CHINO BASIN WATERMASTER

II. BUSINESS ITEMS

C. 20-GALLON CHALLENGE

CHINO BASIN WATERMASTER

9641 San Bernardino Road, Rancho Cucamonga, Ca 91730
Tel: 909.484.3888 Fax: 909.484.3890 www.cbwm.org

KENNETH R. MANNING
Chief Executive Officer

STAFF REPORT

DATE: **September 13, 2007**
September 18, 2007
September 27, 2007

TO: **Committee Members**
Watermaster Board Members

SUBJECT: ***20-Gallon Challenge***

SUMMARY

Recommendation – It is recommended that the Watermaster Board adopt Resolution No. 07-04, encouraging residents and businesses to help drought-proof the Chino Basin by participating in the 20-Gallon Challenge for voluntary water conservation.

Fiscal Impact – None

BACKGROUND

Southern California is experiencing the driest year on record and may be entering an extended drought that will seriously impact available water supplies to the cities and water agencies over in the Chino Basin. Chino Basin Watermaster is encouraging its residents and businesses to join the Inland Empire Utilities Agency and Metropolitan Water District *20-Gallon Challenge for* voluntary water conservation. To help people understand how they can save 20 gallons of water a day, Metropolitan Water District and Inland Empire Utilities Agency have created a water conservation media campaign showing conservation tips and the estimated amount of water savings. The *20-gallon Challenge* is being promoted by many water agencies and cities throughout the MWD service area in conjunction with other conservation outreach efforts

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

RESOLUTION 07-04

RESOLUTION OF THE BOARD OF DIRECTORS OF THE CHINO BASIN WATERMASTER, ENCOURAGING RESIDENTS AND BUSINESSES TO HELP DROUGHT-PROOF THE CHINO BASIN BY PARTICIPATING IN THE *20-GALLON CHALLENGE* FOR VOLUNTARY WATER CONSERVATION IN THE CHINO BASIN

WHEREAS, water conservation has always been a way of life for the residents in the Chino Basin; and

WHEREAS, Southern California is experiencing the driest year on record and may be entering an extended drought that will seriously impact available water supply to the cities and water agencies within the Chino Basin; and

WHEREAS, residents and businesses are encouraged to join the *20-Gallon Challenge* for voluntary water conservation; and

WHEREAS, the more people that start meeting the *20-Gallon Challenge,* the more water we can store to better meet next year's water needs; and

WHEREAS, just a few simple changes, such as fixing a leaky faucet can make a big difference in water savings; and

WHEREAS, NOW IS THE TIME TO GET SERIOUS about water conservation and make every drop count;

NOW, THEREFORE, BE IT RESOLVED, by the Board of Directors that the Chino Basin Watermaster recognizes that the water supply situation in the Chino Basin is serious and encourages everyone to make a difference and contribute to the drought-proofing the Chino Basin by taking the *20-Gallon Challenge.*

APPROVED by the Advisory Committee this 27th day of September 2007.
ADOPTED by the Watermaster Board on this 27th day of September 2007.

By: _____
Chairman, Watermaster Board

APPROVED:

_____
Chairman, Advisory Committee

ATTEST:

_____
Board Secretary
Chino Basin Watermaster

STATE OF CALIFORNIA)
) ss
COUNTY OF SAN BERNARDINO)

I, Ken Manning, Secretary of the Chino Basin Watermaster, DO HEREBY CERTIFY that the foregoing Resolution being No. 07-04, was adopted at a regular meeting of the Chino Basin Watermaster Board by the following vote:

AYES: Unanimous

NOES: 0

ABSENT: 0

ABSTAIN: 0

CHINO BASIN WATERMASTER

_____

Secretary

Date: _____

CHINO BASIN WATERMASTER

II. BUSINESS ITEMS

D. ELIMINATION OF SECRETARY II POSITION

CHINO BASIN WATERMASTER

9641 San Bernardino Road, Rancho Cucamonga, Ca 91730
Tel: 909.484.3888 Fax: 909.484.3890 www.cbwm.org

KENNETH R. MANNING
Chief Executive Officer

STAFF REPORT

DATE: **September 27, 2007**

TO: **Watermaster Board Members**

SUBJECT: **Elimination of Secretary II Position**

Summary

Recommendation – Eliminate the position of Secretary II within the Chino Basin Watermaster list of approved positions.

Fiscal Impact – None

BACKGROUND

Chino Basin Watermaster has operated with the position of Secretary II for a number of years. Originally the position was designed to function as a high level administrative support position with a salary that is reflective of that responsibility. That level of support is now designated to the Executive Assistant position and the duties of the Secretary II have become more fundamental. That position is currently vacant and needs to be eliminated.

The CEO will be working with the Personnel Committee over the next few months to establish a new designation of employee that is more reflective of the job duties with a salary schedule commensurate of those duties.

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

CHINO BASIN WATERMASTER

III. REPORTS / UPDATES

A. LEGAL COUNSEL REPORT

1. Court Approval re Subsidence Long Term Plan

MARK D. HENSLEY, CITY ATTORNEY, SBN 142653
CITY OF CHINO HILLS; and
JENKINS & HOGIN, LLP
JOHN C. COTTI, SBN 193139
ELIZABETH M. CALCIANO, SBN 161080
1230 Rosecrans Avenue, Suite 110
Manhattan Beach, California 90266
(310) 643-8448; Fax (310) 643-8441

Attorneys for Defendant, CITY OF CHINO HILLS

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF SAN BERNARDINO

CHINO BASIN MUNICIPAL WATER DISTRICT,

Plaintiff,

vs.

CITY OF CHINO, et al.

Defendants.

CASE NO. RCV 51010

[Assigned for All Purposes to the Honorable MICHAEL GUNN]

CITY OF CHINO HILLS' EVIDENTIARY OBJECTIONS TO WATERMASTER'S MOTION FOR APPROVAL OF WATERMASTER'S LONG TERM PLAN FOR THE MANAGEMENT OF SUBSIDENCE AND EXHIBITS A THROUGH J ATTACHED THERETO

Date: November 5, 2007
Time: 8:30 a.m.
Dept.: R8

TO WATERMASTER, ALL PARTIES AND THEIR ATTORNEYS OF RECORD HEREIN:

The City of Chino Hills ("City" or "Chino Hills") lodges the following evidentiary objections and moves to strike inadmissible evidence contained in

Watermaster's Motion For Approval of Watermaster's Long Term Plan For The Management Of Subsidence ("Watermaster's Motion"), including Exhibits A through J.

1. **Disputed Statements and Exhibits:** The City objects to the admissibility of statements made at page 6:7-9 and 6:18 through page 7:28, in the Section of the Motion entitled "Chronology of the Interim and Long Term Plans," and statements made at page 9: 20-28, page 10: 21-26, page 12:20-22, page12: 25 through page 13:2, page 13:7-11, page 14:23-27, and page 16: 16-19 ("Disputed Statements") and Exhibits B through J attached thereto. These Disputed Statements and Exhibits purport to describe the City of Chino Hills' actions and participation in the development of the Long Term Plan and how that participation affected the Technical Committee's consideration of the Long Term Plan from the period of March 2006 through October 2006. Watermaster attached Exhibits B through J as "evidence" to support the Disputed Statements.

A. Relevance: The Disputed Statements and Exhibits B-J are irrelevant in that they have no bearing on the appropriateness or adequacy of the Long Term Plan. Watermaster proffers these statements for the sole purpose of prejudicing the Court against Chino Hills. As such, they should be excluded.

B. Lack of Foundation: Chino Hills objects to the Disputed Statements and Exhibits B through J because Watermaster failed to lay a foundation. Watermaster ignored the Evidence Code by failing to provide declarations to support the factual statements made in the Motion. Watermaster failed to establish any of the necessary preliminary facts to warrant introduction of this evidence. Because Watermaster fails to provide evidentiary support for these statements, it is unclear which persons at Watermaster or Watermaster's counsel provided the evidentiary basis for these statements. As such, these statements lack foundation.

C. Privilege: The Disputed Statements at page 16:18 through page 7:28 and at page 12:25 through page 13:2 and Exhibits B through G are privileged communications because the parties agreed to treat these communications as good faith settlement

discussions, these statements should be stricken because their inclusion violates Section 1.C. of the Interim Plan for the Management of Subsidence ("Interim Plan") and Exhibit A of the Interim Plan[1] ("Acknowledgement"), (collectively, "Agreements") as well as Evidence Code Section 1152.

Watermaster cited to these privileged Disputed Statements and Exhibits B through G in express violation of the Agreements, which provide that all written or oral communications made between members of the Technical Group and to Watermaster during meetings of the Technical Group are privileged communications protected from disclosure under Evidence Code §1152. *See* Interim Plan, §1.c[2] and the Acknowledgement.[3] In particular, *inter alia,* the Acknowledgement provided that: "**The privilege shall extend to all conversations among and between members of the Technical Group and any written work product that is developed and presented for the primary purpose of consideration by the Technical Group and its members.**" (Emphasis added.) Thus, the privilege extends to more than just the actual conversations

---

[1] Entitled the "Acknowledgement that Technical Group Communications are Privileged Communications and Technical Group Participation Shall Not Be Used As Evidence"

[2] Section 1.c provides as follows: "Full and Fair Discussion. Discussion between and among the members of the Technical Group shall be considered as good faith settlement discussions and therefore privileged as an offer of compromise. This will ensure an environment of full and candid discussion among professionals. Representatives of the Technical Group will be required to execute acknowledgments of the privileged character of the discussions as a precondition to participation in meetings in a form substantially similar to Exhibit "A" attached hereto. The privilege shall extend to all conversations among and between members of the Technical Group and any written work product that is developed and presented for the primary purpose of consideration by the Technical Group and its members. The existence of the privilege shall have no bearing on the existence or non-existence of other potential privileges that may be asserted with regard to any documents, reports or opinions."

[3] The Acknowledgement states, in pertinent part, that: "1. Offer of Compromise. It is hereby agreed by the following parties that all written or oral communications made between or among members of the Technical Group and to Watermaster during meetings of the Technical Group shall be considered privileged communications as good faith settlement discussions. As such, each party agrees that these communications shall be privileged and protected from disclosure as an "offer of compromise" under Evidence Code § 1152. The existence or non-existence of other privileges or the potential application of any privilege to the specific form of communication, whatever the privilege or communication may be, is not affected by this acknowledgment. [¶] 2. Participation Not Evidence. The decision by any party to the Judgment to participate in meetings of the Technical Group or to voluntarily modify their production in exchange for receiving Substitute Water or Alternate Water will not be used by a party as evidence of any fact regarding subsidence in any legal or equitable proceeding of any kind."

and documents in the physical Technical Group meetings. It extends to any conversations and documents that are "for the primary purpose of consideration by the Technical Group and its members." Further, the Interim Agreement provides that: "An important objective and work product of the Technical Group shall be its effort to serve in advisory capacity to assist Watermaster in its development of the Long Term Plan."

Watermaster included these Disputed Statements and Exhibits B through G in an effort to poison the well so that the Court would not consider Chino Hills' legitimate objections to the Long Term Plan. This is exactly why the Agreements included confidentiality provisions -- to shield parties so that they could participate openly without having their words and participation used against them in subsequent court proceedings.

D. Hearsay: The City further objects to the Disputed Statements and Exhibits "B" through "J" to the extent that they contain inadmissible hearsay. Without knowing on what evidentiary basis Watermaster seeks to introduce these exhibits, it is difficult to lodge the appropriate additional objections. If Watermaster is attempting to rely on an exception to the hearsay rule by qualifying some or all of these Exhibits as business records, for example, Watermaster failed to establish that these records were made in the regular course of a business at or near the time of the act, that a qualified witness testifies to their identity and the mode of their preparation; and that the sources of information and method and time of preparation were such as to indicate trustworthiness. See Evidence Code section 1271.

In addition, Watermaster makes bald, general assertions without attributing the statement to a speaker, without laying any foundation, and without establishing that the statements are not inadmissible hearsay. One such glaring example is Watermaster's statement that it "believes that the affected parties in MZ1 are sufficiently concerned with the potential to cause subsidence that the continuation of a voluntary program . . . is the most efficient and effective means to manage subsidence. . ." Motion at 13:7-11.

E. Authentication: Watermaster makes no effort to authenticate any of the statements, records or exhibits it presents to court. See, e.g., Motion at 12:20-22 and 13:7-

11. Because Watermaster fails to establish the genuineness of the Disputed Statements and Exhibits, they should be excluded. See, e.g., Evidence Code Section 1400.

F. Voluntary Curtailment of Production: The Watermaster breached the Interim Plan provision that prevents parties from asserting another party's voluntary curtailment of production against them in subsequent proceedings. *See* Interim Plan at §7(a) and Acknowledgement, §2. As the Court knows, the Interim Plan called for voluntary modifications to the City's groundwater production patterns in the MZ1. *See* Interim Plan, at p. 1. Now, the LTP simply proposes that the producers in the MZ1 continue to voluntarily curtail production from "managed wells" in the MZ1. *See* LTP at p. 2-1. In this connection the Watermaster makes numerous statements that violate this confidentiality provision and which the City now asks this Court to strike. *See* Motion at 6:7-9; 9:20-28; 10:21-26; 14:23-27; and 16:16-19.

2. **The Long Term Plan Itself is Inadmissible Because Its Scientific Basis Is Unsound.** The City objects to the admissibility of Exhibit A, entitled "Long Term MZ1 Subsidence Management Plan" June 2007 ("LTP"), because it was created in violation of accepted scientific method. Unsupported scientific conclusions are inadmissible pursuant to Evidence Code Section 801 (b). Scientific evidence cannot be admitted unless its basis and reliability are recognized by competent authorities. *See Huntington v. Crowley* (1966) 64 Cal.2d 647, 653, 414 P.2d 382, 388; *see also* Evidence Code Section 801 (expert opinion testimony "is limited to such an opinion as is: [¶] (b) Based on matter . . . that is of a type that reasonably may be relied upon by an expert in forming an opinion").

The crux of the LTP is its Subsidence Guidance Criteria for the MZ-1 Producers, which Watermaster concedes "is the basis of" the Long Term Plan. LTP, pp. 1-2. Yet, Watermaster's expert, Wildermuth Environmental, Inc., arrived at this Guidance Criteria after performing only one controlled aquifer pumping test conducted between June 2004 and September 2005. See MZ-1 Summary Report February 2006, attached to LTP ("MZ-1 Summary Report") at pp. 2-1 to 2-2 and 4-1. In essence, the Subsidence Guidance Criteria, under which Watermaster asks the City to continue to "voluntarily" forbear

production in the MZ1, was formulated on the strength of one test. This incomplete scientific method cannot justify Watermaster's hypothesis as to the subsidence threshold (i.e. subsidence guidance level). This is in violation of the accepted scientific method, which requires, at a minimum, that scientists, collectively and over time, endeavor to construct an accurate (i.e. reliable, consistent and non-arbitrary) representation of the world.[4]

Nor can Wildermuth reproduce its result. Established scientific method holds that:

> "[t]he single feature that is most characteristic of science is its reproducibility. If scientists cannot duplicate their first results, they are forced to conclude that these were invalid. This problem occurs often. Its cause is usually some unrecognized, and hence uncontrolled, factor in the experiment (e.g., unrecognized variation in the properties of different batches of the materials used in the experiment)."

Kimball, J., online text, **Kimball's Biology Pages,** attached as Exhibit B found at http://users.rcn.com/jkimball.ma.ultranet/BiologyPages/S/ScientificMethods.html.

Wildermuth themselves recognize the error in their analysis when they state in their MZ-1 Summary report (February 2006) that different pumping conditions may result in a different threshold water level (i.e. subsidence guidance level):

> "The applicability of this limit to increasing distances from the piezometer/extensometer facility is dependent on an approximate replication

---

[4] The scientific method attempts to minimize the influence of bias or prejudice in the experimenter when testing a hypothesis or theory. The scientific method has four steps:
1. Observation and description of a phenomenon or group of phenomena.
2. Formulation of a hypothesis to explain the phenomena.
3. Use of the hypothesis to predict the existence of other phenomena, or to predict quantitatively the results of new observations.
4. Performance of experimental tests of the predictions by several independent experimenters and properly performed experiments.
Villee, Claude E., Biology, Harvard University, pp. 3-4 (1957) (attached as Exhibit A).

of the tested pumping conditions (i.e. specific wells pumped, pumping rates, and pumping durations). A different areal distribution of pumping might cause localized inelastic compaction away from Ayala Park without drawing PA-7 below 250 ft or recording inelastic effects at the extensometer. A different vertical distribution of extraction will stress the aquifer system in a different manner, and may result in a different threshold water level in PA-7."

MZ-1 Summary Report at pp. 2-2 to 2-3.

Wildermuth clearly recognized that its one test was insufficient to justify the 245-foot Guidance Criteria and that any change in the wells pumped, in the pumping rates or durations, or well depth would likely lead to a different result.[5] Despite this fatal flaw, Watermaster asks for the Court's approval of the LTP that contains a Guidance Criteria that is based on a guess, not on scientific evidence. Therefore, the LTP is inadmissible pursuant to Evidence Code Section 801 and applicable case law, and the City of Chino Hills requests that Exhibit A be stricken.

Nor has Watermaster established the Wildermuth has the qualifications necessary to undertake the one test it did perform or opine on the adequacy of the Long Term Plan. Watermaster fails to establish in its Motion that Wildermuth has any of the requisite knowledge, skill, experience or training necessary to make the broad assertions set forth in the Motion and Long Term Plan.

CONCLUSION

For the foregoing reasons, the City respectfully requests that the Court strike the Disputed Statements as set forth above and Exhibits B through J. In addition, the City

[5] Before the Special Referee in 2005, Mr. Wildermuth himself testified that the Long Term Plan process would require "several more years of studies and model development and analysis . . . , followed by 12 months to reach an agreement on a long-term plan." Special Referee Report dated June 16, 2005, at 6:9-12 (attached to the Motion at Exhibit A, MZ-1 Summary Report, Appendix A). The Special Referee made this point as well. *Id.* at 8:22-26. Despite the recognition that more testing and analysis was required, Watermaster still put forth a Long Term Plan relying on this one test to establish its Guidance Criteria.

also requests that this Court strike the proposed LTP, Exhibit A, in its entirety on the grounds that it relies on an improper scientific method.

While the City has not formally noticed these objections as a Motion, the City requests the Court's guidance prior to the hearing on Watermaster's Motion.

DATED: September 17, 2007

MARK D. HENSLEY, CITY ATTORNEY
CITY OF CHINO HILLS; and
JENKINS & HOGIN, LLP

By: _____
MARK D. HENSLEY
Attorneys for CITY OF CHINO HILLS

EXHIBIT "A"

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Claude A. Villee
Harvard University

BIOLOGY

Third Edition

W. B. Saunders Company
Philadelphia and London

REPRINTED AUGUST, 1957 AND JANUARY, 1958

Made in the United States of America at the Press of W. B. Saunders Company.

LIBRARY OF CONGRESS CATALOG CARD NUMBER: 57–7051

THIS BOOK was writ
that biology is a defir
and theories, concerne
facets of all kind of liv
it is not simply a mix
determined ratio, of b
anatomy and physiol
evolution, or any other
To bring to the fore the
which are basic to t
things, this edition con
(Chapter Two) in whi
jor generalizations of
discussed. These, of
fully appreciated at
but they should be hel
frame of reference f
chapters. They could
profit later in the cours
contains, in addition t
major revisions in the c
evolution, and human a
ology, and smaller cha
A number of illustrati
placed and many nev
added. The new line
edition were made by R
Limberg, and William (

In writing an introdu
ficult to steer a true c
Scylla of superficiality
of overdetail. This text
the major facts and pr
biology without supe
without undue emphas
students find the facts

Chapter 1

Introduction: Biology and the Scientific Method

IN ONE sense, biology is a very old science, for men began many centuries ago to study living things in attempts to solve the fascinating riddle of life. There was a considerable body of knowledge and theories about living things in the time of Aristotle (384–322 B.C.), and even in the older civilizations of Egypt, Mesopotamia and China much was known about practical uses of plants and animals. In fact, the cave men who lived 50,000 and more years ago must have been first rate biologists for they drew accurate and artistic pictures on the walls of their caves of the deer, cattle and mammoths that lived around them. The survival of early man depended on a knowledge of such fundamental biologic facts as which animals were dangerous and which plants could be safely eaten.

Yet in another sense biology is a young science. The major generalizations which are the foundations of any science have been made comparatively recently in biology and many of them are still being revised. The development of the electron microscope, for example, and the recent discovery of ways to prepare tissues for examination in this instrument, have revealed a whole new order of complexity in living matter.

1. EARLY HISTORY OF BIOLOGY

Biology as an organized body of knowledge can be said to have begun with the Greeks. They and the Romans described the many kinds of plants and animals known at the time. Galen (131–200 A.D.) described the anatomy of the human body and was the unchallenged authority for 1300 years. His descriptions, however, were based on dissections of apes and pigs and contained many errors. Galen was the first experimental physiologist and performed many experiments, mostly on pigs, to study the functions of nerves and blood vessels. Men such as Pliny (23–79 A.D.) prepared encyclopedias which were strange mixtures of facts and fiction about living things. In the succeeding centuries of the Middle Ages men wrote "herbals" and "bestiaries," cataloguing and describing plants and animals respectively. With the Renaissance interest in natural history revived and more accurate studies of the structure, functions and life habits of countless plants and animals were made. Vesalius (1514–1564), Harvey (1578–1657) and John Hunter (1728–1793) studied the structure and functions of animals in general and man in particular and laid the foundations of anatomy and physiology. With the invention of the micro-

scope early in the seventeenth century, Malpighi (1628–1694), Swammerdam (1637–1680) and Leeuwenhoek (1632–1723) investigated the fine structure of a variety of plant and animal tissues. Leeuwenhoek was the first to describe bacteria, protozoa and sperm.

Biology expanded and altered greatly in the nineteenth century and has continued this trend at an accelerated pace in the twentieth. This is due in part to the broader scope and more detailed knowledge available today and in part to the new approaches made possible by the discoveries and techniques of physics and chemistry. In the past hundred years many biologists have been drawn to the level of inquiry represented by biophysics and biochemistry. This book is not primarily concerned with that level, but some knowledge of the ultramicroscopic world of atoms and molecules is necessary for a real understanding of even the simplest biologic processes.

2. THE BIOLOGICAL SCIENCES

The usual definition of biology as the "science of life" is only meaningful if we have some idea of what life and science mean. Life does not lend itself to a simple definition and its characteristics—growth, movement, metabolism, reproduction and adaptation—will be discussed in Chapter 3. Biology is concerned with the myriad forms that living things may have, with their structure, function, evolution, development and relations to their environment. It has grown to be much too broad a science to be investigated by one man or to be treated thoroughly in a single textbook, and most biologists are specialists in some one of the biological sciences. The **botanist** and **zoologist** study types of organisms and their relationships within the plant and animal kingdoms respectively. The sciences of **anatomy, physiology** and **embryology** deal with the structure, function and development of an organism; these can be further subdivided according to the kind of organism investigated: e.g., animal physiology, mammalian physiology, human physiology. The **parasitologist** studies those forms of life that live in and at the expense of other forms, the **cytologist** investigates the structure, composition and function of cells, and the **histologist** inquires into the properties of tissues. The science of **genetics** is concerned with the mode of transmission of the characteristics of one generation to another, and is closely related to the study of **evolution,** which attempts to discover how new species arise, as well as how the present forms evolved from previous ones. The study of the classification of plants and animals and their evolutionary relations is known as **taxonomy.** One of the newest biological sciences is **ecology,** the study of the relations of a group of organisms to its environment, including both the physical factors and other living organisms which provide food or shelter for it, or compete with or prey upon it.

There are also specialists who deal with one kind of living thing—ichthyologists, who study fish, mycologists, who study fungi, ornithologists, who study birds, and so on.

3. SOURCES OF SCIENTIFIC INFORMATION

Where, you may ask, do all the facts about biology described in this book come from? And how do we know they are true? The ultimate source of each fact, of course, is in some carefully controlled observation or experiment made by a biologist. In earlier times, some scientists kept their discoveries to themselves, but now there is a strong tradition that scientific discoveries are public property and should be freely published. It is not enough in a scientific publication for a man to say that he has discovered a certain fact; he must give all the relevant details by which the fact was discovered so that others can repeat the observation. It is this criterion of **repeatability** that makes us accept a certain observation or experiment as representing a true fact; observations that cannot be repeated by competent investigators are discarded.

When a biologist has made a discovery, he writes a report, called a "paper," in which he describes his methods in sufficient detail so that another can repeat them, gives the results of his observations, discusses the conclusions to be drawn

from them, perhaps
to explain them, an
of these new facts in
scientific knowledge.
his discovery will be
scrutiny of his collea
ulus for carefully re
tions or experimen
them. He then subm
lication in one of the
in the particular fiel
is estimated that t
7,000 of them publis
the various fields o
read by one or more
tors of the journal,
perts in the field. If
published and thus
literature" of the sub

At one time, wh
journals, it might h
one man to read ther
appeared, but this is
now. Journals such
stracts assist the har
publishing, classified
reports or **abstracts**
lished—giving the fa
erence to the jour
number of journals
viewing the newer
ticular fields have s
twenty-five years; so
ological Reviews, T
Quarterly Review of
view of Microbiolo
views. The new fac
comes widely know
in a professional jou
in abstract and revie
ually may become a
textbook.

Other means for
new knowledge are
held by the professio
ists, geneticists, ph
specialists at which
discussed. There are
national and inter
called **symposia,** of
field to discuss the n
present status of th
field. The discussio
are usually publishe

from them, perhaps formulates a theory to explain them, and indicates the place of these new facts in the present body of scientific knowledge. The knowledge that his discovery will be subjected to the keen scrutiny of his colleagues is a strong stimulus for carefully repeating the observations or experiments before publishing them. He then submits his paper for publication in one of the professional journals in the particular field of his discovery (it is estimated that there are more than 7,000 of them published over the world in the various fields of biology!) and it is read by one or more of the board of editors of the journal, all of whom are experts in the field. If it is approved, it is published and thus becomes part of "the literature" of the subject.

