



10545 Armstrong Avenue

Mather, CA 95655

Tele: [916] 876-6000

Fax: [916] 876-6160

Website: www.srcsd.com

**Board of Directors**

Representing:

County of Sacramento

County of Yolo

City of Citrus Heights

City of Elk Grove

City of Folsom

City of Rancho Cordova

City of Sacramento

City of West Sacramento

Mary K. Snyder  
District Engineer

Stan R. Dean  
Plant Manager

Wendell H. Kido  
District Manager

Marcia Maurer  
Chief Financial Officer

May 14, 2009

Ms. Delores Brown  
Chief, Office of Environmental Compliance  
Department of Water Resources  
PO Box 942836  
Sacramento, CA 94236

**Comments in Response to Revised Notice of Preparation – Environmental Impact Report and Environmental Impact Statement for the Bay Delta Conservation Plan**

Dear Ms. Brown:

The Sacramento Regional County Sanitation District (District) appreciates the opportunity to offer comments on the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) that will be prepared to evaluate the environmental impacts of a proposed Bay Delta Conservation Plan (BDCP). The BDCP and the associated environmental evaluation are of keen interest to the District, as noted in our May 30, 2008 letter, and those comments still apply.

The District provides wastewater collection and treatment services to 1.3 million residents of the greater Sacramento area. The District designed and operates its treatment system, including discharge from the Sacramento Regional Wastewater Treatment Plant (SRWTP), in accordance with its National Pollutant Discharge Elimination System (NPDES) permit issued by the State of California, providing protection of beneficial uses of the Sacramento River and Sacramento-San Joaquin Delta. The District is very concerned with the health of the Delta, including the recent population-level decline of multiple fish species, and supports the goal of the BDCP to improve the long-term ecological productivity and sustainability of the Delta.

The District has provided numerous written comments to the various BDCP committees, workgroups, and sub-work groups. Most of our comments to date have concerned the conservation measures being developed by the BDCP, and many are specific to the Other Stressors conservation measures. The District has also provided comments on the impacts to the District's operations from diversions on the Sacramento River between South Sacramento and the Walnut Grove area. Our previous comment letters, which are attached to this correspondence, center on the following common themes:

- Need for improved stakeholder involvement
- Application of sound science in the development and evaluation of conservation measures
- Relationship to other Delta planning efforts
- Need to fully mitigate all impacts of the project

### **Need for Improved Stakeholder Involvement**

The District has participated in many efforts of the BDCP development and has observed that the BDCP process is lacking in representation by Central Valley stakeholders, particularly Delta stakeholders. One of the District's main concerns is that the BDCP evaluation and ongoing process should address Central Valley stakeholders and other stakeholders not represented on the BDCP steering committee or in other aspects of the ongoing collaboration between state and federal agencies and water agencies.

Broadening the scope of participants will ensure that the best available science and information is used to develop conservation measures that will truly mitigate project impacts. To date the BDCP process has frustrated this objective. For example, after being invited, then uninvited, the District attempted to participate in the scientific conceptual modeling aspect of the BDCP review of the conservation measures, also known as Delta Regional Ecosystem Restoration Implementation Plan (DRERIP). Our technical experts were asked to leave the meeting and thus were unable to contribute their substantial expertise in the areas of water quality and aquatic ecology.

Expanded stakeholder involvement will help ensure that the Project and EIR/EIS rely on the best available scientific knowledge and also will help in identifying reasonable and feasible alternatives that should be considered in the BDCP Draft EIR/EIS. Excluding or failing to consider relevant evidence at the beginning of the process creates a risk that the ultimate adoption of the conservation measures will be ineffective or will be delayed after the release of the Draft EIR/EIS due to the need for further study. For those reasons, it is critical to have broad stakeholder involvement in the development of the BDCP as well as the EIR/EIS.

### **Application of sound science in the development and evaluation of conservation measures**

For the BDCP to gain public support, and for conclusions about the effects of conservation measures to withstand scrutiny, such measures must be based on sound science and substantial evidence. The District is concerned that discussion of the potential effects of "Other Stressors" repeatedly and conclusively identifies the SRWTP discharge as a contributor to the ecosystem decline. In fact, any role of the SRWTP discharge, along with many other potential causes, is an area currently undergoing thorough scientific study by many interested parties. Where, as in the case of multiple other stressors, it may not be possible to reach a definitive conclusion about the effects, the EIR/EIS should resist the temptation to reach a speculative determination that is not supported by substantial evidence.

The ability of the project to meet biological goals is highly dependent on hypothetical habitat restoration activities in zones outside the pathways of through-Delta conveyance, and the project area, such as Suisun Bay. Restoration activities in adjacent areas to the project location are unique to this project and should be evaluated as offsets under the Clean Water Act. In debating the relative merits of the proposed alternatives in the EIR/EIS, the greatest weight should be placed on the outcomes which are more certain: changes to baseline hydrology and water quality owing to the timing, location, and quantity of water export.

### **Relationship to other Delta planning efforts**

The relationship of the BDCP planning and decision making effort to other ongoing planning efforts, whether state, local, or regional, should be clearly addressed in the EIR/EIS. Delta legislative efforts could change the outcome of the BDCP and thus are relevant to the feasibility of the project and any alternatives or mitigation measures and should be considered in the EIR/EIS.

**Need to fully mitigate all impacts of the project**

The EIR/EIS should state that an objective of the selected project will be to avoid unintended impacts on third parties. The selected project should avoid or fully mitigate changes in water or wastewater treatment and other impacts for residents of the Central Valley or the Delta that would not otherwise occur in the absence of the project(s) considered in the BDCP. The impacts of any such changes must be considered in evaluating the environmental costs and benefits of the BDCP. For example, if the BDCP results in a need to increased wastewater treatment in specific communities, such treatment could result in significant environmental impacts, including increased energy use and greenhouse gas emissions, as well as other air quality impacts. These secondary impacts must be disclosed in the EIR/EIS, and the beneficiaries of water diversions from the Delta should be accountable for fully funding any necessary mitigation.

To that end, the BDCP and EIR/EIS should state that the funding for the selected BDCP project will be fair and equitable to stakeholders in the Central Valley and will be financed, in large part, by the beneficiaries of water diversions from the Delta or general bond obligations where the people of the state of California benefit. The cost estimates and funding mechanisms for the alternatives should be clearly presented in the EIR/EIS, with separate cost-benefit analyses and environmental review for all restoration projects, such as notching the weir to the Yolo By-pass, or creating flood plains in the eastern Delta.

The District is also providing the following general comments, general and specific water quality impact comments, and a comment relating to water quality impact analysis.

**General Comments**

The Existing Condition for the EIR/EIS should be the legal and regulatory constraints existing at the time of issuance of the NOP. As such, the Existing Condition for this project should include the legal determinations and operational constraints embodied in the Wanger decision and other recent legal decisions impacting the operation of the State and federal water projects.

The planning goals must ensure that covered activities are implemented in compliance with all applicable water quality protection laws, including the federal Clean Water Act and California Water Code, to provide reasonable protection of beneficial uses. Thus the Clean Water Act and California Water Code should be included as planning goals for the covered activities in the BDCP and addressed in the EIR/EIS.

The EIR/EIS must address and quantify the level of take that the Delta can withstand that will allow the recovery and sustainable fish populations. In this regard, the EIR/EIS must address the limits on volume and timing of exports necessary to ensure sustainable fish populations and a sustainable Delta ecosystem.

The EIR/EIS should carefully evaluate whether the positive effects of habitat restoration projects inside the Delta will outweigh negative effects of diversion of high-quality Sacramento River water. Technical details should be provided about the number, locations, and types of restoration projects that are necessary to provide known biological benefits. The feasibility and sustainability of the restoration projects should be covered in the EIR/EIS, and the responsible parties for implementation identified. The EIR/EIS should clearly explain how entities that are not a part of the BDCP, nor governed by any participant on the BDCP, will implement conservation measure under the BDCP.

Alternatives should be evaluated in the EIR/EIS in which non-structural approaches for achieving water supply reliability are considered at the point of use. Non-structural alternatives should include water conservation, water recycling, localized desalination, increased capture and storage of localized rainfall or other forms of water procurement in lieu of continued or increased Delta deliveries.

The energy and greenhouse gas impacts of pumping from the Delta and subsequent pumping along the conveyance alignment must be evaluated, along with all energy and greenhouse gas impacts of all aspects of the BDCP alternatives. This analysis is consistent with the analysis of the sustainability and reliability of continued use of the Delta as the primary water supply source for major population centers in the State.

### **General Water Quality Impacts**

It appears that many or all of the alternatives will result in degraded water quality in the Delta due to the diversion of higher quality Sacramento River flows from the Northern portion of the Delta. A key element of the BDCP is the construction of new intake facilities on the Sacramento River between South Sacramento and Walnut Grove to allow the diversion of Sacramento River water directly into the SWP and CVP intake pumps located in the South Delta. Depending on the location, amount and timing of water withdrawn into the peripheral canal, the net water quality effect in the Delta in other Delta locations below the diversion point will be an increased influence of the San Joaquin River and San Francisco Bay.

An immediate effect on the operation of the SRWTP will be an increase in the frequency and magnitude of tidal reversals, which will impact the District's ability to release effluent into the Sacramento River. The magnitude of this impact depends greatly on the location, timing, and volume of water withdrawn from the river. Water taken from the Sacramento River above or below Freeport, would significantly impact the District's operations and could impact its National Pollution Discharge Elimination System (NPDES) permit requirements.

Another key element of the BDCP is the construction of thousands of acres of new wetlands habitat in the Delta, which is intended as a mitigation measure to ameliorate the incidental take of endangered species associated with water project operations. Construction of tidal wetlands is projected to increase the levels of methylmercury, organic carbon and nutrients in the Delta. These impacts must be addressed in the EIR/EIS.

### **Specific Water Quality Impact Evaluations**

The EIR/EIS for the BDCP should include evaluations that address the following topics, at a minimum:

- Salinity
- Mercury
- Organic carbon
- Nutrients
- Invasive species
- Effect on the Pelagic Organism Decline
- Cumulative Impacts

**Salinity.** The EIR/EIS should evaluate whether and to what degree the proposed project will lead to increased salinity due to the influence of higher salinity San Joaquin River and SF Bay intrusion over larger portions of the Delta. The EIR/EIS should quantify any increase and determine the need for mitigation to address potentially significant impacts on agricultural and municipal users in the Delta.

**Mercury** – The EIR/EIS should evaluate whether and to what degree any proposed wetlands in the Delta associated with the BDCP project will increase methyl mercury production in the Delta. The EIR/EIS should quantify any anticipated methylmercury increase in fish and determine the need for mitigation or offsets to reduce significant increases.

**Organic carbon.** The EIR/EIS should evaluate whether and to what degree any proposed wetlands associated with the BDCP project will increase organic carbon inputs. The EIR/EIS should determine whether these increased inputs will significantly increase organic carbon levels in ambient Delta waters and whether such increases will impact drinking water suppliers or dissolved oxygen conditions in the Stockton Ship Channel.

