GRAHAM COUNTY

BEFORE THE
ARIZONA NAVIGABLE STREAM ADJUDICATION COMMISSION

IN THE MATTER OF THE NAVIGABILITY OF SMALL AND MINOR WATERCOURSES IN GRAHAM COUNTY, ARIZONA, EXCLUDING THE GILA RIVER	No.: 03-006-NAV

REPORT, FINDINGS AND DETERMINATION REGARDING THE NAVIGABILITY OF SMALL AND MINOR WATERCOURSES IN GRAHAM COUNTY, ARIZONA

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Pursuant to Title 37, Chapter 7, Arizona Revised Statutes, the Arizona Navigable Stream Adjudication Commission ("Commission") has undertaken to receive, compile, review and consider relevant historical and scientific data and information, documents and other evidence regarding the issue of whether any small and minor watercourse in Graham, County, Arizona, excluding the Gila River, was navigable or nonnavigable for title purposes as of February 14, 1912. Proper and legal public notice was given in accordance with law and a hearing was held at which all parties were afforded the opportunity to present evidence, as well as their views, on this issue. The Commission having considered all of the historical and scientific data and information, documents and other evidence, including the oral and written presentations made by persons

appearing at the public hearing and being fully advised in the premises, hereby submits its report, findings and determination.

There are 3,226 documented small and minor watercourses in Graham County, of which 3,069 are unnamed. All of these watercourses, both named and unnamed, are the subject of and included in this report. Excluded from this report is the Gila River which is deemed to be a major watercourse and is the subject of a separate report. Included in this report is a separate stream navigability study for Eagle Creek which was not rejected at level three of the small and minor watercourses study and for which it was felt more analysis and study was required. Attached hereto as Exhibit "A" is a list of all of the small and minor watercourses in Graham County, Arizona, both named and unnamed, covered by this report.

I. Procedure

On August 20, 2003, the Commission gave proper prior notice of its intent to study the issue of whether small and minor watercourses in Graham County, Arizona, were navigable or nonnavigable for title purposes as of February 14, 1912, in accordance with A.R.S. § 37-1123B. A copy of the Notice of Intent to Study and Receive, Review and Consider Evidence on the issue of navigability of small and minor watercourses in Graham County is attached hereto as Exhibit "B."

After collecting and documenting all reasonably available evidence received pursuant to the Notice of Intent to Study and to Receive, Review and Consider

Evidence, the Commission scheduled a public hearing to receive additional evidence and testimony regarding the navigability or nonnavigability of small and minor watercourses located in Graham County, Arizona. Public notice of this hearing was given by legal advertising on September 5, 2003, as required by law pursuant to A.R.S. § 37-1126 and, in addition, by mail to all those requesting individual notice and by means of the ANSAC website (azstreambeds.com). This hearing was held on October 14, 2003, in the City of Safford, the county seat of Graham County, since the law requires that such hearing be held in the county in which the watercourses being studied are located. Attached hereto as Exhibit "C" is a copy of the notice of the public hearing.

All parties were advised that anyone who desired to appear and give testimony at the public hearing could do so and, in making its findings and determination as to navigability and nonnavigability, the Commission would consider all matters presented to it at the hearing, as well as other historical and scientific data, information, documents and evidence that had been submitted to the Commission at any time prior to the date of the hearing, including all data, information, documents, and evidence previously submitted to the Commission.

Following the public hearing held on October 14, 2003, all parties were advised that they could file post-hearing memoranda pursuant to Rule R12-17-108.01. Post-hearing memoranda were filed by the Salt River Project Agricultural and

Improvement and Power District and Salt River Valley Water Users Association and Phelps Dodge Corporation. On January 27, 2004, at a public hearing in Phoenix, Arizona, after considering all of the evidence and testimony submitted, and the post-hearing memorandum filed with the Commission, and the comments and oral argument presented by the parties, and being fully advised in the premises, the Commission, with a unanimous vote, found and determined in accordance with A.R.S. § 37-1128 that all small and minor watercourses in Graham County, Arizona, were nonnavigable as of February 14, 1912.

II. Graham County, Arizona

Graham County, Arizona, is located in the southeastern portion of the state and is approximately 4,649 square miles in land area, with a population of 36,350 as of July 1, 2000. It borders Apache and Navajo Counties to the north, Gila County to the northwest, Greenlee County to the east, Cochise County to the South and Pinal County to the west. Graham County lies within the following latitude and longitude ranges: 32° 25' 45" North to 33° 39' 30" North and 109° 11' 00" West to 110° 27' 00" West.

Graham County lies in the transition zone from the basin and range area of southeastern Arizona to the mountains of middle Arizona. The basin and range area consists of plains and valleys of semi-arid desert and rolling hills of grassland, but arising from them are mountains, sometimes called island mountains, containing pine trees and other mountain foliage. The highest point in the county is Mt. Graham

located near Safford, Arizona, in the Coronado National Forest at 10,717 feet above sea level. The lowest point in the county is at the bottom of San Carlos Lake behind Coolidge Dam at approximately 2375 feet above sea level. The northern third of Graham County is a part of the San Carlos Apache Indian Reservation and contains stands of ponderosa pine and other mountain foliage. The southern two-thirds of the County is a transition area from the mountains to the deserts of the basin and range area but with the island mountains mentioned above.

The major population centers of Graham County are the cities of Thatcher, Pima and Safford, which is also the county seat. Smaller towns or settlements located in Graham County are Solomon, Central, Ft. Thomas, Geronimo, Bylas, San Carlos, Bonita, Ft. Grant and Klondyke. The major commercial industries of Graham County are farming, ranching and tourism. U.S. Highway 70 is the main east-west corridor of transportation, running northwest from the New Mexico border near Duncan in Greenlee County to Peridot and San Carlos on the border with Gila County. The Arizona Eastern Railroad runs from Bowie, Arizona, in the north central section of Cochise County to Miami in Gila County, paralleling U.S. Highway 70 from just south of Solomon to the Gila County line. U.S. Highway 191 (formerly U.S. Highway 666 and known as the Coronado Trail) runs north from Interstate Highway 10 in Cochise County to Safford and then goes in a northeasterly direction to Clifton and Morenci in Greenlee County.

The major areas of interest in Graham County are Mt. Graham in the Coronado National Forest which contains many campgrounds and the center of astromomy with many telescopes, the Apache Indian Reservation, San Carlos Lake formed by Coolidge Dam on the Gila River, Aravaipa Canyon, a popular hiking area, and the Gila Box Riparian Conservation Area. Mt. Graham is a unique site for biologists and naturalists as it is the most southerly site of a glacier during the Wisconsin Glacial Period which ended between 12,000 and 15,000 years ago. It is also the southernmost mountain area on which are found the traditional rocky mountain flora and fauna and at the same time is the northernmost location where typical flora and fauna from the tropical forests of Mexico are found.

III. Background and Historical Perspectives

A. Public Trust Doctrine and Equal Footing Doctrine

The reason for the legislative mandated study of navigability of watercourses within the state is to determine who holds title to the beds and banks of such rivers and watercourses. Under the public trust doctrine, as developed by common law over many years, the tidal lands and beds of navigable rivers and watercourses, as well as the banks up to the high water mark, are held by the sovereign in a special title for the benefit of all the people. In quoting the U.S. Supreme Court, the Arizona Court of Appeals described the public trust doctrine in its decision in *The Center for Law v. Hassell*, 172 Ariz. 356, 837 P.2d 158 (App.1991), review denied October 6, 1992.

> An ancient doctrine of common law restricts the sovereign's ability to dispose of resources held in public trust. This doctrine, integral to watercourse sovereignty, was explained by the Supreme Court in *Illinois Cent. R.R. v. Illinois*, 146 U.S. 387, 13 S.Ct. 110, 36 L.Ed. 1018 (1892). A state's title to lands under navigable waters
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> > is a title different in character from that which the State holds in lands intended for sale.... It is a title held in trust for the people of the State that they may enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing therein freed from the obstruction or interference of private parties.
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> *Id.* at 452, 13 S.Ct. at 118; *see also Martin v. Waddell*, 41 U.S. (16 Pet.) at 413 (describing watercourse sovereignty as "a public trust for the benefit of the whole community, to be freely used by all for navigation and fishery, as well for shellfish as floating fish").

Id., 172 Ariz. at 364, 837 P.2d at 166.

This doctrine is quite ancient and was first formally codified in the Code of the Roman Emperor Justinian between 529 and 534 A.D.[1] The provisions of this Code, however, were based, often verbatim, upon much earlier institutes and journals of Roman and Greek law. Some historians believe that the doctrine has even earlier progenitors in the rules of travel on rivers and waterways in ancient Egypt and Mesopotamia. This rule evolved through common law in England which established that the king as sovereign owned the beds of commercially navigable waterways in order to protect their accessibility for commerce, fishing and navigation for his subjects. In England the beds of nonnavigable waterways where transportation for commerce was not an issue were owned by the adjacent landowners.

[1] *Putting the Public Trust Doctrine to Work*, David C. Slade, Esq. (Nov. 1990), pp. xvii and 4.

This principle was well established by English common law long before the American Revolution and was a part of the law of the American colonies at the time of the Revolution. Following the American Revolution, the rights, duties and responsibilities of the crown passed to the thirteen new independent states, thus making them the owners of the beds of commercially navigable streams, lakes and other waterways within their boundaries by virtue of their newly established sovereignty. The ownership of trust lands by the thirteen original states was never ceded to the federal government. However, in exchange for the national government's agreeing to pay the debts of the thirteen original states incurred in financing the Revolutionary War, the states ceded to the national government their undeveloped western lands. In the Northwest Ordinance of 1787, adopted just prior to the ratification of the U. S. Constitution and subsequently re-enacted by Congress on August 7, 1789, it was provided that new states could be carved out of this western territory and allowed to join the Union and that they "shall be admitted . . . on an equal footing with the original states, in all respects whatsoever." (Ordinance of 1787: The Northwest Territorial Government, § 14, Art. V, 1 stat. 50. See also U. S. Constitution, Art. IV, Section 3). This has been interpreted by the courts to mean that on admission to the Union, the sovereign power of ownership of the beds of navigable streams passes from the federal government to the new state. *Pollard's Lessee v. Hagan, et al.*, 44 U.S. (3 How.) 212 (1845), and *Utah Division of State Lands v. United States*, 482 U.S. 193 (1987).

In discussing the equal footing doctrine as it applies to the State's claim to title of beds and banks of navigable streams, the Court of Appeals stated in *Hassell*:

> The state's claims originated in a common-law doctrine, dating back at least as far as Magna Charta, vesting title in the sovereign to lands affected by the ebb and flow of tides. See *Martin v. Waddell*, 41 U.S. (16 Pet.) 367, 412-13, 10 L.Ed. 997 (1842). The sovereign did not hold these lands for private usage, but as a "high prerogative trust . . . , a public trust for the benefit of the whole community." *Id.* at 413. In the American Revolution, "when the people . . . took into their own hands the powers of sovereignty, the prerogatives and regalities which before belong either to the crown or the Parliament, became immediately and rightfully vested in the state." *Id.* at 416.
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> Although watercourse sovereignty ran with the tidewaters in England, an island country, in America the doctrine was extended to navigate inland watercourses as well. See *Barney v. Keokuk*, 94 U.S. 324, 24 L.Ed. 224 (1877); *Illinois Cent. R.R. v. Illinois*, 146 U.S. 387, 434, 13 S.Ct. 110, 111, 36 L.Ed. 1018 (1892). Moreover, by the "equal footing" doctrine, announced in *Pollard's Lessee v. Hagan*, 44 U.S. (3 How.) 212, 11 L.Ed. 565 (1845), the Supreme Court attributed watercourse sovereignty to future, as well as then-existent, states. The Court reasoned that the United States government held lands under territorial navigable waters in trust for future states, which would accede to sovereignty on an "equal footing" with established states upon admission to the Union. *Id.* at 222-23, 229; *accord Montana v. United States*, 450 U.S. 544, 101 S.Ct. 1245, 67 L.Ed.2d 493 (1981); *Land Department v. O'Toole*, 154 Ariz. 43, 44, 739 P.2d 1360, 1361 (App. 1987).
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> The Supreme Court has grounded the states' watercourse sovereignty in the Constitution, observing that "[t]he shores of navigable waters, and the soils under them, were not granted by the Constitution to the United States, but were reserved to the states respectively." *Pollard's Lessee*, 44 U.S. (3 How.) at 230; see also *Oregon ex rel. State Land Board v. Corvallis Sand & Gravel Co.*, 429 U.S. 363, 374, 97 S.Ct. 582, 589, 50 L.Ed.2d 550 (1977) (states' "title to lands underlying navigable waters within [their] boundaries is conferred . . . by the [United States] constitution itself").

Id., 172 Ariz. 359-60, 837 P.2d at 161-162.

In the case of Arizona, the "equal footing" doctrine means that if any stream or watercourse within the State of Arizona was navigable on February 14, 1912, the date Arizona was admitted to the Union, the title to its bed is held by the State of Arizona in a special title under the public trust doctrine. If the stream was not navigable on that date, ownership of the streambed remained in such ownership as it was prior to statehood--the United States if federal land, or some private party if it had previously been patented or disposed of by the federal government--and could later be sold or disposed of in the manner of other land since it had not been in a special or trust title under the public trust doctrine. Thus, in order to determine title to the beds of rivers, streams, and other watercourses within the State of Arizona, it must be determined whether or not they were navigable or nonnavigable as of the date of statehood.

B. Legal Precedent to Current State Statutes

Until 1985, most Arizona residents assumed that all rivers and watercourses in Arizona, except for the Colorado River, were nonnavigable and accordingly there was no problem with the title to the beds and banks of any rivers, streams or other watercourses. However, in 1985 Arizona officials upset this long-standing assumption and took action to claim title to the bed of the Verde River. *Land Department v. O'Toole*, 154 Ariz. 43, 739 P.2d 1360 (App. 1987). Subsequently, various State officials alleged that the State might hold title to certain lands in or near other watercourses as well. *Id.*, 154 Ariz. at 44, 739 P.2d at 1361. In order to resolve the title questions to the beds of

Arizona rivers and streams, the Legislature enacted a law in 1987 substantially relinquishing the state's interest in any such lands.[2] With regard to the Gila, Verde and Salt Rivers, this statute provided that any record title holder of lands in or near the beds of those rivers could obtain a quitclaim deed from the State Land Commissioner for all of the interest the sate might have in such lands by the payment of a quitclaim fee of $25.00 per acre. The Arizona Center for Law in the Public Interest filed suit against Milo J. Hassell in his capacity as State Land Commissioner, claiming that the statute was unconstitutional under the public trust doctrine and gift clause of the Arizona Constitution as no determination had been made of what interest the state had in such lands and what was the reasonable value thereof so that it could be determined that the state was getting full value for the interests it was conveying. The Superior Court entered judgment in favor of the defendants and an appeal was taken. In its decision in *Hassell*, the Court of Appeals held that this statute violated the public trust doctrine and the Arizona Constitution and further set forth guidelines under which the state could set up a procedure for determining the navigability of rivers and watercourses in Arizona. In response to this decision, the Legislature established the Arizona Navigable Stream Adjudication Commission and enacted the statutes pertaining to its operation. 1992 Arizona Session Laws, Chapter 297 (1992 Act). The charge given to the

[2] Prior to the enactment of the 1987 statute, the Legislature made an attempt to pass such a law, but the same was vetoed by the Governor. The 1987 enactment was signed by the Governor and became law. 1987 Arizona Sessions Law, Chapter 127.

Commission by the 1992 Act was to conduct full evidentiary public hearings across the state and to adjudicate the State's claims to ownership of lands in the beds of watercourses. See generally former A.R.S. §§ 37-1122 to 37-1128.

The 1992 Act provided that the Commission would make findings of navigability or nonnavigability for each watercourse. See former A.R.S. § 37-1128(A). Those findings were based upon the "federal test" of navigability in former A.R.S. § 37-1101(6). The Commission would examine the "public trust values" associated with a particular watercourse only if and when it determined that the watercourse was navigable. See former A.R.S. §§ 37-1123(A)(3), 37-1128(A).

