

received

9-7-12



1 John B. Weldon, Jr., 003701
2 Mark A. McGinnis, 013958
3 Scott M. Deeny, 021049
4 **SALMON, LEWIS & WELDON, P.L.C.**
5 2850 East Camelback Road, Suite 200
6 Phoenix, Arizona 85016
7 (602) 801-9060
8 jbw@slwplc.com
9 mam@slwplc.com
10 smd@slwplc.com

11 *Attorneys for Salt River Project Agricultural*
12 *Improvement and Power District and Salt*
13 *River Valley Water Users' Association*

14 **BEFORE THE ARIZONA NAVIGABLE STREAM**
15 **ADJUDICATION COMMISSION**

16 In re Determination of Navigability of
17 the Upper Salt River

No. 04-008-NAV

**SALT RIVER PROJECT'S
MEMORANDUM REGARDING
WHETHER UPPER SALT RIVER
WAS NAVIGABLE IN ITS
"ORDINARY AND NATURAL
CONDITION"**

18 Pursuant to the Commission's order at its meeting held on June 29, 2012, the Salt
19 River Project Agricultural Improvement and Power District and Salt River Valley Water
20 Users' Association (collectively, "SRP") submit their memorandum regarding whether the
21 Upper Salt River ("Upper Salt") was navigable in its "ordinary and natural condition." *See*
22 *State v. Arizona Navigable Stream Adjudication Comm'n*, 224 Ariz. 230, 229 P.3d 242 (App.
23 2010) ("*State v. ANSAC*"). The Upper Salt was not navigable in its "ordinary and natural
24 condition," or in any other condition.

25 **I. The Proponents of Navigability Bear the Burden of Proving that the Upper Salt is**
26 **Navigable.**

27 In prior decisions, the Arizona courts have held the proponents of navigability bear the
burden of proving that a river is navigable. *See Arizona Ctr. for Law in the Public Interest v.*

1 *Hassell*, 172 Ariz. 356, 363 n.10, 837 P.2d 158, 165 n.10 (App. 1991); *Land Dep't v.*
2 *O'Toole*, 154 Ariz. 43, 46 n.2, 739 P.2d 1360, 1363 n.2 (App. 1987); *Defenders of Wildlife v.*
3 *Hull*, 199 Ariz. 411, 420, 18 P.2d 722, 731 (App. 2001). The Arizona statutes further support
4 this allocation of the burden. In order for the Commission to determine that a particular
5 watercourse is "navigable," the proponents of navigability must establish that fact by a
6 "preponderance of the evidence." See A.R.S. § 37-1128(A). If sufficient evidence is not
7 presented to show navigability for a particular watercourse, the Commission must find the
8 watercourse non-navigable. *Id.*

9 **II. The Court of Appeals' Decision Likely Requires the Commission to Consider the**
10 **Upper Salt in Its "Ordinary and Natural Condition."**

11 At least for purposes of the present phase of this proceeding, the Arizona Court of
12 Appeals' decision in *State v. ANSAC* likely is controlling law that the Commission must
13 follow. 224 Ariz. at 230, 229 P.3d at 242.¹ Relying in large part upon the dictionary
14 definition of "natural," the court found that the Lower Salt River must be considered as if it
15 were "untouched by civilization." *Id.* at 241, 229 P.3d at 253. The court stated: "[W]e
16 conclude that ANSAC was required to determine what the [Lower Salt] River would have
17 looked like on February 14, 1912, in its ordinary (i.e., usual, absent major flooding or drought)
18 and natural (i.e., without man-made dams, canals, or other diversions) condition." *Id.*
19 Although the court correctly determined that ANSAC (in its September 2005 final report) had
20 taken into consideration the impact of Roosevelt Dam on the character of the Lower Salt, *id.*
21 at 240, 229 P.3d at 253, the court found insufficient evidence in the report to conclude that the
22 Commission also had considered the impact of other man-made dams and diversions. *Id.*

23 In addressing what constituted the "ordinary and natural condition" of the Lower Salt
24 River, the Court of Appeals first started with the time "before the Hohokam people arrived
25

26 ¹ The Arizona Supreme Court has not yet addressed the "ordinary and natural" issue. The Court
27 denied discretionary review of the Court of Appeals' decision in *State v. ANSAC*, and the case was
remanded to the superior court and then to the Commission for further proceedings. 224 Ariz. at 245,
229 P.3d at 257.

1 many centuries ago and developed canals and other diversions that actively diverted the
2 River.” *State v. ANSAC*, 224 Ariz. at 242, 229 P.3d at 254. Recognizing that “little if any
3 historical data exists from that period” and that the river “largely returned to its natural state”
4 after the Hohokam disappeared, the court found that “the River could be considered to be in
5 its natural condition after many of the Hohokam’s diversions had ceased to affect the River,
6 but before the commencement of modern-era settlement and farming in the Salt River Valley.
7 ...” *Id.*

8 Although the Court of Appeals determined that “evidence from that early period
9 should be considered by ANSAC as the best evidence of the River’s natural condition,” 224
10 Ariz. at 242, 229 P.3d at 254, the court also recognized that evidence from later (or earlier)
11 periods could have probative value. *Id.* at 243, 229 P.3d at 255. ANSAC has authority to
12 consider such evidence and to give it the appropriate weight. *Id.* The court rejected
13 arguments by the proponents of navigability that any evidence dated after the commencement
14 of man-made diversions should be thrown out and disregarded. “Even if evidence of the
15 River’s condition after man-made diversions is not dispositive, it may nonetheless be
16 informative and relevant.” *Id.*

17 The issue of pre-statehood diversions and other man-made features is much less
18 significant for the Upper Salt than it is for the Lower Salt. There were few early diversions of
19 water on the Upper Salt, which runs primarily through remote areas and narrow canyons. The
20 primary man-made impacts on the Salt River in the Upper Salt region were Roosevelt Dam
21 (completed in 1911) and the other large storage dams (thereafter). No party has contended
22 that the Commission has failed to take the existence of those dams into consideration (i.e., to
23 “back them out” of the analysis) in determining whether the Upper Salt was navigable in its
24 “ordinary and natural condition.”