**Nutrients.** The EIR/EIS should evaluate whether and to what degree any proposed wetlands associated with the BDCP project will increase nutrient inputs. The EIR/EIS should determine whether these increased inputs will significantly increase nutrient levels in ambient Delta waters and whether such increases will impact beneficial uses.

**Invasive species.** The EIR/EIS should evaluate whether and to what degree the BDCP project will increase salinity levels in the Delta. The EIR/EIS should quantify and mitigate the associated potential impacts of expanding the habitat of *Corbula amurensis*, an invasive clam species that significantly impacts phytoplankton levels in the saline/brackish habitats of the Delta and negatively impacts on the Delta food web.

**Effect on the POD.** Current information in federal biological opinions indicates that the operation of the State and federal projects significantly impacts several endangered fish species in the Delta and is a contributor to the POD. The EIR/EIS should clearly address all impacts, adverse as well as potentially beneficial, that the BDCP project will have on the currently impacted fish species.

**Cumulative Impacts.** The EIR/EIS must address the cumulative impact of the proposed project on water supply, the Delta ecosystem, Delta water quality and the surrounding Delta communities. Third party impacts of the proposed project should be addressed.

### **Approach to Water Quality Impact Analysis**

The water quality impact analysis should identify and assess the frequency, magnitude, duration and significance of all incremental changes over current ambient conditions for all water quality parameters of concern in the Delta, including salinity, organic carbon, nutrients and mercury. Additionally, the environmental impacts of the project and all alternatives on invasive species and nutrient effects on the food web must be evaluated.

In evaluating potential impacts to water quality and beneficial uses, the EIR/EIS must consider not only the project's potential to exceed water quality standards (both numeric and narrative) but also whether the project or its alternatives has the potential to substantially degrade water quality individually or cumulatively.

Ms. Delores Brown  
May 14, 2009  
Page 6

The District appreciates the opportunity to provide these comments at this stage in the development of the BDCP EIR/EIS and looks forward to continued and increased involvement in development of a BDCP that will lead to the recovery of the Delta Ecosystem.

If you have any questions, please contact Terrie Mitchell, Legislative and Regulatory Affairs Manager, at 916-876-6160.

Sincerely,



Mary K. Snyder  
District Engineer

Attachments:

- 05/30/08 Comments to Notice of Preparation – BDCP EIR/EIS
- 08/20/08 Comments to 08/19/08 Other Stressors Workgroup Draft Summary of Coarse Level Evaluation Results: Toxic, Conservation Measure 1: Wastewater Treatment Modifications, Bay Delta Conservation Plan and Conservation Measure 2: Methylmercury Load Reductions
- 10/23/08 Comments on Conveyance Workgroup proposals to BDCP Steering Committee
- 11/19/08 Comments to BDCP “Draft Water Operations Conservation Measures” dated 10/31/08
- 12/5/08 Comments pertaining to BDCP Plan Integration Team, 11/21/08 Working Draft, Section 3.3 Approach to Conservation: Overview of Key Conservation Measures and their Integration
- 12/8/08 Comments to BDCP Plan Integration Team, 11/21/08 Working Draft, Section 3.3 Approach to Conservation: Overview of Key Conservation Measures and their Integration
- 12/10/08 Comments on Conservation Measure OSCM1: “Performance Monitoring Metric #1: Ammonia Concentration of Water at Influent and Effluent of a New Treatment Facility if Such a Facility is Built”
- 2/3/09 BDCP Delta Regional Ecosystem Restoration Implementation Plan 01/14/09 Workshop

cc: Senator Barbara Boxer  
Senator Dave Cox  
Senator Diane Feinstein  
Senator Fran Pavley  
Senator Joe Simitian  
Senator Darrell Steinberg  
Senator Lois Wolk  
Congresswoman Doris Matsui  
Congressman Dan Lungren  
Assembly Member Joan Buchanan  
Assembly Member Ted Gaines  
Assembly Member Alyson Huber  
Assembly Member Jared Huffman  
Assembly Member Dave Jones  
Assembly Member Roger Niello  
Assembly Member Mariko Yamada  
Linda Adams, CalEPA  
Gary Bobker, The Bay Institute  
David Brent, City of Sacramento (with attachments)  
Julie Bueren, Contra Costa County  
John Cain, National Heritage Institute  
Mike Chrisman, Resources Agency  
Paul Hahn, County of Sacramento  
Kathy Hopkins, Fairfield-Suisun Sewer District (with attachments)  
Jim Kelly, Central Contra Costa Sanitation District (with attachments)  
Mel Lidel, County of San Joaquin  
Ren Lohofener, United States Fish and Wildlife Services  
John McCamman, California Department of Fish & Game  
Russ Strach, National Oceanic and Atmospheric Agency, National Marine Services  
RWQCB Board Members (with attachments)  
SRCSD Board of Directors (with attachments)  
SWRCB Board Members (with attachments)  
Debbie Webster, Central Valley Clean Water Association (with attachments)  
Jeff Willett, City of Stockton (with attachments)  
Maria Wong, County of Yolo



Sacramento Regional Wastewater

Treatment Plant

6521 Laguna Station Road

Elk Grove, CA 95758-9650

Tele: (916) 675-9000

Fax: (916) 675-9048

Website: www.srcsd.com

May 30, 2008

Ms. Delores Brown  
Chief, Office of Environmental Compliance  
Department of Water Resources  
PO Box 942836  
Sacramento, CA 94236

**Board of Directors**

Representing:

County of Sacramento

County of Yolo

City of Citrus Heights

City of Elk Grove

City of Folsom

City of Rancho Cordova

City of Sacramento

City of West Sacramento

Mary K. Snyder  
District Engineer

Stan R. Dean  
Plant Manager

Wendell H. Kido  
District Manager

Marcia Maurer  
Chief Financial Officer

**Comments in response to Notice of Preparation – Environmental Impact Report and Environmental Impact Statement for the Bay Delta Conservation Plan**

Dear Ms. Brown:

Sacramento Regional County Sanitation District (District) appreciates the opportunity to offer comments on the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) that will be prepared to evaluate the environmental impacts of a proposed Bay Delta Conservation Plan (BDCP). The BDCP and the associated environmental evaluation are of keen interest to the District.

The District provides wastewater collection and treatment services to 1.3 million residents of the greater Sacramento area. The District designed and operates its treatment system in accordance with its National Pollutant Discharge Elimination System (NPDES) permit, issued by the State of California, providing protection of beneficial uses of the Sacramento River and Sacramento-San Joaquin Delta.

The District is very concerned with the pelagic organism decline (POD) in the Delta and supports the goal of the BDCP to address the decline and improve the long-term ecological productivity and sustainability of the Delta. The District believes that the restoration of the health of the Delta ecosystem should be the top priority of the BDCP and that any changes to the structure or operation of the Delta should be carefully evaluated to ensure that it does not conflict with or hinder such restoration.

Additionally, the District observes that the BDCP process has been lacking in representation by Central Valley stakeholders. The BDCP evaluation and ongoing process should address Central Valley stakeholders and other stakeholders not represented on the BDCP steering committee or other aspects of the ongoing collaboration between state and federal agencies and water agencies.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100

In concert with an emphasis on Delta ecosystem recovery and sustainable function, and the proper consideration of the concerns of Central Valley residents and other stakeholders, the District's comments on the scope of the EIR/EIS are as follows:

1. The EIR/EIS must address how each alternative impacts Delta fisheries and how the project will remedy, rather than prolong or exacerbate, the POD. The Notice Of Preparation (NOP, March 17, 2008) presumes that incidental take of endangered species will continue to occur in the future as part of a "conservation plan." The EIR/EIS must address and quantify the level of take that the Delta can withstand that will allow the recovery of sustainable fish populations.
2. The Existing Condition for the EIR/EIS should be the legal and regulatory constraints existing at the time of issuance of the NOP. As such, the Existing Condition for this project should include the legal determinations and operational constraints embodied in the Wanger decision and other recent legal decisions.
3. The EIR/EIS should state that an objective of the selected project will be to avoid unintended impacts on third parties. For example, the selected project should either avoid or mitigate changes in water or wastewater treatment for residents of the Central Valley or the Delta that would not otherwise occur in the absence of the projects considered in the BDCP. The impacts of any such changes must be considered in evaluating the environmental costs and benefits, if any, of the BDCP. The beneficiaries of water diversions from the Delta should be accountable for funding any necessary mitigation.
4. The BDCP and EIR/EIS should state that the funding for the selected BDCP project will be fair and equitable to stakeholders in the Central Valley and will be financed, in large part, by the beneficiaries of water diversions from the Delta. The cost estimates and funding mechanisms for the four alternatives should be presented in the EIR/EIS.
5. The EIR/EIS must fully evaluate the alternative BDCP projects for consistency with State and Federal antidegradation policies under the Clean Water Act and the California Water Code. It appears that many or all of the alternatives will result in degraded water quality in the Delta due to the diversion of higher quality Sacramento River flows from the Northern and Central portions of the Delta. Such action would clearly trigger the need for an antidegradation analysis.
6. The proposed abilities of the four Options to meet biological goals are highly dependent on hypothetical habitat restoration activities in zones outside the pathways of through-Delta conveyance. Although general restoration opportunities are described for the four Options, specific restoration projects would certainly require local stakeholder involvement, separate cost-benefit analyses, and environmental review. In debating the relative merits of the proposed alternatives in the EIR/EIS, the greatest weight should be placed on the outcomes which are more certain: changes to baseline hydrology and water quality owing to the timing, location, and quantity of water export. The EIR/EIS should carefully evaluate whether the positive effects of habitat restoration projects inside the Delta will outweigh negative effects of diversion of high-quality Sacramento River water. Technical details should be provided about the number, locations, and types of restoration projects that are necessary to provide the biological benefits ascribed to the Options. The feasibility and sustainability of the restoration projects should be covered in the EIR/EIS, and the responsible parties for implementation identified.
7. In the BDCP Options Evaluations Report of September 2007, the relative costs (infrastructure, operations, management) of implementing the Options are used as one of the performance criteria for comparing the four Options, but apparently only the costs associated with conveyance infrastructure were

considered. The costs for habitat restoration activities embodied in the Options should also be evaluated in the EIR/EIS.

8. A structural approach for achieving water supply reliability (conveyance) was one of two key components used to evaluate the original range of BDCP alternatives. A fifth BDCP alternative should be evaluated in the EIR/EIS in which non-structural approaches for achieving water supply reliability are considered. Non-structural alternatives should include water conservation, water reclamation, localized desalination, increased capture and storage of localized rainfall or other forms of water procurement in lieu of continued or increased Delta deliveries.

9. The energy and greenhouse gas impacts of pumping from the Delta and subsequent pumping along the conveyance alignment must be evaluated, along with all energy and greenhouse gas impacts of all aspects of the BDCP alternatives. This analysis is consistent with the analysis of the sustainability and reliability of continued use of the Delta as the primary water supply source for major population centers in the State.