The Commission began to take evidence on certain watercourses during the fall of 1993 and spring of 1994. In light of perceived difficulties with the 1992 Act, the Legislature revisited this issue during the 1994 session and amended the underlying legislation. See 1994 Arizona Session Laws, ch. 178 ("1994 Act"). Among other things, the 1994 Act provided that the Commission would make a recommendation to the Legislature, which would then hold additional hearings and make a final determination of navigability by passing a statute with respect to each watercourse. The 1994 Act also established certain presumptions of nonnavigability and exclusions of some types of evidence.

Based upon the 1994 Act, the Commission went forth with its job of compiling evidence and making a determination of whether each watercourse in the state was

navigable as of February 14, 1912. The Arizona State Land Department issued technical reports on each watercourse, and numerous private parties and public agencies submitted additional evidence in favor of or opposed to navigability for particular watercourses. See, *Defenders of Wildlife v. Hull*, 199 Ariz. 411, 416, 18 P.3d 722, 727 (App. 2001). The Commission reviewed the evidence and issued reports on each watercourse which were transmitted to the Legislature. The Legislature then enacted legislation relating to the navigability of each specific watercourse. The Court of Appeals struck down that legislation in its *Hull* decision, finding that the Legislature had not applied the proper standards of navigability. *Id.* 199 Ariz. at 427-28, 18 P.2d at 738-39.

In 2001, the Legislature again amended the underlying statute in another attempt to comply with the Court's pronouncements in *Hassell* and *Hull*. See, 2001 Arizona Session Laws, ch. 166, § 1. The 2001 legislation now governs the Commission in making its findings with respect to the small and minor watercourses in Graham County.

IV. Issues Presented

The applicable Arizona statutes state that the Commission has jurisdiction to determine which, if any, Arizona watercourses were "navigable" on February 14, 1912 and for any watercourses determined to be navigable, to identify the public trust values. A.R.S. § 37-1123. A.R.S. § 37-1123A provides as follows:

> A. The commission shall receive, review and consider all relevant historical and other evidence presented to the commission by the state land department and by other persons regarding the navigability or

nonnavigability of watercourses in this state as of February 14, 1912, together with associated public trust values, except for evidence with respect to the Colorado River and, after public hearings conducted pursuant to section 37-1126:

1. Based only on evidence of navigability or nonnavigability, determine what watercourses were not navigable as of February 14, 1912.

2. Based only on evidence of navigability or nonnavigability, determine whether watercourses were navigable as of February 14, 1912.

3. In a separate, subsequent proceeding pursuant to section 37-1128, subsection B, consider evidence of public trust values and then identify and make a public report of any public trust values that are now associated with the navigable watercourses.

A.R.S. §§ 37-1128A and B provide as follows:

A. After the commission completes the public hearing with respect to a watercourse, the commission shall again review all available evidence and render its determination as to whether the particular watercourse was navigable as of February 14, 1912. If the preponderance of the evidence establishes that the watercourse was navigable, the commission shall issue its determination confirming the watercourse was navigable. If the preponderance of the evidence fails to establish that the watercourse was navigable, the commission shall issue its determination confirming that the watercourse was nonnavigable.

B. With respect to those watercourses that the commission determines were navigable, the commission shall, in a separate, subsequent proceeding, identify and make a pubic report of any public trust values associated with the navigable watercourse.

Thus, in compliance with the statutes, the Commission is required to collect evidence, hold hearings, and determine which watercourses in existence on February 14, 1912, were navigable or nonnavigable. This report pertains to all of the small and minor watercourses in Graham County, Arizona, and excludes the San Pedro

River. In the hearings to which this report pertains, the Commission considered all of the available historical and scientific data and information, documents and other evidence relating to the issue of navigability of the small and minor watercourses in Graham County, Arizona, as of February 14, 1912.

Public trust values were not considered in these hearings but will be considered in separate, subsequent proceedings, if required. A.R.S. §§ 37-1123A3 and 37-1128B. In discussing the use of an administrative body such as the Commission on issues of navigability and public trust values, the Arizona Court of Appeals in its decision in *Hassell* found that the State must undertake a "particularized assessment" of its "public trust" claims but expressly recognized that such assessment need not take place in a "full blown judicial" proceeding.

> We do not suggest that a full-blown judicial determination of historical navigability and present value must precede the relinquishment of any state claims to a particular parcel of riverbed land. An administrative process might reasonably permit the systematic investigation and evaluation of each of the state's claims. Under the present act, however, we cannot find that the gift clause requirement of equitable and reasonable consideration has been met.

Id., 172 Ariz. at 370, 837 P.2d at 172.

The 2001 *Hull* court, although finding certain defects in specific aspects of the statute then applicable, expressly recognized that a determination of "navigability" was essential to the State having any "public trust" ownership claims to lands in the bed of a particular watercourse:

> The concept of navigability is "essentially intertwined" with public trust discussions and "[t]he navigability question often resolves whether any public trust interest exists in the resource at all." Tracy Dickman Zobenica, *The Public Trust Doctrine in Arizona's Streambeds*, 38 Ariz.L.Rev. 1053, 1058 (1996). In practical terms, this means that **before a state has a recognized public trust interest in its watercourse bedlands, it first must be determined whether the land was acquired through the equal footing doctrine. However, for bedlands to pass to a state on equal footing grounds, the watercourse overlying the land must have been "navigable" on the day that the state entered the union.**

199 Ariz. at 418, 18 P.3d at 729 (also citing *O'Toole*, 154 Ariz. at 45, 739 P.2d at 1362 (emphasis added).

The Legislature and the Court of Appeals in *Hull* have recognized that, unless the watercourse was "navigable" at statehood, the State has no "public trust" ownership claim to lands along that watercourse. Using the language of *Hassell*, if the watercourse was not "navigable," the "validity of the equal footing claims that [the State] relinquishes" is **zero**. *Hassell*, 172 Ariz. at 371, 837 P.2d at 173. Thus, if there is no claim to relinquish, there is no reason to waste public resources determining (1) the value of any lands the State **might** own **if** it had a claim to ownership, (2) "equitable and reasonable considerations" relating to claims it might relinquish without compromising the "public trust," or (3) any conditions the State might want to impose on transfers of its ownership interest. See *id.*

V. Burden of Proof

The Commission in making its findings and determinations utilized the standard of the preponderance of the evidence as the burden of proof as to whether or not a stream was navigable or nonnavigable. A.R.S. § 37-1128A provides as follows:

> After the commission completes the public hearing with respect to a watercourse, the commission shall again review all available evidence and render its determination as to whether the particular watercourse was navigable as of February 14, 1912. If the preponderance of the evidence establishes that the watercourse was navigable, the commission shall issue its determination confirming that the watercourse was navigable. If the preponderance of the evidence fails to establish that the watercourse was navigable, the commission shall issue its determination confirming that the watercourse was nonnavigable.

This statute is consistent with the decision of the Arizona courts that have considered the matter. *Hull*, 199 Ariz. at 420, 18 P.3d at 731 ("... a 'preponderance' of the evidence appears to be the standard used by the courts. See, *e.g.*, *North Dakota v. United States*, 972 F.2d 235-38 (8th Cir. 1992)"); *Hassell*, 172 Ariz. at 363, n. 10, 837 P.2d at 165, n. 10 (The question of whether a watercourse is navigable is one of fact. The burden of proof rests on the party asserting navigability . . . ."); *O'Toole*, 154 Ariz. at 46, n. 2, 739 P.2d at 1363, n. 2.

The most commonly used legal dictionary contains the following definition of "preponderance of the evidence":

> Evidence which is of greater weight or more convincing than the evidence which is offered in opposition to it; that is, evidence which as a whole shows that the fact sought to be proven is more probable than not. *Braud*

> *v. Kinchen*, La.App., 310 So.2d 657, 659. With respect to burden of proof in civil actions, means greater weight of evidence, or evidence which is more credible and convincing to the mind. That which best accords with reason and probability. The word "preponderance" means something more than "weight"; it denotes a superiority of weight, or outweighing. The words are not synonymous, but substantially different. There is generally a "weight" of evidence on each side in case of contested facts. But juries cannot properly act upon the weight of evidence, in favor of the one having the onus, unless it overbears, in some degree, the weight upon the other side.

Black's Law Dictionary, 1064 (5th ed. 1979).

The "preponderance of the evidence" standard is sometimes referred to as requiring "fifty percent plus one" in favor of the party with the burden of proof. One could imagine a set of scales. If the evidence on each side weighs exactly evenly, the party without the burden of proof must prevail. In order for the party with the burden to prevail, sufficient evidence must exist in order to tip the scales (even slightly) in its favor. See, generally, *United States v. Fatico*, 458 U.S. 388, 403-06 (E.D. N.Y. 1978), *aff'd* 603 F.2d 1053 (2nd Cir. 1979), *cert. denied* 444 U.S. 1073 (1980); *United States v. Schipani*, 289 F.Supp. 43, 56 (E.D. N.Y. 1968), aff'd, 414 F.2d 1262 (2nd Cir. 1969).

VI. Standard for Determining Navigability

The statute defines a navigable watercourse as follows:

> "Navigable" or "navigable watercourse" means a watercourse that was in existence on February 14, 1912, and at that time was used or was susceptible to being used, in its ordinary and natural condition, as a highway for commerce, over which trade and travel were or could have been conducted in the customary modes of trade and travel on water.
> A.R.S. § 37-1101(5).

The foregoing statutory definition is taken almost verbatim from the U.S. Supreme Court decision in *The Daniel Ball*, 77 U.S. (10 Wall) 557, 19 L.Ed. 999 (1870), which is considered by most authorities as the best statement of navigability for title purposes. In its decision, the Supreme Court stated:

> Those rivers must be regarded as public navigable rivers in law which are navigable in fact. And they are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water.

77 U.S. at 563.

In a later opinion in *U. S. v. Holt Bank*, 270 U.S. 46 (1926), the Supreme Court stated:

> [Waters] which are navigable in fact must be regarded as navigable in law; that they are navigable in fact when they are used, or are susceptible of being used, in their natural and ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and ravel on water; and further that navigability does not depend on the particular mode in which such use is or may be had—whether by steamboats, sailing vessels or flatboats—nor on an absence of occasional difficulties in navigation, but on the fact, if it be a fact, that the [water] in its natural and ordinary condition affords a channel for useful commerce.

270 U.S. at 55-56.

The Commission also considered the following definitions contained in A.R.S. § 37-1101 to assist it in determining whether small and minor watercourses in Graham County were navigable at statehood.

11. "Watercourse" means the main body or a portion or reach of any lake, river, creek, stream, wash, arroyo, channel or other body of water. Watercourse does not include a man-made water conveyance system described in paragraph 4 of this section, except to the extent that the system encompasses lands that were part of a natural watercourse as of February 14, 1912.

3. "Highway for commerce" means a corridor or conduit within which the exchange of goods, commodities or property or the transportation of persons may be conducted.

2. "Bed" means the land lying between the ordinary high watermarks of a watercourse.

6. "Ordinary high watermark" means the line on the banks of a watercourse established by fluctuations of water and indicated by physical characteristics, such as a clear natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation or the presence of litter and debris, or by other appropriate means that consider the characteristics of the surrounding areas. Ordinary high watermark does not mean the line reached by unusual floods.

8. "Public trust land" means the portion of the bed of a watercourse that is located in this state and that is determined to have been a navigable watercourse as of February 14, 1912. Public trust land does not include land held by this state pursuant to any other trust.

Thus, the State of Arizona in its current statutes follows the federal test for determining navigability.

VII. Evidence Received and Considered by the Commission

Pursuant to A.R.S. § 37-1123, and other provisions of Title 37, Chapter 7, Arizona Revised Statutes, the Commission received, compiled, and reviewed evidence and records regarding the navigability and nonnavigability of small and minor

watercourses located in Graham County, Arizona. Evidence consisting of studies, written documents, newspapers and other historical accounts, pictures and testimony were submitted. A comprehensive study entitled "Final Report - Small & Minor Watercourses Analysis for Graham County, Arizona" prepared by Stantec Consulting Inc., in association with JE Fuller/Hydrology & Geomorphology, Inc., under supervision of the Arizona State Land Department, dated April 2001, was submitted. An earlier draft of the final report dated January 2001 was also considered by the Commission, as well as the Small and Minor Watercourse Criteria Final Report dated September 1998 and the 3-County Pilot Study dated September 1999. Documents were also submitted by the Arizona Center for Law in the Public Interest and Phelps Dodge Corporation which submitted additional evidence concerning the importation of water into Eagle Creek. Also considered was the Navigability Study of the Upper Gila River from Safford to the New Mexico State Boundary, dated June 1997, prepared by SFC Engineering Company in association with George V. Sabol Consulting Engineers, Inc., JE Fuller/Hydrology & Geomorphology, Inc. and SWCA, Inc. Environmental Consultants, and revised June 2003 by JE Fuller/Hydrology & Geomorphology, as well as the Navigability Study for the Gila River: Colorado River Confluence to the Town of Safford, dated October 1994, prepared by the Arizona State Land Department, Arizona Geological Survey and SWCA Environmental Consultants, and revised September 1996 and June 2003 by JE Fuller/Hydrology & Geomorphology, Inc. The list of evidence and

records, together with a summarization is attached as Exhibit "D." The Commission also heard testimony and received and considered evidence at the public hearing on small and minor watercourses located in Graham County, Arizona, held in Safford, Arizona, on October 14, 2003. The minutes of the hearing are attached hereto as Exhibit "E".

A. Small & Minor Watercourses Analysis for Graham County, Arizona

1. Analysis Methods.

Due to the large number of small and minor watercourses located in Graham County, Arizona (3,226 watercourses, of which 3,069 are unnamed), it is impractical and unnecessary to consider each watercourse with the same detail that the Commission considered major watercourses. The study of small and minor watercourses developed by Stantec Consulting Inc. in association with J.E. Fuller/Hydrology & Geomorphology, Inc. provided for an evaluation using a three-level process which contained criteria that would be necessarily present for a stream to be considered navigable.[3] A master database listing all small and minor watercourses was developed from the Arizona Land Resource Information System (ALRIS) with input from the U. S. Geological Survey, the U. S. Environmental Protection Agency and other agencies and sources. The final version of the master database called "Streams" includes a hydrological unit code (HUC), segment number, mileage, watercourse type and watercourse name, if

[3] The three-level process begins with a presumption and hypothesis that each stream is navigable. Analysis at each level attempts to reject that hypothesis. Fuller Final Report for Mohave County, November 22, 2002.

available. Thus there is a hydrological unit code for each of the segments of the 1,298 small and minor watercourses in Graham County, Arizona. In addition, the database locates each segment by section, township, and range. Some of the satellite databases discussed below also locate certain significant reference points by latitude and longitude.

Using the master database, the contractor also set up six satellite databases, each relating to a specific stream characteristic or criterion, that would normally be found in a watercourse considered to be navigable or susceptible of navigability. These stream criteria are as follows:

1. Perennial stream flow;
2. Dam located on stream;
3. Fish found in stream;
4. Historical record of boating;
5. Record of modern boating; and
6. Special status (other water related characteristics, including in-stream flow application and/or permit, unique waters, wild and scenic, riparian, and preserve).

All watercourses were evaluated at level one which is a binary (yes or no) sorting process as to whether or not these characteristics are present. For a stream or watercourse not to be rejected at level one, it must be shown that at least one of these characteristics is present. If none of these characteristics are present, the stream or

watercourse is determined to require no further study and is rejected at level one as having no characteristics of navigability.

All streams and watercourses surviving the level one sorting (i.e., determined to have one or more of the above characteristics) are evaluated at level two. The level two analysis is more qualitative than level one and its assessment requires a more in-depth analysis to verify and interpret the reasons that caused a particular stream to advance from level one. Each of the above characteristics on which there was an affirmative answer at level one is analyzed individually at level two to determine whether the stream is potentially susceptible to navigation or not susceptible to navigation; for example, a watercourse that at first appears to be perennial in flow but upon further analysis is determined to have only a small flow from a spring for a short distance and therefore cannot be considered perennial for any substantial portion of the watercourse.

