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**BEFORE THE
ARIZONA NAVIGABLE STREAM ADJUDICATION COMMISSION**

IN THE MATTER OF THE NAVIGABILITY
OF THE UPPER SALT RIVER FROM THE
CONFLUENCE OF THE WHITE AND BLACK
RIVERS TO GRANITE REEF DAM, GILA
AND MARICOPA COUNTIES, ARIZONA.

No. 04-008-NAV

**ARIZONA STATE LAND
DEPARTMENT'S MEMORANDUM**

On April 27, 2010, the Court of Appeals found that the Arizona Navigable Stream Adjudication Commission (“ANSAC” or the “Commission”) misapplied the pertinent test for determining navigability of the Lower Salt River. The Court vacated the superior court’s decision, and remanded the matter back to ANSAC for further proceedings. *State ex rel. Winkleman v. Arizona Navigable Stream Adjudication Com’n*, 224 Ariz. 230, 229 P.3d 242 (App. 2010) (“*Winkleman*”). On October 24, 2011, the superior court remanded the Upper Salt River matter to ANSAC for all further proceedings consistent with the *Winkleman* decision. At ANSAC’s December 14, 2011, meeting, the Commission requested that interested parties submit memoranda with their recommendations on how ANSAC should comply with the *Winkleman*

decision. The Arizona State Land Department (the “ASLD” or the “State”) submits the following Memorandum in response to ANSAC’s request.¹

The Commission’s navigability determination is governed by the federal test of navigability, known as the “*Daniel Ball*” test that provides as follows:

[t]hose 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.

The Daniel Ball, 77 U.S. (10 Wall.) 557, 563 (1870); see *Defenders of Wildlife v. Hull*, 199 Ariz. 411, 420, 18 P.3d 722, 731 (App. 2001) (*Daniel Ball* test correctly paraphrased in A.R.S. § 37-1101(5)). The *Daniel Ball* test requires ANSAC to determine the characteristics of the Upper Salt River in its ordinary and natural condition and whether, at statehood, the River was used or would have been susceptible to use as a highway-for-commerce in that condition. *Winkleman*, 224 Ariz. at 239, 229 P.3d at 251.

In the *Winkleman* decision, the Court of Appeals found that ANSAC failed to evaluate the Lower Salt River’s ordinary and natural condition in light of the numerous dams, canals, and other diversions other than Roosevelt Dam. *Winkleman*, 224 Ariz. at 240, 229 P.3d at 252. The Court of Appeals directed ANSAC to determine “what the River would have looked like on February 14, 1912, in its ordinary (i.e., usual, absent major flooding or drought) and natural (i.e., without man-made dams, canals, or other diversions) condition.” *Winkleman*, 224 Ariz. at 241, 229 P.3d at 253. The Court found that the Lower Salt River was “in its natural condition after many of the Hohokam’s diversions had ceased to affect the River, but before the commencement

¹ The State requests that the Commission delay any action on contested rivers until the U.S. Supreme Court issues its decision in *PPL Montana, LLC v. Montana*, 355 Mont. 402, 229 P.3d 421 (2010), *cert. granted in part & denied in part*, 79 U.S.L.W. 3102* (U.S. June 20, 2011) (No. 10-218). The *PPL* decision could potentially affect application of the federal test in the contested rivers before ANSAC.

of modern-era settlement and farming in the Salt River Valley, when some of the Hohokam's diversions were returned to use and other man-made diversions and obstructions began to affect the River." *Winkleman*, 224 Ariz. at 242, 229 P.3d at 254. In applying the *Winkleman* Court's instruction to the Upper Salt River, the River's natural condition is before the construction of four dams and reservoirs: Roosevelt Dam, Horse Mesa Dam, Mormon Flat Dam, and Stewart Mountain Dam.² The Upper Salt River's ordinary condition necessarily excludes floods and other extraordinary high water events, but includes the average or normal reach of high water each year.