10. The relationship of the BDCP planning and decision making effort to other ongoing planning efforts (e.g. Delta Vision and the Biological Opinion(s) being performed in response to court orders) should be clearly addressed in the EIR/EIS. The NOP describes the means by which the Governor's Delta Vision process led to the direction to initiate the BDCP California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA) process. However, the NOP does not articulate the importance of the Delta Vision report, to be issued in fall 2008, on the BDCP process.

The District thanks you for the opportunity to provide these comments at this stage in the development of the BDCP EIR/EIS and looks forward to continued and increased involvement in development of a BDCP that will lead to the recovery of the Delta ecosystem.

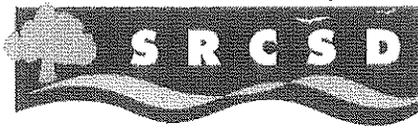
Please include the District on the notice list to receive all notices concerning the BDCP including, but not limited to, notice of any workshops, meetings or hearings on the BDCP or EIR/EIS, and any CEQA Notice of Determination for the project. Please send notices to Terrie Mitchell, Sacramento Regional County Sanitation District (SRCSD), 10545 Armstrong Ave. Suite 101, Mather, CA, 95655, and if notices will be distributed by email, also to [mitchellt@sacsewer.com](mailto:mitchellt@sacsewer.com).

Sincerely,



Wendell Kido  
District Manager

Cc: Debbie Webster, Executive Officer, Central Valley Clean Water Agencies  
Delta Vision Blue Ribbon Task Force  
State Water Resources Control Board Members  
Central Valley Regional Water Quality Control Board Members  
Terrie Mitchell, Legislative and Regulatory Affairs Manager, SRCSD  
Mary Snyder, District Engineer, SRCSD



10345 Armstrong Avenue  
Mather, CA 95655

August 20, 2008

Tele: (916) 876-6000

Fax: (916) 876-6160

Website: www.srcsd.com

Mr. John McCamman, Co-Chair  
Other Stressors Workgroup  
Department of Fish and Game  
1416 Ninth St., 12th Floor  
Sacramento, CA 95814

Mr. Brent Walthall, Co-Chair  
Other Stressors Workgroup  
Kern County Water Agency  
P.O. Box 58  
Bakersfield, CA 93302-0058

**Board of Directors  
Representing:**

- County of Sacramento
- County of Yolo
- City of Citrus Heights
- City of Elk Grove
- City of Folsom
- City of Rancho Cordova
- City of Sacramento
- City of West Sacramento

**Comments in response to August 19, 2008 Other Stressors Workgroup  
Draft Summary of Coarse Level Evaluation Results: Toxics,  
Conservation Measure 1: Wastewater Treatment Modifications, Bay  
Delta Conservation Plan and Conservation Measure 2: Methylmercury  
Load Reductions**

Dear Mr. McCamman and Mr. Walthall:

The Sacramento Regional County Sanitation District (SRCS D) provides the following comments on the August 19, 2008, Other Stressors Workgroup Draft Summary of Coarse Level Evaluation Results: Toxics, Conservation Measure 1: Wastewater Treatment Modifications (Conservation Measure 1) and Conservation Measure 2: Methylmercury Load Reductions (Conservation Measure 2). SRCS D is concerned that the approaches and outcomes listed in these conservation measures could potentially be carried through the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) process, which will be prepared to evaluate the environmental impacts of a proposed Bay Delta Conservation Plan (BDCP). The BDCP and the associated environmental evaluation are of keen interest to SRCS D.

- Mary K. Snyder  
District Engineer
- Stan R. Dean  
Plant Manager
- Wendell H. Kido  
District Manager
- Marcia Maurer  
Chief Financial Officer

SRCS D provides wastewater collection and treatment services to 1.3 million residents of the greater Sacramento area. SRCS D designed and operates its treatment system in accordance with its National Pollutant Discharge Elimination System (NPDES) permit, issued by the State of California, providing protection of beneficial uses of the Sacramento River and Sacramento-San Joaquin Delta.

SRCS D is very concerned with the pelagic organism decline (POD) in the Delta and supports the goal of the BDCP to address the decline and improve the long-term ecological productivity and sustainability of the Delta. The District understands the co-equal goals of the Blue Ribbon Task Force between Delta ecosystem and reliable water supply. We believe that any changes to the operation or structure of the Delta must be carefully evaluated to ensure that the goals of attaining a healthy ecosystem and providing a reliable water supply are actually equal and result in the ecosystem that is desired.

10345 ARMSTRONG AVENUE MATHER, CA 95655

However, SRCSD continues to be troubled by the continued lack of stakeholder involvement in the BDCP, Delta Vision and Interagency Ecological Program efforts that are underway. The BDCP process has been lacking in representation by Central Valley stakeholders, and specifically wastewater interests. It is astonishing that an effort such as BDCP, which is developing proposals that will directly affect wastewater treatment agencies, has effectively shut out these interests from the planning and policy making process. The BDCP EIR/EIS evaluation and ongoing process should address the input of Central Valley stakeholders and other stakeholders not represented on the BDCP steering committee or other work groups of the ongoing collaboration between state and federal agencies and water agencies. To encourage more stakeholder involvement in this process, we are submitting the following general comments and have attached specific comments on Conservation Measure 1 and Conservation Measure 2, for consideration by the Other Stressors Workgroup, as well as the BDCP Steering Committee.

General Comments

1. The approaches recommended in these conservation measures do not take into consideration existing regulatory authority of other State agencies, and ignores established legal authority in the Clean Water Act that establishes water quality objectives and beneficial uses to determine permitted activities. Participation by the State Water Resources Control Board and Central Valley Regional Water Quality Control Board is greatly appreciated. It appears that their understanding of wastewater discharges and processes is demonstrated in part in Conservation Measure 1's "Main points during evaluation" discussion of the great uncertainty over ammonia's effects to the Delta ecosystem. However, after attending the Other Stressors Work Group on August 19, 2008, it appears as if the Workgroup may be removing or re-writing the references to the uncertainties related to the state of the science on the ammonia and endocrine disruptors issues that were pointed out in the "Main Points Evaluation" Section. It is imperative that this scientific uncertainty be included in the discussion so that public policy decisions do not move forward based on unproven and inaccurate scientific speculation.
2. The "great benefit" to the Delta ecosystem from these two conservation measures, as identified in the outcomes and additional positive outcomes, is unproven speculation, and inaccurate. SRCSD continues to call for sound science as the basis of decisions, not only for Delta protection, but in making public policy choices that affect the local community, as well as the State. Specific comments on the outcomes are provided as an attachment to this letter. As stakeholders, and technical experts in wastewater, we hope the workgroup will review and consider our comments.
3. The approaches recommended as conservation measures should avoid unintended and inequitable impacts on third parties. For example, the approaches selected in the conservation measures should either avoid or mitigate changes in water or wastewater treatment for residents of the Central Valley or the Delta that would not otherwise occur in the absence of the projects considered in the BDCP. Any mitigation measures recommended through this workgroup process will have to consider evaluating the environmental costs and benefits, and beneficiaries of water diversions from the Delta should be accountable for funding any necessary mitigation.

Mr. John McCamman  
Mr. Brent Walthall  
August 20, 2008  
Page 3

SRCSD believes providing you comments at this early stage in the development of the BDCP EIR/EIS is beneficial to the BDCP process to prevent inaccurate information and foregone conclusions from moving forward in the process that will not withstand scientific and technical scrutiny. We look forward to continued and increased involvement in development of a BDCP that will lead to the recovery of the Delta ecosystem.

Please include SRCSD on the notice list to receive all notices concerning the BDCP including, but not limited to, notice of any workshops, meetings or hearings on the BDCP or EIR/EIS, and any CEQA Notice of Determination for the project. Please send notices to Terrie Mitchell, Sacramento Regional County Sanitation District (SRCSD), 10545 Armstrong Ave. Suite 101, Mather, CA, 95655, and if notices will be distributed by email, also to [mitchell@sacsewer.com](mailto:mitchell@sacsewer.com).

Sincerely,



Wendell Kido  
District Manager

**Attachment:** Specific Comments on August 19, 2008 Other Stressors Workgroup Draft Summary of Coarse Level Evaluation Results: Toxics, Conservation Measure 1: Wastewater Treatment Modifications, Bay Delta Conservation Plan and Conservation Measure 2: Methylmercury load reductions

cc: Senators Darrell Steinberg and Joseph Simitian  
BDCP Steering Committee Members  
BDCP Management Team  
Mike Chrisman, Secretary, Resources Agency  
Linda Adams, Secretary, Cal-EPA  
Lester Snow, Director, Department of Water Resources  
Delta Vision Blue Ribbon Task Force Members  
State Water Resources Control Board Members  
Central Valley Regional Water Quality Control Board Members  
Debbie Webster, Executive Officer, Central Valley Clean Water Agencies  
Mary Snyder, District Engineer, SRCSD  
Terrie Mitchell, Legislative and Regulatory Affairs Manager, SRCSD

## ATTACHMENT

### Sacramento Regional County Sanitation District (SRCSD) Specific Comments on August 19, 2008 Other Stressors Workgroup Draft Summary of Coarse Level Evaluation Results: Toxics, Conservation Measure 1: Wastewater Treatment Modifications, Bay Delta Conservation Plan and Conservation Measure 2: Methylmercury Load Reductions

The BDCP Conservation Measure language is indented and in italics, and SRCSD's comments are bulleted either before or after the indentations.

#### Coarse-level DRERIP Analysis of Conservation Measure for Wastewater Treatment Modifications

- Understanding the Delta Regional Ecosystem Restoration Implementation Plan (DRERIP) analysis would be helpful to comprehend how this conservation measure is ranked as "Conservation Measure No. 1." The benefits identified for the action and approaches do not have proven scientific backing, and the expected specific benefits achieved as environmental outcomes do not relate back to the action and approach other than to think "...this action was a good idea..."
- The main points identified in this coarse level evaluation do not support the outcomes, and generally do not capture the current level of scientific understanding of the effects of ammonia and endocrine disruptors on the Delta ecosystem. Bold emphasis added to the items below show the reality of the current understanding of the impact ammonia and endocrine disruptors have on the health of the Delta ecosystem (this text is taken directly from Conservation Measure #1).

