Feb. 15, 2002), at <http://www.whitehouse.gov/news/releases/2002/02/20020215-10.html> (last visited May 12, 2004); see also 42 U.S.C. § 10136(b)(2) stating:

Upon the submission by the President to the Congress of a recommendation of a site for a repository, the Governor or legislature of the State in which such site is located may disapprove the site designation and submit to the Congress a notice of disapproval. Such Governor or legislature may submit such a notice of disapproval to the Congress not later than the 60 days after the date that the President recommends such site to the Congress under section 10134 of this title. A notice of disapproval shall be considered to be submitted to the Congress on the date of the transmittal of such notice of disapproval to the Speaker of the House and the President pro tempore of the Senate. Such notice of disapproval shall be accompanied by a statement of reasons explaining why such Governor or legislature disapproved the recommended repository site involved.

²⁶ Press Release, Governor Kenny Guinn, Nevada Governor Guinn Declares "The Battle Begins" as He Vetoes Yucca Mountain Nuclear Dump Recommendation (Apr. 8, 2002), at <http://gov.state.nv.us/pr/2002/4-8YUC.htm> (last visited May 12, 2004).

²⁷ H.R.J. Res. 87, 107th Cong.; Pub. L. No. 107-200, 116 Stat. 735 (2002):

Approving the Site at Yucca Mountain, Nevada, for the development of a repository for the disposal of high-level radioactive waste and spent nuclear fuel, pursuant to the Nuclear Waste Policy Act of 1982.

Resolved by the Senate and House of Representatives of the United States of America in Congress Assembled, That there hereby is approved the site at Yucca Mountain, Nevada, for a repository, with respect to which a notice of disapproval was submitted by the Governor of the State of Nevada on April 8, 2002.

²⁸ *Id.*

Engineer, stands as an obstacle to the accomplishment of the purposes of the NWPA and is therefore preempted under the Supremacy Clause.”²⁹ At first glance, the *Watkins* decision appears dispositive of the state’s delay tactics.³⁰ However, the complaint was dismissed in September 2000 by the district court, which abstained from deciding the preemption issue.³¹ In *United States v. Morros*, the district court’s decision to dismiss the claim was vacated and remanded by the appellate panel by a vote of two to three.³² Both the majority and dissent focused much of their opinions on the issues of jurisdiction and abstention.³³ However, both judicial views provide insight on the issue of preemption.

A. *UNITED STATES V. MORROS* – MAJORITY OPINION

With regard to preemption, the majority opinion focused on two issues. The first was the purpose of the DOE’s water permit applications. The second issue was the extent of Nevada’s authorized participation in deciding whether to site a nuclear waste repository at Yucca Mountain.

The five applications submitted by the DOE indicated that the water uses would include, but not be limited to “road construction, facility construction, drilling, dust suppression, tunnel and pad construction, testing, culinary, domestic and other related site uses.”³⁴ During the water application hearings, a DOE witness stated that “if Congress ultimately designated Yucca Mountain as a nuclear waste repository, the requested water would be used to construct and operate such a facility in addition to the purposes listed on the applications.”³⁵ This is the critical difference between *Watkins* and *Morros*. The water permits in *Watkins* were for site characterization activities only, whereas the disputed permits in *Morros* also included construction and operation activities. In *Watkins*, the court held that Nevada Revised Statute 459.910 was preempted because the state enacted the statute to legislatively veto site characterization activities authorized by the NWPA.³⁶

Because Yucca Mountain had not been designated at the time the DOE applied for water permits, the State Engineer claimed that the activities related to constructing and operating a repository were premature.³⁷ The State Engineer based his ruling on the conclusion that the DOE was requesting water for the “actual use in the receiving, transfer, and processes for the storage of high-level nuclear waste in Nevada.”³⁸ “Because the Yucca Mountain repository

²⁹ *United States v. Morros*, 268 F.3d 695, 699 (9th Cir. 2001).

³⁰ See *id.* at 697 (“Realizing that the current water permits expire in April 2002 and that obtaining new permits would take time, the Department of Energy (“DOE”) filed five permit applications with Nevada’s State Engineer in 1997.”).

³¹ *United States v. Nevada*, 123 F. Supp. 2d 1209 (D. Nev. 2000).

³² *Morros*, 268 F.3d at 709.

³³ For a detailed examination on the Court’s treatment of abstention, see Kevin Beck, *The Ninth Circuit’s Message to Nevada: You’re Not Getting Any Younger*, 3 NEV. L.J. 592 (2003).

³⁴ *Morros*, 268 F.3d at 698.

³⁵ *Id.*

³⁶ *Nevada v. Watkins*, 914 F.2d 1545, 1561 (9th Cir. 1990).

³⁷ *Morros*, 268, F.3d at 711.

