

**ROSETTE, INC. V. U.S. DEPT. OF THE INTERIOR, 2007-NMCA-136, 142 N.M. 717,
169 P.3d 704**

**ROSETTE, INC., a New Mexico Corporation,
Plaintiff-Appellant,**

v.

**THE UNITED STATES OF AMERICA DEPARTMENT
OF THE INTERIOR, UNITED STATES BUREAU OF LAND
MANAGEMENT, STATE OF NEW MEXICO STATE
ENGINEER, STATE OF NEW MEXICO COMMISSIONER
OF PUBLIC LANDS, ROY A. HATCH, FRED KERR, SR.,
GREGORY D. KERR and CODY G. KERR, FARM CREDIT
BANK OF WICHITA, FARMERS HOME ADMINISTRATION,
VAN MARTIN WAMEL, CLINTON E. DUGAN, WILLIAM M.
MASSEY and BILLY F. MASSEY, ANDY and LOUISE
PETERSON, BILL VECK and DEMING NATIONAL BANK,
TRUMAN and ELAINE SHANNON, SANTA FE INGREDIENTS
CO., INC., A.G. RAMOS and LANGFORD KEITH, EQUITABLE
LIFE ASSURANCE SOC., DON BURTON and FEDERAL LAND
BANK, ARMANDO DOMINGUEZ, PAUL RODRIGUEZ, JERRY
VACK, W.W. ROARK, THELMA WARTMAN SMITH, WESTERN
BANK, HOUSTON and F.L.B. MOORE, AMERICULTURE, INC.,
DEVAUN RICHINS, ARCHIE PAYNE, FEDERAL LAND BANK
OF WICHITA, JOHN C. and JODY HATCH, PEARL M. KERR,
and EDDIE HALE KERR,
Defendants-Appellees.**

Docket No. 26,013
COURT OF APPEALS OF NEW MEXICO
2007-NMCA-136, 142 N.M. 717, 169 P.3d 704
January 5, 2007, Filed

APPEAL FROM THE DISTRICT COURT OF HIDALGO COUNTY, J.C. Robinson, District Judge
Certiorari Denied, No. 30,213, March 19, 2007. Released for publication October, 16, 2007.

COUNSEL

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State of New Mexico ex rel. New Mexico State Engineer

JUDGES

OPINION

PICKARD, Judge.

{1} Plaintiff, Rosette, Inc. (Rosette), appeals an order granting summary judgment to Defendant, United States Department of Interior (United States), and an order dismissing its petition to adjudicate all underground water rights in the Animas Valley Underground Water Basin. We hold that (1) the district court properly concluded it did not have jurisdiction to determine ownership of geothermal resources reserved by the United States; (2) relitigation of Rosette's claim is barred by res judicata and collateral estoppel; (3) Rosette's claim fails on the merits under the Geothermal Steam Act of 1970, 30 U.S.C. §§ 1001-28 (2000), and the Stock-Raising Homestead Act of 1916, 43 U.S.C. §§ 299, 301 (2000); and (4) NMSA 1978, § 71-5-2.1 (2003), does not preempt or modify existing federal law that defines the heated water at issue as a geothermal resource subject to royalty payments to the United States. We therefore affirm the order granting summary judgment in favor of the United States. We also hold that the district court did not err in dismissing Rosette's petition for an adjudication of all underground water rights.

I. BACKGROUND

{2} Rosette grows roses in greenhouses for commercial distribution. Rosette owns the surface estate to the real property in Hidalgo County on which the greenhouses are located. Rosette traces title to that property back to patents issued in 1933 and 1935 by the United States under the Stock-Raising Homestead Act. Patents issued under the Stock-Raising Homestead Act reserved all minerals in the land for the United States. 43 U.S.C. § 299(a). The patented lands held by Rosette are subject to such a reservation.

{3} The Federal Geothermal Steam Act authorizes the Secretary of the Interior to lease geothermal resources owned or reserved by the United States. 30 U.S.C. § 1002. "Geothermal resources" are defined, in part, as "all products of geothermal processes, embracing indigenous steam, hot water and hot brines" and "heat or other associated energy found in geothermal formations." 30 U.S.C. § 1001(c). The Geothermal Steam Act establishes a system of rents and royalties for the use of such geothermal resources. 30 U.S.C. § 1004.

{4} Pursuant to the Geothermal Steam Act, the United States claims ownership of the geothermal resources beneath Rosette's surface estate as mineral interests and leases rights to various leaseholders for their use. In 1978, Rosette entered into an agreement with leaseholders to use the geothermal resources to heat its commercial greenhouses. As a designated operator under the lease, Rosette agreed to make royalty payments to the United States.

{5} In its greenhouse operations, Rosette uses hot water pumped from beneath its surface estate. The water, which is heated by geothermal sources beneath Rosette's property, is drawn

from wells and piped through the greenhouses, where it radiates heat. After the water is used for its heat value, it is discharged. As will be discussed below, federal courts have held that the heat carried by the water is a geothermal resource that belongs to the United States because it is a mineral interest reserved by the Stock-Raising Homestead Act. *See Rosette Inc. v. United States (Rosette I)*, 141 F.3d 1394 (10th Cir. 1998); *Rosette, Inc. v. United States (Rosette II)*, 64 F. Supp. 2d 1116 (D.N.M. 1999); *Rosette Inc. v. United States (Rosette III)*, 277 F.3d 1222 (10th Cir. 2002).

{6} Rosette uses water from separate wells located on its surface estate for irrigation. Rosette has permits issued under New Mexico law for beneficial use of groundwater from the wells for "irrigation within greenhouses and related purposes." Rosette's groundwater supply is derived from the Animas Valley Underground Water Basin. The priority dates of Rosette's wells range from 1936 to 1958.

{7} Despite its agreement to pay royalties to the Department of Interior, Rosette filed suit in federal district court against the United States, claiming that geothermal resources were not reserved minerals under the Stock-Raising Homestead Act and that the United States lacked the authority to regulate them. *See Rosette I*, 141 F.3d at 1395 (discussing the proceedings in district court). The lawsuit alleged that the United States has no interest in the geothermal resources used by Rosette to heat its greenhouses. *Id.* at 1396. Rosette asked the district court to quiet title to the geothermal resources and to enjoin the United States from asserting authority over them. *Id.* The district court dismissed Rosette's claim, a decision that was affirmed in *Rosette I*. *Id.* at 1398. The Tenth Circuit held that because Rosette sought a declaration as to ownership of the geothermal resources, Rosette's exclusive remedy was the Quiet Title Act, 28 U.S.C. § 2409a (2000). *Rosette I*, 141 F.3d at 1397 (stating that the Quiet Title Act "is Rosette's only recourse for haling the United States into court on the issue of *ownership* of the geothermal resources"). Because Rosette knew that the United States claimed an interest in the geothermal resources in 1978 when Rosette entered into the leases and agreed to pay royalties, the Tenth Circuit concluded that Rosette's lawsuit was barred by the Quiet Title Act's twelve-year statute of limitations. *Rosette I*, 141 F.3d at 1398.

