STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

DECISION 1646

In the Matter of Application 31369

Chino Basin Watermaster
Applicant

California Department of Fish and Game
Cucamonga County Water District
East Valley Water District
United States Forest Service
Protestants

Center for Biological Diversity
Santa Ana Mainstem Local Sponsors
Southern California Edison
City of Chino
Interested Parties

SOURCES: Deer Creek, Day Creek, Etiwanda Creek, San Sevaine Creek, Chino Creek, San Antonio Creek and Cucamonga Creek, all tributaries to the Santa Ana River

COUNTIES: San Bernardino and Riverside

DECISION CONDITIONALLY APPROVING APPLICATION 31369

BY THE BOARD:

INTRODUCTION

This decision of the State Water Resources Control Board (State Water Board or Board) conditionally approves water right Application 31369 of the Chino Basin Watermaster (Watermaster) to appropriate water by diversion to the groundwater basin within the boundaries of the areas administered by Watermaster, in San Bernardino and Riverside counties.

The State Water Board finds as follows:

1.0 BACKGROUND

1.1 Although the Santa Ana River is fully appropriated, the State Water Board provided that the Chino Basin Watermaster may file an application to appropriate water.

In Order WR 98-08, adopting the Declaration of Fully Appropriated Streams, the State Water Board declared the Santa Ana River to be fully appropriated from January 1 through December 31 of each year. Order WR 98-08 prohibited the filing of any application for the appropriation of water from the river. Subsequently, six petitions were filed asking the State Water Board to amend the prohibition in WR 98-08. One such petition was filed by Watermaster. Upon receipt of evidence supporting the revision of the prohibition for the Santa Ana River, the State Water Board adopted Order WRO-2002-0006, amending Order WR 98-08 to allow the processing of the applications and petitions specifically identified in Order WRO-2002-0006, including the application by Watermaster.

1.2 Application 31369 seeks to appropriate stormwater runoff.

As filed on November 4, 2002 by Watermaster, Application 31369 seeks to divert 97,000 acre-feet per annum (afa) of water from Deer Creek, Day Creek, Etiwanda Creek, San Sevaine Creek, Chino Creek, San Antonio Creek and Cucamonga Creek, all of which are tributaries to the Santa Ana River.[1] The stated purpose of use is underground storage for the purposes of industrial, irrigation, stock watering, and municipal uses, using 68,500 afa of stormwater runoff, and 28,500 afa of recycled water. The place of use is within the area overlying the Chino Groundwater Basin as shown on the map dated October 12, 2007, signed on October 15, 2007, and on file with the State Water Board.

Application 31369 proposes to utilize an existing system of channels, diversion structures and percolation basins (basins) designed to capture storm flows, recycled water flows, and water imported into the Chino Basin. Groundwater recharge using stormwater is the highest priority use for these basins, but when stormwater is not available, these basins are used to recharge groundwater with imported State Water Project water and recycled water. (SWRCB-1, Application 031369, 11/14/06 correspondence.)

[1] The application was publicly noticed on January 31, 2003.

2.0 HEARING ISSUES

On February 1, 2007, the State Water Board issued a Notice of Hearing.[2] The hearing concerned five applications. This decision addresses only Application 31369 by Watermaster. The Notice specified six issues:

1. Is there water available for appropriation by each of the applicants? If so, when is water available and under what circumstances?

2. Will approval of any of the applications or the petition result in any significant adverse impacts to water quality, the environment or public trust resources? If so, what adverse impact or impacts would result from the project or projects? Can these impacts be avoided or mitigated to a level of non-significance? If so, how? What conditions, if any, should the State Water Board adopt to avoid or mitigate any potential adverse impacts on fish, wildlife, or other public trust resources that would otherwise occur as a result of approval of the applications and petition?

3. Is each of the proposed projects in the public interest? If so, what conditions, if any, should the State Water Board adopt in any permits that may be issued on the pending applications, or in any order that may be issued on the wastewater change petition, to best serve the public interest?

4. Will any of the proposed appropriations by the applicants and/or the proposed change in treated wastewater discharge by the petitioner cause injury to the prior rights of other legal users of water?

5. What should be the relative priority of right assigned to any permits that may be issued on the pending applications?

6. What effect, if any, will the projects have on groundwater and/or movement of any contaminated groundwater plumes? Can the effects be mitigated? If so, how?

[2] The Notice was revised on March 1, 2007 with modifications to the date of the pre-hearing conference, the name of the Hearing Officer, and the correction of some typographical errors in the original Hearing Notice.

3.0 WATERMASTER WITHDREW ITS REQUEST TO APPROPRIATE RECYCLED WATER

During State Water Board hearing proceedings, Watermaster withdrew that portion of Application 31369 concerning 28,500 afa of recycled water. According to Watermaster, the actual program as implemented does not involve any issues that invoke the State Water Board's jurisdiction.[3] Further, Watermaster stated that control over the water is maintained at all times, and to the extent that recycled water is placed in the channels, those channels are used only as a means of conveyance. Accordingly, Application 31369 is amended to state: "total combined amount taken by direct diversion and storage during any one year will be 68,500 acre-feet." (May 2, 2007 Reporter's Transcript [R.T.], p. 168.)

4.0 ALL PROTESTS TO THE APPLICATION WERE RESOLVED PRIOR TO HEARING

Four protests were filed against Application 31369. California Department of Fish and Game (CDFG), Cucamonga County Water District (CCWD), and East Valley Water District (EVWD) filed protests alleging adverse impacts to public trust resources, injury to pre-1914 rights, and injury to prior rights, respectively. These three protests were resolved by settlement agreement or stipulation prior to the beginning of the hearing. A fourth protest, by the U.S. Forest Service (USFS), was withdrawn by letter dated April 4, 2005, from Joshua S. Rider, staff attorney, for the USFS. Accordingly, the State Water Board finds that all protests to application 31369 were withdrawn or conditionally resolved prior to the hearing.

5.0 NON-APPLICANT PARTIES STIPULATED OUT OF THE PROCEEDING

In a water right proceeding, the parties include the applicant, persons who filed unresolved protests, and any other persons who are designated as parties in accordance with the procedures set forth in the notice of hearing. (Cal. Code Regs., tit. 23, § 648.1, subd. (b).) Persons presenting non-evidentiary policy statements are not parties. (*Id*., § 648.1, subd. (d).)

