BEFORE THE

ARIZONA NAVIGABLE STREAM ADJUDICATION COMMISSION

IN THE MATTER OF THE NAVIGABILITY OF THE SALT RIVER FROM GRANITE REEF DAM TO THE GILA RIVER CONFLUENCE, MARICOPA COUNTY, ARIZONA	No.: 03-005-NAV

REPORT, FINDINGS AND DETERMINATION REGARDING THE NAVIGABILITY OF THE SALT RIVER FROM GRANITE REEF DAM TO THE GILA RIVER CONFLUENCE

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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 the Salt River from Granite Reef Dam to its confluence with 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 hearings were 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.

I. PROCEDURE

On January 23, 2003, in accordance with A.R.S. § 37-1123 B, the Commission gave

proper prior notice of its intent to study the issue of navigability or nonnavigability of the Salt River from Granite Reef Dam to the confluence with the Gila River. A copy of the Notice of Intent to Study and Receive, Review and Consider Evidence on the issue of navigability of the Salt River in Maricopa County, Arizona, is attached hereto as Exhibit "A."

After collecting and documenting all reasonably available evidence received pursuant to the Notice of Intent to Study and Receive, Review and Consider Evidence, the Commission scheduled a public hearing to receive additional evidence and testimony regarding the navigability or nonnavigability of the Salt River in Maricopa County. Public notice of this hearing was given by legal advertising on February 25, 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 April 7 and 8, 2003, in the City of Phoenix, the county seat of Maricopa County, since the law requires that such hearing be held in the county in which the watercourse being studied is located. Attached hereto as Exhibit "B" 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 April 7 and 8, 2003, all parties were advised that they could file post-hearing memoranda pursuant to the Commission's Rules. Twenty-three separate post-hearing memoranda were filed by the parties including Salt River Project Agricultural Improvement and Power District and Salt River Valley Water Users Association, City of Phoenix, City of

Mesa, City of Tempe, Maricopa County, The Arizona State Land Department, Arizona State University, Salt River Indian Community, Phelps Dodge Corporation, Arizona Center for Law and the Public Interest, Defenders of Wildlife, T he Home Builders Association of Central Arizona and various title companies.

On January 27, 2004, at a public hearing in Phoenix, Arizona, after considering all of the evidence and testimony submitted and the post-hearing memoranda 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 the Salt River from Granite Reef Dam to the confluence with the Gila River in Maricopa County, Arizona, was nonnavigable as of February 14, 1912.

II. THE SALT RIVER FROM GRANITE REEF DAM TO THE CONFLUENCE WITH THE GILA RIVER

A. Geographic, Demographics and Geologic Conditions on The Lower Salt River.

The reach of the Salt River from Granite Reef Dam to the confluence with the Gila River is approximately 37 miles and lies entirely within Maricopa County, Arizona. Granite Reef Dam is located approximately in the center of Section 13 Township 2 North, Range 6 East of the Gila and Salt River Base and Meridian approximately at latitude 33° 31′ North and longitude 111° 41′ West. The confluence of the Salt River with the Gila River is the Gila and Salt River Base and Meridian, approximately latitude 33° 22′ 30″ North and longitude 112° 18′ 20″ West. The elevation at the Granite Reef Dam is 1290 feet above sea level, and the elevation at the Salt River's confluence with the Gila River is 930 feet above sea level. This reach is only a small part geographically of the Salt River watershed. The entire Salt River watershed drains approximately 15,000 square miles of central and eastern Arizona. The watershed ranges in elevation from 12,600 feet at Mt. Humphrey north of Flagstaff and 11,590 feet at Mt. Baldy in the White Mountains to the 930 feet above sea level at the Salt-Gila River confluence.

Major perennial tributaries of the Salt River above Granite Reef Dam include the White, Black and Verde rivers and Tonto Creek. Within the reach area itself, two of the tributaries that only flow during periods of heavy precipitation are Indian Bend Wash and Cave Creek Wash. This 37-mile reach of the Salt River flows through the most populated area of the State of Arizona. There are approximately 3.5 million people living on both sides of this reach of the river in the cities of Phoenix, Mesa, Tempe, Chandler, Scottsdale, Paradise Valley, Glendale and other smaller municipalities and unincorporated rural areas. Within this reach, the Salt River flows through a wide level plain formed almost entirely of alluvial fill eroded from the surrounding mountain ranges. This alluvial fill is quite deep and has been mined extensively for sand and gravel for use in construction projects. There are 17 bridge crossings of the riverbed in this area. Due to occasional heavy flows, sometimes described as floods caused by heavy precipitation and release of water from upstream dams and reservoirs, there has been little building in the riverbed. A map of this reach of the Salt River is attached hereto as Exhibit "C," and a map of the entire Salt River Watershed is attached hereto as Exhibit "D."

Prior to 1870, the approximate date of commencement of modern settlement, the Lower Salt River was a perennial stream with an average flow in excess of 1000 cubic feet per second. During the 30 years prior to the turn of the century, numerous diversion dams and canals were built which diverted most of this flow for agricultural purposes. By statehood in 1912, which followed the completion of Roosevelt Dam upstream at the confluence of Tonto Creek with the Salt River, the Salt River was ephemeral in flow and was dry for portions of the year or flowed only due to reservoir releases upstream. In a judicial decision known as the Kent Decree which was issued in 1910, the court described this reach of the river as follows:

> The Salt River Valley, so-called, is an alluvial plain, nearly level, lying in the central portion of the Territory of Arizona, the soil of which, when supplied with sufficient water, is

> extremely fertile. Its approximate length from east to west as far as the Agua Fria River is thirty-five miles; its average width fifteen miles. The climate is arid with but a slight rainfall, and artificial application of water to the land is necessary in order for the successful growth of agricultural products. Entering the valley from the northeast is the Salt River, **a non-navigable stream**. Into the Salt River and just before its entrance into the valley, flows the Verde River; the Salt River, after such conflux, empties into the Gila River in the southwestern part of the valley. In the valley are located the city of Phoenix and the towns of Tempe, Mesa, Lehi, Scottsdale, Peoria, Glendale and Alhambra; and these places and the farming country lying east of the Agua Fria River tributary to them are irrigated by water diverted from the Salt River by means of canals. The river is subject to very great variations in the amount of water flowing in it; from time to time there is a large volume of water in the river, more than adequate for the irrigation of all the land hitherto attempted to be cultivated; for the great part of the year the supply is inadequate for such cultivation.

Patrick T. Hurley v. Charles F. Abbott, et al., No. 4564, District Court, 3rd Judicial District, Territory of Arizona in and for the County of Maricopa, filed March 1, 1910 (Chief Justice Kent sitting as District Judge) (emphasis added).

B. Diversion Dams and Other Man-made Structures Existing as of February 14, 1912

Since the Salt River, at the time of statehood, was primarily used for irrigation purposes, a number of structures were already in place which contributed to the low flow or even dry periods of the Lower Salt River. The following is the list of structures in existence on February 14, 1912, along with a description of where each canal head lies with respect to the Salt River:

Jointhead Dam, 1867, 56th Street

Salt River Canal (Swilling Ditch), 1867, head at Jointhead Dam

Maricopa Canal, ca. 1870, head at Jointhead Dam

Tempe Canal, 1870, head nine miles upstream of Jointhead Dam

Broadway Canal, 1870, head four miles upstream of Jointhead Dam

San Francisco Canal, ca. 1880, head at Tempe Canal

Utah Canal, 1877, head five miles upstream of Tempe Canal

Mesa Canal, 1878, head two miles upstream of Utah Canal

Grand Canal, 1878, head at Granite Reef Dam

Arizona Canal, 1883, head at Granite Reef Dam

Highland Canal, 1888, head three miles upstream of Mesa Canal

Consolidated Canal, 1891, head at Granite Reef Dam

Arizona Dam, 1883, later rebuilt as Granite Reef Dam, 1891

Roosevelt Dam, 1911, confluence of Tonto Creek and Salt River

Although Roosevelt Dam is not located within the reach between Granite Reef Dam and its confluence with the Gila River, its presence at the time of statehood was considered in the final determination due to its amelioration of flooding and storage of water for use in low flow periods of the Lower Salt River. The reservoir behind Roosevelt Dam had a capacity of 1,336,734 acre feet of water when constructed and has been increased by modification in recent years. Three other major dams and reservoirs have been constructed since statehood on the Salt River above Granite Reef Dam, but due to their dates of construction are not considered relevant to the issue before the Commission.

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 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.

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.

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

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

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.
>
> Although watercourse sovereignty ran with the tidewaters in England, an island country, in America the doctrine was extended to navigable 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).
>
> 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 Commission by the 1992 Act was to conduct full evidentiary public hearings across 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.

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.3d 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 issue of navigability of all watercourses within the State.

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 the 37-mile reach of the Salt River from Granite Reef Dam to the confluence with the Gila River in Maricopa County, Arizona. 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 Lower Salt River from Granite Reef Dam to its confluence with the Gila River in Maricopa 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).[3]

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.

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[3] In a recent Memorandum Decision of the Arizona Court of Appeals, the Defenders of Wildlife and others through their representative, Arizona Center for Law in the Public Interest, attacked the constitutionality of the burden of proof for navigability determination by the Commission specified in A.R.S. § 37-1128(A). In that case, the Defenders claimed that the burden of proof specified in the statute conflicts with federal law and should be declared invalid because it is contrary to a presumption favoring sovereign ownership of bedlands. In discussing and rejecting *Defenders* position the Court stated: ". . . In support of this argument, Defenders cite to our decision in *Defenders,* see 199 Ariz. At 426, ¶ 54, 18 P.3d at 737, and to *United States v. Oregon,* 295 U.S. 1, 14 (1935). But neither of these decisions held that the burden of proof in a navigability determination must be placed on the party opposing navigability. Moreover, this court has twice stated that the burden of proof rests on the party asserting navigability. *Hassell,* 172 Ariz. At 363 n. 10, 837 P.2d at 165 n. 10; *O'Toole,* 154 Ariz. At 46 n. 2, 739 P.2d at 1363 n. 2. We have also recognized that a 'preponderance' of the evidence appears to be the standard used by the courts" as the burden of proof. *Defenders,* 199 Ariz. At 420, ¶ 23, 18 P.3d at 731 (citing *North Dakota v. United States,* 972 F.2d 235, 237-38 (8th Cir. 1992)). Defenders have not cited any persuasive authority suggesting that these provisions in § 37-1128(A) are unconstitutional or contrary to federal law. We agree with this court's prior statements and conclude that neither placing the burden of proof on the proponents of navigability nor specifying the burden as a preponderance of the evidence violates the State or Federal Constitutions or conflicts with federal law." *State of Arizona v. Honorable Edward O. Burke* 1 CA-SA 02-0268 and 1 CA-SA 02-0269 (Consolidated); Arizona Court of Appeals, Division One, (Memorandum Decision filed December 23, 2004).

