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**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

**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. The Court vacated the superior court's decision affirming ANSAC'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*"). 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.<sup>1</sup>

<sup>1</sup> 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.

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 Lower 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 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 River was "in its natural condition after many of the Hohokam's diversions had ceased to affect the River, but before the commencement 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. Thus, the River's natural condition is after the

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10-218). The *PPL* decision could potentially affect application of the federal test in the contested rivers before ANSAC.

Hohokam stopped using the River (in the mid 14<sup>th</sup> century) to before 1870 when Jack Swilling organized the Swilling Irrigation and Canal Company and started building an irrigation system that began modern-day agricultural development of the Salt River Valley. See *Arizona State Land Department Rep., Arizona Stream Navigability Study for Salt River: Granite Reef Dam to the Gila River Confluence*, Draft Final Report, 3-6, 3-7 (Table 3-1), 3-16 (revised Apr. 2003) (the “ASLD Report”) (Evidence Item [“E.I.”] 030).<sup>2</sup> Although ANSAC is not limited to considering evidence of the 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.” *Winkleman*, 224 Ariz. at 242, 229 P.3d at 254.

Ample historical evidence exists in the well-developed record describing the River’s ordinary and natural condition in this time frame.<sup>3</sup> For example, in February 1826, James Ohio Pattie described the River at its confluence with the Verde as follows: “It affords as much water at this point as the Helay [Gila] . . . We found it to abound with beavers. It is a most beautiful stream, bounded on each side with high and rich bottoms.” ASLD Report 3-14. In 1852, John R. Bartlett of the U.S. Boundary Commission conducted a reconnaissance of the River from its confluence with the Gila to present-day Mesa. ASLD Report 3-14. In July 1852, Bartlett described the River at a point twelve miles up-river from its confluence with Gila as follows:

The bottom, which we crossed diagonally, is from three to four miles wide. The river we found to be from eighty to one hundred and twenty feet wide, from two

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<sup>2</sup> By 1883, farmers were settling in the Valley in large numbers, growing crops and taking their grain to the Hayden Mill. City of Phoenix, E.I. 018, Exhibit 191, 3, *Historic American Engineering Record Report On Ash Avenue Bridge* (1991). By 1888, more than 400,000 acres had been cultivated in the Salt River Valley. ASLD Report 3-7 (Table 3-1).

<sup>3</sup> The Court of Appeals again noted that “‘substantial evidence’ exists ‘from which a factfinder might conclude that [the River] met the applicable standard of navigability at the time that Arizona became a state.’” *Winkleman*, 224 Ariz. at 242, 229 P.3d at 254 (quoting *Hassell v. Ctr. For Law in the Pub. Interest*, 172 Ariz. 356, 363, 837 P.2d 158, 165 (App. 1991)). The Court declined to reweigh the evidence, stating that it was for ANSAC, not the Court, to determine navigability. *Winkleman*, 224 Ariz. at 242, 229 P.3d at 254.

to three feet deep, and both rapid and clear. . . . The water is perfectly sweet, and neither brackish nor salty, as would be inferred from the name. We saw from the banks many fish in its clear waters, and caught several of the same species as those taken in the Gila. The margin of the river on both sides, for a width of three hundred feet, consists of sand and gravel, brought down by freshets when the stream overflows its banks; and from the appearance of the drift-wood lodged in the trees and bushes, it must at times be much swollen, and run with great rapidity. . . . [A]long the immediate margin of the stream large cottonwood trees grow.

ASLD Report 3-14 – 3-15 (ellipses and brackets in ASLD Report). In June 1868, G.P. Ingalls, a government surveyor, wrote in his field notes that the River was “fordable during six or seven months of the year in sec 29 at the crossing of the Fort McDowell & Maricopa Wells Road.” *Assessment of the Salt River’s Navigability Prior to And on the Date of Arizona’s Statehood, February 14, 1912*, by Douglas R. Littlefield, Ph.D., Littlefield Research Associates, Oakland, California, December 15, 1996, E.I. 016, Exhibit 189, 44 (the “Littlefield Report”).

Moreover, probative evidence exists of the River’s ordinary and natural physical characteristics. The River’s ordinary and natural channel condition included a perennial low-flow channel located within a broader low floodplain; the banks of the River’s low-flow channel were lined by riparian vegetation such as cottonwood, seepwillow, and mesquite trees, while less dense vegetation or swampy areas were found in the low floodplain. ASLD Report 5-9. In 1867, the River was a deep and narrow stream with a permanent flow. Littlefield Report, 189 (quoting Odd S. Halseth, who gave a speech entitled “1500 Years of Irrigation History” at a 1947 National Reclamation Association meeting in Phoenix).