[3] Recycled wastewater discharged to a stream is water that may be appropriated. (*Crane v. Stevinson* (1936) 5 Cal.2d 387 [54 P.2d 1101]; *Haun v. DeVaurs* (1950) 97 Cal.App.2d 841 [218 P.2d 996].) Although Watermaster's proposal to use recycled water for groundwater recharge may not require an appropriative water right, it may still require State Water Board approval. Section 1211 of the Water Code requires approval of a wastewater change petition before changing the point of discharge, place of use or purpose of use of treated wastewater, unless the change will not result in any decrease in flows in any portion of a watercourse. The record does not reflect whether Watermaster made changes in the recycled water project that would require State Water Board approval under section 1211.

The parties in this matter include Watermaster, and the following non-applicant parties: United States Forest Service, the Santa Ana Mainstem Local Sponsors, Southern California Edison, East Valley Water District, the City of Chino, and the Center for Biological Diversity (Center).[4]

By letter dated April 17, 2007, Watermaster submitted stipulations from the non-applicant parties that they would neither present evidence concerning Application 31369, nor cross-examine witnesses presented in support of Application 31369.

6.0 STORMWATER IS AVAILABLE FOR APPROPRIATION TO GROUNDWATER RECHARGE UNDER APPLICATION 31369

When considering whether to approve an application to appropriate water, the State Water Board must determine whether unappropriated water is available to supply the project described in an application. (Wat. Code, § 1375, subd. (d).) Unappropriated water includes water that has not been either previously appropriated or diverted for riparian use. (Wat. Code, §§ 1201, 1202.)

In determining the amount of water available for appropriation, the State Water Board shall take into account, whenever it is in the public interest, the amounts of water needed to remain in the source for protection of beneficial uses. Beneficial uses include, but are not limited to, instream uses, recreation and the preservation of fish and wildlife habitat. (Wat. Code, § 1243.)

[4] The State Water Board's hearing procedures do not require the filing of a protest as a prerequisite to participating in a hearing. Nonetheless, during the pre-hearing conference on April 6, 2007, the participants requested an opportunity to brief the issue as to what extent the Center should be allowed to participate as a party. According to the Center's Notice of Intent to Appear, the Center intended to present a case-in-chief on the impacts of the applications on public trust resources. Certain applicants objected to the Center's presentation of evidence on the grounds that the Center had not protested their applications. The hearing participants were given the opportunity to brief the issue of whether the Center could participate in the hearing. San Bernardino Valley Municipal Water District and Western Municipal Water District of Riverside County (collectively, Muni/Western), Orange County Water District (OCWD), and the Center submitted timely briefs. In its brief, Muni/Western contended the allowance of a late appearance at a hearing by a person who did not file a protest results in unfair surprise to the hearing participants. OCWD joined with Muni/Western's request to limit the Center's participation to its protest against the wastewater change petition submitted by the City of Riverside.

In his April 20, 2007, ruling, citing the Administrative Procedure Act, the State Water Board's regulations, and hearing procedures, the Hearing Officer stated that it is within the State Water Board's discretion to allow an interested party who has not submitted a protest to participate in an adjudicative proceeding as a party. The Hearing Officer further noted that the Center has an extensive history of advocacy and legal involvement in the Santa Ana River watershed, and its public trust and environmental interests in this proceeding are unique and not represented by other parties. The Hearing Officer concluded that the Center, having complied with the procedural requirements for participating in the hearing, would be allowed to participate fully.

Watermaster contends that unappropriated water is available to supply the project described in Application 31369. Watermaster seeks to divert 68,500 afa of stormwater runoff to underground storage for the purposes of industrial, irrigation, stock watering, and municipal uses. The proposed season of diversion is January 1 to December 31. "Watermaster believes that the amount of 68,500 acre-feet per year, when combined with the 15,000 acre-feet per year of Permit 19895 and the 27,000 acre-feet per year of Permit 20753, for a total of 110,500 acre-feet per year, will be sufficient to allow Watermaster to continue its project as planned." (Chino 7-1.)

Under its project, Watermaster diverts storm flows from four primary drainage systems in the Chino Basin, which it identifies as Chino Creek, Cucamonga Creek, Day Creek, and San Sevaine Creek. All are tributary to the Santa Ana River. The Chino Creek System includes San Antonio Creek, the Day Creek System includes Deer Creek, and the San Sevaine Creek system includes Etiwanda Creek. (Chino 1-1, p. 2.) Chino Creek and Cucamonga Creek discharge directly into Prado Reservoir, and Day Creek and San Sevaine Creek discharge into the Santa Ana River just upstream from Prado Reservoir. Ken Manning, witness for Watermaster, testified that these four creek systems are almost entirely concrete-lined as they pass through the Chino Basin, with the exception of small portions near their confluence with the Santa Ana River. (*Ibid*.) In general, unappropriated water is only present in the channels of these four creek systems during or immediately following storm events or when snowmelt is present. (*Ibid*.) Mr. Manning stated that most of the time the creeks are dry except when they are used to transport imported water or recycled water. (*Ibid*.)

Watermaster's witness, Mark Wildermuth, testified that San Sevaine Creek channel and its tributaries as well as Day Creek receive some intermittent urban dry weather flow, in addition to the intermittent storm flow. Downstream of Watermaster's proposed points of diversion, wastewater treatment plants discharge treated wastewater (recycled water) to Cucamonga Creek, and to Chino Creek. (May 3, 2007 R.T., p. 108.)

Watermaster diverts water from the four creek systems to multiple flow-through and off-channel recharge basins in the Chino Basin. (May 2, 2007 R.T., pp. 137-140.) Although Watermaster seeks to divert 68,500 acre-feet (af) each year under Application 31369, Messrs. Manning and Wildermuth testified that water will not always be available. (*Id.*, p. 142; May 3, 2007 R.T., p. 108.) The actual amount of water available for diversion and recharge will vary greatly in any given year. (May 3, 2007 R.T., p. 12; Chino 2-1, pp. 6-7.) Tony Bomkamp, Watermaster's

witness, stated that Southern California experiences few storm events, roughly 10-15 days of rainfall each year, allowing Watermaster to divert stormwater during just a few days out of the year. (Chino 4-1, p. 7.) Watermaster asserts that in order to achieve its planning goals, it must divert as much stormwater as possible, up to the full diversion amount, into its facilities. (May 3, 2007 R.T., p. 12; Chino 2-1, pp. 6-7.) During a small storm event, all stormwater may be diverted from the stream channel. (Chino 4-1, p. 7.)