At one time, when there were fewer journals, it might have been possible for one man to read them each month as they appeared, but this is obviously impossible now. Journals such as *Biological Abstracts* assist the hard-pressed biologist by publishing, classified by fields, very short reports or **abstracts** of each paper published—giving the facts found, and a reference to the journal. A considerable number of journals devoted solely to reviewing the newer developments in particular fields have sprung up in the past twenty-five years; some of these are *Physiological Reviews, The Botanical Review, Quarterly Review of Biology, Annual Review of Microbiology* and *Nutrition Reviews*. The new fact or theory thus becomes widely known through publication in a professional journal and by reference in abstract and review journals, and eventually may become a sentence or two in a textbook.

Other means for the dissemination of new knowledge are the annual meetings held by the professional societies of botanists, geneticists, physiologists and other specialists at which papers are read and discussed. There are, from time to time, national and international gatherings, called **symposia,** of specialists in a given field to discuss the newer findings and the present status of the knowledge in that field. The discussions of these symposia are usually published as books.

4. THE SCIENTIFIC METHOD

The facts of biology are gained by the application of the scientific method, yet it is difficult to reduce this method to a simple set of rules that apply to all the branches of science. One of the basic tenets of the scientific method is the rejection of authority—the refusal to accept a statement just because someone says it is so. The skeptical scientist wants confirmation of the statement by the independent observation of another.

The basis of the scientific method and the ultimate source of all the facts of science is careful, close observation and experiment, free of bias and done as quantitatively as possible. The observations or experiments may then be analyzed, or simplified into their constituent parts, so that some sort of order can be brought into the observed phenomena. Then the parts can be synthesized or reassembled and their interactions discovered. On the basis of these observations, the scientist constructs a **hypothesis,** (a trial idea about the nature of the observation) or possibly the connections between a chain of events, or even cause and effect relationships between different events. It is in the construction of hypotheses that scientists differ most and that true genius shows itself. The ability to see through a mass of data and suggest a reason for their interrelations is all too rare.

It must be emphasized that science does not advance by the mere accumulation of facts, or by the mere postulation of hypotheses. The two go hand-in-hand in most scientific investigations: hypothesis, observation, revised hypothesis, further observation, and so on. When a scientist embarks upon an investigation he has the advantage of the relevant facts already known with which to build a "working hypothesis" to guide the design of his experiments. When a scientist makes an observation that does not agree with his hypothesis he may conclude either that his hypothesis or that his observation is wrong. He then repeats his observation, perhaps altering the design of his experiment to get at the relationship in a new way, or perhaps using a different technique. If he can satisfy himself that

his observation is valid, he either discards his hypothesis or amends it to account for the new observation. In the final analysis, each new observation must either agree or disagree with the hypothesis to be useful.

Hypotheses are constantly being refined and elaborated. There are few scientists who consider any hypothesis, no matter how many times it may have been tested, as a statement of absolute and universal truth. The hypothesis is simply regarded as the best available approximation to the truth for some finite range of circumstances. The Law of the Conservation of Energy (p. 72), for example, was widely accepted until the work of Einstein showed that it had to be modified to allow for the possible interconversion of matter and energy. Although this might have seemed to be an inconsequential distinction at one time, for it has no importance at all in ordinary chemical processes, it is the theoretical basis of atomic power.

Once a hypothesis has been set up to explain a certain body of facts, the rules of formal logic can be used to deduce certain consequences. In a science such as physics, and to a lesser extent in biology, the hypotheses and deductions can be stated in mathematical terms and elaborate and far-reaching conclusions can be drawn. On the basis of these deductions the results of other observations and experiments can be predicted and the hypothesis can be tested by its ability to make valid predictions. If the hypothesis is a simple generalization, it may be enough simply to examine more examples and see if the generalization holds true. More complex hypotheses, that perhaps cannot be tested directly, can be tested by seeing whether certain logical deductions from the hypothesis hold true. A hypothesis must be subject to some sort of experimental test—it must make a prediction that can be verified in some way—or it is mere speculation.

A hypothesis that fits a large body of different types of observations becomes a **theory**, which is defined by Webster as "a scientifically acceptable general principle offered to explain phenomena; the analysis of a set of facts in their ideal relations to one another." A good theory relates, from one point of view, facts which previously appeared unrelated and which could not be explained on common ground. A good theory grows; it relates additional facts as they become known. Indeed, it predicts new facts and suggests new relationships between phenomena.

A good theory, by showing the relationship between classes of facts, simplifies and clarifies our understanding of natural phenomena. In the words of Einstein, "In the whole history of science from Greek philosophy to modern physics, there have been constant attempts to reduce the apparent complexity of natural phenomena to some simple, fundamental ideas and relations." Science is really the search for simplicity. William of Occam, a fourteenth century philosopher made the dictum, *"Essentia non sunt multiplicanda praeter necessitatem"*, or "Entities should not be multiplied beyond necessity." This principle of parsimony (often called **Occam's razor** because it pares a theory to its bare essentials) means that no more forces or causes should be postulated than are necessary to account for the phenomena observed. In practice, this means that the simplest explanation which will account satisfactorily for all the known facts is to be preferred. A new theory in biology, by clearing away previous misconceptions and by pointing up new interrelations of phenomena, not only stimulates research in theoretical biology, it also provides the basis for a host of practical advances in medicine, agriculture, and similar fields.

A poor theory, in contrast, when its consequences are followed, will sooner or later lead to absurdities and clear, irreconcilable contradictions. It frequently happens that at some stage in our knowledge two, or even more, alternative theories provide equally good explanations for the data at hand. But as more observations or experiments are made, one or the other (or perhaps both!) are ruled out.

The scientific method, then, consists of making careful observations and arranging these observations so as to bring order into the observed phenomena. Then we try to find a hypothesis or a **conceptual scheme** which will explain not only the

facts already observed but also new facts as they are discovered. Sciences differ widely in the extent to which they are predictable and there are some who claim that biology is not a science because it is not completely predictable. However, even physics, generally regarded as the most "scientific" of the sciences, is far from completely predictable. Although we can predict the occurrence of eclipses, we cannot make predictions in the field of quantum mechanics, nor can we predict an earthquake, or even tomorrow's weather.

In most scientific studies one of the ultimate goals is to explain the cause of some phenomenon, but the hard-and-fast proof that a cause and effect relationship exists between two events is extremely difficult to obtain. If the circumstances leading to a certain event always have a certain factor in common in a variety of cases, that factor may be the cause of the event. The difficulty lies in making sure that the factor under consideration is the *only* one common to all the cases. For example, it would be wrong to conclude from finding that Scotch and soda, bourbon and soda, and rye and soda all produce intoxication, that soda is the only factor in common and therefore the cause of the intoxication! This method of discovering the common factor in a variety of cases that may be the cause of the event (known as the **method of agreement**) can seldom be used as a valid proof because of this difficulty in being sure that it really is the only common factor. The finding that all people suffering from beriberi have diets which are low in thiamine is not proof that this deficiency causes the disease, for there may be many other factors in common.

Another method for unraveling cause and effect relations is the **method of difference:** If two sets of circumstances differ in only one factor, and the one containing the factor leads to an event and the other does not, the factor may be considered the cause of the event. For example, if two groups of rats are fed diets which are identical except that one contains all the vitamins and the second contains all but thiamine, and if the first group grows normally and the second group fails to grow and ultimately develops polyneuritis, this would be a strong suggestion, but not absolute proof, that polyneuritis or beriberi in rats is caused by a deficiency of thiamine. By using an inbred strain of rats that are as alike as possible in inherited traits, and by using litter mates (brothers and sisters) of this strain, one could make certain that there were no hereditary differences between the controls (the ones getting the complete diet) and the **experimentals** (the ones getting the thiamine-deficient diet). It could conceivably be that the diet without thiamine does not have as attractive a taste as the one with it, and the experimental group simply ate less food, failed to grow and developed the deficiency symptoms because they were partially starved. This source of error can be avoided by "pair-feeding," by pairing a control and an experimental animal, weighing the food eaten each day by each of the experimental animals and then giving only that much food to each control member of the pair.

A third way of detecting cause and effect relationships is the **method of concomitant variation:** If a variation in the amount of a given factor produces a parallel variation in the effect, the factor may be the cause. Thus if other groups of rats were given diets with varying amounts of thiamine and if the amount of protection against beriberi varied directly with the amount of thiamine in the diet, we could be reasonably sure that thiamine deficiency is the cause of beriberi.

It must be emphasized that it is seldom that we can be more than "reasonably sure" that X is the cause of Y. As more experiments and observations lead to the same result, the probability increases that X is the cause of Y. When experiments or observations can be made quantitative—when their results can be measured in some way—one can, by the methods of statistical analysis, determine the probability that X is the cause of Y, or the probability that Y follows X simply as a matter of chance. Scientists are usually satisfied that there is some sort of cause and effect relationship between X and Y if they can show that there is less than one chance in a hundred that the observed

X — Y relationship could be due to chance alone. A statistical analysis of a set of data can never give a flat yes or no to a question—it can only state that something is very probable or very improbable. It can also tell an investigator approximately how many more experiments he must do to reach a given probability that Y is caused by X.

Each experiment must contain a control group—one treated exactly like the experimental group in all respects but one, the factor whose effect is being tested. The use of controls in medical experiments raises the difficult question of the moral justification of withholding treatment from a patient who might be benefited by it. If there is sufficient evidence that one treatment is better than a second one, a physician would hardly be justified in further experimentation. However, the medical literature is full of treatments now known to be useless or even harmful, which were used for years but finally were abandoned as experience showed they were ineffective and that the evidence which had suggested their use originally was improperly controlled. There is a time in the development of any new treatment when the medical profession is not only morally justified but really morally required to do carefully controlled tests on human beings to be sure that the new treatment is better than the former one.

In such tests it is not sufficient simply to give a treatment to one group of patients and not to give it to another, for it is widely known that there is a strong psychologic effect in simply giving a treatment. For example, a group of students at a large western university served as subjects for a test of the hypothesis that daily doses of extra amounts of vitamin C might help prevent colds. This grew out out of the observation that people who drank lots of fruit juice seemed to have fewer colds. The group receiving the vitamin C showed a 65 per cent reduction in the number of colds contracted during the winter when they were receiving treatment compared to the previous winter when they were not receiving treatment. There were enough students in the group (208) to make this result statistically significant. In the absence of controls, one would have been led to conclude that vitamin C does help prevent colds. But a second group was given "placebos," pills identical in size, shape, color and taste to the vitamin C pills but without any vitamin C. The students were not told who was getting vitamin C and who was not, they only knew they were getting pills that might help prevent colds. The group getting placebos showed a 63 per cent reduction in the number of colds; thus, vitamin C had nothing to do with the result and the reported reductions in both groups were probably psychological effects.

In all experiments, the scientist must ever be on his guard against bias in himself, bias in the subject, bias in his instruments, and bias in the way the experiment is designed. The proper design of experiments is a science in itself, but one for which only general rules can be made.

A hypothesis that has been tested and found to fit the facts and capable of making valid predictions may then be called a theory, a principle, or a law. Although there is some connotation of greater reliance in a statement called a "law" than in one called a "theory," the two words are used interchangeably.

5. APPLICATIONS OF BIOLOGY

Some of the practical uses of a knowledge of biology will become apparent as the student reads on through this text—its applications in the fields of medicine and public health, in agriculture and conservation, its basic importance to the social studies, and its contributions to the formulation of a philosophy of life. There are esthetic values in a study of biology as well. A student cannot expect to learn all or even many of the names and characteristics of the vast variety of plants and animals, but a knowledge of the structure and functions of the major types will greatly increase the pleasure of a stroll in the woods or an excursion to the seashore. The average city-dweller gets only a small glimpse of the vast panorama of living things, for so many of them live in places where they are not easily seen—the sea, or parts of the earth that are not easily visited. Trips to botanical gardens, zoos,

aquariums and muse
one an appreciation
variety of living thing

It is impossible to c
life without reference
places in which they
to one of the major
schemes of biology, t
of a given region are
with each other and w
The study of this is ba
present forms of life a
or less closely by evol
we deal with each of
the facts about them
derstand and remem
them into their place
woven tapestry of life

In our discussions
we will focus our att
man, to gain an ap
place in the biologic
man's somewhat bia
stands in the center
other animals and pl
serve him. In numbe
durance and adaptab
many animals and i
the environment—wh
may be considered
portant biologic attrib
ganism—he often fa
survey study of ge
practical consideratic
mand that our discus
for we are primarily
things as the human
human gestation per
ance of the human b

QUESTIONS

1. How would you de
2. Contrast a hypothe

ntrols, one would have
le that vitamin C does
. But a second group
os," pills identical in
nd taste to the vitamin
t any vitamin C. The
told who was getting
o was not, they only
etting pills that might
s. The group getting
63 per cent reduction
colds; thus, vitamin C
with the result and the
s in both groups were
ical effects.

nts, the scientist must
d against bias in him-
ject, bias in his instru-
he way the experiment
oper design of experi-
in itself, but one for
rules can be made.
it has been tested and
s and capable of mak-
s may then be called a
, or a law. Although
notation of greater re-
nt called a "law" than
heory," the two words
geably.

OF BIOLOGY

ctical uses of a knowl-
ll become apparent as
on through this text—
the fields of medicine
n agriculture and con-
importance to the so-
s contributions to the
ilosophy of life. There
n a study of biology as
not expect to learn all
e names and character-
riety of plants and ani-
ledge of the structure
the major types will
pleasure of a stroll in
cursion to the seashore.
veller gets only a small
st panorama of living
of them live in places
easily seen—the sea,
rth that are not easily
otanical gardens, zoos,

aquariums and museums will help give one an appreciation of the tremendous variety of living things.

It is impossible to describe the forms of life without reference to their habitats, the places in which they live. This brings us to one of the major unifying conceptual schemes of biology, that the living things of a given region are closely interrelated with each other and with the environment. The study of this is basic to sociology. The present forms of life are also related more or less closely by evolutionary descent. As we deal with each of the major life forms, the facts about them will be easier to understand and remember if we try to fit them into their place in the closely interwoven tapestry of life.

In our discussions of biologic principles we will focus our attention primarily on man, to gain an appreciation of man's place in the biologic world. It is only in man's somewhat biased opinion that he stands in the center of the universe, with other animals and plants existing only to serve him. In numbers, size, strength, endurance and adaptability he is inferior to many animals and in his adjustment to the environment—which, as we shall see, may be considered to be the most important biologic attribute of any living organism—he often fails. However, in a survey study of general biology, both practical considerations and interest demand that our discussions focus on man, for we are primarily concerned with such things as the human stomach ache, the human gestation period, and the endurance of the human body.

QUESTIONS

1. How would you define "science"?
2. Contrast a hypothesis and a law.
3. How would you go about testing the hypothesis that beriberi is caused by a deficiency of thiamine?
4. What would you consider to be proof that beriberi is caused by thiamine deficiency?
5. To which of the biologic sciences would you assign the following scientific papers:
   The Flora of Northern Michigan.
   The Fate of the Aortic Arches in the Development of the Chick.
   The Regulation of the Heart Rate.
   The Geographical Distribution of the Species of Wheat.
6. Describe in your own words the mode of operation of the scientific method.
7. Contrast the "method of agreement" and the "method of difference" as means of establishing cause and effect relationships.
8. What characteristics and attitudes do you think would be helpful for a career in science?
9. What is meant by a "controlled experiment"?

SUPPLEMENTARY READING

There are a number of fine books on the history of science: The development of the sciences in general is described in Sedgwick, Tyler and Bigelow's *A Short History of Science,* and a discussion of the role of science in society is given in J. B. Conant's *On Understanding Science.* The histories of the biologic sciences by Nordenskiöld and by Singer are well written and informative. The *History of Medicine* written by Douglas Guthrie describes the beginnings of anatomy, physiology and bacteriology.

The scientific method and its application to research problems are discussed in Conant's *Science and Common Sense* and Cohen's *Science, Servant of Man.* E. Bright Wilson's *An Introduction to Scientific Research* gives an excellent discussion in nontechnical terms of the methods of science and some of the problems involved in scientific investigation. W. B. Cannon's *The Way of an Investigator* gives some interesting examples of the scientfic method in medical research. *In the Name of Science,* by Martin Gardner, describes many pseudosciences and, in showing up their shortcomings, gives an appreciation for scientific evidence and standards.

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

EXHIBIT "B"

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Scientific Methods

Index to this page

There is nothing mysterious or even particularly unusual about the things that scientists do.

There are many ways to work on scientific problems. They all require common sense. Beyond that, they all display certain features that are especially — but not uniquely — characteristic of science.

For example:

- Skepticism. Good scientists use highly-critical standards in the judging of evidence. They approach data, claims, and theories (ideally, even their own!) with healthy doses of skepticism.
- Tolerance of uncertainty. Scientists often work for years — sometimes for an entire career — trying to understand one scientific problem. This often involves finding facts that, for a time, fail to fit into any coherent pattern and that even may support mutually contradictory explanations.

  Sometimes, as one listens to scientists vigorously defending their views, their confidence seems absolute. But deep in their hearts, they know that their views are based on probabilities and that a new piece of evidence may turn up at any time and force a major shift in their views.

- Although they certainly have no monopoly on hard work, their willingness to work long hours and years pursuing a problem is the mark of all good scientists. For science is hard work.
- Before undergoing the frustrations — tempered by occasional joys — of wresting more secrets from nature, you must learn the foundations on which your subject is based.

Although scientific methods are as varied as science itself, there is a pattern to the way that scientists go about their work.

Scientific advances begin with observations.

- A census of the members of a species in some habitat is an observation.
- The readings on the display of a laboratory instrument are observations.

But science is more than a catalog of facts.

The goal of science is to find **an explanation for why the facts are as they are.** Such an explanation is a **hypothesis.**

Link to a case study illustrating the scientific method at work.

Testing Hypotheses

A good hypothesis meets several standards.

- It should provide an adequate explanation of the observed facts.
- If two or more hypotheses meet this standard, the simpler one is preferred.
- It should be able to **predict** new facts.

So if a generalization is valid, then certain specific consequences can be **deduced** from it.

One of the most exciting events in science is to

- predict the results of an experiment not yet performed if the hypothesis is valid and then to
- perform the experiment.

Link to an example.

The Null Hypothesis

Experimental biology often involves setting up an experimental treatment and — at the same time — a **control**. Then one compares the results of the experimental treatment with the results in the controls. If there is a difference, what is the probability that it is due to chance alone; that is, the experimental treatment really had no effect?

The hypothesis that the experimental treatment had no effect is called the **null hypothesis**.

Most workers feel that if the probability (designated p) of the observed difference is less than 1 in 20 ($p = <0.05$), then the null hypothesis is disproved and the observed difference is **significant**.

Link to discussion of statistical methods.

But significance is not proof. In fact, hypotheses can never be proven to be absolutely "true" is the sense that a theorem in geometry can. The most we can say is that there is a high probability that the hypothesis provides a valid explanation of the phenomenon being studied.

Hypotheses that are supported by many observations come to be called **theories**.

Reproducibility of Scientific Work

The single feature that is most characteristic of science is its reproducibility. If scientists cannot duplicate their first results, they are forced to conclude that these were invalid. This problem occurs often. Its cause is usually some unrecognized, and hence uncontrolled, factor in the experiment (e.g., unrecognized variation in the properties of different batches of the materials used in the experiment). With luck, the inability to reproduce experiments will be discovered by the same scientists who did the first experiments. This is why scientists generally repeat their experiments several times before reporting them in a scientific paper.

Link to a description of the format of scientific papers.

On other occasions, workers in another laboratory fail to secure the same results when they

- repeat experiments that have been published or, more often,
- perform experiments designed to carry the study into new areas, but these fail because of a flaw in the original experiments.

When this happens, all the parties concerned should get together to see if they can find out why their results differ.

- Often it is simply a matter of not using precisely the same materials and methods.
- Sometimes, however, a serious flaw may be discovered in the design and/or execution of the original experiments.
- And sometimes it proves impossible to find out why experiments that once seemed to work no longer do so.

In any of these cases, the failure to confirm the experiments must be reported.

Although this is acutely embarrassing for the original investigators, it represent one of the great strengths of science: its **built-in system for self-correction**.

Scientific Fraud

In the vast majority of cases, irreproducible results in science are caused by honest errors.

On rare occasions, however, laboratory reports cannot be confirmed because they are fraudulent. This is distressing to all concerned. If such a fraud becomes widely known, it is also likely to cause a great deal of excitement among the general public.

I believe, however, that rather than casting a cloud over the scientific enterprise, these rare aberrations reveal its great strength.

There is probably no other area of human activity where error is detected and corrected more rapidly. I am confident that you can think of a number of other fields of human study and activity where errors have been made that went uncorrected for years and caused widespread harm.

Dishonest scientists usually harm only themselves. They are disgraced; their careers often at an end.

But the progress of science usually moves forward as fast as (sometimes faster than) before.

Building on the Work of Others

Only rarely does a scientific discovery spring full-blown on the scene. When it does, it is likely to create a revolution in the way scientists perceive the world around them and to open up new areas of scientific investigation. Darwin's theory of evolution [Link] and Mendel's rules of inheritance [Link] are examples of such revolutionary developments.

Most science, however, consists of adding another brick to an edifice that has been slowly and painstakingly constructed by prior work. In fact, it is possible to construct a genealogical tree that traces the historical development of any scientific discovery (even, to a degree, Darwin's and Mendel's). The way in which science builds on the work of others is another illustration of what a communal activity science is.

The development of a new **technique** often lays the foundation for rapid advances along many different scientific avenues. Just consider the advances in biology that discovery of the light microscope and, later, the electron microscope have made possible. Throughout these pages, there are many examples of experimental procedures. Each was developed to solve a particular problem. However, each was then taken up by workers in other laboratories and applied to their problems.

In a similar way, the creation of a new explanation (**hypothesis**) in a scientific field often stimulates workers in related fields to reexamine their own field in the light of the new ideas. Darwin's theory of evolution, for example, has had an enormous impact on virtually every subspecialty in biology (and in other fields as well). To this very day, biologists in specialties as different as biochemistry and animal behavior are guided in their work by evolutionary theory.

Basic Versus Applied Science

The distinction between basic and applied science is more one of goals than of methods. The same rules and standards apply to each.

However, the motivation behind the work is somewhat different. Researchers in applied science have before them a practical problem to be solved. Much of the research that goes on in medicine and in agriculture is applied.

The researcher in basic science, on the other hand, is primarily driven by curiosity - the desire to find out more about how nature works.

Both types of research are not only honorable and demanding professions, but they are mutually dependent as well.

- Applied science repeatedly loses momentum without periodic infusions of fresh ideas and discoveries from basic research. (The light bulb would never have been discovered in the research and development (R and D) department of a candle manufacturer!)
- On the other hand, much basic research has depended on the development of new tools and instruments and, more often than not, these have been developed in laboratories devoted to applied research.

Welcome&Next Search

20 June 2007

CHINO BASIN WATERMASTER

III. REPORTS / UPDATES

E. INLAND EMPIRE UTILITIES AGENCY

6. Monthly Water Conservation Programs Report
7. Monthly Imported Water Deliveries Report (handout)
8. State and Federal Legislative Reports
9. Community Outreach/Public Relations Report

CHINO BASIN WATERMASTER

ADVISORY COMMITTEE

September 27, 2007

AGENDA

INTERAGENCY WATER MANAGERS' REPORT

Chino Basin Watermaster

9641 San Bernardino Road

Rancho Cucamonga, CA 91730

15-20 Minutes

Discussion Items:

- Three-year Recycled Water Business Plan
- Drought Planning Update
- Proposed Landscape Rebate Programs

Written Updates:

- Monthly Water Conservation Programs Report
- Monthly Imported Water Deliveries Report - **Oral**
- State and Federal Legislative Reports
- Community Outreach/Public Relations Report

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Inland Empire
UTILITIES AGENCY*
*A Municipal Water District

Clean, inexpensive, plentiful water

Regional Recycled Water Program 3-Year Business Plan

Regional Sewerage Program Technical/Policy Committees September 6, 2007

Refer: IEUA Board Workshop August 29, 2007

Inland Empire
UTILITIES AGENCY*
*A Municipal Water District

Clean, inexpensive, plentiful water

Chief Executive Officer's Message*

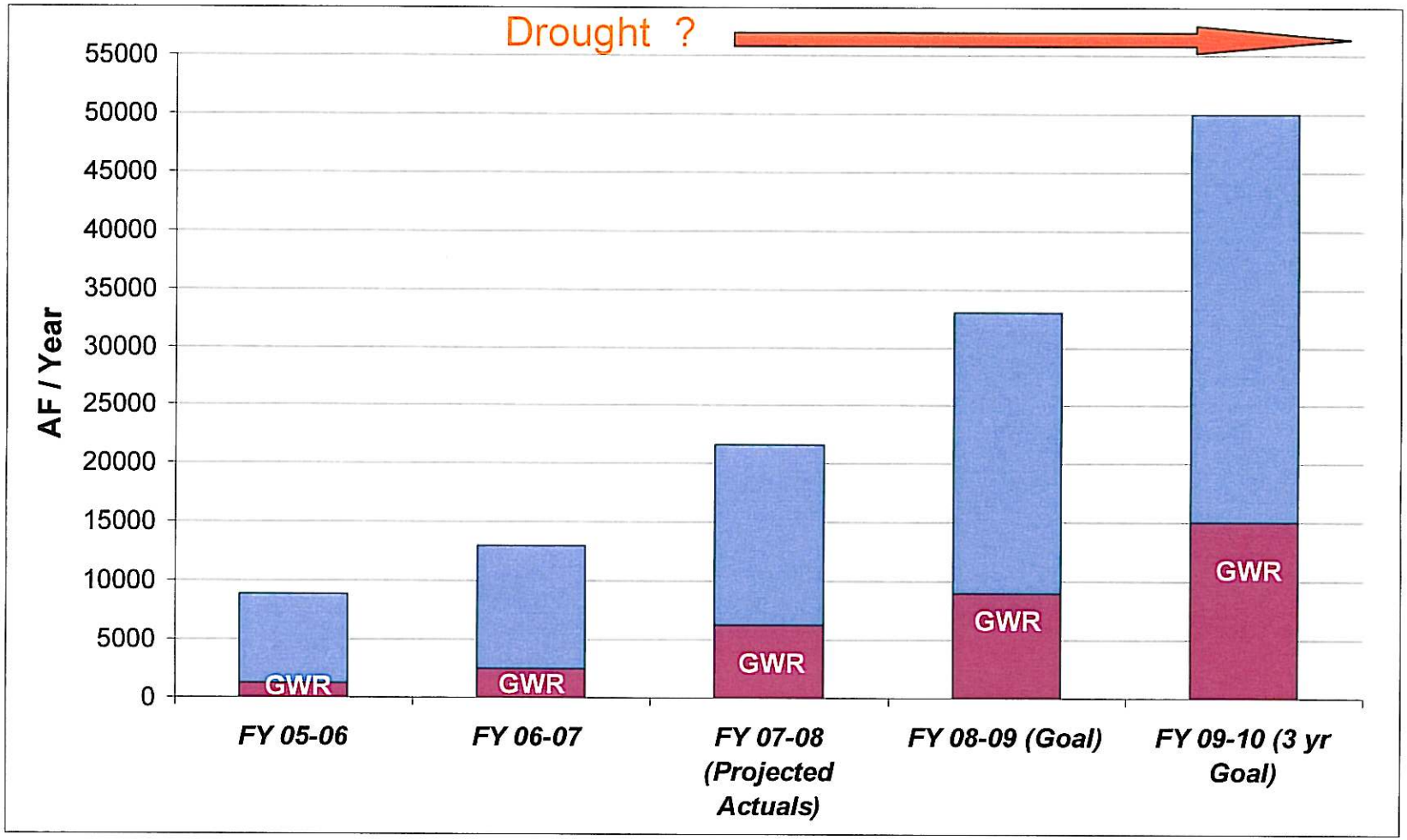
"Water supply issues are front page because of drought conditions and the endangered species "regulatory" and litigious environment. As a result IEUA priorities during the next fiscal year will be significantly affected by the potential reduction of MWD imported supplies to our service area. To compound the water problems during the past winter it was the lowest annual rainfall total on record in southern California. Utilizing our MWD drought groundwater storage account, increasing recycled water use and additional conservation measures will be critical to assuring adequate supply to our 800,000 residents….."