Prior to and during early occupation by Euroamerican settlers, the River was perennial, with reliable flow throughout the year. ASLD Report 5-5; Transcript of hearing held before ANSAC on April 7, 2003 (Tr.), 201 (Schumm); City of Phoenix, Exhibit 182, *Predevelopment Hydrology of the Salt River Indian Reservation, East Salt River Valley, Arizona*, Thomsen and

Porcello (1991) (“Thomsen and Porcello”). The State submitted evidence demonstrating that in its ordinary and natural condition, the River’s average annual flow was approximately 1,500 cubic feet per second (“cfs”). ASLD Report 7-6 – 7-12; 7-26 – 7-27. This flow rate is further supported by Thomas A.J. Gookin’s opinion that the River in its virgin state flowed at 1,541 cfs (Tr. 154-55 (Gookin)), and B.W. Thomsen’s, of the U.S. Geological Survey, estimate that the predevelopment average annual flow rate was 1,712 cfs and the median annual flow rate was 1,301 cfs. City of Phoenix, Thomsen and Porcello, 1, 12; ASLD Report 5-5 (Table 5-3), 7-7. Flow duration data derived from United States Geological Survey (“USGS”) stream gauges indicate that the predevelopment flow rate was between 300 cfs and 3,000 cfs 90% of the time, and less than 20,000 cfs 99% of the time.<sup>4</sup> ASLD Report 7-17 (Table 7-13). Such conditions are boatable according to federal guidelines. ASLD Report 8-1 – 8-2. In other words, the River’s natural and ordinary flow rates produced boatable conditions 99% of the time, meaning there was sufficient water in the River for boating to occur except during a short duration of the largest floods.<sup>5</sup> See ASLD Report 8-1 – 8-2; 7-23 – 7-26; 10-31 – 10-35. Also, existing evidence demonstrates that the River’s ordinary flow was seasonal; there were regular fluctuations in flow that corresponded to expected periods of storms and snowmelt, and flow rates varied within predictable ranges. ASLD Report 7-17, Table 7-13, 7-14, 7-18, Table 7-15.

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

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<sup>4</sup> Rating curves indicate that the ordinary flow was not swift or turbulent. Average flow depths for the range of flow between 300 cfs and 3,000 cfs were between 1.4 and 3.3 feet, with a maximum velocity of 2.2 feet per second (“fps”). ASLD Report 7-23 – 7-26.

<sup>5</sup> Navigability is not destroyed because a watercourse is interrupted by occasional natural obstructions or portages, nor need navigation be open at all seasons of the year, or at all stages of the water. *Economy Light & Power v. United States*, 256 U.S. 113, 122 (1921); see *United States v. Utah*, 283 U.S. 64, 87 (1931) (predictable seasonal variations in flow do not preclude a finding of navigability).

P.3d at 254 n.16. However, existing evidence supports that the River was actually used as a highway-for-commerce. In 1868, the Marysville Ferry operated a Fort McDowell-Maricopa Road and continued until 1874. ASLD Report 3-25. In May 1873, the *Weekly Arizona Miner* reported that two men brought five tons of wheat in a flat boat from Hayden Ferry down the River to the mouth of the Swilling Canal and then down the canal to Helling & Co's mill. ASLD Report 3-18, 3-19 (Table 3-2). Evidence of actual navigation that occurred on the River after 1870, as the River's flows were increasingly diminished by diversions, is significant and probative of navigability.<sup>6</sup> Further, evidence in the record demonstrates that the River's natural physical characteristics were such that the River was susceptible to navigation after its flows were diminished. Thus, the River was either 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.

The Commission should reconsider its prior findings that the River was neither actually navigable nor susceptible to navigation to ensure that its new findings comply with the applicable legal standard.

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.

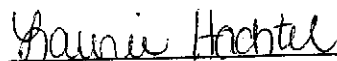
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<sup>6</sup> See *Northwest Steelheaders Ass'n, Inc. v. Simantel*, 112 P.3d 383, 391-393 (Or. Ct. App.) (post-statehood use, by comparable vessels, probative because post-statehood conditions were *less* favorable to navigation than conditions at statehood), *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.")

Substantial evidence exists clearly demonstrating that the Lower Salt River in its ordinary and natural condition before 1870, was used or was capable of being used as a highway-for-commerce. The Commission should consider the significance of post-1870 use of the River despite decreasing flows in reaching its determination. The Commission also should consider diversions as merely one special factor in the Salt River Valley's development rather than as a condition that precludes a navigability finding, and the River's subsequent limited use as merely a unique circumstance in its overall objective review of the evidence under the *Daniel Ball* test. 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 13, 2012.

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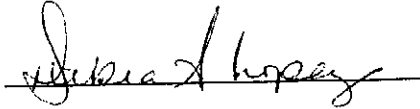
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