Overall, the Upper Salt's hydrology at statehood was not significantly different from the preceding ten to twenty years, except for the effect from Roosevelt Dam. ASLD Upper Salt River Report, 5-12. Although ANSAC is not limited to considering evidence of the Upper Salt River's natural condition solely from that time period, "that early period should be considered by ANSAC as the best evidence of the River's natural condition." *See Winkleman*, 224 Ariz. at 242, 229 P.3d at 254.

Thus, to determine whether the Upper Salt River could have been used as a highway-for-commerce, ANSAC must assess the River's pre-statehood ordinary and natural condition, disregarding all man-made obstructions and diversions.

² Between 1900 and 1945, seven major dams were built on the main streams of the Salt River system. Arizona State Land Department Rep., *Arizona Stream Navigability Study for the Salt River: Granite Reef Dam to the Confluence of the White and Black Rivers*, Draft Final Report, ("ASLD Upper Salt River Report"), (rev. June 2003 by JE Fuller/Hydrology & Geomorphology, Inc.), Evidence Item ("E.I.") 27, 5-15. These dams have the capacity to store over two million acre feet of water. *Id.* In addition, an uncounted number of stock ponds, mining ponds, and other impoundments have been built within the watershed. *Id.* As a result of these man-made obstructions, nearly all the flow of the Upper Salt River except for the reach above Roosevelt Dam had been impounded, flowing only due to flood discharges and flow releases to supply downstream irrigation diversions. ASLD Upper Salt River Report, 8-2.

More than sufficient historical evidence exists in the well-developed record describing the River's ordinary and natural condition in this time frame. Prior to statehood, the River had reliable streamflow, healthy beaver populations, a variety of large fish species, and dense riparian vegetation. ASLD Upper Salt River Report, 2. Not one of the early explorers described a dry riverbed in the Upper Salt at any time of year. ASLD Upper Salt River Report, 5-11. In 1826, James Ohio Pattie described the River at its confluence with the Verde as "afford[ing] as much water at this point as the [Gila] . . . We found it to abound with beavers. It is a most beautiful stream, bounded on each side with high and rich bottoms." ASLD Upper Salt River Report, 3-24. In 1877, Hiram Hodge reported that "at low water [the Salt River] is a clear, beautiful stream, having an average width of two hundred feet for a distance of one hundred miles above its junction with the Gila, and a depth of two feet or more." ASLD Upper Salt River Report, 3-26. Pioneer archaeologist Adolph Bandelier, who visited the Tonto Basin from May 23 to June 1, 1883, described the Salt River as "a broad, blue, rushing stream, wider than the Gila, with clear and very alkaline waters," and called it "the finest large river in the Southwest." ASLD Upper Salt River Report, 3-26. When the Commission assesses the historical evidence, it must factor in its determination that explorer and travelers' descriptions of the Upper Salt River in the late nineteenth and early twentieth centuries were not as common as descriptions for other Arizona rivers because of the remoteness of the location, the rugged terrain, and Apache threat. ASLD Upper Salt River Report, 3-24, 3-40, 4-10.

Probative evidence exists of the River's ordinary and natural physical characteristics that did and could support navigation. The Upper Salt is a perennial stream in its ordinary and natural condition. ASLD Upper Salt River Report, 5-12, 5-35, 8-2. Before statehood, the River had an average annual discharge ranging from about 1,400 cubic feet per second ("cfs") to 1,800

cfs.³ ASLD Upper Salt River Report, 5-12. In addition, early records and reconstructed flow rates for the pre-statehood period indicate that flow rates exceeded 1,200 cfs more than one half of the time. ASLD Upper Salt River Report, 5-12. At these flow rates, the average depth of the River would be about three feet, velocity around four feet per second, and the width about 100 feet. ASLD Upper Salt River Report, 5-20, 5-35. These conditions exceed the minimum required for boating. ASLD Upper Salt River Report, 6-2, 6-6.