#### *Main points identified during evaluation:*

- 1) *There is **high uncertainty over the effects of ammonia on the Delta ecosystem.** Currently, no data exists indicating whether the same effects seen in ocean and San Pablo, San Francisco, and Suisun Bays (the subject of recent articles by Dugdale and Wilkerson). This action should not be implemented until we **find out for sure whether ammonia is even an issue to the food chain and fish populations in the Delta.** Dugdale and Wilkerson are currently working on a screening level study in this area, but results are forthcoming and are being delayed because of the state budget crisis.*
- 2) *There are multiple other factors that could be disrupting the food web in the Delta that may be as important as or more important than ammonia. Therefore, the **relative importance of ammonia in the bigger picture is still unknown and will not be quantified by the Dugdale study.***
- 3) ***Ammonia concentrations in the Sacramento River may not be high enough to cause direct mortality of fish.** This is because there is a huge dilution factor caused by higher flows on the Sacramento River (relative to the San Joaquin River). This dilution factor would be likely reduced with a new Hood*

*Diversion and may have to be dealt with as mitigation of the Peripheral Canal.*

- 4) *The ability of a constructed wetland to reduce water temperature*
- 5) *There is general consensus that endocrine disruptors are affecting fish, but it is not well understood in the Delta.*
- 6) *Overall, the group thought that this action was a good idea, although highly uncertain that ammonia/ammonium is the "smoking gun" that some think it is. Regardless, the other benefits of this action would still provide great benefits to the Delta ecosystem.*

- Studies performed by SRCSO using sophisticated, validated mathematical models indicate that ammonia mortality is not occurring as a result of the SRCSO's discharge. This result has been confirmed on a preliminary basis by special studies performed in 2008 looking specifically at Delta smelt toxicity.
- The ability of constructed wetlands to seasonally reduce water temperature downstream from the District's discharge would not be expected to produce a significant benefit, since the detailed evaluation of the thermal impacts of SRCSO's discharge performed to date using sophisticated modeling tools indicates that the SRCSO's discharge is not currently producing an adverse impact.
- There is no definitive information linking SRCSO's discharge to significant adverse impacts on fish. Therefore, this statement and statements regarding the benefits of wetlands in this area are speculative and uncertain based on available information.
- The disregard for any connection between the action and approaches listed in this conservation measure and the other benefits, which need to be specifically defined, that could be achieved are detailed in the comments below.

*Action: Reduce loads of ammonia and endocrine disruptors entering the Delta from the Sacramento Wastewater Treatment Plant (WWTP) by ~50-60%.*

- What is the scientific rationale for requiring these reductions? What are the targeted compounds and concentrations? What are the removal efficiencies, and the expected effluent quality? Even USEPA recognizes a variety of studies is needed to get a better idea of the level and type of pharmaceuticals in the environment. The National Academy of Sciences (NAS) has been commissioned to give USEPA advice on how to proceed in determining the risk posed by low levels of pharmaceuticals in both fish tissue and water. Suzanne Rudzinski, deputy director of the USEPA Office of Science & Technology in the Office of Water said there are "critical information gaps that need to be filled," particularly relating to the risk, exposure and hazard of pharmaceuticals in the environment. What studies exist to support the action of reducing ammonia loads and endocrine disruptors by 50-60% will improve the

health of an ecosystem? There is little or no monitoring for endocrine disruptors and there are no targets for risk reduction.

*Approach:*

- 1) *Construct a wetland through which secondary treated water will flow before being released back into the Sacramento River.*
  - *Current estimates based on a demonstration project conducted in the 1990s indicate that 3000 acres of constructed wetland would be needed to cover the 158 mgd released from the Sacramento WWTP. No sampling was conducted to determine the effectiveness of the removal of endocrine disruptors. However, other constructed wetland projects indicate that the effectiveness ranges from 50%-60% reduction. Average annual temperatures were reduced by 3 degrees C, reducing thermal impacts to fish and reducing ionization of ammonia to ammonium. Temperature reductions were greater during colder months.*
  - *In an initial literature search, constructed wetlands can be 30%-40% effective at removing endocrine disruptors and 50%-60% effective at removing ammonia. The values for endocrine disruptors are specific to individual chemicals.*
- 2) *Create nitrifying biotowers and tertiary treatment facilities similar to those at the Stockton WWTP before water returns to the river.*
  - *Current data indicate that these methods are up to 90% efficient in removing ammonia and 30%-85% efficient in removing endocrine disruptors.*

- The constructed wetland approach shows a lack of understanding of the SRCS D treatment plant and processes, and a lack of consideration of concept feasibility. It is infeasible to construct a 3000 acre wetland in a highly urbanized area, regardless of the level of wastewater treatment. Even though SRCS D owns 3,550 acres at its treatment plant site, 900 acres are used for the treatment plant processes (sedimentation tanks, digesters, chlorination, dechlorination, biosolids facilities, and recycled water facility) and 2650 acres are managed as open space, and is known as the "Bufferlands". The Bufferlands provides over 2000 acres of open space for riparian and habitat restoration, which includes a managed wetland fed by Laguna and Morrison Creeks, that helps supply the Pacific flyway with a necessary food source and sanctuary. SRCS D has voluntarily provided funding for conserving and restoring this land for over 25 years, and believes it has an environmental stewardship responsibility to continue restoring habitat for the local

community and environment. For more information on the Bufferlands please visit our website at <http://www.srcsd.com/buffer.html>.

- The responsibility for control of contaminants should be determined in accordance with the Clean Water Act, California Water Code and Central Valley Basin Plan, as implemented by the Central Valley Regional Water Quality Control Board, SWRCB and USEPA. Conservation measures to benefit Delta water diverters or water purveyors should be funded by those beneficiaries. The cost and energy to treat water supplies taken from the Delta must be evaluated in comparison to the costs and benefits to remove contaminants through watershed management and treatment at the source. This is particularly true in the Delta, where large natural flows significantly reduce the impact of individual sources on water concentrations in the Delta ecosystem. Water supply agencies benefiting from the use of Delta supplies should fund treatment at the source consistent with a “beneficiary pays” theme.
  
- The need for advanced wastewater treatment at individual treatment facilities is based on the specific discharge conditions, dilution characteristics, and water quality-based requirements as determined under the Clean Water Act and California Water Code regulatory programs. BDCP, or their consultants, should not be overriding these programs and/or oversimplifying the analysis and mandating treatment levels, or types of treatment, at any treatment plants in California without substantial justification and site-specific analysis. SRCS D has spent years collecting data and using sophisticated modeling tools to better inform District management, the community and the regulatory agencies on its analysis of water quality impacts and level of treatment to protect beneficial uses. Neither the Delta Vision nor the BDCP should override the analysis and recommendations of master planning documents of local communities that were completed to meet the requirements of the Clean Water Act and California Water Code.

***Outcomes:***

- 1) *Increased food abundance for delta and longfin smelt, white and green sturgeon, salmonids, and splittail (covered species) by increasing the abundance of diatoms.*
  - 2) *Reduced direct mortality by ammonia of covered species.*
  - 3) *Reduced issues caused by endocrine disruptors in covered species.*
  - 4) *Reduced thermal stress to covered species near effluent.*
  - 5) *Reduced direct mortality by *Microcystis aeruginosa* of covered species.*
  - 6) *Reduced sublethal effects (low DO levels, sublethal toxicity) of *Microcystis aeruginosa* of covered species.*
- Technical support for the above outcomes should be provided to inform decision-makers and the public, and *must* be provided eventually to satisfy CEQA standards. Detailed impact analysis of the WWTP’s discharge in the receiving water has shown no significant impact and

does not exceed USEPA criteria outside the mixing zone. Additionally, studies conducted by the University of California Davis, under Regional Water Board direction, show that the direct mortality of covered species by ammonia is not occurring, making this outcome incorrect. The statement that thermal stress is occurring near the outfall is also incorrect based on the District's Environmental Impact Report thermal study, a study supporting an exception to the State Water Boards Thermal Plan, submitted to the Regional Board in March 2005. The Department of Fish and Game and NOAA supported the concept that there is no significant thermal impact related to the District's discharge.

- What are the specific "issues" connected to the SRCS D discharge and endocrine disruptors? Have risk levels to human health or aquatic habitats been determined? If so, please provide the specific studies on which these statements are based. What is the basis for the statement regarding reduced "direct mortality" or "sublethal effects" caused by *Microcystis*, and what is the clear linkage between ammonia to *Microcystis*? Outcomes should have referenced materials that any reader could refer to in understanding how the outcome relates back to the approach recommended for any conservation measures.

*Additional positive outcomes:*

- 1) *Wetlands are beneficial to other non-covered species (birds, mammals, etc.).*
- 2) *Ammonia fixation could increase nitrate loads into the river, which would be good for algae, and, therefore, fish.*
- 3) *There are ancillary benefits to additional treatment, such as methylmercury and heavy metal reductions.*
- 4) *Improvement to drinking water downstream.*

- Wetlands are beneficial habitat for other than fish, and again the Bufferlands is a concrete demonstration of SRCS D's of habitat restoration and conservation in the Delta. The Delta is not nutrient limited, and the outcome could actually be seen as a problem with future nutrient criteria, if they are adopted. Increased algal production is not encouraged in drinking water supplies because of taste and odor issues surrounding treatment of drinking water supplies. Wetlands have been documented to increase methylation of mercury, not reduce it, and metals are not known to be an issue for the Delta. Increases in total organic carbon that are associated with wetlands is not a positive outcome for drinking water, and may or may not be good for the aquatic environment, depending on the quality of the organic carbon.

*Additional negative outcomes:*

- 1) *Constructed wetlands can attract wildlife that is exposed to these toxins.*
- 2) *Increased algal production is bad for drinking water.*

- What are the toxins that wildlife would be attracted to in a wetland?

SRCSD is also providing the following bulleted specific comments on the Other Stressors Work Group Coarse Level Evaluation Results: Toxics, Conservation Measure No. 2 Methylmercury load reductions.

*Conservation Measure 2. Methylmercury load reductions*

- In general, the approach, outcomes and main points during evaluation reflect a rudimentary understanding of the challenges to achieving methylmercury load reductions.

*Action:*

*Contribute to reducing inputs of methylmercury and loads of mercury enriched sediment entering the Delta by 50%.*

*Approach: The approach includes:*

1. *Support the Regional Water Quality Control Board's efforts to reduce the concentration of methylmercury in Delta waters by:*
    - a. *Improving the mercury and sediment trapping efficiency of the Cache Creek settling basin by 50%. Operation of the settling basin (i.e., periodic removal of mercury-laden sediment) would occur on perpetuity.*
    - b. *Creating settling basins at the downstream end of all floodplain/intertidal marsh restoration activities under the BDCP in the Delta.*
    - c. *Remediating inorganic mercury sources upstream of the Delta to reduce methylmercury by 50%, including mercury contaminated sediment "hot spots" in stream channels and mercury and gold mines*
- The approach to improve the trapping efficiency of the CCSB is not a simple task and will likely result in significant ecosystem impacts from excavation, hauling, noise, dust, and general construction disturbance.

*Outcomes: Expected outcomes of this action include:*

1. *Reduced direct mortality by consumption of mercury by splittail, delta and longfin smelt, green and white sturgeon, steelhead, and Chinook salmon.*
2. *Reduced sublethal effects (genetic, tissue/organ damage, development, reproductive, growth, and immune) of mercury on splittail, delta and longfin smelt, green and white sturgeon, and Chinook salmon.*

- There is no evidence of Delta fish dying from mercury consumption, nor any reason to believe that mortality would be expected from activity in the basin, therefore these outcomes do not make sense.

*Additional positive outcomes:*

1. *Human health benefits, which likely far outweigh ecosystem benefits*

- The vague qualifier comparing unspecified benefits has no meaning. Explicit human health and ecosystem benefits from methylmercury load reductions should be provided.

