Delta Stewardship Council Panel: Delta Cities
May 12, 2011

Presenter: Phil Harrington, Director of Capital Improvements/Water Rights
City of Antioch

City of Antioch Opening Comments

About Antioch

Antioch is the Gateway to the Delta - The City of Antioch (City) is located at the western edge of the California Delta System at the confluence of the Sacramento and San Joaquin Rivers. The City currently provides water services to a population of 103,000 covering an estimated 29 square miles of developed and undeveloped land. In order to meet the treated water demands of our customers, the City obtains water from two primary sources: the Sacramento/San Joaquin Rivers and the Contra Costa Canal owned and operated by the Contra Costa Water District (CCWD). Together, these sources have the potential to provide the City with a total treated water capacity of 52 million gallons per day (MGD). Currently, the City's average day demand for treated water is 14 MGD and a high maximum day demand of 31 MGD. The City owns and operates a Delta intake system located in the lower San Joaquin River. This river pumping intake has the capacity to pump up to 16 MGD whenever the river salinity is at an acceptable level (chloride concentration less than 250 milligrams per liter). Whenever the river salinity level is not acceptable or when demand exceeds the existing pumping capacity, the City purchases substitute water supplies directly from the CCWD.

Antioch's Water Rights

Antioch's water rights are among the highest priority pre-1914 rights in the Sacramento-San Joaquin Delta and are specifically recognized by the California Supreme Court (see Town of Antioch v. Williams Irrigation District (1922). The quality of Antioch's water supply is protected both contractually and as a matter of law. Although the quality of the City's water has been impacted by various upstream projects over the years, including the state and federal water projects, Antioch has been able to divert water of sufficient quality for municipal use during most years since about 1850. Again, the City has over 103,000 residents whose demands are met entirely with water from the Delta, a significant portion of which is diverted from our own intake.
The rights of the City to appropriate and use water from the Delta stem from actual diversions made prior to December 19, 1914, the date in which the Water Commission Act became effective. The City's "Pre-1914 rights" are further defined as a "non-statutory" right based on the fact that the City had simply been acquiring water from the Delta and putting it to beneficial use prior to 1914. Antioch's use of water from the Delta has been continuous since it was initiated by the original purveyors of water to the City, having been interrupted only when the quality was unsuitable for municipal use.

Because the City has a pre-1914, non-statutory right, we are not limited to a recorded maximum quantity and/or specified diversion works.

Existing Agreement with the State Department of Water Resources

The State of California Department of Water Resources (DWR) and the City have an existing agreement which specifies that the City will be able to pump water with a chloride content less than 250 mg/L at least 208 days per year from our existing intake. This agreement was enter into by the City and DWR in 1968, to mitigate the damage caused by the State Water Project. The agreement recognized that historically usable water (250 parts per million or less of chloride) occurred on an average of 208 days per year. If in any year the number of days of availability of usable water is less than 208 days DWR must pay to the City one-third of the City's incremental costs of purchasing substitute water from CCWD. The one-third fraction was based on the assumption that the depletion of the natural supply is due one-third to the operation of the Central Valley Project, one-third to the State Water Project and one-third to all the other upstream diverters, riparians and appropriators. During the early years of this agreement, the City received very little monetary compensation from DWR due to usable water days exceeding the annual threshold of the 208 daysas specified in the contract. However, in the recent years, DWR has been compensating the City significant amounts of money to offset the impacts of the State Water Project as the number of usable water days has fallen beneath the guaranteed 208 days per year.

Antioch's Concerns

Antioch has two primary concerns in the Delta. First, the City has an adjudicated pre-1914 water right, and has used its intake in the Western Delta since 1865. Antioch is concerned that the future changes planned for the Delta may further interfere with its ability to use its intake. Second, Antioch is the Gateway to the Delta, and Delta recreation such as fishing and boating are important to our economy and our identity as a City and as part of the Delta region. We hope to ensure that the future Delta is ecologically viable and rich, and that the recreation and wildlife habitat functions of the Delta are perpetuated and strengthened.

Summary of Antioch's recommendations for the Delta Plan
(Most of the comments we will be making need to be addressed in multiple chapters of the Delta Plan)

- Include in-Delta water supply reliability in discussion of Co-Equal goals.

- Ensure that mitigation and funding are included for impacts resulting froma conveyance facility project.

- Recognize Antioch as a senior in-Delta water user, reliant on maintaining high quality water in the western Delta, and our pre-1914 "adjudicated" water rights.
- Add pre-1920 historical conditions to all Chapters that discuss historical "natural" Delta flows.Support increased Delta outflows as compared to recent historical conditions.
- Continue to support State Water Resources Control Board's development and implementation of Delta flow criteria and establish flow objectives for high priority tributaries.
- Adopt 'Do No Harm' policies for water quality and ecosystem in the Delta.
- Establish true transparency and robust engagement in all Delta planning processes.
- Identify realistic, secure funding sources for in-Delta protections and impact mitigations.