25 ...

26 ...

27 ...

1 **III. Evidence in the Record**

2 The parties have submitted voluminous documents and extensive expert testimony
3 regarding the Upper Salt to the Commission. A review of that evidence shows that the Upper
4 Salt was not navigable in its “ordinary and natural condition.”

5 With respect to the Upper Salt, this question is perhaps best answered by the 1873
6 exploits of Charles Hayden, who was the founder and a long-time resident of Tempe and the
7 father of United States Senator Carl Hayden. Mr. Hayden attempted to boat the Salt River in
8 an effort to determine whether it was susceptible to the flotation of logs from the mountain
9 forests to Tempe:

10 The Hayden party, left up Salt River to come down in a canoe and drive some
11 logs with them, have returned, and pronounce the scheme a failure. With much
12 toil and difficulty, on account of rapids and boulders in the river, they ascended
13 a long way when, having lost their arms, ammunition and provisions, excepting
14 flour, they arrived in a canon so narrow as not to admit of the passage of a log,
15 and were compelled to abandon their boat and foot it. Mr. Hayden is still
sanguine of getting sufficient timber on this side of the canons [*Arizona Weekly
Miner 1873c*].

16 See JE Fuller/Hydrology & Geomorphology, Inc., *Arizona Stream Navigability Study for the*
17 *Salt River: Granite Reef Dam to the Confluence of the White and Black Rivers 2-1* (revised
18 June 2003) [EI 27] (“Fuller”).

19 If there was ever a person who had the incentive and ability to undertake commercial
20 navigation on the Upper Salt, it was Charles Hayden. He owned and operated the flour mill
21 and related works in Tempe, so he could have profited substantially if the Upper Salt had
22 been commercially navigable. Furthermore, his attempt was made in 1873, a time prior to
23 many of the irrigation diversions from the river, and it took place upstream from those
24 diversions that did exist at the time. Mr. Hayden’s 1873 “failure” to float logs down the river
25 is persuasive evidence that the river was not navigable in its “ordinary and natural condition.”

26 The Commission solicited and received a large amount of evidence with respect to the
27 navigability of the Upper Salt. The Commission held two hearings, in two different county

1 seats. The transcript of the October 2005 Phoenix hearing consists of 169 pages.² This
2 evidence supports a finding that the Upper Salt is not navigable.

3 **A. History of the Upper Salt**

4 The historical evidence introduced in this proceeding does not support a finding that
5 the Upper Salt was navigable in its “ordinary and natural condition.”

6 **1. The prehistoric Salt River**

7 The report submitted by the State Land Department’s (“SLD”) consultants, and their
8 hearing testimony, provide evidence regarding the condition of the Upper Salt in the period
9 before settlement by non-natives. “Although the archaeological data suggests few changes in
10 the flow regime in the Upper Salt River and little in the way of agricultural diversions or
11 impediments to navigation, archaeological research has not documented any use of the river
12 for commercial trade and travel or for any regular flotation of logs.” *See Fuller, supra*, at 2-1.
13 In fact, Mr. Fuller testified at the hearing that archaeological research has revealed no
14 evidence of any prehistoric boating on the river (commercial or otherwise) or any flotation of
15 logs (regular or irregular). Tr. at 28-29 (Fuller).

16 The degree of early habitation in the area of the Upper Salt (especially in its uppermost
17 reaches) was substantially less than that in the Lower Salt area. Thus, the impact of
18 prehistoric water diversions was less than for the Lower Salt, and the pre-Hohokam condition
19 of the Upper Salt was more similar to its “ordinary and natural condition.” Regardless, no
20 evidence exists of any navigation on the Upper Salt during prehistoric times. The Upper Salt
21 was not navigable.

22 **2. Early exploration of the Upper Salt**

23 Under the Court of Appeals’ standard, evidence of the time when early explorers
24 ventured into the area, beginning in the 1860s, is perhaps “the best evidence of the River’s
25 natural condition.” *State v. ANSAC*, 224 Ariz. at 242, 229 P.3d at 254. Despite submission of
26 extensive documentation from this period, no evidence exists that any of the early explorers

27 _____
² “Tr. at [page]” refers to the Reporter’s Transcript of the October 20, 2005 hearing.

1 who ventured into the area ever used the Upper Salt as a means of transportation or
2 commerce. Francisco Vasquez de Coronado, for example, is reported to have used rafts on
3 the Salt River, but the evidence shows that Coronado used the rafts only to cross the river (not
4 to travel up or down it), and the evidence also suggests that Coronado's use of the river was
5 perhaps on some other river entirely. *See Fuller, supra*, at 3-4, 3-9; Tr. at 29 (Gilpin).
6 Trappers such as James Ohio Pattie and Ewing Young are reported to have traveled along the
7 river, but all indications are that their travels were by foot or on horseback, not in boats or
8 canoes, even though these same trappers are known to have used canoes on the navigable
9 Colorado River during these same trips. *See Fuller, supra*, at 3-6; Tr. at 29-30 (Gilpin). In
10 1849, Lt. Beckwith traveled from present-day New Mexico to the Upper Colorado River, and
11 a portion of his route appears to have included the Salt River. Again, however, the evidence
12 shows that his travels along the river were by foot or on horseback, not in a boat or a canoe.
13 *See Fuller, supra*, at 3-9; Tr. at 29-30 (Gilpin).