{8} After Rosette's claim was dismissed, the United States moved for summary judgment on its counterclaim, which sought to enjoin Rosette from utilizing geothermal resources. *Rosette II*, 64 F. Supp. 2d at 1118. Rosette filed a cross-motion for summary judgment offering as an affirmative defense that Rosette owned and had title to the disputed resources by virtue of the patents that gave Rosette ownership of the surface lands. *Id.* The central issue facing the district court was whether the right to use geothermal resources as a heat source for the greenhouses passed to Rosette or was retained by the United States under the reservation of minerals in the Stock-Raising Homestead Act. *Rosette II*, 64 F. Supp. 2d at 1119.

{9} Although Rosette asserted that it had a prior vested state property right in the water it used to heat its greenhouses, the federal district court concluded that the geothermal resources located under the patented land were retained by the United States as a reserved mineral pursuant

to the Stock-Raising Homestead Act. *See Rosette II*, 64 F. Supp. 2d at 1121-25. Recognizing a critical distinction between potable water and the heat it transports, the district court held that title to the geothermal resources in question was vested in the United States as a matter of law under the patent reservation in the deed issued under the Stock-Raising Homestead Act. *See Rosette II*, 64 F. Supp. 2d at 1125. This decision was affirmed by *Rosette III*, which held that (1) geothermal resources qualify as minerals under the Stock-Raising Homestead Act, (2) geothermal resources in land for which owners are surface holders are subject to the act's reservation of mineral rights, and (3) any rights Rosette has to use minerals in connection with its rights as a surface holder under the patents do not extend to the use of geothermal resources to heat greenhouses to produce roses for commercial sale. *Rosette III*, 277 F.3d at 1230, 1234. Thus, in *Rosette II* and *III*, the federal district court and Tenth Circuit held that the geothermal resources at issue were minerals owned by the United States and that Rosette was obligated to pay royalties to use them to heat its greenhouses. The district court observed that a contrary result would bestow a windfall on Rosette, which knew from the beginning that its geothermal rights derived from the federal lease. *Rosette II*, 64 F. Supp. 2d at 1125.

{10} Following the litigation in the federal courts, Rosette refused to pay \$671,430 in past due federal royalties and interest despite having assets between \$4 and \$20 million, and was held in contempt by the federal district court. Rosette subsequently entered into a settlement agreement with the United States. As part of the agreement, Rosette agreed not to litigate any issue related to royalties.

{11} In 2004, Rosette filed this suit in state district court as a petition for an adjudication of all underground water rights in the Animas Valley Underground Water Basin. As part of the adjudication suit, Rosette claimed that the litigation in federal courts did not adjudicate the ownership and scope of Rosette's water rights. Rosette contended that New Mexico owns all groundwater, including the hot water beneath Rosette's surface estate, and that Rosette should be able to use that water pursuant to its existing water rights. Claiming that water 250 degrees Fahrenheit and below is not a geothermal resource under New Mexico law, Rosette asked the district court to determine that the United States has no mineral interest in the groundwater situated below Rosette's surface estate. The United States filed a motion for summary judgment, arguing that the state district court lacked jurisdiction over Rosette's claims against the United States and that, even if it had jurisdiction, relitigation of Rosette's claim would be barred by the principles of res judicata and collateral estoppel.

{12} The district court granted summary judgment to the United States "as to all issues and requests for determinations of ownership of the geothermal heat associated with the water underlying [Rosette's] property." First, the district court concluded that it does not have jurisdiction to determine the ownership of the geothermal resources claimed by the United States. The district court agreed with the United States that because geothermal resources are mineral rights, any question as to ownership of those mineral rights must be brought in an action under the Federal Quiet Title Act, in which case exclusive jurisdiction lies in the federal courts. Second, the district court determined that Rosette could not rely on Section 71-5-2.1 to argue

that hot water is not a geothermal resource under New Mexico law and instead is a simple water right. The district court found that Section 71-5-2.1 only relates to the State's collection of royalties for state-owned mineral rights and is not applicable to the federal government. Third, the court concluded that construing Section 71-5-2.1 as defining geothermal resources more narrowly than the Federal Geothermal Steam Act would violate the Supremacy Clause of the United States Constitution, which prohibits states from modifying or changing existing federal law. Fourth, the district court found it unnecessary to rule on the res judicata and collateral estoppel arguments of the United States. Fifth, the district court determined that because Rosette was asking for a finding regarding the ownership of geothermal resources, which is beyond the scope of a water rights adjudication, the sovereign immunity of the United States was not waived by the McCarran Amendment. 43 U.S.C. § 666 (2000). Finally, the district court noted that the Office of the State Engineer had received funds for an adjudication of the water rights in the Animas Basin. In a subsequent order, the district court dismissed Rosette's petition for an adjudication of water rights in the Animas Basin to allow the State Engineer to file a separate adjudication petition. From these two orders, Plaintiff appeals.

{13} On appeal, Rosette argues that the district court erred in ruling that it did not have jurisdiction to determine ownership of the geothermal attributes of Rosette's water rights. Rosette asserts that its existing water rights are controlled by New Mexico water law through permits issued by the State of New Mexico. Thus, in Rosette's view, the State has the sole right as the owner of all underground water to determine at what point that water becomes a geothermal resource, which the Legislature did in enacting Section 71-5-2.1. Rosette argues that the district court erred in determining that Section 71-5-2.1 only relates to the State's collection of royalties for state-owned mineral rights and rejects the notion that the statute attempts to modify or change existing federal law. Based on these premises, Rosette argues that it should not have to pay royalties to the United States for use of the heated water.

{14} The United States responds (1) that the district court properly concluded it lacked jurisdiction to determine ownership of a geothermal resource reserved by the United States, (2) that relitigation of Rosette's claim would have been barred by res judicata and collateral estoppel, (3) that Rosette's claim would fail on the merits under the Stock-Raising Homestead Act and the Geothermal Steam Act, and (4) that Section 71-5-2.1 does not excuse Rosette from its obligation to pay royalties for use of a federal geothermal resource. The State Engineer also weighs in against Rosette, rejecting the arguments that geothermal energy is an element of a water right subject to adjudication. Rather, the State Engineer contends, state and federal law define geothermal resources as a mineral interests, ownership of which is property separate and distinct from water.

II. DISCUSSION

{15} In this appeal, we first address whether the state district court has jurisdiction to determine whether heat in water is a geothermal resource belonging to the United States or an attribute of a water right controlled by the State of New Mexico. Second, assuming *arguendo*

that our state courts possess jurisdiction, we discuss whether Rosette's claims would be precluded by the earlier federal litigation. Third, we determine that Rosette's claim nonetheless fails on the merits under federal law. Finally, we consider the effect of Section 71-5-2.1 on Rosette's obligation to pay a royalty for use of geothermal resources. We consider all of these issues in the hopes of ending, once and for all, Rosette's litigation of issues relating to its obligation to pay federal royalties.

{16} "Summary judgment is appropriate where there are no genuine issues of material fact and the movant is entitled to judgment as a matter of law." *Self v. United Parcel Serv., Inc.*, 1998-NMSC-046, ¶ 6, 126 N.M. 396, 970 P.2d 582. Where issues on appeal involve only questions of law, we review those questions de novo. *Id.*

A. Jurisdiction

{17} We first address the issue of whether the district court erred in ruling it lacked jurisdiction over Rosette's claim against the United States. The determination of whether jurisdiction exists raises a question of law that an appellate court reviews de novo. *See Gallegos v. Pueblo of Tesuque*, 2002-NMSC-012, ¶ 6, 132 N.M. 207, 46 P.3d 668.