Third Draft Delta Plan Discussion (per Kearns & West document received May 9, 2011)

Chapter 7 – Flood/Levees. The Legislature has acknowledged that the statutory Delta is "inherently a flood prone area wherein the most appropriate uses are agriculture, wildlife habitat, and . . . recreational activities," [PRC 29704]. The Legislature has also directed that the Delta Plan "shall attempt to reduce risks to people, property, and state interests in the Delta by promoting effective emergency preparedness, appropriate land uses, and strategic levee investments." [WC 85305]

- What are the interests of your city regarding flood risk and land use in the Primary Zone and/or Secondary Zone of the Delta?
    - Western Delta will be impacted after a major event, which could cause a relocation of X2. System operations and alterations would make it tougher to recover because restoration of fresh conditions would take longer
- For purposes of reducing Delta flood risk, how are the interests of your city and the surrounding county similar, and how do they differ?
    - Municipal Drinking water supply for over 100,000 people, no levees, not agricultural

- What are your city's priorities in considering how to balance flood plain protection with pressures for development in the Secondary Zone?
    - Providing for alternative supply of high quality water not only from flood events but as a result of projects like the BDCP, which will impact our water quality (through allowing X2 to move eastward increasing salinity in Antioch)

    - We believe that flood protection and restoration of freshwater conditions at our intake following flood conditions are compatible and necessary goals of any future project.

2. The Third Staff Draft Delta Plan, in Chapter 7, contains proposed policies designed to reduce flood risk in the Delta [RR P1-P6], along with proposed recommendations [RR R1-R8].

- How well do the policies and recommendations identified in the Third Staff Draft address your key interests?
    a. Delta levees are infrastructure that protectsland uses and resources in and through the Delta. Failures of levees will impact water supply reliability.
    b. Funding is not secure for levees/flood control – What is the policy for this?

- Are there different approaches or policies available to the Council to achieve its statutory mandate?
- In general terms, what would be the cost of your alternative approach or policy, and who would pay?

3. The Third Staff Draft Delta Plan, in Chapter 7, also contains proposed performance measures intended to assist in evaluating progress.

- How useful will the proposed performance measures be in evaluating progress?
- Are there different performance measures available to the Council to achieve its statutory mandate?
- In general terms, why is your proposed performance measure more likely to be useful?

Chapter 5 – Delta Ecosystem

4. The Third Staff Draft Delta Plan, in Chapter 5, contains proposed policies [ER P1-P6] and recommendations [ER R1-R5] designed to meet the co-equal goal of "protecting, restoring, and enhancing the Delta ecosystem."

Antioch supports increased outflow to protect public trust resources and supports the SWRCB Flow Criteria report. Antioch recognizes that increased outflow alone is not enough to achieve Delta restoration, but from the SWRCB flow criteria proceedings, the scientific testimony supported increased Delta outflow as <u>the</u> key component to restoring the Delta ecosystem.

Restoration of habitat must be guided by ecosystem science. Habitat restoration without increased outflow is not "restoring" the Delta.

Q & A

- How well do the policies and recommendations identified in the Third Staff Draft address your key interests?

    - Policy related to 55020, (e) – "Improve water quality to protect human health and the environment consistent with achieving water quality objectives in the Delta." This applies to in-Delta water quality, such as Antioch's drinking water quality, must also be improved. See 85302, page 72 and below.

    - Page 71 – BDCP is "expected to significantly affect the Co-Equal goals".
        - Please clarify what this statement means in the Plan?
        - Please be aware that water supply reliability for Antioch is one of the Co-Equal goals, and that BDCP as proposed will negatively impact our water supply reliability. (flows and X2 location regulatory change)

    - Support 85302, page 72 - 85302(e) *the following subgoals and strategies for restoring a healthy ecosystem shall be included in the Delta Plan.*
        - (4) *Restore Delta flows and channels to support a healthy estuary and other ecosystems.*
        - (5) *<u>Improve water quality to meet drinking water, agriculture, and ecosystem long-term goals.</u>*

- Are there different approaches or policies available to the Council to achieve its statutory mandate?
  - Mitigation measuresand funding for those measures need to be part of Delta projects
  - Make sure that "In-Delta Drinking Water Quality is improved" is not just implied, but specified as part of this policy.
    - Suggest adding wording: "including in-Delta drinking water quality"

  - Include Pre-1920 Delta conditions in all Chapters (in CH 5, discussion on page 66)

  - Both PPIC and DWR tend to quote post-1920 conditions, which do not accurately reflect the start of the rice farming, which began to dramatically increase salinity in the Delta beginning in 1918. **Historical facts:**