Mr. Wildermuth used a Waste Load Allocation Model (WLAM) in order to assess the impact of diversions and recharge under Application 31369. The WLAM estimated the total discharge potentially available for diversion, the recharge capacity for existing and proposed recharge facilities, and the downstream impacts in the Santa Ana River and its tributaries. Inputs to the model included (1) the reservoir operating rules for the Seven Oaks and Prado dams, (2) 50 years of precipitation data and contemporaneous gauged stream discharge data for the period 1950 through 1999, (3) projected 2010 estimates of recycled water discharge to the Santa Ana River, and (4) 1993 land use conditions.[5]

Mr. Wildermuth compared a "no project" or baseline condition to the "with project" condition. For the baseline case, he assumed that only the stormwater detention and conservation facilities that existed prior to the construction of the Chino Basin Facilities Improvement Program[6] would be in place. For the "with project" condition he assumed that all the recharge improvements that are included in Watermaster's Application 31369 were constructed and operated at their maximum rates of diversion and recharge. (Chino 2-1, pp. 2-5.)

Mr. Wildermuth testified that the WLAM, using conditions experienced during water years 1950-1999, predicted the amount of water available in the future for appropriation by Watermaster in the Chino basin would vary from about 7,000 afa to about 160,000 afa, with an average amount of water available for appropriation of roughly 40,000 afa. The volume of water that Watermaster could recharge, however, would be 18,400 afa, on average, and would vary between about 6 afa and 43,000 afa. Mr. Wildermuth testified that the full 110,500 acre-feet that Watermaster seeks to divert into its facilities would only be available in five out of the 50 years analyzed under 1993 land use conditions. Under 2007 land use conditions,

[5] By using 1993 land use conditions, the runoff estimates from the valley floor area will be slightly underestimated, making the runoff projections conservatively low. (Chino 2-1, p.6)

[6] Described in Watermaster's Application 31369.

Mr. Wildermuth estimated that more water would be available than under the 1993 land use conditions. (May 3, 2007 R.T., pp. 5-7, 9-10; Chino 2-1, p. 6.) The average recharge amount of 18,400 af of stormwater per year is based on an annual average of 46,300 af available for diversion. According to the WLAM, the average annual amount of stormwater recharge that is projected to occur with Watermaster's full project under Application 31369 is about 12,700 afa higher than under baseline conditions. Because the diversion systems are not 100 percent efficient, the WLAM also predicted that on average, about 27,900 afa of stormwater discharge would bypass the recharge facilities and discharge into the Santa Ana River under the "with project" case. (Chino 2-1, pp. 6-7.) Having considered the foregoing, the State Water Board concludes that stormwater runoff is available for appropriation to groundwater recharge for beneficial use under Application 31369. The permit issued pursuant to this decision will be subject to all prior rights to the use of water.

7.0 THE PROPOSED PROJECT WILL NOT HAVE A SIGNIFICANT EFFECT ON THE MOVEMENT OF CONTAMINATED GROUNDWATER PLUMES IN THE CHINO BASIN

Under Application 31369, Watermaster seeks to divert 68,500 afa of stormwater runoff from seven creeks, all of which are tributary to the Santa Ana River. Watermaster proposes to utilize an existing system of channels, diversion structures and basins designed to capture storm flows and recycled water flows in the Chino Basin. (Chino 1-1, p. 2; Chino 1-4.)

The Chino Basin is considered to be a single underground reservoir from geologic and legal perspectives. (Chino 2-7, p. 2-6.) Its surface area is approximately 240 square miles, and the groundwater currently in storage is estimated to be between 5 million to 6 million acre-feet. (SWRCB-12, Supplemental Information; May 4, 2007 R.T., p. 76.) In general, groundwater flow mimics surface drainage patterns; from the high mountainous areas in the north and east portions of the basin to lower elevation areas near the Santa Ana River within the Prado Flood Control Basin. (Chino 2-3, p 2-6, Fig 2-3.)

Watermaster has identified nine groundwater contaminant plumes within the Chino Basin that might be affected by the proposed project. (Chino 2-1, p 12 and Fig 14; Chino 2-3, p. 3-15, Fig 3-21; May 4, 2007 R.T., pp. 70-71.) Following is a brief description of each plume:

Chino Airport: A plume of volatile organic compounds (VOC's) extends approximately 14,200 feet south/southwest from the airport. This plume is being investigated, and a draft remediation plan is expected by the end of 2007. (Chino 2-1, pp. 12-13, Chino 2-3, p. 3-15.)

California Institute for Men: A plume of VOC's extends approximately 5,800 feet from north to south. This plume has been characterized and is currently being remediated. (Chino 2-1, p. 13; Chino 2-3, pp. 3-15 & 3-16.)

General Electric Flatiron Facility: Total dissolved chromium and VOC's have been identified in groundwater. The plume extends approximately 9,000 feet south/southwest from the site. This plume has been characterized and is currently being remediated. (Chino 2-1, pp 13-14; Chino 2-3, p. 3-16.)

General Electric Test Cell Facility: A plume of VOC's extends approximately 10,300 feet southwest of the site. This plume has been characterized, and a remediation plan is expected to be completed by the end of 2007. (Chino 2-1, pp. 13-14; Chino 2-3, p. 3-16.)

Kaiser Steel Fontana Site: A plume of degraded groundwater has been identified under the facility. The plume extends approximately 17,500 feet from northeast to southwest. The major contaminants are inorganic dissolved solids and low molecular weight organic compounds. This plume has been characterized and is currently being remediated. (Chino 2-1, p. 15; Chino 2-3, p. 3-17.)