In addition, the level two analysis utilized a refinement with value engineering techniques analyzing watercourses with more than one affirmative response at level one and assigned values to each of the six categories mentioned above. Clearly, perennial flow, historical boating, and modern boating are more important to the issue of navigability than the categories of dam impacted, special status, or fish. Thus, for the purpose of the value engineering study, the following rough values were assigned to each of the six categories: historical boating-10, modern boating-8, perennial stream-7, dam impacted-4, fish-4, and special status-2. This system is a recognized tool used in

value engineering studies, and seven qualified engineers from the state Land Department and consulting staff of the contractor participated in determining the values used for each category. This system establishes that a value in excess of 13 is required for a stream to survive the level two evaluation and pass to level three for consideration.[4] Thus, a stream having both perennial flow and historical boating (sum value of 17), or a combination of the values set for other criteria equaling more than 13, would require that the stream pass to evaluation at level three. If a stream does not have a sum value greater than 13, it is determined to require no further study and is rejected at level two as having insufficient characteristics of navigability.

If a stream survives the evaluation at level two, it goes on to level three which uses quantitative hydrologic and hydraulic analysis procedures including any stream gauge data available, as well as engineering estimates of depth, width and velocity of any water flow in the subject watercourse and comparing the same to minimum standards required for different types of vessels. Also considered is the configuration of the channel and whether it contains rapids, boulders or other obstacles. If a stream or watercourse is not rejected or eliminated at level three, it is removed from this process and subjected to a separate detailed study similar to that performed on a major watercourse, and a separate report will be issued on that stream or watercourse. Since

[4] When this procedure was first developed, a cutoff value of 11 was established for a stream to survive evel two and pass to level three for evaluation. As the procedure was refined, the cutoff value of 13 was substituted for 11 as it was felt to be more accurate.

one stream (Eagle Creek) survived the level three analysis, a separate detailed stream navigability study was performed on it and a separate report is included herein.

2. Application of Analysis Methods to Small and Minor Watercourses in Graham County.

The application of the level one analysis to the 3,226 small and minor watercourses located in Graham County resulted in 3,080 watercourses or 95.6% being determined as not having any of the six characteristics listed above, and these 3,080 were therefore rejected or eliminated and did not proceed to a further evaluation at level two. Attached as Exhibit "F" is a list of the watercourses in Graham County which were determined to have no characteristics of navigability or characteristics indicating susceptibility of navigability at level one.

Only 146 watercourses, approximately 4.5%, received an affirmative response to one or more of the above characteristics or criteria and were evaluated at level two. One hundred twenty-eight of these watercourses had only one affirmative response at level one and, after further analysis of that affirmative response, were rejected and determined not to have the characteristics of navigability requiring further study. Eighteen of the watercourses received an affirmative response to more than one of the characteristics listed. In the value engineering analysis, it was determined that of these 18 streams with more than one affirmative response at level one, only five streams had a sum value of more than 11 when analyzed pursuant to the value engineering

techniques and therefore should be advanced for further study at level three. It was determined that 141 of the streams analyzed at level two could not be considered as susceptible of navigability and were therefore rejected at level two. Attached as Exhibit "G" is a list of the 141 watercourses that received a positive response to one or more of the characteristics listed above and were evaluated at level two. The five streams that survived the value engineering analysis at level two with the old sum value of 11 are Bonita Creek, Eagle Creek, San Carlos River, Black River and Aravaipa Creek. Two of these streams—Aravaipa Creek and Bonita Creek, with value engineering sum values of 12.88 and 12.12, respectively, are lower than the revised sum value of 13 and were therefore not considered by the Commission for evaluation at level three and were in fact rejected at level 2.[5] Thus the three streams that survived the revised value engineering analysis at level two and are considered at level three are Black River, San Carlos River and Eagle Creek.

[5] A further refinement made to the value engineering study deals with the areas of perennial stream, fish and special status and brakes down their values and awards a percentage rating of the full value based upon certain criteria. For example, there are two rating systems for a perennial stream: ALRIS (1999) and Brown, et al. (1981). If both systems list a stream as perennial, it receives full value; if only one lists a stream as perennial, it receives only 50% of full value. Fish is broken down by assigning 75% of full value for native fish and 25% of full value for non-native fish. If both types are present, it receives full value. Special status is broken down into in-stream flow (permit) – 3, in-stream flow (application) receives one-half or 1.5, and .25 each is assigned for riparian, preserves, wild and scenic and unique waters, for a total rating of 1. A total rating of 4 is thus possible for any watercourse that has all of these special status designators--in-stream flow (permit) and (application) are duplicative and only one value for in-stream flow is assigned. The weighted average rating for any watercourse with special status is determined by dividing the total rating by 4.0. This criteria is not applied to the categories of historical boating, modern boating and dam-impacted, since the boating (whether modern or historical) either occurred or it did not, and a dam on the stream exists or does not, so if the boating occurred or a dam is present, the full value of 10, 8 or 4 is used for these categories. If not present, no weight is counted in these categories. This refinement results in the final weights assigned to Aravaipa Creek and Bonita Creek.

3. Level Three Analysis of Black River

The Black River crosses Apache, Greenlee, Navajo, Graham and Gila Counties in the mountainous area of central Arizona and is the boundary between Graham County and Apache and Navajo Counties. It received four affirmative responses in the level one analysis--modern boating, fish, special status, and perennial stream. It runs in a generally south by west direction from its headwaters in Williams Valley and Big Lake to its confluence with the Salt River, approximately 13 miles southwest of White River, Arizona. It is 113.4 miles long and drains a total area of about 1,252 square miles. Elevations along the watercourse range from a maximum of 7,840 feet at the headwaters to about 4,230 at its confluence with the Salt River. For geomorphology purposes, the Black River can be divided into three reaches. In the upper reach and middle reach it flows through deep canyons which have only limited access to the river itself. In the middle reach, the slope flattens out and in the lower reach the slope and banks are much more accessible to persons desiring to go to the river.

There are three U.S. Geological Survey. gauging stations along the Black River which have the following mean annual flows. The upper gauging station near Maverick, Arizona, has a mean annual flow of 141 cubic feet per second ("cfs"). The gauging station near Point of Pines and below the pumping plant has a mean annual flow of 221 cfs. The gauging station near Ft. Apache, Arizona, close to where it flows into the Salt River, has a mean annual flow of 438 cfs. Near Freezeout Creek, eight

miles northwest of Point of Pines, the Phelps Dodge Corporation has constructed a pumping plant to transfer water from the Black River to Eagle Creek for use in its processing plants in the mines near Morenci, which reduces the average flow down the Black River and increases the flow in Eagle Creek.

The overall depth of the river averages between 1-1/2 to 3-1/2 feet and is between 15 and 25 feet in width. The river has numerous rapids and even some low waterfalls which inhibit the use of boats on the river. Notwithstanding this, due to the amount of water, canoes, kayaks and rubber rafts can be used for recreational purposes some of the time on portions of the river. Due to obstructions in the river such as rapids and waterfalls, overgrowth and rock outcrops, shallow-flow depths, and steep slopes in the canyon areas, continuous access to the river is nearly impossible except on a localized recreational use basis and the river itself is not conducive to regular commercial transportation. In view of the overall conditions of the river, it was determined that the Black River should be rejected as a navigable river at level three, and a detailed study was not conducted.

4. Level Three Analysis of San Carlos River

The San Carlos River, named for the town on the San Carlos Indian Reservation through which it flows, is located in the northeastern and far eastern portion of Graham County in southeastern Arizona. It received three affirmative responses at the level one analysis, including perennial stream, dam impacted and the presence of fish.

The headwaters of the San Carlos River are on the north slopes of the Gila Mountains near Ash Creek Ranch in the shadow of Natrones Peak. It flows in a westernly direction through the mountains and then turns southwesterly to just above San Carlos where it turns directly south and flows into San Carlos Lake. Prior to the creation of San Carlos Lake behind Coolidge Dam it had its confluence with the Gila River.

The San Carlos River is 56.7 miles in length and drains a watershed of 1,026 square miles. The watershed ranges from over 6900 feet at the Apache Peaks to 2552 feet where it flows into San Carlos Lake. The mean annual precipitation of the watershed is 17.2 inches. Vegetation within the watershed varies from Arizona upland desert scrub in the lower elevations to oak woodland and piñon juniper in the upper elevations. Along the river itself, cottonwood-willow and walnut riparian forests are found, as well as desert grasses and reeds. In the upper portion of the river, known as the mountain reach, the channel is located in the bottom of a V-shaped deep canyon with very limited access, a small to non-existent floodplain, and a narrow corridor of riparian vegetation. The mountain reach is perennial. In the valley reach the channel is allowed to spread out and is a braided, sand and gravel-bedded channel, approximately 75 feet wide. There are multiple braided channels with widths of the individual channels varying from as low as three feet to as much as 35 feet. The valley reach is intermittent. San Carlos Lake, which is backed up behind Coolidge Dam on the Gila

River, was built in 1928 by the Bureau of Indian Affairs and inundates a portion of the mouth of the old San Carlos River bed near where it flowed into the Gila River.

There is one U.S. Geological Survey stream gauge on the San Carlos River just above the town of San Carlos which discloses an annual mean flow of 63 cfs with most of the larger flows occurring during the winter snow melt, winter rains and summer monsoons. The lower portion of the river is frequently dry during the months of May, June, July, September and October. There have been some large floods reported due to heavy rain, the most recent being January of 1993 with a flow rate of 54,800 cfs. The highest average flows occur during the winter storm months of January and February. There is no modern or historical account of any type of boating on the San Carlos River, and the average flow rate. when compared with government standards for small craft, would not appear to allow the use of canoes, kayaks or tubes except in above-average flows a few weeks of each year. Boating on the San Carlos during floods, at which time it would have greater depths, would be dangerous or difficult due to the high velocities, floating debris, overhanging vegetation, and steep slopes. Boating by any commercial craft would be extremely unlikely and hazardous.

In view of the foregoing, the San Carlos River was rejected as not being susceptible of navigability at level three.

5. Level Three Analysis of Eagle Creek

The Eagle Creek watershed is located in eastern Arizona in what is widely regarded as the transition zone between the basin and range and Colorado Plateau physiographic provinces of Arizona. Eagle Creek was named for the eagles that were once found along its river valley. The watershed extends from its headwaters above the Mogollon Rim near Alpine, from where it runs in a southerly direction almost along the Greenlee-Graham County line to a point nine miles southwest of the Clifton-Morenci area where it flows into the Gila River. It had four affirmative responses at level one—perennial stream, modern boating, fish, and special status. It is 52.5 miles in length and has a drainage area of 622 square miles.

Eagle Creek is a perennial stream but flows more heavily during winter storms, snow melt and summer monsoon storms. There are two U.S. Geological Survey gauging stations located on Eagle Creek. The upper one located near the Double Circle Ranch has a mean annual flow of 26 cfs and the lower one above the pumping plant near Morenci, Arizona, has an annual mean flow of 71 cfs. The average channel depth is .4 to .8 of a foot, and the average channel flow width is 20 to 26 feet. The flow characteristics for Eagle Creek limit acceptable recreational boating conditions to less than 10% of the time. Boating during higher water such as floods, when greater depth is present, would be extremely difficult and hazardous due to the high velocities of the stream, overhanging vegetation, rapids and waterfalls. Since the Arizona State Parks

Department lists Eagle Creek as a modern recreational boating stream and due to there being a record of some modern boating and the presence of a perennial flow, a detailed study was recommended for Eagle Creek.

6. Summary of Results of Small and Minor Watercourses Analysis for Graham County, Arizona

All of the 3,226 small and minor watercourses in Graham County were analyzed in the three-level process developed by the State Land Department and its contractors Stantec and J.E. Fuller Hydrology. At level one, 3,080 watercourses or 95.6% were determined as not having an affirmative response to any of the six characteristics utilized at level one and were therefore rejected and eliminated at level one. One hundred forty-six watercourses, approximately 4.5%, received an affirmative response to one or more of the characteristics or criteria and were evaluated at level two. One hundred twenty-eight of these watercourses received only one affirmative response at level one, and further analysis disclosed that they should be rejected as not having the characteristics of navigability requiring further study. Eighteen of the watercourses received more than one affirmative response at level one and were analyzed under the value engineering system described above. In this analysis fifteen of the watercourses had a sum value of less than 13 and were determined as not having the characteristics of navigability requiring further study. Only three streams had a sum value of more than 13 and were determined to require further study at level three. These three

streams, Black River, San Carlos River and Eagle Creek, were evaluated at level three. Of these three watercourses studied at level 3, only one watercourse, Eagle Creek was forwarded for a detailed study.

B. Prehistoric and Historic Considerations Affecting Small and Minor Watercourses in Graham County, Arizona

In addition to the Small and Minor Watercourses Analysis and other evidence described above, the Commission also considered evidence of the prehistoric conditions and the historic development of Graham County as disclosed in part in the study submitted in connection with hearings on navigability of the Gila River.

1. Prehistory or Pre-Columbian Conditions

Less archaeological work has been done in Graham County than in other parts of the State, although certain sites such as Point of Pines have been extensively excavated over the years. While there have been a number of paleoindian big game hunting sites located to the south of Graham County in Cochise and Santa Cruz Counties, no remains of the paleoindian big game hunting tradition have been found in Graham County. A number of archaic sites have been found south of the Gila River east of Safford, although many archaeologists feel that the Gila River valley is the northern boundary of the local archaic occupation known as the Desert culture or, locally, the Cochise culture, which sites are quite numerous in Cochise County.[6]

[6] The paleoindian period is generally recognized to be between 11000 to 6000 B.C. and the archaic period from 6000 to 300 B.C.

Following the archaic period, the upper Gila River valley and the mountainous areas to the north were occupied by a culture identified as the Mogollon culture. The Mogollon culture, which may have developed out of the indigenous Cochise culture was originally defined as a population inhabiting the mountain and mountain-lowland transition zones in east central Arizona and western New Mexico. Due to similarity in pottery styles, the indigenous inhabitants may have been influenced, either by trade or actual migration, from other early groups in northern Mexico. From 300 B.C. when the culture was first identified until approximately 700 A.D., the Mogollon populations lived in pithouse villages located in easily defensible positions in a dispersed pattern. The sites were relatively small.

After 700 A.D., the population increased, as did the size of the villages, and above-ground structures were found. Archaeological surveys show that during the 800 to 900 A.D. period, there were numerous villages of 50 to 200 rooms along the entire length of the Safford valley and along the Pinaleno Mountain foothills to the south. These sites contained agricultural features such as gridded gardens, terraces, and canals which took water from the Gila River and tributary washes and creeks. From 900 A.D. on, there is evidence of contact with other cultural groups and by 950 to 1200, many Hohokam traits are present in the Safford valley which, no doubt, came up the Gila River from the Phoenix and Florence valleys. Most of the Mogollon cultural contact

was oriented in a north-south direction stretching from the White Mountains in the north to Casas Grandes across the modern international border in the south in Mexico.

After a slight decline in population between 1100 and 1200, the area saw a revival with the introduction of Salado traits around 1200, which lasted into the early 1400's. The Salado culture which was centered around the Tonto and Globe area was probably a revival of the Hohokam, perhaps influenced by migration from Mesoamerica which spread east up the Safford valley and also west into the middle Gila River valley around Florence and Casa Grande. Evidence was also found of a migration which occurred in from approximately 1275 to 1325 A.D. of Anasazi culture, primarily from the Kayenta area in northern Arizona. The Anasazi would move into an area and build a settlement near the existing Mogollon settlements and later they would seem to be integrated into a single entity. This phenomena was developed as a result of the extensive excavations at Point of Pines in the White Mountains, although there is evidence of Anasazi traits found along with the Salado and Mogollon in the Safford valley. Agriculture was the primary occupation of these early populations which practiced irrigation, dry farming and floodwater farming, depending on the local conditions. There is no evidence whatsoever of these early cultures using boats, canoes or any other type of floating device on any of the small and minor watercourses, or for that matter on the Gila River, in Graham County.