³⁸ *Id.* at 698.

ha[d] not been approved by Congress, the State . . . persistently maintained that the United States' claim of federal preemption is premature and that the DOE has sufficient water under permit to continue with its authorized site characterization activities."³⁹ The State of Nevada used this timing argument to extend the already lengthy four-year water permit application process.⁴⁰ Since Nevada's formal notice of disapproval was overridden and Yucca Mountain has been designated by Congress,⁴¹ the State of Nevada's argument about preemption being premature is now moot. If decided today, the *Morros* court would most likely follow *Watkins* and hold that Nevada Revised Statute 459.910 stands as an obstacle to the furtherance of the NWPA and is, therefore, preempted under the Supremacy Clause.⁴²

The second preemption issue in *Morros* was whether the federal government or Nevada is entitled to decide if a high level radioactive waste repository should be located in Nevada. According to the court, the outcome is dependent on the interpretation of the NWPA.⁴³ If the act is interpreted to "explicitly or implicitly" authorize only the federal government "to determine whether siting a nuclear waste repository at Yucca Mountain is in the public interest,"⁴⁴ then the United States will prevail.⁴⁵ In contrast, the United States will lose if the NWPA is interpreted to include state participation beyond the "notice of disapproval process" outlined in 42 U.S.C. § 10136.⁴⁶ The court did not decide this issue but provided some insight as to how the question should be decided.

The court stated: "[t]he NWPA's purpose was to establish 'the Federal responsibility[] and definite Federal policy' for the disposal of radioactive waste and to 'define the relationship between the Federal Government and the State governments' with respect to this problem."⁴⁷ The court found these purposes persuasive with regard to the United States' claim that Nevada Revised Statute 459.910 was preempted, especially when combined with the specific method of state participation required by 42 U.S.C. § 10136.⁴⁸ Even before Yucca Mountain was designated as a repository, the court found that Nevada

³⁹ Adams & Nichols, *supra*, note 10 (Martha Adams is a Nevada Deputy Attorney General, co-author of *The Yucca Mountain Fight is Far From Over*, counsel for the State of Nevada in *United States v. Nevada*, 123 F. Supp. 2d 1209, 1210 (D. Nev. 2000), and counsel for the Nevada Agency for Nuclear Projects in *United States v. Morros*, 268 F.3d 695 (9th Cir. 2001)).

⁴⁰ *Morros*, 268 F.3d at 697.

⁴¹ H.R.J. Res. 87, 107th Cong., Pub. L. No. 107-200, 116 Stat. 735 (2002).

⁴² *Nevada v. Watkins*, 914 F.2d 1545, 1561 (9th Cir. 1990).

⁴³ *Morros*, 268 F.3d at 700.

⁴⁴ Letter from Spencer Abraham, Secretary of Energy, to George W. Bush, President, United States of America (Feb. 14, 2002), at <http://www.ocrwm.doe.gov/ymp/sr/salp.pdf> (last visited May 12, 2004) (stating "there are compelling national interests that require development of a repository" – "national security," "non-proliferation objectives," "energy security," and "homeland security"); See also Letter from George W. Bush, President, United States of America, to Congress (Feb. 15, 2002), at <http://www.whitehouse.gov/news/releases/2002/02/20020215-10.html> (last visited May 12, 2004) ("Proceeding with the repository is necessary to protect the public safety, health, and the Nation's security. . . .").

⁴⁵ *Morros*, 268 F.3d at 700.

⁴⁶ *Id.*

⁴⁷ *Id.* at 702 (citing 42 U.S.C. § 10131(b)(2) & (3)).

⁴⁸ *Id.* at 701-02.

law would nevertheless be preempted to the extent that it conflicts with the NWPA. In effect, Nevada Revised Statute 459.910 attempts to decide an issue at the local level that the NWPA outlines taking place at the federal level.

The NWPA details the method for the state to express its disapproval.⁴⁹ The state has followed the procedure. Congress, in accordance with the NWPA, overrode the state's disapproval. To allow the state to discard the site designation at this stage would usurp congressional authority as outlined in the NWPA. The NWPA clearly does not outline the extensive process in Section 10136 so that the state may thwart site designation by reliance on water law that declares deliberate congressional intent detrimental to the public interest.

B. *UNITED STATES V. MORROS* – DISSENT

Judge Hug⁵⁰ stated in his dissent that “an Act which Congress has not yet passed cannot preempt state law or state agency decisions.”⁵¹ Judge Hug agreed with the State Engineer's denial of water permits on the basis that the NWPA did not yet authorize all of the uses of water included in the applications. Authorization to construct and operate a repository at Yucca Mountain required a congressional act.⁵² Judge Hug indicated, however, that if the DOE were to resubmit its applications limited to activities necessary to continue the evaluation of Yucca Mountain, “the State Engineer could not refuse” to approve the permits on the basis of Nevada Revised Statute 459.910.⁵³

The additional act of Congress required by Justice Hug at the time of the *Morros* opinion has since occurred. The DOE no longer must present a revised application that limits the uses of water to those outlined by the NWPA for site characterization. Rather, the DOE can include the uses necessary to develop a nuclear waste repository at Yucca Mountain.