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 travel 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 which are generally used by the authorities in applying the federal test for navigability to assist it in determining whether this 37 mile reach of the Salt River was 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. PREVIOUS COURT DECISIONS INVOLVING NAVIGABILITY OF THE SALT RIVER

There are three significant cases and decisions involving the Salt River and its water – two prior to statehood, and one in the 1970's. Although the question of navigability or nonnavigability of the Salt River for title purposes was not the main issue in any of the cases, the comments and findings of the court are deemed to have important precedential value as evidence in the Commission's consideration of the issue of navigability.

The first decision was issued by Judge Joseph H. Kibbey on March 31, 1892, in the case captioned *M. Wormser, et al., Plaintiffs, vs. The Salt River Valley Canal Co., et al, Defendants*, No. 708, District Court of the Second Judicial District of the Territory of Arizona in and for the County of Maricopa, and is commonly known as the "Kibbey Decree." This suit was instituted by downstream water users and canal companies against upstream appropriators and was for the purpose of enjoining the upstream appropriators from diverting water from the Salt River in derogation of the rights of downstream users. The plaintiffs alleged in their complaint, which was amended three times, that the Salt River is a natural nonnavigable stream. In deciding that the Spanish system of prior appropriation water law would hold over the common law system of riparian water rights, Judge Kibbey notes that from 1848, when the United States acquired this land, until 1863, when the Territory of Arizona was established, the Salt River Valley was a part of the Territory of New Mexico which had express laws governing the appropriation and use of water for irrigation. When Arizona was established as a separate territory, its territorial legislature adopted the Howell Code

which expressly approved the Spanish system of water rights. This was subsequently approved by Act of Congress. In the decree, Judge Kibbey refers to the California practice of a person seeking to appropriate water initiating it by posting a notice of appropriation. This practice had been imported and used in the Salt River Valley. Judge Kibbey further states that at the time of his decision, "This practice has permeated to such an extent in the Salt River Valley that notices of intention to appropriate many times more water than ever did flow down the Salt River, have been given; and so in the Gila River Valley."

Judge Kibbey also discusses the Act of 1866 relating to the disposal of public lands containing valuable minerals and the Desert Land Act of 1877, both of which give priority of the use of water on lands to be conveyed under those Acts. Judge Kibbey also notes that most of the land in the Salt River Valley which had passed into private ownership as of the time of his decision was pursuant to the Desert Land Act. The Desert Land Act provides in part as follows:

> [T]he right to the use of water by the person so conducting the same, on or to any tract of desert land of six hundred and forty acres shall depend upon a bona fide appropriation: and all surplus water over and above such actual appropriation and use, together with the water of all lakes, rivers and other sources of water supply upon the public lands and **not navigable**, shall remain and be held free for the appropriation and use of the public for irrigation, mining and manufacturing purposes, subject to existing rights.

Act of March 3, 1877, 19 Stat. 377, 43 United States Code §321 (emphasis added). Judge Kibbey decided that the territorial laws could grant a person the right to appropriate water but that such right of appropriation was subject to restrictions, and he went on to apply the law of prior appropriation to decide the dispute in principal between users of the water but does not attempt to settle the rights of individual consumers. He does find "... that the right of appropriation of water for the cultivation of land becomes permanently appurtenant to that land, for without it the land is worthless; without the land the appropriation could not have been made."

The second major decision in this area was in the case of *Patrick T. Hurley, Plaintiff, The United States of America, Intervenor, vs. Charles F. Abbott and 4,800 Others, Defendants,* No. 4564, District Court of the Third Judicial District of the Territory of Arizona in and for the County of Maricopa, and was issued by Chief Justice Kent sitting as District Judge, on March 1, 1910. It is commonly known as the "Kent Decree." The Kent Decree logically followed the Kibbey Decree inasmuch as the Kibbey Decree set forth rights to water from the Salt River as between the various canal companies that were parties to that action, but did not attempt to define the rights of the individual land owners. Events subsequent to the issuance of the Kibbey Decree, including the pending development of the Salt River Federal Reclamation Project which built Roosevelt Dam, made it necessary that rights be established between individual property owners and not just between the canal companies. The Kent Decree does describe the Salt River as a nonnavigable stream as pointed out in Section II-A above, but not in light of navigability for title purposes. Justice Kent describes the purpose of the lawsuit and his decision as follows:

> The purpose of this suit is to obtain a judicial determination and definition of the rights of the various parcels of land and the owners thereof under the various canals above mentioned in and to the use of the water flowing in the Salt and Verde rivers. For a complete and effective adjudication of such rights it is necessary not only to determine the date of appropriation of the water to each parcel of land, but also the amount of the water appropriated and the relative right of each parcel to the other.

Justice Kent notes that the actual maximum normal flow of the Salt River in miner's inches is considerably less than the total practical carrying capacity of all of the various canals which divert water from the Salt River. He also observes that for the past years prior to his decision, more land in the valley has been attempted to be cultivated than the water available in the normal flow of the river would supply. He then divides all of the normal flow of the Salt River by miner's inches to the owners of

property, using legal descriptions of the property, making practical use of the same in the order of priority of appropriation.[4]

The findings in the Kibbey and Kent decrees show that prior to statehood, so much water was appropriated and taken out of the Salt River for irrigation and other purposes that the ordinary flow remaining could hardly have supported the proposition that the Salt River was a navigable stream.

The third major decision bearing on this matter is captioned *Salt River Pima-Maricopa Indian Community, Plaintiff, vs. Arizona Sand & Rock Co., an Arizona corporation, et al., Defendants,* No. CIV 72-376 PHX WDM, United States District Court, District of Arizona. Judgment was entered April 13, 1977. The suit was brought by the Salt River Pima-Maricopa Indian Community for the purpose of determining the location of the south boundary of the Salt River Indian Reservation and ejecting trespassers from reservation land and for the purpose of obtaining damages for their trespass. Actually, there were a number of suits brought by persons claiming ownership of land in the area for extraction of sand and gravel, the State of Arizona through the Department of Transportation which had granted license and permits for the removal of sand and gravel, and various political subdivisions of the State. All of these suits were consolidated in Cause No. CIV 72–376.

The Executive Order by President Rutherford B. Hayes set the southern boundary of the reservation as the middle of the Salt River. Since there were two flow channels at that time in the area in question, the parties' main dispute was over where the middle of the river was located. In the pretrial order to which all parties agreed and which served as a basis for the findings of fact and conclusions of law and judgment, it was stated that fee title to the property north of the southern boundary of the reservation was vested in the United States in trust for the Indian tribe and that the Salt

[4] The unit of measurement of a miner's inch is 1/40th part of one cubic foot of water flowing per second of time.

River is not now and never has been a navigable river. Clearly, this would seem to be a finding by an authorized judicial body that the Salt River in the area with which the suit was concerned was not navigable. The judgment and decision in this case did not make any findings as to the southern half of the Salt River to the south of the southern boundary of the reservation, nor did the court make any findings as to any other portions or reaches of the Salt River other than the area covered by the southern boundary of the reservation. Accordingly, this decision left unanswered the question of navigability of major portions of the Lower Salt River which the Commission must consider.

There may be other court decisions involving the Salt River and the issue with which we are concerned, but none have been brought to the attention of the Commission. If any such unreported trial court cases exist, they would most likely be fact specific and not considered as authority on the issue of navigability for the entire reach of the Lower Salt River.

VIII. 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 the Salt River from Granite Reef Dam to its confluence with the Gila River. Evidence consisting of studies, written documents, reports, newspapers and other historical accounts, pictures, and testimony were submitted. The written materials and documents submitted are approximately three feet thick. Comprehensive studies were submitted including the Final Report and Study prepared by CH2M Hill dated December 1993 and revised by J.E. Fuller/Hydrology and Geomorphology, Inc. under the supervision of the Arizona State Land Department in September 1996 with a further update in April, 2003; the Assessment of the Salt Rivers Navigability prior to and on the date of Arizona Statehood, February 14, 1912 by Dr. Douglas Littlefield, December 1996; Report and

Slides presented by Dr. Stanley Schumm, April, 2003; Report of Dr. Alan Gookin, Engineer, April, 2003; The Historical Development and Use of Water from the Salt River in the Salt River Valley, by David Roberts, Salt River Project, April 2003; The Navigability of the Salt River from Granite Reef Dam to the confluence with the Gila River, James Dorsey and Associates, August 1996; The Salt River a Non-navigable Stream, and Vision in the Dessert by Dr. Jack August, April 2003. Reports, correspondence and studies were also submitted by the Arizona Center for Law and the Public Interest; Arizona Game and Fish Department; Maricopa County; City of Phoenix, City of Mesa; City of Tempe; Salt River Pima, Maricopa Indian Community; Arizona Association of Conservation Districts; Papago Salado Association, Inc.; Southwest Gas Corporation; Qwest; Homebuilders Association of Central Arizona; Arizona Chamber of Commerce; Greater Phoenix Chamber of Commerce; and many other organizations, associations and individuals.

The list of documentary evidence and records, together with a description is attached as Exhibit "E."

A public hearing was held at Phoenix, Arizona, in Maricopa County on April 7 and 8, 2003, for the public to present testimony and evidence on the issue of navigability of the Lower Salt River. A total of 20 witnesses appeared at the hearing in Phoenix and gave testimony. Six of the witnesses were acknowledged experts in the fields of hydrology, hydraulics, geomorphology and history. Others were well informed individuals in the areas of environment, law, land use and development and surveying. A verbatim transcript of the hearing was made by a court reporter. A public hearing was also held on January 17, 2004, in Phoenix, Arizona, to consider all of the evidence, testimony and post-hearing memoranda submitted. The minutes of those hearings are attached as Exhibit "F."

The Arizona State Land Department submitted a Disclaimer of Ownership Interest in Real Property on December 14, 1993. In this document it states that "The

State of Arizona hereby disclaims any claim of right, title or interest, based on the navigability of the Salt River as of February 14, 1912, to real property situated outside the presently existing left and right banks of the Salt River from the Granite Reef Dam to the confluence of the Gila River . . ." The disclaimer further states that "The State Land Commissioner, acting in accord with Section 37-1131(A), Arizona Revised Statutes, finds that no clear evidence exists to rebut the statutory presumption that any state ownership based on navigability is limited to the existing bed of the Salt River in the above reach." This document was created when the 1992 Act was in effect and which has since been amended. Clearly, the intent was to limit the Commission's study, findings and determination to the bed of the Salt River and the banks up to the high water mark, which intent the Commission intends to follow.