By the late 1400's, the earlier populations had nearly all disappeared and the valley and mountainous areas of Graham County were thereafter occupied by the Yavapai culture or proto-Yavapai culture, a Yuman-speaking people, who apparently migrated from the Colorado River in the west, across central Arizona, reaching the mountains and upper Gila valley. The Yavapai population was never large and it was displaced or pushed back by the arrival of the western Apache tribes of the Athabascan cultures around 1700 A.D. The Yavapai and Apache were relatively nomadic, living primarily by hunting and gathering rather than by agriculture. There is no archaeological evidence of the use by the rivers and streams in Graham County by any of the prehistoric Indians for commercial trade or travel or for the flotation of logs.

2. Historical Settlement in Graham County

The first Europeans came into the area with the Coronado Expedition of 1539-1540. This Expedition was prompted by stories of gold-rich cities relayed by Cabeza de Baca following his trek from Florida to Mexico between 1528 and 1536. In 1539 Friar Marcos de Niza and Esteban (a Black who had accompanied Cabeza de Baca) set out from northern Mexico to investigate the stories told of Cibola, the golden cities. Esteban went as far as Zuni, New Mexico, where he was killed and, when Friar Marcos who was traveling some distance behind Esteban, heard of his death, he retreated to New Spain, spreading the tales of the wealth of Cibola. These stories led to the

organization of the Coronado Expedition which set out from Compostela, Mexico in February of 1540.

Historians dispute Coronado's route from northern Mexico to the Zuni pueblos, but it is most likely that he followed the San Pedro River from the present international border north and crossed over into the Sulphur Springs valley between the Galiuro and Winchester Mountains and then traveled north, crossing Aravaipa Creek and through the pass between the Pinaleno and Santa Teresa Mountains until he reached the Gila River somewhere a little west of Ft. Thomas, Arizona. He then crossed the river and followed the passes north through the Gila Mountains, going over the Mogollon Rim into the flat grassy plains near Springerville and Eager. With his 230 mounted men, Coronado was able to send side parties of explorers to the east and west of his regular route and perhaps covered more of southeastern Arizona and Graham County in particular, than is presently suspected. Coronado encountered native peoples living in the vicinity of Chichilticale, a ruin at the northern edge of the Sonoran Desert in the Gila River valley, the exact location of which is disputed. The people he encountered were probably Yavapai Indians.

After the Coronado Expedition of 1540, which resulted in finding no gold or other valuable minerals, Europeans did not explore eastern Arizona until approximately 1800 when mining began at the Santa Rita del Cobre near present-day Silver City, New Mexico. According to historians Apache Indians, who had displaced

the Yavapais around 1700, showed copper ore deposits to Colonel Jose Carasco and soon thereafter Don Francisco Elguea applied for and received a land grant for the area and developed mines.

Mexico won its independence from Spain in 1821 and, although it tried to keep citizens of the expanding United States out of its territory, some began to settle in Taos and Santa Fe in the 1830's and 1840's. In the 1820's American fur traders began trapping beaver along the rivers of the southwest. Their general route was from Santa Fe to the Santa Rita copper mines near what is now Silver City, New Mexico, then westward to the Gila River. The first documented trapping expedition occurred in 1826 when a trapping party traveled down along the Gila River and also trapped along the San Franciso River and Bonita Creek. Throughout the late 1820's and 1830's, and as late as 1842, other trapping parties traveled down along the Gila River and may have traveled up along the side rivers and tributaries but did not leave specific and definite records.

In 1826 James Ohio Pattie and his father Sylvester Pattie and twelve others made the trip from the mines at Silver City across the mountains to the Gila River and trapped in and around the upper Gila River, going as far west as the San Pedro River. Pattie made a number of trips in southern Arizona and is one of the only ones who left a record of these trips to trap beaver. These mountain men, while trapping the rivers of

the southwest, traveled by foot and horseback. There is no record of their having used canoes, rafts or other types of boats until they reached the Colorado River.

In 1846 war broke out between the United States and Mexico and a number of military expeditions passed through southern Arizona. In 1846 General Stephen Watts Kearny, who was guided by Kit Carson, and the Army of the West traveled down the Gila River through southern Arizona on their way to California. Since California was their objective, they did not make many side trips up the tributaries of the Gila River. Lieutenant William Emory who was a topographical engineer mapped the route for the Army of the West and recorded information regarding the area. Emory and two others who kept journals of the expedition recorded that there was not much water in the river and there seemed to be little game, although they did kill some geese and ducks and other small game such as quail. They reported numerous ruins of prehistoric Indians and made sketch maps of several of them. Lieutenant Philip St. George Cook and the Mormon Battalion also passed through the area at this time, but its route was further south, and he did not come in contact with any of the area north of the Gila River.

After the Treaty of Guadalupe Hidalgo which ended the war with Mexico in 1848 and the subsequent purchase in 1853 of the area south of the Gila River by the treaty that accomplished the Gadsden Purchase, the present boundaries of the United States were set and the Army undertook extensive topographical and geographical review of the area. The Apache Indians were a great problem and, beginning in the late

1860's the United States military established a system of military posts throughout southern Arizona to control these Indians. The nearest of these posts were Ft. Apache near the confluence of the White and Black Rivers in the mountains north of Graham County, Camp San Carlos, and Ft. Thomas on the Gila River west of Safford.

During the Apache wars troops discovered copper deposits on the San Francisco River in adjacent Greenlee County which were developed in 1872 resulting in the creation of the Clifton-Morenci Mining District. At the time, Greenlee County was a part of Graham County but was later split off and established as a separate county. The mines in Clifton-Morenci have continued to produce copper and the great open pit mine at Morenci is one of the largest producers of copper in the world today. Recently, deposits of copper ore have been discovered in the Gila Mountains to the north and a little east of Safford, and it would appear that large open pit copper mines may well be developed in Graham County at some time in the future.

Farming and ranching developed about the same time as mining did in eastern Arizona. The first farmers came up the Gila River from Florence and established the town of Safford in 1874.[7] At about the same time Mormon farmers, urged by the Church in Salt Lake City, began to migrate into the upper Gila valley and established the towns of Thatcher and Pima. Vying for the county seat with Safford was the town

[7] The town of Safford is named after Territorial Governor A. P. K. Safford who is known as the father of the Arizona school system. His wife was named Florence, and the town of Florence, county seat of Pinal County, was named after her.

of Solomonville, which was established by a merchant by the name of I. G. Solomon who had a large country store in the town that bore his name. In one corner of his store he established the first post office for Solomonville, and in another corner in 1903 was established the Gila Valley Bank & Trust which was the forerunner of Valley National Bank of Arizona, now merged into Bank One. After the county seat was moved between Safford and Solomonville a couple of times, Safford finally prevailed and became the permanent county seat prior to statehood. There are approximately 50,000 acres of prime farmland in the upper Gila Valley which is now irrigated in part by canals which divert water from the Gila River and in part by wells which pump from the underground aquifer. Ranching also developed in eastern Arizona covering the non-farm areas of Graham County, the southern part of Greenlee County, and the northern part of Cochise County. All of these areas looked in the beginning to Safford as their major trading area.

Transportation in Graham County at or about the time of statehood was by horseback, ox and mule teams, and horse-drawn rigs. In 1893 the Arizona Eastern Railroad was built, which ran from Bowie, Arizona, in Cochise County, north to Solomonville and then followed the Gila River to the Gila County line and on to Globe and Miami, Arizona. Roads for horses and wagons followed the same routes as the highway and road system that exists today but, of course, they have been improved

considerably. By the early 1900's highways suitable for automobile and truck traffic were in place.

Several accounts describe boating on the Gila River, Black River and Eagle Creek, but they consist of recreational floating only, using small rafts and canoes when the water was high enough to allow it. There is no historical evidence of any commercial boating or flotation of logs on any of the small and minor watercourses in Graham County. The evidence and the witnesses all agreed that the weather and climate conditions existing at the present time are the same or very similar to those that existed in 1912 when Arizona became a state. Based on all of the evidence considered, it appears that at the time of statehood, perhaps the Black River and Eagle Creek were susceptible to a limited form of recreational floating downstream but, at most, this was less than ten percent of the time. There is no historical evidence of any commercial enterprise conducted on any of the small and minor watercourses for trade and travel as of the time of statehood. None of the streams and watercourses in Graham County are listed under the Rivers and Harbors Act of 1899. The customary mode of transport in the region was not by boat. Prior to and at the time of statehood, travel was by foot, horseback, mule train, wagon and stagecoach and, after 1893, by train. At the time of statehood and immediately thereafter, trucks and automobiles were also used as the road system was expanded and improved.

VIII. Separate Detailed Stream Navigability Study for Eagle Creek

Since Eagle Creek survived the level three analysis of small and minor watercourses in Graham County, a separate and detailed study of its navigability and susceptibility for navigation was conducted. The separate report on Eagle Creek is incorporated in this Report, Findings and Determination.

Eagle Creek is located in Graham and Greenlee Counties in eastern Arizona in what is generally regarded as the transition zone between the basin and range and Colorado Plateau physiographic provinces of Arizona. It is 52.5 miles in length and drains an area of 622 square miles. The mean annual precipitation for the area is 19.2 inches. The headwaters of Eagle Creek are located along U.S. Highway 191 (formerly Highway 666) in the northeastern portion of Section 33, Township 3 North, Range 29 East, Gila and Salt River Base and Meridian, latitude 33° 34.6' North, longitude 109° 20.3' West. From the headwaters it proceeds in a southerly direction for approximately five miles, then turns due west for approximately eight miles, and then turns south where it parallels the Apache Sitgreaves Forest and San Carlos Indian Reservation, which is also the Graham-Greenlee line, crossing into Graham County at times and then back into Greenlee County until it flows into Township 4 South where it veers in an east by southeast direction. From there it flows generally in a southerly direction until its confluence with the Gila River near the Graham-Greenlee County line at the top of Section 31, Township 5 South, Range 29 East, Gila and Salt River Base and Meridian,

latitude 32° 57.6′ North, longitude 109° 24.4′ West. The confluence with the Gila River is located about nine miles southwest of the Clifton-Morenci area. The Eagle Creek watershed is bounded by the Mogollon Rim on the north, U. S. Highway 191 to the East, and the Nantanes Mountains on the San Carlos Apache Reservation to the West. The watershed is located entirely within the San Carlos Apache Indian Reservation and the Apache Sitgreaves National Forest and, as pointed out above, generally parallels the Reservation and Forest boundary.

A. History of the Eagle Creek Watershed

Eagle Creek was inhabited by the Mogollon culture of pre-Columbian Indians from about 300 B.C. until the 13th century. In 1540 the expedition led by Francisco Vazquez de Coronado passed through this region on its way to conquer what was believed to be rich cities to the north. This was the first incursion of Europeans into the region. During the 17th century A.D., Apache Indians entered the region from the east following their migration from Alaska and western Canada. In 1880 Eagle Creek was the site of an Apache encampment that consisted of approximately 40 to 50 families, including both White Mountain and Chiracahua Apaches who planted corn along the creek. The California gold rush of 1849 brought the first influx of American travelers and settlers into the area. Gold in minor amounts was discovered on Eagle Creek in 1861, and a minor gold rush occurred with Eagle Creek being a destination for many prospectors. It soon became clear that this was not a major find and the

prospectors moved on. Hunters and trappers also began working in this region in the mid-1800's, and conflicts between them, the Apaches, and the prospectors were quite common. Also at about this time Mormon expansion from the north worked its way up the Little Colorado River valley through the area surrounding Eagle Creek and into the Gila River valley to the south. Homesteaders established small ranches along Eagle Creek in the late 1800's and early 1900's, and some of these ranches are still established as working ranches.

In 1898 the Morenci Water Company constructed a log dam on Eagle Creek and began pumping water from the creek through a four-inch pipeline to the Town of Morenci five miles away for municipal and mining use. This use of water from Eagle Creek was expanded in 1945 when the Phelps Dodge Company constructed a pumping station on the Black River to pump water from it into the Eagle Creek watershed to augment the supply of water being diverted to the mines in Morenci. Also in the late 1950's, a well field was developed on Eagle Creek some distance upstream from the Morenci take-out point to provide an additional supply of water to Eagle Creek for diversion to Morenci. The diversions from the Black River and the pumping of water from Eagle Creek to Morenci continues to this day. Pumping from Eagle Creek to Morenci has averaged 10,800 acre feet of water or 15 cfs during the fifty-year period from 1945 to 1999.

In 1926, the Coronado Trail (then U.S. Highway 666 and now U.S. Highway 191) was constructed to provide access between the Clifton-Morenci area and the Springerville-Alpine area. Roads and trails from this highway grant access from the east to Eagle Creek. Forest roads also give access to Eagle Creek from Highway 191, one of the main ones being access to the ranches on the southern end, such as the Double O Ranch to the Honeymoon Campground. Other forest roads and trails from Highway 191 and from the San Carlos Indian Reservation grant access to Eagle Creek from the west. All of the literature indicates that transportation along Eagle Creek as of the time of statehood was by foot, horseback or horse-drawn wagon, and later by automobile and truck as a network of roads, although primitive, was established. No railroad segments were ever constructed along Eagle Creek.

There is no record of any commercial boating of any type on Eagle Creek, Eagle Creek was no doubt used occasionally for irrigation purposes by ranchers for their gardens, but there does not appear to have been any major diversions for agricultural purposes.

B. Wildlife, Habitat and Hydrology

The upper area of the Eagle Creek basin consists primarily of montane conifer forests on or near the Mogollon Rim, with juniper, piñon, woodland, and oak-pine woodland in the lower watershed area. The conifer forest consists of extensive stands of ponderosa pine which were heavily logged during the latter part of the 1800's

and early 1900's. The region is host to a wide variety of wildlife including deer, elk, mountain lion, bear, wolf, coyote, turkey, Mexican pigeons and wild geese. The area is currently the site of reintroduction of the Mexican gray wolf which was eliminated by ranchers and hunters in the early part of the 1900's.

There are two U.S. Geological Survey gauge stations located in the Eagle Creek watershed basin. The upper one, located near the Double Circle Ranch, reports an average annual mean flow of 26 cfs and an annual mean runoff of 18,824 acre feet. The lower gauge station, which is just above the Phelps Dodge pump station five miles outside Morenci and below the well fields which add water to Eagle Creek, reports an average mean flow of 71 cfs and an annual mean runoff of 51,402 acre feet. There is a fair record of floods on Eagle Creek, and the 100-year floods for the two gauge stations report at 24,600 cfs and 47,000 cfs, respectively, although no floods this large have ever been reported. Research indicates that the climate and weather conditions at statehood were not drastically different from currently existing conditions.

Eagle Creek is a perennial stream and is primarily a cobble-bedded channel with low well-vegetated banks. The bank vegetation includes both woody riparian species and grasses. The main channel is straight to slightly sinuous and consists primarily of a single channel with occasional braided reaches. The stream exhibits classical pool and riffle patterns throughout most of its reach. The flow depths range from 3 to 24 inches, and the width of the stream varies from 13 to 80 feet. Comparison of the estimated flow

characteristics for Eagle Creek with federal boating criteria indicates that acceptable recreational boating conditions exist less than 10% of the time. Boating during floods would be difficult and hazardous due to high velocities, overhanging vegetation, rapids and waterfalls. Eagle Creek is listed as a modern recreational boating stream in one of the sources that lists such facts. All of the other sources do not list it as a recreational boating stream. Considering all of the factors, it is concluded that Eagle Creek could be used for recreational boating during seasonal high flow conditions and that canoes, kayaks and tubes could be used, but only approximately 10% of the time. There is no reference to any commercial boating on Eagle Creek, and no commercial recreational outfitters advertise any operations or excursions on Eagle Creek.

