

ATTACHMENT B

DEPARTMENT OF WATER RESOURCES

ENVIRONMENTAL SERVICES OFFICE
3251 S STREET
SACRAMENTO CA 95816-7017



December 28, 1992

Mr. Dante John Nomellini
Central Delta Water Agency
235 East Weber Avenue
Post Office Box 1461
Stockton, California 95201

Dear Mr. Nomellini:

As you requested, enclosed is some preliminary information regarding the fish screen on McDonald Island. The larval fish data I believe are reliable. The data on the juvenile and older fish I do not believe are reliable.

During our study on McDonald and other islands through the Delta, we experienced difficulties in trying to develop a rate of diversion for juvenile and older fish by agricultural siphons and pumps. It is likely that the juvenile and older fish were diverted into the irrigation ditch when the screen was not operating and established residence there. We then captured these fish when we started sampling, even though the screen was in operation. I say this because intuition and logic does not support the data. The only way to answer this question is to wrap a net around the siphon being tested. We plan on doing this where we can in 1993.

Eggs and larval fish unlike juvenile and older fish are planktonic, that is they float where the currents take them. Therefore it is much simpler to develop a rate of diversion for these organisms because you know that unlike the older fish, they are coming in with the flow. That is why I believe that the data on the larval fish are reliable.

As we discussed, I would like to find a site on McDonald Island or some other similarly located island in the Delta where an experimental fish screen can be attached to a 16-inch or 18-inch siphon. I would prefer that the siphon divert continuously or nearly so, through the irrigation period. The screen would be tested on an "off/on" basis, much like we did this year. Power would be brought to the site so the screen could operate on a self-cleaning mode. Lakos is one company willing to design such a screen if a suitable site can be found. It would be great if

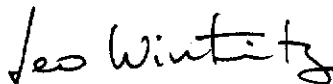
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we could start collecting samples by mid-March, 1993. Dan Odenweller with the Department of Fish and Game supports this idea and is eager to work with us on it.

When we last talked, you indicated that you might be able to assist us in locating an appropriate site for screen testing. I would greatly appreciate your assistance in this. The information we can obtain from additional sampling under the right conditions would be of great value to the farmers, screen makers and water agencies. The preliminary data I am sending you confirms this to some degree.

If you have any questions concerning this letter or the enclosure, please feel free to call me at (916) 445-7203. I hope we can work together to find a suitable site and move on with the screen project.

Sincerely



Leo Winternitz
Environmental Services Office

Enclosure

cc: Dan Odenweller
Department of Fish and Game
3251 "S" Street
Sacramento, California 95816

Paul Raquel
Department of Fish and Game
3251 "S" Street
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1992 AGRICULTURAL DIVERSION FISH IMPACT STUDY
MCDONALD TRACT

NUMBER OF FISH CAUGHT
MAY - AUGUST JUNE - AUGUST

Larval Fish Juveniles and Older

Species	*FISH SCREEN			*FISH SCREEN		
	Off	On	Total	Off	On	Total
Chameleon goby	1276	589	1865	0	0	0
Threadfin shad	1766	60	1826	0	0	0
Striped bass	0	0	0	0	0	0
Centrarchids	9	0	9	2 ¹	1 ²	3
Delta smelt	0	0	0	0	0	0
Sacramento splittail	0	0	0	0	0	0
Mosquitofish	3	0	3	4	23	27
TOTALS:	3054	649	3693	6	24	30
Eggs:						
Striped bass	0	0	0	0	0	0
Threadfin shad	4	14	18	0	0	0
TOTAL EGGS:	4	14	18	0	0	0

¹ Green sunfish

² Bluegill

* Sampling Times were equal for Screen off and on.