

(minutes of June 23, 1948 continued)

COUNCIL CHAMBERS CITY COUNCIL  
CITY HALL - CITY OF LODIPURCHASE  
PITNEY-BOWES  
MAIL MACHINE

The City Clerk reported that Pitney-Bowes Inc. had notified him that their mailing and postage-metering machine prices would advance some seventy-dollars June 28. The City Clerk requested authority to place an order for one of these machines in order to make a saving over purchase later in the year, as he had intended, and would include the cost of this machine in his office budget. Permission to place this order granted.

CITY ENGINEER  
PURCHASE OF  
AUTOMOBILE

City Engineer Heckenlaible requested that the city purchase some adequate means of transportation for the City Engineering Field Department, recommending a Carry-all-Suburban Vehicle to cost \$1,850.00. Mr. Heckenlaible stated that the present 1938 model Ford used for transportation for men and equipment in the field department had been driven over 100,000 miles and was in a very bad state of repair. Also, the employees of his department objected to hauling survey equipment in their private cars. Mr. Heckenlaible was directed to prepare specifications for advertisement for a car suitable for this purpose.

ALVIN BENDER  
RENTAL OF 60'  
STRIP

The application of Alvin A. Bender, 735 E. Pine Street for permission to rent or lease a part of the eighty foot strip owned by the City in Lot 14, Live Oak Colony No. 1 was referred Superintendent of Streets. The Clerk was also directed to ascertain if the present owners of the 4 acres tract of land abutting on the north end of this strip were interested in renting the same, and if so, what rental could be obtained therefore.

SPECIFICATIONS  
FOR CONCESSIONS

The Clerk asked information necessary to draw up complete specifications for concession services at the two ball parks and the Lodi Stadium, particularly as to whether this should be included in one letting or whether this Council would receive separate bids on the ball park concessions from those in the Stadium. He was directed to advertise for bids for all three concessions.

CLERK-CASHIER  
SALARY

The City Treasurer was authorized to pay for an entrance salary of 225 dollars (\$225.00) per month to the successful candidate for "clerk-cashier" providing this qualification warranted the payment of such an amount.

WATER CONSERVATION  
DISTRICT REQUEST  
FOR \$1,625.00  
APPROVED

At this time, Mr. Reuben P. Rott, representing San Joaquin Water Conservation District addressed the City Council in application for a contribution toward the organization costs of this district. Mr. Rott stated that the proposed district would be bounded on the south by the Stockton-East San Joaquin Water Conservation District, on the east by the Tully and Elliott roads, on the north by a line  $\frac{1}{2}$  mile north of the Elliott road, and on the west by a line  $\frac{1}{2}$  mile west of the Lower Sacramento Road, including about 55 thousand acres and the City of Lodi. Mr. Rott stated that the State Division of water resources had estimated the costs of a survey for the district be twenty-five thousand dollars. Thirteen thousand dollars would be paid in the first year, and twelve thousand in the second. Costs to be borne  $\frac{2}{3}$  by the State of California and  $\frac{1}{3}$  by the district benefited. The district under organization had appeared before the Board of Supervisors of San Joaquin County, requesting them to advance the sum of \$3,250.00, a similar

(Wednesday, June 23, 1948 continued)

COUNCIL CHAMBERS CITY COUNCIL  
CITY HALL - CITY OF LODI

sum to be contributed from the district. Mr. Rott's request was that the city contribute  $\frac{1}{2}$  of this \$3,250.00 to-wit: The sum of \$1,625.00 toward the survey in the first year. After the district is organized, they will then be able to levy a tax not to exceed 25¢ per acre for organization costs. The people in the rural portion of the proposed district would then contribute a sum equal to that requested from the city.


It was then moved by Councilman Bull that the City appropriate the sum of \$1,625.00 as its contribution to the cost of organization expenses of a water conservation district, contingent, however, on the appropriation of the sum of \$3,250.00 by San Joaquin County. Motion seconded and carried.

ORDINANCE  
NO. 373  
FORMALLY  
INTRODUCED  
AS AMENDED

At this time, City Attorney West explained several proposed amendments to the sales tax ordinance, (Ordinance No. 373) proposed at the June 16 meeting. Several businessmen interested in the sales tax and the method of its collection participated with the Council in a discussion of the ordinance and these proposed amendments. First, the change from Treasurer-Collector to Treasurer wherever it appeared in the ordinance was approved. Second, Section (C) of the original ordinance was stricken out and the following substituted in lieu thereof: "Section (C)--the sales tax does not apply to sales to purchasers solely for use or consumption in the conduct of their business outside the City Limits of the City of Lodi." Third, computation of the sales tax due from certain vendors where it is extremely difficult to ascertain the amount of taxable sales on a fixed percentage ascertained after an analysis of six month's sales was authorized by the insertion of paragraph (D) in Section 4. The second paragraph under parenthesis, that part (6) of Section 5 stating a rule of the State Board of Equalization adopted by the original ordinance but not set forth in full therein was made by the addition of a second paragraph showing that sales of a business would be taxed on the show-cases, bars, fixtures, equipment, office machines, trucks, and automobiles used in the conduct of the business. On motion of Councilman Bull, Lytle second, all amendments were approved and the amended ordinance no. 373 ordered introduced and laid over for a period of not less than 5 days.

At 11:15 o'clock P. M. on motion of Councilman Tolliver, the City Council adjourned to 8:00 o'clock P. M. on Wednesday, June 30, 1948.

Attest:

  
J. F. Blakely  
City Clerk

The foregoing minutes read at an adjourned regular meeting of the City Council, held June 30, 1948, and approved as written.

  
Mayor

Date: June 30, 1948

RESOLUTION NO. 3417

RESOLUTION URGING SUPPORT OF THE EARLIEST  
POSSIBLE COMPLETION OF THE FOLSOM SOUTH CANAL

WHEREAS, the Folsom South Canal is vitally needed to bring urgently required municipal and industrial water to the eastern portion of San Joaquin County and to such urban area as the City of Lodi; and

WHEREAS, water is urgently required to meet the problems of declining ground water levels in the area of the City of Lodi as well as in many other urban and agricultural areas within the Folsom South Canal service area; and

WHEREAS, the Federal budgeting process for the 1971-72 fiscal year is now beginning with preliminary work by the Executive Branch of the Federal Government; and

WHEREAS, it is now important and urgent that all interested agencies within the State of California urge the National Administration and the Congress to budget for fiscal year 1971-72 maximum funds which can be effectively utilized by the Bureau of Reclamation in furthering the construction of the Folsom South Canal during said forthcoming fiscal year:

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Lodi as follows:

That this City Council urges the Honorable Ronald Reagan, Governor of the State of California, the Honorable Norman B. Livermore, Jr., Secretary of the Resources Agency of the State of California, the Honorable William R. Gianelli, Director of the Department of Water Resources of the State of California, and the Honorable Water Commission of the State of California to take all necessary and appropriate action to, in turn, urge the National Administration and the National Congress to include in its 1971-72 fiscal year budget the maximum appropriation which can be effectively utilized for the

Folsom South Canal Project to the end that the Folsom South Canal Project will be completed to its southern terminus in San Joaquin County with service to this District at the earliest possible time; and

BE IT FURTHER RESOLVED that copies of this resolution shall be transmitted by the Secretary of this District to the Honorable Ronald Reagan, Governor of the State of California, the Honorable Norman B. Livermore, Jr., Secretary of the Resources Agency of the State of California, the Honorable William R. Gianelli, Director of the Department of Water Resources of the State of California, the Honorable Water Commission of the State of California, the Honorable Board of Supervisors of the County of San Joaquin, the Honorable City Council of the City of Stockton, the Honorable Board of Directors of the North San Joaquin Water Conservation District, the Honorable Board of Directors of the Central San Joaquin Water Conservation District and the California Water Service.

Dated: September 2, 1970

I hereby certify that Resolution No. 3417 was passed and adopted by the City Council of the City of Lodi in regular meeting held September 2, 1970 by the following vote:

Ayee: Councilmen - EHARHARDT, HUGHES, KATNICH,  
KIRSTEN and SCHAFFER

Noes: Councilmen - None

Absent: Councilmen - None

  
Bessie L. Bennett  
City Clerk

Continued September 16, 1992

COMMUNICATIONS  
(CITY CLERK)

CLAIMS CC-4(c) On recommendation of the City Attorney and Insurance Consulting Associates, Inc., the City's Contract Administrator, the City Council on motion of Mayor Pro Tempore Pennino, Hinchman second, denied the following claims and referred them back to the City's Contract Administrator:

- a) Evelyn Estrada, Date of loss 8/7/92; and
- b) Scott A. Mastel, Date of loss 8/18/92.

ABC LICENSE  
APPLICATION

CC-7(f) City Clerk Reimche presented an application for Alcoholic Beverage Control License for Durward L. Anderson, Jr. and Norma J. Pacini, the Pan Tree, 26 West Lodi Avenue, Lodi Off-Sale Beer and Wine, Original License.

REGULAR CALENDAR

REQUEST OF THE NORTH SAN JOAQUIN WATER  
CONSERVATION DISTRICT THAT THE CITY JOIN  
IN A HEARING BEFORE THE REGIONAL WATER  
QUALITY CONTROL BOARD REGARDING WATER  
ALLOCATIONS FROM THE MOKELUMNE RIVER

CC-6  
CC-184 The City Council was advised that a request has been received from Stewart Adams, attorney representing the North San Joaquin Water Conservation District that the City participate in scheduled hearings before the Regional Water Quality Control Board. The topic will be water allocations from the Mokelumne River.

Apparently, the Water Board is considering the request of the Fish and Game Department to reduce the amount of water East Bay Municipal Utility District (EBMUD) can take from the Mokelumne in order to protect fish in the river. Mr. Adams is proposing that the City both provide witnesses for the hearing and possibly participate financially in the costs of adjudicating these issues in front of the Regional Water Board.

Mr. Stewart Adams, Attorney-at-Law representing the North San Joaquin Water Conservation District addressed the City Council regarding the matter and responded to questions as were posed.

Mr. John Newbold, 1098 East Woodbridge Road, Lodi addressed the City Council regarding the matter.

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Continued September 16, 1992

On motion of Council Member Sieglock, Snider second, the City Council approved sending a letter to the State Water Resources Control Board urging the Board to provide to North San Joaquin Water Conservation District and the City of Lodi an assured supplemental supply of surface water from the Mokelumne River to meet the current and future needs of our community. Further, the City Council indicated its desire to adjourn this meeting to Tuesday, September 22, 1992 at 7:00 a.m. to consider adoption of a resolution of support in this matter, and authorized Public Works Director Jack Ronsko to testify on behalf of the City at a hearing scheduled in November in front of the Regional Water Quality Control Board.

REPORT ON THE PRESENCE OF GANGS IN THE CITY OF LODI

CC-16  
CC-24(b)

Mr. Perfecto Munoz, 193 Wilderness Way, Woodbridge addressed the City Council regarding the topic of gangs in the City of Lodi and asked for community support in dealing with this problem in our community. Mr. Munoz suggested that a Gang Task Force be created in an effort to help alleviate this problem in our community. Sgt. Richard Dean of the Lodi Police Department was in the audience, addressed the City Council regarding the matter, and responded to questions regarding the subject as were posed by the City Council.

Also addressing the City Council regarding the matter were:

- a) Mr. Arthur Price, 1053 Port Chelsea Circle, Lodi; and
- b) Mr. Robert Shamrock, 14950 East Manzanita Way, Lockeford.

Following additional discussion, on motion of Council Member Pennino, Pinkerton second, Mr. Munoz and Sgt. Richard Dean were asked to report back to the City Council at the October 7, 1992 meeting as to what they perceive the needs of the Task Force will be.

ORDINANCES

There were no ordinances presented for adoption.

CLOSED SESSION

It was determined that there was no need for a Closed Session regarding Labor Relations.

ADJOURNMENT

There being no further business to come before the City Council, Mayor Pinkerton adjourned the meeting at approximately 9:45 p.m. to Tuesday, September 22, 1992 at 7:00 a.m.

*Alice M. Reimche*  
Alice M. Reimche  
City Clerk

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SPECIAL MEETING  
LODI CITY COUNCIL  
CARNEGIE FORUM  
305 WEST PINE STREET  
LODI, CALIFORNIA  
TUESDAY, SEPTEMBER 22, 1992  
7:00 A.M.

Pursuant to State statute, Mayor Pinkerton called a Special Meeting of the City Council at 7:00 a.m., Tuesday, September 22, 1992. Notice of this meeting had been sent out and posted according to State law.

ROLL CALL                      City Clerk Reimche recorded the roll as follows:

Present: Council Members - Hinchman, Pennino, Sieglock  
(arrived 7:03 a.m.), Snider and  
Pinkerton (Mayor)

Absent: Council Members - None

Also present: City Manager Peterson, Assistant City  
Manager Glenn, Public Works Director Ronsko,  
Assistant City Engineer Prima, City Attorney  
McNatt and City Clerk Reimche

REGULAR CALENDAR

RESOLUTION SUPPORTING NORTH SAN JOAQUIN  
WATER CONSERVATION DISTRICT'S ATTEMPTS  
TO SECURE SUPPLEMENTAL WATER FROM THE  
MOKELUMNE RIVER

RESOLUTION NO. 92-165

As directed by the City Council at its meeting of September 16, 1992, the City Attorney prepared the following resolution for Council approval expressing the City's support of the North San Joaquin Water Conservation District's attempts to secure an assured supply of water from the Mokelumne River, and authorizing Public Works Director Jack Ronsko to appear and testify at the State Water Resources Control Board hearing on November 9, 1992.

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Continued September 22, 1992

RESOLUTION NO. 92-165  
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A RESOLUTION OF THE LODI CITY COUNCIL  
IN SUPPORT OF THE NORTH SAN JOAQUIN WATER CONSERVATION DISTRICT'S  
ATTEMPTS TO SECURE SUPPLEMENTAL WATER FROM THE MOKELUMNE RIVER  
=====

WHEREAS, the North San Joaquin Water Conservation District (NSJWCD) is purveyor of water to areas contiguous to the City of Lodi; and

WHEREAS, any surface water which NSJWCD can supply to its users for agricultural purposes from the Mokelumne River avoids a commensurate depletion of the ground water basin which Lodi shares and which is already over-drafted; and

WHEREAS, any ground water not required to be pumped for NSJWCD customers because of the availability of supplemental Mokelumne River water benefits the same ground water table from which Lodi also draws its water for municipal and industrial uses; and

WHEREAS, there are now hearings scheduled before the State Water Resources Control Board which may affect NSJWCD's right to Mokelumne River water; and

WHEREAS, the NSJWCD intends to present testimony at the hearing on November 9, 1992 seeking the allocation of an assured supply of surface water from the Mokelumne River to alleviate a serious depletion of the ground water basin;

NOW, THEREFORE, BE IT RESOLVED BY THE LODI CITY COUNCIL THAT:

1. The City of Lodi supports and endorses the efforts of NSJWCD to obtain a secure supplemental water supply from the Mokelumne River which would benefit both the District and the City, and
2. Lodi Public Works Director Jack Ronsko is hereby authorized and directed to appear at the hearing now scheduled for November 9, 1992 before the State Water Resources Control Board for the purpose of presenting testimony on behalf of NSJWCD's request for such supplemental water.

Dated: September 22, 1992

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I hereby certify that Resolution No. 92-165 was passed and adopted by the Lodi City Council in an adjourned meeting held September 22, 1992 by the following vote:

Ayes: Council Members - Pennino, Sieglock, Snider and Pinkerton (Mayor)

Noes: Council Members - Hinchman

Absent: Council Members - None



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Continued September 22, 1992

Addressing the City Council regarding the matter were:

- a) Janet Pruss, 2421 Diablo Drive, Lodi;
- b) Gerald Neuburger, 5 North California Street, Lodi; and
- c) John Newbold, 1098 East Woodbridge Road, Lodi.