A. Prehistoric or Pre-Columbian Conditions on the Salt River Watershed

The archaeological evidence indicates that approximately 2000 years ago, a sedentary proto-agricultural culture arose in the Salt River Valley that has been denominated as the Hohokam culture. For six to eight thousand years prior to the Hohokam, and existing for a few hundred years contemporaneously with it, was the Archaic or Cochise culture which was primarily hunting and gathering. Although other archaeologists dispute the early date, the foremost expert on Hohokam culture, Emil Haury, postulates that a group of people came from Mexico or Mesoamerica probably as early as 300 B.C. and began using the techniques brought with them for irrigation agriculture. (See Emil W. Haury's Prehistory of the American Southwest, J. Jefferson Reid and David E. Doyel (Eds.), The University of Arizona Press, Tucson, 1986. They probably absorbed the local indigenous Cochise inhabitants, although there is evidence of Cochise-type settlements as late as the end of the first century A.D. No doubt there were subsequent infusions of groups from Mesoamerica into the Hohokam area, but they were apparently absorbed peacefully. A major infusion in the area in approximately 1100 to 1200 by individuals of a new or different cultural system (now

called the Salado) significantly changed the existing settlement pattern. The presence of ball courts and platform mounts clearly show the relationship of the Hohokam and Salado to Mesoamerican cultures.

At the peak of Hohokam culture, the Salt River Valley was one of the most densely populated areas in the southwest, and the population has been estimated at between 80,000 and 150,000. At their peak (approximately 1100-1200 A.D.), the Hohokam irrigated an estimated 140,000 acres with an irrigation system of canals extending over 315 miles. The system included at least 10 separate canal systems, some as long as 16 miles. Most canals measured 10 to 20 feet in width and were 3 to 12 feet deep with a maximum diversion capacity in an individual canal of approximately 240 cubic feet per second. Although the Hohokam culture was gone by the time early European settlers arrived in the valley in 1865-1870, many of the early farmers utilized the existing Hohokam canals for their own irrigation purposes. Excavations indicate that the Hohokam supplemented their diet with fish probably taken from the Salt River during peak flow times. There is no evidence other than speculation that the Hohokam utilized the Salt River for commerce or travel. There is no evidence of boating by the Hohokam. Their use of the river was strictly to divert water from the river for use in irrigation.

After 1450 A.D., the Hohokam culture and population declined almost to a point of extinction, and only ruins existed even when the earliest Spanish explorers such as Father Kino came through the area. The present Papago or Tohono O'odham and Pima Indians are thought to be the descendants of the Hohokam. The decline in the Hohokam is an archaeological mystery. Some of the theories that have been advanced to explain it are an extended drought of over 25 years, erratic flow of the river characterized by extreme floods followed by periods of drought, disease and alkalization of the soil, making it non-productive for farming. Evidence of some of these conditions has appeared in historic times.

B. Historic Development of the Salt River Valley

The first European to stand on Arizona soil was Cabeza deVaca in 1527, who had been involved in a shipwreck on the shore of Texas and was making his way by foot across the Southwest trying to get back to Mexico. When he arrived in Mexico he told of rich cities in the Southwest, which prompted the organization of an expedition to conquer these areas. In 1539, Marco de Niza, as an advanced party for the Coronado expedition, explored into Arizona and although he and the main Coronado expedition did not pass through the Lower Salt River Valley, they certainly crossed the Salt River above Granite Reef Dam in the White Mountains.

Although the area we now call New Mexico was well settled by the conquistadors in the late 1500s and early 1600s, there were no known expeditions of exploration to come into the Salt River Valley area. The church was busy establishing missions to convert the Indian people of the area and Father Kino, in particular, was instrumental in establishing a number of missions in Southern Arizona, including Tucson and Tubac. He traveled as far North as the Salt River Valley in 1696 and is probably the individual who first gave the river its name, Rio Salado. No permanent missions or churches were established in the Salt River Valley by Kino or his associates.

Other than the passage of Spanish explorers and missionaries, the earliest record of the Salt River Valley is contained in the writings of American trappers or mountain men who explored the west trapping for furs, primarily beaver, in the 1820's. Most of them did not leave written records of their travels, but James O. Pattie and Ewing Young did lead a party which trapped along the Salt River and up the Verde River in 1826, and even report an attack by Indians near the confluence of the Gila and Salt Rivers. These trapping activities continued through the 1830s and early 1840s. The trappers did not use boats for travel on the rivers or streams in this area but traveled by foot, horses or mules along the sides of the rivers or the streams.

In 1846 the United States declared war on Mexico and a number of military expeditions passed through Arizona on their way to California. Most of them, however, such as the Mormon Battalion, traveled south of the Salt River Valley. Following the war with Mexico in 1848, the United States annexed all of the Mexican territory north of the Gila River by the Treaty of Guadalupe Hidalgo. In 1853 the United States negotiated the Gadsden Purchase with Mexico and acquired the land south of the Gila River to the present national boundaries. This was done primarily for the purpose of having a southern railroad route to connect the United States with California. In the 1850s a number of military expeditions consisting primarily of surveyors looking for railroad routes traveled through northern and southern Arizona. The routes they mapped out were later used for the construction of transcontinental railroads. In 1852, John R. Bartlett of the United States Boundary Commission conducted a reconnaissance of the Salt River from the confluence with the Gila as far upstream as present day Mesa. In 1865 Camp McDowell was established on the Verde River eight miles above its confluence with the Salt River, and land was cleared and farmed by irrigation by the soldiers. In 1867, a former Confederate soldier, Jack Swilling, and others formed the Swilling Irrigation and Canal Company and cleared out an old Hohokam canal in the eastern portion of Phoenix for carrying water to irrigated fields. Thus began modern irrigation and farming in the Salt River Valley. As irrigation and development of the farmland increased it became clear that the Salt River Valley was to become a major farming area in Arizona. Numerous small towns such as Phoenix, Mesa, Glendale, Tempe, Chandler and others became established as shopping centers for the farmers.

The capital of Arizona Territory was originally established in Prescott in 1863 and then was moved to Tucson in 1867, which was the largest city in Arizona, and after ten years was moved back to Prescott in 1877 and then finally moved to Phoenix in 1889 because it was considered to be a more central point in the territory. Phoenix itself

continued to grow in population but did not become the largest city of Arizona by passing Tucson until the census of 1920. Since that time, however, the Salt River Valley has become the major population county in the state, with Phoenix the fifth most populous city in the United States.

A discussion of the Lower Salt River Valley would be incomplete without mentioning the Salt River Project and the organization of the Salt River Valley Water Users Association. For over 2,000 years the residents of the Salt River Valley have utilized the waters flowing in the Salt River for irrigation purposes, and have diverted the water from the river channel with the use of diversion dams and canals in order to carry the water to the fields to irrigate the crops. The biggest problem has been controlling the water in the river and transporting it to the fields where it's needed. Archeology shows us that the Hohokam culture had this problem, and the historical accounts from the time that Jack Swilling and his group built the first modern canal show that this was a continuing problem. The river is erratic, unpredictable, often flashy with lots of water in it, and at other times it's virtually dry. It doesn't have a steady flow; its flow is highly variable. The early diversion dams were not permanent as they were made of rock or dirt and brush, and when a flood occurred the dam would be washed away and required to be rebuilt when the flood had passed. From the beginning of European settlement in the Salt River Valley, the residents dreamed of a large dam on the upper river that would control the river by ameliorating the damage caused by floods and provide stronger storage for water to use in periods of drought.

In 1901, Congress passed the Reclamation Act and the Salt River Project was one of the very first reclamation projects under that Act. Following the construction of the first reclamation diversion dam and canal by Jack Swilling, numerous dams and canals were constructed so that by the time of the Kibbey Decree in 1892, more water was claimed out of the Salt River than flowed down it, according to Judge Kibbey. There were, however, numerous large floods which would wipe out the small dams and wash

out the canals, requiring the same to be rebuilt after the flood. Large floods occurred in 1890, 1891 and the largest of all was probably in 1893, followed by two only somewhat smaller in 1905 and 1910. In between these floods would be a period of drought which, while allowing the farmers to rebuild the dams and canals, did not provide enough water to irrigate the crops. Clearly, a large storage dam to regulate the water was needed on the upper Salt River. Pursuant to the terms of the Reclamation Act, the people of the Salt River Valley bonded together and applied to the Federal Government for construction of the Salt River Federal Reclamation Project which was authorized in 1903.

The construction of the project required the Federal Government to withdraw lands along the Salt River and Verde River from public entry by private citizens, in order to construct the project. Granite Reef Dam was first constructed in 1908 as a permanent concrete structure 1,100 feet long, to protect the diversion dams and canals on the river below it. A site also was selected on the upper Salt River and the construction of the large permanent dam which would provide a reservoir for the storage of flood waters and generation of electricity was commenced. This was completed and fully operational in 1910, and was dedicated in March of 1911 and named for President Theodore Roosevelt. It originally provided 1,336, 734 acre feet of water storage capacity. in recent years the dam was modified and raised so that its storage capacity is now approximately 1,613,000 acre feet of water. In addition to the site at Roosevelt Dam, the Federal Government had identified other hydroelectric and water storage sites on the Salt and Verde Rivers, and also withdrew those sites from passing to Arizona when it became a state. With the construction of Roosevelt Dam and five other dams on the Salt and Verde Rivers having a present storage capacity of 2,313,201 acre feet of water,[5], the intent of Congress was established to take the water

[5] An acre foot of water is the volume of water necessary to cover one acre of land 1 foot deep or 326,851 gallons.

out of the river and use it on the land for permanent basis for economic development; in other words, for people to use the water to sustain their inhabitations on the land. Without these dams, the development of the Salt River Valley would not have occurred.

During the historical period from 1867 to Statehood, there is no record of any sustained commerce, travel or fishing on the Lower Salt River. There are isolated instances of attempted boating or floating of logs which would be discussed in later sections of this report. All travel along the river during this period was by wagons, horses, mules or on foot.

C. Conditions Around Statehood: Opinions of Pioneers Who Lived in the Area At That Time

Since the issue at hand is whether the Salt River was navigable on the day Arizona became a state, February 14, 1912, almost one hundred years ago, it seems important to determine what the residents of the area who lived through this period thought as to whether the Salt River was navigable. As indicated above, the 1890s and the first decade of the 1900s was a period during which there were some large floods on the Salt River interspersed by periods of drought. The Commission heard testimony from various historians and others who had heard from ancestors, relatives and others who lived during that time as to their opinions of the navigability of the Salt River. For example, United States Senator Carl Hayden, who was born in 1877 and grew up at Hayden's Ferry, now a part of Tempe, next to the Salt River, described it as an erratic and unpredictable stream and observed that the very large flood of 1891 erased two decades of human effort and toil along the edge of the Salt River, including properties owned by his family. His father operated a ferry to allow people to cross the river when it was in flood stage, although if the flood was large enough it would frequently wash the ferry downstream and young Carl would have to take horses down, tie on to it and pull the ferry back upstream. In the flood of 1891, the railroad bridge across the river was washed out and there was a period of time when there was no way that people

could cross the river safely. The 1890s was also a period of extreme drought, which together with the catastrophes caused by the flood, caused many people to leave their farms and seek somewhere else to live. When dry, a person could cross the Salt River by walking or riding a horse. When it was in flood stage it was a barrier. It was never a corridor for transportation. The river served neither commercial nor, in fact, navigable purposes. Transportation in those days along the river was by pack mules, freight wagons, horses and buggies, stagecoach, and even pedestrian. One of the reasons he stated he did not want to enter the family business was because of the dry river bed. Senator Hayden always considered the Salt River as a non-navigable stream, and that the major problem in relation to it was flood control.

