"The New Voice of Salmon"
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Testimony of Richard Pool on behalf of the Golden Gate Salmon Association before the California Assembly
Water Parks and Wildlife Committee
October 19, 2011
Re: Oversight of the Bay Delta Conservation Plan

Summary
The Golden Gate Salmon Association (GGSA) and the California Salmon industry are deeply concerned about the current Bay Delta Conservation Plan (BDCP). We believe it fails to address necessary steps for the recovery of Central Valley salmon falling short of the state and federal legal requirements for a valid habitat conservation plan. Major changes must be made within the BDCP to address these failings. Absent major changes, GGSA believes the project will not be approved by the Delta Stewardship Council or the responsible fishery agencies. We have a number of suggestions for improvements.

Comments
The Golden Gate Salmon Association (GGSA) is a 501 C3 Corporation formed in December of 2010 to address the problems and needs of the Central Valley salmon populations of California. Its Board of Directors and its affiliated organizations represent a broad cross section of the salmon industry including commercial salmon fishermen and women, recreational salmon anglers, seafood processors, seafood We believe restaurants, ocean commercial passenger fishing vessels, river guides, coastal marinas, salmon equipment manufacturers, salmon equipment wholesalers and salmon equipment retailers. Some of the affiliated and supporting organizations include PCFFA, The Golden Gate Fishermen's Association, Water4Fish, Coastside Fishing Club, Salmon Water Now, The Small Boat Commercial Salmon Fishermen's Association, Salmonaid, The California Sportfishing Protection Alliance, The Northern California Council of the Federation of Fly Fishers, The Bay Institute, NRDC and the Northern California Guides Association. These comments therefore represent a strong consensus of the California salmon industry.

The Central Valley river system is the second largest salmon production watershed in the lower 48 states – second only to the Columbia River basin. The Delta is the migratory route for these salmon between their natal Central Valley streams and the Golden Gate. In the past decade this system has been badly abused. It needs emergency action if the salmon are to be saved. The four Chinook (King) Salmon runs of the Central Valley have all suffered severe declines. The Fall Run (a species of concern) has suffered the worst crash dropping 91% from 1.4 million adults in 2002 to 133,000 in 2010. The Late Fall run (unlisted) has dropped 50% since 2007. The Spring Run (ESA listed) has dropped 85% since 2003 and the Winter Run (ESA listed) has dropped 91% since 2006 with only 1,555 adults returning in 2010. These drops occurred in spite of the fact that the fishing seasons were closed the better part of three years during this time period. Clearly, a salmon crisis exists. We see very little in the BDCP plan that will change these trends particularly in the short range.

The BDCP purports to be a Habitat Conservation Plan. In return for implementing The conservation plan it seeks a 50 year permit for the take of covered species under state and federal laws with the construction of a new water diversion project. Federal law requires that the project does not appreciably reduce the likelihood or the survival or the recovery of the listed species in the wild. California state law (NCCP) requires that recovery be aided by the project. The federal CVPIA Act requires that wild salmon populations be doubled and California SB1 requires that the Delta Plan contain conditions for salmon doubling. Covered species for purposes of the Habitat Conservation includes four species of salmon – the Fall Run (a species of concern), the Late Fall Run (a sensitive species), the Winter Run (listed) and the Spring Run (listed) as well as listed steelhead and green sturgeon. Covered species is defined as federal and state listed species and other sensitive species potentially affected by the proposed project. GGSA finds nothing in the BDCP habitat plan that will achieve either the state or federal requirements for salmon. In fact, GGSA sees high risks of the project operations violating both the state and federal laws depending on pumping rates, pumping location, unimpaired flows and the impacts of these on upriver operations.

The BDCP plan lists eight habitat restoration actions in the Delta region that it states will recover covered species. They are (1) Yolo Bypass Fishery Enhancement, (2) Tidal Habitat Restoration, (3) Seasonally Inundated Floodplain Restoration, (4) Channel Margin Habitat Enhancement, (5) Riparian Habitat Restoration, (6) Grasslands Communities Restoration, (7) Vernal Pool Complex Restoration and (8) Restore Non

Tidal Marsh. Some of these can aid salmon recovery in the distant future and at great cost. But, their positive impact is dependent on future pumping rates, Delta flows and saltwater intrusion. Nowhere in the plan does the BDCP acknowledge the potential negatives and analyze the "effects" of them. Neither does the BDCP compare these actions to other recovery options which could occur sooner and be more effective. Finally, nowhere does the BDCP acknowledge and evaluate the single greatest action needed to recover salmon, which is increased through Delta flows.

GGSA has several concerns with the habitat based actions.