Discussion followed with questions being directed to staff and to those who had given testimony regarding the matter.

On motion of Mayor Pinkerton, Pennino second, the City Council adopted Resolution No. 92-165 entitled, "A Resolution of the Lodi City Council In Support of the North San Joaquin Water Conservation District's Attempts to Secure Supplemental Water from the Mokelumne River". The motion carried by the following vote:

Ayes: Council Members - Pennino, Sieglock, Snider and Pinkerton (Mayor)

Noes: Council Members - Hinchman

Absent: Council Members - None

FIRE BATTALION CHIEF POSITION FREEZE

Fire Chief Hughes advised the City Council that in an effort to offset the loss of revenues suffered by the City as a result of the State budget crisis we plan on freezing one Battalion Chief's position for a period of six months. Since the Battalion Chief is the shift supervisor who responds to emergencies it is necessary to have someone available to fill the needs of the position on a 24 hour basis. To accomplish this the Fire Department plans on filling the position with a 40 hour Fire Administrative Officer from 8 a.m. until 5 p.m. on the weekdays and having Battalion Chiefs and Fire Administrative Officers perform standby from 5 p.m. until 8 a.m. on weekdays and from 8 a.m. until 8 a.m. the following day on weekends. With the approval of the proposed motion the person performing the standby would receive pay for 45% of the hours worked in standby. These hours will be hours worked in excess of their normal work week, which is 40 hours for Fire Administrative Officers and 56 hours for Battalion Chiefs.

Following discussion, on motion of Council Member Snider, Hinchman second, the City Council authorized the City Manager to pay Fire Battalion Chiefs and Fire Administrative Officers standby time worked to cover the frozen Battalion Chiefs position for the period of October 1, 1992 through the first pay period in April 1993.

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Continued September 22, 1992

Payment for such time to be at a rate of 45% of hours served on standby.

The motion carried by unanimous vote of the City Council.

**FIRE DEPARTMENT ADMINISTRATIVE LEAVE POLICY AMENDMENT**

Fire Chief Hughes advised the City Council that at its regular meeting of Wednesday, July 1, 1992 the City Council, on the recommendation of staff, suspended the policy of compensation for certain hours of unused Administrative Leave as part of the City's cost reduction necessitated by budget decisions of the State Legislature. The Fire Chief has advised that strict adherence to this decision in the Fire Department will cost money, rather than save it. This is based on the need to "hire back" to fill a vacancy created when a Battalion Chief takes Administrative Leave. This "hire back" to fill such a vacancy is compensated at time and one half. Thus the additional cost to the City of not compensating for certain unused hours of Administrative Leave is approximately \$3,220 annually. It is clearly in the best economic interests of the City to make this exemption from the recently adopted City-wide Administrative Leave policy. This unique situation does not occur in other departments.

Following discussion, on motion of Council Member Hinchman, Pennino second, the City Council exempted the Fire Department from the current suspension of compensation for certain hours of Administrative Leave.

The motion carried by unanimous vote of the City Council.

**ADJOURNMENT**

There being no further business to come before the Council, the meeting was adjourned at 7:22 a.m.

Attest:

*Alice M. Reimche*  
Alice M. Reimche  
City Clerk

*Continued December 15, 1999*

Additionally, it was announced that Dial-A-Ride will be offered free to the public on New Year's Eve from 9:00 p.m. to 2:00 a.m.

Further, the public was informed about the year-end millennium event entitled, "Millennium Kids' Night Out", which will be held in Downtown Lodi on Friday, December 31, 1999 from 4:00 – 7:00 p.m.

- c) Agenda item #H-3 entitled, "Funding request from North San Joaquin Water Conservation District".

Public Works Director Prima reported that the State Water Resources Control Board, in an effort to meet a December 31, 1999 deadline, is holding a final hearing on December 28, 1999 to consider certifying an Environmental Impact Report (EIR) and a water rights decision to implement a major portion of the Bay/Delta Plan.

The North San Joaquin Water Conservation District (NSJWCD) has been participating in this process and must complete their administrative effort to secure a firm water supply for the northeast portion of the County. The Board's draft decision includes recognition of the Memorandum of Understanding between East Bay Municipal Utility District (EBMUD) and other water agencies (not including NSJWCD) which adopts a schedule of Mokelumne River flows. NSJWCD is concerned that while this protects EBMUD and Woodbridge Irrigation District, it does little to help, and may actually reduce water available to NSJWCD. In addition, what little rights NSJWCD has to Mokelumne River water are only temporary and will expire soon.

The District has spent a significant amount of its limited resources on this process and is seeking assistance from the City to continue their efforts. They have provided a cost estimate of \$12,000 for the next two steps which involve participation in this final Board meeting and developing a strategy for continuing with their efforts to obtain a firm water right.

Staff is concerned that a full water rights battle could cost hundreds of thousands of dollars and that the City would need significant study and discussion as to whether or not we should pursue such an effort, particularly when the request is for agricultural water supplies. However, recognizing that any supplemental surface water in our area reduces the demand on groundwater which is the City's sole source of supply, our investments in the East San Joaquin Parties Water Authority's efforts, and the economic importance of the agriculture to the City's economy, staff feels this initial step is reasonable.

In addition, staff requested that the City Council provide additional direction as to the City's future involvement in this process. Items for consideration include:

- Consideration of loaning funds to the District;
- Requiring participation from other agencies, such as San Joaquin County;
- Requiring additional funding from the District's property owners.

Speaking on the matter were the following persons:

1. Fred Weybret, representing NSJWCD, 1520 Edgewood Drive, Lodi, addressed the City Council regarding the matter and talked about the shortage of funds within the District.
2. Ed Steffani, part-time Manager of NSJWCD, 19255 East Brandt Road, Lodi, also addressed the City Council regarding this matter.

Following discussion, the City Council, on motion of Council Member Land, Nakanishi second, unanimously granted the request of funds up to \$12,000 for NSJWCD.

13. ORDINANCES

None.

**CITY OF LODI  
INFORMAL INFORMATIONAL MEETING  
"SHIRTSLEEVE" SESSION  
CARNEGIE FORUM, 305 WEST PINE STREET  
TUESDAY, OCTOBER 17, 2000**

An Informal Informational Meeting ("Shirtsleeve" Session) of the Lodi City Council was held Tuesday, October 17, 2000 commencing at 7:04 a.m.

**A. ROLL CALL**

Present: Council Members – Hitchcock, Land, Nakanishi, Pennino and Mayor Mann

Absent: Council Members – None

Also Present: City Manager Flynn, City Attorney Hays and City Clerk Blackston

**B. CITY COUNCIL CALENDAR UPDATE**

Review of the Mayor's and Council Member's Weekly Calendar (filed) was waived.

**C. TOPIC(S)**

1. "Update on Water Supply Issues"

Public Works Director Prima reported that the City is entirely a groundwater user and the system relies 100% on its wells. The City has been working with other agencies to improve the groundwater supply. The groundwater table in this area is declining, and has been since the turn of the century. Staff is looking at long-term solutions that involve trying to make the most use of surface supplies when they are available, which is typically during the winter months. "Conjunctive use" is an arrangement where an irrigation district or a city uses more surface water when it is available, and stores the groundwater for use in a dry year. Lodi makes all of these efforts through a variety of entities. The East San Joaquin Parties Water Authority (ESJPWA) is a consortium of Lodi, Stockton, Woodbridge, North San Joaquin Water Conservation District (NSJWCD), Stockton East Water District, and Central San Joaquin Irrigation District. These are the primary groundwater users in the basin in the eastern part of the county. Primarily the ESJPWA is a planning agency and is not set up to do projects. Their Board recently reaffirmed its position that it does not intend to take on any projects and has encouraged members to do so on their own or in groups.

The San Joaquin Water Advisory Commission was established by the County a few years ago to advise the San Joaquin County Board of Supervisors on water issues. It consists of representatives from all water entities, and has 17 members that meet once a month to review water supply issues. They are now reviewing the modification to the State Water Code as it pertains to export. They feel that the Water Code should be amended if we are going to do an export project as part of a conjunctive use scheme in San Joaquin County. Through the CalFed process, they have identified empty groundwater basins as a potential storage reservoir for surface water that could be managed and used in dry years. At its last meeting, Tom Shephard, Counsel for the Water Advisory Commission, had a number of alternatives, which could be very restrictive in terms of doing a project with East Bay Municipal Utility District (EBMUD) and Mokelumne River water. The City's position has been that that is not appropriate, because we do look at EBMUD as a potential partner and we should be modifying state law to make a project simpler to implement, not more difficult.

Lodi is involved in the planning effort of the Integrated Storage Investigations and Countywide Groundwater/Surface Water Management Plan. The Integrated Storage Investigations is a program that the State initiated as part of the CalFed process to look at conjunctive use opportunities in groundwater basins. The County has been looking at doing a groundwater management plan countywide. One of the outcomes of these

studies is an updated groundwater model that will be a useful tool for anyone planning on doing a project in the area. It will set a framework and identify possible projects that could be pursued. Mr. Prima stated that staff wants to make sure the plan includes conjunctive use projects as some of the alternatives to meet our groundwater shortage, and to also include conservation and recycling.

Locally, ESJPWA has encouraged its members to go forward with projects. Referring to Exhibit D in the staff report (filed), Mr. Prima explained that the Groundwater Banking Project concept was formerly called the 10-Well Project. The basis of the project is that EBMUD would provide surface water during wet years to NSJWCD. They would provide water to be taken out of the river that would not ordinarily be used by NSJWCD. If they can cut back on groundwater usage, and use this surface water in wetter years, that is a form of banking. The other element would be to actually inject surface water from the aqueduct into the ground and then later take it out during a dry year. The prospect that EBMUD would take groundwater and send it to Oakland in a drought time is an important issue to the Farm Bureau. Their concern is for the potential localized effect which may occur to a farmer's well adjacent to large well being pumped heavily during a long dry season. This concern led staff to look at alternatives to reduce that situation, and to possibly use the City's system as part of the export. Benefits include local control of the export wells.

Mayor Mann questioned if it has been determined whether or not this procedure can be done safely, meaning that contaminated water not be injected, thereby contaminating the whole basin.

Public Works Director Prima responded that staff feels it can be done safely; however, there are still concerns about it, as to how much filtering should be done before water goes in. That is part of the next level of the project development.

Mr. Prima showed an overhead demonstrating the City's 1999 water production (filed). He explained that if all the wells were running at 75% capacity, instead of 35%, it would represent 19,000-acre feet of water in terms of additional capacity, however, he noted that there is evidence that running a well continuously can cause some decline in the production of a well. The mechanics of connecting the City's system to the aqueduct still need to be worked out. The need that EBMUD has for dry-year water is far more than 19,000-acre feet.

Mark Williamson, with EBMUD, replied that they need 70,000-acre feet.

Public Works Director Prima commented that staff has considered the opportunity for Lodi to use surface water during a wet year and, in effect, bank even more groundwater. There are some technical issues in terms of mixing groundwater and surface water. The 10-Well Project with NSJWCD was approximately \$25 million. Almost half of that budget included filters for the groundwater that was extracted. There is concern because of the dibromochloropropane (DBCP). The filters used for DBCP are granular activated carbon filters that need to be run nearly continuously. Mr. Prima suggested that a feasibility study be done to determine whether the City's system could be used as part of this project. He noted that the City now supplies drinking-quality water out of its system, and conceptually the \$15 million saved on filters could go toward a surface plant.

In response to Council Member Hitchcock, Mr. Prima explained that NSJWCD already has two diversion points on the river: one going to the north, one to the south. The amount of water taken out that is provided "in lieu" would be measured, and the injection is metered.

In reply to Council Member Hitchcock, City Attorney Hays responded that any agreement at the outset would deal with costs to the parties because there are certain infrastructure items that need to be built. Injection and extraction systems are both capital costs, and the agreement would contain both elements. In the long term, it is a banking

*Continued October 17, 2000*

circumstance where you account for water (or dollars) going in and account for it coming out.

Council Member Hitchcock asked if the City would have the first right in drought times, and if we could cancel if problems occurred. City Attorney Hays replied that the answer is yes; although, it would most likely be a group project and not just solely Lodi's.

Council Member Pennino commented that in 1993-94 the City talked about digging out Lodi Lake, keeping it filled year-round, and using the water for recharge.

Mr. Prima explained that the CalFed project, which is supporting Woodbridge in terms of placing the dam with a new fish passage facility, included an element to consider dredging the Lake. CalFed was interested in creating habitat along the river, and had looked at Lodi Lake as a potential detriment to fish rearing. As part of the studies that have been done so far, they have not ascertained that the Lake really is a problem when it comes to salmon. However, there is a benefit in increasing the additional riparian habitat by building the causeway from the west side of the lake over to the north point that would allow the circulation trail around the lake. It is assumed that this project would include taking material out of the bottom of the lake, although, CalFed studies are not yet complete.

Council Member Pennino questioned why we cannot go forward on our own with the lake and asked what it would take to keep Lodi Lake filled year-round.

Mr. Prima explained that over the course of the winter, if the level in the river drops, it may not be possible to keep water in the lake year-round without a substantial makeup supply. If it is being done for recharge purposes, that means it is draining, and water would need to be supplied to it. The results of the CalFed studies should determine the best way to operate not only Lodi Lake, but the entire impoundment.

Mayor Mann stated that several years ago discussions took place about dredging a foot or more of soil from the bottom of the lake in order to make it deeper and less hospitable for bacteria.

Mr. Prima responded that the lake was re-graded and some of the high spots were removed. He indicated that he did not recall the issue of bacteria being brought up at that time in terms of the depth; however, he stated that he would check into it. The bacteria issue at Lodi Lake has been perplexing. The beach has had a problem; however, when the levels are measured further out in the lake, the bacteria level is acceptable in terms of swimming. In the river, the bacteria level is often higher, so staff is unsure what is causing it. It has been suggested that circulation from the river into the lake should be improved; although, the data received thus far has indicated the opposite.

In summary, Mr. Prima reported that the City intends to continue working with NSJWCD. Staff would like to develop a scope of work for a consultant to work on outlining and detailing the kind of questions discussed today and determine if it is feasible for the City to pursue a project with NSJWCD and EBMUD. The NSJWCD has been successful in getting a CalFed grant to do a recharge project. Also, NSJWCD will appear before the State, along with EBMUD, before the end of the year to try to get the water rights permits renewed, and they have asked for the City's support. Staff will come back to Council next month with a recommendation on this matter.

In response to Council Member Land, Mr. Prima stated that the water flow into Lodi Lake varies considerably. The amount of water that gets released at Camanche, minus what gets taken out for irrigation by farmers, and what percolates into the ground, is what flows through. When the water reaches the lake it slows and fans out through the lake and the river. Woodbridge measures the flow at their dam and EBMUD measures where they release it.

*Continued October 17, 2000*

**D. COMMENTS BY THE PUBLIC ON NON-AGENDA ITEMS**

None.

**E. ADJOURNMENT**

No action was taken by the City Council. The meeting was adjourned at approximately 7:40 a.m.

ATTEST:

Susan J. Blackston  
City Clerk

*Mayor's & Council Member's Weekly Calendar*

**WEEK OF OCTOBER 17, 2000**

**Tuesday, October 17, 2000**

- 7:00 a.m. Shirtsleeve Session. The topic(s) is:  
1. Update on Water Supply Issues  
*Reminder: Please bring your calendars to review with staff.*
- 7:00 a.m. Special City Council meeting. The topic(s) is:  
1. Closed Session  
a) Actual Litigation – Government Code §54956.9(a) *Albert Thurman v. City of Lodi* California Public Employees' Retirement System, Case No. 2850
- 6:30 p.m. Mann. Lodi Business and Professional Women/USA dinner celebrating National Business Women's Week, Salvation Army Headquarters. Mayor to present proclamation.