C. *Subsequent History*

On November 27, 2002, the United States filed a motion for summary judgment.⁵⁴ The relief sought included declaratory and permanent injunctive relief based largely on the preemptive effect of Congress' designation of Yucca Mountain as a repository site.⁵⁵ Unfortunately, because the potable water supply was being exhausted, the DOE could not patiently wait for the resolution of the summary judgment motion.⁵⁶ On December 3, 2002, based on the DOE's desperate need for additional water, the United States filed a Renewed Motion for Preliminary Injunction to prevent the State of Nevada from interfering with the DOE's withdrawal of water for use at Yucca Mountain.⁵⁷

⁴⁹ 42 U.S.C. § 10136.

⁵⁰ Judge Hug, the only dissenter, is from Nevada. (United States Courts for the Ninth Circuit website is located at <http://www.ce9.uscourts.gov/>) (last visited May 12, 2004).

⁵¹ *Morros*, 268 F.3d at 711.

⁵² *Id.*

⁵³ *Id.*; *Nevada v. Watkins*, 914 F.2d 1545, 1561 (9th Cir. 1990) (stating that Nevada Revised Statute 459.910 was preempted by the NWPA).

⁵⁴ Memorandum for the United States at 2, *United States v. Nevada*, No. CV-S-00-268-RLH-(LRL) (D. Nev. 2002).

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ *Id.*

In response to this motion, counsel for the Nevada State Engineer contacted the United States on December 13, 2002 to discuss the potential for settling the potable water "crisis."⁵⁸ By December 18, the State Engineer, the State of Nevada Agency for Nuclear Projects, and the United States had reached an agreement.⁵⁹ The next day, the parties filed a Joint Stipulation and Motion to Vacate Hearing.⁶⁰ The stipulation allowed the DOE to immediately start pumping water for potable needs at Yucca Mountain.⁶¹ The only restrictions on the DOE's water withdrawal are the requirements to provide the State Engineer with forty-eight hours advance notice before refilling the potable water tanks and using austerity measures to ensure that potable water is not wasted.⁶²

D. State Engineer's Ruling

The Ninth Circuit in *Morros* remanded the case to the federal district court for a decision on the merits.⁶³ The federal district court remanded, to the Nevada State Engineer, the issue of whether the use of water applied for under the DOE's applications would threaten to be detrimental to the public interest.⁶⁴ In Ruling Number 5307, the State Engineer again relied on discretionary provisions of Nevada Revised Statute 533.370(3), stating "that the use of the waters . . . as contemplated under the said applications would threaten to prove detrimental to the public interest."⁶⁵ This conclusion was based on the Governor's notice of disapproval.⁶⁶ The State Engineer concluded that, as the supreme executive in Nevada, the Governor's actions were a manifestation of a public interest.⁶⁷ However, on remand, the federal district court stated:

while there may be evidence, or argument, available from the prior hearings which address the economic and/or environmental impact of the repository, that mere statements and opinions by state officials will not suffice. Under the circumstances, there must be evidence supplied by experts to substantiate any finding and conclusion by the State Engineer.⁶⁸

The State Engineer's ruling completely failed to respond with anything other than "mere statements" and "opinions" by state officials. The State Engineer unpersuasively suggested that the action by the Governor was not a "mere statement," but rather expressed the overwhelming opposition of the residents of Nevada.⁶⁹ However, in July 2002, the *Las Vegas Review-Journal* conducted

⁵⁸ Joint Stipulation and Motion to Vacate Hearing at 2, *United States v. Nevada*, No. CV-S-00-268-RLH-(LRL) (D. Nev. 2002).

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Id.* at 2-3.

⁶³ *United States v. Morros*, 268 F.3d 695, 709 (9th Cir. 2001).

⁶⁴ Nevada State Engineer Ruling No. 5307, Dated November 7, 2003, at <http://water.nv.gov/O&R/Rulings/5307r.pdf> (last visited on May 12, 2004) (on file with the *Nevada Law Journal*).

⁶⁵ *Id.*

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ *Id.*

an opinion poll that found only forty-nine percent⁷⁰ of those surveyed believed Nevada should continue to fight Yucca Mountain.⁷¹ The State Engineer has not offered any evidence from experts to substantiate a claim that the DOE's use of water at Yucca Mountain is detrimental to the public interest. Additionally, accepting this argument would have the effect of vetoing Yucca Mountain, in contradiction of the notice of disapproval process outlined in the NWPA. As discussed above, permitting a second veto opportunity would stand as an obstacle to the NWPA and would allow a decision at the local level that was contemplated to take place at the national level.