C. **Summary**

From the evidence presented, the Commission concludes that Eagle Creek is a perennial stream, flowing all or most of the time in response to discharge from springs, tributary inflows, geologic controls and snow melt, as well as in response to precipitation. There is no evidence to indicate any trade or travel may have occurred in boats on Eagle Creek. No evidence was found to indicate that a commercial enterprise of any kind was conducted by using the watercourse for trade or travel. Likewise, there is no history of boating or commercial fishing on Eagle Creek at the time of statehood, although Eagle Creek is used for recreational fishing and boating. Recreational boating consists of seasonal kayaking, canoeing and water tubing. There is no record of any use

of Eagle Creek for flotation of logs or other material, although flotation of logs may have been possible during seasonal high flows or floods. At least one diversion structure existed on Eagle Creek at the time of statehood, which is the dam located at the current location of the pump station diversion near Morenci. It is likely that there were numerous fords, low bridges, and other crossings existing along Eagle Creek and these structures may have been an impediment to navigation. The evidence collected indicates that transportation in the Eagle Creek basin was customarily accomplished by foot, horse or wagon at the time of statehood and later by automobile and truck as the road system was developed. No evidence was found that entries under the Desert Land Act of 1877 were made for diversion of flow from Eagle Creek, and no evidence was found to indicate that Eagle Creek was regulated under the Rivers and Harbors Act of 1899.

IX. Findings and Determination

The Commission conducted a particularized assessment of equal footing claims the State of Arizona might have to the beds and banks of the 3,226 small and minor watercourses in Graham County, Arizona, and based on all of the historical and scientific data and information, documents, and other evidence produced, finds that none of the said small and minor watercourses, including Eagle Creek on which a separate detailed study was conducted, were used or were susceptible to being used, in their ordinary and natural condition, as a highway for commerce, over which trade and

travel were or could have been conducted in the customary modes of trade and travel on water as of February 14, 1912.

The Commission also finds that none of the small and minor watercourses in Graham County, Arizona, except Eagle Creek and the Black River, are or were truly perennial throughout their length and that as of February 14, 1912, and currently they flow/flowed only in direct response to precipitation and are or were dry at all other times.

The Commission also finds that there is no evidence of any historical or modern commercial boating having occurred on any of the small and minor watercourses in Graham County, Arizona.

The Commission also finds that there is no evidence of any fishing, except recreational fishing, having occurred on the small and minor watercourses in Graham County, Arizona.

The Commission further finds that all notices of these hearings and proceedings were properly and timely given.

In view of the foregoing, the Commission, pursuant to A.R.S. § 37-1128A, finds and determines that the small and minor watercourses in Graham County, Arizona, were not navigable as of February 14, 1912.

Intent
Gila & Graham SFM

AFFIDAVIT/PROOF OF PUBLICATION

EASTERN ARIZONA COURIER

301A East U.S. Hwy 70 Safford, AZ 85546
Phone: (928) 428-2560 / Fax: (928) 428-5396
E Mail: mwatson@eacourier.com

Susan G. Curtis being duly sworn deposes and says:
That she is the legal clerk of the EASTERN ARIZONA COURIER, a newspaper published in the City of Safford, Graham County, Arizona; that the legal described as follows:

Arizona Navigable Stream Adjudication Commission Statement of Intent

a copy of which is hereunto attached, was first published in said newspaper in its issue dated Aug 20, 2003 and was published in each 3 issue(s) of said newspaper for 3 consecutive weeks, the last publication being in the issue dated Sept 3, 2003.

Signed: Susan G. Curtis

Subscribed and sworn to before me this

3 day of September 2003

OFFICIAL SEAL
MONICA L. WATSON
NOTARY PUBLIC - State of Arizona
GRAHAM COUNTY
My Comm. Expires Dec. 29, 2006

Monica L. Watson
Notary Public

My Commission expires: December 29, 2006

STATEMENT OF INTENT
State of Arizona
Navigable Stream Adjudication Commission

Pursuant to A.R.S. §37-1101, et. seq., the Arizona Navigable Stream Adjudication Commission (ANSAC) is planning to hold a watercourse navigability hearing regarding the Gila River in Graham County, Arizona. Notice is hereby given, pursuant to A.R.S. §37-1123 (B), that ANSAC intends to receive, review, and consider evidence regarding the navigability or non-navigability of the Gila River in Graham County. Interested parties are requested to file all documentary and other physical evidence they propose to submit to ANSAC by October 1, 2003. All evidence submitted to ANSAC will be Telegraph Wash 2, Tidwell Wash, Tollgate Wash, Triplet Wash 1, Triplet Wash 2, Tule Creek, Turkey Creek - Pima, Turkey Creek 1 - Graham, Turkey Creek 2 - Graham, Twilight Creek, Two E Wash, Underwood Wash, WA Wash, Watson Wash, West Prong Creek, Whitlock Wash, Willow Creek - Graham, Willow Creek 1, Willow Spring Wash - Graham, Yuma Wash - Graham, and any other named or unnamed small and minor watercourses in Graham County.

An unbound original plus seven bound copies of documentary evidence is to be submitted. ANSAC offices are located at 1700 West Washington, Room 304, Phoenix, AZ 85007. The telephone number is (602) 542-9214. The web site address is http://www.azstreambeds.com. The e-mail address is streams@mindspring.com.

Individuals with disabilities who need a reasonable accommodation to communicate evidence to ANSAC, or who require this information in an alternate format may contact the ANSAC office at (602) 542-9214 to make their needs known.

Req.: Arizona Navigable Stream Adjudication Commission
Published August 20, 27, September 3, 2003 in the Eastern Arizona Courier, Safford, Arizona 85546.

RECEIVED
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BY:

B

DATED this 28 day of ~~April~~ June 2004.

Earl Eisenhower, Chair

Dolly Echeverria, Vice Chair

Jay Brashear, Member

Cecil Miller, Member

James Henness, Member

Staff Members:

George Mehnert
Executive Director

Curtis A. Jennings
Legal Counsel to the Commission

Table A-3
List of Small and Minor Watercourses in Graham County

Apache Wash - Graham
Aravaipa Creek
Ash Creek 1 - Graham
Ash Creek 2 - Graham
Ash Creek 3 - Graham
Bar-X Wash
Bass Canyon
Bear Wallow Creek
Big Creek
Bigler Wash
Billingsley Creek
Black River
Black Rock Wash - Graham
Bobcat Creek
Bollen Wash
Bonita Creek - Graham
Booger Canyon St
Box Spring Creek
Brushy Creek - Graham
Burton Wash
Carland Wash
Cienega Creek - Graham
Clark Wash
Clover Creek - Graham
Copper Creek
Coyote Wash - Graham
Crazy Horse Creek
Crazy Horse Wash
Day Mine Wash
Deer Creek - Pinal
Deer Creek 1 - Graham
Deer Creek 1 - Graham/Pinal
Dial Wash
Dry Creek - Graham
Dry Prong Creek
Eagle Creek
Elwood Canyon Creek
Fine Wash
Fish Creek
Fivemile Wash - Graham
Fourmile Creek
Freezeout Creek
Fresnal Wash - Graham
Frye Creek
Garden Creek
Gardner Creek
Gibson Creek - Graham
Gillespie Wash
Gold Gulch
Goodwin Wash
Goudy Canyon Wash
Grant Creek - Graham
Grapevine Canyon - Graham
Hackberry Creek - Graham
High Creek
Hog Canyon Wash
Horton Creek - Graham
Hot Springs Wash
Hot Well Draw
Jacobson Creek
Jesus Canyon Wash
Johnny Creek
Kelly Gulch
Kennedy Falls Wash
Klondyke Wash
Left Branch Long
Left Fork Markha
Little Rocky Creek
Lone Star Wash
Long Creek
Long Hollow
Low Creek
Malay Creek
Marijilda Wash
Markham Creek
Martin Wash
Martinez Wash - Graham
Middle Prong Creek
Midnight Creek
Moonshine Creek
Mud Spring Wash
Natural Corral Creek
Ninemile Creek
Noon Creek
North Fork Ash Creek
North Oak Creek
Oak Creek 1 - Graham
Oak Creek 2 - Graham
Oak Creek 3 - Graham
Oak Draw
Owl Wash
Paddys River
Paisano Canyon Spring
Park Creek - Graham
Patterson Wash
Paymaster Wash
Peck Wash
Peters Wash
Pistol Creek
Pitchfork Canyon
Point of Pines Creek
Post Creek
Rattlesnake Creek
Redfield Canyon
Reiley Creek
Right Branch Lon

A-1

Table A-3
List of Small and Minor Watercourses in Graham County

Right Fork Markh
Sacaton Wash
Salt Creek - Graham
San Carlos River
San Simon River
Sand Wash - Graham
Sawmill Creek
Scanlon Wash
Sevenmile Creek
Sheep Camp Wash
Sheep Wash - Greenlee
Sheep Wash 1 - Graham
Sheep Wash 2 - Graham
Shoat Tank Wash
Slick Rock Wash
Soldier Creek - Graham
Soldier Hole Creek
South Cienega Creek
South Fork Ash Creek 1
South Fork Ask Creek 2
South Fork Clark
South Oak Creek
South Taylor Wash
Squaw Creek 1 - Graham
Squaw Creek 2 - Graham
Squaw Creek 3 - Graham
Stockton Pass Wash
Stockton Wash
Swamp Springs Canyon
Sycamore Creek - Graham
Telegraph Wash 1
Telegraph Wash 2
Tidwell Wash
Tollgate Wash
Triplet Wash 1
Triplet Wash 2
Tule Creek
Turkey Creek 3 - Graham
Turkey Creek 1 - Graham
Turkey Creek 2 - Graham
Twilight Creek
Two E Wash
Underwood Wash
WA Wash
Watson Wash
West Prong Creek
Whitlock Wash
Willow Creek - Graham
Willow Creek 1
Willow Spring Wash - Graham
Yuma Wash - Graham
Zulu Wash
3,069 Unnamed Washes

NOTICE OF PUBLIC HEARING
State of Arizona
Navigable Stream Adjudication Commission

Pursuant to A.R.S. § 37-1126 (A), notice is hereby given that the Navigable Stream Adjudication Commission will hold public hearings to receive physical evidence and testimony relating to the navigability or nonnavigability of all watercourses in Graham County. The hearings will be held in Graham County on October 14, 2003. The hearings will begin at 1:00 PM in an order established by the chair at the Graham County Health Department 326 West Main Street, Safford, Arizona 85546. These are presently the only hearings scheduled for the watercourses in Graham County.

The list of watercourses in Graham include the Gila River and the following small and minor watercourses: Apache Wash - Graham , Aravaipa Creek - Graham , Ash Creek 1 - Graham , Ash Creek 2 - Graham , Ash Creek 3 - Graham , Bar-X Wash , Bass Canyon , Bear Wallow Creek , Big Creek , Bigler Wash , Billingsley Creek , Black River , Black Rock Wash - Graham , Bobcat Creek , Bollen Wash , Bonita Creek - Graham , Box Spring Creek , Brushy Creek - Graham , Burton Wash , Carland Wash , Chesley Wash , Cienega Creek - Graham , Clover Creek - Graham , Copper Creek , Coyote Wash - Graham , Crazy Horse Creek , Crazy Horse Wash , Day Mine Wash , Deer Creek 1 - Graham , Deer Creek 2 - Graham/Pinal , Dial Wash , Dry Creek - Graham , Dry Prong Creek , Eagle Creek , Elwood Canyon Creek , Fine Wash , Fish Creek , Fivemile Wash - Graham , Fourmile Creek , Freezeout Creek , Fresnal Wash - Graham , Frye Creek , Garden Creek , Gardner Creek , Gibson Creek - Graham , Gillespie Wash , Gold Gulch , Goodwin Wash , Goudy Canyon Wash , Grant Creek - Graham , Grapevine Canyon - Graham , Hackberry Creek - Graham , High Creek , Hog Canyon Wash , Horton Creek - Graham , Hot Springs Wash , Hot Well braw , Jacobson Creek , Jesus Canyon Wash , Johnny Creek , Kelly Gulch , Kennedy Falls Wash , Klondyke Wash , Left Branch Long , Left Fork Markha , Little Rocky Creek , Lone Star Wash , Long Creek , Long Hollow , Low Creek , Malay Creek , Marijilda Wash , Markham Creek , Martin Wash , Martinez Wash - Graham , Middle Prong Creek , Midnight Creek , Moonshine Creek , Mud Spring Wash , Ninemile Creek , Noon Creek , North Fork Ash Creek , North Oak Creek , Oak Creek 1 - Graham , Oak Creek 2 - Graham , Oak Creek 3 - Graham , Oak Draw , Owl Wash , Paddys River , Park Creek - Graham , Patterson Wash , Paymaster Wash , Peck Wash , Pistol Creek , Pitchfork Canyon , Point of Pines Creek , Post Creek , Rattlesnake Creek , Redfield Canyon , Right Branch Lon , Right Fork Markh , Salt Creek - Graham , San Carlos River , San Simon River , Sand Wash - Graham , Sawmill Creek , Sevenmile Creek , Sheep Camp Wash , Sheep Wash 1 - Graham , Sheep Wash 2 - Graham , Shoat Tank Wash , Slick Rock Wash , Soldier Creek - Graham , Soldier Hole Creek , South Cienega Creek , South Fork Ash Creek 1 , South Fork Ask Creek 2 , South Fork Clark , South Oak Creek , South Taylor Wash , Squaw Creek 1 - Graham , Squaw Creek 2 - Graham , Squaw Creek 3 - Graham , Stockton Pass Wash , Stockton Wash , Swamp Springs Canyon , Sycamore Creek - Graham , Telegraph Wash 1 , Telegraph Wash 2 , Tidwell Wash , Tollgate Wash , Triplet Wash 1 , Triplet Wash 2 ,

AFFIDAVIT OF PUBLICATION

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BY:_____

THE ARIZONA REPUBLIC

STATE OF ARIZONA
COUNTY OF MARICOPA } SS.

Melissa Daams, being first duly sworn, upon oath deposes and says: That she is a legal advertising representative of the Arizona Business Gazette, a newspaper of general circulation in the county of Maricopa, State of Arizona, published at Phoenix, Arizona, by Phoenix Newspapers Inc., which also publishes The Arizona Republic, and that the copy hereto attached is a true copy of the advertisement published in the said paper on the dates as indicated.

The Arizona Republic

Septmeber 5, 2003

Melissa Daams

Sworn to before me this
5TH day of
September A.D. 2003

C-1

OFFICIAL SEAL
MARILYN GREENWOOD
NOTARY PUBLIC-ARIZONA
MARICOPA COUNTY
My Comm. Expires May 23, 2007

Marilyn Greenwood
Notary Public

AFFIDAVIT/PROOF OF PUBLICATION

EASTERN ARIZONA COURIER
301A East U.S. Hwy 70 Safford, AZ 85546
Phone: (928) 428-2560 / Fax: (928) 428-5396
E Mail: mwatson@eacourier.com

Susan G. Curtis being duly sworn deposes and says:
That she is the legal clerk of the EASTERN ARIZONA COURIER, a newspaper published in the City of Safford, Graham County, Arizona; that the legal described as follows:

Arizona Navigable Stream Adjudication Commission Notice of Public Hearing

a copy of which is hereunto attached, was first published in said newspaper in its issue dated Sept 7, 2003 and was published in each 1 issue(s) of said newspaper for 1 consecutive issue, the last publication being in the issue dated Sept 7, 2003.

Signed: Susan G. Curtis

Subscribed and sworn to before me this

7 day of September, 2003

Monica L. Watson

OFFICIAL SEAL
MONICA L. WATSON
NOTARY PUBLIC - State of Arizona
GRAHAM COUNTY
My Comm. Expires Dec. 29, 2006

Notary Public

My Commission expires: December 29, 2006

RECEIVED
OCT 06 2003
BY:

NOTICE OF PUBLIC HEARING
State of Arizona
Navigable Stream Adjudication Commission

Pursuant to A.R.S. § 37-1126 (A), notice is hereby given that the Navigable Stream Adjudication Commission will hold public hearings to receive physical evidence and testimony relating to the navigability or nonnavigability of all watercourses in Graham County. The hearings will be held in Graham County on October 14, 2003. The hearings will begin at 1:00 PM in an order established by the chair at the Graham County Health Department 826 West Main Street, Safford, Arizona 85546. These are presently the only hearings scheduled for the watercourses in Graham County.