**Wednesday, October 18, 2000**

- 7:00 p.m. City Council meeting. Summary of meeting of follows:  
4 Presentations  
13 Consent Calendar items  
One Public Hearing  
2 Regular Calendar  
One Ordinance  
One Closed Session item

**Thursday, October 19, 2000**

**Friday, October 20, 2000**

- 7:00 a.m. Economic briefing featuring John Mitchell, Chief Economist, U.S. Bancorp, Sacramento Capitol Club.
- 7:30 a.m. Mann, Nakanishi, Land, Pennino. Mayor's "State of the City" breakfast, Hutchins Street Square, Crete Hall.
- 6:30 p.m. Mary Graham Guild Benefit Art Auction, Best Western Stockton Inn.

**Saturday, October 21, 2000**

**Sunday, October 22, 2000**

**Monday, October 23, 2000**

**Disclaimer: This calendar contains only information that was provided to the City Clerk's office**

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# CITY OF LODI

# COUNCIL COMMUNICATION

AGENDA TITLE: Update on Water Supply Issues  
MEETING DATE: October 17, 2000 (Shirtsleeve Session)  
PREPARED BY: Public Works Director

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RECOMMENDED ACTION: None – information only.

BACKGROUND INFORMATION: Following previous Council direction, City staff has, 1) continued to work within its membership in the East San Joaquin Parties Water Authority (ESJPWA), and 2) held discussions with North San Joaquin Water Conservation District (NSJWCD) and East Bay Municipal Utilities District (EBMUD) on possible conjunctive-use water supply projects. The purpose of this meeting is to update the Council and the public on these activities and describe upcoming activities.

The fundamental element of a conjunctive-use project is that excess surface water supplied from one entity would either be stored in the local groundwater basin, or provided as additional surface water replacing present groundwater use by a local entity, and then, in a drought, the "stored" groundwater would be available to the supplying entity. While the concept sounds simple, issues surrounding the details, both legal and technical, are complex and controversial in some minds. These issues are being addressed as described below and our planned policy direction is shown in italics:

- ESJPWA – This entity has served as a forum for local urban and agricultural water suppliers and users, including EBMUD, to continue discussions and plan for future projects. ESJPWA has confirmed its role as a planning authority and has formally stated that any specific projects are to be undertaken by individuals or groups of members. The ESJPWA has continued the Beckman Test Project to learn more about the fate of injected water into the groundwater basin to assist members in planning a larger scale project.

*We intend to continue this participation and strongly agree that actual projects would be best handled by the ESJPWA's members.*

- San Joaquin Water Advisory Commission – This countywide commission is currently considering one element related to implementing the recently revised County groundwater export ordinance. That element has to do with possible amendments to State law regarding groundwater export. A memorandum describing possible amendments has been drafted by legal counsel and is attached as Exhibit A.

*Without getting into the myriad of details, we intend to support changes that simplify and make conjunctive-use projects more likely to be implemented while allowing for a reasonable degree of local control.*

APPROVED: \_\_\_\_\_

H. Dixon Flynn -- City Manager

- Integrated Storage Investigations and Countywide Groundwater/Surface Water Management Plan – This ambitious and important study is a joint effort among the County, State and local water agencies to develop a comprehensive water supply plan for San Joaquin County. The effort is being assisted by a large steering committee in which we participate. A "Principles of Participation" statement is attached as Exhibit B. One outcome of this work will be an updated computer model of the groundwater basin, which includes surface water flow and use impacts. But the key outcome is a preferred alternative consisting of a package of options, including projects, programs, policies and/or operational strategies that offer a means for achieving plan objectives (see Exhibit C).

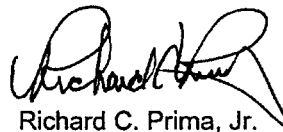
*We intend to continue participation in this effort and work toward including conjunctive-use, conservation, and recycling as potential elements of the Plan.*

- Potential project with Lodi and NSJWCD and/or EBMUD – Following ESJPA's direction that members actually implement projects, and past Council direction, staff has continued to work on a possible project, focusing on what was formerly called the "10-well project". The updated project concept is attached as Exhibit D and would mainly involve EBMUD and NSJWCD. The concept includes two elements that have led City staff to suggest that additional elements (and City participation) be considered. One element is the concern over pumping wells within the agricultural areas for export – that the increased pumping during a dry year could have an adverse impact on adjacent ag wells. The other element is that the exported water will need to be filtered to remove potential contaminants, mainly DBCP. Of the \$25 million budget, nearly half is for filters.

The additional elements suggested would include the City as part of the project by using excess (off-peak) capacity in our wells as all or part of the export wells, thereby minimizing the impact to agricultural areas. The next element would include the City as one of the conjunctive users. The City would use some surface water when it is available, thereby "banking" groundwater for export in dry years. There are numerous feasibility and technical details to consider, as well as legal/institutional ones to work out on these elements. An updated conceptual outline is attached (Exhibit E).

*Staff intends to continue to work with NSJWCD and EMBUD on this project, including the additional elements, and develop a scope of work for a study to address these details. This will be brought back to the Council in the future for discussion and action. We also intend to continue to work with NSJWCD in its efforts to secure surface water for direct use and/or recharge.*

FUNDING: None needed at this time.



Richard C. Prima, Jr.  
Public Works Director

RCP/lm

Attachments

cc: Fran Forkas, Water/Wastewater Superintendent  
Ed Steffani, North San Joaquin Water Conservation District  
Anthony Saracino, East San Joaquin Parties Water Authority  
Mark Williamson, East Bay Municipal Utility District  
Andy Christensen, Woodbridge Irrigation District  
Jack Sieglock, San Joaquin Board of Supervisors  
Bob Johnson, Water Advisory Commission Representative



**SAN JOAQUIN COUNTY  
FLOOD CONTROL & WATER  
CONSERVATION DISTRICT**

P. O. BOX 1810  
1810 EAST HAZELTON AVENUE  
STOCKTON, CALIFORNIA 95201  
TELEPHONE (209) 468-3000  
FAX NO. (209) 468-2999

**MANUEL LOPEZ  
DIRECTOR OF PUBLIC WORKS  
FLOOD CONTROL ENGINEER**

**RECEIVED**

SEP 25 2000

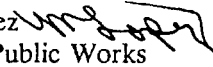


**CITY OF LODI  
PUBLIC WORKS DEPARTMENT**

September 22, 2000

MEMORANDUM

TO: Richard C. Prima, Jr.  
City of Lodi

FROM: Manuel Lopez   
Director of Public Works

SUBJECT: LEGISLATION TO CLARIFY STATE WATER CODE  
SECTIONS 1220 AND 1011.5

The attached letter was presented at the September 20, 2000, meeting of the Advisory Water Commission. During that meeting, it was requested that a copy of this letter be sent for review and comment by the Commission members and their respective organizations' Boards and Councils.

This item will again be placed on the Commission's October 18, 2000, meeting Agenda for discussion and to receive comments.

Should you have any questions, please contact me at 468-3100, or Tom Gau, Deputy Director/Development at 468-3101.

ML:TO  
AWCWTRCODES.MEM

Attachment

c: Thomas M. Gau  
Deputy Director/Development

September 19, 2000

TO:           ADVISORY WATER COMMISSION  
              San Joaquin Flood Control and Water Conservation District

FROM:        THOMAS J. SHEPHARD, SR. AND DEEANNE WATKINS

RE:           Water Code Sections 1220 and 1011.5

The purpose of this memorandum is to outline possible amendments to Section 1220 and Section 1011.5 of the Water Code and to assist the Commission in determining what amendments, if any, to recommend to the Board of Supervisors.

Summary of Water Code Section 1220

Currently, Water Code Section 1220 places specific restrictions on exporting groundwater outside the portions of San Joaquin County that are within the Delta-Central Sierra Basin. The Delta-Central Sierra Basin is defined in Department of Water Resources Bulletin 160-74, and contains the eastern portion of San Joaquin County, as well as other territory.

Water Code Section 1220 prohibits the exportation of groundwater from this area of the county unless the pumping for exportation complies with "a groundwater management plan that is adopted by ordinance . . . by the county board of supervisors, in full consultation with affected water districts, that is subsequently approved by a vote in the counties or portions of counties that overlie the groundwater basin." Subsection (c) of Section 1220 requires the prior agreement of all local agencies supplying water in the affected area before the county board of supervisors can adopt a groundwater management plan pursuant to this section.

The application of various parts of this section is unclear. In addition, complying with the requirements of Water Code Section 1220 is uncertain and difficult. The Advisory Water Commission and the Board of Supervisors are considering possible ways in which legislation could amend and clarify the uncertainties and difficulties of Water Code Section 1220. It is recommended that any proposed changes that are made to Water Code Section 1220 should be specific to San Joaquin County and should not attempt to broadly apply our local preferences to the other areas and counties that are affected by Water Code Section 1220.

## Possible Amendments to Water Code Section 1220

### 1. Limit, but do not prohibit, exportation of groundwater that is part of a conjunctive use project.

Section 1220 can be amended to allow for the exportation of groundwater within certain limitations. For example some portion of the water that is placed in the groundwater basin as a part of a conjunctive use project could be allowed to be pumped for exportation. If this option is pursued various limiting factors could be imposed such as the following:

(a) Limiting the amount of water allowed to be withdrawn for exportation to a certain percentage (for example, 50%) of the water placed in the groundwater basin as part of the conjunctive use project.

(b) Limiting the amount of water allowed to be withdrawn for exportation from a conjunctive use project to a certain numeric number such as  $x$  acre feet per year, or  $x$  acre feet per year not to exceed  $y$  acre feet over or 3 or 5 year period.

(c) Limiting the amount of water allowed to be withdrawn for exportation as part of a conjunctive use project by a certain migration percentage each year.

(d) Limiting the type of conjunctive use project eligible for exportation to one involving imported water that would not otherwise or naturally flow through the Basin. For example, water from the American River that is injected or stored in the groundwater basin would qualify for exportation; however, water from the Mokelumne River that would naturally flow through the County would not qualify as water that could be stored in the groundwater basin and then exported.

(e) It will be necessary to define conjunctive use, which can include injection, in-lieu irrigation, recharge, and possibly other methods. Conjunctive use projects can be combined with export or can be used locally.

### 2. Entirely exempt conjunctive use projects from the limitations of the section.

Section 1220 could be amended so that it does not place any limits on the exportation of injected water or non-native water that is part of a conjunctive use project. Some argue that Section 1220 was never intended to apply to water which is non-native groundwater or water that is artificially stored in the groundwater basin. This option would require defining non-native groundwater, injected water and/or conjunctive use projects that would be eligible for exportation. This option may require a technical study for identification of non-native or injected water.

### 3. Draft project specific legislation that allows for exportation consistent with a planned project.

Draft legislation that specifically applies to a proposed conjunctive use project within San Joaquin County. There are currently many efforts within the County to develop a conjunctive use project that involves some element of exportation. Rather than generally drafting legislation

that later may prove to be too restrictive or too broad, an alternative is to develop a specific project and then draft legislation to allow for exportation of groundwater consistent with the local project. This approach could require specific legislation for each project if there is more than one.

4. Clarify the existing terms concerning adoption of a groundwater management plan.

The terms and application of the existing legislation are confusing and unclear. Legislation could be drafted to further describe how the limitations of Section 1220 apply within San Joaquin County. The following terms of Section 1220 could be clarified:

(a) Clearly define the boundaries of Delta-Central Sierra Basin.

The boundaries of the Delta-Central Sierra Basin are unclear. The boundaries of the Basin are currently identified as lines on a map that appears in Department of Water Resources Bulletin 160-74. It is believed that the southern boundary line is the southern border of the Central San Joaquin Water Conservation District and the western border includes the Delta and portions of Alameda, Contra Costa and Solano counties. The Basin extends to the east into the foothill counties and includes a portion of Calaveras, Stanislaus, Amador, and El Dorado counties. To the north, the Basin includes much of Sacramento County. Legislation could more accurately describe the boundaries of the Basin as it applies to San Joaquin County, while at the same time not affecting the other counties.

In addition, the Eastern San Joaquin County Groundwater Basin has been defined by the Department of Water Resources Bulletin 118-80 and is a much smaller area than the Delta-Central Sierra Basin. Some argue that the boundaries of the Eastern San Joaquin County Basin better define the local areas that are limited by Section 1220. This includes the county line on the north, the San Joaquin River on the west, the county line and the Stanislaus River on the south, and the edge of the alluvium along the foothills on the east. In any event, legislation should clarify the relationship of the Eastern San Joaquin County Groundwater Basin to Section 1220 and the Delta-Central Sierra Basin.

(b) Define requirements of the groundwater management plan. Currently, section 1220 allows for exportation of groundwater if in compliance with a "groundwater management plan." The requirements and type of groundwater management plan required are not specified. We are now familiar with groundwater management plans, referred to as AB3030 plans, adopted pursuant to Water Code section 10750 et seq. However, the legislation authorizing AB3030 plans was not enacted until 1992, six years after Water Code Section 1220 was enacted in 1984. Traditionally AB3030 plans have been adopted with little practical application or control over the management of groundwater. Clarifying legislation could specifically identify the type of groundwater management plan or the components of a groundwater management required by Section 1220.

(c) Define the eligible voters and voting method necessary to approve the groundwater management plan.

Currently, Section 1220 requires the “groundwater management plan” adopted by the county board of supervisors to be subsequently “approved by a vote.”

It is unclear from the existing legislation the type of vote that is necessary to approve the groundwater management plan. The various interpretations could require an election of all registered voters or an election by all landowners. It is also unclear whether the vote must occur at polling places during a general election, if the vote can occur by mailed ballot, or if a protest hearing is sufficient. New legislation should clarify the eligible voters and the voting method required by Section 1220, if a vote is to be required.

(d) Clarify the portions of the counties that must approve the groundwater management plan.

Currently, Section 1220 requires the “groundwater management plan” adopted by the county board of supervisors be subsequently “approved by a vote in the counties or portions of counties that overlie the groundwater basin.”

The existing legislation does not clearly identify the geographic area that must approve a groundwater management plan that has been approved as an ordinance by a county board of supervisors. Some argue that the phrase “approved by a vote in the counties or portions of counties that overlie the groundwater basin” can be interpreted to require a groundwater management plan that applies to a portion of the basin to be approved by a vote of the entire Delta-Central Sierra Basin or alternatively by the entire Eastern San Joaquin County Groundwater Basin. This task would be difficult as these boundaries include many political jurisdictions. Others argue it is more reasonable that the plan must be approved by a vote within the county that the plan applies. Legislation should clarify the geographic areas of the required vote approving the groundwater management plan.

(e) Clarify the requirement that all agencies supplying water approve the plan.

Current legislation requires that all water agencies that supply water within the area of the groundwater management plan must agree to the plan before the Board of Supervisors may adopt the plan by ordinance. Some argue that this would be a difficult and possibly impossible task and the Board of Supervisors should have the ability to adopt a groundwater management plan without first obtaining agreement from all agencies supplying water in the area. Legislation could address this concern.

Water Code Section 1011.5

The basic purpose of Section 1011.5 is to provide protection to the holders of appropriate rights who engage in a conjunctive use program and thus at times do not use their appropriate rights. A portion of 1011.5, in effect until December 31, 2006, provides

for special conditions applicable to the Eastern San Joaquin Basin as defined in Department of Water Resources Bulletin No. 118-80. Section 1011.5 is secondary to the issues of Section 1220. Our recommendation is that any amendment of Section 1011.5 be based on amendments, if any, of Section 1220.

We will be happy to answer any further questions you may have.