Milliken Sanitary Landfill: The landfill has released VOC's and inorganic compounds to groundwater. The plume extends approximately 2,100 feet south of the site. This plume has been characterized; however, no active remediation plan has been developed. (Chino 2-1, pp. 15-16; Chino 2-3, pp. 3-17 & 3-18.) This site is the subject of Santa Ana Regional Water Quality Control Board (Santa Ana Water Board) Order No. 81-003. (Chino Closing Brief, Exhibit B, p. 2; May 4, 2007 R.T., p. 78.)

Upland Sanitary Landfill: Groundwater beneath the landfill has been contaminated with VOC's and inorganic compounds. The plume is defined by only three on-site monitoring wells; therefore, the exact extent of the plume is unknown. Remediation of the plume is ongoing at the site. (Chino 2-1, pp. 16-17; Chino 2-3, pp. 3-18 to 3-19.)

Unnamed VOC Plume – South of the Ontario Airport: A VOC plume exists south of the Ontario Airport that is approximately 17,700 feet wide and 20,450 feet long. A group of potential responsible parties is currently investigating the plume, and it is anticipated to be fully characterized by the end of 2009. (Chino 2-1, p. 17; Chino 2-3, p. 3-19.)

Stringfellow National Priorities List Site: The Stringfellow site was operated as a hazardous waste disposal facility from 1956 until 1972. A groundwater plume, which contains various VOC's, perchlorate and heavy metals such as cadmium, nickel, chromium, and manganese extends approximately 22,500 feet in a southwesterly direction from the original disposal area. Contamination at the Stringfellow site has been addressed by cleanup remedies described in four United States Environmental Protection Agency Records of Decision. Additional characterization is ongoing, and additional remediation work may be required. (Chino 2-1, pp. 17-18; Chino 2-3, p. 3-19.)

These contaminant plumes are moving from their source areas in response to regional groundwater flow, which is driven by groundwater recharge and discharge. (Chino 2-1, p. 18.) In order to predict the future movement of the groundwater plumes, Watermaster analyzed the effect of groundwater recharge from the proposed project on the movement of the groundwater plumes in the Chino Basin by modeling a baseline and a dry-year yield scenario. (Chino 2-1, p 18, Figs 14 & 15, Chino 2-3, pp. 7-1, 7-3, 7-4; May 4, 2007 R.T., p. 71.) The baseline scenario is based on a modified version of the water supply plan from Watermaster's Implementation Plan in the Optimum Basin Management Plan (OBMP). (Chino 2-3, p. 7-3.) The baseline scenario covers the period of 2004 to 2028 and assumes groundwater recharge ranging between 50,000 afa and 100,000 afa. (May 4, 2007 R.T., p. 72.)

The dry-year scenario is described in the OBMP Chino Basin Dry-Year Yield Program Modeling Report. (Chino 2-3, pp. 7-1 to 7-4.) The dry-year yield scenario represents the recharge of 100,000 af of water in 25,000 afa increments, followed some time later by three years of 33,000 af of extraction per year. The cycle is then repeated. (May 4, 2007 R.T., p. 74.) In the dry-year yield scenario it was assumed that the total stormwater recharge anticipated with Watermaster's Application 31369, about 18,000 afa, as well as Watermaster's replenishment-related recharge, would occur throughout the 25-year planning period. (Chino 2-1, p. 18.)

Groundwater modeling was conducted for both the "no groundwater storage" program (baseline scenario) and the "with groundwater storage" program (dry-year yield scenario). Results of the modeling showed that the plume locations are virtually identical for both scenarios and indicated that the change in direction and speed of movement of these plumes caused by the increase recharge is insignificant. (Chino 2-1, p. 18; May 4, 2007 R.T., pp. 72 and 74.) Although some spreading basins are located in the vicinity of contaminated groundwater plumes, the plumes follow the natural groundwater gradient regardless of influence of the spreading basins. This is because the addition of 68,500 afa (as proposed in the Application) of water into the basin, which has an estimated capacity of 8 million acre-feet, has minimal effect on the regional groundwater flow direction.

Pursuant to Program Element Six of the OBMP, Watermaster is working closely with the Santa Ana Water Board and potential responsible parties to address the plumes of contamination in the Chino Basin. (May 4, 2007 R.T., pp. 77-78.) The remediation of each plume in the Basin is the subject of remediation efforts under additional state and federal supervision. (Chino 7-1, Exhibit B.)

The following mitigation measure is listed in Watermaster's OBMP Program Environmental Impact Report Volume (Chino 3-3, p. 4-165):

> When recharge of water is proposed within the vicinity of an existing or known contaminated groundwater plume, modeling and/or additional studies will be conducted to determine whether recharge of the recycled water will increase the local hydraulic gradient and cause more rapid spread of the existing plume. If existing domestic water production wells will be impacted by the plume a minimum of one year earlier than under pre-existing conditions, or if significant quantities of additional groundwater (more than 5,000 acre-feet) will become contaminated within a five year period due to the recharge of the water, an alternate location for recharge will be selected to avoid not only the loss of the recharged water due to contamination, but also additional high quality groundwater due to more rapid expansion of the contaminated plume.

Because modeling does not always successfully predict anticipated outcomes, a permit condition to implement this measure will be included in any permit issued by the State Water Board (condition 9 at the end of this decision). Having considered the foregoing, the State Water Board finds that the proposed project will not have a significant effect on the movement of contaminated groundwater plumes in the Chino Basin.

8.0 APPROVAL OF APPLICATION 31369 WILL NOT HAVE A SIGNIFICANT ADVERSE IMPACT ON PUBLIC TRUST RESOURCES. THE PROJECT WILL NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT UNDER THE CALIFORNIA ENVIRONMENTAL PROTECTION ACT (CEQA)

8.1 Approval of Application 31369 will not have a significant adverse Impact on public trust resources.

The Santa Ana Water Board has divided the Santa Ana River into six reaches. Reach 3, from the Riverside Narrows to Prado Dam, would be affected by the diversions proposed under Application 31369. Watermaster presented testimony by experts in the areas of fisheries biology and wetland studies to demonstrate the lack of impacts on the public trust resources by the proposed project.