Other individuals who were cited to the Commission as having lived alongside the river and were of the opinion that it was not navigable were: Justice Kibbey, author of the Kibbey Decree; Justice Kent, author of the Kent Decree, both quoted in Section VII above; and Rawley T. Stanford, Governor of Arizona and later Arizona State Supreme Court Justice. Frank Harris, who had applied for a homestead, stated that about 60 acres could be cultivated and the rest was in the riverbed and totally unfit for cultivation due to the erratic nature of the river. All of the historical incidents and authorities cited to the Commission from people who lived in Arizona or along the river at that time were that the river was not navigable. Another individual whose views were cited to the Commission was Arthur Powell Davis, Director of the reclamation service later to become the U.S. Bureau of Reclamation, who stated that during the construction of the Roosevelt Dam consideration was never given to using the Salt River to carry men or material to the site. This was the reason why the Apache Trail, a road from Apache Junction to the dam site, was constructed.

Dr. Douglas Littlefield, an acknowledged expert on history of the American West, in particular water rights and river-related issues, who performed a number of navigability studies on the Salt River, the Verde River and the Gila River, presented his

report entitled "The Assessment of the Salt River's Navigability Prior to and on the Date of Arizona Statehood, February 14, 1912." He testified that the Arizona Territorial Legislature, in its first meeting in 1865, petitioned Congress for funds to improve navigation on the Colorado River, and in that petition the Legislature specifically declared that the Colorado River is the only navigable water in this territory. He stated that no contemporary observer thought that the Salt River was navigable prior to and around 1912. He also cited the report of the U.S. Geological Survey (in 1905) describing the Salt River as a permanent supply of water from the head of the Valley to the Tempe Canal north of Mesa. Below that the river is practically dry for the greater part of the year. Dr. Littlefield discounted newspapers as a source of actual facts, since they tended to be boosters of the community that they were published in, largely because most of the communities were actively seeking new residents. Also, it was common practice for newspapers only to print extraordinary events such as floods and other unusual occurrences. He noted that even the newspapers stated that transportation was served by railroad and wagon roads. There was never any claim about the ability of the Salt River to carry commerce. He noted that the surveyors in the Salt River Valley treated the stream as being non-navigable under the Federal regulations relating to the survey of the public domain. He also quoted from various survey reports between 1868 and 1911 which described the Salt River as separating into two to four channels which constantly shifted and created sandbars.

Dr. Littlefield also described federal patents of land some 225 of which were issued during the latter part of the 1900s along the Salt River, and none of these patents exempted the bed of the river or described it as navigable. The holders of these patents, many of which included portions of the bed and banks of the Salt River, were not suitable for farming or building because of the potential for flooding, but most of the time there was no water in the bed of the river. Dr. Littlefield also discussed the state patents that were issued for land along the river, and although they were fewer in

number the situation was the same as with the Federal Government. In conclusion, he opined that no contemporary observer believed that the Salt River was navigable at or about the time of Arizona statehood in 1912.

Other individuals appeared as witnesses, including former State Senator Rusty Bower, who testified he had researched the family history center in Mesa, Arizona and had spoken to descendants of many of the early pioneers, and stated that although there are many anecdotes of floods that none of the pioneer or contemporaneous observers were of the opinion that the Salt River was navigable for commercial purposes.

Numerous descriptions by early settlers indicate that the river was an abraided stream having anywhere from two to four flow channels and that in normal times the water was two or three feet deep. During flood times and periods of rain in the mountains on the watershed, the flow of the river became substantially greater. For example, in July 1852, John R. Bartlett, who was the head of the U.S. Boundary Commission and who traveled the Salt River from its confluence with the Gila to a point near the present day site of Mesa Arizona, described the river as clear and sweet, averaging 80 to 120 feet wide and two to three feet deep. Due to the diversion of water for irrigation, most of the water during the normal flow was taken out of the river by 1900. Historian James H. McClintock in describing the Salt River in 1901 stated that "for the greater part of the year, the Salt River is a river only in name. Yet it is one of the most considerable of the flood streams in the nation."

A review of the literature relating to the historical use of the river during this period of time shows that the primary use of the Salt River was for irrigation and two flour mills which were powered by water. There is also some evidence of recreational fishing. There are also reports of hydroelectric plants which were either operated by the water or under construction on canals at Chandler, Tempe and Phoenix. Clearly, during this time the primary use of the water in the river was for irrigation. A map

derived from the 1900 census data shows that virtually the entire valley was irrigated or was mapped for irrigation.

There is no evidence of any commercial transportation using the Salt River. Transportation in the Salt River Valley was carried out on horseback, stage coach and wagon. Wells Fargo operated a stage coach route along the north side of the Salt River and, while passengers and freight frequently had to cross the river, if the river was high enough to require it, a ferry was used. The Maricopa and Phoenix Railroad was completed to Phoenix in 1887, resulting in the construction of railroad bridges across the Salt River.

D. Historical Accounts of Boating on the Salt River

One of the more important evidentiary factors regarding navigability is the issue of whether or not there was boating for navigation on the river in question prior to or about the time the State was admitted to the Union. The question of whether the river was susceptible to having commercial travel on it at this time is a part of this question, but clearly the issue of susceptibility is to a great extent resolved by whether or not there was actual commercial travel on the river at this time. In the case of the Lower Salt River, such travel by watercraft on the river would have had to occur prior to statehood, since Roosevelt Dam was constructed prior to statehood which, to a great extent, provided control over the waters of the river and, by its holding flood waters as well as ordinary flow in the reservoir behind the dam, prevented any travel by watercraft in the ordinary and natural course on the river after completion of the construction of the dam.

In the study prepared by CH2M Hill and updated by J.F. Fuller/Hydrology and Geomorphology, Inc., there are 16 accounts of boating or floating logs or otherwise attempting to use the Salt River for commercial travel between May 1873 and January 1915. The 16 accounts of boating on the Salt River are all separate incidents or occurrences, and it seems clear that there was no sustained operation of commercial

boating or use of this river as a highway for commerce. For example, there were no docks or ship or boat unloading facilities anywhere along the river. This fact leads to the conclusion that each of the incidents reported in the CH2M Hill report were separate incidents or occurrences. These historical accounts of boating on the Salt River refer to downstream boating, and this was only on occasions when the flow allowed it. There is documentation of some successful, but mostly unsuccessful, attempts to boat or transport goods down the Salt River. The boats that were used were shallow draft row boats and rafts. Also, there is some documentation of the floating of logs or sawn timber down the river but not on a regular or commercial basis. There is no documentation of any attempts, successful or unsuccessful, to commercially transport goods upriver. In fact, there was one account reported in 1884 in which boats were wanted upstream and had to be hauled up by wagon.

All of the 16 accounts of boating or floating logs on the Salt River occurred during periods of high water, either during the late fall or winter during periods of rainfall and storms or during the monsoon period of lighter summer storms and on one occasion, during the spring and early summer runoff from snowfall. The three incidents mentioned of attempting to float logs down the river were single incidents and apparently never repeated. One of the log-floating incidents, which occurred in June 1873, involved Charles Hayden, Senator Carl Hayden's father. Senator Hayden would tell the story about that attempt and why it was never tried again by pointing out that there was a problem getting the logs through the narrow canyons upstream and in the Lower Salt River the flood waters spread logs all up and down the river so that it was more trouble reassembling them for useful purpose than if they had been hauled by wagon. Hayden and his party pronounced the scheme a failure. The second report of log floating occurred in June 1885 from Tonto Creek to Phoenix and was apparently not repeated. In 1890 a newspaper reported that A.J. Chandler had logs or

timbers from abandoned Ft. McDowell floated down the Verde River and used in making headgates for the for the consolidated canal.

Some of the accounts of boating, while purporting to report on commercial transportation on the river, actually occurred on the canals which were fed by water from the river as a result of the diversion dams, and thus were not actually commercial transportation on the river itself. The canals, because of the dams and headgates, could be more easily controlled as to water flow. From the testimony and exhibits presented, we must conclude that at no time prior to and around statehood was the Salt River used for actual commercial transportation in the ordinary and natural course of its flow.[6]

Ferries were used when the water was high in order to cross the river because it could not be forded on foot or by horseback. At least a half dozen ferries operated at various times between 1860-1915. While ferries were required during some months of the year due to heavy flow, at other times horses could cross the river pulling the stage coaches or freight wagons. Because of the erratic nature of the Salt River, these ferries operated only part of the time during the year when the water was too high for people to ford the river on foot or by horseback. Sometimes the water would be so high it would break the ferries loose and they would float down the river and have to be retrieved and pulled back upriver to their mooring site by horses. The ferries were not used for transportation on the river, but merely to cross the river during high water times. To this extent the river must be considered as an obstacle rather than a highway or avenue of commerce. The construction of highway bridges across the river in the 1900's eliminated the need for ferries, although at least one continued to operate as late as 1898. At about the turn of the century, with the majority of the normal flow of the river being diverted for irrigation, ferries became unnecessary. This was especially true

[6] A number of the accounts are taken from newspaper articles which merely announce that certain individuals proposed to travel by boat from Phoenix to Yuma, for example, but there is no follow up as to whether they in fact were successful. Two of the accounts from Arizona newspapers refer specifically that the boat was used to rescue people from the flooded Salt River, and were clearly not used in the effort to promote commercial transportation.

after the construction of Roosevelt Dam which further controlled the flow of the river such that it only flowed during periods of large precipitation or when the waters were released from the reservoirs contained by the upstream dams.

With regard to the issue of susceptibility of navigability, it is within the realm of speculation that since the river prior to statehood had a rather substantial flow of water, if man had decided to dredge the river they could have created a channel on which commerce could have traveled. Constant dredging would have been necessary to clear the sandbars and keep the channel open. This would not be in the ordinary and natural course of events and, accordingly, we must conclude that in the ordinary and natural condition the river was not susceptible of navigability. The historical record accounts of boating or attempted boating on the Lower Salt River cited in the CH2M Hill report do not support the proposition that the river was navigable or susceptible of navigability but are strong evidence that this river was not navigable.

With regard to the issue of fishing on the river, the record is devoid of any evidence that anyone ever used a boat to fish on the river and evidence of fishing, even from the banks of the river, is sparse. Two newspaper articles "mention[ed] fish being supplied to local markets," but nothing in the record supports a conclusion that these fish necessarily came from the Salt River, as opposed to the Verde River, the Gila River, or one of the many canals. To this day fish are occasionally found in the canals in this valley. Another newspaper article states that "restaurants occasionally furnish their boarders with excellent fish caught in the Salt River," but this single article hardly supports a conclusion that a thriving commercial fishery ever existed in the river. There are reports of fishing for recreation and reports Native Americans fishing in the river but no evidence of a fishing industry.

