



SOUTH DELTA WATER AGENCY

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September 4, 2024

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Committee on Natural Resources
Subcommittee on Water, Wildlife and Fisheries

I, JOHN HERRICK, ESQ., declare as follows:


1. I am and have been counsel and general manager of the South Delta Water Agency since 1998. The Agency was created by statute in 1972 to protect the water quantity and quality in the channels of the southern Sacramento-San Joaquin Delta for the beneficial use of the water on the surrounding lands. We are also empowered to assist in flood control, water rights and other related issues which pertain to the protection and use of the beneficial uses of the water.
2. The channels of the southern Delta convey waters from the various tributaries to the Delta pursuant to inflow, tidal action and extractions of water from small individual pumps all the way to large pumps of the Federal Central Valley Project and the State Water Project. The volume of the water in the channels is the supply for plant and animal wildlife, local agriculture and export needs (which include agricultural, municipal and industrial uses). The later includes part of the supply for over 25 million Californians.
3. In the past, we assumed that in years of high flow, silt that naturally builds up in the channels would be moved further downstream and eventually into the San Francisco Bay and Pacific Ocean. Of course that process might not always adequately maintain channel capacity, but it was thought to at least minimize any need for dredging.
4. Approximately 10 years ago we noticed that after a high flow year the silt in some areas had increased and not been moved downstream. Since that time we have monitored the overall silt in our channels. We now conclude that a tipping point was reached and now every year, more silt accumulates in the area regardless of the water year type.

5. For example in a channel known as Doughty Cut, we have monitored a location that has progressed from an open channel, to one with a sand bar, to the sand bar now an island.
6. The impacts from this accumulation of silt are not just significant but approaching catastrophic. I have attached a map and some pictures to highlight three locations. The first is the Doughty Cut mentioned above. That channel is the main route for tidal water to move upstream and enter Tom Paine Slough. Thus, it is the supply for the (approximately) 6500 acres of farmland dependent on it for agricultural use. Given the silt in Doughty Cut, Tom Paine Slough no longer fills on the incoming tide. The result is that from July through early August of this year, the district which pumps water onto the 6500 acres was only able to provide 38-77% of the water needed by the crops. You may recall that time period was an extremely hot spell, if not the worst on record. The first picture shows the Slough nearly empty during that hot spell. Farming cannot survive if its water supply is curtailed or shut off during the growing season.
7. The second area designated on the map where the Undine Road bridge crosses Middle River. Middle River is one of the four main channels in our area. We have watched the silt build up in this channel for at least 20 years now to the point where many diversions cannot operate at full capacity or simply cannot operate. The pictures of this location show that on November 20, 2023 the channel was about 3 feet across and about 6 inches deep. "Normally" is it 30 yards across and 4-6 feet deep. With the pictures is a color-coded Figure showing the build up of silt just from 2023.
8. The last area is on the San Joaquin River, where a local project is monitoring the configuration of the River. Per the engineers involved, that one area alone saw an increase of 250,000 cubic yards of silt from the high flows in 2023. This means of course that the greater southern Delta area received millions of cubic yards of silt in 2023 alone. As the silt builds up, the channels become more shallow and the volume of water decreases. One can only speculate as to how long it will be until some areas simply cannot divert from the surrounding channels.
9. The last graphic I've attached is cross-section of Undine Road at Middle River. It shows what the DSM2 model (the model used to evaluate changes in Delta conditions and to project impacts from changes to those conditions) and gauges "think" existed at this location on November 20, 2023, and what actually existed according to our (very) recent bathymetry. As you can see, the model thinks there is over 2 ½ feet of depth and 50 feet of width, when in reality the channel less than a foot. Such a disconnect in what actually exists from what the "accepted" analysis shows exists means that any and all in-Delta evaluations are both wrong and unreliable.

10. The degradation of the southern Delta channels will eventually destroy local agriculture, radically impact the ability to export water to areas of shortage, impair native fisheries and result in a shallow, marshy swamp of hot, stagnant water with a net increase in water lost to consumptive use.

11. Maintaining the channels, as was always anticipated, will preserve flood conveyance capacity, protect agriculture, protect exports, fight invasive plant species, and restore cool water channels needed for endangered fish species.