14 Of the many early explorers who traveled near or along the Upper Salt, no evidence
15 exists that any of them ever used a boat to travel on the river, upstream or downstream. *See*
16 Tr. at 29-30 (Gilpin). The travels of each of these individuals took them along the Upper Salt.
17 *Id.* If the river had been navigable in its "ordinary and natural condition," it surely would
18 have been easier for them to travel by boat rather than by foot or on horseback.

19 3. Federal land surveys and patents

20 Another group of individuals who were present in the area at a relatively early date
21 were the federal land surveyors who were responsible for conducting the rectangular survey
22 in the new territory. As Dr. Douglas Littlefield testified during the October 2005 hearing,
23 each of these surveyors was under specific instructions to distinguish between navigable and
24 non-navigable streams.³ None of these Government representatives ever once indicated that
25 the Upper Salt was navigable. *See Littlefield, supra*, at 32-44. "Significantly, surveys

26 ³ *See Littlefield, Assessment of the Parts of the Upper Salt River and Tonto Creek Between Granite*
27 *Reef Dam and the Inundation Lines of Roosevelt Lake Prior to and On the Date of Arizona's*
Statehood, February 14, 1912, at 9-32 (October 5, 2005) [EI 29]; Tr. at 111-17 (Littlefield).

1 undertaken for the Upper Salt River above Granite Reef Dam and Tonto Creek and below the
2 inundation lines of Theodore Roosevelt Lake gave no indication that the federal surveyors in
3 charge of the work believed either stream to be navigable.” *Id.* at 44.

4 Similarly, the federal and state land patents issued along the river are persuasive
5 evidence of non-navigability. The Federal Government granted eighteen separate patents that
6 touched or overlay the lower portions of the Upper Salt and Tonto Creek to private
7 individuals. *See id.* at 59; Tr. at 117-23 (Littlefield). In not one case did any of those patents
8 (or the supporting patent files) indicate that acreage was being withheld because the river was
9 navigable. *See Littlefield, supra*, at 60; Tr. at 117-23 (Littlefield). Dr. Littlefield,
10 summarizing his conclusions based upon hundreds of hours of historical research from a wide
11 variety of sources (including survey records, land patents, other government documents, and
12 newspapers), stated: “From this wealth of information, covering the huge array of
13 documentary sources, only one conclusion can be reached: The Upper Salt River and Tonto
14 Creek were not navigable on or before February 14, 1912.” Littlefield, *supra*, at 139.

15 4. The Upper Salt from the 1870s to 1911

16 Water diversion and irrigation in the Valley began in earnest after the 1870s.
17 According the Court of Appeals’ opinion, even if evidence from the period between the 1870s
18 and statehood (1912) is not dispositive, “it may nonetheless be informative and relevant.”
19 *State v. ANSAC*, 224 Ariz. at 243, 229 P.3d at 255.

20 a. Water storage efforts

21 For instance, evidence of the local community’s efforts to build a water storage project
22 on the Salt River is relevant on the issue of whether the river was navigable in its “ordinary
23 and natural condition.” Among the things had to happen before the United States
24 Government could build Roosevelt Dam was that the Government needed to obtain lumber to
25 build the framework for the masonry dam.⁴ A sawmill was constructed in the Sierra Ancha

26
27 ⁴ *See K. Smith, The Magnificent Experiment: Building the Salt River Reclamation Project, 1890-1917*, at 72 (1986) [EI 16].

1 Mountains, upstream from the dam site.⁵ “The lumber road was, by necessity, the first piece
2 of construction on the project; wood was needed for construction of the permanent camp,
3 culverts, and bridges for the roads, tunnel timbering, and building forms for concrete
4 structures.” Smith, *supra*, at 73; *see also* Zarbin, *supra*, at 75.

5 At that time, neither Roosevelt Dam nor any other storage dams on the Upper Salt
6 were constructed, and both the sawmill and the Roosevelt Dam site were upstream from any
7 significant water diversions on the river. Thus, although this segment of the river was still in
8 its “ordinary and natural condition” at the time, the Government built a road to cover the
9 twenty-three miles from the sawmill to the dam site. The historical record contains no
10 mention of floating the timber downstream on the river. Rather, all of the timber was
11 transported from the sawmill to the dam site using the lumber road. *See* Smith, *supra*, at 73;
12 *see also* Zarbin, *supra*, at 75. If the Upper Salt had been navigable in its “ordinary and
13 natural condition,” it would have been a relatively easy task to float the logs down from the
14 sawmill to the dam site.

15 Similarly, the Government had to figure out a way to get workers and supplies from
16 Phoenix to the dam site. *See* Fuller, *supra*, at 3-21 to 3-22 (“Lumber, bricks, lime, fuel oil,
17 and other supplies had to be transported to the site.”). “[N]o freight road existed from the
18 construction site to Mesa . . . , and the road to Globe was treacherous, winding through
19 several mountain ranges.” *See* Smith, *supra*, at 73; Zarbin, *supra*, at 75. Again, this was
20 before the completion of Roosevelt Dam or any of the other storage dams and required
21 transport over the area upstream from Phoenix, where no significant early water diversions
22 existed. If the Upper Salt had been navigable, it would have been an easy task to float barges
23 or other vessels up the river to haul workers and supplies. Instead, the Government
24 constructed the Apache Trail (initially known as the Roosevelt Road), a remote, twisting route
25
26

27 ⁵ *See* Smith, *supra*, at 72-73; *see also* E. Zarbin, *Roosevelt Dam: A History to 1911*, at 89 (1984) [EI
14].