{18} Our jurisdictional inquiry must necessarily include a determination about the true characterization of the lawsuit. That characterization cannot depend on the label given the suit by the plaintiff, but requires the court to scrutinize any relevant facts and information to determine whether the case is properly before the court. *See Valenzuela v. Singleton*, 100 N.M. 84, 87, 666 P.2d 225, 228 (Ct. App. 1982) (stating that a determination about jurisdictional facts requires the court to ascertain whether factual prerequisites to the exercise of jurisdiction are met). Rosette claims that its lawsuit in state court is about the adjudication of water rights, which the district court has jurisdiction to determine. For the reasons that follow, we reject Rosette's claim that because the district court has jurisdiction over an adjudication of water rights, the district court has jurisdiction to determine ownership of geothermal resources that are reserved to the United States as mineral interests.

{19} In its petition, Rosette claimed that the district court had jurisdiction over this matter pursuant to NMSA 1978, § 72-4-17 (1965) and 43 U.S.C. § 666(a). Section 72-4-17 governs jurisdiction for petitions for adjudication of water rights in New Mexico, providing that "[t]he court in which any suit involving the adjudication of water rights may be properly brought shall have exclusive jurisdiction to hear and determine all questions necessary for the adjudication of all water rights within the stream system involved." Under an adjudication, a decree is entered for the water right adjudged to each party. NMSA 1978, § 72-4-19 (1915). The elements of a water right include the priority date, amount of water, purpose and place of use, and any other conditions necessary to define the right. *Id.*

{20} The purpose of an adjudication suit "is to determine all claims to the use of the water in a given stream system in order to facilitate the administration of unappropriated waters and to aid in the distribution of waters already appropriated." *State ex rel. Reynolds v. Pecos*

Valley Artesian Conservancy Dist., 99 N.M. 699, 700, 663 P.2d 358, 359 (1983). Adjudications may be initiated by private claimants, *see* NMSA 1978, § 72-4-15 (1915), but all water users whose rights may be affected must be joined. Section 72-4-17; *see also* *Elephant Butte Irrigation Dist. v. Regents of N.M. State Univ.*, 115 N.M. 229, 233-34, 849 P.2d 372, 376-77 (Ct. App. 1993) (stating that New Mexico's adjudication statutes require the joinder of all claimants to avoid piecemeal litigation). In order to ensure joinder of all parties in general stream adjudications, Congress waived the sovereign immunity of the United States from state procedures to quantify federal water rights in the McCarran Amendment. 43 U.S.C. § 666. Thus, the McCarran Amendment allows the United States to be joined in a comprehensive adjudication of water rights in a state court.

{21} Rosette assumes that because it petitioned for an adjudication of all the water rights of the Animas Valley Underground Water Basin, and the United States has waived its immunity under the McCarran Amendment in general adjudications, the district court erred in concluding it did not have jurisdiction to hear this case.

1. Quiet Title Act

{22} Although Rosette asserts that this lawsuit is about determining water rights, we are not persuaded. In its petition for an adjudication, Rosette asked for more than a determination of water rights. Rosette asked the district court to decree that the United States "has no mineral interest in the groundwater situated below Plaintiff's surface estate." On appeal, Rosette contends that "[t]he bottom-line question before this Court is a property issue; namely who owns what?" Rosette later reiterates that "[t]he underlying question before this Court boils down to the determination of a property interest-whether hot water in New Mexico is the property of the State of New Mexico, or if hot water in New Mexico is the property of the United States."

{23} Rosette asserted the same claim in the litigation before the federal courts. *See Rosette I*, 141 F.3d at 1396 (stating that Rosette's complaint sought a declaration that the United States has no interest in the geothermal resources used by Rosette to heat its greenhouses). Original jurisdiction in quiet title actions over real property to which the United States claims an ownership interest rests exclusively with the federal courts. *See id.* at 1397-98; 28 U.S.C. § 1346(f) (2000). Thus, the federal district court held that the Federal Quiet Title Act "is Rosette's only recourse for haling the United States into court on the issue of *ownership* of the geothermal resources." *Rosette I*, 141 F.3d at 1397.

{24} The federal courts also determined that there is a critical distinction between the heat produced by a geothermal resource and the water used to convey that heat. *Rosette II*, 64 F. Supp. 2d at 1123-25. Despite Rosette's efforts to transform this litigation into an adjudication of water rights under state law, Rosette challenges the ownership of geothermal resources, which federal courts have already determined belong to the United States. Thus, Rosette essentially asks this Court to conclude that the district court has jurisdiction to determine a property interest of the United States. We agree with the district court that Rosette's remedy is a quiet title action

against the United States, and jurisdiction for such action is with the federal courts. *See Rosette I*, 141 F.3d at 1397-98; 28 U.S.C. § 1346(f).

2. McCarran Amendment

{25} The second part of our jurisdictional inquiry focuses on Rosette's claim that the United States has waived its sovereign immunity in this case under the McCarran Act. The validity of an assertion of sovereign immunity is a question of law that we review de novo. *See Gallegos*, 2002-NMSC-012, ¶ 6.

{26} The doctrine of sovereign immunity shields the United States from suit absent the consent of Congress. *See Block v. North Dakota ex rel. Bd. of Univ. & Sch. Lands*, 461 U.S. 273, 287 (1983). Waivers of sovereign immunity must be clearly expressed in statutory text and should not be construed in a way that would extend the waiver beyond that which Congress intended. *Id.* Rosette bears the burden of demonstrating that the United States has unequivocally waived its immunity to allow Rosette's claims against the United States to be heard. *See Holloman v. Watt*, 708 F.2d 1399, 1401 (9th Cir. 1983).

{27} Rosette argued below that the district court possessed jurisdiction over the United States under the McCarran Amendment. However, as noted above, the McCarran Amendment only allows the United States to be joined in a comprehensive water rights adjudication. Nothing in the McCarran Amendment waives the sovereign immunity of the United States for claims challenging federal ownership of reserved mineral interests. *See* 43 U.S.C. § 666. Thus, the McCarran Amendment should not be construed as authorizing state courts to determine a mineral interest claim against the United States.

{28} In rejecting the argument that the state district court had jurisdiction over Rosette's claim that it owned the hot water underneath its surface estate, the district court properly recognized that Rosette was seeking to do more than simply adjudicate water rights, including those of the United States, but instead was attempting to achieve a determination about ownership of geothermal resources. Regardless of any water rights that may be held by Rosette and the federal government, the federal courts have already determined that the heat source Rosette uses in its greenhouses is a geothermal resource owned by the United States and controlled by the Federal Geothermal Steam Act. *See Rosette II*, 64 F. Supp. 2d at 1123. Accordingly, Rosette's claim is not a water rights claim but a mineral interest claim. Under the circumstances, we agree with the district court that the McCarran Amendment does not render the United States amenable to suit in state court for claims challenging the ownership of its geothermal resources. We therefore hold that the district court properly dismissed Rosette's claim because the United States has not waived its sovereign immunity.

