



**WEST BASIN MUNICIPAL WATER DISTRICT**  
17140 S. Avalon Blvd., Suite 210  
Carson, CA 90746

**AGENDA NO. 28**

**NOVEMBER 13, 2008 – Water Resources**  
Smith (Chair), Little  
**NOVEMBER 24, 2008 – Board Meeting**  
Prepared by: Paul Shoenberger  
Submitted by: Paul Shoenberger  
Approved by: Rich Nagel

## INFORMATION CALENDAR

### CITY OF LOS ANGELES HYPERION WATER QUALITY

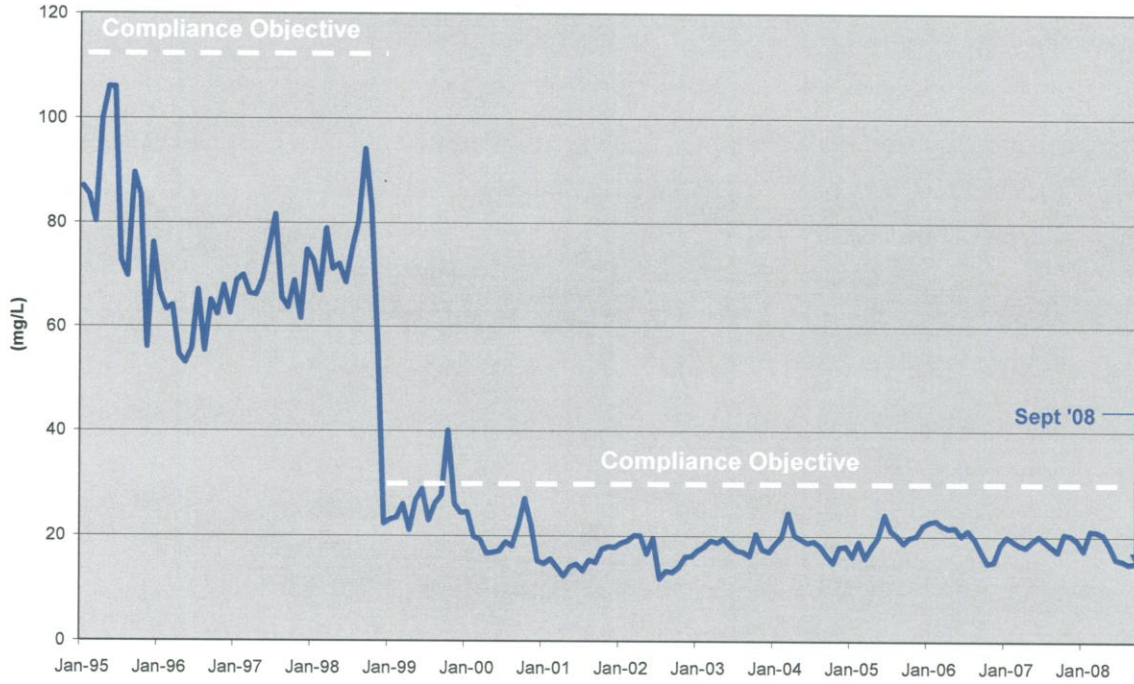
#### SUMMARY:

West Basin and the City of Los Angeles entered into a water recycling agreement in 1991. The main points of the agreement include:

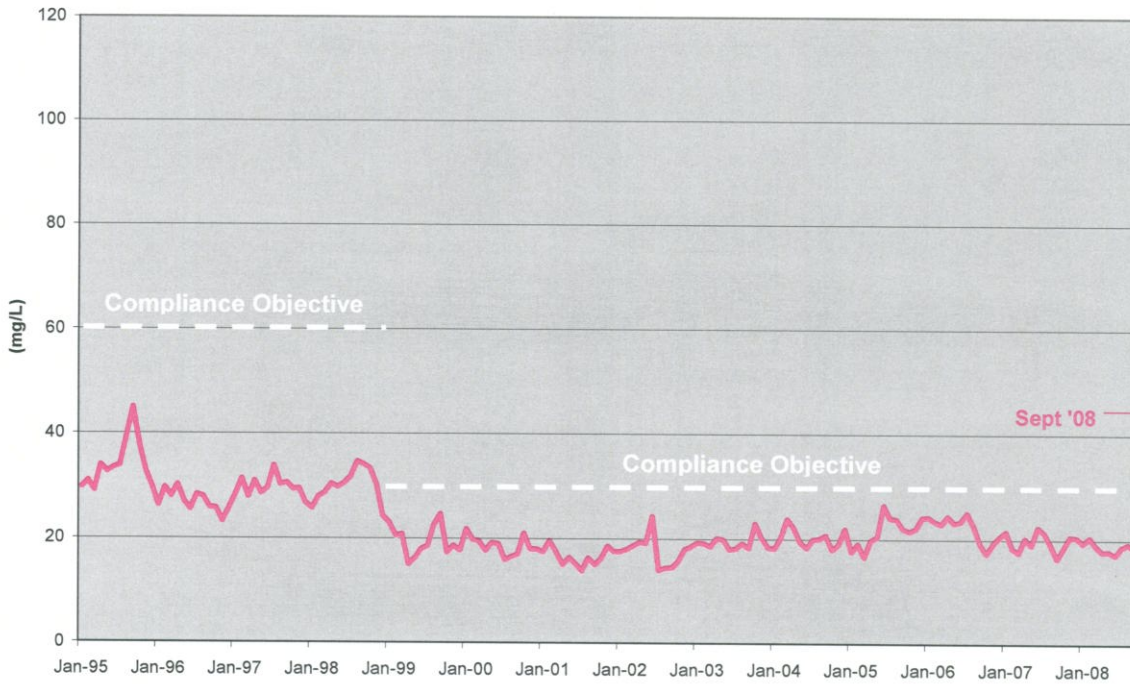
- City of Los Angeles will provide secondary effluent water to West Basin;
- City of Los Angeles will supply effluent complying with the water quality standards required by the EPA and the Regional Water Quality Control Board; currently 30 ppm Total Suspended Solids (TSS) and 30 ppm Biological Oxygen Demand (BOD);
- West Basin is solely responsible for providing additional treatment to the secondary effluent and delivering tertiary treated and usable reclaimed water;
- Provision of secondary effluent is not guaranteed by Los Angeles. West Basin shall provide itself a back-up water supply in the event of a disruption of service;
- West Basin will pay \$7.50 per acre-foot (AF) for the secondary effluent; and
- The Termination clause allows Los Angeles to terminate the agreement with a 120 day notice.

By agreement between Los Angeles and West Basin, Hyperion's water quality requirements are to comply with the EPA and Regional Boards permit. Since 1999, the limits have been 30 parts per million (ppm) TSS and 30 ppm BOD. Below is the water quality that Hyperion has produced for discharge to the ocean since 1995.

Hyperion BOD Compliance  
(1995-2008)

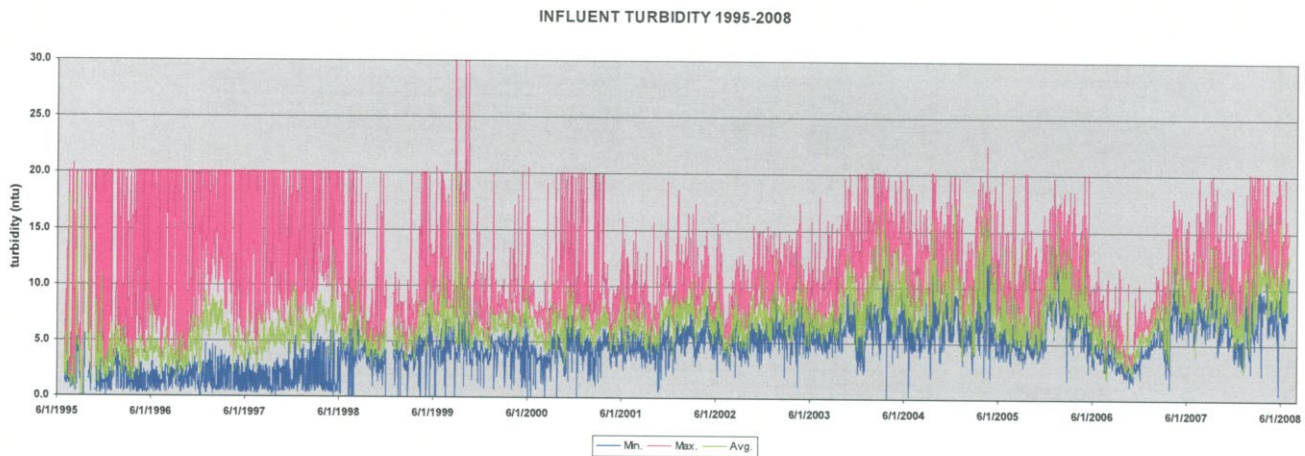


Hyperion Total Suspended Solids Compliance  
(1995-2008)



As shown, Hyperion has met the 30 - 30 requirements for the past eight years.