Mr. Tony Bomkamp performed a water budget analysis that calculated the amount of water required by riparian species within Reach 3 and the Prado Wetlands. The analysis compared that amount to the amount of water actually available in these areas. (May 3, 2007 R.T., pp. 122-124.) The analysis focused on the water needs of the willow because the water needs of this species are larger than any other relevant species in the area. (*Id.*, pp. 145-146.) The analysis also focused on the needs of the Least Bell's Vireo within this riparian habitat because the vireo is an umbrella species having similar habitat requirements to all other avian species of special concern in the study area. (*Id.*, p. 145.) Mr. Bomkamp testified that in the area of Reach 3 above the Prado Wetlands, after accounting for riparian habitat usage (12,000 afa) and evaporation from the water surface (17,000 afa), the average annual amount of water discharging into Prado Basin is 200,000 acre-feet. That is 18 times more water than is required by the riparian habitat. (*Id.*, p.124.) Consequently, Mr. Bomkamp testified, Watermaster's proposed project will have no impact on the Least Bell's Vireo or any other special status avian species. (*Id.*, p. 126.)

The Santa Ana sucker (*Catostomus santaannae*) is another species of special concern in the Santa Ana River. Dr. Jeffrey Beehler, Senior Environmental Project Manager with the Santa Ana Watershed Project Authority, testified regarding the effects of project operations on the sucker. These fish are limited in Reach 3, not by availability of water, but by the lack of suitable

habitat in the form of gravel or cobble needed for spawning. The concrete lining of the creek channels limits the scour necessary to produce cobble. (May 3, 2007 R.T., p. 157.) In addition, Mr. Beehler testified that the Santa Ana sucker is not known to exist in the project area, thus the fish would not be killed in the diversion facilities. (*Id.*, p. 154.)

On March 26, 2003, CDFG filed a protest against Application 31369.[7] CDFG was concerned that the proposed projects may result in direct and cumulative adverse impacts to the resources of the Santa Ana River Basin by reducing instream flows needed to maintain riparian habitat and species within the drainage. CDFG was also concerned that the cumulative diversion rate within the Santa Ana River Basin may reduce riparian and wetland habitat areas within the watershed.

On March 20, 2007 CDFG entered into a settlement agreement with Watermaster (Chino 1-17) and on March 26, 2007, CDFG notified the State Water Board it was withdrawing its protest against Application 31369. Further, CDFG did not oppose the State Water Board's issuance of a permit to Watermaster for the diversion of water under Application 31369.

According to the March 20 Settlement Agreement, the parties do not anticipate an impact on fish, wildlife or other instream beneficial uses as a result of Watermaster's requested appropriation described in Application 31369. Watermaster agreed to continue the existing monthly monitoring and reporting. Also, the parties will meet annually for the first 5 years after a permit is issued to confirm no impacts have resulted. If negative impacts result from the appropriation, provisions are included in the agreement for resolution of those impacts. (CBWM 1-01, pp 8-9; Chino 1-17.) Conditions 10 and 11, set forth at the end of this decision, implement the terms of the settlement agreement.

Having considered the foregoing recitals, the State Water Board finds that approving Application 31369 will not cause any significant adverse impacts to public trust resources.

[7] CDFG's protest was also filed against applications 31370, 31317 and 31372. The protest against these applications will be addressed in separate decisions by the State Water Board.

8.2 The proposed project will not have a significant adverse effect on the environment under CEQA.

Watermaster is CEQA lead agency for the proposed project. The project, as proposed under Application 31369, will use existing catch basins in the Chino Basin Watermaster service area. The basins were originally constructed for the purpose of flood control by the Chino Basin Water Conservation District and the San Bernardino County Flood Control District. Currently, in addition to flood control, Watermaster uses the catch basins for groundwater recharge using recycled water, imported water, and stormwater runoff which is the subject of this application.

Watermaster's Recharge Master Plan includes some of the basins named in Application 31369. Watermaster considers these basins to be second tier projects to the OBMP per section 15152 of the CEQA Guidelines.[8] Therefore, the basins fall within the scope of the Programmatic Environmental Impact Report (PEIR) for the OBMP, which was certified by the Inland Empire Utilities Agency on July 13, 2000. In addition, a project level analysis for these basins was completed in September 2001 through an Initial Study for the Implementation of Stormwater and Imported Water Recharge at 20 Recharge Basins in Chino Basin (Recharge Basin IS). A Notice of Determination dated October 9, 2001 found the implementation of the project would not cause any significant adverse impacts to the environment and the proposed project fell within the scope of the OBMP PEIR, and a de minimis finding was adopted.

The basins were constructed over a number of years, some prior to 1972. Table 1 describes the CEQA documentation completed for each basin, if relevant.

In his testimony, Tom Dodson, President of Tom Dodson and Associates, an environmental consulting firm in San Bernardino, California, stated the CEQA analysis completed for the basins that is part of Application 31369 is adequate. Mr. Dodson made supplemental investigations of the facts contained in the CEQA documents. Based on these investigations, he is of the opinion that the findings made in the OBMP PEIR and the Recharge Basin IS can serve as a basis for a decision by the State Water Board with respect to Application 31369. (Chino 3-1.)

[8] Cal. Code Regs., tit. 14, § 15152. All references in this Decision to the provisions of Title 14 of the California Code of Regulations constituting the Guidelines for Implementation of the California Environmental Quality Act, *id.* § 15000 et seq., are referred to as sections of the "CEQA Guidelines."

As a responsible agency under CEQA, the State Water Board presumes that the environmental documentation prepared by the lead agency is adequate for purposes of CEQA unless a legal proceeding determines that the environmental documentation is inadequate or a subsequent environmental document is required. (CEQA Guidelines, § 15231.) The State Water Board has reviewed the CEQA documents prepared by the lead agency. These documents do not identify any significant adverse environmental impacts.