# **Principles of Participation**

## **San Joaquin County Water Management Plan**

### **PROJECT SCOPE**

Development of the San Joaquin County Water Management Plan comprises several major tasks, all conducted within the framework of an open process of on-going stakeholder involvement:

- Collection and review of available data and studies related to San Joaquin County Water Resources;
- Development of objectives and criteria for evaluation of various "packages" of water management options including projects, programs and operational strategies (alternatives);
- Development of technically feasible water management alternatives;
- Evaluation of the alternatives according to stakeholder objectives and criteria; and
- Recommendation of a preferred alternative to the County Board for consideration;
- Development of a countywide water management plan document based on the selected alternative; and
- Development of financing and implementation plan documents.

To achieve these goals, the project team is asking stakeholder workshop participants to:

1. Learn about countywide water management issues and the respective roles of the San Joaquin County Flood Control and Water Conservation District, its consultants, local water agencies and regulating agencies in this effort.
2. Become familiar with the decision making process used by the San Joaquin County Flood Control and Water Conservation District.
3. Use the meetings as a forum for each organization/community representative to work cooperatively, to consider a range of options, and to communicate specific concerns to other participants and the project team.
4. Report back to constituents and organizational colleagues on the goals and progress of the planning effort.
5. Provide input to the project team on stakeholder objectives, concerns, and values that it should consider in making its decision. Work hard to assure that all participants' concerns have been documented.
6. Make an effort to reach a consensus with other participants, where possible.
7. Attend the series of \_\_\_\_\_ currently planned workshops; and
8. Listen courteously to other points of view and consider alternatives before making recommendations.

# Principles of Participation –p.2

## DISCUSSION PROCESS

All stakeholder perspectives are valued. The preferred deliberation process is collaborative problem solving. In the cases of non-consensus, all viewpoints will be documented and communicated to decision-makers.

## SUPPORT

A neutral facilitator, as well as the San Joaquin County Flood Control and Water Conservation District staff and consultants, will provide technical information and assistance to participants during discussions.

## AGENDA AND TIMETABLE

Participation in the establishment of agendas and matters for discussion will be encouraged. The facilitator will be responsible for preparing the agendas in collaboration with participants. At the conclusion of each meeting, staff will recommend items for inclusion in the next agenda.

## MEETING RECORDING

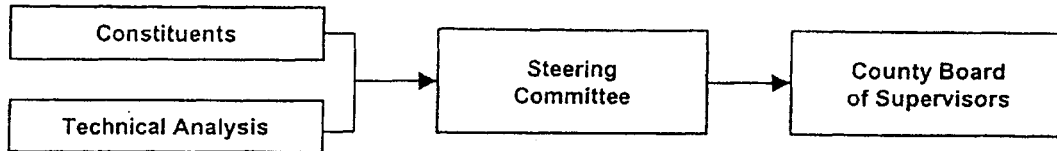
Meetings will be audio taped to assist in the preparation of meeting summaries that will be distributed to participants.

## SUMMARY MEMORANDUM

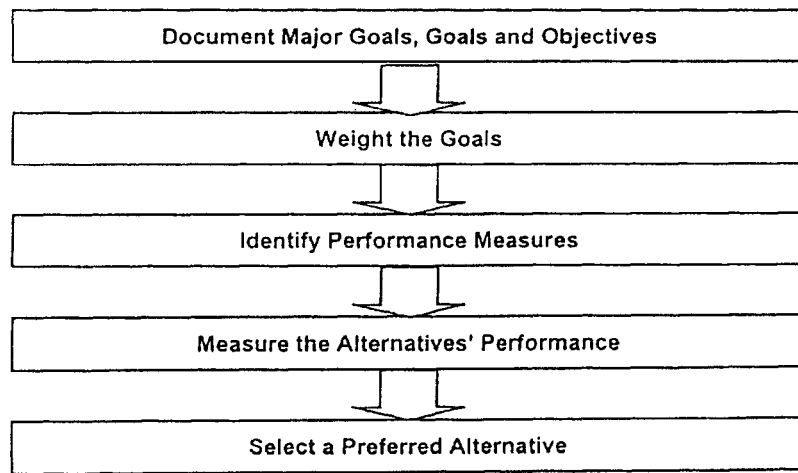
A summary memorandum containing participants recommendations will be prepared for consideration by the County Board when selecting an alternative to be developed into the Management Plan. It is suggested that this summary memorandum contain the following:

- The scope and content of the discussions;
- Recommendations and conclusions on the issues considered; and
- Individual opinions and observations that may not be reflected in the main body of the Water Management Plan document or implementation plan.

## Decision-Making on the Final Plan



## Steering Committee Decision-Making Process



## Some Definitions

- **Option:** *A project, program, or policy or operational strategy that offers a means for achieving plan objectives*
- **Alternative:** *A package of options*
- **Major Goals:** *The essential goals in developing a plan, in broad, overarching terms*
- **Goals:** *Further elaboration on/explanation of the major goals*
- **Objectives:** *Detailed breakdown describing the goals*
- **Performance Measures:** *Indicators or indices of the degree to which water management alternatives meets the objectives*

## **EAST SAN JOAQUIN PARTIES WATER AUTHORITY**

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Central San Joaquin WCD  
City of Lodi  
Woodbridge Irrigation District  
California Water Service Co.

San Joaquin County  
Stockton East Water District  
City of Stockton  
N. San Joaquin WCD

Anthony M. Saracino  
Executive Director/Secretary  
(916) 329-9199

555 Capitol Mall, Ste. 1550  
Sacramento, CA 95814

### **Groundwater Banking Project Concept**

- 1) Project name
  - a. Eastern San Joaquin County Groundwater Bank No.1
- 2) Project goals
  - a. Increase local water supply reliability, reduce overdraft, and provide dry year benefits for project partner
- 3) Project participants
  - a. ESJPWA or subset of member agencies and EBMUD for Bank No. 1
  - b. Other potential partners for Bank No. 2, 3, etc.
- 4) Bank No. 1 Project location
  - a. Project will be bounded by Mokelumne River to the north, Highway 99 to the west, 8-mile road to the south, and Jack Tone Road to the east
- 5) Project scope
  - a. In lieu and injection components
  - b. Mokelumne River water to NSJWCD
  - c. Three extraction wells south of Mokelumne River
  - d. Seven injection/extraction wells near aqueduct
  - e. Average annual recharge: 7,000 acre-feet
  - f. Average annual extraction: 3,500 acre-feet
- 6) Project costs
  - a. Approximately \$25 million
- 7) Project schedule
  - a. Develop project design
  - b. Public outreach and education
  - c. Preparation of application under Groundwater Ordinance

September 2000

**CONCEPTUAL OUTLINE  
GROUNDWATER STORAGE/CONJUNCTIVE USE PROJECT  
NORTH SAN JOAQUIN WATER CONSERVATION DISTRICT  
CITY OF LODI  
EAST BAY MUNICIPAL UTILITY DISTRICT**

**OBJECTIVES**

- Develop a consensus understanding of the groundwater system south of the Mokelumne River and north of the Mokelumne Aqueducts
- Develop a comprehensive community outreach and education program to ensure the public is informed and their concerns fully addressed
- Develop a groundwater banking project which:
  - provides a net benefit to North San Joaquin Water Conservation District (NSJWCD) and City of Lodi (City)
  - provides a net benefit to East Bay Municipal Utility District (EBMUD)
  - fully protects the overlying land uses, including the right to utilize groundwater
  - fully protects all water rights and entitlements

**BENEFITS**

- Benefits sought by NSJWCD:
  - net recharge to groundwater basin
  - provide incentive for NSJWCD water users to utilize NSJWCD surface water supplies
  - increase firm supply to NSJWCD water users
  - upgraded water conveyance systems
- Benefits sought by City of Lodi:
  - net recharge to groundwater basin
  - access to future surface water supply via surface water treatment plant
  - revenue stream through potential use of City wells and treatment works
- Benefits sought by EBMUD:
  - groundwater storage of wet year entitlements to allow dry year extractions
  - high quality supplemental water source

**LANDOWNER PROTECTIONS**

- Community outreach program
- Involvement of Chamber of Commerce, Farm Bureau, and other organized groups
- Formation of a Community Advisory Task Force
- Monitoring well network
- Willing landowners
- County Groundwater Export Permit applied for jointly
- NSJWCD/Lodi/EBMUD operating agreement/contractual guarantees
- Monitoring Committee

**KEY SUCCESS MILESTONES**

- 2x2x2 elected officials meetings
- Cooperative agreement for exploration, engineering feasibility and alternatives development
- Public outreach/Community Advisory Task Force
- Exploration program

**September 2000**

- Formation of Joint Powers Authority (or other arrangement) for project
- Monitoring well network
- Inclusion in County Water Plan
- Water Code 1220 and 1011.5 modifications
- Project engineering
- Environmental documentation
- Groundwater Export Permit
- Project construction
- Project operation/recharge starts

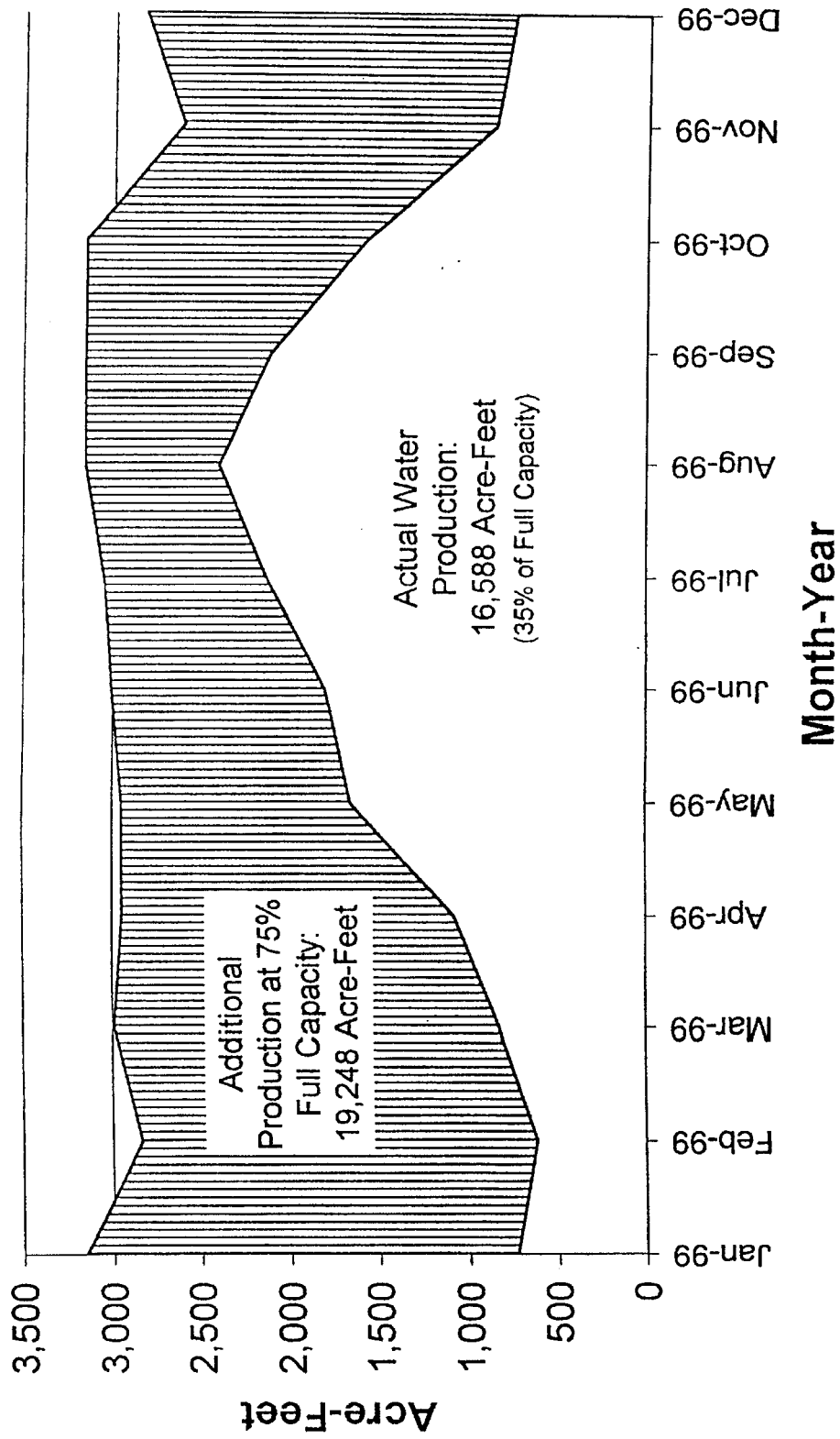
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## Update on Water Supply Issues

October 17, 2000

- ❖ **East San Joaquin Parties Water Authority**
  - Planning agency only
  - Coordination among main groundwater agencies in basin
  - Contact with Farm Bureau
  - *Continue participation & agree that projects should be undertaken by members outside of ESJPWA*
  
- ❖ **San Joaquin Water Advisory Commission**
  - Representatives from all water agencies in County
  - Makes recommendations to Board of Supervisors
  - Considering suggesting amendments to State Water Code re groundwater export
  - *Continue participation & support legislation making conjunctive-use projects more likely to be implemented while allowing for a reasonable degree of local control*
  
- **Integrated Storage Investigation & Countywide Groundwater/Surface Water Management Plan**
  - Participation by all water agencies in County in Steering Committee
  - Supported by State of California
  - Updated groundwater/surface water model
  - Will make recommendation to Board of Supervisors
  - *Continue participation & support conjunctive-use, conservation and recycling as elements of the plan*
  
- ❖ **Project with North San Joaquin County Water Conservation District & East Bay Municipal Utilities District**
  - Combination injection and in-lieu use w/NSJWCD
  - Possible participation by City of Lodi
  - *Continue discussions and develop scope of work for study to examine alternatives for Lodi participation*
  - *Support NSJWCD in their efforts to secure water*

# CITY OF LODI 1999 Water Production





RESOLUTION NO. 2001-72

A RESOLUTION OF THE LODI CITY COUNCIL  
SUPPORTING ASSEMBLY BILL 93 WHICH AUTHORIZES  
THE NORTH SAN JOAQUIN WATER CONSERVATION  
DISTRICT FOLLOWING AN ELECTION HELD PURSUANT  
TO THE PROVISIONS OF PROPOSITION 218 TO FIX  
AND COLLECT A PER-ACRE CHARGE FOR  
WATER SUPPLY OPERATIONS

=====

WHEREAS, groundwater use in northeastern San Joaquin County exceeds the amount being replaced by nature; and

WHEREAS, encouraging use of surface water, when available, will help reduce the demand on groundwater resources; and

WHEREAS, providing funding for projects and programs that will encourage use of surface water is appropriate and necessary for the benefit of the area.

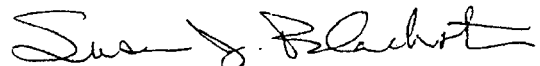
NOW, THEREFORE, BE IT RESOLVED, that the Lodi City Council hereby supports approval of Assembly Bill 93 which will authorize the North San Joaquin Water Conservation District following an election held pursuant to the provisions of Proposition 218 to fix and collect a specified charge, not to exceed \$5.00 per acre to pay for expenses of the District.

Dated: March 21, 2001

=====

I hereby certify that Resolution No. 2001-72 was passed and adopted by the City Council of the City of Lodi in a regular meeting held March 21, 2001, by the following vote:

- AYES: COUNCIL MEMBERS – Hitchcock, Howard, Land, Pennino and Mayor Nakanishi
- NOES: COUNCIL MEMBERS – None
- ABSENT: COUNCIL MEMBERS – None
- ABSTAIN: COUNCIL MEMBERS – None

  
SUSAN J. BLACKSTON  
City Clerk



# CITY OF LODI

## COUNCIL COMMUNICATION

**AGENDA TITLE:** Adopt Resolution Supporting Assembly Bill 93 Which Would Authorize the North San Joaquin Water Conservation District to Fix and Collect a Per-Acre Charge for Water Supply Operations.