Of the other water quality parameters that are important to West Basin, turbidity is the most important. Below is the influent water quality from Hyperion on this parameter since our project went on-line in 1995. As shown in the graph below, the worst water quality coming from Hyperion occurred during the years 1995 to 1998, when they were under construction to convert the plant to a full secondary process.



### City of Los Angeles and West Basin Agreement

Attached as Exhibit "A" is the City of Los Angeles agreement. Key portions of that agreement are shown below.

City of Los Angeles water quality requirements:

Page 13, Section 6.2. "City agrees to use its best efforts to supply secondary effluent from Hyperion, which will conform to the legal requirements established from time to time, by the Environmental Protection Agency (EPA), the California Regional Water Quality Control Board Los Angeles Region (CRWQCB), or such other federal or state regulatory agencies as may have authority there over for discharge to the Santa Monica Bay."

West Basin's sole responsibility to treat the water:

Page 10, Section 4.8 "...West Basin is solely responsible for providing additional treatment to the secondary effluent and delivering tertiary, treated, and usable reclaimed water..."

West Basin's obligation to secure a second source of supply:

Page 13, Section 6.2. "West Basin recognizes that an alternate water supply will be necessary to prevent any damage that might result from a suspension of a supply of secondary effluent..."

*Price for secondary effluent set at \$7.50 per acre-foot:*

Page 20, Section 9.2. "In consideration for the City's DWP, fixing the cost of effluent delivered to West Basin at \$7.50/AF for the term of this agreement, West Basin agrees to supply DWP, at the option of DWP, tertiary treated, reclaimed water in an amount greater than 25,000 acre feet per year."

Termination Clause:

Page 14, Section 6.2. "The City may, by 120-day written notice to West Basin, terminate the contract or permanently terminate the flow of secondary effluent supplied to West Basin under this agreement should the City Council determine, by resolution, that said effluent is no longer surplus..."

### **Actions Taken to Improve Hyperion Water Quality**

Knowing that West Basin was to receive secondary effluent from Hyperion, the Edward C. Little Water Recycling Facility was built with certain unit processes to treat the effluent. Observing increased salinity in the effluent, West Basin and Hyperion cooperatively built slide gates in Hyperion to separate lower salinity water from higher. The construction cost was \$1.2 million, paid for by West Basin. A decrease of about 100 ppm in TDS was noted as the gates were installed. During the Phase IV expansion, to address the variable nature of the secondary effluent turbidity, West Basin added an additional high-rate clarifier process prior to T22 treatment. Recent phases of microfiltration and reverse osmosis equipment have been designed at a lower flux rate to compensate for the varying nature of the effluent.

### **Actions to Improve Hyperion Water Quality Going Forward**

Several positive actions have been identified that should be pursued to improve water quality from Hyperion and prepare for re-negotiations of the agreement including:

1. Have UWS, City of Los Angeles and West Basin develop a staff to staff (City of Los Angeles, West Basin, and UWS) contact and communications protocol;
2. Approach Los Angeles regarding a joint effort to identify improvement areas;
3. Prepare for 2016 re-negotiations of City of Los Angeles agreement; and
4. Prepare for a potential alternative recycled water supply from the County Sanitation Districts of Los Angeles County (CSDLAC) or other sources.

Initial steps to include:

- a. Conceptual study to determine options for replacing City of Los Angeles as source;
- b. CSDLAC influent study (low TDS flows into CSDLAC Carson Plant); and
- c. Pilot plant at CSDLAC to determine treatability and costs.

These items will be brought back to the Board as they are developed.

### **STRATEGIC BUSINESS PLAN IMPLEMENTATION:**

Goal 3, Water Quality – Provide high quality water that meets the needs of our customers.

COMMITMENT STATEMENT:

Water Quality – West Basin is committed to providing safe, high quality water by meeting current and anticipated water quality requirements.

FISCAL IMPACTS:

None at this time.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Committee on November 13, 2008 and agendaized to the November 24, 2008 Board meeting as information for discussion.

RECOMMENDED MOTION:

This item is for information only.

LIST OF EXHIBITS:

Exhibit "A" – Reclaimed Water Agreement between West Basin and City of Los Angeles