* **Excerpt from the Operating and Capital Program Budget- FY 2007/08, June 20, 2007**

Inland Empire
UTILITIES AGENCY*
*A Municipal Water District

Clean, inexpensive, plentiful water

Planned Recycled Water Use



Inland Empire
UTILITIES AGENCY*
*A Municipal Water District

Clean, inexpensive, plentiful water

RECYCLED WATER: THREE (3) YEAR BUSINESS PLAN

- **Focus:** "Rapidly" and cost effectively increase the current amount of recycled water (RW) with a structured Business Plan (Plan). The Plan will have annual usage goals, metrics, and requirements for monthly progress reports. The Plan will be revised and updated annually.

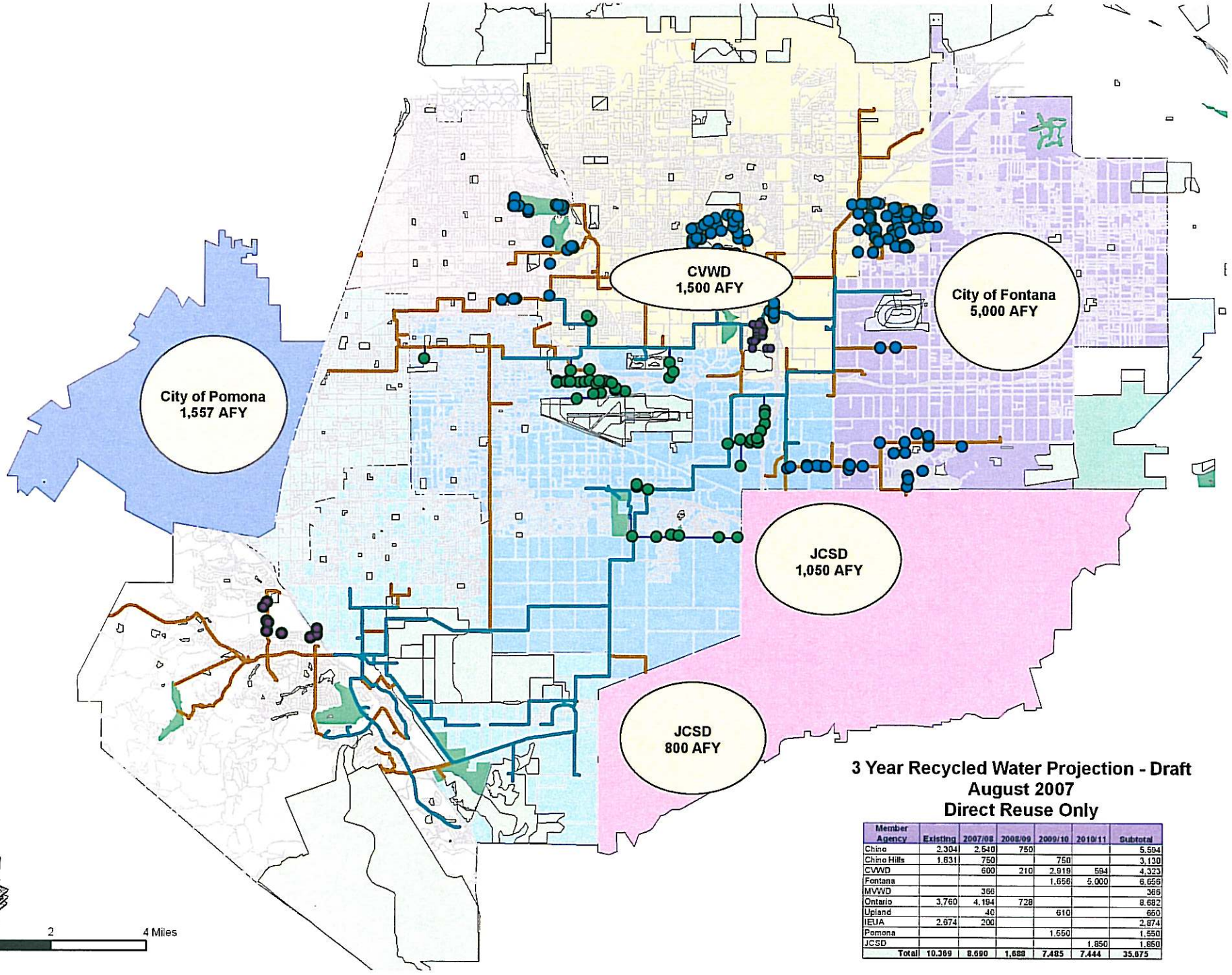
- **Goals:** For the program, the combined annual use (direct and indirect):
  - ✓ Year 1 (ending 6/30/08)....21,500 AFY *
  - ✓ Year 2 (ending 6/30/09)....35,800 AFY
  - ✓ Year 3 (ending 6/30/10)....50,000 AFY
  - *Reference: Year ending 6/30/07...13,000 AFY

- **Background and Status:**
  - ✓ MWH RW Implementation Plan (Nov. 2005)
  - ✓ Projections for direct and indirect use
  - ✓ IEUA Capital Projects Status-Maps, details, costs.
  - ✓ Impacts-Drought (direct & indirect), population growth, regulations.
  - ✓ Implementation issues and concerns (i.e. available sites, energy, etc.)

DRAFT 8-29-07

- **Supply and Demand:**
  - ✓ Available supply of tertiary water...(note 16,875 AFY to river mandated)
  - ✓ Current wastewater treatment at 60.5mgd (67,760 AFY)
  - ✓ Possible Satellite RW Plants
  - ✓ Ultimate RW System over 93,000 AFY

- **Three Year Plan: (additional 37,000 AFY)**
  1) Year one, ending June 30, 2008: additional 8,500 AFY
  2) Year two, ending June 30, 2009; additional 14,300 AFY
  3) Year three, ending June 30, 2010; additional 14,200 AFY



3 Year Recycled Water Projection - Draft
August 2007
Direct Reuse Only

Member Agency	Existing	2007/08	2008/09	2009/10	2010/11	Subtotal
Chino	2,304	2,540	750			5,594
Chino Hills	1,631	750		750		3,130
CVWD		600	210	2,919	594	4,323
Fontana				1,656	5,000	6,656
MVWD		366				366
Ontario	3,760	4,194	728			8,682
Upland		40		610		650
IEUA	2,674	200				2,874
Pomona				1,550		1,550
JCSD					1,850	1,850
Total	10,369	8,690	1,688	7,485	7,444	35,675

Inland Empire
UTILITIES AGENCY*
*A Municipal Water District

Clean, inexpensive, plentiful water

Member Agency	Existing	2007/08	2008/09	2009/10	2010/11	Subtotal
Chino	2,304	2,540	750			5,594
Chino Hills	1,631	750		750		3,130
CVWD		600	210	2,919	594	4,323
Fontana				1,656	5,000	6,656
MVWD		366				366
Ontario	3,760	4,194	728			8,682
Upland		40		610		650
IEUA	2,674	200				2,874
Pomona				1,550		1,550
JCSD					1,850	1,850
Total	**10,369**	**8,690**	**1,688**	**7,485**	**7,444**	**35,675**

Inland Empire
UTILITIES AGENCY*
*A Municipal Water District

Clean, inexpensive, plentiful water

CAPACITY DEVELOPMENT

Developed Maximum Recharge Capacity at 30% RWC and 80% Usage (AFY)

Basin	Ely	Banana	Hickory	Turner	8th St.	Brooks	Total Capacity
FY 05/06	870	870	870	0	0	0	2,610
FY 06/07	870	870	870	1,040	0	0	3,650
FY 07/08	870	870	870	1,040	870	0	4,520
FY 08/09	870	870	870	1,040	870	870	5,390
FY 09/10	870	870	870	1,040	870	870	5,390
FY 10/11	870	870	870	1,040	870	870	5,390

With Future System Expansion

Developed Maximum Recharge Capacity at 30% RWC and 80% Usage (AFY)

Basin	RP3	Declez	Victoria	San Sevaine	Etiwanda DB	Lower Day	New Capacity	All Basins
FY 05/06	-	-	-	-	-	-	-	2,610
FY 06/07	-	-	-	-	-	-	-	3,650
FY 07/08	-	-	-	-	-	-	-	4,520
FY 08/09	-	-	-	-	-	-	-	5,390
FY 09/10	1,210	-	1,040	8,670	1,210	-	12,130	17,520
FY 10/11	1,210	1,040	1,040	8,670	1,210	-	13,170	18,560

Inland Empire
UTILITIES AGENCY*
*A Municipal Water District

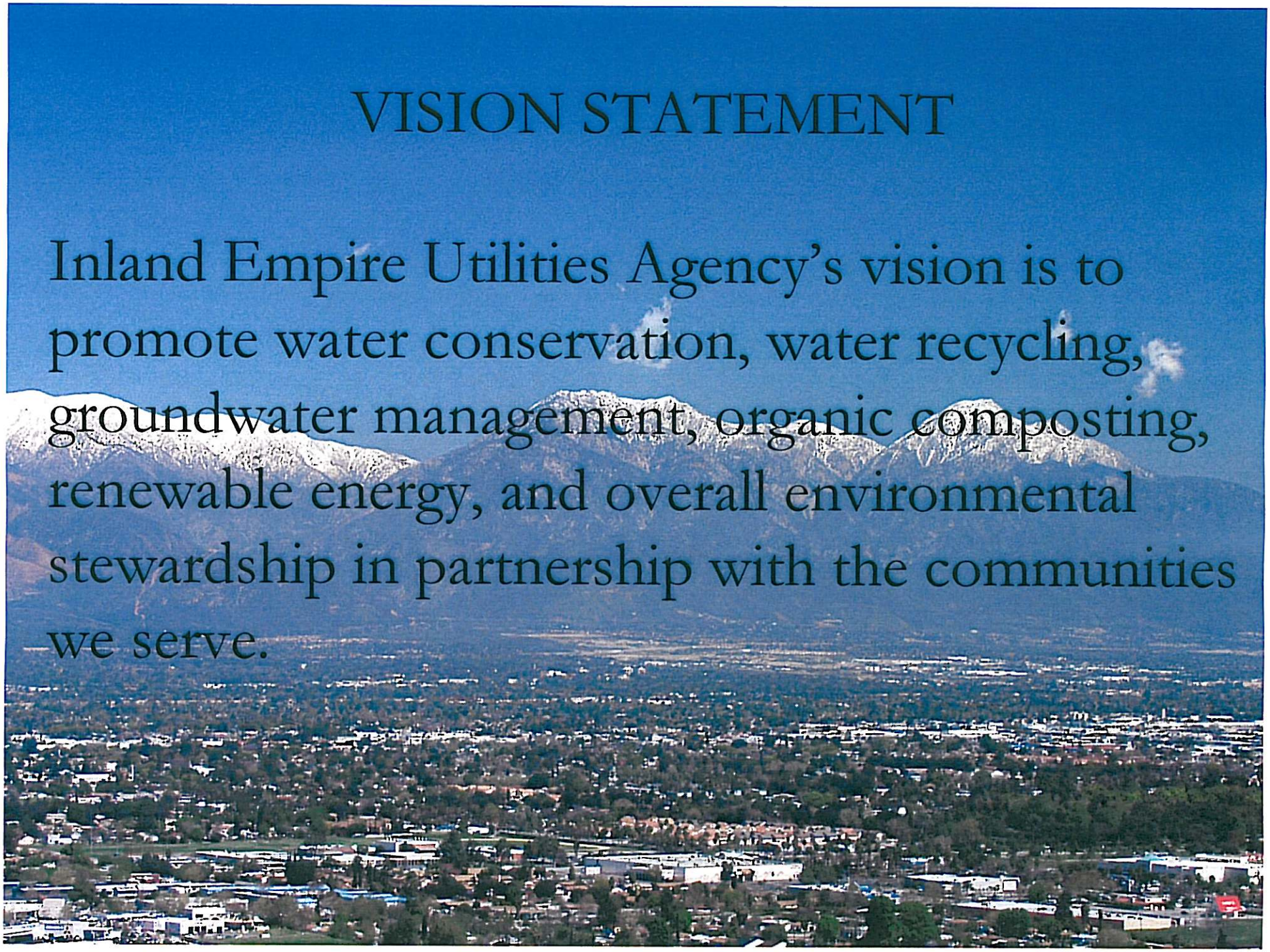
Clean, inexpensive, plentiful water

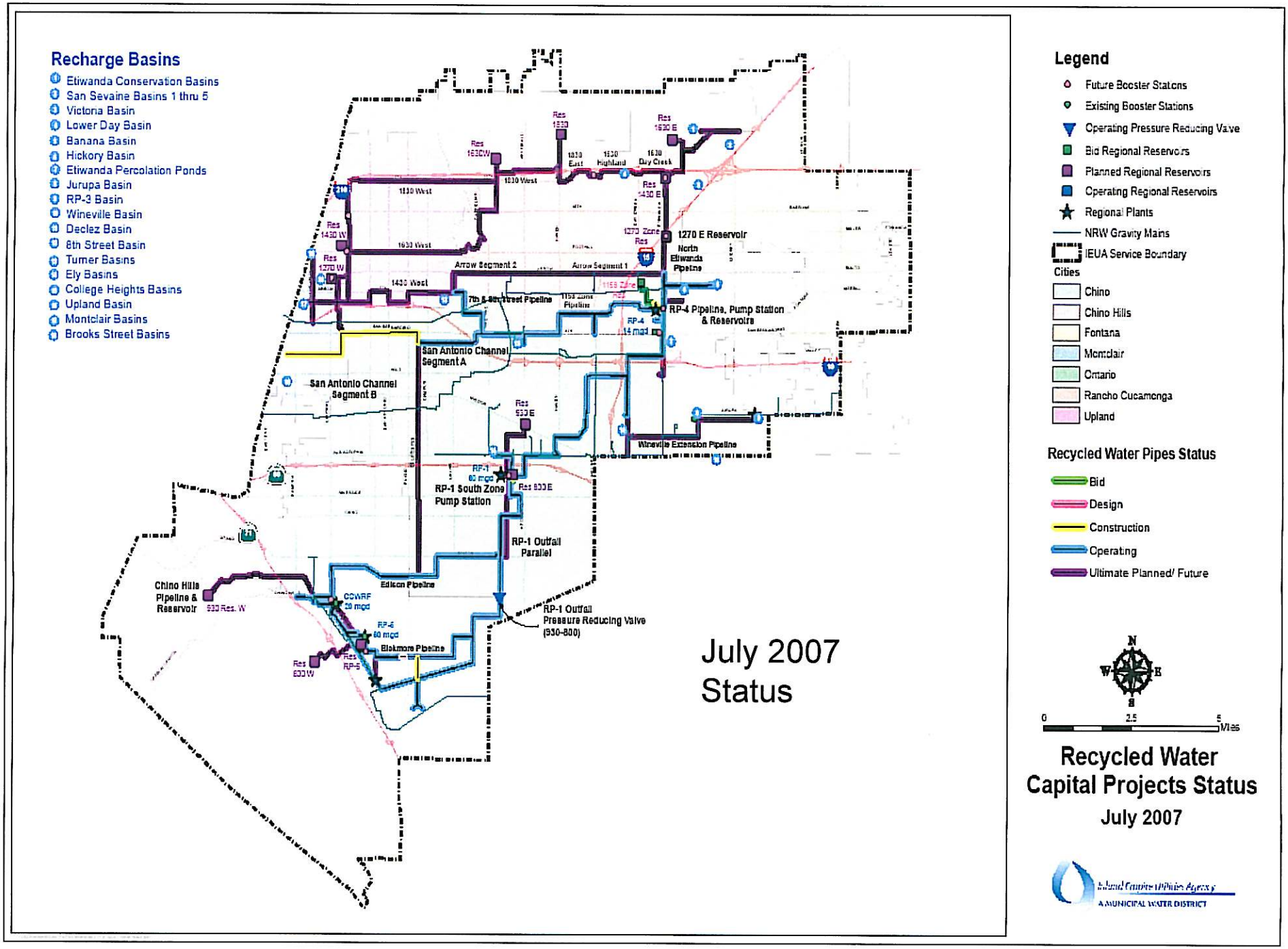
Proposed Actions

- Recycled Business Plan
  - Oct. 3 (IEUA Board)
- Develop "Red Team" with Retail Agencies
  - Oct. 4 (Tech/Policy)
- Prepare Lateral and Customers (MWD Public Facility) Retrofit Policies
  - Oct. 3 (IEUA Board)
  - Oct. 4 (Tech/Policy)

VISION STATEMENT

Inland Empire Utilities Agency's vision is to promote water conservation, water recycling, groundwater management, organic composting, renewable energy, and overall environmental stewardship in partnership with the communities we serve.




Recharge Basins
Etiwanda Conservation Basins
San Sevaine Basins 1 thru 5
Victoria Basin
Lower Day Basin
Banana Basin
Hickory Basin
Etiwanda Percolation Ponds
Jurupa Basin
RP-3 Basin
Wineville Basin
Declez Basin
6th Street Basin
Turner Basins
Ely Basins
College Heights Basins
Upland Basin
Montclair Basins
Brooks Street Basins
Res 1630
Res 1630W
Res 1630 E
1630 East
1630 Highland
1630 Day Creek
1630 West
Res 1430 E
Res 1430 W
1430 West
Res 1270 W
1270 Zone
Res
1270 E Reservoir
North Etiwanda Pipeline
Arrow Segment 2
Arrow Segment 1
1158 Zone
7th & Benson Street Pipeline
1158 Zone Pipeline
RP-4 Pipeline, Pump Station & Reservoirs
RP-4
14 mgd
San Antonio Channel Segment A
San Antonio Channel Segment B
Res 933 E
Wineville Extension Pipeline
RP-1
60 mgd
RP-1 South Zone Pump Station
Res 933 E
RP-1 Outfall Parallel
Edison Pipeline
Chino Hills Pipeline & Reservoir
933 Res. W
CCWRF
20 mgd
RP-5
60 mgd
Res 800 W
Res RP-5
Etiwanda Pipeline
RP-1 Outfall Pressure Reducing Valve (930-800)
July 2007 Status
Legend
Future Booster Stations
Existing Booster Stations
Operating Pressure Reducing Valve
Bid Regional Reservoirs
Planned Regional Reservoirs
Operating Regional Reservoirs
Regional Plants
NRW Gravity Mains
IEUA Service Boundary
Cities
Chino
Chino Hills
Fontana
Montclair
Ontario
Rancho Cucamonga
Upland
Recycled Water Pipes Status
Bid
Design
Construction
Operating
Ultimate Planned/ Future
N
W
E
S
0
2.5
5
Miles
Recycled Water Capital Projects Status
July 2007
Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Inland Empire
UTILITIES AGENCY*
*A Municipal Water District

Clean, inexpensive, plentiful water

RW Project Design/Planning

- Etiwanda Pipeline and 1270 Reservoir
  - Service to Victoria Gardens and Heritage Village
  - San Sevaine, Victoria, Etiwanda Basins
- Wineville Pipeline Extension - Ontario and Fontana Customer Commitments
- Evaluation of Satellite Water Recycling Plant at Red Hill Park
  - Recycled Water Service to Red Hill Park, Red Hill Golf Course, Upland Hills CC
  - Other potential Satellite Plant Sites in Upland
- Local Laterals – Recycled Water Master Plans
  - MVWD – Potential for IEUA to finance and construct (SRF funded)
  - Upland – Euclid medians , Potential for IEUA to finance and construct
  - Others ?
- Three Year Recycled Water Business Plan
  - Increase recycled water deliveries to 50,000 AFY
  - Incorporate stakeholder priorities
  - Improve reliability and redundancy (Storage, Interconnections)

Inland Empire
UTILITIES AGENCY*
*A Municipal Water District

Clean, inexpensive, plentiful water

STATUS OF CURRENT LOANS & GRANTS

PROJECT	STATUS	FUNDING	FUNDING TO DATE	BALANCE EXPECTED
Edison Avenue Pipeline	*Complete*	80% DWR *grant*	53%	*Fall '07*
7th and 8th St. Pipeline	*Complete*	50% DWR *grant*	46%	*Fall '07*
RP-1 So Zone Pump Sta. San Antonio Channel -A San Antonio Channel -B	*90% complete* *Complete* *60% complete*	18% SWRCB Grant 68% SRF 86%	11% SWRCB 31 % SRF 42%	*60% Fall '07* *80% 6/30/08*
LPP, *MWD*	*Complete*	$154/AF	---	*2017*
USBR PLANNING	*Complete*	$980,000	$980,000	---

Inland Empire
UTILITIES AGENCY*
*A Municipal Water District

Clean, inexpensive, plentiful water

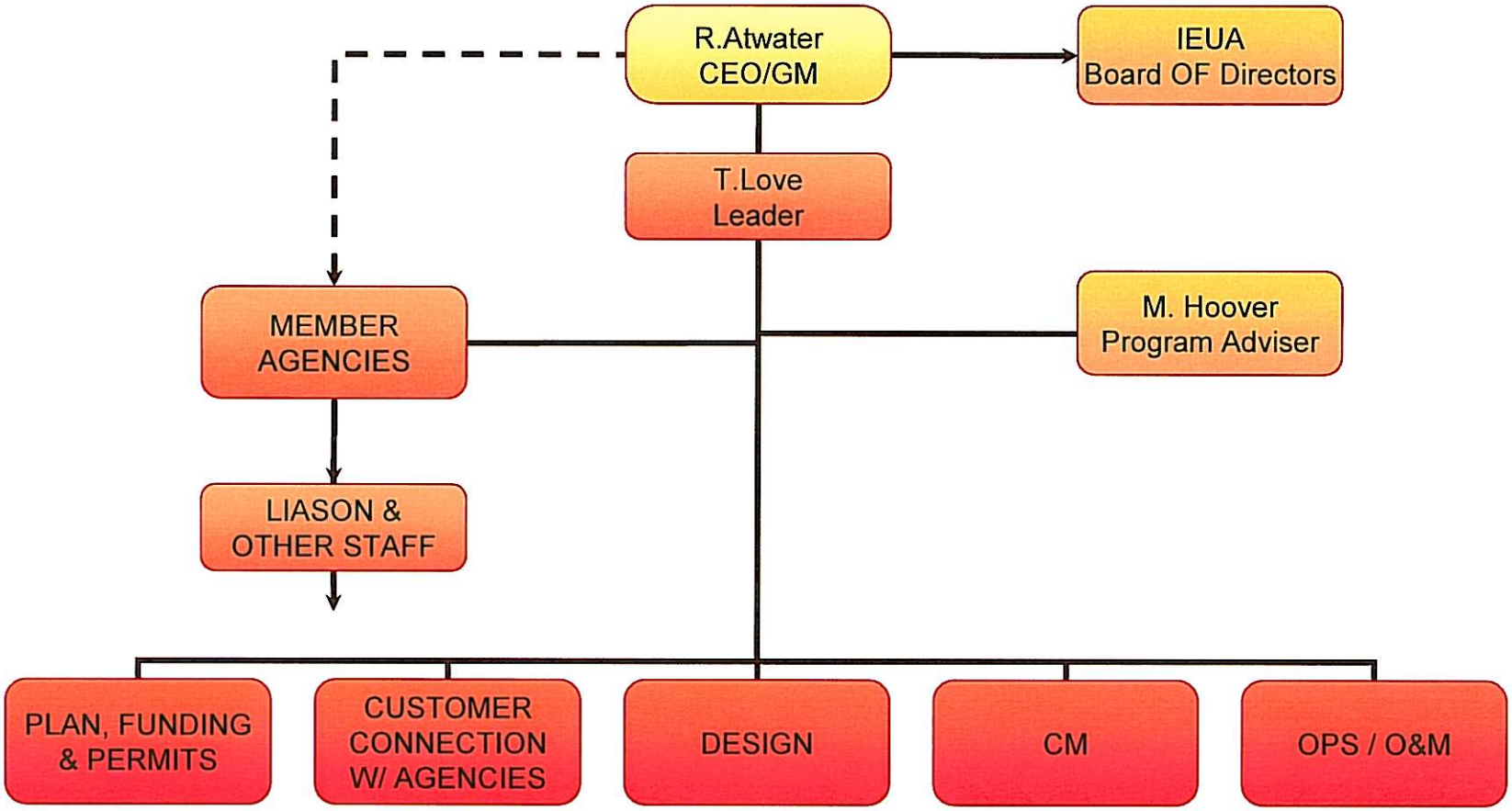
PENDING LOANS & GRANTS 2007 / 08

PROJECT	STATUS	FUNDING	FUNDING TO DATE	BALANCE EXPECTED
SA Channel – B Realignment	*Pending*	***100%, SRF***	***0%***	***September 2007***
MVWD Laterals	*Pending*	**100%, SRF**	**0%**	***November 2007***
RP-4 Res. Pipeline & P.S.	*Pending*	**59% SRF**	**0%**	***08/01/08***
RP-4 Res. Pipeline & P.S.	*Pending*	**25% Grant**	**0%**	***08/01/08***
IEUA Phase II LRP, *MWD*	*Pending*	**$250/AF**	**0%**	***20 years***
USBR Planning	*Pending*	**$1,000,000**	**0%**	***06/30/08***
USBR Construction*	*Pending*	**$2,000,000**	**0%**	***06/30/08***
MWD On-Site Conversion Rebate	Pending	**$250/ AF (2 years)**	**0**	