What evidence of fishing that does exist in the record in no way supports a finding of navigability. At least one newspaper article states that the supply of fish was obtained at a time when the river was "very low, and the pools [were] well filled with

fish." Evidence of fishing in pools at a time when the river was low does not support the proposition that the river was navigable at that time.

E. Hydrology and Geomorphology of the Lower Salt River

The flow of water in the Salt River through the Salt River Valley is characterized by periodic floods (sometimes extremely heavy) interspersed during periods of drought. During the floods the river cannot be navigated safely and the drought periods frequently will have no water in the river on which watercraft can float. There were few stream gauges for stations within the Lower Salt River area for the period before and around Statehood. Accordingly, there is no direct discharge information from which averages or means can be accurately computed. Computing averages is not particularly meaningful since the average is skewed by the heavy floods and the periods of drought. Indirect methods such as computing flow rates on the Verde River and on the Salt River at various times resulted in an average computed by Mr. Fuller in the CH2M Hill report of 1,445 cubic feet per second. Another study made an average annual flow estimate at 1,730 cubic feet per second. Even these averages are not particularly meaningful since it cannot be shown that on any specific day of any specific year that average flow was attained.

Precipitation occurs in the Salt River watershed during two major seasons: in the late summer intense localized aerographic thunderstorms originating to the southeast in the Gulf of Mexico and in winter as large-scale cyclonic storms which originate over the Pacific Ocean and move east through California. The winter storms tend to produce the largest in terms of peak and volume flows on the Salt River, with over 90 percent of the largest storms and floods having occurred in the winter months. Following the winter storms which bring snow on the higher elevations and the late spring and early summer flow from snow melt, the summer months usually have a very low average annual discharge. Thus, the River has been described as extremely erratic in its disposition.

Evidence was submitted by the Salt River project of federal or state court decisions in which navigability of a river was actually determined using the Daniel Ball test. Four of the 21 water courses listed in the document were found to be navigable in whole or in part by a federal or state court. Of these four navigable rivers, the lowest annual average flow was 2,277 cubic feet per second (CFS) for the great Miami River of Ohio, which was found navigable in part and non-navigable in part. The other three water courses found navigable had average annual flows of 7,316 CFS, 6,930 CFS and 4,066 CFS, all of which are much higher than the estimated average annual flow computed for the Lower Salt River listed above. Clearly the water flow in the Lower Salt River does not support a finding of navigability, but in fact tends to support a finding of non-navigability.

The climatic conditions and weather in the southwest have been consistent over the past few hundred years. From 1826 when the mountain men first came through to the present day, we have at least some records of rainfall and flow. By using dendrochronology, or the tree ring method, archaeologists have been able to confirm that the weather has remained fairly consistent in terms of rainfall since at least 780 A.D., and some authorities have projected the weather back even further. The pattern seems to be consistent in that there were occasional floods (sometimes quite heavy) interspersed with periods of drought. Also, there might be a period of years in which the average rainfall was greater, in other words, wet cycles which were followed by dry cycles. But over the long period of time these cycles would be consistent and regularly follow each other. For example, it appears that the period between 1890 and 1920 was generally wetter than the period of between 1920 and through 1940.

The proponents of navigability, in determining the ordinary and natural condition of the Lower Salt River, want to look at the period prior to 1867 when Swilling first began diverting water for determining what the ordinary and natural condition of the river is. Certainly, there were no diversion dams or canals on the river

during this period. One can project this condition back as much as 300 years where there was little farming and diversion of water from the river. However, prior to 1450, the Salt River Valley supported a large population of indigenous farmers we call the Hohokam. As pointed out in the previous section, from approximately 300 B.C. to 1450 A.D., the Salt River Valley was farmed extensively by the Hohokam. Projecting from 1450, when their culture collapsed, back through the tree ring method to approximately 700 A.D., we can say that for a period of 700 years the normal or natural condition of the river was with diversion dams and canals irrigating fields. At the height of the Hohokam civilization, between 1,100 and 1,200 A.D., it is estimated that 140,000 acres was under cultivation, and that the population in the immediate vicinity was estimated at between 80,000 and 150,000 people. Thus, for a period of 700 years, perhaps longer, the Salt River Valley looked more like it does today in the agricultural sense, in that most of the water, if not all of the useful water available in the Salt River, was diverted through diversion dams into canals and used for irrigation. In considering what is the ordinary and natural condition of the river (A.R.S. §37-1101 5, *The Daniel Ball, supra and US vs. Holt Bank, supra),* one has to wonder whether we should go back from the Swilling era 300 years or consider the 700 years that preceded that. *Webster's Dictionary* defines "Ordinary" as "Commonly encountered: usual. The normal or usual condition or course of events." Some of the dictionary definitions of "Natural" are "Present in or produced by nature. Conforming to the usual or ordinary course of nature. Faithfully represent life or nature. Expected and Accepted." Thus one might argue that use of the Salt River for irrigation could be expected and accepted and commonly encountered or usual and such use conforms to the normal and ordinary course of nature and thus is the normal and usual condition.

The geomorphological evidence in the record does refute rather than support a finding of navigability. The Commission was very impressed by the testimony, report and exhibits furnished by Dr. Stanley Schumm, a former geomorphologist for the U.S.

Geological Survey, and for 30 years a professor at Colorado State University, and the author of numerous scientific papers and books on the geomorphology of rivers. He described the Lower Salt River as a "braided river, and a pattern of bars, islands, and low water channels changed through time." The river has a wide, sandy, gravelly channel with the low water channels shifting within the main channel. Dr. Schumm referred to the 1870 General Land Office Survey; the Surveys and Topographical Maps of 1903, 1904 and an aerial photograph of 1934, which showed how the braided Salt River would change channels, deposit sand creating sand banks and islands. Multiple channels were observed in these surveys and aerial photographs which would change with each major flood, resulting in shifting of the sandbars, eroding the islands, eroding the banks and generally change the position of low water channels. He described the river in 1912 as a wide, braided, low width to depth ratio, a dynamic active river. In the 1934 aerial photograph, he pointed out that 14 percent of the bed were low water channels, 54 percent were high water channels, and 32 percent of the river bed consisted of islands and sandbars. Below the Tempe Narrows, the river fans out into a broad alluvial plain with the braided conditions described above. In its ordinary and natural condition it was definitely not navigable.

Dr. Littlefield, whose testimony is described in the preceding section of this report, as well as former Arizona State University geomorphologist Dr. William L. Graff, and Dr. Paul F. Ruff, Associate Professor of Engineering at ASU, agreed with the testimony of Dr. Stanley Schumm regarding the Lower Salt River being a braided river with sandbars and islands and multiple or compound channels which shifted following each period of flood or high flow.

Dr. Schumm's testimony and that of the other experts who testified or whose reports were referred to the Commission that the geomorphology of the Lower Salt River makes it clearly non-navigable was unrefuted in the record. Actually, no evidence was submitted to the Commission by any expert who opined that the river

was in fact navigable at or about the time of Statehood or, for that matter, was even susceptible of navigability in its ordinary and natural condition.

F. Summary and Conclusion

The Commission conducted a "particularized assessment" of potential public trust claims on the Lower Salt River as required in *Center for Law v. Hassell, supra* and in doing so it considered all of the evidence available as to issue of navigability including the Archeology of the Salt River Valley and Prehistoric and Pre-Columbian history, history of the Lower Salt River from the time Europeans first came into the area, the views and opinions of people who lived at or about the time Arizona became a state, the geology and hydrology of the Salt River, the potential for boating or use of the river by watercraft and land use of the land in the vicinity of the Salt River.

The archeological evidence indicates that intensive farming by irrigation of the Salt River valley began approximately 2,000 years ago and that the Lower Salt River area was one of the most intensely populated and farmed areas in the Pre-Columbian era of the area of which later became the United States. No evidence was presented that these Pre-Columbian inhabitants utilized the river for surface transportation or as a highway for commerce. While this is some speculation that they may have used small canoes or craft on the rivers or canals, it is mere speculation and there is no evidence of such use. The evidence shows that the only use these prehistoric Indians made of the Lower Salt River was for the purpose of diverting water into canals for irrigation of crops. All transportation in the area was by foot and not by any form of watercraft.

The first Europeans who were trappers came into the valley and traveled by horse, mule and foot and there is no reports of their using any kind of boats or watercraft on the river. Following the Civil War, more individuals of European descent came into the valley and began cleaning out the old Hohokam canals and using them to convey water from the river by use of diversion dams to irrigate crops. All reports from this era indicate that the Salt River was an extremely erratic and undependable river

characterized by periodic floods followed by longer periods of drought. During periods of high water, ferries would be used to cross the river which was considered an obstacle in this condition rather than a highway for transportation. In between the periods of high water the inhabitants could cross the river by foot or horseback. The dream of all of these early irrigation farmers was that a system of dams would be built which would control the river and preventing flooding and allow a more sustained water supply during drought. This dream was realized by the organization of the Salt River Project and the construction of Roosevelt Dam in 1910. A survey of the opinions of people who lived in the vicinity of the Salt River during the late 1800's and up through the 1920's including the opinions of judges was that the Salt River was not navigable and that its best and highest purpose was as a source of water to be diverted from the river for use and irrigation farming.

A survey of the historical accounts of boating on the Salt River supports the proposition that the river was not suitable for navigation and that there was never any sustained successful use of watercraft on the river or use by the river for floating logs or otherwise as a highway of commerce. While there are reports of some recreational fishing on the river and even isolated reports of taking fish from the river on occasion to restaurants in Phoenix. This fishing was done from the bank and not from boats and does not support the idea that the Lower Salt River was navigable or that there was any kind of fishing industry.

Testimony was also heard regarding the grants of Homesteads and other acquisitions by private individuals of land in the river or adjacent to the river and in all cases there was no indication that the river might be considered navigable such that the bed of the river was excluded from any Homestead or patent granted by the Federal or State Government. Likewise, the surveyors of the land along the river in the early days followed the Federal Surveying Manuals indicating that the river was not navigable. The Lower Salt River is not listed in the Rivers and Harbors Act of 1899.

In the area of hydrology and geomorphology of the Salt River the Commission was favored with the testimony of a number of experts who described the river in its ordinary and natural course as being located in a wide, flat, alluvial plain except for the Tempe narrows with two to four flow channels interspersed by sandbars and small sand islands which would shift with each period of high flow or flood preventing there being a single channel which could be navigated as a highway for commerce. All of the experts testified that in their opinion the river had no characteristics of navigability. None of the experts appearing before the Commission gave testimony opining that the river was in fact navigable for title purposes.

There was evidence, somewhat questionable, that the average annual flow of the Lower Salt River was between 1450 and 1730 CFS. These figures are questionable as to providing proof of navigability since as an average they necessarily reflect floods of 100 – 200,000 CFS followed by periods of drought where there is hardly any water in the river. In any event, even the high figure of 1730 CFS is far below the flow of any river reported in the legal decisions submitted to the Commission. Also, such a flow spread over a wide area in a braided stream of 2 to 4 flow channels interspersed by shifting sand bars and small sand islands would be practically impossible to be considered as navigable or susceptible of navigation.