**MEETING DATE:** March 21, 2001

**PREPARED BY:** Public Works Director

**RECOMMENDED ACTION:** That the City Council adopt a resolution supporting Assembly Bill 93 which would authorize the North San Joaquin Water Conservation District to fix and collect a per-acre charge for water supply operations.

**BACKGROUND INFORMATION:** In each of the past two years, the North San Joaquin Water Conservation District (NSJWCD) has requested, and has received, funds from the City of Lodi to support their water supply activities. In approving these funds, the City Council was clear that the District should work on a permanent source of funding. The amounts approved were \$12,000 (December 15, 1999), and \$21,000 (November 15, 2000).

The District has worked with Assemblyman Pescetti on AB93 which would authorize the District to charge up to \$5.00 per acre per year. Since many parcels in the City are in the District and are under one acre in size, the minimum amount of up to \$5.00 would be added to the property tax. A copy of the bill in it's current form is attached (Exhibit A). Although not explicitly stated in the bill, it is staff's understanding that the District will still need to follow the provisions of Proposition 218 in order to impose the tax.

The District has sent a letter requesting City support (Exhibit B).

Staff is recommending support, partly in response to past Council direction, but, more importantly, in order to secure additional water supplies and help preserve our groundwater basin, the District does need an ongoing source of funding.

**FUNDING:** None needed by the City.

Richard C. Prima, Jr.  
Public Works Director

RCP/pkh

Attachments

cc: Jack Sieglock, San Joaquin County Board of Supervisors  
Ed Steffani, North San Joaquin Water Conservation District  
Andy Christensen, Woodbridge Irrigation District  
Manuel Lopez, San Joaquin County Public Works Director  
Fran Forkas, Water/Wastewater Superintendent

APPROVED: \_\_\_\_\_

H. Dixon Flynn -- City Manager

**Introduced by Assembly Member Pescetti**

January 11, 2001

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An act to add Chapter 6 (commencing with Section 75480) to Part 8 of Division 21 of the Water Code, relating to water.

LEGISLATIVE COUNSEL'S DIGEST

AB 93, as introduced, Pescetti. North San Joaquin Water Conservation District: charge.

(1) Existing law specifies the powers and purposes of water conservation districts.

This bill would authorize the North San Joaquin Water Conservation District, by resolution, to fix and collect a specified per-acre charge, not to exceed \$5 per-acre, on taxable land within the district to pay for the expenses of the district. The bill would authorize the board of the district to provide a procedure for the collection of the charges by way of the county tax bills, thereby imposing a state-mandated local program by imposing additional duties on the affected county with regard to the collection of those charges.

(2) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement, including the creation of a State Mandates Claims Fund to pay the costs of mandates that do not exceed \$1,000,000 statewide and other procedures for claims whose statewide costs exceed \$1,000,000.

This bill would provide that, if the Commission on State Mandates determines that the bill contains costs mandated by the state,

RESOLUTION NO. 2003-118

A RESOLUTION OF THE LODI CITY COUNCIL  
AUTHORIZING THE PUBLIC WORKS DIRECTOR  
TO CAST BALLOTS REPRESENTING CITY-OWNED  
PROPERTIES IN FAVOR OF THE NORTH SAN  
JOAQUIN WATER CONSERVATION DISTRICT  
ACREAGE CHARGE

=====

NOW, THEREFORE, BE IT RESOLVED that the Lodi City Council does hereby authorize the Public Works Director to cast ballots representing City-owned properties in favor of the North San Joaquin Water Conservation District acreage charge on land located within the District, on which surface water or groundwater is applied.

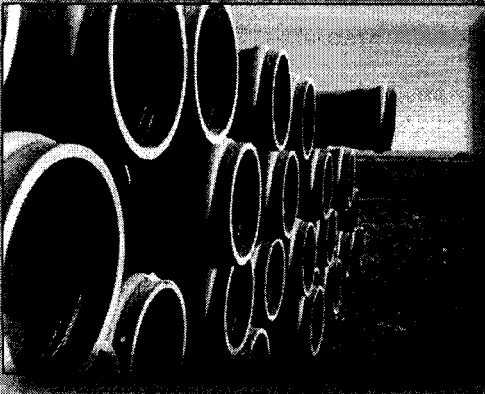
Dated: July 2, 2003

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I hereby certify that Resolution No. 2003-118 was passed and adopted by the City Council of the City of Lodi in a regular meeting held July 2, 2003, by the following vote:

- AYES: COUNCIL MEMBERS – Beckman, Hansen, Howard, Land, and Mayor Hitchcock
- NOES: COUNCIL MEMBERS – None
- ABSENT: COUNCIL MEMBERS – None
- ABSTAIN: COUNCIL MEMBERS – None

  
SUSAN J. BLACKSTON  
City Clerk



*City of Lodi*  
*2005 Urban Water Management Plan*

**FINAL**

*March 2006*



## Chapter 3 Water Supply

### 3.1 Current Water Supply

#### 3.1.1 Background

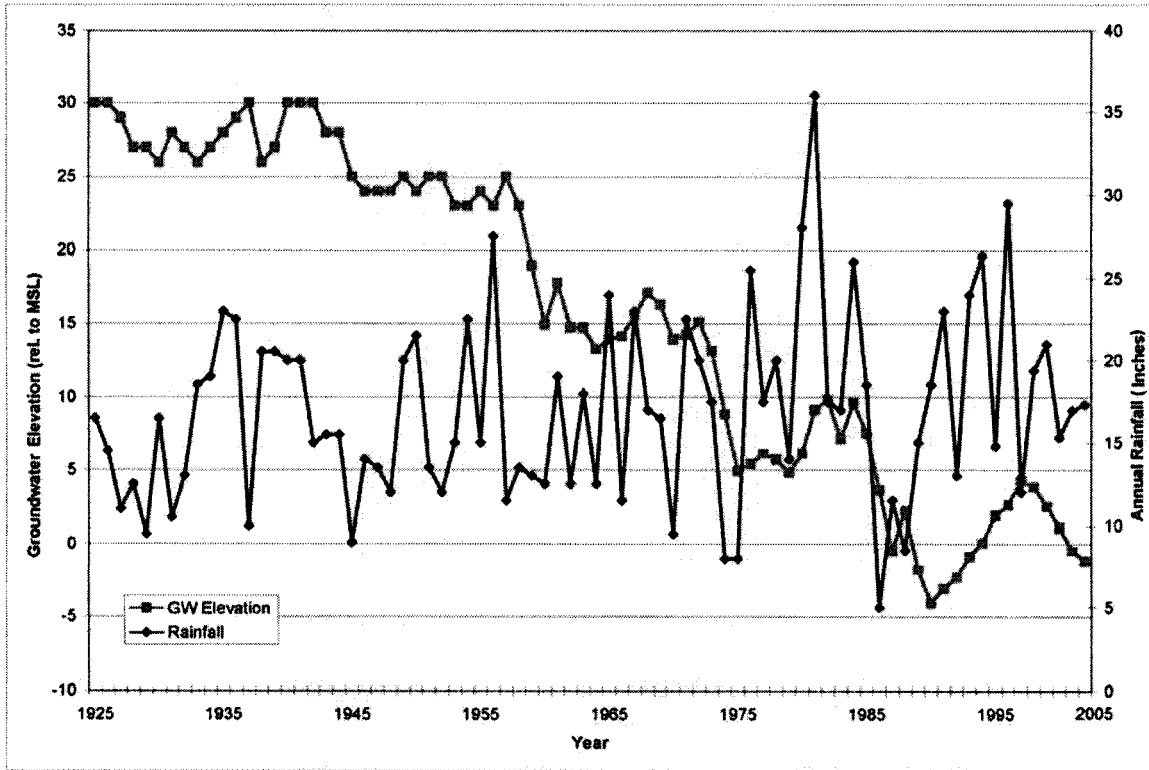
The City currently uses groundwater as its sole source of supply. The City overlies a portion of the San Joaquin Valley groundwater basin, which is not currently adjudicated. The groundwater in the Lodi area exists under unconfined and semi-confined conditions. The Mehrten Formation is the most productive fresh water-bearing unit.

The City is located within the geomorphic province known as the Central Valley, which is divided into the Sacramento Valley and the San Joaquin Valley. The Central Valley is a large, northwestward-trending, asymmetric structural trough that has been filled with several miles of thick sediment (USGS 1986). The City lies within the San Joaquin Hydrologic Basin (DWR, Bulletin 118) which straddles portions of both the Sacramento and San Joaquin Valleys. Sediments of the San Joaquin Valley consist of interlayered gravel, sand, silt, and clay derived from the adjacent mountains and deposited in alluvial-fan, floodplain, flood-basin, lacustrine, and marsh environments. Hydrogeologic units in the San Joaquin Basin include both consolidated rocks and unconsolidated deposits. The consolidated rocks include 1) the Victor Formation, 2) the Laguna Formation, and 3) the Mehrten Formation. The consolidated rocks generally yield small quantities of water to wells except for the Mehrten Formation, which is an important aquifer (DWR). The unconsolidated deposits include 1) continental deposits, 2) lacustrine and marsh deposits, 3) older alluvium, 4) younger alluvium, and 5) flood-basin deposits. The continental deposits and older alluvium are the main water-yielding units in the unconsolidated deposits.

Groundwater flow direction is generally toward the south in agreement with the regional groundwater flow gradient but may vary from south-southwest to south-southeast with local gradients likely influenced by pumping from municipal supply wells. Pumping tests on municipal wells indicate that they possess a large capture zone, and thus have a large influence upon groundwater flow. Pumping of municipal supply wells in the City is performed between 100 and 500 feet below ground surface (Geomatrix, 2006).

DWR has declared that the groundwater basin underlying Eastern San Joaquin County is overdrafted, and groundwater levels in the County and the City are generally decreasing. The groundwater levels also fluctuate over time depending on precipitation, aquifer recharge, and pumping demands. Groundwater elevations relative to mean sea level (MSL), and the corresponding annual precipitation from 1927 through 2004 are shown in **Figure 3-1**. Overall, the average annual decrease in groundwater levels from 1927 to 2004 has been 0.39 feet per year. Generally, groundwater elevations have decreased with the increase in population and water production. However, annual rainfall also influences groundwater elevation. The groundwater level increase from 1981 to 1984 can be partially attributed to the increase in annual rainfall from 1981 to 1983. Groundwater elevations for the years 1927 to 1961 were obtained from East Bay Municipal Utilities District (EBMUD) for the City's 12 square mile area. Groundwater elevation data from 1962 to the present were obtained from the City's Public Works Department for Well No. 2, one of the oldest production wells in the City.

Figure 3-1: Historical Groundwater Elevation

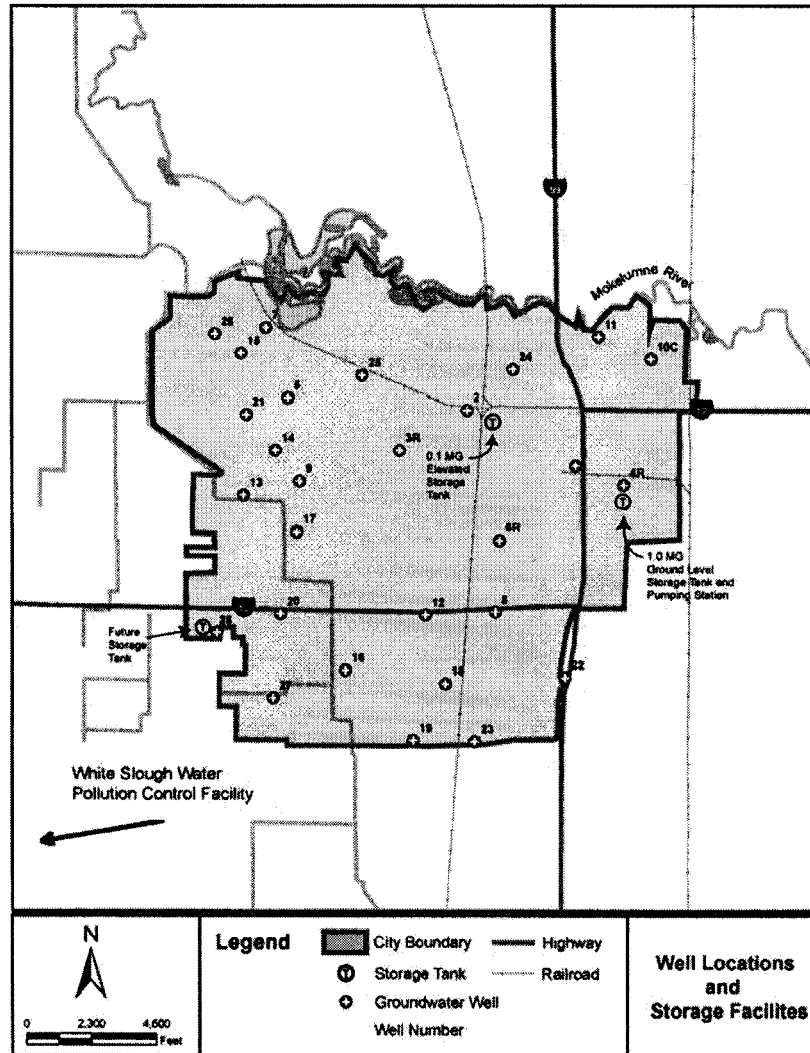


Source: City of Lodi Public Works Department

**3.1.2 Water Supply Facilities**

The Utility operates 26 groundwater production wells. The locations of the wells are presented in **Figure 3-2** and discussed in further detail below.

**Figure 3-2: Well Locations and Storage Facilities**



**3.1.3 Current Groundwater Supply**

The 26 wells that currently provide water to the City have a combined capacity of 35,210 gallons per minute (gpm), or 50.7 million gallons per day (mgd). The wells operate automatically on water pressure demand and pump directly into the distribution system. All wells are equipped to provide emergency chlorination as needed. Historically, water has not required chlorination. Six wells are equipped with granular activated carbon (GAC) for the removal of dibromochloropropane (DBCP). Capacity information for the existing wells is summarized in **Table 3-1**.



Table 3-1: Groundwater Well Capacity

Well Number	Well Capacity, gpm <sup>b</sup>	Well Capacity, mgd <sup>c</sup>
1R	1,130	1.6
2	820	1.2
3R	820	1.2
4R <sup>a</sup>	1,960	2.8
5	1,180	1.7
6R	1,580	2.3
7	1,160	1.7
8	800	1.2
9	900	1.3
10C	1,300	1.9
11R	1,320	1.9
12	800	1.2
13	1,150	1.7
14	1,670	2.4
15	1,500	2.2
16 <sup>a</sup>	1,110	1.6
17	1,800	2.6
18 <sup>a</sup>	1,800	2.6
19	1,110	1.6
20 <sup>a</sup>	2,070	3.0
21	2,050	3.0
22 <sup>a</sup>	1,400	2.0
23 <sup>a</sup>	1,410	2.0
24	1,420	2.0
25	1,580	2.3
26	1,370	2.0
<b>Total</b>	<b>35,210</b>	<b>50.7</b>

Footnotes:

- a. Wells equipped with GAC
- b. gpm = gallons per minute
- c. mgd = million gallons per day

Table 3-2 presents the amounts of groundwater extracted by the City between 1970 and 2004.