1 from Mesa to Roosevelt, including a stretch of eleven miles “in very rough country known as
2 Fish Creek Hill.” Zarbin, *supra*, at 76; *see also* Smith, *supra*, at 75.⁶

3 Construction of the Apache Trail required the work of at least 200 men and involved
4 the removal of rock and other material, primarily by hand. Smith, *supra*, at 75; Zarbin, *supra*,
5 at 77. These difficulties made construction of the road extremely expensive. The total cost of
6 building the road was \$350,644, in turn-of-the-century dollars.⁷ Zarbin, *supra*, at 104; *see*
7 *also* Smith, *supra*, at 76 (some portions of the road cost as much as \$25,000 per mile). Still,
8 no evidence exists in the record that the Government ever seriously considered transporting
9 workers or supplies up the Salt River using water-borne vessels.⁸

10 **b. Early attempts to boat the Salt River**

11 That the Federal Government never attempted to use the Salt River to transport
12 workers or materials from Phoenix to the Roosevelt Dam site during construction is perhaps
13 not surprising when one considers the record of those few persons who did attempt to
14 navigate the river. The recorded opinions on navigability by the participants themselves show
15 that the river was not suitable as a “highway for commerce.” As discussed above, for
16 instance, Charles Hayden and the other participants in a June 1873 trip to float logs down the
17 Salt River to Tempe “pronounce[d] the scheme a failure.” *See also* Tr. at 23 (Gilpin) (“In the
18 first instance, which was the Hayden experiment, they were unsuccessful.”).

19 **c. Commercial operations near the river**

20 The Upper Salt’s lack of susceptibility to navigation is further evidenced by the pre-
21 statehood commercial operations on the banks of the river that could have benefited greatly
22 from a direct water route to the Phoenix area. Despite this substantial potential benefit, no

23 _____
24 ⁶ Photographs of construction and early use of the Apache Trail appear in Zarbin, *supra*, at 91, 114,
133, and 146 and in Littlefield, *supra*, at 121-28.

25 ⁷ This amount is equivalent to more than \$7 million in 2005 dollars. *See* U.S. Department of Labor,
26 Bureau of Labor Statistics (www.bls.gov). This figure is particularly remarkable when one considers
27 that the road was constructed primarily by Apache Indians working at relatively low wage rates. *See*
Tr. at 127 (Littlefield).

⁸ *See also generally* Tr. at 125-26 (Littlefield).

1 evidence exists that any of these commercial entities ever used the Upper Salt as a “highway
2 for commerce.”

3 For example, Mr. Fuller reports that King Woolsey operated a salt works on the banks
4 of the river in the 1870s. *See Fuller, supra*, at 3-15; Tr. at 30-31 (Gilpin). This was prior to
5 the construction of any storage dams, prior to substantial water diversions, and miles
6 upstream from those few diversions that then existed. The river would have provided a direct
7 water route to Mesa, Tempe, or Phoenix if it had been navigable, but all evidence indicates
8 that Woolsey instead had to pack the loads of heavy salt out of the Salt River Canyon by land.
9 *See Fuller, supra*, at 3-15; Tr. at 30-31 (Gilpin).

10 Similarly, Mr. Fuller’s report notes that the completion of the Apache Trail in 1906
11 was an important event for the residents of Globe, giving them “a much shorter wagon route
12 to Phoenix than the existing road over the Pinal Mountains.” *Fuller, supra*, at 3-33.
13 Substantial pre-statehood mining activities occurred in the “Globe Mining District,” which
14 stretched from the Upper Salt to the Gila River. *See id.* at Appendix A (Historical Maps of
15 the Upper Salt River). By the early 1900s, Phoenix was a center of population and a
16 transportation hub. The Upper Salt constituted a direct route from the Globe Mining District
17 to Phoenix. This was before the construction of any storage dams, and this segment of the
18 river was upstream from any significant then-existing diversions. Still, no evidence exists
19 that any miner ever succeeded in (or even attempted) transporting ore down the river on
20 water. *See Tr.* at 35-36 (Gilpin).

21 5. Post-statehood use of the river

22 Although some modern-day boating occurs on the Upper Salt, the vast majority of this
23 takes place upstream from Roosevelt Dam. As Mr. Fuller noted in his report, boating below
24 Roosevelt is neither recommended nor regularly undertaken. *See Fuller, supra*, at 3-39 to 3-
25 40. The stretch of the river between Stewart Mountain Dam and Granite Reef Dam attracts
26 visitors using inner tubes. *Id.* at 3-40. The flows in this stretch of the river are, however,
27 largely dependent upon releases from the man-made reservoirs upstream. *See id.* at 5-3

1 (referring to "Reach 3"); Tr. at 23, 49-50 (Fuller). In addition, no evidence in the record
2 suggests that this lower stretch of the river can support travel by any boats (as opposed to
3 floating on your backside on a rubber tube). See Fuller, *supra*, at 3-40; Tr. at 23 (Fuller).

4 Boating upstream of Roosevelt Dam is sporadic at best, and largely consists of thrill-
5 seekers looking for a white-water adventure.⁹ "The 48 miles of river upstream from
6 Roosevelt Lake . . . is known nation-wide as a first-class whitewater river." U.S. Forest
7 Service, *Evaluation of Navigability at the Time of Statehood: Salt River 2* (January 1998) [EI
8 8] ("USFS"). The same braided channel and bedrock outcroppings that make commercial
9 transport difficult also make the river attractive to kayakers and others. "The gradient of the
10 river is one of the reasons for the wild ride encountered by today's boaters." *Id.* at 2-3. Even
11 this recreational activity occurs only under certain flow conditions that exist only in limited
12 portions of normal years, and some years exist in which the flows never reach the minimum
13 acceptable level even for these types of activities. See Tr. at 19, 21 (Fuller).