The list of watercourses in Graham include the Gila River and the following small and minor watercourses: Apache Wash - Graham, Aravaipa Creek - Graham, Ash Creek 1 - Graham, Ash Creek 2 - Graham, Ash Creek 3 - Graham, Bar-X Wash, Bass Canyon, Bear Wallow Creek, Big Creek, Bigler Wash, Billingsley Creek, Black River, Black Rock Wash - Graham, Bobcat Creek, Bollen Wash, Bonita Creek - Graham, Box Spring Creek, Brushy Creek - Graham, Burton Wash, Carland

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Evidence Log

Hearing No. 03-006

Page No. 1

Arizona Navigable Stream Adjudication Commission

Graham County Small and Minor Watercourses
October 14, 2003

Item Number	Received Date	Source to ANSAC	Description	Entry By
1	01/?/01 approx	Evidence on hand at ANSAC.	Draft Final Report, Small & Minor Watercourses Analysis for Graham County, Arizona.	George Mehnert
2	04/?/01 approx	Evidence on hand at ANSAC.	Final Report, Small & Minor Watercourses Analysis for Graham County, Arizona.	George Mehnert
4	9/?/98	Evidence on hand at ANSAC	Small and Minor Watercourse Criteria Final Report.	George Mehnert
5	9/?/99	Evidence on hand at ANSAC	Final Report, 3 County Pilot Study.	George Mehnert
6	2/18/97	David Baron, ACLPI	Letter from David Baron.	George Mehnert
7	10/24/03	Michael Kafka, Phelps Dodge Corporation	Phelps Dodge Corporation's Submission of Additional Evidence Concerning the Importation of Water Into Eagle Creek.	George Mehnert

D

STATE OF ARIZONA
NAVIGABLE STREAM ADJUDICATION COMMISSION
1700 West Washington, Room 304, Phoenix, Arizona 85007
Phone (602) 542-9214 FAX (602) 542-9220
E-mail: streams@mindspring.com Web Page: http://www.azstreambeds.com
GEORGE MEHNERT
Executive Director

Meeting Minutes
Safford, Graham County
October 14, 2003

COMMISSION MEMBERS PRESENT
Jay Brashear, Earl Eisenhower, James Henness, Cecil Miller.

COMMISSION MEMBERS ABSENT
Dolly Echeverria.

STAFF PRESENT
George Mehnert, Dir; Curtis Jennings, Legal Counsel.

1. **CALL TO ORDER.**
Chair Eisenhower called the meeting to order at approximately 1:05 p.m.

2. **ROLL CALL.**
See above.

3. **HEARING REGARDING THE NAVIGABILITY OR NON-NAVIGABILITY OF THE GILA RIVER IN GRAHAM COUNTY.** Chair explained the need for signing in for guests who wish to speak. Chair indicated that witnesses will not be placed under oath unless the speaker wishes to be placed under oath.
The following people appeared and gave testimony, other information, or asked questions on October 14, 2003: Cheryl Doyle, Mark McGinnis, Bill Staudenmaier, Laurie Hachtel, Steve Wene.

Clarification of time lines were given by Curtis Jennings and the Chairman regarding the start of time for filing post hearing memoranda. Post hearing opening memorandums should be filed within 30 days following the close of taking evidence regarding the entire Gila River. Informational memorandums or other evidence, or written legal argument can be filed with the Commission up to the close of taking of evidence for the entire Gila River.

4. **HEARING REAGARDING THE NAVIGABILITY OR NON-NAVIGABILITY OF THE SMALL AND MINOR WATERCOURSES IN GRAHAM COUNTY.** The following people appeared and gave testimony,

E-1

other information, or asked questions on October 14, 2003: Cheryl Doyle, John Wallace, Bill Staudenmaier.

Request by Bill Staudenmaier to postpone the closing of the record and extend by 10 days the due date for the close of receipt of evidence. The Chair clarified that the extension by 10 days of keeping the record open for taking evidence will also extend by 10 days the 30 days for submitting post hearing memorandums.

Motion: **To extend the time for taking evidence by 10 days.**
Motion by: Jim Henness. Second by: Cecil Miller Vote: All aye.

5. **CALL FOR PUBLIC COMMENT** (comment sheets).
(Pursuant to Attorney General Opinion No. I99-006 [R99-002]. Public Comment: Consideration and discussion of comments and complaints from the public. Those wishing to address the Commission need not request permission in advance. Action taken as a result of public comment will be limited to directing staff to study the matter or rescheduling the matter for further consideration and decision at a later date.)

6. **FUTURE AGENDA ITEMS AND ESTABLISHMENT OF FUTURE HEARINGS AND OTHER MEETINGS.**

7. **ADJOURNMENT.**
Motion: **To adjourn.**
Motion by: Cecil Miller. Second by: Jim Henness Vote: All aye.
Adjourned at approximately 2:30 p.m.

Respectfully submitted,

George Mehnert, Director, October 16, 2003.

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Table A-1A
Watercourses in Graham County Rejected at Level 1

No. (1)	W_ID (2)	W_NAME (3)	SEGCOUNT (4)	W_COUNTIES (5)	W_MILES (6)	W_ADDRESS (7)	W_PER (8)	W_MBOAT (9)	W_HBOAT (10)	W_FISH (11)	W_SSTATUS (12)	W_DIMP (13)	HITS (14)
1	59	Apache Wash - Graham	4	Graham	4.612	T2.0S,R19.0E,S27	No	No	No	No	No	No	0
2	64	Ash Creek 2 - Graham	20	Graham	16.013	T1.0N,R21.0E,S06	No	No	No	No	No	No	0
3	69	Ash Creek 3 - Graham	10	Graham	25.397	T10.0S,R22.0E,S36	No	No	No	No	No	No	0
4	127	Bar-X Wash	9	Graham	9.660	T11.0S,R24.0E,S04	No	No	No	No	No	No	0
5	178	Big Creek	4	Graham	8.664	T10.0S,R23.0E,S01	No	No	No	No	No	No	0
6	229	Black Rock Wash - Graham	34	Graham	26.521	T5.0S,R23.0E,S02	No	No	No	No	No	No	0
7	263	Bollen Wash	12	Graham/Pima	13.046	T11.0S,R18.0E,S13	No	No	No	No	No	No	0
8	269	Booger Canyon St	5	Graham/Pinal	6.746	T8.0S,R18.0E,S10	No	No	No	No	No	No	0
9	286	Box Spring Creek	4	Cochise/Graham	13.703	T11.0S,R22.0E,S18	No	No	No	No	No	No	0
10	384	Carland Wash	3	Graham	7.812	T4.0S,R23.0E,S07	No	No	No	No	No	No	0
11	481	Clark Wash	20	Graham/Pinal	12.744	T9.0S,R17.0E,S23	No	No	No	No	No	No	0
12	491	Clover Creek - Graham	12	Graham	12.742	T2.0N,R24.0E,S31	No	No	No	No	No	No	0
13	525	Copper Creek	17	Graham/Pinal	15.870	T8.0S,R17.0E,S34	No	No	No	No	No	No	0
14	581	Coyote Wash - Graham	17	Graham	20.235	T6.0S,R25.0E,S21	No	No	No	No	No	No	0
15	595	Crazy Horse Creek	1	Graham	2.143	T9.0S,R25.0E,S06	No	No	No	No	No	No	0
16	596	Crazy Horse Wash	2	Graham	4.737	T8.0S,R21.0E,S07	No	No	No	No	No	No	0
17	622	Day Mine Wash	8	Graham	10.732	T4.0S,R23.0E,S21	No	No	No	No	No	No	0
18	638	Deer Creek - Pinal	26	Graham/Pinal	21.583	T4.0S,R16.0E,S33	No	No	No	No	No	No	0
19	641	Deer Creek 1 - Graham	2	Graham	7.162	T8.0S,R21.0E,S26	No	No	No	No	No	No	0
20	642	Deer Creek 1 - Graham/Pinal	13	Graham/Pinal	16.647	T8.0S,R18.0E,S14	No	No	No	No	No	No	0
21	658	Dial Wash	3	Cochise/Graham	16.347	T11.0S,R28.0E,S31	No	No	No	No	No	No	0
22	689	Dry Creek - Graham	2	Graham	6.820	T5.0S,R27.0E,S26	No	No	No	No	No	No	0
23	761	Fine Wash	10	Graham	7.777	T4.0S,R23.0E,S28	No	No	No	No	No	No	0
24	765	Fish Creek	1	Graham/Navajo	0.172	T3.0N,R23.0E,S26	No	No	No	No	No	No	0
25	772	Fivemile Wash - Graham	8	Graham	9.857	T3.0S,R21.0E,S10	No	No	No	No	No	No	0
26	790	Fourmile Creek	19	Graham	13.374	T7.0S,R20.0E,S07	No	No	No	No	No	No	0
27	802	Fresnal Wash - Graham	5	Graham	7.160	T8.0S,R21.0E,S27	No	No	No	No	No	No	0
28	814	Garden Creek	20	Graham/Pinal	22.481	T4.0S,R19.0E,S32	No	No	No	No	No	No	0
29	818	Gardner Creek	2	Graham	6.920	T9.0S,R20.0E,S13	No	No	No	No	No	No	0
30	827	Gillespie Wash	12	Graham	4.285	T10.0S,R25.0E,S14	No	No	No	No	No	No	0
31	831	Gold Gulch	25	Cochise/Graham	32.283	T10.0S,R26.0E,S33	No	No	No	No	No	No	0
32	836	Goodwin Wash	28	Graham	25.496	T4.0S,R23.0E,S17	No	No	No	No	No	No	0
33	852	Grapevine Canyon - Graham	5	Graham	4.243	T10.0S,R24.0E,S06	No	No	No	No	No	No	0
34	37657	High Creek	19	Graham	22.140	T10.0S,R22.0E,S14	No	No	No	No	No	No	0
35	37664	Hog Canyon Wash	8	Graham	9.960	T10.0S,R24.0E,S11	No	No	No	No	No	No	0
36	37689	Horton Creek - Graham	4	Graham	5.053	T11.0S,R22.0E,S01	No	No	No	No	No	No	0
37	37693	Hot Springs Wash	3	Graham	8.191	T5.0S,R24.0E,S20	No	No	No	No	No	No	0
38	37747	Jacobson Creek	23	Graham	11.656	T8.0S,R26.0E,S09	No	No	No	No	No	No	0
39	37752	Jesus Canyon Wash	5	Graham	6.472	T9.0S,R23.0E,S21	No	No	No	No	No	No	0
40	37759	Johnny Creek	11	Graham	7.508	T5.0S,R27.0E,S10	No	No	No	No	No	No	0
41	37786	Kelly Gulch	14	Graham	14.591	T3.0S,R19.0E,S09	No	No	No	No	No	No	0
42	37787	Kennedy Falls Wash	5	Graham	6.824	T8.0S,R21.0E,S20	No	No	No	No	No	No	0
43	37794	Klondyke Wash	3	Graham	6.696	T6.0S,R20.0E,S34	No	No	No	No	No	No	0
44	37824	Left Branch Long	1	Graham	2.924	T7.0S,R20.0E,S30	No	No	No	No	No	No	0
45	37825	Left Fork Markha	12	Graham	12.493	T3.0S,R24.0E,S36	No	No	No	No	No	No	0

NOTES: The column headings are defined as follows:

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W_PER: Stream classification-perennial or not.
W_MBOAT: With modern boating or not.
W_HBOAT: With historical boating or not.
W_FISH: With fish or not.
W_DIMP: Impacted by dam or not.
W_SSTATUS: With special status designations or not.
HITS: Number of affirmative hits based on the six attribute data.

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Table A-1A
Watercourses in Graham County Rejected at Level 1

No. (1)	W_ID (2)	W_NAME (3)	SEGCOUNT (4)	W_COUNTIES (5)	W_MILES (6)	W_ADDRESS (7)	W_PER (8)	W_MBOAT (9)	W_HBOAT (10)	W_FISH (11)	W_SSTATUS (12)	W_DIMP (13)	HITS (14)
46	37864	Little Rocky Creek	7	Graham	5.645	T1.0S,R23.0E,S02	No	No	No	No	No	No	0
47	37882	Lone Star Wash	6	Graham	9.000	T7.0S,R26.0E,S06	No	No	No	No	No	No	0
48	37888	Long Hollow	4	Graham	4.993	T7.0S,R20.0E,S29	No	No	No	No	No	No	0
49	37903	Low Creek	6	Graham	9.277	T9.0S,R21.0E,S36	No	No	No	No	No	No	0
50	37917	Malay Creek	5	Graham/Greenlee	3.649	T3.0N,R27.0E,S10	No	No	No	No	No	No	0
51	37931	Martin Wash	5	Graham	9.298	T10.0S,R24.0E,S21	No	No	No	No	No	No	0
52	37932	Martinez Wash - Graham	10	Graham	8.383	T4.0S,R27.0E,S27	No	No	No	No	No	No	0
53	37972	Middle Prong Creek	11	Graham/Greenlee	10.211	T1.0N,R28.0E,S07	No	No	No	No	No	No	0
54	38035	Mud Spring Wash	2	Cochise/Graham	8.078	T11.0S,R22.0E,S14	No	No	No	No	No	No	0
55	38072	Noon Creek	5	Graham	3.821	T9.0S,R25.0E,S09	No	No	No	No	No	No	0
56	38081	North Fork Ash Creek	12	Graham	10.672	T1.0S,R23.0E,S08	No	No	No	No	No	No	0
57	38096	North Oak Creek	4	Graham	7.041	T10.0S,R20.0E,S25	No	No	No	No	No	No	0
58	38115	Oak Creek 1 - Graham	9	Graham	11.623	T8.0S,R21.0E,S07	No	No	No	No	No	No	0
59	38117	Oak Creek 2 - Graham	4	Graham	8.050	T10.0S,R22.0E,S14	No	No	No	No	No	No	0
60	38119	Oak Creek 3 - Graham	2	Graham	1.883	T4.0S,R27.0E,S29	No	No	No	No	No	No	0
61	38120	Oak Draw	26	Graham	18.029	T9.0S,R27.0E,S02	No	No	No	No	No	No	0
62	38136	Owl Wash	5	Graham	16.515	T10.0S,R28.0E,S18	No	No	No	No	No	No	0
63	38148	Paddys River	7	Graham	11.149	T8.0S,R21.0E,S33	No	No	No	No	No	No	0
64	38152	Paisano Canyon Spring	1	Graham/Pinal	5.624	T6.0S,R18.0E,S14	No	No	No	No	No	No	0
65	38172	Park Creek - Graham	28	Graham	15.452	T3.0S,R26.0E,S35	No	No	No	No	No	No	0
66	38181	Patterson Wash	2	Graham	3.776	T6.0S,R24.0E,S15	No	No	No	No	No	No	0
67	38197	Peters Wash	2	Graham/Pinal	7.132	T10.0S,R18.0E,S33	No	No	No	No	No	No	0
68	38240	Pistol Creek	9	Graham	5.012	T3.0S,R28.0E,S32	No	No	No	No	No	No	0
69	38242	Pitchfork Canyon	8	Graham	8.347	T10.0S,R23.0E,S01	No	No	No	No	No	No	0
70	38311	Rattlesnake Creek	18	Graham	21.094	T7.0S,R20.0E,S27	No	No	No	No	No	No	0
71	38334	Reiley Creek	2	Cochise/Graham	7.731	T11.0S,R23.0E,S32	No	No	No	No	No	No	0
72	38341	Right Branch Lon	1	Graham	1.365	T7.0S,R19.0E,S25	No	No	No	No	No	No	0
73	38343	Right Fork Markh	5	Graham	4.848	T4.0S,R25.0E,S28	No	No	No	No	No	No	0
74	38390	Sacaton Wash	2	Cochise/Graham	8.320	T12.0S,R25.0E,S09	No	No	No	No	No	No	0
75	38427	Sand Wash - Graham	4	Graham	5.507	T6.0S,R19.0E,S27	No	No	No	No	No	No	0
76	38446	Sawmill Creek	13	Graham	15.769	T3.0N,R23.0E,S28	No	No	No	No	No	No	0
77	38448	Scanlon Wash	12	Graham/Pinal	10.139	T9.0S,R18.0E,S06	No	No	No	No	No	No	0
78	38472	Sheep Camp Wash	1	Graham	4.087	T11.0S,R19.0E,S10	No	No	No	No	No	No	0
79	38480	Sheep Wash - Greenlee	21	Graham/Greenlee	16.900	T2.0S,R28.0E,S03	No	No	No	No	No	No	0
80	38481	Sheep Wash 1 - Graham	3	Graham	5.566	T4.0S,R26.0E,S12	No	No	No	No	No	No	0
81	38482	Sheep Wash 2 - Graham	10	Graham	6.463	T8.0S,R21.0E,S12	No	No	No	No	No	No	0
82	38488	Shoat Tank Wash	3	Graham	3.627	T7.0S,R30.0E,S20	No	No	No	No	No	No	0
83	38521	Slick Rock Wash	22	Graham	23.371	T8.0S,R28.0E,S22	No	No	No	No	No	No	0
84	38543	Soldier Hole Creek	7	Graham	8.104	T1.0S,R23.0E,S13	No	No	No	No	No	No	0
85	38553	South Cienega Creek	5	Graham	5.845	T2.0S,R27.0E,S29	No	No	No	No	No	No	0
86	38555	South Fork Ash Creek 1	6	Graham	6.696	T11.0S,R21.0E,S03	No	No	No	No	No	No	0
87	38561	South Fork Clark	4	Graham/Pinal	2.647	T8.0S,R18.0E,S35	No	No	No	No	No	No	0
88	38578	South Oak Creek	4	Graham	5.622	T10.0S,R21.0E,S28	No	No	No	No	No	No	0
89	38580	South Taylor Wash	14	Graham	14.181	T8.0S,R23.0E,S29	No	No	No	No	No	No	0
90	38604	Squaw Creek 2 - Graham	7	Graham	7.534	T7.0S,R20.0E,S21	No	No	No	No	No	No	0