Moreover, floods are not the ordinary condition of the River. Floods do occur on the Upper Salt, but less than one percent of the time. *Compare* ASLD Upper Salt River Report, 5-17, Table 12 (flow duration), 5-20, Table 16 (flow duration) *with* 5-25, Table 18 (floods); Transcript of the ANSAC hearing Oct. 20, 2005, (hereinafter “Tr. ___”) Fuller, 152. Thus, more than ninety-nine percent of the time (that is, in its “ordinary condition”), the River is not in flood. Fuller, Tr. 10/20/05, 152. In addition to being rare, floods are of short duration. Fuller, Tr. 10/20/05, 152. Seasonal high flow, which is an ordinary and expected part of the River’s natural hydrology, is not equivalent to flooding, but rather is simply normal spring runoff. ASLD Upper Salt River Report, 5-6. The ordinary, predictable, seasonal variation in flow discussed in detail in the ASLD Upper Salt Report includes the average, median, maximum, and minimum flow rates that depict the normal, expected range of flows at any given time of year. *See* ASLD Upper Salt River Report, 5-18, Table 14, 5-19, Table 15, 5-20, Table 17; Fuller, Tr. 10/20/05, 152. The existing data clearly shows that regardless of whether average, maximum, median, or minimum flow rates are used, the Upper Salt is boatable at all times of the year.

³ Other estimates of the River’s average annual flow show a range from 1,045 cfs (Smith and Stockton, from tree-ring records), 1,689 cfs (Thomsen and Porcello, from modern gage records), to 2,844 cfs (John Wesley Powell in 1893, from short-term records). ASLD Upper Salt River Report, 4-6.

Most of the Upper Salt River is located within deep bedrock canyons. ASLD Upper Salt River Report, 4-9, 4-15. Bedrock along the channel margins in these canyons precludes significant movement of the river channel or other channel changes. ASLD Upper Salt River Report, 4-9, 4-15. The perennial Upper Salt also has a pool and riffle channel pattern. ASLD Upper Salt River Report, 4-11; Fuller, Tr. 10/20/05, 148-149, Schumm, Tr. 10/20/05, 95; *see* ASLD Upper Salt River Report, 4-9 (pool and riffle stream consists of long, flat pools separated by short, slightly steeper riffles [rapids]). Downstream of the Verde River confluence, the Upper Salt has a slightly sinuous compound channel pattern that is confined by high, stable terraces. ASLD Upper Salt River Report, 4-9 – 4-10, 4-12. The geomorphic condition and characteristics of the Upper Salt have varied little since statehood, except where the River was been dammed to create water supply reservoirs. ASLD Upper Salt River Report, 4-10, 4-15; Dennis Gilpin, Archeologist, SWCA Environmental Consultants (“Gilpin”), Tr. 10/20/05, 53. Thus, the River’s ordinary and natural flow conditions and its natural geomorphology—that is before large-scale irrigation diversions affected the River’s waters—establish that the River was susceptible for use as a highway-for-commerce.

The Court of Appeals declined to consider whether ANSAC misconstrued the “highway-for-commerce” component of the *Daniel Ball* test. *See Winkleman*, 224 Ariz. at 242 n.16, 229 P.3d at 254 n.16. There is substantial evidence that when the River was in its ordinary and natural condition, it was actually used as a highway-for-commerce, or was at least capable of use as a highway-for-commerce within the meaning of the *Daniel Ball* test.⁴ The ASLD Upper Salt River Report documents fourteen accounts of boating on the River in the years prior to

⁴ The Arizona State Legislature has broadly defined the highway-for-commerce requirement as “a corridor or conduit within which the exchange of goods, commodities or property or transportation of persons may be conducted.” A.R.S. § 37-1101(3).