14 The presence of impediments to navigation, even for "daring adventurers," is further
15 buttressed by the 1993 conviction of eight men who used explosives to alter the rapids at
16 Quartzsite Falls, located above the mouth of Cherry Creek. See Fuller, *supra*, at 3-40; Tr. at
17 50. The purpose of this illegal action was to attempt to clear the river of rocks, rapids, and
18 other obstructions that made the river not susceptible to even the most basic and risky boating
19 efforts. See Fuller, *supra*, at 3-40; see also Tr. at 50 (Fuller) ("They were frustrated with the
20 tie-ups at that point."). Prior to this destruction, "[e]ven with modern technology, boaters
21 routinely portaged around this rapid. Such portages took two to four hours, even when
22 traveling light." USFS, *supra*, at 3-4.¹⁰ The rapids were "natural" impediments to irrigation.

23
24
25 ⁹ See Tr. at 19 (Fuller) ("The rafters are after the big water, it's the most fun, the people have the
26 biggest thrill ride for."); see also *id.* at 48-49 (Fuller).

27 ¹⁰ "Even though Quartzsite Falls would have been the most dangerous rapid encountered in 1912,
there are many others which would have been extremely dangerous to someone attempting sustained
trade and travel." USFS, *supra*, at 4.

1 Nothing in the historical record before this Commission indicates that the Upper Salt
2 was used or susceptible to being used as a “highway for commerce,” in its “ordinary and
3 natural condition” or otherwise. The historical evidence shows that the river is and always
4 has been non-navigable.

5 **B. Climate, hydrology, and geomorphology of the Upper Salt**

6 The other evidence in the record is similarly insufficient to constitute a “preponderance
7 of the evidence” in favor of navigability. All of the climatic evidence indicates that the desert
8 climate provided for brief, violent periods of precipitation and runoff, rather than the type of
9 weather that would produce a particularly large or regularly flowing stream. The hydrologic
10 evidence, which is limited in degree, shows that the river was erratic and never included
11 sufficient flows to support a “highway for commerce.” The geomorphic evidence shows that
12 the river was braided in long reaches and also contained bedrock controls, including
13 numerous rapids, that would be impediments to navigation.

14 Precipitation in the Salt River Valley and the adjoining watersheds “occurs during two
15 major seasons: in late summer as intense, localized orographic thunderstorms; and in winter
16 as large-scale cyclonic storms which originate over the Pacific Ocean.” Fuller, *supra*, at 4-4.
17 This weather pattern is reflected in the data relating to the monthly average flows of the river.
18 In Table 14 of his report, Mr. Fuller summed gauge data on the Upper Salt at Roosevelt and
19 the Verde River at Tangle Creek to yield an estimated combined flow number at the
20 confluence of the Salt and Verde Rivers (near the lower end of the reach at issue in this
21 proceeding). See Fuller, *supra*, at 5-18. That data shows a variation in monthly average
22 flows from 3,420 cubic-feet per second (“cfs”) in March to 501 cfs in June. See *id.* These
23 variable flows reflect the erratic nature of the Upper Salt, even on an average basis.

24 The hydrologic information submitted to the Commission is no more supportive of a
25 finding of navigability than is the climate data. There were few stream gauge records
26 available for this reach of the river at or before statehood. See Fuller, at 5-18. Due to this
27 almost complete lack of any real data, what Mr. Fuller did was to add the Upper Salt and

1 Verde figures discussed above and arrive at an estimate of average annual flow on the Upper
2 Salt River below its confluence with the Verde. *See id.* at 5-18 (Table 14).

3 The testimony shows that knowing the average annual flow of a river is of dubious
4 value in determining whether that river is or was “navigable,” however. The average annual
5 flow data is skewed due to high flood volumes relative to “typical” flow rates. For instance, a
6 flow of 285,000 cubic-feet per second (“cfs”) occurred during a flood in 1891 (one of the
7 years a modern-day historian thinks he recalls seeing an article about floating timber down the
8 river). *See Fuller, supra*, at 3-36. If that flood had lasted for only two days, the average
9 annual flow for the entire year 1891 would have been 1,561.5 (117 cfs more than the actual
10 annual average), even if there had been absolutely no flow whatsoever for any of the other
11 363 days that year. It should be beyond dispute that the Upper Salt cannot act as a “highway
12 for commerce” during a flood flow of 285,000 cfs. It is likewise indisputable that the river
13 cannot be navigated with 363 days of no flow. Knowing the average annual flow of an erratic
14 stream like the Upper Salt provides little information about whether that river is or ever was
15 navigable.¹¹

16 The geomorphic evidence in the record also refutes, rather than supports, a finding of
17 navigability. Substantial portions of the river consist of a braided channel, which is
18 associated with sand bars and other impediments to navigation.¹² Geomorphologist Dr.
19 Stanley Schumm stated, for example, that “many bedrock controls, including 18 rapids and
20 steep gradients ranging from 17 to 31 feet per mile,” exist in the river between Roosevelt
21 Lake and the Highway 60 bridge. *Id.* at 2. Dr. Schumm opined: “Clearly, the bedrock
22 controls along the Upper Salt River prohibit navigation.” *Id.*; *see also id.* at 5-8, 12; Tr. at 83-
23 89 (Schumm). These bedrock controls were “natural” impediments to navigation.

24
25 ¹¹ Knowing (or estimating) the “average depth” of a river is likewise of limited value to determining
26 whether it was “navigable.” *See* Tr. at 60-61 (Fuller).

27 ¹² *See* Schumm, *Geomorphic Character of the Upper Salt River* 1, 3-4, 9, 12 (January 2005) [EI 28]
 (“Schumm”).