Inland Empire
UTILITIES AGENCY*
*A Municipal Water District

Clean, inexpensive, plentiful water

Develop "Red Team"



Inland Empire
UTILITIES AGENCY*
*A Municipal Water District

Clean, inexpensive, plentiful water

CAPACITY WITH SYSTEM EXPANSION

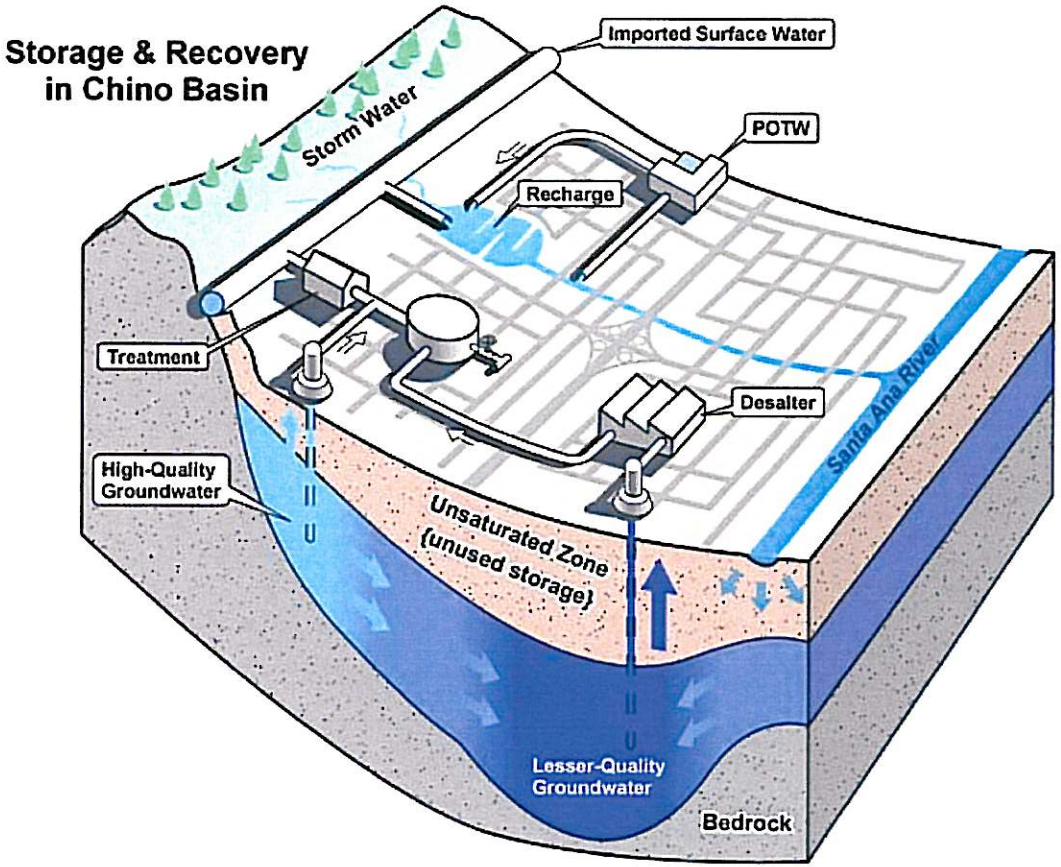
Actual and Projected Recycled Water Groundwater Recharge by Basin (AFY)

RWC	33%	33%	33%	33%	33%	0%	Additional New Capacity	All Basins
Basin	**RP3**	**Declez**	**Victoria**	**San Sevaine**	**Etiwanda DB**	**Lower Day**		
FY 05/06	-	-	-	-	-	-	-	1,304
FY 06/07	-	-	-	-	-	-	-	2,989
FY 07/08	-	-	-	-	-	-	-	3,408
FY 08/09	-	-	-	-	-	-	-	3,405
FY 09/10	1,200	-	950	1,800	300	-	4,250	7,695
FY 10/11	650	1,500	100	4,350	2,400	-	9,000	12,635

Inland Empire
UTILITIES AGENCY*
*A Municipal Water District

Clean, inexpensive, plentiful water

GROUNDWATER STORAGE AND RECOVERY IN CHINO BASIN



Inland Empire
UTILITIES AGENCY*
*A Municipal Water District

Clean, inexpensive, plentiful water

PLANNING FOR A RELIABLE WATER FUTURE

IEUA is showcasing innovative water conservation programs to save water that will help meet our future needs. Every gallon of water saved translates into reduced demand for expensive imported water supplies resulting in lower water bills.

WATER RECYCLING

IEUA's regional recycled water distribution system will provide up to 20% of our future water needs. This safe and inexpensive water can be used for outdoor irrigation, commercial and industrial processing and other non-potable uses.

GROUNDWATER MANAGEMENT

Working with its retail agencies and Chino Basin Watermaster, IEUA is implementing a comprehensive groundwater enhancement program that will provide over 500,000 acre-feet of new groundwater storage within the Chino Basin ensuring that Chino's vast groundwater supply is available to meet the future needs of the region.

ORGANIC COMPOSTING

In a joint venture with Los Angeles County Sanitation District, IEUA is retrofitting an existing warehouse into an enclosed composting facility to process organic material into a high quality fertilizer products.

ENERGY EFFICIENCY

IEUA is developing cost-effective and reliable renewable energy sources through green power technologies such as solar panels, biogas (methane) fuels, and efficient power generation systems to demonstrate what can be done locally to generate power.

AIR AND WATER QUALITY BENEFITS

IEUA is committed to the protection of the region's air and downstream water quality through its Organic Management Strategy of treating waste-water biosolids, dairy manure, yard clippings and other organic materials.

Inland Empire
UTILITIES AGENCY*
*A Municipal Water District

Clean, inexpensive, plentiful water

IEUA REGIONAL RECYCLED WATER PROGRAM

HISTORY

The following are significant events, studies, and reports leading up to the current Implementation Plan:

•1972	Regional Contract , IEUA begins delivery of recycled water
•1981	Chino Basin Reclamation Study
•1991	RW Early Action Plan
•1991	State Water Code, section 13550.(a); "Water Recycling Law"
•1993	Recycled Water Master Plan
•1995	Carbon Canyon Recycled Water System Plan
•1996	Preliminary Design Report (Distribution System)
•1998	Carbon Canyon Recycled Water System Initial Deliveries
•2000	Optimum Basin Management Plan and OBMP EIR
•2000	Peace Agreement
•2001	Recycled Water Facilities Planning Study
•2002	Regional Recycled Water Program Feasibility Study
•2002	Programmatic EIR (June 29th certified by IEUA Board)
•2003	SWRCB Grant ($5 million) Loan ($22 million) Approved
•2003	Initiate Construction of Phase I Facilities
•2005	Regional Recycled Water Program Implementation Plan
•2004	Initiate Design of Phase II Facilities
•2005	Phase III Design initiated

Inland Empire
UTILITIES AGENCY*
*A Municipal Water District

Clean, inexpensive, plentiful water

CAPACITY WITH EXISTING DISTRIBUTION

Actual and Projected Recycled Water Groundwater Recharge by Basin (AFY)

RWC	29%	36%	36%	33%	33%	33%	Current Capacity
Basin	Ely	Banana	Hickory	Turner	8th St.	Brooks	
FY 05/06	188	598	518	0	0	0	1,304
FY 06/07	466	644	647	1,232	0	0	2,989
FY 07/08	840	0	258	710	1,600	0	3,408
FY 08/09	1,080	0	135	710	280	1,200	3,405
FY 09/10	1,080	0	135	710	280	1,240	3,445
FY 10/11	1,080	380	435	710	280	750	3,635

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Inland Empire Utilities Agency Board of Directors Workshop

October 3, 2007

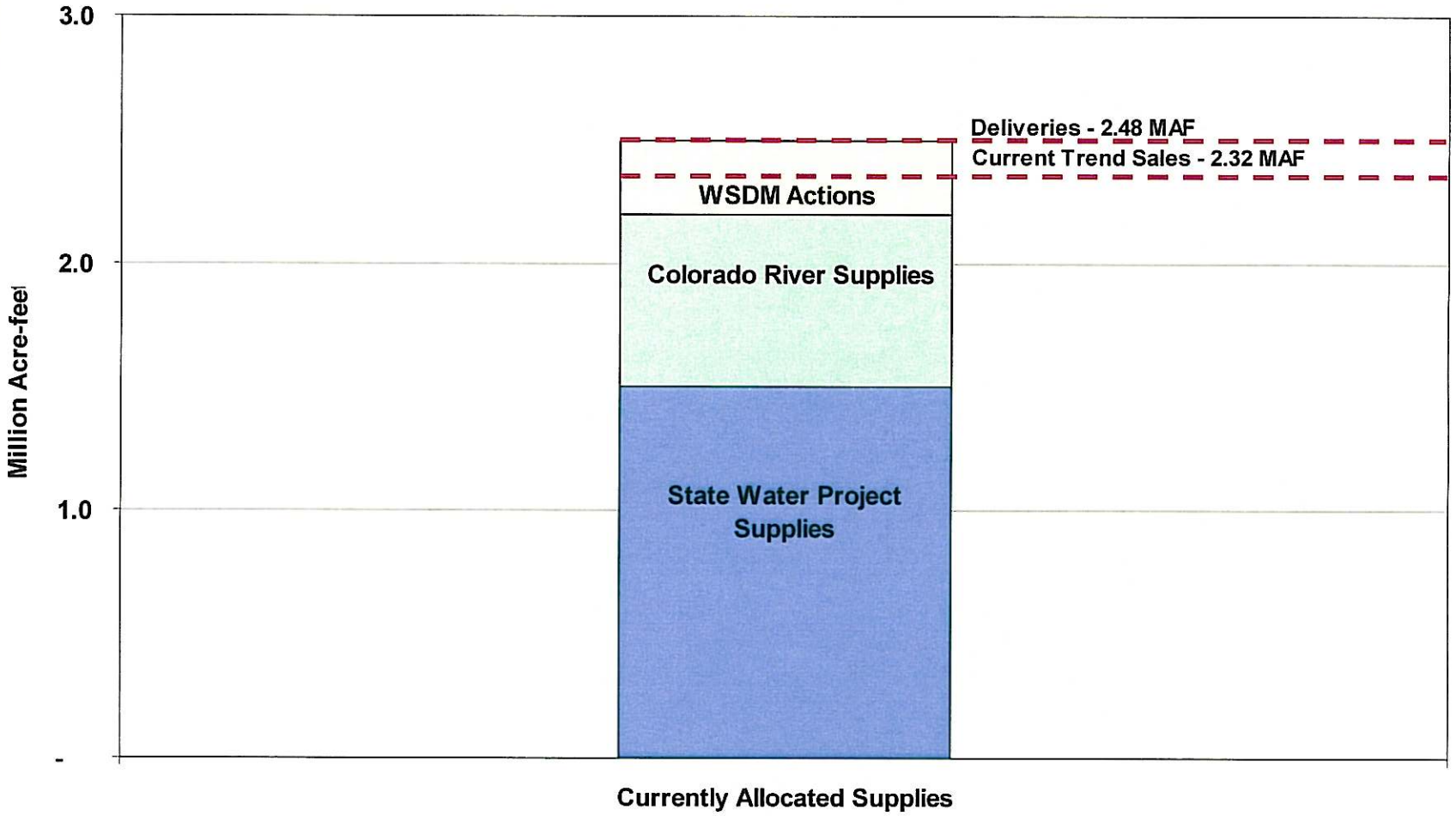
Outline

- Purpose
- Supplies
- Drought Allocation History at Metropolitan
- Water Surplus and Drought Management Plan
- Current discussions among member agencies
- Preferential Rights
- Schedule MWD Board Action
- Options for IEUA
- DYY Administration Considerations
- Next Steps for the Fall

Purpose

- Develop drought allocation plan for IEUA retail agencies
- Coordinate with MWD and other member agencies
- Administer MWD DYY Implementation
- Coordinate with Chino Basin Watermaster
- Implement Water Conservation Action Plan and Recycled Business Plan

2007 Supplies



2008 Supply Outlook

- End of year storage in Oroville 1.2 MAF
- State share of end of year storage in San Luis 250,000 AF
- Key point: "storage is at historic low levels this fall"
- Current trends indicate 20% initial SWP Table A allocation (not including Judge Wanger's decision)
- Up to 30% cut in supplies due to Judge Wanger's decision starting December 25, 2007

MWD Allocation History

- 1976-77 Drought – MWD 10% voluntary reductions to help the rest of the State
- 1991-1992 IICP – Stage 5 was implemented
- 1995 MWD Adopted Drought Plan for one year but did implement (improved hydrology)
- 1998/1999 MWD Approved the Water Surplus and Drought Management (WSDM) Plan

MWD Allocation History - IICP

- Incremental Interruption and Conservation Plan approved in December 1990
- Based on fiscal year 1989-90 MWD sales
- Staged cutbacks
  - Six stages
- Incentives/disincentives---triple water rate penalties but $100/AF incentive payment for less than IICP target

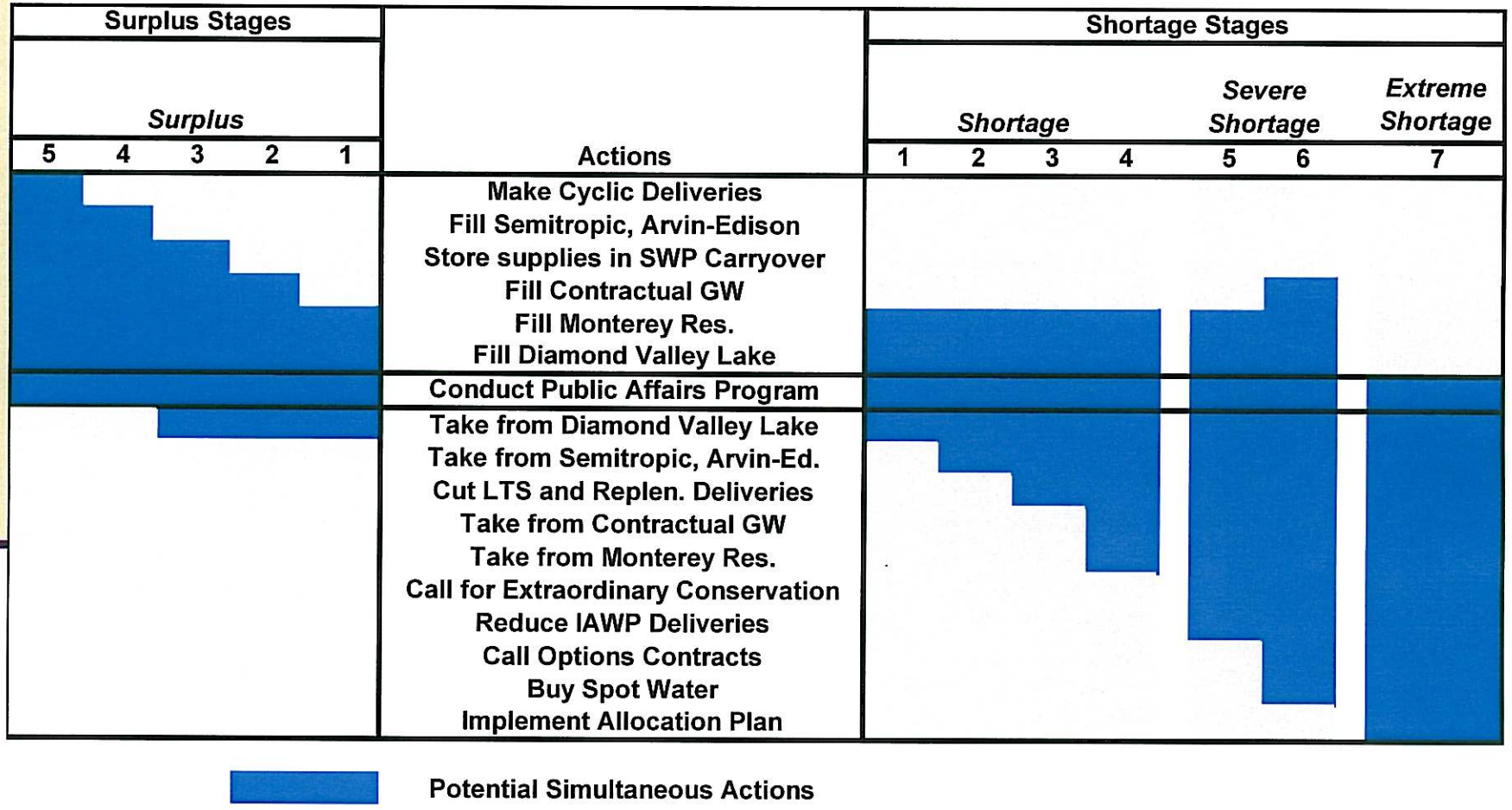
MWD Allocation History – 1995 DMP

- 1994 one of the driest water years
- 1995 Drought Management Plan to manage potential shortages - modified IICP
- Plan was not needed due to 1995 hydrology

Water Surplus and Drought Management Plan

- Adopted in 1999
- Provides for management of supplies for surplus water supply years and shortage years but does not include an allocation plan

Water Surplus and Drought Management Plan



Water Surplus and Drought Management Plan

- Allocation principles and goals adopted
- Allocation plan partially developed but no agreement
- Equitably allocate imported water on basis of agencies' needs.

Water Surplus and Drought Management Plan

- Impact on retail consumers and economy
- Reclamation/Recycling
- Conservation
- Population and economic growth
- Investment in local resources
- Change and/or loss of local supply
- Participation in MWD's Interruptible programs
- Investment in MWD's facilities

Current Discussions

- MWD staff began where the unadopted plan left off
- Three year average base year retail and wholesale firm demands
- Adjustments
- "Two-Promise" Concept
  - Impacts to retail demand less than MWD regional shortage
  - MWD delivery cut no more than twice MWD regional shortage

Current Discussions

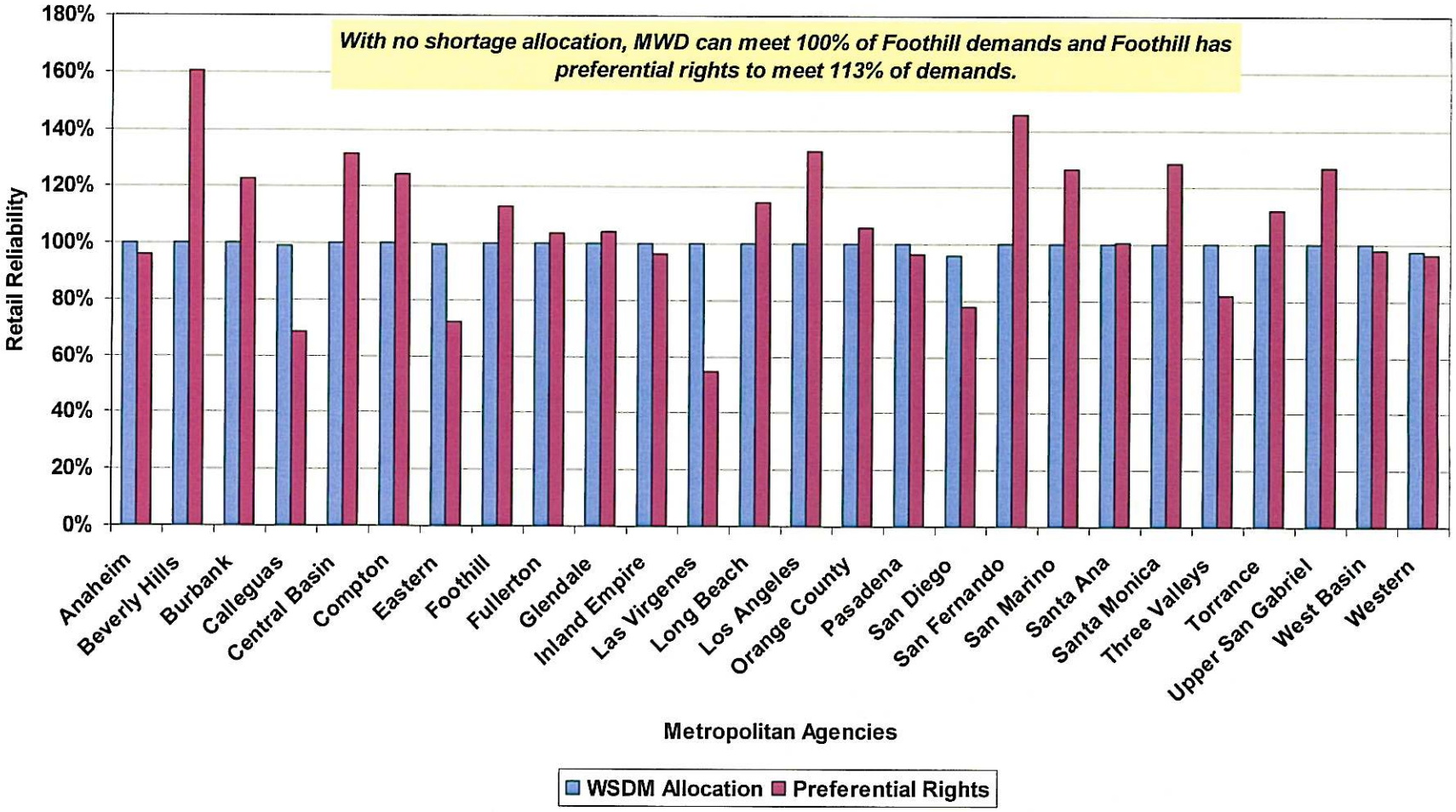
Shortage Level	Wholesale Promise	Retail Promise
1 (5%)	90%	95%
2 (10%)	80%	90%
3 (15%)	70%	85%
4 (20%)	60%	80%
5 (25%)	50%	75%
6 (30%)	50%	70%

Preferential Rights

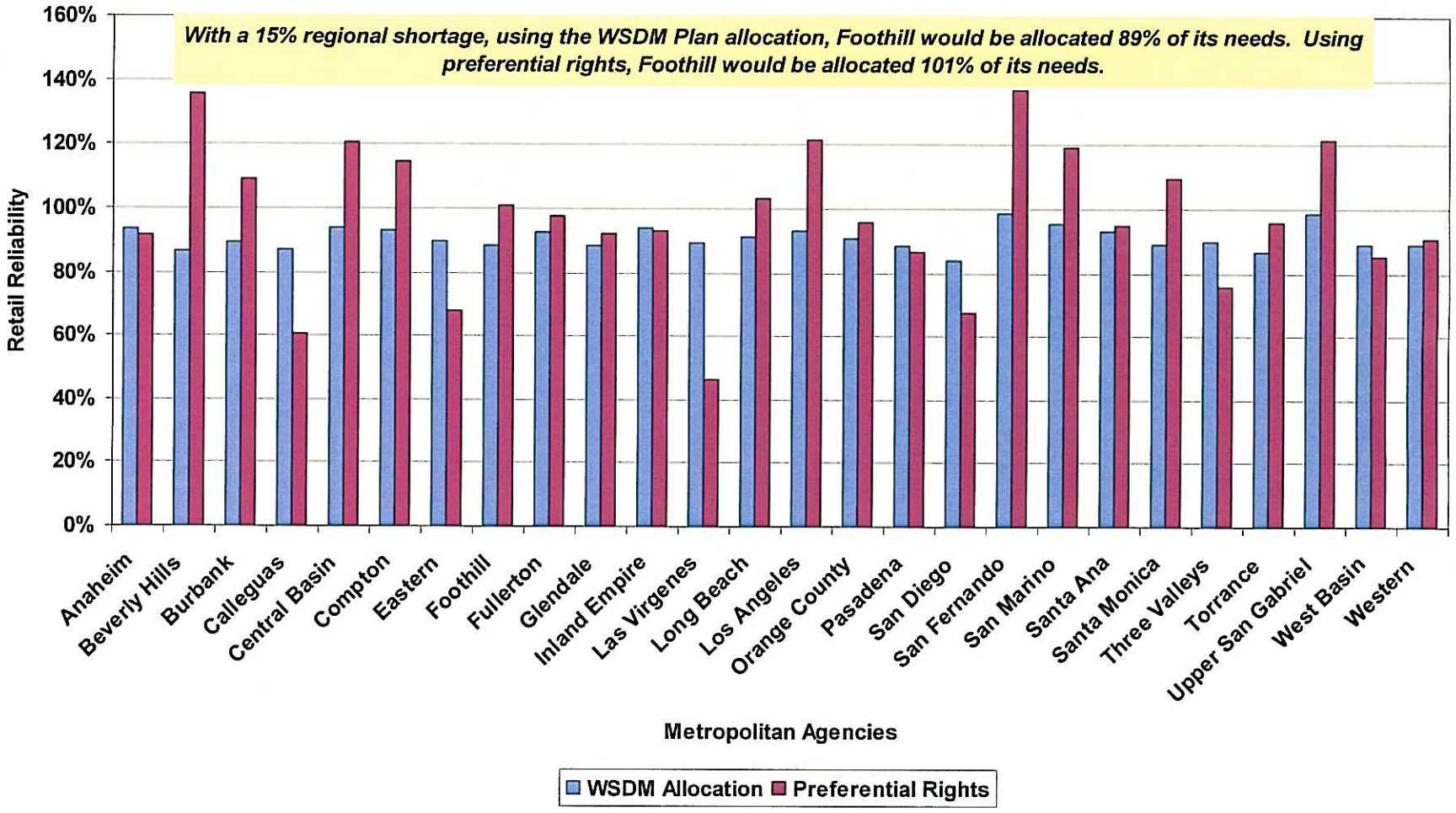
Sec. 135. [Preferential Right to Purchase Water]

Each member public agency shall have a preferential right to purchase from the district for distribution by such agency, or any public utility therein empowered by such agency for the purposes, for domestic and municipal uses within the agency a portion of the water served by the district which shall, from time to time, bear the same ratio to all of the water supply of the district as the total accumulation of amounts paid by such agency to the district on tax assessments and otherwise, excepting purchase of water, toward the capital cost and operating expense of the district's works shall bear to the total payments received by the district on account of tax assessments and otherwise, excepting purchase of water, toward such capital cost and operating expense.

