BEFORE THE
CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

HEARING IN THE MATTER OF
CALIFORNIA DEPARTMENT OF
WATER RESOURCES AND UNITED
STATES BUREAU OF RECLAMATION
REQUEST FOR A CHANGE IN POINT
OF DIVERSION FOR CALIFORNIA
WATER FIX

PART 2 TESTIMONY OF GERALD
NEUBURGER

I, Gerald Neuburger, do hereby declare:

My name is Gerald Neuburger. I'm 74 years old and have lived in the Sacramento Valley since 1949 when I was five. I have fished the lower Sacramento River and the Sacramento/San Joaquin Delta for almost 50 years both as a recreational angler and as a fly fishing guide with the principal species sought being striped bass.

Over the years, I have seen a dramatic decrease in both the number and size of this fantastic game fish, first brought to the state by the California Fish and Game Commission in the late 1800's. Through the pursuit of this fish, I have also become aware of the decline and collapse of the retail business support system that made the Delta a unique recreational opportunity for anglers only rivaled by some of the most famous fisheries on the east coast and the Gulf of Mexico, providing income and employment for
many mom and pop businesses. Although all of my observations both about fishing and the business are anecdotal based on my own observations, they are what I believe to be the truth and reflect the dramatic decline of the Delta's fisheries and the businesses and economics that surround the sport.

**Fishing experience and observations**

Although my mother took me fishing during my formative years, 7-10 years old, on the Sacramento River at Freeport, (my father was overseas in the service for much of my childhood) my first real efforts at fishing the Sacramento River and Sacramento/San Joaquin Delta occurred in my early 20's. After more than a few ineffective attempts to fish from the shore on the Sacramento River, I bought a small boat and learned how to fish very effectively for striped bass using bait, principally sardines, purchased at numerous local bait shops. Because of those efforts, I also became aware of the commercial support system that provided anglers with the things they needed to fish effectively whether it was bait, gear or just the fixings for lunch. During this period, I learned of the striper's habits including fall and spring migration up into the Delta systems from the Bay. I also learned some very successful techniques that would yield results of 10 to 15 pound fish on a regular basis. I remember those times on the Sacramento River at the Clarksburg flats, with seventy to 100 boats on the water. I remember those occasions when I participated in the annual Rio Vista Bass Derby, when there were hundreds of boats visible from the Rio Vista Bridge, fishing the Sacramento River just upstream of its confluence with the San Joaquin River at Pittsburg. The winners of the annual tournaments regularly brought in fish in excess of 40 pounds for
their prizes. To say that fishing was excellent during those years would be an understatement. I don't know what the then Department of Fish and Game's projections of the population of adult striped bass during those years was but the West Delta Chapter of the California Striped Bass Association states the population was approximately 3 million adult fish (Exhibit CSPA-340). While the population then seems quite large as compared to the number of fish today, the population of fish in the 1930's was so great that the fish was taken commercially with annual catches of over 1 million pounds (Exhibit CSPA-341).

A young family and the necessities of the job took me away from the Delta during the 70's and I did not begin fishing again until the late 80's after a three-year absence in the South Pacific, working for the United Nations Industrial Development Organization in the newly independent country of Vanuatu. I also changed my method of fishing from bait fishing to fly fishing. I purchased a Western 14 aluminum boat from a local Lodi dealer for $4,500 and spent another $500 on equipment and fishing gear. I covered the middle portion of the Delta from Beaver Slough on the Mokelumne to Mildred Island on the San Joaquin side of the Delta, quickly learning from experimentation and some guidance from the Delta Fly Fishers, a Stockton based, non-profit, fly fishing advocacy group of about 100 members.

Because I was fully employed as a private business owner, my fishing was limited to weekends, holidays and sneaked time away from work, but the catch rates were gratifying, with regular catches of four to eight pound fish and an occasional ten pound plus fish as a bonus, not to mention the numerous smaller fish, sometimes in the multiple...
dozens. The lure of the Delta and its prolific striper population lured another angler, a South African working in Oakland as a software specialist and we began fishing together, and eventually purchased a larger boat and fished the Delta religiously. We fished almost every weekend with great success during the "season", almost always catching multiple fish in the eight to ten pound class, all of it, "catch and release" fishing. Again, as well as the larger fish, we would catch many smaller fish from 12 inches to three to four pounds. (I could post photos but they would not reflect the catch rates or the abundance of the species). I fished as a private angler until 2006 when I was about to retire from teaching. I decided to take up guiding on the Delta for striped bass using fly fishing gear, catch and release. The part time employment would provide some additional income and at the same time, allow me to introduce others to the Delta's great potential as a fly-fishing venue.