1 Mr. Fuller reached a similar conclusion regarding the geomorphology of the Upper
2 Salt in his report:

3 Review of the geology of the Upper Salt River indicates that the channel
4 geomorphology is substantially unchanged from its condition at or before
5 statehood, except where the river has been inundated by reservoir
6 impoundments. Most of the Upper Salt River is formed in bedrock canyons.
7 Bedrock along the channel margins in these canyons precludes significant
8 movement of the river channel or other channel changes. In addition, the
9 bedrock geology of the Upper Salt River made access to the river difficult
10 during the period around statehood, prevented development of extensive
11 irrigation systems, and prevented the development of large population centers
12 near the river. Bedrock outcrops in the channel created waterfalls, rapids, and
13 narrow canyons which may have been potential impediments to navigation for
14 some types of boats such as keel boats, steamboats and powered barges.

15 Fuller, *supra*, at 4-15.¹³

16 **IV. The Upper Salt Was Not Navigable in Its “Ordinary and Natural Condition.”**

17 Upon reviewing the evidence and specifically considering the “ordinary and natural
18 condition” of the Upper Salt, the Commission should again find it non-navigable. “[A] river
19 is navigable in law when it is navigable in fact.” *Muckleshoot Indian Tribe v. FERC*, 993
20 F.2d 1428, 1431 (9th Cir. 1993). Thus, the Commission must consider all of the evidence in
21 the record before it. When the Commission reviews the evidence submitted, and considers
22 the totality of that evidence, it must again determine that the Upper Salt never has been used
23 as a “highway for commerce” and was not, in its “ordinary and natural condition” (or in any
24 other condition), susceptible to being used as a highway for commerce.

25 **A. The Upper Salt has never been used as a “highway for commerce.”**

26 A watercourse can meet the test for “navigability” under the Arizona statute and the
27 case law if it satisfies either of two elements: (1) If it was actually used as a “highway for

¹³ See also Fuller, *supra*, at 4-10 (“Historical accounts of boating the Upper Salt River describe the waterfalls and rapids, and sheer canyon reaches that lacked beaches or bars on which to land.”); *id.* at 5-6 (“Within the Upper Salt River study reach, the river is located almost entirely within steep bedrock canyons.”).

1 commerce,” or (2) if it, in its “ordinary and natural condition” at the time of statehood, was
2 “susceptible to being used” as a “highway for commerce.” *See* A.R.S. § 37-1101(5).¹⁴

3 It is beyond reasonable dispute that the Upper Salt has never been actually used as a
4 “highway for commerce.” No evidence exists of any prehistoric boating or flotation of logs
5 on the river. *See* Section III(A)(1), *supra*. Likewise, no evidence exists that the early
6 explorers or soldiers in the area, who traveled through the area on several occasions, ever
7 used the river—for “commerce” or otherwise. *See* Section III(A)(2), (3), *supra*. No credible
8 evidence exists in the record that any successful “tie drive” or any other effort to float logs or
9 timber down the river was ever conducted on the Upper Salt. *See* Section III(b), *supra*.¹⁵

10 **B. The Upper Salt was not, in its “ordinary and natural condition,”**
11 **susceptible to being used” as a “highway for commerce.”**

12 Because the evidence shows that the Upper Salt was never actually used as a “highway
13 for commerce,” the only way it can be considered navigable is if it was “susceptible” to such
14 use. No evidence exists in the record to show that the Upper Salt, in its “ordinary and natural
15 condition” or in any other condition, was capable of acting as “a corridor or conduit within
16 which the exchange of goods, commodities or property or the transportation of persons may
17 be conducted.” A.R.S § 37-1101(3) (defining “highway for commerce”).

18 Although the Upper Salt existed in relatively close proximity to much of the
19 exploration and settlement in early Arizona, it was never used for any type of trade or
20 transportation.¹⁶ In order for the Commission to determine that the river was “susceptible to

21 ¹⁴ “For state title purposes under the equal-footing doctrine, navigability is determined at the time of
22 statehood . . . and based on the ‘natural and ordinary condition’ of the water.” *PPL Montana LLC v.*
Montana, 132 S. Ct. 1215, 1228 (2012).

23 ¹⁵ Even the SLD’s hydrologist conceded that the river “in its ordinary and natural condition is not
24 suitable” for navigation such as “hauling cattle or hauling salt from the salt mines.” Tr. at 145
(Fuller).

25 ¹⁶ “Navigability must be assessed as of the time of statehood, and it concerns the river’s usefulness
26 for ‘trade and travel,’ rather than for other purposes.” *PPL Montana*, 132 S. Ct. at 1233. “Mere use
27 by initial explorers or trappers who may have dragged their boats in or alongside the river despite its
nonnavigability in order to avoid getting lost, or to provide water for their horses or themselves, is not
enough.” *Id.*

1 being used . . . as a highway for commerce,” it must find that the prehistoric inhabitants, the
2 early explorers, the soldiers at Fort McDowell, Mr. Woolsey who operated a salt works on the
3 banks of the river, the miners in Globe, and thousands of citizens who resided in the general
4 area prior to statehood simply failed to comprehend the potential usefulness of the river as an
5 avenue for navigation. No evidence exists to support such a finding.

6 It might be theoretically possible that, on one or more occasions in particular years, it
7 would have been feasible for a person to boat or float logs down some portion of the river.
8 Occasional use in exceptional times does not, however, support a finding of navigability.
9 “The mere fact that a river will occasionally float logs, poles, and rafts downstream in times
10 of high water does not make the river navigable.” *United States v. Crow, Pope & Land Ents.,*
11 *Inc.*, 340 F. Supp. at 32 (citing *United States v. Rio Grande Dam & Irr. Co.*, 174 U.S. 690
12 (1899)). “The waterway must be susceptible for use as a channel of useful commerce and not
13 merely capable of exceptional transportation during periods of high water.” *Id.* (citing
14 *Brewer-Elliott Oil & Gas Co. v. United States*, 260 U.S. 77 (1922)).¹⁷

15
16 **V. In Addressing Whether the Upper Salt Was Navigable, the Courts Must Consider**
17 **the Significant Federal Involvement in Damming and Diverting the Salt River**
18 **Before Statehood.**

19 As discussed above, SRP acknowledges that the Court of Appeals’ holding regarding
20 the “ordinary and natural condition” of the river likely is binding authority on the
21 Commission at this stage of the proceedings. *See* Section II, *supra*. The Arizona Supreme
22 Court has not yet addressed the test of navigability for any watercourse in the state, however,
23 so the ruling by the Court of Appeals remains subject to review by the Supreme Court
24 following the conclusion of these proceedings on remand.