E. Summary

In *Morros*, both the majority and dissent were quite aware of the fact that Yucca Mountain had not been designated by Congress and the President. Even with this limitation, the two opinions discussed how the DOE would be successful in obtaining approval of its water permits. Based on the change in Yucca Mountain's status – now a designated site for a nuclear waste repository – the DOE preemption arguments will prevail. The recent out-of-court settlement and the State Engineer's ruling have only temporarily delayed the inevitable federal versus state conflict.

IV. FEDERAL RESERVED RIGHTS DOCTRINE

In addition to the preemption argument, the Department of Energy could pursue acquisition of water rights via a declaratory judgment on the basis of federal reserved rights. The doctrine of federal reserved water rights is an exception to an extensive pattern of deference by the federal government to state regulation of water within their boundaries.⁷²

The federal reserved rights doctrine slowly evolved over the course of the twentieth century. The arid nature of the western United States requires irrigation to "reclaim" the land from the desert.⁷³ The need to irrigate arid, non-riparian land and claims to water for mining purposes gave rise to the appropriation doctrine.⁷⁴ The appropriation doctrine, simply stated, is "first in time, first in right." Appropriation "requires (1) an intent to appropriate; (2) notice of the appropriation; (3) compliance with state laws; (4) a diversion of the water from a natural stream; and (5) its application, with reasonable diligence and within a reasonable time, to a beneficial use."⁷⁵ Because water is limited in the western United States, there are often more uses for the water than available supply. The reserved rights doctrine allows the federal government to obtain a

⁷⁰ While forty-nine percent is nearly half of the number surveyed, it does not establish the overwhelming opposition cited by the State Engineer.

⁷¹ Rogers, *supra* note 6.

⁷² Gila River III, 989 P.2d 739, 747 (Ariz. 1999).

⁷³ See generally *California v. United States*, 438 U.S. 645 (1978) (discussing the development of the appropriation doctrine and reclamation).

⁷⁴ Harrison, *supra* note 4, at 153.

⁷⁵ GEORGE A. GOULD & DOUGLAS L. GRANT, *CASES AND MATERIALS ON WATER LAW* 27 (West Group 2000).

water right with a priority going back to the date of the land reservation, regardless of whether the water has been put to a beneficial use.

The doctrine of reserved rights had its beginning in *United States v. Rio Grande Dam & Irrigation Co.*, which was decided in 1899.⁷⁶ In *Rio Grande*, the court found that “a State cannot by its legislation destroy the right of the United States, as the owner of lands bordering on a stream, to the continued flow of its waters; so far at least as may be necessary for the beneficial uses of the government property.”⁷⁷ The federal reserved rights doctrine was next seen in the context of Indian reservation land.⁷⁸ In *Winters v. United States*, the court found that when the federal government signed a treaty with the Gros Ventre and Assiniboing Indians and reserved the land, the water necessary for the reservation was also impliedly reserved.⁷⁹ Specifically, the reservation was for agriculture, and the land would have no value to the Indians without water.⁸⁰

Furthermore, in *Cappaert v. United States*, the court noted: “[t]his court has long held that when the Federal Government withdraws its land from the public domain and reserves it for a federal purpose, the Government, by implication, reserves appurtenant water then unappropriated to the extent needed to accomplish the purpose of the reservation.”⁸¹ The court went on to state that “[i]n so doing the United States acquires a reserved right in unappropriated water which vests on the date of the reservation and is superior to the rights of future appropriators.”⁸²

Arizona v. California was the first case to expressly apply the reserved rights doctrine to non-Indian reservation land.⁸³ Since *Arizona*, a number of cases have sought to limit the reach of the federal government’s reserved right. In *United States v. New Mexico*, the Supreme Court found that reserved rights only apply to the *primary* purpose for which the land was reserved.⁸⁴ Water uses for secondary purposes would have to be acquired through state regulatory channels.⁸⁵

There is still some debate as to whether reserved rights apply to groundwater. In *Big Horn I*, the Wyoming Supreme Court expressly held “that the reserved water doctrine does not extend to groundwater.”⁸⁶ In *Shamberger v. United States*,⁸⁷ the United States District Court for the District of Nevada held

⁷⁶ *United States v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690 (1899).

⁷⁷ *Id.* at 703.

⁷⁸ *Winters v. United States*, 207 U.S. 564 (1908).

⁷⁹ *Id.* at 575-77.

⁸⁰ *Id.* at 576.

⁸¹ *Cappaert v. United States*, 426 U.S. 128, 138 (1976).