*Additional negative outcomes:*

1. *Downstream settling basins could create anoxic conditions that are good for methylation of mercury – so need to make sure there is circulation of the water column to avoid this. Also, need periodic removal of sediment to remove all mercury.*

- The additional negative outcomes fail to recognize the length of the construction disturbance during times when the basin is accessible (not flooded) and the study necessary to determine HOW to improve the trapping efficiency by 50%. The outcomes of an undetermined project cannot be discussed intelligently.

*Main points during evaluation:*

1. *The action as stated indicates that there are mercury “hot spots” upstream, but does not identify them. This needs to be done. But how far upstream of the Delta can we go under this Plan?*
2. *Evidence of the direct mortality by mercury on covered fish species is limited, particularly in the Delta. It is questionable that this is a population level effect. The trophic level at which the covered fish species are is thought to bioaccumulate mercury, particularly longer-lived fish such as sturgeon and splittail. There is evidence of bioaccumulation in the green sturgeon model, but not the white sturgeon model. There is evidence of bioaccumulation in the splittail model, but it is with low certainty.*
3. *Sublethal impacts are much more likely, especially in the concentrations we find for mercury in the Delta. There is high magnitude and high certainty for sublethal impacts of mercury on covered fish species*

- The most effective tool developed to date to identify hot spots is regional monitoring of small fish with high site fidelity. Silversides, juvenile bass, and prickly sculpin are potential candidates. As biological indicators of exposure over time, they are unparalleled for this application.
  
- There is no reason to not look upstream of the Delta for mercury sources. The constant influx of total mercury in sediment transported to the Delta via the Sacramento and San Joaquin rivers is what methylates in the Delta. If these sources are not reduced, the narrow definition of wetlands that do not methylate mercury will be the only acceptable habitat allowed to be constructed in the Delta and the resulting monoculture may not be consistent with a healthy ecosystem.

Again, the District believes providing you specific comments at this early stage in the development of the BDCP EIR/EIS are beneficial to the BDCP process to prevent inaccurate information and foregone conclusions from moving forward in the process that will not withstand scientific and technical scrutiny. We look forward to continued and increased involvement in development of a BDCP that will lead to the recovery of the Delta ecosystem



10545 Armstrong Avenue

October 23, 2008

Madison, CA 95645

Telephone: (916) 876-6000

Fax: (916) 876-2160

Website: www.srcsd.com

**Board of Directors**

**Representing:**

County of Sacramento

County of Yolo

City of Citrus Heights

City of Elk Grove

City of Folsom

City of Rancho Cordova

City of Sacramento

City of West Sacramento

Mary K. Snyder  
District Engineer

Stan R. Dean  
Plant Manager

Wendell H. Kido  
District Manager

Marcia Maurer  
Chief Financial Officer

Ms. Ann Hayden, Co-chair  
BDCP Conveyance Workgroup  
Environmental Defense Fund  
123 Mission Street, 28th Floor  
San Francisco, CA 94105

Victor Pacheco, P.E., Chair  
BDCP Conveyance Workgroup, Fish Facilities Technical Team  
Department of Water Resources, Delta Conveyance Branch, Bay-Delta Office  
P.O. Box 942836  
Sacramento, CA 94236-0001

**Subject: Comments pertaining to Conveyance Workgroup proposals to Bay Delta Conservation Plan (BDCP) Steering Committee**

Dear Ms. Hayden and Mr. Pacheco:

The Sacramento Regional County Sanitation District (SRCS D) offers the following comments to address recommendations and proposals that may be, or have been, proposed by the BDCP Conveyance Workgroup. The two proposals SRCS D is concerned about are:

- **Diversion Locations for an Isolated Facility**
- **Actions Pertaining to Ammonia Source Control**

The following comments address proposals for actions that could adversely impact ongoing and future SRCS D operations and capital expenditures.

**Proposed Diversion Locations for an Isolated Facility**

The first area of comment addresses information presented in a preliminary draft document titled "Conceptual Proposal for Screening Water Diversion Facilities along the Sacramento River" prepared by the Fish Facilities Technical Team of the BDCP in August, 2008. The proposal documents the current status of review and evaluation of approaches to screening a maximum diversion of 15,000 cubic feet per second (cfs) along the Sacramento River between the City of Sacramento and Walnut Grove. The document is intended to provide initial direction to the Conveyance Workgroup regarding the location, composition and arrangement of fish protective diversion facilities. It is noted that the concepts and locations contained in the proposal require additional discussion and analysis.

It is noted in the proposal that it is desired to select locations on the Sacramento River as far north as possible to (a) reduce exposure of delta smelt, longfin smelt and other estuarine species and (b) minimize fish exposure to screens by avoiding tidally induced reverse flows or stagnant flow conditions.

It is also noted that multiple intakes are desired, with a maximum diversion of 5,000 cfs at a single location. It was noted that a single 15,000 cfs diversion was not considered because there is no diversion of this size in the Sacramento Valley and it is unknown what hydrodynamic effects such a diversion would have on the river channel.

It is also noted that the four preliminary concepts identified in the proposal did not consider water quality. The Team used aerial imagery and fishery survey data to identify potentially suitable locations. The team identified twelve potentially suitable locations for placing a diversion facility. The locations were selected to characterize river cross section geometry and to develop a general understanding of water depth and average velocity versus flow. A field tour of the identified sites was conducted on July 29, 2008 to identify potential constraints. The twelve locations are depicted in Figure 1 of the proposal.

Locations A-A and B-B are located upstream of the SRCSD outfall near Freeport. Location C-C is located in the discharge plume for the Sacramento Regional Wastewater Treatment Plant (SRWTP) (clearly depicted in Figures 2, 7, 9 and 13). Locations D-D and E-E are located in the vicinity SRWTP discharge, within several miles of the SRWTP diffuser.

The evaluation criteria and next steps as described in the proposal do not address the issues of: water quality, Department of Public Health approvals, impact on existing utility operations, site constraints for diversion facilities, constraints on the routing and alignment of conveyance canals or pipelines served by the diversion facilities, and other rational considerations to address project feasibility.

Comments:

1. SRCSD strongly opposes the concept of installing intake facilities at any of the following locations: A-A, B-B, C-C, D-D and E-E. Diversions at A-A and B-B would significantly reduce flow in the Sacramento River at the SRWTP point of discharge and would seriously impact the design and operation of the existing SRWTP facility. Diversion at C-C would result in the diversion of partially diluted SRWTP effluent, would produce enormous public perception issues and would not gain the approval of the Department of Public Health. Diversion at D-D and E-E would similarly create significant public perception issues due to the proximity of the intakes to the SRWTP discharge and also would not be expected to gain the approval of DPH. *SRCSD requests that these alternative diversion locations be eliminated from further consideration by the BDCP Conveyance Workgroup.*
2. In general SRCSD is very concerned with the impact that the proposed intake volumes would have on the flow conditions in the Sacramento River. The concern is that the magnitude and timing of withdrawals from the proposed intake locations would increase the frequency of river reversals and low flow conditions at the SRWTP diffuser. The SRWTP is required to cease discharge to the Sacramento River during flow reversal and low flow conditions. An increase in the frequency of reversals and low flow conditions could significantly impact the design and operation of the SRWTP.

Modeling work completed by the Conveyance Workgroup, as shown at the October 3, 2008, Steering Committee, simulated more frequent river reversals based on various proposed diversion scenarios.

### **Proposed Actions pertaining to Ammonia Source Control**

The second area of comment pertains to the recommendation by the X2 subgroup to the Conveyance Workgroup to focus on ammonia source control, in general, and ammonia control at the SRWTP, specifically. The concerns expressed to date in various public forums regarding the potential adverse impacts of ammonia on Delta fish species are unconfirmed by scientific study. Two areas of concern have been expressed: (1) that ammonia toxicity is impacting Delta smelt and (2) that ammonia levels are inhibiting the Delta food web for fish species, resulting in population level impacts. The Central Valley Regional Water Board is managing studies that are intended to address each of these concerns. The ammonia toxicity studies have been performed and preliminary information indicates that ammonia levels in the Delta are not at levels that would produce toxicity to Delta smelt or other sensitive fish species. Documentation of these study results is in preparation. The initial screening study to begin to address the potential impact of ammonia on the Delta food web has not yet been completed and will not likely be completed until mid to late 2009.

Lastly, the Other Stressors Workgroup is addressing ammonia as a mitigation measure as Conservation Measure TOCO1: "Reduce the Load of Ammonia in Effluent Discharged from the Sacramento Regional County Sanitation District into the Sacramento River to Less than \_\_\_ if Warranted Based on Research". Clearly, studies must be completed before an evaluation of the benefits of control measures can be performed and before definitive recommendations for ammonia source control action could be formulated. BDCP workgroups, or sub workgroups, should recognize that the Other Stressors Workgroup is where any mitigation measure regarding SRCSD's discharge of ammonia should be addressed. We are certain that the BDCP process does not intend to propose the same mitigation measure in multiple workgroups.

SRCSD is willing to work with the Conveyance workgroup in its ongoing evaluation of alternative diversion concepts and the Other Stressors workgroup on ammonia research activities. In the meantime, SRCSD requests that written or oral recommendations to the BDCP Steering Committee be modified as requested in this letter. Should you have any questions please contact Terrie Mitchell, at (916) 876-6092, [mitchellt@sacsewer.net](mailto:mitchellt@sacsewer.net).

Sincerely,



Wendell Kido  
District Manager

cc: Mr. John McCamman, DFG, Other Stressors Workgroup Co-Chair  
Mr. Brent Walthall, Kern County Water Agency, Department of Fish and Game  
BDCP Steering Committee Members  
Mr. John Cain, National Heritage Institute, BDCP Conveyance Workgroup  
Mary K. Snyder, District Engineer, SRCSD  
Terrie Mitchell, Legislative and Regulatory Affairs Manager, SRCSD  
Stan Dean, Plant Manager, SRCSD



10545 Armstrong Avenue  
Mather, CA 95655

Tele: [916] 876-6000

Fax: [916] 876-6160

Website: www.srcsd.com

**Board of Directors**  
Representing:

County of Sacramento

County of Yolo

City of Citrus Heights

City of Elk Grove

City of Folsom

City of Rancho Cordova

City of Sacramento

City of West Sacramento

Mary K. Snyder  
District Engineer

Stan R. Dean  
Plant Manager

Wendell H. Kido  
District Manager

Marcia Maurer  
Chief Financial Officer

November 19, 2008

Ms. Ann Hayden, Co-chair  
Environmental Defense  
123 Mission Street, 28<sup>th</sup> Floor  
San Francisco, CA 94105

Mr. Jerry Johns, Co-chair  
California Department of Water Resources  
P.O. Box 942836, Room 1115-9  
Sacramento, CA 94236-0001

BDCP Conveyance Workgroup

**Subject: Comments pertaining to Bay Delta Conservation Plan (BDCP) draft document titled "Draft Water Operations Conservation Measures" dated October 31, 2008**

The Sacramento Regional County Sanitation District (SRCS D) offers the following comments pertaining to the draft BDCP document titled *Draft Water Operations Conservation Measures*, dated October 31, 2008. SRCS D requests that the draft document be modified to address these comments and concerns pertaining to the state of knowledge regarding the effects of ammonia in the Delta.