{29} For these reasons, we hold that the district court correctly concluded that it lacked subject matter jurisdiction to determine ownership interests of geothermal resources or mineral rights reserved by the United States.

B. Res Judicata and Collateral Estoppel

{30} Even though the district court did not reach the issues of res judicata and collateral estoppel, Rosette argues on appeal that these doctrines would not bar the district court from determining its claims. The United States responds with a detailed analysis of why the district court could have dismissed this case on both res judicata and collateral estoppel grounds. An appellate court may affirm a district court ruling on a ground not relied upon by the district court if reliance on the new ground would not be unfair to the appellant. *City of Sunland Park v. Macias*, 2003-NMCA-098, ¶ 17, 134 N.M. 216, 75 P.3d 816. Because Rosette has argued these issues below and briefed them on appeal, we will consider them as alternative grounds for affirmance.

{31} When a state court is faced with the issue of determining the preclusive effect of a federal court's judgment, federal law applies. *Edwards v. First Fed. Sav. & Loan Ass'n of Clovis*, 102 N.M. 396, 402-04, 696 P.2d 484, 490-92 (Ct. App. 1985). However, because federal and New Mexico law on claim preclusion are similar, we will apply both federal and state precedent in analyzing this case. *See Deflon v. Sawyers*, 2006-NMSC-025, ¶ 2, 139 N.M. 637, 137 P.3d 577. When the facts are not in dispute, the preclusive effect of a prior judgment is a question of law reviewed de novo. *Id.* ¶ 3. Although Rosette's citations suggest that res judicata and collateral estoppel do not apply because the district court granted summary judgment without permitting discovery, Rosette offers no explanation why further factual resolution is essential to determine the legal issues of preclusion. Therefore, we review these issues de novo.

{32} The principles of preclusion operate to promote finality in civil disputes by relieving parties of the burdens of multiple lawsuits, conserving judicial resources, and preventing inconsistent decisions. *See Three Rivers Land Co. v. Maddoux*, 98 N.M. 690, 694, 652 P.2d 240, 244 (1982), *overruled on other grounds by Universal Life Church v. Coxon*, 105 N.M. 57, 59, 728 P.2d 467, 469 (1986). As Rosette initially frames its argument on appeal, we have no quarrel with the statement that res judicata or collateral estoppel do not bar the district court from determining the extent of Rosette's water rights. The purpose of an adjudication is to determine water rights. However, to the extent that Rosette is arguing that its water rights include the heat that the United States has reserved as its mineral interest in geothermal resources, we find that Rosette's claims are precluded by the prior litigation in federal courts.

1. Res Judicata

{33} Res judicata prevents a party or its privies from repeatedly suing another party for the same cause of action when the first suit involving the parties resulted in a final judgment on the merits. *Deflon*, 2006-NMSC-025, ¶ 2. Res judicata applies if three elements are met: (1) a final judgment on the merits in an earlier action, (2) identity of parties or privies in the two suits, and (3) identity of the cause of action in both suits. *Santana v. City of Tulsa*, 359 F.3d 1241, 1246 n.3 (10th Cir. 2004); *see also* Restatement (Second) of Judgments § 24 (1982). In deciding what constitutes a cause of action for res judicata purposes, we apply the transactional approach

from the Restatement (Second) of Judgments § 24. *See May v. Parker-Abbott Transfer & Storage, Inc.*, 899 F.2d 1007, 1009 (10th Cir. 1990); *Chavez v. City of Albuquerque*, 1998-NMCA-004, ¶ 22, 124 N.M. 479, 952 P.2d 474. Under the transactional approach, two cases have the same cause of action if they involve "a common nucleus of operative facts." *Chavez*, 1998-NMCA-004, ¶ 23.

{34} The party seeking to bar a subsequent action has the burden to establish res judicata. *Anaya v. City of Albuquerque*, 1996-NMCA-092, ¶ 5, 122 N.M. 326, 924 P.2d 735. We agree with the United States that each of the elements of res judicata is present in this case. First, the earlier litigation in *Rosette II* and *Rosette III* resulted in a final judgment on the merits. *Rosette II*, 64 F. Supp. 2d at 1125 (holding that title to the geothermal resources in question is vested in the United States as a matter of law); *Rosette III*, 277 F.3d at 1235 (holding that the right to the resources remains in the federal government). Second, both Rosette and the United States were parties to those suits. Third, both the federal litigation and this case have the same cause of action. Under the transactional approach, Rosette's claim involves the same operative facts because the federal court addressed the same question Rosette later asked the state district court to determine-who owns the geothermal resources underlying Rosette's surface estate. *See Rosette II*, 64 F. Supp. 2d at 1119 (stating the issue as "whether the right to use geothermal as a heat source for the greenhouses passed to [Rosette] or was retained by the United States under this reservation, *i.e.*, is geothermal reserved as an 'other mineral'"). To examine Rosette's claim, the federal courts addressed issues arising from Rosette's use of geothermal resources under the lease with the federal government, which involved assessing the effect of the Stock-Raising Homestead Act and the Geothermal Steam Act on Rosette's obligation to pay royalties for its use of the hot water to heat its greenhouses. Thus, the federal courts addressed issues with a common nucleus of operative facts.

{35} Rosette advances several arguments as to why the principles of res judicata do not apply. Rosette argues that the State of New Mexico was not a party to Rosette's federal litigation. However, both Rosette and the United States were parties in the prior suit. Res judicata does not require that all parties to both suits be identical. *See Bethesda Lutheran Homes & Servs., Inc. v. Born*, 238 F.3d 853, 857 (7th Cir. 2001).

{36} Rosette further suggests that its suit in state court involves a different cause of action. Rosette argues that the question is not who owns the geothermal resources, but what underground water is a geothermal resource under New Mexico law. Although Rosette attempts to characterize its petition to adjudicate water rights as a different cause of action that addresses a new question, we are not persuaded. Rather it appears that Rosette is trying to avoid the preclusive effect of the federal litigation by changing its legal theory.

{37} The transactional approach "requires us to go beyond any similarity in desired outcome and to examine the operative facts underlying the claims made in the two lawsuits." *See Anaya*, 1996-NMCA-092, ¶ 8. As discussed above, Rosette's petition asked the district court to determine that the United States has no mineral interest in the groundwater situated below

Rosette's surface estate. On appeal, Rosette continues to ask our courts to determine ownership of a federal geothermal resource. The federal cases conclusively held that the geothermal resources used by Rosette in its greenhouse operations were the subject of mineral interests owned and regulated by the United States. *See Rosette II*, 64 F. Supp. 2d at 1125; *Rosette III*, 277 F.3d at 1234-35. Rosette's attempt to characterize this case as presenting a question of state water rights is misconceived. The federal courts have already considered and rejected Rosette's argument that heat is merely a component of water or an element of a water right and not a mineral. The federal district court analyzed Rosette's contention that it has a prior vested property right to utilize the hot water, along with the contention that Rosette's existing water rights "cannot be subsequently impaired by application of the Geothermal Steam Act." *Rosette II*, 64 F. Supp. 2d at 1121. *Rosette II* rejected Rosette's arguments that use of the geothermal resource is included in its various water rights, thus preempting the Geothermal Steam Act. *Rosette II*, 64 F. Supp. 2d at 1123-24. The court noted:

The problem with this argument is that it fails to make the distinction between using underground water to irrigate roses and using the heat contained in the water to warm a greenhouse. [Rosette] continue[s] to ignore the fact that more than just water is involved in producing the geothermal product. Geothermal energy is defined as the production of the earth's heat energy by magma or molten rock that intrudes into the earth's crust. The water contained in the porous rock is then heated to extreme temperatures and as it rises to the surface, produces steam. The question therefore is not merely a determination of water rights, but includes the issue of whether the [Stock-Raising Homestead Act] reserves this geothermal heating process as a "mineral." The geothermal resource at issue in this case is used to heat greenhouses not irrigate roses. There is a clear use of the resource in the form of "hot water" and/or "heat or other associated energy found in geothermal formations."