⁸² *Id.*

⁸³ *Arizona v. California*, 373 U.S. 546, 601 (1963) (“The Master ruled that the principle underlying the reservation of water rights for Indian Reservations was equally applicable to other federal establishments such as National Recreation Areas and National Forests. We agree with the conclusions of the Master. . .”).

⁸⁴ *United States v. New Mexico*, 438 U.S. 696, 718 (1978).

⁸⁵ *Id.* at 716.

⁸⁶ *In re Big Horn River System*, 753 P.2d 76, 99-100 (Wyo. 1988).

⁸⁷ *Shamberger v. United States*, 165 F. Supp. 600, 610-11 (D. Nev. 1958), stating:

Here it is sought to compel the United States to obtain permits to use water from Wells that the United States itself has dug . . . , on property to which it has had “full title” at all times since the

that the United States clearly possessed an implied right to the groundwater necessary for the purposes of the naval reservation even though the legislation reserving the land contained no provisions for water rights.⁸⁸

The Arizona Supreme Court found that whether the water was on the surface or in the ground was irrelevant.⁸⁹ It reasoned that "if the United States implicitly intended, when it established reservations, to reserve sufficient unappropriated water to meet the reservations' needs, it must have intended that reservation water to come from whatever particular sources each reservation had at hand."⁹⁰

Because the United States Supreme Court denied certiorari in the Arizona case, a clear judicial ruling on the reserved rights doctrine's application to groundwater is lacking.⁹¹ However, the Supreme Court did touch upon the groundwater issue in *Cappaert*.⁹² In that case, the heavy pumping of well water lowered the water level of a unique cavern pool in Death Valley called Devil's Hole.⁹³ While the court found the pool to be surface water, it did limit the groundwater that could be pumped by nearby ranchers in order to reserve the minimum amount of water necessary to protect the pup fish, which was the reason the land was originally reserved.⁹⁴

In *Federal Power Commission v. Oregon*, often referred to as *Pelton Dam*, the State of Oregon argued that the Desert Land Act severed water from the public domain and gave the states regulatory control over the water.⁹⁵ The court in *Pelton Dam* held that the Desert Land Act was inapplicable to reserved land.⁹⁶ The *Pelton Dam* case, under the Power Act, defined public lands and reserved lands. Land subject to disposal and private appropriation under public land law are public lands. In contrast, reserved land is not subject to such disposal and appropriation.⁹⁷

The following similar definition of the "public domain" is provided by W. Douglas Kari in his note: "[p]ublic land, sometimes called the 'public domain,' is land owned by the federal government which remains open to settlement, sale, or disposition under the public land laws."⁹⁸ A reservation of land can be

cession of the land by Mexico in 1848. . . . In the instant case, the United States is not seeking freedom to arrange for services to be performed for it by others. It is merely insisting that it has the right to perform its own services on its own land and use the water obtained by means of such services, without being compelled to seek a permit from the State "to appropriate to beneficial use the waters of each of said wells."

⁸⁸ E. Brendan Shane, *Water Rights and Gila River III: The Winters Doctrine Goes Underground*, 4 U. DENV. WATER L. REV. 397, 403 (2001).

⁸⁹ *Gila River III*, 989 P.2d 739, 747 (Ariz. 1999) ("The significant question for the purpose of the reserved rights doctrine is not whether the water runs above or below the ground but whether it is necessary to accomplish the purpose of the reservation.").

⁹⁰ *Id.*

⁹¹ *Phelps Dodge Corp. v. United States*, 530 U.S. 1250 (2000).

⁹² *Cappaert v. United States*, 426 U.S. 128 (1976).

⁹³ *Id.* at 131-34.

⁹⁴ *Id.* at 142-43.

⁹⁵ *Fed. Power Comm'n v. Oregon*, 349 U.S. 435, 448 (1955).

⁹⁶ *Id.*

⁹⁷ *Id.* at 443-44.

⁹⁸ *Id.* at 443-44; see also W. Douglas Kari, *Groundwater Rights on Public Land in California*, 35 HASTINGS L.J. 1007 (1984).

completed via approval of the Secretary of the Interior,⁹⁹ via executive order,¹⁰⁰ or by congressional act.¹⁰¹

Analyzing the reserved rights doctrine with regard to Yucca Mountain requires a discussion of the mountain's land status. Additionally, a close look at the purpose of the NWSA concerning water is necessary to determine whether an express or implied reservation exists.