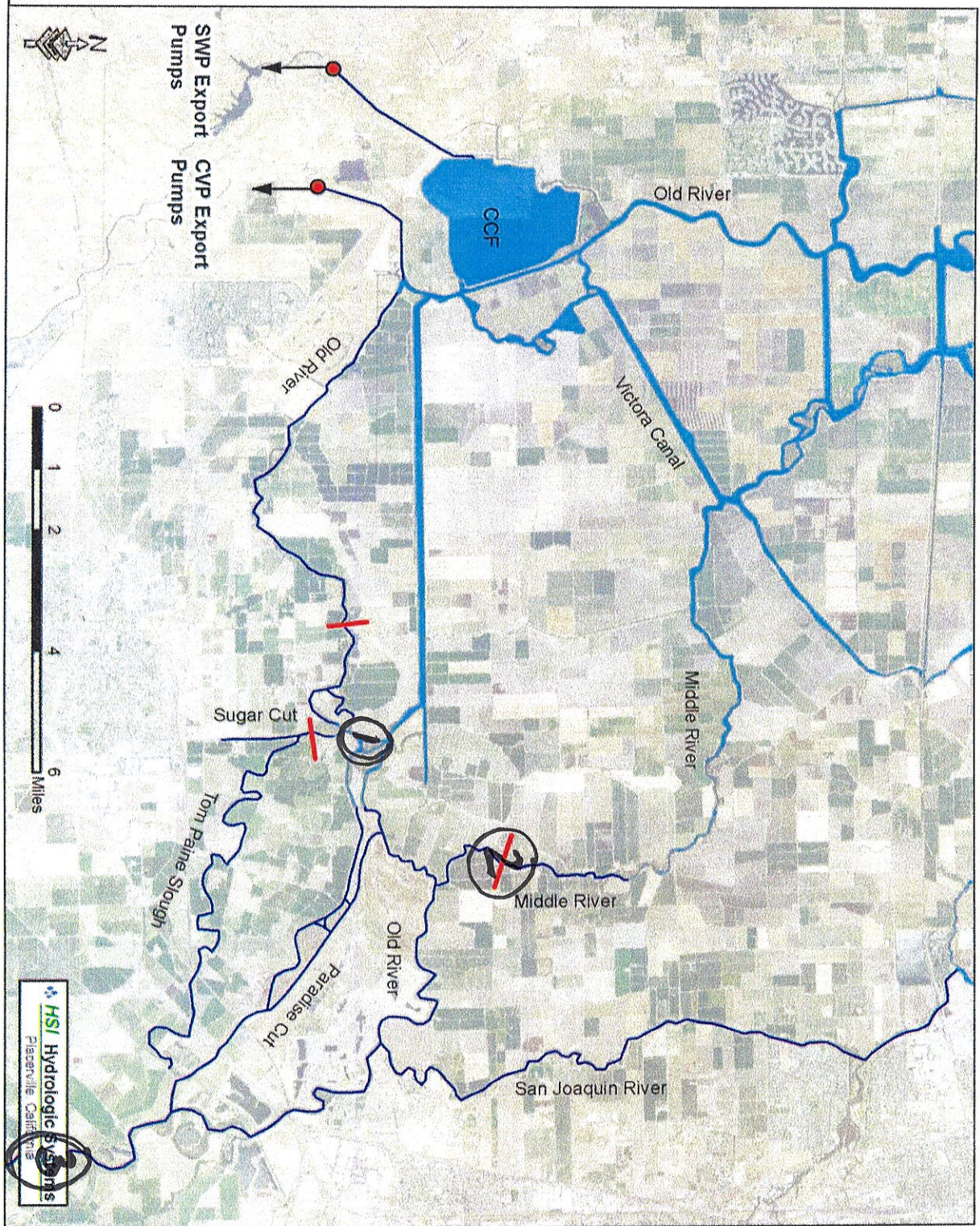
Respectfully submitted,



John Herrick, Esq.

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Figure 1 Export Analysis Comparison Locations.