Rosette II, 64 F. Supp. 2d at 1123 (citations omitted). Thus, the federal district court made clear that there is a critical distinction between water and the heat it transports. *Id.* at 1125. On appeal, the Tenth Circuit also expressly rejected the notion that geothermal energy was excluded from the Geothermal Steam Act or the Stock-Raising Homestead Act when such heat was in the form of "hot water." *Rosette III*, 277 F.3d at 1230. The Tenth Circuit found irrelevant Rosette's contention that Rosette had a permit to utilize the water to develop its homestead and that that use could not be infringed by the federal government:

It is undisputed that Rosette has the right to beneficial use of 450 acre feet of water per annum issued by the New Mexico State Engineers Office. It is further undisputed that these rights predate the passage of the Steam Act. However, the rights do not predate the [Stock-Raising Homestead Act], and therefore, Rosette's rights to the use of the water are governed by its rights under its patents and the reservation of mineral rights by the federal government.

Rosette III, 277 F.3d at 1234. In determining that the federal government was entitled to

royalties from Rosette's use of geothermal energy held in reserve by the federal government, the Tenth Circuit noted Rosette's water rights arguments and concluded that Rosette does not acquire the right to use the geothermal resources in providing heat for its commercial greenhouse operation by virtue of being a surface holder. *Id.* at 1234-35.

{38} The federal courts have already recognized that Rosette may be found to have valid water rights in an adjudication suit, but that Rosette must still comply with the requirements of federal geothermal resource law. Rosette may not avoid the adverse results of the federal litigation by changing its legal theory. *Cf. Three Rivers Land Co.*, 98 N.M. at 695, 652 P.2d at 245 (stating that "a mere change in a legal theory does not create a new cause of action"). Thus, we conclude that all the elements of res judicata are present. Even if the district court possessed jurisdiction over Rosette's claim, any claim relating to the mineral interests underlying Rosette's surface estate that was or could have been litigated in the federal cases may not be relitigated in the state district court.

2. Collateral Estoppel

{39} Similarly, Rosette's claim in the district court is precluded by the principles of collateral estoppel. In contrast to res judicata, collateral estoppel applies whether or not the two suits involve the same cause of action. It operates to bar the relitigation of ultimate facts or issues actually and necessarily determined in the previous litigation. *See Reeves v. Wimberly*, 107 N.M. 231, 233, 755 P.2d 75, 77 (Ct. App. 1988). "The purpose of collateral estoppel is to prevent endless relitigation of the same issues under the guise of different causes of action." *Id.* The four elements of collateral estoppel are

(1) the issue previously decided is identical with the one presented in the action in question, (2) the prior action has been finally adjudicated on the merits, (3) the party against whom the doctrine is invoked was a party, or in privity with a party, to the prior adjudication, and (4) the party against whom the doctrine is raised had a full and fair opportunity to litigate the issue in the prior action.

Dodge v. Cotter Corp., 203 F.3d 1190, 1198 (10th Cir. 2000).

{40} In this case, the four elements are met. First, collateral estoppel applies because Rosette is attempting to relitigate issues it has already litigated against the United States in the federal courts. As discussed above, the issue previously decided in the federal litigation is the same issue Rosette raised in its petition to adjudicate water rights. In *Rosette II*, the litigation centered on whether the right to use geothermal resources as a heat source for the greenhouses passed to Rosette or was retained by the United States under the reservation in patents issued pursuant to the Stock-Raising Homestead Act. 64 F. Supp. 2d at 1119. Here, Rosette asks the same question addressed in the federal courts—who owns the geothermal resources under Rosette's surface estate? Second, the federal litigation reached a final adjudication on the merits, concluding that the United States owned the geothermal resources because they were reserved as a mineral interest. *See Rosette III*, 277 F.3d at 1230, 1235. Last, Rosette, the party against

whom the doctrine is invoked, was a party to the previous adjudication and had a full and fair opportunity to litigate the ownership issue.

{41} Rosette argues that collateral estoppel does not apply because the State of New Mexico was not a party or in privity with Rosette. However, the relevant inquiry for collateral estoppel is the identity of the party against whom the claim is made. *See Deflon*, 2006-NMSC-025, ¶ 14 ("The main concern is that a party against whom collateral estoppel is sought must have had a full and fair opportunity to litigate the issue in the prior action."); Restatement (Second) of Judgments § 27 (1982). Here, the party against whom the doctrine is invoked, Rosette, was a party to the federal litigation.

{42} Rosette also argues that several issues were not decided in the federal cases, including whether state law controls the determination of a geothermal resource, if water under Rosette's land is owned by the State, or if the Stock-Raising Homestead Act includes a federal reserved water right. We reject these arguments.

{43} As we already discussed with respect to res judicata, the federal courts have already determined that the geothermal resources at issue are controlled by federal law. *See Rosette II*, 64 F. Supp. 2d at 1125; *Rosette III*, 277 F.3d at 1234-35. The federal courts rejected Rosette's reasoning that because a major component of the geothermal resource is water, that the heat in the water is therefore included in its water rights under state law. *See Rosette II*, 64 F. Supp. 2d at 1123. The district court recognized a critical distinction between the energy in a geothermal resource and the water that conveys the energy and held that Rosette's water rights did not give it the right to use that energy. *Id.* (rejecting Rosette's argument because it ignored the fact that more than just water is involved in producing the geothermal product). The Tenth Circuit also rejected Rosette's claim that its water rights somehow gave it a right to use the geothermal resources without infringement by the United States. *Rosette III*, 277 F.3d at 1234. The court explained that Rosette's rights to use the water are not governed by its water rights but by Rosette's "rights under its patents and the reservation of mineral rights by the federal government." *Id.* Finally, even though Rosette attempts to argue that a newly enacted New Mexico statute modifies federal law by exempting water of certain temperature from the definition of a geothermal resource, the Tenth Circuit has already disregarded an argument by Rosette that the temperature of water is material to water's status as a geothermal resource. *See id.* at 1233. Therefore, we find that the previous litigation conclusively decided that federal law controls the determination of a geothermal resource and that it is irrelevant whether water under Rosette's land is owned by the State. We also find it irrelevant whether the Stock-Raising Homestead Act includes a federal reserved water right. As Rosette acknowledges in its brief, the United States is not claiming a federal reserved water right. Instead, it is claiming a mineral interest reserved under the Stock-Raising Homestead Act. A federal reserved water right is not necessary to implement the Geothermal Steam Act. *United States v. City & County of Denver*, 656 P.2d 1, 34 (Colo. 1982) (en banc). Accordingly, Rosette is collaterally estopped from raising issues already litigated in the federal courts.