Yucca Mountain is situated on three different pieces of property. Roughly a third of the mountain is located on Nevada Test Site land. Another third is located on Air Force test range land. The final third is located on Bureau of Land Management property. The source of water for Yucca Mountain falls within the Nevada Test Site borders. The State of Nevada could argue that using water for Yucca Mountain from the Nevada Test Site is a secondary purpose of the Nevada Test Site and, therefore, not a reserved right. In the case of Yucca Mountain, Congress has approved the site as the location for a repository. The land has not been formally withdrawn and reserved from the public domain, but the reserved rights doctrine is a doctrine based on implication.¹⁰² Clearly, designating a location as the site for 70,000 metric tons of high-level radioactive waste removes the land from the public domain. Similar to *Pelton Dam*, this land is not available for disposal or subject to private appropriation according to public land law. To designate the land as the site for the nation's first geologic repository means little without the resources (water) necessary to fulfill the purposes of the designation.

According to the *Morros* court, "Yucca Mountain . . . activities require water."¹⁰³ In enacting the NWSA, Congress expressly identified what the Secretary of Energy must consider when acquiring water. The NWSA, as codified in 42 U.S.C. § 10144 states:

The Secretary shall give full consideration to whether the development, construction, and operation of a repository may require any purchase or other acquisition of water rights that will have a significant adverse effect on the present or future development of the area in which such repository is located. The Secretary shall mitigate any such adverse effects to the maximum extent practicable.

This section of the NWSA makes it clear that a repository site requires water. There is no mention of acquisition of water rights via state procedures. Rather, the Secretary's duty is to ensure that the acquisition of water rights has

⁹⁹ See, e.g., Act of June 25, 1910, 36 Stat. 855, 858 (Reservation for dam site by the Secretary of Interior in *Federal Power Commission v. Oregon*, 349 U.S. 435, 439 n.5 (1955)).

¹⁰⁰ See, e.g., Proclamation No. 2,961, 3 C.F.R. 147 (1949 – 1953 Comp.) (Proclamation used to withdraw Devil's Hole from the public domain and make it a detached part of Death Valley); see also *Cappaert v. United States*, 426 U.S. 128, 131 (1976).

¹⁰¹ See, e.g., *United States v. New Mexico*, 438 U.S. 696, 699 (1978).

¹⁰² Traditionally, the threshold question for a reserved water right is whether the Federal Government has in fact withdrawn and reserved the land. *Cappaert*, 426 U.S. at 138. Finding a reserved water right without a formal withdrawal and reservation would represent an extension of current law. However, modern withdrawals have less significance today than when the *Winter's* doctrine was established in the early twentieth century. This Note suggests that designating Yucca Mountain as the site for a high-level waste repository has the same function as a formal withdrawal and reservation. Although, a formal withdrawal and reservation of land and water at Yucca Mountain would remove any uncertainty as to the DOE's water right.

¹⁰³ *United States v. Morros*, 268 F.3d 695, 697 (9th Cir. 2001).

no adverse consequences. In the public hearings leading up the denial of the DOE's applications, the State stipulated that sufficient unappropriated water was available. Therefore, the DOE is not limited due to prior appropriations. No one came forward with a conflicting claim, so there was no showing of adverse effects. Additionally, studies performed at the on-site wells confirm that the water levels at Yucca Mountain have not decreased due to pumping.¹⁰⁴

The Department of Energy has an argument for an implied reserved right to water at Yucca Mountain on the basis of the site's designation by Congress and because the NWPA must be read to reserve water to fulfill its purpose. However, this argument would be strengthened by a formal withdrawal and reservation of land and water at Yucca Mountain. If a reserved right is found, the Department of Energy will not be required to pursue water applications through the Nevada State Engineer. In fact, the State of Nevada would have no authority over the reserved water located at the Yucca Mountain site. Unfortunately for the Department of Energy, it is unlikely that Congress or the President will expressly reserve water at Yucca Mountain due to the political climate, and a century's worth of deference to state water law.

V. FEDERAL NON-RESERVED WATER RIGHTS DOCTRINE

Federal non-reserved water rights is another avenue for the Department of Energy to acquire the necessary water for Yucca Mountain. The doctrine is premised on the Supremacy Clause and could be invoked regardless of whether the land at Yucca Mountain has been reserved from the public domain. Non-reserved rights claim the minimum amount of water necessary subject to prior appropriations. The doctrine, in essence, is a compromise between the reservation doctrine and the total deference to state water regulation.

The existence of federal non-reserved water rights has been seriously debated. Three successive solicitors from the Department of Interior have opined on the subject. In 1979, Solicitor Krulitz defined a broad federal doctrine that allowed federal agencies, "in the absence of an explicit congressional directive to the contrary," to claim and use required unappropriated water in spite of state law.¹⁰⁵ However, Krulitz's broad view seemed to run counter to dicta in *United States v. New Mexico*.¹⁰⁶ The next solicitor, Martz, did not expressly repudiate Krulitz's view of non-reserved water rights, although Martz

¹⁰⁴ U.S. Department of Energy, Office of Civilian Radioactive Waste Management, Site Environmental Report for Calendar Year 2000 Yucca Mountain Site Nye County, Nevada, PGM-MGR-EC-000001, Rev. 00 (August 2001).