25 SRP contends that the Upper Salt was not navigable, in its “ordinary and natural
26 condition” or in any other condition. In making the arguments presented in this

26
27 ¹⁷ *See also United States v. Harrell*, 926 F.2d 1036, 1040 (11th Cir. 1991) (“susceptibility of use as a
highway for commerce should not be confined to ‘exceptional conditions or short periods of
temporary high water’”) (quoting *United States v. Utah*, 283 U.S. 64, 87 (1931)).

1 memorandum, however, SRP does not waive its right to contend before the courts reviewing
2 the Commission's decision that the extensive federal involvement in pre-statehood activities
3 on the Salt River created special circumstances that should be considered in applying the
4 navigability test with respect to this river.

5 The Arizona courts must apply the federal test of navigability in consideration of pre-
6 statehood actions by the United States pursuant to the 1902 Reclamation Act¹⁸ and the effect
7 of those actions on the river as of February 14, 1912. Under the Reclamation Act, the United
8 States Secretary of the Interior is authorized to construct dams and reservoirs to store and
9 divert water for federal Reclamation purposes. *Id.* § 4. That Act also empowers the Secretary
10 to perform any and all functions "for the purpose of carrying out the provisions of [that] Act
11 into full force and effect." *Id.* § 10, now codified at 43 U.S.C. § 373; see also 43 U.S.C. §
12 491. Furthermore, the Enabling Act passed by Congress in 1910, which authorized
13 Arizona's statehood, specifically provided "[t]hat there be and are reserved to the United
14 States, with full acquiescence of the state, all rights and powers for the carrying out of the
15 [1902 Reclamation Act and any amendments thereto], to the same extent as if said state had
16 remained a Territory."¹⁹ The people of Arizona accepted this authorization when they
17 adopted the Arizona State Constitution. See *Ariz. Const.* art. 10, §§ 6, 8.

18 Federal law applies to the determination of which watercourses are "navigable" for
19 title purposes. See *Utah v. United States*, 403 U.S. 9, 10 (1971). The courts have examined
20 the federal test of "navigability" in more than one hundred cases. Those decisions have dealt
21 with a variety of issues, but none of those prior decisions has analyzed how the impacts of
22 pre-statehood actions by the United States (such as the construction of dams and diversion
23 works pursuant to the 1902 Reclamation Act) should factor into the decision of whether a
24

25 ¹⁸ See Act of June 17, 1902, c. 1093, 32 Stat. 388, codified as amended at 43 U.S.C. §§ 371 to 600e.

26 ¹⁹ Act of June 20, 1910, c. 310, § 20 ("Seventh"), 36 Stat. 557 ("Enabling Act"); see also *id.* § 28
27 (reserving to the United States "from the operation of any and all grants made or confirmed by this
act to said proposed state all land actually or prospectively valuable for the development of water
power . . .").

1 particular watercourse was “navigable” on the date of statehood. Depending on what the
2 Commission and the courts decide about whether the Upper Salt was navigable in its
3 “ordinary and natural condition,” that issue might need to be addressed in the appellate review
4 of the Commission’s decision in this matter.

5 For title purposes, the determination of navigability must be made as of the date of
6 statehood. See A.R.S. § 37-1101(5); *Utah v United States*, 403 U.S. 9, 10 (1971). As of
7 February 14, 1912, Roosevelt Dam and Granite Reef Diversion Dam had been completed.
8 Those dams were capturing, storing, and diverting water from the Salt River. The Upper Salt
9 was clearly not “used or susceptible to being used . . . as a highway for commerce” on
10 February 14, 1912, regardless of whether it was ever used or susceptible to such use in any
11 condition at any prior date. The United States was the holder of any public trust interests in
12 the Territory of Arizona before February 14, 1912. Consistent with prior decisions by the
13 U.S. Supreme Court and others, see discussion, *infra*, the United States had the power to
14 restrict or otherwise affect the inchoate public trust interests of the potential new state at that
15 time or to convey lands that could be subject to that trust. On the Salt River, the United States
16 exercised that power pursuant to the 1902 Reclamation Act.

17 The courts have on several occasions examined the powers and limitations on the
18 United States’ actions with respect to watercourses and lands beneath them held by the
19 Federal Government in anticipation of the establishment of future states. In each of those
20 cases, the courts have held that, although there is a presumption against the defeat of a future
21 state’s title that is to be applied in interpreting pre-statehood federal intent and actions, the
22 United States does have broad authority to take actions that affect the equal footing interests
23 of future states. See, e.g., *Alaska v. United States*, 545 U.S. 75, 79 (2005), judgment entered,
24 546 U.S. 413 (2006); *Idaho v. United States*, 533 U.S. 262, 277-78 (2001); *United States v.*
25 *Alaska*, 521 U.S. 1, reh’g denied, 521 U.S. 1144 (1997); *Shively v. Bowlby*, 152 U.S. 1, 48
26 (1894).