{44} For these reasons, even if the district court possessed jurisdiction to determine Rosette's claim, Rosette would have been precluded by res judicata and collateral estoppel from relitigating the issue of who owns the geothermal resources beneath its surface estate.

C. Geothermal Steam Act and Stock-Raising Homestead Act

{45} Next, assuming the district court has jurisdiction, and res judicata and collateral estoppel do not apply, we examine whether Rosette's claim would fail on the merits under the Geothermal Steam Act and the Stock-Raising Homestead Act. Rosette argues that because New Mexico has plenary control over its water, subject only to federal reservations and constitutional provisions, the State has the right to define at what point underground water in the State becomes a geothermal resource.

{46} Once again, the fatal flaw in Rosette's argument is that it fails to distinguish between heat, the mineral interest owned by the United States, and the water that conveys that heat. *See Rosette II*, 64 F. Supp. 2d at 1123 ("[Rosette] continue[s] to ignore the fact that more than just water is involved in producing the geothermal product."). As the federal courts recognized, the question "is not merely a determination of water rights, but includes the issue of whether the [Stock-Raising Homestead Act] reserves this geothermal heating process as a 'mineral.'" *Rosette II*, 64 F. Supp. 2d at 1123. Accordingly, the federal courts determined that the United States owns the geothermal resources underlying Rosette's surface estate because they are mineral interests reserved pursuant to the Stock-Raising Homestead Act. *Rosette III*, 277 F.3d at 1234-35. Given the federal precedent, we are not persuaded that New Mexico or any other state can somehow change the definition of a federal geothermal resource by claiming that water below a certain temperature is exempt from federal regulation and, therefore, belongs to the State. (Moreover, as we discuss in the next section, we reject Rosette's claim that our legislature attempted to do so by enacting Section 71-5-2.1.) Rather, our review of the relevant law convinces us that federal law controls the hot water at issue.

{47} The Geothermal Steam Act authorizes the Secretary of the Interior to issue leases for the development and utilization of geothermal resources "in lands which have been conveyed by the United States subject to a reservation to the United States of the geothermal steam and associated geothermal resources therein." 30 U.S.C. § 1002. By definition, geothermal resources include "all products of geothermal processes, embracing indigenous steam, hot water and hot brines" and "heat or other associated energy found in geothermal formations." 30 U.S.C. § 1001(c). Pursuant to the Geothermal Steam Act, Rosette leases geothermal resources beneath its surface estate to heat its greenhouses. Thus, even though that heat is conveyed by groundwater, federal law requires Rosette to pay royalties to the United States based on the amount or value of any form of heat or energy derived from the geothermal resources. 30 U.S.C. § 1004(a).

{48} Although the United States claims the hot water at issue is a geothermal resource, and federal courts have established the propriety of that claim, Rosette argues that the

Geothermal Steam Act defines "hot water" without regard to temperature. Thus, Rosette contends, any hot water that is subject to and controlled or defined by state law is exempt from the United States' claims pursuant to the Geothermal Steam Act. By enacting Section 71-5-2.1 in 2003, Rosette argues, the New Mexico Legislature acted within its powers to exempt water less than 250 degrees Fahrenheit from the federal definition of a geothermal resource and placed it under control of state water law.

{49} To support this assertion, Rosette relies on Section 1021 of the Geothermal Steam Act. 30 U.S.C. § 1021 states: "Nothing in this chapter shall constitute an express or implied claim or denial on the part of the Federal Government as to its exemption from State water laws." Rosette argues that 30 U.S.C. § 1021 indicates Congressional intent to maintain the status quo between the federal government and state water law. Because 30 U.S.C. § 1021 made no change in the relationship of the State of New Mexico concerning the State's plenary authority over its own waters, Rosette argues, the State was free to define water below 250 degrees Fahrenheit as not being a geothermal resource and thus under State control.

{50} Both parties acknowledge that no federal court has interpreted Section 1021 of the Geothermal Steam Act, but that federal courts have considered similarly worded statutory provisions in other federal statutes. *See United States v. Vesterso*, 828 F.2d 1234, 1240 (8th Cir. 1987); *Sierra Club v. Lyng*, 661 F. Supp. 1490, 1493-94 (D. Colo. 1987). In *Lyng*, a federal district court interpreted language in the Wilderness Act, 16 U.S.C. § 1133(d)(6) (2000), that was nearly identical to 30 U.S.C. § 1021 as a "disclaimer" that "does not purport to work any substantive change in the rights parties may acquire under the various doctrines of water law, including the reserved rights doctrine." 661 F. Supp. at 1494. Similarly, in *Vesterso*, the Eighth Circuit found that the purpose of language nearly identical to 30 U.S.C. § 1021 in the Wilderness Refuge Act, 16 U.S.C. § 668dd(i) (1994) (current version at 16 U.S.C. § 668dd(j) (2000)), was "to prevent a general preemption of state water laws as they affected the federal easements." *Vesterso*, 828 F.2d at 1240. Pointing to these cases, Rosette argues that Section 1021 of the Geothermal Steam Act does not change the interaction of federal and state interests in water in New Mexico. We see no reason to disagree with Rosette; however, we fail to see how this argument helps Rosette.

{51} Unlike the cases cited by Rosette, this appeal does not involve a federal reserved water right or the preemption of state water law, but a mineral right reserved to the United States. Regardless of whether state law governs Rosette's use of groundwater, Rosette's use of federal geothermal resources to heat its greenhouses is governed by the Federal Geothermal Steam Act. Thus, even if 30 U.S.C. § 1021 is interpreted as intending to maintain the status quo between the federal government and the State with respect to the State's plenary control over its water, 30 U.S.C. § 1021 is of no consequence to the mineral interest at issue.

{52} Rosette also argues that another section of the Geothermal Steam Act alleviates it from the burden of paying royalties. 30 U.S.C. § 1024 states:

As to any land subject to geothermal leasing under [S]ection 1002 of this title, all

laws which . . . provide for the disposal of land by patent . . . subject to a reservation of any mineral . . . shall hereafter be deemed to embrace geothermal steam and associated geothermal resources as a substance which either must be reserved or must prevent or restrict the disposal of such land, as the case may be. This section shall not be construed to affect grants, patents, or other forms of conveyances made prior to December 24, 1970.

In Rosette's view, the last sentence of 30 U.S.C. § 1024 explicitly states that mineral reservations in patents issued prior to the effective date of the Geothermal Resource Act are not to be construed as including geothermal resources. We disagree.