statehood, the majority of which describe successful trips where the participants reached their destination. ASLD Upper Salt River Report, 3-34 – 3-40, Appendix B. Successful boating trips occurred throughout the year, and covered the River from just above Roosevelt Dam to Granite Reef Dam. ASLD Upper Salt River Report, 3-34 – 3-40; Fuller, Tr. 10/20/05, 26, 144-145. For instance, in June 1885, typically a month of seasonal low flows, a group of men successfully boated in an 18' x 5' boat from four miles above the Tonto Creek confluence to Phoenix. ASLD Upper Salt River Report, 3-35. In addition, modern boating has occurred and continues today over the entire Upper Salt River, from the confluence of the White and Black Rivers to Granite Reef Dam. ASLD Upper Salt River Report, 6-1 – 6-7; Fuller, Tr. 10/20/05, 21. Modern boating on the River also includes a significant component of commercial boating. Fuller, Tr. 10/20/05, 63-81. Evidence of modern, recreational boating may demonstrate that a river was susceptible to use as a highway-for-commerce.⁵ See *Alaska v. Ahtna, Inc.*, 891 F.2d 1401, 1405 (9th Cir. 1989) (finding that present recreational guided fishing and sightseeing trips are “commercial activity” under the *Daniel Ball* test and can prove a river’s susceptibility for commercial use at the time of statehood); *Adirondack League Club, Inc. v. Sierra Club*, 706 N.E.2d 1192, 1194 (1998) (holding that evidence of a river’s capacity for recreative use is in line with the traditional test of navigability). The Commission should reconsider its prior findings that the Upper Salt River was neither actually navigable nor susceptible to navigation to ensure that its new findings comply with the applicable legal standard.

⁵ See *Northwest Steelheaders Ass’n, Inc. v. Simantel*, 112 P.3d 383, 391-393 (Or. Ct. App. 2005) (post-statehood use, by comparable vessels, probative because post-statehood conditions were less favorable to navigation than conditions at statehood), *review denied*, 122 P.3d 65 (Or. 2005), *cert. denied*, 547 U.S. 1003 (2006); *Winkleman*, 224 Ariz. at 244, 229 P.3d at 243 (“Even if evidence of the River’s condition after man-made diversions is not dispositive, it may nonetheless be informative and relevant.”)

The Court directed ANSAC to properly apply the ordinary and natural component of the *Daniel Ball* test. Equally important is the Court's insistence that ANSAC "may not begin its determination with any presumption *against* navigability." *Winkleman*, 224 Ariz. at 239, 229 P.3d at 251 (emphasis in original). In reaching its determination, "ANSAC's approach and analysis must be wholly impartial and objective, while utilizing the proper legal test." *Winkleman*, 224 Ariz. at 239, 229 P.3d at 251.

Substantial evidence exists clearly demonstrating that the Upper Salt River in its ordinary and natural condition before the construction of four dams and reservoirs was used or was capable of being used as a highway-for-commerce. The Commission should consider impoundments and diversions of the River's flow as merely one special factor in the Upper Salt River Valley's development rather than as a condition that precludes a navigability finding. Moreover, ANSAC must consider the unique circumstances of the Upper Salt in its overall objective review of the evidence under the *Daniel Ball* test in reaching its navigability determination. For example, the River's bedrock geology limited access, and the area surrounding the River was not largely populated at statehood. Another factor is the emphasis on the use of the River for water storage and irrigation, not for transportation and commerce. See ASLD Upper Salt River Report, 4-15; *United States v. Utah*, 283 U.S. 64, 81-83 (1931) (nonuse not indicative of nonnavigability based on many factors including nonsettlement of the region).

Indisputable proof of susceptibility of the Upper Salt River includes: (1) historical accounts establish that people boated the River during every part of the year; (2) modern boating using a variety of boats; (3) geomorphic data that demonstrate a permanent, significant river with a single, well-defined channel; and (4) scientific flow records demonstrate permanent, adequate water supply. The ASLD informs the Commission that due to uncertain resources, the

ASLD may be restricted in responding, participating or producing additional evidence in the adjudication proceedings.

DATED: January 27, 2012.

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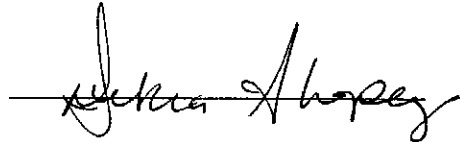
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A handwritten signature in black ink, appearing to read "Susan B. Montgomery", written over a horizontal line.

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