Table 3-2: Historical Groundwater Production (Guidebook Table 5)<sup>a</sup>

Year	Groundwater Production, AF	Percent of Total Water Supply
1970	11,462	100%
1971	12,303	100%
1972	11,686	100%
1973	12,204	100%
1974	12,002	100%
1975	12,294	100%
1976	13,607	100%
1977	10,578	100%
1978	11,477	100%
1979	12,349	100%
1980	12,312	100%
1981	12,487	100%
1982	11,560	100%
1983	11,539	100%
1984	13,997	100%
1985	14,813	100%
1986	15,080	100%
1987	15,304	100%
1988	15,359	100%
1989	14,653	100%
1990	15,387	100%
1991	13,313	100%
1992	13,985	100%
1993	14,013	100%
1994	14,301	100%
1995	14,390	100%
1996	15,102	100%
1997	16,330	100%
1998	14,461	100%
1999	16,588	100%
2000	16,724	100%
2001	17,108	100%
2002	16,641	100%
2003	16,185	100%
2004	17,011	100%

## Footnotes:

- a. The term "Guidebook X" refers to the table in the *Guidebook to Assist Water Suppliers in the Preparation of a 2005 Urban Water Management Plan* by DWR.

### 3.1.4 Current Surface Water Supply

In May 2003, the City entered into an agreement with Woodbridge Irrigation District (WID) to purchase 6,000 acre-feet per year (AFY) of surface water for a period of 40 years. However, at the time this UWMP was prepared, the City had not yet begun using water from this supply. A copy of the City's agreement with WID is included in **Appendix D**.

### 3.1.5 Current Recycled Water Supply

The City's wastewater discharge permit requires an agronomic application rate. According to discussions with City staff, approximately 2,500 AFY of secondary treated recycled water is currently used, primarily for irrigation in the area surrounding WSWPCF. This represents approximately 35 percent of the total treated wastewater produced at WSWPCF. The City discharges the non-irrigation water, treated to Title 22 tertiary standards, to the Delta. The Utility currently lacks the necessary infrastructure to distribute additional recycled water to more of its customers.

For a more detailed discussion of the City's recycled water supply, as well as the processes by which it is treated, refer to Chapter 8.

### 3.1.6 Water Distribution System

The City of Lodi's distribution system consists of a 100,000 gallon elevated storage tank, a 1 million gallon (MG) storage facility and pumping station, and the piping system. The 1 MG storage tank, located east of Highway 99 on Thurman Street, stores groundwater from an onsite well to meet peak hour demands and fire flows. The 100,000 gallon elevated storage tank is located on North Main Street. The storage facilities and their capacities are presented in Table 3-3. Their locations are shown in Figure 3-2.

**Table 3-3: Water Storage Facilities**

Storage Facility	Storage Volume, MG
Elevated storage tank	0.10
Ground level storage tank	1.00
<i>Total</i>	<i>1.10</i>

Distribution mains in the City's piping system range from 14 inches to 2 inches in diameter, and the entire distribution system consists of approximately 225 miles of pipe. The City is in the process of replacing the 2-inch and 3-inch diameter mains as well as other deficient pipes.

A summary of the City's current and planned water supplies is presented in **Table 3-5**.

## 3.2 Future Water Supply

### 3.2.1 Constraints on Existing Supplies

The City's current water supply system is constrained by 1) the pumping capacity of its currently active wells, and 2) a longer-term reduction in supply due to the overdrafting currently taking place in the City's groundwater basin. Although the declining groundwater basin is a result of groundwater extraction by all groundwater pumpers in the area, including other cities, agriculture, private well owners, and the City itself, the City plans to reduce its groundwater pumping in the long term as part of what will have to be a regional effort to stabilize the groundwater basin. A copy of the GBA Groundwater Management Plan is included in **Appendix F**.

### 3.2.2 Future Groundwater Supply

The continuing decline of groundwater levels in the aquifer underlying the City means that the sustainable annual groundwater supply available to the City is something less than what is currently extracted. As a member agency of GBA, the City is participating in the development of policies and programs, including groundwater recharge and conjunctive use programs, intended to help eliminate the eastern San Joaquin County groundwater basin overdraft condition. Additionally, the City plans to reduce its overall groundwater pumping in the future. A safe yield of approximately 15,000 AFY (Treadwell and Rollo, 2005) has been estimated for the aquifer serving Lodi based on water balance calculations (see **Appendix G**) performed using data primarily from the Eastern San Joaquin Groundwater Management Plan (**Appendix F**). This safe yield estimate reflects an acreage-based relationship. Therefore, as the City's land area increases, the estimated safe yield of the underlying aquifer will likely increase. The safe yield estimate will be revisited in the 2010 UWMP update. For the purposes of this UWMP, 15,000 AFY has been assumed as the amount of groundwater available during all future (post-2005) years. Although rigorous scientific analyses have not been performed, the City projects that some recharge of the groundwater basin will occur as the amount of groundwater pumped annually decreases. This result, however, is contingent on the cooperative efforts of all groundwater users within the basin, including other cities, agriculture, and private well owners, to reduce groundwater extraction. The City does not expect development of cones of depression, significant changes in direction or amount of groundwater flow, changes in the movement or levels of contaminants, or changes in salinity and/or total dissolved solids (TDS) concentrations. The amount of groundwater that is projected to be pumped over the next twenty-five years is presented in **Table 3-4**.

**Table 3-4: Projected Groundwater Pumping (Guidebook Table 7)**

Year	2005	2010	2015	2020	2025	2030
Annual Volume, AF	17,300	15,000	15,000	15,000	15,000	15,000
Percent of Total Available Supply <sup>a</sup>	57%	52%	51%	50%	49%	48%

Footnote:

- a. Refers to the total supplies shown in Table 3-5.

### 3.2.3 Future Surface Water Supply

As discussed in Section 3.1.4, in May 2003 the City entered into a 40-year agreement with WID for 6,000 AFY of surface water from the Mokelumne River. The diversion point has not yet been determined. The City is considering options for implementing this source before 2010. Therefore, 6,000 AFY of treated surface water is included in the supply projections presented in Table 3-5 below. The City is also considering the possibility of obtaining additional surface water supplies from WID; these supplies are not included in Table 3-5, however, as they are not yet considered "firm" supplies.

### 3.2.4 Future Recycled Water Supply

As discussed in Section 3.1.5, the City currently treats approximately 7,200 AFY of wastewater at WSWPCF, of which 2,500 AFY is recycled in the vicinity of WSWPCF. WSWPCF has adequate capacity to treat all wastewater flows to Title 22 standards. The City is in the process of developing a Recycled Water Master Plan (RWMP) that will outline additional distribution of this supply to the Utility's customers. For the purposes of this UWMP, all treated wastewater produced at WSWPCF has been treated as recycled water supply and is included in Table 3-5 below. The amount of recycled water available increases with time, because as the City's population increases, the amount of wastewater available for reclamation will also increase. For a more detailed discussion of recycled water supply projections, refer to Section 8.6

**Table 3-5: Current and Planned Water Supplies** (Guidebook Table 4)

Water Supply Source	2005	2010	2015	2020	2025	2030
Groundwater <sup>a</sup> , AFY	17,300	15,000	15,000	15,000	15,000	15,000
WID Surface Water, AFY	6,000	6,000	6,000	6,000	6,000	6,000
Recycled Water <sup>b</sup> , AFY	7,200	7,700	8,300	8,940	9,630	10,380
<b>Total <sup>c</sup>, AFY</b>	<b>30,500</b>	<b>28,700</b>	<b>29,300</b>	<b>29,900</b>	<b>30,600</b>	<b>31,400</b>

Footnotes:

- Refer to Section 3.2.2 for more information.
- Based on the amount of wastewater treated during 2004, according to City staff. Future recycled water supplies are extrapolated from the 2004 amount. Assumes that the permitted capacity of WSWPCF will be increased as necessary.
- Rounded to nearest hundred.

### 3.2.5 Planned Water Supply Projects

At the present time the City does not have approved plans for any additional water supply projects. The City has participated in the Mokelumne River Regional Water Storage and Conjunctive Use (MORE WATER) Feasibility Analysis. The MORE WATER project, if approved, would capture unappropriated flows from the Mokelumne River for storage and beneficial use.

## 3.3 Exchange or Transfer Opportunities

The City does not currently have any approved plans to pursue exchange or transfer opportunities.

## 3.4 Desalinated Water

At the present time the City does not foresee any opportunities for the use of desalinated water, which includes ocean water, brackish ocean water, and brackish groundwater, as long-term supplies.

## 3.5 Wholesale Supplies

Since surface water will be purchased from WID, WID is considered a wholesale water supplier by DWR. As such, the City has provided demand projections to WID for the next 25 years. Similarly, the City has received availability projections from WID for the same time period. These demand and availability projections are presented in **Table 3-6** and **Table 3-7** below. As discussed previously, the City has not yet begun to use this water supply. As stated in the City's contract with WID, any water not taken by the City during the first three years of the contract (May 2003 to May 2006) may be "banked" and delivered to the City in subsequent years, provided WID has sufficient water available. The banked supply may not exceed 18,000 AF. To date, over 16,000 AF of water has been banked. The City has not made any formal plans at this time to use any of its banked supply, in addition to the normal 6,000 AFY, for any of the years shown in the tables below. However, the projected supplies and demands shown below may increase if and when the City decides to use its banked supply. The magnitude and availability of banked supply to be delivered will be discussed with WID at an appropriate time(s) in the future.

**Table 3-6: Demand Projections for Wholesale Supply**

Wholesale Supply	Projected Demand <sup>a</sup>					
	2005	2010	2015	2020	2025	2030
WID Surface Water, AFY	0	6,000	6,000	6,000	6,000	6,000

Footnotes:

- a. Subject to change with WID and City approval. Although the City may take water deliveries in excess of 6,000 AFY from its “banked” supply, no formal plans to do so have been developed at this time.

**Table 3-7: Availability Projections from Wholesale Supplier**

Wholesale Supply	Projected Availability <sup>a</sup>					
	2005	2010	2015	2020	2025	2030
WID Surface Water, AFY	6,000	6,000	6,000	6,000	6,000	6,000

Footnotes:

- a. Subject to change with WID and City approval. Although the City may take water deliveries in excess of 6,000 AFY from its “banked” supply, no formal plans to do so have been developed at this time.
- b. Reliability of WID supply is indicated in the City’s contract with WID in **Appendix D**.

Wholesale supply reliability is presented in Chapter 6. Although changes in deliverable volumes of water for future hydrologic scenarios have not been formally predicted at this time, Chapter 6 presents the most restrictive possible cases for the future.

## Chapter 6 Water Supply Reliability

This section provides a description of the potential variability in the City's water supplies caused by environmental, legal, and climatic factors, as well as the steps being taken by the City to address these potential concerns.

### 6.1 Climate

In California, climate can significantly affect the reliability of water supplies in certain regions. This section analyzes the vulnerability of the City's water supplies to climatic effects.

#### 6.1.1 Reliability and Vulnerability of Water Supply to Seasonal or Climatic Changes

##### Groundwater

Although the City's groundwater basin is replenished in part by the Mokelumne River, the annual quantity of groundwater available does not vary significantly due to seasonal or climatic changes. Additionally, seasonal or climatic changes are not expected to impair the City's ability to extract groundwater, as seven of the City's wells are equipped with emergency generators.

##### Surface Water

The reliability of the City's surface water supply may be affected by drought. The City's contract for surface water delivery from WID, which diverts water from the Mokelumne River, is subject to curtailments of up to fifty percent during dry years. WID is required by the contract to annually provide the City, on or about May 1, with a preliminary estimate of whether or not the City's deliveries will be curtailed in a given year. Final estimates of any curtailment in a given year must be provided to the City on or about July 1.

##### Recycled Water

The amount of recycled water available to the City comes primarily from indoor water use within the City's limits and is not expected to fluctuate significantly due to seasonal or climatic changes.

### 6.2 Projected Normal Water Year Supply

During normal water years, no curtailments or other reductions in supply are expected for any of the City's supplies. The projected normal water year supplies from 2010 to 2030 are shown in **Table 6-1**.

**Table 6-1: Water Supply Reliability (Guidebook Table 8)<sup>a</sup>**

Water Year Type	Supply Type	2010	2015	2020	2025	2030
Normal	Groundwater, AFY	15,000	15,000	15,000	15,000	15,000
	Surface Water, AFY	6,000	6,000	6,000	6,000	6,000
	Recycled Water <sup>b</sup> , AFY	7,700	8,300	8,940	9,630	10,380
	<b>Total<sup>c</sup>, AFY</b>	<b>28,700</b>	<b>29,300</b>	<b>29,900</b>	<b>30,600</b>	<b>31,400</b>

Footnotes:

- The term "Guidebook X" refers to the table in the *Guidebook to Assist Water Suppliers in the Preparation of a 2005 Urban Water Management Plan* by DWR.
- Extrapolated from the amount of wastewater treated in 2004. Assumes that the permitted capacity of WSWPCF will be increased as necessary.
- Rounded to the nearest hundred

### 6.3 Projected Single Dry Year Supply

During single dry water years, there may be up to a 10.5 percent reduction<sup>3</sup> in the City's normal combined water supplies, reflecting a 50 percent curtailment in the City's surface water supply by WID. No reductions are assumed for the City's recycled water or groundwater supplies. The projected single dry water year supplies from 2010 to 2030 are shown in Table 6-2.

### 6.4 Projected Multiple Dry Year Supply

Because the City's surface water supply is the only supply that is considered to be susceptible to dry water years, and because 50 percent is the maximum annual curtailment allowed under the City's contract with WID, supplies available during multiple dry water years are assumed to be no different than supplies available during single dry water years. The projected multiple dry water year supplies from 2010 to 2030 are shown in Table 6-2.

Table 6-2: Single Dry and Multiple Dry Water Year Supply Projections (Guidebook Table 8)

Water Year Type	Supply Type	2010	2015	2020	2025	2030
Single Dry	Groundwater, AFY	15,000	15,000	15,000	15,000	15,000
	Surface Water, AFY	3,000	3,000	3,000	3,000	3,000
	Recycled Water <sup>a</sup> , AFY	7,700	8,300	8,940	9,630	10,380
	<b>Total<sup>c</sup>, AFY</b>	<b>25,700</b>	<b>26,300</b>	<b>26,900</b>	<b>27,600</b>	<b>28,400</b>
Multiple Dry	Groundwater, AFY	15,000	15,000	15,000	15,000	15,000
	Surface Water, AFY	3,000	3,000	3,000	3,000	3,000
	Recycled Water <sup>a</sup> , AFY	7,700	8,300	8,940	9,630	10,380
	<b>Total<sup>c</sup>, AFY</b>	<b>25,700</b>	<b>26,300</b>	<b>26,900</b>	<b>27,600</b>	<b>28,400</b>
Summary	Single Dry Water Year, AFY	25,700	26,300	26,940	27,630	28,380
	<b>% of Normal</b>	<b>90%</b>	<b>90%</b>	<b>90%</b>	<b>90%</b>	<b>90%</b>
	Multiple Dry Water Year(s), AFY	25,700	26,300	26,940	27,630	28,380
	<b>% of Normal</b>	<b>90%</b>	<b>90%</b>	<b>90%</b>	<b>90%</b>	<b>90%</b>

Footnotes:

- Extrapolated from the amount of wastewater treated in 2004. Assumes that the permitted capacity of WSWPCF will be increased as necessary.
- Rounded to the nearest hundred

The future supply volumes presented in Sections 6.2 to 6.4 represent the water to which the City has the legal rights to use. This should not be confused with water that can readily be distributed to the Utility's customers, as additional infrastructure must be constructed before the total volumes presented in the tables above can be distributed to the City. In order to provide the City with surface water, for example, intake facilities, a surface water treatment plant, and additional distribution pipeline could be required.

#### 6.4.1 Minimum Supply Volumes for the Next Three Years

Under agreements with the East Bay Municipal Utilities District (EBMUD), WID obtains water stored in Pardee and Comanche reservoirs. Since both of these reservoirs are currently full, supply volumes for the City of Lodi for the next three years are expected to be "normal." However, the minimum supply volumes for 2006 through 2008, or the supplies available if the City's contract with WID faced maximum curtailments, are presented in Table 6-3.