For over 2000 years, the residents of the Salt River Valley have utilized the waters flowing in the Salt River for irrigation purposes and, in fact, have diverted the water out of the river channel with the use of diversion dams and canals in order to irrigate crops throughout the Salt River Valley. There has never been a more serious attempt to use the river as a highway for commerce. Due to the diversion of waters for irrigation purposes as well as the construction of upstream dams, primarily Roosevelt Dam, the Salt River in the reach under consideration was an ephemeral stream by statehood in 1912 and one which flowed only during times of heavy precipitation. The Kent Decree indicates that in all classes of land there were approximately 242,000 acres of land

within the Salt River Project area eligible to receive water, which is more than the normal flow of the river would support.

Today, the river channel is dry during most of the year provided there is no high precipitation or major releases from upstream dams, and the bed itself is used primarily for sand and gravel mining. Modern development in the flood plain includes soil cement and riprap bank stabilization to prevent flood waters from flowing outside a designated channel, landfills used by the local municipalities and Indian tribes, sand and gravel mining and some agricultural use. Portions of the Phoenix Sky Harbor Airport and other commercial and industrial developments are located in the floodplain. The dams constructed on the upper Salt River and its tributary, the Verde River, have a capacity to store over two million acre feet of water. In recent years, land formerly irrigated has been taken out of agricultural production to be developed as home sites, and some of the water has been used for home consumption

The standard of proof for findings by the Commission is a preponderance of the evidence A.R.S. §37-1128 (A), *Defenders of Wildlife v. Hull, supra and North Dakota v. United States, supra.* The burden of proof rest on the party asserting navigability *Arizona Center for Law v. Hassell, supra and Land Department v. O'Toole, supra.* Clearly, the preponderance of the evidence supports a finding that the Lower Salt River was not navigable on February 12, 1912, and further was not susceptible of navigability in its ordinary and natural condition.

IX . FINDINGS AND DETERMINATION

Based upon all of the historical and scientific data and information, documents and other evidence produced and considered by the Commission, the Commission finds that the Lower Salt River between Granite Reef Dam and its confluence with the Gila River is an erratic, unstable and undependable stream characterized by periodic floods, sometimes extreme, followed by periods of drought when there is little or no

water in the riverbed. The Commission finds that in its ordinary and natural condition even in the absence of the existence of Roosevelt Dam and reservoir the Lower Salt River was a braided stream of 2 to 4 channels interspersed by sandbars and sand islands which shift with floods or high flow of water and as such had a configuration that would be impossible to be considered navigable or susceptible of navigability.

Accordingly, the Commissioner finds that the Lower Salt River from Granite Reef Dam to its confluence with the Gila River was not used or susceptible of use for commercial trade or travel as of February 14, 1912 and therefore was not navigable as of that date nor was it susceptible to navigation.

DATED this 21 day of Sept., 2005.

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

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AFFIDAVIT OF PUBLICATION

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 Lower Salt River between Granite Reef Dam and the confluence with the Gila River in Maricopa 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 nonnavigability of the Lower Salt River between Granite Reef Dam and the confluence with the Gila River in Maricopa County. Interested parties are requested to file all documentary evidence they propose to submit to ANSAC by March 6, 2003. All evidence submitted to ANSAC will be the property of ANSAC and the State of Arizona. Evidence submitted will be available for public inspection at the ANSAC offices during regular office hours.

An unbound original plus seven bound copies of documentary evidence is to be submitted. ANSAC offices are located at 1700 West Washington, Room 404, 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.

George Mehnert
Executive Director
January 21, 2003
83805-Jan 23,30, Feb 6, 2003.

THE ARIZONA REPUBLIC

STATE OF ARIZONA
COUNTY OF MARICOPA } SS.

TOM BIANCO, being first duly sworn, upon oath deposes and says: That he is the legal advertising manager 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

1/23/2003

Sworn to before me this
10TH day of
February A.D. 2003

Ex A

OFFICIAL SEAL
MARILYN GREENWOOD
NOTARY PUBLIC-ARIZONA
MARICOPA COUNTY
My Comm. Expires May 23 2003

Notary Public

AFFIDAVIT OF PUBLICATION

NOTICE OF PUBLIC HEARING
Hearing Date: April 7, 2003
State of Arizona
Navigable Stream
Adjudication Commission

Pursuant to A.R.S. § 37-1128 (A), notice is hereby given that the Navigable Stream Adjudication Commission will hold a public hearing to receive physical evidence and testimony relating to the navigability or nonnavigability of the Lower Salt River between Granite Reef Dam and the confluence with the Gila River in Maricopa County. The hearing will be held in Maricopa County on April 7, 2003. The hearing will begin at 9:00 a.m. at the Arizona Department of Transportation Auditorium, 206 S. 17th Avenue, Phoenix, Arizona 85007. This is presently the only hearing scheduled for the Lower Salt River between Granite Reef Dam and the confluence with the Gila River in Maricopa County, however, as necessary, the hearing will continue on subsequent days as directed by the chairman.

Interested parties may submit evidence to the commission office prior to the hearing. During the public hearing, the commission will receive additional evidence including testimony. The commission will conduct its hearings informally without adherence to judicial rules of procedure or evidence.

Evidence submitted in advance of the hearing will be available for public inspection during regular commission office hours of 8:00 a.m. to 5:00 p.m., Monday thru Friday, except on holidays. The commission office is located at 1700 West Washington Street, Room 304, Phoenix, Arizona 85007. Please call first to review evidence at (602) 542-9214.

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

George Mehnert, Executive Director, February 7, 2003
03102-February 25, 2003.

THE ARIZONA REPUBLIC

STATE OF ARIZONA
COUNTY OF MARICOPA } SS.

TOM BIANCO, being first duly sworn, upon oath deposes and says: That he is the legal advertising manager 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

2/25/2003

Sworn to before me this
26TH day of
February A.D. 2003

OFFICIAL SEAL
GLORIA SALDIVAR
NOTARY PUBLIC-ARIZONA
MARICOPA COUNTY
My Comm. Expires Dec. 1, 2003

Ex B

Notary Public

Exhibit "C"

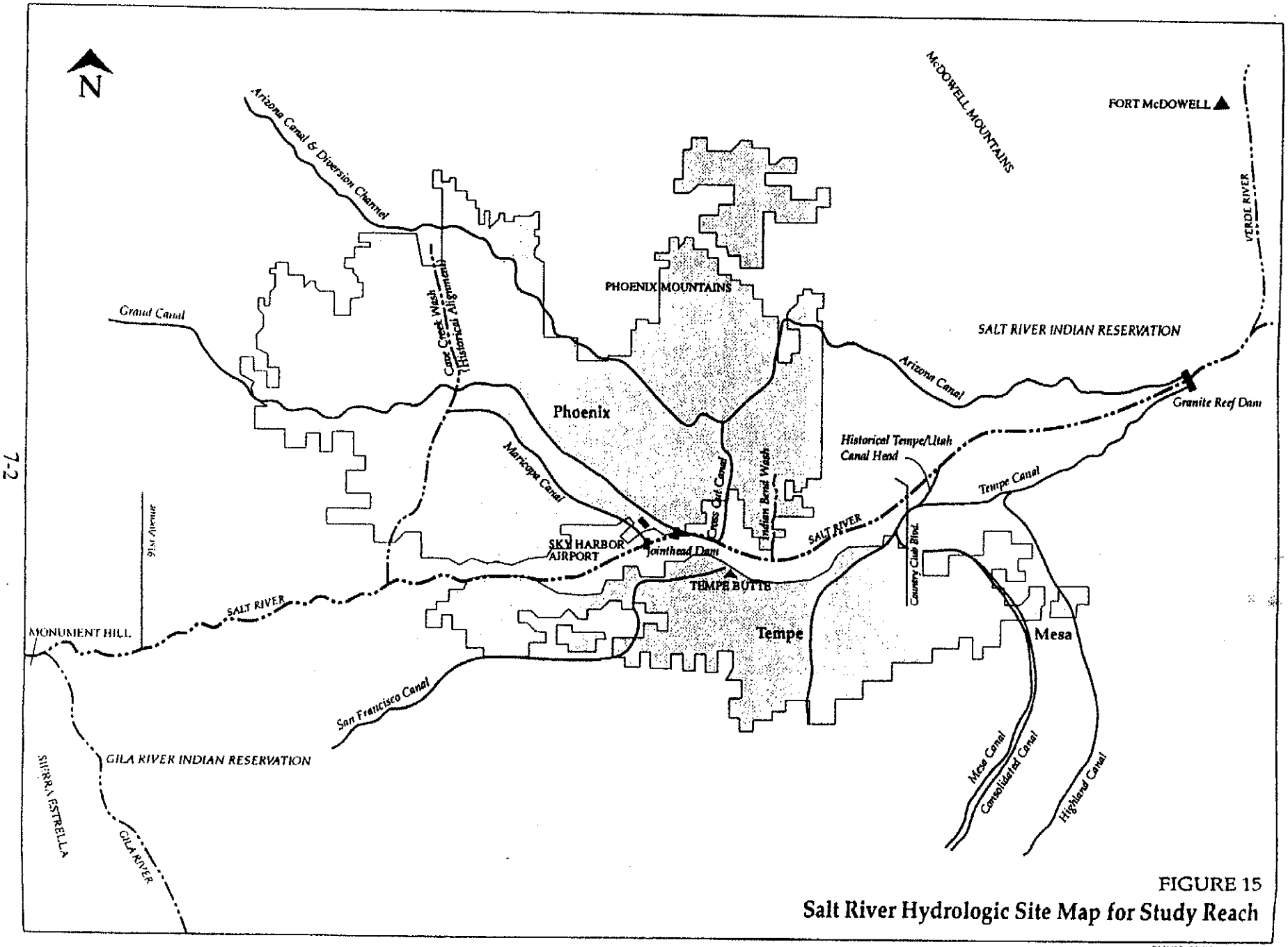

FIGURE 15
Salt River Hydrologic Site Map for Study Reach

PHX35403.5R.30/SRIVER2

7-2

Ex C

Exhibit "D"