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W_FISH: With fish or not.
W_DIMP: Impacted by dam or not.
W_SSTATUS: With special status designations or not.
HITS: Number of affirmative hits based on the six attribute data.

Table A-1A
Watercourses in Graham County Rejected at Level 1

No. (1)	W_ID (2)	W_NAME (3)	SEGCOUNT (4)	W_COUNTIES (5)	W_MILES (6)	W_ADDRESS (7)	W_PER (8)	W_MBOAT (9)	W_HBOAT (10)	W_FISH (11)	W_SSTATUS (12)	W_DMP (13)	HITS (14)
91	38606	Squaw Creek 3 - Graham	2	Graham	3.392	T5.0S,R20.0E,S12	No	No	No	No	No	No	0
92	38622	Stockton Pass Wash	1	Graham	0.991	T10.0S,R24.0E,S12	No	No	No	No	No	No	0
93	38649	Sycamore Creek - Graham	3	Graham	3.794	T6.0S,R20.0E,S31	No	No	No	No	No	No	0
94	38683	Telegraph Wash 1	13	Graham	9.242	T5.0S,R22.0E,S27	No	No	No	No	No	No	0
95	38684	Telegraph Wash 2	6	Graham	4.660	T5.0S,R19.0E,S29	No	No	No	No	No	No	0
96	38703	Tidwell Wash	3	Graham	7.105	T7.0S,R26.0E,S12	No	No	No	No	No	No	0
97	38719	Tollgate Wash	11	Graham/Greenlee	11.861	T7.0S,R28.0E,S10	No	No	No	No	No	No	0
98	38742	Triplet Wash 1	5	Graham	9.407	T2.0S,R19.0E,S11	No	No	No	No	No	No	0
99	38743	Triplet Wash 2	4	Graham	6.835	T1.0S,R19.0E,S30	No	No	No	No	No	No	0
100	38762	Tule Creek	3	Graham/Greenlee	6.773	T3.0S,R28.0E,S08	No	No	No	No	No	No	0
101	38777	Turkey Creek 1 - Graham	9	Graham	10.449	T1.0N,R25.0E,S29	No	No	No	No	No	No	0
102	38773	Turkey Creek 3 - Graham	4	Graham	6.517	T15.0S,R18.0E,S01	No	No	No	No	No	No	0
103	38792	Twilight Creek	2	Graham	2.351	T9.0S,R25.0E,S17	No	No	No	No	No	No	0
104	38795	Two E Wash	6	Graham	9.594	T9.0S,R21.0E,S03	No	No	No	No	No	No	0
105	38800	Underwood Wash	21	Graham	24.492	T7.0S,R22.0E,S30	No	No	No	No	No	No	0
106	38819	WA Wash	7	Graham	13.827	T10.0S,R27.0E,S01	No	No	No	No	No	No	0
107	38872	West Prong Creek	11	Graham/Greenlee	7.488	T1.0N,R27.0E,S02	No	No	No	No	No	No	0
108	38901	Whitlock Wash	14	Graham	11.715	T10.0S,R30.0E,S17	No	No	No	No	No	No	0
109	38920	Willow Creek - Graham	7	Graham	3.240	T8.0S,R20.0E,S29	No	No	No	No	No	No	0
110	38930	Willow Spring Wash - Graham	10	Graham	16.487	T10.0S,R26.0E,S18	No	No	No	No	No	No	0
111	38968	Yuma Wash - Graham	5	Graham	10.463	T7.0S,R28.0E,S01	No	No	No	No	No	No	0
112	-	2969 Unnamed Washes	-	-	-	-	No	No	No	No	No	No	0

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W_MBOAT: With modern boating or not.
W_HBOAT: With historical boating or not.
W_FISH: With fish or not.
W_DMP: Impacted by dam or not.
W_SSTATUS: With special status designations or not.
HITS: Number of affirmative hits based on the six attribute data

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Table A-2A
Watercourses In Graham County Rejected at Level 2

NO (1)	W_ID (2)	W_NAME (3)	SEGCOUNT (4)	W_COUNTIES (5)	W_MILES (6)	W_ADDRESS (7)	L1_PER (8)	L2_PER (9)	L2_MBOAT (10)	L2_HBOAT (11)	L2_DIMP (12)	L2_FISH (13)	L2_SSTATUS (14)	NEW_RAT (15)
1	78	Ash Creek 1 - Graham	16	Graham	19.34	T7.0S,R24.0E,S13	Yes	Yes	No	No	No	Yes	No	11.00
2	849	Grant Creek - Graham	16	Graham	12.75	T9.0S,R24.0E,S19	Yes	Yes	No	No	No	Yes	No	11.00
3	37925	Marijilda Wash	22	Graham	14.96	T7.0S,R26.0E,S34	Yes	Yes	No	No	No	Yes	No	11.00
4	38326	Redfield Canyon	22	ochise/Graham/Pima	24.30	T12.0S,R18.0E,S02	Yes	Yes	No	No	No	Yes	Yes	10.88
5	38642	Swamp Springs Canyon	4	Cochise/Graham	5.70	T11.0S,R20.0E,S32	Yes	Yes	No	No	No	Yes	Yes	10.88
6	807	Frye Creek	8	Graham	15.73	T8.0S,R24.0E,S13	Yes	Yes	No	No	Yes	Yes	No	10.50
7	19016	H43_1999	2	Graham	1.31	T7.0S,R24.0E,S23	Yes	Yes	No	No	Yes	No	No	7.50
8	38019	Moonshine Creek	1	Graham	1.36	T9.0S,R24.0E,S05	No	M	No	No	No	Yes	No	7.50
9	38251	Point of Pines Creek	32	Graham	21.42	T1.0N,R25.0E,S36	Yes	Yes	No	No	Yes	No	No	7.50
10	38267	Post Creek	3	Graham	2.63	T9.0S,R24.0E,S05	No	M	No	No	No	Yes	No	7.50
11	38623	Stockton Wash	47	Graham	32.69	T7.0S,R26.0E,S09	Yes	Yes	No	No	Yes	No	No	7.50
12	38644	Watson Wash	3	Graham	10.04	T6.0S,R25.0E,S27	Yes	Yes	No	No	Yes	No	No	7.50
13	18553	H43_1532	2	Graham	0.48	T1.0S,R26.0E,S19	Yes	Yes	No	No	No	No	No	7.00
14	37926	Markham Creek	8	Graham	11.75	T6.0S,R24.0E,S04	No	No	No	No	Yes	Yes	No	7.00
15	151	Bear Wallow Creek	5	Graham/Greenlee	5.90	T3.0N,R27.0E,S03	Yes	Yes	No	No	No	Yes	No	6.50
16	38542	Soldier Creek - Graham	2	Graham	2.03	T8.0S,R24.0E,S32	No	Yes	No	No	No	Yes	No	6.50
17	132	Bass Canyon	1	Cochise/Graham	6.18	T12.0S,R21.0E,S06	No	No	No	No	No	Yes	Yes	4.76
18	199	Billingsley Creek	2	Graham	6.18	T6.0S,R24.0E,S02	No	No	No	No	Yes	No	No	4.00
19	17631	H43_0448	1	Graham	0.13	T6.0S,R24.0E,S36	No	No	No	No	Yes	No	No	4.00
20	17687	H43_0551	1	Graham	1.30	T7.0S,R26.0E,S26	No	No	No	No	Yes	No	No	4.00
21	17689	H43_0554	1	Graham	1.46	T7.0S,R26.0E,S27	No	No	No	No	Yes	No	No	4.00
22	17692	H43_0557	1	Graham	7.44	T7.0S,R27.0E,S20	No	No	No	No	Yes	No	No	4.00
23	17693	H43_0559	1	Graham	2.53	T7.0S,R26.0E,S26	No	No	No	No	Yes	No	No	4.00
24	17777	H43_0703	1	Graham	0.36	T6.0S,R24.0E,S36	No	No	No	No	Yes	No	No	4.00
25	17995	H43_0954	2	Graham	1.13	T5.0S,R25.0E,S11	No	No	No	No	Yes	No	No	4.00
26	18020	H43_0979	11	Graham	13.03	T7.0S,R26.0E,S08	No	No	No	No	Yes	No	No	4.00
27	18030	H43_0989	1	Graham	7.96	T7.0S,R25.0E,S14	No	No	No	No	Yes	No	No	4.00
28	18031	H43_0990	1	Graham	0.32	T7.0S,R25.0E,S24	No	No	No	No	Yes	No	No	4.00
29	18889	H43_1871	2	Graham	1.01	T4.0S,R25.0E,S12	No	No	No	No	Yes	No	No	4.00
30	18891	H43_1873	2	Graham	1.72	T4.0S,R26.0E,S13	No	No	No	No	Yes	No	No	4.00
31	18892	H43_1874	1	Graham	2.75	T4.0S,R25.0E,S13	No	No	No	No	Yes	No	No	4.00
32	19024	H43_2008	2	Graham	5.85	T7.0S,R25.0E,S04	No	No	No	No	Yes	No	No	4.00
33	19025	H43_2009	2	Graham	4.00	T7.0S,R25.0E,S04	No	No	No	No	Yes	No	No	4.00
34	35523	H81_0014	2	Graham	1.82	T8.0S,R23.0E,S34	No	No	No	No	Yes	No	No	4.00
35	38055	Natural Corral Creek	6	Gila/Graham	7.74	T1.0N,R18.0E,S25	No	No	No	No	No	Yes	No	4.00
36	38189	Peck Wash	13	Graham	13.78	T6.0S,R25.0E,S07	No	No	No	No	Yes	No	No	4.00
37	38417	San Simon River	100	Cochise/Graham	76.23	T13.0S,R31.0E,S32	No	No	No	No	Yes	No	No	4.00
38	186	Bigler Wash	4	Graham	8.33	T6.0S,R24.0E,S09	Yes	Yes	No	No	No	No	No	3.50
39	257	Bobcat Creek	13	Graham	8.94	T2.0N,R24.0E,S34	Yes	Yes	No	No	No	No	No	3.50
40	305	Brushy Creek - Graham	9	Graham	6.93	T3.0S,R26.0E,S08	Yes	Yes	No	No	No	No	No	3.50
41	341	Burton Wash	2	Graham	7.87	T4.0S,R23.0E,S26	Yes	Yes	No	No	No	No	No	3.50
42	468	Cienega Creek - Graham	37	Graham	22.06	T2.0S,R27.0E,S24	Yes	Yes	No	No	No	No	No	3.50
43	744	Elwood Canyon Creek	6	Graham	6.64	T3.0N,R23.0E,S35	Yes	Yes	No	No	No	No	No	3.50
44	799	Freezeout Creek	19	Graham	12.44	T2.0N,R25.0E,S27	Yes	Yes	No	No	No	No	No	3.50
45	840	Goudy Canyon Wash	6	Graham	9.62	T9.0S,R23.0E,S34	Yes	Yes	No	No	No	No	No	3.50

NOTES: The column headings are identified as follows:

- **W_ID:** Unique ID number given to the watercourse.
- **W_NAME:** Name of the watercourse.
- **SEGCOUNT:** Number of segments merged together to comprise the watercouse.
- **W_COUNTIES:** County(ies) where the watercourse is located.
- **W_MILES:** Length of the watercourse in miles.
- **W_ADDRESS:** Township, Range and Section of the mouth of the watercourse.
- **L1_PER:** Level 1 stream classification - perennial or not. The classification is provided by ALRIS (1999) and Arizona State Parks (1995).
- **L2_PER:** Level 2 stream classification; M designation means that the stream is classified as perennial and non-perennial by the two data sources.
- **L2_MBOAT:** With or without modern boating account.
- **L2_HBOAT:** With or without historical boating account.
- **L2_DIMP:** Dam-impacted or not.
- **L2_FISH:** With fish or not.
- **L2_SSTATUS:** With special status designations or not.
- **NEW_RAT** Computed total rating of the watercourse based on the evaluated weights.