<sup>3</sup> Assuming that the amount of available recycled water increases over time, the maximum percent reduction projected will decrease from 10.5 percent in 2010 to 9.6 percent in 2030.



**Table 6-3: Minimum Supply Volumes for 2006-2008** (Guidebook Table 24)

Supply Type	2006	2007	2008
Groundwater, AFY	15,000	15,000	15,000
Surface Water, AFY	3,000	3,000	3,000
Recycled Water, AFY	7,200	7,300	7,400
<b>Total, AFY</b>	<b>25,200</b>	<b>25,300</b>	<b>25,400</b>

Footnotes:

- a. Reflects the total amount of wastewater available to the City for reclamation and reuse.

#### 6.4.2 Basis for Normal, Single Dry and Multiple Dry Year Water Data

The data presented in Sections 6.2 through 6.4 were developed based on 1) the assumptions that the City's groundwater and recycled water supplies are not susceptible to short term drought conditions, and 2) the City's contract with WID. Since the City's contract with WID is relatively new, there have been no historical curtailments in the City's surface water supply upon which to base future dry water year projections. Hence, the maximum allowable curtailment has been assumed for these circumstances. The base year for all water year data is 2005.

**Table 6-4: Basis of Water Year Data** (Guidebook Table 9)

Water Year Type	Base Year
Normal	2005
Single Dry	2005
Multiple Dry	2005

### 6.5 Supply Inconsistencies

Water supply from the City's only wholesale supplier, WID, is susceptible primarily to drought conditions, when diversions from the Mokelumne River may be reduced by WID. Due to the infancy of this contract, there are no historical reductions upon which to base assumptions. Even in the most severe drought conditions, however, WID may only reduce the City's supply by 50 percent. Supply reliability projections for this source are presented in Table 3-7.

Water supply from the City's groundwater wells is considered to be very consistent. Historical fluctuations in groundwater levels due to changes in climatic conditions have been minor, and have not significantly impacted well production capacity. Additionally, six of the City's wells are equipped with granular activated carbon (GAC), and provide added insurance against inconsistencies caused by the presence of contaminants in the City's aquifer. Finally, the availability of seven emergency generators at various well locations ensures the City's ability to extract groundwater during extended power outages.

As discussed previously, the groundwater basin underlying the City is in overdraft, and groundwater levels are decreasing by approximately 0.39 ft/yr. From an extraction standpoint, however, this is a relatively slow process, and the City does not anticipate that overdrafting conditions will significantly impact its ability to extract groundwater in the short term. However, the City remains committed to eliminating the overdraft condition in the long term and has been an active participant in actions to accomplish this task. As a member of GBA, the City has participated in the development of regional groundwater recharge and conjunctive use programs intended to replenish Eastern San Joaquin County's

groundwater basin and promote sustainability for the future. A copy of the GBA Groundwater Management Plan is included in **Appendix F**.

Recycled water supply for the City is considered to be very consistent. Indoor water consumption by the City's customers, which does not significantly fluctuate with climatic conditions like outdoor water use, is the source of the City's recycled water supply. As such, the amount of recycled water available to the City is not expected to fluctuate in the future; indeed, as the number of water and sewer connections increase, so too will the City's recycled water supply.

As a result of the relative consistency of the City's water supplies, there are no plans at this time to *replace* any of the City's supply sources with alternative sources. The City is part of a group of Eastern San Joaquin County water users negotiating a conjunctive use project with EBMUD. Recently, however, negotiations surrounding this project have stagnated. Although this project bears the possibility of increasing the City's future water supplies, for the purposes of this UWMP this potential supply is not reflected in Table 3-5.

Continued April 16, 2003

MOTION#2

Council Member Hansen made a motion, Land second, to adopt Resolution No. 2003-68 authorizing a two percent salary increase for Council Appointees, i.e. City Manager, City Attorney, and City Clerk, effective the next pay period (beginning April 28, 2003), and further that Council review the Appointee salaries again in six months and if additional salary increases are authorized at that time that they are retroactive to the effective date of this action.

DISCUSSION:

Mayor Pro Tempore Howard asked for clarification on whether the purpose for reviewing appointee's salaries again in six months was for considering an increase or for withdrawing it.

Council Member Hansen replied that the review would be for the purpose of considering additional pay increases.

In reply to Mayor Pro Tempore Howard, Mr. Flynn reported that previous action to make pay increases retroactive is usually to January or June; however, he normally did not recommend retroactive pay increases.

VOTE:

The above motion carried by the following vote:

Ayes: Council Members – Hansen, Howard, and Land

Noes: Council Members – Beckman and Mayor Hitchcock

Absent: Council Members – None

NOTE: Discussion ensued regarding how to handle the remaining items on the agenda.

- I-4 "State Budget Update" was ***pulled from the agenda.***
- I-5 "Review capital improvement budget submitted as part of the 2003-05 Financial Plan and Budget"

MOTION / VOTE:

The City Council, on motion of Council Member Land, Beckman second, voted to continue the subject matter to a Special City Council meeting at 7:00 am. on April 22, 2003. The motion carried by the following vote:

Ayes: Council Members – Beckman, Hansen, Howard, and Land

Noes: Council Members – Mayor Hitchcock

Absent: Council Members – None

- I-6 "Adopt resolution approving water sale agreement between Woodbridge Irrigation District and the City of Lodi"

Public Works Director Prima stated that this is a very important issue regarding the future water for the City of Lodi. He reported that there is a declining water table in the City and the entire eastern San Joaquin basin. The City has been active in efforts to reverse this trend over the past years, but progress has been very slow. In the south county great strides have been made, in which the cities of Tracy, Manteca, and Lathrop banded together to work with the South San Joaquin District and enter into an agreement to build a water treatment plant, major pipeline, and purchase water from them for their municipal needs. The water decline in the Lodi area is approximately .3 feet per year. Lodi is a contributor to the decline because the City pumps more water than is being replenished.

Mr. Prima stated that growth is another reason more water is needed. State laws require that cities prove they have a water supply before new development is approved. He noted that the issue of whether Lodi has adequate water supply for the future development of the City will come up when the general plan is updated. There is a possibility that at some

point the basin would be adjudicated, which is a process that involves numerous lawsuits among various water agencies that pump groundwater. The status of the City of Lodi as a municipal appropriator of groundwater is below that of a private property owner who is pumping groundwater. Property owners have overlying water rights that are well established in the state and take precedence over appropriations of water. An outcome of adjudication of the basin could be that Lodi is limited at a certain amount of water that it could pump.

Mr. Prima reported that the City has been working with County interests and other water agencies for many years to try and bring more surface water into the county. Unfortunately in the north county they have been unsuccessful. A recent effort undertaken was an attempt to work with East Bay Municipal Utility District (EBMUD) on a conjunctive use program where EBMUD could provide surface water for injection into the ground in San Joaquin County and in dry years take a portion of that water out for their needs in the bay area. It was called the Beckman Test Project and was not successful. The most recent effort was Lodi's participation with the County in the Mokelumne River Water and Power Authority. This project is to perfect a water right that the County applied for ten years ago on the Mokelumne River, in which Lodi could participate. The project could involve the following alternatives:

- Building a dam on the river;
- Building an off stream reservoir at Duck Creek; the cost for developing that water would be roughly \$400 an acre foot; and
- Having withdrawals on the Mokelumne River downstream from Pardee and Camanche at various locations.

Mr. Prima stated that other alternatives would involve contracts with other entities, although the only entities that have water in the Lodi area are Woodbridge Irrigation District (WID) and EBMUD. The City could also go to a recycling program where wastewater was treated to a much higher level than is done now and build a dual distribution system.

The 40-year water sale agreement is for 6,000 acre feet of water annually to the City. Lodi would get water in all years. During dry years the City would receive 3,000 acre feet and can carryover the amount of water in the dry years and take it in the wet years. The agreement is for \$1.2 million annually, which equates to \$200 an acre foot, or \$20 per person. Lodi would then build the facilities needed to take the water. The carryover would also apply to water in the first three years of the agreement. The City could bank the water on paper and take it in wet years. Mr. Prima reported that various alternatives as to how to use the water are currently being studied. Staff believes there is a viable alternative that would involve groundwater injection in Lodi, which would allow the City to take the water, filter it, put it in the ground, and take it out of the well system. Mr. Prima stated that key to the agreement is a provision for additional water at \$100 an acre foot. The agreement also provides for wheeling additional water at \$20 an acre foot if the City were able to obtain a water supply from someone else. The City can use the canal for delivery and distribution of water. There is a price escalator after six years based on the CPI, which is capped at a maximum of 5% and minimum of 2%. There is a provision for a validation of the agreement. WID plans to issue debt financing and because the agreement is being used as security for its debt service, the agreement would be part of the validation action. Should there be some other water agency who challenges this agreement it would have to voice its concerns during the validation action. If something came of the validation that put an onerous burden on the WID or the City, Lodi would have a chance to back out. WID's project to build the dam is estimated at \$20 million. It will provide for year-round water in Lodi Lake. WID has received permits for the project. There are also provisions in the agreement that give the City the first right of refusal on any other deals that WID might entertain should it find additional water in the future. Its additional water is due to a combination of conservation practices by growers changing to drip irrigation systems and urbanization of lands. Mr. Prima reported that North San Joaquin Water Conservation District does not have a firm water supply. Its contract has

expired and it is now petitioning for an extension. The District has submitted communication (filed) to the Council, which supports this agreement. Mr. Prima stated that a water rate increase will be necessary in the future. If Council decides it wants to allocate a portion of this water to new development, then a part of the cost could be charged to the impact fee program. In summary, Mr. Prima stated that the agreement is a very good deal, and believed that the City would not see a better one. He wholeheartedly recommended that Council adopt the resolution approving the water sale agreement.

In reply to questions by Council Member Hansen, Mr. Prima explained that the City charges a metered water rate for approximately two thirds of its commercial and industrial customers. All of the City's residences are on a flat rate charged per number of bedrooms. He anticipated a 20% rate increase in the coming fiscal year. Options to lessen the rate increase would be to scale back on the capital program or charge some of the cost to the development impact fees.

Council Member Hansen was not in favor of reducing the capital replacement program. He voiced support for the water agreement because he felt it was a proactive approach and also for the benefits of having Lodi Lake filled year round.

Anders Christensen, WID Manager, introduced the following individuals:

- Bill Stokes, Chairman of the Board
- Dan Gallery, WID attorney
- Jim Hanson, WID engineer
- Mark Chandler, Lodi District Winegrape Commission

Mr. Christensen reported that on April 8 the WID Board unanimously approved this agreement. It views this as an historic opportunity for the City, as well as the agriculture community to continue a closely aligned economic tie. He reviewed the permit approvals that the WID has obtained.

Council Member Land asked whether the City could get an extension on the 40-year contract, to which Mr. Christensen stated that he believed it to be a fair and balanced deal for both parties and noted that the agreement does include a provision for a renewal.

In response to Mayor Hitchcock regarding the price of the water, Mr. Christensen offered examples such as the Oakdale, South San Joaquin agreement to provide water to Lathrop at \$450 an acre foot. He reported that the County's groundwater management plan has several proposals for water, which range from \$200 to \$400 an acre foot. South San Joaquin has a ten-year agreement with Stockton for \$50 an acre foot. He believed that in terms of new source water, \$200 an acre foot is average or slightly low. Mr. Christensen pointed out that this agreement allows for the money and the water to stay in the community.

In reply to Council Member Hansen, Mr. Christensen confirmed that Lodi would still get the water regardless of whether WID moved forward with the dam project.

City Manager Flynn explained that water is essentially free for public agencies. The cost is in collecting, transporting, distributing, and processing it. When Lodi delivers water outside the City it charges 150% of cost. He stated that with the proposed agreement, Lodi is virtually getting water at cost.

Council Member Beckman asked if any of the following amendments could be made to the agreement to make it more "palatable":

- Extend the agreement for a 60- or 80-year term;
- Make firm, the agreement to negotiate at the end of the term;
- Add an automatic extension;
- Provide the extra water above 6,000 acre feet at a reduced price;
- Provide a guarantee of extra water.

Mr. Christensen replied that WID has worked with City staff on the agreement for five months and brought to Council what was thought to be the best possible agreement for Lodi and what the WID Board would accept.

Dan Gallery, attorney for WID, read the following excerpt from the agreement, "Upon receipt by the District, a written notice and a request for a renewal from the City, at least two years in advance of the end of the 40-year term, the District agrees to negotiate with the City for a renewal of this agreement for an additional 40-year term on terms and conditions that are reasonable, equitable, and satisfactory to Woodbridge Irrigation District." He noted that following that statement is a provision that gives the City the first right of refusal in the event WID should find in the future that it has some additional water that could be sold. Lodi would have the first right of refusal to purchase it at whatever the market would bring for the water.

In response to Mayor Hitchcock, Mr. Gallery read the following excerpt from the agreement, "The District agrees that it will not enter into any agreement during the initial term of the agreement to provide water to others outside of the District except upon terms which provide that such supply shall be subordinate to the City's rights to be furnished water under this agreement. The City shall have a first right of refusal to purchase any water which the District agrees during the initial term of this agreement to provide to any other purchaser upon the same terms and conditions provided in such other proposed sale." Mr. Gallery did not believe the District would be interested in rewriting the agreement to wrap a first right of refusal in a second 40-year term. He stated that the City is not guaranteed the first right of refusal in the second term.

Mayor Pro Tempore Howard cautioned that if Lodi's requests become excessive or unreasonable, the other party can walk away. It has already been established that other communities would be interested in such an agreement. She expressed her appreciation for the contract and thanked Mr. Prima, Mr. Christensen, and other representatives of the WID. She thanked the WID for coming to Lodi first with the offer. She was pleased with the contract and believed it to be fair and well thought out.

In reply to various questions posed by Mayor Hitchcock, Mr. Prima explained that there are two fundamental classifications for water rights in California, i.e. pre-1914 and post. Pre-1914 water rights are very secure from state re-appropriation. Mr. Gallery added that there is a general doctrine in water law that if someone has an appropriated right and there are several continuous years of non use, they can lose that portion of their right. There is a statute in the Water Code that states when water is conserved by an appropriator, that that water is not lost by non use and can be marketed and sold. He noted that the water in the proposed agreement is water that has been conserved by a pre-1914 appropriator and can be sold. Mr. Prima reported that the City has begun a study with Saracino Kirby Snow and will come back to Council with details on how Lodi might use the surface water. He reiterated that existing legislation requires that in order to approve development, cities must prove that they have adequate water available. Currently there is a threshold of 500 units on projects that require such analysis. Community Development Director Bartlam added that it would not surprise him to see that threshold number decrease in future legislation. The notion of mandatory water meters is also being considered by legislators. Mr. Prima reported that the water from WID would be less hard. It would need to be filtered to remove turbidity and other particles. Staff is confident that the groundwater injection can be done and that it would be cost effective. If this agreement were not approved, Mr. Prima estimated that there could be challenges in the next two to three years when the Urban Water Management Plan is done.

In reply to Council Member Hansen, Mr. Prima acknowledged that having water in Lodi Lake year round would help the underground water situation.

Council Member Hansen asked whether there was anything to address a situation where there was no water in the Mokelumne River or the WID canal, to which City Attorney Hays stated it was a scenario that he did not believe anyone could contemplate as actually happening.

In answer to Council Member Beckman, Mr. Gallery explained that the WID water right is held in the name of and is owned by the District. The water right is for the benefit of the lands that it serves. Ultimately the landowners are the beneficial owner of the right to use the water, but title to the water right is in the District.

Regarding Council's concern about the price of the water, Mr. Gallery pointed out the time to get water that did not cost very much was in the 1950s and 1960s, building dam projects; however, Lodi did not do that. It is very difficult to get a water right today. Mr. Gallery stated that the only time it is possible to get a right to divert water is during wet winter months and then huge storage projects need to be built in order to get the water during the wet months of the wet years.