Table 1

Basin Name	Construction Date	CEQA Documentation in Addition to Watermaster's OBMP Tiered Analysis
San Antonio Creek System		
College Heights (East and West)	1958, 1932	none
Upland Basin	unknown	Recharge Basin IS
Montclair Nos. 1-4	1954	Recharge Basin IS
Brooks	1977	1977 Mitigated Negative Declaration and Recharge Basin IS
West Cucamonga Creek System		
7th Street	1967	Recharge Basin IS
8th Street	1938	Recharge Basin IS
Ely Basin	1950	Recharge Basin IS
Grove Street	2001	Statutory Exemption
Cucamonga Creek System		
Turner No. 1	1976	Turner Basin #1 Expansion Project Notice of Determination filed in May 2001 by the Chino Water Conservation District

Table 1 (continued)

Basin Name	Construction Date	CEQA Documentation in Addition to Watermaster's OBMP Tiered Analysis
Deer Creek System		
Turner No. 2, 3, 4	1971	Recharge Basin IS
Turner No. 5, 8, 9	1971	none
Day Creek System		
Lower Day Nos. 1-3	1912, 1975, 1976	Recharge Basin IS
Etiwanda Percolation Ponds	1960s	1994 San Sevaine Creek Water Project Initial Study and Mitigated Negative Declaration (San Sevaine) and Recharge Basin IS
Wineville	1945	Recharge Basin IS
Riverside	1971	None
Etiwanda Creek System		
Etiwanda Debris Basin	1954, 1960	San Sevaine and Recharge Basin IS
Declez Channel System		
RP-3 site	unknown	*Initial Study for the Implementation of Storm Water and Imported Water Recharge at Proposed RP-3 Recharge Basins*, and negative declaration
Declez Basin	1985	Recharge Basin IS

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Table 1 (continued)

Basin Name	Construction Date	CEQA Documentation in Addition to Watermaster's OBMP Tiered Analysis
San Sevaine Creek System		
San Sevaine Nos. 1-5	1960s	San Sevaine and Recharge Basin IS
Rich Basin	1971	San Sevaine
Victoria Basin	1975	San Sevaine and Recharge Basin IS
Banana Basin	1944	Recharge Basin IS
Hickory Basin	1970/2001	San Sevaine and Recharge Basin IS
Jurupa Basin	1976	San Sevaine and Recharge Basin IS

9.0 COORDINATION OF PERMITS TO APPROPRIATE WATER WITH EXISTING JUDGMENTS AND AGREEMENTS FOR THE USE OF SANTA ANA RIVER WATER

On May 2, 2007 the State Water Board commenced a hearing to consider five applications to appropriate water from the Santa Ana River. The applicants are:

- Watermaster (Application 31369)
- San Bernardino Valley Municipal Water District and Western Municipal Water District of Riverside County (Applications 31165 and 31370)
- Orange County Water District (Application 31174)
- City of Riverside (Application 31372)

Rights to the use of the water in the Santa Ana River, including the potential rights of the applicants in this proceeding, are the subject of several judgments, settlement agreements, and memoranda. Among these is the April 17, 1969, judgment in *Orange County Water District v. City of Chino*, *et al.* (Super. Ct. Orange County, 1969, No. 117628.) Among other matters, the judgment divides the river into various stream reaches and provides that upper watershed parties are obligated to ensure that certain average minimum flows reach the lower watershed. (Applicants' Joint. Ex. 1-1.) In addition, the judgment provides that so long as certain average minimum flows reach the lower basin, the upper basin water users have the right to divert,

pump, extract, conserve and use all surface and ground water originating in the upper basin without interference from lower basin claimants. (Applicants' Joint Ex. 2-2.)

Likewise pertinent is *Western Municipal Water District of Riverside County et al. v. East San Bernardino County Water District* (Super. Ct. Riverside County, 1969, No. 78426.) This judgment was also entered on April 17, 1969. This judgment allocates the water in the upper stream reach for the San Bernardino Basin, Colton Basin and Riverside Basin areas, excepting the Chino Basin, consistent with the Orange County judgment. The relative priority of Watermaster to divert water from the Chino Basin is derived from the rights recognized in the Inland Empire Utilities Agency under the Orange County judgment and the November 16, 1999, Memorandum of Understanding to Affirm and Preserve Existing Rights in the Santa Ana River Watershed. (¶ 13 and ¶ 3(a), Stipulation of Applicants, dated April 5, 2007.)

Normally, under California appropriative water law, the application filed first in time has a higher priority than an application filed at a later date. (Wat. Code, §§ 1450, 1455, 1610; *Pasadena v. Alhambra* (1949) 33 Cal. 2d 908, 929 [207 P.2d 17].) However, taken together, these judgments, settlement agreements, and memoranda may alter the relative priority of the permits that may be issued for the applications pending on the Santa Ana River.

Additionally, exceptions to the rule of "first in time, first in right" can be based on Article X, section 2 of the California Constitution, area of origin protections, and other public policies. (See, e.g., Wat. Code, §§ 10500 et seq., 11460; see also Archibald, Governor's Commission to Review California Water Rights, *Allocating Use of Surface Water: The Priority System and its Alternatives* (Appropriative Rights Staff Memorandum No. 2, July 1977) pp. 5-6.) The State Water Board is also required to subject permit approvals to such terms and conditions as in its judgment will best develop, conserve, and utilize in the public interest the water sought to be appropriated. (Wat. Code, § 1253.) The numerous judgments, settlement agreements and memoranda for the Santa Ana River aimed at managing the diversion and use of water in the river among many competing claims present a situation that may justify modifying the usual priority of competing applications for the appropriation of water.

However, on April 5, 2007 the applicants presented a signed stipulation to the hearing officer to resolve key hearing issues 4 and 5. On April 10, 2007, no party having objected to the stipulation, the hearing officer accepted it as the basis for resolving these key hearing issues

concerning the priorities of the application relative to other legal users of water and among the pending applications. (RT, Vol.1, 2:21-24; see also 4.0 Hearing Issues, p. 5, *ante*.)[9]

Also, condition 6 of the order, *post*, however, does subject this application to "…existing rights determined by the judgment in *Chino Basin Municipal Water District v. City of Chino* (Super. Ct. San Bernardino County, 1978 No. 164327), and the stipulated judgment in *Orange County Water District v. City of Chino* (Super. Ct. Orange County, 1969, No. 117628) insofar as said rights are maintained."

10.0 CONCLUSIONS

Pursuant to Water Code section 1253, the State Water Board may allow the appropriation for beneficial purposes of unappropriated water under such terms and conditions as in its judgment will best develop, conserve, and utilize in the public interest the water sought to be appropriated. The stormwater recharge project described in Application 31369 is one component of Watermaster's Recharge Master Plan. (Chino 1-1, pp. 6-7.) The Recharge Master Plan implements Program Element Two of Watermaster's OBMP. Water appropriated under Application 31369 will recharge the Chino Basin for municipal, industrial, irrigation, and stock watering uses for the 800,000 people who live in the area. (May 3, 2007 R.T., pp. 21-22.)