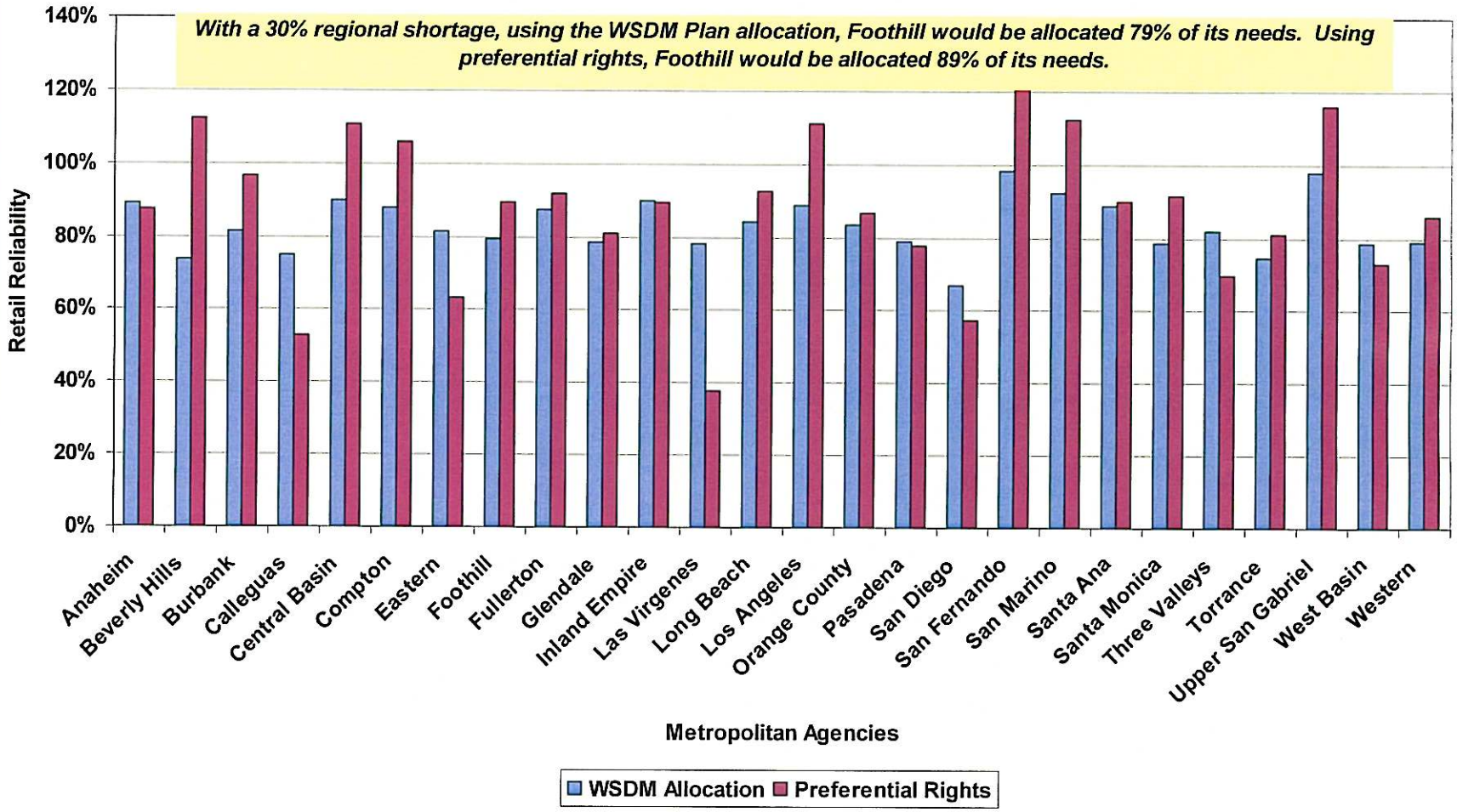
Comparison with No Shortage



Comparison with 15% Regional Shortage



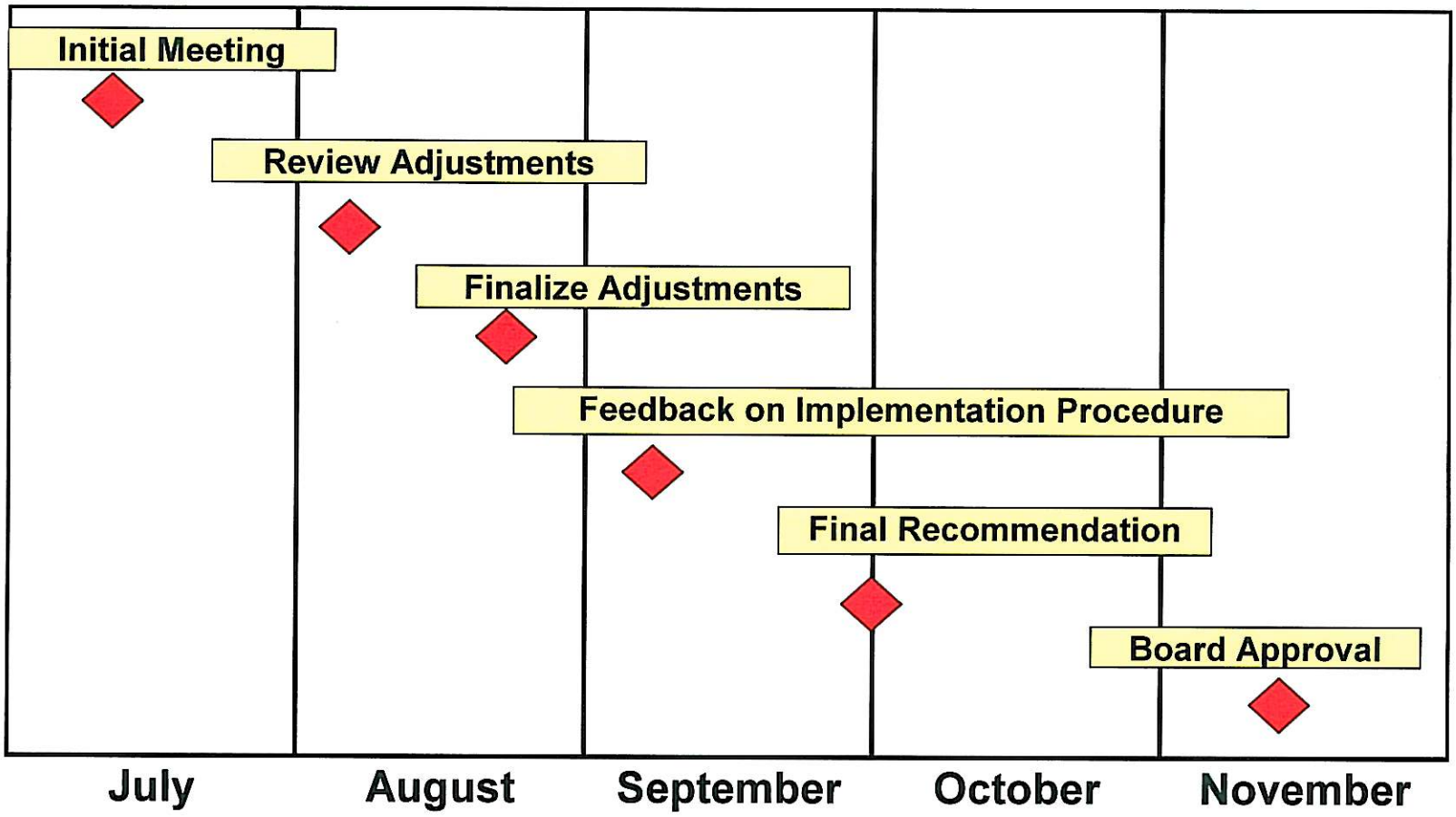
Comparison with 30% Regional Shortage



Current Discussions

- Include recycled water adjustment in any new local water supply development adjustment
- .5% adjustment for conservation rate structure
- 1.5 times wholesale minimum
- No economic adjustment for Levels I and II
- MWD Board discussions started in Sept. and approval scheduled for December

MWD WSDM Timeline



Other Considerations

- Should IEUA step up conservation actions?
- Should IEUA implement 3-year Recycled Business Plan
- MWD DYY Implementation (33,000 AF)
- Coordinate extensively with cities and retail water agencies on customer information:
  - Launch IEUA drought campaign with advertising supplementing MWD and ACWA
  - Speakers bureau and city council resolutions

Recommendation

- NEXT STEPS:
- Focus on water supply reliability for IEUA service area customers through local drought planning discussions (2008-2012 scenarios)
- Enhance conservation efforts with "20 Gallon Challenge" and adoption of Long Beach style emergency steps (mandatory use restrictions)
- Implement recycled water and local supply development projects ASAP to alleviate potential extreme shortages!

Proposed Regional Landscape Rebate Programs

1. Pervious Concrete Rebate Program – Pilot Incentive Rebate Program

- Project Purpose: Promote the strategic use of pervious concrete within a groundwater basin to reduce runoff, improve water quality and enhance the recharge of the Chino Basin. This will test the potential for development of a "southern California" rebate program that could be offered by MWD to encourage groundwater infiltration, reduce urban runoff and achieve conservation and augmentation of local water supplies through storm water capture.

- Partners:
  - MWD ($87,000 Innovative Conservation Program Grant September 2007)
  - Southern California Ready Mix Concrete Association
  - Chino Basin Watermaster
  - U.C. Santa Barbara, Bren School of Environmental Science and Management
  - CSUSB, Water Resources Institute/San Bernardino County Low Impact Development Guidance Program (Five County Storm water Program for monitoring of LID best management practices)

- Rebate: Up to $2 per square foot, up to 50% of the additional expense of installing pervious concrete or equivalent porous surface. Rebate will be offered on a competitive grant basis; It is expected that 3-5 demonstrations projects totaling up to 36,000 square-feet will be selected for implementation;

- Program Budget: $113,000 (will be revised to include project monitoring through San Bernardino County Low Impact Development Guidance Program) of which $87,000 is provided by MWD with $72,000 for rebates. Remainder of budget is IEUA staff in-kind services in administration of the pilot project.

- Selection criteria will include a site evaluation to identify areas with the greatest potential to benefit the Chino Groundwater Basin, the diversity of pervious concrete applications being demonstrated and the amount of matching funds provided by project applicants.

- Expected Timeline:
  - IEUA Board Approval of Rebate Program – October 3, 2007
  - Rebate Application Deadline – November 30, 2007
  - Project Selection – January 15, 2008
  - Project Implementation and Monitoring – 2008-2010

2. Water-Wise Residential Landscape Rebate Program

- Project Purpose: Promote removal of residential turf and installation of water conserving California-Friendly landscapes through development of a residential landscape rebate program that is modeled after existing successful programs to reduce significantly residential outdoor water use (e.g., Las Vegas, El Paso, and Tuscon).

- Partnership:
  - Cities and retail water agencies within IEUA's service area
  - Inland Empire Landscape Alliance
  - Chino Basin Watermaster
  - Chino Basin Water Conservation District

- Proposed Rebate: Up to $2 per square foot, up to $2,000 limit

- Project Budget: $50,000 in IEUA's FY 07/08 Conservation Budget.

- Program Conditions: will be developed in September based upon programs being implemented by Southern Nevada Water Authority and the Crescenta Valley Water District and will include:
  - Size of turf to be removed/modified
  - Application Process
  - Verification of turf removal
  - Educational materials to encourage use of efficient irrigation system, water budgets, water-wise plants

- Expected Timeline:
  - Develop program conditions based upon discussions with Southern Nevada Water Authority and Crescenta Valley Water District
  - IEUA Board Approval of Rebate Program – October 3, 2007
  - Program Kick-Off – October 3, 2007

3. Synthetic Turf Rebate Program

- Project Purpose: Provide a rebate for the installation of synthetic turf to promote water conservation in residential and commercial properties, retrofit and new construction.

- Partnership:
  - MWD funded regional program in July 2007.
  - Cities and retail water agencies within IEUA's service area
  - Inland Empire Landscape Alliance
  - Chino Basin Watermaster
  - Chino Basin Water Conservation District

- Proposed Rebate: MWD is offering 30 cents per square foot for commercial and residential applications, with no upper limits per application. IEUA conservation partnership has recommended that IEUA provide a matching 30 cents per square foot up to the MWD contribution (ex. Rebate for 1,000 square feet is $600; cost to install is $10,000). Participants will be required to remove existing irrigated area and replace it with the synthetic turf (cannot be used to install synthetic turf on un-irrigated property).

- Proposed Budget: IEUA has approved $50,000 in the FY 07/08 conservation budget for targeted enhanced rebate programs, Funding may be limited to first come, first serve while 07/08 funding is available.

- Program conditions: Consistent with MWD's existing Water Conservation Rebate Program. Synthetic turf purchases that were made after July 12, 2007, will qualify for the rebate.

- Expected timeline:
    - MWD Board approved synthetic turf rebate in July 2007
    - Application form under development by MWD
    - Rebates will be available as soon as form is completed
    - Expected initiation of program is October 2007

THIS PAGE

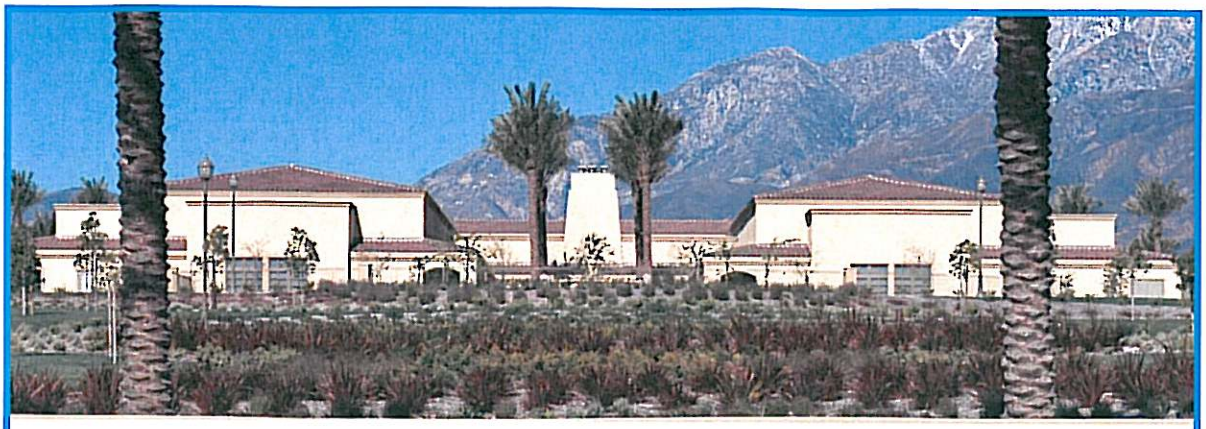
HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION



BREAKFAST AT CENTRAL PARK

Best Irrigation Practices for Landscapes:
The nuts and bolts of new irrigation technology

The Inland Empire Landscape Alliance is pleased to invite you to a breakfast workshop on Best Irrigation Practices for Landscapes. As we find ourselves in the midst of one of the driest years in California's history, incorporating California Friendly® plants, water efficient irrigation systems, and smart design techniques into large landscapes will result in substantial water savings. This program will present information about efficient irrigation techniques and the new technology available to make large landscapes water smart.

The workshop will include a complimentary continental breakfast, a presentation by **Nick Mrvos, Irvine Ranch Water District's landscape water conservation specialist,** followed by a discussion, and self-guided tour of the city of Rancho Cucamonga which will highlight Water-wise plantings and irrigation installations. We look forward to your participation!

Central Park Community Center
11200 Base Line Road
Rancho Cucamonga, CA
(909)477-8050
Wednesday, September 26, 2007
7:30 am to 9:30 am

Space is limited! Please RSVP by September 24, 2007. If you need additional information, please contact Sondra Elrod at (909) 993-1747 or selrod@ieua.org.

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Sponsored by Inland Empire Landscape Alliance

Best Irrigation Practices for Landscapes
Wednesday September 26, 2007
7:30 a.m.-9:30 a.m.

Complimentary Breakfast will be provided

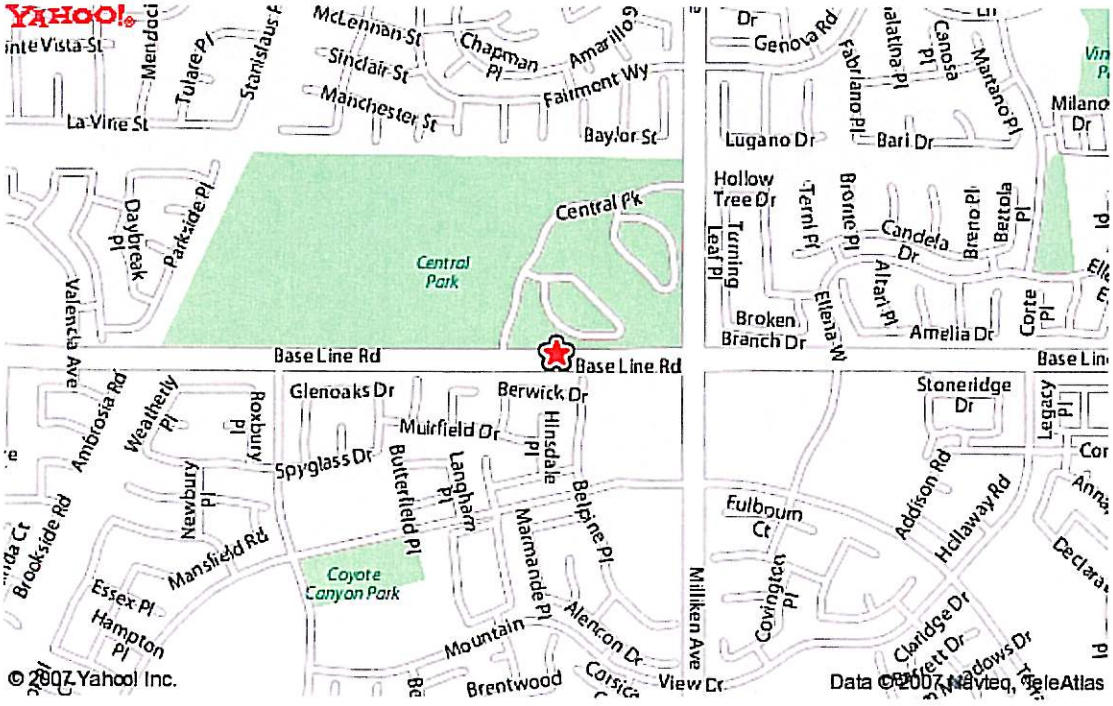
Agenda

I. Introduction- Brad Buller, Land Matters, Consultant to the Inland Empire Utilities Agency

II. Presentation- Nick Mrvos of Irvine Ranch Water District
- Water efficient irrigation systems
- New irrigation technology
- Irrigation Retrofits

III. Discussion- Best Irrigation and Landscape Practices within the Inland Empire region

IV. Self guided tour of BMPs in Rancho Cucamonga



THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Inland Empire Landscape Alliance

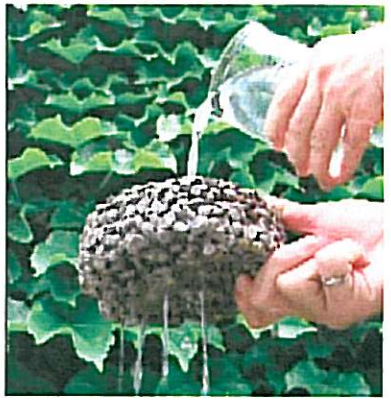
Inland Empire Utilities Agency

September 13, 2007

Proposed Regional Landscape Programs

- Pervious Concrete Rebate Program-Pilot Incentive Rebate Program
- Water-Wise Residential Landscape Rebate Program
- Synthetic Turf Rebate Program

Pervious Concrete Pilot Incentive Rebate Program



- Purpose: Promote and test the use of pervious concrete to reduce runoff, improve water quality, and enhance the recharge of Chino Basin

- This competitive grant program was created in partnership with:
  - MWD
  - Southern California Ready Mix Concrete Association
  - Chino Basin Watermaster
  - U.C. Santa Barbara
  - CSUSB, Water Resources Institute/San Bernardino County Low Impact Development Guidance Program

- Rebate: Up to $2 per square foot, up to 50% of the additional expense of installing pervious concrete or equivalent porous surface

***Program will begin on October 3, 2007 pending IEUA Board Approval**

Water-Wise Residential Landscape Rebate Program

- Purpose: Promote the removal of residential turf and installation of water conserving California-Friendly® landscapes.

- This program was created in partnership with:
  - Cities and retail water agencies within IEUA's service area
  - Inland Empire Landscape Alliance
  - Chino Basin Watermaster
  - Chino Basin Water Conservation District

- Rebate: Up to $2 per square foot, up to $2,000 limit

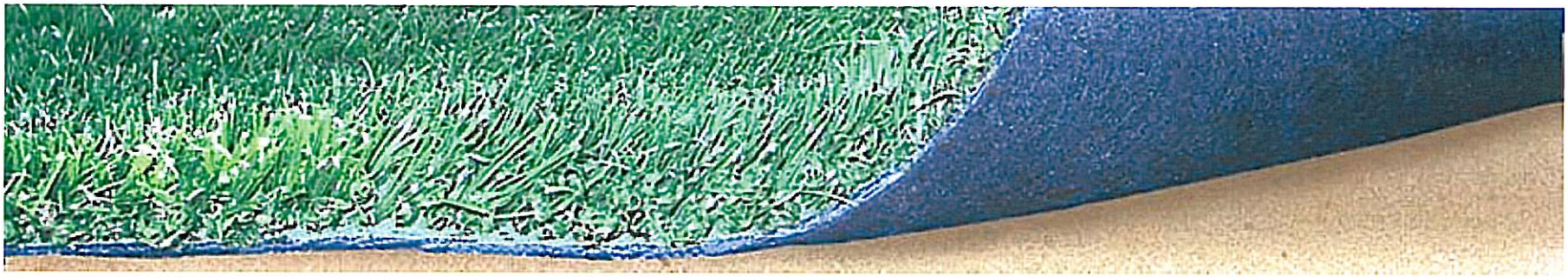
***Program will begin on October 3, 2007 pending IEUA Board Approval**

Synthetic Turf Rebate Program

- Purpose: Provide a rebate for the installation of synthetic turf to promote water conservation in residential and commercial properties, retrofit and new construction.

- This program was created in partnership with:
  - MWD funded regional program in July 2007.
  - Cities and retail water agencies within IEUA's service area
  - Inland Empire Landscape Alliance
  - Chino Basin Watermaster
  - Chino Basin Water Conservation District

- Rebate: MWD is offering 30 cents per square foot for commercial and residential applications, with no upper limits per application. IEUA conservation partnership has recommended that IEUA provide a matching 30 cents per square foot up to the MWD contribution



***Program will begin on October 3, 2007 pending IEUA Board Approval**

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Landscape Alliance Activities Update

Meetings with City and Agency Staffs

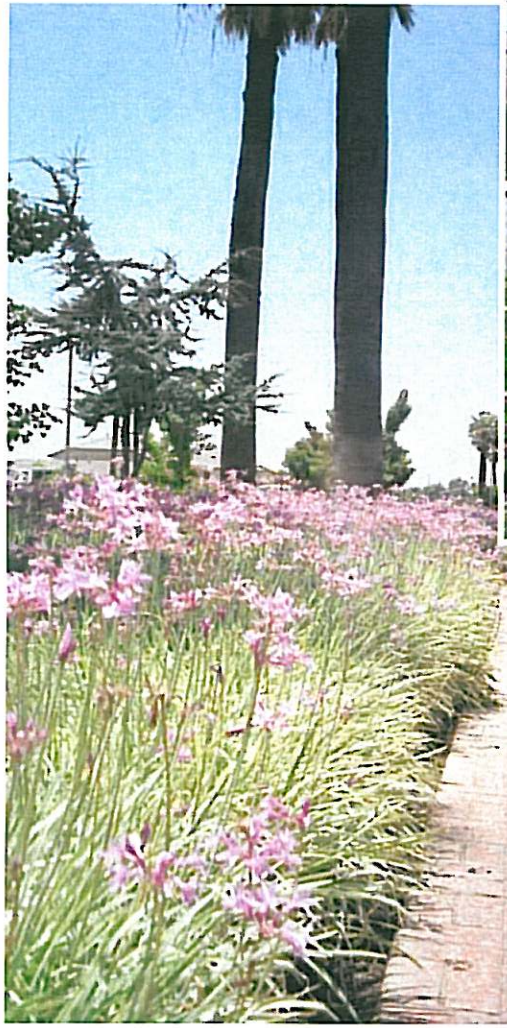
- Conversations with Cities
  - Need for additional information about NPDES requirements, LID, plant pallets, etc
  - More information and the opportunities to do demonstration pervious concrete installations
  - Suggestions for how to implement and plan check/ review
    - Training for staff

Best Management Practices (BMPs)

- We have found examples of Water-Wise landscaping incorporated into cityscapes in parkways, medians, paseos and public facilities
- We are developing a photo guide for city and agency reference of these landscapes

Parkway BMP

Median BMP



Paseo BMP

Public Facility BMP

Goals and Objectives

- Purpose: The goals and objectives will guide the development of a regional Green Landscapes Guide for developers, City Council, Planning Commission, and staff to create water efficient landscapes that are environmentally and economically sustainable

- Goals are consistent with:
  - AB 1881, Laird's Water Conservation in Landscaping bill
  - the recommendations developed by the AB2717 Landscape Task Force's Water Smart Landscapes for California report
  - Local Government Commission's Ahwahnee Water Principles: A Blueprint for Regional Sustainability
  - Metropolitan Water District's California Friendly® guidelines
  - NPDES requirements
  - Low Impact Design standards

- We have sent copies of the proposed Goals and Objectives to each city and are receiving their support and incorporating their recommendations into the Green Landscapes Guide

***We would like the Alliance to be prepared to discuss and ratify the Goals and Objectives at the next meeting**

Workshops

- Past workshops:
  - An Introduction to California Friendly® Landscapes
  - Water Runoff BMPs
  - IRWD's Landscape and Water conservation Through Tiered Rates
  - Implementing & Enforcing the Riverside County Water Efficient Landscape Ordinance
  - Best Planting Practices: Regional Plant Palettes

- Future workshops:
  - New Irrigation Technology
  - General Plan Language for Water Efficient Landscapes
  - Planning Commissioner Tour of the Inland Empire Region
  - An Introduction to Soil and Mulch
  - Water-Wise and California Friendly® Landscapes Part 2
  - Low Impact Design





Join us at our next workshop!