1. Many of the salmon provisions of these actions are unproven and are not linked to any recovery analysis. To be accepted, it must be demonstrated scientifically that they will not further harm the species and will recover the covered species.
2. To be accepted as conservation actions, they must be linked to the "effects" of the project. There is no such linkage and there in no complete analysis of the "effects" of the project on salmon in the plan.
3. The actions are restricted to the Delta. The salmon runs cannot be recovered with Delta projects alone. The "effects" of the proposed project reach far upstream of the Delta and must be analyzed and addressed if salmon are to be recovered and a plan is to be accepted.

A number of "effects" are missing. The project proponents are seeking more water available for export. The amount of water exported, the timing and location of those exports, and the resulting conditions in the Delta will have a dramatic impact on salmon recovery. There is no analysis of those "effects" in the plan. The BDCP Entrainment Analysis released in August, 2011 indicates that exports will be made from both the new North Delta facility and the existing South Delta facilities (pumping up to 84% of the water in some dry years). In the public meeting of September 27th the BDCP announced that the South Delta facilities will only operate in emergencies or for maintenance at the North facility. The "effects" difference of these on salmon will be very large and needs documentation. The project operations will also impact a number of upriver practices that determine if salmon survive or will be recovered. Absent analysis of these "effects" with mitigating actions, GGSA believes the project will likely fail its stated objectives and be rejected by the Delta Stewardship Council and the fishery agencies. SB-1, the California water legislation bill passed in 2009 indicates the BDCP shall <u>not</u> be incorporated into the Delta Plan and the public benefits associated with the BDCP shall <u>not</u> be eligible for state funding unless the BDCP recovers the Delta ecosystem and

restores fisheries under a reasonable range of hydrologic conditions. Failing approval here eliminates the possibility of public funding.

Some of the "effects" analysis that are needed for salmon include:

- The unimpaired flow of water through the Delta present and future.
- The salinity of the Delta under a range of future pumping rates.
- The quantity, timing and upriver sources of the water exported in wet and dry years.
- The amount of water exported in wet and dry years from the new North facility and the current South facilities.
- The impact of upriver reservoir releases on needed flows and temperatures of salmon spawning and rearing areas.
- Reservoir practices for the storage of cold water necessary for successful salmon spawning.

GGSA concludes that the Salmon runs <u>will not</u> be recovered under the current BDCP plan. In fact, if the current plan proceeds, it is almost assured that the runs will further decline. Delays and interference caused by the BDCP will make it difficult to get the right rebuilding projects underway.

Even more alarming than the scientific issues are the costs of the BDCP Delta mitigation measures. They range from a staggering $3.0 to $3.7 billion dollars. Annual maintenance, operations and other costs add $35 to $50 million per year. When GGSA asked the BDCP where this money would come from, the answer was "undetermined". The final page of Chapter eight in the plan, Costs and Funding Sources, states, "The PREs have not committed to pay for any BDCP costs beyond the conveyance component and substantial public and other sources of funding are expected to contribute to the cost of implementing the elements of the plan." Federal courts have repeatedly found such vague and voluntary actions insufficient to meet the standards of the Federal Endangered Species Act.

As noted, the BDCP conservation actions focus solely on the Delta. GGSA questions many of these actions as a potential waste of money for salmon recovery. In 1990 the Winter Run salmon was listed under the ESA (please refer to the attached chart –The Rise and Fall of the Central Valley Chinook Salmon Returns). At that time all of the runs were in very poor shape. Four major problems were identified in the Sacramento River and over the next decade all of them were fixed at a cost of approximately $1 billion.

The fixes were (1) Lack of cold water from Shasta for spawning which was fixed by installing the temperature curtain. (2) Iron Mountain Mine pollution which was fixed by the Superfund. (3) inadequate screens at GCID which were fixed with new screens, and (4) opening the Gates at Red Bluff to allow fish passage in both directions which is now done. With the completion of these projects, all the salmon runs responded in dramatic fashion. In 2002, a modern record was achieved totaling 780,000 returning adults. In the same year another 720,000 were harvested in the ocean. All of those fish migrated through the Delta in its configuration of the late 1990s. Today the Delta is in much the same configuration as it was then. It has the same channels, the same riparian conditions and the same levies. Those conditions were present in 2002 and they are mostly still present today. Why then have the runs crashed? The answer is not in a lack of Delta riparian, flood plain and tidal marsh habitat as proposed by the BDCP but in other factors resulting in record export levels during the period of salmon decline. GGSA suggests that a complete rework of the BDCP conservation actions is needed which would address the real problems of the salmon and other covered species.

