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BY: *gduy*

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DECLARATION OF GARY HUCKLEBERRY
REGARDING THE GILA RIVER

1. Channel Pattern

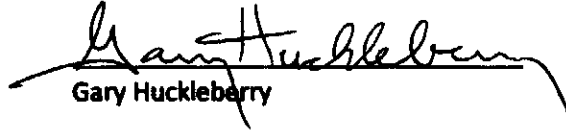
- a. The ordinary channel pattern in the alluvial sections of the Gila River today are best described as a compound channel, which consists of braided flood channels and a sinuous to meandering single thread low flow or primary channel.
- b. The low-flow or primary channel is the "wet" part of the river which conveys the ordinary, non-flood streamflow. The low-flow channel is the portion of the river bottom upon which boating would be most likely to occur in the river's ordinary and natural condition.
- c. In my work on the 2003 Lower Gila ASLD Navigability report, my testimony before ANSAC, and in my papers cited to this Commission (Historical geomorphology of the Gila River (June 1996); Contrasting channel response to floods on the middle Gila River, Arizona (1994); and, Late-Holocene stream dynamics on the middle Gila River, Pinal County, Arizona (1993)), when I described the river as braided, I was referring to the overall pattern of the active or flood channels of the Gila River, and not the low-flow channel.

2. Flood Response

- a. Large floods tend to widen the flood channels of the Gila River and increase the degree of braiding within the floodplain.
- b. After a large, erosive flood, a sinuous low-flow channel would be re-formed within the wider active channels. The typical, ordinary condition of the river included a sinuous, non-braided primary channel.
- c. Flood-induced widening and braiding occurred in many parts of the alluvial segments of the Gila River after the 1905-1906 floods.
- d. The widening and braiding that occurred after the 1905-1906 floods was not typical of the long-term condition of the Gila River.
- e. Re-formation of the low-flow channel would have occurred soon after the large pre-Statehood floods. Because there were no major floods after 1906 until 1914, there is a high probability that upon the date of statehood, 1912, vegetation would have returned to stabilize a low-flow channel. Large floods might relocate the low-flow channel in a different part of the floodplain compared to the pre-flood condition, but the general shape of the low-flow channel would likely be quite similar in the pre- and post-flood condition with respect to its width and depth.
- f. The period of the mid-1800s was typical of the ordinary channel conditions of the Gila River.

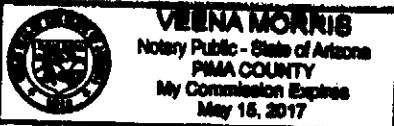
I declare under penalty of perjury that, to the best of my knowledge, the foregoing is true and correct.

Executed this 4 day of September, 2014.


Gary Huckleberry

STATE OF ARIZONA)
)ss.
County of Pima)

On this 4 day of September, 2014, before me personally appeared Gary Huckleberry, whose identity was proven to me on the basis of satisfactory evidence to be the person who he claims to be, and acknowledged that he signed the above document.

(seal)



Notary Public for Arizona