1 The United States, working together with the Territory of Arizona and local citizens,
2 made a conscious decision in the first decade of the 20th Century that the Salt River was
3 worth more to the area for its water than for any potential for water-borne transportation or
4 commerce (even assuming, for purposes of this argument, that such potential ever existed).
5 Acting pursuant to Congress' passage of the 1902 Reclamation Act, the Federal Government
6 undertook the task of building Roosevelt Dam and Granite Reef Diversion Dam to harness the
7 river and put its water to use in making it possible for people to live and thrive in the Phoenix
8 area. *See Ramada Inns, Inc. v. Salt River Valley Water Users' Ass'n*, 111 Ariz. 65, 68, 523
9 P.2d 496, 499 (1974) (referring to the Salt River Project canal system as "indispensable for
10 the maintenance of life and prosperity."). In passing the 1910 legislation to authorize Arizona
11 to become a state, Congress specifically provided that such statehood would not affect the
12 United States' authority under the 1902 Reclamation Act. *See Enabling Act, supra*.

13 Before 1912, when Arizona was a territory, the United States, as the only government,
14 had "the entire dominion and sovereignty, national and municipal, federal and state" over the
15 area. *Shively*, 152 U.S. at 48. During that time, Congress passed the 1902 Reclamation Act,
16 and the United States proceeded to construct Roosevelt Dam and Granite Reef Diversion Dam
17 to carry out the "public purposes appropriate to the objects for which the United States [held]
18 the territory." *See id.* According to the established case law, the pre-statehood federal actions
19 were well within the power and authority of the United States, and the determination of
20 "navigability" under the federal test must take into account any effects of those actions on the
21 condition of the river on February 14, 1912. The 1910 Enabling Act expressly required "full
22 acquiescence" by the future state to the United States' authority under the 1902 Reclamation
23 Act. Thus, although SRP contends that the Upper Salt was not navigable in its "ordinary and
24 natural condition," SRP does not concede that "ordinary and natural condition" constitutes the
25 proper legal test for this particular river, due to the extensive Federal involvement with the
26 river prior to statehood.

27 ...

1 **VI. Summary and Requested Action**

2 The proponents of navigability bear the burden of proof. The evidence in the record
3 does not support a finding that the Upper Salt ever was actually used as a “highway for
4 commerce.” The record likewise does not support a finding that the Upper Salt, in its
5 “ordinary and natural condition” was susceptible to being used as a highway for commerce.
6 The Commission should find the Upper Salt “non-navigable.”

7 DATED this 7th day of September, 2012.

8 SALMON, LEWIS & WELDON, P.L.C.

9 By Mark A. McGinnis

10 John B. Weldon, Jr.
11 Mark A. McGinnis
12 Scott M. Deeny
13 2850 East Camelback Road, Suite 200
14 Phoenix, Arizona 85016
15 Attorneys for SRP

16 ORIGINAL AND SIX COPIES of the foregoing
17 hand-delivered for filing this 7th day of September,
18 2012 to:

19 Arizona Navigable Stream Adjudication Commission
20 1700 West Washington, Room B-54
21 Phoenix, AZ 85007

22 AND COPY mailed this 7th day of September, 2012 to:

23 Fred E. Breedlove III
24 Squire Sanders & Dempsey LLP
25 1 East Washington Street, Suite 2700
26 Phoenix, AZ 85004-2556
27 *Attorney for the Commission*

...

...

...

1 .Laurie A. Hachtel
2 Attorney General's Office
3 1275 West Washington Street
4 Phoenix, AZ 85007-2997
5 *Attorneys for State of Arizona*

6 Joy E. Herr-Cardillo
7 Timothy M. Hogan
8 Arizona Center for Law in the Public Interest
9 2205 E. Speedway Blvd.
10 Tucson, AZ 85719
11 *Attorneys for Defenders of Wildlife, et al.*

12 Sally Worthington
13 John Helm
14 Helm & Kyle, Ltd.
15 1619 E. Guadalupe #1
16 Tempe, AZ 85283
17 *Attorneys for Maricopa County*

18 Sandy Bahr
19 202 E. McDowell Road, Ste. 277
20 Phoenix, AZ 85004
21 *Sierra Club*

22 Julie M. Lemmon
23 1095 W. Rio Salado Parkway, Suite #102
24 Tempe, AZ 85281
25 *Attorney for Flood Control District*
26 *of Maricopa County*

27 Carla Consoli
28 Lewis and Roca
29 40 N. Central Avenue
30 Phoenix, AZ 85004
31 *Attorneys for Cemex*

32 L. William Staudenmaier
33 Snell & Wilmer LLP
34 One Arizona Center
35 400 E. Van Buren
36 Phoenix, AZ 85004-2202
37 *Attorneys for Freeport-McMoRan Corporation*

1 Charles Cahoy
2 P.O. Box 5002
3 Tempe, AZ 85280
4 *Attorney for City of Tempe*

5 William Taebel
6 P.O. Box 1466
7 Mesa, AZ 85211-1466
8 *Attorney for City of Mesa*

9 Cynthia Campbell
10 200 W. Washington, Suite 1300
11 Phoenix, AZ 85003
12 *Attorney for City of Phoenix*

13 Thomas L. Murphy
14 Gila River Indian Community Law Office
15 Post Office Box 97
16 Sacaton, AZ 85147
17 *Attorney for Gila River Indian Community*

18 Michael J. Pearce
19 Maguire & Pearce LLC
20 2999 N. 44th Street, Suite 630
21 Phoenix, AZ 85018-0001
22 *Attorneys for Chamber of Commerce and
23 Home Builders' Association*

24 James T. Braselton
25 Mariscal Weeks McIntyre & Friedlander PA
26 2901 N. Central Avenue, Suite 200
27 Phoenix, AZ 85012-2705
Attorneys for Various Title Companies

Steve Wene
Moyes Sellers & Associates
1850 N. Central Avenue, Suite 1100
Phoenix, AZ 85004-4527
Attorneys for Arizona State University