From the evidence we have seen and from our discussions with salmon scientists, GGSA finds that the deteriorating conditions occurring in the salmon returns since 2002 are attributable mainly to the increased Delta pumping rates. This increased pumping has 1) directly affected juvenile fish migration e.g., entrainment at the Delta pumps, 2) increased predation from the small fish becoming "lost" in the Delta due to changes in flow direction, and 3) significantly reduced freshwater inflow essential for estuarine function affecting food supply for juvenile salmon and exacerbating problems within a highly "invaded" system. Salmon runs were stable or increasing after the drought of the early 1990s when pumping levels averaged about five million acre feet annually. Salmon numbers collapsed from 2002 on, as pumping levels averaged six million acre feet until drought returned in the second half of the decade.

One of the other problems in looking at the BDCP Delta habitat projects is the current nature of salmon losses. Smolt losses in the Delta are extremely high but NMFS studies have found that losses in the rivers feeding the Delta are also very high. If river losses cannot be improved, the Delta habitat improvements or other Delta changes will do little good in restoring the runs. The right answer is a combination of fixes that address both passage in the Delta and improved habitat in the upper river and tributaries.

If public money is to be included in the BDCP conservation actions, GGSA feels there are many other projects that will yield better salmon results sooner and with less money

than those proposed by the BDCP. The public should not be saddled with the costs of sub par projects just because of self-imposed Delta jurisdictional boundaries. We feel the state Resources Agency or the Legislature should solve these jurisdictional problems.

In addition to costing billions, the proposed BDCP conservations actions take decades to complete. The earliest implementations take almost ten years and most of them are not completed for forty years. This is too far in the future. We cannot wait for the speculative benefits of a project that may never come to pass or fails to meet its objectives for a variety of reasons. In instances like this, the Federal courts have ruled against RPAs in ESA driven biological opinions that are too far in the future to be reasonably certain to occur.

The salmon populations are now in "Code Blue". Early rebuilding actions are desperately needed. GGSA is working on a proposed list of projects that we feel will meet this early need. We will make those projects available to the BDCP as soon as they are completed. If BDCP is to succeed, and be a mechanism for salmon recovery, many projects should be included in the plan so it will be acceptable under the law. GGSA has identified a number of them and we are working on more. They may include things like gravel augmentation in key spawning locations (habitat), new flow and temperature standards at spawning and rearing locations (water quality), moving smolts around the Delta by trucking or barging, predator control mechanisms, improved short term unimpaired flows in the Delta, and techniques to expand spawning areas for the fall run.

GGSA is also concerned about the governance of the BDCP project and the adaptive management provisions. The Delta and its watershed problems are highly complex and the solutions are equally complex. Even with the best science currently available, there are bound to be failures or shortcomings in fisheries recovery. We have watched many well intended salmon recovery projects fail in the past. If this recovery effort is to avoid future problems or failure, we believe it is mandatory that the fishery agencies be placed in the position where they can stop failing practices and/ or implement adaptive management practices to ensure species recovery does not fail. If this project is to proceed, we feel the fishery agencies must be positioned in the governance structure where they can have the final call on recovery issues.

Our suggestions for the BDCP are:

- Abandon several of the unproductive Delta habitat proposals that inhibit salmon fishery solutions and reek havoc with Delta farmers and residents. Instead,

broaden the proposed actions to those which are more proven, will get earlier results and cost less money.

- Undertake actions with the Resources Agency and the Legislature to broaden the scope of the BDCP to encompass watershed wide salmon rebuilding actions.
- Convince some of your members to support the current biological opinions as base line so that we can all move forward to more productive solutions.
- Support GGSA and the fishery agencies in finding short range projects that will improve salmon recovery particularly those that can avoid demands on water.
- Support a re-ordering of some of the Bureau of Reclamation's Restoration funds so that productive projects can be funded.