PUBLIC COMMENTS:

- Mark Chandler stated that he was speaking as a concerned private citizen. He believed the water sale agreement to be a historic opportunity. He stated that informed citizens he has spoken to about this issue are very concerned about water security and the degradation of the groundwater supply, and they are willing to absorb whatever increases in cost that it takes to take advantage of this opportunity. The water sale agreement will ensure the long-term economic benefit and prosperity of the community. He encouraged Council to unanimously adopt the resolution approving the water sale agreement, which will provide water supply, tourism, recreation benefits year round, and opportunities to improve the environmental and agricultural impacts.

MOTION:

Council Member Hansen made a motion, Land second, to adopt Resolution No. 2003-69 approving a water sale agreement between the Woodbridge Irrigation District and the City of Lodi.

DISCUSSION:

Council Member Beckman stated that he would support the motion, though he has many concerns about the various terms and conditions of the contract. He commented that he was glad to see North San Joaquin Water Conservation District come forward with an offer to help Lodi by providing its excess water at virtually no cost, which he believed showed a true partner and commitment to intertwined use with the groundwater basin.

Mayor Hitchcock stated that she had concerns about whether there was an immediate need for the water. She suggested that conservation measures be considered, such as requiring circulating pumps in new homes, and revisiting the water meter concept.

In response to Mayor Hitchcock's comment about the immediate need for the water, Mr. Prima explained that it takes decades to make improvements to water supply.

VOTE:

The above motion carried by a unanimous vote.

VOTE TO CONTINUE WITH THE REMAINDER OF THE MEETING

The City Council, on motion of Mayor Pro Tempore Howard, Hitchcock second, unanimously voted to continue with the remainder of the meeting following the 11:00 p.m. hour.

I. REGULAR CALENDAR (Continued)

- I-7 "Adopt resolution authorizing Library Administration to partner with Stockton-San Joaquin County Public Library in the acquisition, implementation, and ongoing maintenance of an integrated library system; and approve funding as recommended by the Lodi Public Library Board of Trustees (\$150,000)"

Library Board of Trustees

Tariq Din Term to expire June 30, 2006  
Christine Lavond Term to expire June 30, 2006

Lodi Arts Commission

Ben Burgess Term to expire July 1, 2006  
Nancy Carey Term to expire July 1, 2006  
Patrick Stockar Term to expire July 1, 2006

Lodi Planning Commission

Dennis Haugan Term to expire June 30, 2006

San Joaquin County Commission on Aging

Terri Whitmire Term to expire June 30, 2006

J-3 Miscellaneous

- a) City Clerk Blackston presented the cumulative Monthly Protocol Account Report through March 31, 2006.

K. REGULAR CALENDAR

- K-1 "Adopt resolution implementing surface water treatment program utilizing Woodbridge Irrigation District contractual allotment and authorizing solicitation of water treatment plant proposals"

Public Works Director Prima reported that the basin Lodi draws its water from is in overdraft. The City and surrounding areas are using far more water than nature is replenishing. Lodi entered a contract with Woodbridge Irrigation District (WID) to purchase 6,000 acre feet of surface water from the Mokelumne River. The water is available from March through October for a period of 40 years at a cost of \$1.2 million per year. For the first three years of the agreement, the City can bank water on paper that it does not use and take it in a later year as it is available. Currently, staff is negotiating with WID to extend the banking option for an additional four years during the time it works on implementing a project. Staff had originally thought that groundwater recharge would be cost effective and provide a direct benefit; however, regulatory requirements have increased and it now appears the cost would be as much, if not greater, than a surface water plant. The possibility of doing surface recharge still exists, but it takes a lot of land and there remains the question as to how much it would benefit Lodi. Short-term sales of the water were considered; however, it has been a wet year so there is little interest. Staff considered using the surface supply for irrigation of parks and school grounds, but it would require building a huge system. In light of other options, staff returned to the idea of treating and drinking the WID water as the best scenario. As a municipal water pumper, the City has a lower standing in terms of water rights than overlying property owners. The Water Code now states that groundwater recharge is not considered a beneficial use of water. Mr. Prima stated that if groundwater recharge were pursued, the west side of the City would be the optimal location for the basin. North of the City, the water has manganese problems and salinity is high in other areas. Near Flag City at Interstate 5, wells have nitrate that exceeds safe drinking water limits. Stockton faces a problem along Interstate 5 where its wells have issues with salinity and high chloride. The Micke Grove area has an issue with DBCP and they have had to install filters on their wells.

Mr. Prima reported that the overdraft of the basin is 150,000 to 200,000 acre feet per year. Staff's conclusion is that the best use of the WID water would be to treat and drink it. If Council approves the concept, it would take four years before a surface water treatment plant could be in operation. Continued reliance on groundwater as 100% of the City's water supply is not sustainable.



In reply to Council Member Hansen, Mr. Prima confirmed that the majority of the cost of a surface water treatment plant could be passed on to new development. Staff recommends an ultra-filtration plant using membranes that would not require chlorination throughout the entire process.

Mayor Pro Tempore Johnson expressed interest in a joint venture with Stockton, noting that it intends to take 33,000 acre feet of water from the Delta on a periodic basis. He noted that the staff report estimates the cost of a water treatment plant would create the need for a 15% increase in water rates, though the cost could eventually be passed on to new development. Mr. Johnson stated if that occurred, it would be important to develop a way to reimburse existing rate payers when development begins to pay for the plant.

Council Member Beckman felt there was no reason to buy land when the City would only use it for 40 years. The land for groundwater recharge can be leased. A treatment plant would sit dormant for four months out of the year when WID water is not available. Mr. Beckman stated that he strongly supported the groundwater recharge option.

Council Member Mounce questioned where the treatment plant would be located, to which Mr. Prima replied that likely locations are west of the WID canal, the western 13 acres at Lodi Lake, or the General Mills property that is vacant.

Mayor Hitchcock expressed her opinion that the area has been overbuilt and Lodi does not have the water supply to handle large development projects. The proposal only replaces 6,000 acre feet of water into an overdraft of 200,000 acre feet. She pointed out that the staff report shows \$300,000 an acre to purchase land, yet developers are charged \$200,000 an acre. She reported that land recently sold for \$30,000 an acre between Eight Mile Road and Harney Lane. She agreed with Council Member Beckman that land should be leased for groundwater recharge. Since staff began giving presentations to Council on this topic, the cost estimate for groundwater recharge increased 62% and the cost of a surface water treatment plant decreased 19%. She expressed concern regarding chlorinating the City's water system.

Mr. Prima replied that the last time staff did an update to adjust land costs was more than two years ago and at that time it was \$200,000 an acre. Staff now estimates it would be the equivalent of \$300,000 an acre to utilize a site for groundwater recharge.

Ed Steffani, General Manager of the North San Joaquin Water Conservation District, pointed out that even after the proposed Stockton and Lodi treatment plants were in operation, there would still be a 170,000 acre foot overdraft. The two plants would cost \$220 million and yet little would be done to solve the problem. Most of the overdraft will take place in the eastern part of the county where they cannot afford to correct the situation. He recommended that the cities work together, combine resources, pursue matching bonds, and do a major groundwater recharge project. He asked Council to delay action for six weeks to allow for the completion of tests at the Micke Grove site. He stated that four to six wells could be placed on the south side of Micke Grove and Lodi could capture all the water it put into the ground for much less cost than a treatment plant.

Council Member Hansen asked whether storm water could be captured and used for recharge.

Mr. Prima replied that most of the storm water goes into the Woodbridge canal. Staff has discussed setting up a recharge project adjacent to the canal.

PUBLIC COMMENTS:

- Dennis Alexander described his vineyard operation and results of drip irrigation and summer water evaporation from various farming techniques. He warned against groundwater recharge at the Micke Grove property because of the chemicals that have

been applied over many years to the vineyards and farmland. Once the contaminants reach the aquifer the well water would be unusable. He recommended that a water treatment facility be constructed using private money by selling stock or shares.

Council Member Hansen asked Mr. Prima to look into the possibility of using private money to fund the water treatment plant.

- Ann Cerney suggested that the two large proposed developments are driving this discussion. She noted that \$25 million is the estimate for the treatment plant, the WID water will cost \$48 million over 40 years, and the groundwater contamination cleanup is estimated to cost \$45 million. To date, the only clear step taken to address the financial consequences of these expenses is to increase the rates to ratepayers. She supported the groundwater recharge option and encouraged Council to wait six weeks as requested by Mr. Steffani.
- Dave Philips voiced support for groundwater recharge and stated that he did not want Lodi's water chlorinated.

MOTION #1:

Council Member Beckman made a motion, Hitchcock second, to NOT pursue a water treatment plant and to explore other options.

DISCUSSION:

Mayor Pro Tempore Johnson and Council Member Mounce indicated support for the water treatment plant option; however, both were willing to wait six weeks for the test results at the Micke Grove property.

Council Member Hansen stated that he wanted Lodi to receive 100% of the benefit from the WID water.

VOTE:

The above motion **failed** by the following vote:

Ayes: Council Members – Beckman and Mayor Hitchcock

Noes: Council Members – Hansen, Johnson, and Mounce

Absent: Council Members – None

MOTION #2 / VOTE:

The City Council, on motion of Council Member Hansen, Mounce second, voted to delay action for six weeks to allow for the Northern San Joaquin Water Conservation District to complete its groundwater recharge studies and directed staff to evaluate and report back to Council with cost estimates for groundwater recharge versus a water treatment plant, cost implications of buying versus leasing property, and an analysis of water chemistry issues at the proposed Micke Grove site for the groundwater recharge project. The motion carried by the following vote:

Ayes: Council Members – Hansen, Johnson, Mounce, and Mayor Hitchcock

Noes: Council Members – Beckman

Absent: Council Members – None

VOTE TO CONTINUE WITH THE REMAINDER OF THE MEETING

The City Council, on motion of Mayor Pro Tempore Johnson, Beckman second, voted to continue with items K-2, L-1, L-2, M-1, M-2, and M-3 following the 11:00 p.m. hour. The motion carried by the following vote:

Ayes: Council Members – Beckman, Hansen, Johnson, and Mayor Hitchcock

Noes: Council Members – Mounce

Absent: Council Members – None

NORTH SAN JOAQUIN WATER CONSERVATION DISTRICT  
 MONTHLY DIVERSIONS FROM MOKELUMNE RIVER  
 ACRE-FEET

Year	Jan.	Feb.	March	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1958	0	0	0	0	0	0	0	0	23	0	0	1	24
1959	0	0	15	2	26	0	0	0	0	0	0	0	43
1960	0	0	0	0	106	185	1	148	160	0	0	0	600
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	139	275	319	443	386	272	56	0	0	1,890
1963	0	0	0	0	42	202	342	318	250	65	6	0	1,225
1964	0	0	0	0	0	268	307	307	119	0	0	0	1,001
1965	0	0	0	0	520	954	1,142	901	740	298	0	0	4,555
1966	0	0	24	624	729	1,185	1,364	1,109	451	89	0	0	5,575
1967	0	0	2	8	721	1,226	1,726	1,765	974	350	0	0	6,772
1968	0	30	41	827	1,644	1,725	1,851	1,513	742	147	0	0	8,520
1969	0	0	24	444	1,620	1,442	1,771	1,667	731	126	0	0	7,825
1970	0	0	84	1,233	1,609	1,582	1,845	1,699	847	230	0	0	9,129
1971	0	0	238	1,272	1,311	1,507	1,540	1,288	772	196	0	0	8,124
1972	0	0	735	1,481	1,594	1,590	1,748	1,592	717	0	0	0	9,457
1973	0	0	0	797	1,878	1,974	2,198	1,883	728	29	0	0	9,487
1974	0	0	33	55	1,416	1,785	1,933	1,891	993	268	0	0	8,374
1975	0	0	2	344	1,805	1,832	2,204	1,786	800	177	0	0	8,950
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	19	1,015	1,599	1,788	1,082	780	431	94	0	6,808
1979	0	0	3	382	1,315	1,660	1,609	1,277	617	688	96	0	7,647
1980	0	1	0	292	944	1,514	1,594	1,223	539	832	612	1	7,552

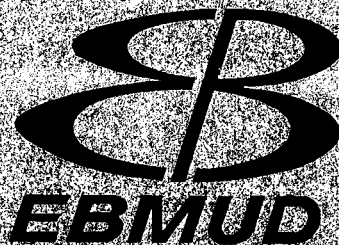


**NORTH SAN JOAQUIN WATER CONSERVATION DISTRICT  
MONTHLY DIVERSIONS FROM MOKELUMNE RIVER  
ACRE-FEET**

Year	Quantity Stored	April	May	June	July	August	Sept	Oct.	Nov.	Diversion
1992	0	0	0	0	0	0	0	0	0	0
1993	20,000	0	322	768	890	610	479	129	0	3198
1994	0	31	31	31	31	31	31	0	0	186
1995	20,000	0	46	540	688	772	413	184	0	2643
1996	20,000	0	233	523	696	620	500	178	0	2750
1997	20,000	473	514	478	0	0	0	0	0	1465
1998	20,000	0	1	206	635	509	378	240	0	1969
1999	20,000	30	343	530	657	496	429	289	22	2796
2000	20,000	54	313	857	503	545	511	0	0	2783
2001	0	0	0	0	0	0	0	0	0	0
2002	6,000	52	278	393	295	375	300	185	0	1878
2003	4,000	0	9	236	788	717	690	700	12	3152
2004	5,000	82	264	469	510	357	274	186	0	2416
2005				558	568	465	390	206		2187

**BAY-DELTA WATER RIGHTS HEARING**

**BEFORE THE  
STATE WATER RESOURCES CONTROL BOARD**



**EAST BAY MUNICIPAL UTILITY DISTRICT**

**EBMUDSIM MODEL DESCRIPTION,  
ASSUMPTIONS, VERIFICATION, AND OUTPUT**

**TESTIMONY OF JOHN W. SKINNER**

June 1998

**EBMUD EXHIBIT NO. 4  
APPENDICES J THROUGH L**

# **APPENDIX L**

**Model Output for  
Joint Settlement Agreement Release Requirements**

**Study No. 97 228 10-6074  
(2020 Conditions/EBMUD demand of 228 MGD)**

97 228 10-6074-FWS  
Mokelumne Partnership Agreement  
2020 LOD, Base Case  
Drought Planning Sequence = 1976-1977-185TAF

Water Available to NSJWCD in Acre-Feet

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1921	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1922	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1923	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1924	0	0	0	0	0	0	0	0	0	0	0	0	0
1925	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1926	0	0	0	0	0	0	0	0	0	0	0	0	0
1927	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1928	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1929	0	0	0	0	0	0	0	0	0	0	0	0	0
1930	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	0	0	0	0	0	0	0	0	0	0	0	0
1932	0	0	0	0	0	0	0	0	0	0	0	0	0
1933	0	0	0	0	0	0	0	0	0	0	0	0	0
1934	0	0	0	0	0	0	0	0	0	0	0	0	0
1935	0	0	0	0	0	0	0	0	0	0	0	0	0
1936	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1937	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1938	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1939	0	0	0	0	0	0	0	0	0	0	0	0	0
1940	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1941	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1942	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1943	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1944	0	0	0	0	0	0	0	0	0	0	0	0	0
1945	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1946	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1947	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1951	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1952	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1953	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1957	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1958	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1970	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1971	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1974	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1975	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1981	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1983	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1984	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1985	0	0	0	0	0	0	0	0	0	0	0	0	0
1986	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1987	0	0	0	0	0	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0	0	0	0	0	0
1993	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
1994	0	0	0	0	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
Minimum	0	0	0	0	0	0	0	0	0	0	0	0	0
Maximum	0	0	0	0	3400	4600	5400	3400	2000	1200	0	0	20000
Average	0	0	0	0	1723	2331	2736	1723	1013	608	0	0	10133