¹⁰⁵ Theodore B. Olson, *Federal "Non-Reserved" Water Rights*, 6 Op. Off. Legal Counsel 328, 331 (1982).

¹⁰⁶ *New Mexico*, 438 U.S. at 701 stating:

Where water is necessary to fulfill the very purposes for which a federal reservation was created, it is reasonable to conclude, even in the face of Congress' express deference to state water law in other areas, that the United States intended to reserve the necessary water. Where water is only valuable for a secondary use of the reservation, however, there arises the contrary inference that Congress intended, consistent with its other views, that the United States would acquire water in the same manner as any other public or private appropriator.

See also GOULD & GRANT, *supra* note 75.

did try to define and restrict its broad application.¹⁰⁷ Martz indicated that the non-reserved right could exist if expressly or impliedly mandated by Congress.¹⁰⁸ However, the two acts he analyzed did not manifest such a clear expression.¹⁰⁹ Both views by Krulitz and Martz provoked heated resistance by western Governors.¹¹⁰ In response to the upheaval in the West,¹¹¹ Solicitor Coldiron issued an opinion that clearly dispelled the positions of Krulitz and Martz. In fact, Coldiron specifically stated “[t]here is no ‘federal non reserved water right.’”¹¹²

Because of the discord among the successive solicitors on the subject of non-reserved rights, Assistant Attorney General from the Office of Legal Counsel, Theodore Olson, wrote a comprehensive memorandum on the “federal government’s legal rights to unappropriated water arising on or flowing across federally owned lands in the western states.”¹¹³ Olson did not rule out the possible existence of a non-reserved water right, but summarized the opinion by stating that there has never been an exercise of such authority.¹¹⁴ Olson did state that the commerce clause, property clause, and supremacy clause gave the federal government authority to preempt state law.¹¹⁵ Similar to Martz, Olson indicated that an exercise of the supremacy clause would have to be “explicit or clearly implied, however, and federal rights to water will not be found simply by virtue of the ownership, occupation, or use of federal land.”¹¹⁶

The Great Sand Dunes National Park and Preserve Act of 2000 is an example of the explicit exercise of federal supremacy called for by Olsen.¹¹⁷ Within the act, the Clinton Administration used the non-reserved rights doctrine to appropriate, not reserve, the necessary amount of water to support a national park and preserve in southern Colorado.¹¹⁸ This action is the

¹⁰⁷ *Supra* note 105, at 360.

¹⁰⁸ *Id.*

¹⁰⁹ *Id.*

¹¹⁰ John D. Leshy, *Water Rights for New Federal Land Conservation Programs: A Turn-of-the-Century Evaluation*, 4 U. DENV. WATER L. REV. 271, 287 (2001).

¹¹¹ *Supra* note 105, at 356.

¹¹² *Id.* at 360.

¹¹³ *Id.* at 328.

¹¹⁴ *Id.* at 382-83.

¹¹⁵ *Id.*

¹¹⁶ *Id.*

¹¹⁷ Pub. L. No. 106-530, 114(9)(b)(2) Stat. 2527 (2000).

¹¹⁸ *Id.* stating:

WATER RIGHTS FOR NATIONAL PARK AND NATIONAL PRESERVE. In carrying out this Act, the Secretary shall obtain and exercise any water rights required to fulfill the purposes of the national park and the national preserve in accordance with the following provisions:

- (A) Such water rights shall be appropriated, adjudicated, changed, and administered pursuant to the procedural requirements and priority system of the laws of the State of Colorado.
- (B) The purposes and other substantive characteristics of such water rights shall be established pursuant to State law, except that the Secretary is specifically authorized to appropriate water under this Act exclusively for the purposes of maintaining ground water levels, surface water levels, and stream flows on, across, and under the national park and national preserve, in order to accomplish the purposes of the national park and the national preserve and to protect park resources and park uses.
- (C) Such water rights shall be established and used without interfering with –

fulfillment of Olson's twenty-year-old opinion.¹¹⁹

In the case of Yucca Mountain, there is no doubt that Congress or the President could expressly appropriate water via the non-reserved rights doctrine. The question is, however, whether Section 124 of the NWPA – Consideration and Effect of Acquisition of Water Rights – can be read to clearly imply such an appropriation.¹²⁰ Within this section, the Secretary of Energy is directed to consider the adverse effects associated with the acquisition of water for the development and construction of a repository.¹²¹ The Secretary is also empowered to mitigate any adverse effects.¹²² This language supports the Secretary of Energy's authority to acquire (appropriate) water necessary for the development, construction, and operation of a repository. Such appropriation would, of course, be cautioned by potential adverse effects.¹²³ However, John D. Leshy, former Solicitor of the Department of Interior, suggests that states have not been adversely impacted by the exercise of federal reservation or appropriation of water.¹²⁴ Additionally, as discussed earlier, the State of Nevada has not demonstrated or even claimed any adverse impacts, and on-site well studies have shown no decrease in water level due to use at the Yucca Mountain site.