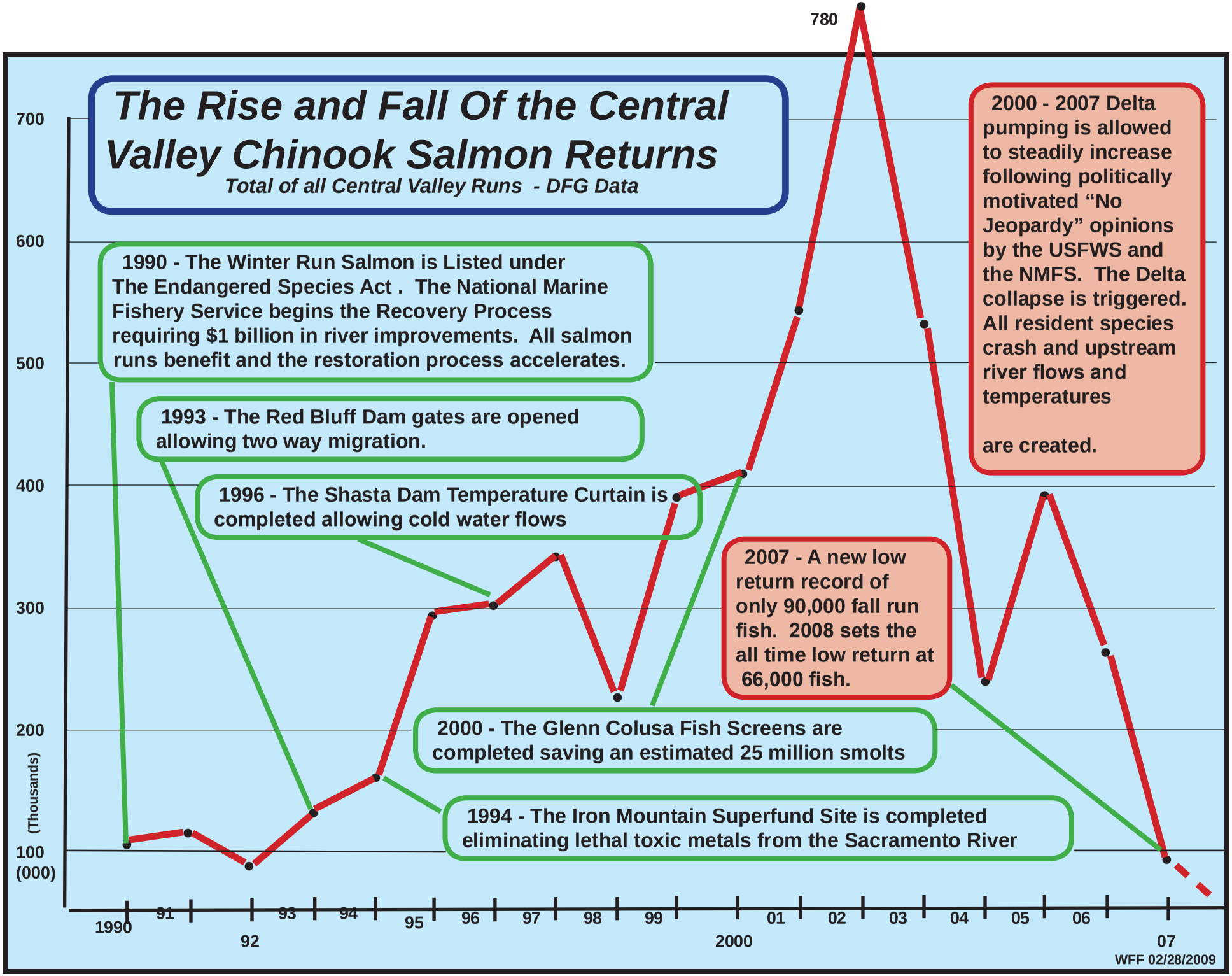
Our suggestions for the Legislature

- Examine ways to allow the BDCP and the Delta Stewardship Council to get out of the jurisdictional problems which force these agencies to look only at actions within the Delta region.

Our Suggestions to the Resource Agency

- Assist in solving the jurisdictional problems mentioned above so the BDCP and Delta Stewardship Council can reach out to better salmon solutions.
- Ensure that the BDCP governance structure places the fishery agencies in a position where they have the authority to stop failures in fishery recovery and can implement adaptive management practices that solve future fishery problems.

We want to point out that GGSA is not against the stated goals of the BDCP. We simply think they missed the mark badly on the habitat plan. We will do our part to help and we hope the BDCP can be changed to aid in the rebuilding process that must be done for salmon. Our special thanks to Jerry Meral and Karla Nemeth for their help in working with us. We thank the Committee for the opportunity to present our views.


The Rise and Fall Of the Central Valley Chinook Salmon Returns
Total of all Central Valley Runs - DFG Data
780
700
600
500
400
300
200
100
(000)
(Thousands)
1990 - The Winter Run Salmon is Listed under The Endangered Species Act . The National Marine Fishery Service begins the Recovery Process requiring $1 billion in river improvements. All salmon runs benefit and the restoration process accelerates.
1993 - The Red Bluff Dam gates are opened allowing two way migration.
1996 - The Shasta Dam Temperature Curtain is completed allowing cold water flows
2000 - 2007 Delta pumping is allowed to steadily increase following politically motivated "No Jeopardy" opinions by the USFWS and the NMFS. The Delta collapse is triggered. All resident species crash and upstream river flows and temperatures
are created.
2007 - A new low return record of only 90,000 fall run fish. 2008 sets the all time low return at 66,000 fish.
2000 - The Glenn Colusa Fish Screens are completed saving an estimated 25 million smolts
1994 - The Iron Mountain Superfund Site is completed eliminating lethal toxic metals from the Sacramento River
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