I guided for the next 10 years, retiring in November 2016. Even though the first three to four years were a matter of learning more about the Delta and its fisheries, my client's catch rates were more than satisfying both to them and to me as a guide with most clients catching at least one fish whose weight approached double digits. I fished the main channels of the San Joaquin and into the inner Delta, fishing the connecting sloughs and flooded islands of Mildred and Franks Tract. Fish were found throughout the system during the first five years of guiding with the exception of the spring when most of the fish migrated up the Sacramento River to spawn in the area of Verona northward. The Department of Fish and Game's website stated that the striped bass spawned in both the Sacramento River system and the San Joaquin, especially in the area from the Antioch
Bridge to the mouth of Middle River (Exhibit: CSPA-342) but my on-the-water experience showed that information to be inaccurate. Even at the height of the spawning cycle during early April, few large females were found in that area. Even so, at that same time, the fishing news in the various newspapers and internet would tout the great fishing success of those fishing the Sacramento River's striper spawning territory. What caused the decline in spawning on the San Joaquin? The DFG website cited the conditions of fresh water with moderate to swift currents as the principal components necessary for spawning, and while that may have been the case many years ago before the San Joaquin River was diverted, the area mentioned on the San Joaquin, Antioch to the mouth of Middle River, was now basically just tidal flow with no fresh water input other than the water introduced into the system by the Mokelumne, a minor flow when the capacity of the San Joaquin is measured at that point in the system.

Although it seemed that finding fish, especially large fish, was becoming more difficult each year from when I started fishing the Delta in the late 1980s, things really turned sour during the 2013 season. Fish in excess of 10 pounds were almost impossible to find and the schools of smaller adult fish were very small as compared to their numbers in the previous years. Where once my clients would come upon schools where they would catch a dozen two to four pound fish, now it was more common to catch singles or just two or three before moving on. In addition, the massive schools of juvenile fish, fish from 10 to 14 inches, were much less numerous. Where often in the past, my fish finder showed masses of fish so large and dense that it seemed that the boat was literally floating on a mound of fish, I now saw only scattered fish in smaller schools.
The final two and a half years of my guiding, fall 2014 to spring 2015, and fall 2015 to spring 2016, and finally fall 2016, were very difficult guiding. Almost all fish were found on the main channel of the San Joaquin and in small numbers. The inner Delta sloughs and flooded islands were void of any targetable numbers of fish. The lack of fish was especially apparent in the spring with no fish caught over 10 pounds for the entire spring of either year. That trend continued into the fall of 2016, my final season as a guide.

Although it is believed that the adult striped bass population in the Delta system may have been as large as 9 million at one time, DFW's current (2014) estimates of the adult striped bass population of 350,000 to 650,000 is a mere shadow of what was once California's premiere inland water game fish. However, I believe even those estimates are overblown and suspect that the actual adult striped bass population is somewhere around 250,000. I base this estimate on the fact that DFW has estimated the population at less than 1,000,000 adults during the entire time I was guiding, from 2006 to 2016. During that time, my actual catch rates dropped by a much greater amount than 50%. If I am correct and the actual number of adult fish is approximately 250,000, the current population of stripers is 1/36th of what it was when the fish was at its maximum adult population or about 3% of the nine million the species once enjoyed. As a comparison, the California Striped Bass Association estimates the current population at 300,000, a number very close to my estimates (Exhibit CSPA-343).

I am aware that there are a number of factors that should be considered in the decline of the striped bass fishery. However, this fishery is not the only fishery in decline.
Every Delta species appears in decline according to DFW records. And if one overlays the decline of the fisheries in graph form over the beginning and gradual increase in pumping water south via the SWP and the Federal CVP, it appears that the correlation is direct and convincing. The amount of water exported south is in direct relation to the health or lack of it for the Delta fisheries, as the water exports have increased, the fish populations have decreased.

**The Economic Impact of the Decline of the Striped Bass Fishery**

When I first started fishing the San Joaquin portion of the Delta in the late 1980's, the Lodi area supported four "bait shops". These mom and pop stores sold much more than bait. They opened early, sometimes before five AM and were well stocked with beer, soft drinks, snacks, hot coffee, and in some cases, even had small delis where one could order a sandwich. The number of workers in each varied from four to ten, depending on their hours of operation and volume of business. The number of bait shops is now down to one. The other three have closed, the most recent closing two years ago, with nothing replacing them.

I keep my boat berthed in the water at Korth's Pirate's Lair at the mouth of the Mokelumne where it meets the San Joaquin. A full small boat repair yard operated within walking distance of the marina. The shop included a full ship's chandlery and was in operation for a good number of years. The boat repair and chandlery closed about 2010. Two individuals made attempts to reopen the ship's chandlery but both attempts have failed. The building and yard now sit vacant.
The short stretch of river I drive before arriving at my marina once supported four restaurants; all of them open year round. The restaurant location known as the "Lighthouse", an on-the-water building on pilings with floating docks, was open year round for the first three years I had my boat berthed at Korth's, and then closed. Three new owners have attempted to re-open the restaurant, the first two failing, the most recent just holding on but only open three days a week during the winter months, seven days a week during the summer.