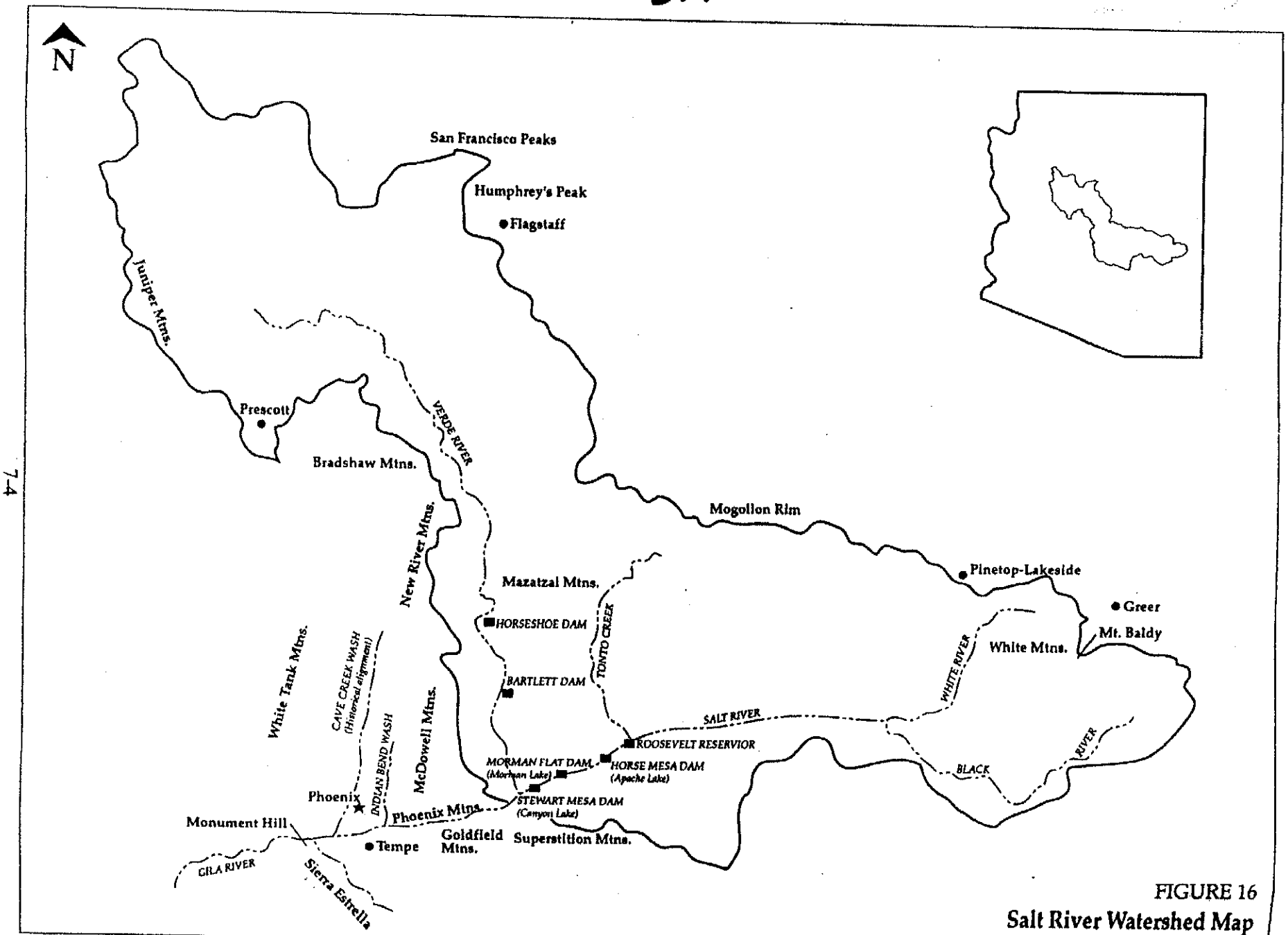

FIGURE 16
Salt River Watershed Map

PHX03403.SR.30/SR5-2

Ex D

Evidence Log

Hearing No. 03-005-NAV

Arizona Navigable Stream Adjudication Commission

Maricopa County, Lower Salt River
April 7—April 8, 2003

Item Number	Received Date	Source to ANSAC	Description	Entry By
1	05/15/96	Evidence on Hand-Arizona SLD, CH2M Hill, SWCA Environmental Consultants, and Arizona Geological Survey.	December 1993 Arizona Stream Study for the Salt River: Granite Reef Dam to the Gila River Confluence. December 1993 final report.	George Mehnert
2	05/16/96	Evidence on Hand-Bob Hoffman.	May 7, 1996 letter from Bob Hoffman to Henry Evans.	George Mehnert
3	06/10/96	Evidence on Hand-Dorothy Riddle.	June 7, 1996 letter.	George Mehnert
4	06/12/96	Evidence on Hand-William W. Quinn, Attorneys for Salt River Pima-Maricopa Indian Community.	Pleadings and other documents in two separate acco fastened volumes.	George Mehnert
5	06/20/96	Evidence on Hand-Sally Worthington, Helm & Kyle.	Letter and other documents including maps.	George Mehnert
6	08/27/96	Evidence on Hand-Mark McGinnis, Salmon, Lewis & Weldon.	Letter and other documents.	George Mehnert
7	08/29/96	Evidence on Hand-Arizona SLD, CH2M Hill, SWCA Environmental Consultants, and Arizona Geological Survey.	September 1996 updated report of December 1993 Arizona Stream Study for the Salt River: Granite Reef Dam to the Gila River Confluence.	George Mehnert
8	08/30/96	Evidence on Hand-Burton Levinson, Chicago Title Ins Co., etal.	August 30, 1996 cover letter and various documents.	George Mehnert

Ex E

Evidence Log Continuation Page

Hearing No. 03-005-NAV

Arizona Navigable Stream Adjudication Commission

Maricopa County, Lower Salt River
April 7—April 8, 2003

Item Number	Received Date	Source	Description	Entry By
9	08/30/96	Evidence on Hand-David Baron, Arizona Center for Law in the Public Interest.	August 30, 1996 cover letter and exhibits.	George Mehnert
10	08/30/96	Evidence on Hand-Arizona Center for Law in the Public Interest.	Title: Material Relevant to both Salt and Gila Rivers.	George Mehnert
11	08/30/96	Evidence on Hand-Arizona Center for Law in the Public Interest.	Exhibits submitted by Arizona Center for Law in the Public Interest.	George Mehnert
12	09/25/96	Evidence on Hand-James Callahan, attorney, City of Phoenix.	Exhibits submitted on behalf of the City of Phoenix, one manila file folder and 2 expanding file folders.	George Mehnert
13	10/11/96	Evidence on Hand-E. Kent Foree, attorney, City of Tempe.	Exhibits submitted on behalf of the City of Tempe.	George Mehnert
14	10/08/96	Evidence on Hand-Duane L. Shroufe, Director, AZ Game & Fish.	Exhibits submitted by the Game and Fish Department.	George Mehnert
15	10/02/96	Evidence on Hand-Snell and Wilmer	Various items submitted, contained in 2 expanding folders.	George Mehnert
16	12/09/96	Evidence on Hand-Douglas Littlefield	Assessment of the Salt River's Navigability Prior to and on the Date of Arizona's Statehood, February 14, 1912.	George Mehnert
17	12/11/96	Evidence on Hand-James Callahan, attorney, City of Phoenix.	Exhibits submitted on behalf of the City of Phoenix.	George Mehnert
18	12/11/96	Evidence on Hand-James Callahan, attorney, City of Phoenix	Updated resume of Doug Kupel and resume of Thomas Buschatzke, and exhibits submitted on behalf of the City of Phoenix.	George Mehnert
19	02/13/97	Evidence on Hand-William P. Burger, Arizona Game and Fish Department.	Letter.	George Mehnert

Evidence Log Continuation Page

Hearing No. 03-005-NAV

Arizona Navigable Stream Adjudication Commission

Maricopa County, Lower Salt River
April 7—April 8, 2003

Item Number	Received Date	Source	Description	Entry By
20	02/18/97	Evidence on Hand-David Baron, Arizona Center for Law in the Public Interest.	Testimony Relevant to Salt River, Granite Reef Dam to the Gila River Confluence.	George Mehnert
21	03/18/97	Evidence on Hand-Jack & Mary Smallhouse.	Tape and transcript of taped testimony of Kingston Smallhouse.	George Mehnert
22	03/13/03	Sally Worthington, Helm & Kyle for Maricopa County Department of Trans.	Letter and attached exhibits. Added CV of Hjalmar W. Hjalmarson, P.E. given by John Helm at hearing on 4/7/03.	George Mehnert
23	03/28/03	Mark McGinnis for SRP	Letter and attachments – The Salt & Gila Rivers in Central Arizona.	George Mehnert
24	04/01/03	Mark McGinnis for SRP	Salt River Centennial by Tammy LeRoy.	George Mehnert
25	04/01/03	Mark McGinnis for SRP	Information Regarding Navigability of Selected Watercourses.	George Mehnert
26	04/02/03	Mark McGinnis for SRP	Geomorphic Character of the Lower Salt River.	George Mehnert
27	04/03/03	Thomas McKinley, and Diane Brossart	Letter from Valley Forward-one page	George Mehnert
28	04/03/03	Charlotte Benson for the City of Tempe	Letter and 10 documents plus book "Vision in the Desert" by Jack August.	George Mehnert
29	04/03/03	James Callahan for the City of Phoenix	Joint report by Dr. Doug Kupel and Ellen Endebrock.	George Mehnert
30	04/07/03	Jon Fuller, engineer, witness.	Submitted at hearing—April 2003 updated report.	George Mehnert
31	04/07/03	Jack August, historian, witness.	Submitted at hearing—The Lower Salt: A Non-navigable Stream.	George Mehnert

Evidence Log Continuation Page

Hearing No. 03-005-NAV

Arizona Navigable Stream Adjudication Commission

Maricopa County, Lower Salt River
April 7—April 8, 2003

Item Number	Received Date	Source	Description	Entry By
32	04/07/03	Stephanie Nowack, Tempe Convention & Visitors Bureau.	Submitted at hearing—Letter from Tempe Convention & Visitors Bureau.	George Mehnert
33	04/07/03	Charles L. Cahoy, Mesa City Attorney's Office.	Submitted at hearing—Pleading entitled City of Mesa's Submission of Evidence and attached documents.	George Mehnert
34	04/07/03	Alan Gookin, engineer, witness.	Submitted at hearing—Document entitled Presentation to Arizona Stream and Navigability Commission.	George Mehnert
35	04/07/03	Mark McGinnis, attorney, SRP.	Submitted at hearing—Accounts of Salt River Boating.	George Mehnert
36	04/07/03	David Roberts, SRP.	Submitted at hearing—PowerPoint printouts, "The Historical Development and Use of Water from the Salt River in the Salt River Valley.	George Mehnert
37	04/07/03	Michael J. Pearce for Arizona Chamber of Commerce	Submitted at hearing—Letter, one page.	George Mehnert
38	04/07/03	Michael J. Pearce for Home Builders Association of Central Arizona.	Submitted at hearing—Letter, two pages.	George Mehnert
39	04/08/03	John Helm, for Maricopa County.	Submitted at hearing—Deposition of Douglas R. Littlefield	George Mehnert
40	04/08/03	Patrick Quinn, for Qwest.	One page letter.	George Mehnert
41	04/08/03	Ted Mullen, for Stockyards Restaurant	One page letter.	George Mehnert
42	04/08/03	Jay Kaprosy, for Greater Phoenix C of C.	One page letter.	George Mehnert
43	04/08/03	Roc Arnett, for East Valley Partnership.	One page E-mail submission.	George Mehnert