On September 30, 2004, the State Water Board approved the most recent set of amendments to the Water Quality Control Plan for the Santa Ana Region. A central feature of these amendments is the inclusion of Maximum Benefit objectives. These objectives permit an increase in the level of salts in groundwater in order to permit the use of imported and recycled water to recharge the groundwater basin. (Santa Ana Regional Water Quality Control Board Resolution R8-2004-0001, Table 5-8a, pp. 55-58.) In exchange for the ability to utilize the Maximum Benefit objectives, the parties in the Chino Basin committed to implement a number of water quality measures, one of which is the stormwater recharge project that is the subject of Application 31369**.** (Chino Closing Brief, pp. 4, 12-18.)

[9] The significance of the City of Redlands, et al., reported right to divert up to 88 cubic feet per second (cfs) in the stipulation is unclear unless the stipulation was to resolve issues other than those presented to the State Water Board in this proceeding. (Stipulation of Applicants dated April 5, 2007, ¶ 15) The State Water Board does not expressly or implicitly recognize the validity of the 88 cfs diversion if it was initiated after 1914 and is not in compliance with the Water Code section 1200, et seq.

The proposed project will not have a significant adverse effect on: (1) the movement of contaminated groundwater plumes in the Chino Basin; (2) public trust resources; or (3) the environment. Accordingly, the State Water Board finds the proposed appropriation of water to be in the public interest. The State Water Board finds and concludes that the 68,500 afa increment of stormwater runoff to be diverted to underground storage pursuant to Application 31369 is available for appropriation and that a permit should be issued.

ORDER

IT IS HEREBY ORDERED THAT Application 31369 be approved and a permit issued subject to prior rights and subject to standard permit terms 6, 10, 11, 12, 13, 14, 15, 30, and the following additional terms and conditions.

1. The Permittee is authorized to divert and use water from Deer Creek, Day Creek, Etiwanda Creek, San Sevaine Creek, Chino Creek, San Antonio Creek and Cucamonga Creek. All of these creeks are tributary to the Santa Ana River within the counties of San Bernardino and Riverside.

2. Permittee is authorized to divert water from the points of diversion identified within Table 2, attached to this decision.

3. Permittee is authorized to use the water for municipal, industrial, irrigation, and stock watering within the area overlying the Chino Basin Groundwater Basin as shown on the map dated October 12, 2007, signed on October 15, 2007, and on file with the State Water Board.

4. The water appropriated shall be limited to the quantity that can be beneficially used and shall not exceed 68,500 acre-feet per annum to be collected to underground storage at a maximum rate of 115,570 cubic feet per second from the 29 points of diversion listed on Table 2 from January 1 to December 31 of each year.

5. The application of water to beneficial use shall be prosecuted with reasonable diligence and be completed by December 31, 2057.

6. Rights under this permit are, and shall be, specifically subject to existing rights determined by the judgment in *Chino Basin Municipal Water District v. City of Chino* (Super. Ct. San Bernardino County 1978 No. 164327), and the stipulated judgment in *Orange County Water District v. City of Chino* (Super. Ct. Orange County, 1969, No. 117628) insofar as said rights are maintained. The State Water Board acknowledges the existence of the judgments, but makes no findings as to the content of the judgments and, therefore, will not enforce the conditions of the judgments as a condition of this permit. Enforceable terms defining the scope of the permit are listed independently in the permit and may not be included in the judgments.

7. Permittee shall consult with the Division of Water Rights and develop and implement a water conservation plan or actions. The proposed plan or actions shall be presented to the State Water Resources Control Board for approval within one year from the date of this permit or such further time as, for good cause shown, may be allowed by the Board. A progress report on the development of a water conservation program may be required by the Board at any time within this period.

   All cost-effective measures identified in the water conservation program shall be implemented in accordance with the schedule for implementation found therein.

8. Prior to diversion of water under this permit, Permittee shall (1) install devices to measure the quantities of water placed into underground storage and (2) install devices and provide documentation of the method to be used to determine the quantity of water recovered from underground storage and placed to beneficial use. All measuring devices and the method of determining the quantity of water recovered from underground storage shall be approved by the Chief, Division of Water Rights prior to diversion of water under this permit. All measuring devices shall be properly maintained.

9. Permittee shall monitor all known contaminated groundwater plumes that may be affected by the diversion of water to recharge groundwater under this permit to determine whether the recharged water will change the local hydraulic gradient and cause more rapid spread of the existing plumes. Permittee shall report annually the results of its monitoring to the

Executive Director, Santa Ana Regional Water Quality Control Board (SARWQCB) and to the Chief, Division of Water Rights. If existing domestic water production wells will be impacted by the plume a minimum of one year earlier than under pre-existing conditions, or if more than 5,000 acre-feet of additional groundwater will become contaminated within a five-year period due to recharge pursuant to the permit, Watermaster shall petition the State Water Board for an alternate location for recharge.

10. Permittee shall conduct its existing monthly monitoring per the March 20, 2007 Stipulation, and report the results of such monitoring annually to the California Department of Fish and Game (CDFG) and the State Water Board in a form approved by the CDFG and the State Water Board. At a minimum, reporting shall indicate average monthly flow data that indicates amount of flow in each tributary before and after the time of diversions and the amount of flow entering the Santa Ana River at each tributary. Within 90 days of the issuance of this permit, Permittee shall submit the monitoring plan for approval by the Chief, Division of Water Rights. The Permittee shall post and maintain the annual monitoring reports on its website. The reports shall remain posted for at least five years.

11. Permittee shall meet at least once annually with the CDFG for five years following the issuance of this permit to confirm that no impacts on fish, wildlife or other instream beneficial uses have occurred as the result of the appropriation of water. In the event that Permittee or CDFG determines that the appropriation of water has caused adverse impacts on fish, wildlife or other instream beneficial uses, Permittee shall meet with the CDFG to develop measures to avoid or mitigate the adverse impacts, and report the mitigation measures to the Chief, Division of Water Rights.