TOM PAINE SLOUGH



UNDINE ROAD at MIDDLE RIVER

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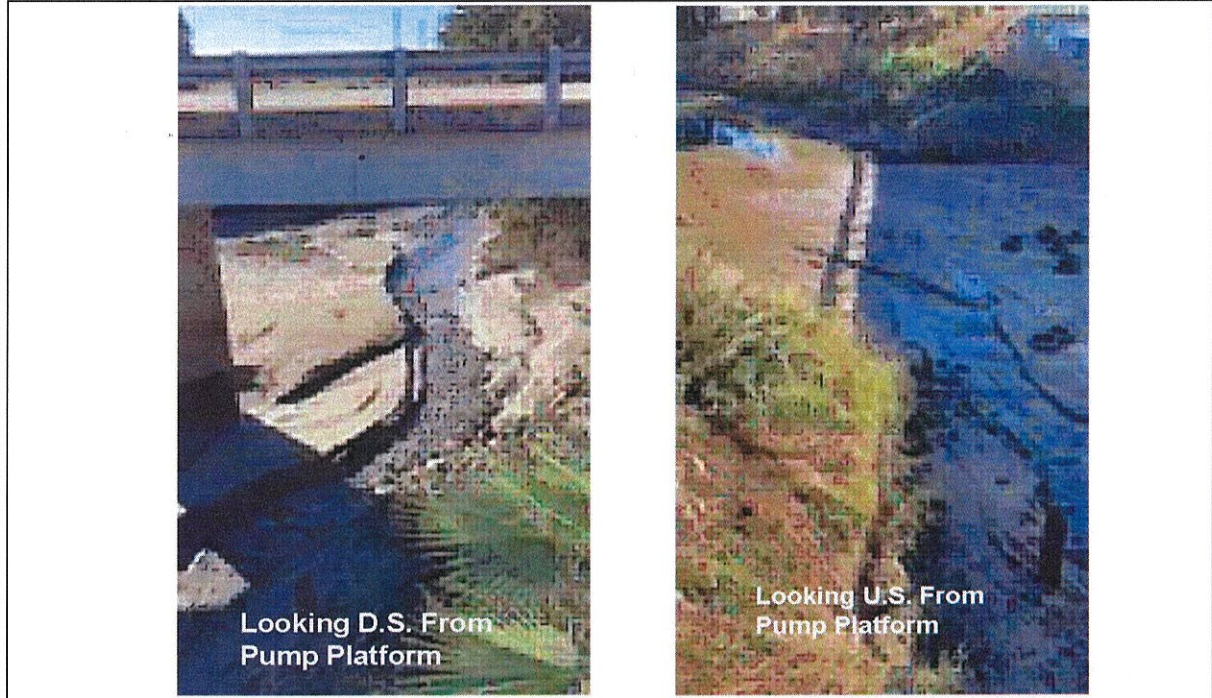


Figure 8 Middle River Upstream and Downstream of Undine Bridge

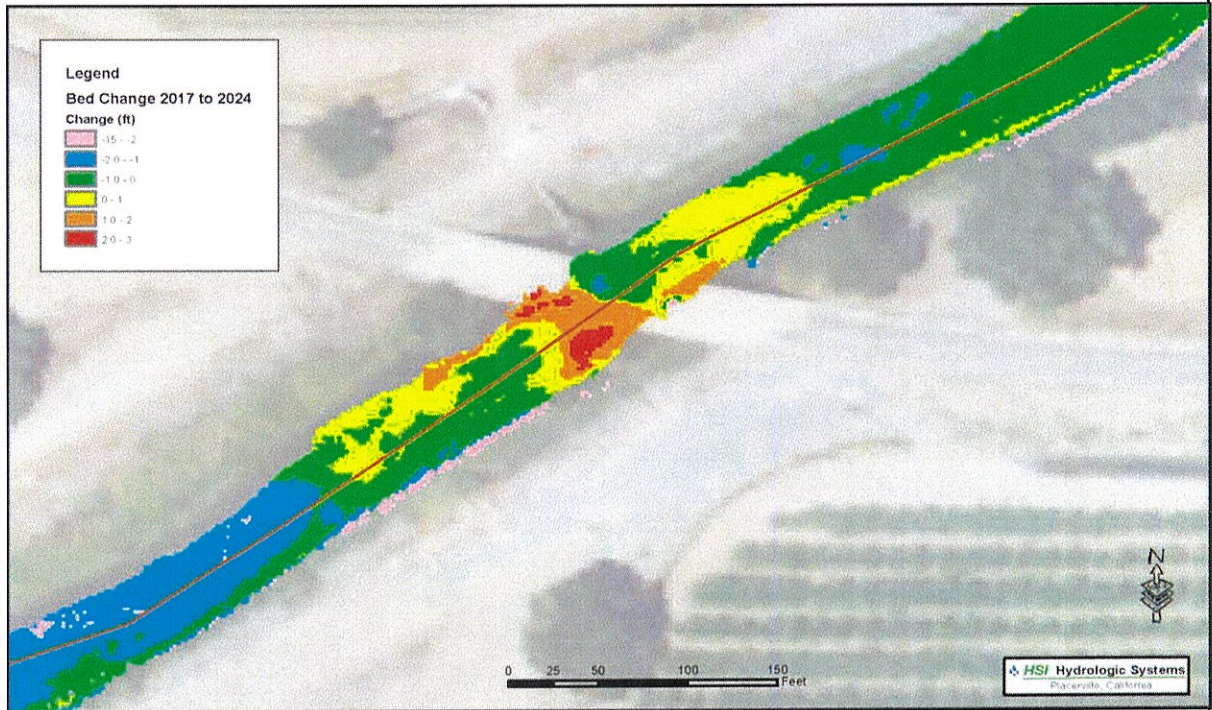


Figure 9 Middle River Siltation at Undine Bridge.

Figure 7 Channel Geometry at Undine Bridge, Middle River