BREAKFAST AT CENTRAL PARK

Best Irrigation Practices for Landscapes:
The nuts and bolts of new irrigation technology

Central Park Community Center
11200 Base Line Road
Rancho Cucamonga, CA
(909)477-8050
Wednesday, September 26, 2007
7:30 am to 9:30 am

Lessons Learned & Insights

- There is a value to each city and agency when we do something together
- Industry is on board & waiting for direction!

Lewis Group of Companies

"Cities need to tell us what they want us to do and how they want us to build"

- Randal Lewis, Executive Vice President, Lewis Corporation

BIA Building Industry Association of Southern California

"Low Impact Design is the way of the future"

- Mark Grey, Director of Environmental Affairs, Building Industry Association of Southern California

Next Steps

- Continue meeting with city and agency staff for input for the development of the Green Landscape Guide
- Ratify goals and objectives at October Landscape Alliance Meeting
- Continue informational workshops for city staffs
- expand workshop series to address residential customers

Next Meeting

Thursday October 11, 2007

4:00-5:00PM

IEUA Board Room

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Regional Conservation Programs
Monthly Report – August 2007

MWD Activities

- **Media Campaign & Public Outreach** - MWD's media campaign kicked off in July with traffic radio announcements. During the month of August, the campaign will expand to 30 and 60-second radio spots, online news and print ads. Outreach materials have been developed and approved for use throughout the region. MWD will post all brochures and materials online for member agency access and ordering in September. The media campaign schedule will run from July-December, 2007.
- **Public Sector Water Conservation Partnership Demonstration Program** - A Board Letter was submitted to the MWD Board on August 21, 2007 requesting that $15 million be allocated for the Accelerated Public Sector Water Efficiency Partnership Demonstration Program. Public agencies who use large amounts of water are excellent candidates for water efficiency improvements; however, due to budgetary constraints, are unable to implement those upgrades. Public agencies also serve as examples within their communities while having a significant impact on the public's attitude and willingness to conserve. MWD will work with member agencies to identify those agencies that have the highest potential for reductions in water demand through the implementation of recommended water efficiency improvements. This program will offer conservation audits to identify water efficiency improvements, pay for enhanced device incentives—paid up front—to purchase proven water-saving retrofit technologies, Pay-for-Performance water use reduction incentives and will also include hook-up of recycled water for use by public agencies, including schools.
- **Water/Energy Partnership Update** - The Water/Energy Program is a partnership between Southern California Edison (SCE), MWD and its member agencies. This program has been designed to provide high efficiency toilets through a direct installation program for low-income, multi-family complexes. Upon completion of toilet retrofits, this program will evaluate cold water (gas savings) and energy savings, which will be co-funded by MWD and SCE. Once sites have been identified, the program is tentatively scheduled to begin in January, 2008.
- **Region-wide Residential Program** - A Request for Proposal was distributed by MWD staff in July and vendor selection is expected to be completed in September, 2007. The regional program is tentatively scheduled to begin in January, 2008.
- **New MWD Commercial, Industrial and Institutional (CII) Rebates** - On July 10, 2007, the MWD Board of Directors approved all CII devices that were recommended through the PAC group, which includes funding for high efficiency/multi-load clothes washers, high efficiency urinals, synthetic turf for commercial, industrial, institutional and residential programs, dry vacuum pumps and high efficiency rotator nozzles for large landscapes, such as golf courses.
- **California-Friendly® Marketing Campaign** - The California Friendly® labeling campaign has been placed on hold until next year.

Landscape Programs

- **Landscape Audit Program** - HydroEarth has completed all 150 Commercial field audits to date and the reports are under review by IEUA. HydroEarth has completed 15 residential field audits. The program consists of 150 commercial audits and 50 large landscape residential audits to be completed by September, 2007.
- **Ontario Cares** - The City of Ontario has undertaken a pilot project in cooperation with IEUA, MWD and the United States Bureau of Reclamation to integrate California-Friendly® landscapes into the city's existing Ontario Cares program that provides home improvements for homeowners residing in low-income neighborhoods. The first California-Friendly® landscape site retrofit was completed on August 16, 2007. A post-site property inspection is scheduled to be done at the end of the month for program and California-Friendly® compliance.
- **Landscape Retrofit Rebate and Education Program** - The RFP for Consulting Services for an experienced Water Use Efficiency Consultant to develop the Landscape Retrofit Rebate and Education Program closed July 16, 2007. Two proposals were received by IEUA: Water Wise Consulting, Inc. submitted a bid for approximately $50,000; Intergy Corporation submitted a bid for $243,000. The proposals are currently under review by the Ad-Hoc Committee.

- **Inland Empire Landscape Alliance** - During the summer months, workshops have been held on a variety of topics, including an introduction to California-Friendly® landscapes, incorporation of NPDES requirements into landscape design, tiered rate structures, and on Western Municipal Water District's experiences working with and enforcing the Riverside County landscaping ordinance, and incorporating native or California-Friendly® plants into plant palettes. Upcoming topics will include new irrigation technology, soil and mulch maintenance, and additional California-Friendly® landscape class, and requirements for a regional landscape ordinance. The next formal meeting for the Landscape Alliance will be held at IEUA on September 13, 2007 at 3:30 p.m.
- **California-Friendly® Landscape Classes (formerly PDA)** - Requested classes have been scheduled through December 31, 2007. All current teacher contracts will expire on December 31, 2007. For those agencies requesting classes for January-June, 2008, the scheduling for them are on hold until MWD completes their RFP submittal reviews, makes the new teacher selections and executes the new contracts. This is expected to be completed in the fall. Once the new contracts have been executed, requested class schedules will be confirmed for January-June, 2008.

Commercial/Industrial/Institutional Program

- **(CII SAVE-A-BUCK)** - For fiscal year 07/08, there have been no rebates issued to date. From program inception (FY 00/01) to date, a total of 13,828 devices have been rebated, representing a lifetime savings of 6,497.88 AF. The following is a list of the most recent rebate activity within the IEUA service area and provided through MWD's Save-A-Buck Program, only:
  - **High Efficiency Clothes Washers** - During the month of July 2007, there were no rebates issued. To date, 409 commercial high efficiency clothes washer rebates have been issued within IEUA's service area since FY 00/01.
  - **Cooling Tower Conductivity Controller** - During the month of July 2007, there were no rebates issued. To date, 19 cooling tower conductivity controller rebates have been issued within IEUA's service area since FY 00/01.
  - **Ultra-Low-Flush Toilets** - During the month of July 2007, there were no rebates issued. To date, 1,884 ULFT rebates have been issued within IEUA's service area since FY 00/01.
  - **ULFT Flushometers** - During the month of July 2007, there were no rebates issued. To date, 4 ULFT flushometer rebates have been issued within IEUA's service area since FY 00/01.
  - **High Efficiency Toilets** - During the month of July 2007, there were no rebates issued. To date, 67 high efficiency toilet (HET) rebates have been issued within IEUA's service area since FY 00/01.
  - **Zero Water Urinals** - During the month of July 2007, there were no rebates issued. To date, 101 waterless urinal rebates have been issued within IEUA's service area since FY 00/01.
  - **Low – Flow Urinals** - During the month of July 2007, there were no rebates issued. To date, 8 low-flow urinal rebates have been issued within IEUA's service area since FY 00/01.
  - **Water Broom** - During the month of July 2007, there were no rebates issued. To date, 695 water broom rebates have been issued within IEUA's service area since FY 00/01.
  - **Weather-Based Irrigation Controllers** - During the month of July 2007, there were no rebates issued. To date, 0 WBIC rebates have been issued within IEUA's service area since FY 00/01.
  - **X-Ray Recirculation Units** - During the month of July 2007, there were no rebates issued. To date, 11 x-ray recirculation unit rebates have been issued within IEUA's service area since FY 00/01.
  - **Pre-Rinse Spray Head-(PRSH)** - During the month of July 2007, there were no rebates issued. To date, 2 pre-rinse spray head rebates have been issued in IEUA's service area since FY 00/01.

Residential Rebate Programs

- **ULFT and HET Rebate Program** –Implemented February 1, 2007, IEUA began processing the ULFT and HET rebates. In the month of July, there were no ULFT rebates processed for FY 07/08. 267 rebates were processed during FY 06/07. Since the program was executed in 2002, a total of 4,523 rebates have been processed by IEUA.
- ***Correction:*** **It was reported in the July Conservation Report that there was 57 ULFT and HET rebated in the month of June. In actuality, it was a total of 89 ULFT and HET rebated.**
- **High Efficiency Clothes Washer Rebate** - Starting FY 07/08, 37 washer rebates were processed in July. For FY 06/07, 1,329 washer rebates were processed by IEUA. A total of 7,790 rebates have been distributed since the program was put into practice in 2002.
- **"SmarTimer of Inland Empire" Program** - One (1) SmarTimer Irrigation Controller rebate was processed in July. To date, 28 SmarTimer Irrigation Controller rebates have been processed, with a total of 254 controllers placed since October, 2006. The program began in April, 2006.

- **Rotating Nozzles for Pop-up Spray Heads** - The new rebate program for rotating nozzles commenced late January, 2007. The incentive is $4 per rotating nozzle to be replaced. The rotating nozzles save up to 6,600 gallons of water over five years. To date, 158 Rotating Nozzles have been placed. There were no rotating nozzles replaced in July.

Other Residential Programs

- **Multi-Family ULFT Program** - The Multi-Family Direct Installation Program began ULFT retrofits in October, 2006. To date, there have been 10,454 ULFTs retrofitted within IEUA's service area. During the month of July, there were 322 retrofits completed.

School Education Programs

- **Garden in Every School** - Schools that applied but were not previously selected are being contacted to see if they are interested in participating in the 07/08 program. Contact is also being renewed with past participants to help maintain the gardens and with the plan of creating a support network between all of the GIES schools. The 07/08 workshop will be held on Saturday, September 22 from 8:30 a.m. to 12:00 p.m. at Liberty Elementary in Ontario.
- **National Theatre for Children** - The schedule for 07/08 school year is currently being developed.
- **Chino Youth Museum** - Over the past year the Chino Youth Museum along with the City of Chino, MVWD, Chino Basin Water Conservation District and IEUA have been meeting to rejuvenate and improve the water exhibit that was constructed in 2002. The planning committee has received drawings from the consultant for the design of the new exhibit. Construction of the exhibit will begin in Fall, 2007.

Outreach

- **Water Fair** - The planning committee for the Water Fair 2007 is meeting monthly. Water Fair 2007 will be held Saturday, October 20, 2007, from 10:00 a.m. to 2:00 p.m., at Montclair Plaza, inside lower level Main entrance. The event will promote water conservation and educate customers on the various rebates and programs that exist in their area. There will be a water show and activities for kids.
- **Water Education Water Awareness Committee (WEWAC)** - WEWAC is finalizing its garden site at the L.A. County Fairgrounds. The garden will incorporate a "backyard friendly" design, low-water use plants and drip irrigation for fairgoers to view.

CALENDAR

August 29, 2007	**Landscape Alliance Workshop, IEUA – 7:30-8:30 a.m.**
August 29, 2007	**S.B. County LID Workshop, IEUA – 9:30 a.m.-3:30 p.m.**
September 11, 2007	**Regional Conservation Partnership Meeting – 9:00-11:00 a.m.**
September 12, 2007	**CUWCC Meeting, San Diego – All Day**
September 13, 2007	**Landscape Alliance Meeting, IEUA – 3:30-4:30 p.m.**
September 22, 2007	**Garden-in-Every School Kick-off Workshop, Liberty Elem. – All Day**
September 26, 2007	**Landscape Alliance Workshop, IEUA – 7:30-9:30 a.m.**
October 9, 2007	**CUWCC Drought Management Workshop, Santa Ana – 9:30-3:00 p.m.**
October 12, 2007	**Water Conservation Summit, UC San Diego – 8:00 a.m.-3:00 p.m.**
October 20, 2007	**Regional Water Fair, Montclair Plaza – All Day**
October 30, 2007	**Landscape Alliance Workshop, IEUA – 7:30-9:30 a.m.**

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Inland Empire
UTILITIES AGENCY

Date:	September 19, 2007
To:	The Honorable Board of Directors
Through:	Public, Legislative Affairs, and Water Resources Committee *(09/12/07)*
From:	Richard W. Atwater RWA Chief Executive Officer/General Manager
Submitted by:	Martha Davis MD Executive Manager of Policy Development
Subject:	August Legislative Report from Innovative Federal Strategies, LLC

RECOMMENDATION

This is an informational item for the Board of Directors to receive and file.

BACKGROUND

Letitia White provides a monthly report on their federal activities on behalf of IEUA.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

None.

RWA:MD:mef

Enclosure

G:\Board-Rec \ 2007 \ 07329 Aug. Leg Report from Innovative Fed Strategies 9-12-07

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Innovative Federal Strategies LLC
Comprehensive Government Relations

MEMORANDUM

To: **Rich Atwater and Martha Davis, IEUA**

From: **Letitia White, Susan Carr and Alex Shockey**

Date: **August 29, 2007**

Re: **August Monthly Legislative Update**

As you know, the House of Representatives started August recess behind schedule this year, after working until late into the night on Saturday, August 4th to pass the last of the annual appropriations bills. The remainder of August in Washington, D.C. has been very quiet, with Congress out of session and legislators back in their home districts meeting with constituents. Many staff have also taken the opportunity of August recess to go on vacation or go to the Member's home district to work. As a result, Washington is a bit of a ghost town!

The August political buzz has revolved mainly around the 2008 Presidential election. With many new, early primaries, the election seems like it is right around the corner! In addition to this buzz, several Members of Congress have announced that they will not run for re-election. These include Dennis Hastert (R) of Illinois (former Speaker of the House), Deborah Pryce (R) of Ohio, Chip Pickering (R) of Mississippi, and Ray LaHood (R) of Illinois.

The California delegation has a newly elected Member to replace Congresswoman Juanita Millender-MacDonald who died in April. On Tuesday, August 21, 2007, California State Assemblywoman Laura Richardson (D) took 67 percent of the vote in a special election in California's 37th Congressional District, which includes Carson, Compton, and portions of Long Beach.

The House and Senate will return on September 4th. The Senate plans to tackle some of the appropriations bills immediately upon its return which will allow House-Senate conferences to move forward. Homeland Security Appropriations will be the first House-Senate conference as it is the only bill that the Senate has passed. The issue of appropriations is important because the current fiscal year ends on September 30th. We will continue to keep you informed on all activities here in Washington.

Suite 800 • 525 Ninth Street, NW • Washington, DC 20004 • 202-347-5990 • Fax 202-347-5941

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Inland Empire
UTILITIES AGENCY

Date:	September 19, 2007
To:	The Honorable Board of Directors
Through:	Public, Legislative Affairs, and Water Resources Committee *(09/12/07)*
From:	Richard W. Atwater Chief Executive Officer/General Manager
Submitted by:	Martha Davis Executive Manager of Policy Development
Subject:	August Legislative Report from Geyer and Associates

RECOMMENDATION

This is an informational item for the Board of Directors to receive and file.

BACKGROUND

Bill Geyer and Jennifer West provide a monthly report on their state activities on behalf of IEUA.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

None.

RWA:MD:mef

Enclosure

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

BILL GEYER
JENNIFER WEST

GEYER ASSOCIATES

CONSULTING AND ADVOCACY IN CALIFORNIA GOVERNMENT 1029 K ST., SUITE 33, SACRAMENTO, CA 95814, (916) 444-9346 FAX: (916) 444-7484, EMAIL: geyerw@pacbell.net

MEMORANDUM

TO: Richard Atwater and Martha Davis

FROM: Jennifer West
Geyer Associates

DATE: August 30, 2007

RE: Legislative Report August

Water Bond 2008?

The Governor and the Department of Water Resources (DWR) are continuing their push for a 2008 water bond. Even though there are only two weeks left in the legislative session, the Governor's office and DWR say a deal can be reached before the legislature goes on fall break. To demonstrate his commitment to the passage of a water bond, the Governor said this week that if a deals fails to come together he might call a special fall session for this purpose. The Governor's water bond proposal is as follows:

$5.95 billion Total Bond

- **Surface and groundwater storage -- $4.5 billion**

For the development of new surface storage reservoirs along the Sacramento River and on the San Joaquin River. According to the Administration, Sites and Temperance Flat Reservoir could yield up to 500,000 acre-feet per year. Some unspecified amount of the $4.5 would be used for groundwater storage projects.

- **Delta Conveyance --$1 billion**

To build a canal or some form of channel conveyance around the Delta for the enhancement of water delivery throughout the state. This funding is intended to be augmented by water user investments.

- **River Restoration --$250 million**

To support restoration on the Klamath River, Salton Sea, San Joaquin and projects on the Sacramento River and its tributaries.

- **Water Conservation --$200 million**

For "targeted water conservation grants" to local communities that can augment existing IRWMPs.

The Governor's office and DWR say they are open to some changes in their proposal. Last month Senator Perata released an outline of a 2008 water bond that included $1 billion for conveyance, $1 billion of Delta restoration and $2 billion for IRWM. No language has yet been released. IEUA withWateReuse has asked Senator Perata and DWR to include separate funding for water recycling in their respective bond proposals.

Hot Bills

AB 1489 (Huffman) IRWMP
This measure would place into statute many provisions of the Proposition 50 guidelines. The environmental justice and environmental community are also circulating amendments that would give them a greater statutory role in the development and implementation of IRWM plans. While these organizations are no longer seeking direct representation on IRWM governance bodies, they want a much earlier and greater role in the development of the plans. AB 1489 also includes codified intent language that implies all groundwater basins are being mismanaged and includes a study of different groundwater management plans. Many groups have recommended that the groundwater language be removed, however, this provision still remains in the bill. IEUA has been participating in the ACWA and author working group on the bill. Additional changes are expected this week.

SB 1002 (Perata) Proposition 84 Delta
SB 1002 is expected to contain funding for immediate actions that can improve Delta health. Senate and Assembly leadership are negotiating a new bill, which should be released next week. This bill reportedly included funding for climate change actions for DWR that might help in the implementation of AB 224 (Wolk).

Inland Empire Utilities Agency Legislative Tracking 8/31/07 (Prepared by Geyer Associates)		
Bond Funding/Prop. 84 and 1E	**Bill Summary**	**Status**
SB 59 (Cogdill) Water Bond 08	Authorizes a $3.9 billion water bond for the 2008 ballot. Includes $2 billion for two surface storage facilities. The Governor has vowed to reopen this issue as part of the budget, or end of session negotiations.	Senate Nat. Resources **Two year bill**
SB 167 (Negrete McLeod) General Plans: planning grants	Establishes grant and loan program at the Office of Planning and Research for Prop. 84 (Chapter 9(c) $90 million). Allows cities and counties to apply for funding to update their general plans.	Senate Approp. **Two year bill**
SB 292 (Wiggins) State Bond Funds: allocation	Requires Cal-EPA and the Resource Agency to develop grant criteria for the urban greening funding in Prop. 84, which contains $90 million.	Senate Approp. **Two year bill**
SB 378 (Steinberg) Flood Prevention Bond Act 2006	Specifies that the $300 million in Prop. 1E for stormwater management would be made available through a joint SWRCB and DWR grant program. The bill authorizes the agencies to prepare guidelines by March 2008. The agencies are required to conduct outreach to disadvantaged communities. There are no north/south split provisions mentioned in the bill.	Assembly WPW **Two year bill**
SB 732 (Steinberg) Prop. 84	Amendments were taken in the last policy committee to delete the references to the IRWMP "statewide criteria." Now the bill deals with implementing the sustainable communities section of Prop. 84.	Assembly Floor (as amended)
SB 1002 (Perata) Prop. 84	Senate Leadership bill that is being developed to address issues in the Delta. A complete rewrite is expected in the next week.	Assembly Floor (as amended)

AB 739 (Laird) Stormwater Discharge	Establishes criteria by which SWRCB and DWR award grants for stormwater management projects funded by a portion of the proceeds of Prop 1E flood bonds and Prop 84.	Senate Floor
AB 783 (Arambula) Drinking Water Improvements	Makes changes to DHS grant funding in Prop. 84 for small and disadvantages communities. (Chapter 2, Section 7022)	Senate Floor
AB 909 (Wolk) Mercury Monitoring	Allows stormwater grant funds in Prop. 84 to be used for grants to public agencies for addressing mercury contamination.	**Two year bill**
AB 1297 (Arambula) IRWMP	IRWMP implementation bill.	**Two year bill**
AB 1303 (Smyth) Urban Greening Act 2007	Establishes an urban greening grant program for Prop. 84 funds. (Chapter 9, (a)).	Assembly Approp. **Two year bill**
AB 1489 (Huffman & Wolk) Resource Bond Funds	Primary IRMWP implementation bill. Proposed amendments would codify the Prop. 50 guidelines for the IRWMP and delete the references to the 2000 Costa bill. Environmental justice and environmental community are seeking amendments that would allow them to have voting membership on an IRWMP governance board. This amendment is permissive. IEUA and SAWPA have been participating in negotiations with the author and the sponsors.	Senate Approps. (held in Approps. May be reintroduced on the floor)
AB 1602 (Nunez) Sustainable Communities & Urban Greening	Establishes a grant program in the Resources Agency "Sustainable Communities and Urban Greening Grant Program." There is $90 million in Prop. 84 for this purpose.	Senate Floor
	Flood Control/Delta Conveyance	
SB 5 (Machado) Flood Management	Establishes the roles and responsibilities for the state of California, local governments and landowners in flood management. Double joined to AB 5 (Wolk).	Assembly Rules

SB 17 (Florez) Reclamation Board and Powers	Gives the "Central Valley Flood Protection Board" new authority over flood control activities in the Central Valley. The bill is backed by Senate leadership.	Assembly Floor
SB 34 (Torlakson) Delta User Fee	Requires the strategic financing plan for the Delta include recommendations in accordance with a "beneficiaries pay" principle, as to persons and entities on which a fee would be imposed, and proposed fee categories in order to create a dedicated revenue stream to pay for maintenance and improvements to delta levees, project levees, and the levee conveyance system.	Assembly Floor
AB 5 (Wolk) Flood Protection	Gives priority for state funds to be given to local agencies that have adopted a local plan of flood protection. Prohibits local governments in the Central Valley from approving new development within high-risk flood prone areas, unless adequate flood protection is assured. AB 5 is now double joined to SB 5 (Machado), which was sent back to Assembly Rules Committee. If SB 5 fails passage, so will AB 5.	Senate Floor
AB 1507 (Emmerson) Floodplain Management	Requires DWR to establish an Alluvial Fan Task Force.	Assembly Approp. **Two year bill**
	Urban Water Management Plans/Conservation/Recycling	
SB 862 (Kuehl/ Steinberg) UWMP	Requires the UWMP to assess energy consumption and Bulletin 160. Contains all of the provisions of SB 1640 (Kuehl), 2006, except for the groundwater provisions. SB 1640 was vetoed last year because of the groundwater reporting language.	Assembly Rules (rereferred back to Assembly Rules)
AB 1435 (Salas) Water Charges	Requires a local water purveyor that supplies water to retail customers to institute a conservation rate structure based on the amount of water used for other than agricultural purposes for each customers that has a service connection for which a water meter has been installed.	Senate Natural Resources **Two year bill**
	Groundwater	