{53} As the Ninth Circuit has acknowledged, 30 U.S.C. § 1024 provides that future laws that reserve minerals to the United States "shall hereafter be deemed to embrace geothermal steam and associated geothermal resources." *United States v. Union Oil Co.* *cf Cal.*, 549 F.2d 1271, 1274 (9th Cir. 1977) (internal quotation marks and citation omitted). However, notwithstanding 30 U.S.C. § 1024, the Ninth Circuit held that the Geothermal Steam Act applies to patents with mineral reservations that were issued under the Stock-Raising Homestead Act, which preceded the enactment of the Geothermal Steam Act. *Union Oil Co.*, 549 F.2d at 1274 (concluding that "[t]he dual purposes of the [Stock-Raising Homestead] Act would best be served by interpreting the statutory reservation to include geothermal resources"). The Tenth Circuit relied on *Union Oil Co.* to reach the same conclusion in *Rosette III*. 277 F.3d at 1226-30 (agreeing that the mineral reservation in the Stock-Raising Homestead Act should be read broadly in light of the dual purposes of Congress to grant patents for agriculture while retaining ownership of subsurface resources for future energy development); *see also id.* at 1234-35 (stating that Rosette's rights to use the hot water are governed by its rights under its patents and the reservation of mineral rights by the federal government pursuant to the Stock-Raising Homestead Act). Thus, even though heat energy may be contained in water, federal law treats geothermal resources owned by the federal government as a separate form of property from water.

{54} Ignoring federal precedent, Rosette boldly asserts that a state can modify a resource defined and controlled by federal law. On appeal, Rosette provides an exhaustive overview of the development of New Mexico water law and cites to authority for the proposition that states have plenary control over water. Rosette points to three cases from the United States Supreme Court to support its contention that the Supreme Court has continuously and consistently recognized the authority of the states over their waters: *California v. United States*, 438 U.S. 645, 647 (1978), *United States v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690, 702-03 (1899), and *Gutierrez v. Albuquerque Land & Irrigation Co.*, 188 U.S. 545, 553-54 (1903). Although these cases may bolster Rosette's general argument that the states have control over their waters, none involve the issue before us—the applicability of Geothermal Steam Act to federally reserved mineral rights. Thus, the Supreme Court cases concerning water rights under state law are irrelevant to the issue of whether Rosette owes royalties to the United States for use of its geothermal resources.

{55} We are also not persuaded by Rosette's reliance on several state court decisions for the proposition that all properties of water, including heat in federally reserved geothermal resources, belong to the State. Initially, we observe that Rosette cites to no cases that involve a federally reserved mineral interest; thus, in general we find Rosette's authority inapposite. In addition, we do not agree that Rosette's authority supports its position. In *Deseret Livestock Co. v. State*, for example, the Utah Supreme Court held that a livestock company could not appropriate water from the Great Salt Lake for the purpose of extracting salt without paying royalties to the State of Utah. 171 P.2d 401, 402-04 (Utah 1946). Rosette relies on *Deseret Livestock Co.* to assert that heat like salt, the mineral at issue in *Deseret Livestock Co.*, is owned by the State because it is contained in water, and thus is subject to appropriation. However, we are more persuaded by the United States' argument that *Deseret Livestock Co.* stands for the proposition that a water right does not include the right to the salt or other minerals conveyed by water. Rather, the Utah Supreme Court recognized a distinction between water and minerals. *See id.* at 403 (stating that Utah's "appropriation laws apply to water as such, and not to minerals valuable for their own sake which may be found therein"). While Utah controlled the salt at issue in *Deseret Livestock Co.*, the federal government controls the mineral at issue here. Thus, the United States is entitled to collect royalties for the use of that mineral, regardless of state water laws.

{56} Rosette further argues that other western states have considered whether water is a mineral that should be included in a reservation of all minerals and have concluded that water is not a mineral. Rosette believes this authority supports its argument that states have plenary authority over their water, including the right to determine when water is not a mineral. Once again, we find that Rosette cites to cases that are not pertinent because the United States has not reserved water underlying Rosette's surface estate, but the geothermal heat conveyed by that water and used by Rosette to heat its greenhouses.

{57} We are also unswayed by the several pages of state statutes Rosette lists in its brief to show that many states have formulated their own definitions of geothermal resources. Simply because a state defines a geothermal resource with regard to temperature does not mean a state can transform a geothermal resource that belongs to the federal government into a state property interest, whether it be mineral or water. *See* 30 U.S.C. § 1001(c) (defining geothermal resources); 30 U.S.C. § 1004 (requiring royalties on geothermal resources).

{58} Although we have no objection to Rosette's thesis that states were given control over their internal waters, we disagree with Rosette's overly broad assertion that state control over water rights extends to control over federally owned mineral interests that are contained in water. This case does not involve a controversy over state water rights, but instead involves Rosette's refusal to pay royalties for the use of a federal geothermal resource, and thus federal law controls.

D. Section 71-5-2.1

{59} We next examine Rosette's argument that Section 71-5-2.1, which was enacted after the federal litigation, requires us to reach a different result. Rosette argues that because groundwater belongs to the State, and the State has the right to define aspects of its property, the State has the exclusive right to define at what point water becomes a geothermal resource subject to federal law. Rosette argues that the Legislature did just that in Section 71-5-2.1. Thus, Rosette contends that New Mexico's recently enacted statute invites reconsideration of the ownership of geothermal resources.

1. New Mexico Geothermal Resource Law

{60} The interpretation of a statute is a question of law that we review de novo. *See Cooper v. Chevron U.S.A., Inc.*, 2002-NMSC-020, ¶ 16, 132 N.M. 382, 49 P.3d 61. Section 71-5-2.1 provides:

When the application of potable water to a beneficial use involves the incidental loss or extraction of heat, and the water is 250 degrees Fahrenheit or less, then that heat is not a geothermal resource for which a royalty is due. In such case, the use is not governed by laws related to geothermal resources but is simply governed by [New Mexico water law].

In Section 71-5-2.1, Rosette contends, the Legislature defined geothermal resources as water more than 250 degrees Fahrenheit. Because the water underlying Rosette's property is less than 250 degrees, Rosette argues that it is not a federal geothermal resource under New Mexico law and instead falls under the control of state water law. Therefore, Rosette is not required to pay federal royalties. Rosette also asserts that because the district court has jurisdiction to adjudicate all aspects of water, the district court has jurisdiction to determine the rights set forth in Section 71-5-2.1. We find no merit in Rosette's interpretation of the statute.

{61} As we have already discussed, the district court lacked jurisdiction to declare that the United States has no mineral interest in the groundwater below Rosette's surface estate. However, even if the state district court possesses jurisdiction, Section 71-5-2.1 would not have excused Rosette from paying royalties to the United States for use of federal geothermal resources as required by the Geothermal Steam Act and Rosette's agreement under the lease.

{62} In New Mexico, the State's geothermal resources are governed by the Geothermal Resources Act and the Geothermal Resources Conservation Act. *See* NMSA 1978, §§ 19-13-1 to -28 (1967, as amended through 2001), and NMSA 1978, §§ 71-5-1 to -24 (1975, as amended through 2003). The Geothermal Resources Act, which is titled "Lease of Geothermal Resources on State Lands," is designed to promote the development of geothermal resources on state lands based on the principle of multiple use. *See* §§ 19-13-3, -5(B). The act establishes a system of leases and royalties that is administered by the state commissioner of public lands. *See* §§ 19-13-2(B), -3, -5(B). The Geothermal Resources Conservation Act protects geothermal resources by regulating wells and prohibiting waste. *See* §§ 71-5-2(A), -4, -6. Read in

conjunction, both acts apply to the development and conservation of state-held geothermal resources and require that royalty payments are made to the State for the use of geothermal resources that belong to the State. *See* §§ 19-13-5 and 71-5-2. The only exception for royalty payments is Section 71-5-2.1, which exempts from royalty requirements the "use" associated with the *incidental* loss of extraction of heat resulting from beneficial use of potable water when the heat content is below 250 degrees Fahrenheit. In such case, the use is not governed by laws related to geothermal resources, but is simply governed by the water code. *Id.*

{63} Section 71-5-2.1 should be interpreted within the context of the state statutory scheme just described. Thus, Section 71-5-2.1 should be read only to modify our state statutes regulating geothermal resources. Contrary to Rosette's assertions, there is no basis for concluding that a state statute could trump federal law.