    In the event of an impasse between Permittee and CDFG as to either: (1) the impact of the appropriation of water on fish, wildlife or other instream beneficial uses; or (2) measures to avoid or mitigate the adverse impacts, the following shall occur:

    (a) Permittee shall issue a letter to the CDFG stating that an impasse has occurred. Alternatively, CDFG may issue a letter to Permittee stating that an impasse has occurred; and
    (b) Within sixty days after the issuance of a letter of impasse, Permittee shall notify the State Water Board of the impasse.

The Chief, Division of Water Rights will initiate a review of the impasse and may initiate a proceeding to resolve the impasse under the Board's continuing authority.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a decision duly and regularly adopted at a meeting of the State Water Resources Control Board held on September 2, 2008.

AYE:	Chair Tam M. Doduc Vice Chair Gary Wolff, P.E., Ph.D Arthur G. Baggett, Jr. Charles R. Hoppin Frances Spivy-Weber
NAY:	None
ABSENT:	None
ABSTAIN:	None

Jeanine Townsend
Clerk to the Board

Attachment

TABLE 2 TO DECISION 1646

Application 31369

Locations of Points of Diversion (POD)

By California Coordinate System of 1983, Zone 6	40-acre subdivision of public land survey or projection thereof	Section	Township	Range	Base and Meridian
POD #1: College Heights North 1,861,321 and East 6,653,870 ft.	**NW¼ of NW¼**	**11**	**01S**	**08W**	**SB**
POD #2: Montclair 1 North 1,855,856 and East 6,652,040 ft.	**NE¼ of NE¼**	**15**	**01S**	**08W**	**SB**
POD #3: Montclair 2 North 1,854,846 and East 6,651,928 ft.	**NE¼ of NE¼**	**15**	**01S**	**08W**	**SB**
POD #4: Montclair 3 North 1,853,335 and East 6,651,424 ft.	**NW¼ of SE¼**	**15**	**01S**	**08W**	**SB**
POD #5: Montclair 3 North 1,853,571 and East 6,651,675 ft.	**SW¼ of NE¼**	**15**	**01S**	**08W**	**SB**
POD #6: Montclair 4 North 1,852,355 and East 6,651,331 ft.	**NW¼ of SE¼**	**15**	**01S**	**08W**	**SB**
POD #7: Brooks North 1,845,097 and East 6,647,790 ft.	**NW¼ of NW¼**	**27**	**01S**	**08W**	**SB**
POD #8: 8th Street North 1,856,072 and East 6,673,019 ft.	**NE¼ of NE¼**	**17**	**01S**	**07W**	**SB**
POD #9: 7th Street North 1,854,979 and East 6,673,030 ft.	**NE¼ of NE¼**	**17**	**01S**	**07W**	**SB**
POD #10: Ely Basin North 1,835,570 and East 6,676,983 ft.	**SW¼ of SE¼**	**33**	**01S**	**07W**	**SB**
POD #11: Turner No. 1 North 1,850,673 and East 6,682,542 ft.	**NW¼ of NE¼**	**22**	**01S**	**07W**	**SB**

By California Coordinate System of 1983 in Zone 6	40-acre subdivision of public land survey or projection thereof	Section	Township	Range	Base and Meridian
POD # 12: Turner No. 2,3,4 North 1,850,134 and East 6,684,634 ft.	**NE¼ of NE¼**	**22**	**01S**	**07W**	**SB**
POD #13: Turner No. 5,8,9 North 1,850,180 and East 6,686,169 ft.	**NE¼ of NW¼**	**23**	**01S**	**07W**	**SB**
POD #14: Lower Day North 1,871,850 and East 6,700,373 ft.	**NE¼ of NE¼**	**31**	**01N**	**06W**	**SB**
POD #15: Etiwanda Spreading Grounds North 1,880,750 and East 6,708,936 ft.	**SW¼ of NE¼**	**21**	**01N**	**06W**	**SB**
POD #16: Wineville North 1,838,841 and East 6,700,369 ft.	**SE¼ of NE¼**	**31**	**01N**	**06W**	**SB**
POD #17: Riverside North 1,837,568 and East 6,699,250 ft.	**SE¼ of NE¼**	**31**	**01N**	**06W**	**SB**
POD #18: Etiwanda D.B. North 1,877,535 and East 6,709,726 ft.	**SW¼ of SE¼**	**21**	**01N**	**06W**	**SB**
POD #19: San Sevaine No 1 North 1,877,471 and East 6,715,443 ft.	**NE¼ of NE¼**	**27**	**01N**	**06W**	**SB**
POD #20: San Sevaine No 2 North 1,876,824 and East 6,715,806 ft.	**NE¼ of NE¼**	**27**	**01N**	**06W**	**SB**
POD #21: San Sevaine No 3 North 1,880,432 and East 6,719,552 ft.	**SW¼ of NE¼**	**23**	**01N**	**06W**	**SB**
POD #22: San Sevaine No 3 North 1,876,134 and East 6,715,774 ft.	**SE¼ of NE¼**	**27**	**01N**	**06W**	**SB**
POD #23: San Sevaine No 4 North 1,875,499 and East 6,715,757 ft.	**SE¼ of NE¼**	**27**	**01N**	**06W**	**SB**
POD #24: San Sevaine No 5 North 1,874,878 and East 6,715,624 ft.	**SE¼ of NE¼**	**27**	**01N**	**06W**	**SB**

By California Coordinate System of 1983 in Zone 6	40-acre subdivision of public land survey or projection thereof	Section	Township	Range	Base and Meridian
POD #25: Victoria Basin North 1,870,739 and East 6,711,701 ft.	**SW¼ of NW¼**	**34**	**01N**	**06W**	**SB**
POD #26: Hickory Basin North 1,857,072 and East 6,713,258 ft.	**SE¼ of SW¼**	**10**	**01S**	**06W**	**SB**
POD #27: Jurupa Basin North 1841430 and East 6,708,522 ft.	**SW¼ of SE¼**	**28**	**01S**	**06W**	**SB**
POD #28: Former RP3 Site North 1,838,205 and East 6,721,781 ft.	**SE¼ of NE¼**	**35**	**01S**	**06W**	**SB**
POD #29: Declez Basin North 1,834,901 and East 6,713,196 ft.	**NE¼ of NW¼**	**3**	**02S**	**06W**	**SB**