SB 178 (Steinberg and Kuehl) Groundwater	Established a statewide groundwater elevation monitoring program. Under the provisions of the program, DWR would be required to receive and evaluate qualifications of those seeking to conduct the required monitoring. If there is no entity willing to do the monitoring, DWR would be required to step in. Recently amendments were taken that removed the opposition from agricultural interests.	Assembly Floor
	Water Quality/Water Supply	
AB 559 (Ruskin) Public Water Systems	Asks the University of California (UC) to direct the UC Center for Water Resources to study the potential adverse affects on human health of compounds used to disinfect drinking water and byproducts resulting from disinfection, with emphasis on chloramine use by the San Francisco Public Utilities Commission, and to report the center's findings to the Legislature by July 1, 2009.	Assembly Approps. **Two year bill**
AB 690 (Jones) Water Corp. Rates/Contamination	States that if a private water corporation receives monetary compensation for damage resulting from contamination of the utility's water supply, the PUC shall require the utility to equitably allocate the compensation between the ratepayers and investors of the utility.	Senate Approps.
AB 1127 (Carter) Percholorate	Would authorize DSH to contract with SAWPA for the purposes of assessing and treating drinking water for perchlorate contamination in and around the City of Rialto.	Assembly E.S. & T.M. **Two year bill**
	Compost	
SB 697 (Wiggins) Compost	Would require compost be used by the Department of Transportation and all persons contracting with the Department.	Assembly Floor
	Green Buildings/Climate Change	
AB 35 (Ruskin) State Green Buildings	Requires the California Integrated Waste Management Board by 2009 to adopt regulations for sustainable building standards for the construction or renovation of state buildings. Similar language is contained in a budget trailer	Senate Approps. Held on suspense

	bill.	
Positions/Recommended Positions		
SB 55 (Florez) Biosolids	Broadly defines "biosolids" to include any product with human waste, which would include some compost. Requires POTWs to certify to the regional boards that biosolids meet "the requirements and standards for any pollutant listed in the waste discharge requirement for the POTW, including, but not limited to, any requirements of standards governing the 126 priority toxic pollutants listed in 40 CFR 131.38." This list is designed for surface water issues and includes many compounds not found in biosolids. The bill was held in the Senate Appropriations Committee.	**Oppose** Senate Approps. **Two year bill**
SB 201 (Florez) Recycled Water Leafy Green	We asked that a section of the bill be deleted that requires extra field testing for recycled water. The Assembly Agriculture Committee did not like the approach of the bill and it was held in committee with no discussion of the recycled water issue.	**Oppose unless amended** Assembly Ag. **Two year bill**
SB 220 (Corbett) Bottled Water	Establishes a system for the regulation and inspection of water vending machines and imposes additional labeling requirements on water bottlers and vendors.	**Support** Assembly Floor
SB 1029 (Ducheny) Drinking water regulations	Places a time limit on the Department of Finance of 60 days to review drinking water regulations that are already adopted on the federal level. ACWA is the sponsor.	**Support** Assembly Floor
AB 224 (Wolk) Climate Change/Water Supply Planning	Requires DWR to assess the possible affects of climate change on water supply. Requires that this information be incorporated into state and local water planning documents. States that if DWR does not provide the information the requirement	**Sponsor** Senate Approps. (Held on

	does not apply. Requires SWRCB to conduct a study on the energy savings and GHG reductions associated with increased use of recycled water and water conservation. The bill was held on suspense apparently for political reasons because of issues between the Senate and Assembly. We are exploring options on the best way to proceed with the bill this year.	suspense)
AB 503 (Swanson) Overtime Notice/public agencies	Would have prohibited an agency from requiring any employee entitled to receive overtime compensation pursuant to any federal statute or regulation to perform services outside the employee's normal work schedule unless a minimum of 8 hours' written notice of that work assignment has been provided to the employee. Recently amended to a study only, looking at issues related to requiring state and local agencies to provide eight-hours' prior written notice when requiring an employee to work overtime.	**Oppose to Neutral** Senate Floor
AB 662 (Ruskin) Water use efficiency	Requires the California Energy Commission (CEC) to prescribe cost effective measures to promote the use of water efficient appliances.	**Support** Senate Floor
AB 566 (Plescia) Landscape Water Conservation	Requires the model landscape ordinance to include climate information for irrigation scheduling based on the California Irrigation Management Information System. IRWD sponsor.	**Support** Senate Approps (held in committee)
AB 715 (Laird) Low-flush Water Closets	Phases in requirements that water closets and water-using urinals have lower flush volumes, requiring manufacturers to produce an increasing percentage of high-efficiency models until 2014 when all new water closets and urinals would have to meet the high-efficiency definition. Allows cities and counties to enact ordinances that would exempt them from this requirement if it was determined that an older system would result in more water being used.	**Support** Senate Floor

AB 885 (Calderon) MWD Board Composition	Restructures the MWD Board of Directors so that no one agency would lose representation, only gain representation. Also requires that MWD study the manner in which members of the Board are designated and selected and the criteria that it uses for determining the number of directors allocated to each member public agency. Central Basin is the sponsor. The bill was held in Senate Local Government. MWD intends to form an internal workgroup to discuss Board representation issues.	**Oppose** Senate Local **Two Year Bill**
AB 888 (Lieu & Laird) Green Building Standards	Requires CalEPA to develop and adopt building standards for commercial construction that meet or exceed the Leadership in Energy and Environmental Design (LEED) Gold Standard. Requires that by 2012 all new commercial buildings, 50,000 square feet or larger, meet these new standards. Small newly constructed buildings can waive this requirement for economic purposes.	**Support** Senate Floor
AB 1260 (Caballero) Taxes and Fees	Clarifies how a public agency may provide notice when proposing a new, or increasing an existing, property-related fee or charge, and establishes a 120-day statute of limitations for any challenges to any property-related fee or charge. This bill is sponsored by ACWA and was introduced in response to the Big Horn decision last fall.	**Support** Senate Floor
AB 1404 (Laird) Water use Reporting	Establishes comprehensive system for reporting water use. Specifically, it requires DWR, the SWRCB and DPH to develop a coordinated water use reporting database.	**Support** Senate Floor
AB 1406 (Huffman) Recycled Water in Condos	Allows the use of recycled water in toilets and urinals in condominiums. Sponsored by IRWD. Recently opposed by DPH and Department of Finance because of concern over cross-connections.	**Support** Senate Floor
AB 1420 (Laird) UWMP Conservation	As recently amended, would require DWR to use a urban water agency's compliance with the demand management measures in the UWMP as the eligibility criteria for grants and loans. It allows for an agency to not be implementing all the demand measures and still be eligible for grants if it submits documentation demonstrating that those measures	**Support** Senate Floor

	it is not implementing are not locally cost effective. Allows DWR to consider the BMPs when developing the guidelines and leaves to the department's discretion what conservation measures known and unknown it will require. Provide for a technical panel that will provide advice to the Legislature for potential amendments to the 14 demand measures in the UWMP.	
AB 1481 (De LaTorre) Water Recycling General Permit	Sponsored by LADWP. Requires that SWRCB prepare a general permit by 2010 for water recycling for landscape irrigation.	**Support** Senate Floor
AB 1560 (Huffman) Building Standards	Requires the CEC to prescribe by regulation, water conservation design standards for new residential construction and new nonresidential buildings.	**Support** Senate Floor

Inland Empire
UTILITIES AGENCY

Date:	September 19, 2007
To:	The Honorable Board of Directors
Through:	Public, Legislative Affairs, and Water Resources Committee *(09/12/07)*
From:	Richard W. Atwater Chief Executive Officer/General Manager
Submitted by:	Martha Davis Executive Manager of Policy Development
Subject:	August Legislative Report from Dolphin Group

RECOMMENDATION

This is an informational item for the Board of Directors to receive and file.

BACKGROUND

Michael Boccadoro provides a monthly report on his activities on behalf of the Chino Basin/Optimum Basin Management Program Coalition.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

None.

RWA:MD:mef

Enclosure

G:\Board-Rec \ 2007 \ 07331 Aug. Leg Report from Dolphin 9-12-07

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

THE DOLPHIN GROUP

August 30, 2007

To: Chino Basin/OBMP Coalition

From: Michael Boccadoro
Senior Vice President

RE: August Status Report

Please find attached the status report from The Dolphin Group for the month of August 2007.

The state's budget, once predicted by most to be a relatively easy process this year, stretched well into late August, marking the second longest budget stalemate in California's history. After holding out for nearly two months, the Senate Republicans finally offered the bare minimum of necessary votes to approve a budget on August 21st.

On the regulatory front, the California Air Resources Board focused on determining the current and historical levels of Greenhouse Gas (GHG) inventories for the purposes of adopting regulations in the coming years, while the CPUC is ruling on the tariffs to implement AB 1969 (Yee) and require the utilities to purchase renewable power from public water and wastewater agencies.

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Chino Basin / OBMP Coalition

Status Report – August 2007

ENERGY/REGULATORY

AB 1969 Implementation

The California Public Utilities Commission continues the process of implementing AB 1969. This measure, sponsored by IEUA and signed into law by Governor Schwarzenegger last year, requires utilities to purchase energy produced by public water and wastewater agencies at the market price referent (MPR). The Commission also took the additional step of expanding the concept to a "sister program" that similarly requires the utilities to purchase renewable energy from non-public agencies.

Following CPUC approval of the program last month, on August 2nd Southern California Edison submitted an advice letter that included the tariff and standard contract that will be offered to customers who elect to participate in the program. Some customer groups raised concerns that Edison's language might imply that they were seeking too many green attributes, namely GHG credits, in order to ensure that the electricity would be considered "renewable". On August 29th, Edison replied to these protests clearly stating they will only be seeking green attributes specific to the actual electricity generation, not to other operations that may have GHG benefits (ie, methane capture).

Because protests were filed, the CPUC Energy Division will write a resolution to resolve the dispute, which must be approved by the Commission. This process will likely take 1-2 months before the tariffs are fully effective.

On August 24th, Southern California Edison also submitted a petition for rehearing of the decision made last month by the Commission. That decision allows customers to either export all energy produced, or first off-set onsite energy before exporting the remainder of the energy produced. SCE believes that AB 1969 clearly states that the program should only permit "export only" agreements, and in this filing has asked the Commission to reconsider their decision.

Greenhouse Gas Inventory

On August 13th, the California Air Resources Board (CARB) released its revised inventory of GHG emissions, by sector, for the years 1990 through 2005. This inventory, when adopted, will serve to guide the Board in adopting regulations aimed at reducing 2005 emissions levels to 1990 levels statewide. The Board will consider and adopt a final inventory in December, 2007.

Manure Management Workshop – ARB

On September 5, the CARB will hold a workshop on manure management activities as they relate to impending greenhouse gas regulations that will be developed by the Board.

The meeting will cover three broad topics:

1. Background and Schedule of AB 32 implementation
2. Solicitation of input regarding the development of GHG reduction measures for manure management activities
3. Discussion of California Climate Action Registry manure management protocols

2007-08 STATE BUDGET

Because most prognosticators believed that this year's budget process would be relatively timely, most of Sacramento was surprised that the 2007-08 budget turned out to be the second-longest delayed budget adoption in the State's history.

Although the Assembly approved a budget on July 20th, negotiations in the Senate quickly deteriorated as it took another month, until August 21st, for the Senate to approve a budget. Governor Schwarzenegger signed the budget on August 24th.

Due to the 2/3 requirement for approval, the makeup of the Senate requires at least two Republican votes to join the Democrats to adopt the budget. Abel Maldonado (R-Santa Maria), a moderate Republican, voted with Democrats after only a few days, but the rest of the Republican Caucus held firm for many more weeks. Among their demands were further budget cuts, relaxed local GHG standards and increased funding for suburban schools.

Eventually, after the Legislature returned to Sacramento after a month-long recess on August 20th, Republican Minority Leader Dick Ackerman, joined with Maldonado to approve the budget by the bare minimum of votes.

LEGISLATION

As the Assembly was in recess for most of the month, and the Senate continued to squabble over the State Budget, few other pieces of legislation saw action in August. Once the budget was approved, however, both houses quickly began to consider measures that had been sent from the other house. All measures are required to be approved by each house's Appropriations Committee by Friday, August 31st.

SB 463- Dairy Biogas Net Metering

This measure, sponsored by IEUA, will allow an investor-owned utility to purchase surplus generation from an eligible biogas net metering customer. This allowance currently exists in the net metering statute for solar and wind self-generation.

Legislative efforts related to SB 451 (Kehoe D-San Diego), which expands AB 1969 to all customers, have prevented further consideration of this bill.

CA SB 463

AUTHOR:	Negrete McLeod [D]
TITLE:	Energy: Biogas Digester Customer-Generator
INTRODUCED:	02/21/2007
LAST AMEND:	05/01/2007
DISPOSITION:	Pending
LOCATION:	Assembly Utilities and Commerce Committee

SUMMARY:

Relates to existing law that provides if the electricity generated by the eligible biogas digester customer-generator exceeds the electricity supplied by an electrical corporation over a specified period, the customer-generator is a net electricity producer and the corporation retains any excess kilowatthours generated over the specified period. Permits a utility to enter into a contract with the customer-generator to purchase excess kilowatthours.

VOTES:

04/24/2007	Senate Energy, Utilities and Communications Committee	P 8-0
05/17/2007	Senate Floor	P 38-0

Position: Support

Other Legislation

CA AB 109

AUTHOR:	Nunez [D]
TITLE:	Global Warming Solutions Act of 2006: Annual Report
INTRODUCED:	01/05/2007
LAST AMEND:	07/18/2007
DISPOSITION:	Pending
COMMITTEE:	Senate Appropriations Committee
HEARING:	08/30/2007

SUMMARY:

Requires the Governor, Treasurer's office, the Public Employees' Retirement and the State Teachers' Retirement systems to annually report to the Legislature information relating to greenhouse gas emissions and green investments. Requires all land conservancies to report to the Legislature on past, current, and future activities to sequester greenhouse gas emissions. Requires an annual on the Global Warming Solutions Act. Includes the reduction of such gases in the Environmental Goals and Policy Project.

VOTES:

04/23/2007	Assembly Natural Resources Committee	P 7-1
05/31/2007	Assembly Appropriations Committee	P 12-5
06/04/2007	Assembly Floor	P 58-16
07/10/2007	Senate Environmental Quality Committee	P 5-2

Position: Watch

CA AB 118

AUTHOR: Nunez [D]
TITLE: Alternative Fuels and Vehicle Technologies: Funding
INTRODUCED: 01/09/2007
LAST AMEND: 08/20/2007
DISPOSITION: Pending
COMMITTEE: Senate Appropriations Committee
HEARING: 08/30/2007

SUMMARY:

Creates the Alternative and Renewable fuel and Vehicle Technology Program and fund to provide grants and loans to specified entities to develop innovative technologies that will transform the state's fuel and vehicle types. Increases driver's license and motor vehicle registration related fees for deposit into the fund. Creates the Air Quality Improvement Program and fund to fund air quality projects relating to fuel and vehicle technologies. Increases the smog abatement fees for deposit into the fund.

VOTES:

04/23/2007	Assembly Transportation Committee	P 9-4
05/31/2007	Assembly Appropriations Committee	P 12-5
06/05/2007	Assembly Floor	P 48-29
07/03/2007	Senate Transportation and Housing Committee	P 6-3
07/10/2007	Senate Environmental Quality Committee	P 5-2

Position: Watch

CA AB 578

AUTHOR: Blakeslee [R]
TITLE: Energy: Distributed Energy Generation: Study
INTRODUCED: 02/21/2007
LAST AMEND: 07/12/2007
DISPOSITION: Pending
LOCATION: Senate Appropriations Committee

SUMMARY:

Deletes the requirement the Energy Commission evaluate the costs and benefits of having an increased number of operational solar energy systems and part of the electrical system. Requires the Public Utilities Commission to study the impacts of distributed energy generation on

the state's distribution and transmission grid. Assesses the impacts of the Solar Initiative Program. Deletes reporting requires on ratepayer subsidies for renewable and fossil fuel, ultraclean and low-emission distributed generation.

VOTES:

04/09/2007	Assembly Utilities and Commerce Committee	P 11-0
05/31/2007	Assembly Appropriations Committee	P 17-0
06/05/2007	Assembly Floor	P 79-0
07/03/2007	Senate Energy, Utilities and Communications Committee	P 8-0

Position: Watch

CA AB 739

AUTHOR: Laird [D]
TITLE: Stormwater Discharge
INTRODUCED: 02/22/2007
LAST AMEND: 08/01/2007
DISPOSITION: Pending
COMMITTEE: Senate Appropriations Committee
HEARING: 08/30/2007
SUMMARY:

Requires the Department of Water Resources to develop project selection and evaluation guidelines to implement a specified stormwater flood management grant program. Provides the design and construction of projects for specified combined municipal sewer and stormwater system are eligible for the program. Requires the state Water Resources Control Board to develop program guidelines. Requires coordination with regard to the development of project selection and evaluation guidelines. Requires a task force.

VOTES:

05/01/2007	Assembly Environmental Safety and Toxic Materials Committee	P 6-0
05/31/2007	Assembly Appropriations Committee	P 12-0
06/05/2007	Assembly Floor	P 58-6
07/02/2007	Senate Environmental Quality Committee	P 5-2

Position: Watch

CA AB 938

AUTHOR: Calderon C [D]
TITLE: Regional Water Management
INTRODUCED: 02/22/2007
LAST AMEND: 07/03/2007
DISPOSITION: Pending
LOCATION: Senate Environmental Quality Committee
SUMMARY:

Authorizes a county or city to convene one or more watershed water quality committees to develop and facilitate cooperation in achieving local water quality solutions. Requires a committee to use reasonable efforts to prepare and submit a watershed management plan that addresses major sources of stormwater, urban runoff, and nonpoint source pollution within the region. Requires a city or county that provides certain utilities to provide facilities for returning captured waters to receiving bodies.

VOTES:

04/24/2007	Assembly Water, Parks and Wildlife Committee	P 13-0
05/09/2007	Assembly Local Government Committee	P 7-0
05/31/2007	Assembly Appropriations Committee	P 17-0
06/04/2007	Assembly Floor	P 78-0
06/27/2007	Senate Local Government Committee	P 3-1

Position: Watch

CA AB 1428

AUTHOR: Galgiani [D]
TITLE: Energy: Biogas Digester and Manure Customer-Generator
INTRODUCED: 02/23/2007
LAST AMEND: 06/26/2007
DISPOSITION: Pending
LOCATION: Senate Environmental Quality Committee
SUMMARY:

Relates to existing law that requires electrical corporations with net energy metering to provide eligible biogas digester customer-generators, that commence operations by a specified date, with net energy metering, under a pilot program. Replaces the existing pilot program for eligible customer-generators with a net energy metering program for eligible customer-generators that use agricultural residues, animal wastes, or animal renderings to generate electricity and meet certain requirements.

VOTES:

04/09/2007	Assembly Utilities and Commerce Committee	P 12-0
04/23/2007	Assembly Natural Resources Committee	P 7-0
05/23/2007	Assembly Appropriations Committee	P 16-0
05/29/2007	Assembly Floor	P 77-0
06/19/2007	Senate Energy, Utilities and Communications Committee	P 7-0

Position: Watch

CA AB 1470

AUTHOR: Huffman [D]
TITLE: Solar Energy: Solar Hot Water Heat and Efficiency Act
INTRODUCED: 02/23/2007
LAST AMEND: 07/10/2007
DISPOSITION: Pending
COMMITTEE: Senate Appropriations Committee
HEARING: 08/30/2007
SUMMARY:

Creates the Solar Water Heating and Efficiency Act. Requires the Public Utilities Commission to design and implement a program to incentivize the installation of 200,000 solar water heating systems in homes and business througout the state in 2007. Requires the commission to establish criteria for such systems receiving gas customer funded incentives. Requires the commission to fund the program through a surcharge to gas customers in gas corporation service areas. Provides exemptions.

VOTES:

04/16/2007	Assembly Utilities and Commerce Committee	P 7-4
04/23/2007	Assembly Natural Resources Committee	P 6-3
05/31/2007	Assembly Appropriations Committee	P 12-5
06/06/2007	Assembly Floor	P 44-34
07/03/2007	Senate Energy, Utilities and Communications Committee	P 6-2

Position: Watch

CA AB 1506

AUTHOR: Arambula [D]
TITLE: Greenhouse Gas Emissions
INTRODUCED: 02/23/2007
LAST AMEND: 07/17/2007
DISPOSITION: Pending
LOCATION: Senate Appropriations Committee
SUMMARY:

Requires the Business, Transportation and Housing Agency to contract with the University of California or with another postsecondary educational institution to conduct a study of the most effective ways for the state to provide incentives to businesses to reduce greenhouse gas emissions, and to report its findings and recommendations to the Legislature.

VOTES:

04/17/2007	Assembly Jobs, Economic Development and The Economy Committee	P 6-0
04/23/2007	Assembly Revenue and Taxation Committee	P 8-1
05/31/2007	Assembly Appropriations Committee	P 12-5
06/06/2007	Assembly Floor	P 76-0
07/10/2007	Senate Environmental Quality Committee	P 5-2

Position: Watch

CA AB 1613

AUTHOR: Blakeslee [R]
TITLE: Energy: Waste Heat and Carbon Emissions Reduction
INTRODUCED: 02/23/2007
LAST AMEND: 08/20/2007
DISPOSITION: Pending
COMMITTEE: Senate Appropriations Committee
HEARING: 08/30/2007
SUMMARY:

Enacts the Waste Heat and Carbon Emissions Reduction Act. Requires a electrical corporation to purchase excess electricity delivered by a combined heat and power system that complies with certain sizing, energy efficiency, and air pollution control requirements. Provides exceptions. Requires such corporations to file a standard tariff for excess electricity purchase from an eligible customer-generator. Requires the Public Utilities Commission to create a pay-as-you-save program for each such corporation.

VOTES:

04/23/2007	Assembly Utilities and Commerce Committee	P 12-0
05/31/2007	Assembly Appropriations Committee	P 16-1

06/06/2007	Assembly Floor	P 77-0
07/03/2007	Senate Energy, Utilities and Communications Committee	P 8-0

Position: Watch

CA SB 9

AUTHOR: Lowenthal [D]
TITLE: Trade Corridor Improvement: Transportation Project
INTRODUCED: 12/04/2006
LAST AMEND: 08/20/2007
DISPOSITION: Pending
COMMITTEE: Assembly Appropriations Committee
HEARING: 08/30/2007
SUMMARY:

Relates to Trade Corridor Improvement Transportation Fund projects. Establishes a process to be administered by the State Transportation Commission for allocation of fund moneys. Establishes the corridors eligible for funding. Establishes criteria for project selection based on improvement of mobility of freight and improvement of air quality. Requires projects to be ready for construction by a specified date. Provides for allocations to projects outside of the trade corridors.

VOTES:

04/17/2007	Senate Transportation and Housing Committee	P 7-3
05/31/2007	Senate Appropriations Committee	P 10-6
06/07/2007	Senate Floor	P 24-12
07/09/2007	Assembly Transportation Committee	P 8-4

Position: Watch

CA SB 19

AUTHOR: Lowenthal [D]
TITLE: Trade Corridor: Projects to Reduce Emissions: Goods
INTRODUCED: 12/04/2006
LAST AMEND: 07/17/2007
DISPOSITION: Pending
LOCATION: Assembly Appropriations Committee
SUMMARY:

Relates to the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006. Requires the Air Resources Board to implement the Goods Movement Emission Reduction Program and to to adopt guidelines and funding criteria for the program. Creates eligibility requirements for funding pursuant to this program. Creates the Goods Movement Emission Reduction Fund to be funded with bond proceeds.

VOTES:

04/17/2007	Senate Transportation and Housing Committee	P 6-4
05/31/2007	Senate Appropriations Committee	P 10-6
06/04/2007	Senate Floor	P 24-14
07/09/2007	Assembly Transportation Committee	P 8-5

Position: Watch

CA SB 55

AUTHOR: Florez [D]
TITLE: Water Quality: Sewage Sludge
INTRODUCED: 01/10/2007

LAST AMEND: 04/30/2007
DISPOSITION: Pending
LOCATION: Senate Appropriations Committee
SUMMARY:

Relates to water quality and sewer sludge. Prohibits the treatment or land application of specified sewage sludge in violation of federal regulations. Requires a supplier of sludge to submit samples to a certified laboratory for testing. Relates to polluting chemicals including agricultural, industrial, personal care products and pharmaceuticals that may act as endocrine disrupters. Relates to pathogens.

VOTES:

04/24/2007 Senate Environmental Quality Committee P 6-1
Position: Watch, Watch

CA SB 210

AUTHOR: Kehoe [D]
TITLE: Greenhouse Gas Emissions: Fuel Standard
INTRODUCED: 02/08/2007
LAST AMEND: 08/20/2007
DISPOSITION: Pending
COMMITTEE: Assembly Appropriations Committee
HEARING: 08/30/2007
SUMMARY:

Requires the State Air Resources Board to adopt, implement, and enforce, a low-carbon fuel standard by regulation, that achieves the maximum technologically feasible and cost-effective reductions in carbon intensity of transportation fuels, and at least a 10% reduction in, the carbon intensity of transportation fuels. Provides the standard would apply to refiners, blenders, producers, and importers of such fuels. Requires the development of related environmental reports requirements.

VOTES:

03/27/2007	Senate Transportation and Housing Committee	P 7-4
04/24/2007	Senate Environmental Quality Committee	P 4-2
05/31/2007	Senate Appropriations Committee	P 10-6
06/04/2007	Senate Floor	P 21-15
07/02/2007	Assembly Transportation Committee	F 7-6
07/09/2007	Assembly Transportation Committee	P 8-6
07/12/2007	Assembly Natural Resources Committee	P 6-3

Position: Watch

CA SB 375

AUTHOR: Steinberg [D]
TITLE: Transportation Planning: Travel Models: Reviews
INTRODUCED: 02/21/2007
LAST AMEND: 07/17/2007
DISPOSITION: Pending
COMMITTEE: Assembly Appropriations Committee
HEARING: 08/30/2007
SUMMARY:

Relates to guidelines for travel demand guidelines used in regional transportation plans, the requirement a regional transportation plan include a preferred growth scenario designed to achieve goals for the

reduction of vehicle miles in the region, an environmental document under the Environmental Quality Act that examines specific impacts of a transportation project located in a local jurisdiction that has amended its general plan and the legislative body finds the project meets specified criteria.

VOTES:

04/24/2007	Senate Environmental Quality Committee	P 5-2
04/26/2007	Senate Transportation and Housing Committee	P 7-1
05/31/2007	Senate Appropriations Committee	P 10-6
06/07/2007	Senate Floor	P 21-15
07/03/2007	Assembly Local Government Committee	P 5-1
07/09/2007	Assembly Transportation Committee	P 8-5

Position: Watch

CA SB 411

AUTHOR: Simitian [D]
TITLE: Energy: Renewable Energy Resources
INTRODUCED: 02/21/2007
LAST AMEND: 07/17/2007
DISPOSITION: Pending
COMMITTEE: Assembly Appropriations Committee
HEARING: 08/30/2007
SUMMARY:

Requires a retail seller of electricity to increase its total procurement of eligible energy renewable resources so that at least 33% of its retail sales are procured from eligible renewable energy resources no later than specified date.