G-2

Table A-2A
Watercourses in Graham County Rejected at Level 2

NO (1)	W_ID (2)	W_NAME (3)	SEGCOUNT (4)	W_COUNTIES (5)	W_MILES (6)	W_ADDRESS (7)	L1_PER (8)	L2_PER (9)	L2_MBOAT (10)	L2_HBOAT (11)	L2_DIMP (12)	L2_FISH (13)	L2_SSTATUS (14)	NEW_RAT (15)
46	15653	H39_0481	1	Gila/Graham	1.10	T1.0S,R19.0E,S07	Yes	Yes	No	No	No	No	No	3.50
47	15798	H39_0628	1	Gila/Graham	0.88	T1.0S,R19.0E,S19	Yes	Yes	No	No	No	No	No	3.50
48	15801	H39_0631	3	Graham	1.24	T1.0S,R19.0E,S31	Yes	Yes	No	No	No	No	No	3.50
49	17456	H43_0127	1	Graham/Greenlee	0.36	T1.0S,R28.0E,S05	Yes	Yes	No	No	No	No	No	3.50
50	17476	H43_0160	1	Graham	0.13	T2.0S,R28.0E,S05	Yes	Yes	No	No	No	No	No	3.50
51	17479	H43_0164	1	Graham	0.46	T2.0S,R28.0E,S08	Yes	Yes	No	No	No	No	No	3.50
52	17533	H43_0273	1	Graham	0.09	T3.0S,R21.0E,S13	Yes	Yes	No	No	No	No	No	3.50
53	17544	H43_0303	1	Graham	0.05	T4.0S,R22.0E,S11	Yes	Yes	No	No	No	No	No	3.50
54	17545	H43_0304	1	Graham	0.21	T4.0S,R22.0E,S11	Yes	Yes	No	No	No	No	No	3.50
55	17550	H43_0312	1	Graham	0.04	T4.0S,R23.0E,S21	Yes	Yes	No	No	No	No	No	3.50
56	17559	H43_0328	1	Graham	0.85	T4.0S,R23.0E,S29	Yes	Yes	No	No	No	No	No	3.50
57	17563	H43_0333	1	Graham	1.90	T5.0S,R23.0E,S02	Yes	Yes	No	No	No	No	No	3.50
58	17568	H43_0341	2	Graham	0.94	T5.0S,R24.0E,S07	Yes	Yes	No	No	No	No	No	3.50
59	17581	H43_0359	1	Graham	0.04	T5.0S,R23.0E,S24	Yes	Yes	No	No	No	No	No	3.50
60	17582	H43_0361	1	Graham	0.17	T5.0S,R23.0E,S24	Yes	Yes	No	No	No	No	No	3.50
61	17616	H43_0418	1	Graham	0.75	T6.0S,R24.0E,S21	Yes	Yes	No	No	No	No	No	3.50
62	17623	H43_0431	1	Graham	0.16	T6.0S,R28.0E,S30	Yes	Yes	No	No	No	No	No	3.50
63	17641	H43_0468	1	Graham	0.22	T7.0S,R23.0E,S01	Yes	Yes	No	No	No	No	No	3.50
64	17642	H43_0469	2	Graham	0.25	T7.0S,R23.0E,S01	Yes	Yes	No	No	No	No	No	3.50
65	17643	H43_0470	2	Graham	3.64	T6.0S,R24.0E,S29	Yes	Yes	No	No	No	No	No	3.50
66	17843	H43_0796	1	Graham	0.61	T3.0S,R21.0E,S14	Yes	Yes	No	No	No	No	No	3.50
67	17844	H43_0797	1	Graham	0.53	T3.0S,R21.0E,S14	Yes	Yes	No	No	No	No	No	3.50
68	17855	H43_0808	2	Graham	1.10	T4.0S,R22.0E,S03	Yes	Yes	No	No	No	No	No	3.50
69	17856	H43_0809	2	Graham	0.39	T4.0S,R22.0E,S10	Yes	Yes	No	No	No	No	No	3.50
70	17858	H43_0811	1	Graham	0.19	T4.0S,R22.0E,S03	Yes	Yes	No	No	No	No	No	3.50
71	17918	H43_0874	1	Graham	0.19	T4.0S,R23.0E,S27	Yes	Yes	No	No	No	No	No	3.50
72	17919	H43_0875	1	Graham	0.03	T4.0S,R23.0E,S27	Yes	Yes	No	No	No	No	No	3.50
73	18033	H43_0992	1	Graham	0.80	T8.0S,R26.0E,S03	Yes	Yes	No	No	No	No	No	3.50
74	18034	H43_0993	1	Graham	0.65	T8.0S,R26.0E,S03	Yes	Yes	No	No	No	No	No	3.50
75	18048	H43_1007	1	Graham	0.12	T8.0S,R26.0E,S19	Yes	Yes	No	No	No	No	No	3.50
76	18049	H43_1008	1	Graham	0.03	T8.0S,R26.0E,S17	Yes	Yes	No	No	No	No	No	3.50
77	18065	H43_1024	1	Graham	0.62	T8.0S,R25.0E,S23	Yes	Yes	No	No	No	No	No	3.50
78	18078	H43_1039	2	Graham	1.15	T9.0S,R24.0E,S12	Yes	Yes	No	No	No	No	No	3.50
79	18205	H43_1170	2	Graham	0.28	T7.0S,R27.0E,S18	Yes	Yes	No	No	No	No	No	3.50
80	18206	H43_1171	1	Graham	0.37	T7.0S,R27.0E,S18	Yes	Yes	No	No	No	No	No	3.50
81	18207	H43_1172	1	Graham	0.12	T7.0S,R27.0E,S18	Yes	Yes	No	No	No	No	No	3.50
82	18488	H43_1461	1	Graham	0.08	T1.0N,R25.0E,S23	Yes	M	No	No	No	No	No	3.50
83	18489	H43_1462	1	Graham	0.08	T1.0N,R26.0E,S25	Yes	Yes	No	No	No	No	No	3.50
84	18554	H43_1533	2	Graham	3.52	T1.0S,R28.0E,S19	Yes	M	No	No	No	No	No	3.50
85	18615	H43_1595	3	Graham	1.75	T2.0S,R27.0E,S15	Yes	Yes	No	No	No	No	No	3.50
86	18616	H43_1596	2	Graham	2.49	T2.0S,R27.0E,S16	Yes	Yes	No	No	No	No	No	3.50
87	18629	H43_1609	1	Graham	0.07	T3.0S,R28.0E,S17	Yes	Yes	No	No	No	No	No	3.50
88	18966	H43_1949	2	Graham	1.16	T7.0S,R27.0E,S09	Yes	Yes	No	No	No	No	No	3.50
89	18968	H43_1951	1	Graham	0.32	T7.0S,R26.0E,S09	Yes	Yes	No	No	No	No	No	3.50
90	18971	H43_1954	1	Graham	0.08	T7.0S,R24.0E,S03	Yes	Yes	No	No	No	No	No	3.50

NOTES: The column headings are identified as follows:

W_ID: Unique ID number given to the watercourse.
W_NAME: Name of the watercourse.
SEGCOUNT: Number of segments merged together to comprise the watercouse.
W_COUNTIES: County(ies) where the watercourse is located.
W_MILES: Length of the watercourse in miles.
W_ADDRESS: Township, Range and Section of the mouth of the watercourse.
L1_PER: Level 1 stream classification - perennial or not. The classification is provided by ALRIS (1999) and Arizona State Parks (1995).
L2_PER: Level 2 stream classification; M designation means that the stream is classified as perennial and non-perennial by the two data sources.
L2_MBOAT: With or without modern boating account.
L2_HBOAT: With or without historical boating account.
L2_DIMP: Dam-impacted or not.
L2_FISH: With fish or not.
L2_SSTATUS: With special status designations or not.
NEW_RAT Computed total rating of the watercourse based on the evaluated weights.

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Table A-2A
Watercourses in Graham County Rejected at Level 2

NO (1)	W_ID (2)	W_NAME (3)	SEGCOUNT (4)	W_COUNTIES (5)	W_MILES (6)	W_ADDRESS (7)	L1_PER (8)	L2_PER (9)	L2_MBOAT (10)	L2_HBOAT (11)	L2_DIMP (12)	L2_FISH (13)	L2_SSTATUS (14)	NEW_RAT (15)
91	18972	H43_1955	9	Graham	9.56	T7.0S,R24.0E,S08	Yes	M	No	No	No	No	No	3.50
92	19004	H43_1987	2	Graham	0.82	T8.0S,R24.0E,S07	Yes	Yes	No	No	No	No	No	3.50
93	19020	H43_2003	1	Graham	1.56	T7.0S,R24.0E,S35	Yes	Yes	No	No	No	No	No	3.50
94	19021	H43_2004	2	Graham	0.56	T7.0S,R24.0E,S24	Yes	Yes	No	No	No	No	No	3.50
95	19022	H43_2005	1	Graham	0.19	T7.0S,R24.0E,S24	Yes	Yes	No	No	No	No	No	3.50
96	19023	H43_2006	1	Graham	0.08	T7.0S,R24.0E,S14	Yes	Yes	No	No	No	No	No	3.50
97	19035	H43_2020	1	Graham	0.26	T8.0S,R24.0E,S09	Yes	Yes	No	No	No	No	No	3.50
98	19105	H43_2091	3	Graham	3.38	T5.0S,R23.0E,S02	Yes	Yes	No	No	No	No	No	3.50
99	19113	H43_2100	1	Graham	0.40	T4.0S,R22.0E,S12	Yes	Yes	No	No	No	No	No	3.50
100	19114	H43_2101	4	Graham	1.07	T4.0S,R22.0E,S11	Yes	Yes	No	No	No	No	No	3.50
101	19116	H43_2103	1	Graham	0.22	T4.0S,R22.0E,S11	Yes	Yes	No	No	No	No	No	3.50
102	19117	H43_2104	1	Graham	0.23	T4.0S,R22.0E,S11	Yes	Yes	No	No	No	No	No	3.50
103	19122	H43_2109	4	Graham	7.51	T3.0S,R23.0E,S19	Yes	Yes	No	No	No	No	No	3.50
104	19126	H43_2113	2	Graham	1.76	T2.0S,R23.0E,S28	Yes	Yes	No	No	No	No	No	3.50
105	19127	H43_2114	2	Graham	2.23	T2.0S,R23.0E,S27	Yes	Yes	No	No	No	No	No	3.50
106	19129	H43_2116	3	Graham	0.44	T4.0S,R22.0E,S11	Yes	Yes	No	No	No	No	No	3.50
107	19131	H43_2118	1	Graham	0.68	T3.0S,R22.0E,S33	Yes	Yes	No	No	No	No	No	3.50
108	19146	H43_2136	2	Graham	0.88	T3.0S,R22.0E,S19	Yes	Yes	No	No	No	No	No	3.50
109	19148	H43_2138	1	Graham	0.33	T3.0S,R21.0E,S13	Yes	Yes	No	No	No	No	No	3.50
110	19149	H43_2139	2	Graham	0.41	T3.0S,R21.0E,S13	Yes	Yes	No	No	No	No	No	3.50
111	19150	H43_2140	1	Graham	0.37	T3.0S,R21.0E,S13	Yes	Yes	No	No	No	No	No	3.50
112	19151	H43_2141	6	Graham	4.99	T3.0S,R21.0E,S11	Yes	Yes	No	No	No	No	No	3.50
113	19152	H43_2142	1	Graham	0.18	T3.0S,R21.0E,S12	Yes	Yes	No	No	No	No	No	3.50
114	19155	H43_2146	1	Graham	0.13	T3.0S,R22.0E,S20	Yes	Yes	No	No	No	No	No	3.50
115	19166	H43_2160	1	Graham	0.26	T3.0S,R21.0E,S10	Yes	Yes	No	No	No	No	No	3.50
116	19175	H43_2167	2	Graham	0.33	T3.0S,R21.0E,S09	Yes	Yes	No	No	No	No	No	3.50
117	19176	H43_2168	2	Graham	0.79	T3.0S,R21.0E,S09	Yes	Yes	No	No	No	No	No	3.50
118	19177	H43_2169	5	Graham	1.60	T3.0S,R21.0E,S09	Yes	Yes	No	No	No	No	No	3.50
119	19178	H43_2170	1	Graham	0.07	T3.0S,R21.0E,S10	Yes	Yes	No	No	No	No	No	3.50
120	19180	H43_2172	2	Graham	1.03	T3.0S,R21.0E,S08	Yes	Yes	No	No	No	No	No	3.50
121	19196	H43_2188	1	Graham	0.17	T3.0S,R20.0E,S01	Yes	Yes	No	No	No	No	No	3.50
122	19201	H43_2193	1	Graham	0.63	T3.0S,R20.0E,S01	Yes	Yes	No	No	No	No	No	3.50
123	19353	H43_2346	1	Graham	0.32	T4.0S,R23.0E,S27	Yes	Yes	No	No	No	No	No	3.50
124	20168	H46_0623	1	Graham	1.83	T11.0S,R28.0E,S01	Yes	Yes	No	No	No	No	No	3.50
125	35588	H81_0091	1	Graham	0.80	T10.0S,R24.0E,S04	Yes	Yes	No	No	No	No	No	3.50
126	35596	H81_0099	1	Graham	0.65	T10.0S,R24.0E,S04	Yes	Yes	No	No	No	No	No	3.50
127	37605	Hackberry Creek - Graham	19	Graham	15.32	T1.0S,R19.0E,S07	Yes	Yes	No	No	No	No	No	3.50
128	37694	Hot Well Draw	38	Graham	27.88	T11.0S,R29.0E,S09	Yes	Yes	No	No	No	No	No	3.50
129	37887	Long Creek	9	Graham	10.66	T3.0S,R21.0E,S24	Yes	Yes	No	No	No	No	No	3.50
130	37977	Midnight Creek	16	Graham	9.83	T4.0S,R27.0E,S10	Yes	Yes	No	No	No	No	No	3.50
131	38065	Ninemile Creek	11	Graham	10.15	T2.0S,R23.0E,S01	Yes	Yes	No	No	No	No	No	3.50
132	38183	Paymaster Wash	8	Graham	7.70	T3.0S,R25.0E,S05	Yes	Yes	No	No	No	No	No	3.50
133	38465	Sevenmile Creek	11	Graham	8.21	T2.0S,R24.0E,S26	Yes	Yes	No	No	No	No	No	3.50
134	38556	South Fork Ask Creek 2	17	Graham	15.70	T2.0S,R24.0E,S21	Yes	Yes	No	No	No	No	No	3.50
135	38602	Squaw Creek 1 - Graham	11	Graham	7.84	T2.0N,R24.0E,S31	Yes	Yes	No	No	No	No	No	3.50

NOTES: The column headings are identified as follows:

W_ID:	Unique ID number given to the watercourse.	**L2_PER:**	Level 2 stream classification; M designation means that the stream is classified as perennial and non-perennial by the two data sources.
W_NAME:	Name of the watercourse.		
SEGCOUNT:	Number of segments merged together to comprise the watercouse.	**L2_MBOAT:**	With or without modern boating account.
W_COUNTIES:	County(ies) where the watercourse is located.	**L2_HBOAT:**	With or without historical boating account.
W_MILES:	Length of the watercourse in miles.	**L2_DIMP:**	Dam-impected or not.
W_ADDRESS:	Township, Range and Section of the mouth of the watercourse.	**L2_FISH:**	With fish or not.
L1_PER:	Level 1 stream classification - perennial or not. The classification is provided by ALRIS (1999) and Arizona State Parks (1995).	**L2_SSTATUS:**	With special status designations or not.
		NEW_RAT	Computed total rating of the watercourse based on the evaluated weights.

G-4

Table A-2A
Watercourses in Graham County Rejected at Level 2

NO (1)	W_ID (2)	W_NAME (3)	SEGCOUNT (4)	W_COUNTIES (5)	W_MILES (6)	W_ADDRESS (7)	L1_PER (8)	L2_PER (9)	L2_MBOAT (10)	L2_HBOAT (11)	L2_DIMP (12)	L2_FISH (13)	L2_SSTATUS (14)	NEW_RAT (15)
136	38602	Squaw Creek 1 - Graham	11	Graham	7.64	T2.0N,R24.0E,S31	Yes	Yes	No	No	No	No	No	3.50
137	38781	Turkey Creek 2 - Graham	5	Graham	9.70	T6.0S,R19.0E,S19	Yes	Yes	No	No	No	No	No	3.50
138	696	Dry Prong Creek	18	Graham/Greenlee	14.38	T2.0N,R27.0E,S14	No	No	No	No	No	Yes	No	3.00
139	825	Gibson Creek - Graham	4	Graham	3.77	T8.0S,R25.0E,S32	No	No	No	No	No	Yes	No	3.00
140	38399	Sall Creek - Graham	28	Graham	42.45	T3.0S,R20.0E,S05	No	No	No	No	No	Yes	No	3.00
141	33347	H77_1461	1	Graham	3.33	T5.0S,R19.0E,S09	No	No	No	No	No	No	No	0.00

NOTES: The column headings are identified as follows:

W_ID: Unique ID number given to the watercourse.
W_NAME: Name of the watercourse.
SEGCOUNT: Number of segments merged together to comprise the watercouse.
W_COUNTIES: County(ies) where the watercourse is located.
W_MILES: Length of the watercourse in miles.
W_ADDRESS: Township, Range and Section of the mouth of the watercourse.
L1_PER: Level 1 stream classification - perennial or not. The classification is provided by ALRIS (1999) and Arizona State Parks (1995).
L2_PER: Level 2 stream classification; M designation means that the stream is classified as perennial and non-perennial by the two data sources.
L2_MBOAT: With or without modern boating account.
L2_HBOAT: With or without historical boating account.
L2_DIMP: Dam-impacted or not.
L2_FISH: With fish or not.
L2_SSTATUS: With special status designations or not.
NEW_RAT Computed total rating of the watercourse based on the evaluated weights.

G-4