**Reliance on unpublished and uncorroborated information as the basis for statements of fact**

SRCS D requests that the following language in the draft document be eliminated:

Page 28, third paragraph: *"Although the relationship between X2 and abundance of several fish species has served as the basis for D-1641 X2 requirements, recent analyses have identified stronger correlations between abundance and contaminant concentrations (e.g. ammonia) and water temperature (D. Fullerton, unpubl.data)."*

SRCS D objects to this language on several levels. First, the data source is unpublished and has not been peer reviewed. Second, BDCP, in its Other Stressors conservation measures, is already addressing the potential impacts of ammonia related to toxicity and/or food web impacts. A statement that the effects of ammonia will be investigated in that venue would be more appropriate than the current draft language. Third, greater validity seems to be given to this unpublished correlation analysis than is granted to the correlation analysis that formed the basis for D-1641.

Evidence the following language from page 29 of the draft document:

*“The relationship between Delta outflow and abundance indices for covered fish species has focused primarily on the late winter and spring; there is uncertainty associated with this relationship, and even greater uncertainty associated with the importance of Delta outflow to survival and abundance of covered fish during the remainder of the year. There is also substantial*

*uncertainty in the relationship between Delta outflow and fish abundance in the BDCP implementation period after changes have been implemented to enhance Delta aquatic habitat, reduce SWP and CVP exports from the South Delta, and improve hydrologic conditions within Delta channels. **There is uncertainty of a cause and effect relationship between outflow (or X2) and abundance of some covered species because it is a correlation [emphasis added].** In fact, recent analyses suggest that relationships between abundances of some fish species and water temperatures and ammonia are stronger than those with outflow/X2 (D. Fullerton unpubl. data).”*

In the above text, the implication is that new, uncorroborated, unpublished data should be treated with certainty (based on a correlation) to assert a “relationship” but the correlations used in the formulation of D-1641 should be questioned, because they don’t prove cause and effect. This is an uneven and unacceptable treatment of information.

The BDCP should not be basing its work or conclusions on unpublished correlations without scientific evidence linking to a causal relationship. Again, this topic has been adequately considered and described in the Other Stressors work group as a working hypothesis which will be examined through independent studies. The assertion of a relationship in the subject draft document is inconsistent and unfounded.

#### **Other requested changes in text**

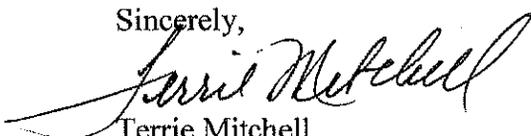
It is requested that changes to the following language be made:

Page 8: *“Although it is uncertain that diverting water from locations north of the Delta will improve overall ecosystem function and substantially decrease entrainment in the south Delta, the population level response of covered species to this parameter is uncertain, largely because numerous other non-flow factors are responsible for their decline, including food limitation, invasive species, discharges of contaminants and increasing temperature trends.”*

SRCSA requests that this language be changed to state that other non-flow factors may have contributed to the decline. As worded, the implication is that the effects of these non-flow factors, and in particular the role of contaminants, is well understood, which it is not.

SRCSA appreciates the consideration of these comments by the BDCP working group in charge of this draft document.

Sincerely,



Terrie Mitchell  
Manager, Legislative & Regulatory Affairs  
SRCSA



10545 Armstrong Avenue

December 5, 2008

Mather, CA 95655

Tele: [916] 876-6000

Fax: [916] 876-6160

Website: www.srcsd.com

**Board of Directors**  
Representing:

County of Sacramento

County of Yolo

City of Citrus Heights

City of Elk Grove

City of Folsom

City of Rancho Cordova

City of Sacramento

City of West Sacramento

Mary K. Snyder  
*District Engineer*

Stan R. Deau  
*Plant Manager*

Wendell H. Kido  
*District Manager*

Marcia Maurer  
*Chief Financial Officer*

Laura King-Moon, Co-chair  
BDCP Integration Team  
State Water Contractors  
1121 L Street, Suite 1050  
Sacramento, California 95814

John Cain, Co-Chair  
BDCP Integration Team  
National Heritage Institute  
100 Pine Street, Suite 1550  
San Francisco, CA 94111

**Subject: Comments Pertaining to Bay Delta Conservation Plan  
Integration Team, November 21, 2008 Working Draft,  
Section 3.3 Approach to Conservation: Overview of Key  
Conservation Measures and their Integration**

Ms. King-Moon and Mr. Cain:

The Sacramento Regional County Sanitation District (SRCSD) offers the following comments addressing the reduction of toxic contaminants as one of the multiple stressors on the Delta. Clearly resolving the Delta's issues requires a comprehensive and long-term solution that weighs all impacts and outcomes against the intended benefits.

SRCSD appreciates the recognition that many stressors co-exist and may be impacting the Delta. However, while some of the stressors (e.g. diversions, flows, invasive species, etc.) are known to be impacting the Delta, other stressors are under evaluation to determine if they have the potential of impacting the Delta (ammonia, endocrine disrupting compounds, etc.). These potential impacts will be known after further research is completed.

SRCSD has consistently commented on the need for decisions regarding solutions to the Delta's issues be based on objective scientific approaches that identify relevant and cost effective solutions and that demonstrate scientific linkages between "cause-and-effect" relationships. We have enumerated in several forums and comments letters that public statements, whether at conferences or in BDCP conservation measures, about research results of recent ammonia studies should be limited until the results are at a minimum shared, and preferably published and peer reviewed.

SRCSO is aware of several different studies relative to the issue of ammonia impacts in the Delta, including but not limited to studies by Dr. Richard Dugdale and Dr. Inge Werner. In the case of Dr. Dugdale's work, the studies deal with possible ammonia inhibition of the Delta food web rather than ammonia toxicity. The ammonia inhibition of the Delta food web studies are yet to be performed in the Delta. It is not yet known if Dr. Dugdale's hypothesis (ammonium concentrations inhibit nitrate uptake in algal) would apply to the freshwater portions of the Delta, or whether such effects would have any significance to Delta fish populations.<sup>1</sup> The most recent progress report SRCSO has received of additional studies regarding Dr. Dugdale's food web inhibition studies indicates ammonia is not inhibiting the food web in the Northern Delta.

With regard to Dr. Werner's work, the most recent study report indicates that the results from 2006 may not be valid for determining if Delta smelt are in fact highly sensitive to unionized ammonia. (See *Pelagic Organism Decline (POD): Acute and Chronic Invertebrate and Fish Toxicity Testing in the Sacramento-San Joaquin Delta 2006-2007*, Final Report (POD Study) (April 30, 2008).) In fact, this final report indicates that test results from 2006 and 2007 yielded contradictory results. It should also be noted that the toxicity test method for Delta smelt changed from static renewal in 2006 to flow-through in 2007, specifically because of poor survival of controls in 2006. In addition, Delta smelt are negatively affected by low electrical conductivity (EC), and most sampling sites in 2006 (wet hydrologic year) had EC levels of between 100-200 umhos/cm. When EC was explicitly considered for the 2006-2007 data, "[a]mmonia did not have a significant effect on Delta smelt survival." (POD Study, p. 88.) Thus, the marginally significant relationship for the 2006 data is questionable considering the challenges in experimental methods. Toxicity testing in 2007 found that "turbidity and EC/salinity were the two most important factors affecting delta smelt survival overall."

Because of the variable results, the Central Valley Regional Water Quality Control Board, Dr. Werner, and Sacramento Regional County Sanitation District have entered into a working relationship to conduct a study on *The Effects of Wastewater Treatment Effluent-Associated Contaminants on Delta Smelt*. (*The Effects of Wastewater Treatment Effluent-Associated Contaminants on Delta Smelt*, Ammonia Toxicity Sampling and Analysis Plan (Finalized July 28, 2008). This study, which began in March 2008, was intended to identify the potential for adverse effects of wastewater effluent, in particular ammonia, on Delta smelt larvae. (*Id.* p. 3.) Until this study and others in progress are completed and verified, it is premature for the BDCP to rely on preliminary results from early studies to imply that ammonia discharges from wastewater are negatively impacting aquatic life in the Delta. Although it should be noted that preliminary results indicate that over 4 times the maximum ambient ammonia concentrations, and over 5 times the average amount of effluent discharged to the Sacramento River, did not cause significant adverse effects to Delta smelt. These data, and ammonia dose-response testing by Dr. Werner, indicate that USEPA recommended water quality criteria are protective of Delta smelt. (See 30-July-08 Status Update at [http://www.swrcb.ca.gov/rwqcb5/water\\_issues/delta\\_water\\_quality/ambient\\_ammonia\\_concentrations](http://www.swrcb.ca.gov/rwqcb5/water_issues/delta_water_quality/ambient_ammonia_concentrations)).

Based upon the above, SRCSO is requesting the following changes to this document as indicated on the attached BDCP Review Document Comment Form and as outlined below (page 6, section 3.3.2, Lines 42-45):

---

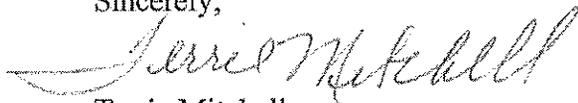
<sup>1</sup> See *Concerns about Ammonia Concentrations in Delta Waters*, Regional Water Board website at [http://www.waterboards.ca.gov/centralvalley/water\\_issues/delta\\_water\\_quality/ammonia\\_issues/ammonia\\_issues\\_11jun08.pdf](http://www.waterboards.ca.gov/centralvalley/water_issues/delta_water_quality/ammonia_issues/ammonia_issues_11jun08.pdf).

~~Results of recent water quality investigations suggest that Concern exists that ammonia directly (e.g. acute and chronic toxicity) or and indirectly (e.g. adverse effects to macroinvertebrates, phytoplankton, and other species that reduce food availability) may impacts covered fish species in the Delta. although there remains Ongoing studies are attempting to reduce the considerable uncertainty regarding the extent to which this occurs.~~

An additional comment SRCSD has relates to additional technical studies that are being proposed by the Integration Team (reference Handout #4 from 11-18-08 Integration Team meeting). It is unclear to us why additional technical studies are being proposed by the Integration Team, separate from the conservation measures being proposed by the various workgroups. For instance, the Other Stressors Workgroup is addressing ammonia as a proposed mitigation measure as Conservation Measure TOCO1: "Reduce the Load of Ammonia in Effluent Discharged from the Sacramento Regional County Sanitation District into the Sacramento River to Less than [redacted] if Warranted Based on Research." Although the BDCP states in this approach to conservation that they will work with SRCSD and other dischargers to determine any potential direct and indirect effects of ammonia on covered species. It is our understanding from the November 25 BDCP Integration Team meeting that a new technical team to review ammonia issues is being formed and does not include any discharger representatives. SRCSD requests active participation as a technical reviewer on the ammonia issues technical study.