Evidence Log Continuation Page

Hearing No. 03-005-NAV

Arizona Navigable Stream Adjudication Commission

Maricopa County, Lower Salt River
April 7—April 8, 2003

Item Number	Received Date	Source	Description	Entry By
44	04/09/03	Richard Foreman, for Southwest Gas Corp	One page letter postmarked 04/04/03.	George Mehnert
45	04/09/03	Deborah Abele, for Papago Salado Assn., Inc.	One page letter postmarked 04/07/03.	George Mehnert
46	04/11/03	Charlotte Benson, for City of Tempe.	Copies of PowerPoint slides offered by Chris Anaradian during testimony on 04/07/03.	George Mehnert
47	04/11/03	Don Keuth, for Phoenix Community Alliance.	One page letter postmarked 04/07/03.	George Mehnert
48	04/11/03	Dave Iwanski, for Arizona Association of Conservation Districts.	Two page letter with one page map, post-marked 04/07/03.	George Mehnert
49	04/11/03	Diane B. McCarthy, for Westmarc, Western Maricopa Coalition.	One page letter postmarked 04/08/03.	George Mehnert
50	04/15/03	Roger Baele, for Friends of West Valley Recreation Corridore.	One page letter not postmarked, but bearing a date of April 9, 2003, a date following the CLOSE OF EVIDENCE, April 8, 2003.	George Mehnert
51	04/24/03	Mark McGinnis	Slides presented by Stanley Schumm at the hearing on April 7, 2003. Submitted following the hearing per the Commission.	George Mehnert

Meeting Minutes
Phoenix, Maricopa County
Hearing Regarding the Lower Salt River River in Maricopa County
April 7 & 8, 2003

COMMISSION MEMBERS PRESENT
Jay Brashear, Dolly Echeverria, Earl Eisenhower, James Henness, and Cecil Miller

COMMISSION MEMBERS ABSENT
None.

STAFF PRESENT
Curtis Jennings, George Mehnert, Tom Vogt.

1. CALL TO ORDER
Chair Eisenhower called the meeting to order at approximately 9:15 a.m. on April 7, 2003

2. ROLL CALL
All Commissioners present.
Following roll call Chair Eisenhower explained some house keeping rules.

3. LOWER SALT RIVER WATERCOURSE NAVIGABILITY HEARING (discussion and action).

The following people appeared and gave testimony or asked questions on Apil 7, 2003: Jon Fuller, Laurie Hachtel, Mark McGinnis, Charlotte Benson, Chris Anaradian, Vera Kornylak, Grady Gammage Jr., Steve Wene, John Helm, Doug Martin, Doug Martin, Dave Nichols, Winn Alverson, Allen Gookin, David Littlefield, Stanley Schumm, David Roberts, Michael Pearch, Diane Flaaen.

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.)

Chairman Eisenhower recessed the hearing at approximately 3:45 p.m. to reconvene the following day.

CONTINUATION OF THE HEARING REGARDING THE NAVIGABILITY OF THE LOWER SALT RIVER TOOK PLACE ON APRIL 8, 2003.

Ex F-1

Chair Eisenhower called the meeting to order at approximately 9:00 a.m. on April 8, 2003. All Commission members were present and staff present were attorney Curtis Jennings, director George Mehnert, and research assistant Tom Vogt.

CONTINUATION OF LOWER SALT RIVER WATERCOURSE NAVIGABILITY HEARING FROM APRIL 7, 2003 (discussion and action).

The following people appeared and gave testimony or asked questions on Apil 8, 2003: Senator Russell Bowers, Charlotte Benson, James Braselton, Diane Flaaen, Grady Gammage, Jr., Laurie Hachtel, John Helm, Vera Kornylak, Mark McGinnis, Michael Pearch, Steven Wene.

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.)

Motion: To adjourn.
Motion by: Jim Henness Second by: Cecil Miller Vote: All aye
Meeting adjourned at approximately 9:30 a.m.

Respectfully submitted,

George Mehnert, Director **Date: April 10, 2003**

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
Phoenix, Maricopa County, Arizona
January 27, 2004

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

COMMISSION MEMBERS ABSENT
None.

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

1. **CALL TO ORDER.**
   Chairman Eisenhower called the meeting to order at approximately 08:15 a.m.
2. **ROLL CALL.**
   See above.
3. **APPROVAL OF MINUTES.**

A. **Minutes of January 22, 2004.**
   Motion: To approve minutes.
   Motion by: Jim Henness. Second by: Dolly Echeverria. Vote: All aye.

4. **VOTE TO DETERMINE THE NAVIGABILITY OR NON-NAVIGABILITY OF THE GRAHAM COUNTY SMALL AND MINOR WATERCOURSES, Cause Number 03-006-NAV.**
   Motion: Non-Navigable.
   Motion by: Jay Brashear. Second by: Cecil Miller. Vote: All aye.
5. **VOTE TO DETERMINE THE NAVIGABILITY OR NON-NAVIGABILITY OF THE GREENLEE COUNTY SMALL AND MINOR WATERCOURSES, Cause Number 03-008-NAV.**
   Motion: Non-Navigable.
   Motion by: Jim Henness. Second by: Dolly Echeverria. Vote: All aye.
6. **VOTE TO DETERMINE THE NAVIGABILITY OR NON-NAVIGABILITY OF THE SAN FRANCISCO RIVER, Cause Number 03-010-NAV.**
   Motion: Non-Navigable.
   Motion by: Jim Henness. Second by: Dolly Echeverria. Vote: All aye.

Ex F-2

7. **VOTE TO DETERMINE THE NAVIGABILITY OR NON-NAVIGABILITY OF THE BLUE RIVER, Cause Number 03-011-NAV.**

Mr. Brashear said that he recalled reading about one attempt to float logs down the Blue River to be used as timbers in the mines around Morenci, and Mr. Brashear indicated this effort to float logs down the Blue River was strong evidence of non-navigability because it was done only one time, and was never tried again Mr. Brashear further stated, that if the river had been navigable, floating logs down the river would have occurred more than one time. Mr. Brashear said while the evidence seems to be a little murky, this single attempt and no further attempts to float logs, is evidence that the Blue River was not navigable.

Motion: **Non-Navigable.**

Motion by: Jay Brashear. Second by: Jim Henness. Vote: All aye.

8. **VOTE TO DETERMINE THE NAVIGABILITY OR NON-NAVIGABILITY OF THE LOWER SALT RIVER, Cause Number 03-005-NAV.**

Motion: **Non-Navigable.**

Motion by: Cecil Miller. Second by: Dolly Echeverria.

Discussion: The only discussion was by Commissioner Brashear. *(Although the following is written in the form of a verbatim statement, it is not intended to be verbatim, but, rather, substantially correct and complete):*

Mr. Chairman. I would like to offer a few observations on the Lower Salt (River) because I think this is one of the most critical decisions and important decisions that this Commission will make and I came to some conclusions on it. I would like to unveil a few of those to the Commission and see if they find me wrong or that I deserve to be corrected before we take the vote. I had something of a struggle with some of the argument that the river, the Lower Salt, was navigable but for man's interference. Man's interference screwed up the river and brought that into question, and this led me to ponder the problem of nature and navigability. It seems to me that there is one view which I discard and that is that you have to consider the river without any human presence around it. That leads me to a further conclusion that if; it is like the philosophy 101 thing that if a tree falls in a forest and there is no one around to hear it fall, did it make a noise when it fell? How can you have a navigable waterway with no human kind to float on it? And it seems to me like the experience on this Commission is that at a very minimum we need some lawyers to argue about whether it was navigable or not, and, so I kind of dismissed the Bambi school of nature when it comes to navigability. Man is a part of nature whether we like it or not, and so I don't think he can be dismissed entirely from these considerations. I don't think it makes any difference whether man was here or not however, to the other characteristics of the river. It seems like the way it was described in the evidence, that it is kind of

an ornery and erratic critter; it's kind of a river in search of a streambed and when it floods it moves cubic yards or maybe cubic kilometers of earth around to make certain that it will never find where it really belongs. In more normal times the river shifts through its own flood stream some of it meandering into other streams. It also may settle into a shallow stream or it may dry up entirely; and those just do not seem to me that they are characteristics that lend to any kind of navigability or susceptibility of navigability.

And I think that there were some other things, some legal decisions that I found very pertinent. Two federal judges, Judge Kibby in 1892 and Kent in 1910 regarding allocating water for the Salt River both declared the river as non-navigable. Now, I have been told by my lawyer friends that this really doesn't count for much because they did not do a particularized assessment of the river, and that their declaration of non-navigability is dicta. And while that may hold some status or standing in law, common sense says to me that if two federal judges, years apart, would not have made allocations of that river to suck it dry if there had been any potential for any use of it as a navigable stream. And I wanted to argue about that because in the middle; between the Kibby and the Kent decrees, the congress enacted the federal rivers and harbors act in 1899 and the idea of that act, apparently of great concern on the part of congress, was to protect the nation's navigable rivers. In 1902 the congress appropriated funds for the construction of Roosevelt dam. If there was this concern in congress about navigable streams it seems unlikely to me that a successful act in congress to block a navigable river would stand much of a chance. And then I think the final evidence on the thing that is mentioned in the evidence is that a boat was constructed to be used in the construction of Roosevelt dam and the boat was hauled overland to get to the construction site and it certainly seems to me that if there had been, even with some manipulation of the stream bed, that if they could have got that boat up to the site by stream, it would have been done rather than moving it over what in 1912 must have been rather primitive roads and difficult conditions. Then there is some argument in the material that was submitted to us that ferries establish evidence of navigability and I have some problem with that because if a stream is navigable and if you build a ferry across it, and it was mentioned in the evidence that one of them broke loose, and apparently you put cables and ropes and stuff to guide the ferry back and forth across. It seems to me that a ferry would certainly not indicate navigability because a cable or something stretched across the stream would interfere with the flow up and down the stream and the use of the Salt as a highway of commerce. So I don't think the ferry argument stands, at least, my test and there was some other evidence at attempts of navigability; one of them floating logs and another about fish catch and stuff. However, those mostly were based on newspaper accounts and having spent a long time in that field I can tell you that newspapers then as now report unusual

activities not common and ordinary activities. Some of those articles were written tongue in cheek. One of them I recall was about the Salt River Admirals or something, and I think that those actually offer evidence that the Salt was not navigable. There were attempts; one of them was floating logs and some other activities that didn't work and the (newspaper) reporting of them at the time; much of which was tongue in cheek, just don't add up to evidence that the river was navigable. So in view of this I have decided, and I am open to argument that I am wrong from the Commission, that the Salt River was non-navigable at the time of statehood, and was not susceptible to navigation.

Vote: All aye.

9. **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.)

There was no public comment.

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

11. **ADJOURNMENT.**

Motion: **To adjourn.**

Motion by: Jim Henness. Second by: Dolly Echeverria. Vote: All aye.

Meeting adjourned at approximately 08:40 a.m.

Respectfully submitted,

George Mehnert, Director, January 23, 2004
Navigable Stream Adjudication Commission