    - Antioch has diverted fresh water at its intake since 1850. Historical records show that water at this location remained fresh throughout the year for all but the driest years prior to the early 1900s. CCWD's analysis also confirms the historically fresh nature of the Delta in this time period.
    - Between 1860 and 1917, marsh lands were reclaimed, hydraulic mining left extensive tailings, and Delta channels were isolated from the marsh areas by the construction of levees. Water also began to be diverted during this period for irrigation.
    - Between 1918 and 1944, large volumes of water were diverted from the Sacramento River for rice farming, and salinity intrusion into the Delta was greater than before (or since). Annual irrigation diversions were greater than 6.5 MAF/yr by 1945.
    - Between 1945 and 1967, 17.5 MAF of upstream storage were created, including 4.5 MAF in Shasta Dam. South of Delta exports began in 1951.
    - Since 1968, the amount of upstream storage has increased to a total of 30.4 MAF, and south of Delta exports increased to 6 MAF in 1990.
    - Throughout this time period, the salinity at the City of Antioch's intake has increased dramatically, and salinity patterns in the Delta have also changed radically, with far saltier conditions beginning earlier, and persisting longer, than in the pre-development historical record. The City is unable to use water at its intake during a wide range of conditions and the BDCP modeling results and our analyses indicate that the proposed BDCP project will further exacerbate these conditions during most seasons.

- We are also concerned that the appropriate ecological baseline should be tied to conditions that existed prior to 1900, as native species would have adapted to naturally fresher Delta conditions.

- In general terms, what would be the cost of your alternative approach or policy, and who would pay?

5. The Third Staff Draft Delta Plan, in Chapter 5, also contains proposed performance measures intended to assist in evaluating progress.

- How useful will the proposed performance measures be in evaluating progress?
- Are there different performance measures available to the Council to achieve its statutory mandate?

Antioch generally supports the performance measures. Antioch believes that there needs to be a "no harm" policy adopted across the board with respect to Delta Ecosystem Restoration and in-Delta Water Quality. The policies in the Delta Plan should not adversely impact the Delta Ecosystem and in-Delta Water Quality.

- In general terms, why is your proposed performance measure more likely to be useful?
    a. More protective of Antioch's WQ and ecosystem improvements

Chapter 6 – Water Quality

6. The Third Staff Draft Delta Plan, in Chapter 6, contains proposed recommendations [WQ R1-R9] designed to improve water quality in order to meet the co-equal goals.

Generally support the policies of the Third Draft, which supports the SWRCB flow criteria process, that will result in benefit not only to the ecosystem but also to public trust resources and beneficial uses.

Q&A

- How well do the policies and recommendations identified in the Third Staff Draft address your key interests?

    Delta outflows need to defined in order to provide adequate outflows for recovery of the ecosystem and in-Delta beneficial uses

- Are there different approaches or policies available to the Council to achieve its statutory mandate?

- In general terms, what would be the cost of your alternative approach or policy, and who would pay?

7. The Third Staff Draft Delta Plan, in Chapter 6, also contains proposed performance measures intended to assist in evaluating progress.

- How useful will the proposed performance measures be in evaluating progress?
- Are there different performance measures available to the Council to achieve its statutory mandate?

    a. Water quality at Antioch should be included as a compliance point for evaluating the performance measures.
- In general terms, why is your proposed performance measure more likely to be useful?

Chapter 8 – Protect Unique Cultural....

8. The Third Staff Draft Delta Plan, in Chapter 8, contains proposed recommendations [DP R1-R7]designed to meet the Legislature's direction to achieve the co-equal goals "in a manner that protects and enhances the unique cultural, recreational, natural resources, and agricultural values of the Delta as an evolving place." [29702(a)]

The Delta and its culture are unique for many reasons – but one of the defining characteristics has been that it is a fresh water environment.

- How well do the recommendations identified in the Third Staff Draft address your key interests?
    a. Good that municipal drinking water quality is mentioned
    b. There are no "teeth" to mandate fixes to impacts on drinking water
- Are there different approaches or policies available to the Council to achieve its statutory mandate?
- In general terms, what would be the cost of your alternative approach or policy, and who would pay?

9. The Third Staff Draft Delta Plan, in Chapter 8, also contains proposed performance measures intended to assist in evaluating progress.

- How useful will the proposed performance measures be in evaluating progress?
- Are there different performance measures available to the Council to achieve its statutory mandate?
    - DSC should recommend to DPC that The Economic Sustainability Plan should include, planning for the following items:
        - "Improvement of water quality for drinking water and beneficial uses"
    - Add a new item on pg. 107
        - DP R4 -Beneficiaries of any out of Delta conveyance system should pay for necessary mitigation for impacts to public trust resources and beneficial uses.

    - Secure ongoing funding for public access parks and recreation in the Delta (what is the guarantee of funding for current Parks & Rec proposal for Delta parks/public access?)

- In general terms, why is your proposed performance measure more likely to be useful?
    - Sufficient outflow and improved water quality are essential performance measures to ensure that the Delta's culture - - agriculture, recreation, history – are preserved and improved.