The non-reserved rights doctrine should be viewed by Nevada as a compromise, and a reconciliation tool with the federal government. The doctrine, as summarized by Leshy, encourages cooperation between the state and federal interest.¹²⁵ Unfortunately, the state of Nevada is using water law as a tool to block a politically unpopular federal project, and will continue to resist cooperation with the federal government to the detriment of Nevada's citizens.

(i) any exercise of water right in existence on the date of enactment of this Act for a non-Federal purpose in the San Luis Valley, Colorado; and

(ii) the closed Basin Division, San Luis Valley Project.

(D) Except as provided in subsections (c) and (d), no Federal reservation of water may be claimed or established for the national park or the national preserve.

¹¹⁹ *Supra* note 110, at 288.

¹²⁰ 42 U.S.C. § 10144 (2000).

¹²¹ *Id.*

¹²² *Id.*

¹²³ *Id.*

¹²⁴ *Supra* note 110, at 281.

¹²⁵ *Id.* at 288-89, stating:

National interests are protected because the federal government holds an enforceable water right in its own name, and federal, not state law measures the substance of the right. This means the standard by which the right is quantified and adjudicated is one of the federal law which, like the quantification and adjudication of a traditional federal reserved right, is ultimately reviewable by the Supreme Court of the United States.

State interests are protected because the federal agency has to file for the right and, thus, the right may be adjudicated and administered in the state water administration system, and in accordance with the state priority system. Both sides are served by the fact that the uncertainty over the contours of the right may be resolved relatively promptly, without the need to wait decades for a general stream adjudication. And, more subtly, both sides are served because this approach compels them to cooperate more closely, which may foster better communications between, and more confidence in, each other.

VI. CONCLUSION

The DOE has several alternatives to thwart the State of Nevada's attempts, via water law, to prevent the construction of the Nation's first high-level radioactive waste repository at Yucca Mountain. First, the DOE should continue to pursue declaratory and permanent injunctive relief on the basis of presidential, congressional, and the NWPA's preemptive effect. Second, the DOE should aggressively pursue a formal land withdrawal, which explicitly reserves the necessary water to fulfill the primary purposes of the reservation: construction and operation of a repository. Finally, the President or Congress could explicitly appropriate, rather than reserve, the required quantity of non-reserved water. By pursuing one or more of these alternatives, the DOE will be able to put the water law issues surrounding Yucca Mountain to rest and focus its attention on more important design, safety, and licensing issues.

The Ninth Circuit in *Morros* has described the elements and analysis necessary for the DOE to succeed on the merits of Nevada water law standing as an obstacle to the performance of congressionally mandated duties outlined in the NWPA. Nevada failed to successfully veto Yucca Mountain according to the congressionally prescribed method. Additionally, based on Yucca Mountain being designated as the site for a repository by Congress and the President, the State of Nevada's attempt to administratively and legislatively veto Yucca Mountain will be preempted. The courts simply cannot allow a state to unilaterally overrule the concerted effort of Congress and the President, thereby usurping federal authority.

The Department of Energy does have an implied reserved right to water at Yucca Mountain on the basis of the site's designation by Congress and the President. While the NWPA can easily be read to provide the Secretary of Energy the authority to reserve the necessary water to fulfill the purposes outlined in the NWPA, a formal land withdrawal that explicitly reserves the required water would solidify the DOE's claim to reserved water rights. However, given the federal government's long pattern of deference to state water law, it is unlikely that the United States will rely on the reserved right while other alternatives exist to resolve this matter.

There is no question that the President and Congress hold the authority to appropriate non-reserved water, contrary to state law. Until the Clinton Administration, such authority was only theory and had not been exercised. Following the example used in Colorado, the President could again invoke the supremacy clause to appropriate the required water for construction and operation of a repository at Yucca Mountain. While this third alternative is relatively untested, it has the potential to serve as a reconciliation tool where the State of Nevada works with the federal government to solve this important issue.

What is ironic about the extended conflict between Nevada and the DOE is that the arid nature of Nevada was one of the motivating factors in selecting Yucca Mountain for characterization as a potential site for a high-level radioactive waste repository. Nevada is the driest state in the nation, yet water is the

very issue that is responsible for delaying progress on Yucca Mountain. As was seen during the course of this conflict, the required water exists and water law truly is the “weed that flowers in the arid west.”¹²⁶

¹²⁶ Harrison, *supra* note 4, at 173 (quoting Ninth Circuit Judge Fletcher in *United States v. Orr Water Ditch Co.*, 256 F.3d 935, 940 (2001)).