SRCSD is willing to work with the Integration Team in its ongoing evaluation of integrating various conservation measures, including diversion concepts and ammonia research activities. In the meantime, SRCSD requests that written or oral recommendations to the BDCP Steering Committee be modified as requested in this letter. Should you have any questions please contact me at 916-876-6092, mitchell@sacsewer.com.

Sincerely,



Terrie Mitchell  
Legislative and Regulatory Affairs Manager, SRCSD

Attachment: BDCP Review Document Comment Form

cc: Mr. John McCamman, DFG, Other Stressors Workgroup Co-Chair  
Mr. Brent Walthall, Kern County Water Agency  
BDCP Steering Committee Members  
Mary K. Snyder, District Engineer, SRCSD  
Stan Dean, District Manager, SRCSD  
Prabhakar Somavarapu, Plant Manager, SRCSD  
Debbie Webster – Central Valley Clean Water Association

**Bay Delta Conservation Plan  
Review Document Comment Form**

**Document:** Draft Ch. 3.3 (November 21, 2008, HO #5)

**Name:** Terrie Mitchell

**Affiliation:** Sacramento Regional County Sanitation District

**Date:** 12/05/08

Please use this form to document your comments to the above document. Please number your comments in the first column and indicate the page, section, and line number (if provided) that reference the comment's location in the review document in the next three columns. **Return completed comment forms to Rick Wilder (wilderrm@saic.com) and Pete Rawlings (rawlingsms@saic.com).**

To be of the greatest value to the document development process, please make your comments as specific as possible (e.g. rather than stating that more current information is available regarding a topic, provide the additional information [or indicate where it may be acquired]; rather than indicating that you disagree with a statement, indicate why you disagree with the statement and recommend alternative text for the statement). Do not enter information in the **Disposition** column. This column will be used by SAIC to record how each comment was addressed during the document revision process.

No.	Page #	Section #	Line #	Comment	Disposition
	5	3.3.2	10-14	<p>Requested edits: Concern exists that ammonia directly (e.g. acute and chronic toxicity) or indirectly (e.g. adverse effects to macroinvertebrates, phytoplankton, and other species that reduce food availability) may impact covered fish species in the Delta. Ongoing studies are attempting to reduce the considerable uncertainty regarding the extent to which this occurs.</p> <p>Comment: Available data from studies performed in 2008 in the Sacramento River indicates that neither acute nor chronic ammonia toxicity to Delta smelt is present in the vicinity of the SRCSD treated effluent discharge to the Sacramento River. Results from initial studies regarding impacts of ammonia on the Delta food web are inconclusive and unpublished. The statement that study results are suggesting confirmation of ammonia impacts is unfounded.</p>	
	12	3.3.6	25	Requested edit: <del>In addition to conservation measures that are specific to particular geographic regions</del>	



10545 Armstrong Avenue  
Mather, CA 95655

Tele: (916) 876-6000

Fax: (916) 876-6160

Website: www.srcsd.com

**Board of Directors**

**Representing:**

County of Sacramento

County of Yolo

City of Citrus Heights

City of Elk Grove

City of Folsom

City of Rancho Cordova

City of Sacramento

City of West Sacramento

Mary K. Snyder  
District Engineer

Stan R. Dean  
Plant Manager

Wendell H. Kido  
District Manager

Marcia Maurer  
Chief Financial Officer

December 8, 2008

Laura King-Moon, Co-chair  
BDCP Integration Team  
State Water Contractors  
1121 L Street, Suite 1050  
Sacramento, California 95814

John Cain, Co-Chair  
BDCP Integration Team  
National Heritage Institute  
100 Pine Street, Suite 1550  
San Francisco, CA 94111

**Subject: Comments Pertaining to Bay Delta Conservation Plan  
Integration Team, November 21, 2008 Working Draft,  
Section 3.3 Approach to Conservation: Overview of Key  
Conservation Measures and their Integration**

Ms. King-Moon and Mr. Cain:

The Sacramento Regional County Sanitation District (SRCS D) offers the following comments addressing the reduction of toxic contaminants as one of the multiple stressors on the Delta. Clearly resolving the Delta's issues requires a comprehensive and long-term solution that weighs all impacts and outcomes against the intended benefits.

SRCS D appreciates the recognition that many stressors co-exist and may be impacting the Delta. However, while some of the stressors (e.g. water project diversions, flow manipulations, predation, invasive species, etc.) are known to be impacting the fish populations of the Delta, other stressors (i.e. "toxic contaminants", "ammonia", endocrine disrupting compounds, ), which have been heavily regulated by the State and Regional Water Boards over the past several decades, are under renewed evaluation to determine if they have the potential of impacting Delta species or habitat. These potential impacts are currently unproven and will be verified only after further research is completed.

SRCS D has consistently commented on the need for decisions regarding solutions to the Delta's issues be based on objective scientific approaches that identify relevant and cost effective solutions and that demonstrate specific scientific linkages or "cause-and-effect" relationships. We have repeatedly enumerated in public forums and comments letters that BDCP documentation about the impact of toxic contaminants, in general, and research results of recent ammonia studies, specifically, should be properly stated. Where

TECHNOLOGY IN WATER WITH NATURE

references are made to “recent research”, statements should be properly limited and qualified until the results are shared in proper technical forums to allow opportunity for technical evaluation and peer review.

As has been stated in previous correspondence, SRCSD is aware of several different studies relative to the issue of ammonia impacts in the Delta, including but not limited to studies by Dr. Richard Dugdale and Dr. Inge Werner being performed in coordination with the Central Valley Regional Water Board and SRCSD. In the case of Dr. Dugdale’s work, the studies deal with possible ammonia inhibition of the Delta food web and have only recently been initiated. Preliminary results in the Sacramento River have not supported Dr. Dugdale’s hypothesis that ammonium concentrations inhibit phytoplankton growth. Initial results also do not support other hypotheses that smaller, less valuable algal species are produced in areas where ammonium concentrations exceed Dr. Dugdale’s inhibition threshold. This information is derived from the first progress report for Dr. Dugdale’s studies in the Northern Delta.

Another related study deals with ammonia toxicity. The Central Valley Regional Water Quality Control Board, UCD (Dr. Werner), and Sacramento Regional County Sanitation District have entered into a working relationship to conduct a study on *The Effects of Wastewater Treatment Effluent-Associated Contaminants on Delta Smelt*. (*The Effects of Wastewater Treatment Effluent-Associated Contaminants on Delta Smelt*, Ammonia Toxicity Sampling and Analysis Plan (Finalized July 28, 2008). This study, which began in March 2008, is intended to identify the potential for adverse effects of wastewater effluent, in particular ammonia, on Delta smelt larvae. (*Id.* p. 3.) Preliminary results derived from bioassays conducted in the summer of 2008 indicate no evidence of ammonia toxicity to Delta smelt in the Sacramento River near the SRCSD discharge.

In addition to ammonia, SRCSD is not aware of any studies that have been performed in the Delta to definitively link toxic contaminants to reductions in Delta fish species populations. Despite that fact, BDCP integration team documents continue to allege, infer and/or state that such linkages occur and seem to provide disproportionate attention to control measures aimed at toxic contaminants or other inputs from Central Valley municipal and agricultural interests. Based upon the above, SRCSD is requesting the following changes to the Section 3.3 document as outlined below.

Page 2, paragraph 1: The statement that toxic dischargers have contributed to declines in covered fish, wildlife and plant species and other organisms is made without citation to a reference or linkage to scientific evidence. This statement should be eliminated or correctly qualified.

Page 2, paragraph five: The statement is made that conservation measures addressing other stressors (including toxic contaminants) are expected to reduce adverse effects on covered species. While potentially true, this statement should be properly qualified to reflect what is actually known and documented to be factual.

Page 3, paragraph 3, item 3: The implication is made that reducing the occurrence of toxic contaminants in Delta waterways will reduce direct and indirect effects on covered species. Toxic effects are not based on the presence of potentially toxic materials, but on the concentration of those materials and the duration of exposure of organisms to those concentrations. This generalized statement regarding the occurrence of toxic contaminants is

misleading, since linkage between toxic contaminants and populations of covered species has not been made and is not cited to scientific evidence or specific references in the BDCP draft document. This statement should be modified.

Page 4, paragraph two: The statement is made that the reduction of toxic discharges would result in a healthier, more productive ecosystem, increasing the potential that covered fish species would respond to other conservation measures. Again, this statement is made without citation to references that confirm that discharges are toxic or that modifications of discharges would lead to an improved Delta ecosystem. Without evidence of specific linkages, such statements are misleading and overstate the certainty regarding the effect of conservation measures aimed at modification of local municipal or agricultural discharges.

Page 6, paragraph three: The statement is made that results of recent water quality investigations suggest that ammonia directly (e.g. acute and chronic toxicity) and indirectly (e.g. adverse effects to macroinvertebrates, phytoplankton and other species that reduce food availability) affects covered fish species in the Delta. As stated above, preliminary results from studies by Dugdale and Werner show the opposite. Results from other unidentified studies should be specifically referenced and validated before statements are included in draft BDCP documents.

Page 7, paragraph two: Absent from the discussion of the suggested improvements in the North Delta and Yolo Bypass are the potentially significant negative impacts of increased mercury methylation and higher levels of mercury in Delta fish. This fact should at least be acknowledged in this section which otherwise only addresses the potential benefits of the proposed conservation measures in the North Delta.

Page 9, paragraph three: The statement is made that reductions in ammonia loads from upstream sources are expected to benefit fish and other species in the west Delta and Suisun Marsh. This statement should be eliminated or modified unless supported by valid scientific documentation.

Page 9, paragraph five, item two: The statement is made that water quality in the South Delta will be improved, in part, through reductions in "polluted agricultural and municipal discharges." This generalized statement is again offered without support or specific references to facts linking such discharges to current or future ambient water quality. Additionally, the success of covered fish populations has not been linked generally to ambient water quality or to specific discharges.

Page 10, paragraph four: The statement is made that increased San Joaquin River flows would be expected to reduce the residence time of toxics in the Delta. Citations for this statement should be provided if it is to be included in the draft document.

Page 11, paragraph five, item 2: Again, the generalized and unsubstantiated statement is made that the reduction of inputs of toxic contaminants into Delta waterways would positively affect covered species in the Delta. This statement should either be supported by specific references or modified.

Page 12, paragraph three: This paragraph again discusses the reduction of loads of contaminants from urban and agricultural sources and states that such reductions would improve the quality and quantity of spawning, rearing and holding habitat for covered fish species. This more detailed statement of an alleged linkage between “contaminants” and covered fish species is again offered with no documentation or citation to scientific evidence. This statement should be modified or eliminated if unsupported.