VOTES:

04/24/2007	Senate Energy, Utilities and Communications Committee	P 5-3
04/26/2007	Senate Environmental Quality Committee	P 5-1
05/17/2007	Senate Floor	P 21-15
07/02/2007	Assembly Utilities and Commerce Committee	P 8-3
07/09/2007	Assembly Natural Resources Committee	P 5-3

Position: Watch

CA SB 451

AUTHOR: Kehoe [D]
TITLE: Renewable Energy Resource Customer-Generator
INTRODUCED: 02/21/2007
LAST AMEND: 07/16/2007
DISPOSITION: Pending
COMMITTEE: Assembly Appropriations Committee
HEARING: 08/30/2007
SUMMARY:

Requires every electrical corporation to make the tariff available to any customer of the corporation on a first-come-first-served basis until the corporation meets its proportionate share of a combined statewide cumulative rated generating capacity of electrical generating facilities of 1,000 megawatts. Provides the electricity generated by a facility counts toward the corporation's renewables portfolio. Allows a customer to receive service pursuant to an alternative net metering program.

VOTES:

04/24/2007	Senate Energy, Utilities and Communications Committee	P 8-0
05/29/2007	Senate Appropriations Committee	P 15-0
05/31/2007	Senate Floor	P 39-0
07/02/2007	Assembly Utilities and Commerce Committee	P 12-0
07/09/2007	Assembly Natural Resources Committee	P 8-0

Position: Oppose_Unless

CA SB 1001

AUTHOR: Perata [D]
TITLE: Regional Water Quality Control Boards
INTRODUCED: 02/23/2007
LAST AMEND: 07/10/2007
DISPOSITION: Pending
COMMITTEE: Assembly Appropriations Committee
HEARING: 08/30/2007
SUMMARY:

Relates to regional water boards and their responsibilities under the federal Clean Water Act and Porter-Cologne. Requires the State Water Resources Control Board, with the Department of Finance, to prepare a detailed report on the financial basis and programmatic effectiveness of its water quality programs. Requires the Legislative Analyst's office to prepare a report on the financial basis and programmatic effectiveness of the board's fee-based water quality programs. Requires related regulations.

VOTES:

04/24/2007	Senate Environmental Quality Committee	P 5-2
05/31/2007	Senate Appropriations Committee	P 10-6
06/07/2007	Senate Floor	P 22-15
07/03/2007	Assembly Environmental Safety and Toxic Materials Committee	P 4-2

Position: Watch

CA SB 1036

AUTHOR: Perata [D]
TITLE: Energy: Renewable Energy Resources
INTRODUCED: 02/23/2007
LAST AMEND: 07/12/2007
DISPOSITION: Pending
COMMITTEE: Assembly Appropriations Committee
HEARING: 08/30/2007
SUMMARY:

Repeals provisions providing for the New Renewable Resources Account within the Renewable Resource Trust Fund. Deletes the requirement that the Energy Commission award the production incentives and allocate and award supplemental energy payments to eligible renewable energy resources to cover above-market costs of renewable energy. Requires the Commission to terminate production incentives unless the project began generating electricity by a certain date.

VOTES:

04/24/2007	Senate Energy, Utilities and Communications Committee	P 8-0

05/07/2007	Senate Appropriations Committee	P 17-0
06/04/2007	Senate Floor	P 39-0
07/02/2007	Assembly Utilities and Commerce Committee	P 7-3
07/09/2007	Assembly Natural Resources Committee	P 6-3

Position: Watch

Inland Empire
UTILITIES AGENCY

Date:	September 19, 2007
To:	The Honorable Board of Directors
Through:	Public, Legislative Affairs, and Water Resources Committee *(09/12/07)*
From:	Richard W. Atwater Chief Executive Officer/General Manager
Submitted by:	Martha Davis Executive Manager of Policy Development
Subject:	August Legislative Report from Agricultural Resources

RECOMMENDATION

This is an informational item for the Board of Directors to receive and file.

BACKGROUND

Dave Weiman provides a monthly report on his federal activities on behalf of IEUA.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

None.

RWA:MD:mef

Enclosure

G:\ Board-Rec \ 2007 \ 07332 Aug. Leg Report from Ag Resources 9-12-07

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Agricultural Resources
635 Maryland Avenue, N.E.
Washington, D.C. 20002-5811
(202) 546-5115
(202) 546-4472-fax
agresources@erols.com

August 28, 2007

Legislative Report

TO: **Richard W. Atwater**
General Manager, Inland Empire Utility Agency

FR: **David M. Weiman**
Agricultural Resources
LEGISLATIVE REPRESENTATIVE, IEUA

SU: **Legislative Report, August 2007**

Highlights:

- **Congress Out During August, Back After Labor Day**
- **Senate Hearings on Title XVI, IEUA/CVWD Recycling Project**
- **Recycled Water Determined to be Energy Efficient – State Hearing**
- **Farm Bill Policy – Policy and Process**
- **Drought Conditions**
- **News and Notes**
- **IEUA Working Partners**

Congress Out During August, Session Reconvenes After Labor Day – September to Have Packed Agenda. Congress went on its usual month-long breaking August 3. Many members went on fact-finding trips to Iraq and the surrounding region. In September, the congressional agenda will be packed. September is the last month of the fiscal year and all annual funding bills are pending. Some kind of a annual funding bill will be fashioned next month – and it faces a possible presidential veto. Some believe that a "government-wide shut-

down is possible unless an agreement is reached. The Iraq "surge" report is expected and will dominate if not dwarf the funding bill issues. The Farm Bill expires at the end of September as well. And, energy legislation remains pending. In short, a full agenda, limited time, and real deadlines.

Senate Hearings on Title XVI, IEUA/Cucamonga Valley Projects. The Senate Energy Committee's Water and Power Subcommittee held hearings on six water recycling bills in California and Texas. IEAU's GM testified on behalf of the agency and submitted a statement from Robert DeLoach, GM, Cucamonga in support of the legislation. This is the second time the Subcommittee has heard testimony, once in the 109th Congress (last year) and now in the 110th. Next step, markup. The subcommittee has signaled that they intend to markup some of the six bills (from the hearing, it was obvious that at least two of the proposals were preliminary, and various required reports would not be completed before the end of the year. The IEUA and CVWD proposals are complete and are expected to be in the "first wave" of bills qualified for markup.

Water Recycling Gets Boost in State of California Hearing. .A hearing in the State Legislature examined the "Carbon Footprint of Water." IEUA's Rich Atwater and MWD participated in the hearing. So did Pacific Institute's Peter Gleick. His statement highlights that recycled water is among the most energy efficient of all water produced. We are sharing this new analysis with our delegation, the committees and the Bureau of Reclamation and OMB.

Farm Bill Policy-Schedule for Farm Bill. The House has made water districts eligible for USDA funding for digesters and has provided some funding for a program that makes digester funding eligible. The Senate is anticipated to do the same. Whether or not the funding is real remains to be determined. As previously reported, the House has passed a bill, and it's pending in the Senate. The Senate is now expected to begin Ag Committee mark on or about September 17. The bill will not get to the Senate Floor before October and – best possible scenario – will complete action by the end of the year. There is a growing possibility that no agreement can be reached and an "extension" of the existing program will be proposed.

Drought Conditions. According to the USDA/NOAA Drought Monitor as of the end of August drought is touching every Western State (Texas only a small amount). Southern California is still listed as "extreme.

News and Notes. ***Leslie Gooch***, current legislative director, Office of Rep. Gary Miller is joining a public policy firm. Miller's new Leg Director will be ***Sandra Breitengross***. ***Bureau of Reclamation*** is circulating new criteria guidelines. ***Corps Authorization bill (WRDA)*** fate is uncertain. Bill, now conferenced, may face veto. It contains new authority for the Santa Ana River. ***EPA*** has announced new guidelines for watershed planning. Finally, long-time House Water and Power Subcommittee staffer, ***Steve Lanich***, informed Rep. Grace Napolitano that he would be retiring at the end of the calendar year.

IEUA Continues to Work With Various Partners. On an on-going basis in Washington, IEUA continues to work with:

a. Metropolitan Water District of Southern California (MWD)
b. Milk Producer's Council (MPC)
c. Santa Ana Watershed Project Authority (SAWPA)
d. Water Environment Federation (WEF)
e. Association of California Water Agencies (ACWA)
f. WateReuse Association
g. CALStart
h. Orange County Water District (OCWD)
i. Cucamonga Valley Water District (CVWD)
j. Western Municipal Water District
k. Chino Basin Watermaster

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Inland Empire
UTILITIES AGENCY

Date:	September 19, 2007
To:	The Honorable Board of Directors
Through:	Public, Legislative Affairs, and Water Resources Committee *(09/12/07)*
From:	Richard W. Atwater Chief Executive Officer/General Manager
Submitted by:	Sondra Elrod Public Information Officer
Subject:	Public Outreach and Communications

RECOMMENDATION

This is an informational item for the Board of Directors to receive and file.

Outreach/Tours

- IEUA hosted the California Integrated Waste Management Board/CalTrans compost workshop on Thursday, August 23, 2007, in the Event Room
- IEUA hosted the Low Impact Development (LID) workshop on Wednesday, August 29, 2007, in the Event Room.

Calendar of Upcoming Events

- September 7 – 30, 2007, ECO Now Exhibit at LA County Fair.
- September 12, 2007, Chino Day at the LA County Fair. **(Anderson)**
- September 14 – 16, 2007, IEUA/MWD Director Koopman's State Water Project Tour.
- September 21, 2007, Chino Hills Day at the LA County Fair. **(Anderson)**
- September 26, 2007, IEUA Picnic, 11:30 a.m., Grand Avenue Park, Chino Hills.
- September 28, 2007, Fontana Days at the LA Fair County Fair. **(Santiago)**
- October 20, 2007, annual regional Water Fair, Montclair Plaza, 10:00 a.m. to 2:00 p.m.
- October 25, 2007, San Antonio Water Company 125th Anniversary Celebration, 4:00 p.m.. 139 North Euclid Avenue
- October 31, 2007, IEUA hosted Blood Drive from 9:00 a.m. to 3:00 p.m.
- We are working with the CBWCD to plan 'California Friendly' events during the month of October.
- December 20, 2007, IEUA Holiday Luncheon, Los Serranos Country Club, 11:30 a.m.

- April 25 – 27, 2008, IEUA/MWD Director Koopman's Agricultural Inspection Trip.

OUTREACH/EDUCATIONAL INLAND VALLEY DAILY BULLETIN NEWSPAPER CAMPAIGN

- Safety Issue expected to run August 29, 2007.
- During August and September IEUA will utilize some of our 'run-of-press' pages in the Daily Bulletin to run a 'water conservation' campaign to get the message out on the importance of water conservation this summer. The theme of the campaign is "It's time to get serious" (to be consistent with MWD's message). The ads will offer water-saving tips and the number of "gallons" saved which will be consistent with San Diego's *20-Gallon Challenge* tips and numbers.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

None.

CHINO BASIN WATERMASTER

IV. INFORMATION

1. Newspaper Articles

EPA cites six SoCal dairies for Clean Water Act violations

The Associated Press
News Fuze

Article Launched:08/01/2007 07:45:18 PM PDT

LOS ANGELES—Federal regulators cited six Southern California dairies for violating clean water rules designed to prevent the facilities' animal waste from polluting local water supplies, officials said Wednesday.

The dairies were ordered to repair leaks in waste lagoons, build raised barriers around the lagoons, arrange to remove manure piles and make other changes to comply with the law, U.S. Environmental Protection Agency scientist Glenn Sakamoto said.

Regulators said runoff from the facilities could pollute the Santa Ana River. The dairies were cited for violations of state-issued permits that include failing to contain on-site manure, execute waste management plans, and design and manage manure-containment structures, the EPA said.

The facilities could face fines of up to $32,500 per day per violation if they don't make needed fixes and as a result pollute streams, rivers or groundwater, Sakamoto said.

"We're hoping and trust that dairymen want to do what's best to protect the environment," Sakamoto said. "If the acts continue and it results in a discharge, we may look at the next step, which would be penalties."

Representatives for the dairies—identified as Legend Dairy #1, Legend Dairy #3, Sun Valley Jersey Dairy #1, Miersma Dairy #1, Tom Alger Dairy and Venegas Dairy—did not return messages or could not be reached for comment.

The orders were issued based on a March 2007 EPA inspection of the dairies, which are located in Chino, Ontario and Mira Loma.

Michael Marsh, who leads the trade group Western United Dairymen, said the organization would work with the dairies to bring them into compliance.

"Dairy producers have got to follow clean water and clean air laws," he said. "We take the business of keeping the environment clean very seriously."

In 2000 and 2001, the EPA fined numerous dairies in the Chino area for similar Clean Water Act violations, officials said.

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Save water now to avoid restrictions

Article Launched:07/29/2007 12:00:00 AM PDT

If you haven't started conserving water yet, what are you waiting for?

Some people may be stalling until an actual water emergency is declared locally, with the mandatory water-use restrictions that might entail. In our view, there is already enough evidence of problems ahead that there is no need to wait. Better to take some small steps now to help make our water last than to get hammered by harsh restrictions sometime next year, or the year after that.

The most recent indicator of the problem is the fact that Gov. Arnold Schwarzenegger declared a state of emergency in Riverside County because agriculture there has been decimated by the lack of rainfall. Riverside received less than 2 inches of precipitation in the rain year that ended June 30 - less than Death Valley got.

Of course, the real problem is that the dry conditions are not a local matter. The aridness reaches high into the Sierra Nevada mountain range as well as across the Colorado River Basin - meaning most of the Southwest.

The Sierra snowpack this spring was about a third of its normal size, resulting in a 40 percent cut in deliveries from the State Water Project. The Colorado River, in its eighth year of drought, is supplying half the water it did five years ago. Los Angeles had the driest year since the first records were kept in the 1870s.

Altogether, it's a triple-whammy that has water officials nervous. The good news is that the 2005-2006 rain year was a wet one, so we came into the dry year that just ended with ample stored supplies. The bad news that it won't be enough if the year we're just starting is anywhere close to as arid as the last.

And then, scientists are talking about the "medieval megadrought" in the Southwest, which according to tree-ring records lasted from 900 to 1400 A.D. And there are some signs that the warming of the ocean surface near the equator is changing rainfall patterns, shifting the bulk of precipitation farther north and out of the Colorado Basin.

Now, we needn't go all gloom-and-doom. We could have a big rain year that includes plenty of snowfall in the Sierras. That eight-year Colorado Basin drought could break any time. As we all know, the weather can surprise the experts.

But if it doesn't, and the dry conditions continue, the current "suggestion" of a 10 percent use cutback by customers of Southern California water agencies will become something firmer, and perhaps deeper.

So back to our original point: If you haven't already, start conserving water now.

Where to start? Check the Metropolitan Water District's Web site, www.bewaterwise.com, which offers water-saving tips and rebates available for water-saving appliances and irrigation equipment, both household and industrial. Or check the California Urban Water Conservation Council's site, www.h2ouse.org, where the first of the "Top 5 Actions" to save water is simply to check and repair any leaks around your house. You'll find guides for landscaping with plants that aren't so thirsty, allowing you to conserve over the long haul.

Between the two sites, you'll find many ways to save thousands of gallons of water and wads of money. At the same time, you'll be helping Southern California get through the dry times.

Close Window | Send To Printer

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Water forecast discouraging

By Jason Pesick, Staff Writer
Inland Valley Daily Bulletin

Article Launched:07/22/2007 12:17:29 AM PDT

Representatives of local water agencies said they can make it through the dry season but are encouraging people to cut back on their water usage.

While the water purveyors aren't yet in panic mode, a number of factors next year could cause real trouble.

"Next year could be disastrous," said Anthony "Butch" Araiza, general manager of the West Valley Water District, which serves Bloomington and portions of Colton, Fontana and Rialto.

The rainy season that just ended was the driest in the history of Los Angeles and one of the driest ever in the Inland Empire, said Jim Ashby, a climatologist with the Western Regional Climate Center in Reno, Nev.

"Water levels are down and have been dropping over the past few years," said Robert Martin, general manager of East Valley Water District, which provides water to Highland and part of San Bernardino.

The area relies on snow melting off the mountains to provide water, but there wasn't much this year.

Martin and Araiza said water levels are decent, but they are worried about what will happen next year if there isn't much rain.

"Next year could have to have pretty strong water conservation to make it through," said Randy Van Gelder, general manager of the San Bernardino Valley Municipal Water District, or Muni.

Compounding that problem, an environmental controversy over Delta smelt fish is reducing the amount of water available from the Sacramento-San Joaquin Delta.

Two lawsuits say pumping threatens the endangered species. The dispute means that the San Bernardino area could get 40 percent less water from the delta than it is entitled to and possibly much less than that next year, Van Gelder said.

Another pressure on regional water agencies is the amount of development that siphons water.

Some agencies - such as Colton's and Rialto's, West Valley and the Fontana Water Company - also have to deal with perchlorate, a toxic substance, in their drinking water.

Rialto alone has three wells shut down because of the perchlorate. Muni is launching an advertising campaign to encourage people to conserve water.

Close Window | Send To Printer

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Stand up to polluters

Article Launched:07/26/2007 12:00:00 AM PDT

Perchlorate is an issue that affects everybody in San Bernardino County because of potentially huge costs to local governments' budgets. It is tragic that the Department of Defense and its contractors have denied their responsibility. Frankly, the Bush administration has been derelict on the perchlorate issue.

When I represented Rialto in the state Senate, I personally went to EPA Regional Administrator Wayne Nastri to ask for help. Rialto did not want the plume declared a Superfund site because city officials thought it would stigmatize the area. Yet San Gabriel Valley is a Superfund site and is economically prosperous.

To see effective cleanup, we only need to look to the San Gabriel Valley Water Quality Authority. When I introduced a bill to create an Inland Empire Water Quality Authority five years ago, it was opposed by several local water purveyors. Now is the time for all the agencies affected by perchlorate to find a new spirit of cooperation.

The cleanup effort was thrown into disarray with the Santa Ana Regional Water Quality Control Board's near fatal error in 2002, when they repealed Cleanup and Abatement Orders. Since then I was able to strengthen the law so that the regional board must go after the polluters to get replacement water (SB 1004, 2003).

Now the Santa Ana regional board can right the course and see that the new Cleanup and Abatement orders are enforced. There are hearings starting Aug. 21 in Rialto. I am depending on the state to be strong and stand up to a drove of industry attorneys.

NELL SOTO
Assembly member
61st District

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Water funding OK'd

Panel approves money for perchlorate investigation

Jason Pesick, Staff Writer
San Bernardino County Sun

Article Launched:08/02/2007 12:00:00 AM PDT

Money to investigate perchlorate contamination around Rialto, Fontana and Colton was one of a few projects a congressional committee has approved, Rep. Joe Baca, D-Rialto, announced.

A conference committee made up of members of the House of Representatives and Senate approved a number of water projects for the Inland Empire, including money for the perchlorate investigation. The programs are part of the Water Resources Development Act.

"I think it's a good move," said Rialto Councilman Ed Scott, who is a member of the City Council's perchlorate committee.

Perchlorate, a chemical used in rocket fuels and other explosives, has seeped into Rialto's drinking water from industrial sites in the city's north end. The plume is creeping toward Colton.

Local agencies have either shut down contaminated wells or are treating the water so that no contaminated water is served. Perchlorate, if ingested, can affect the functioning of the thyroid and possibly mental development.

If both houses of Congress and the president sign off on the legislation, the Army Corps of Engineers would investigate the source of the perchlorate around Rialto, Fontana and Colton.

The extent of the contamination is not completely known, and it's not possible to clean it up without first understanding where it is coming from and where it is, Scott said.

The amount of money Baca secured for the project was not available.

"Whatever it is, it's a step in the right direction," Scott said.

The city asked its congressional representatives for almost $12.7 million for an investigation of the Rialto Basin.

The projects announced Tuesday as part of the Water Resources Development Act included other Inland Empire projects:

Money for the Army Corps of Engineers to improve the Colton Drainage System to prevent flooding and remove storm flows along Valley Boulevard and around Arrowhead Regional Medical Center in Colton.

Funding for Ontario's Francis Street Storm Drain and Connectors Project that Rep. Gary Miller, R-Diamond Bar, also requested money for. The project would help reduce flooding, which could hurt Ontario and Chino's dairy industry.

Money for Rialto to support the Lytle Creek Groundwater Recharge Project to study Lytle Creek and understand both flooding and water-shortage issues in the creek.

The amount of money for these projects was also not available.

On Friday, Baca's office announced the House Appropriations Committee's approval of $7.5million as part of the Defense Appropriations Bill. That money included $2.5 million for perchlorate treatment in the area.

Rialto also asked Congress for $15 million for the Bunker Hill Water Supply Project to clean water as part of a U.S. Environmental Protection Agency cleanup effort. After the water is cleaned, Rialto and other areas outside San Bernardino would have access to some of it, said Randy Van Gelder, general manager of the San Bernardino Valley Municipal Water District.

Close Window | Send To Printer

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

NEWS RELEASE
Association of California Water Agencies
910 K Street, Suite 100 · Sacramento, California 95814-3512
916/441-4545 · FAX 916/441-7893 · http://www.acwa.com

FOR IMMEDIATE RELEASE
August 31, 2007

Contact: Tim Quinn, ACWA Executive Director, 916/606-3124 (cell)
Jennifer Persike, ACWA Director of Strategic Coordination and Public Affairs, 916/441-4545, or 916/296-3981 (cell)

Court Ruling to Have Sweeping Water Impacts

Cuts in Deliveries Loom in Wake of Court-Ordered Reduction in Delta Pumping

Sacramento — The Association of California Water Agencies (ACWA) today said court-ordered reductions in deliveries by the State Water Project and federal Central Valley Project would have sweeping impacts across the state.

"The scope of this decision will be felt in nearly every region of California, in some cases within a few weeks," ACWA Executive Director Timothy Quinn said. "These reductions represent the single largest court-ordered redirection of water in state history. It truly hammers home the serious challenges facing our statewide water system."

In a highly anticipated ruling today, U.S. District Court Judge Oliver Wanger ordered the two projects to reduce pumping in the Sacramento-San Joaquin River Delta to protect a threatened fish species, the Delta smelt. The reduced pumping translates into a loss of as much as one-third or more of previously available water supplies – or a cut of up to two million acre-feet.

Quinn said the cuts would affect jobs and productivity, especially in the hard-hit agricultural areas from San Joaquin Valley to San Diego. New development in urban areas also could feel the effects in the near term.

"This puts in vivid and real terms the deepening crisis we are seeing in the Delta. It's an ecological crisis and it's a water supply crisis. While many factors are affecting the ecosystem, this reinforces the fact that our Delta water infrastructure doesn't work for the environment or for the state's economy," Quinn said.

Wanger's decision compounds challenges already facing water suppliers this year due to dry conditions. Many agencies have been drawing on emergency or reserve supplies and asking their customers to voluntarily reduce water use. More stringent restrictions – including rationing – are expected as a result of the ruling, and the situation could be dire if dry conditions continue.

"If anyone needed a wake-up call, this is it," Quinn said. "We need to address fundamental problems in the Delta so we can better protect the environment and the water supplies so critical to our state."

ACWA is a statewide association of public agencies whose 450 members are responsible for about 90% of the water delivered in California. For more information, visit www.acwa.com.

# # #

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION

Environmental groups find fault with state's perchlorate standard proposal

Jason Pesick, Staff Writer
San Bernardino County Sun

Article Launched:08/29/2007 11:54:54 PM PDT

The state is in the final stages of setting a standard dictating how much perchlorate can be in your drinking water.

The cap on the amount of the widespread contaminant that can be in the drinking water could be in place within weeks.

But the proposal of 6 parts per billion is not one that will sit well with the environmental community.

It could also lead to hikes in water rates, as water purveyors are forced to begin cleaning perchlorate from the water they serve.

"We're disappointed that in light of all the accumulating evidence that perchlorate is harmful at levels well below this that California decided to stick with 6 ppb," said Bill Walker, vice president for the Environmental Working Group's West Coast office.

Perchlorate has been discovered in drinking water throughout areas of Southern California used for agricultural, industrial and military purposes.

On Aug. 6, the state Department of Public Health submitted a standard of 6 ppb to the state Office of Administrative Law. Once its review is complete, it will send the regulation to the secretary of state to sign off on.

Since the state began developing the standard, the Centers for Disease Control and Prevention released a study showing that even at low levels, perchlorate can affect hormone levels in a large percentage of women.

The proposed standard is also higher than the 2 ppb set by Massachusetts last year.

Perchlorate is used in the production of explosives like fireworks and rocket fuel.

Chilean fertilizer used in agricultural areas around the Southland is also thought to be responsible for perchlorate contamination.

It can affect the functioning of the thyroid, which is important for metabolism and neurological development.

Between August 2002 and August 2007, 251 wells had reported having perchlorate at a level of 4 ppb or higher in California.

Of those, 114 are in San Bernardino and Riverside counties.

The process of setting a standard began in August last year when the state Office of Environmental Health Hazard Assessment set a public health goal of 6 ppb.

Its task is to only take public health into consideration when setting that goal. Then the Department of Public Health takes into account how practical the proposed standard would be.

A few months after the public health goal was set, the CDC study came out in October.

"This is going to be important information for those people who are setting acceptable levels (for perchlorate)," one of the study's co-authors James Pirkle, said when the study came out.

Massachusetts officials said they came to a level of 2 out of caution and a difference of a opinion with California officials over how much perchlorate people ingest from other sources besides water, like food.

Massachusetts officials said they thought people take in a fair bit of perchlorate from other sources besides water, so they wanted to set a lower standard for perchlorate in water.

While environmentalists aren't satisfied with California's proposed standard, because they see it as too high, some water

THIS PAGE

HAS

INTENTIONALLY

BEEN LEFT

BLANK

FOR PAGINATION