The "Riverboat" restaurant, another restaurant on pilings with floating docks was a very popular destination for boaters and anglers with large crowds for lunch and dinner and little spare dock space available to park a small boat throughout most of the year. It has now changed hands three times and is only open three days a week.

Korth's Pirate's Lair, where I berth my boat, leased an on-shore diner that served breakfast, lunch and dinner when I first located there in 2006. The lease holder let his lease go a few years after due to a fall off of business. Since that time, the marina owners leased the diner twice only to have the lease holder's attempt at operating at a profit fail. The marina owner now runs the diner at a break even or slight loss with a manager, believing that a "full service marina" should operate such a facility as a benefit to the berth holders.

Further down the road, the Spindrift marina operated a restaurant and pizza parlor. It closed approximately five years ago due to lack of business. The small community of Bethel Island had three on-the-water restaurants ten years ago. Now, only one is in operation, the other two closing for lack of business.
The area mentioned above is only a very small slice of the Delta geography. If one drives throughout the Delta's levee roads and visits the various marinas, one can find instance after instance where there were bait shops and on-the-water restaurants that are now boarded up. None of these were owned by large corporations, all were mom and pop stores. Many, such as the diner at Korth's, had been in existence for more than one generation.

If I were to choose any one event on the Delta to be an indicator of the economic health of the Delta as it is tied to the striped bass fishery, it would be the Rio Vista Bass derby, held for 70 years during the height of the annual fall run of stripers from the Bay up into the Delta waters. The event is marked by numerous community events including a parade, music and festivals, and most important, the derby itself. It is a three-day affair with what used to be perhaps a thousand participants. I remember participating on several occasions in the 1960's. When driving west over the Rio Vista bridge, I could see well over 100 boats both up river and down river of the Rio Vista bridge. It took a fish in excess of forty pounds to win the tournament's top prize, usually a boat and motor. In recent years, the number of participants has fallen dramatically and in an effort to preserve the species, the operators have rewritten the rules, picking a number in inches for the length of a fish as a target size rather than the weight of the largest fish to determine the winner. The decline in the number of anglers has also caused a reduction in the value of the prizes, with the top prize, now a cash award of $1,500 rather than the boat and motor and extensive list of merchandise of years ago (Exhibit CSPA-344). The change in festival rules regarding the winning fish has to do with the reproductive
capacity of the female stripers. Large stripers tend to be females, and a large female can spawn many more eggs than a small one (Exhibit CSPA-34).

**Summary**

It is my belief through personal observation and on-the-water experiences that the striped bass population in the Delta has declined dramatically in the last 25 years. Population estimates by various government agencies placed the population at roughly 1 million adult fish at the beginning of my time on the Delta. My current estimate of the fishery is 250,000 adult fish, one quarter of what it was when I began fishing the Delta in earnest, one fourth of what it was in the late 1980's and less than 1/36th of what the population was at its height. While numerous factors have had some influence on the decline of the fishery, the overriding and glaring cause of the decline has to be linked directly to the greatly increased amount of water diverted from Delta outflow through its export via the two government water projects. As is more than evident, as exports increased, the fishery declined in direct correlation.

Equally evident is that the health of the commercial interests of the Delta, the bait shops, small mom and pop stores, the on-the-water restaurants, and other services is directly related to the health of the Delta's fisheries. While the three summer months bring out many recreational boaters, the year round commerce that anglers provided for these businesses is what carried them through the winter months when the recreational boating traffic all but disappeared. The decline in the striped bass fishery and the smaller amount of anglers fishing for the species was responsible for sales at these small operations withering away. Although each of these businesses by itself was not a major

**TESTIMONY OF GERALD NEUBURGER, Page 10 of 11, CSPA-212**
economic factor in the Delta's health, when added together, these businesses represented a large investment in retail sales, real estate and employment. My personal estimate is that these businesses supported in excess of two to three thousand workers and several hundred business owners.

As for my own financial investment over the years of fishing I'd estimate costs of boats and equipment at $80,000 and another $100,000 in supplies including gasoline, bait, food, berth and launch fees, repairs and insurance, for a total of approximately $180,000. Multiply that number by the potential number of anglers that a healthy striped bass fishery would bring about and it is a staggering amount of commerce and employment that the state is losing with the collapse of the fishery, not to mention the recreational benefits and the health of the Delta's wildlife and ecosystem.

Executed this 29th day of November, 2017 in Lodi, California.

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Gerald Neuburger