{64} In addition, Section 71-5-2.1 does not state that heat is not a geothermal resource. As with the Federal Geothermal Steam Act, the Geothermal Resources Act and the Geothermal Resources Conservation Act do not include temperature specifications in the definition of geothermal resources. *See* §§ 19-13-2(A) and 71-5-3(A). In addition, Section 71-5-2.1 does not exempt from royalty payments all uses of heat obtained from waters at or below 250 degrees Fahrenheit. It merely articulates the limited circumstances under which a royalty is not owed to the State. Thus, we reject Rosette's overly broad interpretation of Section 71-5-2.1. We do not agree that by enacting Section 71-5-2.1, the Legislature intended to limit the definition of geothermal resources, thereby exempting Rosette from the burden of paying federal royalties for the use of federal geothermal resources. Rather, we conclude that the Legislature intended Section 71-5-2.1 to apply in limited circumstances to the collection of royalties for the use of state geothermal resources.

{65} Moreover, even if we accepted Rosette's interpretation of the statute, we do not think the exemption would apply in this situation. Section 71-5-2.1 exempts from state royalty requirements those uses of hot water having a temperature of 250 degrees or less where the heat is *incidental* to the beneficial use of the water. In this case, Rosette uses the hot water for the sole purpose of heating its greenhouses, after which the water is discarded. Thus, the use is direct and not incidental. Therefore, under any construction of the statute, we cannot agree with Rosette that Section 71-5-2.1 alleviates it from the burden of paying of federal royalties.

{66} Next, we address Rosette's argument that, by enacting Section 71-5-2.1, the Legislature simply acted within its rights to clarify an aspect of property that belongs to the State. Rosette argues that New Mexico courts have considered various aspects of water, including salinity and turbidity, but no court has ever considered temperature as a property of water.

{67} First, we reject the notion that temperature is an element of a water right that the State must adjudicate. As the State Engineer argues, heat is not defined as an element of a water right. Instead, water is one medium from which heat can be obtained. Although Rosette argues that the temperature of water is a property of a water right in the same way salinity and turbidity

are, our courts have rejected the proposition that holders of water rights are entitled to a specific water quality. *See Stokes v. Morgan*, 101 N.M. 195, 201-02, 680 P.2d 335, 341-42 (1984). The State Engineer persuades us that neither our state water code nor case law entitle Rosette to water of a certain temperature. Thus, we do not accept Rosette's contention that the State can assert control over the resource at issue because heat is an intrinsic element of a water right subject to adjudication. The Legislature's decision not to collect royalties when water is below a certain temperature and heat use is incidental to the beneficial use of potable water does not contradict the fact that heat is treated as a separate form of property from water.

{68} Second, we disagree with the assertion that no court has ever considered temperature as a property of water. This issue was addressed by the Tenth Circuit in *Rosette III* and resolved in favor of the United States. *See* 277 F.3d at 1232-33. In *Rosette III*, Rosette argued that only water of a temperature sufficient to generate electricity qualifies as a mineral. *Id.* at 1232. The Tenth Circuit rejected this argument, stating that the temperature of geothermal resources is immaterial to their status as a mineral under the Stock-Raising Homestead Act. *Rosette III*, 277 F.3d at 1233 (stating that even if geothermal resources were not hot enough to be converted into electricity, "this does not prevent them from being removed from the soil and utilized for commercial purposes"). Rather than heat being defined as an element of a water right or as a "property" of water, water is instead one medium from which heat can be obtained.

{69} We conclude that the Legislature did not intend Section 71-5-2.1 to exempt water that is less than 250 degrees from its status as a federal geothermal resource. Therefore, we hold that the district court properly determined that the "royalty" referred to in Section 71-5-2.1 refers solely to royalties that would be payable to the State.

2. Supremacy

{70} Finally, the United States argues that the Supremacy Clause of the United States Constitution prohibits states from enacting legislation that conflicts with federal legislation and either changes or modifies existing federal law. We agree.

{71} Under the Supremacy Clause, states may not frustrate federal policy either through legislation or judicial interpretation in certain areas of the law. *See Self*, 1998-NMSC-046, ¶ 7; *Champlin Petroleum Co. v. Lyman*, 103 N.M. 407, 410, 708 P.2d 319, 322 (1985) (stating that "Congress intends that its laws shall operate uniformly throughout the United States, unimpaired by differences in state laws or state court decisions"). The Geothermal Steam Act defines geothermal resources as "all products of geothermal processes, embracing indigenous steam, hot water and hot brines" and "heat or other associated energy found in geothermal foundations." 30 U.S.C. § 1001(c). Thus, the Geothermal Steam Act broadly defines geothermal resources.

{72} If Section 71-5-2.1 were construed as applying to federal geothermal resources, it would exempt from royalty payments the use of heat carried by water 250 degrees Fahrenheit or less, while the Federal Geothermal Steam Act expressly requires royalty payment for the use of

all hot water or heat found in geothermal formations. Rosette's interpretation of Section 71-5-2.1 would allow New Mexico to override the requirements of the Federal Geothermal Steam Act. Thus, Section 71-5-2.1 cannot be construed as applying to federal geothermal resources without creating a conflict with federal law.

{73} To avoid a direct conflict between state and federal law, which would render our state law unconstitutional, Section 71-5-2.1 must be construed as having no application to federal geothermal resources governed by the Geothermal Steam Act. Section 71-5-2.1 cannot be interpreted to limit the royalty requirements for the use of geothermal resources, except with respect to state-owned resources. Thus, we conclude that the New Mexico Legislature did not intend to alter the obligation to pay federal royalties and has no power to do so. Therefore, we hold that the Supremacy Clause prohibits Section 71-5-2.1 from modifying or changing existing federal law in respect to geothermal resources owned by the United States.

III. CONCLUSION

{74} Despite Rosette's efforts to recast the debate by defining heat as a component of water or as an element of a water right, Rosette cannot avoid the fundamental point that a geothermal resource is not defined as a component of water, but as a form of energy produced from the natural heat of the earth that may be conducted through various media, including water. Accordingly, Rosette fails to establish that summary judgment was inappropriate.

{75} We therefore affirm the grant of summary judgment to the United States. Because the State Engineer subsequently filed a petition to adjudicate the water rights in the Animas Basin, we also affirm the order dismissing Plaintiff's petition.

{76} **IT IS SO ORDERED.**

LYNN PICKARD, Judge

WE CONCUR:

A. JOSEPH ALARID, Judge

JAMES J. WECHSLER, Judge