An additional comment SRCSD has relates to additional technical studies that are being proposed by the Integration Team (reference Handout #4 from 11-18-08 Integration Team meeting). It is unclear to us why additional technical studies are being proposed by the Integration Team, separate from the conservation measures being proposed by the various workgroups. For instance, the Other Stressors Workgroup is addressing ammonia as a proposed mitigation measure as Conservation Measure TOC01: “Reduce the Load of Ammonia in Effluent Discharged from the Sacramento Regional County Sanitation District into the Sacramento River to Less than \_\_\_ if Warranted Based on Research.” The BDCP states in its approach to conservation that they will work with SRCSD and other dischargers to determine any potential direct and indirect effects of ammonia on covered species. It is our understanding from the November 25 BDCP Integration Team meeting that a new technical team to review ammonia issues is being formed and does not include any discharger representatives. SRCSD requests to be included as an active participant in these ammonia issues technical studies.

SRCSD is willing to work with the Integration Team in its ongoing evaluation of integrating various conservation measures, including North Delta isolated facility diversion concepts and ammonia research activities. In the meantime, SRCSD requests that written or oral recommendations to the BDCP Steering Committee be modified as requested in this letter. Should you have any questions please contact me at 916-876-6092, mitchell@sacsewer.com.

Sincerely,



Terrie Mitchell  
Legislative and Regulatory Affairs Manager, SRCSD

cc: Mr. John McCamman, DFG, Other Stressors Workgroup Co-Chair  
Mr. Brent Walthall, Kern County Water Agency  
BDCP Steering Committee Members  
Mary K. Snyder, District Engineer, SRCSD  
Stan Dean, District Manager, SRCSD  
Prabhakar Somavarapu, Plant Manager, SRCSD  
Debbie Webster – Central Valley Clean Water Association



16545 Armstrong Avenue

December 10, 2008

Madison, CA 95655

Tele: (916) 876-6000

Fax: (916) 876-6160

Website: www.srcsd.com

Mr. Richard Wilder  
SAIC  
1810 S Street  
Sacramento, CA 95811

**Board of Directors  
Representing:**

**Subject: Comments on Conservation Measure OSCM1: "Performance Monitoring Metric #1: Ammonia Concentration of Water at Influent and Effluent of a New Treatment Facility if Such a Facility is Built"**

County of Sacramento

The Sacramento Regional County Sanitation District (SRCSD) offers the following comments on the proposed **Conservation Measure OSCM1: "Performance Monitoring Metric #1: Ammonia concentration of water at influent and effluent of a new treatment facility if such a facility is built"**. Our comments, at this point are general in nature, because once again we were just made aware of this document and were requested to provide comments in less than 24 hours. A common theme we continue to bring forward is the need for more stakeholder involvement and public access to draft documents as they are being developed. Our brief comments are highlighted below:

County of Yolo

City of Citrus Heights

City of Elk Grove

City of Folsom

City of Rancho Cordova

City of Sacramento

City of West Sacramento

**Comment 1: It is premature to even propose a performance metric for ammonia.**

Mary K. Snyder  
District Engineer

This latest document appears to establish a performance metric prior to understanding if ammonia is even impacting the Delta in environmentally relevant concentrations. SRCSD appreciates the recognition that many stressors co-exist, impacting the Delta, while some of the stressors (diversions, flows, invasive species) are known to be impacting the Delta and others are considered to have the potential of impacting the Delta (ammonia, endocrine disrupting compounds). The potential impacts will be known after further research is completed.

Stan R. Dean  
Plant Manager

Wendell H. Kido  
District Manager

Marcia Maurer  
Chief Financial Officer

The Other Stressors Workgroup is addressing ammonia as a mitigation measure as Conservation Measure TOCO1: "Reduce the Load of Ammonia in Effluent Discharged from the Sacramento Regional County Sanitation District into the Sacramento River to Less than \_\_\_ if Warranted Based on Research". Clearly, studies must be completed before an evaluation of the benefits of control measures can be performed and before definitive recommendations for ammonia source control action could be formulated and a performance metric established.

**Comment 2: Environmental relevant ammonia concentrations in the river should be considered as a performance measure, not arbitrary treatment plant loadings.** Before a performance metric is established, the environmental relevant ammonia concentration in the receiving water must be established.

Studies need to be done first that prove there is an impact to the environment requiring the establishment of revised water quality criteria. The Clean Water Act and California Water Code require a regulatory process be followed in establishing appropriate water quality beneficial uses and water quality criteria. The target then would be a water quality criteria that is established under existing Clean Water Act and California Water Code. Targets should not be set arbitrarily for treatment plant loadings, without regard for the actual effect on the ecosystem.

**Comment 3: A narrative performance measure is more appropriate.** At this point if you are including a performance metric for this conservation measure it should be a narrative rather than numeric. The arbitrary assignment of some reduction in ammonia loading based on the operations of a treatment plant will not provide a meaningful performance measure. A suggested target would be to not exceed established water quality criteria for ammonia, with adaptive management triggers and responses taken when the established water quality criteria is exceeded in the receiving water. The monitoring plan should include monitoring at a level to demonstrate beneficial uses of the receiving water are not being degraded. The same changes should be made in Table 3.X. "Conservation Measure Effectiveness Monitoring and Potential Adaptive Management Responses".

As always SRCSD want to be an active participant, providing useful input to the BDCP process. Involving SRCSD and utilizing our expertise in water quality and wastewater treatment processes would lead to more realistic performance measures for this conservation measure. Please contact me at 916-876-6092 or [mitchellt@sacsewer.com](mailto:mitchellt@sacsewer.com) if you have any questions.

Sincerely,



Terrie Mitchell  
Manager, Legislative and Regulatory Affairs

cc: Laura King-Moon, Co-chair BDCP Integration Team  
John Cain, Co-Chair BDCP Integration Team  
Mary Snyder, District Engineer  
Stan Dean, District Manager  
Prabhakar Somavarapu, Plant Manager, SRCSD  
Debbie Webster – Central Valley Clean Water Association



10548 Armstrong Avenue

Yuba, CA 95655

Tele: (916) 876-6000

Fax: (916) 876-6160

Website: www.srccd.com

February 3, 2009

**Board of Directors  
Representing:**

County of Sacramento

County of Yolo

City of Citrus Heights

City of Elk Grove

City of Folsom

City of Rancho Cordova

City of Sacramento

City of West Sacramento

Mary K. Snyder  
District Engineer

Stan R. Dean  
Plant Manager

Wendell H. Kido  
District Manager

Marcia Maurer  
Chief Financial Officer

Honorable Mike Chrisman  
Secretary, Resources Agency  
1416 Ninth Street  
Sacramento, CA 95814

Mr. Joe Grindstaff  
Executive Director, CALFED  
650 Capitol Mall, 5<sup>th</sup> Floor  
Sacramento, CA 95814

**Re: Bay Delta Conservation Plan  
Delta Regional Ecosystem Restoration Implementation Plan  
January 14, 2009 Workshop**

On behalf of the Sacramento Regional County Sanitation District (SRCS D) and our ratepayers, I feel compelled to bring to your attention the regrettable actions of some members of the Bay Delta Conservation Plan (BDCP) Steering Committee, which further indicates the "closed nature" of the BDCP process, and the disregard for interested stakeholders who have a real and significant stake in the outcome of deliberations and decisions made by your agencies.

As you know, SRCS D is vitally interested in the work of the BDCP, and has participated (to the limited extent permitted by BDCP staff) in past workshops and meetings of various technical working groups. In early January, we were notified and invited to participate in the Delta Regional Ecosystem Restoration Implementation Plan (DRERIP) evaluation workshop to be held on January 14, 2009. On January 8, we were summarily disinvented by your consultant with The Essex Group. We expressed our frustration at being excluded from the evaluation team, but confirmed that SRCS D would have a representative present at the workshop to observe.

On January 14, 2008, Dr. Diana Engle from Larry Walker Associates, on behalf of SRCS D, went to the DRERIP workshop, having traveled from Ventura specifically for that purpose. Shortly before the workshop commenced, Laura King-Moon approached Dr. Engle and informed her that she would have to leave, and that the decision to exclude her was made by Karen Scarborough. Some time later during the workshop, one of the consultants from Science Application International Corporation (SAIC) informed Linda Dorn of my staff that the decision to exclude SRCS D from the DRERIP evaluation workshop "was made at a very high level."

Later that same morning, after Dr. Engle and Ms. Dorn were asked to leave the DRERIP workshop, Terrie Mitchell of my staff received an email from Karen Scarborough, informing her that the Cal-FED and DWR staff "see the DRERIP evaluation as a deliberative process that is staffed and attended by technical staff

TECHNOLOGY IN BUILDING WITH NATURE

Honorable Mike Chrisman  
Mr. Joe Grindstaff  
February 3, 2009  
Page 2

trained on the model." Even though a previous e-mail indicated that some of the team members may not have direct DRERIP experience, but have expertise with conceptual models.

What is unclear to the District is why these BDCP processes are being conducted in secrecy, where interested parties are prohibited from listening and observing. Even more peculiar is that the meeting announcement for the DRERIP workshop indicated that the process is designed to draw upon other sources of information, be conducted by a multi-disciplinary team of experts, and that the evaluation is transparent and documented. CALFED's own webpage highlights the DRERIP evaluation process and notes that, "The actions that are refined through the scientific evaluation process will inform public policy decisions within the Delta, and thus will be useful for other Delta planning efforts such as the BDCP and Delta Vision." (See, [www.science.calwater.ca.gov/drerip/drerip\\_index.html](http://www.science.calwater.ca.gov/drerip/drerip_index.html)) Thus, while publicly extolling the value and virtues of the DRERIP process to determine the planning decisions to be made in the BDCP and by Delta Vision, Department of Water Resources, and the State Water Contractors continue to exclude interested parties and the public from these important meetings. The public has a right to know what is being discussed and decided at these meetings that involve state and federal agency representatives.

We are very disappointed that technical representatives for SRCSD were excluded from the DRERIP evaluation workshop. Dr. Engle has a PhD in aquatic ecology, has published scientific articles on a wide variety of topics relevant to the food-web model under discussion, including phytoplankton, zooplankton, nutrient cycling, aquatic plants, watershed processes, and other topics. Her area of expertise is rivers and floodplains and she has extensively studied the research articles cited as sources in the DRERIP food web model. Dr. Engle has spent months examining historic water quality data from the Delta to gain insights on some of the issues under discussion, and has conducted several pertinent analyses that have not been presented in other Delta related forums, which would have provided useful context for some of the topics under discussion.

The BDCP process will lose its credibility if it continues to conduct the public's business behind closed doors, while excluding interested parties willing to participate in finding real and lasting solutions to the Delta crisis. We urge you to take whatever steps are necessary to ensure that a repeat of the events that occurred at the January 14, 2009 DRERIP meeting are not repeated.

Sincerely,



Mary Snyder  
District Engineer

cc: Cliff Dahm, CALFED

Honorable Mike Chrisman  
Mr. Joe Grindstaff  
February 3, 2009  
Page 3

bcc: Craig Johns, California Resource Strategies  
Tom Grovhoug, LWA  
Stan Dean, SRCSD  
Claudia Goss, SRCSD  
Terrie Mitchell, SRCSD  
Linda Dorn, SRCSD